Submitted to:
Vermont Department of Health
Division of Alcohol and Drug Abuse Programs

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This report highlights findings from the evaluation of the Vermont Department of Health Alcohol and Drug Abuse Programs’ School-Based Substance Abuse Services (SBSAS) program covering the period from July 2012 through June 2015. During this period, SBSAS consisted of grants to 21 different Supervisory Unions (SUs) throughout Vermont. These grants were aimed at the following Healthy Vermonter 2020 objectives:

- Reduce past month use of alcohol, marijuana and other illicit substances among adolescents (12-17)
- Reduce binge drinking among adolescents (12-17)

**SBSAS Program Requirements and Optional Activities**

All SUs receiving SBSAS funds were required to deliver screening and referral to substance abuse and mental health services and support initiatives that integrate substance abuse prevention into their comprehensive coordinated school health framework. In addition to these required activities, SUs could choose from a menu of additional prevention and early intervention activities. These included:

- evidence-based classroom curricula addressing the prevention of substance use
- youth empowerment groups
- provision of prevention-related information to parents
- evidence-based parent education programs
- teacher and support staff training on alcohol, tobacco and other drug prevention
- educational support groups

Most of these optional activities were selected by almost all SUs to be implemented in at least some of their schools. The exception was evidence-based parent education, which was selected by only about half of the funded SUs. This may be due to a challenge cited in this report with engaging parents in these types of programs.

**Findings Regarding Implementation**

Process data on the required and optional activities were collected through a web-based Survey Monkey tool three times a year. Additional data on components of coordinated school health were collected through a Readiness Checklist developed and administered by ADAP in year one, and the CDC’s School Health Profiles administered by VDH in year two.

A comparison of 2014 School Health Profiles data from funded and non-funded schools found that SBSAS-funded schools were more likely to have:

- a school health team that offers guidance on the development of policies or coordinates activities on health topics.
• a required course for students that addresses Vermont’s Health Education Grade Expectations for the prevention of alcohol, tobacco and other drugs at either the middle or high school level.

• screening and referral procedures for students with suspected substance use and/or mental health problems.

• a cooperative agreement with an outside agency to provide assessment and treatment services to students who are referred for drug and/or alcohol problems.

• provided parents and families with health information designed to increase their knowledge of alcohol or drug use prevention.

In addition, there was steady improvement across the three years in the rate of referral for further assessment among students who screened positive for possible substance abuse disorders. By year three, ADAP’s goal of 90% referred was met.

The findings suggest that SBSAS has led to improvements in integrating the components of coordinated school health including improved coordination of ATOD prevention, screening and referral services, both within SUUs and between schools and community service providers. It is also worth noting that Student Assistance Professionals (SAPs) have played an instrumental role in facilitating these services and building relationships with community partners.

Although there could be other explanations for the differences noted in the School Health Profiles data between funded and non-funded schools, it is reasonable to assume that SBSAS funding contributed to the funded schools’ greater capacity to coordinate school health activities, especially those related to substance abuse prevention for both students and parents. This greater capacity includes supports for students with suspected substance abuse issues.

**Barriers to Implementation**

Though grantees reported improvement through this grant, barriers to ATOD problem identification, screening and referral still exists within some SUUs. These include students not being identified as having a potential problem, student or parental refusal, time constraints, and confidentiality concerns. Almost all SUUs cited barriers to students’ receiving assessment and treatment services in the community, especially lack of appropriate services, cost, transportation and lack of parental support.

Barriers related to some of the optional activities of the grant were also identified. Engaging parents has been challenging particularly through participation in parenting programs and assessing whether parents are utilizing prevention information that is disseminated through school newsletters, websites and other formats. Another barrier that was frequently cited was finding time for prevention activities such as youth empowerment groups, educational supports groups and training for staff with multiple demands on staff and students’ time.
SBSAS Effects on Student Behaviors and Perceptions

Outcomes achieved through the SBSAS grants program were assessed using data from Vermont’s Youth Risk Behavior Survey (YRBS). Data from high school and middle school students were analyzed separately. Trends in outcome measures relevant to the SBSAS goals were tracked both for SBSAS-funded SUs and non-SBSAS SUs. These trends were compared between the two groups, and also examined separately for just the SBSAS SUs. A number of process measures regarding implementation of optional activities were also examined to see if they predicted changes in the outcome measures. Because the YRBS is conducted in the early spring every two years, changes were examined between 2011 and 2013 in order to assess SBSAS effects in its first year, and also between 2013 and 2015 to assess subsequent effects.

Several noteworthy patterns emerged from these analyses. First, for both high school and middle school students, prevalence rates for nearly all substance use measures decreased over the period from 2011 to 2015. This was the case, however, for both SBSAS-funded SUs and non-SBSAS SUs. Although these trends are both encouraging and welcome, the context of declining rates in substance use behaviors generally almost certainly made it more difficult to discern and substantiate SBSAS-specific effects. One reasonable interpretation of the data is that the collective impacts of multiple prevention initiatives across the State of Vermont, including SBSAS, are at least partly responsible for the positive trends, but the effects of any one initiative cannot be easily disentangled.

Even with that limitation in mind, some tentative conclusions can be drawn regarding the effectiveness of the SBSAS grants program. Compared to the non-funded SUs, SBSAS SUs experienced greater decreases in all substance use prevalence rates examined, and improvements in perceptions known to be risk factors for substance use, among high school students between 2011 and 2013. SBSAS appears, therefore, to have positively impacted high school students in the initial year of the project. Unfortunately most of these effects were not sustained during the interval from 2013 to 2015. Across the entire four-year period, however, a small net positive impact of SBSAS remained for all but one of the substance use behaviors examined. The reasons for the apparently diminished effectiveness in the second two-year interval are not known, although it is not unusual for a program to have an initial impact due to being novel that wears off over time.

A noticeably less encouraging pattern was observed for SBSAS effects on middle school student outcomes. Changes observed were generally less favorable to SBSAS over the first two-year interval, and mixed over the second interval. One possible explanation is the generally low prevalence rates of substance use in the middle school grades. This makes them more volatile because they can be affected by even small numbers of students. In addition, a number of substance use rates among non-SBSAS showed especially large percent declines. Although the reasons for this are not known, it becomes especially difficult to demonstrate positive effects when the comparison units are performing so well.
What SBSAS Features Predicted Success in Achieving Desired Outcomes?

Implementation of evidence-based curricular programs emerged as being especially potent predictors of success in achieving favorable changes for most outcome measures among the funded SUs. With respect to high school student outcomes, programs that stood out were Life Skills Training and the Michigan Model. For middle school student outcomes, the most effective curricular programs were again Life Skills Training, along with Project Alert and Know Your Body. For high school student outcomes, implementation of evidence-based parent programs also showed consistently positive effects across the outcome measures, although only one such effect was statistically significant. This pattern was not observed in regard to middle school student outcomes. Evidence for effects of other optional activities, including youth empowerment groups, delivery of parent information, teacher and staff training, and educational support groups, was generally mixed, with fewer effects in the favorable direction and fewer statistically significant effects.

The analysis of SU attributes also found that smaller SUs, in terms of enrollment, generally achieved more desirable changes in outcome measures compared to larger SUs. This was not surprising, given the fixed funding levels allocated to SBSAS grantees regardless of their size. This finding is consistent with process data indicating that implementation of SBSAS-funded optional activities varied considerably across schools within the funded SUs. Smaller SUs, because they have fewer schools, were more likely able to provide SBSAS-funded services to most or all of their schools and therefore provide these services to higher percentages of their students.

Conclusions and Implications

Several tentative conclusions may be drawn from this evaluation. First, the SBSAS grants program enabled SUs to more fully adopt and implement coordinated school health practices, particularly those linked to substance abuse prevention services and activities. These include evidence-based prevention curricula, screening and referral, cooperative agreements with external agencies to provide assessment and treatment services, and provision of substance abuse prevention information to parents. The SBSAS grants also enabled SUs to provide other services and programs such as youth empowerment groups, parent education programs, and educational support groups.

SBSAS funding appeared to contribute to better outcomes in substance use behaviors and related perceptions for high school students, but the same was not true for middle school students. The positive effects observed for high school students were, however, mainly concentrated in the first year of funding (i.e., by the time the 2013 YRBS was administered). The optional activity most consistently and strongly predictive of favorable outcomes, for both middle and high school students, was the provision of evidence-based prevention curricula for students designed to prevent and reduce substance abuse. These conclusions must remain tentative due to the non-experimental design of the study and in light of various alternative explanations that are possible for the patterns observed in the data.
Vermont’s SBSAS grants program is one of several recent and/or current substance abuse prevention initiatives providing funds to schools and communities across the state. It is reasonable to speculate that all these efforts have collectively contributed to the substantial decreases observed between 2011 and 2015 in most substance use measures among Vermont’s middle and high school students. Several decades of prevention research have demonstrated that school-based prevention strategies, especially evidence-based prevention education programs, can help prevent and reduce substance use among adolescents. Whether this occurs through the SBSAS grants program specifically, or through other initiatives, is perhaps less important than ensuring that effective school-based prevention services are, in fact, implemented in all schools across the state and for all grade levels for which they are appropriate as an essential component of the state’s broader comprehensive substance use prevention efforts.

In light of the findings from this evaluation, several suggestions are offered to ADAP for its consideration of potential enhancements to the SBSAS grants program:

- provide relatively higher levels of funding to larger SUs, as determined either by the number of students or the number of schools in the SU
- review the criteria and procedures used by schools to identify students for screening and work towards greater consistency across SUs
- seek ways to facilitate efforts by schools to establish productive partnerships with community agencies that can provide assessment and intervention services
- promote opportunities for peer-to-peer sharing and learning across SUs
- continue to identify and help find solutions to barriers faced by schools in implementing SBSAS components, particularly with respect to resources and staffing needs
- regarding the optional activities, emphasize or require a stronger focus on evidence-based curricular programs
- consider de-emphasizing or not funding other optional activities that have less of an evidence base and that were not shown in this evaluation to be generally related to better substance use prevention outcomes
- simplify the data collection procedures used for monitoring programmatic activities, including less frequent collection of detailed implementation data unless needed for ADAP performance measures