

What is...

Scientifically-Defensible Prevention?

Everyone involved in efforts to prevent substance use problems hopes that their efforts will be successful. But hope is not enough to reduce the risk of substance abuse problems. Staff at federal and state government agencies, private foundations, and other prevention organizations are encouraging (or even requiring) the use of “scientifically-defensible” prevention programs.

- **What does it mean to use scientifically-defensible prevention programs?**
- **How can a school or community group know if a prevention program is science-based?**

While no one has the final answer on what prevention strategies will be most effective for a particular place or audience, research and evaluation findings are helping us learn which approaches are more likely to work well with specific audiences in a variety of settings.

Science-based programs are approaches that have been developed and evaluated using scientific processes. These programs are grounded in a clear theoretical foundation and have been carefully implemented and evaluated. The evaluation findings have been subjected to critical review by

other researchers and the program has been replicated in a variety of settings. Programs and approaches that are scientifically-defensible have produced desired results in a number of different settings.

Some prevention programs focus on the entire community, while others target those at high risk for developing a substance use problem. Some program evaluations are primarily quantitative and describe program outcomes statistically. Others are primarily qualitative and describe program process and outcomes in rich detail, while other evaluations mix both strategies. Some research projects measure change in attitudes and behavior at a specific point in time, while others study one group of participants over a long period of time. Regardless of these differences in program focus, research design, or evaluation methodology, it is important that all prevention efforts reflect the scientific process and be designed and implemented in ways that are likely to be effective. This emphasis on science does not detract from the art of implementing prevention programs. Rather, it focuses the art of prevention toward strategies that work best.

For community-based prevention professionals and volunteers, working to implement prevention strategies designed

to meet the needs of their own communities, it can be difficult to know which approaches to try. Learning about and using scientifically-defensible programs means increasing the likelihood that prevention efforts will achieve our desired goals. Using strategies that have been tested and demonstrated to be effective will increase the likelihood of reducing substance use and resulting problems. It can also mean looking carefully at our current prevention strategies and perhaps making some changes in our approach. These changes can be difficult to make especially if current prevention programs are popular with staff, participants or funding sources.

In the months ahead, staff from the Central Center for the Application of Prevention Technologies (CAPT), as part of the National CAPT Network, will be working with local organizations throughout the central region to help communities learn more about:

- 1) specific approaches to prevention that can be considered scientifically-defensible, and
- 2) ways to identify local resources and needs to make the changes necessary to implement those approaches.

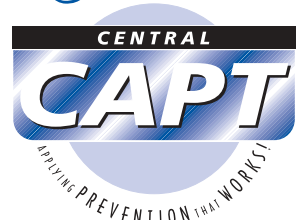
These staff will review prevention research and evaluation findings for credibility, utility and generalizability. Credibility refers to the level of certainty concerning the cause and effect relationship of program to outcomes. Utility refers to the

extent to which the findings can be used to improve programming, explain program effects or guide future studies. Generalizability refers to the extent to which findings from one site can be applied to other settings and populations.

If you are interested in learning more about scientifically-defensible prevention approaches, contact CAPT at 1-800-782-1878. They can provide information about prevention programs that have demonstrated effectiveness and programs with great promise that are currently being evaluated. In addition, they can assist you in identifying strategies for communicating knowledge about effective prevention programs to the general public.

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CSAP Center for
Substance Abuse
Prevention



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of Prevention Technologies**



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