

School Health Profiles

Surveillance for Characteristics of Health Programs Among Secondary Schools



2004

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Suggested Citation

Whalen LG, Grunbaum JA, Kann L, Hawkins J, McManus T, Davis KS. School Health Profiles: Surveillance for Characteristics of Health Programs Among Secondary Schools (Profiles 2002). Atlanta, GA: Centers for Disease Control and Prevention, 2004.

Ordering Information

For additional information about school health or to request free copies of this report, send an e-mail to Healthyyouth@cdc.gov, call 888-231-6405, or visit our Web site at http://www.cdc.gov/healthyyouth/profiles.

PROFILES 2002

School Health Profiles

Surveillance for Characteristics of Health Programs Among Secondary Schools

Laura G. Whalen, M.P.H.

Jo Anne Grunbaum, Ed.D.

Laura Kann, Ph.D.

Joseph Hawkins, M.A.

Tim McManus, M.S.

Kristen S. Davis, M.P.H.

TABLE OF CONTENTS

STATE AND LOCAL SCHOOL HEALTH PROFILES COORDINATORS	v
INTRODUCTION	1
METHODOLOGY	
Sampling	
Data Collection	
Data Analysis	
BACKGROUND	3
Health Education	3
Requirements	3
Standards and Guidelines	3
Coordination of Health Education	3
Professional Preparation and Staff Development	4
Physical Education	4
Health Services	4
Food Service	5
School Policy and Environment	5
Tobacco-Use Prevention	5
Violence Prevention	6
HIV/AIDS Prevention	6
Family and Community Involvement	7
RESULTS	8
Health Education	8
Required Health Education	8
Standards, Curricula, Guidelines, and Frameworks for Required Health Education Courses	8
Content of Required Health Education Courses	
Use of Specific Teaching Methods	15
Coordination of Health Education	16
Professional Preparation and Staff Development	16
Physical Education	20
Health Services	21
Food Service	22
Sahaal Paliay and Environment	22

Tobacco-Use Prevention	22
Violence Prevention	24
HIV/AIDS Prevention	25
Family and Community Involvement	26
TRENDS	28
Long-Term Trends	
Short-Term Trends	
COMPARISON TO NATIONAL DATA	30
Health Education	
Physical Education	
Food Service	31
School Policy and Environment	
Family and Community Involvement	32
DISCUSSION	33
REFERENCES	36
TABLES	41

STATE AND LOCAL SCHOOL HEALTH PROFILES COORDINATORS

Site	Coordinator	Affiliation
Alabama	Martha Holloway, M.S.	Department of Education
Alaska	Beth Shober, M.A.	Department of Education and Early Development
Arizona	Cheri Levenson, M.P.A.	Department of Education
Arkansas	Kathleen Courtney, M.S.	Department of Education
California	Caroline Roberts, M.P.H.	Department of Education
Chicago, IL	Margaret M. Finnegan, M.S.	Chicago Public Schools
Connecticut	Bonnie J. Edmondson, M.S.	Department of Education
Dallas,TX	Phyllis E. Simpson, Ph.D., M.S.	Dallas Independent School District
Delaware	Janet Arns Ray, M.S.	Department of Education
District of Columbia	Linda Wright, M.A.	District of Columbia Public Schools
Fort Lauderdale, FL	Mike Weissberg, M.S.	School Board of Broward County
Georgia	Mary Johnson	Department of Education
Hawaii	Patricia Hamamoto	Department of Education
Houston,TX	Rose Haggerty, M.Ed.	Houston Independent School District
Idaho	Barbara S. Eisenbarth, M.Ed.	Department of Education
Illinois	Glenn Steinhausen, Ph.D.	State Board of Education
lowa	Sara A. Peterson, M.A.	Department of Education
Kentucky	Renee White, Ph.D., M.S.H.A.	Department of Education
Los Angeles, CA	Rona Cole, M.A.	Los Angeles Unified School District
Maine	Joni Foster	Department of Education
Massachusetts	Belinda J. Abbruzzese, M.P.H.	Department of Education
Miami, FL	Rodolfo Abella, Ph.D.	Miami-Dade County Public Schools
Michigan	Kim Kovalchick, M.S.W., M.P.H.	Department of Education
Minnesota	Kathy Brothen	Department of Education Department of Children, Families and Learning
Missouri	Kevin Miller, M.A.	Department of Children, Farmies and Learning Department of Elementary and Secondary Education
Montana	Susan Court	Office of Public Instruction
Nebraska	Jeff Armitage	Department of Education
		•
New Hampshire	Ginny St. Martin, M.A.T. Tom Collins, Ph.D.	Department of Education
New Jersey New Mexico	Lonnie Barraza	Department of Education
New York		Department of Education
North Carolina	Patricia Kocialski, M.Ed. Michael Sanderson, M.P.H.	Department of Education
North Carolina North Dakota		Department of Health and Human Services
	Nicole L. Wright, M.S.	Department of Public Instruction
Oklahoma	Judy G. Duncan	Department of Education
Orange County, FL	Kathy Bowman-Harrow, M.S.	Orange County Public Schools
Oregon	Kara Stebbins, M.P.H.	Department of Education
Palm Beach, FL	Dani Fitzgerald	School District of Palm Beach County
Pennsylvania	Shirley A. Black, M.Ed.	Department of Education
Philadelphia, PA	Bettyann Creighton, M.Ed.	School District of Philadelphia
Rhode Island	Cynthia Y. Corbridge, M.Ed., M.S.W.	Department of Education
San Bernardino, CA	Angela Jones, M.S.	San Bernardino Unified School District
San Diego, CA	Marge Kleinsmith-Hildebrand, M.S.	San Diego Unified School District
San Francisco, CA	Phong Pham, M.A.	San Francisco Unified School District
South Carolina	Aaron Bryan, M.A.	Department of Education
Tennessee	Jerry Swaim, M.S.	Department of Education
Texas	Janet Russell, Ph.D.	Texas Education Agency
Utah	Vicky Dahn, Ph.D.	Office of Education
Vermont	Shevonne Travers, M.S.	Department of Education
Virginia	Muriel Azria-Evans, Ph.D.	Department of Education
Washington	Julia Dilley, M.E.S., Ph.D.	Department of Health
Wisconsin	Brian Weaver	Department of Public Instruction

INTRODUCTION

In 1995, the Centers for Disease Control and Prevention (CDC) collaborated with state, territory, and local education and health agencies to develop the School Health Education Profiles. At that time, the survey assessed mainly health education and some school policies primarily related to HIV/AIDS prevention. Based on input from education and health agencies, the survey evolved to provide a more comprehensive assessment of school health programs. In 2002, new topics were added to assess the areas of physical education and activity, nutrition and food service, and asthma. To reflect more accurately this expansion in the survey's content, the word "education" was dropped from the title of the survey. Thus the new name for the survey is the School Health Profiles (Profiles).

The purpose of Profiles is to assist state, territory, and local education and health agencies in monitoring and assessing characteristics of and trends in school health education; physical education; asthma management activities; school health policies related to HIV/AIDS prevention, tobacco-use prevention, violence prevention, physical activity, and nutrition and food service; and family and community involvement in school health programs. This broad focus now provides at least some information on six of the eight components of the Coordinated School Health Program (CSHP). The six components of CSHP assessed by Profiles are as follows:

- Health education, which provides students with the knowledge, attitudes, and skills they need to avoid or modify behaviors related to the leading causes of death, illness, and injury during youth and adulthood.
- Physical education, which provides students with the knowledge, attitudes, skills, behaviors, and confidence to adopt and maintain physically active lifestyles.

- Health services, which provide care to students who
 otherwise might not have access to care. Academic
 and social success is linked to positive physical and
 mental health.
- Food service, which can promote healthy dietary behaviors and help ensure appropriate nutrient intake, thus promoting optimal health, growth, and intellectual development.
- School policy and environment, which can provide a safe, positive physical and psychological setting; prevent injuries from occurring at school; and prevent student school failure, substance abuse, and violence.
- Family and community involvement in school health programs, which can help family members become more knowledgeable about health issues, thus enabling them to serve as positive role models by reinforcing healthy behaviors at home.

Profiles data were collected in 1996, 1998, 2000, and 2002. In each sampled middle/junior or senior high school, the principal and lead health education teacher (i.e., the person who coordinates health education policies and programs within a middle/junior high school or senior high school) each completed a self-administered questionnaire. This report summarizes data from the 2002 Profiles. Principals' surveys were completed successfully in 43 states and 13 cities, and lead health education teachers' surveys were completed successfully in 42 states and 13 cities. This report also examines both long-term (1996-2002) and short-term (2000-2002) trends in health education and school health policies. In addition, this report compares the 2002 Profiles data with national data on health education and school health policies from the School Health Policies and Programs Study 2000 (SHPPS 2000).

METHODOLOGY

SAMPLING

The Profiles employ random systematic equal-probability sampling strategies to produce representative samples of schools serving students in grades 6 through 12 in each jurisdiction. In most states and cities, the sampling frame consists of all regular secondary public schools with one or more of grades 6 through 12. Twenty-three education and health agencies modify this procedure by inviting all schools, rather than just a sample, to participate.

DATA COLLECTION

Data are collected from each sampled school during the spring semester. Both the principal's and teacher's questionnaires are mailed to the principal, who then designates the school's lead health education teacher to complete the teacher's survey. Participation in the survey is confidential and voluntary; follow-up telephone calls and written reminders are used to encourage participation. The principal and teacher record their responses in the questionnaire booklets and return them directly to the state or local education or health agency.

DATA ANALYSIS

The data are weighted to reflect the likelihood of principals or teachers being selected and to adjust for differing patterns of nonresponse. Data from a state or city that had an overall response rate of 70% or greater and appropriate documentation were weighted, whereas data from a state or city that did not meet these criteria were not weighted. Weighted data represent all public schools serving grades 6 through 12 in that jurisdiction; unweighted data represent only the participating schools. Because of a low response rate (less than 50%), data from principals' surveys conducted in five states and lead health education teachers' surveys conducted in seven states are not included in this report. Thus, this

report represents information from 35 states with data from both principals' and lead health education teachers' surveys, 3 states with data from the principals' survey only, and 13 cities with data from both principals' and lead health education teachers' surveys (Table 1).

Across states, the sample sizes of the principals' surveys ranged from 52 to 608, and the response rates ranged from 50% to 91%; across cities, the sample sizes ranged from 14 to 223, and the response rates ranged from 65% to 100% (Table 1). The sample sizes of the lead health education teachers' surveys across states ranged from 49 to 591, and the response rates ranged from 53% to 90%; across cities, the sample sizes ranged from 8 to 217, and the response rates ranged from 53% to 100%.

SAS software was used to compute point estimates. Medians are presented for all states combined (i.e., those with weighted data and those with unweighted data combined) and for all cities combined (i.e., those with weighted data and those with unweighted data combined). The Wilcoxon rank-sum test was used to test for differences between 1996 data and 2002 data and between 2000 data and 2002 data across states and cities. This is a nonparametric analogue to a two-sample t-test. This statistical procedure (a) rank ordered all sites for both years separately for states and cities, (b) summed the ranks separately by year and for states and cities, and (c) compared the rank sums separately for states and cities to determine whether the distribution of the variable was the same for 1996 and 2002 or for 2000 and 2002. Assuming the percentages have an underlying continuous distribution, the distribution of ranks is approximately normal; therefore, a z value was used as the test statistic. The distributions were considered significantly different if p was less than or equal to .05.

BACKGROUND

HEALTH EDUCATION

Requirements

The Institute of Medicine recommends that schools require at least a one-semester health education course at the senior high school level.³ School health education provides students with the knowledge, attitudes, and skills they need to avoid or modify behaviors related to the leading causes of death, illness, and injury during youth and adulthood. Health education should address the physical, mental, emotional, and social dimensions of health and be age appropriate.⁴ Health education curricula should be planned, sequential, and implemented for all grades in elementary and middle/junior high schools and through at least one semester in senior high schools.^{3,5}

Standards and Guidelines

The seven *National Health Education Standards*, developed by the Joint Committee on National Health Education Standards, describe what students should know and be able to do as a result of school health education.⁶ According to these standards, students should be able to

- 1. Comprehend concepts related to health promotion and disease prevention.
- 2. Demonstrate the ability to access valid health information and health-promoting products and services.
- 3. Demonstrate the ability to practice health-enhancing behaviors and reduce health risks.
- 4. Analyze the influence of culture, media, technology, and other factors on health.
- 5. Demonstrate the ability to use interpersonal communications skills to enhance health.

- 6. Demonstrate the ability to use goal-setting and decision-making skills to enhance health.
- 7. Demonstrate the ability to advocate for personal, family, and community health.

School health education is supported by the *Healthy People 2010* Objective 7-2, which looks to

Increase the proportion of middle, junior high, and senior high schools that provide school health education to prevent health problems in the following areas: unintentional injury; violence; suicide; tobacco use and addiction; alcohol and other drug use; unintended pregnancy, HIV/AIDS, and STD [sexually transmitted disease] infection; unhealthy dietary patterns; inadequate physical activity; and environmental health.^{7 (pg. 7-14)}

Coordination of Health Education

A necessary component of effective health education is management and coordination by a professional who is trained in health education. That person may work directly within the school or at the school district level. Curriculum planning and development is enhanced when schools have a school health coordinator. In addition, collaboration among health education teachers and other school staff members also improves the implementation of health education curricula. To supplement a separate health education course, health-related information can be included in a range of disciplines, including physical education, the sciences, mathematics, language arts, social studies, home economics, and the arts.

Professional Preparation and Staff Development

The quality of school health education is determined, in part, by teacher preparation.⁵ Professional preparation and staff development for teachers are critical for the implementation of effective school health education.¹⁰⁻¹² Staff development for health education teachers should focus on those strategies that will actively engage students as well as facilitate their mastery of critical health information and skills.⁵ Teachers who receive training implement health education curricula with more fidelity than teachers who do not receive training, resulting in more knowledge gain among students.¹³

PHYSICAL EDUCATION

The 1999-2000 National Health and Nutrition Examination Survey (NHANES) estimated that more than 15% of adolescents aged 12 through 19 years were overweight.¹⁴ In 1999, there were nearly twice as many overweight children and almost three times as many overweight adolescents as there were in 1980.15 Overweight or obesity that develops during childhood or adolescence may persist into adulthood and increase the risk later in life for coronary heart disease, gallbladder disease, some types of cancer, and osteoarthritis of the weight-bearing joints. 16 Regular participation in physical activity during childhood and adolescence can help control weight, increase muscle mass, build bones, and prevent or delay the onset of high blood pressure and hypertension.¹⁷ Schools can play an important role in motivating students to be active and in providing opportunities for physical activity. CDC's Guidelines for School and Community Programs to Promote Lifelong Physical Activity Among Young People recommends that schools adopt a comprehensive approach to physical activity, including daily physical education, teaching of skills and knowledge to maintain a physically active lifestyle, daily recess periods for elementary school students, and extracurricular physical activity programs. 18 In 2001, the independent, nonfederal Task Force on Community

Preventive Services, in conjunction with CDC, published recommendations for increasing physical activity. Among the interventions that were strongly recommended were school-based physical education curricula and policies that increased the amount of time spent in physical education class and increased the amount of time that students were active during physical education class.¹⁹

The importance of physical education in promoting the health of young people is supported by three *Healthy People 2010*⁷ objectives:

- 22-8. Increase the proportion of the nation's public and private schools that require daily physical education for all students.
- 22-9. Increase the proportion of adolescents who participate in daily school physical education.
- 22-10. Increase the proportion of adolescents who spend at least 50% of school physical education class time being physically active.

HEALTH SERVICES

Currently, 6.3 million U.S. children (8.7%) have asthma as diagnosed by a health professional. In 2000, children made 4.6 million visits to doctors' offices and hospital outpatient departments, made 728,000 visits to hospital emergency departments, and had 214,000 hospitalizations due to asthma. An estimated 14 million lost school days are attributed to asthma among school-aged children. The impact of illness and death due to asthma is disproportionately higher among low-income populations, racial and ethnic minorities, and children in inner cities than in the general population.

Although asthma cannot be cured, it can be controlled. By being "asthma friendly," schools can help students manage their asthma, that is, by being more supportive of students and staff members with asthma, adopting asthma-friendly policies and procedures, coordinating services for students with asthma, and providing asthma education for students and staff members.²³ The following *Healthy People 2010*⁷ objectives address asthma:

- 24-4. Reduce activity limitations among persons with asthma.
- 24-5. (Developmental) Reduce the number of school or work days missed by persons with asthma due to asthma.

One method for decreasing asthma-related absenteeism is to increase the proportion of schools that have a nurse-to-student ratio of at least 1:750, as called for in Healthy People 2010 Objective 7-4.7 CDC also has promoted access to school nurses for asthmatic students in its Strategies for Addressing Asthma Within a Coordinated School Health Program.²⁴

FOOD SERVICE

The high prevalence of overweight young people and the concomitant rise in type 2 diabetes among children and adolescents are reminders of the important contribution of nutrition and physical activity to health. 14,25 Around two-thirds of young people over-consume fat. In addition, an average of 25% of their caloric intake comes from added sugars, yet fewer than 20% consume the daily recommended servings of fruit.^{26,27} Schools provide a unique opportunity to teach students to make healthy dietary choices. Through both classroom instruction and the food service program, students can learn and practice skills for maintaining a healthy diet. To promote lifelong healthy eating habits, CDC developed the Guidelines for School Health Programs to Promote Lifelong Healthy Eating.²⁸ These guidelines recommend that nutrition education be included as a part of school health education. Nutrition education should be developmentally

appropriate and use a participatory approach to help students adopt healthy eating behaviors. A second key recommendation is for the adoption of school nutrition policies that promote healthy eating through classroom nutrition education and a supportive school environment. Additional recommendations call for the integration of nutrition education and school food services, training for school staff members to prepare them for their roles, the involvement of families and communities in supporting and reinforcing nutrition education, and the evaluation of school nutrition programs.²⁸

Nutrition, health, and education agencies and professional organizations are increasingly concerned about the widespread availability of foods and beverages sold on school campuses that are not part of the federally regulated school meal programs.²⁹ Teaching students to make healthful food choices, not only at mealtimes but also at all other times during the school day, should be an integral part of a school's nutrition education program. Because federal regulations do not prohibit the sale of soft drinks and foods of low nutritional value (e.g., chips, most candy bars) in a la carte venues, schools must be particularly careful to monitor these areas. Schools can meet the challenges of "competitive" foods through policies and practices such as offering students more healthful choices in vending machines and at school stores, canteens, and snack bars.³⁰ The importance of establishing a comprehensive school environment that supports a good overall diet is recognized by the Healthy People 2010 Objective 19-15: to "increase the proportion of children and adolescents aged 6 to 19 years whose intake of meals and snacks at school contributes to good overall dietary quality."7 (pg. 19-40)

SCHOOL POLICY AND ENVIRONMENT

Tobacco-Use Prevention

Tobacco use is the single most preventable cause of death in the United States and accounts for 430,000

deaths each year. Approximately 80% of tobacco users initiate its use before the age of 18 years.³¹ CDC's *Guidelines for School Health Programs to Prevent Tobacco Use and Addiction* identifies components of a school policy to help prevent tobacco use among youth.³² The following are key elements of such a policy:

- Prohibit tobacco use by students, school staff, parents, and visitors on school property, in school buildings, and at school functions away from school property.
- Prohibit tobacco advertising in school buildings, on school property, and in school publications.

An inclusive tobacco-use prevention policy can help schools in achieving the *Healthy People 2010* Objective 27-11: to "increase smoke-free and tobacco-free environments in schools, including all school facilities, property, vehicles, and school events." (pg. 27-27)

Violence Prevention

Seventy-one percent of all deaths among persons 10 through 24 years of age result from only four causes: motor vehicle crashes, other unintentional injuries, homicide, and suicide. The No Child Left Behind Act of 2001 authorizes federal funds for school programs to prevent violence in and around schools. Heftective and safe schools are well prepared for any potential crisis or violent acts. The CDC's School Health Guidelines to Prevent Unintentional Injury and Violence identifies strategies for schools that can help prevent unintentional injuries, violence, and suicide. An important strategy is to establish both social and physical environments that promote safety and prevent unintentional injuries, violence, and suicide. Two Healthy People 2010⁷ objectives also call for the reduction of violence and toxic exposures at schools:

 8-20. (Developmental) Increase the proportion of the nation's primary and secondary schools that have official school policies ensuring the safety of students and staff from environmental hazards, such as chemicals in special classrooms, poor indoor air quality, asbestos, and exposure to pesticides.

 15-39. Reduce weapon carrying by adolescents on school property.

HIV/AIDS Prevention

In 2002, an estimated 1,909 young people aged 13 to 24 were diagnosed with AIDS, for a cumulative total (through December 2002) of 36,299 AIDS cases in this age group. The AIDS cases reported in 2001 were among men who had sex with men, 7% were among injection drug users, and 8% were among men infected with HIV through heterosexual contact. Among females aged 13 to 24, nearly 45% of all AIDS cases reported in 2001 were attributed to heterosexual contact and 6% to injection drug use. The HIV exposure risk category is unknown for 28% of males and 48% of females in this age group who were reported with AIDS in 2001. The HIV exposure risk category is unknown for 28% of males and 48% of females in this age group who were reported with AIDS in 2001.

The majority of new AIDS cases are diagnosed among members of racial/ethnic minority populations. In areas with confidential HIV infection reporting, 85% of HIV infections and nearly 80% of AIDS cases reported in 2001 among children under the age of 13 occurred among African American and Hispanic children. Through December 2001, more than 33,000 young people aged 13 to 24 were reported with AIDS; 21,935 of these young people (almost 66%) were African American or Hispanic.³⁸

Advances in the treatment of HIV infection have extended the lives of people living with HIV and AIDS.^{39,40} Thus, school health policies that address issues raised by HIV infection and AIDS are critical for protecting the rights of affected students and school staff members. The National Association of State Boards

of Education provides policy recommendations to help schools develop or modify policies that address issues raised by HIV infection among students and staff.⁴¹

FAMILY AND COMMUNITY INVOLVEMENT

Partnerships among schools, parents, community members, and other professionals are key elements of effective school health programs. These partnerships contribute to successful school health programs and to improved health-related knowledge and skills among students.⁴²

A health committee or advisory council within the school or school district can help build support for school health initiatives. Schools that have a good relationship with parents are more likely to gain parent cooperation with school health efforts. Support from parents can lead to the overall success or failure of a student as well as the success or failure of a new health program in the school. In addition, parent involvement in health education increases both student achievement and self-esteem. 44

RESULTS

HEALTH EDUCATION

Required Health Education

Required health education is defined as instruction about specific health education topics that students must receive for promotion or graduation from school. Many schools required health education for students in grades 6 through 12, and most schools offered one or more health education courses.

- Across states, the percentage of schools that required health education for students in grades 6 through 12 ranged from 32.7% to 100.0% (median: 92.3%) (Table 2). Among those schools, the median percentage that taught one or more separate required health education courses was 93.7% and ranged from 77.6% to 100.0% across states.
- Across cities, the percentage of schools that required health education for students in grades 6 through 12 ranged from 68.8% to 100.0% (median: 88.3%) (Table 2). Among those schools, the median percentage that taught one or more separate required health education courses was 87.3% and ranged from 64.3% to 100.0% across cities.

Schools taught required health education in each of the following ways:

- The percentage of schools that taught required health education in a combined course with physical education ranged from 31.8% to 96.1% across states (median: 60.2%) and from 12.1% to 96.6% across cities (median: 56.8%).
- The percentage of schools that taught required health education in a course mainly about another subject

(e.g., science, social studies, English) ranged from 8.3% to 55.0% across states (median: 23.8%) and from 18.8% to 100.0% across cities (median: 55.2%).

Standards, Curricula, Guidelines, and Frameworks for Required Health Education Courses

Many schools require that teachers use specific standards, curricula, or guidelines in required health education courses. The ranges in percentage of schools that required their use were as follows* (Table 3):

- The National Health Education Standards: from 19.9% to 68.9% across states (median: 38.9%) and from 24.4% to 72.0% across cities (median: 47.5%).
- A state, district, or school curriculum, guidelines, or framework: from 82.9% to 100.0% (median: 95.9%) across states and from 80.0% to 100.0% across cities (median: 100.0%).
- Materials from health organizations such as the American Red Cross or the American Cancer Society: from 17.7% to 61.7% across states (median: 36.1%) and from 31.1% to 92.9% across cities (median: 58.0%).
- A commercially developed teacher's guide: from 25.6% to 80.2% across states (median: 49.4%) and from 33.1% to 80.0% across cities (median: 62.5%).

Content of Required Health Education Courses

Required health education courses aim to increase student knowledge about a variety of health-related topics. The ranges in percentage of schools that covered

^{*} Schools could report use of one or more types of material.

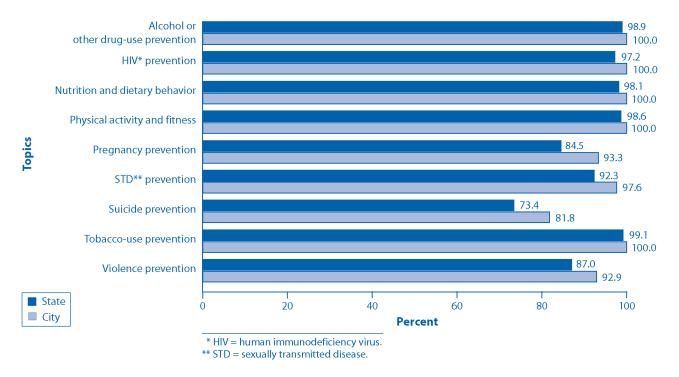


FIGURE 1. Median percentage of schools that tried to increase student knowledge of specific topics in a required health education course, School Health Profiles, 2002.

specific health-related topics in required health education courses were as follows (Tables 4a, b, c, Figure 1):

- Accident or injury prevention: from 75.2% to 97.3% across states (median: 90.9%) and from 46.3% to 100.0% across cities (median: 90.5%).
- Alcohol or other drug-use prevention: from 96.4% to 100.0% across states (median: 98.9%) and from 96.4% to 100.0% across cities (median: 100.0%).
- Consumer health: from 70.6% to 88.4% across states (median: 80.3%) and from 66.7% to 93.4% across cities (median: 81.3%).
- Cardiopulmonary resuscitation (CPR): from 44.1% to 87.6% across states (median: 65.6%) and from 17.1% to 93.4% across cities (median: 70.9%).

- Death and dying: from 34.5% to 75.2% across states (median: 56.3%) and from 19.5% to 69.9% across cities (median: 59.1%).
- Dental and oral health: from 40.2% to 82.1% across states (median: 63.3%) and from 19.5% to 88.5% across cities (median: 66.7%).
- Emotional and mental health: from 84.4% to 98.9% across states (median: 95.2%) and from 65.0% to 100.0% across cities (median: 91.8%).
- Environmental health: from 53.9% to 86.1% across states (median: 72.8%) and from 27.5% to 89.7% across cities (median: 81.9%).
- First aid: from 56.7% to 92.6% across states (median: 76.0%) and from 24.4% to 100.0% across cities (median: 78.6%).

- Growth and development: from 80.7% to 97.1% across states (median: 90.3%) and from 63.4% to 100.0% across cities (median: 96.4%).
- HIV prevention: from 84.4% to 100.0% across states (median: 97.2%) and from 90.2% to 100.0% across cities (median: 100.0%).
- Human sexuality: from 62.3% to 97.6% across states (median: 88.9%) and from 86.3% to 100.0% across cities (median: 96.6%).
- Immunization and vaccinations: from 36.2% to 78.8% across states (median: 62.4%) and from 34.1% to 93.4% across cities (median: 75.8%).
- Nutrition and dietary behavior: from 92.9% to 100.0% across states (median: 98.1%) and from 67.6% to 100.0% across cities (median: 100.0%).
- Personal hygiene: from 72.6% to 94.0% across states (median: 84.8%) and from 36.6% to 97.9% across cities (median: 88.2%).
- Physical activity and fitness: from 94.9% to 100.0% across states (median: 98.6%) and from 76.5% to 100.0% across cities (median: 100.0%).
- Pregnancy prevention: from 61.0% to 95.3% across states (median: 84.5%) and from 78.2% to 100.0% across cities (median: 93.3%).
- STD prevention: from 74.0% to 97.7% across states (median: 92.3%) and from 81.0% to 100.0% across cities (median: 97.6%).
- Suicide prevention: from 55.3% to 92.0% across states (median: 73.4%) and from 51.2% to 96.6% across cities (median: 81.8%).

- Sun safety: from 42.7% to 82.8% across states (median: 71.9%) and from 22.0% to 88.7% across cities (median: 80.0%).
- Tobacco-use prevention: from 96.1% to 100.0% across states (median: 99.1%) and from 95.9% to 100.0% across cities (median: 100.0%).
- Violence prevention: from 78.7% to 96.0% across states (median: 87.0%) and from 81.4% to 100.0% across cities (median: 92.9%).

Required health education courses aim to improve student skills. The ranges in percentage of schools that covered specific skills were as follows (Table 5, Figure 2):

- Accessing health information: from 73.3% to 96.7% across states (median: 86.6%) and from 66.7% to 96.9% across cities (median: 87.4%).
- Advocating for health: from 74.8% to 91.6% across states (median: 81.6%) and from 64.3% to 100.0% across cities (median: 88.1%).
- Analysis of media messages: from 61.0% to 98.5% across states (median: 84.9%) and from 66.7% to 95.2% across cities (median: 83.3%).
- Communication: from 84.0% to 100.0% across states (median: 93.5%) and from 77.8% to 100.0% across cities (median: 96.3%).
- Decision making: from 89.7% to 100.0% across states (median: 97.7%) and from 89.3% to 100.0% across cities (median: 98.6%).
- Goal setting: from 83.4% to 100.0% across states (median: 93.4%) and from 91.7% to 100.0% across cities (median: 96.2%).

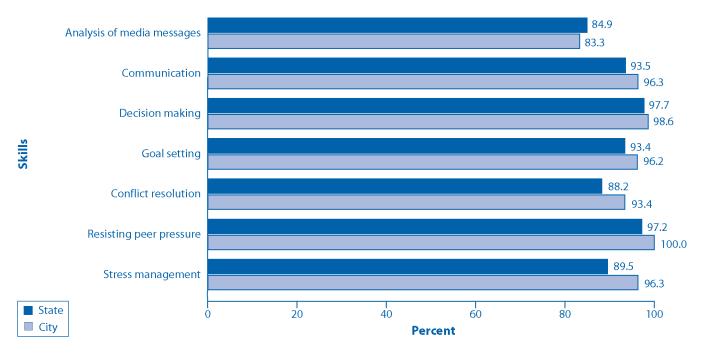


FIGURE 2. Median percentage of schools that tried to improve specific student skills in a required health education course, School Health Profiles, 2002.

- Conflict resolution: from 78.3% to 95.8% across states (median: 88.2%) and from 89.3% to 100.0% across cities (median: 93.4%).
- Resisting peer pressure: from 90.0% to 100.0% across states (median: 97.2%) and from 85.7% to 100.0% across cities (median: 100.0%).
- Stress management: from 70.5% to 98.6% across states (median: 89.5%) and from 75.0% to 100.0% across cities (median: 96.3%).

Tobacco-Use Prevention Topics

Specific tobacco-use prevention topics covered in required health education courses included health outcomes and risks of tobacco use, external influences on tobacco use, skills to avoid tobacco use, and cessation of tobacco use.

The ranges in percentage of schools that taught about health outcomes and risks of tobacco use in a required health education course were as follows (Table 6a):

- Addictive effects of nicotine: from 90.3% to 100.0% across states (median: 97.3%) and from 84.0% to 100.0% across cities (median: 97.5%).
- Benefits of not smoking cigarettes: from 90.0% to 100.0% across states (median: 97.6%) and from 90.3% to 100.0% across cities (median: 97.7%).
- Benefits of not using smokeless tobacco: from 86.0% to 99.5% across states (median: 93.0%) and from 63.0% to 100.0% across cities (median: 93.0%).
- Health consequences of cigarette smoking: from 93.3% to 100.0% across states (median: 98.5%) and from 88.0% to 100.0% across cities (median: 100.0%).

- Health consequences of smokeless tobacco use: from 87.7% to 100.0% across states (median: 94.9%) and from 61.5% to 100.0% across cities (median: 93.0%).
- Health effects of environmental tobacco smoke (ETS): from 85.9% to 100.0% across states (median: 95.9%) and from 80.0% to 100.0% across cities (median: 98.0%).
- Number of illnesses and deaths related to tobacco use: from 84.8% to 100.0% across states (median: 94.5%) and from 80.0% to 100.0% across cities (median: 96.3%).
- Risks of cigar or pipe smoking: from 76.7% to 96.1% across states (median: 87.9%) and from 75.0% to 100.0% across cities (median: 94.2%).

The ranges in percentage of schools that taught about the external influences on tobacco use in a required health education course were as follows (Table 6b):

- Influence of families: from 81.2% to 97.7% across states (median: 91.4%) and from 76.0% to 100.0% across cities (median: 93.0%).
- Influence of the media: from 84.2% to 100.0% across states (median: 95.5%) and from 83.3% to 100.0% across cities (median: 95.6%).
- Social or cultural influences: from 82.7% to 95.9% across states (median: 90.0%) and from 75.0% to 100.0% across cities (median: 90.0%).
- How students can influence others to prevent tobacco use: from 77.6% to 97.5% across states (median: 88.1%) and from 76.0% to 100.0% across cities (median: 89.6%).

- How students can influence others to quit using tobacco: from 74.3% to 95.0% across states (median: 85.0%) and from 75.3% to 100.0% across cities (median: 87.1%).
- How many young people use tobacco: from 80.9% to 100.0% across states (median: 92.8%) and from 80.5% to 100.0% across cities (median: 93.0%).

The ranges in percentage of schools that taught skills to avoid tobacco use and to stop using tobacco in required health education courses were as follows (Table 6c):

- How to find information on tobacco-use cessation: from 62.1% to 86.5% across states (median: 72.6%) and from 68.0% to 92.7% across cities (median: 82.6%).
- Making a personal commitment not to use tobacco: from 60.9% to 83.0% across states (median: 73.3%) and from 66.7% to 100.0% across cities (median: 80.0%).
- How to say no to tobacco use: from 87.2% to 100.0% across states (median: 95.0%) and from 84.0% to 100.0% across cities (median: 97.2%).

HIV/AIDS Prevention Topics

Specific HIV prevention topics covered in required health education courses included HIV transmission and prevention and external influences on HIV risk behaviors.

The ranges in percentage of schools that covered HIV transmission and prevention topics in required health education courses were as follows (Table 7a):

• Abstinence to avoid HIV infection: from 70.5% to 99.4% across states (median: 95.0%) and from 85.0% to 100.0% across cities (median: 100.0%).

- How HIV is transmitted: from 75.7% to 99.4% across states (median: 95.1%) and from 84.7% to 100.0% across cities (median: 100.0%).
- How HIV affects the body: from 74.3% to 99.3% across states (median: 94.7%) and from 85.1% to 100.0% across cities (median: 97.9%).
- How to correctly use a condom: from 7.8% to 65.5% across states (median: 40.4%) and from 39.0% to 100.0% across cities (median: 63.2%).
- Condom efficacy: from 40.6% to 88.1% across states (median: 71.4%) and from 50.0% to 100.0% across cities (median: 89.8%).
- The number of young people who get HIV: from 66.5% to 94.9% across states (median: 85.2%) and from 76.8% to 100.0% across cities (median: 92.4%).

The ranges in percentage of schools that covered external influences on HIV risk behavior topics in required health education courses were as follows (Table 7b):

- Influence of alcohol or other drugs: from 69.2% to 98.4% across states (median: 89.9%) and from 77.3% to 100.0% across cities (median: 95.2%).
- Social or cultural influences: from 62.5% to 91.2% across states (median: 82.9%) and from 71.6% to 100.0% across cities (median: 91.0%).
- How to find valid information on HIV: from 60.5% to 92.0% across states (median: 76.8%) and from 66.6% to 100.0% across cities (median: 90.5%).
- Compassion for persons with HIV or AIDS: from 59.6% to 94.5% across states (median: 82.2%) and from 73.3% to 100.0% across cities (median: 93.7%).

Nutrition and Dietary Intake Topics

Specific nutrition and dietary intake topics covered in required health education courses included choosing healthful foods, food safety, and behaviors that contribute to maintaining a healthy weight.

The ranges in percentage of schools that covered topics related to choosing healthful foods in required health education courses were as follows (Table 8a):

- Benefits of healthy eating: from 88.7% to 99.5% across states (median: 95.4%) and from 54.1% to 100.0% across cities (median: 98.1%).
- Using food labels: from 77.3% to 96.5% across states (median: 86.4%) and from 44.4% to 99.0% across cities (median: 90.1%).
- Food guide pyramid: from 80.7% to 97.6% across states (median: 90.8%) and from 51.4% to 100.0% across cities (median: 95.7%).
- Choosing a variety of grains: from 77.3% to 93.0% across states (median: 84.7%) and from 40.0% to 100.0% across cities (median: 88.9%).
- Choosing a variety of fruits and vegetables: from 81.6% to 96.3% across states (median: 88.6%) and from 47.5% to 100.0% across cities (median: 95.0%).
- Choosing a low-fat diet: from 77.9% to 97.4% across states (median: 88.6%) and from 47.5% to 100.0% across cities (median: 91.9%).
- Using less salt: from 63.3% to 88.1% across states (median: 78.1%) and from 37.5% to 97.0% across cities (median: 83.1%).

- Moderating intake of sugars: from 79.5% to 95.4% across states (median: 87.5%) and from 45.0% to 100.0% across cities (median: 89.7%).
- Eating more calcium-rich foods: from 66.2% to 88.3% across states (median: 80.7%) and from 45.0% to 97.0% across cities (median: 82.8%).

The ranges in percentage of schools that covered topics related to food safety and maintaining a healthy weight in required health education courses were as follows (Table 8b):

- Keeping food safe to eat: from 55.7% to 85.5% across states (median: 74.1%) and from 37.5% to 94.0% across cities (median: 81.7%).
- Preparing healthy meals and snacks: from 67.8% to 90.4% across states (median: 81.5%) and from 40.5% to 100.0% across cities (median: 87.3%).
- Aiming for a healthy weight: from 83.2% to 98.1% across states (median: 91.5%) and from 51.4% to 100.0% across cities (median: 93.0%).
- Risks of unhealthy weight control practices: from 76.7% to 97.5% across states (median: 89.7%) and from 51.4% to 100.0% across cities (median: 93.0%).
- Accepting body size differences: from 74.1% to 94.1% across states (median: 87.5%) and from 54.1% to 100.0% across cities (median: 86.2%).
- Eating disorders: from 74.9% to 99.3% across states (median: 90.0%) and from 57.6% to 100.0% across cities (median: 93.0%).

Physical Activity Topics

Specific physical activity topics covered in required health education courses included the benefits of physical activity and challenges to engaging in physical activity.

The ranges in percentage of schools that covered topics related to the benefits of physical activity in required health education courses were as follows (Table 9a):

- Physical, psychological, or social benefits: from 83.3% to 100.0% across states (median: 93.1%) and from 58.3% to 100.0% across cities (median: 94.6%).
- Health-related fitness: from 74.0% to 97.8% across states (median: 88.6%) and from 55.6% to 96.3% across cities (median: 88.9%).
- Phases of a workout: from 60.1% to 96.2% across states (median: 83.6%) and from 47.4% to 93.4% across cities (median: 73.3%).
- How much physical activity is enough: from 59.5% to 92.7% across states (median: 81.5%) and from 36.1% to 93.4% across cities (median: 77.6%).
- Decreasing sedentary activities: from 67.8% to 92.8% across states (median: 83.2%) and from 35.9% to 100.0% across cities (median: 86.4%).

The ranges in percentage of schools that covered topics related to the challenges of physical activity in required health education courses were as follows (Table 9b):

• Overcoming barriers to physical activity: from 50.2% to 81.8% across states (median: 67.8%) and from 30.8% to 93.0% across cities (median: 72.4%).

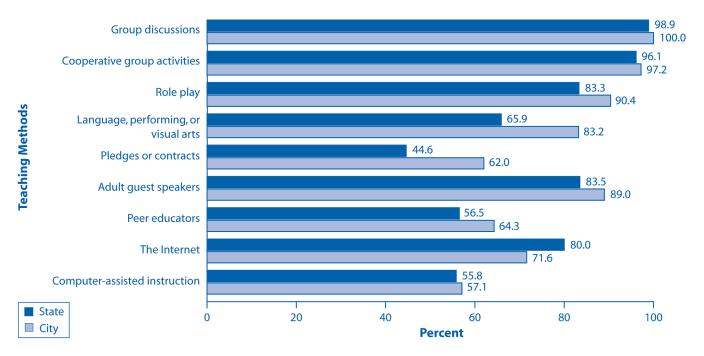


FIGURE 3. Median percentage of schools that used specific teaching methods in a required health education course, School Health Profiles, 2002.

- Developing an individualized physical activity plan: from 44.2% to 80.1% across states (median: 65.9%) and from 28.9% to 84.4% across cities (median: 63.6%).
- Monitoring progress toward reaching goals: from 41.2% to 79.1% across states (median: 61.0%) and from 28.9% to 75.1% across cities (median: 60.2%).
- Opportunities for physical activity in the community: from 51.0% to 87.5% across states (median: 71.0%) and from 33.3% to 92.9% across cities (median: 73.3%).
- Preventing injury during physical activity: from 60.5% to 94.6% across states (median: 82.6%) and from 48.6% to 95.5% across cities (median: 74.8%).
- Weather-related safety: from 57.2% to 93.9% across states (median: 80.1%) and from 33.3% to 97.7% across cities (median: 80.7%).

• Dangers of using performance-enhancing drugs: from 63.3% to 96.2% across states (median: 88.2%) and from 50.0% to 100.0% across cities (median: 92.0%).

Use of Specific Teaching Methods

Teachers used a variety of teaching methods to facilitate the learning process. The ranges in percentage of schools that used specific teaching methods in required health education courses were as follows (Table 10, Figure 3):

- Group discussions: from 92.1% to 100.0% across states (median: 98.9%) and from 89.3% to 100.0% across cities (median: 100.0%).
- Cooperative group activities: from 88.0% to 100.0% across states (median: 96.1%) and from 83.3% to 100.0% across cities (median: 97.2%).

- Role play: from 62.8% to 93.7% across states (median: 83.3%) and from 82.0% to 100.0% across cities (median: 90.4%).
- Language, performing, or visual arts: from 47.2% to 82.5% across states (median: 65.9%) and from 53.7% to 95.9% across cities (median: 83.2%).
- Pledges or contracts: from 26.3% to 58.9% across states (median: 44.6%) and from 33.3% to 76.9% across cities (median: 62.0%).
- Adult guest speakers: from 69.3% to 95.0% across states (median: 83.5%) and from 50.0% to 96.2% across cities (median: 89.0%).
- Peer educators: from 44.4% to 68.1% across states (median: 56.5%) and from 43.9% to 87.5% across cities (median: 64.3%).
- The Internet: from 63.5% to 93.3% across states (median: 80.0%) and from 39.0% to 88.0% across cities (median: 71.6%).
- Computer-assisted instruction: from 39.9% to 71.6% across states (median: 55.8%) and from 29.3% to 72.7% across cities (median: 57.1%).

Coordination of Health Education

Across states and cities, a health education teacher was identified most often (state median: 44.5%; city median: 35.4%) as being responsible for coordinating health education (Table 11). A school district administrator was less likely (state median: 25.0%; city median: 19.7%) to be responsible for coordinating health education, as was a school administrator (state median: 18.5%; city median: 17.5%). A school nurse infrequently or rarely (state median: 1.8%; city median: 2.3%) coordinated

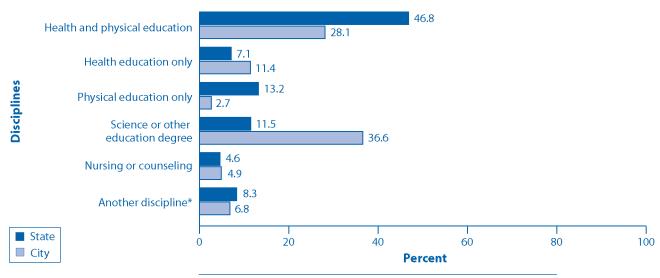
health education, as did an "other" staff person (state median: 3.8%; city median: 8.5%). The median percentage of schools in which no one was responsible for coordinating health education was 5.1% across states and 4.7% across cities.

Health education staff planned or coordinated healthrelated projects with other school staff or community members. The ranges in percentage of schools in which health education staff coordinated health-related activities with others were as follows (Table 12):

- Physical education staff: from 51.6% to 91.2% across states (median: 70.8%) and from 28.6% to 96.7% across cities (median: 53.1%).
- School health services staff: from 36.4% to 83.8% across states (median: 66.7%) and from 28.2% to 90.4% across cities (median: 71.2%).
- School mental health staff: from 40.7% to 79.4% across states (median: 56.5%) and from 50.0% to 71.4% across cities (median: 58.8%).
- Food service staff: from 9.8% to 35.0% across states (median: 21.1%) and from 0.0% to 39.5% across cities (median: 19.4%).
- Community members: from 30.2% to 73.0% across states (median: 56.2%) and from 28.6% to 69.4% across cities (median: 51.1%).

Professional Preparation and Staff Development

Lead health education teachers reported professional preparation in many disciplines. The median percentages of schools in which the lead health education teacher had professional preparation in a specific discipline were as follows (Table 13, Figure 4):



^{*} Includes kinesiology, exercise science or exercise physiology, public health, home economics or family and consumer science, and other.

FIGURE 4. Median percentage of schools in which the lead health education teacher had professional preparation in a specific discipline, School Health Profiles, 2002.

- Health and physical education: 46.8% across states and 28.1% across cities.
- **Health education only:** 7.1% across states and 11.4% across cities.
- Physical education only: 13.2% across states and 2.7% across cities.
- Science or other education degree: 11.5% across states and 36.6% across cities.
- Nursing or counseling: 4.6% across states and 4.9% across cities.
- Another discipline: 8.3% across states and 6.8% across cities.

Lead health education teachers received staff development during the preceding 2 years in many health-related topics. The ranges in percentage of schools in which the lead health education teacher had received

staff development in a specific topic were as follows (Tables 14a, b, c):

- Accident or injury prevention: from 23.3% to 61.0% across states (median: 40.2%) and from 20.8% to 82.9% across cities (median: 37.5%).
- Alcohol or other drug-use prevention: from 34.8% to 68.0% across states (median: 50.8%) and from 34.9% to 93.8% across cities (median: 68.1%).
- Consumer health: from 10.3% to 27.0% across states (median: 15.4%) and from 7.4% to 43.1% across cities (median: 22.6%).
- Cardiopulmonary resuscitation (CPR): from 37.0% to 81.3% across states (median: 60.7%) and from 27.1% to 98.1% across cities (median: 52.3%).
- Death and dying: from 6.4% to 18.6% across states (median: 12.2%) and from 0.0% to 37.5% across cities (median: 16.5%).

- Dental and oral health: from 2.3% to 20.0% across states (median: 8.6%) and from 0.0% to 38.6% across cities (median: 14.5%).
- Emotional and mental health: from 21.0% to 52.1% across states (median: 32.9%) and from 25.6% to 58.3% across cities (median: 43.7%).
- Environmental health: from 9.4% to 29.6% across states (median: 15.1%) and from 14.3% to 50.1% across cities (median: 25.4%).
- First aid: from 24.6% to 68.7% across states (median: 53.6%) and from 25.0% to 98.1% across cities (median: 50.2%).
- Growth and development: from 12.0% to 36.6% across states (median: 23.4%) and from 24.1% to 66.7% across cities (median: 42.9%).
- HIV prevention: from 24.8% to 76.7% across states (median: 47.8%) and from 35.4% to 100.0% across cities (median: 71.9%).
- Human sexuality: from 13.9% to 59.0% across states (median: 31.3%) and from 25.6% to 89.6% across cities (median: 58.7%).
- Immunization and vaccinations: from 3.6% to 41.9% across states (median: 16.6%) and from 10.9% to 45.2% across cities (median: 25.1%).
- Nutrition and dietary behavior: from 17.0% to 48.2% across states (median: 26.6%) and from 16.5% to 56.9% across cities (median: 34.5%).
- Personal hygiene: from 5.3% to 23.1% across states (median: 11.6%) and from 0.0% to 48.2% across cities (median: 16.8%).

- Physical activity and fitness: from 29.7% to 67.3% across states (median: 40.9%) and from 15.3% to 90.4% across cities (median: 39.3%).
- Pregnancy prevention: from 14.4% to 43.0% across states (median: 26.2%) and from 22.9% to 81.3% across cities (median: 45.0%).
- STD prevention: from 19.1% to 64.0% across states (median: 38.1%) and from 32.5% to 89.6% across cities (median: 60.1%).
- Suicide prevention: from 9.0% to 47.9% across states (median: 22.7%) and from 14.3% to 72.9% across cities (median: 27.9%).
- Sun safety: from 5.9% to 22.1% across states (median: 11.4%) and from 6.0% to 52.0% across cities (median: 18.6%).
- Tobacco-use prevention: from 26.6% to 57.1% across states (median: 38.1%) and from 26.8% to 83.3% across cities (median: 43.1%).
- Violence prevention: from 34.1% to 74.6% across states (median: 51.2%) and from 28.6% to 93.8% across cities (median: 59.7%).

The ranges in percentage of schools in which the lead health education teacher wanted but had not yet received staff development were as follows (Tables 15a, b, c):

- Accident or injury prevention: from 31.7% to 62.1% across states (median: 49.8%) and from 22.9% to 72.0% across cities (median: 63.1%).
- Alcohol or other drug-use prevention: from 52.7% to 78.9% across states (median: 67.5%) and from 62.5% to 88.0% across cities (median: 73.5%).

- Consumer health: from 31.4% to 70.1% across states (median: 49.3%) and from 37.5% to 71.5% across cities (median: 59.8%).
- Cardiopulmonary resuscitation (CPR): from 37.8% to 74.3% across states (median: 61.3%) and from 50.0% to 83.4% across cities (median: 74.2%).
- Death and dying: from 35.3% to 74.4% across states (median: 55.6%) and from 42.9% to 85.6% across cities (median: 62.9%).
- Dental and oral health: from 20.5% to 51.1% across states (median: 36.1%) and from 20.8% to 73.5% across cities (median: 52.8%).
- Emotional and mental health: from 48.8% to 77.8% across states (median: 64.7%) and from 63.5% to 84.0% across cities (median: 73.1%).
- Environmental health: from 32.7% to 67.8% across states (median: 52.4%) and from 43.8% to 77.6% across cities (median: 65.2%).
- First aid: from 39.1% to 76.6% across states (median: 61.2%) and from 35.2% to 80.3% across cities (median: 71.4%).
- Growth and development: from 32.6% to 61.9% across states (median: 49.4%) and from 41.0% to 81.3% across cities (median: 61.6%).
- HIV prevention: from 46.9% to 83.4% across states (median: 62.6%) and from 53.5% to 88.0% across cities (median: 66.1%).
- Human sexuality: from 41.0% to 75.1% across states (median: 57.4%) and from 58.5% to 87.5% across cities (median: 68.5%).

- Immunization and vaccinations: from 23.0% to 60.3% across states (median: 43.8%) and from 22.9% to 67.3% across cities (median: 55.9%).
- Nutrition and dietary behavior: from 46.3% to 73.3% across states (median: 61.9%) and from 52.1% to 82.1% across cities (median: 66.6%).
- Personal hygiene: from 25.3% to 51.6% across states (median: 40.8%) and from 25.0% to 67.7% across cities (median: 53.8%).
- Physical activity and fitness: from 34.9% to 74.4% across states (median: 59.6%) and from 33.3% to 84.0% across cities (median: 62.5%).
- Pregnancy prevention: from 39.2% to 71.0% across states (median: 56.3%) and from 56.2% to 87.8% across cities (median: 67.2%).
- STD prevention: from 45.9% to 79.0% across states (median: 62.8%) and from 56.2% to 87.8% across cities (median: 68.7%).
- Suicide prevention: from 57.9% to 84.8% across states (median: 70.8%) and from 62.5% to 92.0% across cities (median: 75.0%).
- Sun safety: from 34.0% to 66.2% across states (median: 50.7%) and from 22.9% to 73.0% across cities (median: 58.8%).
- Tobacco-use prevention: from 48.7% to 72.5% across states (median: 60.9%) and from 39.6% to 81.9% across cities (median: 61.2%).
- Violence prevention: from 65.6% to 87.7% across states (median: 78.2%) and from 66.9% to 96.0% across cities (median: 76.9%).

Lead health education teachers received staff development during the preceding 2 years on specific teaching methods. The ranges in percentage of schools in which the lead health education teacher had received staff development in a specific teaching method were as follows (Table 16):

- Teaching students with physical or cognitive disabilities: from 22.7% to 62.5% across states (median: 42.3%) and from 27.9% to 85.7% across cities (median: 54.8%).
- Teaching students of various cultural backgrounds: from 14.4% to 65.3% across states (median: 36.2%) and from 39.5% to 85.8% across cities (median: 66.8%).
- Teaching students with limited English proficiency: from 3.5% to 58.8% across states (median: 18.3%) and from 19.3% to 88.0% across cities (median: 60.5%).
- Using interactive teaching methods such as role plays or cooperative group activities: from 40.9% to 70.0% across states (median: 54.7%) and from 53.6% to 100.0% across cities (median: 71.8%).
- Encouraging family or community involvement: from 20.1% to 53.7% across states (median: 32.9%) and from 28.9% to 71.4% across cities (median: 49.6%).
- Teaching skills for behavior change: from 29.2% to 61.3% across states (median: 46.0%) and from 31.9% to 85.7% across cities (median: 57.9%).

The ranges in percentage of schools in which the lead health education teacher wanted but had not yet received staff development in a specific teaching method were as follows (Table 17):

- Teaching students with physical or cognitive disabilities: from 46.0% to 72.7% across states (median: 62.5%) and from 43.0% to 85.7% across cities (median: 65.8%).
- Teaching students of various cultural backgrounds: from 32.6% to 64.4% across states (median: 54.5%) and from 42.9% to 77.4% across cities (median: 66.0%).
- Teaching students with limited English proficiency: from 27.1% to 66.1% across states (median: 52.6%) and from 52.8% to 80.0% across cities (median: 62.9%).
- Using interactive teaching methods such as role plays or cooperative group activities: from 41.1% to 73.4% across states (median: 60.4%) and from 49.0% to 86.7% across cities (median: 66.6%).
- Encouraging family or community involvement: from 53.6% to 78.1% across states (median: 65.9%) and from 68.8% to 83.9% across cities (median: 74.6%).
- Teaching skills for behavior change: from 63.6% to 87.7% across states (median: 74.8%) and from 62.5% to 100.0% across cities (median: 78.5%).

PHYSICAL EDUCATION

The percentage of schools that required at least some physical education for students in grades 6 through 12 ranged from 47.7% to 100.0% across states (median: 98.2%) and from 60.8% to 100.0% across cities (median: 92.9%) (Table 18). Although most schools required physical education, some schools allowed students to be exempted from physical education for the following reasons:

• Enrolled in another course, such as math or science: from 0.0% to 41.2% across states (median: 4.9%) and from 0.0% to 19.9% across cities (median: 3.3%).

- Participated in school sports: from 0.0% to 81.6% across states (median: 5.1%) and from 0.0% to 58.0% across cities (median: 35.6%).
- Participated in other school activities, such as ROTC, marching band, chorus, or cheerleading: from 0.0% to 58.5% across states (median: 6.0%) and from 6.1% to 72.3% across cities (median: 15.1%).
- Participated in community sports activities: from 0.0% to 22.7% across states (median: 2.0%) and from 0.0% to 26.2% across cities (median: 2.0%).

In addition to physical education, many schools provide students with the opportunity to participate in intramural activities or physical activity clubs. The median percentage of schools that offered those activities was 68.5% across states and 92.4% across cities (Table 19). Among those schools, the median percentage of schools that provided students with transportation home after intramural activities or clubs was 32.3% among states and 35.6% among cities. The percentage of schools that allowed the use of their school's activity or athletic facilities for community-sponsored sports teams or physical activity programs ranged from 69.2% to 97.3% across states (median: 90.9%) and from 46.9% to 100.0% across cities (median: 75.8%).

HEALTH SERVICES

Asthma management activities are an important aspect of school health services. The ranges in percentage of schools that implemented school-based asthma management activities were as follows (Tables 20a, b):

• Assuring immediate access to medications: from 66.6% to 100.0% across states (median: 91.8%) and from 78.6% to 100.0% across cities (median: 89.8%).

- Having a full-time registered nurse: from 1.4% to 98.0% across states (median: 41.2%) and from 6.1% to 100.0% across cities (median: 63.3%).
- Identifying and tracking students with asthma: from 43.9% to 98.1% across states (median: 82.8%) and from 24.7% to 98.0% across cities (median: 80.0%).
- Obtaining and using an Asthma Action Plan: from 26.8% to 79.7% across states (median: 56.4%) and from 19.5% to 95.6% across cities (median: 61.3%).
- Providing intensive case management for students with asthma: from 12.7% to 53.7% across states (median: 34.1%) and from 29.0% to 79.4% across cities (median: 46.0%).
- Educating school staff about asthma: from 25.0% to 67.4% across states (median: 51.9%) and from 27.9% to 75.5% across cities (median: 57.1%).
- Educating students with asthma about asthma management: from 19.6% to 77.4% across states (median: 46.8%) and from 23.1% to 84.7% across cities (median: 64.2%).
- Teaching asthma awareness to all students: from 13.5% to 47.6% across states (median: 24.8%) and from 8.7% to 50.0% across cities (median: 34.7%).
- Encouraging full participation in physical education and physical activity: from 77.5% to 99.4% across states (median: 95.5%) and from 81.3% to 100.0% across cities (median: 94.4%).
- Modifying physical education and physical activities: from 57.1% to 92.3% across states (median: 81.8%) and from 65.6% to 95.1% across cities (median: 85.5%).

FOOD SERVICE

The percentage of schools that allowed students to buy snack foods or beverages from vending machines or at the school store, canteen, or snack bar ranged from 70.0% to 98.1% (median: 89.3%) across states and from 41.4% to 100.0% (median: 82.5%) across cities. The types of foods and beverages available for purchase from the vending machines or at the school store, canteen, or snack bar were as follows (Table 21):

- Chocolate candy: from 23.7% to 94.6% across states (median: 67.3%) and from 27.3% to 91.2% across cities (median: 60.0%).
- Other kinds of candy: from 28.8% to 94.1% across states (median: 70.0%) and from 27.3% to 90.1% across cities (median: 61.9%).
- Salty snacks not low in fat: from 31.2% to 92.1% across states (median: 79.1%) and from 46.7% to 96.1% across cities (median: 80.3%).
- Salty snacks low in fat: from 30.7% to 91.8% across states (median: 79.4%) and from 50.9% to 90.0% across cities (median: 76.0%).
- Fruits or vegetables: from 15.5% to 64.5% across states (median: 39.9%) and from 16.3% to 80.3% across cities (median: 55.0%).
- Low-fat baked goods: from 25.6% to 75.8% across states (median: 62.3%) and from 47.7% to 76.4% across cities (median: 63.1%).
- Soft drinks, sports drinks, or fruit drinks that are not 100% juice: from 88.3% to 99.0% across states (median: 95.3%) and from 78.6% to 100.0% across cities (median: 97.1%).

- 100% fruit juice: from 51.5% to 91.9% across states (median: 79.3%) and from 59.0% to 91.3% across cities (median: 82.4%).
- Bottled water: from 62.5% to 98.4% across states (median: 90.3%) and from 72.7% to 100.0% across cities (median: 91.5%).

The percentage of schools that allowed students 20 or more minutes to eat lunch, once they were seated, ranged from 61.2% to 92.0% (median: 80.4%) across states and from 57.4% to 96.7% (median: 87.0%) across cities.

SCHOOL POLICY AND ENVIRONMENT Tobacco-Use Prevention

Tobacco-use prevention policies can help prevent tobacco use among students. The percentage of schools that had a policy prohibiting tobacco use ranged from 96.1% to 100.0% across states (median: 99.1%) and from 87.3% to 100.0% across cities (median: 97.9%) (Table 22). Among those schools that had a policy prohibiting tobacco use, the ranges in percentage of schools that designated an individual to enforce the policy were from 38.4% to 79.5% across states (median: 62.4%) and from 35.5% to 94.1% across cities (median: 62.4%). An "ideal" tobacco-use prevention policy prohibits all tobacco use by all students, school staff members, and visitors on school property; in school vehicles; and at off-campus, school-sponsored events. The percentage of schools that had a policy that included all of these elements ranged from 12.6% to 65.4% across states (median: 45.9%) and from 34.6% to 71.1% across cities (median: 55.7%).

Consequences exist for students who are caught smoking cigarettes in schools that have a policy prohibiting tobacco use. The ranges in percentage of schools that sometimes, almost always, or always took specific actions when students were caught smoking cigarettes were as follows (Table 23a, b, Figure 5):

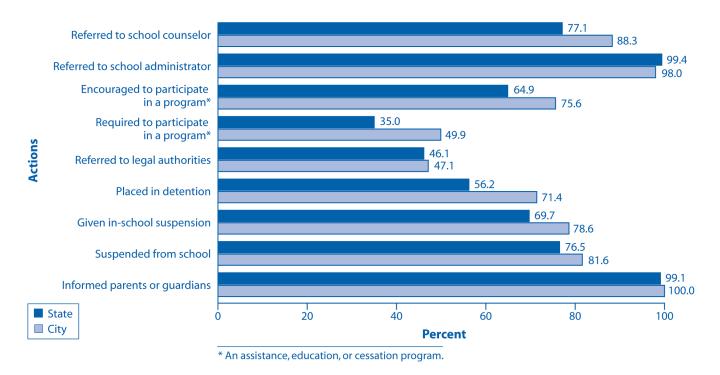


FIGURE 5. Among schools with a policy prohibiting tobacco use, the median percentage of schools that sometimes, almost always, or always took specific actions when students were caught smoking cigarettes, School Health Profiles, 2002.

- Referring students to a school counselor: from 56.5% to 94.2% across states (median: 77.1%) and from 65.4% to 93.5% across cities (median: 88.3%).
- Referring students to a school administrator: from 95.1% to 100.0% across states (median: 99.4%) and from 90.6% to 100.0% across cities (median: 98.0%).
- Encouraging students to participate in an assistance, education, or cessation program: from 35.6% to 82.0% across states (median: 64.9%) and from 37.8% to 85.7% across cities (median: 75.6%).
- Requiring students to participate in an assistance, education, or cessation program: from 14.3% to 60.8% across states (median: 35.0%) and from 20.3% to 89.4% across cities (median: 49.9%).

- Referring students to legal authorities: from 13.3% to 96.3% across states (median: 46.1%) and from 17.7% to 78.6% across cities (median: 47.1%).
- Placing students in detention: from 35.8% to 81.4% across states (median: 56.2%) and from 41.2% to 79.9% across cities (median: 71.4%).
- Giving students in-school suspension: from 50.0% to 88.1% across states (median: 69.7%) and from 41.9% to 93.1% across cities (median: 78.6%).
- Suspending students from school: from 53.6% to 93.1% across states (median: 76.5%) and from 56.1% to 100.0% across cities (median: 81.6%).
- Informing parents or guardians: from 95.7% to 100.0% across states (median: 99.1%) and from 93.9% to 100.0% across cities (median: 100.0%).

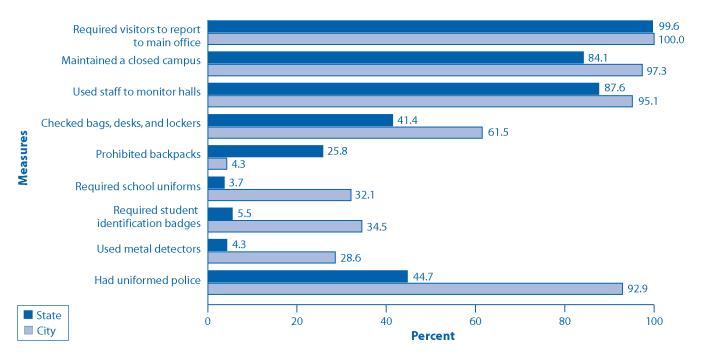


FIGURE 6. Median percentage of schools that implemented safety and security measures, School Health Profiles, 2002.

Some schools implemented tobacco prevention policies that prohibit tobacco advertisements, sponsorship of events, and wearing of tobacco brand-name apparel by students. The ranges in percentage of schools that implemented such policies were as follows (Table 24):

- Prohibiting tobacco advertisements in school buildings, on school grounds, on school buses, and in school publications: from 88.6% to 96.3% across states (median: 93.0%) and from 78.6% to 98.1% across cities (median: 93.9%).
- Prohibiting tobacco advertisements through sponsorship of school events: from 80.3% to 96.9% across states (median: 92.2%) and from 71.4% to 100.0% across cities (median: 91.8%).
- Prohibiting students from wearing tobacco brandname apparel: from 64.6% to 98.6% across states (median: 92.4%) and from 70.0% to 100.0% across cities (median: 90.3%).

Violence Prevention

Schools implement safety and security measures to ensure the safety of students, staff members, and visitors. The median percentage of schools that had a written plan for responding to violence was 96.8% across states and 97.7% across cities. The ranges in percentage of schools that implemented safety and security measures were as follows (Table 25, Figure 6):

- Requiring visitors to report to the main office: from 86.6% to 100.0% across states (median: 99.6%) and 100.0% across all cities.
- Maintaining a closed campus: from 35.3% to 98.7% across states (median: 84.1%) and from 73.1% to 100.0% across cities (median: 97.3%).
- Using staff to monitor school halls: from 63.6% to 94.9% across states (median: 87.6%) and from 85.7% to 100.0% across cities (median: 95.1%).

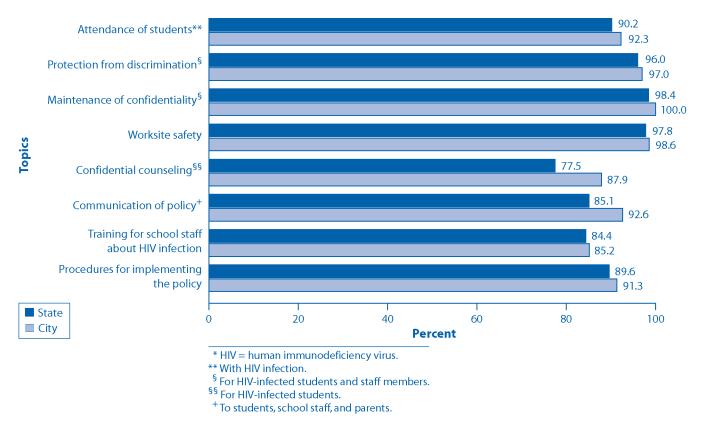


FIGURE 7. Among schools with a written policy on HIV*-infected students or school staff, the median percentage of those schools that addressed specific topics, School Health Profiles, 2002.

- Checking bags, desks, and lockers: from 2.7% to 70.9% across states (median: 41.4%) and from 6.3% to 96.7% across cities (median: 61.5%).
- Prohibiting backpacks: from 0.0% to 50.7% across states (median: 25.8%) and from 0.0% to 30.0% across cities (median: 4.3%).
- Requiring school uniforms: from 0.0% to 23.7% across states (median: 3.7%) and from 0.0% to 96.6% across cities (median: 32.1%).
- Requiring student identification badges: from 0.0% to 36.6% across states (median: 5.5%) and from 0.0% to 76.7% across cities (median: 34.5%).

- Using metal detectors: from 0.0% to 38.5% across states (median: 4.3%) and from 0.0% to 96.7% across cities (median: 28.6%).
- Having uniformed police: from 9.0% to 90.4% across states (median: 44.7%) and from 75.6% to 100.0% across cities (median: 92.9%).

HIV/AIDS Prevention

HIV-related school policies provide support for infected students and staff. The percentage of schools with a written policy that protects the rights of HIV-infected students or school staff ranged from 32.5% to 90.3% across states (median: 67.8%) and from 56.5% to 92.9% across cities (median: 72.8%) (Table 26). Among those schools that had a written policy, the ranges in percentage of schools that addressed specific topics were as follows (Table 26, Figure 7):

- Attendance at school of HIV-infected students: from 82.6% to 96.3% across states (median: 90.2%) and from 74.7% to 97.6% across cities (median: 92.3%).
- Protection of HIV-infected students and staff members from discrimination: from 90.8% to 100.0% across states (median: 96.0%) and from 92.3% to 100.0% across cities (median: 97.0%).
- Maintenance of confidentiality for HIV-infected students and staff members: from 94.3% to 100.0% across states (median: 98.4%) and from 92.3% to 100.0% across cities (median: 100.0%).
- Worksite safety: from 91.0% to 100.0% across states (median: 97.8%) and from 92.3% to 100.0% across cities (median: 98.6%).
- Confidential counseling for HIV-infected students: from 58.9% to 88.2% across states (median: 77.5%) and from 59.3% to 100.0% across cities (median: 87.9%).
- Communication of policy to students, school staff, and parents: from 78.4% to 91.3% across states (median: 85.1%) and from 84.6% to 96.9% across cities (median: 92.6%).
- Training for school staff about HIV infection: from 65.5% to 93.4% across states (median: 84.4%) and from 72.5% to 100.0% across cities (median: 85.2%).
- Procedures for implementing the HIV infection policy: from 83.9% to 95.8% across states (median: 89.6%) and from 85.2% to 100.0% across cities (median: 91.3%).

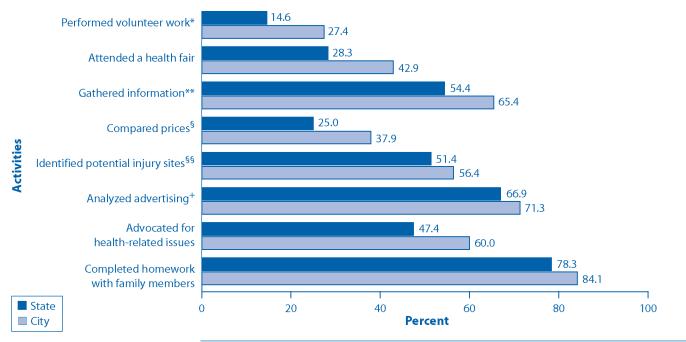
FAMILY AND COMMUNITY INVOLVEMENT

Partnerships between schools, families, and community members are important elements of a school health program. The percentage of schools that had a school health advisory committee to develop policies or coordinate activities that address health issues ranged from 18.9% to 77.6% across states (median: 47.2%) and from 36.6% to 100.0% across cities (median: 78.5%). During the school year, the ranges in percentage of schools that engaged parents and families in health education activities were as follows (Table 27):

- Providing families with information on the health education program: from 46.4% to 86.5% across states (median: 69.5%) and from 52.7% to 91.0% across cities (median: 75.6%).
- Meeting with parent organizations (e.g., PTA, PTO) to discuss the health education program: from 7.9% to 43.0% across states (median: 20.3%) and from 10.5% to 64.6% across cities (median: 28.5%).
- Inviting family members to attend a health education class: from 24.1% to 51.5% across states (median: 35.5%) and from 29.5% to 64.5% across cities (median: 48.5%).

The ranges in the percentage of schools that had students participate in health-related community activities as a part of a required health education course were as follows (Table 28, Figure 8):

• Performing volunteer work at a community organization that addresses health issues (e.g., hospital, local health department): from 10.2% to 24.2% across states (median: 14.6%) and from 2.4% to 56.4% across cities (median: 27.4%).



^{*} At a hospital, a local health department, or other community organization that addresses health issues.

FIGURE 8. Median percentage of schools in which students participated in health-related community activities as part of a required health education course, School Health Profiles, 2002.

- Participating in or attending a health fair: from 12.4% to 36.3% across states (median: 28.3%) and from 16.7% to 71.4% across cities (median: 42.9%).
- Gathering information on community health services: from 41.2% to 71.7% across states (median: 54.4%) and from 21.4% to 75.0% across cities (median: 65.4%).
- Visiting a store to compare prices of health products: from 15.0% to 35.6% across states (median: 25.0%) and from 0.0% to 55.9% across cities (median: 37.9%).
- Identifying potential injury sites: from 39.7% to 72.7% across states (median: 51.4%) and from 19.0% to 74.2% across cities (median: 56.4%).

- Analyzing advertising designed to influence health behaviors or health risk behaviors: from 43.3% to 83.6% across states (median: 66.9%) and from 55.6% to 93.4% across cities (median: 71.3%).
- Advocating for health-related issues: from 30.4% to 68.6% across states (median: 47.4%) and from 35.7% to 74.9% across cities (median: 60.0%).
- Completing homework with family members: from 66.4% to 90.2% across states (median: 78.3%) and from 45.2% to 97.0% across cities (median: 84.1%).

^{**} About health services available in the community.

[§] Visited a store to compare prices on health products.

^{§§} At school, at home, or in the community.

⁺ Advertising in the community that was designed to influence health behaviors or health risk behaviors.

TRENDS

The Profiles were first conducted in 1996 and are repeated biennially. Although the questionnaires have been modified each year, some questions have remained constant, thereby allowing for analysis of change over time. Long-term trends compare data between the 1996 and 2002 Profiles. Short-term trends compare data between the 2000 and 2002 Profiles.

LONG-TERM TRENDS

Significant improvements in health education and health policy were detected between 1996 and 2002 in the following areas:

- Across states, the median percentage of schools in which teachers taught about accident or injury prevention and about physical activity and fitness increased from 83.3% to 90.9% and from 94.5% to 98.6%, respectively.
- Across **states** and **cities**, the median percentage of schools in which teachers taught about nutrition and dietary behavior increased from 94.3% to 98.1% for states and from 97.4% to 100.0% for cities.
- Across states and cities, the median percentage of schools in which teachers taught about tobacco-use prevention increased from 97.2% to 99.1% for states and from 95.3% to 100.0% for cities.
- Across **states**, increases were found in the median percentage of schools in which teachers tried to improve student skills in communication (from 90.2% to 93.5%), decision making (from 96.5% to 97.7%), goal setting (from 89.8% to 93.4%), and conflict resolution (from 81.5% to 88.2%).

- Across states and cities, the median percentage of schools in which teachers tried to improve student skills in stress management increased from 85.6% to 89.5% for states and from 80.1% to 96.3% for cities.
- Across **states**, the median percentage of schools in which the health education teacher coordinated the health education activities at the school increased from 33.0% to 44.5%.
- Across states, the median percentage of schools in which health education teachers planned or coordinated health-related projects or activities with school health services staff increased from 44.3% to 66.7%.
- Across states, increases were found in the median percentage of schools that had a written HIV policy that protected students and staff from discrimination (from 90.4% to 96.0%); maintained confidentiality of HIV-infected students and staff (from 94.9% to 98.4%); ensured worksite safety (from 92.7% to 97.8%); and communicated the HIV policy to students, staff, and parents (from 75.7% to 85.1%).
- Across **states** and **cities**, the median percentage of schools that had a health advisory group to address health issues increased from 19.7% to 47.2% for states and from 18.1% to 78.5% for cities.

Significant deteriorations in health education and health policy were detected between 1996 and 2002 in the following areas:

Across states and cities, the median percentage
of schools that required a health education course
decreased from 95.4% to 92.3% for states and from
97.1% to 88.3% for cities.

- Across **states**, decreases were found in the median percentage of schools in which teachers taught how HIV is transmitted (from 99.4% to 95.1%), how to correctly use a condom (from 48.3% to 40.4%), and the influence of alcohol and other drugs on HIV risk behaviors (from 92.7% to 89.9%).
- Across cities, the median percentage of schools in which health education teachers planned or coordinated health-related projects or activities with school food service staff decreased from 26.2% to 19.4%.

SHORT-TERM TRENDS

Significant improvements in health education and health policy were detected between 2000 and 2002 in the following areas:

 Across states, the median percentage of schools in which the teacher used the Internet as a teaching

- method in the classroom increased from 70.4% to 80.0%.
- Across states, the median percentage of schools in which tobacco advertising through sponsorship of school events was prohibited increased from 90.2% to 92.2%.
- Across states, the median percentage of schools that had a written plan for responding to school violence increased from 94.5% to 96.8%.
- Across states, the median percentage of schools that had uniformed police, undercover police, or security guards during regular school hours as a part of safety and security measures increased from 32.8% to 44.7%.

No significant deteriorations in health education and health policy were detected between 2000 and 2002.

COMPARISON TO NATIONAL DATA

To provide a comprehensive description of school health education and other components of the school health program, CDC periodically conducts the School Health Policies and Programs Study (SHPPS). SHPPS was first conducted in spring 1994⁴⁵ and repeated in spring 2000.⁴⁶ SHPPS 2000 school-level data were collected from a nationally representative sample of public and private elementary, middle/junior high, and senior high schools. The following section compares 2002 Profiles data (states and cities) with the national SHPPS 2000 data from middle/junior high and senior high schools.^{47,48}

HEALTH EDUCATION

- Nearly all schools across states and cities (median: 92.3% and 88.3%, respectively) and nationally (82.9%) required some health education.⁴⁷
- Across states and cities, the median percentages of schools that taught specific tobacco topics were similar to the national percentages: the addictive effects of nicotine (median: 97.3% and 97.5%, respectively, versus 98.5%), the benefits of not smoking cigarettes (median: 97.6% and 97.7%, respectively, versus 98.3%), the benefits of not using smokeless tobacco (median: 93.0% and 93.0%, respectively, versus 87.5%), the number of illnesses and deaths related to tobacco use (median: 94.5% and 96.3%, respectively, versus 91.8%), the influence of families (median: 91.4% and 93.0%, respectively, versus 86.2%), the influence of the media (median: 95.5% and 95.6%, respectively, versus 94.5%), social or cultural influences (median: 90.0% and 90.0%, respectively, versus 84.9%), how students can influence others to prevent tobacco use (median: 88.1% and 89.6%, respectively, versus 87.8%), and how students can influence others to guit using tobacco (median: 85.0% and 87.1%, respectively, versus 80.0%).47

- Across states, the median percentages of schools that taught how to correctly use a condom (median: 40.4%) and how HIV is transmitted (median: 95.1%) as a part of a required health education course were similar to the national percentages (33.6% and 93.2%, respectively). Across cities, however, the median percentages of schools that taught how to correctly use a condom (median: 63.2%) and how HIV is transmitted (median: 100.0%) were greater than the national percentages.
- Across states and cities, the median percentages of schools that used specific teaching methods were somewhat greater than the national percentages: role play (median: 83.3% and 90.4%, respectively, versus 72.2%), pledges or contracts (median: 44.6% and 62.0%, respectively, versus 32.3%), adult guest speakers (median: 83.5% and 89.0%, respectively, versus 69.4%), the Internet (median: 80.0% and 71.6%, respectively, versus 57.2%), and computer-assisted instruction (median: 55.8% and 57.1%, respectively, versus 38.7%). 47
- Across states and cities, the median percentages of schools that used specific teaching methods were similar to the national percentages: group discussions (median: 98.9% and 100.0%, respectively, versus 97.8%), cooperative group activities (median: 96.1% and 97.2%, respectively, versus 94.6%), and peer educators (median: 56.5% and 64.3%, respectively, versus 58.4%).⁴⁷
- Across states and cities, the median percentages of schools in which the health education teacher planned or coordinated projects with other school staff members were somewhat greater than the national percentages: school health services staff (median: 66.7% and 71.2%, respectively, versus 53.5%) and

school mental health staff (median: 56.5% and 58.8%, respectively, versus 41.1%). However, across states and cities, the median percentages of schools in which the health education teacher planned or coordinated projects with the PE staff (median: 70.8% and 53.1%, respectively, versus 61.0%) and food service staff (median: 21.1% and 19.4%, respectively, versus 20.5%) were similar to the national percentages.⁴⁷

PHYSICAL EDUCATION

 Nearly all schools across states and cities (median: 98.2% and 92.9%, respectively) and nationally (95.9%) required some physical education.⁴⁷

FOOD SERVICE

- Nearly all schools across states and cities (median: 89.3% and 82.5%, respectively) and nationally (82.6%) allowed students to purchase snack foods or beverages from vending machines or at school stores, canteens, or snack bars.⁴⁷
- Among schools that allowed students to purchase snack foods or beverages from vending machines or at school stores, canteens, or snack bars,
 - The median percentages of schools across states and cities that sold unhealthful snacks were similar to the national percentages: chocolate candy (median: 67.3% and 60.0%, respectively, versus 57.5%), other kinds of candy (median: 70.0% and 61.9%, respectively, versus 62.2%), and salty snacks not low in fat (median: 79.1% and 80.3%, respectively, versus 71.2%).⁴⁷
 - The median percentages of schools across states and cities that sold healthful snacks were greater than the national percentages: salty snacks low in

fat (median: 79.4% and 76.0%, respectively, versus 58.9%), fruits or vegetables (median: 39.9% and 55.0%, respectively, versus 16.1%), low-fat baked goods (median: 62.3% and 63.1%, respectively, versus 42.7%), 100% fruit juice (median: 79.3% and 82.4%, respectively, versus 58.8%), and bottled water (median: 90.3% and 91.5%, respectively, versus 60.3%).⁴⁷

SCHOOL POLICY AND ENVIRONMENT

- Across states, the median percentage of schools with an "ideal" tobacco-use policy (median: 45.9%) was nearly the same when compared to the national percentage (44.6%).⁴⁸ Across cities, however, the median percentage of schools with an "ideal" tobacco-use policy (median: 55.7%) was somewhat greater than the national percentage.
- Across states and cities, the median percentages of schools that prohibited tobacco advertising were similar to the national percentages: in school buildings, on school grounds, on school buses, and in school publications (median: 93.0% and 93.9%, respectively, versus 92.0%) and through sponsorship of school events (median: 92.2% and 91.8%, respectively, versus 93.9%). In addition, the median percentages of schools across states and cities that prohibited students from wearing tobacco brand-name apparel or carrying merchandise with tobacco brand-name logos (median: 92.4% and 90.3%, respectively) were similar to the national percentage (83.4%).⁴⁷
- Across states and cities, the median percentages of schools that required visitors to report to the main office (median: 99.6% and 100.0%, respectively) were similar to the national percentage (96.1%).⁴⁷

- Across states, the median percentages of schools that maintained a closed campus (median: 84.1%) and used metal detectors (4.3%) were similar to the national percentages (83.7% and 10.0%, respectively).⁴⁷
- Across states and cities, the median percentages of schools that had uniformed police (44.7% and 92.9%, respectively) varied greatly between states, cities, and the national percentage (30.5%).⁴⁷

FAMILY AND COMMUNITY INVOLVEMENT

• Across states and cities, the median percentages of schools that implemented activities with families were similar to the national percentages: provided information on health education to families (median: 69.5% and 75.6%, respectively, versus 65.9%) and met with

- parents' organizations (median: 20.3% and 28.5%, respectively, versus 24.9%).⁴⁷
- Across states, the median percentages of schools that had students participate in specific health-related community activities were similar to the national percentages: perform volunteer work at a community organization that addresses health issues (median: 14.6% versus 17.7%), participate in or attend a health fair (median: 28.3% versus 22.2%), visit a store to compare prices of health products (median: 25.0% versus 26.9%), identify potential injury sites (median: 51.4% versus 48.5%), and analyze advertising designed to influence health behaviors or health risk behaviors (median: 66.9% versus 65.3%).⁴⁷

DISCUSSION

Schools with CSHPs are poised to help young people improve health-related knowledge, attitudes, and skills. In addition, these programs can help improve health behaviors and health outcomes, educational outcomes, and social outcomes among children and young adults. ⁴⁹ The expanded School Health Profiles provides information helpful for assessing some aspects of six of the eight components of CSHPs. Long- and short-term trends in Profiles data, as well as comparisons to national SHPPS 2000 data, illustrate how school health programs have evolved over time to address the health needs of students.

The National Health Education Standards, the Institute of Medicine, and the Healthy People 2010 objectives all stress the importance of health education to help keep young people healthy. 3,6,7 Frequency, coordination, and content are all important components of health education that Profiles monitors. For example, Profiles showed that the median percentage of schools that required a health education course in 2002 was 92.3% across states and 88.3% across cities, a significant decrease from 1996 (95.4% and 97.1%, respectively). Furthermore, comparisons with the SHPPS 2000 data show that the national estimate for required health education at the middle/junior and senior high school levels (82.9%) was somewhat less than current state and city medians. 47 These findings are significant because a required health education course is important for ensuring that students develop appropriate knowledge, attitudes, and skills to help keep them healthy.

Coordinating health education activities with other school staff members ensures health issues are consistently addressed and reinforced within schools. The 2002 Profiles data illustrate that the median percentage of schools that reported coordination between health education and health services, mental health, and physi-

cal education staff was more than 50%. However, since 1996, the median percentage of schools across cities that reported coordination between health education and food service staffs has decreased. Nationally, according to SHPPS 2000, the percentage of health education teachers who coordinated with health services and mental health staff members was somewhat less than the state and city medians and approximately the same for coordination with the physical education and food service staff.⁴⁷ Increased coordination between health education and other school staff members may help improve implementation of the health education curriculum.

The *National Education Standards* identified particular student skills, such as goal setting and decision making, that are important for enhancing health.⁶ The Profiles data indicated that greater than 75% of schools across states tried to improve student skills in communication, decision making, goal setting, and conflict resolution. This finding represents a significant increase since 1996 in the median percentage of schools across states that have taught these skills.

Healthy People 2010 Objective 7-2 specifies that certain topics should be addressed during health education, such as tobacco use and addiction, alcohol and other drug use, and HIV/AIDS prevention. More than 90% of states and cities addressed topics related to tobacco-use prevention and alcohol- and other drug-use prevention in a required health education course. Since 1996, a significant decrease occurred in the median percentage of middle/junior and senior high schools across states that taught how HIV is transmitted. The median percentage of middle/junior high schools across states that taught how to correctly use a condom and the influence of alcohol and other drugs on HIV risk behaviors also decreased. Schools need to ensure that health education

topics address the priority health problems identified by the *Healthy People 2010* objectives.

According to the U.S. Department of Education, Internet access in public schools increased from 3% in 1994 to 63% in 1999.50 As availability and connectivity to the Internet increase, teachers are more likely to use the Internet as a teaching tool in the classroom. In 1999, the U.S. Department of Education reported that 53% of public school teachers had used computers or the Internet for instruction during class time.⁵¹ In 2002, the median percentage of schools that reported using the Internet as a teaching method in a required health education course was 80.0% across states and 71.6% across cities. This demonstrates a significant increase from 2000 in the median percentage of schools across states that use the Internet and indicates the positive effort teachers have made to incorporate this technology into required health education courses.

CDC guidelines and *Healthy People 2010* objectives call for required daily physical education as part of a comprehensive approach to promoting health among young people. In 2002, the median percentage of schools across states and cities that required some physical education for students in grades 6 through 12 was greater than 90%. However, according to national SHPPS 2000 data, only 6.4% of middle/junior high schools and 5.8% of senior high schools met the recommended standard of daily physical education for all students. ⁵²

Schools face a challenge in meeting the *Healthy People* 2010 objective of increasing the proportion of children whose snack intake at school contributes to a good overall diet.⁷ Vending machines, school stores, canteens, and snack bars offer foods that are high in fat, sugar, and salt and compete with foods available through the school meal programs. One strategy for meeting the challenge of "competitive" foods is to offer more healthful options

at the same venues. In 2002, among schools that allowed students to purchase snack foods or beverages from vending machines or at school stores, canteens, or snack bars, the median percentage of schools across states and cities that offered healthful options was substantially greater than the SHPPS 2000 national percentage.⁴⁷

Providing asthma management services in schools has become an important part of school health services. The 2002 Profiles data provide important baseline measures of the types of services schools offer students. Many schools across states and cities assured immediate access to medication and modified physical education for students with asthma. However, large ranges were identified in the percentages of schools that had a full-time registered nurse (1.4% to 100.0%), identified and tracked students with asthma (24.7% to 98.1%), and obtained and used an Asthma Action Plan (19.5% to 95.6%). Many schools need to improve their health services for students with asthma.

The No Child Left Behind Act of 2001 reauthorized the Pro-Children Act of 1994, which prohibits smoking in any indoor facility that receives federal funds and provides routine or regular education, day care, health care, early childhood development, or library services to children. 34,53 The Pro-Children Act is intended to protect children from the negative health consequences of second-hand smoke and is generally limited to indoor facilities. The CDC Guidelines for School Health Programs to Prevent Tobacco Use and Addiction established a higher standard of health protection and prevention of tobacco use by identifying key elements of a school policy.³² This "ideal" tobacco-use prevention policy prohibits tobacco use by students, faculty, staff, and visitors on school property; in school vehicles; and at school-sponsored functions away from school property. In 2002, the median percentage of schools across states (45.9%) with an "ideal" tobacco prevention policy was nearly identical

to the national estimate (44.6%).⁴⁸ Across cities, the median percentage of schools with an "ideal" tobacco prevention policy was 55.7%. Clearly, more schools need to adopt and enforce "ideal" tobacco prevention policies to meet the *Healthy People 2010* objective of 100% smoke-free and tobacco-free environments in schools.⁷

The No Child Left Behind Act of 2001 also authorized schools to use federal funds for programs to prevent violence in and around schools.³⁴ The median percentages of schools across states that implemented safety and security measures, such as requiring visitors to report to the main office and maintaining a closed campus, were similar to national estimates from SHPPS 2000. The median percentages of schools that implemented more visible safety and security measures, such as the use of uniformed police, varied greatly between states, cities, and nationally (44.7%, 92.9%, and 30.5%, respectively).⁴⁷

Collaboration between schools and families is critical to the success of CSHPs. Across states and cities, the median percentages of schools that provided families with information on health education (69.5% and 75.6%, respectively) were high. However, the median percentage of schools across states and cities that met with parents' organizations to discuss health education or invited family members to attend health education courses was less than 50%. Most schools could increase the involvement of parents and families in school health programs.

The findings in this report are subject to several limitations. First, these data apply only to public middle/junior high and senior high schools. Second, the data for the middle/junior and senior high schools have been combined and may hide large differences in programs and policies between the two levels. Third, the data are self-reported by school principals and lead health education teachers and may be subject to bias. Finally, the Profiles data do not provide an in-depth assessment of all elements of a CSHP.¹

State and local education and health officials use Profiles data to improve school health programs. These data are used to advocate for health education and physical education and to identify topics taught in health education and physical education courses. The data help identify and monitor asthma management activities and school health policies related to HIV/AIDS prevention, tobaccouse prevention, violence prevention, physical activity, and food service. The data also identify and monitor community and parental involvement in school health programs and identify areas for improvement. Finally, Profiles data can help school administrators and staff members determine how well their schools are addressing the health and safety needs of their students.

REFERENCES

- 1. Allensworth DD, Kolbe LJ. The comprehensive school health program: exploring an expanded concept. *Journal of School Health* 1987;57(10): 409-412.
- 2. Armitage P, Berry G. Statistical Methods in Medical Research. 3rd edition. Cambridge, MA: Blackwell Scientific Publications, Inc., 1994:448-468.
- 3. Institute of Medicine. Schools and Health: Our Nation's Investment. Washington, DC: National Academy Press, 1997.
- 4. McKenzie FD, Richmond JB. Linking health and learning: an overview of coordinated school health. In: Marx E, Wooley SF, eds., with Northrop D. Health Is Academic: A Guide to School Health Programs. New York, NY: Teachers College Press, 1998:1-14.
- Lohrmann DK, Wooley SF. Comprehensive school health education. In: Marx E, Wooley SF, eds., with Northrop D. Health Is Academic: A Guide to School Health Programs. New York, NY: Teachers College Press, 1998:43-66.
- 6. Joint Committee on National Health Education Standards. National Health Education Standards: Achieving Health Literacy. Atlanta, GA: American Cancer Society, 1995.
- U.S. Department of Health and Human Services.
 Healthy People 2010. 2nd ed. with Understanding and
 Improving Health and Objectives for Improving Health,
 2 vols. Washington, DC: U.S. Department of Health
 and Human Services, 2000.

- 8. National Commission on the Role of the School and the Community to Improve Adolescent Health. *Code Blue: Uniting for Healthier Youth.* Alexandria, VA: National Association of State Boards of Education, 1990.
- 9. Palmer JM. Planning wheels turn curriculum around. *Educational Leader* 1991;49:57-60.
- 10. Allensworth DD. Health education: state of the art. *Journal of School Health* 1993;63(1):14-20.
- 11. Lavin AT. Comprehensive school health education: barriers and opportunities. *Journal of School Health* 1993;63(1):24-27.
- 12. Hamburg MV. School health education: what are the possibilities? In: Cortese P, Middleton K, eds. The Comprehensive School Health Challenge: Promoting Health Through Education. Santa Cruz, CA: ETR Associates, 1994:3-19.
- 13. Ross JG, Luepker RV, Nelson GD, Saavedra P, Hubbard BM. Teenage health teaching modules: impact of teacher training on implementation and student outcomes. *Journal of School Health* 1991; 61(1):31-34.
- 14. National Center for Health Statistics. Prevalence of overweight among children and adolescents: United States, 1999-2000. (March 2003) Available at http://www.cdc.gov/nchs/products/pubs/pubd/hestats/overwght99.htm.

- 15. U.S. Department of Health and Human Services. The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General, 2001.
- U.S. Public Health Service. The Surgeon General's Report on Nutrition and Health. Washington, DC: U.S. Department of Health and Human Services, Public Health Service, 1988.
- 17. U.S. Department of Health and Human Services. *Physical Activity and Health: A Report of the Surgeon General.* Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 1996.
- 18. CDC. Guidelines for school and community programs to promote lifelong physical activity among young people. MMWR 1997;46(RR-6):1-36.
- CDC. Increasing physical activity: a report on recommendations of the Task Force on Community Preventive Services. MMWR 2001;50(RR-18):1-14.
- 20. National Center for Health Statistics. Asthma prevalence, healthcare use and mortality, 2000–2001. (June 2003) Available at http://www.cdc.gov/nchs/products/pubs/pubd/hestats/asthma/asthma.htm.
- 21. CDC. Surveillance for asthma—United States, 1980-1999. MMWR 2002;51(SS-1):1-13.

- 22. Lieu TA, Lozano P, Finklestein JA, Chi FW, Jensvold NG, Capra AM, et al. Racial/ethnic variation in asthma status and management practices among children in managed Medicaid. *Pediatrics* 2002; 109(5):857-865.
- 23. National Asthma Education and Prevention Program. *Managing Asthma:* A Guide for Schools. Bethesda, MD: National Asthma Education and Prevention Program, National Heart, Lung, and Blood Institute, 2002.
- 24. CDC. Strategies for addressing asthma within a coordinated school health program. (November 2003) Available at http://www.cdc.gov/nccdphp/dash/00_pdf/asthma.pdf.
- 25. Fagot-Campagna A. Emergence of type 2 diabetes mellitus in children: epidemiological evidence. Journal of Pediatric Endocrinology and Metabolism 2000;13(Suppl 6):1395-1402.
- 26. Troiano RP, Briefel RR, Carroll MD, Bialostosky K. Energy and fat intakes of children and adolescents in the United States: data from the National Health and Nutrition Examination Surveys. *American Journal of Clinical Nutrition* 2000;72(5 Suppl): 1343S-1353S.
- 27. Enns C, Mickle S, Goldman J. Trends in food and nutrient intakes by adolescents in the United States. *Family Economics and Nutrition Review* 2002;14:56-67.
- 28. CDC. Guidelines for school health programs to promote lifelong healthy eating. MMWR 1996; 45(RR-9):1-41.

- 29. Story M, Neumark-Sztainer D. Foods available outside the school cafeteria: issues, trends, and future directions. *Topics in Clinical Nutrition* 1999;15:37-46.
- 30. Wechsler H, Brener ND, Kuester S, Miller C. Food service and foods and beverages available at school: results from the School Health Policies and Program Study 2000. *Journal of School Health* 2001;71(7): 313-324.
- 31. CDC. Youth tobacco surveillance—United States, 2000. MMWR 2001;50(SS-4):1-84.
- 32. CDC. Guidelines for school health programs to prevent tobacco use and addiction. MMWR 1994; 43(RR-2):1-18.
- 33. Arias E, Smith BL. Deaths: preliminary data for 2001. *National Vital Statistics Reports* 2003;51(5):1-44.
- 34. No Child Left Behind Act of 2001, Pub. L. No. 107-110, §1061, 115 Stat. 2083 (2002).
- 35. Dwyer K, Osher D, Warger C. Early Warning, Timely Response: A Guide to Safe Schools. Washington, DC: U.S. Department of Education, 1998.
- 36. CDC. School health guidelines to prevent unintentional injury and violence. MMWR 2001;50(RR-22): 1-73.
- 37. CDC. HIV/AIDS Surveillance Report. 2002;14(1):1-40.
- 38. CDC. HIV/AIDS Surveillance Report. 2001;13(2):1-44.
- 39. Kaiser Family Foundation. The HIV/AIDS epidemic in the United States. (August 2003) Available at http://www.kff.org//content/2002/3029-02/US_Fact_Sheet.pdf.

- 40. Partnership for Prevention. Priorities in prevention: HIV/AIDS evolving epidemic demands renewed attention. (August 2003) Available at http://www.prevent.org/priorities/PinP_0303_HIV-AIDS.pdf.
- 41. National Association of State Boards of Education.

 Someone at School Has AIDS: A Comprehensive
 Guide to Education Policies Concerning HIV Infection.

 Alexandria, VA: National Association of State
 Boards of Education, 2001.
- 42. Epstein JL. School/family/community partnerships. *Phi Delta Kapaan* 1995;76:701-712.
- 43. Carlyon P, Carlyon W, McCarthy A. Family and community involvement in school health. In: Marx E, Wooley SF, eds., with Northrop D. Health Is Academic: A Guide to School Health Programs. New York, NY: Teachers College Press, 1998:67-95.
- 44. Birch DA. Involving families in school health education: implications for professional preparation. *Journal of School Health* 1994;64(7):296-299.
- 45. Kann L, Collins JL, Pateman BC, Small ML, Ross JG, Kolbe LJ. The School Health Policies and Programs Study (SHPPS): rationale for a nationwide status report on school health programs. *Journal of School Health* 1995;65(8):291-294.
- 46. Kolbe LJ, Kann L, Brener N. Overview and summary of findings: School Health Policies and Programs Study 2000. *Journal of School Health* 2001;71(7): 253-259.
- 47. CDC. [School Health Policies and Programs Study 2000]. Unpublished raw data. 2000.

- 48. Small ML, Everett-Jones S, Barrios LC, Crossett LS, Dahlberg LL, Albuquerque MS, Sleet DA, Greene BZ, Schmidt ER. School policy and environment: results from the School Health Policies and Programs Study 2000. *Journal of School Health* 2001;71(7):325-334.
- 49. Kolbe LJ. Education reform and the goals of modern school health programs. *State Education Standard* 2002;3:4-11.
- Williams C. Internet Access in Public Schools: 1994-1999. Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2000.

- 51. Smerdon B, Cronen S, Lanahan L, Anderson J, Iannotti N, Angeles J. Teachers' Tools for the 21st Century: A Report on Teachers' Use of Technology. Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2000.
- 52. Burgeson CR, Wechsler H, Brener ND, Young JC, Spain CG. Physical education and activity: results from the School Health Policies and Programs Study 2000. *Journal of School Health* 2001;71(7):279-293.
- 53. Pro-Children Act of 1994, 20 U.S.C.S. §6081 et seq. (2001).