

PROFILES 2000

School Health Education Profiles

Surveillance for Characteristics of Health Education
Among Secondary Schools

2003
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES



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P R O F I L E S 2 0 0 0

School Health Education Profiles

Surveillance for Characteristics of Health Education
Among Secondary Schools

Phyllis Storch, M.P.H.

Jo Anne Grunbaum, Ed.D.

Laura Kann, Ph.D.

Barbara Williams, Ph.D.

Steve Kinchen

Lloyd Kolbe, Ph.D.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

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STATE AND LOCAL SCHOOL HEALTH EDUCATION PROFILES COORDINATORS

| Site | Coordinator | Affiliation |
|----------------------|-----------------------------------|--|
| Alabama | Gay Allen | Department of Education |
| Alaska | Beth Shober | Department of Education and Early Development |
| Arkansas | Kathleen Courtney, M.S. | Department of Education |
| California | Caroline Roberts | Department of Education |
| Chicago, IL | Margaret M. Finnegan, M.S. | Chicago Public Schools |
| 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 | Phil Hulst | Department of Education |
| Hawaii | Lynn Shoji | Department of Education |
| Houston, TX | Rose Haggerty, M.Ed. | Houston Independent School District |
| Idaho | Barbara Eisenbarth, M.Ed. | Department of Education |
| Illinois | Glenn Steinhausen, Ph.D. | State Board of Education |
| Indiana | Phyllis J. Lewis, M.S.N. | Department of Education |
| Iowa | Sara A. Peterson, M.A. | Department of Education |
| Kentucky | Renee White, M.S.H.A. | Department of Education |
| Louisiana | Lillie Burns, M.A. | Department of Education |
| Los Angeles, CA | Rona Cole, M.A. | Los Angeles Unified School District |
| Maine | Joni Foster | Department of Education |
| Maryland | Lynne Weise, M.Ed. | Department of Education |
| Massachusetts | Belinda Abbruzzese, M.P.H. | Department of Education |
| Miami, FL | Rodolfo Abella, Ph.D. | Miami-Dade County Public Schools |
| Michigan | Merry Stanford, M.Ed., M.S.W. | Department of Education |
| Minnesota | Jim Colwell | Department of Children, Families and Learning |
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| Montana | Susan Court | Office of Public Instruction |
| Nebraska | Jeff Armitage | Department of Education |
| New Hampshire | Virginia C. St. Martin, M.A.T. | Department of Education |
| New Jersey | Sarah Kleinman | Department of Education |
| New Orleans, LA | Stephanie M. Turlich | Orleans Parish School Board |
| North Dakota | Linda Johnson, M.S. | Department of Public Instruction |
| Ohio | Mary Lou Rush, Ph.D. | Department of Education |
| Oklahoma | Cecily Welter | Department of Education |
| Orange County, FL | Kathy Bowman-Harrow, M.S. | Orange County Public Schools |
| 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 |
| 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 | Tommy Fleming | Texas Education Agency |
| Utah | Vicky Dahn, Ph.D. | Office of Education |
| Virginia | Fran Anthony Meyer, Ph.D. | Department of Education |
| West Virginia | J. Dean Lee | Department of Education |

INTRODUCTION

School health education has the potential to reduce and prevent some of the most critical public health problems in the United States, including cardiovascular disease, cancer, motor-vehicle crashes, homicide, and suicide.¹ The importance of school health education is exemplified by Objective 7-2 of *Healthy People 2010*, which is 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 infection; unhealthy dietary patterns; inadequate physical activity; and environmental health.”²(pg.7-14)

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.³ 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 communication 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.

The quality of school health education is determined, in part, by the curriculum planning and development process, teacher preparation, curriculum implementation, and assessment and evaluation,⁴ as well as by resources available to complement these tasks.

In 1995, CDC collaborated with state and large local education and health agencies to develop the School Health Education Profiles (Profiles). The purpose of the Profiles is to monitor and assess characteristics of and trends in health education and health policies among middle/junior high schools and senior high schools across states and cities. Data were collected in 1996, 1998, and 2000 from each school’s 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) using a self-administered questionnaire.

This report summarizes data from the 2000 Profiles. Principals’ and lead health education teachers’ surveys were conducted in 38 states and 13 cities to assess trends in school health education and school health policies since the mid-1990s. In addition, this report compares the 2000 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 systematic equal-probability sampling strategies to produce representative samples of schools serving students in grades 6–12 in each jurisdiction. In most states and cities, the sampling frame consists of all regular secondary public schools with one or more of grades 6–12. Some 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 questionnaires are mailed to the principal, who then identifies the school's lead health education teacher. 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

A weighting factor is applied to each record 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 6–12 in that jurisdiction; unweighted data represent only the participating schools. Because of a low response rate, data from principals' surveys conducted in four states and lead health education teachers' surveys conducted in five states are not included in this report. Thus, this report

represents information from 33 states with data from both principals' and lead health education teachers' surveys, one state 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 56 to 573, and the response rates ranged from 53% to 98%; across cities, the sample sizes ranged from 24 to 242, and the response rates ranged from 58% to 100% (Table 1). The sample sizes of the lead health education teachers' surveys across states ranged from 47 to 563, and the response rates ranged from 50% to 91%; across cities, the sample sizes ranged from 24 to 235, and the response rates ranged from 60% to 100%.

SAS software was used to compute point estimates. Medians are presented for all states (i.e., those with weighted data and those with unweighted data combined) and for all cities (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 and 2000 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 if the distribution of the variable was the same for 1996 and 2000. 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 at $p \leq .05$.

BACKGROUND

HEALTH EDUCATION

The Institute of Medicine (IOM) recommends that schools require at least a one-semester health education course at the secondary school level.¹ 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.⁵ 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.^{1,4}

A necessary component of effective health education is management and coordination by a professional who is trained in health education.⁶ 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.⁷

Professional preparation and staff development for teachers are critical for the implementation of effective school health education programs.^{8,9} Lack of teacher training is a serious obstacle to the implementation of effective school health education.¹⁰ 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.⁴ 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.¹¹

Partnerships between schools, parents, community members, and other professionals are a key element of effective school health programs. Those partnerships contribute to successful school health education programs and to improved student health-related knowledge and skills.¹² 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.¹³ 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.¹⁴

SCHOOL HEALTH POLICIES

Effective school health policies can help create a safe, positive physical and psychological school environment, prevent injuries from occurring at school, and prevent school failure, substance use, and violence.^{15, 16}

Because 50% of new cases of HIV infection occur among adolescents and young adults,¹⁷ having school health policies that address issues raised by HIV infection and AIDS is critical for protecting the rights of affected students and school staff members. The policies should cover school attendance, employment, privacy, infection control, participation in athletics, HIV prevention education, counseling services, and staff development.¹⁸

Tobacco use is the single leading preventable cause of death in the United States.¹⁹ Approximately 80% of tobacco users initiate use before the age of 18 years.²⁰ CDC's *Guidelines for School Health Programs to Prevent Tobacco Use and Addiction* identify strategies for schools to help prevent tobacco use among youth.²¹ An important strategy is the development and enforcement of a school policy on tobacco use. The policy should include prohibitions against tobacco use by students, school staff members, parents, and visitors on school property, in school buildings, and at school functions away from school property. In addition, the policy should prohibit tobacco advertising in school buildings, on school property, and in school publications. An effective tobacco control policy is essential in helping to achieve the *Healthy People 2010* objective to decrease tobacco use among youth.²

Seventy-one percent of all deaths among persons 10–24 years of age result from only four causes: motor vehicle crashes, other unintentional injuries, homicide, and suicide.²² The No Child Left Behind Act of 2001 authorizes federal funds for school programs to prevent violence in and around schools.²³ Effective and safe schools are well prepared for any potential crisis or violent acts.²⁴ The CDC's *School Health Guidelines to Prevent Unintentional Injury and Violence* identify strategies for schools that can help prevent unintentional injuries, violence, and suicide.²⁵ An important strategy is to establish both social and physical environments that promote safety and prevent unintentional injuries, violence, and suicide.

RESULTS

HEALTH EDUCATION

Required Health Education

- Across states, the percentage of schools that required health education for students in grades 6–12 ranged from 31.4% to 100.0% (median: 91.7%) (Table 2). Among those schools, the median percentage that taught one or more separate health education courses was 95.4% and ranged from 78.1% to 100.0% across states.
- Across cities, the percentage of schools that required health education for students in grades 6–12 ranged from 0.0% to 100.0% (local median: 88.0%) (Table 2). Among those schools, the median percentage that taught one or more separate health education courses was 93.2% and ranged from 69.0% to 100.0% across cities.

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

Many schools required teachers in a required health education course to use specific standards, curricula, or materials. The range in percentages of schools that required their use was as follows* (Table 3):

- **The National Health Education Standards:** from 16.5% to 60.8% across states (state median: 32.2%) and from 27.1% to 73.7% across cities (local median: 45.1%).
- **A state, district, or school curriculum, guidelines, or framework:** from 81.0% to 100.0% (state median: 95.9%) across states and from 93.9% to 100.0% across cities (local median: 100.0%).
- **Materials from health organizations** such as the American Red Cross or the American Cancer Society: from 10.5% to 59.0% across states (state median: 36.2%) and from 34.8% to 78.7% across cities (local median: 67.9%).
- **A commercially developed teacher’s guide:** from 20.5% to 80.1% across states (state median: 52.1%) and from 32.7% to 78.2% across cities (local median: 63.5%).

Content of Required Health Education Courses

Required health education courses aim to increase student knowledge about a variety of health-related topics. The range in percentages of schools that covered specific health-related topics was as follows (Table 4, Figure 1):

- **Alcohol or other drug-use prevention:** from 94.6% to 100.0% across states (state median: 99.2%) and from 98.1% to 100.0% across cities (local median: 100.0%).
- **Dietary behavior and nutrition:** from 85.9% to 98.6% across states (state median: 93.6%) and from 90.1% to 100.0% across cities (local median: 96.4%).
- **HIV prevention:** from 74.7% to 100.0% across states (state median: 97.8%) and from 95.8% to 100.0% across cities (local median: 100.0%).
- **Physical activity and fitness:** from 88.1% to 98.1% across states (state median: 94.3%) and from 84.9% to 100.0% across cities (local median: 95.6%).

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

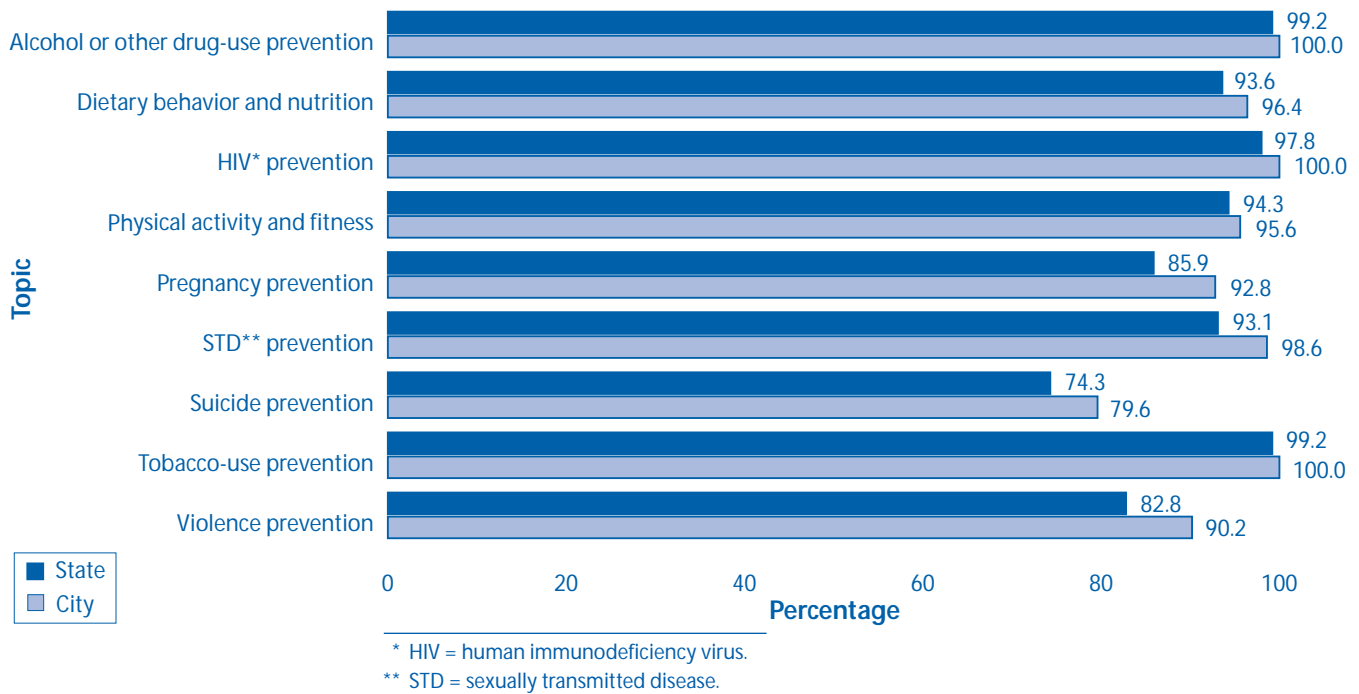


FIGURE 1. Median percentage of schools that aimed to increase student knowledge in specific topics in a required health education course, School Health Education Profiles, 2000.

- Pregnancy prevention:** from 45.0% to 97.5% across states (state median: 85.9%) and from 79.5% to 100.0% across cities (local median: 92.8%).
- STD prevention:** from 62.4% to 100.0% across states (state median: 93.1%) and from 88.2% to 100.0% across cities (local median: 98.6%).
- Suicide prevention:** from 56.6% to 90.4% across states (state median: 74.3%) and from 50.2% to 95.2% across cities (local median: 79.6%).
- Tobacco-use prevention:** from 92.9% to 100.0% across states (state median: 99.2%) and from 95.0% to 100.0% across cities (local median: 100.0%).
- Violence prevention:** from 72.4% to 94.9% across states (state median: 82.8%) and from 85.6% to 100.0% across cities (local median: 90.2%).
- Required health education courses aim to improve student skills. The range in percentages of schools that covered specific skills was as follows (Table 5, Figure 2):**
- Analysis of media messages:** from 62.3% to 93.6% across states (state median: 81.0%) and from 57.1% to 90.1% across cities (local median: 77.9%).
- Communication:** from 85.4% to 97.7% across states (state median: 91.3%) and from 87.9% to 100.0% across cities (local median: 94.4%).
- Decision making:** from 91.2% to 99.6% across states (state median: 97.7%) and from 93.9% to 100.0% across cities (local median: 98.3%).
- Goal setting:** from 84.8% to 98.6% across states (state median: 93.1%) and from 84.6% to 100.0% across cities (local median: 95.6%).

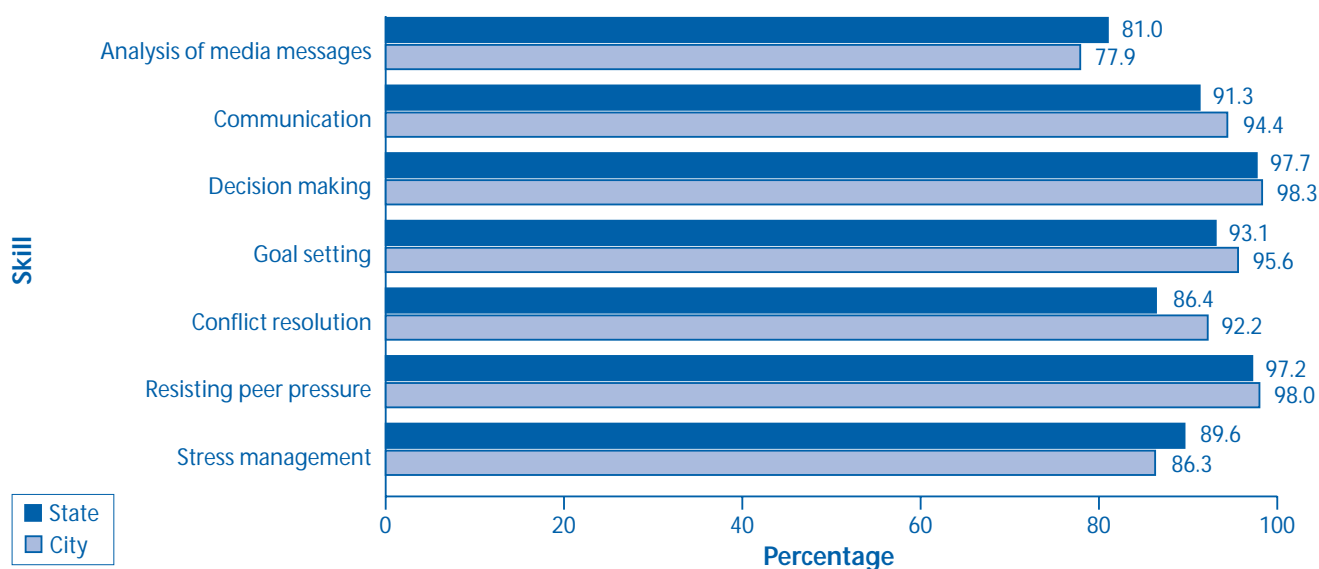


FIGURE 2. Median percentage of schools that aimed to improve specific student skills in a required health education course, School Health Education Profiles, 2000.

- **Conflict resolution:** from 78.7% to 100.0% across states (state median: 86.4%) and from 84.6% to 100.0% across cities (local median: 92.2%).
- **Resisting peer pressure:** from 88.9% to 99.2% across states (state median: 97.2%) and from 93.9% to 100.0% across cities (local median: 98.0%).
- **Stress management:** from 75.8% to 98.8% across states (state median: 89.6%) and from 72.1% to 100.0% across cities (local median: 86.3%).
- **How HIV is transmitted:** from 69.0% to 99.3% across states (state median: 95.3%) and from 93.1% to 100.0% across cities (local median: 100.0%).
- **How to correctly use a condom:** from 9.5% to 68.5% across states (state median: 35.8%) and from 29.8% to 90.9% across cities (local median: 66.3%).
- **Condom efficacy:** from 40.6% to 84.3% across states (state median: 71.2%) and from 67.2% to 100.0% across cities (local median: 90.8%).

Specific HIV prevention topics were covered in required health education courses. The range in percentages of schools that covered those HIV prevention topics was as follows (Table 6):

- **Abstinence to avoid HIV infection:** from 70.3% to 100.0% across states (state median: 95.1%) and from 92.3% to 100.0% across cities (local median: 100.0%).
- **The number of young people who get HIV:** from 67.7% to 95.6% across states (state median: 87.8%) and from 86.3% to 100.0% across cities (local median: 96.0%).
- **How to find valid information on HIV:** from 61.7% to 91.5% across states (state median: 82.1%) and from 83.5% to 100.0% across cities (local median: 95.4%).

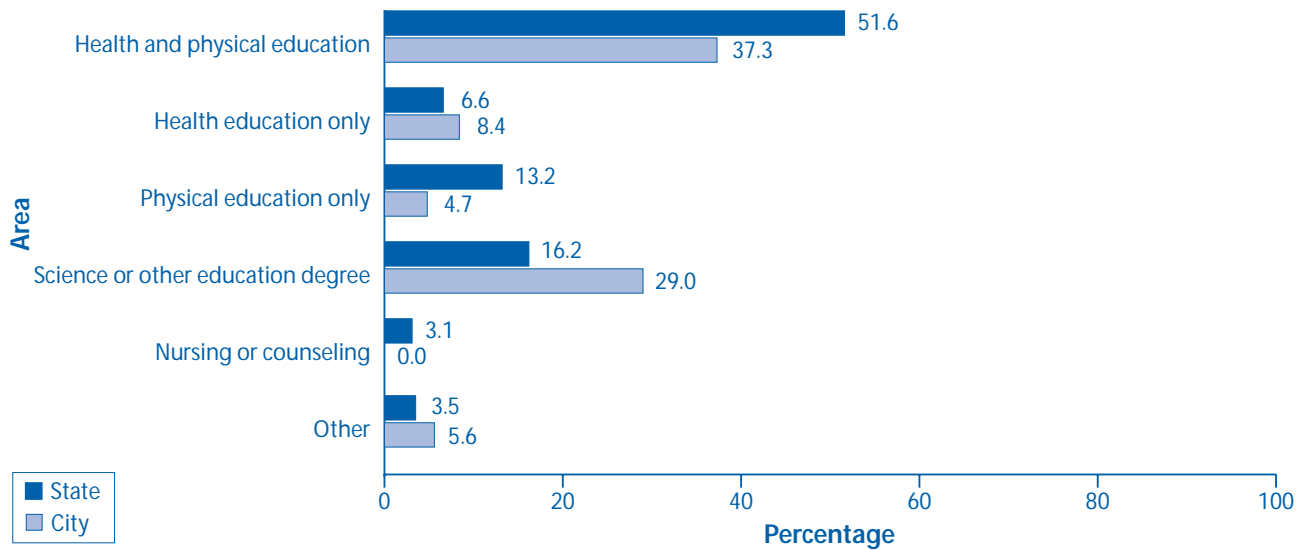


FIGURE 3. Median percentage of schools in which the lead health education teacher had professional preparation in a specific area, School Health Education Profiles, 2000.

Coordination of Health Education

Across states and cities, a health education teacher was identified most often (state median: 45.7%; local median: 50.8%) as being responsible for coordinating health education (Table 7). A school district administrator was less likely (state median: 22.5%; local median: 21.9%) to be responsible for coordinating health education, as was a school administrator (state median: 20.7%; local median: 22.4%). A school nurse infrequently or rarely (state median: 1.6%; local median: 1.2%) coordinated health education. The median percentage of schools in which no one was responsible for coordinating health education was 4.4% across states and 3.7% across cities.

Health education staff worked with other school staff and community members on health education activities. The range in percentages of schools that coordinated health-related activities was as follows (Table 8):

- **Physical education (PE) staff:** from 47.6% to 90.1% across states (state median: 67.9%) and from 35.8% to 100.0% across cities (local median: 62.1%).

- **School health services staff:** from 30.8% to 85.5% across states (state median: 67.8%) and from 36.6% to 95.0% across cities (local median: 74.9%).
- **School mental health staff:** from 36.0% to 78.9% across states (state median: 52.9%) and from 38.1% to 81.5% across cities (local median: 60.2%).
- **Food service staff:** from 8.4% to 29.1% across states (state median: 17.3%) and from 10.5% to 56.5% across cities (local median: 16.8%).
- **Community members:** from 30.7% to 74.6% across states (state median: 50.3%) and from 38.2% to 74.1% across cities (local median: 49.7%).

Professional Preparation of Lead Health Education Teachers

Lead health education teachers reported professional preparation in an array of disciplines. The median percentage of schools in which the lead health education teacher had professional preparation in a specific discipline was as follows (Table 9, Figure 3):

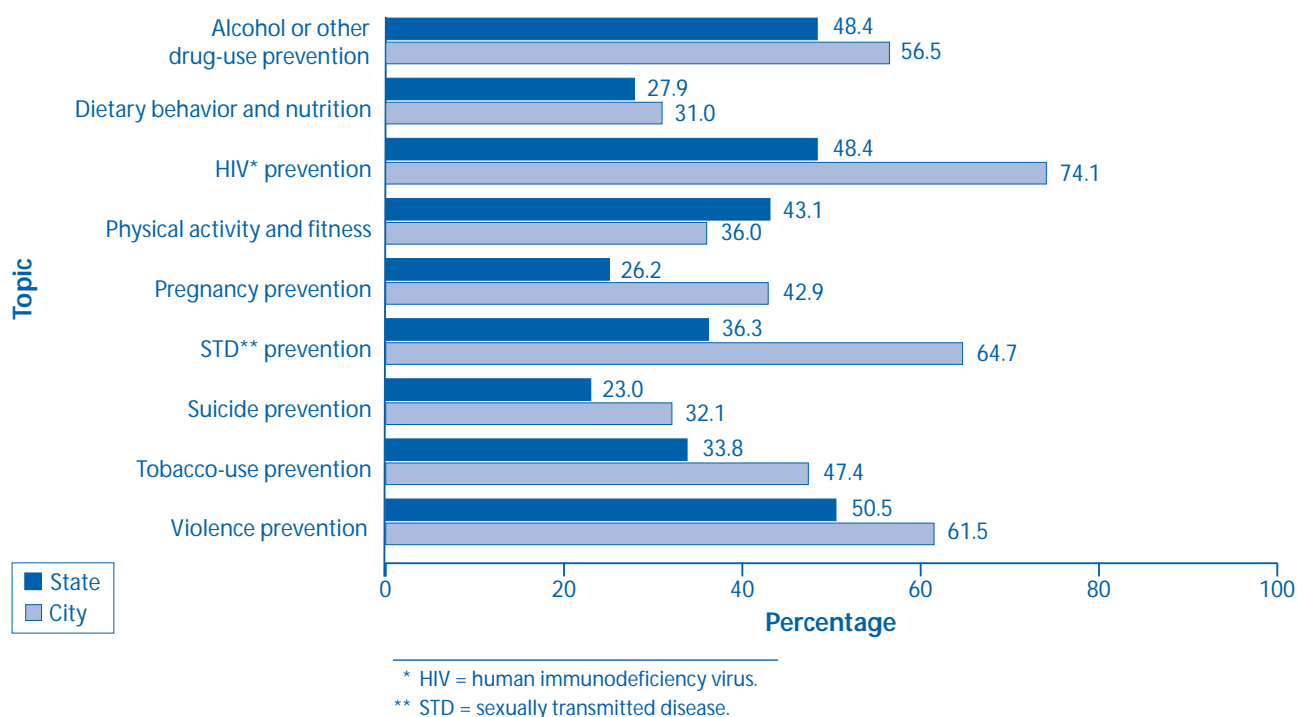


FIGURE 4. Median percentage of schools in which the lead health education teacher had received ≥ 4 hours of staff development during the preceding 2 years in specific health education topics, School Health Education Profiles, 2000.

- **Health and physical education:** 51.6% across states and 37.3% across cities.
- **Health education only:** 6.6% across states and 8.4% across cities.
- **Physical education only:** 13.2% across states and 4.7% across cities.
- **Science or other education degree:** 16.2% across states and 29.0% across cities.
- **Nursing or counseling:** 3.1% across states and 0.0% across cities.
- **Another discipline:** 3.5% across states and 5.6% across cities.

Staff Development of Lead Health Education Teachers
Lead health education teachers had 4 or more hours of staff development during the preceding 2 years in many health-related topics. The range in percentages of schools in which the lead health education teacher had received staff development in specific topics was as follows (Table 10, Figure 4):

- **Alcohol or other drug-use prevention:** from 36.5% to 79.6% across states (state median: 48.4%) and from 35.8% to 100.0% across cities (local median: 56.5%).
- **Dietary behavior and nutrition:** from 16.8% to 70.8% across states (state median: 27.9%) and from 11.0% to 66.7% across cities (local median: 31.0%).
- **HIV prevention:** from 30.3% to 88.0% across states (state median: 48.4%) and from 54.2% to 100.0% across cities (local median: 74.1%).

- **Physical activity and fitness:** from 22.9% to 61.9% across states (state median: 43.1%) and from 13.3% to 91.4% across cities (local median: 36.0%).
- **Pregnancy prevention:** from 14.0% to 63.4% across states (state median: 26.2%) and from 32.1% to 97.7% across cities (local median: 42.9%).
- **STD prevention:** from 17.3% to 80.7% across states (state median: 36.3%) and from 48.3% to 97.7% across cities (local median: 64.7%).
- **Suicide prevention:** from 13.6% to 73.0% across states (state median: 23.0%) and from 13.1% to 75.7% across cities (local median: 32.1%).
- **Tobacco use prevention:** from 15.4% to 78.5% across states (state median: 33.8%) and from 28.4% to 100.0% across cities (local median: 47.4%).
- **Violence prevention:** from 32.7% to 73.3% across states (state median: 50.5%) and from 33.5% to 93.4% across cities (local median: 61.5%).
- **Physical activity and fitness:** from 45.9% to 75.1% across states (state median: 58.3%) and from 26.6% to 82.9% across cities (local median: 57.0%).
- **Pregnancy prevention:** from 43.9% to 79.3% across states (state median: 58.5%) and from 53.1% to 87.5% across cities (local median: 67.1%).
- **STD prevention:** from 49.7% to 84.0% across states (state median: 65.4%) and from 61.3% to 95.8% across cities (local median: 73.3%).
- **Suicide prevention:** from 60.1% to 84.9% across states (state median: 72.0%) and from 56.7% to 91.4% across cities (local median: 73.5%).
- **Tobacco-use prevention:** from 50.0% to 87.3% across states (state median: 63.4%) and from 47.7% to 91.4% across cities (local median: 64.2%).
- **Violence prevention:** from 64.3% to 91.5% across states (state median: 77.9%) and from 61.3% to 97.1% across cities (local median: 81.5%).

The range in percentages of schools in which the lead health education teacher wanted but had not yet received staff development was as follows (Table 11):

- **Alcohol or other drug-use prevention:** from 54.2% to 85.9% across states (state median: 71.1%) and from 60.7% to 94.3% across cities (local median: 75.5%).
- **Dietary behavior and nutrition:** from 44.5% to 79.3% across states (state median: 62.7%) and from 37.8% to 79.2% across cities (local median: 70.8%).
- **HIV prevention:** from 50.1% to 85.0% across states (state median: 68.2%) and from 59.3% to 85.7% across cities (local median: 70.3%).

Lead health education teachers received staff development during the preceding 2 years on various teaching methods. The range in percentages of schools in which the lead health education teacher had received staff development in specific teaching methods was as follows (Table 12, Figure 5):

- **Teaching students with physical or cognitive disabilities:** from 26.8% to 57.1% across states (state median: 38.8%) and from 11.1% to 70.6% across cities (local median: 46.2%).
- **Teaching students of various cultural backgrounds:** from 12.4% to 66.2% across states (state median: 34.2%) and from 41.3% to 79.8% across cities (local median: 66.5%).

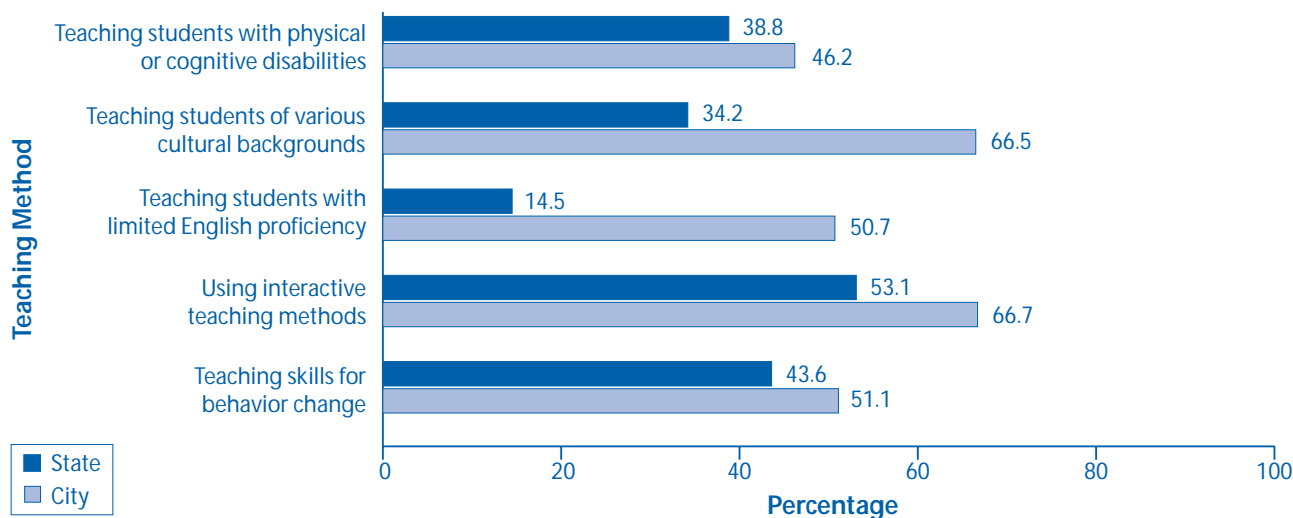


FIGURE 5. Median percentage of schools in which the lead health education teacher received staff development in specific teaching methods, School Health Education Profiles, 2000.

- **Teaching students with limited English proficiency:** from 2.4% to 59.2% across states (state median: 14.5%) and from 16.2% to 85.6% across cities (local median: 50.7%).
- **Teaching students of various cultural backgrounds:** from 33.2% to 70.0% across states (state median: 52.0%) and from 51.9% to 82.6% across cities (local median: 70.5%).
- **Using interactive teaching methods** such as role-plays or cooperative group activities: from 40.2% to 67.4% across states (state median: 53.1%) and from 54.0% to 85.1% across cities (local median: 66.7%).
- **Teaching students with limited English proficiency:** from 19.7% to 77.6% across states (state median: 45.0%) and from 38.9% to 79.5% across cities (local median: 62.2%).
- **Teaching skills for behavior change:** from 22.6% to 60.1% across states (state median: 43.6%) and from 34.1% to 80.0% across cities (local median: 51.1%).
- **Using interactive teaching methods** such as role-plays or cooperative group activities: from 44.5% to 83.1% across states (state median: 61.0%) and from 51.0% to 95.8% across cities (local median: 68.4%).
- **Teaching skills for behavior change:** from 65.8% to 88.7% across states (state median: 76.8%) and from 62.2% to 88.6% across cities (local median: 78.7%).
- **Teaching students with physical or cognitive disabilities:** from 47.7% to 84.2% across states (state median: 61.5%) and from 54.0% to 88.6% across cities (local median: 73.1%).

The range in percentages of schools in which the lead health education teacher wanted but had not yet received staff development in specific teaching methods was as follows (Table 13):

Parental and Community Involvement

The percentage of schools that had a school health advisory committee to address health issues ranged from 20.4% to 78.8% across states (median: 42.9%) and from 41.2% to 95.5% across cities (median: 68.6%).

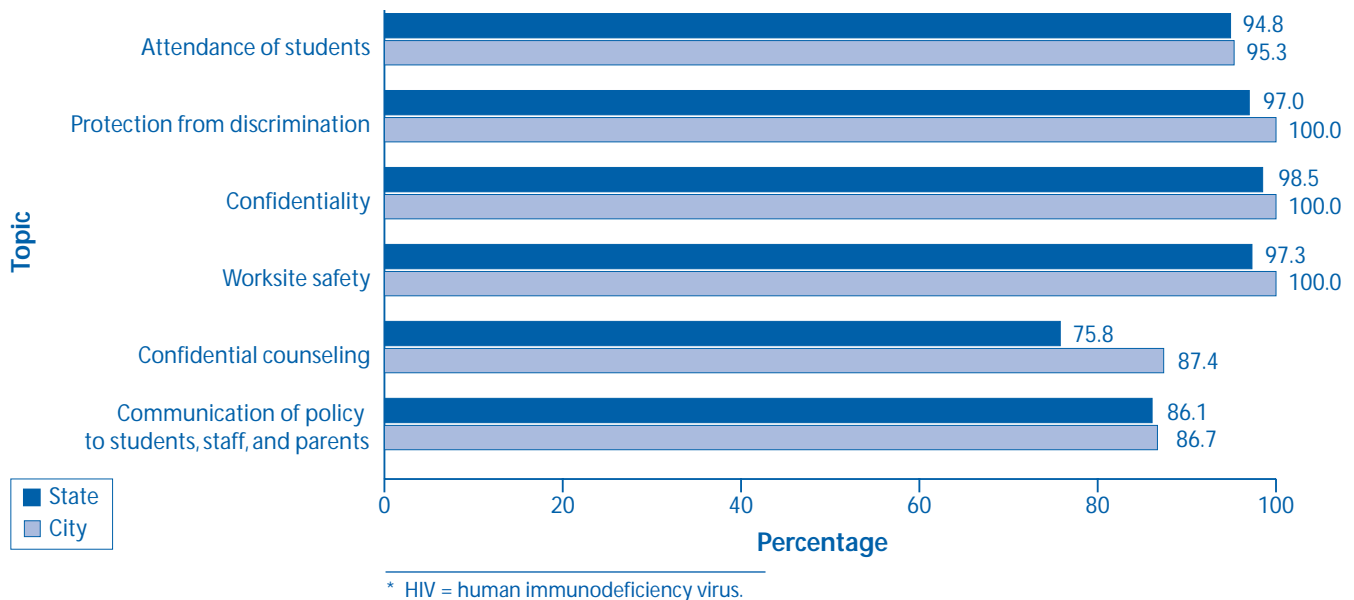


FIGURE 6. Among schools with a written policy on HIV*-infected students or school staff, the median percentage of those schools that addressed specific topics, School Health Education Profiles, 2000.

The percentage of schools that received parental feedback about health education in their children’s school ranged from 30.4% to 65.9% (state median: 52.5%) across states and from 44.5% to 69.9% across cities (local median: 57.1%) (Table 14). Among those schools that received feedback, the median percentage of schools that received mainly positive feedback was 88.7% across states and 90.0% across cities. The median percentage of schools that received mainly negative feedback was 1.0% across states and 0.0% across cities. The median percentage of schools that received equally positive and negative feedback was 10.3% across states and 10.0% across cities.

SCHOOL HEALTH POLICIES

HIV Infection/AIDS

The percentage of schools with a written policy that protects the rights of HIV-infected students or school staff ranged from 26.7% to 75.4% across states (state median: 54.8%) and from 37.8% to 100.0% across cities (local median: 67.5%) (Table 15). Among those that had a written policy, the range in percentages of schools

that addressed specific topics was as follows (Table 15, Figure 6):

- **Attendance at school of HIV-infected students:** from 84.3% to 100.0% across states (state median: 94.8%) and from 78.3% to 100.0% across cities (local median: 95.3%).
- **Protection of HIV-infected students and staff members from discrimination:** from 89.9% to 100.0% across states (state median: 97.0%) and from 91.7% to 100.0% across cities (local median: 100.0%).
- **Maintenance of confidentiality for HIV-infected students and staff members:** from 92.4% to 100.0% across states (state median: 98.5%) and from 95.8% to 100.0% across cities (local median: 100.0%).
- **Worksite safety:** from 90.9% to 100.0% across states (state median: 97.3%) and from 87.5% to 100.0% across cities (local median: 100.0%).

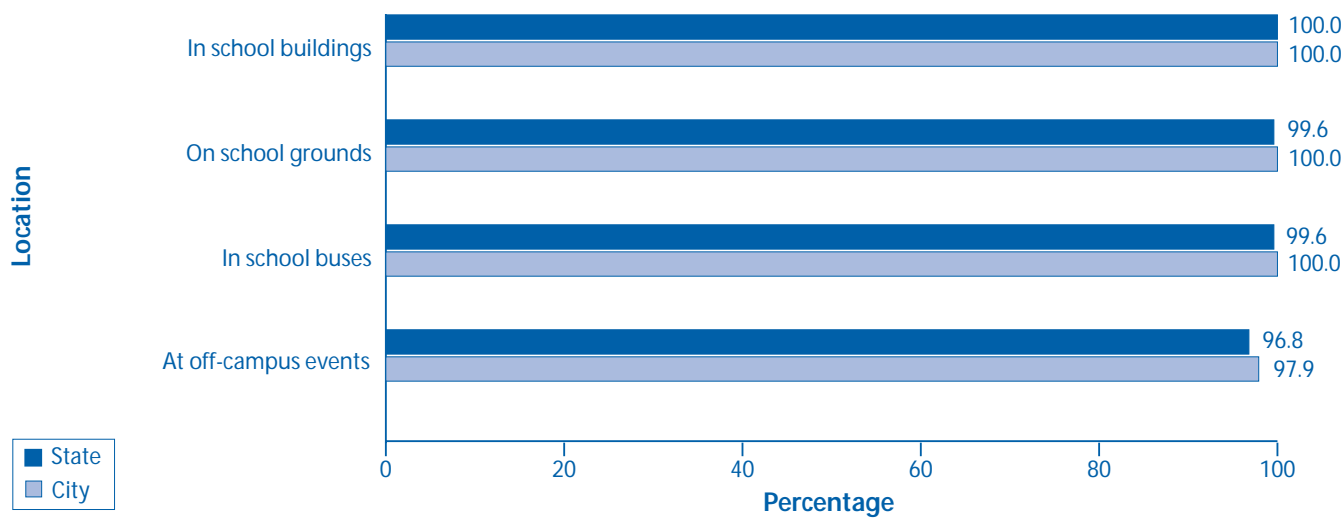


FIGURE 7. Among schools with a policy prohibiting cigarette smoking by students, the median percentage of those schools that had a policy prohibiting cigarette smoking in specific locations, School Health Education Profiles, 2000.

- Confidential counseling for HIV-infected students:** from 63.3% to 84.6% across states (state median: 75.8%) and from 0.0% to 100.0% across cities (local median: 87.4%).
- Communication of the policy to students, school staff, and parents:** from 74.3% to 92.3% across states (state median: 86.1%) and from 78.3% to 100.0% across cities (local median: 86.7%).
- On school grounds:** from 98.2% to 100.0% across states (state median: 99.6%) and from 96.8% to 100.0% across cities (local median: 100.0%).
- In school buses or other vehicles used to transport students:** from 95.4% to 100.0% across states (state median: 99.6%) and from 97.7% to 100.0% across cities (local median: 100.0%).
- At off-campus, school-sponsored events:** from 84.7% to 100.0% across states (state median: 96.8%) and from 91.3% to 100.0% across cities (local median: 97.9%).

Tobacco Use

The percentage of schools with a policy that prohibits cigarette smoking by students ranged from 96.1% to 100.0% across states (state median: 99.4%) and from 92.5% to 100.0% across cities (local median: 98.0%) (Table 16). Among those that had a policy, the range in percentages of schools that prohibited smoking in specific locations was as follows (Table 16, Figure 7):

- In school buildings:** from 99.1% to 100.0% across states (state median: 100.0%) and from 97.7% to 100.0% across cities (local median: 100.0%).

The percentage of schools with a policy that prohibits cigarette smoking by students in all four locations (in school buildings, on school grounds, in school buses, and at off-campus events) ranged from 84.0% to 100.0% across states (state median: 96.3%) and from 90.6% to 100.0% across cities (local median: 97.9%).

Consequences exist for students who are caught smoking cigarettes in schools that have a policy prohibiting cigarette smoking by students. The range in percentages of schools that took specific actions was as follows (Table 17):

- **Referring students to a school counselor:** from 42.3% to 81.1% across states (state median: 59.6%) and from 34.8% to 100.0% across cities (local median: 71.9%).
- **Referring students to a school administrator:** from 93.7% to 100.0% across states (state median: 98.8%) and from 85.0% to 100.0% across cities (local median: 96.3%).
- **Encouraging students to participate in a cessation program:** from 28.5% to 75.5% across states (state median: 54.9%) and from 21.3% to 76.5% across cities (local median: 63.6%).
- **Requiring students to participate in a cessation program:** from 9.6% to 57.7% across states (state median: 25.4%) and from 8.6% to 90.5% across cities (local median: 36.6%).
- **Placing students in detention:** from 33.0% to 66.3% across states (state median: 49.7%) and from 29.5% to 91.3% across cities (local median: 60.3%).
- **Suspending students from school:** from 43.1% to 90.5% across states (state median: 74.0%) and from 50.0% to 100.0% across cities (local median: 75.0%).
- **Informing parents or guardians:** from 93.3% to 100.0% across states (state median: 98.6%) and from 74.3% to 100.0% across cities (local median: 97.7%).

Tobacco advertising is prohibited by many schools. The median percentage of schools that prohibited tobacco advertising was as follows (Table 18):

- **Tobacco advertising in school buildings, on school grounds, on school buses, and in school publications:** 92.5% across states and 92.1% across cities.
- **Tobacco advertising through sponsorship of school events:** 90.2% across states and 90.7% across cities.
- **Student wear of tobacco brand-name apparel:** 92.1% across states and 85.8% across cities.

Unintentional Injuries and Violence

The median percentage of schools that had a written plan for responding to violence was 94.5% across states and 97.6% across cities. The range in percentages of schools that implemented safety and security measures was as follows (Table 19, Figure 8):

- **Requiring visitors to report to the main office:** from 84.6% to 100.0% across states (state median: 99.6%) and from 97.8% to 100.0% across cities (local median: 100.0%).
- **Maintaining a closed campus:** from 33.7% to 100.0% across states (state median: 87.3%) and from 78.8% to 100.0% across cities (local median: 95.7%).
- **Using staff or adult volunteers to monitor school halls:** from 67.9% to 93.8% across states (state median: 87.1%) and from 87.0% to 100.0% across cities (local median: 95.8%).
- **Checking bags, desks, and lockers:** from 7.4% to 77.5% across states (state median: 45.6%) and from 6.1% to 92.9% across cities (local median: 59.3%).

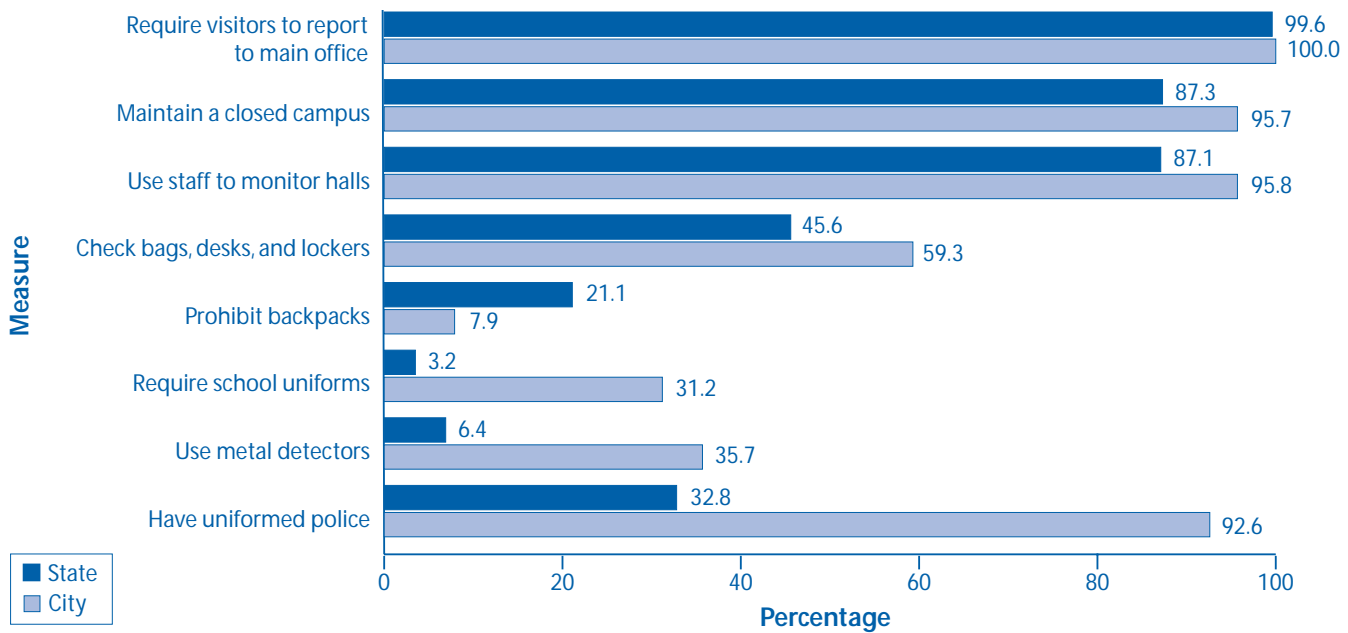


FIGURE 8. Median percentage of schools that implemented safety and security measures, School Health Education Profiles, 2000.

- Prohibiting backpacks:** from 0.0% to 54.2% across states (state median: 21.1%) and from 0.0% to 45.5% across cities (local median: 7.9%).
- Using metal detectors:** from 0.0% to 49.3% across states (state median: 6.4%) and from 0.0% to 93.3% across cities (local median: 35.7%).
- Requiring school uniforms:** from 0.0% to 53.3% across states (state median: 3.2%) and from 0.0% to 87.5% across cities (local median: 31.2%).
- Having uniformed police:** from 6.5% to 83.3% across states (state median: 32.8%) and from 56.3% to 100.0% across cities (local median: 92.6%).

TRENDS IN HEALTH EDUCATION AND SCHOOL HEALTH POLICIES

The Profiles were first conducted in 1996 and repeated biennially with all surveys using many of the same questions. For this report, the data from questions that were the same in 1996 and 2000 were analyzed for changes over time.

- The following are improvements in health education and health policy that occurred from 1996 to 2000:

- Across **states** and **cities**, the percentage of schools in which teachers taught about tobacco-use prevention increased.

- Across **states**, the percentage of schools in which teachers tried to improve student skills in communication, decision making, goal setting, conflict resolution, resisting peer pressure, and stress management increased.

- Across **states** and **cities**, the percentage of schools in which the health education teacher coordinated health education increased.

- Across **states**, the percentage of schools in which health education teachers planned or coordinated health-related projects or activities with school health services staff increased.

- Across **states**, the percentage of schools that had a written HIV policy on procedures to protect students and staff from discrimination; maintain confidentiality of HIV-infected students and staff; ensure worksite safety; and communicate the policy to students, staff members, and parents increased.

- Across **cities**, the percentage of schools that had a written HIV policy on worksite safety increased.

- Across **states** and **cities**, the percentage of schools that had a health advisory group to address health issues increased.

- The following deteriorations in health education and health policy occurred from 1996 to 2000:

- Across **states** and **cities**, the percentage of schools that required a health education course decreased.

- Across **states**, the percentage of schools in which teachers taught about dietary behavior and nutrition decreased.

- Across **states**, the percentage of schools in which teachers taught how HIV is transmitted decreased.

- No changes in health education and health policy were detected from 1996 to 2000 in the following areas:

- Across **states** and **cities**, the percentage of schools in which teachers taught about alcohol or other drug-use prevention, HIV prevention, physical activity and fitness, pregnancy prevention, STD prevention, suicide prevention, and violence prevention.

- Across **cities**, the percentage of schools in which teachers taught about nutrition and dietary behavior.

- Across **cities**, the percentage of schools in which teachers tried to improve student skills in communication, decision making, goal setting, conflict resolution, resisting peer pressure, and stress management.
- Across **states**, the percentage of schools in which teachers taught how to correctly use a condom and about condom efficacy.
- Across **cities**, the percentage of schools in which teachers taught how HIV is transmitted, how to correctly use a condom, and about condom efficacy.
- Across **states** and **cities**, the percentage of schools in which health education teachers planned or coordinated health education projects or activities with physical education staff, school mental health staff, and food service staff.
- Across **cities**, the percentage of schools in which health education teachers planned or coordinated health-related projects or activities with school health services staff.
- Across **cities**, the percentage of schools that had a written HIV policy on procedures to protect students and staff from discrimination; maintain confidentiality of HIV-infected students and staff; and communicate the policy to students, staff members, and parents.

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 1994²⁶ and repeated in spring 2000.²⁷ SHPPS 2000 school-level data were collected from a nationally representative sample of public and private elementary, middle/junior high, and senior high schools. A comparison of 2000 Profiles data (states and cities) with the national SHPPS 2000 data from middle/junior high and senior high schools demonstrates the following:

- Nearly all schools across states and cities (median: 91.7% and 88.0%, respectively) and nationally (96.2%) required some health education.²⁸
- Across states and cities, the median percentage of schools that tried to increase student knowledge on specific topics in a required health education course was higher for nearly all topics as compared to the national percentage.²⁸
- Across states and cities, the median percentage of schools in which the health education teacher planned or coordinated projects with PE staff (median: 67.9% and 62.1%, respectively), health services staff (median: 67.8% and 74.9%, respectively), and mental health staff (median: 52.9% and 60.2%, respectively) was similar to the national percentage of schools in which the health education teacher planned or coordinated projects with PE staff, health services staff, and mental health staff (59.9%, 60.4%, and 49.2%, respectively).²⁸
- Across states and cities, the median percentage of schools that required visitors to report to the main office (median: 99.6% and 100.0%, respectively) and that maintained a closed campus (median: 87.3% and 95.7%, respectively) was similar to the national percentage of middle/junior and senior high schools that required visitors to report to the main office (94.3% and 99.2%, respectively) and that maintained a closed campus (89.4% and 73.4%, respectively). However, the median percentage of schools that used metal detectors and had uniformed police varied greatly between states and cities (metal detectors: 6.4% and 35.7%, respectively; uniformed police: 32.8% and 92.6%) and nationally in middle/junior and senior high schools (metal detectors: 10.0% and 10.0%, respectively; uniformed police: 19.2% and 30.1%, respectively).²⁹
- Nearly all schools across states and cities (median: 99.4% and 98.0%, respectively) and nationally (95.0%) had a policy prohibiting cigarette smoking by students.²⁹ Among those schools, nearly all schools across states and cities and nationally prohibited student smoking in school buildings, on school grounds, in school buses, and at school-sponsored, off-campus events.

DISCUSSION

School health education could be one of the most effective means to reduce and prevent serious health problems, including cardiovascular disease, cancer, motor vehicle crashes, homicide, and suicide, in the United States.¹ The Profiles provide information on curriculum planning, curriculum implementation, and teacher qualifications and preparation, which are all important areas of focus as schools and districts work to improve school health education and health policies.

The 2000 Profiles data demonstrated that many schools have implemented programs and policies that can positively influence health education curriculum planning and development. Although the median percentage of schools that required a health education course was 91.7% across states and 88.0% across cities, this represents a decrease from 1996 for both states and cities. The median percentage of schools that had a person to coordinate health education was very high: 95.6% across states and 96.3% across cities.

Nationwide, high school students continue to practice behaviors that place them at risk for the development of serious health problems.³⁰ The Profiles data indicated that, across states and cities, most schools tried to increase student knowledge in specific topics and a large percentage tried to improve student skills to reduce risk behaviors. Across states and cities, more than 85% of schools taught about diet and nutrition, physical activity and fitness, and the prevention of HIV infection and tobacco, alcohol, and drug use. However, since 1996 the median percentage of states in which teachers taught about dietary behavior and nutrition, how HIV is transmitted, and how to correctly use a condom has decreased.

Collaboration between schools and the community is critical to the success of health education programs within schools, but the median percentage of schools that planned or coordinated health education projects or activities with community members was only 50.3% across states and 49.7% across cities. This clearly shows that most schools have room for improvement in their rates of collaboration with community members.

A large percentage of schools had a lead health education teacher with professional preparation in health education or in health and physical education combined. However, some schools had a lead health education teacher whose professional preparation was not in health education. Health education could be more effective if a greater percentage of schools employed a lead health education teacher who was professionally trained in health education.

Opportunities for professional development are important for maintaining and increasing teachers' knowledge and skills. The median percentage of schools in which a lead health education teacher had received 4 or more hours of staff development during the preceding 2 years in a specific health topic varied by topic. However, the median percentage of schools in which the lead health education teacher wanted, but had not yet received, staff development ranged from 58.3% (physical activity and fitness) to 77.9% (violence prevention) across states and from 57.0% (physical activity and fitness) to 81.5% (violence prevention) across cities. More frequent staff development with the most up-to-date information is needed to help teachers confidently and effectively present health topics to their students.

The findings in this report are subject to several limitations. First, these data apply only to public middle/junior high schools and senior high schools. Second, the data are self-reported by school principals and lead health education teachers. Finally, the Profiles data do not provide an in-depth assessment of all elements of health education or health policies.

State and local education and health officials use Profiles data to improve school health education and

health policies. Data are used to advocate for health education and to identify health education topics that are taught. Data also are used to identify and monitor community and parental involvement in health education, to identify areas for improvement, to encourage appropriate professional preparation, and to identify topics for staff development. 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.

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