



Relationship Between School-Based Prevention Effort and the Prevalence of Health Risk Behaviors in Washington State

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Purpose

The purpose of this study was to assess whether a high level of school-based prevention effort was associated with a lower prevalence of substance use among students attending public schools in the state of Washington. This state has made a unique commitment to prevention by supplementing federally funded programs with state, county, and local resources such as the Prevention and Intervention Services Program.

Methods

The Washington State Survey of Adolescent Health Behaviors (WSSAHB), a student self-report instrument administered statewide during November of 2000, provided data on the prevalence of substance use and antisocial behavior aggregated to the school level.

Specialists supported by the Prevention and Intervention Services Program completed a prevention survey during the spring of 2001 to assess the overall level of prevention in a sample of schools, some of which also participated in WSSAHB. A high score on this survey indicated that the school had implemented the elements of a comprehensive prevention program including school policies, a research-based prevention curriculum implemented with high intensity, a systematic process for identifying high risk youth, a variety of school-based and community services to address needs identified, and close coordination of prevention and intervention services across funding and administrative boundaries. Specialists completed surveys on 333 schools for a response rate of 74 percent.

Findings

Consistent with expectations, students in high prevention schools reported significantly lower rates of tobacco, alcohol, or marijuana use in the last 30 days compared to students in medium effort schools. Figure 1 shows the average prevalence of substance use by prevention level after adjusting for any differences in school demographics (e.g., school size, community type, percent minority, and percent eligible for free or reduced lunch).

The error band (95 percent confidence interval) plotted around the mean illustrates which differences are statistically significant given the number and homogeneity of schools in the sample. The sample of low prevention schools was too small to draw conclusions but the results appear to suggest that some schools may have exerted a low level of effort because the need for prevention services was relatively low and subsequently resources were diverted elsewhere.

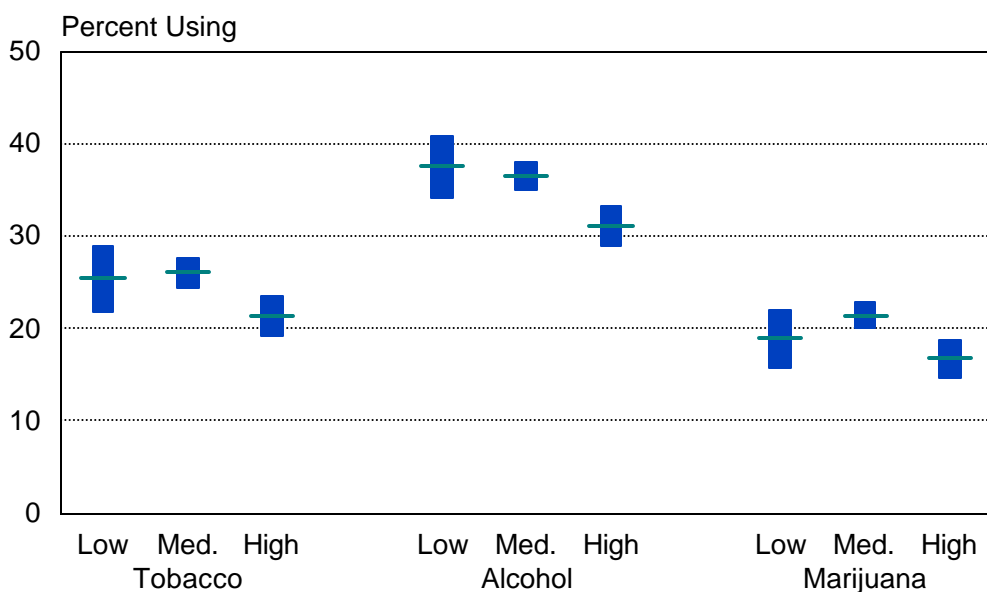


Figure 1. Prevalence of substance use for Grades 8 and 12 in schools at three levels of prevention effort after controlling for differences in school demographics. These results are based on 20 low prevention, 84 medium prevention, and 47 high prevention schools. Error bands (95 percent confidence interval) reflect the size and homogeneity of the sample.

No significant differences by level of prevention or grade level were observed for antisocial behavior such as attacking someone or being suspended from school in the past 12 months. The risk and protective factors that predict antisocial behavior are essentially the same as those that predict substance use and most school programs attended to both problems, yet no differences in outcomes were detected—a surprising finding.

Conclusions

Schools implementing a comprehensive prevention program are more successful in reducing adolescent substance use than schools that implement some, but not all, the elements thought to be important. This, of course, means well-articulated school policies that are enforced. This certainly means multiple age-appropriate, research-based prevention curriculum implemented with a high level of fidelity, intensity, and penetration within the school. It also means a systematic process for identifying students at risk and finding school-based or community resources to address their needs. However, a consistent drug-free philosophy that pervades all school functions and a high level of coordination across funding sources and administrative jurisdictions are also among the distinguishing features of high prevention schools.

More research is needed to control for student needs and the factors that impact the allocation of scarce school resources. If the same schools participate in the 2002 administration of the WSSAHB and the prevention survey, it will be possible to conduct a more sophisticated analysis. More work is also needed to further examine the impact of prevention programs on antisocial behavior.