

Attacks on many fronts needed to fight the war against substance abuse

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The Bottom Line:

Most interventions for substance abuse target individuals who are already abusing. But there are many other approaches that are effective in preventing, stopping, reducing, or lessening harm from substance use and abuse. These include:

- Policies to reduce the availability of substances like tobacco and alcohol and prevent serious outcomes like death from drunk driving, personal injury from alcohol intoxication, or disease resulting from smoking;
- Interventions to ensure children are raised in an emotionally healthy environment;
- Interventions given when a young person has just begun to use substances and that are designed to help them alter their habits to prevent later, serious substance abuse;
- Treatment for anxiety or depression to reduce or eliminate substance abuse in teens with those conditions; and
- Needle exchange programs to help reduce the spread of disease among those who are already addicted.

Whatever the intervention, it should be based on good evidence that it works in real life situations.

What problem is being addressed?

Adolescent substance abuse is a widespread problem, creating major social and personal consequences for young people, their families, and their communities. While most interventions are targeted to individual substance abusers, some public policies, like public smoking bans or drinking age limits, can work to reduce the harm that can result from alcohol misuse, such as deaths from drunk driving or cardiovascular or lung disease from cigarette smoke.

What intervention is being tested?

The authors looked at programs designed to prevent, stop or reduce adolescent substance abuse and the harm associated with it. These included:

- interventions that use laws and policies to restrict access to substances;

- early childhood interventions (including prenatal) to ensure healthy development and reduce the social and family risk factors that can lead to adolescent substance abuse;
- early screening and brief treatment programs that try to change behaviours and reduce the likelihood of occasional use turning into a substance abuse problem; and
- treatment of mental health problems that exist along with established substance abuse using [cognitive behavioural therapy \(CBT\)](#), [family therapy](#), or [12-step programs](#).

They included interventions that were both universal (given to all members of a population) and targeted (given only to those at risk). The review concentrated on interventions for which there was evidence of effectiveness, that is, programs that work in the “real world”, as opposed to programs where evidence was limited to experimental conditions.

What is the *real scientific* evidence?

Results of the systematic reviews showed that the following interventions were effective in preventing or stopping adolescent substance abuse or reducing the harms associated with it.

Regulatory intervention:

There is evidence for the effectiveness of the enforcement of laws that limit access by adolescents to alcohol. Interventions included raising age limits and ensuring compliance with minimum age requirements for purchasing alcohol or tobacco products.

Developmental prevention:

There is evidence of efficacy in using home visitation or other social strategies to improve conditions that promote healthy child development and adolescent development.

Early screening and brief treatment:

There is evidence for the efficacy of brief motivational interventions to change substance use behaviours, that is, helping young users to stop using substances before they experience serious harm. For instance, teens could be helped to recognize how substance use will interfere with their goals or relationships with family and friends.

Treatment:

There is evidence for the effectiveness of treating psychiatric disorders like depression or anxiety to reduce or eliminate substance abuse.

Harm reduction:

There is evidence that needle exchange programs for reducing the risk of contracting HIV or hepatitis B are effective in reducing harm associated with injectable drugs. Other examples include random breath testing and graduated licence programs, which have been shown to be effective in reducing drunk driving.

The authors conclude that it is necessary to use a combination of these types of interventions to significantly reduce the numbers of adolescents involved in substance abuse.

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The preceding is a summary of:

Toumbourou JW, Stockwell T, Neighbors C, Marlatt GA, Sturge J, Rehm J. *Interventions to reduce harm associated with adolescent substance use*. Lancet 2007, 369: 1391-1401.