



Effective Public Health Practice Project Summary Statement

December 2005

This is a summary statement written to condense the work of the authors of a systematic review. The reference for the full review is below. The intent of this summary is to provide an overview of the findings and implications of the full review. For more information on individual studies included in the review, please see the review itself.

Reference for Review in APA: Thomas, H., Micucci, S, Ciliska, D., Mirza, M. (2005) **Effectiveness of School-based Interventions in Reducing Adolescent Risk Behaviour: A Systematic Review of Reviews.** Effective Public Health Practice Project

Issue: Adolescent risk behaviours (i.e. smoking, alcohol consumption, illicit drug use, unprotected sexual activity and behaviour disorders) result in short and long-term negative health consequences. In Canada in 2003, among grade 10 students, daily smoking was reported among 15% of males and 11% of females. By grade 10, 34% of males and 23% of females reported consuming alcohol at least once a week and about 45% reported being really drunk once or twice. Marijuana use has become more common: 19% of males and 9% of females report frequent use (Health Canada, 2005). Almost 75% of males and females reported experiencing sexual intercourse by grade 10. Of these 17% of males and 7% of females reported using no protection. Tobacco use appears to be a marker for other risk behaviours. Many surveys demonstrate that all of the risk behaviours tend to cluster among certain subgroups of adolescents.

The Mandatory Health Programs and Services Guidelines (1997) include reducing adolescent risk behaviours in the Chronic Disease Prevention, Injury Prevention including Substance Abuse, Sexual Health and Child Health sections.

Review Content Summary: There were 33 methodologically strong reviews. Of these, 18 related to drug use prevention including tobacco, alcohol, and other drugs. Some universal programs are effective. The characteristics of successful programs include an interactive format led by trained facilitators, content that is either focused on system-wide change or comprehensive life skills, duration of 11-30 hours and a community-based component. Programs were most effective when delivered immediately before initial drug use/ experimentation. Program objectives (e.g. non-use, delayed use, harm minimization) need to be clear and measured appropriately. Youth at different levels of risk require different interventions. Youth input regarding programming may enhance their participation.

The results of the 8 reviews that related to sexual risk behaviour are not so clear. While some programs were successful in reducing these behaviours, most had little or no impact. One comprehensive school/community program was effective; however, it requires replication. No programs increased sexual activity or led to early initiation of sexual activity. Many of the characteristics of successful programs are similar to those cited for drug use prevention.

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The 7 reviews related to behavioural disorder prevention contained primary studies with many methodological flaws, so all of the results need to be viewed with caution. Three focused on suicide prevention. All concluded that universal school awareness programs were not effective. They recommended that protocols directed at assuring that teachers and others had standardized procedures to follow when confronted with a suicidal student be put in place. The remaining reviews looked at behavioural disorder prevention or mental health promotion more generally. They found very mixed results.

Comments on this review's methodology: The methodology of this review of reviews is strong. A comprehensive literature search included 8 electronic databases (to their inception), hand searching of 7 peer-reviewed journals (for two previous years), and retrieval of all relevant articles from reference lists of retrieved articles. The relevance and methodological quality of the reviews was assessed by two reviewers independently. Differences were resolved through consensus. Only the results from the methodologically strong reviews are presented. Although the methodology in many of the reviews was strong, the primary studies (particularly those related to sexual risk behaviour and behavioural disorders) included often were not. The most frequent flaws were lack of random allocation to groups, lack of controlling for confounders, outcome measures that were not reliable or valid, large numbers of drop-outs (or differences in drop-out rates between high and low risk adolescents), and discordance between units of allocation and analysis. As well, very few studies had follow-up for more than 2 years. Data were extracted from each strong review using a standardized data extraction form. Data were narratively synthesized.

Evidence points *ARE NOT* weighted or ranked according to strength

What's the evidence?	Implications for practice and policy:
>Some universal drug use prevention programs are effective.	> Successful programs need to be packaged in a user-friendly format and marketed to schools.
>Interactive programs with trained facilitators and focused on comprehensive life skills are effective	> Teachers need to be trained to be facilitators of small groups. > Public Health personnel could provide this training and assist in delivering programs
>Successful programs were more effective with an additional community-based component.	> Community-wide programs including the school environment, parents and community members could be coordinated by Public Health.
>Although not as strong, the evidence for programs to reduce sexual risk-taking shows that successful programs have similar characteristics.	> See above.
>Didactic programs are not effective in reducing any of the risk behaviours.	> Didactic programs need to be stopped.

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>The methodology of primary studies in the prevention of behavioural disorders needs to be improved.	> Promising programs need to be replicated and rigorously evaluated.
>Universal suicide prevention programs are not effective.	> Stop such programs. Instead, schools should focus on having a standardized plan in place for teachers when they encounter a suicidal student.
General Implications: Resources need to be made available to deliver successful universal school-based drug use prevention programs. Community-based programs need to be implemented to complement the school-based ones. Further testing of interactive broad-based programs for effectiveness in reducing sexual risk behaviour and behavioural disorders is required.	

Cost Benefit or Cost-Effectiveness Information: Not included in review.

References Used to Outline Issue:

Ontario Ministry of Health and Long Term Care (1997). Mandatory Health Programs and Services Guidelines. Toronto: Queen's Printer for Ontario

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The format of this summary statement has been adapted from health-evidence.ca (www.health-evidence.ca).

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