

**Communities That Care: A Science-based Approach to Prevention in
Communities**

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[SLIDE 1] Good morning. In this presentation, I'd like to share with you the advances in prevention science that have been made in the U.S. during the past 25 years or so. I hope to leave you all with an understanding that the best way to prevent many of the health and behavior problems that youth experience is through a science-based approach that (a) focuses on empirically identified risk and protective factors and (b) employs tested and effective programs to address these factors. I also would like to introduce you to one approach--or more specifically, one system--for mobilizing communities to systematically address adolescent health and behavior problems through the adoption of a science-based approach to prevention, which we call *Communities That Care*.

First let me begin by presenting a background for where prevention science sits in the realm of youth intervention. **[SLIDE 2]** I'm borrowing this figure from the Committee on Prevention of Mental Disorders, which appears in Institute of Medicine Report on Reducing Risks for Mental Disorders (Mrazek & Haggerty, 1994). This figure

shows the continuum of intervention, starting temporally with prevention, which refers to those interventions that occur before the onset of a problem and has universal, selective, and indicated components, and then moving on to treatment, which are therapeutic interventions beginning after the onset of a problem, followed by maintenance, which focuses on long-term treatment to reduce recurrence of the problem and after-care services. Historically, most of the effort to combat physical and mental health problems in youth has focused on treatment and maintenance sections of the intervention spectrum. However, if we can focus on the prevention section of this spectrum, we can stay ahead of the curve and reduce the prevalence of youth health and behavior problems, and ultimately get a better return on our social investments spending far fewer resources.

[SLIDE 3] It may surprise you to know that about 25 years ago we did not know how to prevent problems like delinquency or drug abuse in the United States. We did not have programs or policies that had been tested and proven to be effective for promoting the successful development of young people. School-based drug prevention programs that were evaluated before 1980 were found to be largely ineffective (Elmqvist, 1995; Hanson, 1992; Moskowitz, 1989). Some school based drug information programs were found to increase drug use among teens (Tobler, 1986). **[SLIDE 4]** By 1980, nine well controlled experiments seeking to prevent delinquency had been conducted in the United States. Not one was effective in preventing delinquency (Berleman, 1980).

Today this has changed. Prevention scientists have applied a public health approach to these problems, and have shown that they can be prevented. How? Prevention science is based on a simple idea. **[SLIDE 5]** If you want to prevent something before it happens, you have to change its predictors. **[SLIDE 6]** Long-term (i.e., longitudinal) studies of young people growing up have identified the predictors of problem behaviors, such as substance abuse, depression, youth violence, and teen pregnancy. Predictors of these problem behaviors are called risk factors. Additionally, these studies have identified predictors that counterbalance or moderate the effects of risk; for example, Opportunities for prosocial activities and Social Skills. These are called promotive and protective factors, respectively.

[SLIDE 7] With regard to promotive and protective factors, these can reside in the characteristics of individuals, for example, intelligence, resilience (which may not be malleable), and skills and abilities to participate and succeed in social, school and civic settings (which are malleable). These factors can also reside in the social domains of peers, family, school, and—most important to us at this seminar today--the community. Opportunities to be actively involved with positive adults and peers, and Recognition for prosocial involvement, are other protective factors that have been shown in the research to promote positive youth development. When young people are provided with opportunities and recognition, and have the basic skills to process these opportunities and recognition, they consequently develop strong connections or bonds of attachment and commitment to their families, schools and communities. This is the next important protective factor that promotes positive youth development --a feeling of being connected or bonded to the positive people around them. Finally, when families, schools and communities communicate clear standards for behavior to young people, those who feel bonded, emotionally connected, and invested in the group, will follow those standards that promote health and success. These are the basic protective factors that promote positive development in young people.

[SLIDES 8-11] With regard to risk factors, we know that these, too, can reside in the characteristics of the individual as well as social domains of peers, family, school, and community. These tables shows risk factors in the individual, peer, family, school, and community domains that have been found in at least two longitudinal studies to increase the probability of substance abuse, delinquency, teen pregnancy, dropping out of school, violence, and other behavior problems in young people. These factors are important because they are potential targets for preventive action. As you can see, many of these risk factors predict multiple problems.

[SLIDE 12] So, the first major advance in the science of prevention was the identification of risk, protective, and promotive factors that predict health and behavior problems in youth. The second major advance was the development of preventive interventions to combat these problems. Rigorous trials conducted during the past 25 years have identified tested and effective prevention programs, policies, and actions that do work, as well as some programs that do not work.

[**SLIDE 13**] An increasing number and range of efficacious prevention approaches have been identified. In this slide, we see 12 different topic areas that contain at least one prevention program that was found in a controlled trial to significantly reduce a child or youth problem behavior through a focus on risk and protective factors. Overall, this table represents 56 prevention programs that have been shown to be efficacious and are currently available.

[**SLIDE 14**] Here are a few prevention programs that have been evaluated and have shown to have significant effects on youth outcomes:

- Nurse Family-Partnership by David Olds (Health Sciences Center, University of Colorado).
- The Incredible Years by Carolyn Webster-Stratton (University of Washington).
- Life Skills Training by Gilbert Botvin (Institute for Prevention Research, Cornell University).
- Guiding Good Choices J. David Hawkins & Richard Catalano (Social Development Research Group, University of Washington).
- Strengthening Families Program For Parents and Youth 10-14 by Richard Spoth (Institute for Social and Behavioral Research, Iowa State University).
- Big Brothers / Big Sisters (BBBS of America).
- Olweus Bullying Prevention Program by Dan Olweus.
- Communities Mobilizing for Change on Alcohol by Alexander C. Wagenaar.

I'll show you where you can get more information on these programs at the end of the presentation. Let me expand on one of these programs, Life Skills Training (LST) by Gilbert Botvin. [**SLIDE 15**] LST is a universal prevention program, operating in the school domain, and is designed to prevent youth from initiating or continuing cigarette, alcohol, marijuana, and/or other drug use. The program addresses social, psychological, cognitive, and attitudinal factors that are associated with substance use. Age appropriate versions of the curriculum are administered to elementary- and middle-school students, beginning in the third and seventh grades, respectively (Hawkins & Catalano, 2004). Protective factors addressed by LST include: Healthy beliefs and clear

standards, Individual characteristics, and Skills. Risk factors addressed by LST include: Community laws and norms favorable toward drug use, firearms, and crime, Early initiation of problem behavior, Favorable attitudes toward problem behavior, and Friends who engage in the problem behavior. **[SLIDE 16]** Results of evaluations of LST have shown the program to reduce tobacco, alcohol, and marijuana use by 50-75%, with effects maintained through Grade 12; reduce polydrug use up to 66%; reduce pack-a-day smoking by 25%; and decrease use of inhalants, narcotics, and hallucinogens by 25% to 55%.

[SLIDE 17] Thus, the good news regarding prevention science is (a) the identification of risk, protective, and promotive factors that predict health and behavior problems in youth and (b) the development of preventive interventions to combat these problems. But the bad news is that the tested and effective policies and programs I just mentioned are not widely used. In fact, policies and programs that are not effective or have not been evaluated are more widely used than policies and programs that have shown effects (Gottfredson, 2002; Hallfors, 2001; Ringwalt, 2002). Nor are they demanded. Unfortunately, most communities have not yet made the use of tested and effective programs a priority.

[SLIDE 18] Now I would like to focus on the role of communities in a science-based approach to prevention. So, what do we know regarding risk and protection in communities? Well, we know that communities vary significantly in their aggregate levels of risk, protection, and substance abuse (Hawkins et al., 2004). **[SLIDE 19]** To illustrate this point, we see a topographical map of a city with three communities. Aggregate levels of risk in each community is shown in relief with darker colors (browns and reds) indicating higher levels risk. Community #2, for example, demonstrates the highest level of risk, followed by Community #3 and then Community #1. If we were planning prevention services for this city, we would want to concentrate our efforts in Community #2, followed by Community #3, then Community #1.

[SLIDE 20] Regarding prevention in communities, we also know that aggregate levels of risk and protection are significantly related to aggregate levels of adolescent substance use. This means that if we can lower the prevalence of risk factors in a

community, and increase the prevalence of protective factors in that community, then maybe we can change the prevalence of substance use in that community.

[SLIDE 21] We see evidence for this in some of the research we are doing at the Social Development Research Group. For example, we have found that aggregate levels of risk for the 10th-grade cohort of students in 2000 predicts the prevalence of drug use for a different cohort of 10-grade students two years later (Fagan et al., in press). We have seen this same type of relationship for aggregate levels of risk predicting academic achievement, as well (Arthur et al., 2006).

[SLIDE 22] The challenge for prevention in communities, therefore, is to address those risk factors most prevalent in a community with tested and effective policies and programs and to address those protective factors most depressed in a community with tested and effective policies and programs that strengthen those protective factors. It is essential to provide a system of steps and tools to guide communities to choose and put in place the tested and effective programs most appropriate to their own profiles of risk and protection. Communities need access to current information about what works in youth development and prevention, and they need procedures and tools to match their own community, school, or neighborhood profile of risk and protection with tested and effective policies and programs.

[SLIDE 23] I would now like to introduce you to the Communities That Care (CTC) prevention system. CTC is a system for mobilizing communities to systematically address adolescent health and behavior problems through the adoption of a science-based approach to prevention. It applies the advances in prevention science to guide prevention programming in communities, and matches the community's profile of risk and protection, obtained thru repeated epidemiological surveys of the community's youth population, with the appropriate tested and effective policies and interventions.

[SLIDE 24] CTC is based on the idea that local control, through participation in local prevention coalitions, builds ownership to create sustainable change in communities. The focus, ultimately, is on youth outcomes to insure success. That is, we want to know, ultimately, if fewer teens are using drugs, smoking cigarettes, or committing violent acts. Furthermore, CTC relies upon a well-developed theory of behavior, the Social

Development Strategy (Hawkins & Catalano, 2002), which identifies developmentally appropriate leverage points for intervention.

[SLIDE 25] The theory of change behind CTC implementation can be formalized as a logic model, which helps us understand the process by which introducing CTC in communities produces the desired effects in targeted outcomes. This logic model shows that, through training and technical assistance, CTC (a) promotes the adoption of a science-based framework to guide prevention programming, (b) improves collaboration within the community regarding prevention initiatives, and (c) guides the selection of tested and effective prevention programs that are appropriate for that particular community. These changes result in reduced risk and augmented protection for communities' youth populations, which, in turn, improve positive youth development and reduce youth behavior problems.

[SLIDE 26] Implementation of CTC is organized into five stages, each with its own series of manualized "benchmarks" and "milestones" to help guide and monitor the process. Stage 1 consists of an assessment of community readiness, which identifies the important individuals and organizational structures necessary to initiate community mobilization. Stage 2 organizes the intra- and inter-organizational infrastructure and introduces individuals, organizations, and the community to CTC through training events for key leaders and formation of the community prevention board. In Stage 3, an assessment of levels of youth problem behaviors and of the risk and protective factors related to them, as well as assessment of existing community resources, are conducted. Stage 4 is characterized by the development of a community action plan that entails targeting of specific intermediate and long-term outcomes for intervention and selecting appropriate preventive interventions to address them. Finally, Stage 5 consists of implementing the interventions and conducting on-going assessment to monitor outcomes and implementation of selected intervention programs.

Now, I'd like to go back to Stage 3 for a minute and explain in detail what a community risk and protection profile looks like and how it is created. **[SLIDE 27]** As I mentioned earlier, the CTC process incorporates epidemiological data regarding levels of risk, protection, and health and behavior outcomes in communities, districts, schools, cities, or neighborhoods. To accomplish this, we rely on the CTC Youth Survey (Arthur

et al., 2002). This instrument assesses the experiences and perspectives, and provides valid and reliable measures of risk and protective factors across gender, grade and racial/ethnic groups (Arthur et al., 2002; Glaser et al., 2005). In CTC, the Youth Survey helps guide policy planners to select the appropriate tested and effective programs and strategies for communities and further monitors the effects of those programs and strategies through repeated administrations of the surveys. The version of the CTC Youth Survey that we are currently using in our evaluation of CTC has over 200 items and is designed to be administered in a one-hour class period.

[SLIDE 28] Once the data are collected, a profile can be constructed that shows the percentage of youth above a certain level of risk or protection, or the percentage of youth who experience a particular outcome. Here, we see a profile of substance use and antisocial behavior outcomes for a cohort of 10th-grade students in a high school in the United States. For this group of students, we see higher than average rates of alcohol and marijuana use, and high rates of binge drinking and being drunk or high at school. **[SLIDE 29]** In order to understand the mechanisms by which we can address those problem behaviors, we can look at the profile of protective factors for these same students. This profile shows lower than average levels of Social Skills, which has been demonstrated to be a protective factor for these outcomes. Therefore, we would want to select a prevention program for this school (or classroom) that targets Social Skills.

[SLIDE 30] We can also look at the profile of risk factors for these students. Here, we see elevated rates of Poor Family Management, Parental Attitudes Favorable Toward Drug Use, and Peer Attitudes Favorable Toward Drug Use and should consider targeting these risk factors with appropriate tested and effective prevention programs.

[SLIDE 31] Based on these profiles, we can develop a plan for prevention programming. To continue with this example, we could target the elevated Attitudes Favorable Toward Drug Use risk factors, and the depressed Social Skills protective factor, with a classroom- or school-based curriculum that promotes social and emotional competence for students in this age range, for example, with the Life Skills Training program.

[SLIDE 32] So how long does it take communities to go through the CTC process? The following timelines have been put forth as a guide. Generally, it should

take about 6 to 9 months to complete an assessment of risk and protection a community and an assessment of the available resources in a community. Selection, implementation, and initial evaluation of tested and effective prevention programs and strategies should be completed within one year. Consequently, changes in levels of risk and protection, and changes in some early youth outcomes, such as delayed initiation of substance use and delinquency, for example, should be seen within 2 to 5 years. Other longer-term outcomes, such as change in community prevalence rates for substance use, delinquency, and youth violence will take longer to manifest. Finally, a long-term vision for a safe and healthy community, with on-going evaluation and feedback, should be realized within 5 to 10 years.

[SLIDE 33] Currently, CTC has been implemented in over 500 communities across 6 countries (i.e., The U.S., Great Britain, Canada, Australia, The Netherlands, and Cyperss). Evaluations of CTC are currently underway in the U.S., Canada, and the Netherlands. (If we have time today or tomorrow, I would like to tell you more about the large-scale evaluation of CTC that we are currently conducting in the U.S., that is, the Community Youth Development Study.) In the United States, some communities in the states of Oregon and Washington have been active in the CTC process for over 10 years. Support for CTC implementation in the U.S. has been given by the federal, state, and local governments, as well as by businesses and private foundations. In 2005, CTC was purchased by the federal government for national distribution.

[SLIDE 34] Implementation of CTC, however, does require some resources. For example, CTC manuals and curriculum materials are needed. Technical assistance and training should be administered by people certified in the CTC process. And the community will have to set up a data monitoring system to provide routine feedback for program planning and adjustment. **[SLIDE 35]** For more information on the resources needed to implement CTC, as well as a list and description of prevention programs that have been found to be efficacious and are currently available for implementation, you can go to: **<http://preventionplatform.samhsa.gov/>**

[SLIDE 36] In closing, I'd like to leave you with a suggestion for five things that can be done to improve outcomes for communities' youth populations:

1. Support the rigorous evaluation of promising but untested prevention programs.

2. Help communities collect epidemiologic data and monitor the risk and protective factors affecting young peoples' development.
3. Provide a system for local communities to choose tested and effective programs that address the identified needs of their young people.
4. Promote the requirement that a portion of public funds be used for implementing tested and effective programs.
5. Provide information, training, and technical assistance to communities to disseminate the advances in prevention science and ensure the success of prevention programs.

As a result of the progress in prevention science and youth development during the last quarter of a century, we now have an opportunity to help communities reinvent themselves as protective environments for the positive development of all their children. Thank you.

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