



University of Wisconsin
Comprehensive Cancer Center
Tobacco Surveillance and Evaluation Program

School Tobacco Program: Second Year Assessment Program Brief March 2004

Major findings:

- Funding was provided to 46 projects covering 201 school buildings in 55 districts in Wisconsin. The purpose was to continue to support enhanced implementation of school tobacco programs which followed the Centers for Disease Control and Prevention's Guidelines for School Health Programs to Prevent Tobacco Use and Addictions.
- During the second year, the average funding award decreased from the first year average of about \$22,500 to about \$11,500.
- School districts reported approximately 33,000 students received classroom instruction, about 22,000 received new or enhanced peer services, and over 1800 were served by or referred to tobacco cessation programs during the second year of funding.
- The number of students reported served by cessation services in the second year was three times the number referred or served during the first year of the program.
- Significant improvement in all areas addressed in the CDC Guidelines was reported between the baseline and both the one and two-year follow-ups. Schools reported increased consistency with CDC Guidelines in the areas of policy, curriculum, instruction, staff training, family and community involvement, cessation services, and evaluation.
- During the second year, significant improvements were reported in the areas of policy, curriculum, instruction and family/community involvement since the end of the first year. Significant improvements were not reported in the areas of training, cessation and evaluation. Overall scores also showed significant improvement over the previous year.
- Evidence from prior research in other states suggests that enhanced implementation of the CDC school tobacco program guidelines is associated with significant reduction in student tobacco use. These results are expected in Wisconsin as well as a result of improved school tobacco policies and programs.

Tobacco Surveillance and Evaluation Program

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Background

The Department of Public Instruction (DPI), in cooperation with the Department of Health and Family Services' Wisconsin Tobacco Prevention and Control Program (formerly the Wisconsin Tobacco Control Board--WTCB), administers and oversees the School Tobacco Program Grants. This program allows public school districts and consortia to apply for funds to create or expand upon strategies identified as effective by the Centers for Disease Control and Prevention (CDC) in reducing or eliminating youth tobacco use. There is research evidence that implementation of the CDC Guidelines in California schools was significantly related to reduced smoking prevalence, increased quit attempts and increased negative expectations and attitudes regarding tobacco among students (Rohrbach et al., 2002). Another study in Oregon found that schools with high or medium levels of implementation of the Guidelines, relative to low implementation schools, had greater decline in 8th graders' 30-day smoking prevalence (Rohde et al., 2001). Thus the DPI used the CDC Guidelines as the cornerstone of this grant program.

In order to be considered for grant receipt, districts and consortia were required to submit policy and program assessments for each of their respective school buildings. Originally, one hundred and nine school districts and consortia throughout the state applied for grant funding on behalf of the 313 school buildings they serve. Forty-three percent of applicant school districts and 36 percent of consortia received first year grant funding, with a total award amount of about \$1.1million. (See Anderson, Moberg and White, 2002 for a detailed report on the baseline data). In the 2002-03 school year the same projects were awarded a reduced second year total of approximately \$625,000.

In addition to providing grant dollars to local school districts, targeted training and technical assistance was provided to schools and communities through ongoing collaboration between the Department of Public Instruction, American Lung Association of Wisconsin, CESAs and local tobacco free coalitions. Statewide training and technical assistance efforts targeted cessation, youth education programs (including curriculum, instruction, family and community involvement), and staff development as well as policy communication and enforcement.

Methods

All applicant schools completed self assessments of their school tobacco prevention programs as part of their grant application process. These assessments serve as the baseline for evaluation. In order to evaluate change, funded schools completed the assessment at the end of the first and second years of funding, with an 86% response rate (n=155 of 180 schools with baseline data) for the first year and a 91% response rate (n= 164 of the 180 schools with baseline data) for the second year. Unfunded schools were not surveyed the second year due to the low response rate, approximately 40%, in the first year.

The assessment questions were developed from the CDC's Guidelines for School Health Programs to Prevent Tobacco Use and Addiction (1994). Seven assessment sections follow the CDC's recommendations for ensuring quality school programs that prevent, reduce or eliminate tobacco use: policy, instruction, curriculum, training, family & community involvement, tobacco cessation, and evaluation. Each of the 58 assessment questions measured the level to which respondents reported that the school building had elements of quality tobacco education programs and policies in place. Questions were scored according to whether a given

characteristic existed completely ('yes'), existed only to some degree ('somewhat'), or not at all ('no'). Responses were scored two, one, or zero points, respectively, to each question and averaged within each area of the guidelines. The higher the score, the more anti-tobacco programs consistent with the guidelines were in place.

Results

Schools in districts that received funding were compared at baseline and one and two year follow-up to estimate the effects of funding on changes in school tobacco policies and programs over time. All data are based on self report of school staff.

Baseline Assessment

The 201 funded school buildings reporting included 34% elementary, 32% middle schools or junior highs, and 22 percent high schools. The remaining 12% were various atypical combinations of grade levels.

On the baseline self assessments, we found that in funded schools, school policies were most consistent with the CDC Guidelines (73% of possible score), followed by curriculum (57%) and instruction (47%). Less consistent with guidelines were the areas of staff training (28%), family/community involvement (29%), cessation programming (18%) and evaluation (19%). Thus there was a great deal of room for improvement in many of the guideline areas.

First Year Results

At the end of the first year, districts or consortia of districts (n=46 projects) reported that 40,045 students received classroom instruction using "curriculum developed, enhanced or purchased through the grant," 18,969 students received programs/services from trained peers, 1,729 students were trained for peer to peer tobacco programs, 589 students were referred for or served by cessation programs, and 428 students were disciplined under new tobacco policies (Table 1). Projects reported that grant-funded activity had focused on curriculum (89%), peer to peer program implementation (61%), cessation and student assistance (56%), community connection and coalition building (50%), parent/family education and outreach (44%), and policy development (37%).

Table 1: Annual District-Level Reports of Program Reach

	Number of Projects Reporting (Including Consortia)	Number of School Buildings	Total Number of Students Receiving Programs	Total Number of Students Receiving Instruction from Trained Peers	Number of Students Trained for Peer to Peer Instruction	Number of Students Referred/Served by cessation Programs	Number of Students Disciplined under New Tobacco Policies
1 st year	46	165	40,045	18,969	1,729	589	428
2 nd year	45	201	32,652	22,455	1,092	1,854	674

Data reported by each school building at the end of the first year showed statistically significant improvements on all areas of the CDC guidelines. Unfunded applicant schools were used as a comparison group in the first year, but the response rate was low (40%) and selection bias cannot be ruled out. Comparison of reported change in funded and unfunded schools indicates significant improvements in both groups, but a greater amount of change in the funded schools than in those that were not funded under this grant program (Table 2).

Second Year Results

At the end of the second year, projects (n= 45 districts or consortia with data) reported that 32,652 students received classroom instruction using “curriculum developed, enhanced or purchased through the grant,” 22,455 students received programs/services from trained peers, 1,092 students were trained for peer to peer tobacco programs, 1,854 students were referred for or served by cessation programs, and 674 students were disciplined under new tobacco policies (Table 1). Particularly encouraging is the increasing numbers of students referred for cessation.

At least 36 additional buildings within districts were also added during the second year of funding. Districts reported that grant-funded activity had focused on curriculum (84%), cessation and student assistance (64%), peer to peer program implementation (58%), community connection and coalition building (42%), policy development (40%), and parent/family education and outreach (33%).

Results from self assessments at the end of the second year show that the funded schools had increased significantly from the baseline on all areas of the CDC guidelines. Table 2 presents the data in the original metric of the questions, averaged across the items in that domain. The scales can thus range from 0 = Not in place, 1 = Somewhat, and a possible high of 2 = Yes, is in place. A 0 score would indicate none of the elements of an area are in place, while a 2 would indicate all elements in that area are in place.

Changes from baseline, prior to funding, to the end of the first year were significant in all of the reported domains. During the second year, additional significant improvements were reported in the areas of policy, curriculum, instruction and family/community involvement since the end of the first year. Significant additional improvements were not reported in the areas of training, cessation and evaluation. Overall scores showed significant improvement over each time period.

Limitations

The self assessment tool was developed primarily as a planning and needs assessment device for schools. As such, validity and reliability of responses were not initially issues in the development of the tool. The limitations from an evaluation research perspective are that the tool is completed as a self report from individuals or teams in each school, potentially with differential incentives for impression management at baseline (to demonstrate need) and at follow-up (to demonstrate progress). In addition, different individuals/teams may have

completed the tool at the baseline and one and two year follow-up with different response biases inherent in the process.

Table 2 :				
Mean Change from Baseline to Year One and Year Two				
(Funded results based on 164 buildings that completed all three instruments)				
		Baseline	One Year	Two Year
Policy (17 Items)				
	Funded	1.54	1.72**	1.81**
	Unfunded [†]	1.66	1.78*	----
Curriculum (17 Items)				
	Funded	1.17	1.48**	1.66**
	Unfunded [†]	1.49	1.65*	----
Instruction (6 Items)				
	Funded	0.98	1.27**	1.38**
	Unfunded [†]	1.49	1.65*	----
Training (4 Items)				
	Funded	0.58	0.97**	.98
	Unfunded [†]	0.63	0.85*	----
Family / Community Involvement (7 Items)				
	Funded	0.65	1.03**	1.20**
	Unfunded [†]	0.70	0.89*	----
Cessation (3 items)				
	Funded	0.42	0.90**	.95
	Unfunded [†]	0.45	0.67*	----
Evaluation (4 Items)				
	Funded	0.45	0.88**	.90
	Unfunded [†]	0.50	0.79*	----
Overall (58 Items)				
	Funded	1.07	1.37**	1.51**
	Unfunded [†]	1.23	1.41*	----
		[†] Unfunded programs were not followed the second year <i>Scale ranges from 0 = none in place to 2= all elements in place.</i> <i>Actual sample sizes vary from 164 due to missing data.</i>		Change since prior time point significant based on paired t-test at: *P<.05 **P<.001

Comment

These data indicate significant self-reported improvement in tobacco programming in Wisconsin schools related to receipt of the Tobacco Program grants. These improvements continued over the two years of funding. In addition to Tobacco Program grants, training and technical assistance provided by DPI under the grant program may have also affected both funded and unfunded (comparison) schools. In addition to these self-report data, the next round of School Health Education Program (SHEP) survey data will be analyzed to assess anticipated long term differences between funded schools and random schools in their tobacco programs and policies. Generalizing from other research linking student outcomes to high levels of implementation of CDC Guidelines, we expect that student tobacco use will be significantly reduced by this grant program, but have not directly measured this outcome.

References

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