*Colombo Plan International Centre for Credentialing and
Education of Addiction Professionals (ICCE) Training Series
Universal Prevention Curriculum for Substance Use (UPC) Series 1*

Introduction to Prevention Science

Trainer Manual

Training Curriculum Series 1

COLOMBO PLAN

Acknowledgments

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TRAINER ORIENTATION

Introduction

The problem

Psychoactive substance use and substance use disorders (SUDs) continue to be major problems around the world, taking a toll on global health and on social and economic functioning. The United Nations Office on Drugs and Crime (UNODC) reports that, in 2012, 162 to 324 million people between ages 15 and 64 used illicit substances[1] at least once.[2]

Of those who use psychoactive substances, a significant number will develop substance use problems or SUDs. The 2012 UNODC survey notes that the number of problem users stayed stable with between 16 and 39 million people between ages 15 and 64 using illicit substances at a level defined as "problem use." The wide range is due to difficulties collecting complete and accurate data internationally.

SUDs contribute significantly to global illness, disability, and death. So, the prevention of substance use and other social problems is a goal that can significantly improve the health and well-being of people around the world. In addition, the World Bank has pointed out that several low-cost interventions can have large-scale effects not only on population health, but also on productivity. Thus, prevention can make a difference to the economic welfare of countries—especially those in the developing world.

Evidence-based prevention: New tools for the prevention toolbox

Finding what works in prevention has been a challenge. Many approaches, which have been popular—e.g., "scare tactics" campaigns, information-only educational approaches, and former users' testimonials—have been found to be ineffective in rigorous research. But research has also found that there are effective interventions and strategies that recognize when, how, and with whom to intervene to make progress in addressing substance use. Recently, the UNODC published a rigorous review of the results of over 20 years of research on effective drug use prevention strategies and interventions, the International Standards on Drug Use Prevention.

Summarizing the research, this report identifies a range of evidence-based preventive interventions that can make a difference in the lives of populations at-risk for drug use world-wide. But prevention does more than just prevent substance use. Its aim is to promote the healthy and safe development of children and youth to realize their potential and become contributing members of their community and society. This curriculum series,

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[1] *Illicit substances* include opioids, cannabis, cocaine, amphetamine-type stimulants, and other substances (e.g., hallucinogens, ecstasy).
[2] UNODC. (2014). *World drug report 2014*. New York: United Nations.

the Universal Prevention Curriculum for Substance Use, is designed to train prevention professionals, working in a range of settings to reach all populations, with research-based strategies developed to strengthen families, schools, community organizations, and other institutions. This training will help to address "the enormous unmet need for drug use prevention, treatment, care and support, particularly in developing countries,"[4] as described by Yury Fedotov, Executive Director of UNODC.

The UPC Training Series 1

Curriculum 1: *Introduction to Prevention Science* is part of a training series developed through funding from the U.S. Department of State to The Colombo Plan for the International Centre for Credentialing and Education of Addiction Professionals (ICCE). Information about ICCE can be found at http://www.colombo-plan.org/icce/?page_id=19.The overall goal of the training series is to reduce the significant health, social, and economic problems associated with substance use throughout the world by building international prevention capacity through training, professionalizing, and expanding the prevention workforce. Also, since the publication of the UNODC International Standards on Drug Use Prevention, there has been a great need to update the knowledge of prevention staff about these new standards, as well as policy-makers and other stakeholders who are engaged in prevention.

Who is it for: This curriculum series will provide extensive foundational knowledge to **prevention coordinators** about the most effective evidence-based prevention interventions that are currently available. Prevention coordinators, usually located at the community, state or country level, are prevention professionals involved in the assessment and planning for prevention, the organization, selection and implementation of evidence-based (EB) interventions, and the monitoring and evaluation of programming. Current plans include a follow-up series directed at prevention specialists working in programs with a greater focus on building skills to deliver these EB interventions at the direct service level. Prevention coordinators often supervise specialists as part of their responsibilities. Prevention coordinators generally have, as a minimum, a bachelor's degree and two years of prevention experience.

The training series comprises nine separate curricula:

Curriculum 1: Introduction to Prevention Science (this curriculum, 5 days)

Curriculum 2: Physiology and Pharmacology for Prevention Specialists (3 days)

Curriculum 3: Monitoring and Evaluation of Prevention Interventions and Policies (5 days)

Curriculum 4: Family-Based Prevention Interventions (4 days)

Curriculum 5: School-Based Prevention Interventions (5 days)

Curriculum 6: Workplace-Based Prevention Interventions (3 days)

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[3] UNODC. (2013). *World drug report 2013*. New York: United Nations.
[4] UNODC. (2011). *World drug report 2011* (p. 9). New York: United Nations.

Curriculum 7: Environment-Based Prevention Interventions (3 days)

Curriculum 8: Media-Based Prevention Interventions (3 days)

Curriculum 9: Community-Based Prevention Implementation Systems (5 days)

Each curriculum is self-contained, but it is necessary to take Curricula 1 and 2 first, as these curricula introduce the basic processes that underlie addiction and the brain, the basic pharmacology of the psychoactive substances, and the preventive mechanisms that have been found to be effective in almost 20 years of prevention science. Curriculum 3 trains prevention coordinators in basic evaluation techniques to monitor the progress and measure the outcomes of their prevention efforts. Then, curricula 4 through 8 provide a more in-depth look at the intervention approaches themselves in each of the primary settings where they take place—in the family, school, workplace and community settings with environmental interventions and mass media programs. Curriculum 9 looks at the ways to establish prevention infrastructures in the community or working within systems to develop preventive interventions.

Overall, this curricula series will help prevention professionals master the knowledge gained from more than 20 years of research into understanding the most effective ways of preventing substance use around the world.

Goals and Objectives for Curriculum 1

Training goals

- To provide an overview of the science that is the foundation for prevention;

- To provide an overview of the information needed to inform the selection of prevention interventions;

- To provide participants with the tools to inform stakeholders and policy-makers about the foundation of evidence-based substance use prevention; and

- To provide participants with the tools to coordinate and supervise substance use prevention specialists.

Learning objectives

Participants who complete Curriculum 1 will be able to:

- Discuss the levels of progression of substance use and the role of prevention;

- Explain the scientific foundation of prevention to the public, stakeholders, policy-makers, and substance use prevention specialists:

  - The who, what, when, where, and how of substance use within the defined community;

  - The influence of personal and environmental factors on vulnerability and risk;

- Human development, both for targeting interventions, but also for tailoring messaging and intervention strategies;

- How-to apply empirically-based behavior change theories; and

- The importance of research to understanding how effective interventions 'work'.

■ Describe the background and principles underlying the development of the United Nations Office on Drugs and Crime International Standards on Drug Use Prevention; and

■ Describe the importance of implementation fidelity and monitoring of the delivery of prevention interventions and the implementation of prevention polices.

The Trainer

Trainer qualifications

This curriculum can be implemented by people with little previous training experience. However, trainers should have had this or similar training, and be familiar with the subject matter. Trainers for this course should have the following knowledge and skills:

■ A working knowledge of the curriculum content;

■ Experience working with prevention delivery and services;

■ Experience using the preventive techniques taught in the course;

■ Ability to facilitate participant learning, including use of diverse exercises, case studies, and group exercises that address multiple learning styles;

■ Understanding of and sensitivity to cultural issues specific to both the participants and the target populations addressed by prevention; and

■ Ability to work with participants in a positive, empathetic manner.

Two trainers, or co-trainers, are essential for multiday courses. In addition, a support person to help with logistics is ideal, particularly with training groups of more than 20 participants.

Trainer fidelity to curriculum

This curriculum is designed to be delivered as it is written. Every effort should be made to read or memorize notes for each slide. The order of the slides also should be maintained and all slide notes should be presented. If, for some reason adaptation is required, please follow the following principles from the U.S. Substance Use and Mental Health Services Administration:

■ Change capacity before changing the program. It may be easier to change the curriculum, but changing local capacity to deliver it as it was designed is a safer choice;

■ Consult with ICCE. Consult with ICCE trainers to determine what experience and/ or advice he or she has about adapting the curriculum to a particular setting or circumstance;

- Retain core components. There is a greater likelihood of effectiveness when the core component(s) of the original curriculum are retained;

- Be consistent with evidence-based principles. There is a greater likelihood of success if an adaptation does not violate an established evidence-based prevention principle; and

- Add, rather than subtract. It is safer to add to a curriculum than to modify or subtract from it.

Trainer demeanor

This curriculum is designed to meet the professional needs of prevention coordinators and specialists who are working with their communities to address the challenging problems of substance use and other problem behaviors. The seriousness of these problems and the focus of the training participants to learn the most effective ways of intervening sets a level of seriousness that should be reflected in the trainer's dress, manner, comfort level with the material, and training expertise. The training material you are teaching is complex and requires extensive preparation, so you can feel confident and comfortable as you progress through the program. You, as a trainer, need to project your expertise in the art of training as you lead the group through the presentations, exercises, and discussions throughout the curriculum. Your dress and demeanor should reflect your professionalism, but also be comfortable for the many hours you will be sharing with your students.

The following guidelines may be useful:

- Clothing says a lot about a person. Dressing one level above that of the training participants show respect for them without being too formal and 'stand-offish. 'Dressing too casually may signal a lack of seriousness on the part of the trainer;

- "Flashy" jewelry or clothing can be distracting when you want your participants' attention on the content of the training, not on what you're wearing;

- Careful personal grooming (brushed teeth, combed hair, a fresh shave or trimmed beard, clean fingernails) says that the trainer cares about what others think of him or her;

- Avoid perfumes and colognes, which can be overwhelming, especially for those who are allergic; and

- Neither the trainer nor the participants should chew gum during the training sessions.

Additional suggestions regarding overall presentation are in Appendix B.

The Trainer Manual

This Trainer Manual has five parts:

- Part I—Trainer Orientation (this section);

- Part II—Master Agenda;

- Part III—Evaluation Forms;

- Part IV—Training Modules; and

- Part V—Appendices.

Part II— Master Agenda is included for planning. This training is designed to be delivered over five consecutive days, as reflected in the Master Agenda. However, the modular structure allows for flexibility. If necessary, the training could be offered over several weeks (with some modifications), although all seven modules should be delivered in the order in which they are presented in the manual.

The times indicated for module activities are guidelines. Actual times will depend on each training group's size and participation level. Based on participants' learning needs, more or less time can be allotted by the trainer than is indicated on a particular topic. The Master Agenda also assumes that the training day begins at 0900 hours and ends at or about 1700 hours. The trainer should prepare a daily schedule for participants, using actual start and end times.

Part III— Evaluation Forms include: Module Evaluation form for participants to complete at the end of each module; An Overall Training Evaluation form to be used at the end of the training; and a Pre- and Post-Test designed to assess whether participants have met the learning objectives of the training. The Module Evaluation helps the trainer identify whether adjustments need to be made during the training. The Overall Training Evaluation provides an overall look at participants' experiences from their perspective. Participants need to know that completing the forms is important and that their feedback will improve training content and delivery over time. The results of the pre- and post-tests also provide guidance on areas of the training that need strengthening. These are designed for each curriculum and are not included in the Manuals. They will be provided to the trainers separately.

Part IV—Training Modules provides instructions for presenting the seven modules in Curriculum 1. Each module in the manual includes:

- A Preparation Checklist;

- A timeline;

- An overview of goals and objectives;

- Presentation and exercise instructions;

- Exercise materials;

- Copies of Resource Pages from the Participant Manual; and

- Copies of the PowerPoint slides.

Trainer presentations are written as a script, and script text is italicized, e.g., **Say:** Please turn to Module 2 in your manuals. Trainers should feel free to use their own words and add examples. Adding real-life examples enriches the training experience but needs to be balanced with time considerations.

Teaching instructions throughout the modules offer specific guidance, alternative approaches, or special considerations.

> Teaching Instructions: Look like this.

The curriculum incorporates icons that offer the trainer visual cues:

Icon	Indicates
30 minutes	The approximate time for the section.
	The trainer introduces a journal or other writing exercise.
	The trainer refers to the *Participant Manual*.
	The trainer uses newsprint.
	The trainer introduces a small-group exercise.
	The trainer introduces a partner exercise.
Say: or **Ask:**	The trainer begins or continues a presentation or asks a question of the group.

Part V—Appendices include:

Appendix A—Learner-Centered Trainer Skills: A Brief Overview;
Appendix B—Dealing With Difficult Participants during Training;
Appendix C—Glossary;

Appendix D—Resources;
Appendix E—Curriculum Developers;
Appendix F—Expert Advisory Group; and
Appendix G—Special Acknowledgments.

Appendix D—Resources is particularly important. This appendix provides resources for background reading on major curriculum topics to help trainers become as familiar as possible with the curriculum topics.

The Participant Manual

Trainers must tell participants to bring their manuals with them each day. The Participant Manual contains a participant orientation, introduction (1-page) to the content in the module, glossary, resources, and a summary of the content (10-page) plus citations for take-home review, and includes, for each module:

- **Introduction** to each module;

- **Training goals and learning objectives**;

- A **timeline**;

- **PowerPoint (PPT) slides** with lines for taking notes;

- **Resource Pages** containing additional information or exercise instructions, and materials; and

- **Summary** of the module with citations for future reference.

Special Features. The design of the Participant Manual has several features which promote learning both during the training and afterward. The one-page Introduction first introduces the new and challenging concepts of prevention science before the session starts. During the training, participants can take notes next to each slide and write any questions they might want to ask. After the session, the Summary reinforces and reminds participants of the primary material and further resources they can consult when they return from the training. Of course, the Glossary and Resources in the Appendix also provide follow-up actions they can take.

The trainer also provides each participant with a notebook. It can be a spiral-bound notebook, a lined notepad, or simply pieces of paper stapled together. Participants use the notebook as a journal, for specific writing exercises, and to note:

- Shared resources they would like to review at a later date;

- Topics they would like to read more about;

- A principle they would like to think more about;

- A technique they would like to try;

- Ways to use their new skills and knowledge in their practice; and

■ Possible barriers to using new techniques.

Overarching Themes of the Universal Prevention Curriculum (UPC) Series 1

There are several significant themes that need to be stressed throughout the UPC series. The first is the definition of **substance use**, which includes the use of psychoactive substances including tobacco and alcohol (which are usually illegal for children), the illegal drugs of abuse, inhalants, and the nonmedical use of prescription medications.

Another theme is the **science of prevention**, which has shown how substance use has affected individuals, families, schools, communities, and countries; and how it can be addressed with effective strategies, policies and interventions. This is likely to be a new concept for most of the participants in your training. That is one of the reasons why the United Nations Office on Drugs and Crime conducted a thorough review of prevention science to identify the most effective approaches to prevention that can have the strongest impact on the population.

Those effective interventions, also known as **evidence-based (EB) prevention interventions and policies**, are now available for implementation. This training is designed to help prevention practitioners select those interventions and policies that most likely address community need, implement these interventions and policies, and monitor the quality of the implementation and the outcomes for the participants.

The science has also explained **the developmental nature of substance use and similar behavioral problems**. This requires an understanding of how to intervene at various ages starting with very young children, progressing through the more vulnerable teenage and young adult years, and continuing throughout the lifespan.

Another theme is that **substance use and other problem behaviors are generally the result of negative interactions between environmental factors and the characteristics of individuals**. EB prevention practices are designed to positively intervene in these different environments—e.g., the family, school, workplace, and community-wide. That is why we are producing curricula designed to assist prevention professionals in all these settings.

Trained prevention professionals also need to be knowledgeable in a wide range of disciplines, including epidemiology, pharmacology, psychology, counseling, and education. They will learn how to apply these skills to assess the nature and extent of substance use in their area, identify the populations most at-risk, and select which interventions are needed to make a difference.

They will also learn how to **bring people together, analyze data, persuade stakeholders of the value of EB programs and policies, and implement, monitor, and evaluate the outcomes** of these EB efforts.

The overall curriculum series theme is to create leaders in evidence-based prevention in countries around the world.

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Thumb or Flash Drive

The thumb drive contains PowerPoint (PPT) presentations, and copies of the following resources for Modules 1–7.

UNODC International Standards on Drug Use Prevention

The development of the International Standards on Drug Use Prevention was an international effort supported by the United Nations Office on Drugs and Crime (UNODC) to summarize the prevention science literature and to highlight the key characteristics of evidence-based prevention interventions and policies. The purpose is to communicate these effective prevention approaches to improve available prevention services. This Universal Prevention Curriculum series was developed to disseminate this knowledge emerging from prevention science over the past 20 years by educating prevention practitioners about these effective strategies so they can apply them in the real world. The International Standards will be a helpful resource throughout the training and will be referred to in each of the curricula.[PDF available from http://www.unodc.org/unodc/en/prevention/prevention-standards.html.]

European Drug Prevention Quality Standards: A Manual for Prevention Professionals

This Manual is a joint production by the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) and the Prevention Standards Partnership, and presents and describes basic and expert level quality standards for substance use prevention. The standards cover all aspects of substance use prevention work, including needs and resource assessment, program planning, intervention design, resource management, implementation, monitoring and evaluation, dissemination, sustainability, stakeholder involvement, staff development, and ethics. Considerations regarding the standards' real-life implementation are provided, acknowledging differences in professional culture, policy, and the structure of prevention delivery within Europe. This can be useful background for the trainer and helpful to participants as they put into practice what they learn in the training. [Trainees can order a copy free of charge from the website at: http://www.emcdda.europa.eu/publications/manuals/prevention-standards.]

The Learning Approach

The adult learner

Although some didactic presentation by the trainer is necessary, the training series relies heavily on collaborative exercises and other learner-directed activities. Adults have great deal to offer the learning process, having already accumulated knowledge through their education, work, and other experiences. The curriculum provides opportunities for the

trainer to encourage participants to share their relevant experience and knowledge with others and to connect them with the curriculum content. This process also facilitates increased partnerships and collaborations when participants return to their home communities.

In addition, international training involves adult learners from all over the world, which means that each one represents a different culture and life experience that can contribute valuable lessons to the prevention training. Understanding cultural differences in terms of the primary prevention settings—the family, school, and community—is essential when trying to apply the lessons of science to the practice of prevention. These settings play a significant role in children's development from infancy to adulthood. Each trainee, then, has the role of helping his/her fellow learners understand how prevention can help to produce healthy productive children and adults in societies around the world. The trainer has the role of encouraging those contributions in discussions, classroom exercises, and having trainees share experiences throughout the curricula.

The training series follows the premise that training of adult learners should be based on the following principles:

- Focus on real-world problems;

- Emphasize how the information can be applied;

- Relate the information to learners' goals;

- Relate the materials to learners' experiences;

- Allow debate of and challenge to ideas;

- Listen to and respect the opinions of learners;

- Encourage learners to be resources for the trainer and for one another; and

- Treat learners with RESPECT.

The approach

The learning approach for the training series includes:

- Trainer-led presentations and discussions;

- Frequent use of creative learner-directed activities, such as small-group and partner-to-partner interactions;

- Small-group exercises and presentations;

- Reflective writing exercises;

- Periodic reviews to enhance retention; and

- Learning assessment exercises.

> *A Helpful Hint:* In this foundational curriculum series, there are often sections of narrative that need to be delivered by the trainer to communicate basic principles, background research, and other didactic material. To strengthen the collaborative and interactive nature of the training, the trainer should often ask for volunteers among the participants to involve them in the process of reading the slides or the training narrative if it is a training-of-trainers session.

Group Dividers

Groupwork, especially small groups, is an important element to a well-designed training program. Small groups encourage participants to learn from each other as they express opinions, add ideas, and ask questions, and practice skills or apply knowledge at the same time. In contrast to a whole group gathered together for a given activity, small groups give participants a greater opportunity of becoming involved and actively participating in the training — and giving them invaluable experience with real-world roles.

Typically, trainers use the grade-school method of counting off by fours or fives – which is not a very creative process. A little planning before you form small groups ensures that the participants will be successful and all content is addressed. Below are some of the ways that you can use to divide your participants into small groups:

1

Put 4 or 5 different kinds of candy in a bag. As participants come into the training room, ask them to choose a piece of candy and get into groups based upon the type of candy they have. For example, you may have a Kit Kat group, a Hershey's Kisses© group, and an M&M's© group.

#2

Ask participants to find group members who all share the same birthday month as they do.

#3

Bring a stack of cards numbered 1-10. Groups can be arranged by the same number or by odd numbers and even numbers.

#4

Make picture cards of different kinds of fruits, for example: apple, orange, pear, banana, papaya, strawberry, etc. Ask participants to find group members who have the same fruit picture card.

#5

Ask participants to form a line at the front of the room. They should line up according to the years of experience in the prevention field in descending order, Then, count off in groups 1, 2, 3, 4, 5, etc. for as many groups as you need. All the ones form a group, all the twos for a group, and continue until all groups are formed.

#6

Gather the whole group at the back of the training room. Have enough space available for participants to move around. Give participants a different colored balloon to blow. Ask them to float their balloons in the air, and catch one. All the participants who have caught the same color balloon form a group.

#7

Ask participants to think of favorite color. Have everyone stand and say their color out loud, finding others who are saying the same color.

#8

Prepare by collecting a set of postcards which all have unique pictures on them. Cut the postcards into the number of pieces according to the groups that you would like to form. Pass out the postcard pieces to each participant. Ask them to form groups using their pieces with other participants to form a complete picture.

Some of these approaches may take more time than others to set up, but sometimes half the fun is observing how your participants approach solving problems together. These approaches could also be used at the beginning of the training session to help participants get to know each other, or the groups may stay the same for a few weeks as you introduce or reinforce new concepts. No matter how you use groups in your training sessions, these approaches can help build community, create opportunities for collaboration, generate discussion, and enhance critical thinking skills. And they're fun too!

Adapted from:

http://www.flipitconsulting.com/2012/02/09/free-10-creative-ways-to-form-groups/

http://recapp.etr.org/recapp/index.cfm?fuseaction=pages.LearningActivitiesDetail&PageID=177

http://www.dummies.com/how-to/content/organizing-small-groups-for-training.html

Preparation

Major training preparation tasks include:

- Logistical planning, including scheduling, selecting the site, and obtaining or arranging for equipment and supplies at the site;

- Selecting and preparing participants; and

- Becoming thoroughly familiar with the curriculum.

Scheduling and site selection are connected. If a hotel site is used, planning needs to begin several months ahead of time.

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The training space

An attractive, well-organized training space can enhance a participant's learning experience. The room must be large enough to accommodate all participants and small groups. Seating small groups at round tables is ideal because it saves significant time moving into and out of small groups for the many exercises. The trainer must be able to rearrange the room and seating for particular presentations and exercises. Additional small tables around the edges of the room can hold supplies, learning materials, and trainer materials.

The ideal space is not always possible, however. If the space is not large enough to accommodate tables, the small groups can always push back chairs and work on the floor if participants are comfortable doing so. Using more than one room at a site can help with space for small-group activities. However, no more than two rooms should be used because it is helpful to have a trainer present in each room to continuously monitor the group process. The training space must provide privacy for role-plays and other activities.

The trainer can create colorful posters or mobiles to add life to the training room. Posters can present key concepts, such as the etiological model, outcomes and environmental influences. Providing tea, coffee, water, and snacks for refreshment breaks encourages participants to mingle and talk with one another during these times. Participants will need information on where to get lunch, if it is not provided.

Equipment and supplies

The Power Point (PPT) presentations require a laptop computer, LCD projector, and screen. A remote control for the projector allows the trainer to move freely around the room. If a remote is not available, then, the co-trainer who is not currently presenting or a training assistant can advance slides.

If a PPT projector is not available (or breaks down during the training!), the training can continue without it. The Participant Manual has copies of all slides, and the Trainer Manual has all the information to explain each slide. At least one whiteboard (with markers), several pads or rolls of newsprint, tape, and colored paper and markers for creative group presentations are essential to the training. The Preparation Checklist in each module indicates the specific supplies needed for the module.

Selecting and preparing participants

Ideally, the training group should be large enough to be divided into at least four small groups of at least three participants each, but the training materials can be adjusted for smaller training groups. The training group should not be larger than 20 participants, and should comprise the same members throughout the six training modules.

A training group that includes a mix of participants with various degrees of experience often facilitates peer-to-peer teaching and learning. The trainer can prepare participants for learning and increase their positive expectations before the training begins, by sending participants a retraining package that contains items such as:

- A friendly, enthusiastic welcome letter;

- The training Master Agenda;

- Training goals and learning objectives;

- A short list of provocative questions that will stimulate interest in the material (e.g., Can you really measure the prevention of a disease—i.e., something that doesn't happen?);

- A quiz that participants can either send back or bring with them to the first session; and

- A list of positive (anonymous) comments about the training from past participants.

When possible, a personal call from a trainer can engage participants and give the trainer useful information about them, and their level of interest and motivation.

Becoming familiar with the curriculum

Trainers should read the curriculum, study it, and make sure they understand the training goals and learning objectives of each module, and are fully prepared to facilitate the exercises. The better a trainer knows the material, the more he or she can focus on the participants. Solid preparation helps a trainer relax and be more engaging. Co-trainers should strategize their roles and responsibilities ahead of time. The content and timeline box in each module has a column labeled "Person Responsible." This page should be photocopied so that trainers can use it for multiple training groups. Co-trainers can specify in this space the training sections for which each will take primary responsibility. Depending on the match of presentation styles and personalities, some trainers choose to deliver entire modules before switching roles; others prefer to switch roles more frequently.

Other decisions to make include:

- When each co-trainer will capture comments from participants on newsprint or act as timekeeper;

- What the expectations are for individual and small-group process observation; and

- Whether content contributions are accepted or expected or both from the non-presenting co-trainer.

Customizing the curriculum

The trainer should be prepared to share his or her examples. The trainer should discuss any adaptations that were necessary for applying techniques to members of particular ethnic, cultural, or gender groups. The trainer should also ask participants to share experiences from their work to ensure that the training addresses specific concerns.

The trainer also must have a good understanding of the needs of the training group and be prepared to adapt the training accordingly. For example, the trainer may need to:

- Simplify the language (particularly clinical terms and jargon) to make concepts easier to understand;

- Allow more time for participants to understand concepts that may be foreign to their cultural world view;

- Adapt writing exercises for participants with low levels of literacy; and
- Be creative (e.g., use metaphor or traditional storytelling to make a point).

Important!

Although the curriculum can and should be adapted to suit participants' needs, and trainers' personalities and training styles, trainers must maintain the integrity of the content. For example:

- The logistics of an exercise may be changed, but the learning objectives should remain the same and be met.

- Group discussion is a valuable part of learner-directed training, but trainers need to manage the time well and not let undirected discussion replace information dissemination or practice exercises.

- Trainers should not assume that participants already know certain information; sections should not be skipped. Prevention science training is new for most trainees; participants need all the information in the curriculum.

Training timelines allow for interactivity and creativity. However, trainers must remember that adding extra exercises and allowing extended discussion will increase the time needed to complete the module.

Time is allotted in Module 1 for a ceremonial welcome. The trainer may want to invite a representative from the organization sponsoring the training and/or a guest speaker (e.g., community leader, local thought leader in the field of substance use prevention, local prevention program director etc.) to welcome participants to the training. Such a welcome can impress on participants the importance of the training.

Getting Started: Preparation Checklists

1 to 2 months before the first session

☐ Review the curriculum carefully.

☐ Review Appendix D—Resources for background reading.

☐ Determine who will attend the training.

☐ Develop a retraining package for trainees.

☐ Develop an overall schedule for the training, including dates and times for each module.

☐ Arrange for the training space and audiovisual equipment.

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☐ *Obtain all necessary training materials.*

☐ *Invite guest speakers.*

☐ Make arrangements for refreshments, including lunches if they are provided.

☐ Prepare a list of local resources for additional training and support for participants. The list could include:

    ○ Other training programs that are or will be available;

    ○ Names of local individuals or programs that may be helpful; and

    ○ The trainer's email address or telephone number and an invitation for participants to contact the trainer with questions or issues (if appropriate).

1 to 2 weeks before the first session

☐ Confirm participants' registration.

☐ Confirm guest speakers.

☐ Secure enough copies of the Participant Manual.

☐ Download or order copies of the UNODC *International Standards for Drug Use Prevention*; you can advise participants that they can order the *European Drug Prevention Quality Standards*: A Manual For Prevention Professionals in class.

☐ Load the PPT presentations onto the laptop computer.

☐ Review the entire training manual.

☐ Prepare and make a copy of daily schedules for each participant.

1 to 2 days before the first session

☐ Finalize room and equipment arrangements.

☐ Verify onsite lunch arrangements, if necessary.

☐ Set up the room.

☐ Prepare name badges, if necessary.

☐ Make copies of the first day's Daily Evaluation form.

☐ Gather all supplies, including the *Participant Manual*, notebooks, and copies of the International and European Standards documents, daily schedules and evaluation forms.

☐ Review "Before every session" (below).

Before every session

Review the checklist before presenting each module.

The training space

☐ Arrange chairs for each session in a comfortable way, keeping in mind that space is needed for both small- and large-group exercises.

☐ Prepare posters or other materials illustrating key concepts and terms, and post them around the training room.

☐ Save and post key newsprint pages and posters generated during the training to use for review.

Equipment and materials

☐ CD player for instrumental background music.

☐ Computer, LCD projector, and screen.

☐ Newsprint pads (flipcharts) and easel, and crayons or markers.

☐ Evaluations forms.

☐ Pins, tacks, or tape to post newsprint on the walls.

☐ All other materials needed for the session.

☐ A timer (optional).

General preparation

☐ Review the Preparation Checklist and the modules.

☐ Assemble and test necessary equipment, materials, and supplies.

☐ **Prepare to have fun!**

After each session

☐ Review completed Module Evaluation forms for suggestions for the next day's delivery.

☐ Secure creative and/or key newsprint resources (e.g., definitions, creative artwork, relevant case studies) developed by participants for use as a final review and in future trainings.

☐ Add into the curriculum content information contributed by participants and/or the co-trainers.

MASTER AGENDA

DAY 1 Date:_____

Module 1—Training Introduction		
Time of Day	**Time of Session**	**Content**
0900-0930	30 minutes	Ceremonial welcome
0930-0945	15 minutes	Trainer welcome, housekeeping, and ground rules
0945-1045	60 minutes	Partner exercise: Introductions
1045-1100	*15 minutes*	*Break*
1100-1115	15 minutes	Presentation: Training materials
1115-1130	15 minutes	Why this training?
1130-1145	15 minutes	Large-group exercise: Training expectations
1145-1230	45 minutes	Small-group exercise: What kinds of information do you think you need to develop substance use prevention programming in your community? Where would you get this information?
1230-1330	*60 minutes*	*Lunch*
Total Time = 270 minutes (4 hours 30 minutes)		

Module 2—Epidemiology of Substance Use and the Role of Prevention		
Time of Day	**Time of Session**	**Content**
1330-1345	15 minutes	Introduction to module 2
1345-1410	25 minutes	Presentation: Why prevention is important
1410-1510	60 minutes	Presentation: Substance use: Impact on health
1510-1525	*15 minutes*	*Break*
1525-1540	15 minutes	Large-group exercise: Global substance use and prevention
1540-1555	15 minutes	Large-group exercise: What is epidemiology?
1555-1625	30 minutes	Presentation: Epidemiology and prevention
1625-1655	30 minutes	Small-group exercise: How epidemiology contributes to prevention
1655-1705	10 minutes	Wrap-up
End of Day 1		

MASTER AGENDA

DAY 2   Date:_____

Module 2—Epidemiology of Substance Use and the Role of Prevention (Continued)		
Time of Day	**Time of Session**	**Content**
0900-1000	60 minutes	Presentation and discussion: Vulnerability to substance use and progression to addiction
1000-1015	*15 minutes*	*Break*
1015-1100	45 minutes	Presentation and discussion: Environmental influences and the Etiology Model
1100-1130	30 minutes	Small-group exercise: Major environmental influences and interventions
1130-1145	15 minutes	Presentation and discussion: The need for integrated substance use services
1145-1215	30 minutes	Presentation and discussion: Epidemiology and prevention review
1215-1230	15 minutes	Module 2 evaluation
1230-1330	*60 minutes*	*Lunch*
Total Time = 485 minutes (8 hours 5 minutes)		

Module 3—Definitions and Behaviors Addressed by Prevention. What Is Prevention Science?		
Time of Day	**Time of Session**	**Content**
1330-1345	15 minutes	Introduction to module 3
1345-1415	30 minutes	Presentation and discussion: Definitions and principles
1415-1425	10 minutes	Presentation: Prevention intervention and policy development
1425-1455	30 minutes	Presentation and discussion: Building interventions based on substance use prevention theories
1455-1530	35 minutes	Presentation and discussion: Developing and adapting evidence-based substance use prevention interventions and policies
1530-1545	*15 minutes*	*Break*
1545-1630	45 minutes	Small-group exercise: Community problem

MASTER AGENDA

DAY 2 (Continued)   Date:_____

Module 3—Definitions and Behaviors Addressed by Prevention. What Is Prevention Science?		
Time of Day	**Time of Session**	**Content**
1630-1640	10 minutes	Presentation: Prevention research methodologies
1640-1655	15 minutes	Review and discussion: Why prevention science is important
1655-1710	15 minutes	Module 3 evaluation and wrap-up
End of Day 2		
Total Time = 220 minutes (3 hours 40 minutes)		

DAY 3   Date:_____

Module 4—Introduction to Monitoring and Evaluation: Key to Prevention Research		
Time of Day	**Time of Session**	**Content**
0900-0915	15 minutes	Introduction to module 4
0915-0935	20 minutes	Presentation: Evaluation and research
0935-0945	10 minutes	Presentation: Evaluation methods and intent
0945-1000	*15 minutes*	*Break*
1000-1100	60 minutes	Presentation and discussion: Evaluation system and research designs
1100-1130	30 minutes	Presentation and discussion: Sampling and measurement
1130-1145	15 minutes	Data collection, analysis, and statistics
1145-1205	20 minutes	Presentation: Summary and review of module 4
1205-1220	15 minutes	Module 4 evaluation
1220-1320	*60 minutes*	*Lunch*
Total Time = 260 minutes (4 hours 20 minutes)		

MASTER AGENDA

DAY 3 (Continued)   Date:_____

Module 5—Evidence-Based Prevention Interventions and Policies: The UNODC International Standards on Drug Use Prevention		
Time of Day	**Time of Session**	**Content**
1320-1340	20 minutes	Introduction to module 5
1340-1405	25 minutes	Presentation and discussion: How the International Standards were developed
1405-1425	20 minutes	Presentation: What makes it evidence-based prevention?
1425-1445	20 minutes	Presentation and discussion: Quality of the studies and intervention categories
1445-1500	*15 minutes*	*Break*
1500-1545	45 minutes	Small-group exercise: Preparation for presentations on EB interventions/policies that target populations
1545-1605	20 minutes	Presentation and discussion: Infancy and early childhood
1605-1635	30 minutes	Presentation and discussion: Middle childhood
1635-1705	30 minutes	Presentation and discussion: Early adolescence and adolescence
1705-1735	30 minutes	Presentation and discussion: Late adolescence and adulthood
1735-1745	10 minutes	Wrap-up
End of Day 3		

MASTER AGENDA

DAY 4   Date:_____

Module 5—Evidence-Based Prevention Interventions and Policies: The UNODC International Standards on Drug Use Prevention (Continued)		
Time of Day	**Time of Session**	**Content**
0900-0915	15 minutes	Presentation and discussion: What have we learned from the International Standards
0915-1000	45 minutes	Small-group exercise: Applying EB strategies to your community
1000-1015	15 minutes	Module 5 evaluation
1015-1030	*15 minutes*	*Break*
Total Time = 355 minutes (5 hours 55 minutes)		

Module 6 — The Role of the Substance Use Prevention Coordinator and Prevention Specialist		
Time of Day	**Time of Session**	**Content**
1030-1045	15 minutes	Introduction to module 6
1045-1105	20 minutes	Presentation: Prevention coordinators: Professional development
1105-1125	20 minutes	Presentation and discussion: Primary tasks of the prevention coordinator
1125-1135	10 minutes	Presentation: Prevention coordinator skills
1135-1220	45 minutes	Large- and small-group exercise: Who are the stakeholders in your community
1220-1320	*60 minutes*	*Lunch*
1320-1340	20 minutes	Presentation: Prevention coordinator skills (continued)
1340-1410	30 minutes	Presentation: Community needs assessment
1410-1430	20 minutes	Large-group discussion: Needs assessment in the community
1430-1445	15 minutes	Presentation: Substance use prevention interventions: Understanding the evidence base
1445-1500	*15 minutes*	*Break*

MASTER AGENDA

DAY 4 (Continued) Date:_____

Module 6—The Role of the Substance Use Prevention Coordinator and Prevention Specialist (Continued)		
Time of Day	**Time of Session**	**Content**
1500-1530	30 minutes	Presentation and discussion: Selecting EB preventive interventions and implementation
1530-1630	60 minutes	Small-group exercise: Community/country teams develop prevention strategies
1630-1645	15 minutes	Presentation: Supervisory skills
1645-1700	15 minutes	Wrap-up
End of Day 4		

DAY 5 Date:_____

Module 6—The Role of the Substance Use Prevention Coordinator and Prevention Specialist (Continued)		
Time of Day	**Time of Session**	**Content**
0900-0930	30 minutes	Presentation and discussion: Professional ethics
0930-0950	20 minutes	Presentation: Professional competence and integrity
0950-1035	45 minutes	Individual review and large-group discussion: What would you do: Ethics case studies
1035-1050	15 minutes	Module 6 evaluation
1050-1105	15 minutes	Break
Total Time = 515 minutes (8 hours 35 minutes)		

MASTER AGENDA

DAY 5 (Continued)   Date:_____

Module 7—Review of Introduction to Prevention Science: Application to Practice		
Time of Day	**Time of Session**	**Content**
1105-1120	15 minutes	Introduction to module 7 and review of exercise
1120-1220	60 minutes	Small-group exercise: Development of a plan to organize a preventive intervention in your country or community to integrate learning from this introductory curriculum
1220-1320	*60 minutes*	*Lunch*
1320-1405	45 minutes	Large-group discussion: Review of plans,approaches to overcoming barriers, and general Q & A session
1405-1435	30 minutes	Overall training evaluation
1435-1505	30 minutes	Program completion ceremony and socializing
End of Day 5		
Total Time = 240 minutes (4 hours)		

MODULE EVALUATION

Date   : _____   Trainer 1: _____

Module: _____   Trainer 2: _____

To be completed at the end of each day by training participants.

Please indicate your agreement with these statements about today's session	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. The training was well organized.					
2. The trainers were knowledgeable about the subject					
3. The trainers were well prepared for the course.					
4. The trainers were open to participant comments and questions.					
5. The training topics were relevant to my work.					
6. I expect to use the information gained from this training.					
7. I would recommend this training to a colleague.					
Please complete the following statements:					
One thing I learned today that I plan to use in my work is:					
What I liked best about todays' training was:					
I wish there had been more information about:					
Today's training could have been better if:					
Other comments:					

CURRICULUM 1-INTRODUCTION TO PREVENTION SCIENCE

OVERALL TRAINING EVALUATION

Date   : _____   Trainer 1: _____

                                    Trainer 2: _____

Please indicate your agreement with these statements about the training OVERALL	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Training Methodology					
1. The training objectives were clearly stated.					
2. Objectives of the training were achieved.					
3. Material was clearly presented.					
4. The training activities/exercises allowed the practice of important concepts.					
5. The training provided balance among presentations, activities, participant questions, and discussions.					
6. The training topics were relevant to my work.					
7. I expect to use the information gained from this training.					
8. I would recommend this training to a colleague.					
9. The training modules were presented in logical order.					
Training Materials					
1. Visual aids were adequate and facilitated the learning process.					
2. Manuals were helpful and facilitated understanding of the topics.					
3. Translation services (if applicable) were adequate and facilitated the learning process.					
Trainers (for each trainer)					
1. a. Trainer 1 was well prepared. b. Trainer 2 was well prepared.					
2. a. Trainer 1 was knowledgeable about the subject matter. b. Trainer 2 was knowledgeable about the subject matter.					
3. a. Trainer 1 communicated the material in a meaningful way. b. Trainer 2 communicated the material in a meaningful way.					
4. a. Trainer 1 provided clear answers to participant questions. b. Trainer 2 provided clear answers to participant questions.					
5. a. Trainer 1 promoted engagement and participation. b. Trainer 2 promoted engagement and participation.					

(continued)

Please complete the following statements:
The **most** useful module was:
The **least** useful module was:
Before this training is presented again, I suggest the following changes:
I would be interested in having further training on these topics:

Other comments

MODULE 1

TRAINING INTRODUCTION

Module 1 Preparation Checklist

- ■ Review Getting Started for general preparation information.

- ■ Preview Module 1.

- ■ Prepare for ceremonial welcome.

- ■ If you are not providing lunch, prepare a list of possible options for participants.

- ■ Write on newsprint the following ground rules, leaving room for more items:

  - • Ask questions;

  - • Make mistakes;

  - • Collaborate; and

  - • Have fun!

- ■ Tape two sheets of newsprint together, label them "Training Expectations," and post the sheets in a spot where they can stay until the training ends.

- ■ In addition to the materials listed in Getting Started, assemble the following:

  - • A *Participant Manual* for each participant;

  - • A copy of the overall training schedule and Master Agenda for each participant;

  - • A notebook for each participant:

    - ○ Copies of the UNODC International Standards for Drug Use Prevention and the European Drug Prevention Quality Standards: A Manual For Prevention Professionals

    - ○ *Index cards*

    - ○ *One glue stick or roll of tape for each table.*

- ■ *Place one index card on each chair.*

Content and Timeline		
Activity	Time	Person Responsible
Ceremonial Welcome	30 minutes	
Trainer welcome, housekeeping, and ground rules	15 minutes	
Partner exercise: Introductions	60 minutes	
Break	15 minutes	
Presentation: Training materials	15 minutes	
Presentation: Why this training?	15 minutes	
Large-group exercise: Training expectations	15 minutes	
Small-group exercise: What kinds of information do you think you need to develop substance use prevention programming in your community? Where would you get this information?	45 minutes	
Lunch	60 minutes	

Module 1 Goals and Objectives

Training goals

- To create a positive learning community and environment;

- To give participants background information about why the training is being done;

- To give participants a summary of the overall training goals, objectives, and learning approach of the curriculum; and

- To provide participants with a brief introduction to the types of information needed by prevention staff to develop prevention strategies.

Learning objectives

Participants who complete Module 1 will be able to:

- Explain the overall training goals and at least four objectives of the 5-day training;

- State at least one personal learning goal; and

- Briefly describe what types of information can help you undertake evidence-based prevention programming in your community.

🕐 30 minutes

Ceremonial welcome

Slide 1.1

International Centre for Credentialing and Education of Addiction Professionals (ICCE)
The Universal Prevention Curriculum (UPC) for Substance Use Training Series

Curriculum 1

Introduction to Prevention Science

MODULE 1—TRAINING INTRODUCTION

THE COLOMBO PLAN

Trainer welcome, housekeeping, and ground rules

Say:

Welcome! We want to thank you for taking the time to attend this training. Your presence here shows that you care about the people you work with, and are interested in improving the health of the citizens of your communities.

My name is_____, and my co-trainer is _____. We'll be working together to facilitate this training.

However, we want this training to be a collaborative process among all of us. Each of you brings experience, knowledge, and skills to share with others. The training will also be experiential; you will be actively involved in creating a learning community.

> **Teaching Instructions:** Review any important housekeeping items, such as where the restrooms are, where smoking is permitted, and where refreshment breaks will be. Turn to the Ground Rules newsprint page you prepared.

Say:

Let's take a few minutes to look at some ground rules for our time together. Ground rules help ensure a positive learning environment. I've written some very basic rules on this newsprint:

- *Ask questions;*
- *Make mistakes;*
- *Collaborate; and*
- *Have fun!*

All of these contribute to learning. Something else we need to add is, confidentiality.

> **Teaching Instructions:** Add "confidentiality" to the list of ground rules.

Say: *The training will include exercises in which you will work together and share your thoughts. To get the most of the experience, it is important that you feel safe in this training group. A commitment to maintaining confidentiality will help that happen.*

Now what other ground rules do you think we might need?

> **Teaching Instructions:** Add items to the list as they are mentioned. You may want to prompt participants if they do not mention things like being on time, no mobile calls or texting, and so on.

Say: *I think we have some great ground rules that will help us get the most out of our time together.*

Today's sessions, Modules 1 and about half of 2 will give you:

- *A chance to get to know one another (or to know one another better);*

- *An overview of the curriculum and training materials; and*

- *An introduction to the types of information needed by prevention staff to develop evidence-based prevention strategies.*

Learning Objectives

- Explain the overall training goals, e.g.,
  - Overview of prevention science
  - Selecting effective interventions and other skills/tools of prevention coordinators
- Understand at least four learning objectives, e.g.,
  - Progression of substance use and epidemiology
  - Prevention science and the UNODC International Standards of Drug Use Prevention
  - Prevention implementation, evaluation, and monitoring
- State at least one personal learning goal

1.2

Say:

Let's look at the learning objectives for Module 1. By the time we complete this module, I hope you will be able to:

- *Explain the overall training goals, e.g.,*
  - *Overview of prevention science*
  - *Selecting effective interventions and other skills/tools of prevention coordinators*
- *Understand at least four of the learning objectives, e.g.,*
  - *Progression of substance use and epidemiology;*
  - *Prevention science and the UNODC International Standards of Drug Use Prevention; and*
  - *Prevention implementation, evaluation, and monitoring.*
- *State at least one personal learning goal.*

First, we're going to do an exercise that will help us get to know one another.

60 minutes

Partner exercise: Introductions

Partner Exercise: Introduction

- What is your name?
- What is your job title? What does your job entail?
- Can you tell me a recent amusing experience or exciting adventure you may have had recently OR one interesting fact about yourself (this could be a special skill, interest, hobby)?

1.3

Say:

When you came in today, you found two index cards on your chair. Please take one of the cards out now. I'd like you to take 2 minutes to write your answers to the questions on the slide.

Teaching Instructions: Allow 2 minutes or until everyone seems to have finished writing.

Say: *Now please find a partner—preferably someone you don't already know. And include your trainers!*

Once you have your partner, you will have 5 minutes each to introduce yourselves to one another, using the questions and answers on your card as a guide:

- *What is your name?*

- *What is your job title? What does your job entail?*

- *Can you tell me a recent amusing experience or exciting adventure you may have had recently, OR one interesting fact about yourself (this could be a special skill, interest, hobby)?*

Once you know your partner better, you will be introducing him or her to the rest of the training group.

> **Teaching Instructions:** Including yourself in the partner exercise will help reinforce the collaborative nature of the training. Sharing something interesting or amusing about yourself will also help participants know you better and increase their comfort levels.
>
> Even though you are participating, watch the time and 5- and 2-minute warnings.

Say: *Now, each of us will introduce our partners to the whole training group, using what we learned from them. Who would like to go first?*

> **Teaching Instructions:** Facilitate the introductions by ensuring that each person takes only a few minutes.

Say: *Thank you all for sharing! _____ will now collect your cards and put them on the newsprint labeled "Participants" so you can review them at any time.*

Presentation: Training materials

Slide 1.4

Training Materials

- Master Agenda
- *Participant Manual*
- Power Point slides with lines to note
- Notebook for a journal
- *UNODC International Standards on Drug Use Prevention*
- *European Drug Prevention Quality Standards (To be ordered)*

1.4

Say: *Now, we're going to take a look at the materials you received as you came in this morning.*

Teaching Instructions: Call participants' attention to the Master Agenda and briefly review it. Hold up each piece as you explain the training materials.

Say: *Please refer to your Participant Manual. This manual plays an important role in the training process. You should bring it with you each day.*

Take a minute to look through the manual. It begins with Part I—Participant Orientation, page 1; read it as soon as you have a chance. Part II, beginning on page 21 includes, for each module:

- ***Introduction*** *to each module – At the beginning of each module, we will set aside approximately 5 minutes for you to review this introduction on your own; it will highlight the content of the module and touch on the major concepts to be covered.*

- ***Power Point slides*** *with lines for notes*

- ***Resource Pages***; *these pages have information you'll need for exercises, information to read later, or exercise instructions; and*

- *A **Module Summary** expanding on the introduction with citations for future reference.*

Finally, the manual includes a Glossary on page 543 and a list of Resources on page 551.

Next, you have a notebook to use as a journal. We'll be giving you specific journal writing exercises from time to time. You can also use the journal to note:

- *Shared resources you would like to review at a later date:*

- *Topics you would like to read more about;*

- *An idea you would like to think more about, and*

- *Ways you might be able to add some of the things you are learning to your practice.*

The last module of this training will be devoted to sharing and discussing in both small groups and the whole training group, ideas that you have about integrating the training into your community prevention practice, so keep track of your ideas as we go along.

> **Teaching Instructions:** Arrange to download a copy of the International Standards for Drug Use Prevention and make copies for the participants; and, in the first class, direct the participants to order a free copy of the European Drug Prevention Quality Standards, which is too large to download. Have a copy for display.

Now, take a look at the International Standards for Drug Use Prevention, produced by the United Nations Office of Drugs and Crime (UNODC), to serve as a guide for policy-makers on the concept of 'evidence-based' prevention interventions and policies. This publication also serves as the basic foundation of this curriculum series, which is designed to help prevention practitioners put into practice the knowledge gleaned from more than 20 years of prevention research. This document will also help as a resource as we proceed through this curriculum in understanding prevention science and its implications for prevention service delivery. So, keep it handy!

The European Drug Prevention Standards is a joint production by the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) and the Prevention Standards Partnership, and presents and describes basic and expert level quality standards for substance use prevention. The standards cover all aspects of substance use prevention work, including needs and resource assessment, program planning, intervention design, resource management, implementation, monitoring and evaluation, dissemination, sustainability, stakeholder involvement, staff development, and ethics. Considerations regarding the standards' real-life implementation are provided, acknowledging differences in professional culture, policy, and the structure of prevention delivery within Europe. So, this publication can serve as an important guide after training as you undertake your prevention work. You can order a copy of your own at the website with the following URL: http://www.emcdda.europa.eu/publications/manuals/prevention-standards .

Presentation: Why this training?

Slide 1.5

Substance Use World-Wide

- The United Nations Office on Drugs and Crime (UNODC) reports that, in 2012, 162 to 324 million people between ages 15 and 64 used illicit substances at least once.
- Of those who use psychoactive substances, 10%-14% will develop substance use problems.

1.5

Say:

Welcome back! Now, let's look at some of the reasons this training series was developed.

Psychoactive substance use and substance use disorders (SUDs) continue to be major problems around the world, taking a toll on global health and on social and economic functioning. The United Nations Office on Drugs and Crime (UNODC) reports that, in 2012, 162 to 324 million people between ages 15 and 64 used illicit substances at least once. Of these, about 10-14% will develop substance use problems.

Illicit substances in the survey included opioids, cannabis, cocaine, other amphetamine-type stimulants, hallucinogens, and ecstasy, among others.

UNODC, (2014). World drug report 2014, New York: United Nations.

Teaching Instructions: The statistics regarding global drug use were current at the time of printing. You can stay up-to-date by periodically checking the web sites of the World Health Organization and United Nations Office on Drugs and Crime:

http://www.who.int/substance_abuse/facts/global_burden/en-index.html

http://www.unodc.org/documents/wdr/

World Extent of Psychoactive Substance Use

Illicit Drugs

Alcohol

Tobacco

185 million illicit drug users Source: UNDCP, 2002

2 billion alcohol users Source: WHO, 2002

1.3 billion smokers Source: WHO, 2002

http://www.who.int/substance_abuse/facts/global_burden/en/

1.6

Say:
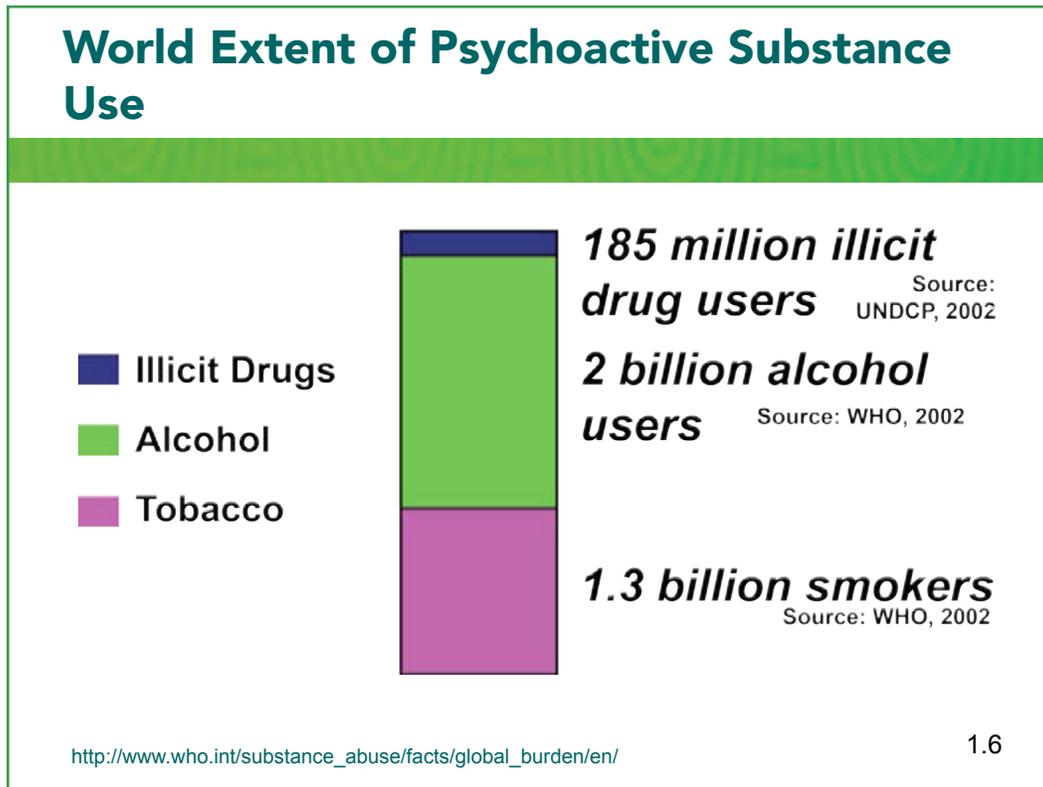
In addition, the World Health Organization estimates that there are 2 billion alcohol users and 1.3 billion smokers.

Leading Causes of Attributable Global Mortality and Burden of Disease, 2004

Attributable Mortality	%	Attributable Disability-Associated Life Years	%
1. High blood pressure	12.8	1. Childhood underweight	5.9
2. Tobacco use	8.7	2. Unsafe sex	4.6
3. High blood glucose	5.8	3. Alcohol use	4.5
4. Physical inactivity	5.5	4. Unsafe water, sanitation, hygiene	4.2
5. Overweight and obesity	4.8	5. High blood pressure	3.7
6. High cholesterol	4.5	6. Tobacco use	3.7
7. Unsafe sex	4.0	7. Suboptimal breastfeeding	2.9
8. Alcohol use	3.8	8. High blood glucose	2.7
9. Childhood underweight	3.8	9. Indoor smoke from solid fuels	2.7
10. Indoor smoke from solid fuels	3.3	10. Overweight and obesity	2.3
59 million total global deaths in 2004		**1.5 billion total global DALYs in 2004**	

1.7

Say:

Tobacco use and alcohol use are the second and eighth leading causes of death, and third and sixth leading causes of years of life lost due to premature death and to disability.

49

Disability Adjusted Life Years (DALY)

	Mortality (% of all deaths worldwide)	DALYs (% of total years of life lost)
Tobacco	8.8	4.1
Alcohol	3.2	4.0
Illicit drugs	0.4	0.8

Disability Adjusted Life Years (DALY) are calculated by adding the years of life lost due to premature mortality and the years of life lost due to living with disability. The years of life lost due to disability are determined from morbidity, where each disease has been given a certain disability weight, which is multiplied with the time spent with that disease, to arrive at the years of life lost due to disability.

http://www.who.int/substance_abuse/facts/global_burden/en/

1.8

Say:

WHO also estimates that approximately 12% of all deaths are attributable to tobacco and alcohol use.

In addition to deaths, the number of years of life lost due to premature mortality (early death) and due to living with disability [called Disability Adjusted Life Years (DALY)] amount to 8% of total years of life lost attributable to tobacco and alcohol use.

Prevalence of Substance Use (18-29 Year Olds)

Country	Tobacco	Alcohol	T & A	Cannabis	Other drugs	Other Drugs W/ Cannabis Initiations
Colombia	49.1	96.1	96.8	14.4	7.2	42.2
Mexico	64.4	91.5	92.1	11.5	9.6	58.3
USA	74.4	96.2	96.0	57.6	27.3	12.6
Belgium	–	88.4	88.4	31.0	10.2	8.7
France	–	94.5	94.5	52.9	11.0	21.7
Italy	–	79.6	79.6	17.4	1.1	27.0
Netherlands	–	92.6	92.6	38.9	15.5	40.7
Ukraine	81.1	99.7	99.4	15.2	2.6	32.1
Nigeria	9.0	62.1	63.1	3.1	0.4	93.1
South Africa	33.1	45.5	52.0	12.7	3.0	51.1
China	49.3	78.7	84.0	1.4	0.6	–
Japan	–	97.2	97.2	4.5	4.8	77.3
New Zealand	–	95.4	95.4	63.0	23.6	7.0

Degenhardt et al., 2010

1.9

Say:

Substance use varies across the world. A study conducted internationally by a team of epidemiologists with support from the World Health Organization found that most countries have high rates of combined alcohol and tobacco use among 18-29 year olds. The use of cannabis and other drugs varied across the world with New Zealand and the USA leading with 87% and 85%, respectively, and China and Japan reporting the lowest rates of 2% and 9%, respectively.

Variation of Disability-Adjusted Life Years by Substance

1.10
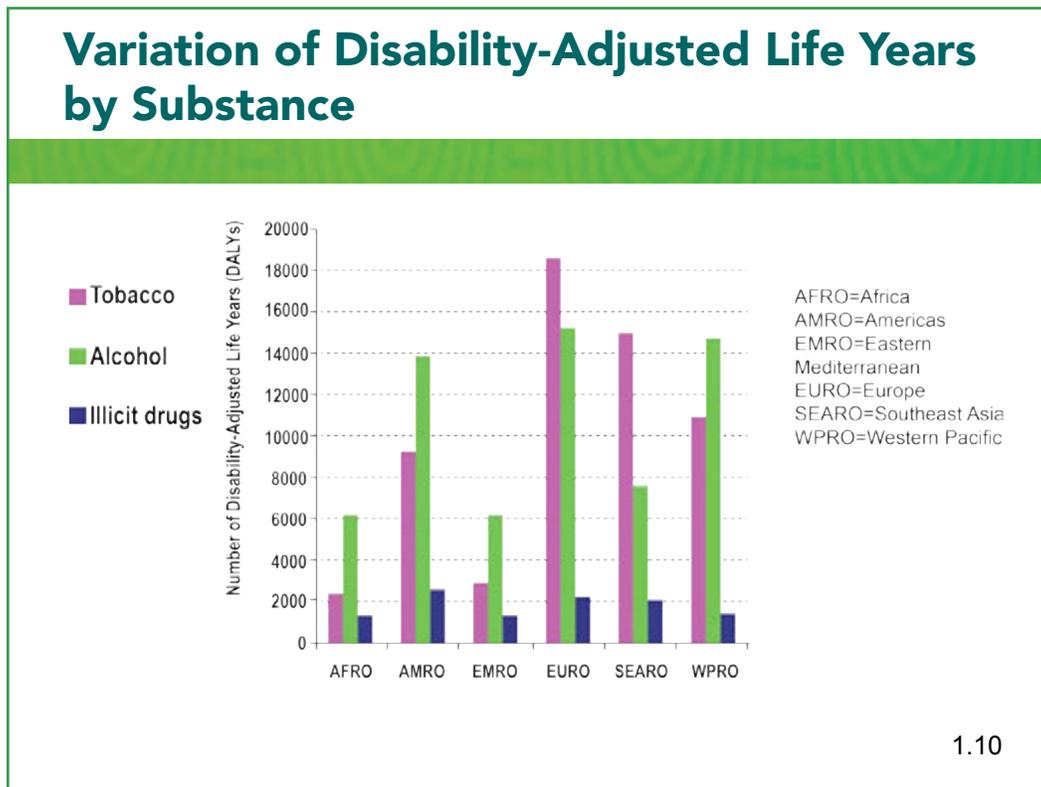
Say:
We also know that the number of Disability-Adjusted Life Years varies by substance across the world. This slide presents estimates from the World Health Organization. Europe leads in DALY for tobacco and alcohol with the Eastern Mediterranean countries and Africa having the lowest DALY for these substances.

In Module 2, we will look at the extent of substance use around the world and, how epidemiology is a key to understanding how to intervene with prevention programs and strategies with target populations at-risk for abuse and addiction. But first, we need to look at prevention itself and how it serves global health and well-being.

Why is Prevention of Health and Social Problems Important for any Nation?

■ Health is linked to:
- ▫ Rising incomes
- ▫ Increased productivity
- ▫ Children's education
- ▫ Adult well-being

1.11

Say:

So, we ask the question: Why is prevention important for any nation? There is growing recognition that health not only has a direct impact on human welfare, but also is related to raising income levels through: worker productivity, children's education, savings and investment, and demographic structure.

> ## Why is Substance Use Prevention Important?
>
> - The primary objective of substance use prevention is to help people, particularly young people, avoid or delay the initiation of the use of psychoactive substances, or, if they have started already, to avoid the development of disorders (e.g. dependence).
>
> - The general aim of substance use prevention is much broader, the healthy and safe development of children and youth to realize their potential and become contributing members of their community and society.
>
> 1.12

Say:

Why is Substance Use Prevention Important?

Substance use prevention stops people from beginning to use drugs and other psychoactive substances, and can help those who have started to avoid progressing to substance abuse and substance use disorders. But substance use prevention has a broader intent, the healthy and safe development of children and youth to realize their talents and potential. It does this by helping them positively engage with families, schools, peers, workplace and communities.

But prevention has to work, if it is to help. And, that only happens if evidence-based substance use prevention interventions and policies are implemented. What we mean is, we are taking what we have learned in research to apply it in the "real-world" of communities so we can be more successful in preventing problem behaviors that impede healthy growth.

And what is your role in all of this? You have come to this training to learn the latest research-based information about substance use that you could use in your prevention work. You may not all share the same title, but you all share many of the same tasks in being the face of prevention for your workplace, community, or even country. Some of your work for government offices at various levels, or non-governmental organizations, or a local government service agency, or a university.

Prevention Coordinators: The Face of Prevention

Prevention Coordinators:

■ Translate prevention science for policy-makers, decision-makers and major stakeholders, and the public

■ Apply their understanding of prevention science to promote the quality delivery of evidence-based prevention programming

1.13

Say: *For simplicity sake, we will use the term Prevention Coordinators for your type of work. As the "face" of Prevention, you are also its "voice". You translate prevention science for policy-makers, decision makers and major stakeholders, as well as the public. And after this training, you will apply your understanding of prevention science to promote the quality of delivery of evidence-based prevention programming either by yourself, or by those you may supervise.*

We will discuss your roles and the competencies and skills needed to perform these two major responsibilities in Module 5 of this first curriculum that introduces you to prevention science and its application to substance use prevention. This curriculum is designed to lay a knowledge foundation that will be repeated in the other curricula in this series.

Training Series Goal

- To reduce the significant health, social, and economic problems associated with substance use throughout the world by:
  - Building international prevention capacity through training, professionalizing, and expanding the substance use prevention workforce.

1.14

Say:

This curriculum is part of a training series developed through funding from the U.S. Department of State to The Colombo Plan for the International Centre for Credentialing and Education of Addiction Professionals.

The overall goal of the training series is to reduce the health, social, and economic problems associated with substance use by building international prevention capacity through training about the most effective evidence-based prevention interventions and strategies, professionalizing the prevention coordinator and specialist standards, and expanding the global prevention workforce. This curriculum series focuses on applying the key findings reported in the International Standards for Drug Use Prevention to "real-world" communities around the globe. You will find a list of the curricula included in the training series on Resource Page 1.1 page 28 in your manuals.

Overarching Themes (1/2)

- Substance use inclusion: Tobacco & alcohol, illegal drugs, inhalants and the non-medical use of Rx drugs
- The "science of prevention" and how it can provide effective interventions for families, schools, workplace and communities
- Evidence-based (EB) interventions and policies and how to use them

1.15

Say: *Here are the overarching themes that are incorporated into the curriculum series which we will discuss in each curriculum.*

Teaching Instructions: Read the bullets on the slides.

Overarching Themes (2/2)

- Developmental nature of substance use
- The Etiology Model: Substance use is a result of interactions between environmental factors and the characteristics of individuals
- Prevention professionals need to be "expert" in a multiple of disciplines
- Emphasis on the skills to convene stakeholders, analyze data, and implement, monitor, and evaluate outcomes

1.16

Curricula in the Series

- Curriculum 1: Introduction to Prevention Science (5 days)
  - Foundational and basic knowledge, not skills-based
  - Overview of the science that underlies evidence-based prevention interventions and strategies and the application of these effective approaches in prevention practice

1.17

Say:

So that you'll know more about what to expect during the training, we're going to take a few minutes to look at the entire training series. We will go into this curriculum more in-depth when we begin the training in a few minutes.

Curriculum 1: Introduction to Prevention Science is a 5-day Curriculum that provides an overview of the science that underlies evidence-based prevention interventions and strategies and the application of these effective approaches in prevention practice.

Curricula in the Series

- Curriculum 2: Physiology and Pharmacology for Prevention Specialists (3 days)
  - Foundational and basic knowledge, not skills-based
  - Overview of the physiology and pharmacology of psychoactive substances and their effects on the brain to affect mood, cognition, and behavior and the consequences of such use on the individual, the family, and the community

1.18

Say:
Curriculum 2: Physiology and Pharmacology for Prevention Specialists is a 3-day course that provides an overview of the physiology and pharmacology of psychoactive substances and their effects on the brain to affect mood, cognition, and behavior and the consequences of such use on the individual, the family, and the community.

Curricula in the Series

- Curriculum 3: Monitoring and Evaluation of Prevention Interventions and Policies (5 days)
  - Skills-based
  - Describes the primary evaluation methods used to measure evidence-based drug use prevention interventions; provides guidance in applying them to "real-world" settings

1.19

Say:

Curriculum 3: Monitoring and Evaluation of Prevention Interventions and Policies is a 5-day curriculum that describes the primary evaluation methods used to measure evidence-based substance use prevention interventions; and provides guidance in applying them to "real-world" settings.

Curricula in the Series

- Curriculum 4: Family-Based Prevention Interventions (4 days)
  - Foundational and basic knowledge, not skills-based
  - Overview of the family as the primary socialization agent of children, the science behind family-based prevention interventions, and the application of such evidence-based approaches to help prevent the onset of substance use in children

1.20

Say:
Curriculum 4: Family-Based Prevention Interventions is a 4-day course that provides an overview of the family as the primary socialization agent of children, how micro- and macro-environmental influences interact to affect families and the risk of substance use, the science behind family-based prevention interventions, and the application of such evidence-based approaches to help prevent the onset of substance use in children.

Curricula in the Series

■ Curriculum 5: School-Based Prevention Interventions (5 days)

◻ Foundational and basic knowledge, not skills-based

◻ Overview of the school in society, the science behind school-based prevention interventions, and the application of such evidence-based approaches in school settings around the world

1.21

Say:

Curriculum 5: School-Based Prevention Interventions is a 5-day course that overviews the role of school in society, the science behind school-based prevention interventions, and the application of such evidence-based prevention interventions in school settings around the world.

Curricula in the Series

- Curriculum 6: Workplace-Based Prevention Interventions (3 days)
  - ◻ Foundational and basic knowledge, not skills-based
  - ◻ Overviews the role of work and the workplace in society, how stresses and other work-related influences affect people's risk of substance use, the science behind workplace prevention interventions, and the application of such evidence-based approaches in work settings around the world

1.22

Say:

Curriculum 6: Workplace-Based Prevention Interventions is a 3-day course that overviews the role of work and the workplace in society, how stresses and other work-related influences affect people's risk of substance use, the science behind workplace prevention interventions, and the application of such evidence-based approaches in work settings around the world.

Curricula in the Series

- Curriculum 7: Environment-Based Prevention Interventions (3 days)
  - Foundational and basic knowledge; and skills-based
  - Overviews the science underlying evidence-based drug use prevention environmental interventions involving policy and community-wide strategies

1.23

Say:

Curriculum 7: Environment-Based Prevention Intervention is a 3-day curriculum on the science underlying evidence-based substance use prevention environmental interventions involving policy and community-wide strategies, and will focus primarily on underage alcohol and tobacco use prevention strategies and policy.

Curricula in the Series

- Curriculum 8: Media-Based Prevention Interventions
  (3 days)
  - Foundational and basic knowledge; and skills-based
  - Overviews the science underlying the use of media for substance use prevention interventions

1.24

Say:

Curriculum 8: Media-Based Prevention Interventions is a 3-day curriculum that overviews the science underlying substance use prevention media interventions, then presents skills on the use of media for evidence-based prevention interventions.

Curricula in the Series

■ Curriculum 9: Community-Based Prevention Implementation Systems (5 days)

◻ Foundational, and skills-based

◻ Overviews the science underlying systems approaches to prevention interventions; presents exemplars of evidence-based drug use prevention systems; and provides guidance on developing such approaches

1.25

Say:

Curriculum 9: Community-Based Prevention Implementation Systems is a 5-day curriculum that overviews the science underlying systems approaches to prevention interventions; presents exemplars of evidence-based substance use prevention systems; and provides guidance on developing such approaches.

Curriculum 1 Training Goals

- To provide an overview of the science that is the foundation for prevention;
- To provide an overview of the information needed to inform the selection of prevention interventions;
- To provide participants with the tools to inform stakeholders and policy-makers about the foundation of evidence-based drug use prevention;
- To provide participants with the tools to coordinate and supervise drug use prevention specialists

1.26

Say:
Now, let's take a look at the goals and objectives of this 5-day training, Introduction to Prevention Science. The overall goals of the training are:

- *To provide an overview of the science that is the foundation for prevention;*

- *To provide an overview of the information needed to inform the selection of prevention interventions;*

- *To provide participants with the tools to inform stakeholders and policy-makers about the foundation of evidence-based substance use prevention;*

- *To provide participants with the tools to coordinate and supervise substance use prevention specialists.*

Curriculum 1 Learning Objectives (1)

■ Discuss the levels of progression of substance use and the role of prevention;

■ Explain the scientific foundation of prevention to the public, stakeholders, policy-makers, and drug use prevention specialists;

　□ the importance of understanding the who, what, when, where, and how of substance use within the defined community

　□ the importance of understanding the influence of personal and environmental factors on vulnerability and risk

　□ the importance of understanding human development both for targeting interventions but also for' tailoring messaging and intervention strategies

　□ the importance of applying empirically-based behavior change theories

　□ the importance of research to understanding how effective interventions 'work'

1.27

Say:

At the end of these 5 days, I hope you will be able to:

■ *Discuss the levels of progression of substance use and the role of prevention;*

■ *Explain the scientific foundation of prevention to the public, stakeholders, policy-makers, and substance use prevention specialists; especially,*

　• *The what, who, how, when and where of substance use within the defined community;*

　• *The influence of personal and environmental factors on vulnerability and risk;*

　• *Human development both for targeting interventions but also for tailoring messaging and intervention strategies;*

　• *How to apply empirically-based behavior change theories; and*

　• *The importance of research to understanding how effective interventions 'work'.*

Curriculum 1 Learning Objectives (2)

■ Describe the background and principles underlying the development of the United Nations Office on Drugs and Crime International Standards on Drug Use Prevention

■ Describe the importance of implementation fidelity and monitoring of the delivery of prevention interventions and the implementation of prevention polices

1.28

Say:

■ *Describe the background and principles underlying the development of the United Nations Office on Drugs and Crime International Standards on Drug Use Prevention*

■ *Describe the importance of implementation fidelity and monitoring of the delivery of prevention interventions and the implementation of prevention polices.*

 15 minutes

Large-group exercise: Training expectations

Slide 1.29

Large-group Exercise: Training Expectations

- Write two training expectations on your remaining index card

1.29

Say: *Before we move on, I'd like to take some time to consider your expectations for this training, given what you know so far. Please take 2 minutes to think about what you would like to get from these 5 days, and then write those expectations on the second index card.*

71

Teaching Instructions: After 1 minute, ask for volunteers to briefly share their training expectations with the group. As each participant gives his or her expectations, comment as appropriate. For example:

- Yes, we will definitely be able to meet that expectation.

- Yes, that's an important part of this training.

- Actually, we won't be getting into that much detail in this training; we'll be talking more about that in Curriculum X.

- That is not really in the scope of this curriculum, but I can help you find some resources on the topic.

Take no more than 10 minutes for sharing.

Say:

Thank you all for sharing! _____ is going to collect your cards now and attach them to the "Training Expectations" newsprint. We'll leave that newsprint up until the end of the training so we can check back from time to time and see how we're doing.

45 minutes

Small-group exercise: What kinds of information do you need for prevention

Slide 1.30

Small-Group Exercise: What Kinds of Information Do You Need for Prevention?

- **What kinds of data will you need to understand the substance use problem in your community?**
- **Where will you get it?**
  - Form small groups
  - Use newsprint to list the types of information and where you think you can get it
  - Report back to the large group

1.30

Say:

While we will go into detail about epidemiology in Module 2, which is the study of the onset of substance use (the incidence) and the continuation of use (the prevalence), we would like to introduce the topic with this exercise which asks you to think about the kinds of data you will likely need when you begin to plan evidence-based prevention programming for your community. What will you need to know to do that, and where will you get that information?

Please form groups of four to five people each to help you brainstorm what you will need. You won't need your manuals for this.

Teaching Instructions: As participants are forming groups, give each group two sheets of news print.

Say: *You will have 15 minutes to list the kinds of information and where you think you can get it. Then you will report back to the large group.*

Teaching Instructions: Provide 5- and 2-minute warnings.

When 15 minutes have elapsed, ask each group to begin its presentation. When all groups have presented, summarize the similarities and differences and move to Module 2.

Resource Page 1.1: Colombo Plan International Centre for Credentialing and Education of Addiction Professionals (ICCE) Universal Prevention Curriculum Series 1 (UPC-1)

Curriculum 1: Introduction to Prevention Science (5 days)

- Foundational and basic knowledge; and

- Overviews the science that underlies evidence-based prevention interventions and strategies and the application of these effective approaches in prevention practice.

Curriculum 2: Physiology and Pharmacology for Prevention Specialists (3 days)

- Foundational and basic knowledge, not skills-based; and

- Overview of the physiology and pharmacology of psychoactive substances and their effects on the brain to affect mood, cognition, and behavior, and the consequences of such use on the individual, the family, and the community.

Curriculum 3: Monitoring and Evaluation of Prevention Interventions and Policies (5 days)

- Skills-based; and

- Describes the primary evaluation methods used to measure evidence-based substance use prevention interventions; provides guidance in applying them to "real-world" prevention settings.

Curriculum 4: Family-based Prevention Interventions (4 days)

- Foundational and basic knowledge; and

- Overviews the family as the primary socialization agent of children, the science behind family-based prevention interventions, and the application of such evidence-based approaches to help prevent the onset of substance use in children.

Curriculum 5: School-based Prevention Interventions (5 days)

- Foundational and basic knowledge; and

- Overviews the school in society, the science behind school-based prevention interventions, and the application of such evidence-based approaches in school settings around the world.

Curriculum 6: Workplace-based Prevention Interventions (3 days)

- Foundational and basic knowledge; and

- Overviews the role of work and the workplace in society, how stresses and other work-related influences affect people's risk of substance use, the science behind workplace prevention interventions, and the application of such evidence-based approaches in work settings around the world.

Curriculum 7: Environment-based Prevention Interventions (3 days)

- Foundational and basic knowledge; and skills-based; and

- Overviews the science underlying evidence-based substance use prevention environmental interventions, involving policy and community-wide strategies.

Curriculum 8: Media-based Prevention Interventions (3 days)

- Foundational and basic knowledge; and skills-based; and

- Overviews the science underlying the use of media for substance use prevention interventions.

Curriculum 9: Community-based Prevention Implementation Systems (5 days)

- Foundational and skills-based; and

- Overviews the science underlying systems approach to prevention interventions; presents exemplars of evidence-based substance use prevention systems; and provides guidance on developing such approaches.

Resource Page 1.2: Overarching Themes of the Universal Prevention Curriculum (UPC) Series 1

There are several significant themes that need to be stressed throughout the UPC series. The first is the definition of **substance use**, which includes the use of tobacco and alcohol (which are usually illegal for children), the illegal drugs of abuse, inhalants and the non-medical use of prescription medications.

Another theme is the **science of prevention**, which has shown how substance use has affected individuals, families, schools, communities, and countries; and how it can be addressed with effective strategies, policies and interventions. This is likely to be a new concept for most of the participants in your training. That is one of the reasons why the United Nations Office on Drugs and Crime conducted a thorough review of prevention science to identify the most effective approaches to prevention that can have the strongest impact on the population.

Those effective interventions, also known as **evidence-based (EB) prevention interventions and policies**, are now available for implementation. This training is designed to help prevention practitioners select those interventions and policies that most likely address community need, implement these interventions and policies, and monitor the quality of the implementation and the outcomes for the participants.

The science has also explained **the developmental nature of substance use and similar behavioral problems**. This requires an understanding of how to intervene at various ages, starting with very young children, progressing through the more vulnerable teenage and young adult years, and continuing throughout the lifespan.

Another theme is that **substance use and other problem behaviors are generally the result of negative interactions between environmental factors and the characteristics of individuals**. EB prevention practices are designed to positively intervene in these different environments—e.g., the family, school, workplace, and community-wide. That is why we are producing curricula designed to assist prevention professionals in all of these settings.

Trained prevention professionals also need to be knowledgeable in a wide range of disciplines, including epidemiology, pharmacology, psychology, counseling, and education. They will learn how to apply these skills to assess the nature and extent of substance use in their area, identify the populations most at-risk, and select which interventions are needed to make a difference.

They will also learn how to **bring people together, analyze data, persuade stakeholders of the value of EB programs and policies, and implement, monitor, and evaluate the outcomes** of these EB efforts.

THE OVERALL CURRICULUM SERIES THEME IS TO CREATE LEADERS IN EVIDENCE-BASED PREVENTION IN COUNTRIES AROUND THE WORLD.

Resource Page 1.3: U. S. Society for Prevention Research: Principles of Prevention Science

- *Developmental focus*, which means that, as prevention professionals, we need to understand that there are variations in the factors that influence behaviors as they occur over the life course. It also means that, in any society, there are developmental or age-related tasks that need to be accomplished as children grow. Any disruption of the accomplishment of these tasks may lead to the occurrence of disorders or problem behaviors at certain stages of development. All of this needs to be considered as we look at potential prevention interventions we want to use in our efforts to prevent the onset of drug use and its consequences.

- *Developmental epidemiology* of the target population plays a critical role in prevention. We recognize how transitions through different ages place children at varying risks—e.g., a child's transition from spending most of the time at home and with caretakers, to spending most of the time in school. But we also need to acknowledge the differences in factors related to the use of psychoactive substances and outcomes within and across populations, this means that the factors or processes leading to initiate substance use and to continue use vary across individuals, groups, and populations. Such heterogeneity is critical to understanding risk variations in processes and mechanisms that are reflected in intervention design.

- *Transactional ecological factors* refer to the various environmental influences on our beliefs, values and attitudes and behaviors. This includes the interaction of the characteristics of the individual, family, school, community, and the larger socio-political and physical environments. These interactions not only influence our beliefs, attitudes, and behavior, but also are interdependent, affecting each other. Within this overall framework, prevention science draws from a wide range of theories that explain the dynamics of human development and behavior.

- *Human motivation and change processes* focuses on human motivation and change processes. Understanding these processes helps design effective interventions which seek change in individuals and environments to prevent or treat substance use. Many factors play a role in influencing behaviors and impacting decision-making, including deciding not to use psychoactive substances or engage in other high-risk behaviors.

- *The transdisciplinary nature of prevention science* means that we need to involve transdisciplinary teams with an array of expertise to address the complexity of the issues addressed by prevention science. This expertise includes understanding the etiology of a range of problem behaviors; intervention development and practice expertise; knowledge of research design, sampling and data collection and analysis, as well as understanding program and policy implementation and analysis.

- *Professional ethical standards* are based on values. Values are the basic beliefs that an individual thinks to be true and are also seen as guiding principles in one's life or the bases on which an individual makes a decision. Clearly, the work of prevention involves decisions, in regards to the treatment of others, in the most important settings of their

lives—family, school and workplace. But it also involves the community environment where policies and laws dictate legal and illegal behavior. The prevention practitioner needs to be guided by ethics and values that can help in these challenging areas of life. We will go into detail about professional ethics in prevention in Module 6, but these guide all aspects of prevention science.

■ *Continuous feedback between theoretical and empirical investigations* seeks to explain the mechanisms that account for a behavioral outcome discovered through empirical epidemiological investigations or evaluations of prevention interventions.

■ *Improving public health* is a vision that prevention science can serve through the collaborative work of prevention scientists and community prevention practitioners using their collective skills and particular expertise. Science, practice and policy must be mutually informed by research in controlled and natural settings.

■ *Social Justice* is related to the Human Rights Movement and the Health as a Right Movement. Social Justice is the ethical and moral imperative to understand why certain population subgroups have a disproportionate burden of disease, disability, and death, and to design and implement prevention programs and systems and policy changes to address the root causes of inequities.

MODULE 2

EPIDEMIOLOGY OF SUBSTANCE USE AND THE ROLE OF PREVENTION

Module 2 Preparation Checklist

- Review Getting Started for general preparation information.

- Preview Module 2. Be familiar with the instructions for the exercises in this module.

Content and Timeline		
Activity	Time	Person Responsible
Introduction to module 2	15 minutes	
Presentation: Why prevention is important	25 minutes	
Presentation: Substance use: Impact on health	60 minutes	
Break	15 minutes	
Large-group exercise: Global substance use and prevention	15 minutes	
Large-group exercise: What is epidemiology?	15 minutes	
Presentation: Epidemiology and prevention	30 minutes	
Small-group exercise: How epidemiology contributes to prevention	30 minutes	
Wrap-up	10 minutes	
Presentation and discussion: Vulnerability to substance use and progression to addiction	60 minutes	
Break	15 minutes	
Presentation and discussion: Environmental influences and the Etiology Model	45 minutes	
Small-group exercise: Major environmental influences and interventions	30 minutes	
Presentation and discussion: The need for integrated substance use services	15 minutes	
Presentation and discussion: Epidemiology and prevention review	30 minutes	
Module 2 evaluation	15 minutes	
Lunch	60 minutes	

Module 2 Goals and Objectives

Training goals

- Place the prevention of substance use and substance use disorders and other health problems in the context of promoting the well-being and growth of nations;

- Provide an overview of epidemiology and how epidemiologic findings inform the targeting of prevention interventions and policies;

- Place prevention interventions within the context of socialization; and

- Provide an understanding of the need for a comprehensive and integrated spectrum of services to address substance use.

Learning objectives

Participants who complete Module 2 will be able to:

- Explain why substance use prevention is important for the well-being and health of a nation;

- Discuss the relationship between epidemiology and prevention;

- Describe the interactions of the macro- and micro-level influences with personal characteristics that contribute to substance use behaviors;

- Discuss the relationship between socialization processes and substance use prevention; and

- Explain the continuum of substance using behaviors and points for intervention and why there is a need for comprehensive and integrated prevention and treatment interventions/services.

Introduction to module 2

Slide 2.1

International Centre for Credentialing and Education of Addiction Professionals (ICCE)
The Universal Prevention Curriculum (UPC) for Substance Use Training Series

Curriculum 1

Introduction to Prevention Science

MODULE 2—EPIDEMIOLOGY OF SUBSTANCE USE AND THE ROLE OF PREVENTION

Say:

In this section of the module, we will be looking at the Epidemiology of Substance Use and The Role of Prevention.

Introduction

2.2

Say: As we begin Module 2, I would like you to review this one-page introduction to the material we will cover. You may encounter terms and concepts that are new to you and that is to be expected in this challenging area of prevention science. We will discuss all of this material as we progress through the Module.

Teaching Instructions: Please allow 5-10 minutes for the participants to read the Introduction to themselves. It is presented below for your information.

Introduction

In this module, you will learn about the epidemiology of substance use, which is the study of the use of alcohol, tobacco, illegal drugs, inhalants, and the misuse of prescription medications among populations. Understanding the nature and extent of use is a key to intervening with evidence-based (EB) prevention interventions and policies and will help you in your work as prevention professionals.

First, we will look at why prevention is important for health, safety and economic well-being of nations. That is an important reason why the United Nations Office of Drugs and Crime (UNODC) supports EB prevention interventions to address substance use

because these science-based approaches have the promise to be successful with populations around the world.

We will examine the epidemiologic data on the impact of specific substances on health, including:

- The impact of excessive alcohol use on health, safety, and the overall wealth of countries;

- The direct and second-hand impact of tobacco smoking, especially, on children and others who are around smokers; and

- The global impact of illicit drugs on countries around the world.

We will also look at the types of data that are available from epidemiological surveys and analytic studies. The analytic studies help us understand some of the causes of use and addiction, and what populations are the most affected. They also identify the potential target populations for prevention.

To clarify some of the causes of substance use, we will look at an Etiology Model which shows how environmental influences interact with individual characteristics to place people at more or less risk for substance use and other problem behaviors. We will also consider how we can intervene successfully with evidence-based interventions.

In so doing, we will consider the process of socialization that helps children gain the culturally-accepted attitudes, norms, beliefs, and behaviors that help them become successful in life. The goal of prevention is to strengthen these positive attributes while reducing the effects of negative influences as youth mature into adults.

Lastly, we will see how important it is to integrate prevention and treatment services to address all people at-risk to have a greater impact on substance use communities.

Training Goals

- Place the prevention of substance use and substance use disorders and other health problems in the context of promoting the well-being and growth of nations

- Provide an overview of epidemiology and how epidemiologic findings inform the targeting of prevention interventions and policies

- Place prevention interventions within the context of socialization

- Provide an understanding of the need for a comprehensive and integrated spectrum of services to address substance use

2.3

Say:

Overall, the training goals for this module are:

- *Place the prevention of substance use and substance use disorders and other health problems in the context of promoting the well-being and growth of nations;*

- *Provide an overview of epidemiology and how epidemiologic findings inform the targeting of prevention interventions and policies;*

- *Place prevention interventions within the context of socialization; and*

- *Provide an understanding of the need for a comprehensive and integrated spectrum of services to address substance use.*

Learning Objectives

- Explain why substance use prevention is important to the well-being and health of a nation
- Discuss the relationship between epidemiology and prevention
- Describe the interactions of the macro- and micro-level influences with personal characteristics that contribute to substance use behaviors
- Discuss the relationship between socialization processes and substance use prevention
- Explain the continuum of substance using behaviors and points for intervention and why there is a need for comprehensive and integrated prevention and treatment interventions/services

2.4

Say: *The learning objectives for Module 2 are broad, and are designed to place prevention within a policy context and also to provide an overview of some of the basic information you will need to understand as a Prevention Coordinator. You will find over the course of this Curriculum Series that we will come back to many of the points we will cover today.*

Let's look at the learning objectives for Module 2:

- *Explain why substance use prevention is important for the well-being and health of a nation.*

- *Discuss the relationship between epidemiology and prevention.*

- *Describe the interactions of the macro- and micro-level influences with personal characteristics that contribute to substance use behaviors.*

- *Discuss the relationship between socialization processes and substance use prevention.*

- *Explain the continuum of substance-using behaviors and points for intervention and why there is a need for comprehensive and integrated prevention and treatment interventions/services.*

As was mentioned in Module 1, we will be using the terms "substance" and "drug" throughout this Curriculum Series. In general, when we talk about substances we are including the use of alcohol and tobacco as well as inhalants. When we talk about drugs, we are generally talking about illegal drugs or the misuse of prescription drugs.

Presentation: Why prevention is important?

Slide 2.5

Why Prevention Is Important

2.5

Say: *In this section of the module, we will be looking at Why Prevention is Important.*

Why is Prevention of Health and Social Problems Important for Any Nation?

Health is linked to:

- Rising incomes
- Increased productivity
- Children's education
- Adult well-being

2.6

Say: *We mentioned this earlier, but it is important to repeat.*

Why is prevention important for any nation? There is growing recognition that health not only has a direct impact on human welfare, but also has been found to be related to raising income levels by altering the demographic structure, whereby healthy people live longer. This means increased worker productivity, wages, savings and investment. In turn, increased productivity requires an educated and competent workforce.

Health, Safety and Well-being Are Related to National Economic Growth

Studies show that:

■ Low-cost health interventions can produce large-scale effects on population health, as well as on productivity

■ Also, improving health and nutrition in utero, and in the first few years of life, can have large effects on physical and cognitive development and economic success as an adult

(Source: World Bank (2008), Population Health and Economic Growth)

2.7

Say:

The World Bank found that the low cost of some health interventions have large-scale effects on population health, thus increasing productivity, and making health investments a promising policy tool for growth, particularly in developing countries. Therefore, it is recommended that a higher priority be given to tackling widespread "neglected" diseases—that is, diseases with low mortality rates that are not priorities from a pure health perspective, but do have substantial effects on productivity.

Studies further suggest that prenatal care leads to healthy babies, and to healthy physical and cognitive development during childhood, and is the basis for successful adults. Such observations support the important role of prevention interventions and policies, including those directed to substance use

World Bank (2008), Population Health and Economic Growth. Available at: http://siteresources.worldbank.org/EXTPREMNET/Resources/489960-1338997241035/Growth_Commission_Working_Paper_24_Population_Health_Economic_Growth.pdf

Non-Communicable Diseases Constitute More than 60% of Deaths Worldwide

Injuries 9%

Cardiovascular diseases 30%

Other conditions* 30%

Cancer 13%

Other chronic diseases 9%

Chronic respiratory diseases 7%

Diabetes 2%
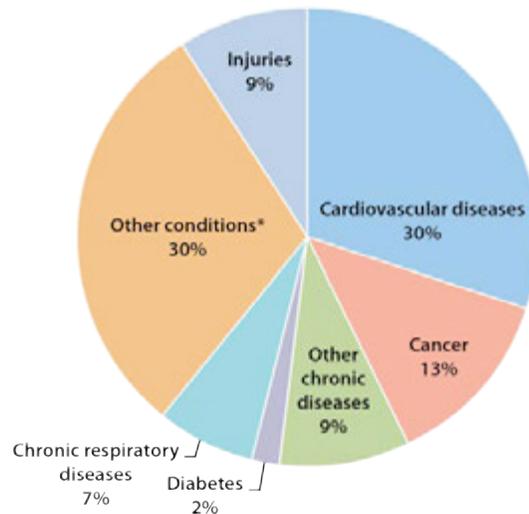
(Source: Bloom et al, 2011)

2.8

Say:

According to a recent report published by the World Economic Forum, non-communicable diseases and conditions now account for 60% of all deaths world-wide. These are deaths that are not due to bacterial or viral infections nor to parasitic diseases.

These are deaths due to life-style decisions.

Bloom, D.E. et al. (2011). The Global Economic Burden of Noncommunicable Diseases. Geneva: World Economic Forum. Available at: www.weforum.org/EconomicsOfNCD

Percentage of Companies That Have Established and Implemented Policies and Programs to Combat Non-Communicable Diseases

Policy or programme	All countries	Low-income countries	High-income countries
Anti-smoking	59	37	74
Anti-alcohol	56	42	61
Incentives for exercise	30	21	35
Stress reduction	23	14	32
Physical health	36	23	42

(Source: Bloom et al, 2011)

2.9

Say:

The growing recognition of health issues related to life-style has prompted large companies to establish and implement policies or programs to address smoking, alcohol, physical exercise, stress reduction, and physical health.

You can see from this table, again from the World Economic Forum, that the majority of companies have addressed smoking and alcohol use. More information about available evidence-based workplace prevention interventions are covered in Curriculum 6.

What has also been noted in the study of the World Economic Forum is that, there are differences between low-income and high income countries as to the proportion of companies that have moved toward addressing these health issues in programs established in the workplace.

Bloom, D.E. et al. (2011). The Global Economic Burden of Noncommunicable Diseases. Geneva: World Economic Forum. Available at: www.weforum.org/EconomicsOfNCD

Evidence-Based Prevention Can Improve Health

The importance of introducing and sustaining evidence-based substance use prevention interventions in communities reaching parents, schools, businesses, and the media becomes increasingly important for growing economies. Having healthy populations that feel safe and secure go far to improve everyone's lifestyles.

2.10

Say:

The importance of introducing and sustaining evidence-based substance use prevention interventions in communities reaching parents, schools, businesses, and the media becomes increasingly important for growing economies. Having healthy populations that feel safe and secure go far to improve everyone's lifestyles.

Let's look at the problems that are caused by substance use. We will look at alcohol first, then tobacco and finally, drugs, mostly illicit drugs.

Presentation: Substance use: Impact on health

Substance Use: Impact on Health

2.11

Say: *In this section of the module, we will be looking at Substance Use: Impact on Health.*

> # Alcohol Use and Health: Alcohol Use Disorders
>
> - Harmful use of alcohol (also often referred to as "alcohol abuse")
> - Alcohol dependence (also known as alcoholism or alcohol dependence syndrome)
> - Alcohol psychosis
>
> 2.12

Say:

According to the World Health Organization's Global Burden of Disease Study, "alcohol use disorders" comprise alcohol use disorders as well as disorders that have been found to be linked to alcohol use.

Alcohol use disorders include these diagnoses that come from the 10th Edition of the International Classification of Diseases:

- *Harmful use of alcohol (also often referred to as "alcohol abuse") defined as "a pattern of alcohol use that is causing damage to health";*

- *Alcohol dependence (also known as alcoholism or alcohol dependence syndrome) defined as "a cluster of behavioral, cognitive, and physiological phenomena that develop after repeated alcohol use, and typically include a strong desire to consume, difficulties in controlling its use, persisting in its use despite harmful consequences, a higher priority given to alcohol use than to other activities and obligations, increased tolerance, and sometimes a physical withdrawal state"; and*

- *Alcohol psychosis defined as a cluster of psychotic phenomena that occur during, or following alcohol use but, that are not explained on the basis of acute intoxication alone, and do not form part of a withdrawal state.*

World Health Organization (2014). Global Status Report on Alcohol and Health, 2014. Available at: http://www.who.int/substance_abuse/publications/global_alcohol_report/en/

Prevalence of alcohol use disorders by sex, WHO region and the world, 2004[a]
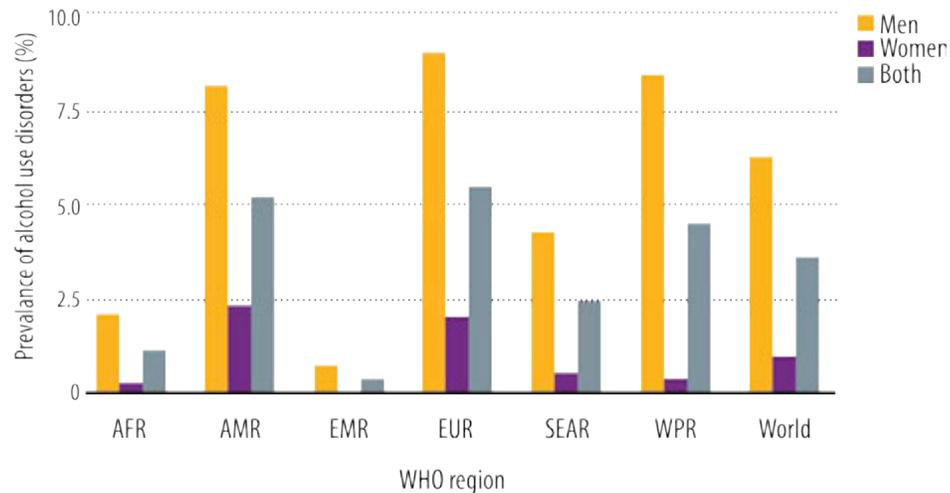
[a] Source: Rehm et al., 2009.

2.13

Say:

Looking at the prevalence of alcohol disorders across the world, we see that the rates for both men and women are greatest in Europe and the Americas, and lowest in the Eastern Mediterranean and African countries. The rates for males across all regions are greater than they are for women.

Rehm, J. et al. (2009). Alcohol and global health 1: global burden of disease and injury and economic cost attributable to alcohol use and alcohol-use disorders. Lancet, 373:2223–2233.

Major Disease and Injury Categories Causally Linked to Alcohol

- Neuropsychiatric disorders
- Gastrointestinal diseases
- Cancer
- Intentional injuries
- Unintentional injuries
- Cardiovascular diseases
- Fetal alcohol syndrome and pre-term birth complications
- Diabetes mellitus

2.14

Say:

However, there are other diseases and injuries that have been found to be causally linked to alcohol consumption, either for the consumer or others. These include:

- *Neuropsychiatric disorders: These disorders represent the major alcohol-related disorders and involve epilepsy, other than withdrawal-induced seizures (Samokhvalov et al., 2010). Many other neuropsychiatric disorders are associated with alcohol, but the extent to which they are caused by alcohol consumption is not clear.*

- *Gastrointestinal diseases, including liver cirrhosis and pancreatitis (both acute and chronic).*

- *Alcohol consumption has been found to be carcinogenic, particularly for cancers of the colorectum, female breast, larynx, liver, esophagus, oral cavity and pharynx (Baan et al., 2007). There is also a direct relationship between the consumption of alcohol and the risk for these cancers–that is, the higher the consumption of alcohol, the greater the risk for these cancers (Hamajima et al., 2002).*

- *Alcohol consumption, especially heavy drinking, has also been linked to suicide and violence.*

- *Almost all categories of unintentional injury, such as, road traffic accidents, falls, drowning, and poisoning have some relationship to alcohol consumption. In addition, there is an association between level of alcohol concentration in the blood and psychomotor impairment.*

- *Alcohol consumption has also been found to be associated with cardiovascular diseases, such as, ischemic heart disease and ischemic stroke*. In addition, epidemiologic studies have found that alcohol consumption has harmful effects on persons with hypertension, cardiac dysrhythmias and hemorrhagic stroke, regardless of the drinking pattern (Rehm et al., 2010).*

- *Fetal alcohol syndrome and pre-term birth complications have also been found to be associated with alcohol consumption by expectant mothers, thus impairing the development of their infants.*

- *Finally, it has been found that there is a relationship between alcohol consumption and diabetes mellitus. However, research findings show that light to moderate drinking may be beneficial, while heavy drinking is detrimental (Baliunas et al., 2009a).*

*Coronary heart disease brought on by reduced blood flow to the heart.

Baan, R. et al. on behalf of the WHO International Agency for Research on Cancer Monograph Working Group (2007). Carcinogenicity of alcoholic beverages. *Lancet Oncology*, 8:292–293.

Baliunas, D. et al. (2009b). Alcohol as a risk factor for type 2 diabetes: A systematic review and meta-analysis. *Diabetes Care*, 32:2123–2132.

Hamajima, N. et al. (2002). Collaborative Group on Hormonal Factors in Breast Cancer. Alcohol, tobacco and breast cancer-collaborative reanalysis of individual data from 53 epidemiological studies, including 58,515 women with breast cancer and 95,067 women without the disease. *British Journal of Cancer*, 87:1234–1245

Rehm, J. et al. (2010). The relation between different dimensions of alcohol consumption and burden of disease – an overview. *Addiction*, 105:817 -843.

Roerecke, M., Rehm, J. (2010). Ischemic heat disease mortality and morbidity rates in former drinkers: A meta-analysis. *American Journal of Epidemiology*, 14 December [online] doi: 10.1093/aej/kwq364

Samokhvalov, A.V. et al. (2010): Alcohol consumption, unprovoked seizures and epilepsy: a systematic review and meta-analysis. *Epilepsia* [Epub ahead of print January 13].

World Health Organization (2014). Global Status Report on Alcohol and Health, 2014. Available at: http://www.who.int/substance_abuse/publications/global_alcohol_report/en/

Global Alcohol-Attributable Deaths as a Percentage* of Total Deaths By Disease of Injury, 2004

Alcohol-use disorder	100%	Hypertensive heart	
Cirrhosis of the liver	50%	Disease	16%
Epilepsy	30%	Other intentional injuries	13%
Esophagus cancer	30%	Falls	12%
Liver cancer	30%	Self-inflicted injuries	8%
Violence	30%	Breast cancer	8%
Mouth & oropharynx		Other neoplasms	5%
Cancers	25%	Colon and rectum cancers	4%
Road accidents	22%	Cardiovascular disease	3%
Other unintentional		Unipolar depressive	
Injuries	18%	Disorder	2%
Poisonings	18%	Ischemic heart disease	2%
Drownings	17%	Prematurity and low	
		birth weight	1%

_____

- Rounding errors may apply

2.15

Say:

We can see in this table from the Global Status Report On Alcohol and Health, World Health Organization that alcohol use disorders rank first among the alcohol-attributable deaths, followed by cirrhosis of the liver and epilepsy, esophagus and liver cancers, and violence.

World Health Organization (2011). Global status report on alcohol and health. Geneva.

Disability-Adjusted Life Year

Sum of Years of Life Lost Due to Premature Mortality in the Population (YLL)

⬌

Sum of Years of Life Lost Due to Disability for People Living with the Health Condition or Its Consequences (YLD)

2.16

Say:

Another measurement used to compare the consequences of diseases is the Disability-Adjusted Life Year or DALY. The World Health Organization defines one DALY as "…one lost year of "healthy" life."

The sum of these DALYs across the population, or what is termed, the burden of disease, can be thought of as a measurement of the gap between current health status and an ideal health situation, where the entire population lives to an advanced age, free of disease and disability." The DALY measure allows comparisons across diseases and health conditions.

DALYs for a disease or health condition are calculated as the sum of Years of Life Lost (YLL) due to premature mortality in the population and Years Lost due to Disability (YLD) for people living with the health condition or its consequences.

For more information: www.who.int/healthinfo/global_burden_disease/metrics_daly/en/

Alcohol-Attributable Burden of Disease, 2004

Disorder or injury	Alcohol-attributable DALY's ('000s)			Distribution of alcohol-attributable DALYs (%)			Population-attributable fractions (%)		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Alcohol use disorders	23738	21154	2584	34.2	35.7	25.5	100	100	100
Road traffic accidents	8046	7123	923	11.6	12	9.1	19.5	24.4	7.7
Cirrhosis of the liver	6632	5271	1361	9.6	8.9	13.4	48.6	59.4	28.5
Other unintentional injuries	6208	5043	1165	8.9	8.5	11.5	12.2	16.4	5.8
Violence	5443	4814	630	7.8	8.1	6.2	25.1	26.9	16.5
Liver Cancer	2210	1860	350	3.2	3.1	3.5	32.9	39.4	17.6
Epilepsy	2150	1451	699	3.1	2.5	6.9	27.4	34.3	19.3
Self-inflicted injuries	2083	1712	372	3	2.9	3.7	10.6	14.6	4.7
Ischemic heart disease	1807	1917	-110	2.6	3.2	-1.1	2.9	5.1	-0.4
Cerebrovascular disease	1579	1598	-19	2.3	2.7	-0.2	3.4	6.6	-0.1
Esophagus cancer	1563	1300	263	2.3	2.2	2.6	32.8	41.7	16
Poisonings	1449	1170	278	2.1	2	2.7	19.5	23.9	10.9
Drownings	1378	1129	249	2	1.9	2.5	12.8	15.4	7.4
Hypertensive heart disease	1203	954	249	1.7	1.6	2.5	15	23.4	6.3
Falls	1152	977	175	1.7	1.6	1.7	6.7	9.4	2.6
Unipolar depressive disorder	1023	794	229	1.5	1.3	2.3	1.6	3.3	0.6
Mouth and Oro-pharynx cancers	973	862	112	1.4	1.5	1.1	25.7	30.9	11.2
Breast cancer	546	0	547	0.8	0	5.4	8.2	0	8.3
Colon/rectum cancer	221	183	37	0.3	0.3	0.4	3.8	5.7	1.4
Other neoplasms	128	84	43	0.2	0.1	0.4	6.5	8.3	4.6
Prematurity and low birth weight	120	645	55	0.2	0.1	0.5	0.3	0.3	0.3
Diabetes mellitus	-280	-225	-56	-0.4	-0.4	-0.5	-1.4	-2.5	-0.5
Net alcohol DALYs	69375	59237	10137	100	100	100	4.5	7.4	1.4

2.17

Say:

When we look at the calculations across the globe, we see some commonalities and some differences.

Here we see in the far left column, a list of disorders or injuries. The three large columns show the estimated alcohol-attributable burden of disease in the world's population as DALYS for males and females by: (1) number in thousands and (2) the proportion or percentage of the population affected. The table looks at these DALYs across disorders or injuries, or within a disorder or injury classification.

For instance, for alcohol use disorders, it is estimated that 23,738,000 life years are lost through premature deaths or disability. Men have a greater number of DALYs than women.

For more information regarding DALYs, refer to your resource page.

Global Distribution of All Alcohol-Attributable DALYs by Disease or Injury, 2004

9.6% Liver cirrhosis

38.8% Neuropsychiatric disorders

26.3% Unintentional injuries

0.2% Prematurity and low birth weight

8.1% Cancer

6.2% Cardiovascular diseases and diabetes mellitus

10.8% Intentional injuries
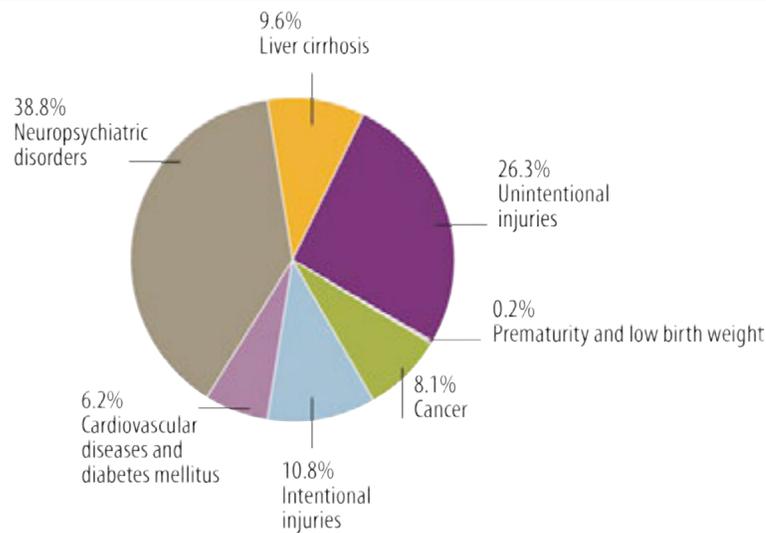
2.18

Say:

When we look at the global distribution of all alcohol-attributable DALYs by disease or injury category, we see that Neuropsychiatric Disorders constitute almost 39% followed by Unintentional Injuries (26%), Intentional Injuries (11%), Liver Cirrhosis (10%), Cancer (8%), Cardiovascular Diseases and Diabetes Mellitus (6%) and Prematurity and Low Birth Weight (less than 1%).

Alcohol-Attributable DALYs as a Percentage of Total DALYs by WHO Sub-region, 2004

Percentage
- 0–1.9
- 2–4.9
- 5–9.9
- 10–19
- Not applicable
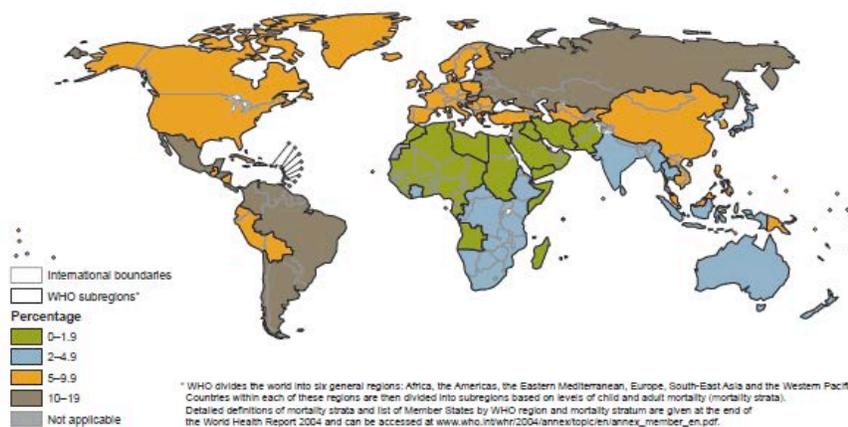
2.19

Say:

Examination of the distribution of alcohol-attributable DALYs by WHO subregions shows that those countries that are in dark grey, have the highest rates followed by those in orange, while those in green have the lowest rates. The Americas and European countries have the highest rates.

Economic Wealth and Alcohol-Attributable Mortality, and Burden of Disease and Injury by WHO Sub-regions, 2004

WHO Subregion	DALYs ('000s)	Deaths ('000s)	DALYs per litre per 1000 inhabitants	Deaths per litre per 10,000 inhabitants	GDP-PPP in US$ per capita
AFR D	2591	90	1.83	1.00	1879
AFR E	5324	179	3.47	1.80	1615
AMR A	3400	55	1.34	0.24	37765
AMR B	8767	264	3.23	1.04	8480
AMR D	1161	28	3.24	0.96	4297
EMR B	258	8	2.58	0.78	11607
EMR D	517	15	3.74	1.19	2528
EUR A	2988	25	0.70	0.08	28880
EUR B	2744	110	2.17	0.92	7803
EUR C	11893	484	4,00	1.75	9211
SEAR B	2945	80	5.76	1.86	3523
SEAR D	9193	275	5.32	1.92	1768
WPR A	791	31	0.63	0.29	29653
WPR B	18338	611	2.53	0.95	4017
World	**70910**	**2255**	**2.9**	**1.0**	**10930**

2.20

Say:

What is the association between alcohol health issues and national economies? This WHO table shows the DALYs deaths for each WHO sub-region. The far right column shows a score representing economic wealth, that is calculated by subtracting a measure of affluence, i.e., purchasing power parity, from a measure of regional wealth, i.e., gross domestic product divided by the number of people living in the region.

Let's look at the Western Pacific Region, at the bottom of the chart. This region has an economic wealth score of 4017, the lowest of all countries, has the highest alcohol-attributable mortality and DALYs of 611 and 18,338, respectively.

We can see from this chart that regions with lower economic development have greater health problems related to alcohol, at least among those who drink alcohol. For more information, please review the WHO's Global Status Report on Alcohol and Health, 2011.

World Health Organization (2011). Global Status Report on Alcohol and Health, 2011. Available at: http://www.who.int/substance_abuse/publications/global_alcohol_report/msbgsruprofiles.pdf

Smoking and Health

- Smoking and cardiovascular disease
- Smoking and respiratory disease
- Smoking can cause cancer almost anywhere in your body
- Smoking and other health risks

2.21

Say:
Now let's turn to another widely-used substance, tobacco. The relationship between smoking and health concerns has been well-documented over the past 60-70 years.

Smoking has been implicated with cardiovascular diseases that affect the heart and blood vessels, causing stroke and coronary heart disease. It has been found that even those who smoke less than five cigarettes a day, have evidence of early cardiovascular disease.

Smoking damages blood vessels that causes them to thicken and to grow narrower, thus making the heart beat faster and increasing blood pressure and the formation of blood clots. This type of change impedes oxygen going into the heart, causing damage to the heart muscle, resulting in a heart attack. Clots, blocking blood flow to the brain, can cause a stroke.

Smoking can also cause lung disease by damaging airways and the small air sacs (alveoli) found in the lungs. Lung diseases caused by smoking, include chronic obstructive pulmonary disease (COPD), emphysema and chronic bronchitis.

Cigarette smoking causes most cases of lung cancer and can trigger an asthma attack, in those who have asthma.

Smoking can cause cancer almost anywhere in your body, including bladder, cervix, colon and rectum, esophagus, kidney and ureter, larynx, liver, pancreas, stomach, and trachea, bronchus, and lungs.

Smoking is also associated with other health risks, such as, difficulty conceiving and pre-term delivery, low birth weight, and low bone density.

For more information please:

Centers for Disease Control and Prevention
http://www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/effects_cig_smoking/#disparities

U.S. Department of Health and Human Services. The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014.

U.S. Department of Health and Human Services. How Tobacco Smoke Causes Disease: What It Means to You. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2010.

Prevalence of Daily Smoking Among Population Aged 15+ by Country

Country	Year	%	Country	Year	%
Greece	2008	40%	Belgium	2008	20%
Chile	2009	30%	Switzerland	2007	20%
Ireland	2007	28%	Israel	2009	20%
Turkey	2008	26%	Denmark	2010	20%
Poland	2009	25%	Slovak Republic	2009	19%
Hungary	2009	25%	Norway	2010	19%
Spain	2009	25%	Slovenia	2007	19%
France	2008	25%	Portugal	2006	19%
Estonia	2008	25%	Finland	2009	19%
Korea	2009	24%	New Zealand	2007	19%
Czech Republic	2008	24%	Luxembourg	2010	19%
Japan	2010	23%	Australia	2007	17%
Austria	2006	22%	Canada	2009	17%
Italy	2010	22%	United States	2009	17%
Germany	2009	21%	Sweden	2009	14%
United Kingdom	2009	21%	Iceland	2010	14%
Netherlands	2010	20%	Mexico	2006	13%

Rounding errors may apply

2.22

Say:

Here, we have an estimate of the prevalence of daily smoking in populations aged 15 and older, in 34 countries, for the period 2006-2010. As we will learn later, prevalence includes both new initiators of smoking, as well as those who already are smoking. For this graph, prevalence of daily smoking includes all smokers who were smoking daily at the time of the survey, no matter if they had just begun smoking daily, or if they had been smoking daily for years.

Represented here are mostly European or Western countries, with the inclusion of very few countries in Asia and the Middle-East, and none from Africa. However, what we see is a great variation across the countries with highest rates noted for Greece (40 percent), and the lowest rates noted for Mexico (approximately 13 percent).

Tobacco in Australia - http://www.tobaccoinaustralia.org.au/chapter-1-prevalence/1-13-international-comparisons-of-prevalence-of-sm

Current Use of Any Tobacco Product among School Students Aged 13–15 By Sex And WHO Region, 2000–07 (%)

Region	Boys	Girls	Total
African region	14	5	8
Americas region	14	15	14
Eastern Mediterranean region	7	2	5
European region	21	17	19
Southeast Asia region	10	2	6
Western Pacific region	19	8	13
Total	12	7	10

2.23

Say:

We have more information on school children and tobacco use, as a result of school surveys. Here, we see the percentages of school students aged 13-15, who reported the use of any tobacco product within 30 days prior to the survey. Overall, approximately 10 percent of these adolescents were smoking; 12 percent of boys and 7 percent of girls.

However, if we look at smoking rates by WHO regions, we see a variation. Smoking rates for the European Region, the Americas, and the Western Pacific region are higher than the other regions, 19 percent, 14 percent, and 13 percent respectively. The region with the lowest smoking rate is the Eastern Mediterranean region, 5 percent, followed by the Southeast Asia region, 6 percent, and the African region, 8 percent.

Tobacco in Australia - http://www.tobaccoinaustralia.org.au/chapter-1-prevalence/1-13-international-comparisons-of-prevalence-of-sm

Health Outcomes: Exposure to Second-Hand Smoke and Strength of the Evidence

- **Children-Parental Exposure**
  - Under two years of age=Incidence of acute lower respiratory infections and hospital admissions-WHO=A; Cal-EPA=A; US Surgeon General=A
  - Under 14 years of age=Incidence of new cases of asthma-Cal-EPS=A; US Surgeon General=B
  - Under 8 years of age=incidence of acute otitis media-Cal-EPA=A; US Surgeon General=A
- **Adult Non-Smokers-At Home or At Work Exposure**
  - Over 20 years of age=adult onset of asthma-Cal-EPA=A; US Surgeon General=B
  - Over 15 years of age=Incidence of lung cancer-Cal-EPA=A; US Surgeon General=A; IARC=A
  - Over 15 years of age=Incidence of any ischaemic heart disease-Cal-EPA=A; US Surgeon General=A

Evidence: WHO; California Environmental Protection Agency (CAL-EPA); US Surgeon General; International Agency for Research and Cancer (IARC)
A=Supportive; B=Suggestive-Number represents the number of sources that rate the level of evidence.

2.24

Say:

Not only are smokers at heightened risk for health problems, but, studies have found that those exposed to second-hand smoke from the use of tobacco products have been found to experience serious health issues, particularly, family members and work colleagues of smokers.

This slide summarizes the information regarding the health outcomes noted in studies of exposure to second-hand smoke. There were four sources of this information: Reports from the World Health Organization, the California Environmental Protection Agency, the U.S. Surgeon General, and the International Agency for Research and Cancer.

We see that children under 14 years of age exposed to parental smoking are at higher risk for acute lower respiratory infections that warrant hospitalizations, asthma, and acute otitis media than those who did not experience such exposure.

In adult non-smokers, exposure to second-hand smoke occurs in the home or at work. Incidence rates were higher for those exposed than those not exposed to second-hand smoke for adult onset of asthma, lung cancer and ischemic heart disease.

*(**Definitions**: Acute Otitis Media=Middle ear inflammation; Ischemic Heart Disease=Reduced blood flow to the heart)*

Oberg, M., Jaakkola, M.S., Woodward, A., Peruga, A., and Prüss-Ustün, A. (2011). Worldwide burden of disease from exposure to second-hand smoke: a retrospective analysis of data from 192 countries. The Lancet, 377, 139-146. Available at: http://www.who.int/quantifying_ehimpacts/publications/smoking.pdf

Distribution of Total Deaths and DALYs Attributable to Second-Hand Smoke, 2004

Lower respiratory infections
165 000 deaths
27%

Otitis < 100 deaths
0%

Asthma
37 000 deaths
6%

Lung cancer
21 000 deaths
4%

Ischaemic heart disease
379 000 deaths
63%

Ischaemic heart disease
2.8 mio DALYs
26%

Lower respiratory infections
5.9 mio DALYs
54%

Lung cancer
0.22 mio DALYs
2%

Asthma
1.9 mio DALYs
17%

Otitis
0.02 mio DALYs
0.2%

Number of deaths/DALYs attributable to exposure to SHS, 2004; percentage of total deaths/DALYs attributable to SHS; total = 100%

(Source: Oberg et al., 2010)

2.25

Say:

Osberg and her colleagues estimated the proportion of deaths and DALYs that could be attributed to second-hand smoke.

Approximately 63 percent deaths due to ishemic heart disease could be attributed to second-hand smoke, as could 27 percent of deaths due to lower respiratory infections. When making the estimates for DALYs, that you will recall includes lost years due to death and disability, the researchers found that 54 percent of DALYs due to lower respiratory infections were due to second-hand smoke, 26 percent of ischemic heart disease, and 17 percent of asthma cases.

Oberg, M., Woodward, A., Jaakkola, M.S., Peruga, A., and Prüss-Ustün, A. (2010). Global Estimate of the Burden of Disease from Second-Hand Smoke. World Health Organization, Geneva. Available at: http://whqlibdoc.who.int/publications/2010/9789241564076_eng.pdf

Illicit Drug Use and Health: Global Burden of Disease

- Study included
  - Amphetamines
  - Cannabis
  - Cocaine
  - Opioids
- 20.0 million DALYs of all disease related DALYs (0.8%)
- Opioid dependence largest contributor (9.2 million DALYs)
- Injecting drug use contributed 2.1 million DALYs related to HIV and 502,000 DALYs related to Hepatitis C
- Suicide as a risk of
  - Amphetamine dependence=854,000 DALYs
  - Opioid dependence=329,000 DALYs
  - Cocaine dependence=324,000 DALYs

2.26

Say:

Now let's turn to illicit drug use.

Degenhardt and a group of researchers conducted analyses to determine the global burden of disease, that was attributable to illicit drug use. They focused on amphetamines, cannabis, cocaine, and opioids. As we saw earlier, illicit drug use contributed 0.8% to the global burden of disease, as measured by Disability Adjusted Life Years/DALYs.

Opioid dependence was the largest contributor accounting for almost half of all DALYs related to illicit drug use. Injecting drug use contributed 2.6 million DALYs through HIV and Hepatitis C.

Finally, suicide as a risk of amphetamine dependence, opioid dependence and cocaine dependence together, contributed 1.5 million DALYs.

Degenhardt, L. et al. (2013). Global burden of disease attributable to illicit drug use and dependence: Findings from the Global Burden of Disease Study, 2010. The Lancet, 382, 1564-1574.

World Extent of Psychoactive Substance Use

Illicit Drugs

Alcohol

Tobacco

185 million illicit drug users
Source: UNDCP, 2002

2 billion alcohol users
Source: WHO, 2002

1.3 billion smokers
Source: WHO, 2002

http://www.who.int/substance_abuse/facts/global_burden/en/

2.27
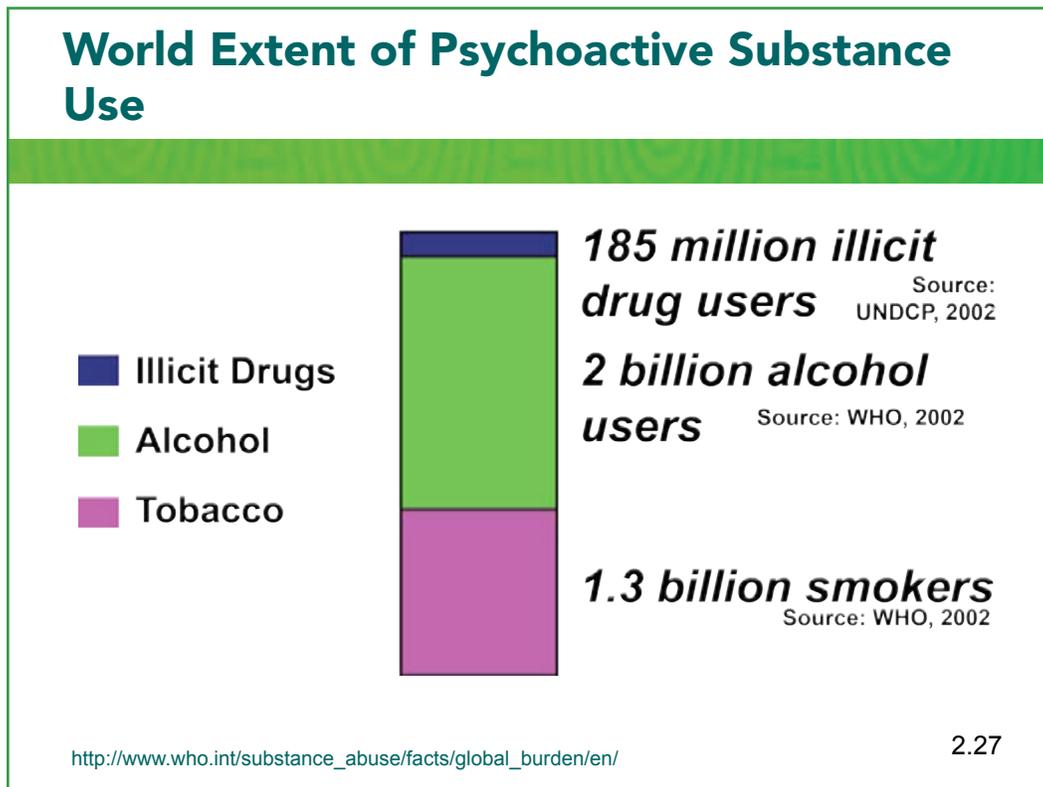
Say:
We have seen this slide and the next one, before. We show them again to reinforce the message that psychoactive substance use is a huge health problem, whether we are talking about illicit drug use, alcohol use, or smoking.

Disability Adjusted Life Years (DALY)

	Mortality (% of all deaths worldwide)	DALYs (% of total years of life lost)
Tobacco	8.8	4.1
Alcohol	3.2	4.0
Illicit drugs	0.4	0.8

http://www.who.int/substance_abuse/facts/global_burden/en/

2.28

Say:

The World Health Organization estimates that 12% of mortality worldwide is due to the use of tobacco, alcohol and illicit drugs, and almost 10 percent of all Disability Adjusted Life Years (DALY) can be attributed to tobacco, alcohol, and illicit drug use.

Costs to Society of Ignoring Prevention

Mental, Emotional, and Behavioral Disorders

Health of Individual
- Mortality
- Health-related quality of life

Health of Others
- Family
- Victims of crimes
- Peers

Economic Resources

Productivity

Services

Informal Care

Juvenile Justice

Education

Health Care

Child Welfare

Adapted from Eisenberg and Neighbors (2007)

2.29
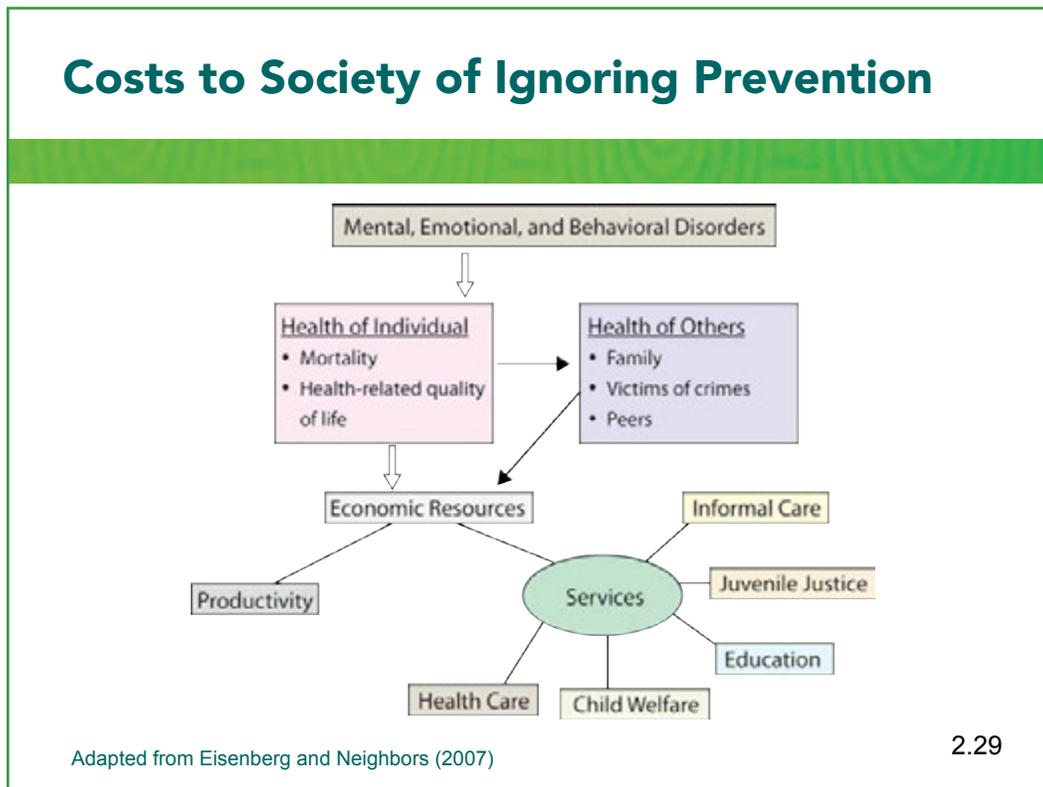
Say:

Not addressing the health, safety, and well-being of young people leads not only to lower productivity, but also draws on services so that, rather than supporting healthy lifestyles, these same services are directed to mental, emotional, and behavioral disorders, including substance use and substance use disorders. Not only are these services needed for those affected by these disorders, but also their families and their communities.

Eisenberg, D. and Neighbors, K. (2007). See: http://www.nap.edu/catalog.php?record_id=12480

Substance Use and Health

- Substance use disorders contribute significantly to global illness, disability, and death
  - Injection drug use (IDU) is a significant means of transmission for serious communicable diseases such as hepatitis and HIV/AIDS
  - Overall, roughly 10 percent of all new HIV infections worldwide are the result of IDU
- Despite the recognition of the health challenges presented by HIV and related infections, the Executive Director of UNODC, Yury Fedotov, notes that "there continues to be an enormous unmet need for drug use prevention, treatment, care and support, particularly in developing countries."

2.30

Say:

Substance use disorders contribute significantly to global illness, disability, and death. Injection drug use (IDU) is a significant means of transmission for serious communicable diseases, such as, hepatitis and HIV/AIDS. The World Health Organization (WHO) notes that 136 countries report IDU, and UNODC estimates that 11 to 21 million people injected drugs in 2009. Overall, roughly 10 percent of all new HIV infections worldwide, are the result of IDU. Yet, despite recognition of these drug use-related health problems as the executive director of UNODC, Mr. Fedotov notes, "there continues to be an enormous unmet need for drug use prevention, treatment, care and support, particularly for developing countries."

Why Is Substance Use Prevention Important? (1/2)

■ The primary objective of substance use prevention is to help people, particularly young people, to avoid or delay the initiation of the use of substances, or, if they have started already, to avoid that they develop disorders
(e.g. dependence)

■ The general aim of substance use prevention is much broader, the healthy and safe development of children and youth to realize their potential and become contributing members of their community and society

2.31

Say:

Why is Substance Use Prevention Important? We saw this slide earlier when we introduced this curriculum.

Substance use prevention stops people from beginning to use substances, and can help those who have started to use, to avoid progressing to substance abuse.

SAY WITH EMPHASIS:

But substance use prevention has a broader intent, to keep our children and youth healthy and safe and for youth to realize their talents and potential. It does this by helping them positively engage with families, schools, workplace, and communities.

Why Is Substance Use Prevention Important? (2/2)

Substance Use Prevention Is Only Important If **Evidence-based** Substance Use Prevention Interventions and Policies Are Implemented and Evaluated!!!

2.32

Say:

Substance use prevention is only important, if evidence-based substance use prevention interventions and policies are implemented and evaluated!!!. This will be discussed later in this curriculum.

Evidence-Based Prevention Interventions

"Evidence Based Practice (EBP) is the use of systematic decision-making processes or provision of services which have been shown, through available scientific evidence, to consistently improve measurable client outcomes. Instead of tradition, gut reaction or single observations as the basis of decision-making, EBP relies on data collected through experimental research and accounts for individual client characteristics and clinician expertise."

(Evidence Based Practice Institute, 2012; http://depts.washington.edu/ebpi/)

2.33

Say:

So what does 'evidence-based' prevention mean. Drawing from the definition of the Evidence-Based Practice Institute of the University of Washington, there are two key aspects to this definition:

- *Systematic decision-making using scientific evidence that is associated with improved or positive outcomes.*

- *Reliance on data collected through rigorous experimental research.*

 15 minutes

Large-group exercise: Global substance use and prevention

Large-Group Exercise: Global Substance Use and Prevention

How can you use these findings on the social and health consequences of substance use to gain support for prevention?

■ Impact on the community

■ Impact on families and the workplace

2.34

Ask: *How can you use these findings on the social and health consequences of substance use to gain support for prevention?*

■ *Impact on the community; and*

■ *Impact on families and the workplace.*

Teaching Instructions: Call on those who raise their hands, and write their responses on chart paper.

Ask: How can you use these findings in a proposal to funders to implement substance use and related HIV/AIDS prevention in your region?

Teaching Instructions: Spend a few minutes on the responses.

Large-group exercise: What is epidemiology?

Slide 2.35

Large-Group Exercise: What is Epidemiology?

Who Is Familiar with the Concept?

2.35

Ask: *Before we begin the next section that relates to the importance of epidemiology to prevention, I want to know:*

How many of you are familiar with the term, "epidemiology"?

Teaching Instructions: Let the group raise their hands.

Ask: *So, what does the term mean to you?*

Teaching Instructions: Call on several of those who raised their hands, and write their responses on the chart paper. If people are repeating the same response, just put check marks after the terms.

What is Epidemiology?

The World Health Organization defines epidemiology as:

■ The study of the distribution and determinants of health-related states or events (including disease)

    □ The onset of the health-related state/event/disease (incidence)

    □ The existing cases of the health-related state/event/ disease (prevalence)

■ The application of this study to the control of diseases and other health problems

(Source: World Health Organization: http://www.who.int/topics/ epidemiology/en/)

2.36

Say:

Here is the definition of epidemiology from the World Health Organization. The key elements are, that, it is a methodology used to understand how health-related conditions are distributed in a population—according to certain characteristics of the populations affected such as age, occupation, geographic residence—and the determinants of the health issue of interest—are those identified to have the health problem located in one town, are they all workers in a specific industry, are they all women?

Another key element is identifying new cases with the health problem or incident cases, and distinguishing them from those who have had the health problem for a while prevalence cases. This is important not only for infectious diseases, but also, for more chronic diseases, as well as substance use.

Presentation: Epidemiology and prevention

Epidemiology and Prevention

2.37

Say: *In this section of the module, we will be looking at Epidemiology and Prevention.*

Epidemiology and Prevention

To reduce or eliminate a health problem, we need to:

- Treat existing cases affected by the health problem
- Prevent new cases from being affected by the health problem

Source: http://www.who.int/topics/epidemiology/en/

2.38

Say: It is very important to keep in mind: In order to eliminate a health problem, whether it is measles, influenza, cancer, or substance use, it is important to treat the existing cases and prevent the occurrence of new cases. This means having comprehensive and integrated prevention and treatment interventions in place.

We will return to this later, in this module.

What Epidemiologic Methods Contribute to Prevention?

- Various methods can be used to carry out epidemiological investigations:
  - Surveillance and descriptive studies can be used to study distributions of a health issue
  - Analytical studies are used to study determinants of the health issue (etiologic studies)
- Forms the foundation for developing prevention and treatment strategies
- Forms the basis for planning and evaluation of prevention and treatment service delivery

2.39

Say:

Epidemiologists use a variety of methods for collecting the information they need. These include surveillance systems that may consist of the requirement of doctors and other health professionals to report anyone with a specific diagnosis, such as, HIV or other infections. They also include surveys of populations that may be defined as household residents within a specific geographic region, or by some characteristic, such as, age, such as for school-based surveys. These surveys can be conducted once, or multiple times over years.

In addition to these surveillance and descriptive studies, epidemiologists also conduct analytic studies to understand the determinants of the health issue. For instance, perhaps a population survey shows that a specific geographic area has high rates of the particular health issue of interest. Health workers and researchers will want to further study the problem, perhaps to visit the geographic site and conduct interviews and medical tests, or they can begin implementing disease control, such as, immunizations and treatment. These studies are, generally, hypothesis-driven and are also called etiologic studies.

Furthermore, as suggested earlier, epidemiologic research findings help to form the foundation for the development of prevention and treatment strategies, and are the basis for the planning and the evaluation of prevention and treatment delivery.

Prevalence of Substance Use (18-29 Year Olds)

Country	Tobacco	Alcohol	T or A	Cannabis	Other Drugs	Other Drug W/O Cannabis Initiation
Colombia	49.1	96.1	96.8	14.4	7.2	42.2
Mexico	64.4	91.5	92.1	11.5	9.6	58.3
USA	74.4	96.2	96.0	57.6	27.3	12.6
Belgium	--	88.4	88.4	31.0	10.2	8.7
France	--	94.5	94.5	52.9	11.0	21.7
Italy	--	79.6	79.6	17.4	1.1	27.0
Netherlands	--	92.6	92.6	38.9	15.5	40.7
Ukraine	81.1	99.7	99.4	15.2	2.6	32.1
Nigeria	9.0	62.1	63.1	3.1	0.4	93.1
South Africa	33.1	45.5	52.0	12.7	3.0	51.1
China	49.3	78.7	84.0	1.4	0.6	--
Japan	--	97.2	97.2	4.5	4.8	77.3
New Zealand	--	95.4	95.4	63.0	23.6	7.0

(Source: Degenhardt et al., 2008)

2.40

Say:
So let's look at some descriptive epidemiologic data. What is the prevalence of substance use, world-wide? Remember, by prevalence, we mean existing use of substances, including persons who may have just begun use, as well as, those who have been using for a long period of time.

The World Health Organization and other international agencies have supported epidemiologic studies [mostly surveys] of substance use over the past two decades. The most recent one targeted persons aged 18-29 years old living in households, in key cities in several major countries. The findings summarized here, indicate that substance use is pervasive, whether we are addressing the Americas, Europe, Africa, or Asia.

Also, of interest, is that countries vary in the proportions of people using different drugs. For instance, while 63% of those living in New Zealand reported that they used cannabis, only 1.4% and 3.1% of those living in China and Nigeria reported such use. We also see variations in use patterns, even within regions, with the US reporting that 57.6% used cannabis compared to 14.4% in Colombia and 11.5% in Mexico. Also, with the Americas, if we compare the prevalence of the use of the drugs without cannabis, we see a different pattern unfolding, in which 58% of Mexicans and 42.2% of Colombians report such use, while, in the US, the percentage is much lower, 12.6%.

Of course, some of this variation may be related to the rigor by which the survey was carried out, but it also reflects true variations. This information is important for prevention, as it suggests different forms of intervention, as well as prevention messaging.

The information on tobacco use in Belgium, France, Italy, Netherlands, Japan, and New Zealand is not reported, as use of tobacco was not included on the survey for these countries.

LARGE-GROUP DISCUSSION:

Ask:

- *What similarities do you see?*

- *What differences do you see?*

- *Do you see any patterns?*

- *What factors may explain this variation?*

Teaching Instructions: Call on different people to respond.

Degenhardt L, Chiu W-T, Sampson N, Kessler RC, Anthony JC, et al. (2008) Toward a global view of alcohol, tobacco, cannabis, and cocaine use: Findings from the WHOWorld Mental Health Surveys. PLoS Med 5(7): e141. Available at: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2443200/pdf/pmed.0050141.pdf

Substance Use Starts with the Young
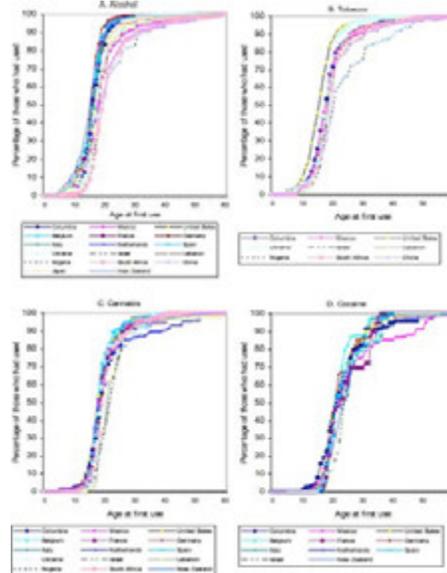
(Source: Degenhardt et al., 2008)

2.41

Say:

These slides show the incidence of substance use, the age at which individuals from different countries initiate the use of alcohol, tobacco, cannabis, and cocaine. Again, we see variations by country. More importantly, we see that the age of initiation varies by substance, and seems to cluster for many countries in middle to late childhood into adolescence.

Such observations suggest that prevention interventions must begin early. Over the course of today, this will become a recurrent theme…prevention must begin early.

Degenhardt L, Chiu W-T, Sampson N, Kessler RC, Anthony JC, et al. (2008) Toward a global view of alcohol, tobacco, cannabis, and cocaine use: Findings from the WHOWorld Mental Health Surveys. PLoS Med 5(7): e141. Available at: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2443200/pdf/pmed.0050141.pdf

How Does Epidemiology Guide Prevention Programming? (1/3)

Current Use of Marijuana and Prior Year Perceptions of Harmfulness Associated with Regular Use of Marijuana for 12th Graders
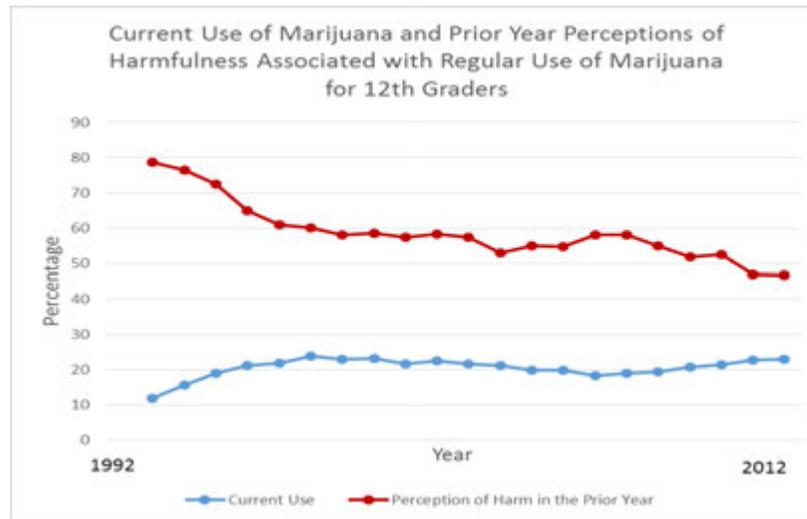
(Source: Johnston et al, 2013)

2.42

Say:

In addition to the characteristics of the substance use patterns and of those who use substances, epidemiologic research has provided other information that has informed the development of prevention programming.

Survey data indicate that there is an inverse relationship between perceptions of harmfulness or risks associated with use of substances and the use of these substances.

For example, here is data from the U.S. Monitoring the Future Study showing perceptions of the risks associated with regular use of marijuana during the year prior to use, and reported use for the 30 days prior to the survey. The lines are almost mirror images of each other.

These data come from: Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2013). Monitoring the Future national survey results on drug use, 1975-2012. Volume I: Secondary school students. Ann Arbor: Institute for Social Research, The University of Michigan.

How Does Epidemiology Guide Prevention Programming? (2/3)

Current Use of Marijuana and Prior Year Disapproval of Regular Use of Marijuana for 12th Graders
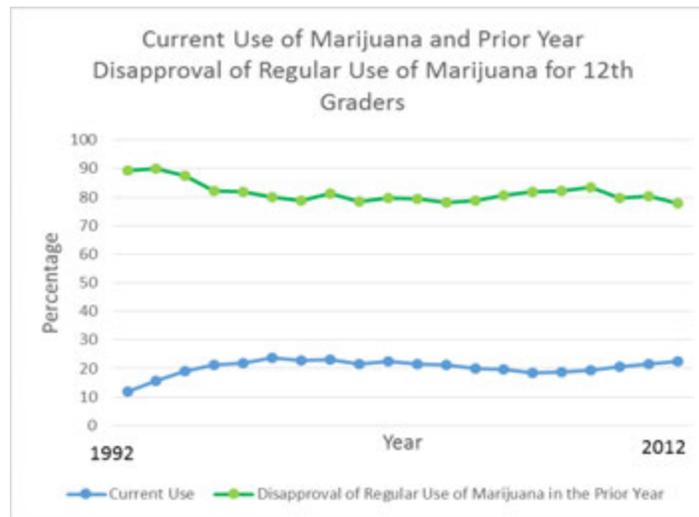
(Source: Johnston et al., 2013)

2.43

Say:

In addition, if we look at data from the same survey for the same population regarding the relationship between the percentage of students reporting disapproval of the regular use of marijuana, and use of marijuana reported in the following year, we see an inverse relationship. As disapproval increases, marijuana use decreases, and as disapproval decreases, the reported use of marijuana increases.

How Does Epidemiology Guide Prevention Programming? (3/3)

- Substances being used and how they are used
- Characteristics of those using substances
  - Age of initiation
  - Gender
  - Geographic location
- Non-use is related to perceptions of harm associated with use of a substance
- Non-use is related to perceptions of social disapproval of use

2.44

Say:
    So let's summarize. We can see that epidemiology provides information not only on what substances are being used and how they are used, but also, the characteristics of those using including:

- *Age of initiation;*

- *Gender; and*

- *Geographic location.*

We also saw that non-use of substances is related to perceptions of harm associated with use and with perceptions of social disapproval of use. All of this information has implications for prevention, as we will see throughout all the UPC curricula.

30 minutes

Small-group exercise: How epidemiology contributes to prevention

Slide 2.45

Small-Group Exercise: How Epidemiology Contributes to Prevention?

- Provide 3 reasons why this information is important for prevention
- In what ways can this information be used to guide prevention programming?
- Give, at least one example, of how this aspect is addressed in a prevention intervention or policy in your community
- Report back to the large group

2.45

Say:
I want you to break up into four work groups. Each workgroup will receive a card with one of these characteristics:

- *Age of initiation;*
- *Gender;*
- *Ethnicity/cultural group; and*
- *Geographic location.*

In the next 15 minutes, I want each group to address the 3 questions on the card:

- *Provide 3 reasons why this information is important for prevention?*

- *In what ways can this information be used to guide prevention programming?*

- *Give, at least one example, of how this aspect is addressed in a prevention intervention or policy in your community.*

Teaching Instructions: Allow the groups, 15 minutes, to address the questions. Then, give each group 5 minutes to report out.

Say:

Okay, let's hear your reasons. Who in group 1 is reporting out?

Teaching Instructions: Allow each group to report out. Ask the large group for comments.

Say:

Thanks. These were useful comments.

Presentation and discussion: Vulnerability to substance use and progression to addiction
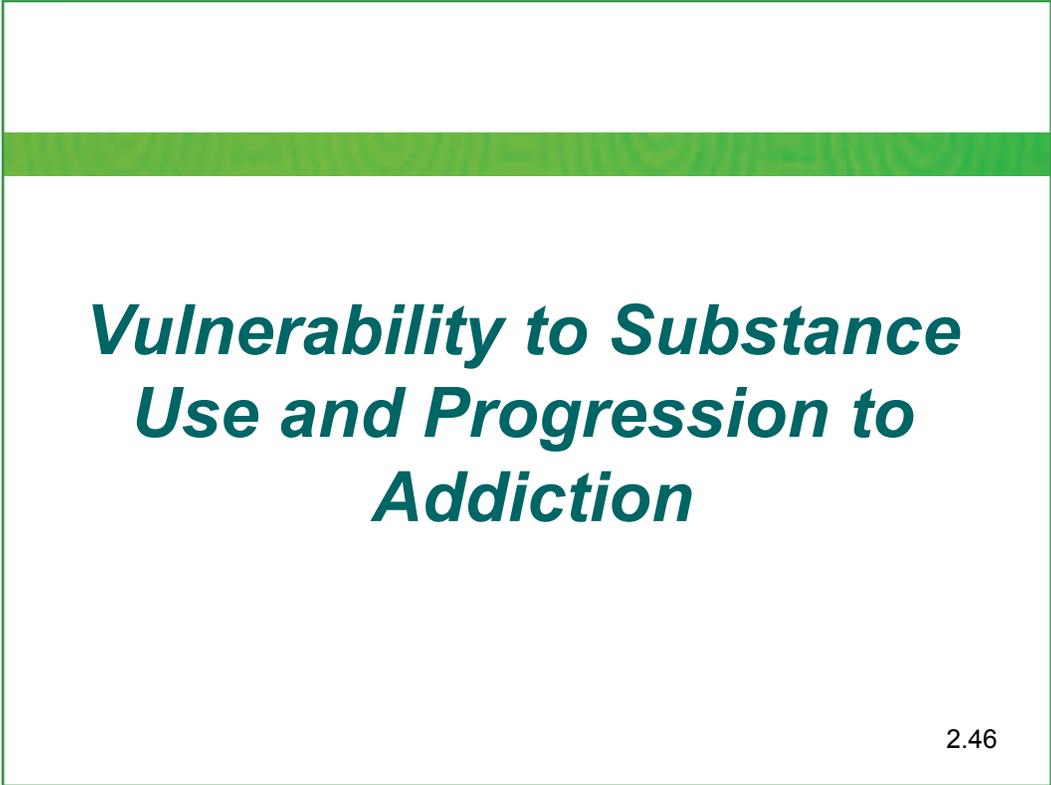
Vulnerability to Substance Use and Progression to Addiction

2.46

Say:
So how does this process happen—why do people begin to use substances and what factors are associated with progression to abuse and addiction?

Etiology of Substance Use

The term "etiology" has been defined as "… the science that deals with the causes or origin of disease, the factors which produce or predispose toward a certain disease or disorder"

(Source: Merriam-Webster Dictionary)

2.47

Say:

The foregoing information pertained to what we learn from descriptive epidemiology about existing patterns of substance use.

Although of great interest to prevention professionals, it is understanding the causes or origins of substance use, that is particularly important. It is this understanding that is the etiology of substance use or any health condition.

When we talk about etiology, what do we mean? An official definition is that it is the science that examines the causes or origin of a disease or disorder, and the factors that produce, or predispose to that disease, or disorder.

For decades, researchers have been trying to understand why people initiate substance use and then, once initiation begins, and particularly when substance users are faced with some of the consequences, why some progress on to abuse and dependence/addiction.

Etiologic Studies

- Determinants of or factors involved in substance use initiation
- Longitudinal studies of children and adolescents
  - General populations
  - Children of substance users

2.48

Say:

The information from descriptive epidemiologic studies—primarily, surveys--tells us how substance use may be confined to certain groups, say, those aged 20-40 years of age, or mostly in males, or in certain communities. As we saw, this information is important for our understanding of the nature and extent of substance use in a population within a community. Prevention also needs to understand what factors differentiate populations who use substances, from those who do not.

Studies that look at this are called analytic epidemiologic studies and, generally, select a population prior to the age of initiation and study them over a period of time.

Most of the epidemiologic information we have, regarding the determinants of substance use initiation, come from psycho-social longitudinal studies, genetic studies, and clinical studies.

Since the mid-1970s, several longitudinal studies of children and adolescents were conducted to determine what characteristics differentiated those who began substance use, from those who did not. Some of these studies included general populations, mostly students in school, and examined psycho-social factors, including, family relationships, engagement in risky behaviors, attitudes towards substance use, peer relationships, and academic experiences.

Some of these studies selected the children of substance users and not only collected similar psycho-social information, but also conducted genetic testing. These studies sometimes included twins or other siblings or other children, whose parents were not substance users.

Risk and Protective Factors: Background (1/2)

- Relatively little research was conducted until the 1970s regarding what factors or processes were associated with the onset of substance use

- In the mid-1970s, primarily in the United States, several longitudinal studies were conducted that followed cohorts of early adolescents into adulthood that examined factors that were related to substance use initiation

- In 1992 two significant works summarized this research on factors related not only to the initiation of substance use but also to the progression from use to abuse

2.49

Say:
Many early studies, that were conducted to understand what factors differentiated those individuals who used psychoactive substances from those that did not, were limited in design, and findings were difficult to interpret. It was not until the mid-1970s that several longitudinal studies were initiated, that followed cohorts of early adolescents into adulthood, that more solid evidence as to what factors were significantly involved.

In 1992, two significant works were published summarizing the findings from these longitudinal studies. The first, by David Hawkins and his research team, reported on findings related primarily to the initiation of substance use. The second work was an edited volume of papers by Glantz and Pickens, that focused on factors that were found to be related to progression from use to abuse.

It should be emphasized, that, the basis for these two works, was research conducted in the United States.

Hawkins, J. D., Catalano, R. F., & Miller, J. Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. Psychological Bulletin, 112, 64-105.

Glantz, M. D. & Pickens, R. W. (1992). Vulnerability to drug abuse: Introduction and overview. In M. D. Glantz & R. W. Pickens (Eds.), Vulnerability to drug abuse (pp. 1-14). Washington, DC: American Psychological Association.

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Risk and Protective Factors: Background (2/2)

- Risk factors are defined as measures of behavior or psychosocial functioning (including attitudes, beliefs, and personality) that were found to be associated with increased risk to use psychoactive substances
  - Contextual factors
  - Individual and interpersonal
- Protective factors involve measures that appear to prevent the use of psychoactive substances or reduce the untoward negative effects of risk. Protective factors identified through research include strong bonding to family, school, community and peers that hold prosocial attitudes and support prosocial behaviors

2.50

</div>

Say:

In general, risk factors are defined as measures of behavior or psychosocial functioning (including attitudes, beliefs, and personality), that were found to be associated with the use of substances. These included:

- *Contextual factors including laws and norms favorable to substance use behaviors: those related to availability, extreme economic deprivation, and neighborhood disorganization*

- *Individual and interpersonal factors including physiological measures, family history of substance use and attitudes toward substance use, poor/inconsistent family management, family conflict, and, low family bonding.*

The Glantz and Pickens work indicated that, while contextual factors played a significant role in the initiation of substance use, it was the individual and interpersonal factors, particularly, physiological, neurological, and genetic factors, that were found to have more significant influences on the progression to substance abuse.

Protective factors involved measures that appeared to prevent the use of psychoactive substances, or reduce the untoward negative effects of risk. Protective factors identified through research include strong bonding to family, school, community and peers that hold prosocial attitudes and support prosocial behaviors.

Hawkins, J. D., Catalano, R. F., & Miller, J. Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. Psychological Bulletin, 112, 64-105.

Glantz, M. D. & Pickens, R. W. (1992). Vulnerability to drug abuse: Introduction and overview. In M. D. Glantz & R. W. Pickens (Eds.), Vulnerability to drug abuse (pp. 1-14). Washington, DC: American Psychological Association.

Examples of Risk and Protective Factors

Risk factors	Protective factors
Childhood factors	
▪ Birth injury/disability/low birth weight ▪ Insecure attachment ▪ Poor social skills	▪ Social skills ▪ Attachment to family ▪ School achievement
Family factors	
▪ Poor parental supervision and discipline ▪ Parental substance abuse ▪ Family conflict and domestic violence ▪ Social isolation/lack of support networks	▪ Supportive caring parents ▪ Parental employment ▪ Access to support networks
School factors	
▪ School failure ▪ Negative peer group influences ▪ Bullying ▪ Poor attachment to school	▪ Positive school climate ▪ Sense of belonging/bonding ▪ Opportunities for some success at school and recognition of achievement
Community factors	
▪ Neighbourhood violence and crime ▪ Lack of support services ▪ Social or cultural discrimination	▪ Access to support services ▪ Community networking ▪ Participation in community group
Adapted from Durlak (1998) and National Crime Prevention (1999)	

(Source: www.community.nsw.gov.au/about_us/news_and_publications/inside...)

2.51

Say: *Here is a chart that provides some examples of risk and protective factors in four domains: Childhood, family, school, and community.*

The concept of risk and protective factors has been universally embraced, and for the last two decades, has informed the field of prevention interventions. However, more recent research has come to view risk and protective factors as indicators of other developmental mechanisms, that are working to increase individual vulnerability to substance use, and it is the interface of individual vulnerability with the micro-level and macro-level environments that, either put at-risk or protect from engagement in negative behaviors, such as, substance use.

What does this look like?

Substance Use Is a Developmental Problem
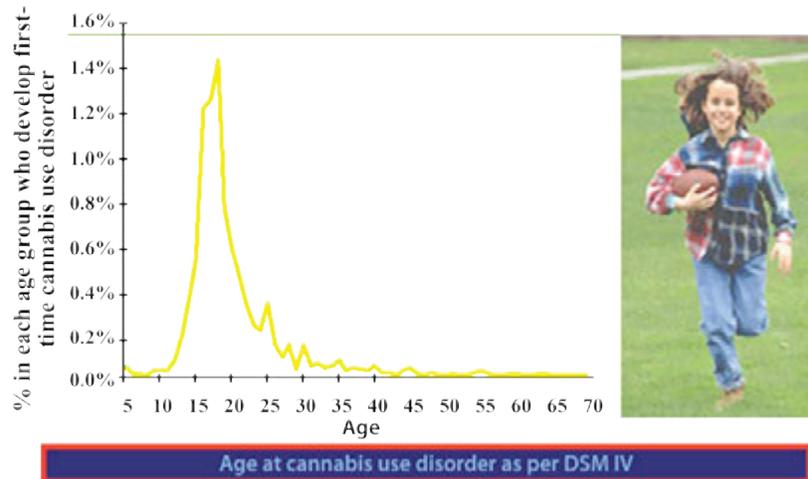
NIAAA National Epidemiological Survey on Alcohol & Related Conditions, 2003

©UNODC 2013

2.52

Say:

Before we look at this new way of thinking about the etiology of substance use, let's just review what we know about substance use and child development.

In most cases, as we saw earlier, substance use begins in late childhood and adolescence. We also know that substance use doesn't happen overnight. It is a process that includes many different pathways and, mostly, driven by decisions influenced by internal, biological factors and external, environmental and social factors.

Developmental Phases

- Each stage of development, from infancy to early adulthood, is associated with the growth of the following as a person matures:
  - Intellectual ability
  - Language development
  - Cognitive, emotional, and psychological functioning
  - Social competency skills
- Any major disruption of this growth will make a person more vulnerable to problem behaviors such as substance use
- Prevention needs to intervene early in each developmental phase to prevent the onset of substance use and dependence

2.53

Say:

Each developmental stage from infancy through adulthood is associated with the growth of intellectual ability; language skills; cognitive, emotional, and psychological functioning, and the continued acquisition of social competency skills. Any major disruption of this growth can lead to problem disorders, such as, substance use.

Even though, by adolescence, the brain and body have not reached maturity, social demands made on children and adolescents to cope with competing social, biological, and academic changes, are high. How these challenges are handled has important long-term implications for emergence of risk behaviors.

Life Course Social Field Concept
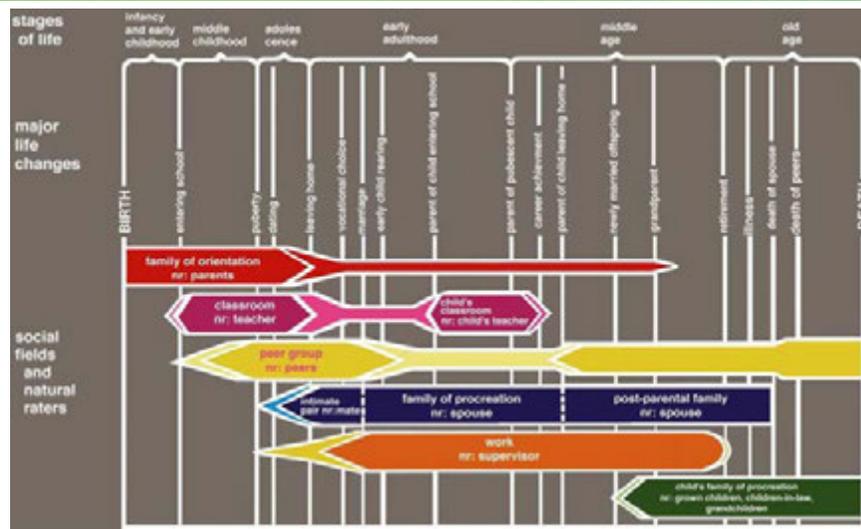
(Source: Kellam et al., 1975)

2.54

Say:

This slide depicts the stages of life across the top, major life events such as birth, entering school, entering puberty, vocational choice, marriage etc., as vertical white lines and, then, the social fields or influences on an individual's life, as horizontal bars across these major events. Those are the bars in different colors.

The width of the colored bars represent the strength of influence. So, we see that the red bar, family or parents, have the most influence from birth through puberty and although family or parental influence diminishes over time, it remains strong into middle and old age. The other bars depicted here are the school in magenta, peers in yellow, spouse and immediate family in dark blue, workplace in orange, and grandchildren, etc., in green. These fields represent the micro-level influences on how children develop into adults at different periods in their lives.

These influences or influencers are called socialization agents. As we discussed earlier, it is through these people and settings that surround us that we, as human beings, learn what is expected of us, in our society. These socialization agents guide us by teaching us the spoken and body language of our culture, how to behave in a variety of situations, and how to make important life decisions.

Kellam, S.G., Branch, J.D., Agrawal, K.C., & Ensminger, M.E. (1975). Mental health and going to school. The Woodlawn program of assessment, early intervention and evaluation. Chicago: University of Chicago Press, Chicago Press.

Socialization

- Human infants are born without any culture
- Socialization is a process of transferring culturally acceptable attitudes, norms, beliefs and behaviors and to respond to such cues in the appropriate manner
- Since socialization is a lifelong process, the individual will be socialized by a large array of different socializing agents (e.g., parents, teachers, peer groups, religious, economic and political organization and virtual agents, such as mass media)

2.55

Say:

We will be using the term "socialization" many times over the course of the UPC curricula. We just talked about socialization agents or influencers and their importance to us, as we develop. The process they use to help us achieve our culturally-accepted goals is called the socialization process. What does this term mean?

When we are born, we have no innate culture. Culture, attitudes, beliefs, language, behavior are all learned. This learning process is socialization. Socialization is a lifelong process, and as we have just seen, we are socialized by a large array of socialization agents throughout our lives. Socialization takes place through observation and guided learning in a positive environment. Socialization is enhanced when children form warm attachments, and feel bonded to the socialization agent. Being raised in a positive family environment, feeling successful in school or faith-based organization, having acceptance among peers, creates feelings of belonging and bonding. Having poor or failed interactions can promote feelings of alienation or not belonging, and may drive individuals away from family, peers, school or faith-based organizations.

In the next slides, we will look at this process and how it relates to substance use.

45 minutes

Presentation and discussion: Environmental influences and the Etiology Model
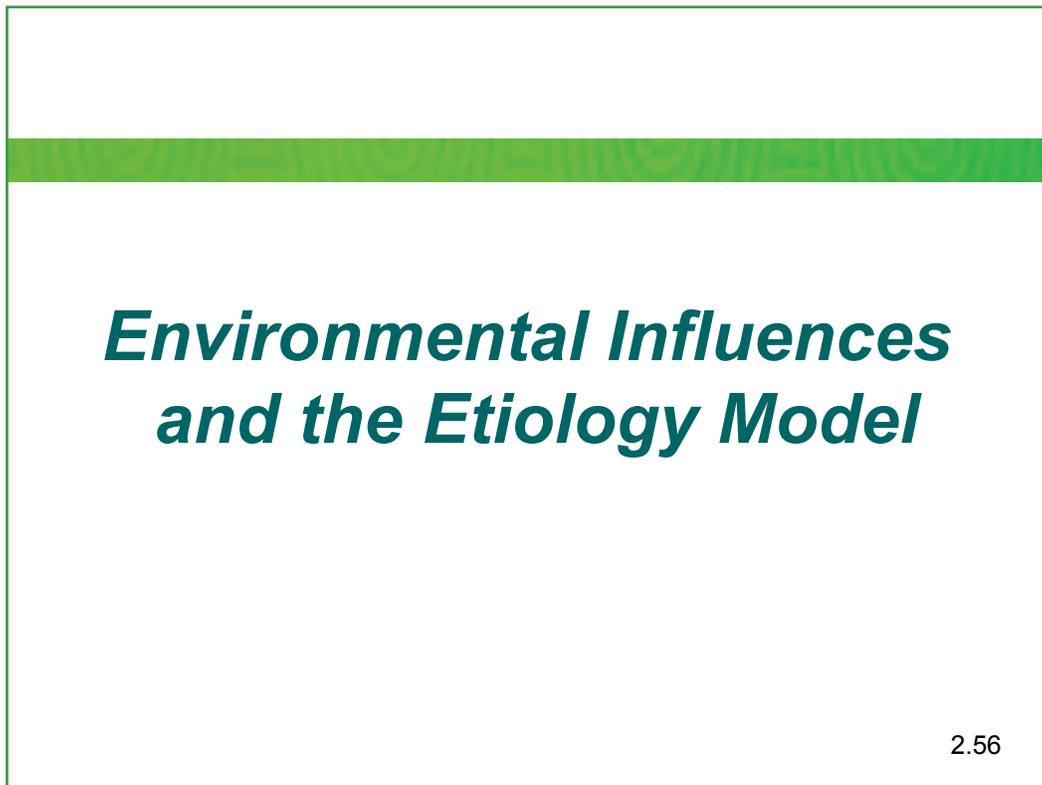
Environmental Influences and the Etiology Model

2.56

Say: In this section of the module, we will be looking at Environment Influences and the Etiology Module.

Etiology Model: How the Interactions of Personal Characteristics and the Micro- and Macro-Level Environments Work (1/2)

Macro-Level Environments

Micro-Level Environments

Personal Characteristics

Beliefs Attitudes Behaviors

• Genetics
• Temperament
• Physiology

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2.57
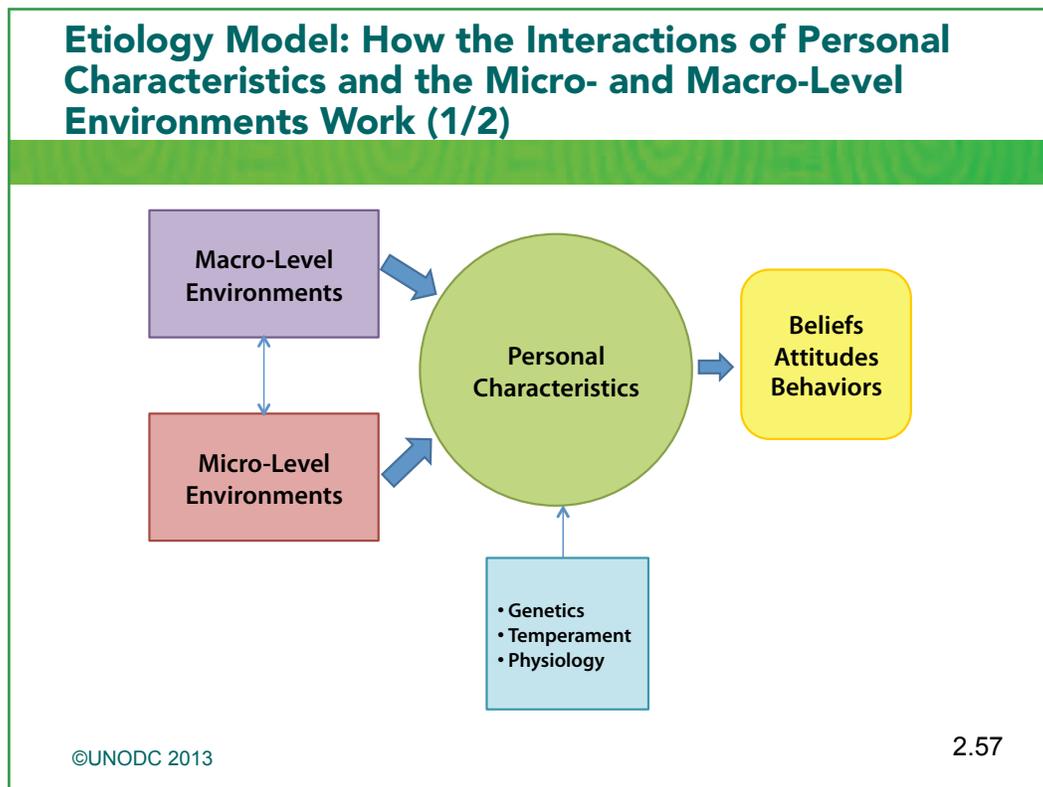
Say:

How do we put this all together in a way that guides our thinking about prevention? One way is, to consider the socialization process: what influences how we perceive and respond to the environments around us. How do we learn language, how to behave in specific situations, and how to become acceptable members of our families, our communities, and our societies?

When we are born, we have our own biological and physiological characteristics. These shape how we behave and interact with our environments. In positive environments, we are enabled to achieve our developmental goals; in negative environments we are not always successful in these achievements.

We are born into both micro- and macro-level environments. The micro-level environments consist of those that are immediate or most proximal to us, such as, our parents and families and as we get older the school, our peers, and the workplace. Beyond the micro-level environment is the larger neighborhood, community, and society. Although ever present, our micro-level environments buffer or temper and explain the macro-level environment, until we are able to engage with the macro-level environment, as independent individuals.

The interactions between, and across, these environments can be positive and result in our development and growth into productive adults, but can also be negative and result in stresses and, possibly, our engagement in potentially harmful behaviors or lifestyles.

Etiology Model: How the Interactions of Personal Characteristics and the Micro- and Macro-Level Environments Work (2/2)

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2.58
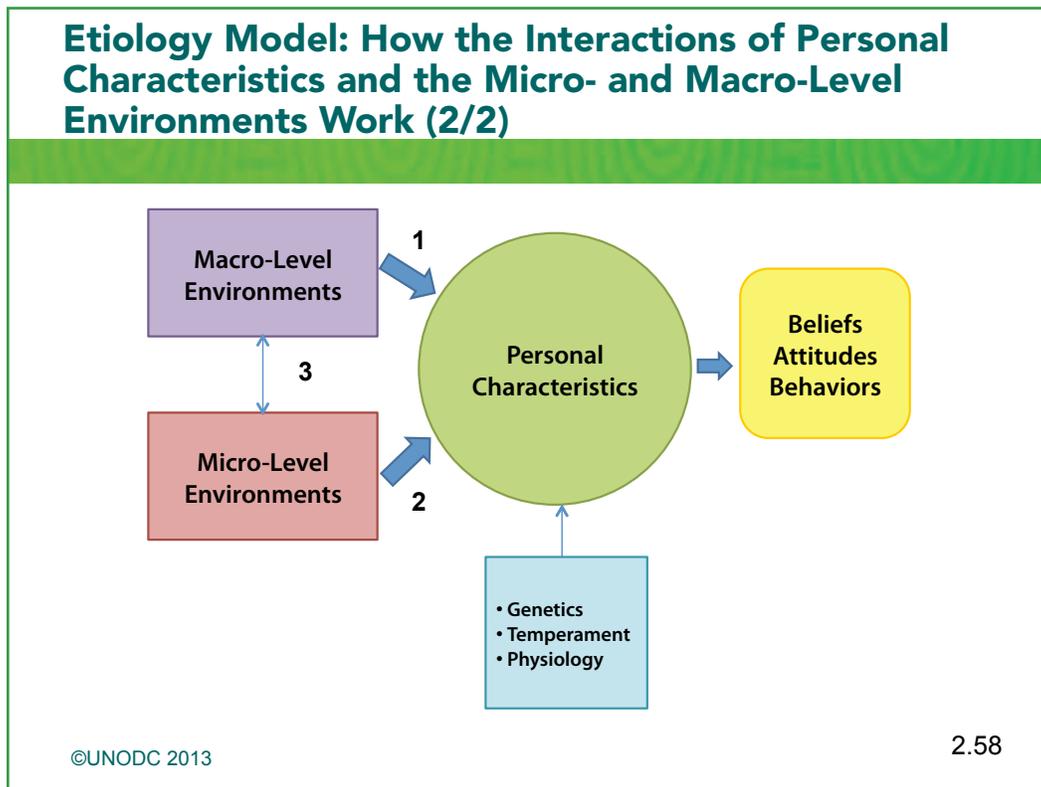
Say:

Let's look at this model again. Let's look at the arrow that is labeled "1". It is a two-headed arrow which means the influence is bi-directional. So, for example, a child is born with what psychologists call a difficult temperament, meaning, he has difficulty adjusting to the world around him. He may be fussy and demand attention. If his parents are not able to cope with this child, there is a strong possibility that the child will continue to have problems dealing with new environments as he grows older, such as, in school, with his peers, and in the workplace. However, if his parents develop the skills to appropriately and supportively manage this child, his potential for easier adjustment in these other settings is enhanced.

Now let's look at the arrow labeled "2", again, a two-headed arrow. Let's take another child who is close to his parents, but, who lives in a poor neighborhood with lots of run-down and empty houses. Unemployment is high and during the day, young single men hang out on the street drinking. They are in a gang. Our child must go past these young men on his way to school. The young men tease the child and tell him that he will have to become a member of the gang. Despite his loving and supportive parents, the child may eventually join the gang and drop out of school. He may actually believe that by doing this, he is protecting his parents.

149

The arrow labeled "3" is also a two-headed arrow. This suggests that what happens in the macro-level environment will have an impact on the micro-level environment. We mentioned in the prior slide a situation, whereby economic deprivation and unemployment impacted parents, and how they parented their children. But, we can think of other types of examples. A positive example will be discussed in the curriculum on environment-based prevention interventions, whereby, regulations restricting the minimum age for purchasing alcohol sends a message to parents and young people that alcohol consumption is not healthy for children and adolescents, and impacts perceptions of social approval of such use.

Ask:

Who can give me another situation that exemplifies this interaction?

Teaching Instructions: Call on a few people. We are looking for situations, such as, stress on parenting as a result of a job loss or health issue, deteriorating neighborhood with more and more empty houses and issues of safety, changing catchment area for school requiring attending another school or losing friends in school, or changes in lighting in the neighborhood and renovation of a local playground, providing opportunities for engaging in the community and for health and safety of the residents.

Interaction between Personal Characteristics (Vulnerability) and Environment

2.59
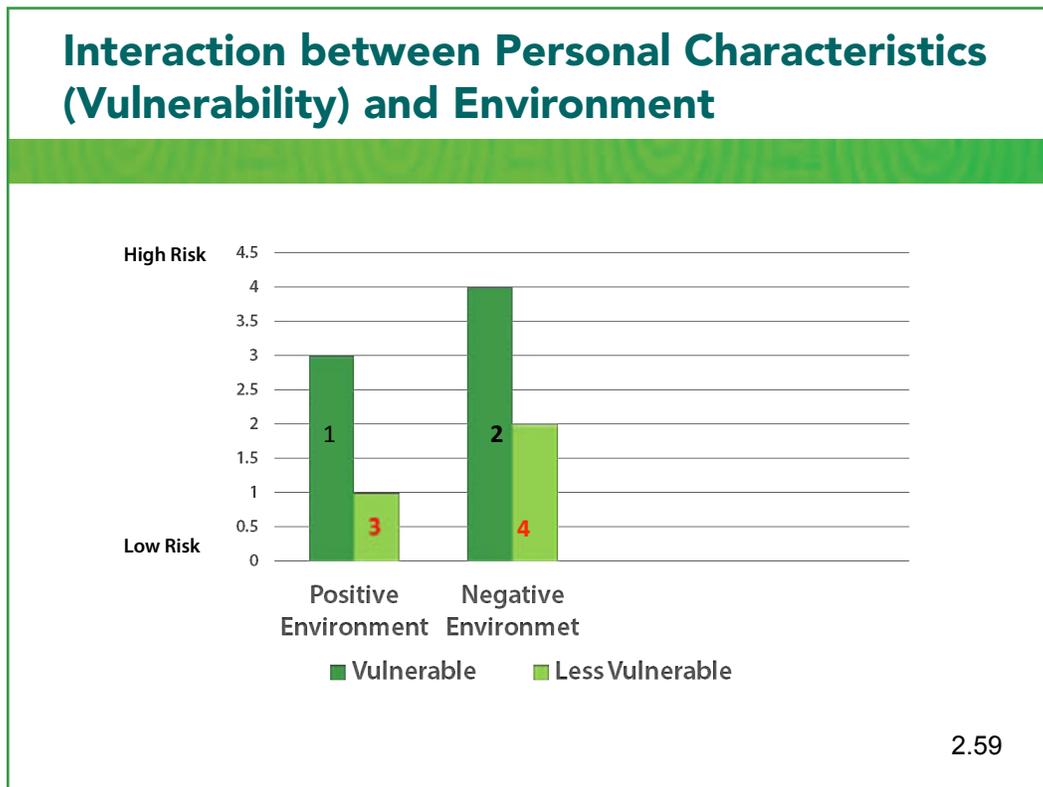
Say:

So how does this interaction work? If you can think of the personal characteristics like switches, that can be either "on" or "off" (the green-colored bars) and, then, think of the environmental factors as dials (positive group on the left, and negative group on the right).

Environmental factors can turn risk for engagement in a negative behavior up or down, depending on experience. So, if we have a child who has learning disabilities that is exposed to a negative environmental experience, such as, adversity, the dials are ramped up, and risk is increased—represented by the "2" on the dark green bar on the right. But for this same child experiencing a positive environment, such as, being raised in a warm, nurturing family, the dials are turned down and risk is decreased, as represented by the "1" on the green bar, on the left.

Ask:

Who can give an example that represents "4", a less vulnerable person in a negative environment?

151

Say:

No single factor alone is sufficient to cause substance use; there is likely some critical combination of the number and type of switches that are on, and dials that are turned up, that cause an individual to cross some liability threshold, to initiate substance use and progress to abuse and addiction. The threshold can be reached by any number of combinations of these factors that may be unique for each individual. The functional relationship between factors is also complex and not necessarily additive; e.g., some internal genetic risk variants, for instance, may require specific environmental influences to increase liability, such as, experiencing poor parenting. Similarly, the relationship between factors can be synergistic working together to affect risk.

Micro-Level Influence: Parents and Family

- Parents and families:
  - Nurture children and keep them safe
  - Instill social and emotional regulatory skills
  - Teach children about sharing and reciprocity
  - Reinforce accepted norms, values, and age- and gender-specific behaviors of the community/society
- Parenting and family continue to be important through adolescence when youth have more autonomy and opportunities for risky behaviors

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2.60

Say:

Let's talk a bit about how all of these interactions, experiences and influences operate.

The home environment is the single most profound influence on every aspect of child development. The family provides nurturing and keeps children safe. Parents instill social and emotional regulatory skills, teach children the importance of sharing and the skills and opportunities to engage in reciprocal relationships. They, generally, reinforce accepted norms, values, and prosocial behaviors. Furthermore, parents and family continue to serve an important role through adolescence, guiding and supporting their children, as they become more autonomous and have more opportunities to engage in risky behaviors.

Micro-level Influence: Peers

Peer relationships are influential socializing experiences that affect attitudes, skills, and "normative" behaviors

2.61

Say:

Peers become increasingly important as children enter adolescence. Peers contribute uniquely and independently from family factors in the socialization process, and can be considered one of the primary engines of development for children.

Positive adult development, including marriage and mating, is very much influenced by friendship patterns over time and, particularly, in adolescence. Choice of peers, therefore, is important. Parents can serve an important role in making sure selected peers and peer groups evidence prosocial behaviors and attitudes.

Micro-Level Influences: Schools, Faith-Based Organizations

After the family, the next major socialization agents in a society are schools and/or other education-related groups (such as guilds or apprenticeships) and religious organizations

- Provide the needed skills to transition from childhood into the expected adult roles important to any society
- Reinforce societal values, norms, and acceptable behaviors

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2.62

Say:

After the family, the next major socialization agents in a society are schools and/ or other education-related groups (such as guilds or apprenticeships), and faith-based organizations. These organizations provide the needed knowledge, skills, and experiences so that children can transition, from childhood, to assume their expected adult roles. They also reinforce values, norms, and acceptable societal behaviors.

A child's attachment to school and to faith-based organizations are components of resilience, suggesting that effective and responsive teachers and clergy members, an evidence-based curriculum, classroom reinforcements, positive school and religious organizational culture, opportunities for school and religious participation, and well-maintained building structures, may play an important role in positive development.

Macro-Level Environmental Factors

General
- Social and cultural environment
- Poverty
- Physical environment

Environmental Prevention
- Restricts access to substances, especially for youth
- Modifies the context of use
- Promotes non-substance use norms

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2.63

Say:

As we indicated earlier, macro-level environmental factors have a strong direct influence on personal characteristics as they do on the micro-level factors, such as, caregivers and families, schools, and peers. To address these influences, environmental prevention of substance use focuses on restricting access to the substances themselves, often making it more difficult, more expensive, and even impossible to obtain; modifying the context of use—e.g., by collaborating with entertainment sites to prevent abuse; or working with retail outlets to prevent sales to youth; and efforts to promote non-substance use norms through communications, that correct the misperceptions on the extent of use, and realistic information on the dangers of the psychoactive substances themselves.

Macro-Level Influences of the Social and Cultural Environment

The social environment of the larger community influences beliefs, attitudes and behaviors through:

■ Shaping social norms

■ Influencing beliefs about the risks and consequences of using psychoactive substances

■ Effecting stress responses

■ Enforcing patterns of social control

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2.64

Say:

What influence does the social and cultural environment have on individual beliefs, attitudes and behaviors, in addition to what we already discussed?

The social and cultural environment shapes social norms, influences beliefs about the risks and consequences of behaviors, such as, substance use and how to deal with stressful situations. How a community enforces laws or regulations has an impact on how we assess the tolerance or approval of behaviors, such as, alcohol consumption or drug use.

Poverty and Families…

- Increases stress among parents and caregivers
- Reduces ability to invest in learning & educational opportunities
- Compromises ability to be involved, patient, responsive and nurturing parents to their children throughout development
- Creates conditions that are stressful for children
- Interferes with growth, ability to respond adaptively to stress, development of psychological health and self-regulatory skills
- All of these conditions are strongly associated with risk for substance use and other problem behaviors

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2.65

Say: *Furthermore, poverty, or lack of income, or resources, can impact families, parents and caregivers in a number of ways:*

- *It increases stress on parents and caregivers. This means that:*
  - *They will be less able to attend to the basic nurturing, physical, and emotional needs of a child; and*
  - *The stress they experience can lead not only to neglect, but also, to child maltreatment.*

- *It can also reduce the family's ability to invest in learning and educational opportunities important to children's development, such as, schools or day care;*

- *Not only does poverty increase stress among the adults in the family, but it also creates stress for the children. They are aware of the potential instability not only in the caregivers, but also in terms of housing, food, and safety; and*

- *Such stress has the potential to interfere with physical, cognitive and emotional growth and, therefore, may impede the development of the skills necessary to overcome stress in the future.*

Ultimately, all of these conditions have been found, through research, to be strongly associated with risk for substance use and abuse, as well as, other problem behaviors.

On a Societal Level, Poverty...

■ Affects the quality of the environment

■ Limits choices and opportunities that adults can access to help their children

■ Places a strain on social systems and supports

■ Increases conflict

■ Has adverse effects on parent and child health

■ Breaks down cooperation among residents and between community organizations

■ Consequences for children:

  □ Teaching children effective social skills they will need to interact with peers and other adults is more difficult and less effective

  □ Poor children are much more likely to grow up to be poor adults and to raise children who suffer the same problems they experienced

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2.66

Say:

Poverty not only impacts families, peers and other micro-level environments, but ultimately, it impacts society overall. Here is a listing of some of these impacts:

■ *It affects the quality of the physical environment and may have a negative impact on health of the community;*

■ *It limits available resources and choices and opportunities for adults as well as children; and*

■ *It stresses social support systems, and can lead to social disorganization and breakdown.*

The consequences for children in terms of the lack of social and cognitive skills means the perpetuation of engagement in negative behaviors, and becoming unsuccessful adults and parents, themselves.

Discrimination and Social Exclusion

Profound effects on child development:

■ Physical and mental health disorders

■ Poor educational attainment

■ Lower levels of employment

■ Higher levels of risk behaviors; e.g., substance use

■ Restricted access to services and social supports

■ Effects are compounded for immigrants

2.67

Say:

In addition, real or observed, structural inequalities can lead to adverse educational, health and behavioral outcomes due to differential access to material needs, such as, adequate nutrition, quality housing and schools, as well as the increased exposure to environmental toxins, and hazards.

Coupled with poor access to services and social supports, and a lack of neighborhood collectivity efficacy, further increase the problem.

Finally, these problems are compounded for such groups as immigrants due to language and legal status barriers, perceived discrimination, and acculturation issues.

Political Instability

- Effects on child development are due to profound stress and adversity:
  - Disrupts basic services (e.g. housing, transportation, communication, sanitation, water, and health care)
  - Orphaned children or living alone on the streets or refugees or child soldiers
  - High rates of exposure to violence, disease, living in severely unhealthy conditions, injured, murder, traumatized, and victimized
- Consequences
  - Deficits and delays in numerous functional domains
  - High rates of psychological disorders and eventual substance use and addiction

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2.68

Say:

What is the impact in extreme macro-environmental situations where there is political upheaval? The impact on development in times of political instability has been well documented. With disruption of basic services, splitting apart of families, exposed to violence and disease, children are left on their own. This not only impacts their physical and mental health, but impedes normal development, increasing deficits in fundamental cognitive, social and emotional domains, and leads to high rates of psychological disorders, including substance use and addiction.

Small-group exercise: Major environmental influences and interventions

Slide 2.69

Small-Group Exercise: Environmental Influences

- Micro-Level Environmental Influences
  - Family
  - School
  - Peer
- Macro-Level Environmental Influences
  - Poverty
  - Social environment
  - Physical environment

2.69

Say: *We will explore how micro-level and macro-level environments influence those exposed in this group exercise. We will divide into four work groups. Two groups will focus on micro-level environments, and two will focus on macro-level environments.*

One of the micro-level environment groups will list 5 positive influences, and the other group will list 5 negative influences. Similarly, one of the macro-level environment groups will list 5 positive influences, and the other group will list 5 negative influences. You have

15 minutes. Then, each group will report back to the full group. Please have one person from your group do the reporting.

Teaching Instructions: Allow about 20 minutes to develop the lists; then 10 minutes, reporting back to the larger group. Have each group present what their group has listed.

Small-Group Exercise: Following Up with Interventions

How can you intervene with the negative influences listed in the previous exercise?

2.70

Say:
Please convene again in your small groups to review the lists of negative influences. We want you to provide up to 5 proposed prevention interventions with these negative influences, using some of the positive influences, such as, the family, the school and other approaches.

Teaching Instructions: Allow about 20 minutes to develop the lists; then 10 minutes reporting back to the larger group. Have each group present what their group has listed.

Epidemiology and Prevention Targets (1/2)

Descriptive epidemiologic research findings have prevention implications

- Where to target interventions?
- What substances to target?
- To whom should interventions be targeted?
- When to target the interventions?
- What should be the mediators of the prevention intervention (objectives and messages of prevention)?

2.71

Say: *To summarize, we learned that epidemiologic studies help Prevention Coordinators and Specialists to know:*

- *Where to target prevention interventions, that may be a specific geographic area;*

- *What substances to target, for some populations alcohol and tobacco may be more of a problem than marijuana;*

- *To whom should the interventions be targeted, what groups seem to be most at-risk or more susceptible, such as, children of substance users;*

- *When to target the interventions, if the age of onset is 14 years of age, the interventions should begin earlier, say, at age 12;*

- *And finally, what should the mediators of the prevention intervention be--what are the objectives and messages that should be of concern, such as, addressing the attitudes toward use, normative beliefs as to the prevalence of use, and perceptions of the risks associated with use.*

Epidemiology and Prevention Targets (2/2)

- Analytic epidemiology looks at etiology as applied to prevention
- Understanding interactions between vulnerability and micro- and macro-environments has prevention implications
  - Identifying most at-risk populations
  - Identifying points of intervention
    - Developmental stage
    - Settings

2.72

Say:

Findings from etiologic studies provide a better understanding of vulnerability and risk, that there is a relationship between the personal characteristics of human beings and their micro- and macro-environments. This understanding helps to identify the most at-risk populations, such as, children in poverty, as well as points when interventions can take place, such as, with babies of substance using mothers or in early childhood to improve cognitive development through pre-school experiences. It also helps us identify settings in which interventions can be delivered, such as, in families and schools.

LARGE-GROUP DISCUSSION:

What other observations have you made about the contributions of epidemiology to prevention?

Teaching Instructions: : Call on a few people.

Presentation and discussion: The need for integrated substance use services

Slide 2.73

The Need for Comprehensive Integrated Substance Use Services

2.73

Say: *In this section of the module, we will be looking at The Need for Comprehensive Integrated Substance Use Services.*

Substance Users Represent a Range of Use Patterns

- In any population at any point in time we will find:
  - Vulnerable non users
  - Initial users with the potential to progress to abuse and substance use disorders
  - Those who are already using and may or not be experiencing the consequences of their use
- Such a range in substance use patterns requires a range of interventions

2.74

Say:

We have also learned something else from our epidemiologic studies. They tell us that, in any population and any point in time, we will find:

- *Non-users, who are vulnerable and at-risk, for initiating use;*

- *Those who have initiated use, and are at-risk for continuing use;*

- *Those who have already begun and continue to use; and*

- *This range of patterns requires a range of interventions.*

Epidemiologic studies reinforce the need to offer comprehensive prevention and treatment services in any community to reduce new cases of substance use and to treat those who have already initiated substance use to help them sustain substance-free productive lives.

Natural History of Substance Use/Abuse

2 Discontinue Use

1 Initiate Use

4 Develop Problems
• **Health**
  - **Dependency**
  - **Infections**
  - **Chronic problems**
  - **Mortality**
• **Emotional, psychological**
• **Social**

Influential Factors

🔴 =Personal Characteristics

🟢 =Environmental Factors

🟡 =Pharmacological Factors

3 Continue Use
- **Frequency**
- **Multiple Substances**
- **Varied Administration**

5 No Problems

Size of circle related to estimated influence

2.75

Say:

When epidemiologists study a health condition, they try to document the natural history of the condition. For substance use, the natural history is a progression from initiation of use (Box 1) to either discontinuation (Box 2) or to continued use (Box 3), that may involve not only use of one substance, but of multiple substances.

We know from many epidemiologic studies that those who continue their substance use can develop problems (Box 4), and that not everyone who continues to use substances develops problems (Box 5).

The establishment of a natural history allows us to identify points where an intervention could and should take place, but also it suggests what types of intervention or interventions are necessary.

The colored circles you see represent the influential factors we just discussed that have been found to play a role in movement from one box to another. The red circles represent the personal characteristics, green circles represent environmental factors—either micro-level or macro-level, and the yellow circles represent the pharmacological effects of the substance or substances being used. These effects will be covered in more detail in Curriculum 2 - Physiology and Pharmacology.

The size of the circles represent the degree to which personal characteristics; environmental factors, and, the pharmacological characteristics of the substances themselves, play a role in the progression from initial use to continued use, and to addiction. The larger the circle, the larger the influence.

So, we see that the initiation of substance use is influenced by personal characteristics somewhat, while environmental factors, such as, peer use has a greater influence.

Personal characteristics and environmental factors continue to play a role in the continued use of substances, however, now the pharmacological effects of the substances begin to influence continued use.

As substance use continues, the pharmacological aspects of the substances have greater influence over the life of the substance user, leading to health as well as emotional and psychological and social problems.

We also know that the initiation of many substances does not always continue overtime. There is evidence that spontaneous non-use occurs mostly for drugs such as cocaine, heroin and amphetamines. We also know that it is the age that substance use is initiated, rather than the duration of use, that increases the likelihood of moving through this progression to dependency. The younger the age of initiation, the more vulnerable the child is, to progress to substance abuse.

For prevention professionals, it is important to understand that substance use starts out as a behavior, that continued use leads to increasing the amount and frequency of use. The increased use stimulates a psycho-physical need to continue use and dependency. In most situations, dependency dominates the lives of substance users and soon, other social and health problems emerge.

So, there are definitely opportunities for prevention interventions and policies to have an impact, even when substance use has been initiated.

In the next Module we will be discussing this process in more detail.

Spectrum of Substance Use Services

(Source: National Research Council, 1994)

2.76
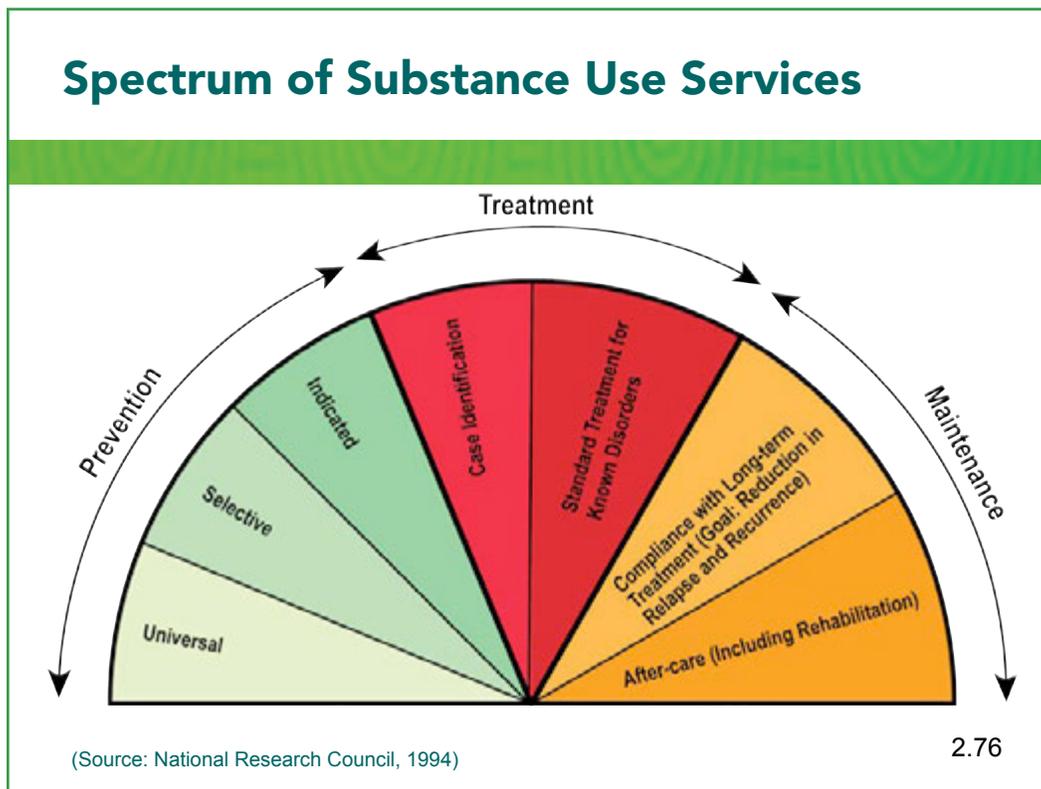
Say:

  The Institute of Medicine in the United States developed a graphic of this spectrum of services from prevention, through treatment, to maintenance of a substance use-free state.

I'll explain the prevention categories in the next slide; but here the IOM is explaining how prevention, treatment, and maintenance are an integrated whole in the array of services needed for all populations exposed to substance use. The descriptive services in each wedge, such as Case Identification, Standard Treatment, etc. further describe the types of interventions used to bring those affected to a non-substance-using state.

We know that not only do the psychoactive substances affect the neurobiological functioning of the brain, but as a result, has impacted other aspects of the users' lives. This is particularly important if the substance use and progression occurs in childhood or early adolescence, when the brain is developing and emotional and sexual maturity progresses. Studies indicate that early onset of substance use is associated with more rapid progression to abuse and dependence with associated behavioral problems that impact educational and vocational attainment, and the formation of healthy social relationships.

In addition, we know that the consequences of substance use impact families and the neighborhoods of those affected.

National Research Council. Reducing Risks for Mental Disorders: Frontiers for Preventive Intervention Research. Washington, DC: The National Academies Press, 1994

Classification of Prevention Interventions

- Universal—For those who represent a mixture of user groups, however most are non-users
- Selective—For those who are vulnerable or determined to be at-risk
- Indicated—for those who may have already initiated substance use but do not need treatment

2.77

Say:

The spectrum of services suggests that prevention programming target three groups on non-users.

- *Universal interventions or policies address those groups that are generally made up of individuals representing a mixture of user groups, however, most are non-users. Represented in this category of interventions would be most of the school-based curriculum and school and environmental policies that we will learn about later;*

- *Selective interventions target populations that have been identified as being vulnerable or at-risk, these also include school and family interventions and policies that keep children in schools; and*

- *Finally, Indicated interventions target those who may have already initiated substance use, these are generally counseling interventions.*

Presentation and discussion: Epidemiology and prevention review

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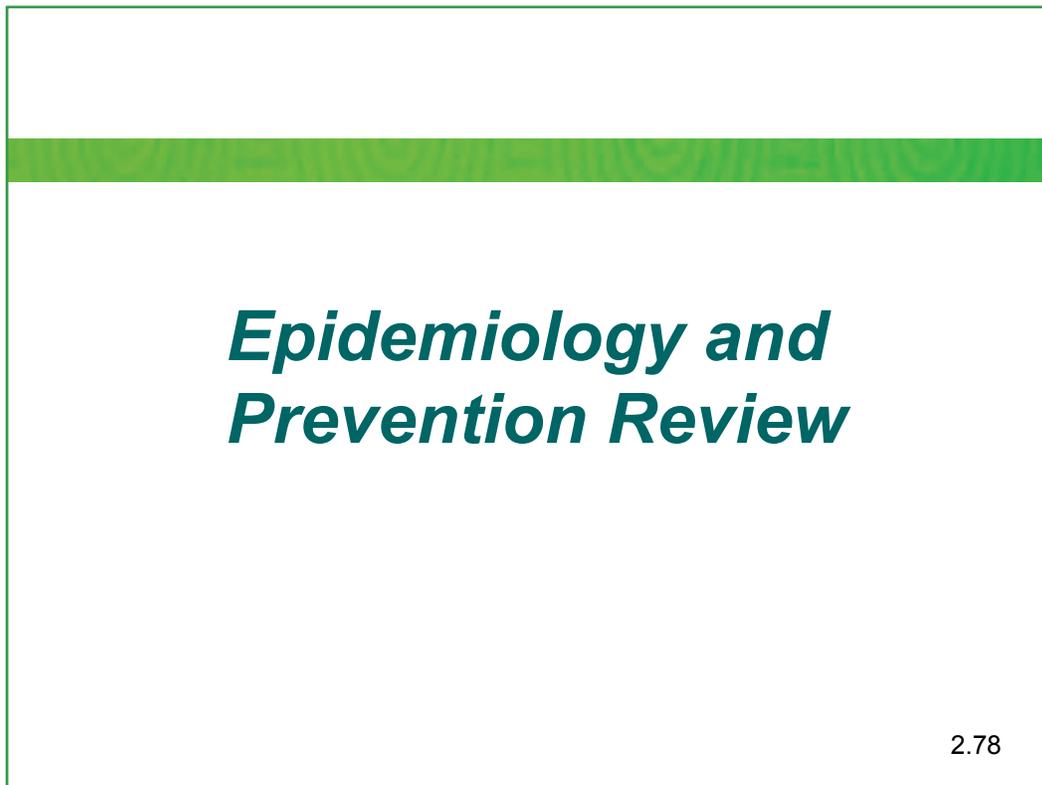
Epidemiology and Prevention Review

2.78

Say: In this section of the module, we will be looking at Epidemiology and Prevention review.

Epidemiology and Substance Use Prevention

- Substance use patterns and trends within and across populations

- Interactions of micro- and macro-level environments and individual behavioral, and psychosocial and biological characteristics

- Causal mechanisms leading to initiation of substance use and processes involved in progression from initiation to substance abuse and substance use disorders

- Processes involved in discontinuation of substance use

- Substance use over the life course, including developmental processes that influence substance use trajectories and behavioral, health, and social consequences of substance use

2.79

Say:

What contributions does epidemiologic research make to the field of substance use prevention?

In addition to providing a picture of substance use patterns and trends over time within and across population groups, epidemiologic research examines the interactions of micro-level environmental factors, for example, those related to family and peers, and macro-level environmental factors, for example, those related to communities and individual behavioral and psychosocial and biological characteristics. Such research also provides information on the processes and mechanisms not only associated with initiation and progression to substance use, but also, those associated with discontinuation of use. Furthermore, by following substance users over time, epidemiologic research provides information on the behavioral, health and social consequences of substance use.

Applying Epidemiology Findings and Methods to Your Prevention Practice

- Substance use patterns and trends within and across populations
- Interactions of micro- and macro-level environments and individual behavioral, and psychosocial and biological characteristics
- Causal mechanisms leading to initiation of substance use
- Processes involved in discontinuation of substance use
- Substance use over the life course, including developmental processes

2.80

LARGE-GROUP DISCUSSION:

Say:
How can you apply these findings and epidemiologic methods to prevention in your own work? How can you use data from etiologic studies to understanding the development of substance use in your community? What new information have you learned that you think will be most helpful? Are there existing surveys that can be used to inform the development of prevention programming?

Teaching Instructions: Allow about 15 minutes to discuss these questions. Suggested answers to the questions.

- I can see what substances are being used in my community and who is using them.

- By understanding the factors associated with the onset of substance use, I can begin to think of what types of interventions would be most appropriate for my community. For instance, the most vulnerable children are those whose parents use substances. These children would need selective or indicated interventions.

- I understand that in my community, we need both substance use prevention and treatment programming to address the needs of all substance users and those most vulnerable to initiating use.

15 minutes

Module 2 evaluation

Module 2 Evaluation

15 minutes

2.81

Say: *Thank you all for your great participation!*

Please be sure to complete the evaluation form before we start module 3.

MODULE 3

PREVENTION SCIENCE: DEFINITIONS AND PRINCIPLES

Module 3 Preparation Checklist

■ Review Getting Started for general preparation information.

■ Preview Module 3. Be familiar with the instructions for the exercises in this module.

Content and Timeline		
Activity	Time	Person Responsible
Introduction to module 3	15 minutes	
Presentation and discussion: Definitions and principles	30 minutes	
Presentation: Prevention intervention and policy development	10 minutes	
Presentation and discussion: Building interventions based on substance use prevention theories	30 minutes	
Presentation and discussion: Developing and adapting evidence-based substance use prevention interventions and policies	35 minutes	
Break	15 minutes	
Small-group exercise: Community problem	45 minutes	
Presentation: Prevention research methodologies	10 minutes	
Review and discussion: Why prevention science is important	15 minutes	
Module 3 evaluation and wrap-up	15 minutes	

Module 3 Goals and Objectives

Training goals

- Provide a standard definition of prevention science;

- Provide the science-base for prevention intervention development and delivery; and

- Introduce you to terms and concepts that are the foundation of prevention research and evaluation.

Learning objectives

Participants who complete Module 3 will be able to:

- Define prevention science;

- Explain the three legs of prevention science and practice: epidemiology/etiology, intervention/policy development, and research methods;

- Describe the theoretical foundations of prevention;

- Describe the processes for the development of prevention interventions; and

- Define terms and concepts that are the foundation of prevention research and evaluation.

![15 minutes]

Introduction to module 3

Slide 3.1

International Centre for Credentialing and Education of Addiction Professionals (ICCE)
The Universal Prevention Curriculum (UPC) for Substance Use Training Series

Curriculum 1

Introduction to Prevention Science

MODULE 3—PREVENTION SCIENCE:
DEFINITIONS AND PRINCIPLES

Say:

In this module, we will be looking at Prevention Science: Definitions and Principles.

3.2

Say:

As we begin Module 3, I would like you to review this one-page introduction to the material we will cover. You may encounter terms and concepts that are new to you and that is to be expected in this challenging area of prevention science. We will discuss all of this material as we progress through the Module.

Teaching Instructions: Please allow 5-10 minutes for the participants to read the Introduction to themselves.

Introduction

Module 3 will introduce you to some of the goals and principles of prevention science, developed by the United States Society for Prevention Research (SPR) in 2011, to promote wider understanding and a consensus in this emerging field. The goal of prevention science is: "To improve public health by identifying malleable [changeable] risk and protective factors, assessing the efficacy and effectiveness of preventive interventions and identifying optimal means for dissemination and diffusion." To achieve this, prevention science should be multidisciplinary and include both scientists and practitioners, to apply the results of research to prevention in the community.

We introduced the term **"evidence-based"** in Module 2. Evidence-based (EB) interventions and policies require: Systematic decision-making using of scientific evidence that is associated with improved or positive outcomes; and reliance on data collected through rigorous experimental research. Over the past 20 years, the field of substance use prevention has accumulated sufficient research to have evidence-based interventions, just as in other health disciplines.

Some of the guiding principles of prevention science include:

1. Having a **developmental focus** which says that the factors affecting positive and negative behaviors change, as children mature;

2. Addressing the **individual and the micro- and macro-level environments**, and what makes EB interventions work in preventing negative outcomes;

3. Understanding **theories of human behavior change** and their application to prevention interventions;

4. Applying an understanding of the local **epidemiology of the substance use** to target prevention interventions and policies, and to the selection of the most appropriate intervention;

5. Applying **ethical standards** to professional practice and the delivery of prevention interventions.

This module also includes concepts, such as:

1. Individual vulnerability and risk—The extent to which children meet their critical developmental benchmarks; and when they fail to do so, they are often at increased vulnerability for problem behaviors, including substance use.

2. Socialization-The process involved in learning the culture, attitudes, beliefs, language, and behavior of society. You will hear about EB prevention interventions that work to promote socialization directly with children, or through trained socialization agents–parents or teachers.

3. Behavioral theories and their application to the Content of EB interventions involving attitudes, perceptions, and norms regarding substance use. The other components of interventions include Structure, which is how the intervention or policy is organized and constructed; and Delivery which relates to the implementation of the intervention or policy.

We will also consider and discuss the "balancing act" between adapting EB interventions and policies to suit audiences, and remaining faithful to the original design and content, which was tested in research. Lastly, we will learn about some of the primary research methodologies used to test EB interventions.

Training Goals

- Provide a standard definition of prevention science
- Provide the science-base for prevention intervention development and delivery
- Introduce you to terms and concepts that are the foundation of prevention research and evaluation

3.3

Say: *Overall, the training goals of the module are:*

- *Provide a standard definition of prevention science;*

- *Provide the science-base for prevention intervention development and delivery; and*

- *Introduce you to terms and concepts that are the foundation of prevention research and evaluation.*

Learning Objectives

- Define prevention science
- Explain the three legs of prevention science and practice: epidemiology/etiology, intervention/policy development, and research methods
- Describe the theoretical foundations of prevention
- Describe the processes for the development of prevention interventions
- Define terms and concepts that are the foundation of prevention research and evaluation

3.4

Say:

This module was developed to introduce you to prevention science, and for you to understand why epidemiology, intervention and policy development and advanced research methodologies influence the effectiveness of prevention programming, leading to evidence-based interventions and practice.

The module will help you:

- *Define prevention science;*

- *Explain the three legs of prevention science and practice: epidemiology/etiology, intervention/policy development, and research methods;*

- *Describe the theoretical foundations of prevention;*

- *Describe the processes for the development of prevention interventions; and*

- *Define terms and concepts that are the foundation of prevention research and evaluation.*

Presentation and discussion: Definitions and principles
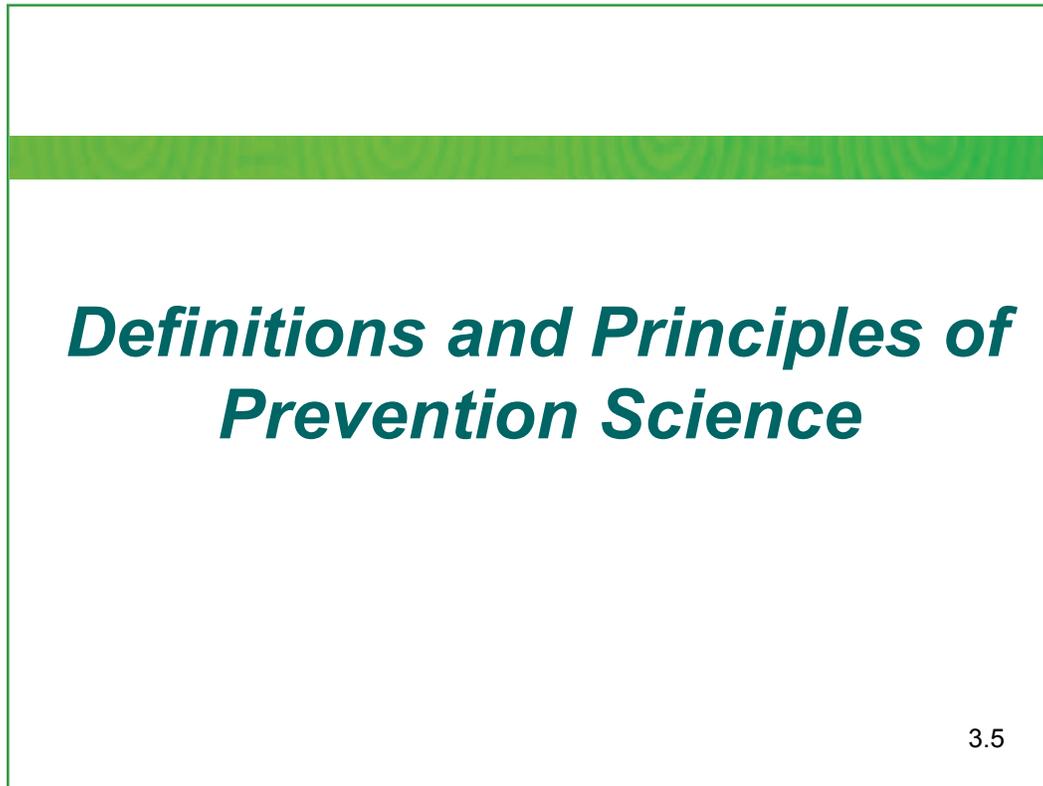
Definitions and Principles of Prevention Science

3.5

Say: *In this section of the module, we will be looking at Definitions and Principles of Prevention Science.*

Defining Prevention Science

- The primary goal of prevention science is to improve public health by identifying malleable risk and protective factors, assessing the efficacy and effectiveness of preventive interventions and identifying optimal means for dissemination and diffusion
- The field involves the study of human development and social ecology as well as the identification of factors and processes that lead to positive and negative health behaviors and outcomes
- Prevention science is the foundation for health education and health promotion as well as preventive interventions

3.6

Say: *Over the past twenty to thirty years, prevention researchers and prevention practitioners have been accumulating a wealth of information that has served to inform how to develop and deliver effective prevention interventions for a variety of behaviors, including substance use. In 2011, the United States Society for Prevention Research used this information to develop a document that lays out an evolving field of prevention science.*

In this document, it states that the "primary goal of prevention science is to improve public health by identifying malleable risk and protective factors, assessing the efficacy and effectiveness of preventive interventions, and identifying optimal means for dissemination and diffusion".

The field is multidisciplinary, meaning, that many fields of knowledge contribute to our understanding of human development, and those factors and processes that lead to positive and negative health behaviors and outcomes.

Prevention science has become the foundation not only for preventive interventions, but also, for the related areas of health education and health promotion.

Prevention Science—Practice and Research

Practice → ← Research

Prevention Science

3.7
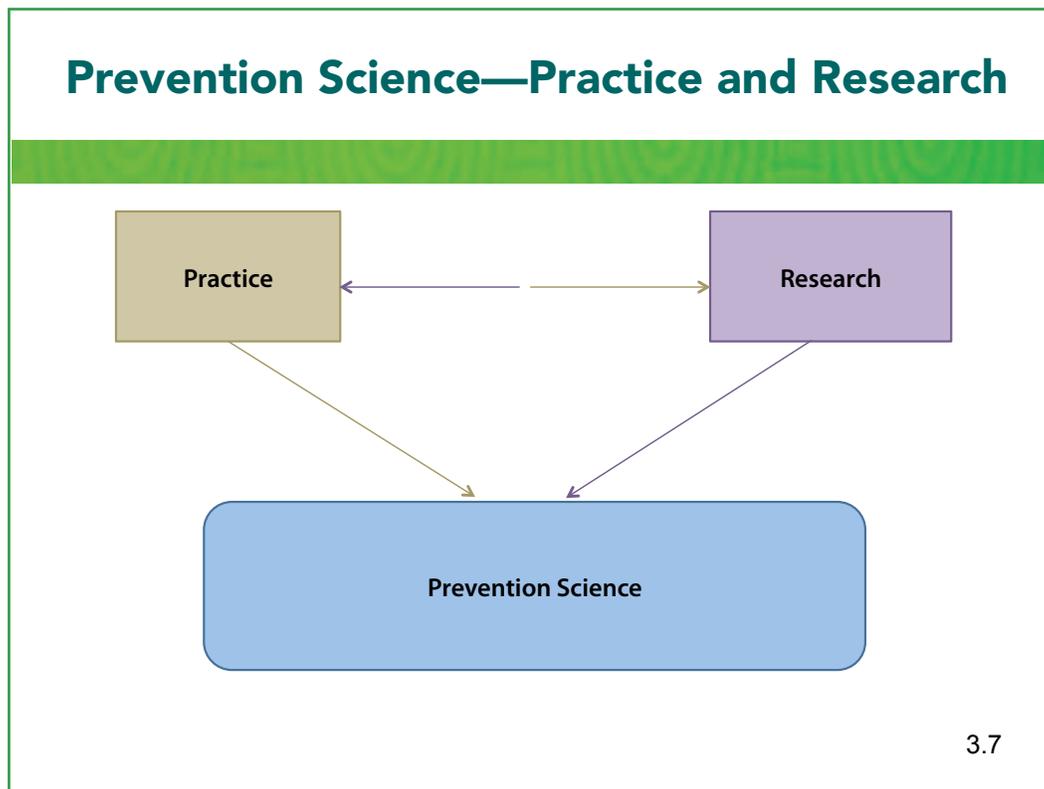
Say:

Sometimes, when we hear the word "science", we think it only involves research. However, those who have been trained in fields such as psychology, social work, and counseling know that science has two arms: research, yes, but also, practice.

Practitioners have vast experience in delivering interventions to a wide variety of groups. This information is important for researchers TO HAVE. The improvement of prevention interventions is very much dependent on the equal interaction between practitioners and researchers. The importance of having a sound understanding of the scientific foundation of prevention interventions is discussed in Module 6, when the role of the prevention coordinator as a 'translator' of this foundation to policy-makers and local community leaders is covered.

We are familiar with the terms "preventionist" or "prevention specialist", but we, in the field of prevention, draw heavily on prevention science even when we may not be aware of the science itself. You will learn as we proceed through the Universal Prevention Curriculum, that, science forms a strong foundation for evidence-based prevention interventions.

Guiding Principles of Prevention Science

- **Developmental focus**
- **Developmental epidemiology of the target population**
- **Transactional ecology**
- Human motivation and change processes
- A team approach
- Ethical practices
- Continuous feedback between theoretical and empirical investigations
- Improving the public health
- Social justice

3.8

Say: *In addition to establishing a definition of prevention science, the Society for Prevention Research has detailed guiding principles.*

In the next few slides, we will look at these principles. Many of them provide the foundation of this training series.

Let's describe each of these in turn. You will find these definitions at the end of this Module in your Participant Manual. The following summarizes these definitions:

■ *What does **"having a developmental focus"** mean? This means, that, as prevention professionals, we need to understand that there are variations in the manifestations of factors that influence behaviors, as they occur over the life course. It also means that in any society, there are developmental or age-related tasks that need to be accomplished as children grow. Any disruption of the accomplishment of these tasks may lead to the occurrence of disorders or problem behaviors at certain stages of development. All of this needs to be considered as we look at potential preventive interventions we want to use, in our efforts to prevent the onset of drug use and its consequences.*

■ **Developmental epidemiology of the target population** plays a critical role in prevention. We recognize how transitions through different ages place children at varying risks—e.g., a child's transition from spending most of the time at home and with caretakers, to spending most of the time in school. But, we also need to acknowledge the heterogeneity in etiology and outcomes within and across populations, this means that the factors or processes leading to initiate substance use and to continue use vary across individuals, groups, and populations. Such heterogeneity is critical to understanding risk variations in processes and mechanisms, that are reflected in intervention design.

■ What are **transactional ecological** factors? This refers to various environmental influences on our beliefs, values and attitudes and behaviors. As you will recall from the Etiology Model that we first saw in Module 2, the interaction of the characteristics of the individual, family, school, community, and the larger socio-political and physical environments not only influence our beliefs, attitudes, and behavior, but also, are interdependent, affecting each other. These interactions give the meaning to the term, "transactional ecology". These interactions occur between genetic and other biological processes and dynamics of social relationships, within the context of environmental factors. Within this overall framework, prevention science draws from a wide range of theories that explain dynamics of human development and behavior.

Etiology Model: How the Interactions of Personal Characteristics and the Micro- and Macro-Level Environments Work
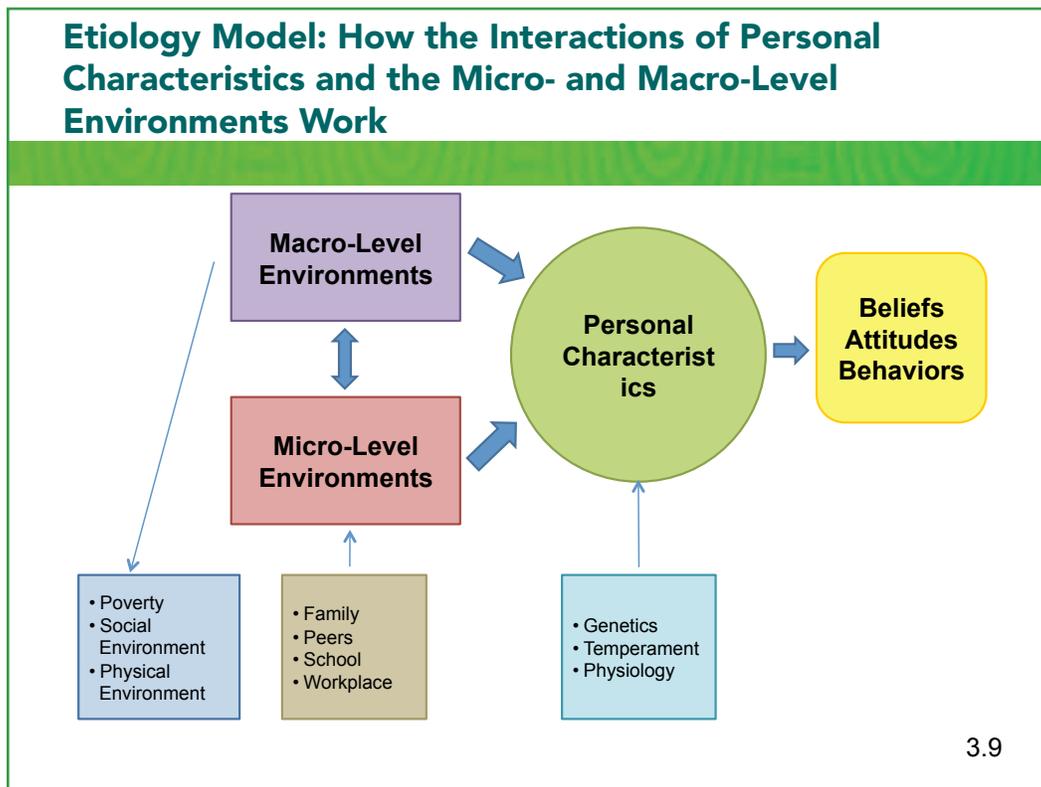
Say:

The Etiology Model we discussed in Module 2 represents the concept of ***transactional ecological*** *factors. Let's just review what this shows without going into too much detail, but, just to underscore how important this concept is, to prevention.*

We see that the micro-level environmental factors include the family, peers, school and workplace, while the macro-level environmental factors are the larger ones of poverty, and the social and physical environments. In Module 2, we discussed the bi-directional nature of the interactions between the micro- and macro-level environmental factors. And also, the influence of these environments on individuals, and how individuals see and respond to the world around them.

While it's main feature is to represent the origins of substance use, we can see how the various environmental levels interact and affect individuals in their interactions with environmental settings, like the family, school, and community.

Guiding Principles of Prevention Science

- Developmental focus
- Developmental epidemiology of the target population
- Transactional ecological
- **Human motivation and change processes**
- A team approach
- Ethical practices
- Continuous feedback between theoretical and empirical investigations
- Improving the public health
- Social justice

Source: Standards of Knowledge for the Science of Prevention, Society for Prevention Research, 2011.

3.10

Say:

*Here, we see the next guiding principle: **human motivation and change processes**.*

*Prevention science focuses on **human motivation and change processes** to help design effective interventions, which seek change in individuals and environments to prevent or treat substance use. We will be looking at these processes and the theories that pertain to them later on in this module, and throughout the UPC curricula.*

Let's look at the next slide which shows the interactions that influence behaviors we want to produce or change—the decision-making that results in not using psychoactive substances and other high-risk behaviors.

The Etiology Model and Human Motivation and Change Processes

Macro-Level Environments

Micro-Level Environments

Biological/ Personal Characteristics

Socialization

• Beliefs
• Attitudes

• Social and Cognitive Competence
• Skills

Intent

Behavior

© Sloboda forthcoming

3.11
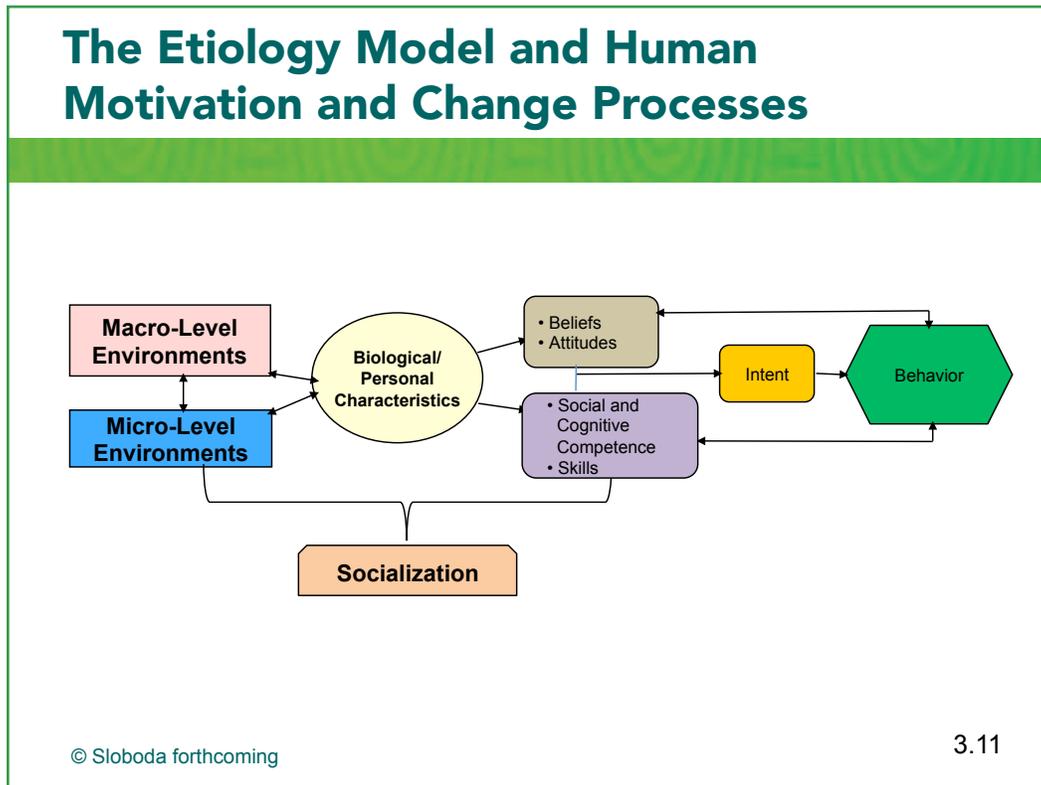
Say:

Here, we are beginning to make the transition from understanding the processes leading up to engagement in a behavior-whether a positive or negative behavior, such as substance use.

This framework illustrates the factors involved in the human motivation and change processes we work with, in prevention. It shows how the various environmental levels, personal characteristics and the socialization process interact in the decision-making that takes place before the use of any substance use, and performance of other problem behaviors.

Remember, socialization is the process involved in learning the culture, attitudes, beliefs, language, and behavior of the society, within which we live. The key, here, in socialization is learning, and evidence-based prevention teaches the acceptable attitudes and behaviors of society, in order to avoid substance use and become successful, healthy adults.

As we saw in the prior module, genetic and other biological factors play a significant role in the achievement of developmental benchmarks, that is, the goal of each stage of development, from infancy to early adulthood, that includes: intellectual ability, language development, cognitive, emotional, and psychological functioning, and attainment of social competency skills.

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As we noted before, the extent to which developmental benchmarks are met determines our level of vulnerability to influences from our environment. Such vulnerability can vary within an individual and across developmental periods. Children who don't reach early developmental benchmarks are, likely the most vulnerable, as failure to achieve these early benchmarks signifies their difficulty in reaching later ones.

Environmental factors can both lessen, or enhance this vulnerability. As environmental experiences are associated with heightened stress or adversity, the risk for substance use is increased. The environmental influences are viewed at two major levels, those in close proximity to the individual—micro level environments—and those that are more distant—macro level environments.

It is the combination of these environmental influences and personal characteristics of individuals that shapes beliefs, attitudes, and behavior. So, it is possible for vulnerable children who receive positive parenting to overcome their challenges, while similarly vulnerable children who are neglected by their parents, may not be so successful.

What is also important to note in this slide is that the two levels of influence--the macro- and micro-level--do not operate independently to influence our behavior, but they also impact one another. For instance, family stability and, even, parenting behaviors can be challenged when one or both caregivers are unemployed for long periods of time. If we live in impoverished or disorganized neighborhoods, children may be at-risk or not feel safe. Think about the basic challenge of just walking to school through such a community.

Socialization in Modern Societies

In complex and multicultural societies, the likelihood that the socialization process is not always optimal has increased:

- Complex "cultures" – mechanical vs. organic solidarity
- Neighborhood disorganization
- Conflicts between socialization agents, e.g., home vs. school
- Geographic mobility and immigration
- Global village syndrome

3.12

Say:

  Let's now talk about socialization, and how socialization influences evidence-based prevention interventions.

Think about your own lives. Think about those who influenced your growing up….parents, teachers, other adults. Think about who influences your perceptions of the world and how you behave now.

For many of us, our personal worlds have become much more complicated than they were, when we were children. Think of your parents' world. How different is it from yours?

As our world expands through travel, education, and social media, we are involved in more complex and multi-cultural societies. Such exposure to other ways of thinking about issues or of behaving, sometimes, is confusing.

In these situations, the likelihood of having an optimal socialization process, whereby the right decisions or behaviors are clear, become more challenging.

Prevention Interventions Target…

- The individual directly
- The individual's micro- and macro-level environments

3.13

Say:

As we will learn when the curricula focus on specific types of prevention interventions, both individuals and their environments are targeted by prevention interventions. That means, that the interventions work to directly change an individual's beliefs, attitudes and behaviors, e.g., school interventions focusing on resisting pressure from peers to try marijuana, etc.; or to help socialization agents improve their socialization skills, such as, improving parenting or teaching skills or improving the home environment. Or they work to modify the setting to make it more difficult to engage in negative behaviors, such as, requesting proof of age to prevent underaged youth from accessing alcohol and adding street lights to prevent criminal activity, etc.

A Socialization Perspective of Prevention —Behavioral Interventions

Prevention specialists…

■ May either **train** socialization agents, such as parents and teachers

■ Or **directly engage** in the socialization process, thus becoming socialization agents themselves

3.14

Say:

What this also means is, that these prevention interventions are designed to help prevention specialists either to train key socialization agents, such as, parents and teachers to improve their socialization (parenting, classroom management) skills, or to directly engage the target groups in the socialization process and, thus, becoming socialization agents themselves.

As we will learn when we discuss environment-based prevention interventions, this concept is also applicable when we implement laws, regulations, or alter the physical environment. In these cases, the environmental interventions, themselves, provide guidelines for appropriate behavior. By altering the behavior effectively, we will see that attitudes and beliefs about substance use, also, change.

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Both Socialization and Prevention Programming Help Individuals

- To use evidence-based practices to collect and interpret cues within individuals' social and emotional context to learn and "try on" new behaviors
- To weigh the potential outcomes for the performance of these behaviors within their social and emotional context

3.15

Say:

Both socialization and prevention programming share similar processes. They both use evidence-based practices to help individuals interpret cues in their social and emotional contexts; they help individuals learn and practice new behaviors, such as, how to resist offers to use substances; and they help individuals to weigh the potential outcomes for the performance of these behaviors, within their own social and emotional context.

Guiding Principles of Prevention Science

- Developmental focus
- Developmental epidemiology of the target population
- Transactional ecological
- Human motivation and change processes
- **A team approach**
- **Ethical practices**
- **Continuous feedback between theoretical and empirical investigations**
- **Improving public health**
- **Social justice**

Source: Standards of Knowledge for the Science of Prevention, Society for Prevention Research, 2011.

3.16

Say:

As we review the remaining principles, we can see how these will be pertinent to many aspects of prevention practice. In fact, we will remind you of these principles as we continue through this module and those following.

- *A team approach: The transdisciplinary nature of prevention science means that we need to involve transdisciplinary teams with an array of expertise to address the complexity of the issues addressed by prevention science. This expertise includes understanding the etiology of a range of problem behaviors; intervention development and practice expertise; knowledge of research design, sampling and data collection and analysis, as well as understanding program and policy implementation and analysis;*

- *Ethical practices: We will go into detail about professional ethics in prevention in Module 6, but these guide all aspects of prevention science;*

- *Continuous feedback between theoretical and empirical investigations: Later in this module, we will discuss how theory seeks to explain the mechanisms that account for a behavioral outcome discovered through empirical epidemiological investigations, or evaluations of prevention interventions;*

- **Improving public health**: To achieve the vision of prevention science to improve the nation's health, scientists and community prevention practitioners need to collaborate and utilize their collective skills and particular expertise. Science, practice and policy must be mutually informed by research in controlled and natural settings; and

- **Social Justice**: Social Justice is related to the Human Rights Movement and the Health as a Right Movement. Social justice is the ethical and moral imperative to understand why certain population sub-groups have a disproportionate burden of disease, disability, and death, and to design and implement prevention programs, and systems and policy changes to address the root causes of inequities.

Major Components of Prevention Science

- Epidemiology and Etiology
- **Intervention Development**
- Research Methodology

3.17

Say:

In Module 2, we discussed the first component of prevention science, Epidemiology and Etiology. Now we're going to focus on the second component, Intervention Development, and we'll preview some of the major research methodologies that are used in prevention science. Modules 4 and 5 will focus on research approaches and the UNODC International Standards for Drug Use Prevention, which assessed the scientific literature around the prevention of substance use.

- *Epidemiology and Etiology seek to identify the predictors and processes associated with positive and negative behavioral outcomes, and their distribution in populations;*

- *Intervention Development focuses on designing interventions that alter trajectories of vulnerable populations by promoting positive developmental outcomes, and reducing negative behaviors and outcomes; and*

- *Research methodology, as used in prevention, involves an array of tools and techniques including community entrance and engagement skills, study design, sampling methodologies, sample maintenance and retention, and statistical analyses used primarily to monitor and evaluate prevention interventions.*

Presentation: Prevention intervention and policy development

Prevention Intervention and Policy Development

3.18

Say: In this section of the module, we will be looking at Prevention Intervention and Policy Development.

Prevention Intervention and Policy Development—Assumptions (1/2)

■ Prevention interventions and policies address malleable factors specified in theoretical models of positive and negative behavior

■ Intervention and delivery systems consider characteristics of the target population; with interventions classified as:

  ❑ Universal – Total population at all risk levels

  ❑ Selective – Known groups at risk—e.g., children of drug users

  ❑ Indicated – Individuals who already use drugs, but are not yet deemed dependent

3.19

Say:

 This next section will look at prevention intervention and policy development. However, before we address the development of prevention interventions and policies, there are a few assumptions to be discussed.

■ *First of all, as we said earlier, prevention interventions and policies address malleable factors specified in theoretical models of positive and negative behavior change. Malleable factors are those things that we can change, such as, knowledge, attitudes, skills and intentions around behaviors, such as, staying substance-free. Prevention interventions and policies focus on addressing these factors in order to alter or change one's life course, by promoting positive developmental outcomes and reducing negative behaviors and outcomes;*

- *Intervention and delivery systems consider characteristics of the target population (e.g., age, gender, race/ethnicity, culture, and developmental status), and proximal or micro contexts (family, peers, schools, community, and workplace), and distal or macro contexts (e.g., population density, poverty rates, crime, community resources, and quality of the built/physical environment); and*

- *Interventions are classified as universal, selective, and indicated, based on risk distribution among the targeted population.*

  - *Universal—Risk level is the situation where risk is specifically unknown, and may include individuals at low risk as well as those at high risk, such as, a class of students attending a regular school;*

  - *Selective—Risk is known, and the risk status is used to identify groups, such as, children of substance users, children in poverty, children impacted by war or natural disasters; and*

  - *Indicated—Individuals who already use drugs, but, do not yet meet diagnostic criteria for dependence.*

Prevention Intervention and Policy Development—Assumptions (2/2)

- Effective prevention is the result of collaborations
- Existing platforms for prevention often can be embedded in existing service settings
- Standardization is important and requires monitoring for fidelity and quality of service delivery
- Effective prevention should be sustained with sustainability considered early during implementation

3.20

Say:

But to be effective, it is also important that other delivery aspects of prevention be considered:

- *Collaborative relationships between prevention researchers, constituents, key stakeholders (e.g., parents, educators, faith communities, recreation providers, mental and physical health practitioners, other service providers and their managers, political leaders, law enforcement, and business leaders) and community prevention practitioners can provide critical support to the quality, implementation feasibility, use, and sustainability of the preventive effort;*

- *Refinements and/or adaptations can occur as interventions are embedded in service settings. These adaptations should be subject to empirical validation through systematic testing to examine efficacy;*

- *Standardization of intervention implementation requires documentation of intervention components, manualization, development of training and technical assistance, an organization to provide training and technical assistance, and guidelines for and monitoring of implementation fidelity and quality assurance; and*

- *Sustainability and dissemination should be important considerations early in the development of an intervention. However, these elements should not completely determine the possible choices for intervention development.*

We will learn more about building community systems to support and maintain prevention throughout the UPC training.

Stages of Intervention Design

- Adopting a theoretical foundation to guide the intervention
  - Identifying the target group
  - Selecting a theoretical framework
  - Developing intervention objectives
- Building the program using a multidisciplinary team
  - Methods and strategies
  - Tailoring interventions
  - Intervention settings
- Pilot testing, implementation, and evaluation

Source: Rohrbach, 2014

3.21

Say: *Intervention development is complex and takes place through steps or stages. There are a number of ideas about what these steps are, but, in general, they include:*

- *Adopting a theoretical foundation to guide the intervention;*

- *Building the program; and*

- *Pilot testing.*

But it doesn't stop there. Once the intervention is designed, developed, assessed and made ready for implementation, the life cycle continues with research to test its effectiveness over time, and across groups.

Briefly, the selection of a theoretical foundation to guide intervention development depends on the characteristics and vulnerability status of the target group. Will the intervention address children of substance users? Will it focus on changing the classroom setting, or how to handle students who have been found to be smoking?

Developing a theoretically-based intervention that is able to communicate and engage the target group appropriately often requires a small team of practitioners, researchers, and representatives of various stakeholder groups who will ultimately participate in, and use the intervention.

Rohrbach, L.A., (2014). Design of prevention interventions. In: Sloboda, Z. and Petras, H. Advances in Prevention Science: Defining Prevention Science, New York: Springer Publishing.

Identification of Vulnerable and "At-Risk" Populations

- Individual assessments—Examples
  - Problem-oriented Screening Instrument for Teenagers
  - Drug Use Screening Inventory
- Surveys
  - School-based surveys (e.g., Monitoring the Future Study, European School Survey Project on Alcohol and Other Drugs)
  - Household surveys
  - Surveys of specific vulnerable groups (e.g., homeless
- Community Indicators
  - Archival data

3.22

Say:

Identification of vulnerable and at-risk populations is the first step in adopting a theoretical foundation to guide your intervention. Although prevention science has not yet developed a standardized set of instruments or tests to use for identifying vulnerable and at-risk groups, there are a number of tools available to prevention professionals, that can be used to identify the characteristics of a target population.

These range from assessments of individuals, such as, the Problem-Oriented Screening Instrument for Teenagers, (POSIT) also available for parents, and the Drug Use Screening Inventory (DUSI); school- and population-based epidemiologic surveys such as Monitoring the Future or household surveys, such as, the U.S. National Drug Use and Health Survey; or archival indicators, such as, juvenile delinquency records, records of school drop outs, or child welfare agencies.

We will be discussing these data collection methods in more detail, later, in Module 6.

(http://www.assessments.com/catalog/POSIT.htm)

Presentation and discussion: Building interventions based on substance use prevention theories
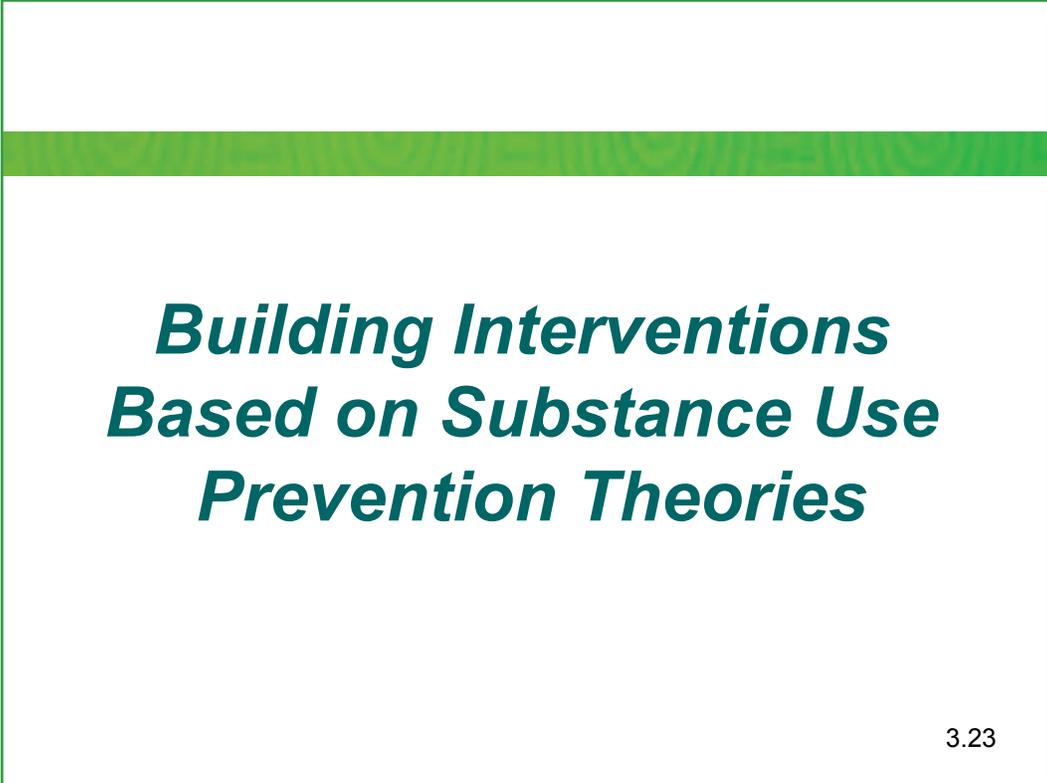
Building Interventions Based on Substance Use Prevention Theories

3.23

Say: *In this section of the module, we will be looking at Building Interventions Based on Substance Use Prevention Theories.*

Selecting a Theoretical Framework

■ Provides an understanding of the determinants of behavior

■ Makes clear the mechanisms being used to produce the outcome of interest

■ Informs the selection of the intervention approach to achieve these outcomes

3.24

Say:

The next step is to select a theoretical framework for the intervention. The theoretical framework:

■ *Provides an understanding of the environmental and behavioral determinants of behavior related to a specified health problem;*

■ *Clarifies potential mechanisms for producing the desired outcome of interest; and*

■ *Helps to select the intervention strategy or approach that will achieve these outcomes (Bartholomew & Mullen, 2011).*

Several important theories have informed the development of evidence-based prevention interventions over the past 30-40 years. We will be discussing these theories throughout the UPC, providing more details of their elements and how they are used to guide intervention development.

Stages of Research in Prevention Research Cycle

Source: Preventing Mental, Emotional and Behavioral Disorders Among Young People: Progress and Possibilities. (2009). Washington, D.C.: Institute of Medicine, National Academy of Sciences

3.25
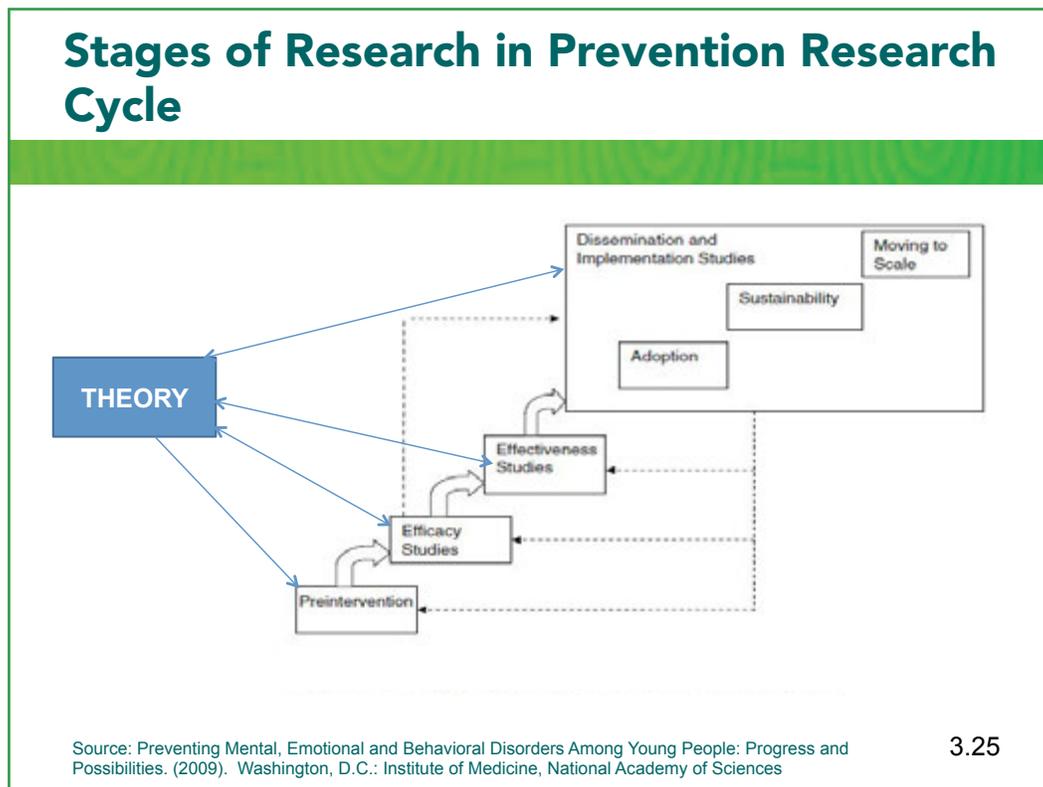
Say:

Theory is important to framing objectives for research, as well as for intervention development. In this slide, we see the stages of research:

Pre-intervention occurs when the intervention is designed based on various theories of behavior change, and our understanding of the factors and processes involved in choosing to engage in behaviors, such as, substance use.

Efficacy studies, then, are conducted to determine if the intervention achieves the initial desired short-term outcomes, without harming the target population. These studies are important as they confirm the theoretical foundations of the intervention.

Once the efficacy of the intervention is determined, it can be tested or evaluated in 'real world' conditions through effectiveness studies.

Then, once determined to be effective, the next steps are to disseminate the intervention, and to test it under different situations or with different populations.

Again, we will go into more detail about this process throughout the UPC curricula, addressing how this framework works for the development and evaluation of prevention interventions.

Substance Use Prevention Theories (1/3)

- Over the past three decades, substance use prevention in the United States has been informed by theory
- Prevention theories center around:
  - Theories of etiology
  - Theories of human development
  - Theories of human behavior
    - Learning theories
    - Theories of behavior change

3.26

Say: *Today, we are not going into depth on any particular theory, but, we want to emphasize the importance of theory for all aspects of prevention science, including strategies used to deliver an intervention or policy.*

*There are many theories that have informed prevention science over the past three to four decades. When prevention scientists and practitioners talk about theory, they are talking about **a set of interrelated concepts that are used to describe, explain, and predict how various aspects of human behaviors are related to each other**. In most cases, theories draw from empirical or research evidence. The findings from research to test theories are used to further refine those theories.*

In prevention, there are theories of etiology, human development and human behaviors. Theories of human behavior that are pertinent to the development of prevention interventions include those that focus on how human beings learn, and others that focus on how human beings can change their behaviors, particularly, those behaviors that have negative health outcomes, such as, substance use.

Substance Use Prevention Theories (2/3)

During the 1980s these theories were taken from other disciplines and other fields

- Social Learning Theory (Bandura, 1977)—Human beings learn through observation

- Problem Behavior Theory (Jessor and Jessor, 1977)—Multiple risky behaviors have the same or common roots

- Ecology of Human Development (Bronfenbrenner, 1979, 2005) —Systems outside of the individual influence individual behavior

- Theory of Planned Behavior (Ajzen 1991)—Beliefs about behavioral outcomes, beliefs about normative expectations about behavior and beliefs about barriers/enhancers to performance of the behavior influence engagement in the behavior

3.27

Say:

Prevention science draws heavily on theories developed in other fields. The next few slides will, briefly, describe a number of the key theories that have been used to inform substance use prevention programming.

Perhaps, the most well known theories are those of Bandura, Jessor and Jessor, Bronfenbrenner, and Ajzen.

Briefly,

- *Bandura's Social Learning Theory focuses on how human beings learn behavior by observing others, and imitating and modeling these behaviors;*

- *Jessor and Jessor's Problem Behavior Theory focuses on the individual within his/her environment, and states that multiple risky behaviors have the same or common root, or base;*

- *Bronfenbrenner's Ecology of Human Development states that systems or contexts outside the individual (e.g., family, peers, school, parents' work situation, culture, community characteristics, time/history, socio-cultural factors) influence how that individual behaves; and*

- *Ajzen's Theory of Planned Behavior shows the link between attitudes and behavior, and states that three sets of perceptions/attitudes guide behavior: beliefs about the outcomes or consequences of the behavior, beliefs about the normative expectations of others (or social acceptability) toward the behavior, and beliefs about the barriers and enhancers to the performance of the behavior (can it be done).*

Substance Use Prevention Theories (3/3)

More recently, prevention scientists have developed theories that are unique to prevention science. Here are five examples of such theories:

- Theory of Triadic Influence (Flay, 1999; Flay and Petraitis, 1997, 2003)—influence of cultural, social, and individual factors

- Risk and Protective Factors (Hawkins et al., 1992)—Societal and cultural and interpersonal factors

- Positive Youth Development (Catalano et al., 1999)—Enhancing and reinforcing positive development

- Resilience Theory (Werner and Smith, 1982; Bernard, 2004)

- Nurturing Environments (Biglan and Hinds, 2009)

3.28

Say:

More recently, prevention scientists have developed theories that are unique to prevention science, reflecting more closely the major objectives of the field, and the interventions and policies developed. Here, are examples of the most dominant theories in the field:

- *Flay and Petraitis' Theory of Triadic Influence suggests three influences contribute to risky behavior: cultural factors (e.g., perceived tolerance for adolescent alcohol use), social or interpersonal factors (e.g., having parents who use drugs or are negligent), and intrapersonal factors (e.g., poor impulse control). Within each stream of influence, there are additional levels of influence, such as, personal attitudes or perception of peer approval of a behavior, and those more distant, such as, neighborhood unemployment rates;*

- *Hawkins and his colleagues' Risk and Protective Factors approach examined both cross-sectional and longitudinal studies to identify risks to substance use, that are divided between societal and cultural factors, that provide the legal and normative expectations for behavior and intra- and inter-personal factors (families, school classrooms, and peers);*

- *Catalano and his associates' Positive Youth Development emphasizes the importance of enhancing and reinforcing positive development;*

- *Werner and others' Resilience Theory is similar to Positive Youth Development and Risk and Protective Factors, and states that some individuals have special competencies to adapt to stressful situations and events; and*

- *Finally, Biglan and Hines' Nurturing Environments combines many aspects of these other theories, and focuses on risk reduction and the promotion of resilience and other positive attributes.*

The importance of knowing about these theories, even in their brief form, is for you to understand that developing interventions is based on empirically-driven theory.

Developing Intervention Objectives: Forming the Content of the Intervention

- Most of the theories mentioned have been translated into theoretical models
- These theoretical models generally include an outcome or behavior of interest and those factors that explain the performance of the behavior
- These models not only include specific factors but also the relationship between and among the factors

3.29

Say:

The last step in adopting a theoretical foundation for your intervention is to develop intervention objectives. These theories form the guidelines, or basis, for the development of the objectives, or content of the intervention.

Generally, they not only include the desired outcome or behavior, such as, reduced or no substance use, but also, those factors that have been found to be associated, or to explain the performance of the behavior, such as, perceptions that engagement in the behavior would have negative consequences, or, that the behavior is not really acceptable to one's peers.

These models also are dynamic and, generally, show relationships between, and among, these explanatory factors. Let's look at such a model.

Theory of Planned Behavior

Source: http://people.umass.edu/aizen/tpb.diag.html#null-linkrce:

3.30
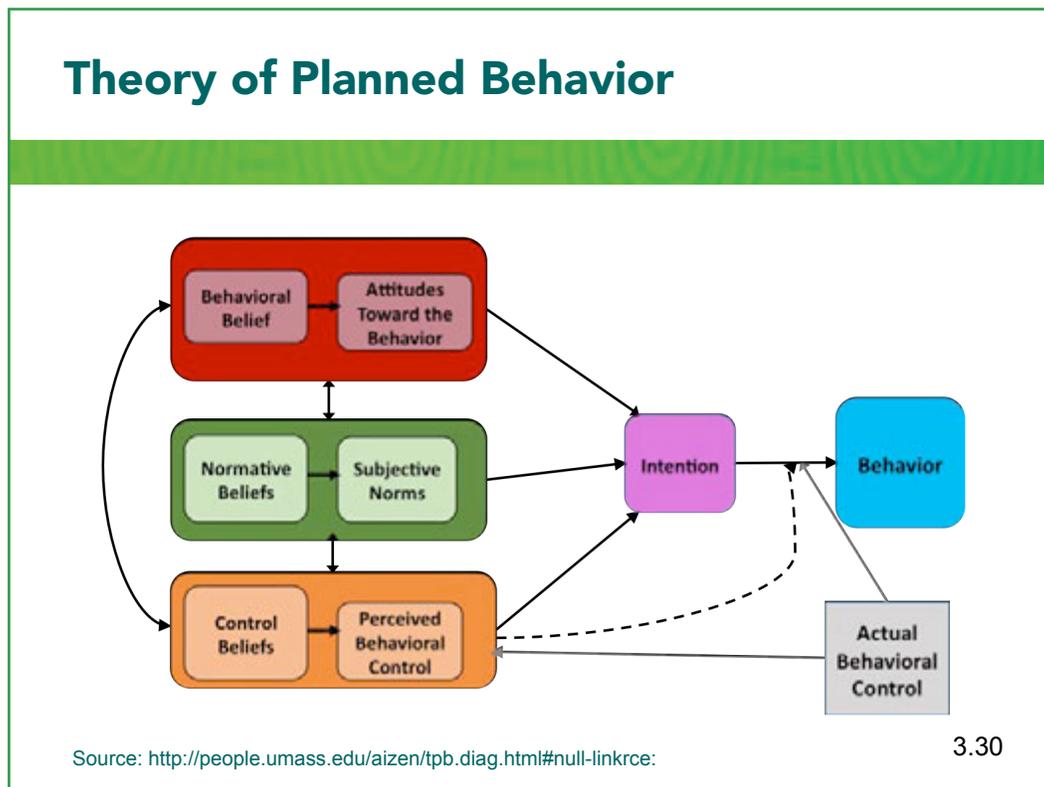
Say:

 Here is a model of the Theory of Planned Behavior. It is an example of the components of a theory showing how they are related to each other. In this model, the factors that are thought to impact behavior are presented on the left side.

The red box consists of beliefs about the association of positive or negative consequences to the behavior of interest, and the value placed on those consequences. In other words, "What could happen if I smoke cigarettes? What are the health consequences? Are these real? Will it impact my life and those around me?"

The green box includes perceptions of the normative nature of the behavior by influential others. "If I begin smoking, what would my parents say? What would my friends say?"

The orange box focuses on beliefs about what skills would impede, or facilitate the behavior and perceptions of one's ability to control the behavior. "Do I have the skills to resist using alcohol at my friend's party?"

The interaction of these components inform an individual's intention to perform the behavior (the purple box) and then, of course, whether the individual has the skills, resources, etc. to engage, or, not to engage in the behavior (The blue box).

This model is very important in prevention, and you will see it several times in your UPC training.

217

Program "X": A School-Based Substance Use Prevention Curriculum

- Decision making
- Communication
- Other life skills

- **Perceptions of consequences of substance use**

- Perceptions regarding the normative nature of substance use among teens

Intention to use

Outcomes:
- Alcohol
- Tobacco
- Marijuana
- Other drugs

Acquisition of a repertoire of resistance skills

3.31
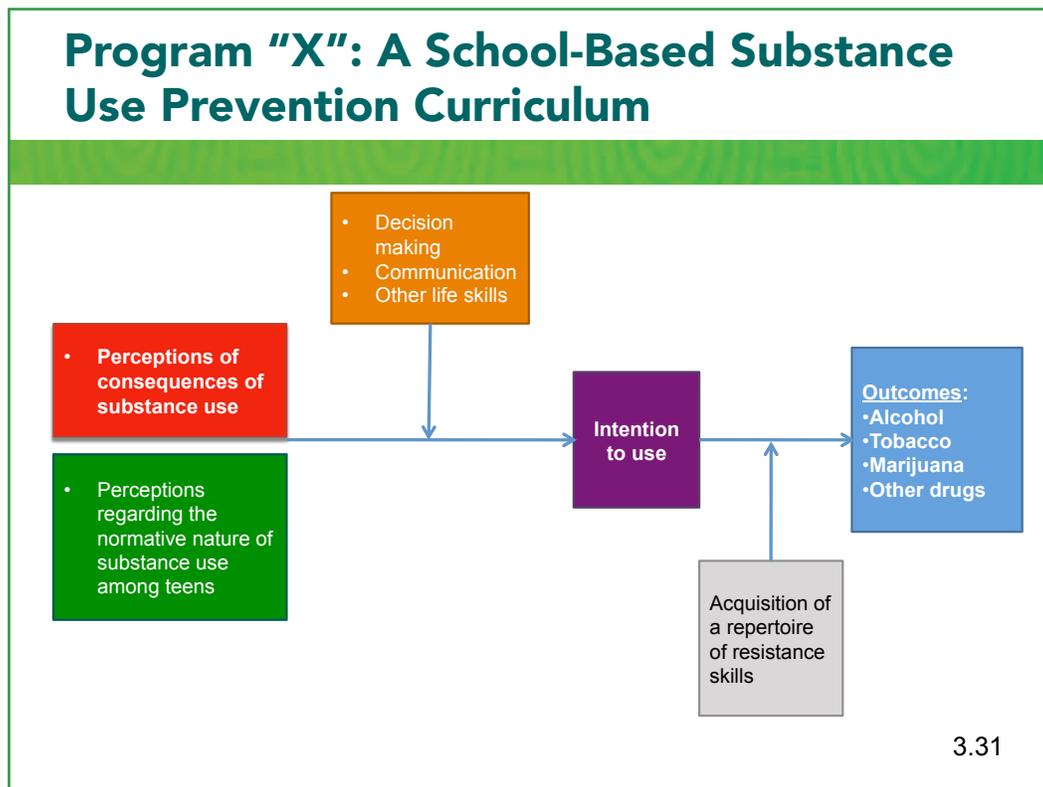
Say:

*Let's apply this model to a school-based prevention intervention to see what we want a program to look like. Here, we have an hypothetical **Program X: An evidence-based prevention school curriculum**. What characteristics would we want this program to have?*

The first prevention target from the Theory of Planned Behavior model is the red box— Attitudes towards the behavior and its consequences.

■ *Perceptions of the consequences of substance use for the target adolescents.*

The next target is the green box from the Theory of Planned Behavior model—Normative beliefs.

■ *Perceptions they have regarding the normative nature of substance use among their peers.*

Then, the Theory of Planned Behavior skills target is the orange box-Behavioral control.

■ *Decision-making, communication and other life skills.*

Please note that the skills training follows after addressing perceptions of the consequences of substance use, focusing on those that are more relevant to adolescents, and perceptions of the non-normative nature of substance use among their peers.

All these efforts are made so that the target group is comfortable with the Intentions in the purple box.

- **Decision not to use substances.**

However, we have found that it isn't enough to have the target group intend not to use substances, but to be realistic in knowing that they also need skills to refuse the use of substances with confidence. Our program "X, then, will provide them a repertoire of resistance skills that they can practice with the other participants of the intervention.

Finally, we have our behavioral outcomes in the blue box:

- **The non-use of any substance.**

These programs, generally, do all of this by having students collect information and, using decision-making and other skills to interpret the information for their own lives. These programs also help students communicate this information through small group activities and discussion groups.

The process serves to put the information into their own life framework with the object of having them decide that they do not want to use drugs or other substances. These programs also provide activities and opportunities for students to devise, and practice resistance skills, applicable to their own lives.

Presentation and discussion: Developing and adapting evidence-based substance use prevention interventions and policies
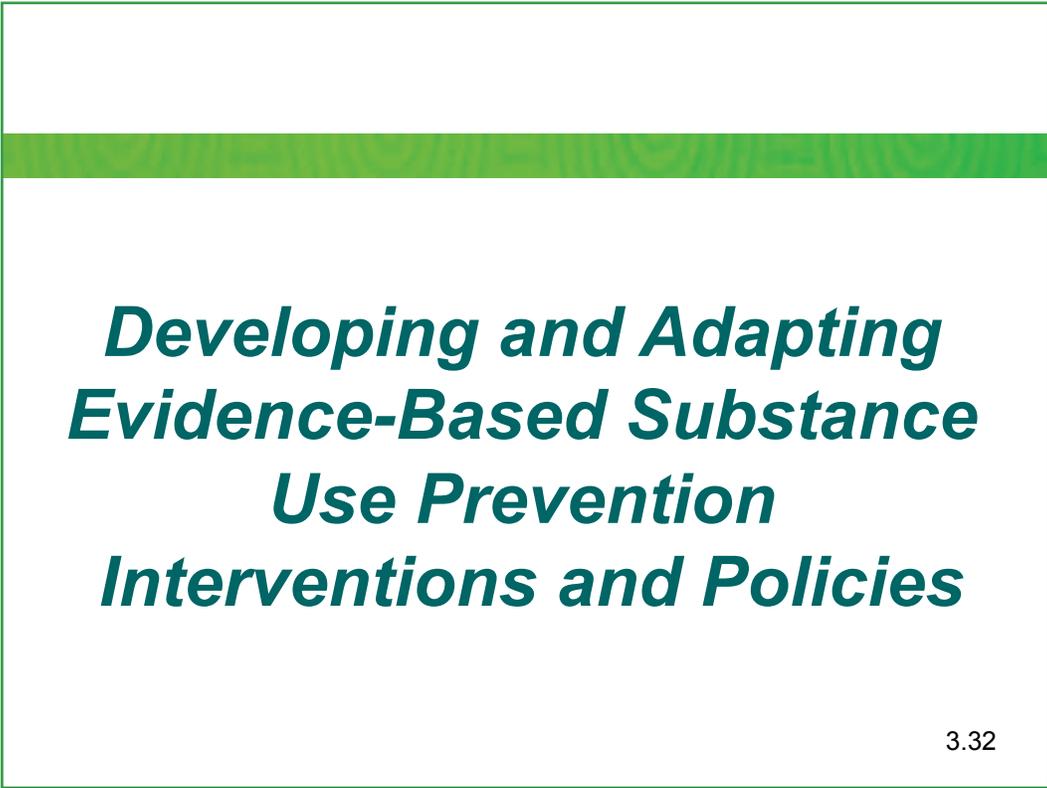
Developing and Adapting Evidence-Based Substance Use Prevention Interventions and Policies

3.32

Say: *In this section of the module, we will be looking at Developing and Adapting Evidence-Based Substance Use Prevention Interventions and Policies.*

Building the Program: Methods and Strategies

- Methods: Theory-informed processes for influencing change in the determinants of behavior and environmental conditions
- Strategies: Practical applications of the theoretical approach

3.33

Say:

*Now we're looking at the second stage of Intervention Design: **Building the program using a multidisciplinary team** starting with methods and strategies.*

Bartholomew and colleagues (2006) distinguish between methods, which are theory-informed processes for influencing change in the determinants of behavior and environmental conditions, and strategies, which are practical applications of the theoretical approach.

In our example, the method we are using, is the application of Theory of Planned Behavior that addresses perceptions related to how normative or prevalent substance use may be in a population, and the consequences for same-age peers that result from substance use to enhance decisions to not intend on using substances.

But this isn't enough, the program needs to increase feelings of self-efficacy to be able to resist the use of substances, when in a variety of relevant situations where substances are made available. This is achieved through modeling, skill training, guided practice with feedback, and reinforcement.

Strategies for applying these methods might include step-by-step modeling and demonstration of skills in video-taped segments, and in-person role-playing of common situations, in which one would use the skill, followed by feedback and reinforcement.

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Aspects of a Prevention Intervention or Policy

There are three aspects of a prevention intervention or policy:
- Structure
- Content
- Delivery

3.34

</div>

Say:

Before we go on, it is important to emphasize the three aspects of prevention interventions: Structure, Content, and Delivery. All three aspects are guided by theory. In other words, going back to Program "X", we need to 'flesh out' the model and look at these other features.

- *Structure has to do with how the prevention intervention or policy is organized and constructed. For example the necessary number of sessions or boosters; the organization of sessions. Will Program "X" consist of 10, 15 or 20 lessons? How long will the lessons take—30 minutes, 45 minutes? Will they be spread over a week or several weeks?*

- *Content is related to the objectives of the intervention, and has to do with what information, skills, and strategies are used to achieve the desired objectives. For example, inclusion of both peer refusal skills and social norm development, inclusion of family communications training. We have covered this already in talking about the application of theory to practice.*

- *Delivery* has to do with how the intervention or policy is to be implemented, and how the intervention or policy is expected to be received by the target audience. For example, use of interactive instructional strategies for adolescents and adults, offering parenting skills programs at times that are convenient for families, monitoring the implementation of an intervention or policy to enhance fidelity to the intervention's core elements.

LARGE-GROUP DISCUSSION:

Ask: *Can someone tell me why structure is important to a prevention intervention:*

What about content. Why is content important?

And finally, delivery, why is delivery important?

> **Teaching Instructions:** Call on those who volunteer. List the reasons on the poster paper.

Tailoring Interventions

The concept of shaping the intervention activities to meet the needs of the target group is generally referred to as "tailoring"

■ Cultural beliefs

■ Values

■ Language

■ Visual images

(Source: Rohrbach, 2014)

3.35

Say:

*As we build the intervention, we need to consider **tailoring intervention messages** to match the characteristics of participants.*

Such tailoring increases the likelihood that the participants will view the program as relevant, and that our desired outcomes will be achieved. Tailoring includes addressing cultural beliefs, values, language, and visual images, but, does not mean altering the theoretical foundation of the intervention.

Fidelity and Adaptation (1/2)

Definitions:

- *Fidelity*—the delivery of a manualized prevention intervention program as prescribed or designed by the program developer
- *Adaptation*—the modification of program content to accommodate the needs of a specific consumer group

Castro, FG, Barrera, M, and Martinez, Jr., CR., 2004

3.36

Say:

As most of the evidence-based prevention interventions or policies have been developed in western countries, there may be a need to tailor the program for a non-western community. However, it is important to remember, particularly, for evidence-based interventions, to maintain the intent of the program by maintaining the full program. This represents a balance between fidelity, the delivery of a prevention intervention program, as prescribed or designed by those who developed the program and adaptation, the modification of program content to accommodate the needs of a specific consumer or target group.

This is also a cross-cutting theme for UPC, and you will hear this topic many times over the course of your participation in UPC trainings.

Castro, FG, Barrera, Jr. M., and Martinez, Jr., CR. (2004). The cultural adaptation of prevention interventions: Resolving tensions between fidelity and fit. Prevention Science, 5: 41-45.

Fidelity and Adaptation (2/2)

	Program Assessment Characteristics	New Target Group	Consequences
Language	English	Other	Inability to understand program content
Ethnicity	White	Other	Conflicts in beliefs, values, and/or norms
Urban/rural	Urban	Rural	Logistical and environmental barriers affecting participation
Risk Factor Number and Severity	Few factors/moderate severity	Several factors/high severity	Insufficient effect on multiple or most severe risk factors
Family Stability	Stable family systems	Unstable family systems	Limited compliance
Community Consultation	Consulted with community on program design and/or administration	Not consulted	No community 'buy-in", resistance, low participation rates
Community Readiness	Moderate	Low	Absence of infrastructure and organizations to address substance abuse problems and to implement programs

Castro, FG, et al. 2004.

3.37

Say:

Why is it important to be concerned about the balance between fidelity and adaptation?

In this chart adapted from a 2004 article by Felipe Castro and colleagues, we see some examples of concern. Some of these are obvious, like, if the program is in English and delivered in English the target group will not understand the program content. But some are not so obvious, such as, when the program was evaluated in a white or Western population and the target group is not white or Western, there may be conflicts in beliefs, values, and perhaps, norms.

Large-Group Exercise: Program "X": A School-Based Substance Use Prevention Curriculum

- Decision making
- Communication
- Other life skills

- **Perceptions of consequences of substance use**

- Perceptions regarding the normative nature of substance use among teens

Intention to use

Acquisition of a repertoire of resistance skills

<u>Outcomes</u>:
•Alcohol
•Tobacco
•Marijuana
•Other drugs

3.38

LARGE-GROUP EXERCISE:

Say:
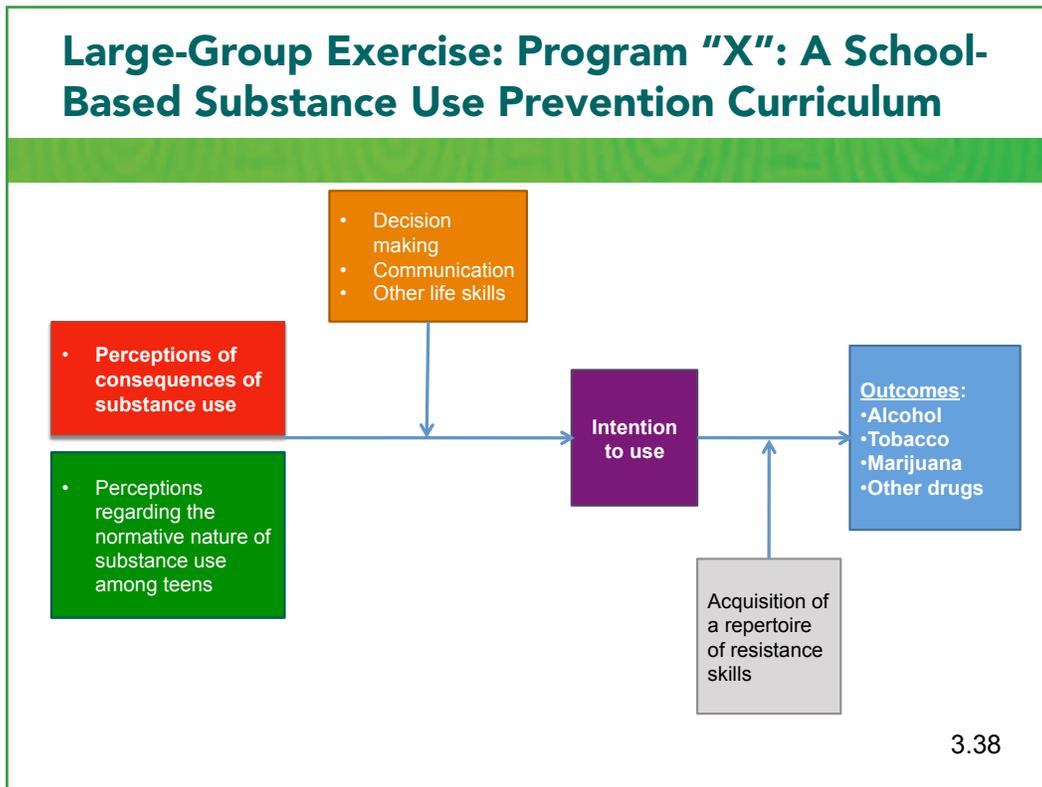
Okay, Let's take the model of a school-based substance use prevention curriculum that we saw earlier.

Ask:

To what extent would these concepts apply or work in a school in your community? If you were adapting this program, what would you be concerned about?

Teaching Instructions: Call on several people to answer these questions. Allow 15 minutes for this exercise.

Fidelity vs. Adaptation

The Substance Abuse and Mental Health Services Administration recommends:

- Change capacity before changing the program
- Consult with the program developer
- Retain core components
- Be consistent with evidence-based principles
- Add, rather than subtract

3.39

Say:

Here are some pointers from the U.S. Substance Abuse and Mental Health Services Administration about adapting a program for a new community:

- **Change capacity before changing the program**. It may be easier to change the program, but changing local capacity to deliver it as it was designed, is a safer choice;

- **Consult with the program developer**. Consult with the program developer to determine what experience and/or advice he or she has about adapting the program to a particular setting or circumstance;

- **Retain core components**. There is a greater likelihood of effectiveness when a program retains the core component(s) of the original intervention;

- **Be consistent with evidence-based principles**. There is a greater likelihood of success if an adaptation does not violate an established evidence-based prevention principle; and

- **Add, rather than subtract**. It is safer to add to a program than to modify or subtract from it.

The discussion of the balance between fidelity and adaptation will come up in almost all of the subsequent curricula in this series. Although this concept has been of concern for many years, it is only lately that it has been addressed from a scientific perspective.

Your role as a prevention to discuss how to adapt an evidence-based intervention, without losing its impact. Your discussion with your colleagues in the training will help to clarify how best to make necessary adaptions for your communities.

An Interaction of Personal Characteristics and the Micro- and Macro-Level Environments, Socialization and Points of Intervention

©Sloboda, forthcoming

3.40
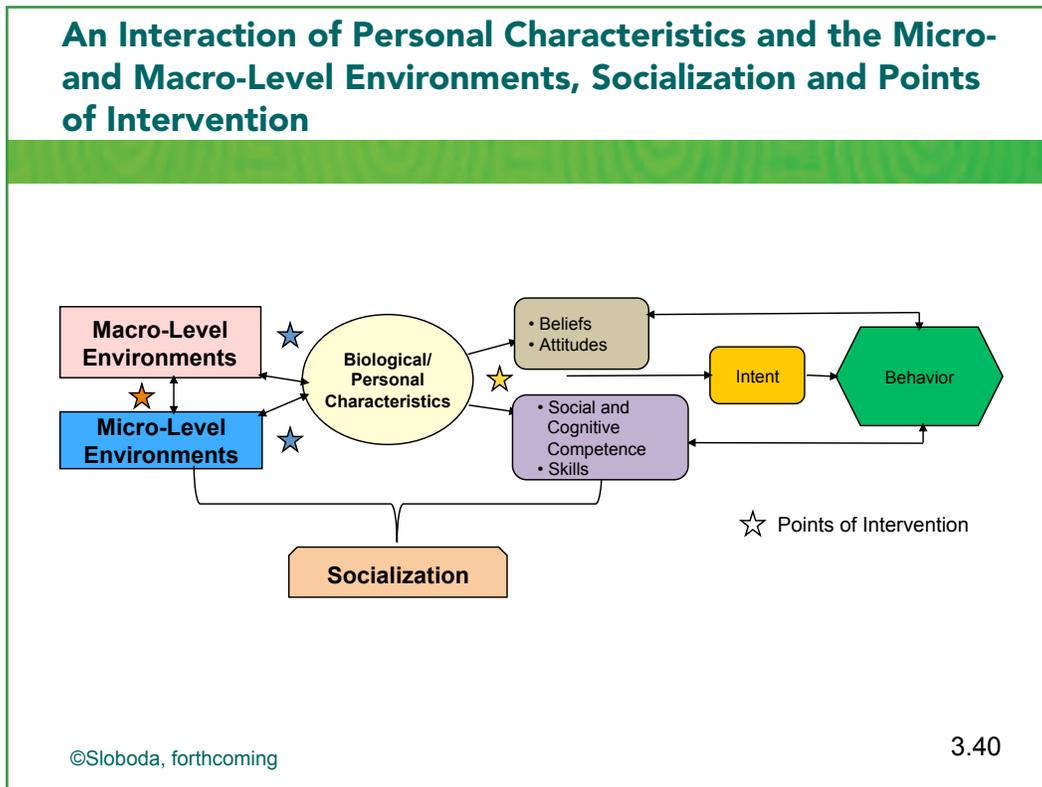
Say:

Here is the model that shows where prevention programs can intervene to prevent the formation of beliefs, attitudes, and behaviors that can lead to substance use. This time, we indicate points for intervention with stars. Please note that intervention points include those that address micro- and macro-level environments, the orange and blue stars, but, also those that directly address the target population, the gold star.

We will hear about prevention interventions that are delivered to parents, teachers, children and adolescents, within the family, school, and workplace environments, and within the community.

Intervention Settings

Select a setting in which it will be appropriate and feasible to implement the intervention

- Schools
- Religious facilities (churches, temples, etc)
- Community centers
- Clinics
- Workplace

3.41

Say: *As the next step, then, in building the program, we need to consider the setting of the intervention. Many settings are appropriate for the delivery of a prevention intervention. Much depends on how best to reach the population that will receive the intervention. In addition, other factors, such as, organizational characteristics that may enhance or impede intervention effectiveness should be considered, as well as devising strategies for ensuring site cooperation and accessibility.*

Ask: *What other intervention settings can we consider?*

Teaching Instructions: If no response, suggest: well-baby centers, social service agencies.

Targeting the Intervention/Policy

Characteristics of the target population
- ■ Age
- ■ Gender
- ■ Geographic location
- ■ Reach
- ■ Vulnerability and risk
  - ❑ Universal
  - ❑ Selective
  - ❑ Indicated

3.42

Say:

We have been discussing the development of a prevention intervention. Now we will focus on tailoring or targeting the intervention to a specific population, or group.

When targeting the intervention/policy, what are the major characteristics that are important?

■ *Age is important for several reasons. Age is related to developmental competencies, to being 'at-risk', and to the level of severity for substance use consequences. Age also has implications for the content of an intervention, strategies used to deliver the interventions, and the setting in which the intervention takes place. Communities/cultures may also differ as to what behaviors are expected for different age groups;*

■ *Gender is also important. Like age, gender may play a role in being "at-risk" and be important for the setting, in which the intervention takes place. Furthermore, communities/cultures may have different expectations for females and males that need to be addressed in the intervention;*

■ *Geographic location is important, not only in terms of what substances may be prevalent, but also, for what resources and support services may be available;*

■ *Reach means to what extent the intervention or policy is intended to reach various groups. Interventions could be focused on families in a particular geographic area, or on specific high risk groups, or they can address whole communities; and*

■ *Finally, the focus of an intervention or policy could be populations at varying levels of vulnerability and risk. The field of prevention has developed three risk levels that guide prevention programming:*

• *Universal—Risk level is the situation where risk is specifically unknown, and may include individuals at low risk, as well as, those at high risk, such as, a class of students attending a regular school;*

• *Selective—Risk is known, and the risk status is used to identify groups, such as, children of substance users, children in poverty, children impacted by war or natural disasters; and*

• *Indicated—Individuals who already use drugs, but, do not yet meet diagnostic criteria for dependence.*

These characteristics need to be considered together. Developing an intervention for 14-16 year olds in a rural community, that has an alcohol problem, would be different from developing one for 14-16 year olds in the inner city, where cannabis or other drugs is a problem.

45 minutes

Small-group exercise: Community problem

Small-Group Exercise: Community Problem

Within workgroups
- Identify the problem
- Who will be the target for an intervention
- Specify where the intervention will take place (setting)—could be multiple settings
- Specify what the focus of the intervention will be, e.g., addressing normative beliefs, perceptions of risk/harm, perceptions of social acceptability

3.43

Say:

So, we covered a lot on the development and implementation of prevention interventions. Let's see how we can apply this information.

I want you to go into your work groups. Each group will receive a card indicating a fictitious community. Each of these communities has identified a substance use problem (binge drinking by adolescents in public parks, drunk driving, increased number of children and adolescents coming to the emergency department of the local hospital because of cannabis use, and, increased number of adolescents stopped by police who are in possession of drugs). As a group, then, go through the steps for developing an intervention.

In the next module, we will be learning about evidence-based prevention interventions. This activity will be repeated at the end of the next module, when you can specify the application of evidence-based prevention strategies.

Teaching Instructions: Allow 30 minutes for the groups to complete this exercise. Then, allow about 15 minutes, to have each group report out to the larger group for discussion.

Presentation: Prevention research methodologies

Prevention Research Methodologies

3.44

Say: *In this section of the module, we will be looking at Prevention Research Methodologies.*

Prevention Research Methodology (1/2)

Research methodology=An array of tools and techniques including:

- Study design
- Sampling methodologies
- Sample recruitment, maintenance and retention
- Statistical analyses

3.45

Say:

The third leg of prevention science is research and research methodology.

Prevention research methodology includes an array of tools and techniques relative to study design, sampling methodologies, sample recruitment, maintenance and retention, and statistical analyses.

Unlike many other research areas, prevention researchers incorporate both qualitative and quantitative approaches in their studies, including in the development of interventions/ policies. This mixed methods approach is not just conducting qualitative and quantitative studies independently of each other, but to include these approaches within a well-defined framework that shows how these methods are complementary to each other.

We will talk about some of these in the discussion of evidence-based prevention interventions in the next module, and, in greater detail, in the curriculum on monitoring and evaluation.

(Castro, F. G., Kellison, J. G., Boyd, S., & Kopak, A. (2010). A methodology for conducting integrative mixed-methods research and data analyses. Journal of Mixed Methods Research, 4, 342–360.)

Prevention Research Methodology (2/2)

- The purpose of prevention research methods is three-fold:
  - Identifying factors, processes, and mechanisms associated to behaviors that have positive and negative health-related outcomes in a population
  - Understanding how identified factors, processes and mechanisms are related to positive and negative health-related outcomes and how they are distributed across:
    - Stages of development
    - Populations
    - Geographic areas
  - Assess the efficacy, effectiveness, and dissemination of prevention interventions
- Prevention researchers incorporate both qualitative and quantitative approaches in their studies

3.46

Say:

For prevention, research is important in three areas:

First, as mentioned earlier, etiologic research identifies factors, processes, and mechanisms associated to behaviors that have positive and negative health-related outcomes in a population.

Second, etiologic and epidemiologic research findings provide an understanding as to how these factors are related to these behaviors across stages of development, population groups, and geographic areas.

Third, research methods help assess the efficacy, effectiveness and the dissemination of the prevention intervention or policy—is it achieving its intended outcomes and are these outcomes related to the content, structure, and delivery of the prevention intervention or policy? This is where monitoring and evaluation plays a very important role in determining whether an intervention is evidence-based or not. We will discuss this more fully in the next two modules.

<u>Definitions:</u>

Efficacy *is the extent to which an intervention (technology, treatment, procedure, service, or program) does more good than harm when delivered under optimal conditions.*

Effectiveness *studies test whether interventions are effective under "real-world" conditions or in "natural" settings. Effectiveness trials may also establish for whom, and under what conditions of delivery, the intervention is effective.*

Research Methodologies – Assumptions

- Prevention research is guided by the theories or conceptual frameworks that underlie the research question or the intervention/policy. These frameworks inform:
  - Research design
  - Measurement
  - Analyses
- Employ a multidisciplinary approach
- Use of rigorous and multiple research methodologies
- Use appropriate data analyses
- Establish and monitor safety and protection of human subjects

3.47

Say:

The field of prevention science has established certain assumptions that are important to prevention research methodologies.

- *First, prevention research is guided by the theories that underlie the intervention. This research should identify the mediators of the intervention, examine the extent to which they are related to the research questions and the outcomes of the interventions/ policies, and, specify their role in achieving these outcomes. The theory lays out the specific relationships between constructs across time;*

- *Because of the complexity of prevention research, multidisciplinary teams address sampling, measurement, data collection and management, and data analysis. Therefore, the research team includes population/problem expertise, design, sampling, data systems, and analytical experts;*

- *Rigorous scientific methods should be used to identify etiologic models, and to test intervention outcome hypotheses. These methods reflect the type and setting in which the intervention is being implemented, with recognition of the advantages and disadvantages of the research designs;*

- *Maximizing measurement reliability and validity is essential to minimize errors and assuring the quality of the study. Longitudinal studies that follow groups over time require the use of measures that provide consistency across time, the developmental course of the research participants, and changing contexts;*

- *A variety of data collection methods should be employed. Data are collected at different levels (e.g., individual, classroom, community), and multiple sources requiring integration across and within levels, with consideration for subsequent analyses;*

- *Data analyses should address issues of attrition and missing data, the multilevel and nested features of the research design, and takes full advantage of the longitudinal nature of the data. For this reason, prevention researchers employ a variety of statistical techniques that have been developed specifically for prevention research, or drawn from other fields, with modifications for prevention intervention studies; and*

- *Very important, prevention researchers need to establish and monitor the safety and protection of human subjects.*

Review and discussion: Why prevention science is important

Slide 3.48

> ### Why is Prevention Science Important to Substance Use Prevention Specialists Internationally?
>
> Prevention science is important to practice:
> - Defines a field of prevention that includes its own language and methods that are standardized and can be shared across regions
> - Creates a link between research and practice
> - Provides a strong foundation for the development and delivery of effective prevention interventions and policies
> - Links etiologic factors, processes, and mechanisms to prevention interventions and policies
> - Is cost effective when evidence-based interventions and policies are implemented with fidelity and are sustained over time
> - Professionalizes the field of prevention science with two strong arms: research and application/practice
>
> 3.48

Say:

Many substance use prevention practitioners and specialists, who are not researchers, may wonder how prevention science is important to us? And to prevention practitioners and specialists world-wide?

Here are a few reasons why prevention science is important to us all:

- *This is a new field, but, one that now has defined its own language and terms, and methods for the development of interventions and policies;*

- *It creates a natural bi-directional link between research and practice that is mutually dependent;*

- *Prevention science provides a strong theoretical and rigorous method that informs the development and delivery of effective prevention interventions and policies;*

- *It makes the link between etiologic factors, processes and mechanisms and the development of prevention interventions and policies;*

- *It demonstrates that the delivery of evidence-based interventions and policies are cost-effective, when delivered with fidelity and are sustained over time; and*

- *It professionalizes the field of prevention science requiring special training that sets it apart from other fields, both in research and in practice.*

LARGE-GROUP DISCUSSION:

Say: *In what ways do you find this information important for what you do everyday?*

Module 3 evaluation and wrap up

Module 3 Evaluation

15 minutes

3.49

Say: *Thank you all for your great participation today!*

Please be sure to complete the module 3 evaluation form before you leave.

Resource Page 3.1: Theoretical Foundation of Prevention Science

During the 1980s, these theories were taken from other disciplines and other fields.

Social Learning Theory (Bandura, 1977)— Focuses on how human beings learn behavior-by observing others and imitating and modeling these behaviors.

Problem Behavior Theory (Jessor and Jessor, 1977)— Focuses on the individual within his/her environment, and states that multiple risky behaviors have the same or common root, or base.

Ecology of Human Development (Bronfenbrenner, 1979, 2005)— States that systems or contexts outside the individual (e.g., family, peers, school, parents' work situation, culture, community characteristics, time/history, socio-cultural factors) influence how that individual behaves.

Theory of Planned Behavior (Ajzen 1991)— Shows the link between attitudes and behavior, and states that three sets of perceptions/attitudes guide behavior: beliefs about the outcomes or consequences of the behavior, beliefs about the normative expectations of others (or social acceptability) toward the behavior, and beliefs about the barriers and enhancers to the performance of the behavior (can it be done).

More recently, prevention scientists have developed theories that are unique to prevention science. Here are five examples of such theories.

Theory of Triadic Influence (Flay, 1999; Flay and Petraitis, 1997, 2003)— Suggests three influences that contribute to risky behavior: cultural factors (e.g., perceived tolerance for adolescent alcohol use), social or interpersonal factors (e.g., having parents who use drugs or are negligent), intrapersonal factors (e.g., poor impulse control). Within each stream of influence, there are additional levels of influence, such as, personal attitudes or perception of peer approval of a behavior and those more distant, such as, neighborhood unemployment rates.

Risk and Protective Factors (Hawkins et al., 1992)— Examines both cross-sectional and longitudinal studies to identify risks to substance use, that are divided between societal and cultural factors, and provide the legal and normative expectations for behavior and intra- and inter-personal factors (families, school classrooms, and peers)

Positive Youth Development (Catalano et al., 1999)— Emphasizes the importance of enhancing and reinforcing positive development.

Resilience Theory (Werner and Smith, 1982; Bernard, 2004)— States that some individuals have special competencies to adapt to stressful situations and events.

Nurturing Environments (Biglan and Hinds, 2009)— Combines many aspects of these other theories and focuses on risk reduction, the promotion of resilience and other positive attributes.

MODULE 4

INTRODUCTION TO MONITORING AND EVALUATION: KEY TO PREVENTION RESEARCH

Module 4 Preparation Checklist

- Review Getting Started for general preparation information.

- Preview Module 4. Be familiar with the instructions for the exercises in this module.

Content and Timeline		
Activity	Time	Person Responsible
Introduction to module 4	15 minutes	
Presentation: Evaluation and research	20 minutes	
Presentation: Evaluation methods and intent	10 minutes	
Break	15 minutes	
Presentation and discussion: Evaluation system and research designs	60 minutes	
Presentation and discussion: Sampling and measurement	30 minutes	
Presentation: Data collection, analysis, and statistics	15 minutes	
Presentation: Summary and review of module 4	20 minutes	
Module 4 evaluation	15 minutes	
Lunch	60 minutes	

Module 4 Goals and Objectives

Training goals

■ Provide definitions and terminology used in the evaluation of substance use prevention interventions; and

■ Overview of research methods including:

- • Research design;

- • Sampling;

- • Measurement and data collection methods;

- • Analysis; and

- • Interpretation of research results.

Learning objectives

Participants who complete Module 4 will be able to:

■ Define key terminology associated with the evaluation of substance use prevention interventions; and

■ Understand differences in research methods including:

- • Research designs

- • Sampling methods

- • Measurement and data collection methods

- • Statistical approaches

- • Interpretation of research findings

15 minutes

Introduction to module 4

International Centre for Credentialing and Education of Addiction Professionals (ICCE)
The Universal Prevention Curriculum (UPC) for Substance Use Training Series

Curriculum 1

Introduction to Prevention Science

MODULE 4—INTRODUCTION TO MONITORING AND EVALUATION: KEY TO EVIDENCE-BASED PREVENTION

Say:
In this module, we will be looking at Introduction to Monitoring and Evaluation: Key to Evidence-based Prevention.

Introduction

4.2

Say:

As we begin Module 4, I would like you to review this one-page introduction to the material we will cover. You may encounter terms and concepts that are new to you, and that is to be expected in this challenging area of prevention science. We will discuss all of this material as we progress through the Module.

Teaching Instructions: Please allow 5-10 minutes for the participants to read the Introduction to themselves.

Introduction

This module will introduce you to the **definition of evaluation** as a type of research, which is a systematic way of assessing the short- and long-term outcomes of a prevention intervention, and the factors that are related to these outcomes. Evaluations can be conducted over the course of intervention development from planning, through early development, to full-blown implementation, and after the program is over. In reality, all prevention intervention stages should be evaluated because you learn valuable information to improve the program.

You will learn about the primary **purposes** for evaluation: To measure impact and outcomes; to see which populations responded and which did not; to look at costs to

determine benefits; and to compare the effectiveness of one program versus another. Module 4 describes an integrated evaluation system that includes **process evaluation or monitoring**, and **outcome evaluation**.

Process evaluation describes what happened in the program—it quantifies the dosage of the intervention, the implementation fidelity, and its ability to affect change. Monitoring answers questions such as: Who participated in the intervention, who delivered the intervention, how much of the intervention was delivered (e.g., number of lessons), and did the intervention make a difference in perceptions or intentions? It is an essential part of the valuation process, even when an outcome evaluation is not conducted.

Outcome evaluation characterizes the extent to which the knowledge, attitudes, beliefs, and behaviors have changed for individuals exposed to the intervention or policy compared to those who were not exposed. Long-term outcomes focus on the desired end-product of an effective intervention, which is the reduction or elimination of substance use.

As prevention coordinators, you will need to play a major role in framing and developing the **evaluation design**. The primary components of the design include: Research questions; the type of study needed; the target population; selection criteria for the population; measures that relate to the evaluation questions; data collection; and analysis. Your experience will contribute much to each of these components.

There are several strong research designs that are used in evidence-based evaluation; we will look at the definitions, as well as, the advantages and disadvantages of each of these approaches: The Classical Experimental Design (Randomized Control Trial (RCT); the Interrupted Time Series Design; and the One Group Pre-test and Post-test Design.

We will look closely at other components of evaluation design—e.g., **sampling** and **measurements**-- to see how the population is defined and selected, and the measures developed to assess their attitudes, beliefs, intentions, and behaviors related to substance use. Further, we are likely to need both **quantitative** and **qualitative** measures in our evaluation. The quantitative primarily deal with objective numbers of things, such as, levels of use, while qualitative deal with the subjective aspects and address the "why?" and "what-does-it-mean?" type of questions. Lastly, we will look at **data collection methods and data analysis**, including basic statistics, to give you an overview of their importance in evaluation reporting.

Training Goals

- Provide definitions and terminology used in the evaluation of substance use prevention interventions
- Overview of research methods including:
  - Research design
  - Sampling
  - Measurement and data collection methods
  - Analysis
  - Interpretation of research results

4.3

Say:

This module and Curriculum 3 on Monitoring and Evaluation were developed not to make you evaluation researchers, but, to provide you with sufficient knowledge and information so that you will appreciate, understand, and have the ability to work with an evaluation researcher.

In this module, we will primarily introduce you to terminology and some basic evaluation information. This module was designed so that you have a better understanding and appreciation for the following module that introduces you to evidence-based substance use prevention interventions. Curriculum 3 will go into more depth on the 'how-tos" of monitoring and evaluation, and of their importance to you, as prevention professionals.

Learning Objectives

- Define key terminology associated with the evaluation of substance use prevention interventions
- Understand differences in research methods including:
  - Research designs
  - Sampling methods
  - Measurement and data collection methods
  - Statistical approaches
  - Interpretation of research findings

4.4

Say:

These are the learning objectives for this module.

- *Define key terminology associated with the evaluation of substance use prevention interventions; and*

- *Understand differences in research methods including:*

  - *Research designs;*

  - *Sampling methods;*

  - *Measurement and data collection methods;*

  - *Statistical approaches; and*

  - *Interpretation of research findings.*

They are designed to introduce the definitions and methodologies of evaluation and research, and increase your understanding of the types of research that form the foundation of the International Standards for Drug Use Prevention, presented in Module 5.

Terminology

- Evaluation and Research
- Monitoring and Evaluation
- Efficacy and Effectiveness
- Research Design
- Sampling
- Probability
- Measurement and Data Collection
- Validity
- Reliability
- Analysis
- Statistics

4.5

Say:

Here is a basic list of terms that are part of the language of evaluation. Every field has its own vocabulary. Often, these words have special meaning to the professionals in the field that may seem confusing or baffling to those outside of the field. But all disciplines, whether medicine, physics, social work, farming, auto mechanics, even sports, such as, soccer have their own language.

We will describe each as we progress through the module. As mentioned earlier, we will go into more depth learning more about each of these areas in the curriculum on Monitoring and Evaluation.

Presentation: Evaluation and research

Evaluation and Research

4.6

Say:

In this section of the module, we will be looking at Evaluation and Research.

Evaluation and Research

Physics

Zoology

Astrophysics

Research

Evaluation

Etiology

Social Science/Behavioral Research

4.7
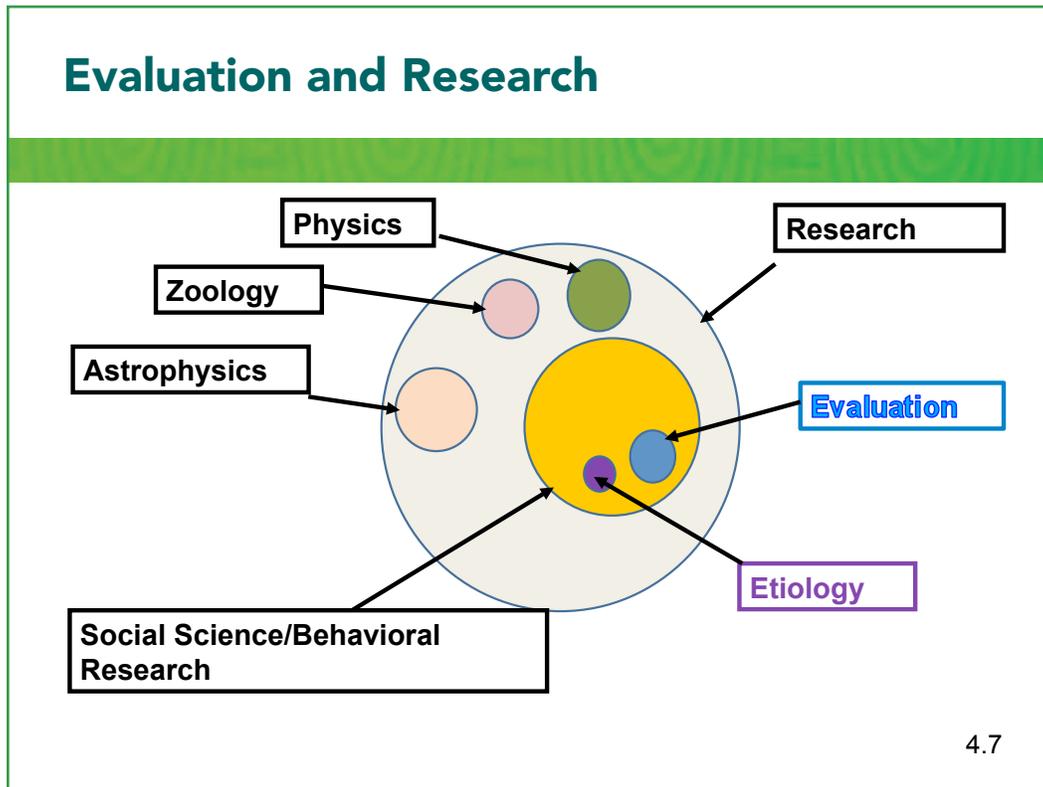
Say:

The world of research is a large one and encompasses laboratory studies of cells and animals, it encompasses the study of stars and planets, and it also examines human behavior under a variety of situations. Studies of human behavior include a range of research questions and research approaches that encompass etiologic research (the causes of disease) that includes genetics and neuroscience, as well as, the attitudes, beliefs, and behaviors associated with the disease. It also encompasses evaluations including the assessment of exposure to a prevention intervention and its outcomes.

So, we know that evaluation is a type of research approach.

Definitions

- **RESEARCH** is "a systematic investigation, including development, testing and evaluation, designed to develop or contribute to generalizable knowledge" [US Federal §45CFR46.102(d)]
- Research encompasses a range of 'systematic investigations' including controlled laboratory studies, studies of animals, studies in clinical settings, studies in the community
- **EVALUATION IS A TYPE OF RESEARCH**
- **EVALUATION is a systematic or structured way of assessing the short- and long-term desired outcomes of a prevention program and those factors that are related to these outcomes**

4.8

Say:

There are a number of definitions available for the term 'evaluation'. All of them include the terms 'systematic' or 'structured', 'assessment', and 'outcomes'.

Some people differentiate evaluation from research. However, research is defined as "a systematic investigation…designed to develop or contribute to generalizable knowledge"

Research encompasses a range of systematic investigations, including laboratory studies using test tubes to the study of animals in the lab, zoo, or in the wild, and to the study of humans in the laboratory, as well as, in the community. As such then, evaluation is one form of research.

Evaluation is a systematic or structured way of assessing the short- and long-term desired outcomes of a prevention program, and those factors that are related to these outcomes.

Purposes of Evaluation (1/2)

Level of impact/outcome:

- To what extent did the program achieve the desired outcomes and were the level of these outcomes significantly greater than if no program were delivered

Reach:

- To what extent did the program achieve the same outcomes for everyone who participated, or only to certain groups among those who participated in the program

4.9

Say:

There are a number of purposes for conducting an evaluation.

One is level of impact or outcome. Did the program achieve the desired outcomes, and was the level of these outcomes significantly greater than if no program were delivered at all?

Second is reach. Did the program achieve the same outcomes for everyone who participated or only to certain groups. For instance, were the outcomes similar between boys and girls?

Ask:

For level of impact and reach, these are the basic questions to consider. Are there other questions to consider?

Teaching Instructions: Allow 10 minutes for this activity. Write down what people say on the flip chart.

Say:

Now let's look at some other purposes of evaluation.

Purposes of Evaluation (2/2)

Costs:

■ To what extent did the benefits of the program outweigh the costs of the program itself

Comparison:

■ To what extent is one program more effective than another holding costs constant

4.10

Say:
Other purposes for conducting an evaluation include:

Costs. To what extent did the benefits accrued because of the program outweigh the costs of the program itself?

And finally, is this program more effective than another in terms of outcomes, holding costs constant?

Ask:
For costs and comparison, there are other questions you might ask. What are those? Also, there are certainly other purposes to conducting a program evaluation beyond level of impact, reach, costs, and comparison. What other ones would you add?

Teaching Instructions: Allow 10-15 minutes for this activity. Write down what people say on the flip chart.

When to Conduct Evaluation? (1/2)

Planning a **NEW** Intervention

Assessing a **DEVELOPING** Intervention

Assessing a **STABLE, MATURE** Intervention

Assessing an Intervention after it has **ENDED**

Conception

Completion
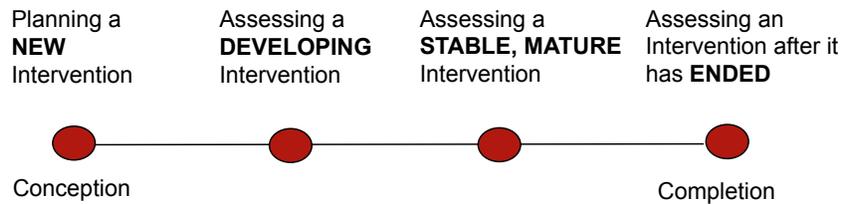
The stage of program development influences the reason for program evaluation.

4.11

Say:

Evaluations can be conducted over the course of intervention development from planning stages, through development, to full-blown implementation, and when the intervention is no longer being delivered.

In reality, all prevention interventions stages should be evaluated.

When to Conduct Evaluation? (2/2)

| Planning a **NEW** Intervention | Assessing a **DEVELOPING** Intervention | Assessing a **STABLE, MATURE** Intervention | Assessing an Intervention after it has **ENDED** |

Conception   Completion

Efficacy Evaluation   **Effectiveness Evaluation**
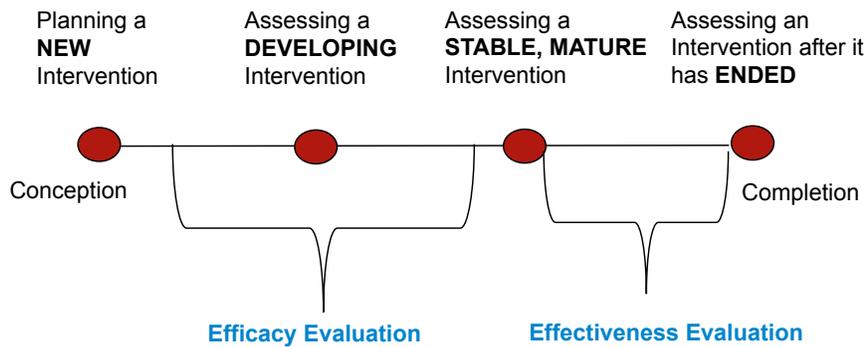
The stage of program development influences the reason for program evaluation.

4.12

Say:

We will learn throughout the Universal Prevention Curriculum about evidence-based prevention interventions. Key to these interventions is that they are based on theories as to how to influence decision-making processes so as not to use substances, and on socialization. We will also learn that a central outcome of these prevention interventions is intentions to use/not use alcohol, tobacco, or other drugs.

*Therefore, the evaluation of any **NEW** prevention intervention would require first making sure that the components of the intervention, content, structure, and delivery are associated with their intended effect. For example, do lessons on decision-making improve participants' decision-making skills? Is it possible to deliver the lesson on decision-making within a school class period of 30-40 minutes? Are interactive techniques used to deliver the lesson on decision-making effective? These types of evaluations are called Efficacy Evaluations, Efficacy Studies, or Efficacy Trials—meaning, are they achieving their objectives under controlled conditions? Examining the intervention at this stage will contribute to further **DEVELOPING** intervention, as improvements to these components are made based on the results of these early evaluations.*

*An evaluation of a **STABLE** and **MATURE** prevention intervention that is delivered close to, or in 'real world' conditions is called an Effectiveness Evaluation or Effectiveness Trial. The evaluation findings from these types of studies can be used to monitor the program*

and provide feedback on short-term outcomes immediately, or within a few months after the intervention and on implementation delivery issues. Evaluation can help highlight successful delivery, as well as, areas warranting improvement. Longer-term outcomes also can be assessed for mature programs, with follow-up periods generally of 6 months up to several years after the intervention. The period of follow-up is dependent on the age of the target population and the behavior of importance. For substance use, generally, follow-up would reach into mid- to late-adolescence.

At the **END** *of the prevention intervention, evaluation helps assess the value of the intervention, as well as, document lessons learned for the future. In this phase, an evaluation can assess the adoption and sustainability of the intervention. This is a time when unexpected outcomes can also be assessed.*

For the purposes of prevention coordinators and specialists, effectiveness studies, that is, those studies that test an intervention in 'real-world' conditions are of primary interest. These studies not only look at the outcomes of the intervention, but also, address the questions: for whom was the intervention most effective and under what delivery conditions?

Presentation: Evaluation methods and intent

Slide 4.13

> # *Evaluation Methods and Intent*
>
> 4.13

Say:

In this section of the module, we will be looking at Evaluation Methods and Intent.

Efficacy and Effectiveness

- Efficacy is the extent to which an intervention (technology, treatment, procedure, service, or program) does more good than harm when delivered under optimal conditions

- Effectiveness trials test whether interventions are effective under "real-world" conditions or in "natural" settings. Effectiveness trials may also establish for whom, and under what conditions of delivery, the intervention is effective

4.14

Say:

Let's just review the differences between these two important and related evaluation approaches.

Efficacy studies, generally, are conducted to determine if the intervention achieves the short-term outcomes that are desired, without doing more harm than good to the participants. For many substance use prevention interventions, these short-term outcomes are defined by the theoretical foundation for the intervention. In other words if the intervention is designed to improve parenting or class-room management skills, the efficacy study would determine if the intervention achieved these improvements.

Effectiveness studies test whether interventions are effective in achieving short-, intermediate- and long-term outcomes under "real-world" or "natural" settings. This means if, for instance, the intervention was desiring to reduce substance use of children by improving parenting skills, the effectiveness study would determine if children, within the intervention compared to those not in the intervention, had lower rates of substance use in adolescence. Furthermore, the effectiveness study would also determine whether these lower rates of substance use were related to improved parenting skills.

Effectiveness trials may also establish for whom, and under what conditions of delivery the intervention was most effective.

Flay, B.R., Biglan, A., Boruch, R.F., Castro, F.G., Gottfredson, D., Kellam, S., Mosckcki, E.K., Schinke, S. and Valentine, J. (2005). Standards of Evidence: Criteria For Efficacy, Effectiveness And Dissemination. http://www.preventionresearch.org.

Evaluation Process

- Did the prevention intervention/policy achieve its short-term outcome?
- Did the intervention/policy achieve its intended effect(s) for the target population that received the intervention—other important questions
  - Was there differential responses by subgroup—gender, ethnic group, substance use status?
  - What intervention/policy characteristics were associated with the outcomes that were achieved?
  - To what extent was fidelity of delivery associated with positive/negative outcomes?

4.15

Say: *The overall intent of an evaluation is not only to understand what was done in the program, but also to determine if the program did what it was supposed to do.*

- *Did the prevention intervention/policy achieve its short-term outcome? For example, are children's perceptions of risk moving in the right direction? Are parents utilizing appropriate monitoring skills? Are new mothers responsive to the needs of their new-borns?*

- *Did the intervention/policy achieve its intended effect(s) for the target population that received the intervention—other important questions*

  - *Was there differential responses by sub-group—gender, ethnic group, substance use status?*

  - *What intervention/policy characteristics were associated with the outcomes that were achieved? Was it due to changed attitudes and beliefs? Was it a combination of changed attitudes and competency skills?*

  - *To what extent was fidelity of delivery associated with positive/negative outcomes?*

Points to Consider in Conducting an Evaluation

- What is the purpose of the evaluation?
- What is going to be evaluated?
- Who would be interested in the evaluation outcomes and why?
- What is your time line? Is it realistic?
- What do you intend to do with the evaluation results?
- What resources are available for the evaluation (e.g., time, money, expertise)?

4.16

Say:

Before conducting an evaluation, it is important to clarify,

- *What is the purpose? Is it to determine whether to sustain the evaluation? Is it to see why a program is effective?*

- *What is going to be evaluated? What are the outcomes?*

- *Who would be interested in the evaluation outcomes, and why? Is this something that a local government would want to know? Is the local leadership interested in replicating the program across the community?*

- *What is your time line? Is it realistic? If you are interested in substance use as an outcome, and the age of initiation is 16 years of age, an evaluation of a school-based program delivered to 12-year olds would have to follow these children over 4-5 years to see if the outcome is achieved.*

- *How will the results be summarized and reported? And, who would have access to these results?*

- *Finally, what resources are available for the evaluation? What level of experience and expertise is available? How much will it cost? And, how much time will the evaluation take?*

Evaluation System-Process Evaluation/ Monitoring and Outcome Evaluation

- An evaluation system generally includes two important components
  - ◘ Process evaluation or monitoring
  - ◘ Outcome evaluation
- Process evaluation or monitoring addresses the questions:
  - ◘ What did we do?
  - ◘ How much did we do?
  - ◘ Who participated?
  - ◘ Who implemented the intervention/policy components?
  - ◘ Was the intervention/policy implemented as intended?
- Outcome evaluation addresses the question:
  - ◘ Did we achieve what we wanted to achieve with the intervention/policy components?

4.17

Say:

An evaluation should be seen as an integrated system that includes two major components: Process evaluation or monitoring, and outcome evaluation.

Process evaluation or monitoring: The purpose of a process evaluation is to characterize the process through which an intervention or policy is implemented. It focuses on inputs and outputs of the program, quantifying the dosage of the intervention, the implementation fidelity, and its ability to affect change.). But, it is also more. It is a way of monitoring what is happening, when it happens to be sure the intervention or policy is implemented as intended, not only according to a manual or guidelines, but, also according to the strategic plan. As a monitoring approach, this is a very important administrative tool for any service provider to use.

A process evaluation or monitoring asks the questions:

- *What did we do?*

- *How much did we do?*

- *Who participated?*

- *Who implemented the intervention/policy components?*

- *Was the intervention/policy implemented as intended?*

Outcome Evaluation: The purpose of the outcome evaluation is to characterize the extent to which the knowledge, attitudes, behaviors, and practices have changed for those individuals or entities who received the intervention, or who were targeted by the policy compared to non-recipients (often thought of as short- and intermediate-outcome). Long-term outcomes relate to the desired end-product of the intervention, in our case, reduced or elimination of substance use. Often, evaluations end with the long-term outcomes.

Presentation and discussion: Evaluation system and research designs

Slide 4.18

Say:

In this section of the module, we will be looking at Evaluation System and Research Designs.

Monitoring and Evaluation System

Process Evaluation

Outcome/Impact Evaluation

Program Inputs → Program Outputs → Program Outcomes & Impact

SITUATION

Needs
Priorities
Mandates
Mission/Vision
Resources
Local dynamics
Stakeholder buy in

Investment
• Staff
• Volunteers
• Time
• Money
• Materials
• Equipment
• Technology
• Partners

Activities
• Assessment
• Train
• Deliver Services
• Counseling
• Facilitate
Target Audience
• Children
• Families

Outcomes
• Short Term
• Intermediate Term
• Long Term

Implementation → Outcomes

4.19

Say:
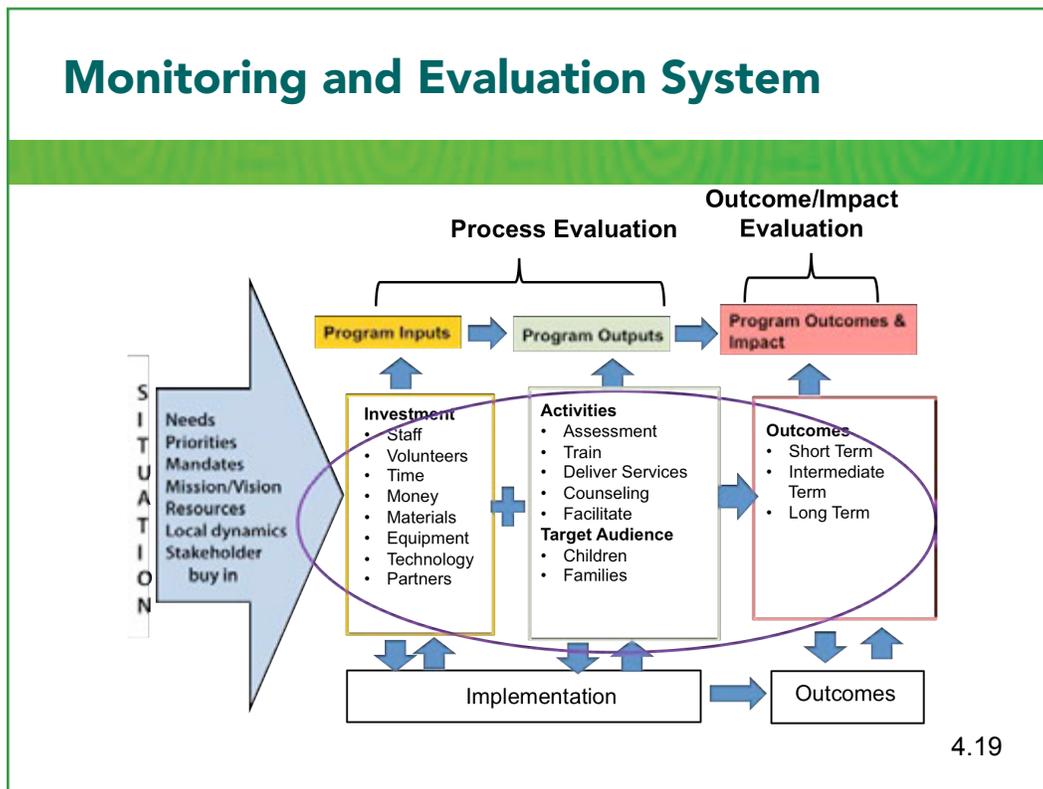
A full monitoring and evaluation system should look like this. We see the process evaluation is related to how the prevention intervention is implemented, and that, although outcome evaluation focuses on outcomes, per se, a full evaluation of a prevention intervention should include both implementation or program inputs and outputs, as well as, short-, intermediate-, and long-term outcomes.

Please note that process evaluation or monitoring is very important EVEN WHEN AN EVALUATION IS NOT PLANNED, as it documents the delivery of the prevention intervention. So if you are implementing any prevention program, you will want to monitor what is going on in the program, who is being reached, and how much of the prevention program was received.

We will be revisiting this model in the curriculum on Monitoring and Evaluation, where we will be taking the model apart, and examining each piece to see how it is applicable to planning, implementation, and assessment or evaluation.

But, first, I want to introduce you to the components of an evaluation design.

The model is adapted from Calculating the Costs of Child Welfare Services Workgroup. (2013). Cost analysis in program evaluation: A guide for child welfare researchers and service providers. Washington, DC: Children's Bureau, Administration for Children and Families, U.S. Department of Health and Human Services.

Introduction to Evaluation Design

An evaluation design is a guide for investigating a question or hypothesis. It includes:

■ Research questions or hypotheses

■ Study type or research design

■ Definition of the population to be studied

■ Sampling method

■ Variables and their measurement

■ Data collection methodology

■ Statistical analyses plan

4.20

Say:

What do we mean by a research design? In general, a research design is a roadmap, guide or plan for investigating a research question or a hypothesis.

The design of a study is defined by the research questions or hypotheses being addressed. The study type, the population being studied, sampling, etc., are all dependent on having very clear research questions or hypotheses.

Once there is agreement on these, the next component of the design is to decide on the study type, whether it will be descriptive, experimental, quasi-experimental, and whether it will be cross-sectional, longitudinal, or case study.

Who will be included in the study population? What age groups will be included? What genders? Will these be people only living in households, or will they be people who live on the streets, or are in a treatment facility? These are inclusion criteria. But, we also want to know who will not be included in the study. Sometimes, the study is limited to only literate people or people who can comprehend the research questions that are being asked. These are exclusion criteria.

Once a study population is decided upon, then, how will people be selected for the study? Will all of the people meeting the inclusion and exclusion criteria be included in the study, or will it be necessary to take a smaller sub-set of the larger group? The sub-

set is called a sample. However, it is important that this sample be representative of the larger group. There are several methods of sampling that have been developed to assure representation.

And, then, it is important to take the research questions and translate them into variables or constructs, or words, also termed, attributes that can be measured. We use measurements every day. The temperature is a measure of heat, for instance. When we buy fruit at the market, it is weighed and its weight is a measure. We also can turn other attributes into measures. Marital status can be broken down simply into being married or not. Issues such as validity must be considered when deciding on the measures: do these measures really represent what we want to know?

Once the measures are determined, then how these measures or data will be collected needs to be thought through. Sometimes, these measures or data have been collected already into forms we all complete to get our drivers license, or they may be completed by others such as hospital staff in an emergency department, or by police officers. If the data are being collected from the study population directly, there are a number of methods for doing this. We can ask directly using a standard format, such as, a questionnaire or survey form. These data collection forms can be completed in person, on the phone, through the mail, or through the internet. Careful consideration must be given to issues of anonymity and confidentiality, as well as, truthfulness or reliability. In addition, respondent fatigue must be attended to: are the questions too difficult to answer or require too much time to complete?

Finally, the research design includes a plan for taking all the information or data that were collected, and making sense of it all. How can we pull all of this data together to begin answering the original research questions?

We won't go into too much detail in this module, as these components of the research design will be addressed in more depth in the curriculum on Monitoring and Evaluation.

Types of Research Designs Used in Evaluation

- Experimental or Quasi-Experimental Design
  - Classical experimental design
  - Times series or interrupted time series
- Non-experimental design
  - One group pre-test and post-test

4.21

Say:

If you review the literature on research designs, you will find many different types. Today, we are just going to look at a couple of designs, that are used most frequently, in evaluations of prevention interventions.

Not all are perfect, not even the "Gold Standard" classical experimental design. All have advantages and disadvantages. Some are more applicable in certain situations than others.

In almost all cases, except for more complex evaluation designs, evaluation of prevention interventions are longitudinal, that is, study populations are followed over a period of time, subsequent to the implementation of the intervention, to determine long-term outcomes. This is, particularly, true as many prevention interventions target children or adolescents, and the behavior of interest, such as substance use may not occur until late adolescence.

Concerns for Evaluation

- Internal Validity—Are the findings from the evaluation of a prevention intervention really the result of the participation or exposure to the intervention or to something else
- External Validity—Can the findings from the evaluation of a prevention intervention be generalized to other situations and to other populations

4.22

Say: *In all evaluations, the major concerns are related to the validity of the results. What does validity mean? In the case of evaluation, validity means, "Were the effects that were found the result of the intervention?" But, there are two types of validity to be concerned about.*

First, is internal validity, that is, are the findings really the result of participation or exposure to the intervention or to something else?

Second, is external validity, that is, can the findings from the evaluation of a prevention intervention be applicable to other situations, and to other populations? In other words, if the prevention intervention was delivered to European children, is it applicable to children from South America?

You can see how important these issues are. It is one thing to find that the intervention was effective for middle-class adolescents, but, this doesn't mean that it will be effective for adolescents living in poverty. We will revisit this issue later, when we begin looking at the United Nations Office on Drugs and Crime's International Standards on Drug Use Prevention. The criteria for inclusion as evidence-based interventions was having positive outcomes from more than one strong evaluation.

Before we describe the research designs and their advantages and disadvantages, let's first examine what we are looking for, in an evaluation.

"Threats" to Internal Validity–Examples

- Maturation
- History
- Selection
- Testing
- Mortality
- Instrumentation

4.23

Say:

Although evaluation researchers are concerned with external validity, their major concern is internal validity….Was it the prevention intervention that made the difference? Was it effective?

There are a number of threats to internal validity that an evaluation researcher is concerned about. We will briefly go over examples of these threats. These threats are life or experiential events that take place over time and may also be associated with the outcomes found in an evaluation.

*First, is **maturation**, that is the impact of the passage of time. So, for instance, was the positive outcome from a school-based substance use curriculum related to the curriculum or to the fact that adolescents mature and 'grow up,' leave their social group, and become involved in work or family? They've left substance use behind independent of the intervention.*

*Second, is **history**, that is, another aspect of the passage of time. Perhaps, in a community, where substance use has been found to be a problem, a lot of other interventions are put in place, such as, an educational video, or parents are concerned and are monitoring their children's time and friendships more closely.*

*Another threat is **selection of the sample**. If not everyone in the group is included in*

the intervention, and the evaluation researcher can only intervene with a smaller group or study sample, this smaller group should represent the larger group. Suppose the research only includes members of the community that are willing to participate in the study, or only non-substance using adolescents will participate. These participants are not necessarily representative of the larger group, so, the findings from the research can only be extended to those who are similar to participants, but not of the larger group.

*A fourth threat to internal validity can be the **assessment or test** itself. There is some evidence that subjects can learn from just answering the evaluation questions. So, the selection and formatting of the research instrument can be a challenge.*

*Another threat to internal validity is what we call **"mortality"**. This may be a literal event in that the study subjects die, but, in general, the term concerns study participants who leave the study, or may be lost to follow-up. For instance, in a study of a school-based prevention intervention, the adolescents in the control group are either expelled from school, or voluntarily leave school. The loss of these substance-using study participants from the control schools could make the control schools have better outcomes than the intervention schools. So, losses to follow-up or attrition must be considered by the evaluation researcher, when the study is planned.*

*Finally, another threat is the **measurement instrument** itself that may have poorly worded questions on, say, the base-line assessment that were changed on the post-assessment instrument. This is, particularly, challenging when conducting interventions with children. If a researcher is evaluating a prevention intervention that covers two to three years starting when the children are, say, 10 years old. The wording of questions asked at the beginning of the study may not be developmentally-appropriate or relevant when the same children are 12 or 13 years old. Extra cautions in pilot-testing the assessment forms is extremely important in these situations.*

> # "Threats" to External Validity–Examples
>
> ■ Situation: All situational specifics (e.g. intervention conditions, time, location, lighting, noise, intervention administration, developer involvement, timing, scope and extent of measurement, etc.)
>
> ■ Pre-test effects: If cause-effect relationships can only be found when pre-tests are carried out, then this also limits the generalizability of the findings.
>
> ■ Post-test effects: If cause-effect relationships can only be found when post-tests are carried out, then this also limits the generalizability of the findings
>
> ■ Reactivity (placebo, novelty, and Hawthorne effects): If cause-effect relationships are found they might not be generalizable to other settings or situations if the effects found only occurred as an effect of studying the situation
>
> 4.24

Say:

*Let's begin looking at factors that impact external validity. External validity means that the findings from the evaluation of a prevention intervention **can be generalized (or applied) to other situations, and to other populations.***

A threat to external validity is an explanation of how you might be wrong in making a generalization about the cause-effect relationship for an intervention. Generalizability is limited when the cause of the evaluation findings may be related to factors that exist outside of the intervention.

*Just the **specific situation or delivery** of the intervention can impact external validity. These can include the intervention conditions, as well as, the time of day or year, location, lighting, noise, associated with the intervention. It also includes the way the intervention is administered whether the intervention developer was involved, and the timing, scope and extent of measurement.*

*The other potential threat to external validity is what is called the **pre-test or post-test effects**. This occurs when the tests themselves appear to be impacting outcomes rather than the intervention. There is a learning effect that occurs just by experiencing the pre- or post-test. The questions and choice of answers may suggest to the person taking the test what the right answers may be.*

277

*Another threat is what is called **reactivity to the intervention**. Other terms that may be more familiar are placebo, novelty, and Hawthorne effects. These occur as a result of knowing that one is participating in an experiment. For instance, in clinical trials that test the effects of medications, those who are receiving the placebo, not the medication that is being tested, sometimes, report positive and desired effects.*
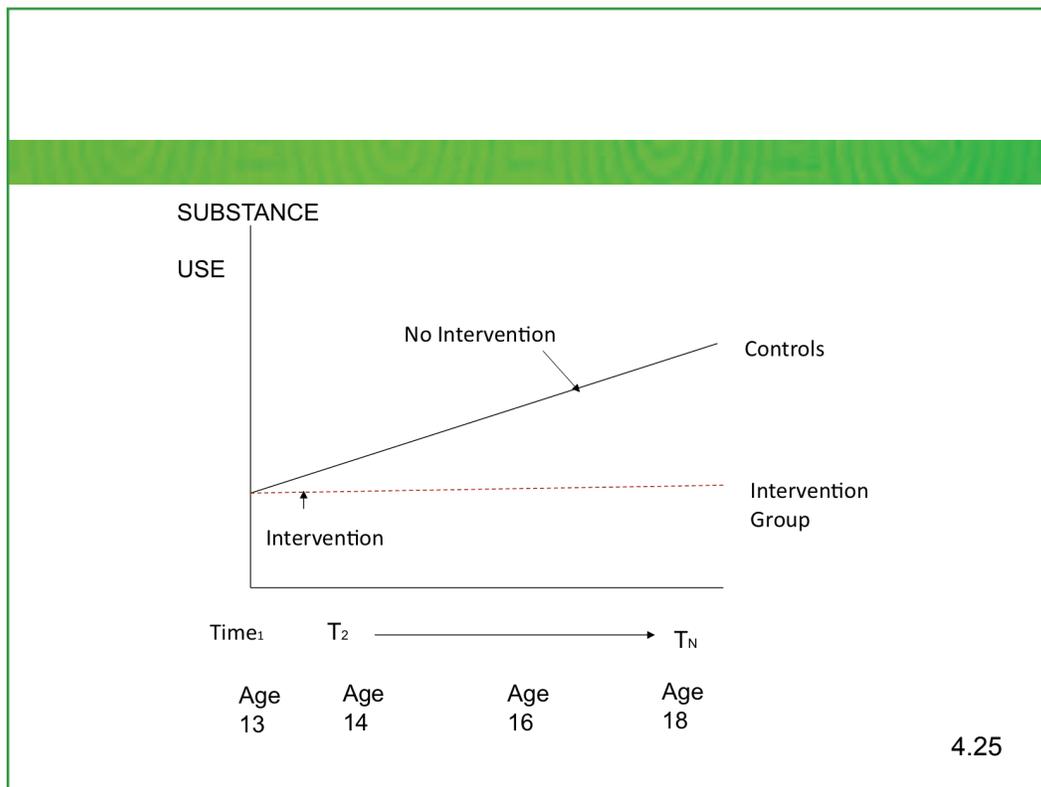
Say:

This is a simple representation of what we want to see in an evaluation. We see here, two axes. On one, is a measure of substance use. On the other, time depicted as age of the target group.

We have two lines; one a black line, representing a group that did not receive the intervention and the second, a red-dotted line representing a group that received the intervention.

We see that both groups were similar on their level of substance use at Time one when the target group is 13 years old. We see that the Intervention Group received the intervention between ages 13 and 14.

We also see that for the intervention group, the level of substance use remained low over the course of time. However, the Control Group, that did not receive the intervention showed increases in their level of substance use over time.

The control group is also called "conditions as usual". In other words, the control group represents what would happen to the intervention group IF THE INTERVENTION GROUP DID NOT RECEIVE THE INTERVENTION. This is the essence of a strong research design.

Of course, we are assuming that all threats to internal and external validity were addressed. This is a perfect situation.

279

Classical Experimental Design (1/3)

THE GOLD STANDARD

TIME 1 — — — — — — — → TIME "N"

RANDOMIZATION

DEFINED POPULATION

Intervention Group → Pre-test O_1

Control Group → Pre-test O_1

Prevention Intervention X

Post-test $O_{"n"}$

Post-test $O_{"n"}$

4.26
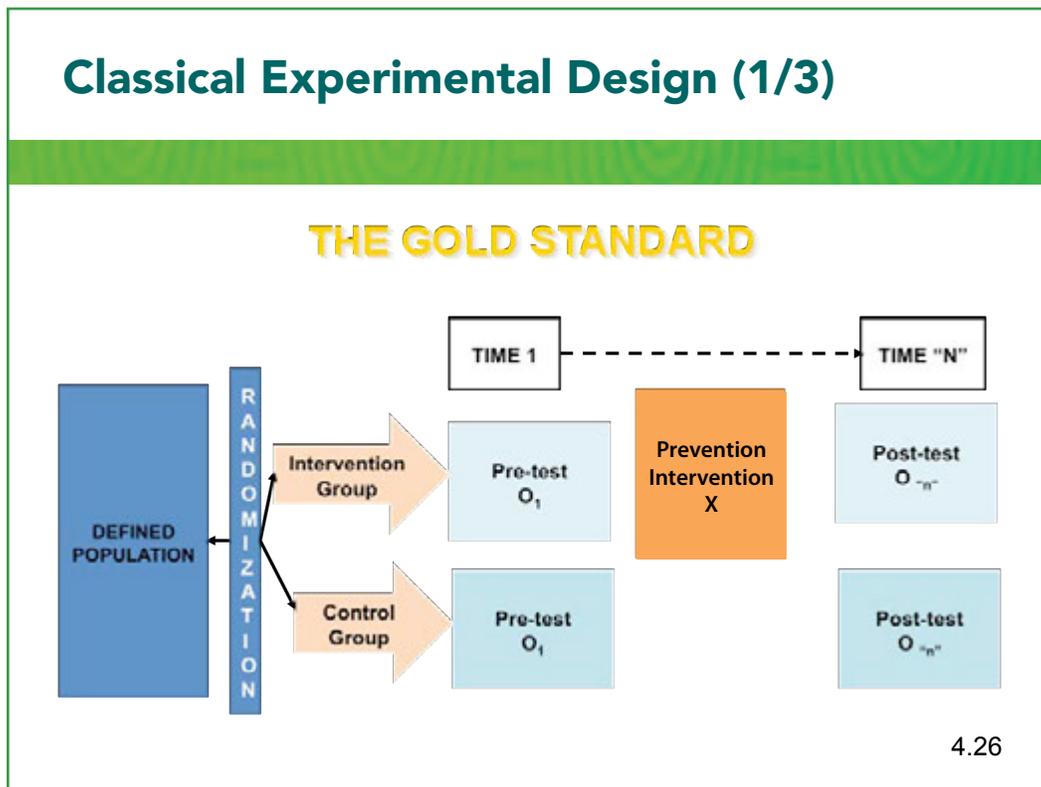
Say:

Let's look at the various research designs we listed before. Here is the Classical Experimental Design, often referred to, as a Randomized Control Trial.

What do we see?

First, we see that individuals from a defined population were randomly assigned to either the intervention group that will receive the intervention, or to the control group that won't receive the intervention.

The "O" is when an observation or measurement was made. The Pre-test measurement for both groups occurs before the before the Intervention Group receives the prevention intervention. The Post-test measurement is made sometime after the exposure to the prevention intervention, and is made for both the Intervention and Control Groups. We see in the box on Time, we have the letter "N" and for the boxes for the measurements under Time N, there is an "n" subscript with each O. The "N" signifies one or multiple times that measurements are made. To achieve the outcomes desired, it may be necessary to follow the study populations over time, perhaps one or more years.
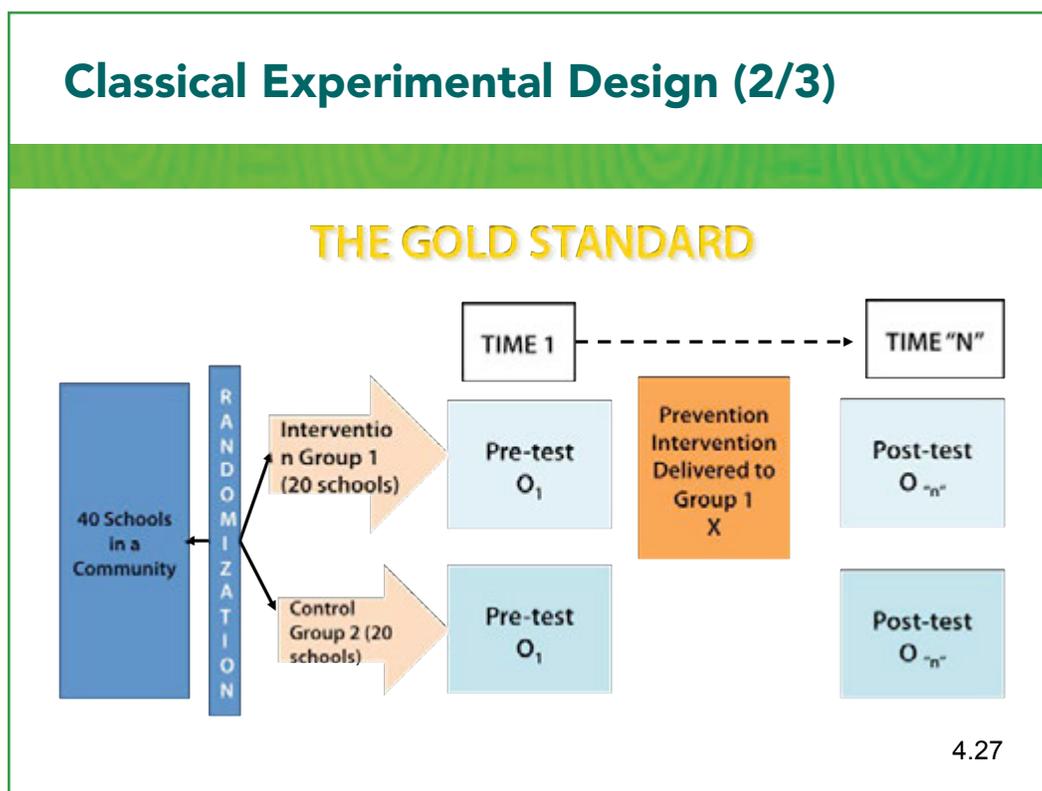
Say:

Let's apply this to a 'real' situation. Most evidence-based interventions involve this type of evaluation study. We are delivering a school-based substance use prevention intervention. We select 40 schools and randomly assign each school to one of two groups: Group One will receive the intervention, while Group 2 will not receive the intervention; these are the control schools.

The students in all schools receive a survey that includes many measures, including, whether or not they have used alcohol, tobacco or other substances. The survey is administered before the intervention is delivered at Observation point 1 in the intervention schools and the control schools. Then the survey will again be administered after the intervention is completed, perhaps, at 6 months, one year or longer. Those survey administrations are referred to as Observations point "n", using the letter "n" to indicate multiple survey administrations after the intervention.

Classical Experimental Design (3/3)

- Strengths
  - Clear causal inference
  - Addresses issues of internal validity
- Weaknesses
  - Expensive for large samples
  - Difficult to manage
  - Ethical issues
  - Issues of external validity (generalization)

4.28

Say:

There are many strengths to this design, as a researcher can make a clear causal inference of the intervention on the intervention group. In addition, this design addresses many of the threats to internal validity that we discussed earlier.

However, these designs are expensive to use in large samples, and it is difficult to manage. Furthermore, many issues related to threats to external validity remain a challenge. That is, it may be difficult to extend the findings from one study conducted in one type of population to other studies, that include populations with different characteristics.

Sometimes, withholding an intervention, even if it has not demonstrated positive outcomes, may be viewed as unethical. This may happen when a school has very serious substance use issues and it is thought that being in the control condition will cause more harm. Such situations require careful consideration. That is why it is recommended that a review group consisting of community members in addition to someone knowledgeable about research ethics be involved with the design of any evaluation from the time the evaluation is being planned.

Interrupted Time Series Experimental Design (1/2)

| O_1 | O_2 | O_3 | O_{10} | INTERVENTION | O_{11} | O_{12} | $O_{"N"}$ |
| Jan | Feb | Mar | …Oct | | Nov | Dec | Jan and beyond |

4.29
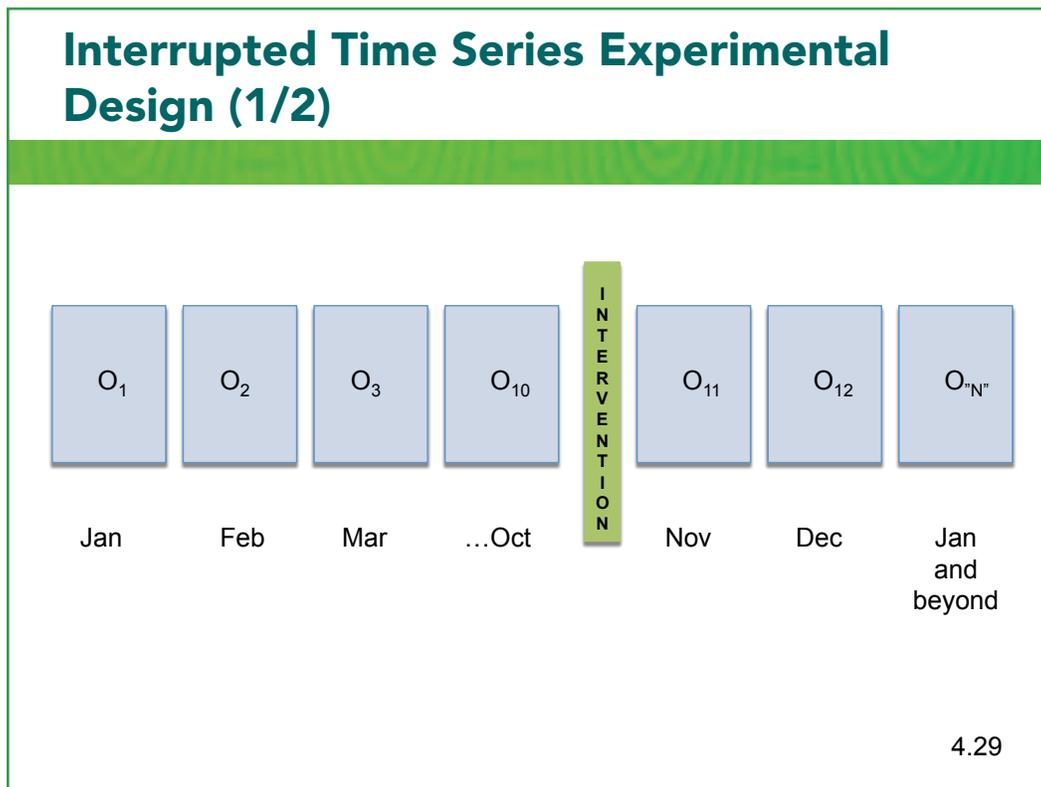
Say: *This Interrupted Time Series design is an alternative to the One Group Pre-Test and Post-Test design that we will see in next. In this design, several measurements are made prior to and after the intervention. This type of design has been used successfully in examining the introduction of an environmental intervention. We'll see an example of this in the next slide.*

Interrupted Time Series Experimental Design (2/2)

Alcohol related accident O_1	Alcohol related accident O_2	Alcohol related accident O_3	Alcohol related accident O_4	INTERVENTION	Alcohol related accident O_{12}	Alcohol related accident O_{13}	Alcohol related accident $O_{"N"}$
Jan	Feb	Mar	...Oct		Nov	Dec	Jan and beyond

4.30
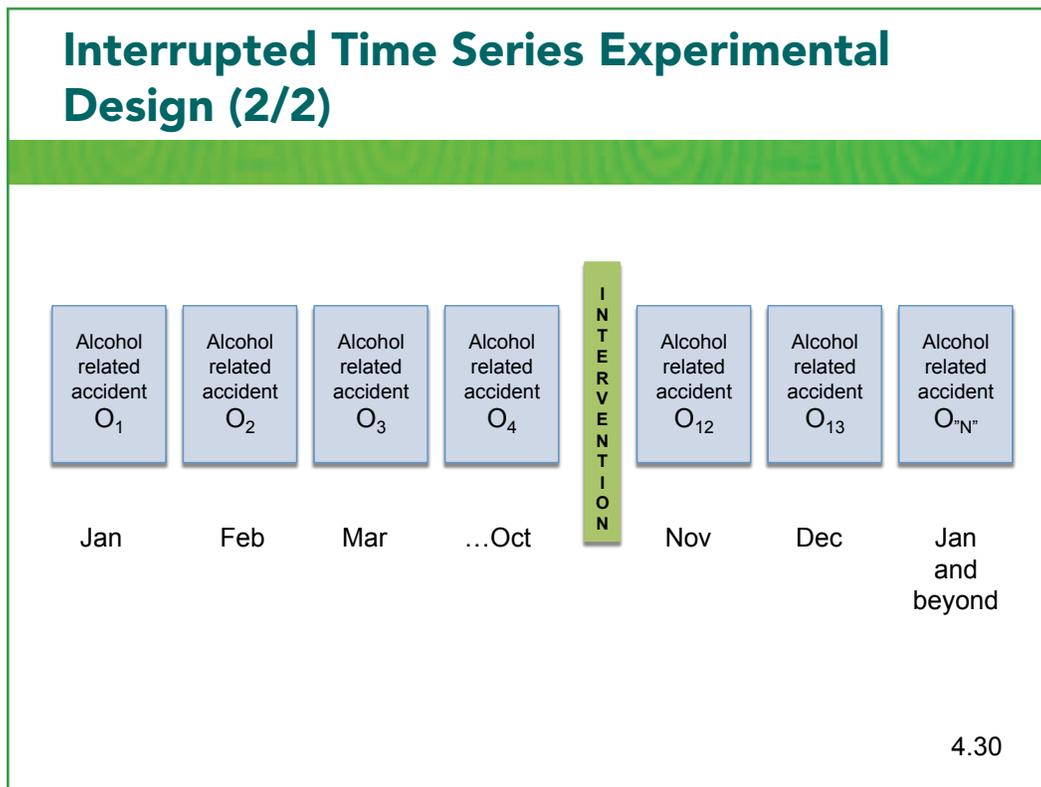
Say: *Here is an example where archival data are used to evaluate a new prevention environmental strategy.*

A community has experienced an increase in alcohol-related automobile accidents. A new bar tending training program designed to restrict access of alcohol to adults aged 21 and older is planned for implementation in November. Data on alcohol-related automobile accidents are collected routinely from January through October. In November, the program is implemented. The routine data collection continues through the following January and beyond.

If the data show reductions in the number of accidents, we might assume that the program is successful—unless there are other explanations for the reduction. Let's look at the strengths and weaknesses of this approach.

Interrupted Time Series Experiment

- Strengths
  - Strong causal inference
  - Multiple data points allow for change over time
- Weaknesses
  - Could be expensive
  - Time consuming
  - Subject to artifact changes in driving behavior

4.31

Say:

The advantages of the Interrupted Time Series Experiment are that this approach allows for strong causal inferences, and using multiple data points allows to observe change over time.

However, such data collection may be expensive, particularly, for manpower needs, time-consuming and, in our example, very much subject to whether alcohol tests are made at the time of the accidents. Furthermore, other factors that are going on in the community may be responsible for changes in the use of alcohol and driving, such as, newspaper articles or media coverage of accidents. It is difficult to determine, therefore, whether the change noted is due to the intervention, or some other factors that were not part of the intervention.

*An alternative design would be the addition of another similar community, that may have also experienced increases in alcohol related automobile accidents, to serve as a comparison or quasi-control condition. This would require similar data collection efforts in the other community **WITHOUT INTRODUCING AN INTERVENTION**, thus strengthening causal inferences that the program is working in the experimental community.*

One Group Pre-test and Post-test (1/3)

Group 1 Pre-test O_1	$\dashrightarrow$	Prevention Intervention X	$\dashrightarrow$	Group 1 Post-test O_2

Time 1   **Time 2**

4.32
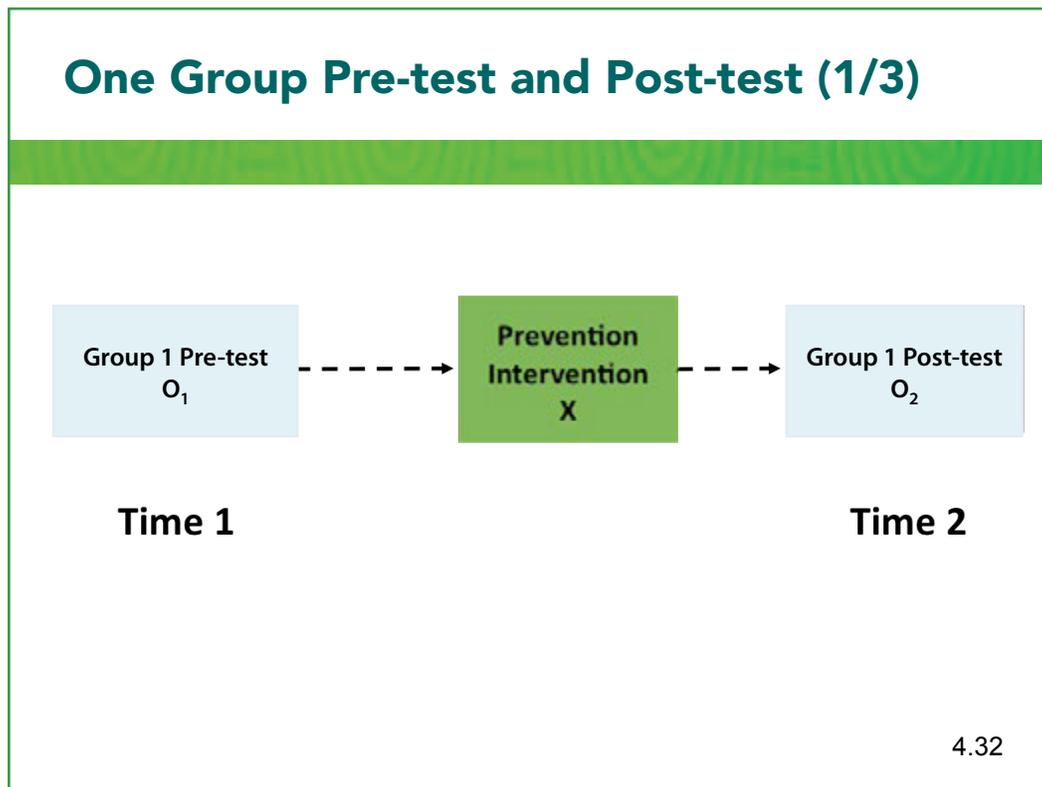
Say: *The one group pre-test and post-test design is the most common found in evaluation research. Prior to the prevention intervention, a pre-test is administered and some time after the intervention, a post-test, containing many of the same measures from the pre-test, is administered.*

One Group Pre-test and Post-test (2/3)

Juvenile Offenders Pre-test O_1	-->	Summer Boot Camp X	-->	Juvenile Offenders Post-test O_2
Time 1				**Time 2**

4.33
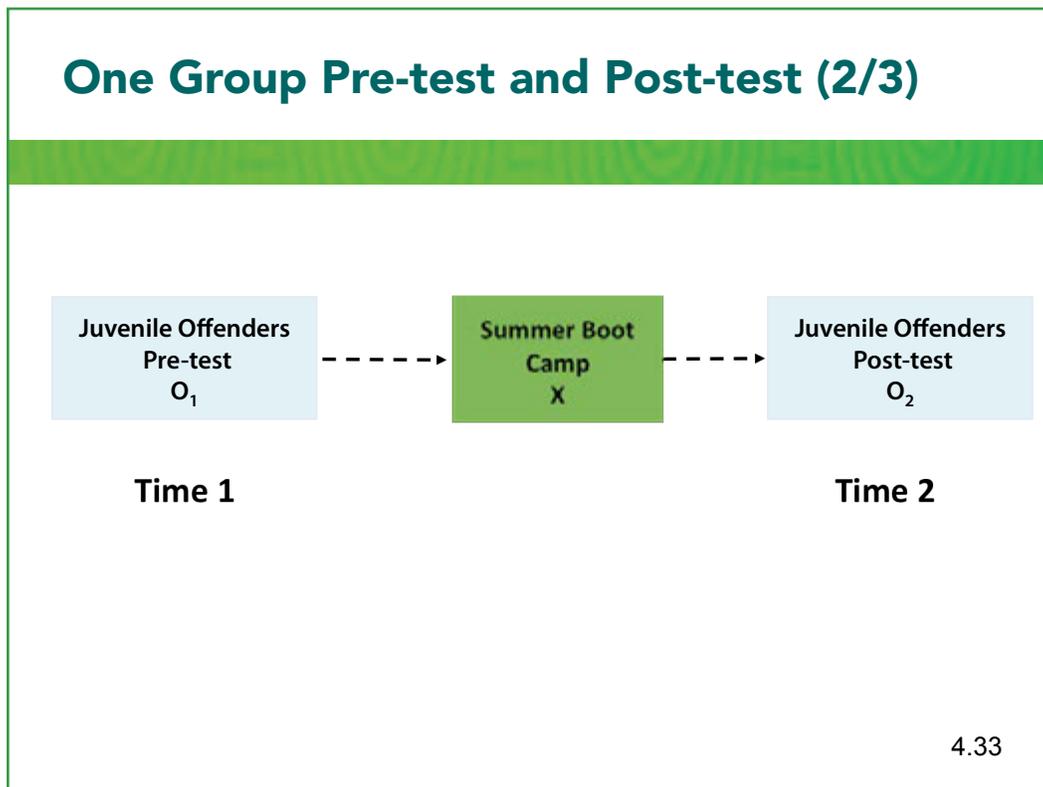
Say:

Now, let's see what this looks like, in an example. Juvenile offenders are selected to participate in a summer-long boot-camp type intervention. Before the subjects begin the program, they are evaluated on their attitudes, beliefs and plans for the future. All the selected subjects complete the boot-camp and are re-tested using the same measures.

Ask:

No matter what the outcome from the evaluation, how sure would you be about saying that the summer boot-camp had any effect on the juvenile offenders?

Teaching Instructions: Call on three people to get their input.

One Group Pre-test and Post-test (3/3)

- Strengths
  - Inexpensive
  - Easy to Administer
- Weaknesses
  - No comparison group- change could be due to one or more sources other than the treatment (e.g., selection bias, history, maturation, instrumentation, etc.)

4.34

Say: *The One Group Pre-test and Post-test Design is inexpensive to use, and easy to administer. However, without a comparison group, the results may be due to one or more of the internal threats to validity, such as, selection bias, maturation or even the outcome of the measurement instrument. For instance, it is possible that only those juvenile offenders who had decided that they had to change their lives participated in the program. The program may be quite effective with them, as they are already motivated.*

Presentation and discussion: Sampling and measurement

Slide 4.35 ══════════════════════════════════
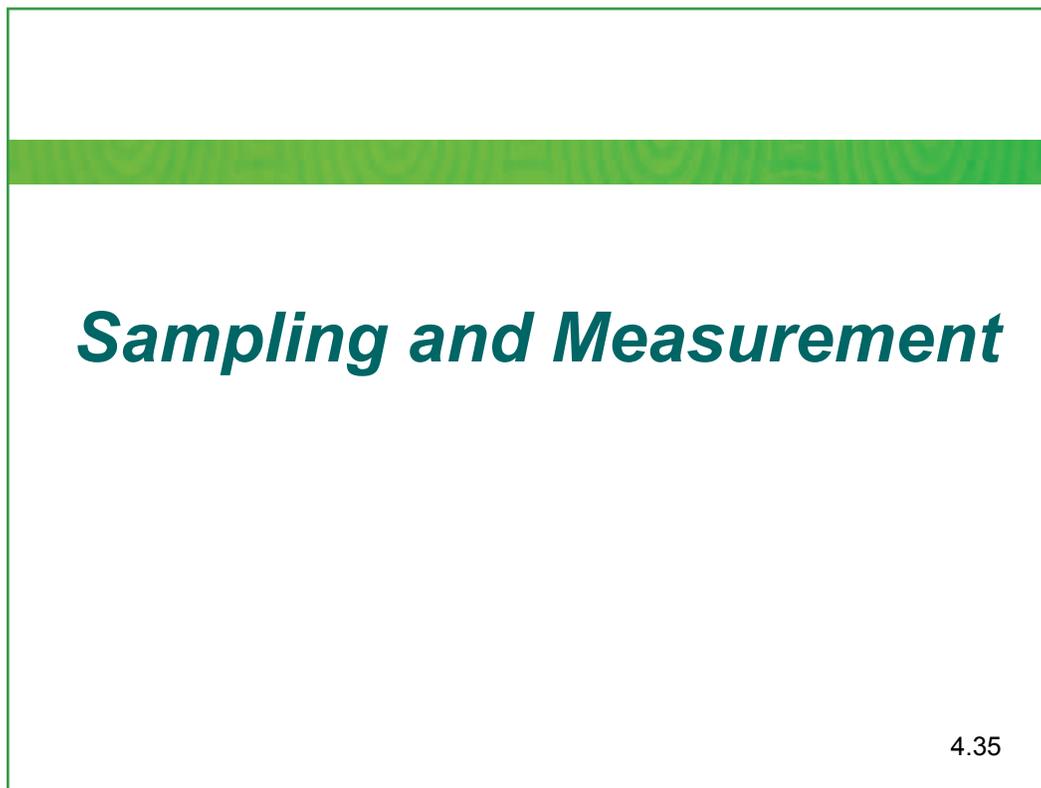
Sampling and Measurement

4.35

Say: *In this section of the module, we will be looking at Sampling and Measurement.*

289

Sampling (1/5)

- Sampling is a process through which a subgroup of a larger population is selected for study that is representative of the key characteristics of that larger population
- Sampling is used when resources and workload are constrained

4.36

Say:

Sampling is a common procedure used in research when studying a variety of things not just people, such as plants, animals, products like cars, cakes, etc.

The sampling process helps to extend information collected from a smaller sub-group to the larger population, of which it is a part.

Researchers sample when resources, in terms of time or money or even manpower, are constrained.

Sampling (2/5)

30 Students   5 Students

4.37

Say: *The concept of sampling isn't very complicated. We want to select a sub-set of people that look like the people we started with.*

So, if you have 30 children in a classroom and you want to talk to them about what they think about their school, what do you do? You don't have time to talk to all of them, but, you want to talk to 5. So five children will be your sample. You may use different ways to select these 5 children. You may list all 30 children and randomly pick 5 or pick every sixth child.

Say:

Here's another example. Suppose you want to survey the population of a country about their attitudes towards children under 18 having access to alcohol. Canada's population is over 35 million people. First of all, you may not want to survey children and adolescents who make up about 20% of the population leaving about 28 million people. Unless you have a lot of funding and staffing for this survey, you will want to survey a smaller number of people, so, you will draw a sample, say 1,000 people.

"Estimates of population, Canada, provinces and territories?. Statistics Canada. Retrieved 26 March 2014
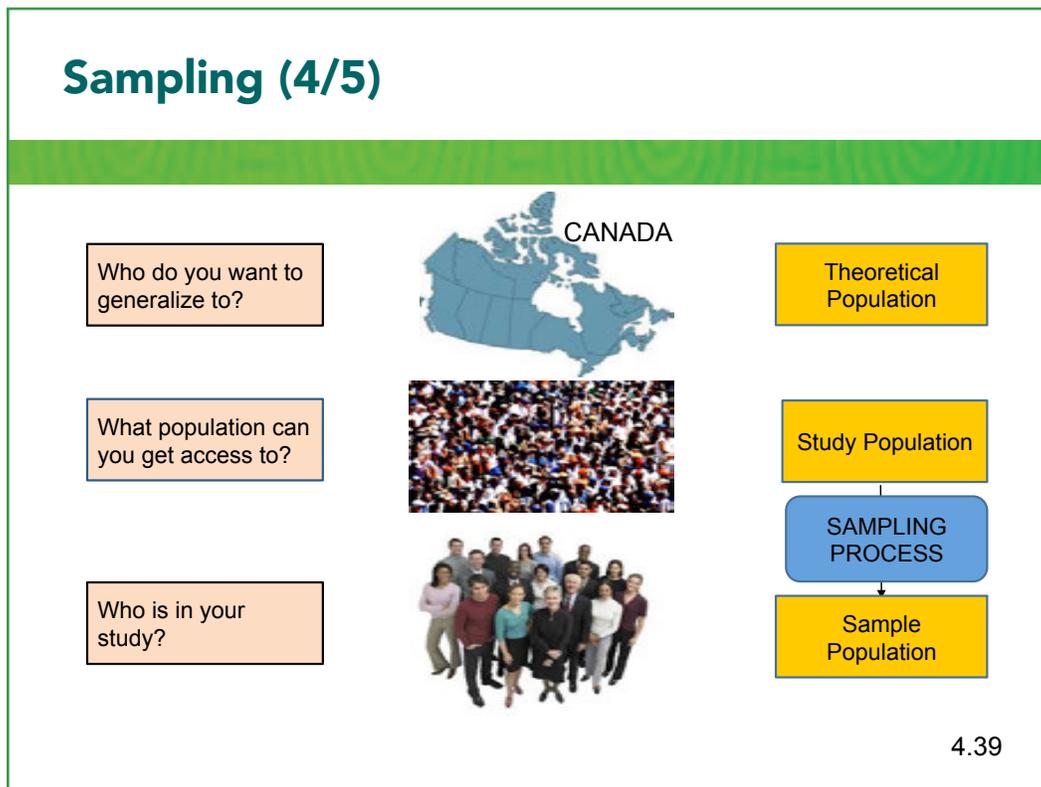
Say: *What does the sampling process include:*

First, you need to define and describe the population to be studied: What are its characteristics? We already know that about 20% are under the age of 18. What is the gender break-down? How many males? How many females? We may want to know the age distribution of males and females, or even whether they live in cities, suburbs or in rural areas.

In addition, the reality is that you may not be able to reach everyone. So the next question is, what population can I have access to? Generally, if you are conducting a national survey, it may be people living in households or who have computers.

And then, you need to decide who will be in your study and sample. These are the inclusion criteria, and then, who will you need to exclude from the sample, the exclusion criteria.

Types of Sampling Methods (5/5)

- Probability
- Non-Probability

4.40

Say:

There are many sampling methods, each with its own set of advantages and disadvantages. Researchers divide sampling methods into those that are based on probability, and those that are not based on probability. We won't go into a lot of detail today, as we will talk more about how to select a sample in the curriculum on Monitoring and Evaluation.

Today, we will just provide a definition of the two types of sampling methods, those based on probability and those that are not based on probability.

*What does **probability** mean? Probability is a measure or estimate of the degree of confidence one may have, that an occurrence of event will take place. Generally, this probability is assessed on a scale from zero, that is, the occurrence of the event is impossible to "one", that is, that the occurrence of the event happening, is certain.*

When weather forecasters talk about weather, they talk about the 'chances' of rain, based on the science of meteorology. These 'chances' are generally reported in terms of percentages, that is, there is a 50% chance that it will rain.

With probability sampling, all units, persons, households etc. in the larger study population have a specific likelihood of being included in the sample. The mathematical probability that any one of them will be selected, can be calculated. With these calculations, a

researcher can make statements about the larger population from which a probability sample was selected, based on information from the sample.

In contrast, with **non-probability sampling**, all units, persons or households in the larger study population are selected on the basis of their availability, or because of the researcher's personal judgment as to how representative they are. Their chances of selection cannot be calculated using mathematical methods. Without this mathematical calculation, it is not possible for a researcher to extend the findings from a data collected for a non-probability sample to the large population from which the sample was derived.

There are several methods for selecting both probability and non-probability samples that we will discuss in more detail in the Monitoring and Evaluation curriculum. These definitions will be repeated at that time, and you will be able to see the advantages and disadvantages of each.

Measurement (1/6)

- Measurements in our everyday life
- Measurements depend on the quality of measurement instruments
- Measurements must be carefully defined

4.41

Say: *We are all familiar with the issue of measurement that we address daily in our lives. When we visit a doctor we are weighed, our temperature taken and our blood pressure is assessed. When we go to the market our vegetables, fruit, meat, and seafood is weighed. Even the clothes we wear have been measured. A measurement is developed by putting a number to an attribute, that is, a quality or characteristic. So, weight is measured in pounds, kilograms, or stones. Temperature is measured by degrees of heat.*

In evaluation, many of the things we are interested in are, behaviors. We ask about the use of alcohol, tobacco products, and both prescription and non-prescription drug use. We are also interested in perceptions and beliefs, such as, how many people in our community drink alcohol, whether we think smoking of marijuana on a daily basis will impact health.

The precision of all the measurements, both, at the doctor's office, at the market, or in a student survey depends greatly on the quality of the measurement instruments we use. Even the blood pressure monitors have to be calibrated and may differ one from another. So, too, are the instruments that we use in social science and in evaluation.

It is not sufficient to say we are interested in measuring drug use in our community. We need to be more explicit. What do we mean by "drug"? Do we want to include only what may be illicit drugs? Or all psychoactive drugs? What do we mean by "use"? Are we only interested in frequent drug use, say, at least once every day or episodic use?

Measurement (2/6)

- Reliability: Stability of our measurements when measured over time
- Validity: Measurements truly reflect the attribute or quality we want to measure
- Substance use prevention instrumentation:
  - Substance Abuse and Mental Health Services Administration: http://captus.samhsa.gov/sites/default/files/capt_resource/an_annotatedbibliography_of_measurement_compendia_06-22-12.pdf
  - European Monitoring Centre on Drug and Drug Addiction: http://www.emcdda.europa.eu/eib

4.42

Say:

When we talk about measurement, we are concerned about the reliability and validity of the measurement.

How stable are the measurements when repeated over time? That represents the consistency or reliability.

Are we measuring what we want to measure? That represents validity.

You can see from these definitions that there may be some controversy in the field of social science. However, fortunately, the field of substance use prevention has developed instruments for assessing the effectiveness of prevention interventions that have been used in many different situations, and for many different populations.

Today, we are just focusing on defining measurements; we will go into more depth on types of measurements and how they are classified as these aspects are important for statistical analyses in the curriculum on Monitoring and Evaluation.

Types of Measures (3/6)

- Quantitative data is described in numbers and shows how often something occurs or to what degree a phenomenon exists
- Qualitative data is described in words and explains why people behave or feel the way they do

Source: http://captus.samhsa.gov/prevention-practice/epidemiology-and prevention/epidemiological-data/1

4.43

Say: *In general, there are two types of data that you will want to collect—quantitative and qualitative. There are many definitions of these types of data. What is included in this slide comes from the U.S. Substance and Mental Health Services Administration.*

Here we see that quantitative data are generally described as numbers, and shows how often something occurs or to what degree, a phenomenon exists.

Qualitative is generally related to descriptions, rather than numbers.

However, you will find that these definitions are not precise.

What is important is that to obtain an adequate 'picture' of the substance use situation in any community, both quantitative AND qualitative information is needed.

Quantitative Measures (4/6)

- Answers, "How many?" "How often?"
- Measures levels of behavior and trends
- Is objective, standardized, and easily analyzed
- Is easily comparable to similar data from other communities and levels
- Examples: Statistics, survey data, records, archival data

Source: http://captus.samhsa.gov/prevention-practice/epidemiology-and-prevention/epidemiological-data/1

4.44

Say:

Quantitative measures generally provide measures of quantity…how many persons aged 12 to 17 years of age ever used cannabis/marijuana/hashish in the past thirty days? Or, for those that have used cannabis in the past thirty days, on average, how many times in the past thirty days did they use cannabis?

Quantitative measures are also used to measure levels of behavior and trends over time.

Quantitative measures are objective, standardized, and usually easily analyzed. As they are standardized, they can be collected across communities and groups.

Examples of quantitative measures are those that come from surveys or records.

Qualitative Measures (5/6)

■ Answers, "Why?" "Why not?" or "What does it mean?"

■ Allows insight into behavior, trends, and perceptions

■ Is subjective and explanatory

■ Helps interpret quantitative data, provides depth of understanding

■ Examples: Focus groups, key informant interviews, case studies, story-telling, observation

4.45

Say:

Qualitative measures are generally subjective and address the "why?" and "what does it mean?" type of questions.

They provide insights into behavior, trends, and perceptions.

They are more explanatory and help to interpret quantitative data.

These measures are collected through focus groups, key informant interviews, and case studies.

Presentation: Data collection, analysis, and statistics

Slide 4.46

Data Collection, Analysis, and Statistics

4.46

Say:
  In this section of the module, we will be looking at Data Collection. Analysis and Statistics.

Measurement Collection Methods: Examples (6/6)

- ■ Quantitative Measures
  - ▫ Archival sources
  - ▫ Population-based surveys
    - ▪ Household members
    - ▪ Students
    - ▪ Special Populations
- ■ Qualitative Measures
  - ▫ Key informant interviews
  - ▫ Focus groups
  - ▫ Ethnographic studies
  - ▫ Open-ended questions

4.47

Say:

Once an evaluator has decided on the research questions of interest, and the research design, study population, sampling method, and measurements, the next step is to decide what types of measurements are involved, and, then, the best method for collecting these measurements.

Quantitative measurement collection methods may be archival sources, such as, records of arrests, school absenteeism or expulsions, academic grades, hospital emergency departments, and, treatment admissions.

Quantitative measurement collection methods also include population-based surveys, such as, surveys of members of sampled households, students of samples schools, or samples of special population groups, such as, street children.

The quantitative nature of the measurements from these sources, generally, come from the standardization of the measurement across all groups.

Qualitative measures come primarily from less rigorous approaches allowing for more free-flowing discussion around a topic, rather than provided in a survey or archival situation. Generally, evaluation researchers use these methods when they want to explore new characteristics of an issue. For instance, they may want to know more about new substances that are available on the street, or they may want to have an idea about situations, where adolescents have access to alcohol, tobacco, or other substances.

Analysis

- Measurements become data through their transformation into a usable form such as tables, scales, etc
- Data analysis allows the evaluator to systematically describe the population and to begin to answer the research questions

4.48

Say:

Once the measures are collected, they need to be transformed into data and into a form that allows further examination or analysis. Data analysis allows the evaluator to systematically describe the study population, and to begin to answer the research questions that formed the basis for the evaluation. This process of description, and further analysis is assisted with the use of statistical methods.

Some of these are familiar to you, others are not, and will only be referred to today, and, will receive more attention in the curriculum on Monitoring and Evaluation.

Statistical Analysis

- Statistics
- Descriptive
- Inferential

4.49

Say: *Even though we are not necessarily aware of it, we deal with statistics every day. We talk about election results, sports scores, ratings of hotels etc.*

As we just mentioned, evaluators generally are interested in analytic techniques that allow them to both describe a population or behavior, and to make inferences or to draw conclusions about the research questions that can be attributed from the sample to the larger study population. These types of analyses use descriptive or inferential statistics.

Statistics is a branch of mathematics that is designed to summarize and to manipulate data to examine various research questions. Generally, there are two types of statistics.

Descriptive *statistics are as labelled, descriptive. They are used to organize or summarize a set of measurements. For example, in our training group we have _____ men and ___ women (Insert the correct numbers on the blanks). Government Census reports are good examples of the use of informative and meaningful descriptive statistics. Such information as gender, age, income, housing of a country's citizens are helpful for planning future services for health care, education, and social services.*

Inferential *statistics are more complex, and use data gathered from a sample to make inferences, or draw conclusions about the larger population from which the sample was drawn. For example, if we conducted a student survey on substance use with a random sample of students attending a school in our community, we could take that information and make inferences about substance use in the school student population, as a whole.*

Review of Basic Descriptive Statistics

- Mean
- Median
- Mode and Range
- Variance and Standard Deviation
- Frequency Distributions
- Histograms

4.50

Say:

Most researchers begin to explore their data by examining how their measures or data are distributed. What does this mean? Many of the basic descriptive statistics are also used in our everyday lives, and you may be familiar with them. Here is a list of the most common:

- *Mean;*

- *Median;*

- *Mode and range;*

- *Variance and standard deviation;*

- *Frequency distributions; and*

- *Histograms.*

In the next set of slides, we will discuss the first three. Definitions of the others are included in the Glossary.

**Review of Basic Descriptive Statistics:
Mean, Median, Mode and Range**
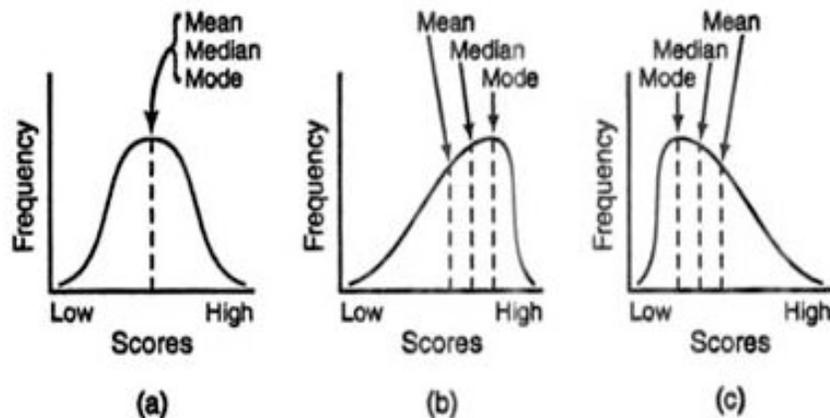
4.51

Say:

The mean is the most commonly used measure. It is the measure of central tendency, and the arithmetic average. An example of how this would be used in an evaluation of a substance use prevention intervention is to determine what is the mean number of days in the prior month that substance use was reported by the intervention and control groups. Let's say that the average frequency of substance use is close to zero, for both groups.

The median is the point that divides a ranked set of data in equal parts, and the mode is a number that represents the highest frequency of a response of score. How would these statistics be used in an evaluation of a substance use prevention intervention? It isn't enough just to look at the average frequency of substance use among members in the intervention and control groups. The evaluation researcher may also want to determine what is the frequency of use most common in the two study groups. It is possible that although the average frequency of substance use is comparable in the intervention and control groups, the modal frequency of use may show that more of the control group are using once a week than those in the intervention group.

In the chart above we see a range of scores from low to high. When the scores are "normally distributed", the mean, median and mode all fall at the same score. However, as you can see in the charts shown here, when the scores are not normally distributed, but, are skewed or shifting towards either the low or high ends of a range of scores, these three measures differ, telling a different story about the scores for a study population.

Inferential Statistics

- Inferential statistics can be used to determine associations between variables and predict the likelihood of outcomes or events
- Inferential statistics rely on probabilities as to whether the likelihood of a pattern of findings could have occurred by chance
- If the probability of the occurrence of the findings are lower or greater than by chance, the finding is considered significant

4.52

Say:

*While descriptive statistics allow us to draw conclusions about a population through graphs, **inferential statistics** provides us the tools to examine the associations between our measures, and to predict the likelihood of outcomes, and to determine whether differences found within and across populations, are significant.*

*Inferential statistics rely on **probabilities** determining whether the finding could have occurred by chance or, if lower or greater than by chance, are they significant.*

A probability is defined as the likelihood of something happening. The classical demonstration is the coin toss.

Given the function of inferential statistics, we can see that they are very important in any evaluation study. We will not get into more detail on inferential statistics today, but we wanted to introduce the concept to you at this time.

Reporting Results

- It isn't enough to conduct the evaluation. A complete evaluation includes reporting the results
- Showing findings
- Presenting findings

4.53

Say:

No evaluation is complete until a report of the findings is made available to a variety of audiences, including stakeholders, as well as, other researchers.

The audience for the findings determines how the findings are to be presented. These may range from graphic representations along with tables with levels of significance.

20 minutes

Presentation: Summary and review of module 4

Slide 4.54

4.54
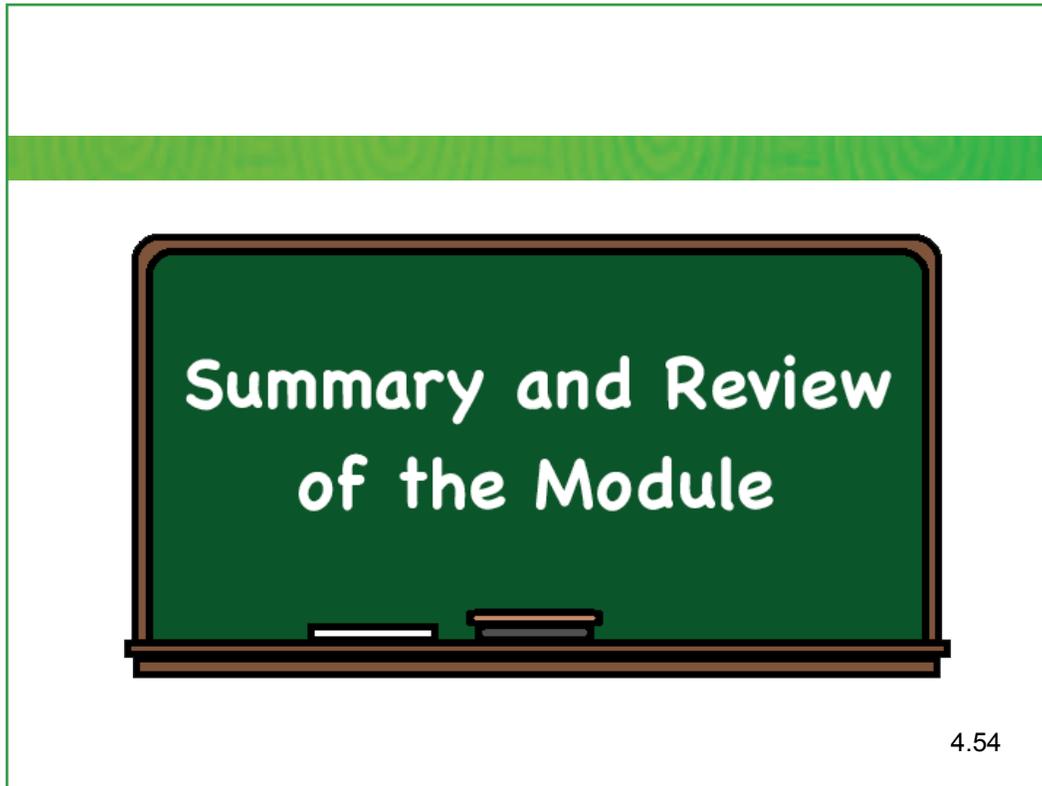
Say: *Let us read the summary on page 197 of your Manual to review what we have learned from this module so far.*

Ask: *In what ways do you find this information important for what you do everyday?*

Module 4 evaluation

Slide 4.55 ══════════════════════

Module 4 Evaluation

15 minutes

4.55

Say: *Thank you all for your great participation!*

Please be sure to complete the module 4 evaluation form before we start module 5.

MODULE 5

EVIDENCE-BASED PREVENTION INTERVENTIONS AND POLICIES: THE UNODC INTERNATIONAL STANDARDS ON DRUG USE PREVENTION

Trainer Manual: Module 5—Evidence-Based Prevention Interventions and Policies: The UNODC International Standards on Drug Use Prevention

311

Module 5 Preparation Checklist

■ Review Getting Started for general preparation information.

■ Preview Module 5. Be familiar with the instructions for the exercises in this module.

Content and Timeline		
Activity	Time	Person Responsible
Introduction to module 5	20 minutes	
Presentation and discussion: How the International Standards were developed	25 minutes	
Presentation: What makes it evidence-based prevention?	20 minutes	
Presentation and discussion: Quality of the studies and intervention categories	20 minutes	
Break	15 minutes	
Small-group exercise: Preparation for presentations on EB interventions/policies that target populations	45 minutes	
Presentation and discussion: Infancy and early childhood	20 minutes	
Presentation and discussion: Middle childhood	30 minutes	
Presentation and discussion: Early adolescence and adolescence	30 minutes	
Presentation and discussion: Late adolescence and adulthood	30 minutes	
Wrap-up	10 minutes	
Presentation and discussion: What have we learned from the International Standards	15 minutes	
Small-group exercise: Applying EB strategies to your community	45 minutes	
Module 5 evaluation	15 minutes	
Break	15 minutes	

Module 5 Goals and Objectives

Training goals

- Provide the bases for the International Standards on Drug Use Prevention;

- Provide criteria for evidence-based prevention interventions/policies and practice;

- Emphasize the importance of applying a human development framework to the planning and delivery of prevention interventions and policies; and

- Equip prevention coordinators with the background and knowledge to communicate the importance of evidence-based prevention to policy-makers and the public in their area.

Learning objectives

Participants who complete Module 5 will be able to:

- Describe the advantages and disadvantages of delivering evidence-based prevention interventions and policies;

- Describe the criteria used to determine evidence-based interventions and policies;

- Describe the roles of prevention within a developmental framework; and

- With this knowledge, learn how to encourage policy-makers and stakeholders to support EB interventions in your community.

20 minutes

Introduction to module 5

Slide 5.1

International Centre for Credentialing and Education of Addiction Professionals (ICCE)
The Universal Prevention Curriculum (UPC) for Substance Use Training Series

Curriculum 1

Introduction to Prevention Science

MODULE 5—EVIDENCE-BASED PREVENTION INTERVENTIONS AND POLICIES: THE UNITED NATIONS OFFICE ON DRUGS AND CRIME *INTERNATIONAL STANDARDS ON DRUG USE PREVENTION*

Say:
In this module, we will be looking at Evidence-Based Prevention Interventions and Policies: The UNODC International Standards on Drug Use Prevention.

Trainer Manual: Module 5—Evidence-Based Prevention Interventions and Policies: The UNODC International Standards on Drug Use Prevention

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Say:

As we begin Module 5, I would like you to review this one-page introduction to the material we will cover. You may encounter terms and concepts that are new to you and that is to be expected in this challenging area of prevention science. We will discuss all of this material as we progress through the Module.

Teaching Instructions: Please allow 5-10 minutes for the participants to read the Introduction to themselves.

Introduction

This module provides a more in-depth understanding of the development of the International Standards on Drug Use Prevention: A guide for policy-makers, which summarizes the science that underlies evidence-based (EB) prevention interventions and policies for preventing or reducing substance use. The Standards were developed by the United Nations Office on Drugs and Crime (UNODC) in collaboration with prevention researchers, prevention specialists and policy-makers from around the world.

Using a human developmental framework, the Standards recognize that individuals at various stages of development--e.g., infancy and early childhood, middle childhood,

adolescence, and late adolescence and adulthood—have different needs and respond to different types of instructional strategies. Furthermore, the document recognizes that interventions and policies can be delivered in different settings, such as, the family, school, workplace, or community, and can target either those who influence the lives of individuals—parents, teachers, work supervisors—or the individuals themselves. It also recognizes the risk status of different populations—universal, selective, and indicated—is important to the appropriate delivery of the interventions. The Standards is directed at policy and decision makers to provide the scientific rationale to only support those programs that have been shown through rigorous research to be effective.

Module 5 will outline the numerous steps and extensive scientific criteria that were used to screen and select eligible studies of substance use prevention interventions and policies, for inclusion in the Standards document. Of 584 studies initially reviewed by a group of experts, only 256 were abstracted for further review. Among these, eligible interventions and policies have been investigated with positive outcomes in multiple studies. Thus, you will learn about **systematic reviews**, which summarize the best research by synthesizing the results of rigorously evaluated prevention interventions; and **meta-analyses**, which synthesize results like systematic reviews, but also uses statistics to evaluate the results from two or more studies. The resultant evidence was then rated to be 'excellent' (5 stars), 'very good' (4 stars), 'good' (3 stars), 'adequate' (2 stars), or 'limited' (1 star).

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Training Goals

- Provide the bases for the *International Standards on Drug Use Prevention*
- Provide criteria for evidence-based prevention interventions/policies and practice
- Emphasize the importance of applying a human development framework to the planning and delivery of prevention interventions and policies
- Equip prevention coordinators with the background and knowledge to communicate the importance of evidence-based prevention to policy-makers and the public in their area

5.3

Say: *Overall, the training goals of this module are:*

- *Provide the bases for the International Standards on Drug Use Prevention;*

- *Provide criteria for evidence-based prevention interventions/policies and practice;*

- *Emphasize the importance of applying a human development framework to the planning and delivery of prevention interventions and policies; and*

- *Equip prevention coordinators, with the background and knowledge, to communicate the importance of evidence-based prevention to policy-makers and the public, in their area.*

Learning Objectives

- Describe the advantages and disadvantages of delivering evidence-based prevention interventions and policies
- Describe the criteria used to determine evidence-based interventions and policies
- Describe the roles of prevention within a developmental framework
- With this knowledge, learn how to encourage policymakers and stakeholders to support EB interventions in your community

5.4

Say:

The intent of this module is to introduce you to the concept of 'evidence-based' prevention interventions and policies, and to the International Standards on Drug Use Prevention, a guide for policy-makers that was developed by the United Nations Office on Drugs and Crime (UNODC) in collaboration with prevention researchers, prevention specialists and policy-makers from around the world.

The Standards have been developed using a human developmental framework that recognizes that individuals at various stages of development have different needs and respond to different types of instructional strategies. Furthermore, interventions and policies can be delivered in different settings, such as, the family, school, workplace, or community, and target either those who influence the lives of individuals—parents, teachers, work supervisors—or the individuals themselves.

Subsequent curricula will focus on these developmental periods within each of the settings.

The module will enable you to:

- *Describe the advantages and disadvantages of delivering evidence-based prevention interventions and policies;*

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- *Describe the criteria used to determine evidence-based interventions and policies;*

- *Describe the roles of prevention within a developmental framework; and*

- *With this knowledge, learn how to encourage policy-makers and stakeholders to support EB interventions in your community.*

Why is Substance Use Prevention Important?

- The primary objective of drug prevention is to help people, particularly young people, to avoid or delay the initiation of the use of drugs, or, if they have started already, to avoid that they develop disorders (e.g. dependence)

- The general aim of drug prevention is much broader, the healthy and safe development of children and youth to realize their potential and become contributing members of their community and society

- Effective drug use prevention contributes significantly to the positive engagement of children, youth and adults with their families, schools, workplace and community

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5.5

Say:

Before we talk about the International Standards on Drug Use Prevention, let's again talk about why substance use prevention is important. These concepts guided the development of the Standards document.

Here they are listed for you. Just to summarize, the overarching goal of substance use prevention is to help avoid or delay the initiation of substance use. However, prevention interventions are also designed to help those who may have already initiated use, and are at-risk for progressing to abuse and dependence. But, the major aim of substance use prevention is broader: focusing on the health and safety of our global children and youth by helping children, youth and adults engage positively with their families, their schools, their workplaces, and their communities.

As we will learn soon, the targets of the Standards are policy-makers and decision makers. The aim was to provide the science and research that supports evidence-based prevention, but also to emphasize that substance use prevention also impacts other important developmental aspects, including, education, employment and healthy living. As we discussed in Module 1, effective prevention programming can impact a nation's health and economy.

Trainer Manual: Module 5—Evidence-Based Prevention Interventions and Policies: The UNODC International Standards on Drug Use Prevention

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Points of Intervention Model

©Sloboda, forthcoming

5.6
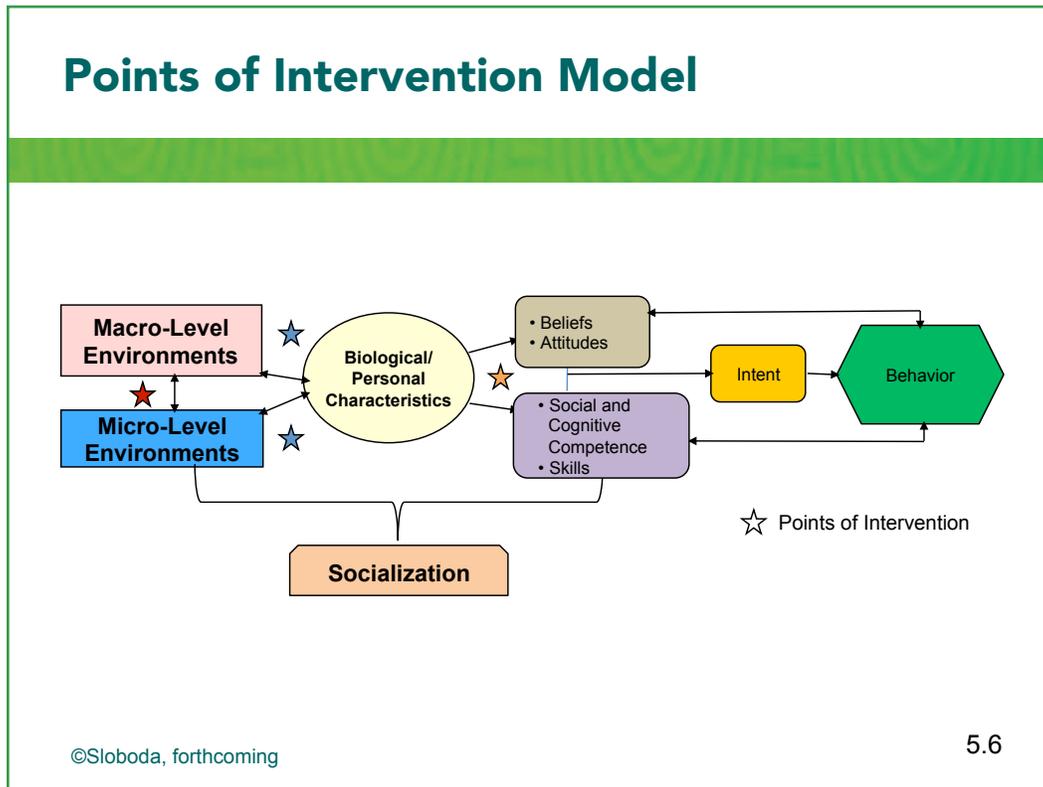
Say:

Here is our Points of Intervention Model again. Keep this model in mind, as we go through the summary of evidence-based substance use prevention interventions. Please note that intervention points include those that address micro- and macro-level environments, the orange and blue stars, but, also, those that directly address the target population, the yellow star.

We will hear about preventive interventions that are delivered to parents, to teachers, to children and adolescents, within family environment, school environments, and workplace environments and within the community.

International Standards on Drug Use Prevention
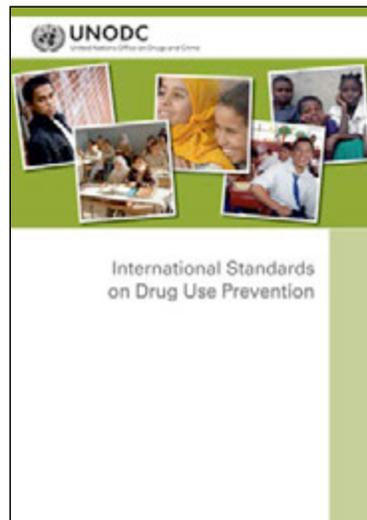
5.7

Say:

Until 2012, when the United Nations Office on Drugs and Crime (UNODC) developed the International Standards on Drug Use Prevention, no one body has reviewed and summarized research findings from the prevention science literature.

We provided each of you a copy of this publication to use as a resource for the course, and for your practice when you return home. The UNODC website also provides valuable resource material and access to the background papers, which are summarized in the publication.

Trainer Manual: Module 5—Evidence-Based Prevention Interventions and Policies: The UNODC International Standards on Drug Use Prevention

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Presentation and discussion: How the International Standards were developed

Slide 5.8

How the International Standards for Drug Use Prevention Were Developed

5.8

Say: *In this section of the module, we will be looking at How the International Standards for Drug Use Prevention were Developed.*

Intent of the International Standards

■ To summarize the currently available scientific evidence, describing effective interventions and policies and their characteristics

■ To identify the major components and features of an effective national drug prevention system

■ Ultimately, to help policy-makers worldwide to support programs, policies and systems that are a truly effective investment in the future of children, youth, families and communities

5.9

Say:

The intent of the International Standards is to pull together the results of prevention research, and to begin establishing what are the key characteristics of evidence-based prevention interventions and policies, that have had positive outcomes in reducing or eliminating drug use.

The concept behind the Standards document is to help policy-makers support only those programs that have been shown, through rigorous research, to be effective. Furthermore, the Standards offers a common forum and opportunity for policy-makers, prevention practitioners, prevention researchers, and others who understand the importance of effective prevention, to plan together effective prevention programming for their communities.

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Building on Existing Resources

Secretariat for Multidimensional Security
Inter-American Drug Abuse Control Commission

CICAD

Canadian Centre on Substance Abuse
Partnership. Knowledge. Change.

European Monitoring Centre for Drugs and Drug Addiction

Mentor International

NIH National Institute on Drug Abuse
The Science of Drug Abuse & Addiction

World Health Organization

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5.10

Say:

The Standards builds on and recognizes the work of many other organizations that have been publishing other types of standards and guidance on prevention.

These include such agencies as the Organization of American States, the National Institute on Drug Abuse in the United States, the Canadian Centre on Substance Abuse, the World Health Organization, the European Monitoring Centre for Drugs and Drug Addiction, and Mentor International with its new Prevention Hub.

Who Was Involved?

- Lead by the UNODC Prevention, Treatment and Rehabilitation Section
- Group of experts (80+) identified relevant references for us. Important to note, experts were:
  - Nominated by UNODC and Member States
  - Researchers, practitioners, policy-makers, UNODC field offices
  - Geographically representative (30+ countries)
- Two primary consultants:
  - Dr. Zili Sloboda
  - Ms. Angelina Brotherhood

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5.11

Say:

The development of the International Standards was systematic and inclusive. A group was formed including over 80 experts identified who were nominated by UNODC and Member States. The group consisted of researchers, practitioners, and policy-makers from around the world.

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Map of Where the Expertise Came From

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5.12

Say: *You can see from the map the areas from which these experts came, noted in green.*

What Do We Mean by "Evidence-Based"?

"**Evidence Based Practice (EBP)** is the use of *systematic decision-making* processes or provision of services which have been shown, *through available scientific evidence, to consistently improve measurable client outcomes*. Instead of tradition, gut reaction or single observations as the basis of decision making, *EBP relies on data collected through experimental research and accounts for individual client characteristics and clinician expertise*."

(Evidence Based Practice Institute, 2012; http://depts.washington.edu/ebpi/)

5.13

Say:

So what does 'evidence-based' prevention mean. Drawing from the definition of the Evidence-Based Practice Institute of the University of Washington, there are two key aspects to this definition:

■ *Systematic decision-making using scientific evidence that is associated with improved or positive outcomes; and*

■ *Reliance on data collected through rigorous experimental research.*

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What are the Prime Barriers to Implementing EB Interventions?

- Often appears to go against conventional wisdom
- Challenges cultural and religious beliefs in regard to parenting, family structure, gender roles, etc.
- Requires new skills and specialized training
- Delivery challenge to maintain fidelity of implementation, while adapting to the specific needs of the target group and population
- Limited availability of resources
- Requires monitoring and assessments

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5.14

Say:

Why would you NOT implement evidence-based programming? The research shows that many barriers to implementation of evidence-based effective programs are:

- *They may go against conventional wisdom and may not 'feel' right intuitively;*

- *Many times, evidence-based programming requires new skills and often specialized training;*

- *The delivery of evidence-based programming requires adherence to the program as it was designed, and the need to implement with fidelity, while still adapting to the specific needs of the target group, may be challenging;*

- *Furthermore, the resources needed to deliver evidence-based programming may not be available; and*

- *Finally, evidence-base programming requires monitoring for fidelity and assessments to determine that the program is being delivered, as it was designed and that the desired outcomes are, as intended.*

Why Implement Evidence-Based Practices? (1/2)

Best Outcomes

- Gives target groups and populations the best interventions, techniques, and policies that are available
- Offers the possibility to deliver services in a more effective and efficient way
- Provides a more rational basis to make policy decisions
- Provides a common language
- Gives the opportunity to develop a common concept for the evaluation of scientific research
- Forms a new basis for education and training, it offers the possibility to achieve continuity and more uniformity of service delivery, and provides more clarification on missing links and shortcomings in our current scientific knowledge

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5.15

Say:

The question is, can you overcome the barriers and pave the way for the best outcomes for your population?

By implementing evidence-based programming, we are giving our target groups the best interventions, techniques, and policies that are available.

Also, because these evidence-based interventions and policies have been implemented and rigorously evaluated with multiple groups, they are generally more effective and efficient.

Furthermore, having the research behind evidence-based prevention programming forms a rational basis on which policy decisions can be made.

In addition, the choice of evidence-based programming provides a common language to use across communities, and provides a common concept for evaluation of newly available scientific research

*Finally, it forms a new basis for education and training, **such as this curriculum series**, allowing for more uniformity in service delivery and of identifying where there are gaps or missing information, in both research and practice.*

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Why Implement Evidence-Based Practices? (2/2)

Barriers to Implementing EB Interventions	Advantages to Implementing EB Interventions
• Often appears to go against conventional wisdom	• Gives target groups and populations the best interventions, techniques, and policies that are available
• Challenges cultural and religious beliefs in regard to parenting, family structure, gender roles, etc.	• Offers the possibility to deliver services in a more effective and efficient way
• Requires new skills and specialized training	• Provides a more rational basis to make policy decisions
• Delivery challenge to maintain fidelity of implementation, while adapting to the specific needs of the target group and population	• Provides a common language
• Limited availability of resources	• Gives the opportunity to develop a common concept for the evaluation of scientific research
• Requires monitoring and assessments	• Forms a new basis for education and training; offers the possibility for continuity and uniformity in service delivery; and provides more clarification on missing links in our current scientific knowledge

5.16

Say:

Here is a summary of the barriers and advantages we just discussed.

Ask:

Can you think of other barriers or advantages that might apply, in regard to bringing evidence-based substance use prevention interventions to your community?

"Substance use prevention that is based on scientific evidence is an effective and cost-effective investment in the well-being of children, youth, and all people."

5.17

Say: *In summary, as this slide states:*

"Substance use prevention that is based on scientific evidence is an effective and cost-effective investment in the well-being of children, youth and all people."

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Review Process for International Standards on Drug Use Prevention
[http://www.unodc.org/unodc/en/prevention/
prevention-standards.html]

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5.18

Say:

The next slides summarize the process that was used to develop the International Standards. We are reviewing the process, just so you understand that it was a large effort and drew from a broad literature and relied on the expertise of researchers, as well as, prevention practitioners and policy-makers from around the world.

We will not go into the details of the multiple staged process of review that was conducted to determine the final set of effective intervention and policy strategies and their characteristics.

The International Standards document is available at the United Nations Office on Drugs and Crime website along with several appendices that provide more details about the process of review.

Presentation: What makes it evidence-based prevention?

What Makes An Intervention Evidence-Based (EB)?

5.19

Say: In this section of the module, we will be looking at What Makes an Intervention Evidence-Based (EB)?

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International Standards: Collection of the Evidence

- Provided by the Group of Experts
- Systematic review of reviews conducted by the Centre for Public Health at the Liverpool John Moores University
- Manual search of Cochrane and Campbell databases

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5.20

Say:

Where did the materials come from for review?

Most of the references, consisting mostly of published articles from peer-reviewed journals and peer-reviewed reports, came from:

- *The group of experts;*

- *Systematic reviews of reviews that was conducted by the Centre for Public Health at the Liverpool John Moores University, and*

- *A search of reviews available through the Cochrane and Campbell databases.*

International Standards: Criteria for Selecting Studies

■ Identify studies of the **evaluation of effectiveness** reporting as outcome(s) **changes in the use or in the initiation** of tobacco, alcohol, or drugs

■ In the case of interventions and policies targeting **up to middle childhood**, **changes in mediating variables** recognised by the scientific literature were accepted

　□ As identified by consensus by the Group of Experts

　□ Listed in an Annex to the Methodological Appendix

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Say:

When all the articles and reports of research studies were submitted by the Group of Experts, they were reviewed against broad criteria to select the most relevant ones for further review.

The studies had to report on evaluations of effectiveness, including outcomes related to:

■ *Changes in the use of tobacco, alcohol, or drugs; and*

■ *In those cases where the intervention and policies targeted children through middle childhood, prior to the at-risk years, changes in mediating variable/attitudes, perceptions, behaviors recognized in prevention science as antecedents of the use of tobacco, alcohol, and/or drugs.*

International Standards: Summary of the Selection Process of Articles and Reports for Review

Studies Received for Review=584

Studies of Prevention Interventions Reporting Substance Use Outcomes or Mediating Factors=256

Epidemiological Studies Only=268

Studies on Treatment=60

Systematic Reviews and Meta-Analyses=137

Randomized Control Trials=60

Other Primary Studies=60

5.22

Say: This figure shows the first stage of collecting studies for review, and selecting articles and reports that would undergo further review.

The group of experts were sent 584 studies for review. Of these, 328 did not meet the major criteria that studies should focus on prevention of tobacco, alcohol or drugs or address accepted mediators of such behaviors, as we just discussed.*

Of the 256 remaining studies, 137 were systematic reviews or meta-analyses of multiple effectiveness studies, 60 consisted of randomized control trials of the same or similar interventions or policies, and 60 were primary studies.

Information was abstracted from the 256 studies. This information included aspects of the studies such as:

■ Descriptions of the research designs,

■ Descriptions of the study populations,

■ Descriptions of the measurements used to describe the populations, as well as, the short- and long-term outcomes, and

■ A thorough description of the intervention or policy.

Criteria for 'quality' of the study were developed and applied by two independent reviewers. In cases where the 2 reviewers did not agree, a third reviewer was asked to conduct another independent review.

---

* If asked 268 studies were on the epidemiology of drug use and 60 were primarily related to drug abuse treatment or addressed the prevention of the consequences of drug abuse.

Trainer Manual: Module 5—Evidence-Based Prevention Interventions and Policies: The UNODC International Standards on Drug Use Prevention

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Rigorous Acceptable Research Designs

- Randomized control trial or classic experimental design
- Experimental designs with comparison groups
- Time series experiment

5.23

Say:

Before we talk about the international standards themselves, it is important to talk a little bit about research and research design in a general way. This may help provide an understanding about the rigor that was applied to the selection of the international standards document. **We discussed evaluation designs earlier. Here, you will see how important these are for determining what is considered evidence-based prevention interventions.**

The classic and most recognized research design includes the following elements:

- *Randomization of the study population either, to the group that will receive the intervention, the treatment or intervention group, or to the group that will not receive the intervention, the control group.*

The importance of the control group, **as you recall from our earlier discussion**, *is that it represents what would happen if there were no intervention. The importance of randomization is that researchers want the intervention and control group to have the same characteristics….Same age and gender distribution, similar distributions of vulnerability, and same distribution of possible substance use. Randomization procedures optimize comparability. Remember, we want to see what would happen if no intervention took place. If the intervention and control groups are not comparable, then, any positive*

or negative results may not be the outcome of the intervention, but of these different characteristics. The intervention and the control group form the study population.

■ *Collecting base-line or pre-intervention information. Collecting such information allows us to assess the key measures we hope to impact with the intervention prior to the intervention. Comparable measures must be collected from both the intervention and control populations at a comparable time period.*

■ *Collecting key measures at various time points, after the intervention was implemented, for both the intervention and control groups. Often, these measures are made directly after the intervention was completed and periodically afterwards. The length of such follow-up may vary, depending on the age of the study population, and the availability of funding. Generally, it is at least 6 to 12 months.*

This design is considered the gold standard. In some situations, the gold standard is not possible and other rigorous designs are acceptable, such as, an experimental design that uses a comparison group rather that a randomized control group and time series experiments that may include comparison groups. In these last two approaches, every attempt is made to select a comparison group that shares the same characteristics as the intervention group.

We will talk more about research design, sampling and measurement in more depth in the curriculum on Monitoring and Evaluation.

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Systematic Review and Meta-Analyses

■ **Systematic reviews** summarize the best available research by synthesizing the results of rigorously evaluated similar prevention interventions

■ **Meta-analyses** are designed to integrate the findings from summarized rigorously evaluated similar prevention interventions to develop a statistical estimate of the overall effect or outcome

5.24

Say:

The UNODC review group wanted to find multiple studies that found positive results from rigorous evaluations of specific types of prevention interventions, not just one study.

There are many studies of substance use prevention interventions in the research literature. But the research community has devised two methods for looking at the evaluation findings across these many studies to learn how well these different programs work: systematic reviews and meta-analyses.

A SYSTEMATIC REVIEW summarizes the best available research by synthesizing the results of rigorously evaluated prevention interventions. Such reviews use specific and clear procedures to find, review, evaluate and synthesize results. Because these procedures are explicitly defined in advance, ensures that the approach can be replicated. Furthermore, the procedures are designed to minimize bias.

A META-ANALYSIS uses similar procedures to a systematic review – for identifying studies and for structuring clear inclusion criteria, but also uses statistics to evaluate the results from two or more separate studies. Meta-analyses are designed to answer questions that cannot be answered by a single study –such as how effective are family skills training programs, generally, for reducing child behavior problems. Often times, results from

individual studies will conflict and it is hard to evaluate which study provides clearer evidence about how a program or broad category of programs work. Combining studies into one analysis helps address that.

Because two or more single studies of program effects differ in so many ways, it is important for meta-analyses to take into account factors that could influence the outcomes of those studies. This way, meta-analyses can also account for these factors or characteristics, such as, program location or various program activities work better or worse than programs that don't have those factors.

These strategies are a nice way to summarize a lot of information.

Trainer Manual: Module 5—Evidence-Based Prevention Interventions and Policies: The UNODC International Standards on Drug Use Prevention

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International Standards: Summary of the Selection Process of Articles and Reports for Review

Studies Received for Review=584

Studies of Prevention Interventions Reporting Substance Use Outcomes or Mediating Factors=256

Epidemiological Studies Only=268

Studies on Treatment=60

Systematic Reviews and Meta-Analyses=137

Randomized Control Trials=60

Other Primary Studies=60

5.25

Say:

Let's go back to this slide that shows how the selected articles and reports were screened. Please note that of the 256 articles that met our initial criteria, 137 were systematic reviews or meta-analyses, 60 consisted of two or more randomized control trials, and the other 60 consisted of studies that were supporting of the systematic reviews.

Presentation and discussion: Quality of the studies and intervention categories

Slide 5.26

Quality of the Studies and Intervention Categories

5.26

Say:

In this section of the module, we will be looking at Quality of the Studies and Intervention categories.

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Quality of the Studies (1/2)

- Criteria to assess quality using "best practices" from medicine and social and behavioral fields
- Systematic reviews and meta-analyses
  - Methods adopted by scientific review bodies: Cochrane and Campbell Collaborations and the Community Guide
    - Clear, transparent and sufficient inclusion criteria for study selection
    - Transparent, broad and diverse methods used for literature search
    - Sufficient detail included methodology, study participants, intervention characteristics and findings
    - Documentation and quality of data analyses and interpretation
    - Quality of the data analyses and interpretation

5.27

Say:

The UNODC review group systematically reviewed the articles and studies on substance use, selecting those that were most relevant to substance use prevention interventions. Then, these articles and studies were categorized by the methods that were used to assess the outcomes of substance use prevention interventions.

Now, these articles and studies were reviewed to determine the quality of the methods that were used. The criteria for this level of review were based on standards for such assessments. These are presented in the slide.

For those that consisted of systematic reviews and meta-analyses there had to be:

- *Clear, transparent and sufficient inclusion criteria stated that were established before the review was made;*

- *The methods that were used for the literature search had to be provided;*

- *The review had to include details about the methodologies, about the study participants, a description of the intervention itself, and clear information about the findings from the studies; and*

- *Finally, in addition to documentation of the data analysis and interpretation of findings, an assessment of the data analyses methods was needed.*

Quality of the Studies (2/2)

Randomized Controlled Trials and Other

■ Randomization methods and baseline comparability of groups

■ Blinding of study participants, personnel and/or outcome assessors to group assignment

■ Amount, nature or handling of incomplete outcome data due to loss-to follow-up

■ Others sources of bias documented

5.28

Say:

The UNODC review group systematically reviewed the randomized controlled trials and other studies, where there had to be a clear statement regarding:

■ *The methods used for data selection and in the case of randomized controlled trials, the methods used for random assignment, as well as, an analysis of the comparability of groups at baseline;*

■ *Any indication of assurance that neither the study participants, particularly the control group, nor the outcome assessors knew about assignment—this is not always the case when it comes to many randomized controlled trials or other evaluations;*

■ *The extent to which study participants may have been lost from follow-up at any point in the study due, perhaps, to moving out of the area, incarceration, or death and how this missing information was handled in the analysis; and*

■ *What if any other sources of bias may have occurred that would affect the study's findings.*

This 'quality of evidence' was classified as 'excellent', 'very good', 'good', 'adequate', or 'limited'.

Trainer Manual: Module 5—Evidence-Based Prevention Interventions and Policies: The UNODC International Standards on Drug Use Prevention

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International Standards: Categorization of Interventions and Policies

- Developmental framework:
  - Infancy and early childhood
  - Middle childhood
  - Early adolescence
  - Adolescence and adulthood
- Setting
  - Family
  - School
  - Workplace
  - Community
- Target population
  - Universal
  - Selective
  - Indicated

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5.29

Say:

Once these analyses were completed, the articles and studies were categorized using these three dimensions describing the reviewed substance use prevention interventions and policies:

- *Age-related developmental periods—infancy and early childhood, middle childhood, early adolescence, and adolescence and adulthood;*

- *Setting in which the intervention or policy is implemented—family, school, workplace, or community; and*

- *Target population—universal, selective or indicated.*

What Is Included in the Standards

- For each intervention and policy:
  - ▫ Short description and rationale for the intervention or policy
  - ▫ Summary of the evidence
  - ▫ List of the characteristics that have been found to be linked to positive outcomes, as well as to NO or NEGATIVE outcomes
  - ▫ Additional existing guidelines/ tools/ resources
- Chapter on the critical components of a national drug control system

5.30

Say:

Within the framework for each intervention and policy, a short description and rationale for the intervention or policy is provided along with a summary of the evidence from the review of the research.

In addition, a list of the characteristics that were found to be linked to positive outcomes, as well as, to no or negative outcomes is provided.

*It should be emphasized, that like a well-made cake, **ALL** of the components or ingredients to these interventions and policies must be in place to be effective!!!*

In addition other relevant guidelines, tools or resources are provided.

Finally, the Standards includes a chapter on the critical components of a national drug control system that would support and sustain evidence-based drug use prevention interventions and policies.

Today, we will focus primarily on an overview and description of the evidence-based interventions and policies.

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Summary Including an Indication of Efficacy

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5.31

Say:

This chart appears in the Standards document that you have in your materials. You may wish to follow along with your own copy as this slide is not as clear. The graphic summarizes the outcomes of the reviews. We will be examining each section of the graphic as we go into more detail about the standards.

*Across the top, are the age categories: **Prenatal and infancy, Early childhood, Middle childhood, Adolescence, and Adulthood.***

*On the left side, we have the settings: **Family, School, Community, Workplace, and Health sector.***

Then, for each intervention/policy found by age group and setting is a listing of the interventions and policies.

*In addition, you will note the color of the box surrounding the interventions and policies. The color responds to the category of intervention: whether it is **Universal in GREEN, Selective in YELLOW or Indicated in RED**.*

You may recall from our earlier modules that:

■ *Universal—Risk level is the situation where risk is specifically unknown, and may include individuals at low risk, as well as, those at high risk, such as, a class of students attending a regular school;*

- *Selective—Risk is known and the risk status is used to identify groups, such as, children of substance users, children in poverty, children impacted by war or natural disasters; and*

- *Indicated—Individuals who already use drugs, but, do not yet meet diagnostic criteria for dependence.*

Finally, the stars represent level of evidence, that is, the strength of the evaluation evidence for the positive outcomes. These range from:

- *ONE STAR (*) = limited evidence*

- *TWO STARS (**) = adequate evidence*

- *THREE STARS (***) = good evidence*

- *FOUR STARS (****) = very good evidence*

- *FIVE STARS (****) = excellent evidence*

What we will discuss today are the characteristics of the content, structure, and delivery strategy of evidence-based interventions and policies. We will be looking at the boxes with the colored borders in more detail in the next slides.

Furthermore, in the next several curricula, these elements will be further explored and exemplar manualized interventions and approaches will be described, so, you have a better idea how these 'ingredients' are best put together.

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Advantages of the International Standards

What are some of the ways to use the International Standards in prevention work?

■ It can guide choices of policies or interventions because it assesses those with the best outcomes

■ It can convince stakeholders of nature and extent of drug use and how prevention can produce a healthier community

■ It can educate other prevention or prevention-related professionals of the need to institute new practices

■ It reflects a world-wide consensus on the science of prevention

■ It adds to the professionalism of prevention practitioners in showing effectiveness of interventions

5.32

Say:

What are some of the ways to use the International Standards in prevention work?

■ *It can guide choices of policies or interventions because it assesses those with the best outcomes;*

■ *It can convince stakeholders of the nature and extent of drug use and how prevention can produce a healthier community;*

■ *It can educate other prevention or prevention-related professionals of the need to institute new practices;*

■ *It reflects a world-wide consensus on the science of prevention; and*

■ *It adds to the professionalism of prevention practitioners in showing effectiveness of interventions.*

Perhaps, as we go through the standards, you will think of other advantages of having the International Standards available to guide prevention programming in your communities.

![45 minutes]

Small-group exercise: Preparation for presentations on EB interventions/policies that target populations

Slide 5.33

Small-Group Exercise: EB Interventions/ Policies that Target Populations

5.33

Say:
In this section, we will do something a little different in a small group exercise. We're going to involve all of you in preparing and delivering this part of the curriculum. As one of the most important supports to the knowledge base, the International Standards provides an excellent overview of the research in regard to the developmental tasks of four different age groups, and the outcomes and intervention approaches most relevant to each age group. To provide a more interactive approach to our training, we will break into 4 groups; and each group will review the slides and narrative for its assigned topic.

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You will spend about 45 minutes to prepare to present these slides and narrative to everyone in the class. You will have an average of 15 to 20 minutes to present the slides and narrative, and, at the end of your presentation, you will lead a large-group discussion included in most sections. Please note that some of the presentations will be longer than others.

Please elect no more than 2 speakers for your presentation and discussion leader, in order to keep within time.

The purpose here is to involve you and fellow participants in exploring this critical information about the targets for prevention in EB interventions. We invite you to also contribute your experience and knowledge with these age groups in your countries/ communities, and how this information can be helpful in your work.

Teaching Instructions: Assign to the following:

- Group 1: Infancy and Childhood (7 slides and large-group discussion)

- Group 2: Middle Childhood (12 slides and 1 large-group discussion)

- Group 3: Adolescence (13 slides and 1 large-group discussion)

- Group 4: Late Adolescence and Adulthood (13 slides)

Allow 45 minutes for the preparation; and approximately 15 minutes (Group 1) and 20 minutes (Groups 2-4) to present to the large group.

Presentation and discussion: Infancy and early childhood

Slide 5.34

Say:

Let's start with the infancy and early childhood developmental period. This period, generally, includes birth to age 5 years.

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Infancy and Early Childhood: Key Developmental Goals

- Development of warm and safe attachment to caregivers
- Age-appropriate language skills, as well as other executive cognitive functions
- Self regulation
- Pro-social attitudes and skills

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5.35

Say:

In general, the key developmental goals of this developmental period include,

- *Developing a warm and safe attachment to caregivers. Such attachment forms the bases for family bonding and forming attachments to others, building trust in others, creating an atmosphere for learning and growth;*

- *It is during this early period that children first acquire language skills, exercise executive functioning, begin to learn how to control their emotions; and*

- *Through bonding with warm and accepting caregivers, develop pro-social attitudes and acquire pro-social skills and learn acceptable behaviors.*

Infancy and Early Childhood: Key Resilience Factors

- Caregivers who are
  - Responsive
  - Provide stimulation
- Children who
  - Learn how to be effective in having needs met
  - Are easy to soothe
  - Are not temperamental

5.36

Say:

The key factors for achieving developmental goals and making children resilient to stressors are heavily reliant on those with whom they have most contact, their caregivers and their own coping styles.

Caregivers who are responsive to children's needs and provide stimulation enable children to develop appropriately. Also, children who are easily soothed, have learned how to effectively have their needs met, are not temperamental tend to be more resilient than those children who have difficult temperaments.

Caregivers who fail to be responsive or provide proper stimulation for their children increase the probability that their children will fail in school, form poor peer relationships, and engage in negative behaviors.

Caregivers who lack the skills to parent children with difficult temperaments also make their children vulnerable to not achieving key developmental goals, and to making poor life decisions.

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Infancy and Early Childhood: Evidence-Based Strategies

Intervention	Level of risk targeted	Indication of efficacy
Interventions targeting pregnant women with substance abuse disorders	**Selective** Groups at risk	★ Limited
Prenatal and infancy visitation	**Selective** Groups at risk	★★ Adequate
Early childhood education	**Selective** Groups at risk	★★★★ Very good
Community-based multi-component		

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5.37

Say:

Here is a summary of the evidence-based interventions and policies that were found to be effective for the infancy and early childhood developmental period. There were three that were found to have evidence of effectiveness:

■ *Interventions that target pregnant women with substance abuse disorders;*

■ *Prenatal and infancy visitation; and*

■ *Early childhood education.*

Please note that all target children are those who are considered at-risk for later substance use, as well as, other behavioral problems.

Please also note the indication of efficacy for these interventions. They range from limited evidence of efficacy to very good evidence of effectiveness.

The next slides present the content, structure, and delivery characteristics of these evidence-based prevention interventions and policy.

Interventions for Pregnant Women with Substance Abuse Disorders Characteristics Linked to Positive Outcomes*

Content	• Pharmacological and/or psychosocial therapy that is voluntary, based on scientific evidence and tailored to the patient • Treatment of co-morbid physical and mental health disorders • Provide attachment-based parenting interventions
Structure	• Integrated treatment services
Delivery	• Trained health workers

Campello et al, 2014

5.38

Say:

Interventions for pregnant women with substance abuse disorders had limited evidence of efficacy, but in those limited studies that were reviewed, it was noted that they have positive outcomes when delivered comprehensively by trained health workers.

The content of the effective programs included pharmacological and/or psychosocial therapy that is tailored to the needs of the patient, treatment of any evident co-morbid physical and/or mental health disorders, and providing parenting skills to enhance warm attachment.

These services should be provided within an integrated treatment setting.

Such interventions can be incorporated into existing treatment settings that include women.

Campello, G., Sloboda, Z., Heikkil, H., Brotherhood, A. (2014). International standards on drug use prevention: the future of drug use prevention world-wide. International Journal of Prevention and Treatment of Substance Use Disorders, 2, 6-27.

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Visitation Programs Characteristics Linked to Positive Outcomes**

Content	• Basic parenting skills • Support mothers to address a range of issues including health, housing, employment, etc.
Structure	• Regular visits up to two years of the age of the baby, at first every two weeks and then every month.
Delivery	• Trained health workers

5.39

Say:

The review of the research of visitation programs for new mothers who have substance use or related problems reached a level of adequate evidence of efficacy, when delivered with the following characteristics:

■ *Use of trained health workers, trained to deliver these services within the recommended structure with regular visits up to two years, first providing services and support every two weeks, and then, monthly; and*

■ *In addition to providing basic parenting skills, these program provide support for the mothers in terms of their physical and mental health, housing, food, and employment when needed.*

Again, this is the type of program that can be integrated into other existing programs for new mothers or even wellness programs for newborns or infants.

Early Childhood Education Characteristics Linked to Positive Outcomes***

Content	• Cognitive skills
	• Social skills
	• Language skills
	• Provide socio-economic support to families
Structure	• Delivered daily
Delivery	• Trained teachers

Campello et al, 2014

5.40

Say: *Early childhood education programs that target children between 2 and 5 years, who live in deprived communities, are, therefore, considered selective policies. These programs have been found to have good evidence of effectiveness and not only impact the use of marijuana in adolescence, but, also prevent other risky behaviors as well as to support academic achievement, social inclusion, and mental health.*

As you will note with all of the evidence-based prevention interventions we discussed today, prevention specialists, whether teachers or counselors, need training before they can deliver the intervention.

The intervention emphasizes appropriate cognitive, social and language skills for these children, and prepares them for the school setting and their roles as students, as well as, for academic challenges.

The interventions consist of daily sessions over extended periods of time.

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Large-group Discussion: Infancy and Early Childhood

- What are some of the age-related developmental goals for infancy and early childhood (ages 0-5)?
- What are some of the types of programs and policies that address these 2 age groups?
- How important is having appropriate training to implement these interventions? Why?

5.41

Say: *You may wish to make some notes in your journal. As part of your presentation to the class, please review these questions and select one person to lead the large-group discussion.*

- *What are some of the age-related developmental goals for infancy and early childhood (ages 0-5)?*

- *What are some of the types of programs and policies that address these age groups?*

- *How important is training to implement these interventions?*

Ask: *Let's hear some of your thoughts on these questions. First, what are some of the age-related developmental goals for infancy and early childhood and middle childhood?*

Teaching Instructions: Select three individuals to respond.

Good. Now how about the second question: What are some of the types of programs and policies that address these two age groups?

Teaching Instructions: Again, select three different individuals to respond.

Okay. How important is having appropriate training to implement these interventions? And, when you answer, tell us why you feel that way.

Teaching Instructions: Again, select three different individuals to respond.

Let's go on to early adolescence.

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30 minutes

Presentation and discussion: Middle childhood

Middle Childhood

5.42

Say: *The next developmental period we will address is Middle Childhood. Generally, this includes children around age 6 through 10 years.*

Middle Childhood: Key Developmental Goals (1/2)

Emergent executive cognitive and emotional regulatory functions:

- Maintaining attention
- Controlling emotions
- Social inclusivity
- Receptivity to others
- Effective communication
- Accurate perception of emotion

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5.43

Say: *This is a period when children acquire the skills needed to relate to the world outside of their families, mostly, in school settings and with same age peers.*

While the family remains the principal source of safety and support, day care, school and peer groups begin to take on an increasing role in influencing the beliefs, attitudes, and behaviors of children.

As the brain continues to develop, emergent cognitive and emotional regulatory functions become key during this period. Children learn to:

- *Maintain attention;*

- *Control their emotions;*

- *Be more open to new people, even those who look different from them, and to be more receptive to new ideas and behaviors;*

- *Be more effective in communicating their needs and ideas; and*

- *Be more accurate in identifying and labeling emotions.*

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Middle Childhood: Key Developmental Goals (2/2)

- Continued development of age specific language and numeracy skills
- Impulse control and self control
- Goal directed behavior
- Decision-making and problem-solving skills

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5.44

Say:

During this period, children:

- *Continue to increase their language and numeracy skills;*

- *By being able to better identify their needs and their emotions, they begin to control impulsive behaviors and practice self control;*

- *Develop goals and are better able to plan behaviors to achieve these goals; and*

- *Begin acquiring decision-making and problem-solving skills.*

Middle Childhood: Vulnerability and Resilience Factors (1/2)

- Community norms, school culture and quality of education become increasingly important for safe and healthy emotional, cognitive, and social development

- The role of social skills and prosocial attitudes grows in middle childhood and they become key protective factors, impacting also the extent to which the school-aged child will cope and bond with school and peers

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5.45

Say:

While children in this age group are increasing their cognitive, emotional, and social competencies, there are also challenges that could put vulnerable children at-risk.

As we mentioned earlier, children are spending more time away from their families and are being exposed to new ideas, new behaviors, and new experiences. This may be confusing for unprepared children.

This is why clear prosocial community norms, school culture and quality of the educational experience become important. It is during middle childhood that the role of social skills and having prosocial attitudes grows in significance.

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Middle Childhood: Vulnerability and Resilience Factors (2/2)

■ Problems such as the onset of mental disorders (such as anxiety disorders, impulse control disorder, and conduct disorders) may also impede the development of the achievement of these goals

■ Children of dysfunctional families often start to affiliate at this time with deviant peers, thus putting themselves at increased risk for negative life choices, including substance use and involvement in illegal activities

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5.46

Say:

Factors that may impede achieving developmental goals may be within the child, such as, the onset of a mental disorder or outside of the child, such as, coming from a dysfunctional family that may make the child more dependent on peers.

Middle Childhood: Evidence-based Strategies

Intervention	Level of risk targeted	Indication of efficacy
Parenting skills programmes	**Universal & selective** General population and groups at risk	★★★★ Very good
Personal and social skills education	**Universal** General population	★★★ Good
Classroom environment improvement programmes	**Universal** General population	★★★ Good
Policies to keep children in school	**Selective** Groups at risk	★★ Adequate
Community-based multi-component		

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5.47

Say:

For this age group, three interventions and a preventive policy were found to have fairly good indication of efficacy. Also, the three interventions targeted universal groups and one, selective or at-risk groups while the evidence-based policies to keep children in school focused primarily on at-risk children.

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Parenting Skills Characteristics**** (1/2)

	Linked to Positive Outcomes	Linked to No or Negative Outcomes

Content	• Enhance family bonding
	• Provide skills for:
	  – Warm child-rearing
	  – Setting rules for acceptable behavior
	  – Monitoring free time and friendship patterns
	  – Positive and developmentally appropriate discipline
	  – Involvement in children's learning and education
	  – Becoming role models
		• Provide information to parents about drugs
		• Undermine parents' authority

5.48

Say:

Parenting skills programs provide support to parents and improve their parenting styles and skills, and have been found to be effective for the general population of children as well as children at-risk. There was strong evaluation support for parenting skills for this developmental period. The content characteristics that were found to be linked to positive outcomes included:

Enhance family bonding and to provide parents/caregivers the skills for:

- *Warm child-rearing;*

- *Setting rules for acceptable behavior;*

- *Monitoring free time and friendship patterns;*

- *Positive and developmentally-appropriate discipline;*

- *Involvement in children's learning and education; and*

- *Becoming role models.*

It was also found that parenting skills programs that just provided information to parents or caregivers about drugs, or that undermine parents' authority lead to no positive outcomes or to negative outcomes.

Parenting Skills Characteristics**** (2/2)

	Linked to Positive Outcomes	Linked to No or Negative Outcomes
Structure	• Multiple group sessions • Interactive	• Focus exclusively on the child • Lecture as only means of delivery
Delivery	• Trained instructors • Organized to facilitate participation	• Poorly trained instructors

5.49

Say:

Parenting skills programs with positive outcomes also provided multiple sessions that were interactive, involving the parents. Again, like the other evidence-based interventions and policies we discuss today, all instructors receive specialized training.

Those parenting skills programs that had no impact or negative outcomes were those that focused only on the child, and in which the primary form of delivery was lectures.

It is important to note that the core of these parenting skills characteristics are also relevant to early adolescents. We will present these again along with added characteristics for the older age group.

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Personal and Social Skills - Focused Education Characteristics***

	Linked to Positive Outcomes	Linked to No or Negative Outcomes
Content	• Coping skills • Personal skills • Social skills	• Providing information on specific substances • Focus only on self-esteem • Focus only on emotional education • Fear arousal
Structure	• Structured series of sessions • Possibly, booster sessions, over multiple years	
Delivery	• Trained teachers • Interactive methods of delivery	• Using untrained teachers • Primarily using non-interactive methods

5.50

Say:

Moving now to the school, are those interventions that focus on personal and social skills development? The evidence for their effectiveness is good.

These programs provide opportunities to learn skills to cope with a variety of situations that arise in the daily lives of children. They support the development of general social competencies and address normative beliefs and attitudes.

These are largely programs that are delivered by trained teachers who use interactive methods to deliver the content. The primary focus of these programs is on skills development with an emphasis on coping skills, as well as, personal and social skills. These programs generally consist of a series of sessions and, in many cases, have booster sessions over the school years to reinforce and enhance these life skills.

Interventions that had no outcomes or negative outcomes, generally, were information or knowledge only, were focused on building self-esteem only or on emotional education only. Use of teachers without specialized training and using non-interactive methods were also found not to have positive outcomes on substance use.

Classroom Environment Improvement Programs***
Characteristics Linked to Positive Outcomes

Content	• Strategies to respond to inappropriate behavior • Strategies to acknowledge appropriate behavior • Feedback on expectations
Structure	• Actively engages students • Delivered in first school years
Delivery	• Trained teachers

5.51

Say:

The school is not only a setting in which intervention curriculum can be delivered, but also is a setting in which to improve the school experience and enhance positive feelings about school and education.

These programs strengthen classroom management competencies of teachers and support the socialization of children to successfully assume their role as students.

These programs are, generally, delivered by regular teachers who are trained in non-instructional strategies to respond effectively to inappropriate behavior, to reinforce appropriate behavior and to give feedback on what are the roles of students, and what is expected behaviors. These programs are, generally, delivered in the first school years and actively engage students. These programs improve both academic and socio-emotional learning.

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Policies to Keep Children in Schools**

■ Building new schools
■ Conditional cash transfer to families to keep children in schools

5.52

Say:

Research shows that keeping children in schools has been linked to positive outcomes. Evidence to support this policy's effectiveness is adequate and most of the evaluation studies were conducted in low- and middle-income countries.

Policies to keep children in school are most effective for children who are at-risk for a number of reasons related to their families, and also to their communities. Building new schools to replace run-down buildings and providing cash incentives to families to maintain children in schools are the chief characteristics of these policies.

Large-group Discussion: Middle Childhood

■ What are some of the age-related developmental goals for middle childhood (ages 6-10)?

■ What are some of the types of programs and policies that address these 2 age groups?

■ How important is having appropriate training to implement these interventions? WHY?

5.53

**LARGE-GROUP DISCUSSION:**

Say:
 As part of your presentation to the class, please review these questions and select one person to lead the large-group discussion. You may wish to make some notes in your journal.

■ _What are some of the age-related developmental goals for middle childhood (ages 6-10)?_

■ _What are some of the types of programs and policies that address these age groups?_

■ _How important is training to implement these interventions?_

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Presentation and discussion: Early adolescence and adolescence

Slide 5.54

Early Adolescence and Adolescence

5.54

Say: *Adolescence covering ages 11-18 years and late adolescence is a period of many challenges as the brain continues to develop in the context of hormonal and other normal biological processes. The adolescent developmental period is fraught with stress and erratic emotions that can lead to poor decision-making, thus increasing the likelihood of engaging in risky behaviors that may have negative health and social outcomes.*

Adolescence: Key Developmental Goals

Learning self-regulation of emotion and behavior:

- Social/emotional skills to establish stable relationships
- Sensitivity to feelings and needs of others
- Conflict resolution
- Pro-social skills
- Impulse control

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5.55

Say:

Adolescence is a developmental period that focuses on the enhancement of the self-regulation and control of emotions and behaviors. This is a period in which we learn those social and emotional skills that enable us to establish stable relationships, particularly with the opposite sex, when we learn to be more sensitive to the feelings and needs of others, when we learn how to control anger and aggressive feelings, which can lead to handling conflicts in a positive way.

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Adolescence: Vulnerability and Resilience Factors (1/2)

■ Associations with people and organizations beyond those experienced in childhood

■ Exposure to new ideas and experiences

■ A time to "try out" adult roles and behaviors

■ A time of significant changes in the adolescent's brain -- a potentially opportune time for poorly reasoned decisions and involvement in potentially harmful behaviors (risky sexual behaviors, smoking, drinking, drug use, and risky driving)

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5.56

Say:

As we noted earlier, children mature into these early teen years, their physical and emotional development can often place them at increasing risk of negative influences or resilient, as it strengthens their ability to resist such opportunities.

This is an exciting time for adolescents. First, is the exposure to a broader array of people and organizations that may present new ideas and experience, perhaps challenging those that the child may have held for a long time. This is a time when youth want to try out adult roles and behaviors, including use of alcohol, smoking, perhaps, sexual behaviors and drugs.

Second, this is a time when significant changes in the adolescent's brain take place. This is often a time when poorly reasoned decisions are made leading to involvement in harmful behaviors. But, it also provides an opportunity for learning new cognitive and emotional skills that help them navigate the difficult challenges they will face.

Adolescence: Vulnerability and Resilience Factors (2/2)

- Peers' strongly influence adolescents with fear of peer rejection a major concern:
  - Leads to a range of behaviors from choices on fashion and entertainment to experimenting with substance use and other problem behaviors
- Parents' influence remains significant though not always obvious
- Protective factors against drug use
  - Healthy attitudes towards substances and safe social normative beliefs
  - Good social skills, resilient mental and emotional health
- "Plasticity and malleability" of adolescent brain opens the door to evidence-based prevention

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5.57

Say:

Here again, we see the positive and negative influences that can affect adolescents. While peers can have a great influence over what they think, wear, and consider 'cool,' and the fear of peer rejection can be a powerful motivator, parents still have influence and other prosocial learning can be a protective factor.

After all, this is a period when children are open to new ideas. And, although the plasticity and malleability of the brain presents opportunities for poor decisions, it also presents opportunities for prevention with well-constructed interventions to reinforce and heighten prosocial attitudes and behaviors.

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Adolescence: Evidence-Based Strategies

Intervention	Level of risk targeted	Indication of efficacy
Parenting skills programmes		
Prevention education based on personal and social skills and social influence	**Universal & selective** General population and groups at risk	★★★ Good
School policy and culture	**Universal** General population	★★ Adequate
Addressing individual psychological vulnerabilities	**Indicated** Individuals at risk	★★ Adequate

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5.58

Say:

There are many more evaluation studies of interventions that address the needs of this age group of EARLY adolescents. Parenting skills programs are shown in grey as they were discussed earlier, but, remain effective for this group, as well as, personal and social skills-based curricula, policies within the school, both addressing the universal needs.

For the more at-risk population, interventions that provide individual attention, such as, those that address psychological vulnerabilities and mentoring have adequate evidence of effectiveness.

Parenting Skills Characteristics*** (1/2)

	Linked to Positive Outcomes	Linked to No or Negative Outcomes

Content	• Enhance family bonding
	• Provide skills for:
	  – Warm child-rearing
	  – Setting rules for acceptable behavior
	  – Monitoring free time and friendship patterns
	  – Positive and developmentally appropriate discipline
	  – Involvement in children's learning and education
	  – Becoming role models
		• Provide information to parents about drugs
		• Undermine parents' authority

Campello et al, 2014

5.59

Say:

Again, as in the case for middle childhood, the content of effective parenting skills programs for early adolescence includes the enhancement of family bonding and parenting skills, particularly, in setting rules, monitoring free time and friendship patterns and continuing to be involved in the child's educational experience. These have been found to have positive outcomes for early adolescents with very good supportive evidence of effectiveness.

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Parenting Skills Characteristics*** (2/2)

	Linked to Positive Outcomes	**Linked to No or Negative Outcomes**
Structure	• Multiple group sessions • Interactive	• Focus exclusively on the child • Lecture as only means of delivery
Delivery	• Trained instructors • Organized to facilitate participation	• Poorly trained instructors

Campello et al, 2014

5.60

Say:

What is key about these programs is that the material, situations, and issues are relevant for older children. They include multiple group sessions that are highly interactive. They require trained instructors and are organized to facilitate full participation.

Personal and Social Skills Education***
Added Characteristics

	Linked to Positive Outcomes	Linked to No or Negative Outcomes
Content	• Addresses perceptions of risk or harm associated with substance use • Emphasizes immediate age-appropriate consequences of substance use • Addresses misconceptions regarding the normative nature and expectations of substance use	• Information only • Focus only on self-esteem • Focus only on emotional education • Address only ethical/moral decision making or values
Structure	• Structured series of interactive sessions • Booster sessions	• Unstructured dialogue sessions • Primarily using non-interactive methods
Delivery	• Trained teachers	• Using untrained teachers (change accordingly) • Use ex-drug users as testimonials

Campello et al, 2014

5.61

Say:

Personal and social skills education also are very relevant for this age group, as for younger children with adequate evidence of effectiveness. However, early adolescence is a period when youth enter the at-risk years for substance use. These programs foster substance and peer refusal competencies to counter social pressures to use substances and to cope with challenging life situations in healthy ways. The additional components address perceptions of risk or harm associated with substance use, with a focus on consequences that are particularly relevant to early adolescence. In addition, at this time, youth hold misconceptions regarding the normative nature of substance use with many overestimating the number of their peers who they think smoke, drink, or use drugs. Also without accurate information, they are not able to weigh consequences against perceptions of the expectations associated with substance use.

This age group is particularly interested in being engaged in prevention activities and the effective methods for such engagement require trained teachers or instructors, who act more as facilitators and coaches than lecturers.

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School Policies and Culture**
Characteristics (1/2)

	Linked to Positive Outcomes	Linked to No or Negative Outcomes
Content	• Policies clearly specific what substances are target and what locations and/or occasions they apply • Reducing or eliminating availability of and access to tobacco, alcohol, or other drugs • Address infractions of substance use policies with positive sanctions, providing referral to counseling or other support services NOT punishment • Support normal school functioning NOT disruption • Support positive school ethos and commitment to school and student participation	• Punish infractions of substance use policies (e.g., suspension, expulsion) • Random drug testing

Campello et al, 2014

5.62

Say:

The personal and social skills education programs generally consist of manualized curriculum. However, the school offers other opportunities for evidence-based prevention programming, including addressing the policies relative to the use of substances and how to handle infractions to creating a more positive environment, in which students feel safe, comfortable, and successful that have been found to be effective with adequate evidence.

In general, school policies regarding substance use must be specific as to what substances are being targeted, reducing or eliminating access to substances, and addressing infractions of these policies in a positive way with counseling or supportive services. This approach was found to have a positive impact on substance use among all students, as well as, school staff. When infractions of these policies are negative, perhaps, through suspensions or expulsions, substance rates either remained unchanged or increased.

Furthermore, there is absolutely no evidence that drug testing deters substance use.

School Policies and Culture**
Characteristics (2/2)

Structure	• Participation of all stakeholders (students, parents, and school staff) in the development of substance use-related policies	• Information not available
Delivery	• Implemented with other prevention interventions such as skills-based education or parenting skills	• Information not available

Campello et al, 2014

5.63

Say:

These effective school policies are more successful with the participation of a range of stakeholders in developing the policies and how to handle infractions. Often, students and parents along with school staff are involved. Finally, prevention policies in the school are most effective when they are implemented with other prevention interventions. The policies and the interventions deliver the same messages in different ways and support each other.

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Individual Psychological Vulnerabilities Intervention**
Characteristics Linked to Positive Outcomes

Content	• Provide skills on how to positively cope with emotions
Structure	• Sessions tend to be short, between 2 and 5 in number
Delivery	• Screening done using validated instruments • Trained professionals

Campello et al, 2014

5.64

Say:

During this period, children with psychological vulnerabilities such as sensation-seeking, impulsivity, anxiety sensitivity or hopelessness have been found to be associated with substance use, if not addressed in a positive way. These youth begin to have problems in school, with their parents, or with their peers. In general, those identified with these problems are screened by professionals using validated instruments. Interventions that provide these youth the skills to positively cope with their emotions have been found to have positive outcomes. These interventions are delivered again by trained professionals and consist of 2 to 5 short sessions.

Mentoring Characteristics*

	Linked to positive outcomes	Linked to negative outcomes
Content	• Information not available	• Information not available
Structure	• Very structured program of activities	• Information not available
Delivery	• Trained mentors	• Mentors that are not trained and/or supported

Campello et al, 2014

5.65

Say:

Although the evidence-base for mentoring programs, particularly, for youth at-risk for engagement in problem behaviors is not strong, the research literature indicated that trained mentors delivering a very structured program of activities can result in positive outcomes. In general, youth are matched with adults who commit to support them on a regular basis over extended periods of time.

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Large-Group Discussion: Adolescence

- What are some of the age-related developmental goals for early adolescence and adolescence (ages 11-18)?
- How do these differ from those of younger children?
- What are some of the types of programs and policies that address these age groups?

5.66

LARGE-GROUP DISCUSSION:

Say: *As part of your presentation to the class, please review these questions and select one person to lead the large-group discussion. You may wish to make some notes in your journal.*

- *What are some of the age-related developmental goals for early adolescence and adolescence (ages 11-18)?*

- *How do these differ from those of the younger children?*

- *What are some of the types of programs and policies that address these age groups?*

Presentation and discussion: Late adolescence and adulthood

Slide 5.67

Late Adolescence and Adulthood

5.67

Say: In most societies, it is in later adolescence, generally, ages 15 through 18 or 19 that youth begin to take on adult roles, and may become more independent of their families.

They will be introduced to new belief and value systems and new behaviors including the use of tobacco and alcohol and, perhaps other substances.

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Late Adolescence: Vulnerability and Resilience Factors (1/2)

- Maturation processes described in early adolescence continue in adolescence and adulthood

- For older adolescents, significant brain changes are still occurring creating opportunities for poorly thought out decisions and involvement in potentially harmful behaviors, such as risky sexual behaviors, smoking and drinking, risky driving behaviors and drug use.

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5.68

Say:

As noted earlier about adolescence, late adolescence continues to be a time when significant changes occurring in the adolescent brain creates a potentially opportune time for poorly thought-out decisions and involvement in potentially harmful behaviors, such as, risky sexual behaviors, smoking and drinking, risky driving behaviors, and drug use.

Late Adolescence: Vulnerability and Resilience Factors (2/2)

- Vulnerability factors related to peers and resilience factors related to mental health, personal and social skills, and healthy attitudes remain relevant

- The "plasticity" and malleability of the brain continues, suggesting that also this period of development is a time when interventions can reinforce or alter earlier experiences

- In addition, interventions delivered in settings other than the family and the school, such as the workplace, the health sector, entertainment venues and the community, become more relevant

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5.69

Say:
Many youth in late adolescence may no longer be in school and may have entered the workforce. In more industrialized societies, these youth may move out of the family home and no longer live in supervised settings. They are taking on more adult roles.

Furthermore, as we learned earlier, assuming adult roles in any society, such as, working, starting families, and serving as members of communities are also associated with stresses. Coping with these stresses may be difficult for most people, but those who are more vulnerable for any reason may find solace in alcohol, tobacco, or drugs.

For these reasons, the workplace and the health sector, as well as the community are prime settings for continued prevention interventions and policies to help people deal with their stresses in positive ways.

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Late Adolescence and Adulthood: Evidence-Based Strategies (1/2)

Intervention	Level of risk targeted	Indication of efficacy
Prevention education based on personal and social skills and social influence		
School policy and culture		
Addressing individual psychological vulnerabilities		
Mentoring		
Alcohol & tobacco policies	**Universal** General population	★★★★★ Excellent

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5.70

Say:

In addition to those evidence-based interventions and policies we just discussed (IN GREY), we have found that alcohol and tobacco policies, have excellent scientific support for effectiveness.

Late Adolescence and Adulthood: Evidence-Based Strategies (2/2)

Intervention	Level of risk targeted	Indication of efficacy
Community-based multi-component initiatives	**Universal & selective** General populations & groups at risk	★★★ Good
Media campaigns	**Universal** General population	★ Limited
Workplace prevention	**Universal, selective & indicated** All components	★★★ Good
Entertainment venues	**Universal** General population	★ Limited
Brief intervention	**Indicated** Individuals at risk	★★★★ Very good

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5.71

Say:

Other evidence-based interventions and policies include community-based multi-component initiatives which we will discuss last today, media campaigns that have limited evidence of support unless they are designed and delivered appropriately, workplace prevention programming with good evidence of effectiveness, interventions in entertainment venues also with limited evidence of support but quite promising, and brief interventions with very good evidence of effectiveness.

Trainer Manual: Module 5—Evidence-Based Prevention Interventions and Policies: The UNODC International Standards on Drug Use Prevention

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Tobacco and Alcohol Policies*****
Characteristics Linked to Positive Outcomes

Content	• Reduce access of tobacco and alcohol to underage children and adolescents • Reduce availability of tobacco and alcohol products

Structure	• Increase price through taxation
	• Increase minimum age for sale
	• Comprehensive prevention strategies
	  – Active and consistent law enforcement
	  – Education of retailers
	• Banning advertisement of tobacco
	• Restricted advertisement of alcohol products targeting youth

Delivery	

Campello et al, 2014

5.72

Say:

As tobacco and alcohol use are more prevalent than drug use, and the associated global health burden is greater, delaying the use of these substances among youth can have a significant social impact. Furthermore, youth who use drugs often also abuse alcohol.

Evidence-based tobacco and alcohol policies are those that reduce access to underage children and adolescents and reduce the availability of tobacco and alcohol products.

Successful policies are those that increase the minimum age for sale of these products and increase their prices through taxation. Banning advertisement of tobacco and restricting the advertisement of alcohol products targeting youth have also been shown to reduce their use. Finally, active and consistent enforcement of these policies and involving retailers through educational programs are part of these effective approaches.

Media Campaign Characteristics* (1/2)

	Linked to Positive Outcomes	**Linked to No or Negative Outcomes**
Content	• Have a solid theoretical basis • Change cultural norms about substance use • Educate about the consequences of substance use • Suggest strategies to resist substance use • Target parents as this appears to have an independent effect also on children	• Exaggerated, unrealistic threats

Campello et al, 2014

5.73

Say:

Media campaigns are quite commonly viewed as an "easy" prevention intervention. However, research has shown that, unless, done properly, based on communications and prevention science, media campaigns may be not only ineffective, but also quite costly. The evidence base for media campaigns is weak; however, the research literature shows that well-designed campaigns can result in positive outcomes. The characteristics of these successful campaigns include: Having a strong theoretical basis; focus on changing cultural norms about substance use; educate about the consequences of substance use; and suggest strategies to resist use. Furthermore, it has been found that by targeting parents, well-designed and executed media campaigns have been found to have an independent effect on children. In other words, media campaigns that address parents do have an impact on children.

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Media Campaign Characteristics* (2/2)

	Linked to Positive Outcomes	Linked to No or Negative Outcomes
Structure	• Deliver messages based on strong formative research • Connect with other existing substance use prevention programs • Achieve adequate exposure • On-going systematic evaluations to adjust messaging	• Poorly thought out and poorly designed • Poorly resourced
Delivery	• Precisely define the target population	

Campello et al, 2014

5.74

Say:

What is also important is how the media campaign is structured. Messages should be delivered that have been tested first on representatives of the target population through focus groups or small, controlled pilot studies. As we mentioned earlier, media campaigns that connect with, and support other substance use prevention programming enhances the campaign's impact. Furthermore, attached to the campaign should be on-going systematic evaluations so that messaging can be adjusted to achieve its intended impact.

Finally, effective campaigns take the time to precisely define the target population, and through monitoring, are aware that that population is being reached.

What was found that doesn't work in media campaigns? Exaggerated or unrealistic threats or scare techniques, as well as, poorly thought-out and poorly designed campaigns and campaigns that have limited resources. You will learn much more about designing and implementing effective media campaigns in a later curriculum that is devoted to this topic.

Workplace Prevention Program***
Characteristics Linked to Positive Outcomes (1/2)

Content	• Multiple components that include both policies and interventions • Provide brief intervention (including web-based) • Include a clear communication component • Use alcohol and drug testing ONLY as part of this comprehensive program • Stress management courses
Structure	• Developed with the involvement of all stakeholders (employees, management, employers, and unions when applicable), • Embedding the substance use prevention intervention in other health or wellness-related programs

Campello et al, 2014

5.75

Say:

The workplace is an ideal setting for prevention interventions and policies not only to address workplace related issues, but potentially for parenting skills training.

In general, workplace prevention programs have multiple components that include integrated policies and interventions. Like the school-based policies, workplace policies should be clearly communicated and involve all stakeholders.

Alcohol and drug testing should only be considered if it is a part of a comprehensive program that includes opportunities for counseling and treatment.

In addition, as the workplace can be a source of stress, courses that provide coping skills are important components of a workplace prevention program. Structuring workplace prevention programming within other health or wellness programs reduces stigma and enhances participation.

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Workplace Prevention Program*
Characteristics Linked to Positive Outcomes (2/2)

| Delivery | • Non-punitive approach that guarantees confidentiality and access to counseling and treatment are important components |
| | • Trains managers, employees and workplace health staff about their role in prevention interventions and policies |

Campello et al, 2014

5.76

Say:

Again, as we said about almost all of the evidence-based interventions we discussed, managers, employees, and workplace health staff receive training about their role and functions relative to the prevention interventions and implementation of policies. Finally, again as with school policies, non-punitive approaches and guaranteed confidentiality enhances the positive outcomes of these programs. This is particularly important as substance users who have been through treatment are reintegrated into the workforce.

Entertainment Venues Interventions*
Characteristics Linked to Positive Outcomes

Content	• Identifying underage patrons for alcohol service • Management of intoxicated patrons
Structure	• Includes active participation of representatives of law enforcement, health and social service sector • Counseling and treatment for staff and management who need it • Raise awareness and acceptance of the program
Delivery	• Trained serving staff and managers

Campello et al, 2014

5.77

Say:

Entertainment venues include bars, clubs, restaurants and outdoor or special settings where large scale events may occur, such as, large parties, concerts or raves. Although these venues are associated with positive opportunities for social gathering and support the local economy, they also provide opportunities for engagement in harmful behaviors, such as, alcohol use, drug use, drugged driving and aggression.

Research in this setting as a prevention opportunity is a rapidly emerging area. Although the evidence of effectiveness is limited, if implemented well, these interventions can have positive outcomes.

Most of these interventions include multiple components that include training of staff and managers on responsible beverage service and management of intoxicated patrons. These programs, generally, involve representatives of law enforcement and the health and social service sectors. They also provide counseling and treatment services for staff and management who need it, and include communications and media support to raise awareness and acceptance of the program.

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Brief Interventions****
Characteristics Linked to Positive Outcomes

Content	• Screening
	• Brief intervention or referral to treatment
	• Addressing the relationship of substance use and goals of the individual
Structure	• One-to-one counseling
	• Structured sessions
Delivery	• Trained health and social service workers

Campello et al, 2014

5.78

Say: *There is quite a lot of research evaluating brief intervention programs. These programs are designed for adolescents and adults who are using alcohol or other substances, but who do not need treatment. Brief interventions consist of one-on-one structured counseling sessions. These sessions can range from one to several.*

They can be delivered by trained health or social service workers. Using validated screening tools, the counselor and the client determine if there is a substance use problem and if so, the counselor provides immediate basic counseling focusing on the extent to which the substance use is interfering with the daily lives or goals of the client. If the problem is found to require additional services, the brief intervention counselor either extends counseling or refers the client for additional treatment. In some brief intervention programs, motivational interviewing techniques are used. In these situations, the substance use of the person is discussed and the person is supported in making decisions about reducing use and setting realistic goals. These sessions tend to extend up to 4 one-hour sessions.

Brief interventions, typically, are delivered in primary health care settings or emergency departments, but they also have been effectively delivered in schools or workplace.

Community-Based Multi-Component Initiatives Characteristics***

- Support the enforcement of tobacco and alcohol policies
- Include a range of settings such as families and schools
- Provide training and resources to the community
- Involve universities to support both implementation with monitoring and evaluation
- Sustain prevention initiatives for more than one year

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5.79

Say:

The community-based multi-component initiatives impact all age groups, and in many ways, all settings. These community efforts focus on prevention and create partnerships, task forces, coalitions that bring together representatives from multiple sectors of the community, who want to address substance use and abuse.

These community groups establish an infrastructure to support prevention programming, providing financial and technical support to the community to deliver and sustain evidence-based prevention interventions and policies over time.

These initiatives support the enforcement of tobacco and alcohol policies and interventions and policies in a range of settings. They provide training for prevention specialists and resources to undertake prevention programming. They often involve universities to support the implementation, monitoring and evaluation of the prevention initiatives.

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401

Presentation and discussion: What have we learned from the International Standards?

What Have We Learned from the International Standards?

5.80

Say:

Now, we will be looking at What have we learned from the International Standards?

> # What Have We Learned from the International Standards? (1/2)
>
> - Effective family programs focus on parenting skills and family management
> - Effective school interventions positively impact substance use
>   - Effective policies improve school climate, feelings of school bonding, keep children in school
>   - Effective classroom management skills reduce aggressive behavior, and improve academic achievement
>   - Effective prevention curricula improve personal and social skills
>   - Effective counselling intervenes with individuals with psychological problems
>
> 5.81

Say:

Thank you for those excellent presentations, and now we look at what we have learned in this review of the International Standards on Drug Use Prevention. On the slides is a summary of some of the primary ideas embodied in the most effective prevention interventions that were analyzed in the Standards.

- *Family programs that focus on parenting skills and family management*

- *Schools that have—*

  - *Effective school policies can improve school climate, feelings of school bonding, and have a positive impact on substance use;*

  - *Effective classroom management skills can reduce aggressive behavior in the classroom and improve academic achievement, with an ultimate positive income on substance use and other behaviors;*

  - *Effective counselling for individuals with psychological problems;*

  - *Effective drug use prevention curriculum that improve personal and social skills have multiple positive outcomes; and*

  - *Effective policies that keep children in school.*

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What Have We Learned from the International Standards? (2/2)

- Effective workplace substance use policies are clear and communicated to employees, incorporate substance use prevention into wellness programs, and reduce workplace stress
- Effective community-focused interventions and policies include:
  - Brief interventions designed for persons who use substances but either do not need or want treatment
  - Implementation of tobacco and alcohol policies that address access and availability for under-aged children and adolescents
  - Training for the staff and managers of entertainment venues, such as bars, clubs, restaurants, to enforce tobacco/alcohol policies and address drug use, and to deal effectively with intoxicated patrons
  - Effective use of the media to convey prevention messages and to support other community-based prevention programming

5.82

Say:

We've also learned about effective policies and programs that take place in more of the adult settings for prevention: namely, the workplace and the community at large.

The effective workplace provides supportive policies regarding substance use and incorporates substance use prevention principles into wellness programs. This not only improves substance use in the work setting, but also reduces stress and improves the environment and productivity.

Communities present opportunities for a number of effective prevention interventions and policies, particularly, when supported by task groups or partnerships that include representatives from all sectors of the community including schools, business, law enforcement, faith-based organizations, and health and social service agencies. Community-focused interventions and policies include:

- *Brief interventions designed for persons who use substances, but either do not need or want treatment;*

- *Implementation of tobacco and alcohol policies that address access and availability for under-aged children and adolescents;*

■ *Training for the staff and managers of entertainment venues, such as, bars, restaurants, taverns, dance clubs to enforce tobacco and alcohol policies and address drug use, and to deal effectively with intoxicated patrons; and*

■ *Effective use of the media to convey prevention messages and to support other community-based prevention programming.*

Overall, this module has given you an overview of some of the basic foundations of prevention science as it relates to your work as prevention coordinators and specialists. The next module will focus on that work and how this information will help you do it effectively.

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Small-group exercise: Applying EB strategies to your community

Slide 5.83

Small-Group Exercise: Applying EB Strategies to Your Community

- For each group:
- If you were to implement one of the strategies listed for this age group, which one would work best in most communities you work with? Why do you feel this way? For example: organizational factors, cultural factors, economic factors
- Which ones would not work in your community? Why do you feel this way? For example: organizational factors, cultural factors, economic factors

5.83

Say: *For this exercise, we will have you break up into four different groups from the one you presented on in the previous session. In this way, you will have the opportunity to be involved with the information in regard to one of the other primary target age groups.*

Again, you will be assigned to one of the other 4 age groups--infancy and early childhood, middle childhood, early adolescence, and, late adolescence and adulthood. Please address the following questions for your age group:

1. *If you were to implement one of the strategies listed for this age group, which one would work best in most communities you work with? Why do you feel this way?*

2. *Which ones would not work in your community? Why do you feel this way?*

Teaching Instructions: Please allow approximately 20 minutes to review and another 15 minutes for reporting out and discussion. For each of these questions, the reasons for implementation or non-implementation may be related to organizational factors such as: available prevention staff, lack of resources, or, non-supportive attitudes to new programs; cultural factors such as supports the values and beliefs of the community or stigma associated with drug users; and economic factors such as the program costs too much or we could include the intervention within an existing.

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Module 5 evaluation

Module 5 Evaluation

15 minutes

5.84

Say: *Thank you all for your great participation!*

Please be sure to complete the module 5 evaluation form before we start module 6.

Resource Page 5.1: Why Implement Evidence-Based Practices?

Barriers to Implementing EB Interventions	Advantages to Implementing EB Interventions
Often appears to go against conventional wisdom	Gives target groups and populations the best interventions, techniques, and policies that are available
Challenges cultural and religious beliefs in regard to parenting, family structure, gender roles, etc.	Offers the possibility to deliver services in a more effective and efficient way
Requires new skills and specialized training	Provides a more rational basis to make policy decisions
Delivery challenge to maintain fidelity of implementation, while adapting to the specific needs of the target group and population	Provides a common language
Limited availability of resources	Gives the opportunity to develop a common concept for the evaluation of scientific research
Requires monitoring and assessments	Forms a new basis for education and training, it offers the possibility to achieve continuity and more uniformity of service delivery, and provides more clarification on missing links and shortcomings in our current scientific knowledge

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MODULE 6

THE ROLE OF THE SUBSTANCE USE PREVENTION COORDINATOR AND PREVENTION SPECIALIST

Module 6 Preparation Checklist

- ◼ Review Getting Started for general preparation information.

- ◼ Preview Module 6. Be familiar with the instructions for the exercises in this module.

Content and Timeline		
Activity	*Time*	*Person Responsible*
Introduction to module 6	15 minutes	
Presentation: Prevention coordinators: Professional development	20 minutes	
Presentation and discussion: Primary tasks of the prevention coordinator	20 minutes	
Presentation: Prevention coordinator skills	10 minutes	
Large- and small-group exercise: Who are the stakeholders in your community	45 minutes	
Lunch	60 minutes	
Presentation: Prevention coordinator skills (continued)	20 minutes	
Presentation: Community needs assessment	30 minutes	
Large-group discussion: Needs assessment in the community	20 minutes	
Presentation: Substance use prevention interventions: Understanding the evidence base	15 minutes	
Break	15 minutes	
Presentation and discussion: Selecting EB preventive interventions and implementation	30 minutes	
Small-group exercise: Community/country teams develop prevention strategies	60 minutes	
Presentation: Supervisory skills	15 minutes	
Wrap-up	15 minutes	
Presentation and discussion: Professional ethics	30 minutes	
Presentation: Professional competence and integrity	20 minutes	
Individual review and large-group discussion: What would you do?: Ethics case studies	45 minutes	
Module 6 evaluation	15 minutes	
Break	15 minutes	

Module 6 Goals and Objectives

Training goals

- Provide an overview of the role of the Prevention Coordinator in:

    - "Translating" prevention science to policy-makers, decision makers, general public;

    - Adoption, implementation, and sustainability of evidence-based prevention programming;

    - Supervising prevention specialists; and

    - Monitoring and evaluating prevention programming.

- Introduce concepts of professionalism and ethical behavior:

    - Confidentiality;

    - Ethical principles and professional codes of ethics;

    - Ethical decision-making; and

    - The importance of supervision in ethical practice.

Learning objectives

Participants who complete Module 6 will be able to:

- Describe how Prevention Coordinators communicate prevention science to decision-makers and other audiences to encourage the adoption of evidence-based interventions;

- Discuss how Prevention Coordinators apply the recommendations of the International Standards on Drug Use Prevention to bolster their programming;

- Describe the key elements of the evidence-based implementation process through sustainability and the factors that influence the success of the process;

- Summarize some of the basic rules in regard to ethics and professional behavior in prevention programming; and

- Discuss supervisory responsibilities of Prevention Coordinators.

15 minutes

Introduction to module 6

Slide 6.1

International Centre for Credentialing and Education of Addiction Professionals (ICCE)
The Universal Prevention Curriculum (UPC) for Substance Use Training Series

Curriculum 1

Introduction to Prevention Science

MODULE 6—THE ROLE OF THE SUBSTANCE USE PREVENTION COORDINATOR AND PREVENTION SPECIALIST

THE COLOMBO PLAN

Say:
In this module, we will be looking at The Role of the Substance Use Prevention Coordinator and Prevention Specialist.

Introduction

6.2

Say: As we begin Module 6, I would like you to review this one-page introduction to the material we will cover. You may encounter terms and concepts that are new to you and that is to be expected in this challenging area of prevention science. We will discuss all of this material as we progress through the Module.

Teaching Instructions: Please allow 5-10 minutes for the participants to read the Introduction to themselves.

Introduction

This module will introduce you to a full description of the roles of the substance use Prevention Coordinator and Prevention Specialist. The term Prevention Coordinator, generally, applies to prevention professionals who are responsible for the planning, implementation, and monitoring of prevention interventions and/or policies within a defined geographic area. These individuals not only supervise Prevention Specialists who help deliver or monitor prevention programming, but also serve as the 'face' and 'voice' of prevention in the community. As a follow-up to Module 5, this module will also discuss how Prevention Coordinators can apply the recommendations of the *International Standards on Drug Use Prevention* to bolster their programming in the

community. The module will also describe the key elements of the evidence-based (EB) implementation process through sustainability and the factors that influence the success of the process. This module will also explore the Prevention Coordinator's professional roles and ethics of professional behavior pertaining to the field, to the community, to those participating in prevention interventions, and to those that deliver the prevention interventions.

In Module 6 you will learn about the skills needed by Prevention Coordinators to perform the planning and implementation tasks, which involve communications, community organization, and supervision and management as you work both within and outside your organization to deliver EB interventions in your area. You will see how knowledge of epidemiology, research design, and research methods can be applied to encouraging the use of EB interventions in your schools, family programs, and other settings for prevention. In addition, epidemiology helps you assess the nature and extent of substance use, the establishment of priority audiences for your efforts, and the baseline data for evaluating the impact of your prevention programming. You will use community outreach skills to identify and work to develop community partnerships so you can undertake EB multicomponent initiatives that can impact on many priority audiences in your area. You will also learn about professional ethics related to prevention and apply those in challenging real-world case studies.

Training Goals

- Provide an overview of the role of the Prevention Coordinator in:
  - "Translating" prevention science to policy-makers, decision makers, general public
  - Adoption, implementation, and sustainability of evidence-based prevention programming
  - Supervising prevention specialists
  - Monitoring and evaluating prevention programming
- Introduce concepts of professionalism and ethical behavior:
  - Confidentiality
  - Ethical principles and professional codes of ethics
  - Ethical decision-making
  - The importance of supervision in ethical practice

6.3

Say:

Overall, the training goals of this module are:

- *To provide an overview of the role of the Prevention Coordinator in:*

  - *"Translating" prevention science to policy-makers, decision makers and the general public;*

  - *Adoption, implementation, and sustainability of evidence-based prevention programming;*

  - *Supervising prevention specialists; and*

  - *Monitoring and evaluating prevention programming.*

- *To introduce concepts of professionalism and ethical behavior:*

  - *Confidentiality;*

  - *Ethical principles and professional codes of ethics;*

  - *Ethical decision-making; and*

  - *The importance of supervision in ethical practice.*

Learning Objectives

■ Describe how Prevention Coordinators communicate prevention science to decision-makers and other audiences to encourage the adoption of evidence-based interventions

■ Discuss how Prevention Coordinators apply the recommendations of the *International Standards on Drug Use Prevention* to bolster their programming

■ Describe the key elements of the evidence-based implementation process through sustainability and the factors that influence the success of the process

■ Summarize some of the basic rules in regard to ethics and professional behavior in prevention programming

■ Discuss supervisory responsibilities of Prevention Coordinators

6.4

Say:

Up to this point, we have talked about the "tools" for putting prevention programming into a community. Today ,we will talk about how to put this together and use it as Prevention Coordinators. After today, we hope you will be able to:

■ *Describe how Prevention Coordinators communicate prevention science to decision- makers and other audiences to encourage the adoption of evidence-based interventions;*

■ *Discuss how Prevention Coordinators apply the recommendations of the International Standards on Drug Use Prevention to bolster their programming;*

■ *Describe the key elements of the evidence-based implementation process through sustainability and the factors that influence the success of the process;*

■ *Summarize some of the basic rules in regard to ethics and professional behavior in prevention programming; and*

■ *Discuss supervisory responsibilities of Prevention Coordinators.*

Presentation: Prevention coordinators: Professional development

Slide 6.5

Prevention Coordinators: Professional Development

6.5

Say:

In this section of the module, we will be looking at Prevention Coordinators: Professional Development.

Prevention Coordinators: The Face of Prevention

Prevention Coordinators:

- Translate prevention science for policy-makers, decision-makers and major stakeholders, and the public
- Apply their understanding of prevention science to promote the quality delivery of evidence-based prevention programming

6.6

Say:
You saw this slide in Module 1. Although much of the material we cover in Module 6 is relevant for both the Prevention Coordinator and Prevention Specialist, as we said earlier, we view Prevention Coordinators to be the "face" of prevention. In this role, Prevention Coordinators function as translators of prevention science to their organization, their community and policy-makers, using their knowledge of prevention science, to promote the quality delivery of evidence-based prevention interventions and policies.

Today, we will discuss the competencies and tasks needed by Prevention Coordinators to perform these roles and the processes involved in selecting and implementing the appropriate prevention interventions and policies for the specific needs of the community.

Much of material involved in the implementation and monitoring of interventions in the community will be covered in more depth in later curricula. In addition, these curricula will delve into the science and detailed descriptions of interventions for the specific settings for prevention—i.e., the family, schools, workplace, media and general environment. I will remind you about this as we go along.

But What Do You Need to Be the "Face of Prevention?"

- Professional development
- Professionalism
- Competencies and skills
    - European Monitoring Centre for Drugs and Drug Addiction (EMCDDA)−European Drug Prevention Quality Standards
    - IC&RC Standards for Addiction Professionals

6.7

Say:

In your professional development, you have already taken the first step in readying yourself as the "face of prevention." You're participating in this training, which will help you identify the competencies and skills you will need to become a prevention professional, ready to bring evidence-based prevention interventions to your community.

Professionalism, as defined in the Merriam-Webster dictionary is, "the conduct, aims, or qualities that characterize or mark a profession or a professional person"; and it defines a profession as "a calling requiring specialized knowledge and often long and intensive academic preparation." We're going to discuss in this session some of the competencies and skills recognized by different authorities as involved in the prevention professionals' work. Among these organizations are the two we see here: the European Monitoring Centre for Drugs and Drug Addiction' The European Drug Prevention Quality Standards and the IC&RC's Standards for Addiction Professionals.

Professional Development

- Professional Development is "the process of obtaining the skills, qualifications, and experience that allow you to make progress in your career ".
- The three legs of prevention science
  - Epidemiology
  - Intervention
  - Research

6.8

Say:

As we said, taking this course begins the process of building your knowledge about the 30 years of research that underlies some of the most effective preventive interventions for substance use. But you have a dual role. It's not only your job to understand evidence-based prevention, but to explain it to your staff, community leaders, decision-makers, and the public.

In order to implement effective prevention, you have to communicate its importance, why it works, and why your community needs it. Thus, you need to master the contributions that the three legs of prevention science make toward the development and delivery of evidence-based prevention interventions: epidemiology to assess the problem; intervention to effectively prevent its growth; and research, to evaluate what happens after you intervene so you can make adjustments and keep it going

We spoke earlier about the field of prevention science. Although the information that we discussed came from the Society for Prevention Research, its applicability to the practice of prevention should be clear.

Professionalism

- Skills
- Competencies
- Integrity
- Ethics

6.9

Say: *Along with having specialized knowledge and a set of relevant skills, being a professional means exhibiting competency, having integrity, abiding by ethical standards, being accountable, and projecting an image that represents yourself as a professional to your professional colleagues. So, when we discuss the tasks of a Prevention Coordinator, let's be mindful of these elements also. The following slide summarizes the competency standards for Prevention Coordinators.*

Prevention Competencies and Skills

Competencies	Skills
General Competencies	Analytic Abilities Communication Program Management and Staff Supervision Social and Personal Interactive
Basic Intervention Competencies	Knowledge of effective substance use prevention approaches/components Interactive instructional strategies Understanding developmental issues
Specific Intervention Competencies	Effective parenting strategies Teaching decision-making skills Understanding classroom management Knowledge of policy and other environmental approaches
Meta-Competencies	Skills that cut across all of these specific approaches Ability to adapt prevention interventions Include cultural sensitivity, community organization, planning and resource development, and monitoring and evaluation.

(Sources: European drug prevention quality standards, 2011)

6.10

Say:

We provided you with copies of a manual produced by the European Monitoring Centre for Drugs and Drug Addiction, which was published in 2011, that describes quality standards for prevention professionals. Based on that manual, we listed four areas of competencies related to intervention delivery—General competencies, Basic intervention competencies, Specific intervention competencies and Meta-competencies.

General competencies relate to people and to carrying out any prevention intervention or policy—e.g., communication skills, program management, social and person skills;

Basic intervention competencies include those needed to deliver a prevention intervention—e.g., knowledge of effective substance use prevention approaches and components, interactive instructional strategies, understanding developmental issues;

Specific intervention competencies include the knowledge and skills specific to a selected intervention—e.g., effective parenting strategies, teaching decision-making skills; and

Meta-competencies cut across the above areas and have the ability to adapt prevention interventions effectively to meet the specific needs of the target audience--e.g., cultural sensitivity—but also community organization, planning and resource development, and monitoring and evaluation.

Presentation and discussion: Primary tasks of the prevention coordinator

Slide 6.11
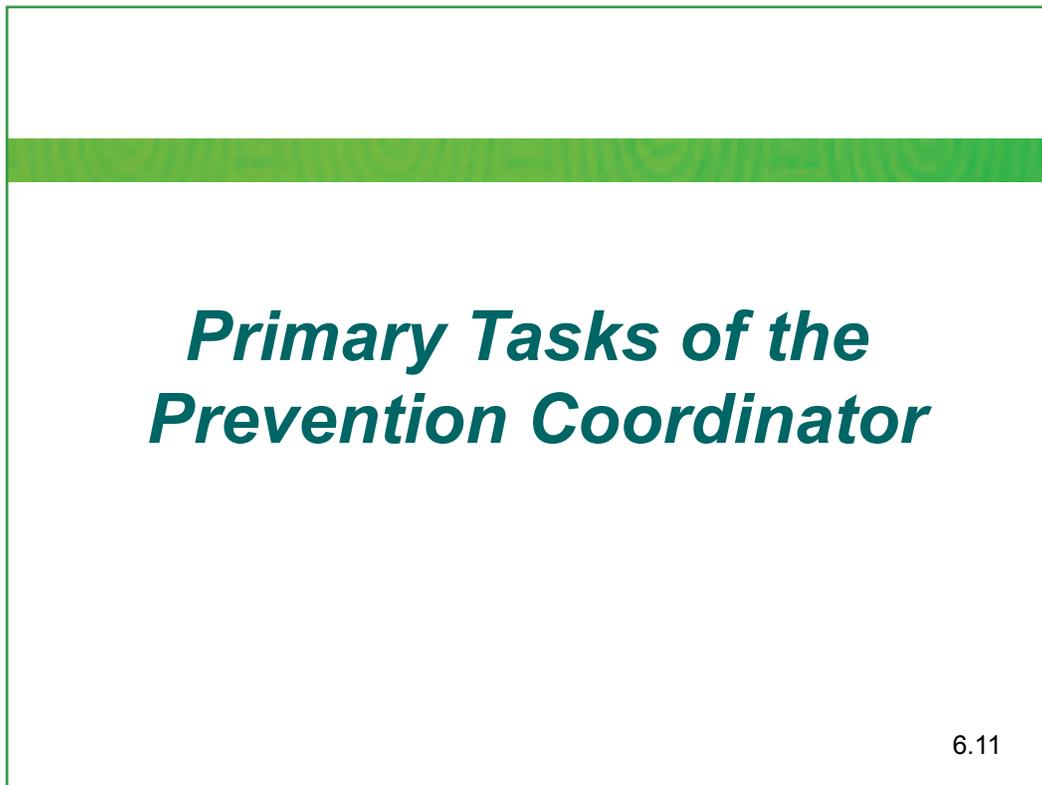
Primary Tasks of the Prevention Coordinator

6.11

Say: *In this section of the module, we will be looking at Primary Tasks of the Prevention Coordinator.*

Tasks of the Prevention Coordinator

- Assessment of the problem
- Availability of community resources
- Selecting prevention programming and implementation
- Monitoring and evaluation

6.12

Say: *The competencies and skills listed in the previous slide help prepare Prevention Coordinators to undertake some of their primary tasks listed on this slide. We will also see these tasks in the next graphic, while we go through examples of these tasks at work.*

These include:

- *Assessment of the problem;*

- *Availability of community resources;*

- *Selecting prevention programming and implementation; and*

- *Monitoring and evaluation.*

Prevention Coordinator Tasks

6.13

Say:
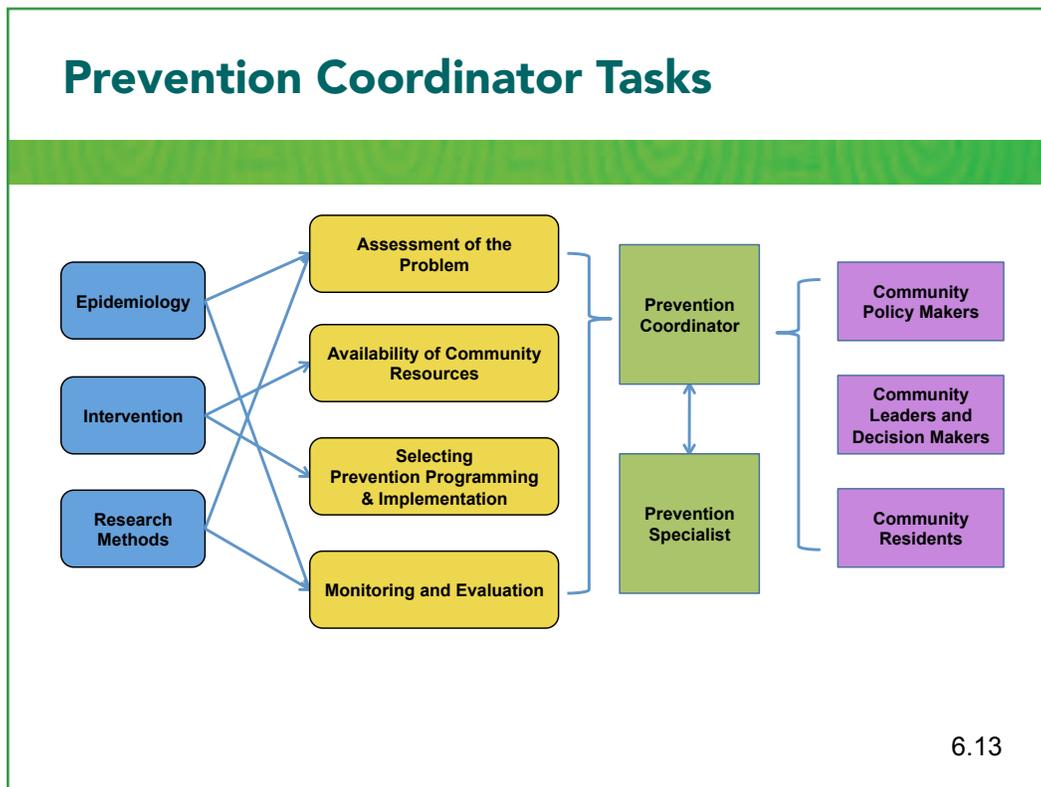
This chart depicts the primary tasks of the Prevention Coordinator. Let's go through them and then let's suggest other general tasks, and those tasks that may be specific to your local experience.

■ *Assessment of the problem: We spoke earlier this week about the importance of understanding the nature and extent of substance use within our communities in order to organize prevention programming. Also, of great importance is understanding who seem to be vulnerable and what are the influences that may be associated with the onset and continuation of the problem. Addressing these questions provides a prevention framework that helps target appropriate interventions.*

■ *Availability of community resources: The success of implementing substance use prevention programming depends greatly on a number of factors including gaining the support of the community and other relevant stakeholders including members of the target population. It also includes taking an inventory of available community resources. The European Monitoring Centre's Manual for prevention professionals defines resources as, "Money, time, people (e.g., staff members, target population), competencies (e.g., skills, knowledge, experience), information, networks, materials (e.g., equipment), etc. that are available or required to implement a programme". We would include current availability of prevention programs or social and health services*

into which prevention programming can be integrated. We call these existing services "platforms".

- **Selecting prevention programming**: The match of prevention programming to community needs and available resources is one aspect of service delivery. But, also involved in service delivery is implementation quality—is the intervention/policy being delivered as intended, does it follow evidence-based practice and, if available, the manual—and sustainability. Service delivery, therefore, builds on community collaboration and support, but also on developing the professional capabilities of staff supervising and delivering the intervention or policy.

- **Implementation**: Prevention Coordinators often collaborate with Prevention Specialists and community partners to implement the selected programs and policies which are undertaken. As we discussed in Module 3, it is important that the prevention interventions that are selected are delivered as they were designed. Monitoring, the next task is essential for assuring quality delivery.

- **Monitoring and evaluation**: Finally, the Prevention Coordinator with community stakeholders and a local university or research institution, should develop a system to monitor the quality of the delivered prevention programming and to assess its impact on both short-, intermediate-, and long-term outcomes.

We will touch on each of these issues and on professional ethics in this Module. More in-depth discussion of preparing and sustaining the infrastructure to support and sustain the quality delivery of evidence-based prevention interventions and policies, and on monitoring and evaluation will be presented in later curricula. In addition, this curriculum will be followed by those with more details regarding interventions delivered in the Family, School, Workplace, as well as, on the Media and Environmental interventions and policies.

Background Material in this Module: Much of the presentation draws from materials from the National Institute on Drug Abuse and the European Monitoring Centre for Drugs and Drug Addiction. The organization of this Module draws from a number of sources. One is the list of domains that come from Prevention Specialist Job Task Analysis (JTA) completed by the International Certification and Reciprocity Consortium (www.internationalcredentialing.org), European Drug Prevention Quality Standards—A Manual for Prevention Professionals (http://www.emcdda.europa.eu/publications/manuals/prevention-standards), and, the experience of the curriculum developers. What we will review today will incorporate items from the IC&RC and the EMCDDA.

Knowledge of Prevention Science

6.14
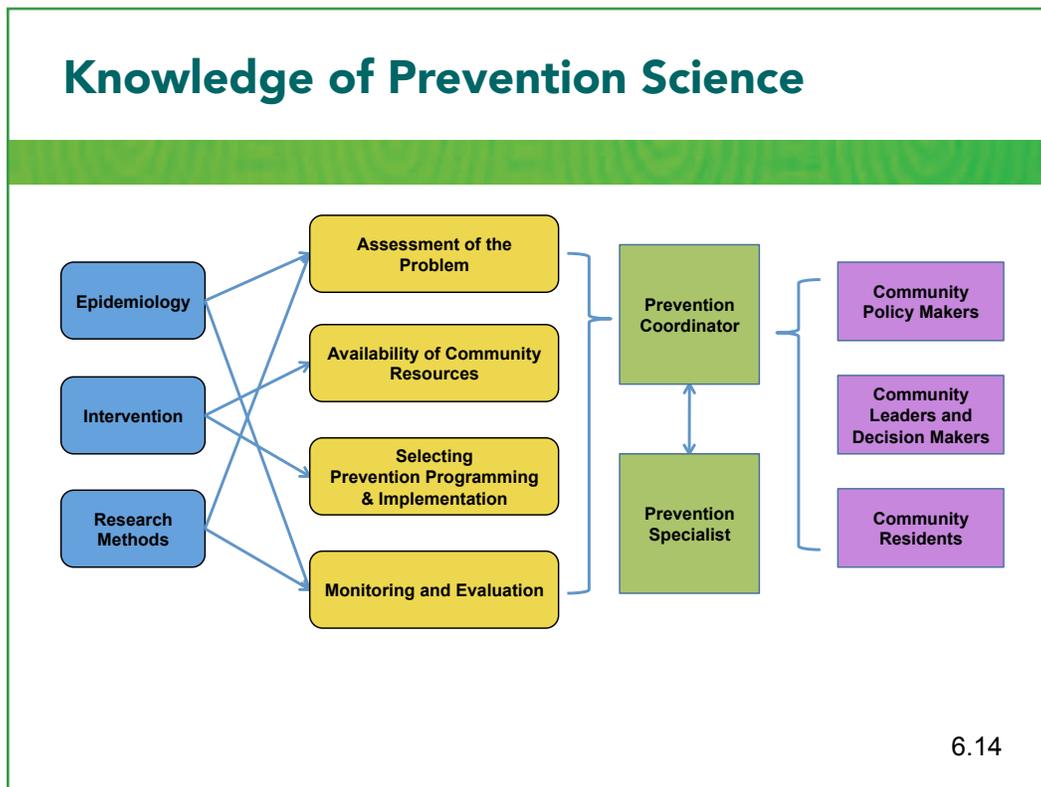
Say:

Now, we can see how Prevention Coordinators use the three legs of prevention science to do some of the primary tasks of their work. For example:

*EPIDEMIOLOGY: Being able to assess **epidemiological** information regarding the nature (what types of substances are used and how they are used and who is using) and the extent of use (what proportion of the population is using these substances by specific characteristics—age, gender, geographic area) is important to:*

■ *Alerting communities about the substance use problem;*

■ *Coordinating community groups to assess available resources and plan prevention strategies;*

■ *Selecting the most appropriate prevention interventions or policies to implement; and*

■ *Establishing baselines and follow-up for evaluation and monitoring systems put in place.*

*INTERVENTION: Understanding how **interventions** are designed to address a specific target population is also important not only to select the appropriate one, but also to assure that the intervention is delivered to the right audience and that it is delivered with*

fidelity. Intervention development requires knowledge of the initiation and progression of substance use, theories of behavior change, and of optimizing learning for all developmental age groups.

***RESEARCH**: Finally, Prevention Coordinators need to understand the **research methods** used to evaluate the interventions, which require skills in statistics, measurement, and design so they can explain why these interventions work and how they would go about evaluating their impact once they were implemented. Many Prevention Coordinators consult with university professors and other local experts to design the evaluation approaches they put in place.*

Prevention Coordinator Role

Tasks or Stages of Implementation
- Assessment of the Problem
- Availability of Community Resources
- Selecting Prevention Programming & Implementation
- Monitoring and Evaluation

Prevention Coordinator

Prevention Specialist

- Community Policy Makers
- Community Leaders and Decision Makers
- Community Residents

6.15

Say:
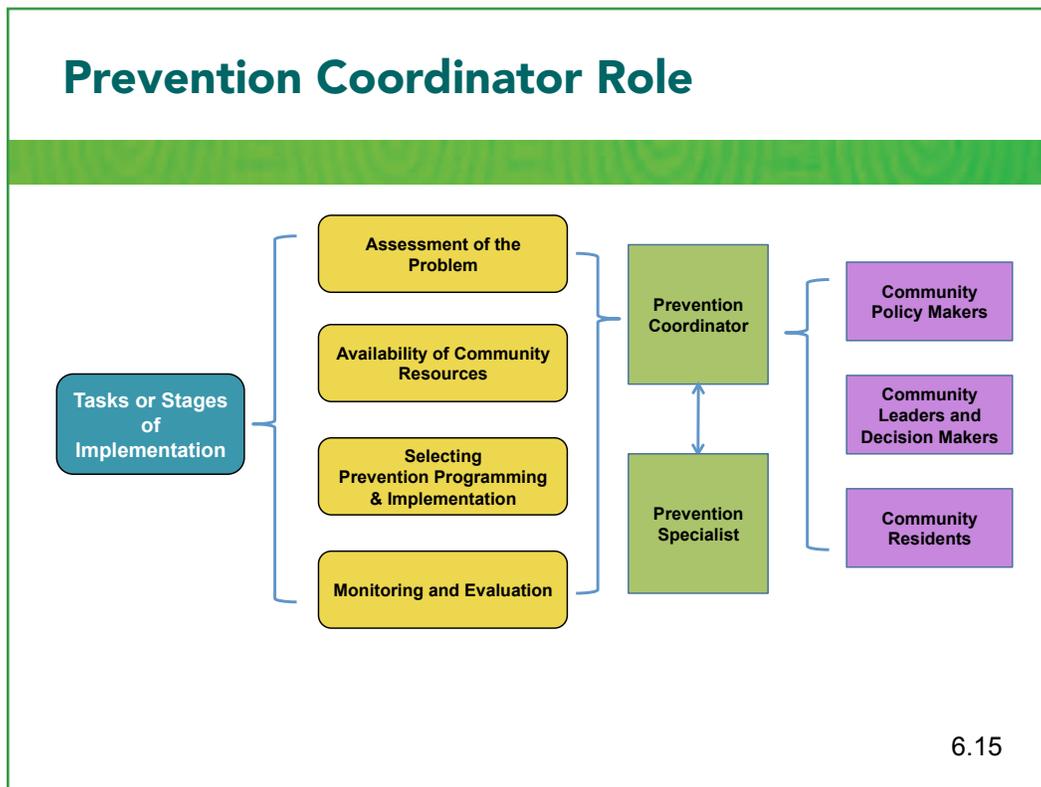
This graphic continues to describe the pivotal role of Prevention Coordinators and Prevention Specialists in bringing evidence-based interventions and policies to communities, including the tasks we just discussed.

WHO ARE THESE PREVENTION COORDINATORS? *When we use the term Prevention Coordinator, we are generally speaking of prevention professionals who are responsible for the planning, implementation, and monitoring of prevention interventions and/ or policies within a defined geographic area. These individuals not only supervise Prevention Specialists who may serve one or more functions such as delivery of or monitoring prevention programming, but are also the 'face' and 'voice' of prevention in the community as we described earlier.*

*Today, we will discuss what this means to you in your work and your community.*
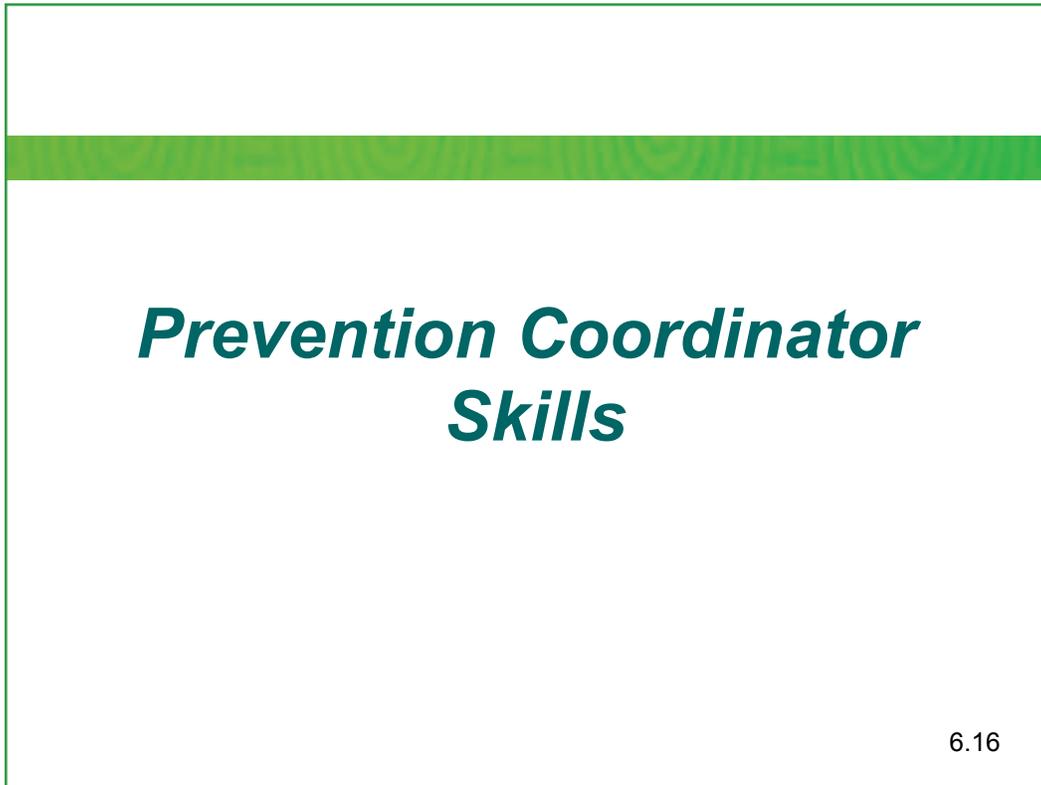
Presentation: Prevention coordinator skills

Prevention Coordinator Skills

6.16

Say:

In this module, we will be looking at Prevention Coordinator Skills.

Prevention Coordinator Skills: Communications

Listening	Analyzing	Writing

Communications Skills

Speaking

Formal	Informal

6.17

Say:
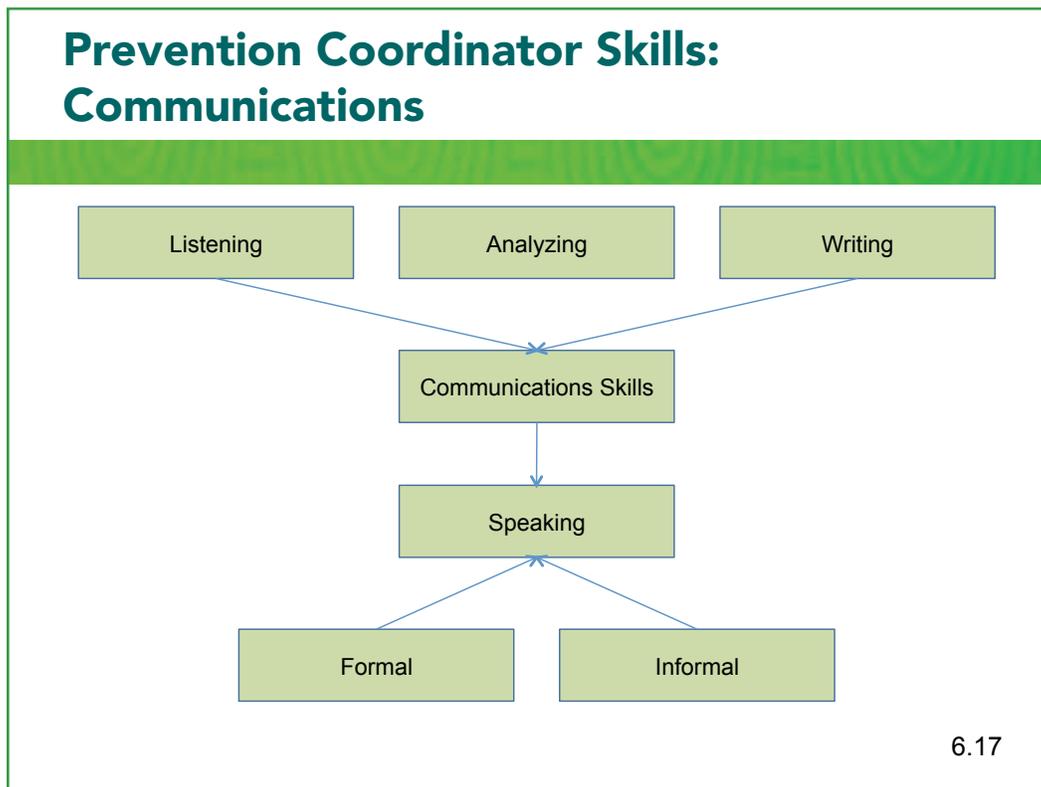
  Let's talk a bit about the major skills needed by effective Prevention Coordinators. One of the most important is having good communication skills. So, what do we mean by that:

Communications is key to any profession and includes the ability to communicate to a variety of audiences. Prevention, particularly of a stigmatized issue, such as, substance use and abuse can be difficult. However, having a sound knowledge base about the science of prevention provides a framework for sound messaging.

Making these messages relevant to the many audiences that you deal with depends on your relationship and understanding of their needs and objectives. We want to draw on your experiences to exemplify how this can be done effectively. Communications skills involve:

■ *Being a good listener: Understand what is of interest to your audiences, hear what they want and what they perceive as barriers either implicitly or explicitly to what you want them to agree to/embrace/support;*

■ *Having good analytic skills to interpret what you read, what you see, what you understand about the nature of community problems, and how to put together proposals to do something about them;*

- *Being a good writer: Understand the perspective of your audience; understand the reading level and experience of the audience, understand what "moves" your audience; and*

- *Being an effective speaker.*

  - *Informally this means: Look at the person when they are talking, repeat in your own words a key point the other person is making; nod your head when appropriate; make comments that are directly related to what the other person is saying; and*

  - *Formally, present in language that is geared to your audiences training and experience, develop a few key points you want to make and repeat them at least twice, provide context or logic model for your points.*

Communications—Audiences and Messages

- Community policy-makers
- Community Leaders and Decision-Makers
- Community Residents

6.18

Say:

Within a community, generally, there are many different organizations and service providers that potentially have relevance to substance use prevention and with whom Prevention Coordinators work almost daily. These are 'stakeholders' and include:

- *Government agencies such as:*

  - *Legislatures or other law makers or city/community officials;*

  - *Education;*

  - *Libraries;*

  - *Social services;*

  - *Law enforcement agencies;*

  - *Public health agencies including departments of public health and mental health, coroners offices, public hospitals ;*

  - *Judiciary; and*

  - *Public welfare.*

- *Non-governmental organizations such as:*
  - *Drug abuse treatment programs;*
  - *Drop-in centers;*
  - *Youth organizations;*
  - *Unions;*
  - *Federation of employees;*
  - *Medical facilities;*
  - *Community-based social service organizations;*
  - *Faith-based organizations; and*
  - *Universities.*
- *Businesses such as:*
  - *Entertainment venues—restaurants, bars, taverns, night clubs*
  - *Commercial stores;*
  - *Large companies;*
  - *Newspapers;*
  - *Shopping malls;*
  - *Manufacturers; and*
  - *Small businesses.*

Large- and small-group exercise: Who are the stakeholders in your community

Slide 6.19

Large- and Small-Group Exercise: Who Are the Stakeholders in the Community

For each stakeholder group, list:

- Reason these groups would be interested in substance use prevention
- The communication message(s) to get these groups involve in substance use prevention planning and/or delivery?

6.19

Ask: *What other organizations in your community may have an interest in substance use prevention programming? Why would they be interested?*

Teaching Instructions: Let the group respond and on a chart, make a list of their suggestions.

Say: *Now let's go into our work groups. Each of the groups will be given two potential stakeholder groups. For each stakeholder group, answer the following questions:*

1. *What would be the reason these groups would be interested in substance use prevention?*

2. *What would be the communication message to get these groups involve in substance use prevention planning and/or delivery?*

RECONVENE THE GROUP:

Say:
Okay, let's hear from group 1. Tell us what stakeholder groups you were given. What were the reasons for these groups to be interested in substance use prevention? What communication messages do you suggest to get them involved.

Okay, let's hear from group 2….group 3…(all groups)

Ask:

1. *What about community residents, what information would they need to gain their support for substance use prevention programming?*

2. *What about our target groups for substance use prevention? Who are they? How would they be involved in substance use prevention programming?*

Presentation: Prevention coordinator skills (continued)

Slide 6.20

**Prevention Coordinator Skills:
Community Organization & Partnerships**

Community Organization
- Bringing together representatives of sectors of the community that share a common interest
- There may not be a prevention infrastructure
- BUT…
  - Not all communities are ready for a community organization, like a partnership
  - Not all communities will need or have the same partnership structures
  - Not all community partnership structures will remain the same over time

What They Do
- Support the enforcement of tobacco and alcohol policies;
- Include a range of settings such as families and schools;
- Provide training and resources to the community;
- Involve universities to support both implementation with monitoring and evaluation; and
- Sustain prevention initiatives for more than one year.

6.20

Ask:

In the west, the term, "community organization" is used to describe a wide range of activities that involve the community. What we mean here, is, building a community of like-interested groups and people to build support for the delivery and maintenance of evidence-based substance use prevention efforts.

We learned from Module 5 that community-based multi-component initiatives are community efforts to focus on prevention and create partnerships, task forces, coalitions that bring together representatives from multiple sectors of the community who want to address substance use and abuse. These community groups establish an infrastructure to support prevention programming providing financial and technical support to the community to deliver and sustain evidence-based prevention interventions and policies over time.

These initiatives support the enforcement of tobacco and alcohol policies and interventions in a range of settings. They provide training for Prevention Specialists and resources

to undertake prevention programming. They often involve universities to support the implementation, monitoring, and evaluation of the prevention initiatives.

We just discussed the many and diverse sectors of a community that share an interest in substance use prevention. There are many ways to involve these groups. However, not all communities are ready for community organizations, such as those we will discuss. Furthermore, a community partnership structure in one community may not "look" like that of another and finally, as the substance use issue changes in a community so too, will the structure of any community partnership.

Characteristics of Effective Community Partnerships

- Leadership
- Membership
- Structure
- Operations and processes
- Strategic vision
- Contextual factors

Source: NORC (2010) Literature review: Developing a conceptual framework to assess the sustainability of community coalitions post-federal funding

6.21

Say:

When we talk about community organization, we are not talking about social reform movements. We are talking about organizing key representatives within the community who share concern about substance use and want to jointly develop and support prevention strategies to address such use. The 'organization' part of this process can range from task group meetings to formal community partnerships or coalitions.

What are the characteristics of effective community partnerships?

- *Leadership: Having the organizational capacity and shared commitment and vision on the parts of its membership;*

- *Membership: Including diverse representation of community sectors and gatekeepers, and reflecting diverse cultural groups who are committed to the success of the partnership. Having schools represented on the partnership provides access not only to students, but also, parents. And, including a university member will serve to enhance training needs of the partnership, but also, in monitoring and evaluating a prevention strategy;*

- *Structure: Having a well-defined set of rules and clearly defined responsibilities for each member and a governing body with active steering committees;*

- *Operations and Processes: Having well-defined processes for communications, decision-making, and conflict resolution;*

- *Strategic Vision: Having a well-articulated and embraced reference for all of the partnership's activities and future direction; and*

- *Contextual Factors: Being aware of external conditions or situations that may impede or enhance partnership activities, and readiness to make appropriate adjustments.*

Nine Stages of Readiness

1. No Awareness
2. Denial/Resistance
3. Vague Awareness
4. Pre-planning
5. Preparation
6. Initiation
7. Stabilization
8. Confirmation/Expansion
9. High Level of Community Ownership

Source: Edwards et al. 2000.

6.22

Say:

*In recognition that not all communities are ready to organize around prevention issues, Dr. Edwards and her colleagues at Colorado State University developed the nine stages of readiness. The important message, here, is to assess the readiness of your community for change and to use your communication and planning skills that we will discuss in a while to help move the community along. These stages range from **No awareness that there's a substance use problem to high level of community ownership about the interventions currently underway and being monitored for effectiveness.***

Not all communities can support a community partnership, either. The important thing to do is to move ahead with what other groups you can, who are committed to addressing substance use in your community.

Edwards RW, Jumper-Thurman P, Plested BA, Oetting ER, Swanson L. (2000). Community readiness: Research to practice. American Journal of Community Psychology, 28:291–207.

Barriers to Effective Partnerships (1/2)

- Conflict within the partnership
- Negative partnership climate
- Competing priorities and competing theories about substance use
- High turnover rates of leadership and membership
- Disagreement or imbalance in approaches being taken
- Difficulty obtaining necessary resources

6.23

Say:
Not all partnerships that start out are successful. There are a number of barriers that need to be overcome when setting up and maintaining these partnerships over time.

There are sometimes conflicts across the membership that may be based on history between organizations or competing priorities and theories about substance use.

Partnerships with high turnover rates both among leaders and members fail as do those where there is no commitment to the strategic plan. And, of course, not having the resources necessary to implement prevention interventions and policies will impact the work of the partnership.

Barriers to Effective Partnerships (2/2)

- Difficulty obtaining access to and influencing powerful legislators and other decision makers
- High turnover rates of key leaders in the community who support the partnership
- Lack of enthusiasm of businesses and not-for-profit organizations
- Community residents do not perceive targeted problem as a problem
- Conflict between what the partnership wants to implement in the community and what the community wants

6.24

Say:
Other barriers include:

- *Difficulty obtaining access to and influencing powerful legislators and other decision makers;*

- *High turnover rates of key leaders in the community who support the partnership;*

- *Lack of enthusiasm of businesses and not-for-profit organizations;*

- *Community residents do not perceive targeted problem as a problem; and*

- *Conflict between what the partnership wants to implement in the community and what the community wants.*

Ask:
Do any of you work with a community partnership? Can you tell us about your membership and how your partnership functions?

Presentation: Community needs assessment

Slide 6.25
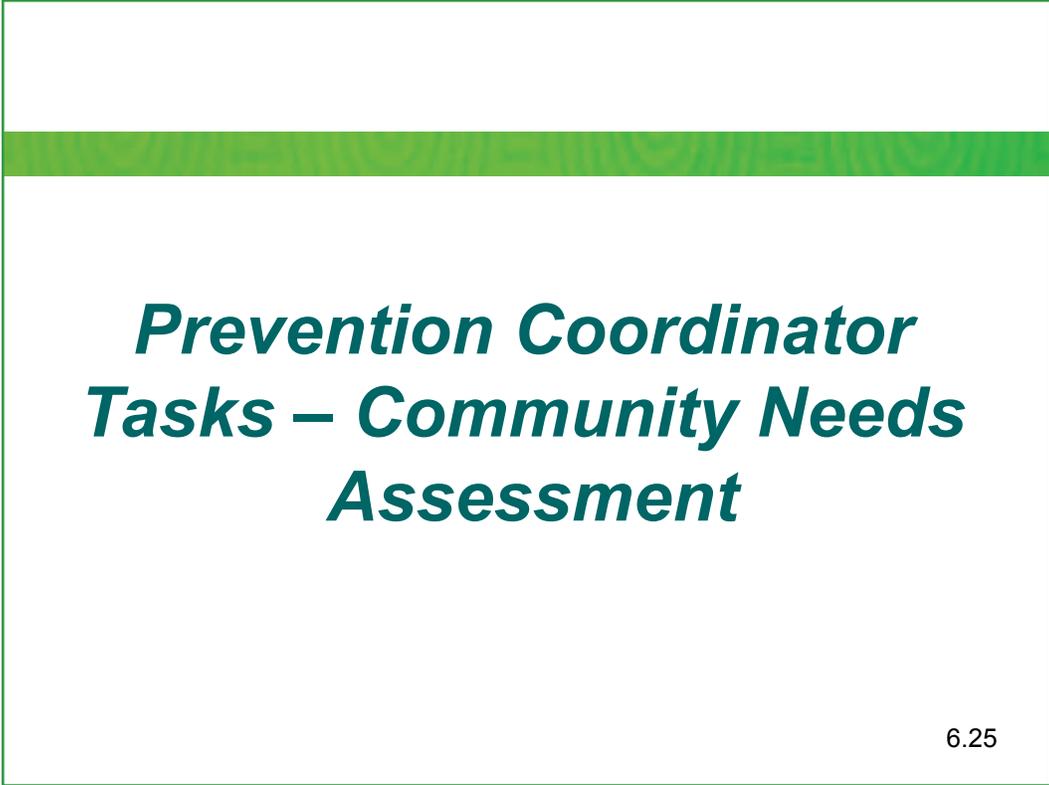
> # *Prevention Coordinator Tasks – Community Needs Assessment*
>
> 6.25

Say: *In this module, we will be looking at Prevention Coordinator Tasks - Community Needs Assessment.*

Assessment of the Problem

- Stepping back to look at the community as a whole
- Assessment of substance use
- Assessment of vulnerabilities and risk
- Thinking about prevention in the long-term and the short-term

6.26

Say:

Although there are some core commonalities across communities, every community has some unique characteristics that inform prevention programming. Prevention Coordinators know their communities. So, it is important to step back and look at your community, as a whole.

What are its strengths?

Where are there impediments for prevention programming?

What does the substance use picture look like?

What information is available to make this assessment? Are there school surveys? Are there police arrest data? What about the health care facilities, is there information there that is useful?

How is substance use viewed by the community? Are there particular groups that you want to address first?

Who are the vulnerable groups? Why do you consider them vulnerable? What environmental factors influence these vulnerable groups?

Finally, what do you want to achieve in the short-term? What do you want to achieve on the long-term?

Dimensions of Prevention Need

■ Prevalence — Who is using what substances?

■ Incidence — Who begins the use of what substances?

■ Service need — What types of prevention interventions are needed?

■ Delivery Platform — How can prevention interventions be delivered to the target groups?

■ Quality of services delivered — Are services appropriate and adequate?

6.27

Say:

In a more formal way, a Prevention Coordinator needs to know the prevalence of the problem--how extensive is the problem—how many people are substance users? What are their characteristics—are they mostly males? Are they mostly residents of urban areas or specific areas within a city? And, what substances are being used? Are most of the substances being used alcohol or cannabis or other locally available substances such as Khat? Are the substances that are used coming in from other countries? How are these substances administered, if drugs, are they injected? Smoked? Snorted?

You also want to know the incidence of use—who is initiating the use of substances and what substances are they using—the target of prevention, particularly indicated prevention programming. Are these new users experiencing any problems, such as, absenteeism from school or work?

Understanding the problem and who is involved will, then, serve to inform the Prevention Coordinator's assessment about existing services. What existing prevention interventions are available? Are they reaching the target populations? Are these evidence-based prevention interventions and/or policies? Are there existing social or health programs available in which evidence-based prevention interventions can be integrated? Do these interventions share the characteristics, as defined in the International Standards on Drug Use Prevention?

Substance Use Related Problems

- Focus on a few issues: e.g., DUI arrests among adolescents, increased substance use among teens, children of substance abusers at risk for substance use and other problems, substance use in the workplace
- What factors are related to the problem?
- What resources are needed to address the problem?

6.28

Say:

Prevention Coordinators need to be able to describe the substance use problem that needs to be addressed. What are the consequences that have been seen? For example, is the community seeing an increase in alcohol-related traffic accidents? Are there reports in health care facilities of increases in the number of teens coming to them with substance-related problems? Are local businesses concerned about their employees' substance use?

What factors seem to be related to these problems? What resources are available to address the problem?

Assessment of Prevention Need

- Involvement of representatives of several community sectors to form partnership or an advisory group
- Data review — What does it mean? What groups are at risk for substance use? Why? What types of services are needed to prevent initiation or progression to substance use disorder?
- Prioritize needs (vulnerabilities and risks)

6.29

Say:

 If the Prevention Coordinator is working with a community partnership, this is a time to involve its members in assessing the information that was collected. If there is no community partnership, the creation of an advisory group made up of similar community representatives would be advantageous as it would not only be viewed as having the community involved, it would also provide an opportunity to have different perspectives or interpretations of the information.

The questions that can be asked of the data include:

- What is the problem here?

- What are the drugs or substances of concern?

- What groups seem to be at-risk?

- What services would they need to prevention substance use or progression to a substance use disorder?

Once there is a sense of the problem and need, it is, then, important to prioritize these needs.

Summary of Needs Assessment Steps

- Carefully frame what problem you want to address and what you mean by 'need'
- Use multiple data collection methods
- Try to combine quantitative and qualitative methods
- Use key informants to help interpret the data

6.30

Say:

In summary then,

- *Carefully frame what problem you want to address and what you mean by 'need';*

- *Use multiple data collection methods;*

- *Try to combine quantitative and qualitative methods; and*

- *Use key informants to help interpret the data.*

If you are fortunate enough to be working with a community group, partnership, or coalition, the members should be part of this process.

Large-group discussion: Needs assessment in the community

Slide 6.31

> ### Large-Group Discussion: Needs Assessment in the Community
>
> - What approaches have you used in your communities to assess the extent and nature of substance use?
> - How have you characterized the need for prevention?
> - Have you worked with partners to help develop prevention efforts?
> - Did you work within the existing service structure or develop something new?
> - Would you do anything differently since our discussion today?
>
> 6.31

Say:

As part of our review, I'd like to discuss, as a group, some of the following questions about your experiences in addressing community needs. So, please take a few minutes to review the questions on the slide and we'll discuss them as a group together.

Ask:

- *What approaches have you used in your communities to assess the extent and nature of substance use?*

- *How have you characterized the need for prevention?*

- *Have you worked with partners to help develop prevention efforts?*

- *Did you work within the existing service structure or develop something new?*

Ask:

After what we have talked about so far, would you do anything differently now?

Presentation: Substance use prevention interventions: Understanding the evidence base

Slide 6.32

Substance Use Prevention Interventions: Understanding the Evidence Base

6.32

Say: *In this section of the module, we will be looking at Substance Use Prevention Interventions: Understanding the Evidence Base.*

Etiology Model: Interaction of Personal Characteristics and the Micro- and Macro-Level Environments
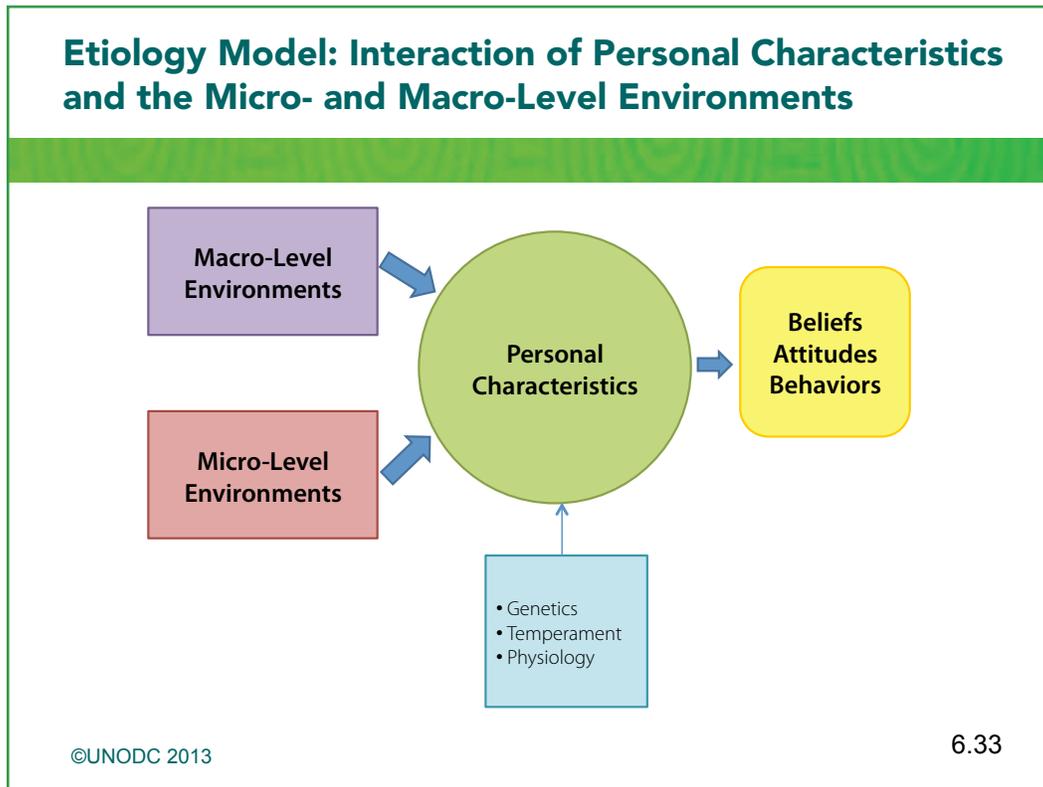
Say: *This is a good place to review the Etiology Model again from Module 2 that shows the influences on individuals as to how they shape beliefs and attitudes about various life challenges, and what types of behaviors individuals engage in.*

You may recall that when we reviewed this slide, we noted not only do the micro- and macro-level environments have independent influences on an individual's beliefs, attitudes, and behaviors but they also influence each other.

Environmental Influences

- Micro-Level Environmental Factors
  - Family
  - School
  - Peer
- Macro-Level Environmental Factors
  - Poverty
  - Social environment
  - Physical environment

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6.34

Say:

Let's just review these environmental factors:

The micro-level environmental factors that have been found to have the greatest influence on us, as individuals, include the family, school, and peers while macro-level environmental factors include family income and resources, and the social and physical environment.

Evidence-Based Prevention Interventions

- Theoretical based (relative to target behavior, target population, and beliefs about causation)
- Indication that there was quality implementation
- Evaluated using rigorous research design (comparing outcomes for populations receiving the intervention to those of populations that did not have the intervention)—UNODC International Standards on Drug Use Prevention

6.35

Say: *We have defined evidence-based prevention before, but, let's just review the key criteria:*

The interventions should have a theoretical basis drawing on theories that relate to the target behavior and population, and represent beliefs about causation or etiology.

There has to be some indication that there was quality implementation, i.e., the intervention was delivered, as it was designed to be delivered.

And, finally, that it was evaluated using rigorous research designs.

The UNODC International Standards on Drug Use Prevention applied these criteria to the review of the literature.

So let's again just review the findings from the Standards document.

International Standards on Drug Use Prevention

International Standards
on Drug Use Prevention
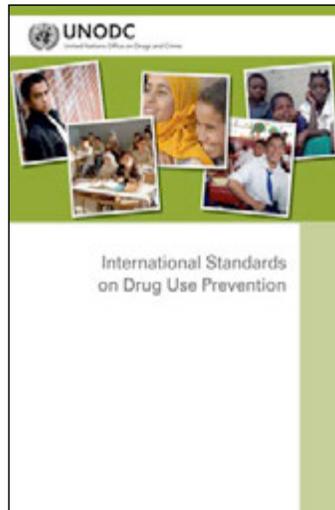
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6.36

Summary Including an Indication of Efficacy

6.37

Say:

Remember this chart? It summarizes the outcomes of the reviews.

Across the top are the age categories or developmental periods: Prenatal and infancy, Early childhood, Middle childhood, Adolescence, and Adulthood.

On the left side, we have the settings: Family, School, Community, Workplace, and Health sector.

Then, for each intervention/policy found by age group and setting is a listing of the interventions and policies. In addition, you will note the color of the box surrounding the interventions and policies. The color responds to the category of intervention, whether it is Universal in GREEN, Selective in Yellow or Indicated in Red.

You may recall from Curriculum 1 that:

■ *Universal—Risk level is the situation where risk is specifically unknown and may include individuals at low risk, as well as, those at high risk, such as, a class of students attending a regular school;*

■ *Selective—Risk is known and the risk status is used to identify groups such as children of substance users, children in poverty, children impacted by war or natural disasters; and*

- *Indicated—Individuals who already use drugs, but do not yet meet diagnostic criteria for dependence.*

Finally, the stars represent the level of efficacy OR EVIDENCE OF EFFECTIVENESS ranging from

- *ONE STAR (*) = Limited EVIDENCE*

- *TWO STARS (**) = Adequate EVIDENCE*

- *THREE STARS (***) = Good EVIDENCE*

- *FOUR STARS (****) = Very good EVIDENCE*

- *FIVE STARS (****) = Excellent EVIDENCE*

Points of Intervention Model

Biological/Personal Characteristics

Macro-Level Environments

Micro-Level Environments

• Beliefs
• Attitudes

• Social and Cognitive Competence
• Skills

Intent

Behavior

Socialization

☆ Points of Intervention

©Sloboda, forthcoming

6.38
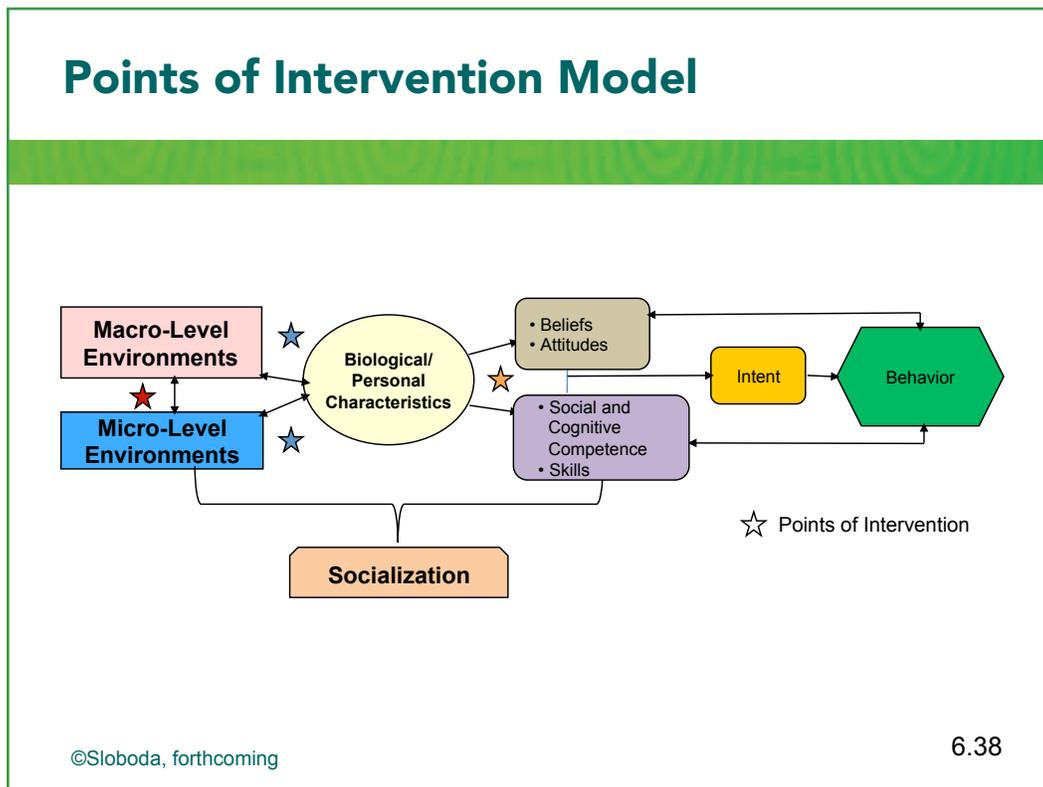
Say:

Here is our intervention model again. This time, we indicate points for intervention with the stars. Please note that intervention points include those that address micro- and macro-level environments—the orange and blue stars--but also those that directly address the target population—the gold star.

We will hear about preventive interventions that are delivered to parents, to teachers, to children and adolescents, within family environment, school environments, workplace environments and within the community.

Infancy and Early Childhood: Evidence-Based Strategies

Intervention	Level of risk targeted	Indication of efficacy
Interventions targeting pregnant women with substance abuse disorders	**Selective** Groups at risk	★ Limited
Prenatal and infancy visitation	**Selective** Groups at risk	★★ Adequate
Early childhood education	**Selective** Groups at risk	★★★★ Very good
Community-based multi-component		

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6.39

Say:

So, as an example, let's quickly go through the summary of the evidence-based interventions and policies from the International Standards that were found to be effective for the infancy and early childhood developmental period. There were three that were found to have evidence of effectiveness:

■ *Interventions that target pregnant women with substance abuse disorders;*

■ *Prenatal and infancy visitation; and*

■ *Early childhood education.*

Please note that all target children are those who are considered at-risk for later substance use, as well as, other behavioral problems.

Please note also the indication of efficacy for these interventions. They range from limited evidence of efficacy to very good evidence.

You will recall that the other materials presented included the content, structure, and delivery characteristics of these evidence-based prevention interventions and policy.

Presentation and discussion: Selecting EB preventive interventions and implementation
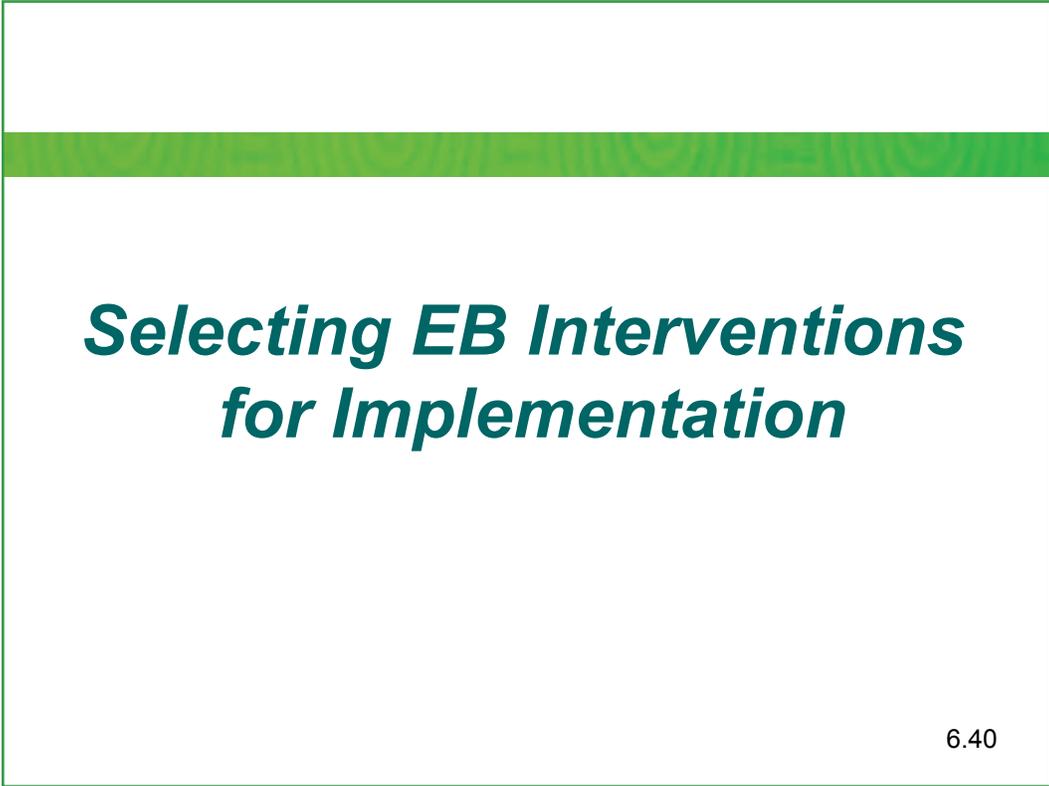
Selecting EB Interventions for Implementation

6.40

Say: *In this section of the module, we will be looking at Selecting EB interventions for implementation.*

> # Key Questions for Selecting a Prevention Strategy and for Evaluation
>
> - What do I really believe is causing the problem? What am I trying to accomplish with this intervention? What am I trying to enhance or change?
> - What groups am I targeting? Who do I want to reach? How can I best reach them?
> - What am I expecting the strategy to change? Enhance?
>   - What do I want them to learn?
>   - What do I want them to believe?
>   - What do I want them to do?
>
> 6.41

Say:

So, how do we put together the assessments you have made with the International Standards?

Again, although "I" is used in this slide, it is always advantageous to include key stakeholders in this decision process.

- *What do I really believe is causing the problem? What am I trying to accomplish with this strategy? What am I trying to enhance or change? Do I want to improve parenting skills for substance using mothers and fathers? Do I want to reinforce prosocial attitudes and behaviors during the at-risk years of adolescents? Do I want to create a positive and productive and substance-free workplace? Do I want to limit children's access to alcohol and tobacco?*

- *What groups am I targeting? Who do I want to reach? How can I best reach them? Do I want to collaborate with drug treatment programs to include parenting skills programs? How about working with the local hospital or midwife to help new mothers who may have drug abuse or other behavioral problem? Can I work with child welfare and integrate a parenting skills program for foster care and adoptive parents?*

■ *What am I expecting the intervention to change? Enhance? These include your short-term and long-term outcomes.*

- *What do I want them to learn? Such as, decision-making and resistance skills;*

- *What do I want them to believe? Such as, substance use is not normative and is not generally tolerated; and*

- *What do I want them to do? Such as, engage in more prosocial activities or improve their academic performance.*

> ## Before You Proceed with Your Selection Ask Yourself…
>
> - Is this intervention/policy consistent with my mission?
> - Does this intervention/policy address my goals/objectives?
> - Is the intervention/policy within my capacity or the community's capacity to implement?
> - Is the intervention/policy culturally relevant to my situation?
> - Has the intervention/policy been designated as scientific and effective?
> - If the intervention/policy has been so designated, does it meet the principles of effectiveness for prevention programming?
>
> 6.42

Say: *Exercising your program management and supervisory skills, it is important for you to consider other questions about your prevention intervention selection, such as the following:*

Before you make the selection, it is important to confirm that the intervention/policy:

- *Is consistent with your mission*
- *Addresses your goals and objectives*
- *Is within the capacity of your staff and the community to implement WITH QUALITY*
- *Is culturally-appropriate to our community*
- *Is evidence-based*

And FEASIBILITY...

- Is the intervention available? Manuals? Training?
- Is it affordable? Total costs include intervention materials Plus training costs and time Plus staffing Plus ongoing administration
- Can it be delivered without meeting small "p" political barriers?
- Consistent with existing policies; doesn't conflict with other existing programs, has organizational/ community support
- How does it fit within social or cultural norms and practices?

6.43

Say:

And, of course, is implementation of the intervention/policy feasible:

- *Is the intervention available? Are there manuals and training?*
- *Is the intervention affordable? What are the costs of the manual and training?*
- *Can it be delivered within the purview and interests of the community stakeholders?*
- *Will this conflict or duplicate other efforts, and will it have both organizational and community support?*
- *And, how does it fit within existing social and cultural norms and practices?*

Availability of Community Resources

- Inventory prevention or prevention-related services or resources that are available
- Develop tools to further explore the content of these services. For example:
  - What is the intent of the service? How is this related to prioritized needs? Examples:
    - Reducing access to alcohol
    - Improving post-natal outcomes by involving substance using mothers in prenatal care and parenting training
    - Referring students found with drugs for counseling
  - Who is served?
  - What services are delivered?
  - What measures are used to assess these services? Their reach?

6.44

Say:

Another task of Prevention Coordinators is to assess what substance use prevention or prevention-related services or resources are already available in the community.

An inventory of these services fulfills two functions. First, it provides an overview of not only actual substance use prevention programming, but also provides information on the other available social and health services that may support evidence-based substance use prevention interventions or policies

In addition to identifying these services, it is important to include in the inventory:

- *What is the intent of the services and are these related to the prioritized needs?*
- *What is the content of the services?*
- *Who is served?*
- *What actual services are delivered, and by whom?*
- *Is there any assessment available to determine not only the reach of services, but the outcomes of the services?*

Putting it Together

- Needs and services: Is there a match?
- Where are the gaps? Prioritize
- Make recommendations

6.45

Say:
With the needs assessment, priorities of needs and services, the inventory of available services, the next step is to put this together and identify gaps. On the basis of this analysis, recommendations for prevention interventions and policies can then be examined.

> ## Selecting a Prevention Strategy
>
> *One of the most significant steps in prevention planning*
>
> 6.46

Say:

Now, we come to the most significant of tasks for any Prevention Coordinator, selecting a prevention strategy. You will hear more about this process in the curriculum on systems for prevention interventions. But just a few words.

Implementation

- Accessing materials to determine necessary resources
- Check for training and technical assistance
- Establish/recruit sites
- Develop a plan to monitor implementation
    - Who will implement/deliver?
    - When will strategy be implemented? How long will it be in place?
    - What is the target population?
    - How will fidelity be determined? Barriers?

6.47

Say:

Therefore, once the interventions/policies have been selected, then, the Prevention Coordinator needs to address implementation issues, such as:

- *Access materials to determine necessary resources;*

- *Check for training and technical assistance;*

- *Establish/recruit sites; and*

- *Develop a plan to monitor implementation*

    - *Who will implement/deliver?*

    - *When will the strategy be implemented? How long will it be in place?*

    - *What is the target population?*

    - *How will fidelity be determined? Barriers?*

Implementation Schema-Influences

Program/Intervention Characteristics

Organizational/ Community Context

Dissemination And Diffusion → Adoption → Implementation Adaptation → Sustainability

Instructor/Implementer Characteristics

Source: Sloboda, Dusenbury, Petras, 2014

6.48
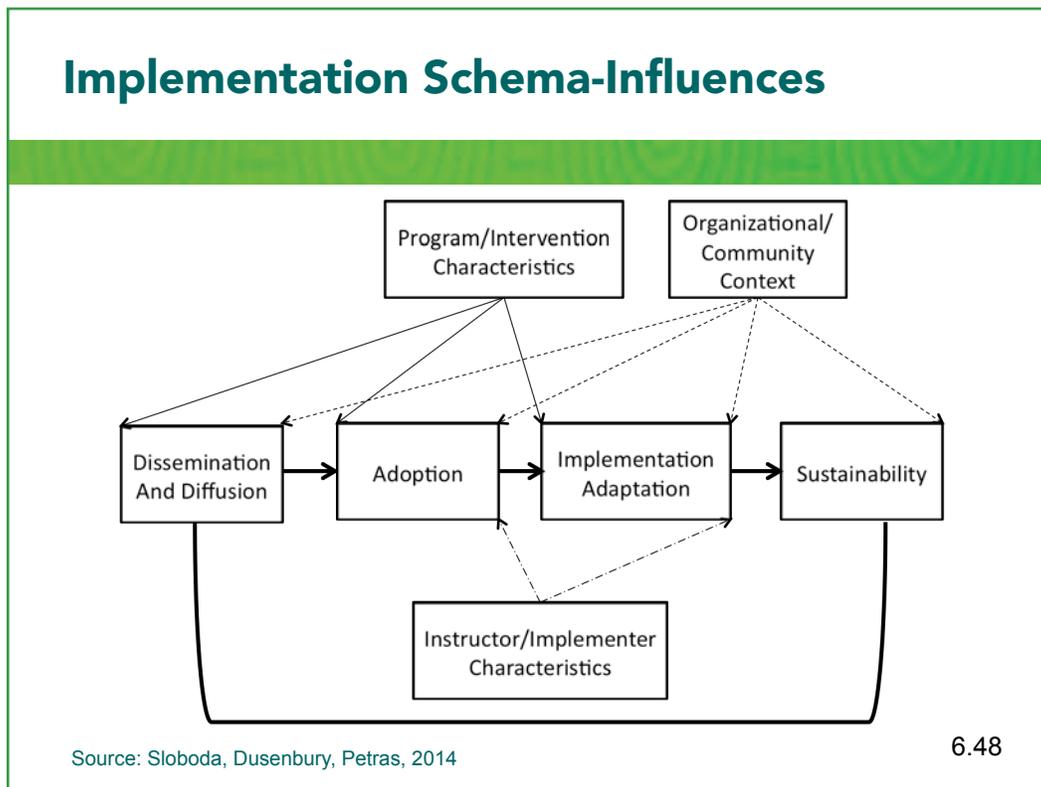
Say:

There are other issues that should be addressed in addition to these, particularly, if you want to institutionalize or sustain prevention programming over time. Implementation is not an end onto itself.

There are many definitions for implementation, and a new field of implementation science has been evolving over the past few years that is focused on specifying the key factors or processes that impact the implementation of evidence-based programs and practices.

In general, this literature has determined that there are at least four stages of implementation from dissemination and diffusion to adoption, that is when an organization or community selects an intervention to deliver, then to implementation or delivery to sustainability when the intervention becomes institutionalized.

The challenge has been that although prevention science has developed effective interventions and policies, they not only haven't been acknowledged; they are not implemented. This problem is not only an issue for social and health services, but also businesses and industry have had negative experiences when introducing a new method for production or even a new product.

What are the reasons for this? There are a number of factors that have been found to impede or enhance the movement of an innovation through from dissemination and

diffusion to adoption, from adoption to implementation and from implementation to sustainability. These relate not only to the characteristics of the intervention, but also, to the organizational and community context and to the characteristics of the implementer.

Just as examples of these factors:

- *A school-based substance use prevention curriculum introduces interactive instructional strategies that are new to a teacher or instructor;*

- *The intervention requires additional training and there is resistance of staff to receive training or to change how they generally carry out their activities;*

- *A health services administrator may not want to 'deal' with substance use issues or may be ideologically opposed to introducing substance use prevention into his or her setting; and*

- *Substance use may not be seen as a priority in a community.*

LARGE-GROUP EXERCISE:

Ask:
What types of barriers do you foresee in implementing, say, a school-based substance use prevention curriculum in your community?

> **Teaching Instructions:** Allow 5-10 minutes to raise these issues.
>
> How about introducing a home visitation program for new mothers in a local health care setting?

> **Teaching Instructions:** Allow 5-10 minutes to raise these issues.

Sloboda, Z., Dusenbury, L., & Petras, H. (2014) Implementation science and the effective delivery of evidence-based prevention. In Sloboda, Z. & Petras, H. (Eds.). Advances in Prevention Science. Volume 1: Defining Prevention Science. New York: Springer.

Monitoring and Evaluation

- Critical skills and competency of prevention coordinators
  - Monitoring Progress
  - Evaluating Outcomes
- Understanding the various methods to apply in the various settings for the various purposes

6.49

Say:

Another significant task of a Prevention Coordinator is monitoring and evaluation of the delivered prevention interventions. We will just skim this since we addressed this in Module 4. In addition, you will be covering this thoroughly in Curriculum 3.

As we mentioned earlier, you don't have to be the expert here, but YOU can bring on local experts who can assist in this ongoing responsibility. Our goal is to help you apply monitoring methods so you can assure that the interventions are delivered appropriately and with quality. We also want to ensure that you are familiar with the concepts and terminology, often used by evaluators, so that you are knowledgeable enough to become a significant part of the evaluation team.

Evaluation Process

- What was done in the program?
- How was the program carried out?
- Who participated in it?
- Was the program implemented as intended?
- Did the program achieve what was expected?
- Did the program produce the desired long-term effects?

6.50

Say: *As you know, these are the basic questions to ask and usually they are from the questions that arose when you were planning the program or policy, and which continue to be the guide to the monitoring function as the program continues:*

- *What was done in the program?*

- *How was the program carried out?*

- *Who participated in it?*

- *Was the program implemented as intended?*

- *Did the program achieve what was expected?*

- *Did the program produce the desired long-term effects?*

Data Collection Methods for Evaluation (1/2)

Methods	Techniques	Advantages	Disadvantages
General/ special population surveys	Face-to-face Telephone Mail	Prevalence rates Incidence rates Standardized, scientific Over time patterns Correlates & consequences of substance use	Expensive Misses chronic substance abusers, 'hidden' groups Special training needed
Use of existing data	Hospital admissions Infectious disease data ME death records Arrest reports	Readily available Inexpensive	Validity and representativeness Not population-based
	Drug abuse treatment admissions School records-academic performance, truancy, dropouts School & community policies re tobacco, alcohol sales, other data		Duplications Sensitive to administrative actions

6.51

Say:

Again, a reminder about the basic data collection methods involved in evaluation. The above chart summarizes some of the basic characteristics of the various evaluation methods you can use—to assess the baseline; measure progress; and, then, determine outcomes within a reasonable time-frame.

These methods are a combination of quantitative approaches, for example, the use of surveys and archival information, and qualitative approaches, such as key informant interviews that are presented in the next slide.

Each data collection method has advantages, but each also has disadvantages. Choosing one method over another is a matter of trade offs, mostly, in terms of costs and the level of confidence one has of the findings.

Data Collection Methods for Evaluation (2/2)

Methods	Techniques	Advantages	Disadvantages
Use of qualitative techniques Ethnographic Studies	Recruits individually or in groups; provides insight on: - Social context of substance use - Fleshes out quanti-tative data	Inexpensive Reach 'hidden populations' Special relevance to prevention	Not population-based Not always representative Special training needed
Key Informants & Focus Groups	**Possible Informants** treatment providers outreach or youth workers police officers emergency/hospital staff School staff active substance users researchers	Inexpensive Provides guide to basic concepts for messaging in terms of beliefs and attitudes Experts provide insights into data	Not representative Special training in facilitation is needed Recruitment is a challenge

6.52

Say:

Here is a listing of other qualitative methods including ethnographic studies, key informants, and focus groups. We will be discussing the use of these methods in the curriculum on monitoring and evaluation.

60 minutes

Small-group exercise: Community/country teams develop prevention strategies

---

Small-Group Exercise: Community/Country Teams Develop Prevention Strategies

- Assess the problem within a prevention framework (Who is vulnerable? What are the environmental factors that may be associated with the problem?)
- What community resources are available?
- What are the most appropriate evidence-based prevention interventions? Why did you make this selection?
- What is your implementation plan?
- What is your monitoring plan?
- What ethical considerations should you keep in mind when planning and implementing this prevention program?

6.53

 Say:

We have prepared four different community situations regarding substance use. You will recognize them from Module 2:

1. *Binge drinking by adolescents in public parks,*

2. *Drunk driving,*

3. *Increased number of children and adolescents coming to the emergency department of the local hospital because of cannabis use, and*

4. *Increased number of adolescents in possession of substances who are stopped by police.*

We will create teams of four people. Each of the four will receive a number. The person with number "1" will be the Prevention Coordinator, with number "2" the police chief, with number "3" the local business owner, and with number "4" a local citizen.

The Prevention Coordinator will serve as the leader of the group. You will have a list of questions to answer as you plan a prevention strategy and select prevention interventions and/or policies for your community, justifying your selection. Select one person in the group to present your plan to the larger group.

> **Teaching Instructions:** Allow about 45 minutes for this exercise. Have each group report to the full group for an additional 15 minutes.

Presentation: Supervisory skills

Slide 6.54

Say: *In this section of the module, we will be looking at Supervisory Skills.*

Supervision

- Organizing
- Staffing
- Leading
- Controlling

6.55

Say:
Among the other tasks that a Prevention Coordinator may have is supervision. Basically these tasks include:

- **Organizing**: Setting up the prevention team, allocating resources, and assigning work to achieve goals;

- **Staffing**: Identifying, hiring, and developing the necessary number and quality of employees, including providing training as needed;

- **Leading**: Influencing people to act (or not act) in a certain way; and

- **Controlling**: Monitoring performance and making needed corrections.

Supervisory Skills

- **Technical skills**: The specialized knowledge and expertise used to carry out particular techniques or procedures
- **Human relations skills**: The ability to work effectively with other people
- **Conceptual skills**: The ability to see the relation of the parts to the whole and to one another
- **Decision-making skills**: The ability to analyze information and reach good decisions

6.56

Say: *To achieve these tasks requires a number of skills. These are skills we mentioned in relation to communicating and relating to various community groups but they equally apply to the work setting. These include:*

- *Technical skills: The specialized knowledge and expertise used to carry out particular techniques or procedures;*

- *Human relations skills: The ability to work effectively with other people;*

- *Conceptual skills: The ability to see the relation of the parts to the whole and to one another; and*

- *Decision-making skills: The ability to analyze information and reach good decisions.*

Presentation and discussion: Professional ethics

Slide 6.57

Professional Ethics

6.57

Say:
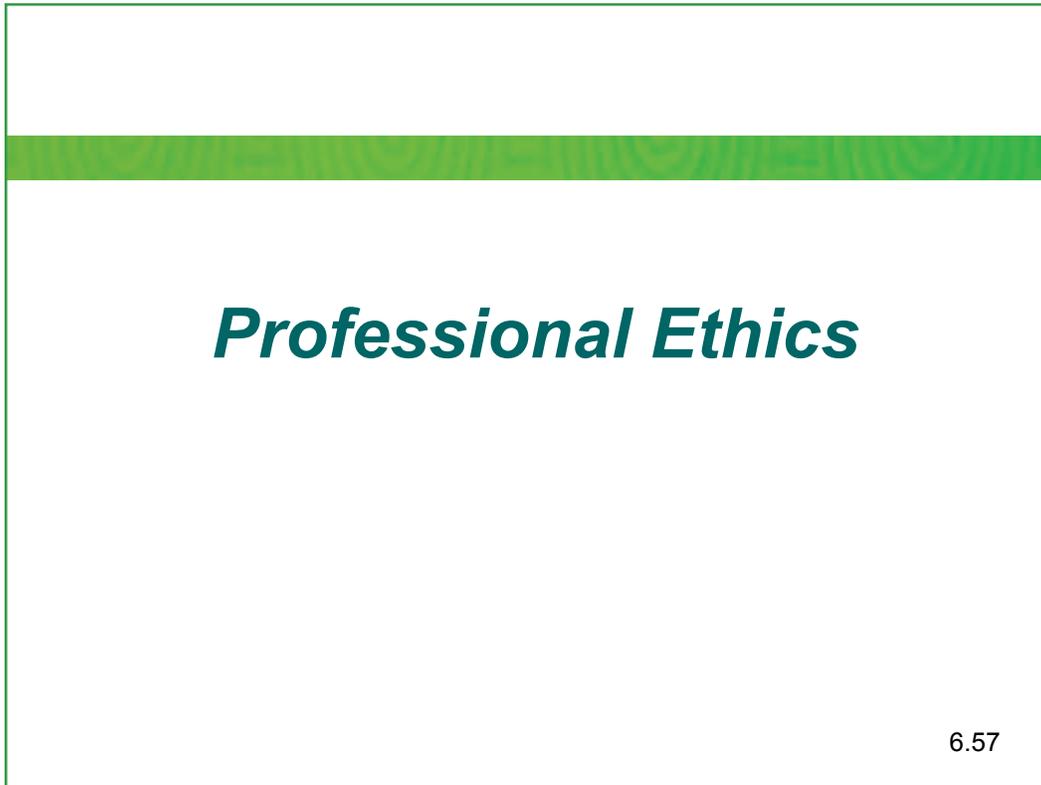
In this section of the module, we will be looking at Professional Ethics.

Professions and Codes of Ethics

Almost all professional groups have codes of ethics. Here are some examples:

- Medicine
- Social work
- Psychology
- Law
- Social science research
- Substance use treatment and prevention

6.58

Say:
In this section, we are going to explore some of the common themes related to ethics in the field of prevention. Various professional organizations have their own codes of ethics:

- *Medicine;*
- *Social work;*
- *Psychology;*
- *Law;*
- *Social science research; and*
- *Substance use treatment.*

Professional Ethics in Prevention

Models to guide behavior and decision-making in prevention:

■ The White and Popovits Model

■ Prevention Think Tank Model

6.59

Say:

Now, we turn to the area of professional ethics.

Professional ethical standards are based on values. Values are the basic beliefs that an individual thinks to be true, and are also seen as guiding principles in one's life or the bases on which an individual makes a decision. Clearly, the work of prevention involves decisions in regards to the treatment of others in the most important settings of their lives—the family, the school and the workplace. But, it also involves the community environment where policies and laws dictate legal and illegal behavior. The prevention practitioner needs to be guided by ethics and values that can help in these challenging areas of life.

In general, for the addiction field there are two sources on ethics. The White and Popovits Model based on the book by these two authors, Critical incidents: Ethical issues in the prevention and treatment of addiction. The other source specifically for prevention is the Prevention Think Tank Code of Ethical Conduct. You should have a copy of the latter document in your training materials.

In addition, the International Centre for Credentialing and Education of Addiction Professionals (ICCE) has developed a set of Ethical Guidelines (see Resource 6.2) for ICCE Credentialed Professionals.

White, W. L., & Popovits, R. M. (2001). Critical incidents: Ethical issues in the prevention and treatment of addiction. Bloomington, IL: Lighthouse Institute.

Elements of All Professional Codes

- Protecting clients by identifying scope of competency
- Doing no harm by acting responsibly and avoiding exploitation
- Protecting client, professional, and organizational confidentiality and privacy
- Maintaining the integrity of the profession

6.60

Say:

There are both similarities and differences among these codes and the codes used by local or national certifying or licensing boards. However, there are some common themes within all of these codes:

- *Protecting clients by identifying a professional's scope of competency;*

- *Doing no harm by acting responsibly and avoiding exploitation;*

- *Protecting client, professional, and organizational confidentiality and privacy; and*

- *Maintaining the integrity of the profession.*

Although these codes don't always provide a specific answer to a particular ethical dilemma, they all provide general guidance to both prevent and resolve ethical conflicts.

Professional Ethical Judgment

Even with an ethical code, there are instances of ambiguity. Therefore professional judgment is important to guide decisions. One needs:

■ Active knowledge of national, regional, and local regulations and laws

■ An established deliberative process

6.61

Say:

When professionals encounter limitations, competing demands, and differing goals, they must use their own professional judgment to discern the best course of action. No set of formal ethical principles, no matter how detailed they may be, can be a substitute for:

■ *An active knowledge of national, regional, and local regulations and laws; and*

■ *An established deliberative process.*

Definition of Code of Ethics

- White and Popovits[1] define those codes for professional practice as:

    "An explicitly defined set of beliefs, values and standards that guide organizational members in the conduct of activities in pursuit of the agency's mission"

- The Prevention Think Tank Code of Ethical Conduct states that:

    "These principles call for honorable behavior, even at the sacrifice of personal advantage"

Sources: White, W. L., & Popovits, R. M. (2001). Critical incidents: Ethical issues in the prevention and treatment of addiction. Bloomington, IL: Lighthouse Institute; Prevention Think Tank, IC&RC

6.62

Say:

As we discussed earlier, many professional associations have a code of ethics of some sort, and most professions have an organization that issues certification or licensure to practitioners who meet a particular set of standards, including affirmation of their code of ethics. White and Popovits[1] define those codes for professional practice as: "an explicitly defined set of beliefs, values and standards that guide organizational members in the conduct of activities in pursuit of the agency's mission"

In addition, a group of prevention professionals put together the Prevention Think Tank Code of Ethical Conduct. In the code, ethics is defined as … "honorable behavior, even at the sacrifice of personal advantage". You have the Prevention Think Tank Code of Ethical Conduct in your resource materials.

---

1 White, W. L., & Popovits, R. M. (2001). Critical incidents: Ethical issues in the prevention and treatment of addiction. Bloomington, IL: Lighthouse Institute.

Functions of Codes of Ethics: Internal

- Identifying values for members of the organization to strive for as they perform their duties
- Setting boundaries for both appropriate and inappropriate behavior
- Providing guidelines for staff members facing difficult situations encountered in the course of their work performance
- Communicating a framework for defining and monitoring relationship boundaries of all types
- Providing guidelines for day-to-day decision-making by all staff members and volunteers in the organization
- Protecting both the integrity and reputation of individual members of the organization (including both paid and volunteer staff) and of the organization itself
- Establishing high standards of ethical and professional conduct within the culture of the organization

6.63

Say:

White and Popovits describe both internal and external functions and purposes for such a code. Internal functions and purposes include:

- *Identifying values for members of the organization to strive for, as they perform their duties;*

- *Setting boundaries for both appropriate and inappropriate behavior;*

- *Providing guidelines for staff members facing difficult situations encountered in the course of their work performance;*

- *Communicating a framework for defining and monitoring relationship boundaries of all types;*

- *Providing guidelines for day-to-day decision-making by all staff members and volunteers in the organization;*

- *Protecting both the integrity and reputation of individual members of the organization (including both paid and volunteer staff) and of the organization itself; and*

- *Establishing high standards of ethical and professional conduct within the culture of the organization.*

Functions of Codes of Ethics: External

- Protect both the health and safety of clients, while promoting the quality of services provided to them
- Enhance public safety

6.64

Say: *The external purposes for an organizational code for professional practice are to:*

- *Protect both the health and safety of clients, while promoting the quality of services provided to them; and*

- *Enhance public safety.*

The Core of Ethics is Values

- What are values?
- They can be personal core beliefs that guide and motivate attitudes and actions
- They can be external related to one's:
  - Culture
  - Family
  - Organizational
  - Professional

6.65

Say: *Professional ethical standards are based on values. Values are the basic beliefs that an individual thinks to be true. Values also can be seen as guiding principles in one's life or the bases on which an individual makes a decision regarding good or bad, right or wrong, and most important or least important. Examples of personal values are:*

- *Family comes first;*

- *Be kind to others; and*

- *Keep learning.*

Every individual has a set of personal values that provides a basis for how he or she views the world. Values can also be cultural, guiding social behavior, or organizational, guiding business or other professional behavior. Examples of cultural values are:

Honor one's ancestors;

Obey one's parents; and

The good of "all" is more important than the good of "one."

Examples of organizational values are:

- *The customer is always right;*

- *Work hard; and*

- *Be honest.*

In a few minutes we're going to look at a list of values that William White thinks are critical bases for ethical decision-making. First, however, I'd like you to think about this issue of values on your own. Make a note of three values that you feel are most important in your work. We won't share these today, but, just by writing them down helps to make them "alive" to you.

Universal Values: White and Popovits

- Autonomy
- Obedience
- Conscientious Refusal
- Beneficence
- Gratitude
- Competence
- Justice
- Stewardship
- Honesty and Candor

- Fidelity
- Loyalty
- Diligence
- Discretion
- Self-improvement
- Non-maleficence
- Restitution
- Self-interest

6.66

Say: *White and Popovit's values are:*

- *Autonomy, what White describes as enhancing freedom of personal identity. Autonomy also can be defined as the capacity of a rational individual to make informed, uncoerced decisions;*

- *Obedience: Obeying legal and ethically permissible directives;*

- *Conscientious Refusal: Disobeying illegal or unethical directives;*

- *Beneficence: Helping others; non-discrimination by age, gender, or ethnicity;*

- *Gratitude: What White described as "giving back" or passing good along to others;*

- *Competence: Being knowledgeable and skilled;*

- *Justice: Being fair, distributing by merit;*

- *Stewardship: Using resources judiciously, wisely;*

- *Honesty and Candor: Telling the truth; being transparent;*

- *Fidelity: Not breaking promises;*

- *Loyalty: Not abandoning;*

- *Diligence: Working hard;*

- *Discretion: Respecting confidentiality and privacy;*

- *Self-improvement: Being the best that you can be;*

- *Non-maleficence: Not causing harm by considering the possible harm that any intervention might do and understanding that at times it may be better not to do something, or even to do nothing, than to risk causing more harm than good;*

- *Restitution: Making amends to persons injured; and*

- *Self-interest: Protecting yourself.*

Ethics

Ethics:

- Are principles that guide behavior defined by society or a professional group or organization
- Informs decision-making

6.67

Say:
Ethics are principles that guide behavior defined by society or a professional group or organization. Ethics, also, inform decision-making.

> ## "Prevention Think Tank" Code of Ethical Conduct
>
> - Principles of ethics are models of exemplary professional behavior
> - Responsibilities to
>   - The public
>   - Service recipients
>   - Colleagues within and outside of the prevention field
> - Guide performance of professional responsibilities and express the basic tenets of ethical and professional conduct
> - They are guided by the core values and competencies emerging from the development of the prevention field
>
> 6.68

Say:

For the field of prevention, the Prevention Think Tank developed a code of ethical conduct for Prevention Specialists that was accepted by the National Association of Prevention Professionals and Advocates (NAPPA).

These include:

- *Principles of ethics are models of exemplary professional behavior*

- *Responsibilities to:*

  - *The public*

  - *Service recipients*

  - *Colleagues within and outside of the prevention field*

- *Guide performance of professional responsibilities and express the basic tenets of ethical and professional conduct*

- *They are guided by the core values and competencies emerging from the development of the prevention field*

Principles of the Prevention Think Tank Code of Ethical Conduct

- Non-Discrimination
- Competence
- Integrity
- Nature of Services
- Confidentiality
- Ethical Obligations for Community and Society

6.69

Say: *The Prevention Think Tank Code of Ethical Conduct lays out six principles:*

- *Non-discrimination;*
- *Competence;*
- *Integrity;*
- *Nature of services;*
- *Confidentiality; and*
- *Ethical obligations for community and society.*

Ask: *Which of these is most important to you? Why?*

Teaching Instructions: Spend about 15 minutes on this discussion.

Non-Discrimination

Prevention professionals shall not discriminate against service participants or colleagues based on:

- Race
- Ethnicity
- Religion
- National origin
- Sex
- Age

- Sexual orientation
- Educational level
- Economic
- Medical condition
- Physical or mental ability

6.70

Say:

The first principle is non-discrimination. This principle not only applies to those who participate in prevention interventions or are impacted by prevention policies, but also, colleagues and other professionals with whom Prevention Specialists come in contact through their work.

Presentation: Professional competence and integrity

Professional Competence and Integrity

6.71

Say: *In this section of the module, we will be looking at Professional Competence and Integrity.*

Competence (1/3)

Prevention professionals shall:

- Master their prevention specialty's body of knowledge and skill competencies
- Strive continually to improve personal proficient and quality of service delivery
- Discharge professional responsibility to the best of their ability

6.72

Say:

Competence includes a synthesis of education and experience combined with an understanding of the cultures within which prevention application occurs.

Prevention professionals shall:

- *Master their prevention specialty's body of knowledge and skill competencies*

- *Strive continually to improve personal proficient and quality of service delivery*

- *Discharge professional responsibility to the best of their ability*

Maintaining one's competence requires continual learning and professional improvement throughout one's career.

Competence (2/3)

- Diligence, render services carefully, promptly, and thoroughly and to observe applicable standards
- Plan and supervise adequately and to evaluate any professional activity for which responsible
- Recognize limitations and boundaries of competence and not use techniques or offer services outside those boundaries and assess adequacy of competence for the assumed responsibility
- Prevention professionals should be supervised by competent senior prevention professionals or other competent prevention professionals

6.73

Say:

Competence addresses the delivery of service, planning and supervision of any professional activity for which the Prevention Coordinator is responsible, and, to recognize limitations and boundaries of one's own competence. Competency also relates to the supervision of prevention professionals.

Competence (3/3)

- When prevention professionals have knowledge of unethical conduct or practice on the part of another prevention professional, they have an ethical responsibility to report the conduct or practice to funding, regulatory or other responsible bodies
- Prevention professionals should recognize the effect of impairment on professional performance and should be willing to seek appropriate treatment

6.74

Say: *Furthermore, professionalism includes reporting any unethical conduct or practice on the part of our colleagues, and to recognize, in ourselves, any impairment that may impact the quality of our professional performance.*

Professional Integrity: Being Honest and Fair

- All information should be presented fairly and accurately with appropriate citations
- Prevention professionals should not misrepresent either directly or by implication professional qualifications or affiliations
- Where there is evidence of impairment in a colleague or service participant, prevention professionals should be supportive of assistance or treatment
- Prevention professionals should not be associated directly or indirectly with any service, product, individual, or organization in a way that is misleading

6.75

Say:

Integrity means the quality of being honest and fair (Merriam-Webster Dictionary). Being honest and fair applies to openly acknowledging sources of information that may be presented, as well as, how we represent our training, skills and experiences. It also applies to being supportive of our colleagues or service participants who may show evidence of impairment. In addition, prevention professionals should not be associated either directly or indirectly with any service, product, individual, or organization in a way that is misleading.

Nature of Services: Do No Harm

Services provided by prevention professionals shall be respectful and non-exploitive

■ Preserves and supports the strengths and protective factors inherent in each culture and individual

■ Use formal and informal structures to receive and incorporate input from service participants in the development, implementation, and evaluation of prevention interventions and policies

■ Where there is suspicion of abuse of children or vulnerable adults, prevention professionals shall report the evidence to the appropriate agency

6.76

Say:

The key to any prevention intervention or policy is DO NO HARM. Any prevention programming should preserve and support the strengths and protective factors that are inherent in each culture and individual. As indicated earlier, efforts should be made to include representatives from the target population. And, when there is any suspicion of abuse of either children or vulnerable adults, the evidence of this behavior should be reported to the appropriate agency.

Confidentiality

- Any information that is acquired during the delivery of a prevention intervention or policy shall be safeguarded including:
  - Any verbal disclosure
  - Unsecured maintenance of records or recording of any activity or presentation without appropriate releases
- Prevention professionals shall be aware of all State and National confidentiality regulations relevant to their prevention specialty and be responsible for adhering to such regulations

6.77

Say:

In many cases, a prevention professional may hear or see personal information. It is important that information be safeguarded and not revealed. The definition of this type of information is available under local, state, and national regulations. All prevention professionals should be aware of what these regulations state and be responsible for adherence to these regulations.

Ethical Obligations for Community and Society

- "According to their conscience, prevention professionals should be proactive on public policy and legislative issues"
- Prevention professionals when appropriate, should educate the general public and policy-makers about the public's welfare, individual's right to services and personal wellness
- Prevention professionals should adopt a personal and professional stance that promotes health

6.78

Say:

In addition to their obligations to those who participate in prevention interventions and policies and their colleagues, prevention professionals have ethical obligations to their communities and societies. They should be proactive on public policy and legislative issues. They should educate the general public and policy-makers about the public's welfare, individual's right to services and personal wellness. And, they should adopt a personal and professional stance that promotes health.

Individual review and large-group discussion: What would you do?: Ethics case studies

Slide 6.79

Large-Group Discussion: What Would You Do? Case Studies on Ethics

- Review the case studies
- Take notes on "what you would do"
- Large-group discussion

6.79

Say:

To wrap our sessions in regard to ethics and professionalism, we would like you to review and consider some of the following case studies in regard to some of the principles of ethics we've been talking about in this module. So, please review the case studies and write notes about what you would do if faced with these situations. We'll discuss these as a group in about 20 minutes.

Ethics Case Studies (1/4)

Case Study 1

You and three of your colleagues just hosted a community meeting about substance use among adolescents. After the meeting, the four of you go out for dinner. Two of the group order wine with their meals.

1. Is there an issue or concern about your two colleagues? Explain
2. What ethic's rule or guide applies?
3. What additional information do you need, if any?

6.80

Say:

Let's review Ethics Case Study 1.

Ethics Case Studies (2/4)

Case Study 2

You work for a local drug use prevention program, which is a small, non-profit NGO that provides prevention services. Your boss just had a very successful meeting with Blackbeard, a local rum factory, which is a leading industry in your area. Blackbeard is interested in supporting a responsible drinking education program. Your boss is enthusiastic but is asking you for advice about pursuing the project.

1. Should your program apply to Blackbeard for funding an alcohol education program?
2. What are the implications of accepting a grant from Blackbeard?
3. What ethic's rule or guide applies?
4. What additional information do you need, if any?

6.81

Say:

Let's review Ethics Case Study 2.

Ethics Case Studies (3/4)

Case Study 3

The director of a local school has developed a drug use prevention curriculum that consists of presentations by recovered drug abusers about their lives while abusing drugs, by a representative of the local police who talks about recent drug-related arrests, and by a local doctor on the health consequences of drug and alcohol use. The school director has provided this program for five years. He wants your NGO to deliver his program in his and other local schools. He has funding to support the expansion of the program.

1. Should your NGO consider the offer? How does your knowledge gained from this curriculum about evidence-based practices affect your thinking about this project? Explain.

2. What is your NGO's ethical obligation to the community?

3. What ethic's rule or guide applies?

4. What additional information do you need, if any?

6.82

Say:

Let's review Ethics Case Study 3.

Ethics Case Studies (4/4)

Case Study 4

While eating out at a local restaurant with friends, you see one of your prevention colleagues at the bar. He appears to be drunk and is loud and aggressive. The bar- tender tries to calm him down and offers to call a cab to take him home. There have been rumors about his drinking, however, you never witnessed this behavior before.

1. Is there an issue of concern? Explain
2. What ethic's rule or guide applies?
3. What additional information do you need, if any?

6.83

Say:

Let's review Ethics Case Study 4.

Module 6 evaluation

Slide 6.84

Say: *Thank you all for your great participation!*

Please be sure to complete the module 6 evaluation form before we start module 7.

Resource Page 6.1: Prevention Think Tank Code of Ethical Conduct

Preamble

The principles of ethics are models of exemplary professional behavior. These principles of the Prevention Think Tank Code express prevention professionals' recognition of responsibilities to the public, to service recipients, and to colleagues within and outside of the prevention field. They guide prevention professionals in the performance of their professional responsibilities and express the basic tenets of ethical and professional conduct. The principles call for honorable behavior, even at the sacrifice of personal advantage. These principles should not be regarded as limitations or restrictions, but as goals toward which prevention professionals should constantly strive. They are guided by core values and competencies that have emerged with the development of the prevention field.

Principles

I. Non-Discrimination

Prevention professionals shall not discriminate against service recipients or colleagues based on race, ethnicity, religion, national origin, sex, age, sexual orientation, education level, economic or medical condition, or physical or mental ability. Prevention professionals should broaden their understanding and acceptance of cultural and individual differences and, in so doing, render services and provide information sensitive to those differences.

II. Competence

Prevention professionals shall master their prevention specialty's body of knowledge and skill competencies, strive continually to improve personal proficiency and quality of service delivery, and discharge professional responsibility to the best of their ability. Competence includes a synthesis of education and experience combined with an understanding of the cultures within which prevention application occurs. The maintenance of competence requires continual learning and professional improvement throughout one's career.

   a. Prevention professionals should be diligent in discharging responsibilities. Diligence imposes the responsibility to render services carefully and promptly, to be thorough, and to observe applicable standards.

   b. Due care requires prevention professionals to plan and supervise adequately, and to evaluate any professional activity for which they are responsible.

   c. Prevention professionals should recognize limitations and boundaries of their own competence and not use techniques or offer services outside those boundaries. Prevention professionals are responsible for assessing the adequacy of their own competence for the responsibility to be assumed.

d. Prevention professionals should be supervised by competent senior prevention professionals. When this is not possible, prevention professionals should seek peer supervision or mentoring from other competent prevention professionals.

e. When prevention professionals have knowledge of unethical conduct or practice on the part of another prevention professional, they have an ethical responsibility to report the conduct or practice to funding, regulatory or other appropriate bodies.

f. Prevention professionals should recognize the effect of impairment on professional performance and should be willing to seek appropriate treatment.

III. Integrity

To maintain and broaden public confidence, prevention professionals should perform all responsibilities with the highest sense of integrity. Personal gain and advantage should not subordinate service and the public trust. Integrity can accommodate the inadvertent error and the honest difference of opinion. It cannot accommodate deceit or subordination of principle.

a. All information should be presented fairly and accurately. Prevention professionals should document and assign credit to all contributing sources used in published material or public statements.

b. Prevention professionals should not misrepresent, either directly or by implication, professional qualifications or affiliations.

c. Where there is evidence of impairment in a colleague or a service recipient, prevention professionals should be supportive of assistance or treatment.

d. Prevention professionals should not be associated, directly or indirectly, with any service, product, individual, or organization in a way that is misleading.

IV. Nature of Services

Practices shall do no harm to service recipients. Services provided by prevention professionals shall be respectful and non-exploitive.

a. Services should be provided in a way that preserves and supports the strengths and protective factors inherent in each culture and individual.

b. Prevention professionals should use formal and informal structures to receive and incorporate input from service recipients in the development, implementation and evaluation of prevention services.

c. Where there is suspicion of abuse of children or vulnerable adults, prevention professionals shall report the evidence to the appropriate agency.

V. Confidentiality

Confidential information acquired during service delivery shall be safeguarded from disclosure, including—but not limited to—verbal disclosure, unsecured maintenance of records or recording of an activity or presentation without appropriate releases. Prevention professionals are responsible for knowing and adhering to the State and Federal confidentiality regulations relevant to their prevention specialty.

VI. Ethical Obligations for Community and Society

According to their consciences, prevention professionals should be proactive on public policy and legislative issues. The public welfare and the individual's right to services and personal wellness should guide the efforts of prevention professionals to educate the general public and policy-makers. Prevention professionals should adopt a personal and professional stance that promotes health.

I have read and understand the Prevention Think Tank Code of Ethical Principles. I will, to the best of my ability, adhere to and honor this Code in my professional and personal dealings.

Date _____   Signature

Printed name: _____

Revised September 2003

Contact the Prevention Think Tank at pttinc@preventionthinktank.org

Resource Page 6.2: Ethical Guidelines For Addiction Professionals Credentialed by The International Center for Credentialing and Education of Addiction Professionals (ICCE)

The International Center for Credentialing and Education of Addiction Professionals has developed a code of ethics to which all addiction professionals credentialed by ICCE conforms to and to which it holds them accountable. In dealing with their clients, whether in the prevention or treatment field, addiction professionals often experience situations that call for ethical decision-making in which there may be no specific answers. The ICCE Ethical Guidelines for Addiction Professionals that is aimed at helping addiction professionals credentialed by ICCE make and communicate ethical decisions expanded by the following guidelines:

"I do affirm

That in the practice of my profession, I shall assert the ethical principles of autonomy and justice as a guide to my professional conduct;
That I shall not discriminate against clients based on race, religion, age, gender, disability, nationality, sexual orientation or economic condition;
That I shall maintain objectivity and integrity and uphold the highest standard in the services I offer;
That I recognise the profession is founded on national standards of competency which promote the best interest of my client, of myself, of the profession and the society. I also recognise the need for ongoing education as a component of professional competency;
That I shall respect the best interest and promote the welfare of the person or group with whom I am working with;
That I shall protect client rights and shall not disclose confidential information acquired during treatment, teaching or investigations without an executed consent;
That I shall safeguard the integrity of the counselling relationship and shall ensure that the client has reasonable access to effective treatment;
That I shall not exploit the current or former clients in any manner for personal or agency gains;
That I shall not under any circumstances involve in sexual/romantic, business relationship with current or former clients;
That I shall terminate the counselling relationship when it is not benefitting the client
That I shall uphold the legal and accepted codes of conduct which pertain to my profession;
That I shall not give false assurances or make comments or public statements which are not reflective of the current scientific understanding of substance use disorder and its treatment;
That I shall assign credit to all who have contributed to the published material and for the work upon which the publication is based;

That I shall abide and uphold these standards in the conduct of my profession. Any violation thereof shall be subject to disciplinary action from the Committee or revocation of my credential. "

I shall not use or abuse any illicit substances

"I agree to the above ethical guidelines as an ICCE Credentialed Addiction Professional."

Signature

Name:

Date:

Resource Page 6.3: Ethics Case Studies

Case Study 1: You and three of your colleagues just hosted a community meeting about substance use among adolescents. After the meeting, the four of you go out for dinner. Two of the group order wine with their meals.

1. Is there an issue or concern about your two colleagues? Explain.

2. What ethic's rule or guide applies?

3. What additional information do you need, if any?

4. What additional information do you need, if any?

Case Study 2: You work for a local drug use prevention program, which is a small, non-profit NGO that provides prevention services. Your boss just had a very successful meeting with Blackbeard, a local rum factory, which is a leading industry in your area. Blackbeard is interested in supporting a responsible drinking education program. Your boss is enthusiastic, but is asking you for advice about pursuing the project.

1. Should your program apply to Blackbeard for funding an alcohol education program?

2. What are the implications of accepting a grant from Blackbeard?

3. What ethic's rule or guide applies?

4. What additional information do you need, if any?

Case Study 3: The director of a local school has developed a drug use prevention curriculum that consists of presentations by recovered drug abusers about their lives while abusing drugs, by a representative of the local police who talks about recent drug-related arrests, and by a local doctor on the health consequences of drug and alcohol use. The school director has provided this program for five years. He wants your NGO to deliver his program in his and other local schools. He has funding to support the expansion of the program.

1. Should your NGO consider the offer? How does your knowledge gained from this curriculum about evidence-based practices affect your thinking about this project? Explain.

2. What are the implications of accepting a grant from Blackbeard?

3. What ethic's rule or guide applies?

4. What additional information do you need, if any

Case Study 4: While eating out at a local restaurant with friends, you see one of your prevention colleagues at the bar. He appears to be drunk and is loud and aggressive. The bartender tries to calm him down and offers to call a cab to take him home. There have been rumors about his drinking, however, you never witnessed this behavior before.

1. Is there an issue of concern? Explain

2. What ethic's rule or guide applies?

3. What additional information do you need, if any?

Case Study 5: You have been delivering a school-based substance use prevention program in your local school over the last two weeks. Today after the other students leave, one boy stays behind to talk with you. He tells you that his friend has been smoking marijuana when he visits the student's house on the weekends. He is concerned and doesn't know what to do and is asking for your help.

1. Is there an issue of concern? Explain

2. What ethic's rule or guide applies?

3. What additional information do you need, if any?

4. What do you do?

MODULE 7

REVIEW OF INTRODUCTION TO PREVENTION SCIENCE: APPLICATION TO PRACTICE

Module 7 Preparation Checklist

■ Review Getting Started for general preparation information.

■ Preview Module 7. Be familiar with the instructions for the exercises in this module.

Content and Timeline		
Activity	*Time*	*Person Responsible*
Introduction to Module 7 and review of exercise	15 minutes	
Small-group exercise: Development of a plan to organize a preventive intervention in your country or community to integrate learning from this introductory curriculum	60 minutes	
Lunch	60 minutes	
Large-group discussion: Review of plans, approaches to overcoming barriers, and general Q & A session	45 minutes	
Overall training evaluation	30 minutes	
Program completion ceremony and socializing	30 minutes	

Module 7 Goals and Objectives

Training goals

- To encourage participants apply their knowledge about evidence-based (EB) prevention to their own practice;

- To help them think about opportunities and barriers to bringing prevention to their area; and

- To provide the opportunity to network with other participants when they return home.

Learning objectives

Participants who complete Module 7 will be able to:

- Complete a draft community or country plan that will describe the steps needed to implement evidence based prevention in their area; and

- Network with other participants when they leave training through email and other communication mechanisms.

Introduction to module 7 and review of exercise

Slide 7.1

Say:
In this module, we will review what we learned in this curriculum, Introduction to Prevention Science and apply to our practice.

Training Goals

- To encourage participants to apply their knowledge about evidence-based (EB) prevention to their own practice
- To help them think about opportunities and barriers to bringing prevention to their area
- To provide the opportunity to network with other participants when they return home

7.2

Say: *Overall, the training goals for the module are:*

- *To encourage participants to apply their knowledge about evidence-based (EB) prevention to their own practice;*

- *To help them think about opportunities and barriers to bringing prevention to their area; and*

- *To provide the opportunity to network with other participants when they return home.*

Learning Objectives

- Participants will complete a draft community or country plan that will describe the steps needed to implement evidence-based prevention in their area
- Participants will be encouraged to network with other participants when they leave training through email and other communication mechanisms

7.3

Say: *The learning objectives are:*

- *Participants will complete a draft community or country plan that will describe the steps needed to implement evidence-based prevention in their area*

- *Participants will be encouraged to network with other participants when they leave training through email and other communication mechanisms.*

60 minutes

Small-group exercise: Development of a plan to organize a preventive intervention in your country or community to integrate learning from this introductory curriculum

Slide 7.4

Small-group Exercise: Community or Country Prevention Plan

- Assessment of the problem
- Availability of community resources
- Selection of prevention intervention programming
- Implementation
- Monitoring and evaluation
- Ethical considerations:
  - Non-Discrimination
  - Competence
  - Integrity
  - Nature of Services
  - Confidentiality
  - Ethical Obligations for Community and Society

7.4

Say:

This is our final exercise for Curriculum 1. We want you to take all of the information you gained in this curriculum and develop a community or country prevention intervention plan to address some of the substance use problems you have in your area.

Say:

In this slide, we present the broad topics to be covered:

- *Assessment of the problem;*

- *Availability of community resources;*

- *Selection of prevention intervention programming;*

- *Implementation;*

- *Monitoring and Evaluation;*

- *Ethical considerations:*

  - *Non-Discrimination;*

  - *Competence;*

  - *Integrity;*

  - *Nature of Services;*

  - *Confidentiality; and*

  - *Ethical Obligations for Community and Society.*

You will have one hour to complete this plan. We will break after one hour and then take about 45 minutes for some of you to present your plans to the full group. We encourage you to take notes during the session.

Large-group discussion: Review of plans,approaches to overcoming barriers, and general Q & A session

Slide 7.5

Large-group Discussion: Review of Community or Country Plans

7.5

Say: *We have about 45 minutes for you to present your plans to the full group. We encourage you to take notes during the session, since we're sure there will many good ideas you will want to incorporate, as well.*

Networking Opportunities

- Exchange email addresses, telephone numbers, and regular addresses to keep in touch
- Training staff will be happy to answer questions as well

7.6

Say:

Now that we've heard everyone's plans, many of you may want to be in touch with each other as you begin the process of implementing some of these ideas that you share. Please feel free to contact each other after training. Participants have made their emails and other contact information available to you. Training staff have also expressed interest in providing guidance questions about the information we've shared with you.

![30 minutes] 30 minutes

Overall evaluation

Slide 7.7
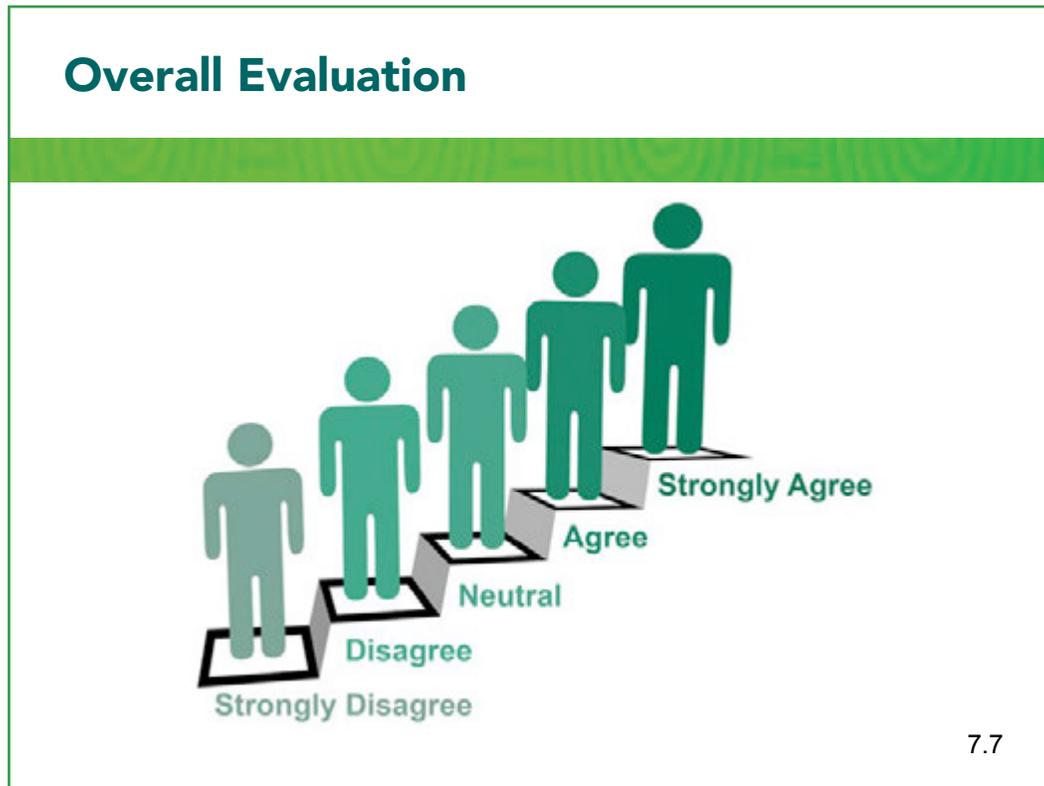
Say: *Thank you all for your great participation today!*

Please be sure to complete the overall evaluation form before you leave.

Program completion ceremony and socializing

Say:
Thank you for actively participating in the training. Your commitment to enhancing your practice is admirable, and you deserve this completion ceremony

> **Teaching Instructions:** Call each participants by name and present each participant with personalized Training Completion Certificate.
>
> Encourage participants to applaud one another.
>
> Invite participants to stay for refreshment and socializing.

APPENDIX A—LEARNER-CENTERED TRAINER SKILLS

When delivering this curriculum in a way that matches adult learning theory, trainers need to know and use both "platform" skills and "facilitation" skills.

Platform Skills

Platform skills include how one presents, both verbally and visually.

Verbal platform skills for good trainers include the following:

- Eliminate weak words/phrases, such as "sorta" and "later."

- Replace nonwords (like "um," "ah," and "er") with pauses.

- Use vivid language.

- Use simple and direct language.

- Emphasize beginnings and endings; transitions are important.

- Project your voice so everyone can hear, but not too loud.

- Vary vocal pitch and inflection for emphasis.

- Vary vocal pace and rhythm to keep participants' attention.

- Use pauses for emphasis and to allow participants to think about what was just said.

- Enunciate clearly.

- Practice breath control for smooth delivery.

- Be natural; loosen up (keep training serious, but also fun).

Visual platform skills include the following:

- Stand up straight and confidently.

- Move around the room to talk with all participants, but don't move so much that it is distracting.

- If it is culturally appropriate, use eye contact to keep participants' attention.

- Use hand gestures for emphasis, but not to the point of distraction.

- Vary facial expressions for emphasis and to indicate your own interest.

- Maintain a "match" between visual and verbal elements.

Facilitation Skills

Rather than simply provide information and give answers to questions, facilitating trainers create a positive and productive environment that supports learning. The good facilitator:

- Defines his or her role for participants;
- Is positive;
- Doesn't judge;
- Focuses participants' energy on a task;
- Suggests methods or procedures for accomplishing the task;
- Protects individuals and their ideas from attack;
- Helps find win/win solutions by seeking agreement on problems and process;
- Gives everyone an opportunity to participate;
- Resists the temptation to give immediate advice and offer solutions by redirecting questions back to the group; and
- Is not afraid to make mistakes.

Effective communication skills for facilitators include:

- Listening with full focus on the speaker;
- Focusing the training group's attention;
- Recognizing progress;
- Scanning/observing;
- Modeling;
- Summarizing; and
- Using silence appropriately.

The "ideal" facilitator was defened by Karger.[1] Although he was writing about facilitating marketing focus groups, his principles are apt for training facilitation as well. His definition (with terms modified slightly) is as follows:

> The best facilitator has unobtrusive chameleon-like qualities; gently draws group members into the process; deftly encourages them to interact with one another for optimum synergy; lets the dialogue flow naturally with a minimum of intervention; listens openly and deeply; uses silence well; plays back group member statements in a distilling way that brings out more refined thoughts or explanations; and remains completely nonauthoritarian and nonjudgmental. Yet the facilitator will subtly guide the proceeding when necessary and intervene to cope with various kinds of troublesome participants who may impair the productive group process. (p. 54)

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1 Karger, T. (1987). Focus groups are for focusing, and for little else. Marketing News, (21), 52–57.

APPENDIX B—DEALING WITH DIFFICULT PARTICIPANTS DURING TRAINING

During the course of training, you may encounter participants who display difficult or challenging behavior. As the trainer, you have the responsibility of ensuring a comfortable and safe environment for the other members of the group. Remember the following points:

- Project confidence and good humor.

- Be prepared.

- Don't take it personally.

- Use effective communication skills.

- Avoid an authoritarian/lecturing approach.

- Have clear guidelines for the group.

- Avoid sarcasm.

- Be patient and polite.

- Redirect.

- Assess whether you need to change your approach.

- Ignore "bad" attitude.

You will encounter a range of learning styles across the group. If possible, try to establish the expectations of the participants and incorporate different strategies to meet these expectations in a range of ways to engage all learning styles.

Prevention and Early Interventions

- Make the environment comfortable and the program interesting.

- Explore participants' motivations for being in the group.

- Establish group rules and boundaries.

- Involve participants in decision-making.

- Establish a positive relationship and encourage relationships in the group—modeling.

Source: Government of Queensland, Australia, Brisbane North Institute of Technical and Further Education.

- Aim your intervention at the behavior and consequences, not at the person (the same principle applies for groups and individuals).

- The intention isn't to apportion blame; it's to resolve the problem.

Coping Strategies

- Assess the situation—keep yourself and participants safe.

- Ignore negative or non-damaging behavior.

- Remain calm—don't argue with the other person or make accusations; be discreet.

- Avoid ultimatums.

- Use active listening skills to check your understanding of the situation.

- Refer back to group rules set up at the beginning of the session—what behavior will or will not be accepted—and don't get pushed beyond this limit.

- Be persistent and consistent in your response, which conveys to the difficult person that you mean what you say.

- Provide an opportunity for time out or a private chat.

- Believe in yourself and your ability to deal with others.

- Look for ways to reduce the causes of the behavior.

- Monitor the effectiveness of your coping strategy, modifying it where appropriate.

- Assess the impact on others.

- Seek advice if necessary.

Behavior The participant is:	Possible Reasons The participant may be:	What To Do
Overly talkative—to the extent that others do not have an opportunity to contribute.	- An "eager beaver." - Exceptionally well-informed. - Naturally wordy. - Nervous.	- Interrupt with "That's an interesting point. Let's see what everyone else thinks." - Directly call on others. - Suggest, "Let's put others to work." - When the person stops for a breath, thank him or her, restate pertinent points, and move on.

Behavior The participant is:	Possible Reasons The participant may be:	What To Do
Argumentative—to the extent that others' ideas or opinions are rejected, or others are treated unfairly.	■ Seriously upset about the issue under discussion. ■ Upset by personal or job problems. ■ Intolerant of others. ■ Lacking in empathy. ■ A negative thinker.	■ Keep your temper in check. ■ Try to find some merit in what's being said; get the group to see it, too; then move on to something else. ■ Talk to the person privately and point out what his or her actions are doing to the rest of the group. ■ Try to gain the person's cooperation. ■ Encourage the person to concentrate on positives, not negatives.
Engaging in side conversations with others in the group.	■ Talking about something related to the discussion. ■ Discussing a personal matter. ■ Uninterested in the topic under discussion.	■ Direct a question to the person. ■ Restate the last idea or suggestion expressed by the group, and ask for the person's opinion.
Unable to express himself or herself so that everyone understands.	■ Nervous, shy, excited. ■ Not used to participating in discussions.	■ Rephrase, restating what the person said and asking for confirmation of accuracy. ■ Allow the person ample time to express himself or herself. ■ Help the person along without being condescending.

Behavior The participant is:	Possible Reasons The participant may be:	What To Do
Always seeking approval.	■ Looking for advice. ■ Trying to get the trainer to support his or her point of view. ■ Trying to put the trainer on the spot. ■ Having low self-esteem.	■ Avoid taking sides, especially if the group will be unduly influenced by your point of view. ■ Show support without favoritism.
Bickering with another participant.	■ Carrying on an old grudge. ■ Feeling very strongly about the issue.	■ Emphasize points of agreement and minimize points of disagreement. ■ Direct participants' attention to the objectives of the session. ■ Mention time limits of the session. ■ Ask participants to shelve the issue for the moment.
Uninvolved and unwilling to commit to new tasks.	■ Lazy. ■ Too busy already. ■ Feel he or she should not have been made to attend the session in the first place. ■ Unaware of his or her own skills and abilities.	■ Ask the person to volunteer for tasks (others in group must volunteer as well). ■ Clearly explain the purpose of the training and the benefits to individuals and the organization. ■ Identify how the outcomes can be applied in the workplace. ■ Privately ask why the person won't become involved and is unwilling to commit to new tasks. ■ Provide constructive feedback and provide reassurance and encouragement.

Dealing with difficult behavior can be emotionally tiring. Caring for yourself during this time is vital to the effective management of the situation:

- Recognize the effect an interaction has on you.

- Allow yourself recovery time.

- Be aware of things that help you recover effectively and quickly.

- Use your co-trainer for support.

APPENDIX C—GLOSSARY

adaptation	Modification of program content to accommodate the needs of a specific consumer group.
brief interventions	Systematic, focused processes that aim to investigate potential substance use and motivate individuals to change their behavior. The goal is to reduce risky substance use before the individual becomes dependent or addicted.
cognitive skills	The ability for people to think for themselves and address problems in a reasoned way, conceptualize and solve problems, and draw conclusions and come up with solutions through analysis.
collaborative evaluation	A collaborative approach involves both parties, the program staff and the evaluation staff--they become a team. Other members of the team under a collaborative model may include stakeholders with an interest in the outcomes of the prevention intervention. However, it is important that team roles, activities, responsibilities and interactions are well-defined.
contract	An agreement similar to a memorandum of understanding, creating obligations enforceable by law.
drug testing	Chemical analysis of biological samples (including blood, urine, hair, and sweat) to detect the presence of drug or their metabolites.
demand reduction	Preventing or at least delaying youths' substance use by attempting to instill anti-substance use values, norms, beliefs and attitudes, and by giving them the skills to say "no" effectively to peers who may invite them to use substances.
EAP	Employee Assistance Program – An employer-sponsored service designed for personal or family problems, including mental health, substance abuse, various addictions, marital problems, parenting problems, emotional problems, or financial or legal concerns.
effectiveness trials	Tests whether interventions are effective under "real-world" conditions or in "natural" settings. Effectiveness trials may also establish for whom, and under what conditions of delivery, the intervention is effective.

efficacy	Efficacy is the extent to which an intervention (technology, treatment, procedure, service, or program) does more good than harm when delivered under optimal conditions.
evaluation	A rigorous and independent assessment of either completed or ongoing activities.
evidence-based practice	Systematic decision-making processes or provision of services which have been shown, through available scientific evidence, to consistently improve measurable client outcomes. Instead of tradition, gut reaction or single observations as the basis of decision-making, EBP relies on data collected through experimental research and accounts for individual client characteristics and clinician expertise. (Evidence Based Practice Institute, 2012; http://depts.washington.edu/ebpi/)
executive functions	Includes those areas of the brain involved in decision-making, planning, awareness of time and skills, the evaluation of new ideas, engagement with others, and controlling impulsivity--areas most involved in the perception of future consequences, social interactions, and risky decisions leading to behavioral problems.
external validity	The extent to which the outcomes from a prevention intervention can be transferred to another population or condition.
internal validity	The extent to which the outcomes from a prevention intervention can be accredited to the intervention itself.
intervention	Focuses on altering trajectories by promoting positive developmental outcomes and reducing negative behaviors and outcomes.
intervention content	The objectives of the intervention and has to do with what information, skills, and strategies are used to achieve the desired objectives. For example, inclusion of both peer refusal skills and social norm development, inclusion of family communications training.

intervention delivery	How the intervention or policy is to be implemented and how the intervention or policy is expected to be received by the target audience. For example use of interactive instructional strategies for adolescents and adults, offering parenting skills programs at times that are convenient for families, monitoring the implementation of an intervention or policy to enhance fidelity to the intervention's core elements.
intervention fidelity	The measure of how closely an intervention was delivered compared to how delivery was originally planned. Implementation quality is often quantified with measures of fidelity, dose, quality of delivery, and elements added to the intervention protocol.
intervention mediators	The factors that the intervention intends to manipulate and that are directly linked to the desired outcomes.
intervention structure	How the prevention intervention or policy is organized and constructed. For example, the necessary number of sessions or boosters; the organization of sessions.
intervention-types	Universal: For those who represent a mixture of user groups, however most are non-users. Selective: For those who are vulnerable as a group—e.g., the children of abusers, or determined to be at-risk. Indicated: For those who may have already initiated substance use but do not need treatment.
macro-level environments	Examples: social and physical environments/neighborhood, economy, political environment, social and natural disasters.
micro-level environments	Examples: family, peers, school administrators, religious leaders, workplace administrators and colleagues.
monitoring (process evaluation)	The ongoing process by which stakeholders obtain regular feedback on the progress being made towards achieving their goals and objectives.
motivation, extrinsic	Source for motivation comes from outside the person and task, including expectation for reward, fear of punishment, avoiding embarrassment.
motivation, intrinsic	Source comes from within the person, like enjoyment, or for its own sake.

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outcome evaluation	The purpose of the outcome evaluation is to characterize the extent to which the knowledge, attitudes, behaviors, and practices have changed for those individuals or entities who received the intervention or who were targeted by the policy compared to non-recipients (often thought of as short- and intermediate-outcomes). Long-term outcomes relate to the desired end-product of the intervention in our case reduced or elimination of substance use. Often, evaluations end with the long-term outcomes.
personal characteristics	Include: genetics, temperament, and physiology.
probability sampling	With probability sampling all units, persons, households etc. in the study population have an opportunity of being included in the sample. The mathematical probability that any one of them will be selected, can be calculated.
process evaluation (monitoring)	The purpose of a process evaluation is to characterize the process through which an intervention or policy is implemented. It focuses on inputs and outputs of the program, quantifying the dosage of the intervention, the implementation fidelity, and its ability to affect change.). It is a way of monitoring what is happening when the intervention or policy is implemented as intended, according to a manual or guidelines and a strategic plan.
protective factors	Characteristics that reduce the likelihood of substance use.
reliability of a measurement	How stable are the measurements when repeated over time? Also termed, consistency.
research	Research is a defined as "a systematic investigation, including development, testing and evaluation, designed to develop or contribute to generalizable knowledge" [US Federal §45CFR46.102 (d)]
risk factors	Characteristics that interact with personal vulnerabilities to increase the likelihood of substance use.
socialization	Lifelong process by which culturally-appropriate and acceptable attitudes, norms, beliefs, and behaviors are transferred and internalized.

stages of change	A theory that recognizes that individuals are at different places on a continuum with respect to making behavioral changes – typically from pre-contemplation (where they do not consider their current behavior to be problematic and have not even begun to think about the change) through contemplation, preparation, action, and maintenance (where behavior change has been made and sustained).
stakeholder	A person, group or organization, that has interest or concern in an organization, affected by a course of action.
statistics	Mean: The mean is the most commonly used measure. It is the measure of central tendency and the arithmetic average. Median: The median is the point that divides a ranked set of data in equal parts and the mode is number that represents the highest frequency of a response of score. Mode: The mode is a frequency that appears most often in a listing.
stigma	A set of negative and often unfair beliefs that a society or group of people have about something; disapproval of personal characteristics or beliefs that are against cultural norms; stigma often leads to status loss, discrimination, and exclusion from meaningful participation in society.
supply reduction	Developing reasonable, clear and consistently enforced policies targeting the possession, use and sale of all substances, including alcohol and tobacco, on and around school grounds, and at all school-sponsored events.

"threats" to internal validity	Maturation: The passage of time.
	History: What happened between the pre and post-test?
	Selection: Sampling of groups is not completely random.
	Testing: Tests are taken more than one time
	Mortality: Subjects drop out of the study in a non-random manner.
	Instrumentation: Any one of many measurement related weaknesses in the study.
"threats" to external validity	Situation: All situational specifics (e.g. intervention conditions, time, location, lighting, noise, Intervention administration, developer involvement, timing, scope and extent of measurement, etc.)
	Pre-test effects: If cause-effect relationships can only be found when pre-tests are carried out, then this also limits the generalizability of the findings.
	Post-test effects: If cause-effect relationships can only be found when post-tests are carried out, then this also limits the generalizability of the findings.
	Reactivity (placebo, novelty, and Hawthorne effects): If cause-effect relationships are found they might not be generalizable to other settings or situations if the effects found only occurred as an effect of studying the situation.
	Hawthorne effects: These occur as a result of knowing that one is participating in an experiment.

types of statistics	Descriptive Statistics: They are used to organize or summarize a set of measurements. For example, in our training group we have ____ men and ___ women (Insert the correct numbers on the blanks). Government Census reports are good examples of the use of informative and meaningful descriptive statistics. Such information as gender, age, income, housing of a country's citizens are helpful for planning future services for health care, education, and social services. Inferential Statistics: These are more complex and use data gathered from a sample to make inferences about the larger population from which the sample was drawn. They provide us the tools to examine the associations between measures and to predict the likelihood of outcomes and to determine whether differences found within and across populations are significant. For example, if we conducted a student survey on substance use with a random sample of students attending a school in our community, we could take that information and make inferences about substance use in the school student population as a whole.
vulnerability	An individual disposition, determined by genetic, psychological and social factors, that makes the development of risk behaviors and mental disorders more likely. The obverse is known as resistance or resilience. (Lessons learned-vulnerable young people and prevention – Federal Office of Public Health, Bern, Switzerland, 2006:www.bag.admin.ch/shop/00010/00207/index.html?lang=en
workforce substance use	Substance use and impairment that occurs outside of the work setting and not during work hours.
workplace substance use	Substance use and impairment that occurs on the job or during work hours. This can mean literally using substances in the work setting or just before work, with impairment occurring during work hours, and/or when the worker is on the job even if not in the work setting.

APPENDIX D—RESOURCES

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