

INTRODUCTION

In the United States, 54 million young people attend school for about six hours of class time approximately 180 days per year.¹ Schools are therefore in a unique position to help improve the health status of children and adolescents throughout the United States. In 1995, the Centers for Disease Control and Prevention (CDC), in collaboration with state and local education and health agencies, developed the School Health Profiles (Profiles) to measure health education practices and some school health policies. During the past 10 years, based on input from education and health agencies, Profiles has evolved to provide a more comprehensive assessment of school health policies and programs.

Profiles helps state and local education and health agencies monitor and assess characteristics of and trends in school health education; physical education; health services; school health policies related to human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) prevention, tobacco-use prevention, violence prevention, physical activity, and competitive foods (foods and beverages sold outside of the U.S. Department of Agriculture [USDA] school meal programs); and family and community involvement in school health programs. Profiles has been conducted biennially since 1996 and includes state and local surveys of principals and lead health education teachers in middle and high schools.

The broad focus of Profiles provides some information on five of the eight components of a coordinated school health program (CSHP):²

- **Health education** provides students with a planned, sequential curriculum that addresses the physical, mental, emotional, and social dimensions of health. The curriculum is designed to motivate and assist students to maintain and improve their health, prevent

disease, and reduce health-related risk behaviors.

It allows students to develop and demonstrate increasingly sophisticated health-related knowledge, attitudes, skills, and practices.

- **Physical education** provides students with a planned, sequential curriculum that provides cognitive content and learning experiences in a variety of activity areas. Quality physical education should promote, through a variety of planned physical activities, each student's optimum physical, mental, emotional, and social development, and should promote activities and sports that all students enjoy and can pursue throughout their lives.
- **Health services** are provided for students to appraise, protect, and promote health. These services are designed to ensure access or referral to primary health care services or both, foster appropriate use of primary health care services, prevent and control communicable disease and other health problems, provide emergency care for illness or injury, promote and provide optimum sanitary conditions for a safe school facility and school environment, and provide educational and counseling opportunities for promoting and maintaining individual, family, and community health.
- **Healthy and safe school environment** refers to the physical and aesthetic surroundings and the psychosocial climate and culture of the school. Factors that influence the physical environment include the school building and the area surrounding it, any biological or chemical agents that are detrimental to health, and physical conditions such as temperature, noise, and lighting. The psychosocial environment includes the emotional and social conditions that affect the well-being of students and staff.

- **Family and community involvement** provides an integrated school, parent, and community approach for enhancing the health and well-being of students. School health advisory councils, coalitions, and broadly based constituencies for school health can build support for school health program efforts. Schools can actively solicit parent involvement and engage community resources and services to respond more effectively to the health-related needs of students.

This report summarizes 2006 Profiles data. For each middle or high school sampled, the principal and the lead health education teacher (the person who coordinates health education policies and programs within the school) each completed a self-administered questionnaire. Principal data from the 36 state and 12 local surveys with weighted data and lead health education teacher data from the 34 state and 12 local surveys with weighted data are included in this report.

Principal data from the remaining 8 state and 4 local surveys with unweighted data and lead health education teacher data from the remaining 10 state and 4 local surveys with unweighted data are not included in this report. One local survey with weighted data is not included in this report because permission to use the data was not granted to CDC. This report also examines both long-term (1996–2006) and short-term (2004–2006) trends in school health programs and policies.

METHODOLOGY

SAMPLING

Profiles employs random, systematic, equal-probability sampling strategies to produce representative samples of schools that serve 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. In 2006, 19 education and health agencies modified this procedure and invited all secondary schools, rather than just a sample, to participate.

DATA COLLECTION

The data are collected from each sampled school primarily during the spring semester, with the exception of Texas, which collected data during Fall 2006. Both the principal and lead health education teacher questionnaire booklets are mailed by the state or local education or health agency to the principal, who then designates the school's lead health education teacher to complete the teacher questionnaire.

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 from states and cities that had response rates of 70% or greater and appropriate documentation (separately for the principal and teacher surveys) were weighted. The data are weighted to reflect the likelihood of principals or teachers being selected and to adjust for differing patterns of nonresponse.

This report represents information from the 34 states and 12 cities with weighted data from both principal and lead health education teacher surveys and 2 states with weighted data from the principal survey only (Table 1). Across states, the sample sizes of the principal surveys ranged from 68 to 661, and response rates ranged from 70% to 91%; across cities, the sample sizes ranged from 31 to 234, and response rates ranged from 71% to 98%. The sample sizes of the lead health education teacher surveys across states ranged from 68 to 659, and response rates ranged from 70% to 91%; across cities, the sample sizes ranged from 32 to 212, and the response rates ranged from 70% to 100%. SAS software was used to compute point estimates.³ Medians and ranges are presented separately for states and cities.

The Wilcoxon rank-sum test was used to test for differences between 1996 and 2006 data and between 2004 and 2006 data across states and cities.⁴ This is a nonparametric analogue to a two sample t-test. This statistical procedure rank-ordered all sites for both years separately for states and cities, summed the ranks separately by year and for states and cities, and compared the rank sums separately for states and cities to determine whether the distribution of a variable was the same for 1996 and 2006, or for 2004 and 2006.

Assuming the percentages have an underlying continuous distribution, the distribution of ranks is approximately normal; however, because of the small sample sizes, p values were obtained from the t distribution rather than the normal distribution. Because multiple comparisons were made, the distributions were considered statistically significantly different if p was less than 0.01.

To analyze long-term trends and short-term trends, many variables from the 1996 and 2004 Profiles were recalculated so that the denominators used for each year of data were defined identically. In most cases, this denominator included all schools, rather than a subset of schools. As a result of this recalculation, percentages previously reported for the 1996 or 2004 Profiles might differ from those reported here. Only estimates based on the same denominator should be compared.

BACKGROUND

HEALTH EDUCATION

Requirements

Health education curricula should be planned, sequential, and implemented for all grades in elementary and middle schools and through at least one semester in high schools.^{5,6} Health education should address the physical, mental, emotional, and social dimensions of health and be age appropriate.⁷ 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.

A comprehensive health education curriculum includes a variety of topics, such as personal health, family health, community health, consumer health, environmental health, sexuality education, mental and emotional health, injury prevention and safety, nutrition, prevention and control of disease, and substance use and abuse.

Standards and Guidelines

The *National Health Education Standards: Achieving Health Literacy* provides a framework for designing or selecting health education curricula and allocating instructional resources, as well as providing a basis for the assessment of student achievement. The *National Health Education Standards* also offers students, families, and communities concrete expectations for health education. The Joint Committee on National Health Education Standards released the first set of standards in 1995.⁸ The National Health Education Standards Review and Revision Panel released the following updated set of eight standards in 2007:⁹

1. Students will comprehend concepts related to health promotion and disease prevention to enhance health.

2. Students will analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors.

3. Students will demonstrate the ability to access valid information and products and services to enhance health.

4. Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.

5. Students will demonstrate the ability to use decision-making skills to enhance health.

6. Students will demonstrate the ability to use goal-setting skills to enhance health.

7. Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.

8. Students will demonstrate the ability to advocate for personal, family, and community health.

School health education is supported by the U.S. Department of Health and Human Services' *Healthy People 2010*,¹⁰ Objective 7-2: "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."

Coordination of Health Education

A necessary component of effective health education is management and coordination by a professional who is trained in health education.¹¹ That person may work at either the school or the school district level. Curriculum planning and development is enhanced when schools have a school health coordinator. Collaboration between 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.¹²

Professional Preparation and Staff Development

The quality of school health education is determined, in part, by teacher preparation.⁷ Professional development for teachers through continuing education and training is critical for the implementation of effective school health education.¹³⁻¹⁵ Professional development for health education teachers should focus on strategies that actively engage students and help students master important health information and skills.⁷ Studies have shown that teachers who receive training tend to implement health education with more fidelity than do teachers who do not receive such training, resulting in increased knowledge gain among students.¹⁶

PHYSICAL EDUCATION

Regular physical activity can reduce risk for the development of chronic diseases among adults,¹⁷ including cardiovascular disease,¹⁸ cancer,¹⁹ and diabetes.²⁰ Because participation in physical activity as a young person influences participation in physical activity as an adult, it can contribute to decreased risk for the development of such chronic diseases.²¹ Regular participation in physical activity as a young person contributes to healthy bone and muscle development, reduces feelings of depression and anxiety, and promotes psychological well-being.²¹

Further, regular physical activity reduces risk for the development of overweight among youth. In 2004, 18.8% of 6-year-olds to 11-year-olds and 17.4% of 12-year-olds to 19-year-olds were considered obese, and an additional 20.4% of 6-year-olds to 11-year-olds and 15.3% of 12-year-olds to 19-year-olds were considered overweight.*²² Many youth become less active as they move from childhood into adolescence and adulthood.²³⁻²⁶

Schools can play an important role in providing opportunities for physical activity, and instructing students on ways to be physically active and the benefits of physical activity. CDC's *Guidelines for School and Community Programs to Promote Lifelong Physical Activity among Young People*²⁷ recommends that schools adopt a comprehensive approach to physical activity by requiring daily physical education, teaching skills and knowledge for maintaining and enjoying a physically active lifestyle, and providing extracurricular physical activity programs. In 2002, the Task Force on Community Preventive Services published recommendations that communities can implement to increase physical activity among young people. The task force strongly recommended modifying school-based physical education curricula and policies to increase the amount of time students spend in moderate to vigorous activity while in physical education classes.²⁸ Increasing the amount of time students are active can be achieved either by increasing the amount of time spent in physical education class or by increasing the amount of time students are active during already scheduled physical education classes.

* Note that these classifications of obese and overweight do not reflect the classifications used in the article cited but rather the June 2007 recommendations from the Expert Committee on the Assessment, Prevention, and Treatment of Child and Adolescent Overweight and Obesity convened by the American Medical Association (AMA) and cofunded by AMA in collaboration with the Health Resources and Services Administration and the CDC.

To support quality physical education, The National Association for Sport and Physical Education published the second edition of the *National Standards for Physical Education* in 2004.²⁹ The importance of physical education and activity in promoting the health of young people is also supported by the following *Healthy People 2010*¹⁰ objectives:

- **22-6.** Increase the proportion of adolescents who engage in moderate physical activity for at least 30 minutes on 5 or more of the previous 7 days.
- **22-7.** Increase the proportion of adolescents who engage in vigorous physical activity that promotes cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion.
- **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.
- **22-12.** Increase the proportion of the nation's public and private schools that provide access to their physical activity spaces and facilities for all persons outside of normal school hours.

HEALTH SERVICES

According to the American Academy of Pediatrics (AAP), at a minimum, schools should provide the following three types of services: 1) state-mandated services, including health screenings, verification of immunization status, and infectious disease reporting, 2) assessment of minor health complaints, medication

administration, and care for students with special health care needs, and 3) capability to handle emergencies and other urgent situations.³⁰ More comprehensive services might include administration of immunizations, case management, wellness promotion, and patient education, as well as services for students with special needs, such as physical therapy.

School nurses play many roles, but their main purpose is to support student success by providing health care assessment, intervention, and follow-up for all children within the school setting.³¹ The importance of having sufficient school nurses for all students is reflected in *Healthy People 2010*¹⁰ Objective 7-4, “to increase the proportion of the nation’s elementary, middle, and high schools that have a nurse-to-student ratio of at least 1 to 750.”

Asthma is a chronic illness that has increased in prevalence since 1980.³² The impact of illness and death due to asthma is disproportionately higher among low-income populations, racial and ethnic minorities, boys, and children in inner cities.³²⁻³⁴ In 2005, 142.2 per 1,000 children ages 5–17 had a diagnosis of asthma in their lifetime.³⁵ In 2002, children made five million visits to doctors’ offices and hospital outpatient departments, 727,000 visits to hospital emergency departments, and had 196,000 hospitalizations due to asthma. An estimated 14.7 million lost school days are attributed to asthma among school-aged children.³³

Although asthma cannot be cured, it can be controlled with proper diagnosis and appropriate care and management activities. Schools can help students manage their asthma by adopting policies and procedures to create safe and supportive learning environments for students with asthma. In *Strategies for Addressing Asthma Within a Coordinated School Health Program*,³⁶ CDC recommends obtaining a written action plan for all students with asthma and ensuring that students have immedi-

ate access to medications, including allowing students to carry and self-administer medications. *Healthy People 2010*¹⁰ identifies the following objectives to effectively manage and improve the quality of life of persons with asthma:

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

NUTRITION SERVICES

The need to promote healthy eating among youth has intensified as a result of the growing national epidemic of obesity.²² Healthy eating is also important in the prevention of type 2 diabetes, the prevalence of which has increased dramatically among young people; type 2 diabetes also is often associated with obesity.^{37,38} Schools are in a unique position to promote healthy dietary behaviors and to help ensure appropriate nutrient intake. In 2004, more than half (54%) of school-aged children in the United States received either school breakfast or school lunch, and 1 in 6 received both.³⁹ School nutrition services staff can promote healthy eating through the foods they make available each day in the school cafeteria and the opportunities they have to reinforce nutrition education taught in the classroom.

The goal of school nutrition services is to provide nutritionally appropriate meals that are accessible to all students at a reasonable price in a pleasant and comfortable environment.⁵ School meal programs should offer a variety of foods that adhere to the recommendations of the Dietary Guidelines for Americans, including offering fresh fruit, vegetables, and whole grain products. School menus should reflect the ethnic and cultural food preferences of students, including those with special dietary requirements, and encourage student and family involvement in menu planning and taste testing.

HEALTHY AND SAFE SCHOOL ENVIRONMENT

Competitive Foods

USDA defines competitive foods as those foods and beverages sold at school outside of the USDA school meal program, regardless of their nutritional value.⁴⁰ The only federal regulation on sale of foods and beverages outside of the school meal program addresses foods of minimal nutritional value (FMNV).^{†,41} Currently, federal regulations require only that a school prohibit access to FMNV in food service areas during mealtimes. The average young person consumes more than 10% of calories from saturated fat, less than two thirds of the recommended intake of calcium, and more than double the recommended amount of sodium.⁴²⁻⁴⁴ For both boys and girls aged 9 to 13 years, 21% derive more than one quarter of their energy intake from added sugars.⁴⁵

Schools have a unique opportunity to provide students with healthy dietary choices and to help students learn about healthy food choices. The Child Nutrition and WIC Reauthorization Act of 2004 requires school districts that participate in the USDA National School Lunch Program or School Breakfast Program to develop a local wellness policy that must address nutrition education and provide nutrition guidelines for all foods available on school campuses.⁴⁶ The recently released Institute of Medicine report, *Nutrition Standards for Foods in Schools: Leading the Way Toward Healthier Youth*⁴⁷ provides specific recommendations for foods and beverages sold outside of the school meal programs that schools, districts, and states should consider when developing or strengthening policies related to nutrition in schools.

† Foods of minimal nutritional value (FMNV) are defined as items that provide less than 5% of the U.S. recommended daily allowance per serving for each of eight essential nutrients. FMNV include carbonated soft drinks, water ices, chewing gum, and certain candies made largely from sweeteners, such as hard candy and jelly beans. Under the federal regulations, foods such as potato chips, chocolate bars, and doughnuts are not considered FMNV and can be sold in the cafeteria or elsewhere in the school at any time.

The implementation of these recommendations, the USDA local wellness policy, and other initiatives helps support the achievement of the *Healthy People 2010*¹⁰ 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.

Tobacco-Use Prevention

Tobacco use is the single leading preventable cause of death in the United States. During 1997–2001, smoking resulted in an estimated annual average of 259,494 deaths among men and 178,408 deaths among women in the United States.⁴⁸ Approximately 82% of adults who ever smoked daily tried their first cigarette before age 18 years.⁴⁹ Thus, to be most effective, school-based programs must target young people before they initiate tobacco use or drop out of school. CDC's *Guidelines for School Health Programs to Prevent Tobacco Use and Addiction*⁵⁰ recommend strategies to aid schools in preventing tobacco use among youth. The following are key elements of those strategies:

- Develop and enforce a school policy on tobacco use that prohibits tobacco use by students, school staff, parents, and visitors on school property, in school buildings, in all school vehicles, and at school functions away from school property.
- Prohibit tobacco advertising in school buildings, on school property, and in school publications.
- Provide instruction about the negative consequences of short-term and long-term tobacco use, social influences on tobacco use, peer norms regarding tobacco use, and refusal skills.
- Provide tobacco-use prevention education for students in kindergarten through grade 12.

- Provide program-specific training for teachers.
- Support cessation efforts among students and staff who use tobacco.

To be comprehensive, a tobacco-use prevention policy should prohibit all tobacco use by students, faculty, staff, and visitors during school and nonschool hours; in school buildings; on school grounds; in school buses or other vehicles used to transport students; and at off-campus, school-sponsored events.⁵⁰ Instituting such a policy can assist schools in achieving *Healthy People 2010*¹⁰ Objective 27-11: to increase tobacco-free environments in schools, including all school facilities, property, vehicles, and events.

Violence Prevention

In 2003, unintentional injuries, suicide, and homicide accounted for 48.5% of all deaths among children aged 10 to 14 years and 74.9% of all deaths among adolescents aged 15 to 19 years.⁵¹ The No Child Left Behind Act of 2001 authorizes federal funds for school programs to prevent violence in and around schools.⁵² CDC's *School Health Guidelines to Prevent Unintentional Injury and Violence*⁵³ identifies the following strategies for school health efforts to prevent unintentional injury, violence, and suicide:

- Establish social and physical environments that promote safety and prevent unintentional injuries, violence, and suicide.
- Implement health and safety education to help students adopt and maintain safe lifestyles.
- Establish mechanisms for short-term and long-term response to crises, disasters, and injuries.

*Healthy People 2010*¹⁰ Objective 15-39 calls for the reduction of weapon carrying by adolescents on school property.

HIV Infection and AIDS Prevention

Advances in drug therapies have extended the lives of people living with HIV infection and AIDS. Children are living longer with the disease and thus have a direct impact upon schools as they enter the school system. In 2005, 1,255 young people aged 13 to 19 years were diagnosed with HIV/AIDS, for a cumulative total (through 2005) of 5,311 HIV/AIDS cases in this age group.⁵⁴ Consistent condom use and HIV testing are important strategies for preventing the transmission of HIV. Nationwide, 62.8% of currently sexually active students in grades 9 through 12 had used a condom during last sexual intercourse while only 11.9% of students in grades 9 through 12 had been tested for HIV.⁵⁵

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 guide educators in addressing these issues,⁵⁶ including:

- The right to school attendance for students with HIV infection or AIDS.
- Nondiscrimination for employees with HIV infection or AIDS.
- The right to privacy regarding HIV infection status.
- Adherence to infection-control guidelines.
- Accommodations for students living with HIV infection or AIDS to facilitate their participation in school-sponsored physical activities.

- An HIV infection prevention education program.
- Confidential counseling for students.
- A planned HIV education program for staff.
- Provisions for school administrators to notify students, parents, and school personnel about current policies concerning HIV infection and AIDS.

FAMILY AND COMMUNITY INVOLVEMENT

Partnerships between schools, families, and community members are key elements of effective school health programs.⁵⁷ Schools that have a good relationship with families and community members are more likely to gain their cooperation with school health efforts. These relationships also increase the probability of successful school health programs and improved student health outcomes.^{58,59} Interventions aimed at preventing and treating childhood obesity,⁶⁰ school-based tobacco-use prevention programs,⁶¹ and asthma interventions^{62,63} have all been found to be more effective when they involve parents and community organizations. Family and community involvement is especially important when addressing topics that can be emotionally charged, such as the prevention of HIV, other STDs, and pregnancy.⁶⁴ Without parental support of HIV, other STD, and pregnancy prevention education programs and policies, they cannot be sustained.^{65,66}

RESULTS

HEALTH EDUCATION

Required Health Education

Required health education is defined on the Profiles questionnaire as instruction about health topics that students must receive for graduation or promotion from school. Many schools require health education for students in grades 6 through 12. The percentage of all schools that required health education for students in any of grades 6 through 12 ranged from 55.6% to 99.4% (median: 91.5%) across states and from 56.0% to 100.0% (median: 87.2%) across cities (Table 2).

A required health education course is taught as a separate semester-long, quarter-long, or year-long unit of instruction for which the student receives credit. The percentage of all schools that required students to take only one required health education course ranged from 12.5% to 82.4% across states (median: 39.4%) and from 0.0% to 74.7% across cities (median: 44.5%) (Table 2). The percentage of all schools that required students to take two or more required health education courses ranged from 8.1% to 79.3% across states (median: 43.0%) and from 0.0% to 66.9% across cities (median: 16.1%).

Among schools that required health education for students in any of grades 6 through 12, schools taught required health education in the following ways:

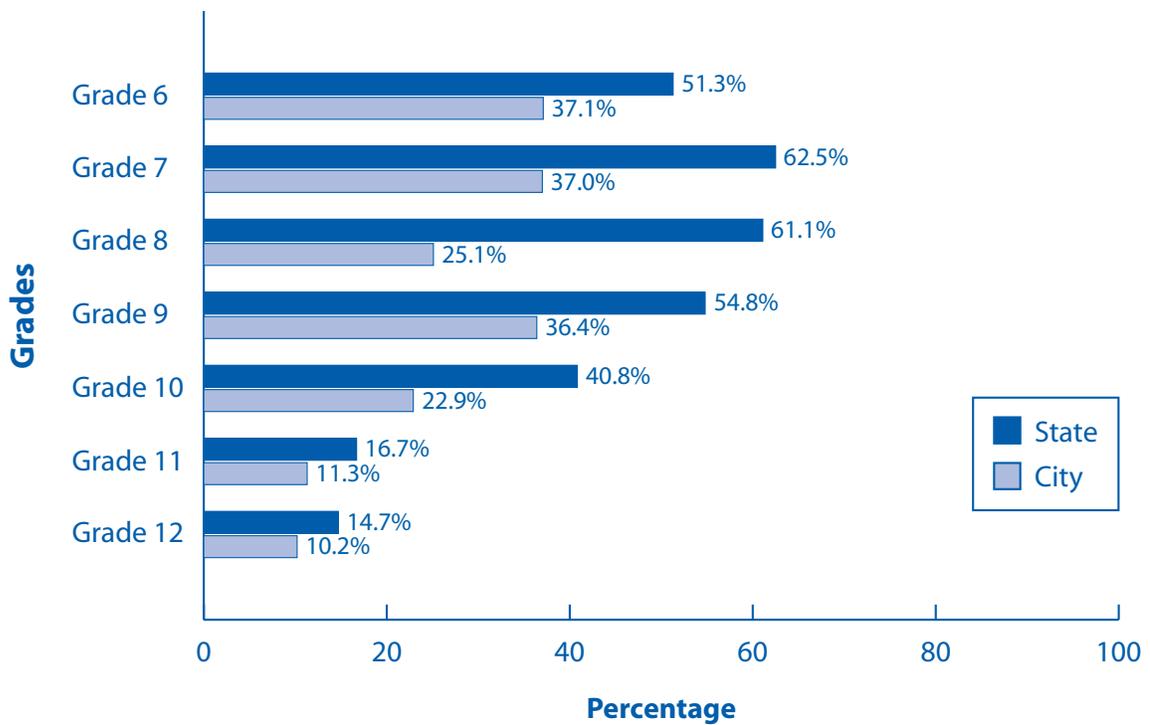
- The percentage of schools that taught required health education in a combined health education and physical education course ranged from 32.8% to 98.0% across states (median: 63.1%) and from 12.4% to 100.0% across cities (median: 68.4%) (Table 2).
- The percentage of schools that taught required health education in a course mainly about another subject other than health education, such as science, social studies, home economics, or English, ranged from 7.2% to 37.4% across states (median: 19.6%) and from 0.0% to 90.9% across cities (median: 38.9%) (Table 2).

Among schools that required a health education course for students in any of grade 6 through grade 12, some schools required that students who fail the course repeat it. The percentage of these schools that required students to repeat a required health education course ranged from 35.0% to 95.4% (median: 55.4%) across states and from 35.1% to 86.2% (median: 60.2%) across cities (Table 2).

Among schools with students in particular grades, the percentage of schools across states that taught a required health education course in that grade ranged from 11.8% to 93.2% (median: 51.3%) in grade 6, 11.4% to 93.3% (median: 62.5%) in grade 7, 15.0% to 93.3% (median: 61.1%) in grade 8, 7.9% to 86.1% (median: 54.8%) in grade 9, 9.0% to 83.9% (median: 40.8%) in grade 10, 1.9% to 77.2% (median: 16.7%) in grade 11, and from 1.9% to 73.7% (median: 14.7%) in grade 12 (Table 3, Figure 1).

Among schools with students in particular grades, the percentage of schools across cities that taught a required health education course in that grade ranged from 0.0% to 100.0% (median: 37.1%) in grade 6, 0.0% to 100.0% (median: 37.0%) in grade 7, 0.0% to 100.0% (median: 25.1%) in grade 8, 0.0% to 100.0% (median: 36.4%) in grade 9, 0.0% to 58.8% (median: 22.9%) in grade 10, 0.0% to 42.3% (median: 11.3%) in grade 11, and from 0.0% to 37.3% (median: 10.2%) in grade 12 (Table 3, Figure 1).

FIGURE 1. Median percentage of schools that taught a required health education course in each grade,* School Health Profiles, 2006.



* Among schools with students in each grade.

Materials Used in Required Health Education Courses

Many schools required that teachers use specific materials in a required health education course. The percentage of all schools that required use of specific materials[‡] ranged as follows (Table 4):

- **The National Health Education Standards:** from 24.7% to 76.9% across states (median: 44.1%) and from 0.0% to 63.7% across cities (median: 33.3%).
- **Any state-developed, district-developed, or school-developed curriculum:** from 36.3% to 95.9% (median: 75.3%) across states and from 0.0% to 97.1% across cities (median: 48.9%).
- **A commercially developed curriculum:** from 15.0% to 43.9% across states (median: 22.9%) and from 0.0% to 58.4% across cities (median: 20.6%).
- **A commercially developed student textbook:** from 17.6% to 80.7% across states (median: 43.9%) and from 0.0% to 83.9% across cities (median: 32.7%).
- **A commercially developed teacher’s guide:** from 15.8% to 71.0% across states (median: 37.1%) and from 0.0% to 67.3% across cities (median: 34.8%).
- **Health education performance assessment materials:** from 23.0% to 70.5% across states (median: 36.3%) and from 0.0% to 59.2% across cities (median: 26.7%).

[‡] Schools could report use of one or more types of material.

- **Materials from health organizations** such as the American Heart Association or the American Cancer Society: from 14.5% to 45.6% across states (median: 30.3%) and from 0.0% to 55.1% across cities (median: 30.7%).

Content of Required Health Education Courses

Required health education courses aim to increase student knowledge about a variety of health-related topics. The percentage of all schools that tried to increase student knowledge on specific health-related topics in a required health education course during the 2005–2006 school year ranged as follows (Tables 5a, b, c):

- **Alcohol-use or other drug-use prevention:** from 43.9% to 99.0% across states (median: 86.8%) and from 0.0% to 100.0% across cities (median: 57.6%).
- **Asthma awareness:** from 25.3% to 71.6% across states (median: 48.3%) and from 0.0% to 76.8% across cities (median: 36.9%).
- **Consumer health, such as choosing sources of health-related information, products, and services wisely:** from 34.8% to 95.5% across states (median: 77.4%) and from 0.0% to 95.0% across cities (median: 52.1%).
- **Cardiopulmonary resuscitation (CPR):** from 23.6% to 78.6% across states (median: 53.4%) and from 0.0% to 68.3% across cities (median: 46.6%).
- **Dental and oral health:** from 34.1% to 87.4% across states (median: 55.2%) and from 0.0% to 91.7% across cities (median: 41.3%).
- **Emotional and mental health:** from 40.9% to 98.4% across states (median: 83.1%) and from 0.0% to 98.9% across cities (median: 57.2%).
- **Environmental health, such as how air and water quality can affect health:** from 33.5% to 83.2% across states (median: 59.9%) and from 0.0% to 84.8% across cities (median: 47.2%).
- **First aid:** from 28.6% to 88.2% across states (median: 61.9%) and from 0.0% to 80.8% across cities (median: 47.9%).
- **Foodborne illness prevention:** from 29.2% to 84.5% across states (median: 61.4%) and from 0.0% to 88.9% across cities (median: 45.3%).
- **Growth and development:** from 40.3% to 96.5% across states (median: 80.6%) and from 0.0% to 98.7% across cities (median: 54.2%).
- **HIV prevention:** from 35.6% to 99.3% across states (median: 84.2%) and from 0.0% to 100.0% across cities (median: 57.2%).
- **Human sexuality:** from 28.9% to 96.9% across states (median: 76.3%) and from 0.0% to 97.3% across cities (median: 56.2%).
- **Immunizations:** from 24.1% to 79.4% across states (median: 51.0%) and from 0.0% to 78.7% across cities (median: 37.3%).
- **Injury prevention and safety:** from 35.0% to 93.9% across states (median: 77.6%) and from 0.0% to 88.7% across cities (median: 52.3%).
- **Nutrition and dietary behavior:** from 43.1% to 98.6% across states (median: 85.8%) and from 0.0% to 100.0% across cities (median: 57.2%).
- **Physical activity and fitness:** from 44.0% to 98.9% across states (median: 86.5%) and from 0.0% to 100.0% across cities (median: 56.3%).

- **Pregnancy prevention:** from 29.6% to 99.3% across states (median: 80.0%) and from 0.0% to 100.0% across cities (median: 56.2%).
- **STD prevention:** from 30.8% to 98.9% across states (median: 79.9%) and from 0.0% to 100.0% across cities (median: 57.2%).
- **Suicide prevention:** from 32.6% to 89.5% across states (median: 66.0%) and from 0.0% to 91.9% across cities (median: 49.3%).
- **Sun safety or skin cancer prevention:** from 37.3% to 85.7% across states (median: 65.9%) and from 0.0% to 87.9% across cities (median: 43.3%).
- **Tobacco-use prevention:** from 42.9% to 99.0% across states (median: 86.6%) and from 0.0% to 100.0% across cities (median: 57.2%).
- **Violence prevention, such as bullying, fighting, or homicide:** from 39.7% to 95.3% across states (median: 78.7%) and from 0.0% to 95.2% across cities (median: 57.2%).
- **Communication skills, such as how to ask for assistance with a health-related problem:** from 36.8% to 94.1% across states (median: 77.2%) and from 0.0% to 100.0% across cities (median: 54.4%).
- **Decision-making skills, such as deciding to get appropriate health screenings and exams:** from 34.6% to 94.9% across states (median: 77.9%) and from 0.0% to 92.1% across cities (median: 57.2%).
- **Goal-setting skills, such as setting a goal for improving personal health habits:** from 40.3% to 98.0% across states (median: 81.5%) and from 0.0% to 97.4% across cities (median: 54.4%).
- **Conflict resolution skills, such as techniques to resolve interpersonal conflicts without fighting:** from 39.1% to 95.6% across states (median: 79.7%) and from 0.0% to 94.5% across cities (median: 57.2%).
- **Resisting peer pressure to engage in unhealthy behavior related to personal health and wellness:** from 42.0% to 98.8% across states (median: 86.0%) and from 0.0% to 100.0% across cities (median: 55.4%).

Required health education courses also aim to improve student skills for adopting, practicing, and maintaining healthy behaviors. The percentage of all schools that tried to improve specific student skills in a required health education course during the 2005–2006 school year ranged as follows (Table 6):

- **Finding valid information or services related to personal health and wellness:** from 35.7% to 96.7% across states (median: 79.2%) and from 0.0% to 97.2% across cities (median: 54.4%).
- **Influence of media on personal health and wellness:** from 37.6% to 96.7% across states (median: 80.6%) and from 0.0% to 97.5% across cities (median: 54.4%).

Tobacco-Use Prevention Topics

Tobacco-use prevention topics taught in a required health education course included health outcomes and risks of tobacco use, external influences on tobacco use, and skills to avoid and to stop using tobacco. The percentage of all schools that taught about health outcomes and risks of tobacco use in a required health education course during the 2005–2006 school year ranged as follows (Table 7a):

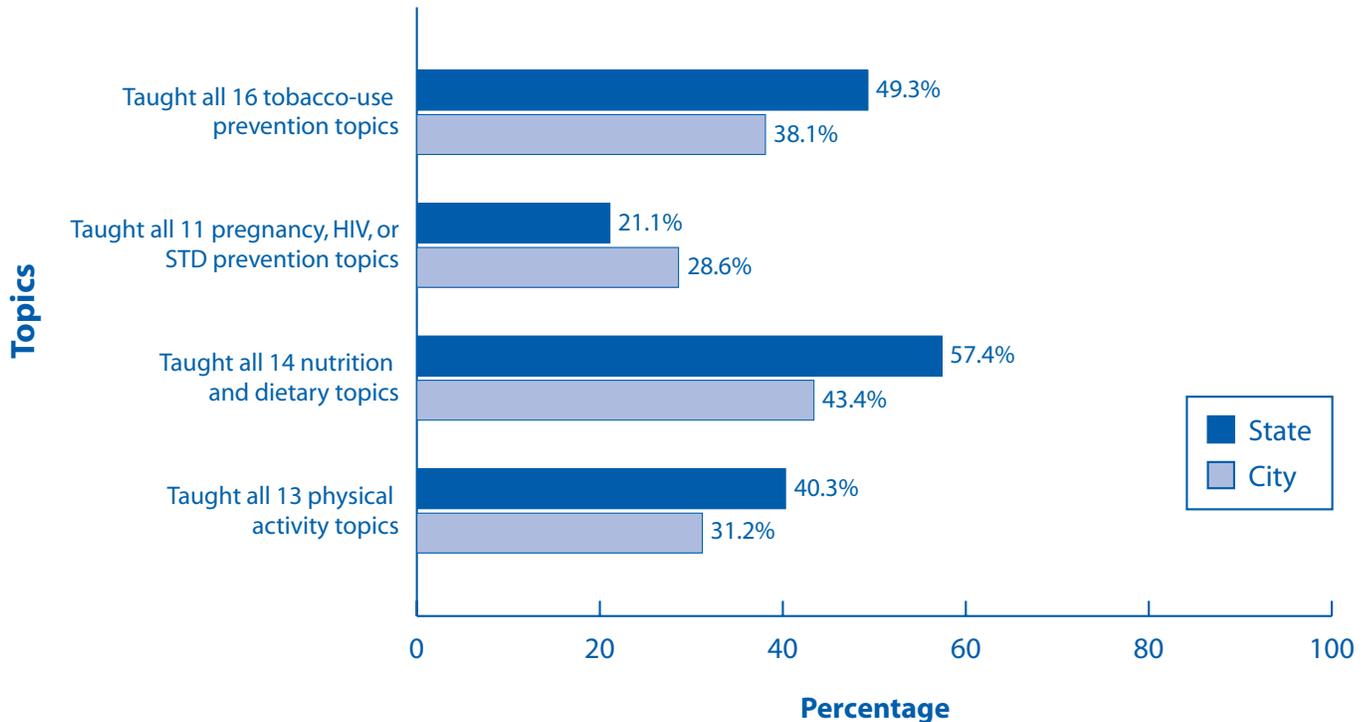
- **Addictive effects of nicotine in tobacco products:** from 40.8% to 99.0% across states (median: 85.6%) and from 0.0% to 100.0% across cities (median: 56.8%).

- **Benefits of not smoking cigarettes (including long-term and short-term health benefits, social benefits, environmental benefits, and financial benefits):** from 42.0% to 98.7% across states (median: 85.9%) and from 0.0% to 100.0% across cities (median: 56.8%).
- **Benefits of not using smokeless tobacco:** from 37.6% to 98.3% across states (median: 81.4%) and from 0.0% to 98.7% across cities (median: 49.3%).
- **Short-term and long-term health consequences of cigarette smoking (such as stained teeth, bad breath, heart disease, and cancer):** from 41.3% to 99.0% across states (median: 86.2%) and from 0.0% to 100.0% across cities (median: 56.8%).
- **Short-term and long-term health consequences of using smokeless tobacco:** from 38.5% to 98.3% across states (median: 83.3%) and from 0.0% to 97.5% across cities (median: 53.9%).
- **Health effects of environmental tobacco smoke (ETS) or second-hand smoke:** from 40.2% to 98.3% across states (median: 84.2%) and from 0.0% to 98.9% across cities (median: 54.5%).
- **Short-term and long-term risks of cigar smoking:** from 35.9% to 91.0% across states (median: 71.7%) and from 0.0% to 93.9% across cities (median: 48.9%).
- **Influence of the media on tobacco use:** from 38.1% to 98.7% across states (median: 83.9%) and from 0.0% to 100.0% across cities (median: 56.8%).
- **Social or cultural influences on tobacco use:** from 36.5% to 95.0% across states (median: 78.8%) and from 0.0% to 96.3% across cities (median: 56.8%).
- **How many young people use tobacco:** from 37.2% to 96.6% across states (median: 80.1%) and from 0.0% to 96.6% across cities (median: 55.7%).
- **Resisting peer pressure to use tobacco:** from 40.0% to 97.9% across states (median: 83.7%) and from 0.0% to 98.9% across cities (median: 56.8%).
- **Making a personal commitment not to use tobacco:** from 32.2% to 84.5% across states (median: 64.1%) and from 0.0% to 86.9% across cities (median: 49.0%).
- **How students can influence or support others to prevent tobacco use:** from 36.7% to 96.8% across states (median: 77.8%) and from 0.0% to 97.7% across cities (median: 54.7%).

The percentage of all schools that taught skills to avoid and to stop using tobacco in a required health education course during the 2005–2006 school year ranged as follows (Table 7c):

- **How to find valid information or services related to tobacco-use prevention or cessation:** from 33.1% to 93.2% across states (median: 69.3%) and from 0.0% to 92.7% across cities (median: 50.0%).
 - **How students can influence or support others in efforts to quit using tobacco:** from 35.5% to 95.1% across states (median: 75.3%) and from 0.0% to 95.3% across cities (median: 54.7%).
- The percentage of all schools that taught about external influences on tobacco use in a required health education course during the 2005–2006 school year ranged as follows (Table 7b):
- **Influence of families on tobacco use:** from 35.7% to 97.1% across states (median: 82.2%) and from 0.0% to 97.6% across cities (median: 53.2%).

FIGURE 2. Median percentage of all schools that taught all 16 tobacco-use prevention topics; all 11 pregnancy, HIV,* or STD† prevention topics; all 14 nutrition and dietary behavior topics; or all 13 physical activity topics in a required health education course during the 2005–2006 school year, School Health Profiles, 2006.



* Human immunodeficiency virus.
 † Sexually transmitted disease.

The percentage of all schools that taught all 16 tobacco-use prevention topics in a required health education course during the 2005–2006 school year ranged from 23.1% to 74.5% across states (median: 49.3%) and from 0.0% to 76.8% across cities (median: 38.1%) (Table 12, Figure 2).

Pregnancy, HIV, or STD Prevention Topics

Pregnancy, HIV, or STD prevention topics taught in a required health education course included HIV transmission and prevention; external influences on HIV-related risk behaviors and sexual behaviors; and skills to avoid HIV infection, STDs, and pregnancy. The percentage of all schools that taught about HIV transmission and prevention topics in a required health education course during the 2005–2006 school year ranged as follows (Table 8a):

- **Abstinence as the most effective method to avoid pregnancy, HIV, and STDs:** from 28.5% to 99.3% across states (median: 78.0%) and from 0.0% to 100.0% across cities (median: 56.8%).
- **How HIV is transmitted:** from 28.0% to 99.3% across states (median: 78.7%) and from 0.0% to 100.0% across cities (median: 55.7%).
- **How HIV affects the human body:** from 28.3% to 99.3% across states (median: 77.8%) and from 0.0% to 98.7% across cities (median: 55.7%).
- **Condom efficacy, that is, how well condoms work or do not work:** from 11.7% to 90.0% across states (median: 56.0%) and from 0.0% to 91.1% across cities (median: 53.0%).

- **Risks associated with having multiple sexual partners:** from 26.5% to 96.2% across states (median: 73.7%) and from 0.0% to 95.0% across cities (median: 55.7%).

The percentage of all schools that taught about external influences on HIV-related risk behaviors and sexual behavior; and taught skills to avoid HIV infection, STDs, and pregnancy in a required health education course during the 2005–2006 school year ranged as follows (Table 8b):

- **Influence of alcohol and other drugs on HIV-related risk behaviors:** from 26.8% to 99.3% across states (median: 77.0%) and from 0.0% to 97.4% across cities (median: 54.7%).
- **Social or cultural influences on sexual behavior:** from 63.2% to 87.9% across states (median: 81.8%) and from 0.0% to 90.1% across cities (median: 49.4%).
- **How to prevent HIV infection:** from 27.6% to 98.9% across states (median: 78.2%) and 0.0% to 98.7% across cities (median: 55.7%).
- **How to find valid information or services related to HIV or HIV testing:** from 22.9% to 91.9% across states (median: 64.1%) and from 0.0% to 92.3% across cities (median: 52.9%).
- **How to correctly use a condom:** from 1.0% to 59.1% across states (median: 24.3%) and from 0.0% to 74.8% across cities (median: 34.2%).
- **Compassion for persons living with HIV or AIDS:** from 23.3% to 91.6% across states (median: 65.5%) and from 0.0% to 88.8% across cities (median: 52.4%).

The percentage of all schools that taught all 11 pregnancy, HIV, or STD prevention topics in a required health education course during the 2005–2006 school year ranged from 1.0% to 53.1% across states (median: 21.1%) and from 0.0% to 66.5% across cities (median: 28.6%) (Table 12, Figure 2).

Required HIV Prevention Units or Lessons

Required HIV prevention units or lessons may be taught not only in a required health education course, but also in a variety of other courses. The percentage of all schools that taught required HIV prevention units or lessons in specific courses ranged as follows (Table 9):

- **Science:** from 12.9% to 66.3% across states (median: 32.4%) and from 25.4% to 76.4% across cities (median: 53.9%).
- **Home economics or family and consumer education:** from 6.4% to 66.9% across states (median: 24.3%) and from 0.0% to 46.2% across cities (median: 12.0%).
- **Physical education:** from 9.3% to 71.8% across states (median: 26.9%) and from 6.4% to 83.4% across cities (median: 36.7%).
- **Family life education or life skills:** from 14.6% to 86.3% across states (median: 38.3%) and from 28.7% to 71.2% across cities (median: 39.1%).
- **Special education:** from 5.4% to 47.3% across states (median: 16.7%) and from 13.9% to 56.3% across cities (median: 29.4%).
- **Social studies:** from 2.0% to 19.9% across states (median: 7.8%) and from 0.0% to 31.5% across cities (median: 10.0%).

Nutrition and Dietary Behavior Topics

Nutrition and dietary behavior topics taught in a required health education course included choosing healthful foods, food safety, and behaviors that contribute to maintaining a healthy weight. The percentage of all schools that taught about choosing healthful foods in a required health education course during the 2005–2006 school year ranged as follows (Table 10a):

- **Benefits of healthy eating:** from 42.4% to 98.2% across states (median: 84.7%) and from 0.0% to 100.0% across cities (median: 56.8%).
- **Using food labels:** from 37.9% to 95.6% across states (median: 79.4%) and from 0.0% to 98.7% across cities (median: 55.0%).
- **Food guidance using My Pyramid:** from 35.7% to 92.5% across states (median: 77.8%) and from 0.0% to 98.7% across cities (median: 55.0%).
- **Eating more fruits, vegetables, and grain products:** from 41.7% to 97.0% across states (median: 83.3%) and from 0.0% to 100.0% across cities (median: 53.9%).
- **Choosing foods that are low in fat, saturated fat, and cholesterol:** from 40.1% to 96.7% across states (median: 81.3%) and from 0.0% to 98.7% across cities (median: 55.0%).
- **Using sugars in moderation:** from 39.3% to 95.0% across states (median: 80.3%) and from 0.0% to 98.7% across cities (median: 52.9%).
- **Using salt and sodium in moderation:** from 36.0% to 92.9% across states (median: 79.3%) and from 0.0% to 95.1% across cities (median: 53.9%).

- **Eating more calcium-rich foods:** from 37.4% to 92.4% across states (median: 76.3%) and from 0.0% to 94.0% across cities (median: 51.8%).

The percentage of all schools that taught about food safety and behaviors that contribute to maintaining a healthy weight in a required health education course during the 2005–2006 school year ranged as follows (Table 10b):

- **Food safety:** from 33.3% to 93.1% across states (median: 69.6%) and from 0.0% to 89.2% across cities (median: 49.8%).
- **Balancing food intake and physical activity:** from 41.2% to 97.3% across states (median: 83.1%) and from 0.0% to 100.0% across cities (median: 52.1%).
- **Preparing healthy meals and snacks:** from 36.0% to 93.5% across states (median: 74.2%) and from 0.0% to 94.7% across cities (median: 51.2%).
- **Risks of unhealthy weight control practices:** from 38.6% to 97.3% across states (median: 81.6%) and from 0.0% to 98.7% across cities (median: 53.9%).
- **Accepting body size differences:** from 37.1% to 94.4% across states (median: 78.4%) and from 0.0% to 93.9% across cities (median: 55.7%).
- **Eating disorders:** from 36.1% to 95.4% across states (median: 78.5%) and from 0.0% to 95.0% across cities (median: 55.9%).

The percentage of all schools that taught all 14 nutrition and dietary behavior topics in a required health education course during the 2005–2006 school year ranged from 23.8% to 78.0% across states (median: 57.4%) and from 0.0% to 79.2% across cities (median: 43.4%) (Table 12, Figure 2).

Physical Activity Topics

Physical activity topics taught in a required health education course included the benefits of physical activity, guidance for engaging in physical activity, and the challenges to engaging in physical activity. The percentage of all schools that taught about the benefits of physical activity and guidance for engaging in physical activity in a required health education course during the 2005–2006 school year ranged as follows (Table 11a):

- **Physical, psychological, or social benefits of physical activity:** from 41.4% to 96.7% across states (median: 82.6%) and from 0.0% to 92.6% across cities (median: 52.4%).
- **Health-related fitness (i.e., cardiovascular endurance, muscular endurance, muscular strength, flexibility, and body composition):** from 41.3% to 94.5% across states (median: 78.2%) and from 0.0% to 90.1% across cities (median: 50.5%).
- **Difference between physical activity, exercise, and fitness:** from 36.8% to 90.8% across states (median: 73.3%) and from 0.0% to 81.1% across cities (median: 47.9%).
- **Phases of a workout (i.e., warm-up, workout, and cool down):** from 36.8% to 93.2% across states (median: 72.4%) and from 0.0% to 84.6% across cities (median: 45.8%).
- **How much physical activity is enough (i.e., determining frequency, intensity, time, and type of physical activity):** from 35.1% to 92.2% across states (median: 73.3%) and from 0.0% to 86.8% across cities (median: 45.7%).
- **Decreasing sedentary activities such as television watching:** from 40.2% to 93.6% across states (median: 77.2%) and from 0.0% to 92.8% across cities (median: 50.2%).

The percentage of all schools that taught about the challenges to engaging in physical activity in a required health education course during the 2005–2006 school year ranged as follows (Table 11b):

- **Overcoming barriers to physical activity:** from 32.6% to 84.2% across states (median: 67.4%) and from 0.0% to 80.6% across cities (median: 46.8%).
- **Developing an individualized physical activity plan:** from 29.1% to 79.6% across states (median: 60.4%) and from 0.0% to 79.3% across cities (median: 41.4%).
- **Monitoring progress toward reaching goals in an individualized physical activity plan:** from 28.9% to 74.8% across states (median: 57.4%) and from 0.0% to 79.5% across cities (median: 38.3%).
- **Opportunities for physical activity in the community:** from 33.0% to 85.9% across states (median: 68.9%) and from 0.0% to 80.0% across cities (median: 43.6%).
- **Preventing injury during physical activity:** from 36.3% to 92.9% across states (median: 72.9%) and from 0.0% to 84.6% across cities (median: 46.9%).
- **Weather-related safety (e.g., avoiding heat stroke, hypothermia, and sunburn while physically active):** from 37.4% to 89.3% across states (median: 71.6%) and from 0.0% to 79.1% across cities (median: 47.0%).
- **Dangers of using performance-enhancing drugs, such as steroids:** from 34.3% to 96.3% across states (median: 78.9%) and from 0.0% to 94.8% across cities (median: 54.7%).

The percentage of all schools that taught all 13 physical activity topics in a required health education course during the 2005–2006 school year ranged from 20.1% to 62.0% across states (median: 40.3%) and from 0.0% to 64.8% across cities (median: 31.2%) (Table 12, Figure 2).

Teaching Methods in Required Health Education Courses

Teachers used a variety of methods to facilitate the learning process. The percentage of all schools that sometimes, almost always, or always used specific teaching methods in a required health education course during the 2005–2006 school year ranged as follows (Table 13a, b):

- **Audio-visual media, such as videos:** from 39.1% to 92.8% across states (median: 79.1%) and from 0.0% to 94.9% across cities (median: 53.2%).
- **Group discussions:** from 42.6% to 97.8% across states (median: 84.7%) and from 0.0% to 100.0% across cities (median: 55.0%).
- **Cooperative group activities:** from 39.9% to 94.3% across states (median: 80.2%) and from 0.0% to 97.7% across cities (median: 52.9%).
- **Role play, simulations, or practice:** from 32.0% to 78.5% across states (median: 58.8%) and from 0.0% to 83.8% across cities (median: 42.9%).
- **Language, performing, or visual arts:** from 23.0% to 66.1% across states (median: 41.0%) and from 0.0% to 76.1% across cities (median: 43.9%).
- **Pledges or contracts for changing behavior or abstaining from a behavior:** from 17.5% to 43.3% across states (median: 28.5%) and from 0.0% to 54.8% across cities (median: 28.0%).
- **Peer teaching:** from 28.7% to 82.7% across states (median: 50.0%) and from 0.0% to 75.2% across cities (median: 42.3%).
- **The Internet:** from 31.5% to 85.4% across states (median: 64.3%) and from 0.0% to 82.9% across cities (median: 39.7%).
- **Computer-assisted instruction:** from 22.5% to 62.4% across states (median: 41.7%) and from 0.0% to 59.1% across cities (median: 27.3%).
- **Guest speakers:** from 29.8% to 77.2% across states (median: 53.0%) and from 0.0% to 64.8% across cities (median: 42.8%).
- **Health education programs available through video-conferencing or other distance learning methods:** from 1.7% to 16.7% across states (median: 7.8%) and from 0.0% to 23.5% across cities (median: 10.0%).

Teachers also used a variety of methods to highlight diversity or the values of various cultures. The percentage of all schools that used specific methods to highlight diversity or the values of various cultures in a required health education course during the 2005–2006 school year ranged as follows (Table 14):

- **Using textbooks or curricular materials reflective of various cultures:** from 31.1% to 72.8% across states (median: 53.5%) and from 0.0% to 87.6% across cities (median: 45.8%).
- **Using textbooks or curricular materials designed for students with limited English proficiency:** from 4.7% to 41.3% across states (median: 22.2%) and from 0.0% to 85.4% across cities (median: 27.2%).
- **Asking students or families to share their own cultural experiences related to health topics:** from

27.7% to 72.3% across states (median: 54.3%) and from 0.0% to 86.7% across cities (median: 44.9%).

- **Teaching about cultural differences and similarities:** from 36.4% to 85.5% across states (median: 65.6%) and from 0.0% to 91.5% across cities (median: 53.9%).
- **Modifying teaching methods to match students' learning styles, health beliefs, or cultural values:** from 40.6% to 92.1% across states (median: 75.3%) and from 0.0% to 97.5% across cities (median: 56.0%).

Coordination of Health Education

The quality of health education may be enhanced by a health education coordinator who coordinates the selection of the curriculum, serves as a content expert for teachers, secures and manages resources, and advocates for school health activities. The percentage of all schools with a health education coordinator ranged from 80.4% to 99.5% across states (median: 95.8%) and from 74.2% to 100.0% across cities (median: 92.7%) (Table 15). Many different staff may serve as the health education coordinator in a school. Among schools with a health education coordinator, the percentage of schools in which specific staff served as the health education coordinator ranged as follows (Table 15):

- **District administrator or district health education or curriculum coordinator:** from 5.9% to 49.0% across states (median: 25.2%) and from 5.8% to 38.1% across cities (median: 19.6%).
- **School administrator:** from 8.5% to 33.9% across states (median: 20.8%) and from 5.9% to 36.9% across cities (median: 13.5%).
- **Health education teacher:** from 24.8% to 75.1% across states (median: 46.9%) and from 14.6% to 63.7% across cities (median: 49.3%).

- **School nurse:** from 0.0% to 8.7% across states (median: 2.1%) and from 0.0% to 9.1% across cities (median: 2.7%).
- **Someone else:** from 1.1% to 14.2% across states (median: 3.8%) and from 0.0% to 29.8% across cities (median: 10.1%).

During the 2005–2006 school year, health education staff worked on health education activities with other school staff. The percentage of all schools in which health education staff worked on health education activities with others ranged as follows (Table 16):

- **Physical education staff:** from 54.6% to 91.1% across states (median: 76.7%) and from 45.1% to 96.8% across cities (median: 59.9%).
- **School health services staff (e.g., nurses):** from 28.2% to 87.8% across states (median: 66.4%) and from 26.2% to 84.8% across cities (median: 67.6%).
- **School mental health or social services staff (e.g., psychologists, counselors, and social workers):** from 38.3% to 82.4% across states (median: 55.8%) and from 22.9% to 87.5% across cities (median: 56.3%).
- **Nutrition or food service staff:** from 13.5% to 49.4% across states (median: 37.9%) and from 8.5% to 54.3% across cities (median: 27.5%).

Professional Preparation and Staff Development

Lead health education teachers reported professional preparation in many disciplines. The percentage of all schools in which the major emphasis of the lead health education teacher's professional preparation was in each specific discipline ranged as follows (Table 17):

- **Health and physical education combined:** from 9.5% to 88.9% across states (median: 45.5%) and from 1.8% to 85.0% across cities (median: 26.4%).

- **Health education only:** from 1.2% to 42.9% across states (median: 4.7%) and from 0.0% to 37.1% across cities (median: 8.0%).
- **Physical education only:** from 2.0% to 36.4% across states (median: 11.8%) and from 0.0% to 24.5% across cities (median: 8.6%).
- **Other education degree:** from 0.0% to 33.7% across states (median: 5.2%) and from 0.0% to 26.7% across cities (median: 4.6%).
- **Kinesiology, exercise science or exercise physiology, home economics or family and consumer science, biology, or other science:** from 0.0% to 28.6% across states (median: 10.7%) and from 0.0% to 55.1% across cities (median: 11.0%).
- **Nursing or counseling:** from 0.0% to 18.2% across states (median: 2.7%) and from 0.0% to 85.4% across cities (median: 2.7%).
- **Public health, nutrition, or another discipline:** from 0.0% to 14.4% across states (median: 2.9%) and from 0.0% to 18.4% across cities (median: 3.2%).

The percentage of all schools that required newly hired staff who teach health topics to be certified, licensed, or endorsed by the state in health education ranged from 23.8% to 99.0% across states (median: 84.5%) and from 0.0% to 100.0% across cities (median: 75.7%) (Table 18).

The percentage of all schools in which the lead health education teacher was certified, licensed, or endorsed by their state to teach health education in middle school or high school ranged from 26.7% to 97.7% across states (median: 79.6%) and from 35.3% to 91.7% across cities (median: 69.4%) (Table 18).

The percentage of all schools in which the lead health education teacher had experience teaching health education classes or topics for a specific number of years ranged as follows (Table 18):

- **1 year:** from 1.7% to 23.1% across states (median: 7.5%) and from 2.4% to 29.4% across cities (median: 9.9%).
- **2 to 5 years:** from 12.4% to 38.4% across states (median: 22.9%) and from 12.6% to 48.5% across cities (median: 22.7%).
- **6 to 9 years:** from 12.1% to 23.8% across states (median: 16.6%) and from 1.9% to 32.7% across cities (median: 15.5%).
- **10 to 14 years:** from 9.7% to 22.5% across states (median: 13.8%) and from 0.0% to 27.5% across cities (median: 13.9%).
- **15 years or more:** from 16.2% to 59.4% across states (median: 37.9%) and from 8.8% to 63.1% across cities (median: 36.0%).

Lead health education teachers received staff development during the 2 years preceding the survey on many health topics. The percentage of all schools in which the lead health education teacher received staff development on specific topics ranged as follows (Tables 19a, b, c):

- **Alcohol-use or other drug-use prevention:** from 36.3% to 70.0% across states (median: 50.4%) and from 39.0% to 100.0% across cities (median: 64.5%).
- **Asthma awareness:** from 11.0% to 57.4% across states (median: 19.2%) and from 5.9% to 68.0% across cities (median: 33.8%).

- **Consumer health:** from 14.0% to 42.2% across states (median: 22.2%) and from 17.2% to 53.3% across cities (median: 27.7%).
- **CPR:** from 29.6% to 85.4% across states (median: 67.0%) and from 38.2% to 88.0% across cities (median: 58.1%).
- **Dental and oral health:** from 3.5% to 22.7% across states (median: 12.3%) and from 5.0% to 37.3% across cities (median: 14.4%).
- **Emotional and mental health:** from 23.8% to 62.3% across states (median: 35.6%) and from 18.4% to 86.7% across cities (median: 45.3%).
- **Environmental health:** from 7.7% to 21.4% across states (median: 14.2%) and from 7.5% to 38.9% across cities (median: 20.4%).
- **First aid:** from 29.1% to 77.1% across states (median: 56.7%) and from 24.3% to 90.0% across cities (median: 50.7%).
- **Foodborne illness prevention:** from 9.2% to 30.2% across states (median: 18.9%) and from 6.1% to 38.5% across cities (median: 18.8%).
- **Growth and development:** from 17.9% to 49.8% across states (median: 25.7%) and from 21.2% to 65.4% across cities (median: 47.2%).
- **HIV prevention:** from 21.3% to 63.9% across states (median: 43.7%) and from 42.9% to 100.0% across cities (median: 64.2%).
- **Human sexuality:** from 12.7% to 65.6% across states (median: 31.6%) and from 32.2% to 100.0% across cities (median: 63.8%).
- **Immunizations:** from 7.4% to 30.7% across states (median: 16.6%) and from 6.1% to 36.9% across cities (median: 22.7%).
- **Injury prevention and safety:** from 25.0% to 58.6% across states (median: 39.9%) and from 24.5% to 75.8% across cities (median: 41.9%).
- **Nutrition and dietary behavior:** from 21.3% to 72.8% across states (median: 35.4%) and from 21.8% to 63.6% across cities (median: 43.4%).
- **Physical activity and fitness:** from 27.5% to 64.6% across states (median: 48.3%) and from 23.6% to 81.2% across cities (median: 46.9%).
- **Pregnancy prevention:** from 10.3% to 55.7% across states (median: 27.5%) and from 22.9% to 92.8% across cities (median: 42.6%).
- **STD prevention:** from 17.4% to 64.8% across states (median: 36.7%) and from 35.4% to 100.0% across cities (median: 58.7%).
- **Suicide prevention:** from 11.4% to 39.6% across states (median: 25.5%) and from 16.3% to 82.8% across cities (median: 31.0%).
- **Sun safety or skin cancer prevention:** from 6.8% to 43.1% across states (median: 13.4%) and from 6.1% to 46.1% across cities (median: 18.4%).
- **Tobacco-use prevention:** from 16.7% to 49.7% across states (median: 34.6%) and from 28.1% to 100.0% across cities (median: 40.7%).
- **Violence prevention:** from 40.7% to 70.1% across states (median: 52.3%) and from 44.0% to 81.4% across cities (median: 64.8%).

The percentage of all schools in which the lead health education teacher wanted to receive staff development on specific health topics ranged as follows (Tables 20a, b, c):

- **Alcohol-use or other drug-use prevention:** from 53.7% to 81.4% across states (median: 72.5%) and from 48.3% to 85.9% across cities (median: 75.4%).
- **Asthma awareness:** from 33.0% to 68.3% across states (median: 56.5%) and from 35.3% to 85.2% across cities (median: 66.2%).
- **Consumer health:** from 36.1% to 65.5% across states (median: 49.4%) and from 35.2% to 74.5% across cities (median: 60.3%).
- **CPR:** from 48.9% to 78.4% across states (median: 64.4%) and from 60.6% to 84.6% across cities (median: 74.8%).
- **Dental and oral health:** from 27.0% to 57.4% across states (median: 42.5%) and from 33.6% to 76.3% across cities (median: 52.4%).
- **Emotional and mental health:** from 55.6% to 80.2% across states (median: 67.4%) and from 62.9% to 87.5% across cities (median: 77.7%).
- **Environmental health:** from 37.1% to 65.9% across states (median: 52.5%) and from 38.6% to 80.6% across cities (median: 61.1%).
- **First aid:** from 50.2% to 79.6% across states (median: 65.1%) and from 56.8% to 84.4% across cities (median: 73.6%).
- **Foodborne illness prevention:** from 35.8% to 61.4% across states (median: 49.8%) and from 39.4% to 80.6% across cities (median: 61.3%).
- **Growth and development:** from 39.4% to 67.0% across states (median: 55.9%) and from 47.3% to 83.8% across cities (median: 64.8%).
- **HIV prevention:** from 46.1% to 77.4% across states (median: 63.5%) and from 60.5% to 84.6% across cities (median: 70.1%).
- **Human sexuality:** from 40.9% to 75.4% across states (median: 57.3%) and from 50.5% to 80.6% across cities (median: 69.1%).
- **Immunizations:** from 30.7% to 59.5% across states (median: 45.1%) and from 33.8% to 80.3% across cities (median: 55.8%).
- **Injury prevention and safety:** from 42.0% to 72.4% across states (median: 59.6%) and from 42.5% to 78.6% across cities (median: 64.3%).
- **Nutrition and dietary behavior:** from 57.3% to 78.5% across states (median: 73.2%) and from 58.5% to 83.1% across cities (median: 76.3%).
- **Physical activity and fitness:** from 50.9% to 78.5% across states (median: 67.8%) and from 46.8% to 83.8% across cities (median: 67.3%).
- **Pregnancy prevention:** from 39.5% to 72.3% across states (median: 57.9%) and from 49.3% to 84.4% across cities (median: 67.1%).
- **STD prevention:** from 46.2% to 77.7% across states (median: 62.8%) and from 55.1% to 88.0% across cities (median: 70.0%).
- **Suicide prevention:** from 62.6% to 85.2% across states (median: 72.3%) and from 62.9% to 96.3% across cities (median: 77.2%).

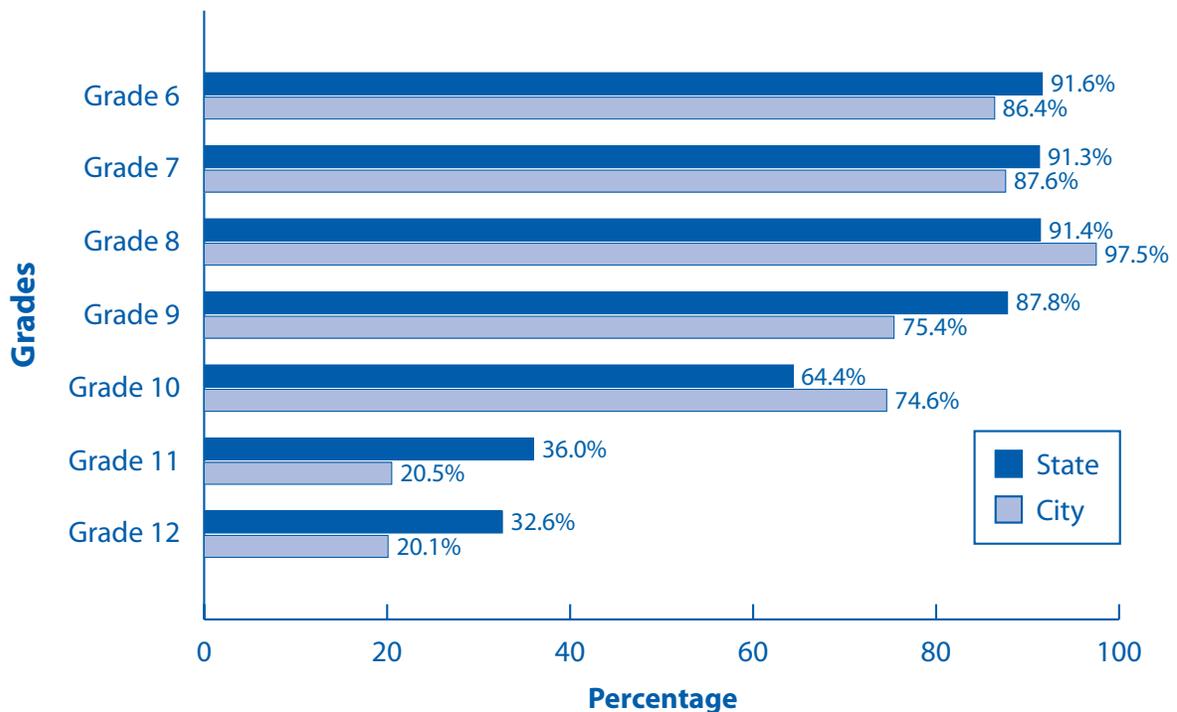
- **Sun safety or skin cancer prevention:** from 40.0% to 66.1% across states (median: 55.9%) and from 42.8% to 73.8% across cities (median: 60.0%).
- **Tobacco-use prevention:** from 45.1% to 74.3% across states (median: 63.5%) and from 51.5% to 83.8% across cities (median: 66.0%).
- **Violence prevention:** from 58.7% to 83.6% across states (median: 76.3%) and from 63.4% to 94.8% across cities (median: 82.5%).
- **Encouraging family or community involvement:** from 26.1% to 72.0% across states (median: 36.9%) and from 32.6% to 73.1% across cities (median: 53.0%).
- **Teaching skills for behavior change:** from 31.6% to 61.1% across states (median: 46.2%) and from 35.8% to 78.0% across cities (median: 61.0%).
- **Classroom management techniques, such as social skills training, environmental modification, conflict resolution and mediation, and behavior management:** from 39.4% to 75.7% across states (median: 57.1%) and from 49.7% to 90.2% across cities (median: 61.8%).
- **Assessing or evaluating students in health education:** from 15.2% to 66.7% across states (median: 31.4%) and from 25.8% to 82.2% across cities (median: 32.4%).

Lead health education teachers also received staff development during the two years preceding the survey on specific teaching topics. The percentage of all schools in which the lead health education teacher had received staff development on specific topics ranged as follows (Table 21):

- **Teaching students with physical, medical, or cognitive disabilities:** from 35.1% to 64.9% across states (median: 49.6%) and from 24.9% to 73.6% across cities (median: 41.1%).
- **Teaching students of various cultural backgrounds:** from 12.5% to 65.9% across states (median: 39.6%) and from 21.7% to 77.5% across cities (median: 60.1%).
- **Teaching students with limited English proficiency:** from 7.6% to 77.9% across states (median: 25.9%) and from 17.5% to 85.6% across cities (median: 49.5%).
- **Using interactive teaching methods such as role plays or cooperative group activities:** from 35.7% to 68.0% across states (median: 52.1%) and from 52.3% to 89.8% across cities (median: 65.0%).
- **Teaching students with physical, medical, or cognitive disabilities:** from 49.8% to 72.9% across states (median: 63.8%) and from 45.2% to 90.2% across cities (median: 72.4%).
- **Teaching students of various cultural backgrounds:** from 36.5% to 66.8% across states (median: 58.2%) and from 43.6% to 85.8% across cities (median: 69.2%).
- **Teaching students with limited English proficiency:** from 30.7% to 65.0% across states (median: 53.8%) and from 42.7% to 81.4% across cities (median: 64.6%).

The percentage of all schools in which the lead health education teacher wanted to receive staff development on specific teaching methods ranged as follows (Table 22):

FIGURE 3. Median percentage of schools that taught a required physical education course in each grade,* School Health Profiles, 2006.



* Among schools with students in each grade.

- **Using interactive teaching methods such as role plays or cooperative group activities:** from 44.7% to 72.1% across states (median: 61.3%) and from 46.5% to 81.9% across cities (median: 68.1%).
- **Encouraging family or community involvement:** from 53.6% to 72.4% across states (median: 64.0%) and from 50.7% to 87.7% across cities (median: 72.7%).
- **Teaching skills for behavior change:** from 65.2% to 85.7% across states (median: 72.8%) and from 63.2% to 91.0% across cities (median: 78.8%).
- **Classroom management techniques:** from 52.4% to 75.7% across states (median: 67.1%) and from 58.0% to 89.3% across cities (median: 75.6%).

- **Assessing or evaluating students in health education:** from 58.6% to 83.2% across states (median: 68.8%) and from 48.9% to 91.8% across cities (median: 72.7%).

PHYSICAL EDUCATION AND PHYSICAL ACTIVITY

Required Physical Education

Physical education is defined on the Profiles questionnaire as instruction that helps students develop the knowledge, attitudes, motor skills, behavioral skills, and confidence needed to adopt and maintain a physically active lifestyle. Many schools required physical education for students in grades 6 through 12. The percentage of all schools that required physical education for students in any of grades 6 through 12 ranged from 36.8% to 100.0% across states (median: 97.3%) and from 44.0% to 100.0% across cities (median: 95.6%) (Table 23).

A required physical education course is taught as a semester-long, quarter-long, or year-long unit of instruction for which the student receives credit. It is *not* recess, intramural activities, physical activity clubs, or school sports. The percentage of all schools that required students to take only one required physical education course ranged from 4.8% to 47.4% across states (median: 18.1%) and from 4.7% to 47.3% across cities (median: 27.5%) (Table 23). The percentage of all schools that required students to take two or more required physical education courses ranged from 14.4% to 94.6% across states (median: 76.6%) and from 30.9% to 93.9% across cities (median: 61.1%) (Table 23).

Among schools that required a physical education course for students in any of grades 6 through 12, some schools required that students who fail the course repeat it. The percentage of these schools that required students to repeat a required physical education course ranged from 37.9% to 80.6% across states (median: 55.6%) and from 26.4% to 82.7% across cities (median: 52.1%) (Table 23).

The percentage of all schools that required newly hired staff who teach physical education to be certified, licensed, or endorsed by the state in physical education ranged from 35.0% to 100.0% across states (median: 97.0%) and from 90.6% to 100.0% across cities (median: 98.3%) (Table 23).

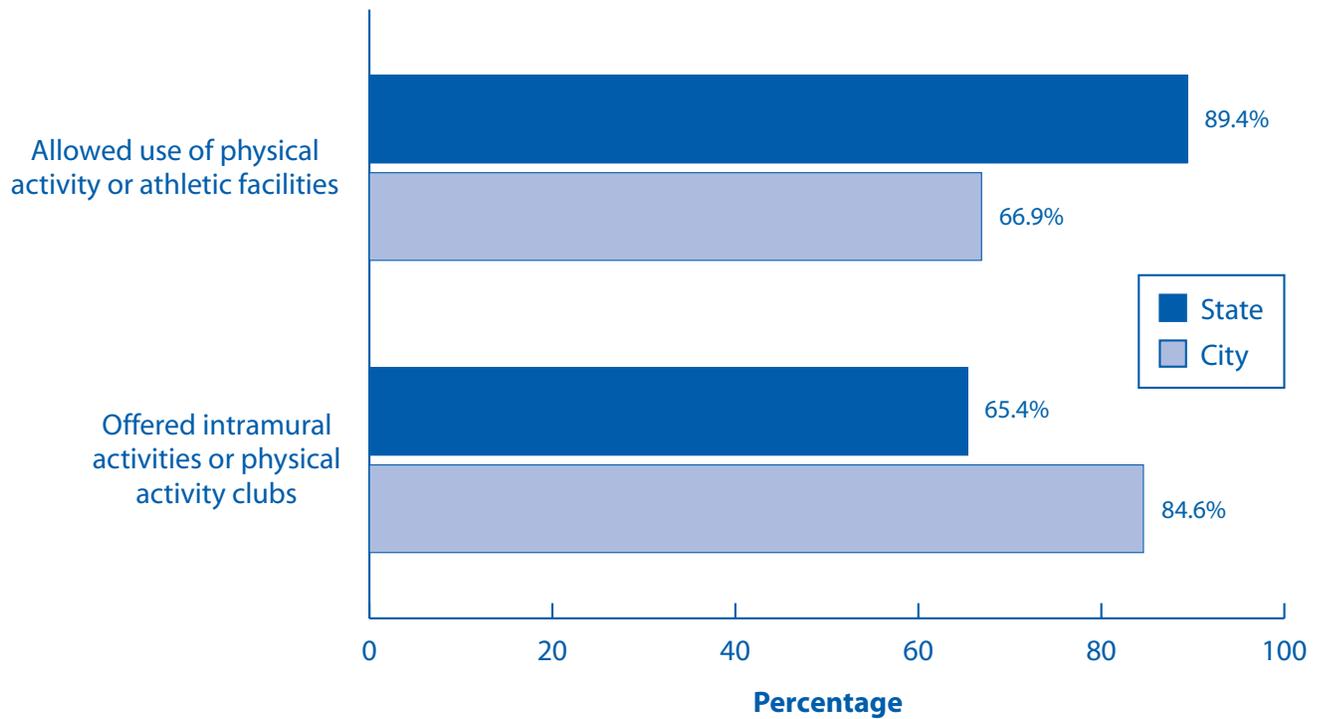
Among schools with students in particular grades, the percentage of schools across states that taught a required physical education course in that grade ranged from 9.9% to 100.0% (median: 91.6%) in grade 6, 7.8% to 100.0% (median: 91.3%) in grade 7, 9.2% to 100.0% (median: 91.4%) in grade 8, 23.3% to 100.0% (median: 87.8%) in grade 9, 12.8% to 98.9% (median: 64.4%) in grade 10, 5.4% to 100.0% (median: 36.0%) in grade 11, and from 5.4% to 98.9% (median: 32.6%) in grade 12 (Table 24, Figure 3). Among schools with students in particular grades, the percentage of schools across cities

that taught a required physical education course in that grade ranged from 14.3% to 100.0% (median: 86.4%) in grade 6, 14.3% to 100.0% (median: 87.6%) in grade 7, 14.3% to 100.0% (median: 87.5%) in grade 8, 38.3% to 100.0% (median: 75.4%) in grade 9, 21.2% to 93.7% (median: 74.6%) in grade 10, 17.3% to 77.4% (median: 20.5%) in grade 11, and from 16.0% to 77.4% (median: 20.1%) in grade 12 (Table 24, Figure 3).

Among schools that required a physical education course for students in any of grades 6 through 12, the percentage of schools that allowed students to be exempted from taking a required physical education course for specific reasons ranged as follows (Table 25a, b):

- **Religious reasons:** from 16.3% to 64.5% across states (median: 37.1%) and from 27.5% to 67.9% across cities (median: 43.9%).
- **Long-term physical or medical disability:** from 63.1% to 92.7% across states (median: 79.7%) and from 47.9% to 92.6% across cities (median: 77.4%).
- **Cognitive disability:** from 11.5% to 59.8% across states (median: 28.1%) and from 12.7% to 47.2% across cities (median: 32.5%).
- **Enrollment in other courses (i.e., math or science):** from 0.0% to 48.7% across states (median: 15.2%) and from 5.1% to 49.0% across cities (median: 14.6%).
- **Participation in school sports:** from 0.5% to 75.4% across states (median: 5.4%) and from 0.0% to 73.2% across cities (median: 23.2%).
- **Participation in other school activities (i.e., ROTC, band, or chorus):** from 0.0% to 56.9% across states (median: 8.9%) and from 7.7% to 64.8% across cities (median: 39.6%).

FIGURE 4. Median percentage of all schools that allowed use of physical activity or athletic facilities* or that offered opportunities for students to participate in intramural activities or physical activity clubs, School Health Profiles 2006.



* For community-sponsored sports teams, classes, or lessons outside of school hours or when school is not in session.

- **Participation in community sports activities:** from 0.0% to 16.8% across states (median: 2.0%) and from 0.0% to 15.3% across cities (median: 3.3%).
- **High physical fitness competency test score:** from 0.0% to 17.4% across states (median: 0.8%) and from 0.0% to 14.7% across cities (median: 1.6%).
- **Participation in vocational training:** from 0.0% to 25.7% across states (median: 2.5%) and from 0.0% to 23.8% across cities (median: 1.8%).
- **Participation in community service activities:** from 0.0% to 11.0% across states (median: 1.2%) and from 0.0% to 3.8% across cities (median: 1.5%).

The percentage of schools that did not allow students in any of grades 6 through 12 to be exempted from a required physical education course for enrollment in other courses, participation in school sports, participation in other school activities, participation in community sports activities, high physical fitness competency test scores, participation in vocational training, and participation in community service activities ranged from 17.0% to 95.2% across states (median: 71.3%) and from 12.7% to 83.6% across cities (median: 44.1%).

Physical Activity

Schools can promote physical activity among students by supporting walking or biking to and from school and by allowing community-sponsored sports teams or physical activity programs to use school facilities outside of school hours or when school is not in session. The percentage of all schools that supported or promoted walking or biking

to and from school (e.g., through promotional activities, designating safe routes or preferred routes, or having storage facilities for bicycles and helmets) ranged from 10.3% to 62.9% across states (median: 46.1%) and from 18.1% to 80.8% across cities (median: 42.1%). The percentage of all schools that allowed use of their physical activity or athletic facilities for community-sponsored sports teams, classes, or lessons outside of school hours or when school is not in session ranged from 64.0% to 97.6% across states (median: 89.4%) and from 58.0% to 98.9% across cities (median: 66.9%) (Table 26, Figure 4).

Schools also may offer students the opportunity to participate in intramural activities or physical activity clubs. The percentage of all schools that offered opportunities for students to participate in intramural activities or physical activity clubs ranged from 35.4% to 90.1% across states (median: 65.4%) and from 61.9% to 95.0% across cities (median: 84.6%) (Table 26, Figure 4). Among those schools, the percentage that provided transportation home for students who participated in after-school intramural activities or physical activity clubs ranged from 10.3% to 76.5% among states (median: 30.8%) and from 6.8% to 68.0% across cities (median: 19.9%) (Table 26).

NUTRITION SERVICES

Most schools serve lunch to their students. The percentage of all schools that served lunch ranged from 88.9% to 100.0% across states (median: 99.6%) and from 96.0% to 100.0% across cities (median: 100.0%) (Table 27). It is important that students have enough time to eat lunch once they are seated. Among schools that served lunch to students, the percentage of schools in which students usually had 20 minutes or more to eat lunch once they were seated ranged from 64.7% to 95.9% across states (median: 82.8%) and from 58.5% to 94.4% across cities (median: 78.5%) (Table 27).

HEALTHY AND SAFE SCHOOL ENVIRONMENT

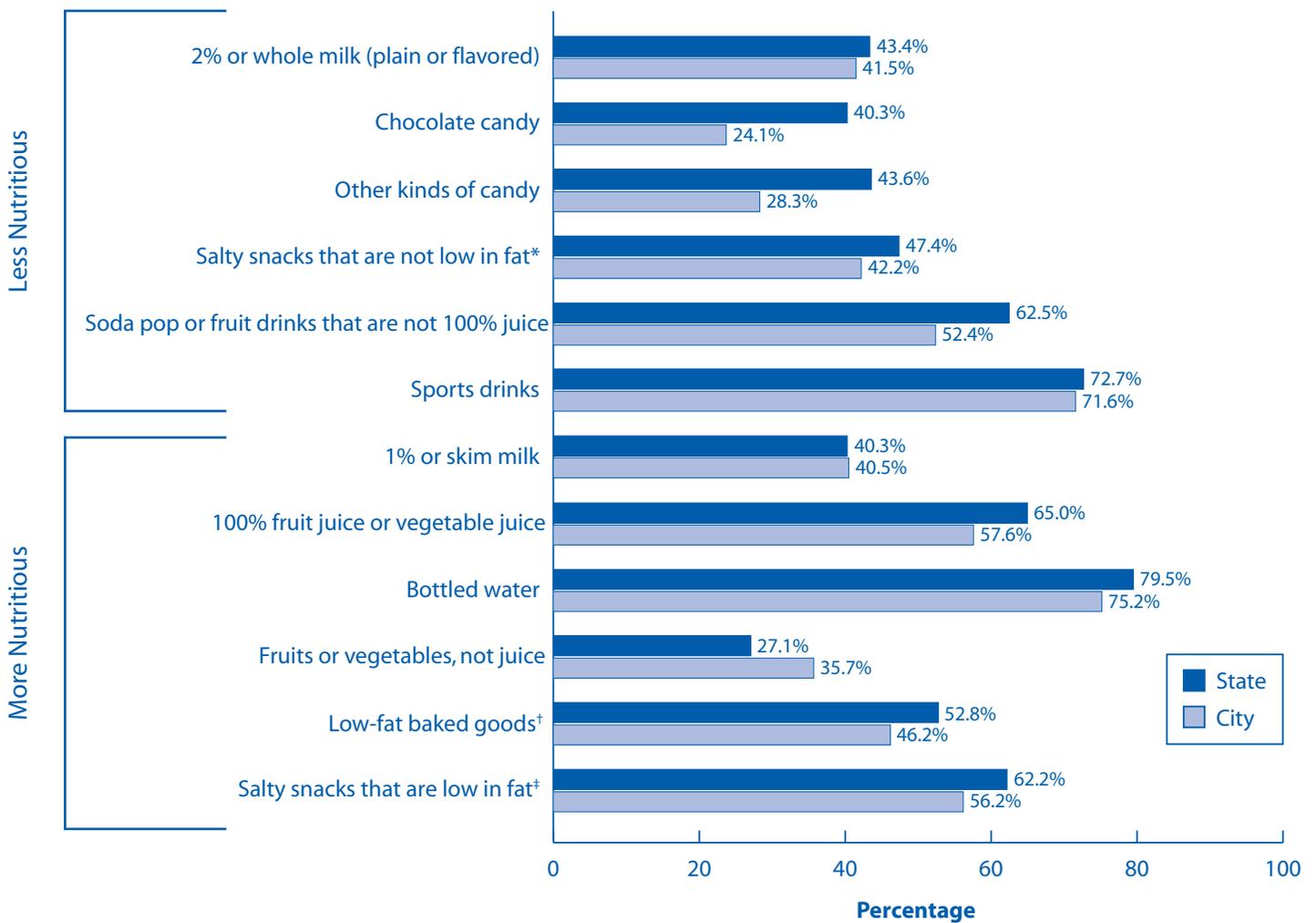
Competitive Foods

The percentage of all schools that allowed students to purchase snack foods or beverages from one or more vending machines at the school or at a school store, canteen, or snack bar ranged from 61.9% to 94.0% across states (median: 83.3%) and from 31.5% to 88.6% across cities (median: 79.2%) (Table 28a, b; Figure 5).

The percentage of all schools that allowed students to purchase less nutritious snack foods and beverages from vending machines or at the school store, canteen, or snack bar ranged as follows (Table 28a, Figure 5):

- **2% or whole milk (plain or flavored):** from 15.9% to 67.9% across states (median: 43.4%) and from 16.1% to 64.6% across cities (median: 41.5%).
- **Chocolate candy:** from 8.4% to 82.9% across states (median: 40.3%) and from 4.0% to 59.1% across cities (median: 24.1%).
- **Other kinds of candy:** from 11.2% to 82.6% across states (median: 43.6%) and from 5.7% to 59.3% across cities (median: 28.3%).
- **Salty snacks that are not low in fat, such as regular potato chips:** from 11.0% to 75.9% across states (median: 47.4%) and from 4.4% to 81.0% across cities (median: 42.2%).
- **Soda pop or fruit drinks that are not 100% juice:** from 25.3% to 86.0% across states (median: 62.5%) and from 9.6% to 71.9% across cities (median: 52.4%).
- **Sports drinks:** from 30.5% to 90.2% across states (median: 72.7%) and from 18.0% to 84.3% across cities (median: 71.6%).

FIGURE 5. Median percentage of all schools that allowed students to purchase less nutritious and more nutritious snack foods or beverages, School Health Profiles, 2006.



* Such as regular potato chips.

† Such as cookies, crackers, cakes, pastries, or other low-fat baked goods.

‡ Such as pretzels, baked chips, or other low fat chips.

The percentage of all schools that allowed students to purchase more nutritious snack foods and beverages from vending machines or at the school store, canteen, or snack bar ranged as follows (Table 28b, Figure 5):

- **1% or skim milk:** from 10.7% to 66.2% across states (median: 40.3%) and from 14.7% to 60.1% across cities (median: 40.5%).
- **100% fruit juice or vegetable juice:** from 41.0% to 78.6% across states (median: 65.0%) and from 25.0% to 75.9% across cities (median: 57.6%).
- **Bottled water:** from 55.6% to 90.8% across states (median: 79.5%) and from 29.0% to 86.6% across cities (median: 75.2%).
- **Fruits or vegetables, not juice:** from 6.6% to 46.8% across states (median: 27.1%) and from 10.3% to 58.8% across cities (median: 35.7%).

- **Low-fat cookies, crackers, cakes, pastries, or other low-fat baked goods:** from 9.8% to 73.4% across states (median: 52.8%) and from 13.4% to 69.2% across cities (median: 46.2%).
- **Salty snacks that are low in fat, such as pretzels, baked chips, or other low-fat chips:** from 12.5% to 82.9% across states (median: 62.2%) and from 14.2% to 81.0% across cities (median: 56.2%).

The percentage of all schools that allowed students to purchase candy; snacks that are not low in fat; soda pop, sports drinks, or fruit drinks that are not 100% fruit juice; or 2% or whole milk during specific times of the school day ranged as follows (Table 29):

- **Before classes begin in the morning:** from 20.2% to 72.5% across states (median: 35.0%) and from 7.2% to 58.0% across cities (median: 27.6%).
- **During any school hours when meals are not being served:** from 11.9% to 56.6% across states (median: 29.3%) and from 2.9% to 39.1% across cities (median: 12.0%).
- **During school lunch periods:** from 3.9% to 81.3% across states (median: 34.9%) and from 15.7% to 72.3% across cities (median: 36.9%).

The percentage of all schools that had a policy stating that if food is served at student parties, after-school or extended day programs, or concession stands, fruits or vegetables would be among the foods offered ranged from 9.9% to 38.0% across states (median: 17.9%) and from 8.7% to 62.3% across cities (median: 23.1%) (Table 29).

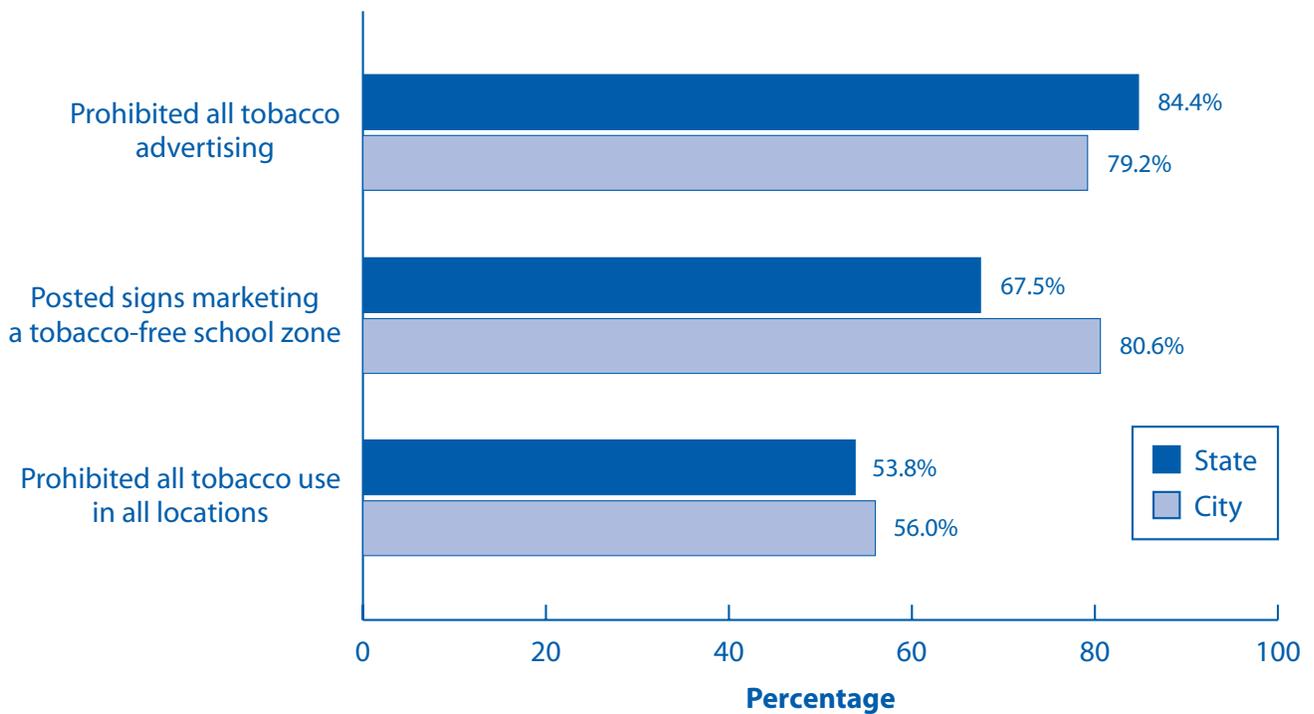
Tobacco-Use Prevention

Policies prohibiting tobacco use at school can help prevent tobacco use among students. The percentage of all schools that had a policy prohibiting tobacco use ranged from 94.3% to 100.0% across states (median: 98.9%) and from 84.0% to 100.0% across cities (median: 98.2%) (Table 30). The percentage of all schools that prohibited the use of all tobacco, including cigarettes, smokeless tobacco (i.e., chewing tobacco, snuff, or dip), cigars, and pipes; by students, faculty and school staff, and visitors; in school buildings, outside on school grounds (including parking lots and playing fields), on school buses or other vehicles used to transport students, and at off-campus, school-sponsored events; ranged from 22.8% to 76.3% across states (median: 53.8%) and from 15.5% to 79.5% across cities (median: 56.0%) (Table 30, Figure 6).

Among schools with a policy prohibiting tobacco use, specific actions may be taken when students are caught smoking cigarettes. The percentage of these schools that sometimes, almost always, or always took specific actions when students were caught smoking cigarettes ranged as follows (Tables 31a, b):

- **Informed parents or guardians:** from 93.2% to 100.0% across states (median: 98.3%) and from 82.5% to 100.0% across cities (median: 97.0%).
- **Referred students to a school counselor:** from 57.1% to 92.1% across states (median: 76.9%) and from 65.6% to 98.2% across cities (median: 84.9%).
- **Referred students to a school administrator:** from 92.6% to 100.0% across states (median: 97.9%) and from 81.1% to 100.0% across cities (median: 94.6%).
- **Encouraged, but not required, students to participate in an assistance, education, or cessation program:** from 30.3% to 81.2% across states (median: 60.2%) and from 38.7% to 90.7% across cities (median: 65.7%).

FIGURE 6. Median percentage of all schools that prohibited all tobacco advertising,* posted signs marking a tobacco-free school zone,† and prohibited all tobacco use in all locations,‡ School Health Profiles, 2006.



* In school buildings, on school grounds, on school buses and other school vehicles, in school publications, and through sponsorship of school events; and prohibited students from wearing tobacco brand-name apparel or carrying merchandise with tobacco company names, logos, or cartoon characters.

† A specified distance from school grounds where tobacco use is not allowed.

‡ Prohibited the use of all tobacco, including cigarettes, smokeless tobacco (i.e., chewing tobacco, snuff, or dip), cigars, and pipes; by students, faculty and school staff, and visitors; in school buildings, outside on school grounds (including parking lots and playing fields), on school buses or other vehicles used to transport students, and at off-campus school-sponsored events.

- **Required students to participate in an assistance, education, or cessation program:** from 10.3% to 70.4% across states (median: 32.7%) and from 18.2% to 84.7% across cities (median: 48.6%).
- **Referred students to legal authorities:** from 15.4% to 97.2% across states (median: 58.0%) and from 19.3% to 75.4% across cities (median: 48.5%).
- **Placed students in detention:** from 50.9% to 84.4% across states (median: 62.7%) and from 52.2% to 87.0% across cities (median: 66.7%).
- **Gave students in-school suspension:** from 54.7% to 89.7% across states (median: 69.0%) and from 54.7% to 93.3% across cities (median: 69.7%).
- **Did not allow students to participate in extracurricular activities or interscholastic sports:** from 49.9% to 97.7% across states (median: 74.4%) and from 36.9% to 64.0% across cities (median: 55.3%).
- **Suspended students from school:** from 53.2% to 89.0% across states (median: 75.4%) and from 56.4% to 92.8% across cities (median: 75.1%).

- **Expelled students from school:** from 0.0% to 18.9% across states (median: 8.3%) and from 0.0% to 24.2% across cities (median: 9.7%).
- **Reassigned students to an alternative school:** from 0.6% to 37.7% across states (median: 7.3%) and from 0.0% to 31.6% across cities (median: 14.2%).

Among schools with a policy prohibiting tobacco use, the percentage of these schools that had procedures to inform specific groups about the tobacco-use prevention policy that prohibited their use of tobacco ranged from 97.6% to 100.0% across states (median: 99.5%) and from 95.8% to 100.0% across cities (median: 98.0%) for students, from 90.6% to 99.4% across states (median: 96.4%) and from 81.3% to 100.0% across cities (median: 96.4%) for faculty and staff, and from 74.0% to 96.6% across states (median: 87.3%) and from 69.5% to 96.0% across cities (median: 86.7%) for visitors (Table 32).

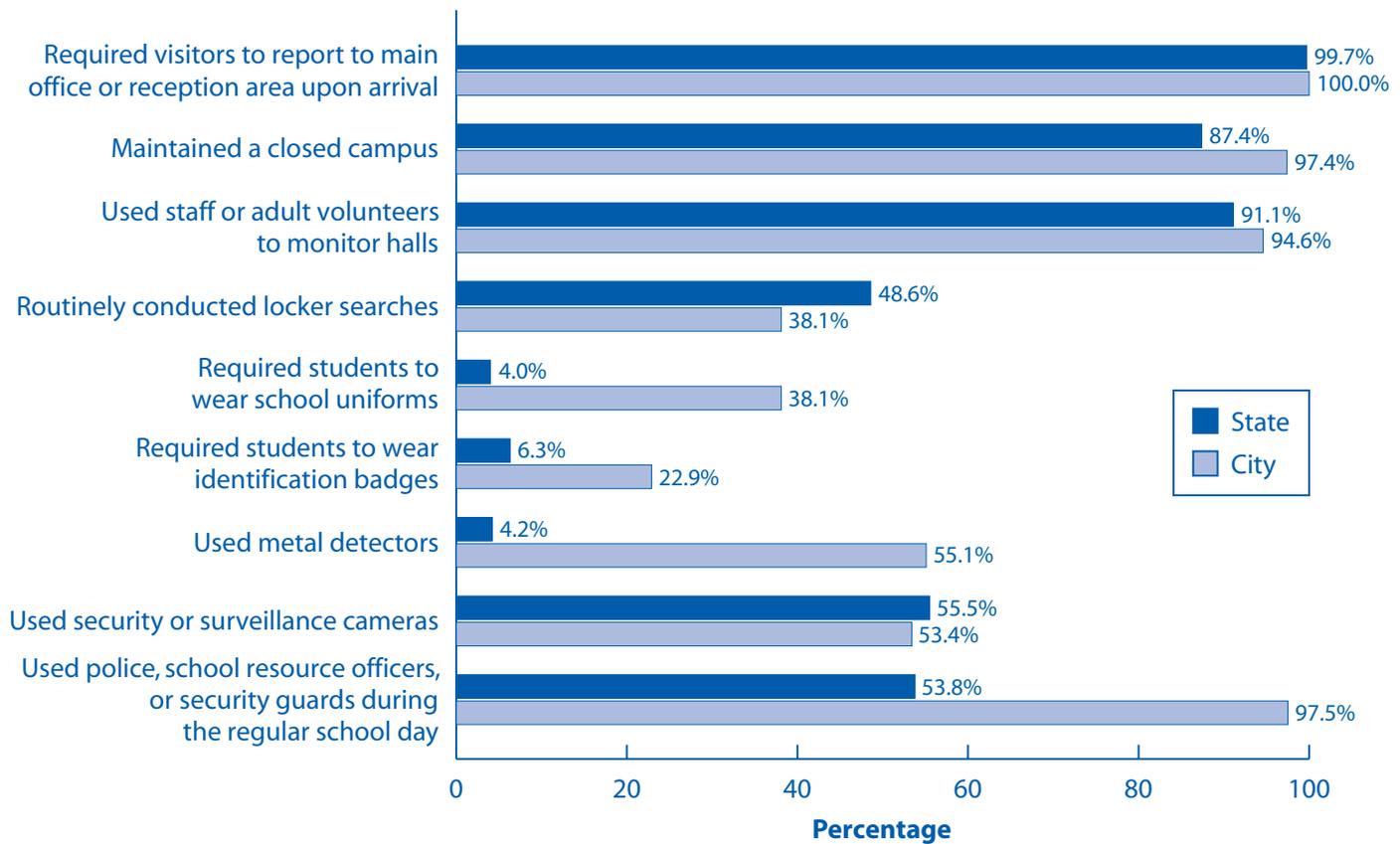
In addition, among schools with a policy prohibiting tobacco use, the percentage of these schools that had a policy to inform students' families about the rules related to tobacco use by students ranged from 95.2% to 100.0% across states (median: 98.7%) and from 90.9% to 100.0% across cities (median: 95.3%) (Table 32).

Many schools prohibit tobacco advertisements in specific locations, tobacco advertising through sponsorship of school events, and students from wearing tobacco brand-name apparel or carrying merchandise with tobacco company names, logos, or cartoon characters. The percentage of all schools that implemented such policies ranged as follows (Table 33):

- **Prohibited tobacco advertising in the school building:** from 92.1% to 100.0% across states (median: 95.4%) and from 90.3% to 100.0% across cities (median: 93.7%).

- **Prohibited tobacco advertising on school grounds, including on the outside of the school building, on playing fields, or other areas of the campus:** from 90.8% to 100.0% across states (median: 94.7%) and from 87.2% to 100.0% across cities (median: 92.4%).
- **Prohibited tobacco advertising on school buses or other vehicles used to transport students:** from 91.3% to 98.5% across states (median: 94.7%) and from 84.7% to 98.2% across cities (median: 92.3%).
- **Prohibited tobacco advertising in school publications (e.g., newsletters, newspapers, web sites, or other school publications):** from 90.6% to 98.6% across states (median: 93.7%) and from 87.4% to 98.2% across cities (median: 91.6%).
- **Prohibited tobacco advertising through sponsorship of school events:** from 89.3% to 95.9% across states (median: 92.7%) and from 80.8% to 97.5% across cities (median: 90.6%).
- **Prohibited students from wearing tobacco brand-name apparel or carrying merchandise with tobacco company names, logos, or cartoon characters:** from 78.2% to 98.9% across states (median: 95.7%) and from 71.6% to 100.0% across cities (median: 91.5%).
- **Prohibited all tobacco advertising in school buildings, on school grounds, on school buses or other vehicles used to transport students, in school publications, and through sponsorship of school events; and prohibited students from wearing tobacco brand-name apparel or carrying merchandise with tobacco company names, logos, or cartoon characters:** from 68.8% to 91.6% across states (median: 84.4%) and from 52.2% to 91.0% across cities (median: 79.2%) (Figure 6).

FIGURE 7. Median percentage of all schools that implemented specific safety and security measures, School Health Profiles, 2006.



The percentage of all schools that provided referrals to tobacco cessation programs for faculty and staff ranged from 9.9% to 40.4% across states (median: 22.0%) and from 11.3% to 42.7% across cities (median: 20.7%) (Table 34). The percentage of all schools that provided referrals to tobacco cessation programs for students ranged from 17.8% to 81.2% across states (median: 47.9%) and from 19.8% to 96.4% across cities (median: 53.5%) (Table 34).

The percentage of all schools that posted signs marking a tobacco-free school zone, that is, a specified distance from school grounds where tobacco use is not allowed, ranged from 38.0% to 93.2% across states (median: 67.5%) and from 28.4% to 88.2% across cities (median: 80.6%) (Table 34a, b; Figure 6).

Violence Prevention

Schools implement measures to ensure the safety and security of students, staff, and visitors. The percentage of all schools that implemented specific safety and security measures ranged as follows (Table 35a, b; Figure 7):

- **Required visitors to report to the main office or reception area upon arrival:** from 92.3% to 100.0% across states (median: 99.7%) and from 98.9% to 100.0% across cities (median: 100.0%).
- **Maintained a “closed campus” where students are not allowed to leave school during the school day, including during lunchtime:** from 40.8% to 98.4% across states (median: 87.4%) and from 77.9% to 100.0% across cities (median: 97.4%).

- **Used staff or adult volunteers to monitor school halls during and between classes:** from 73.9% to 96.5% across states (median: 91.1%) and from 87.4% to 97.7% across cities (median: 94.6%).
- **Routinely conducted locker searches:** from 2.3% to 66.6% across states (median: 48.6%) and from 7.7% to 71.3% across cities (median: 38.1%).
- **Required students to wear school uniforms:** from 0.0% to 32.2% across states (median: 4.0%) and from 0.0% to 100.0% across cities (median: 38.1%).
- **Required students to wear identification badges:** from 0.7% to 42.8% across states (median: 6.3%) and from 3.2% to 98.0% across cities (median: 22.9%).
- **Used metal detectors, including wands:** from 0.0% to 37.6% across states (median: 4.2%) and from 1.8% to 95.3% across cities (median: 55.1%).
- **Used security or surveillance cameras, either inside or outside the school building:** from 20.5% to 85.3% across states (median: 55.5%) and from 6.2% to 100.0% across cities (median: 53.4%).
- **Use police, school resource officers, or security guards during the regular school day:** from 14.9% to 90.1% across states (median: 53.8%) and from 81.8% to 100.0% across cities (median: 97.5%).
- **A safe-passages to school program:** from 1.5% to 20.8% across states (median: 5.8%) and from 6.5% to 60.0% across cities (median: 24.9%).
- **A program to prevent gang violence:** from 8.0% to 55.7% across states (median: 23.9%) and from 42.1% to 89.7% across cities (median: 58.1%).
- **A program to prevent bullying:** from 30.8% to 83.6% across states (median: 65.1%) and from 45.3% to 96.9% across cities (median: 75.6%).

The percentage of all schools that had a comprehensive plan to address crisis preparedness, response, and recovery in the event of a natural disaster or other emergency or crisis situation ranged from 87.1% to 100.0% across states (median: 97.6%) and from 96.0% to 100.0% across cities (median: 100.0%) (Table 36).

HEALTH SERVICES

Schools can support student success by providing health services to students. The percentage of all schools that had a nurse who provided standard health services to students ranged from 28.9% to 100.0% across states (median: 90.6%) and from 16.0% to 100.0% across cities (median: 97.8%) (Table 37).

The percentage of all schools where a student would ever be permitted to carry and self-administer specific medications ranged as follows (Table 37):

- **Prescription quick-relief inhaler:** from 51.4% to 95.1% across states (median: 76.0%) and from 43.2% to 79.5% across cities (median: 66.8%).
- **Epinephrine auto-injector (e.g., EpiPen®):** from 23.9% to 64.1% across states (median: 45.3%) and from 8.3% to 67.7% across cities (median: 30.7%).

The percentage of all schools that had or participated in specific violence prevention programs ranged as follows (Table 36):

- **A peer mediation program:** from 15.8% to 78.8% across states (median: 39.8%) and from 42.0% to 93.8% across cities (median: 70.0%).

- **Insulin or other injected medications:** from 10.5% to 64.4% across states (median: 31.0%) and from 2.1% to 41.6% across cities (median: 18.4%).
- **Any other prescribed medications:** from 2.6% to 45.2% across states (median: 11.1%) and from 1.7% to 34.3% across cities (median: 13.7%).
- **Any over-the-counter medications:** from 3.1% to 59.3% across states (median: 13.5%) and from 2.5% to 31.4% across cities (median: 12.2%).

The percentage of all schools that provided specific health services to students ranged as follows (Table 38):

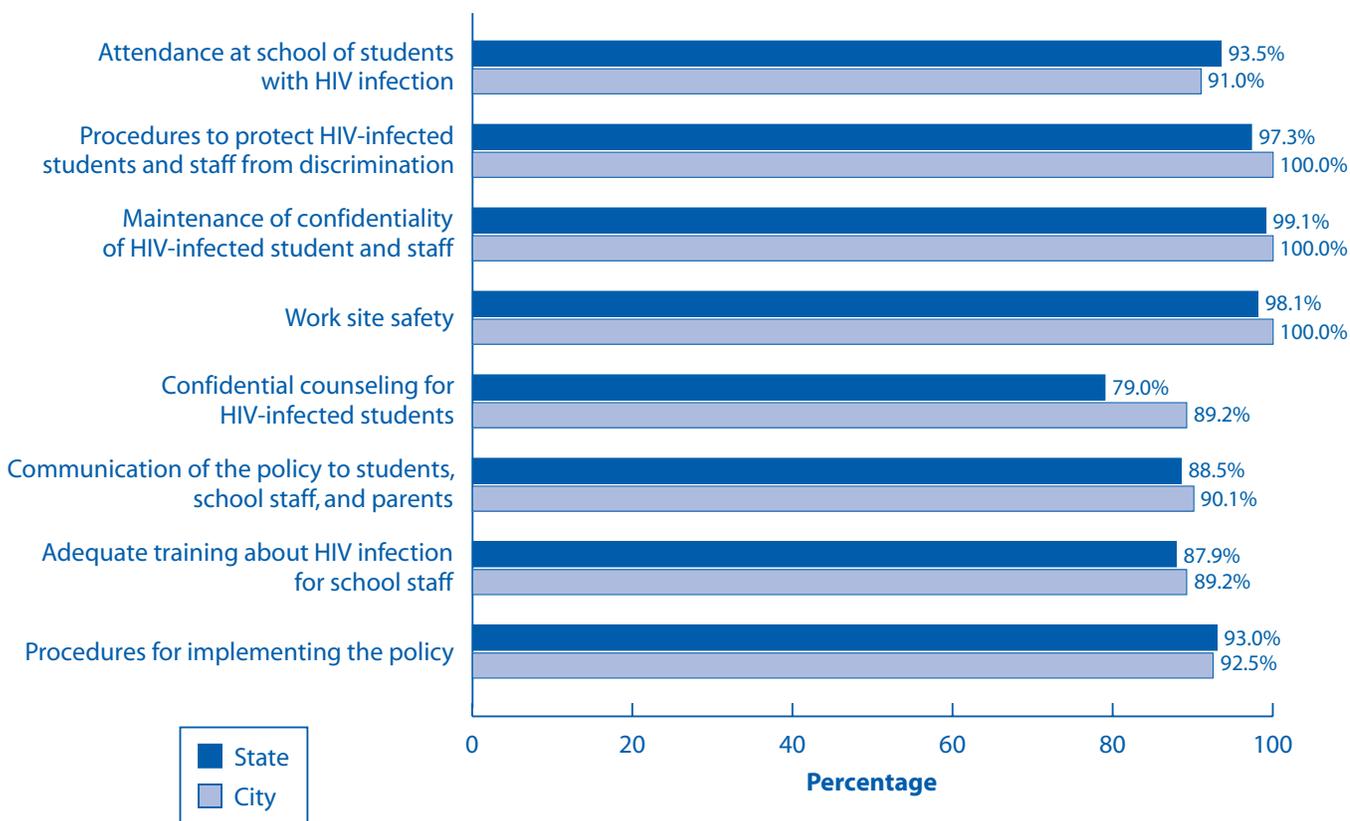
- **Identification or school-based management of chronic health conditions, such as asthma or diabetes:** from 38.9% to 95.5% across states (median: 74.4%) and from 38.8% to 94.5% across cities (median: 79.4%).
- **Identification or school-based management of acute illnesses:** from 34.3% to 87.8% across states (median: 67.2%) and from 32.9% to 87.8% across cities (median: 68.0%).
- **Asthma Action Plan (or Individualized Health Plan) for all students with asthma:** from 22.8% to 86.8% across states (median: 65.4%) and from 19.7% to 86.9% across cities (median: 69.2%).
- **Immunizations:** from 32.1% to 80.7% across states (median: 49.9%) and from 36.1% to 76.8% across cities (median: 60.9%).
- **Assistance with enrolling in Medicaid or SCHIP (State Children’s Health Insurance Program):** from 37.0% to 86.4% across states (median: 53.6%) and from 29.4% to 85.8% across cities (median: 59.2%).

POLICIES RELATED TO HIV INFECTION AND AIDS

School policies can provide critical support for HIV-infected students and staff. The percentage of all schools with a policy on students and/or staff who have HIV infection or AIDS ranged from 27.0% to 89.5% across states (median: 51.6%) and from 28.1% to 100.0% across cities (median: 46.8%) (Table 39). Among those schools that had a policy, the percentage whose policy addressed specific issues for students and/or staff with HIV infection or AIDS ranged as follows (Table 39a, b; Figure 8):

- **Attendance at school of students with HIV infection:** from 85.2% to 100.0% across states (median: 93.5%) and from 65.4% to 100.0% across cities (median: 91.0%).
- **Procedures to protect HIV-infected students and staff from discrimination:** from 93.3% to 100.0% across states (median: 97.3%) and from 93.0% to 100.0% across cities (median: 100.0%).
- **Maintenance of confidentiality of HIV-infected students and staff:** from 92.7% to 100.0% across states (median: 99.1%) and from 93.0% to 100.0% across cities (median: 100.0%).
- **Work site safety:** from 93.6% to 100.0% across states (median: 98.1%) and from 75.7% to 100.0% across cities (median: 100.0%).
- **Confidential counseling for HIV-infected students:** from 68.9% to 91.0% across states (median: 79.0%) and from 69.2% to 96.2% across cities (median: 89.2%).
- **Communication of the policy to students, school staff, and parents:** from 77.3% to 97.4% across states (median: 88.5%) and from 78.3% to 100.0% across cities (median: 90.1%).

FIGURE 8. Among schools with a policy on students or staff with HIV* infection or AIDS,† the median percentage whose policy addressed specific issues, School Health Profiles, 2006.



* Human immunodeficiency virus.

† Acquired immunodeficiency syndrome.

- **Adequate training about HIV infection for school staff:** from 67.2% to 95.5% across states (median: 87.9%) and from 55.1% to 100.0% across cities (median: 89.2%).
- **Procedures for implementing the policy:** from 84.7% to 98.0% across states (median: 93.0%) and from 78.7% to 100.0% across cities (median: 92.5%).

FAMILY AND COMMUNITY INVOLVEMENT

Partnerships between schools, families, and community members are important elements of a school health program. The percentage of all schools that had one or more than one group (e.g., a school health council, committee,

or team) that offered guidance on the development of policies or coordinated activities on health topics ranged from 34.7% to 73.9% across states (median: 54.9%) and from 24.1% to 79.0% across cities (median: 48.4%) (Table 40).

The percentage of all schools that engaged parents and families in specific health education activities during the 2005–2006 school year ranged as follows (Table 40):

- **Provided families with information on school health education:** from 47.6% to 82.7% across states (median: 66.1%) and from 53.7% to 97.4% across cities (median: 69.3%).

- **Met with a parents' organization (e.g., the PTA) to discuss school health education:** from 10.5% to 32.8% across states (median: 22.3%) and from 18.8% to 63.3% across cities (median: 32.2%).
- **Invited family members to attend health education classes:** from 21.0% to 45.6% across states (median: 32.4%) and from 18.8% to 75.4% across cities (median: 41.8%).
- **Identified advertising in the community designed to influence health behaviors:** from 28.2% to 79.6% across states (median: 61.4%) and from 0.0% to 88.2% across cities (median: 51.1%).
- **Advocated for a health-related issue:** from 23.1% to 82.2% across states (median: 44.6%) and from 0.0% to 59.7% across cities (median: 40.6%).
- **Completed homework or projects that involved family members:** from 34.1% to 90.2% across states (median: 71.1%) and from 0.0% to 94.5% across cities (median: 47.9%).

The percentage of all schools that asked students to participate in health-related community activities as part of a required health education course during the 2005–2006 school year ranged as follows (Table 41):

- **Performed volunteer work at a hospital, a local health department, or any other local organization that addresses health issues:** from 6.2% to 24.8% across states (median: 13.0%) and from 0.0% to 36.9% across cities (median: 15.5%).
- **Participated in or attended a community health fair:** from 9.0% to 35.6% across states (median: 22.0%) and from 0.0% to 55.6% across cities (median: 23.9%).
- **Gathered information about health services that are available in the community, such as health screenings:** from 20.1% to 66.4% across states (median: 40.0%) and from 0.0% to 62.1% across cities (median: 36.8%).
- **Visited a store to compare prices of health products:** from 5.6% to 38.5% across states (median: 23.5%) and from 0.0% to 48.8% across cities (median: 22.4%).
- **Identified potential injury sites at school, home, or in the community:** from 22.4% to 70.0% across states (median: 48.5%) and from 0.0% to 70.0% across cities (median: 35.2%).

TRENDS

The Profiles were first conducted in 1996 and are repeated biennially. Although the questionnaires are modified each year, some questions remain constant, which allows investigators to analyze changes over time. **Long-term trends** compare median percentages calculated across all states or cities between the 1996⁶⁷ and 2006 Profiles.

Short-term trends compare median percentages between the 2004⁶⁸ and 2006 Profiles.

LONG-TERM TRENDS

Significant improvements in school health practices and policies were detected between 1996 and 2006 in the following areas:

- Across **states**, the median percentage of all schools in which health education staff worked on health education activities with physical education staff, school health services staff, and nutrition or food service staff increased from 69.2% to 76.7%, from 44.3% to 66.4%, and from 18.2% to 37.9%, respectively.
- Across **states**, increases were found in the median percentage of all schools in which the lead health education teacher received staff development during the two years preceding the survey on alcohol-use or other drug-use prevention (from 40.3% to 50.4%), consumer health (from 9.3% to 22.2%), CPR (from 50.7% to 67.0%), dental and oral health (from 5.9% to 12.3%), emotional and mental health (from 21.4% to 35.6%), environmental health (from 8.8% to 14.2%), first aid (from 40.3% to 56.7%), growth and development (from 16.1% to 25.7%), injury prevention and safety (from 23.9% to 39.9%), nutrition and dietary behavior (from 26.9% to 35.4%), physical activity and fitness (from 31.9% to 48.3%), suicide prevention (from 15.6% to 25.5%), tobacco-use prevention (from 21.3% to 34.6%), and violence prevention (from 41.8% to 52.3%).
- Across **states**, increases were found in the median percentage of all schools in which the lead health education teacher wanted to receive staff development on alcohol-use or other drug-use prevention (from 53.5% to 72.5%), consumer health (from 33.0% to 49.4%), CPR (from 39.6% to 64.4%), dental and oral health (from 18.7% to 42.5%), emotional and mental health (from 53.5% to 67.4%), environmental health (from 38.6% to 52.5%), first aid (from 40.5% to 65.1%), growth and development (from 32.5% to 55.9%), HIV prevention (from 53.8% to 63.5%), human sexuality (from 50.6% to 57.3%), injury prevention and safety (from 34.4% to 59.6%), nutrition and dietary behavior (from 47.4% to 73.2%), physical activity and fitness (from 38.6% to 67.8%), pregnancy prevention (from 47.4% to 57.9%), STD prevention (from 55.0% to 62.8%), suicide prevention (from 68.3% to 72.3%), tobacco-use prevention (from 46.0% to 63.5%), and violence prevention (from 62.4% to 76.3%).
- Across **cities**, increases were found in the median percentage of all schools in which the lead health education teacher wanted to receive staff development on alcohol-use or other drug-use prevention (from 62.1% to 75.4%), dental and oral health (from 35.9% to 52.4%), emotional and mental health (from 65.6% to 77.7%), first aid (from 58.2% to 73.6%), growth and development (from 41.0% to 64.9%), HIV prevention (from 56.1% to 70.1%), human sexuality (from 46.2% to 69.1%), injury prevention and safety (from 43.2% to 64.3%), nutrition and dietary behavior (from 54.9% to 76.3%), physical activity and fitness (from 45.8% to 67.3%), pregnancy prevention (from 46.8% to 67.1%), STD prevention (from 52.7% to 70.0%), and tobacco-use prevention (from 47.1% to 66.0%).

- Across **states**, among schools that had adopted a policy on students and/or staff who have HIV infection or AIDS, increases were found in the median percentage of schools that had a policy that addressed the following issues for students and staff: procedures to protect HIV-infected students and staff from discrimination (from 90.4% to 97.3%); maintenance of confidentiality of HIV-infected students and staff (from 94.9% to 99.1%); work site safety (from 92.7% to 98.1%); communication of the policy to students, school staff, and parents (from 75.7% to 88.5%); and procedures for implementing the policy (from 86.2% to 93.0%).
- Across **cities**, the median percentage of all schools that had one or more than one group (e.g., a school health council, committee, or team) that offered guidance on the development of policies or coordinated activities on health topics increased from 18.7% to 48.4%.

Significant deteriorations in school health practices and policies were detected between 1996 and 2006 in the following areas:

- Across **states and cities**, the median percentage of all schools requiring teachers to use any state-developed, district-developed, or school-developed curriculum in a required health education course decreased from 84.5% to 75.3% and from 96.8% to 48.9%, respectively.
- Across **states**, the median percentage of all schools that tried to increase student knowledge on CPR in a required health education course decreased from 65.3% to 53.4%.
- Across **cities**, decreases were found in the median percentage of all schools that tried to increase student knowledge in a required health education course on alcohol-use or other drug-use prevention (from

96.6% to 57.6%), dental and oral health (from 75.0% to 41.3%), environmental health (from 71.8% to 47.2%), STD prevention (from 94.5% to 57.2%), and violence prevention (from 90.3% to 57.2%)

- Across **states**, the median percentage of all schools that tried to improve student decision-making skills in a required health education course decreased from 87.9% to 77.9%.
- Across **cities**, decreases were found in the median percentage of all schools that tried to improve student skills in a required health education course in communication (from 88.4% to 54.4%) and decision making (from 93.0% to 57.2%).
- Across **states**, decreases were found in the median percentage of all schools that taught in a required health education course abstinence as the most effective method to avoid pregnancy, HIV, and STDs (from 88.9% to 78.0%); how HIV is transmitted (from 91.9% to 78.7%); how HIV affects the human body (from 91.3% to 77.8%); condom efficacy (from 67.0% to 56.0%); influence of alcohol and other drugs on HIV-related risk behaviors (from 87.5% to 77.0%); social or cultural influences on sexual behavior (from 75.2% to 65.4%); and how to correctly use a condom (from 41.5% to 24.3%).
- Across **cities**, decreases were found in the median percentage of all schools that taught in a required health education course how HIV is transmitted (from 96.8% to 55.7%); how HIV affects the human body (from 94.8% to 55.7%); condom efficacy (from 75.9% to 53.0%); social or cultural influences on sexual behavior (from 85.6% to 49.4%); how to find valid information or services related to HIV or HIV testing (from 82.8% to 52.9%); how to correctly use a condom (from 67.4% to 34.2%); and compassion for persons living with HIV or AIDS (from 87.0% to 52.4%).

- Across **states and cities**, the median percentage of all schools in which the lead health education teacher had experience teaching health education classes or topics for 15 years or more decreased from 54.1% to 37.9% and from 67.3% to 36.0%, respectively.
- Across **states**, the median percentage of all schools in which the lead health education teacher received staff development during the 2 years preceding the survey on HIV prevention decreased from 51.4% to 43.7%.
- Across **states and cities**, the median percentage of all schools that had adopted a policy on students and/or staff who have HIV infection or AIDS decreased from 69.5% to 51.6% and from 82.5% to 46.8%, respectively.
- Across **states**, increases were found in the median percentage of all schools in which the lead health education teacher wanted to receive staff development on CPR (from 58.0% to 64.4%), dental and oral health (from 33.7% to 42.5%), first aid (from 58.4% to 65.1%), growth and development (from 47.1% to 55.9%), immunizations (from 38.7% to 45.1%), injury prevention and safety (from 43.9% to 59.6%), nutrition and dietary behavior (from 64.8% to 73.2%), physical activity and fitness (from 57.6% to 67.8%), and sun safety or skin cancer prevention (from 48.2% to 55.9%).
- Across **states**, the median percentage of all schools that had a policy stating that if food is served at student parties, after-school or extended day programs, or concession stands, fruits and vegetables would be among the foods offered increased from 9.7% to 17.8%.

SHORT-TERM TRENDS

Significant improvements in school health practices and policies were detected between 2004 and 2006 in the following areas:

- Across **states**, the median percentage of all schools that taught about using salt and sodium in moderation in a required health education course increased from 64.9% to 79.3%.
- Across **states**, the median percentage of all schools in which health education staff worked on health education activities with nutrition or food service staff increased from 23.4% to 37.9%.
- Across **states**, increases were found in the median percentage of all schools in which the lead health education teacher received staff development during the two years preceding the survey on consumer health (from 15.1% to 22.2%).
- Across **states**, the median percentage of all schools that allowed students to purchase snack foods or beverages from vending machines or at a school store, canteen, or snack bar decreased from 89.5% to 83.3%.
- Across **states**, decreases were found in the median percentage of all schools that allowed students to purchase from vending machines or at the school store, canteen, or snack bar chocolate candy (from 52.6% to 40.3%), other kinds of candy (from 55.2% to 43.6%), and salty snacks that are not low in fat (from 63.7% to 47.4%).
- Across **states**, the median percentage of all schools that allowed students to purchase candy; snacks that are not low in fat; soda pop, sports drinks, or fruit drinks that are not 100% juice; or 2% or whole milk during school lunch periods decreased from 51.7% to 34.9%.

Significant deteriorations in school health practices and policies were detected between 2004 and 2006 in the following areas:

- Across **states** and **cities**, the median percentage of all schools requiring teachers to use any state-developed, district-developed, or school-developed curriculum in a required health education course decreased from 96.8% to 75.3% and from 100.0% to 48.9%, respectively.
- Across **states**, among schools that required a physical education course for students in any of grades 6 through 12, the median percentage that allowed students to be exempted from taking a required physical education course for enrollment in other courses increased from 6.9% to 15.2%.
- Across **states** and **cities**, the median percentage of all schools that had adopted a policy on students and/or staff who have HIV infection or AIDS decreased from 59.4% to 51.6% and from 65.3% to 46.8%, respectively.
- Across **cities**, the median percentage of all schools that had one or more than one group (e.g., a school health council, committee, or team) that offered guidance on the development of policies or coordinated activities on health topics decreased from 72.3% to 48.4%.

DISCUSSION

Coordinated school health programs (CSHPs) help students develop and improve health-related knowledge, attitudes, and skills. In addition, these programs can help improve health behaviors, health outcomes, educational outcomes, and social outcomes among adolescents and young adults.⁶⁹ School Health Profiles provides information to help assess some aspects of five of the eight components of CSHPs. Long-term and short-term trends in Profiles data illustrate how school health policies and programs have evolved over time to meet the needs of students and demonstrate areas for improvement.

By providing school-level data that is representative of each participating state and large urban school district, Profiles complements the School Health Policies and Programs Study (SHPPS). SHPPS was conducted most recently in 2006, and provides nationally representative data on school health policies and programs related to all eight components of CSHPs.⁷⁰

The *National Health Education Standards*, the Institute of Medicine, and the *Healthy People 2010* objectives all identify health education as important to help keep America's youth healthy.^{5,9,10} Profiles measures many characteristics of health education. For example, across states, the median percentage of all schools that taught a required health education course in a particular grade decreased from 51.3% in grade 6 to 14.7% in grade 12. These results are of concern because as a student's grade increases, the prevalence of many health risk behaviors also increases,⁵⁵ creating an even greater need for required health education in higher grades.

*Healthy People 2010*¹⁰ Objective 7-2 specifies that the following topics be addressed in health education: unintentional injuries; violence; suicide; tobacco use and addiction; alcohol and other drug use; unintended pregnancy, HIV/AIDS, and STD infections; unhealthy

dietary patterns; inadequate physical activity; and environmental health. Across states, a median of more than 75% of all middle schools and high schools tried to increase student knowledge on tobacco-use prevention; alcohol-use or other drug-use prevention; HIV, STD, and pregnancy prevention; nutrition and dietary behavior; and physical activity and fitness. Across cities, however, the median percentage of all middle and high schools that tried to increase student knowledge did not exceed 60% for any topic.

In addition, since 1996, a significant decrease occurred in the median percentage of all middle and high schools across states that taught about abstinence as the most effective method to avoid pregnancy, HIV, and STDs; how HIV is transmitted; how HIV affects the human body; condom efficacy; influence of alcohol and other drugs on HIV-related risk behaviors; social or cultural influences on sexual behavior; and how to correctly use a condom. For cities, a significant decrease occurred in the median percentage of all middle and high schools that taught about alcohol-use or other drug-use prevention, dental and oral health, environmental health, STD prevention, and violence prevention. Concurrently, a significant decrease occurred in the median percentage of all middle schools and high schools across cities that taught how HIV is transmitted; how HIV affects the human body; condom efficacy; social or cultural influences on sexual behavior; how to find valid information or services related to HIV or HIV testing; how to correctly use a condom; and compassion for persons living with HIV or AIDS.

These results are of concern, in general, because schools need to ensure that health education topics address the priority health problems identified by the *Healthy People 2010*¹⁰ objectives, and specifically, because the impact of the HIV epidemic is continuing to grow in many communities.

The *National Health Education Standards* identify particular student skills such as goal setting, decision making, communication, and stress management that are important for enhancing health.⁹ More than 70% of all middle schools and high schools across states tried to improve student skills in finding valid health information, products, and services. Middle schools and high schools also tried to reduce the influence of media on personal health and wellness; improve communication, decision-making, goal-setting, and conflict resolution skills; and promote attitudes to resist peer pressure for engaging in unhealthy behaviors.

Since 1996, across states, a significant decrease occurred in the median percentage of all middle schools and high schools that tried to improve student skills in decision making. During the same period, across cities, a significant decrease also occurred in the median percentage of all middle schools and high schools that tried to improve student skills in communication and decision making.

An important component of effective health education is that an individual is appointed to coordinate it.⁵ More than 90% of all middle and high schools across states and cities have a health education coordinator. It is also important that health education teachers be trained in health education. In 2006, professional preparation of the lead health education teacher varied greatly across states and cities. The median percentage of all middle and high school lead health education teachers who had professional preparation in health education was 4.7% across states and 8.0% across cities. The median percentage of all health education teachers who had professional preparation in health and physical education combined was 45.5% across states and 26.4% across cities.

Coordination of health education activities with other components of the school health program helps ensure that health issues are consistently addressed and reinforced within schools. The median percentage of all

middle and high schools across states and cities that worked on health education activities with physical education, health services, and mental health or social services staff was more than 50%. Since 1996, across states, a significant increase occurred in the median percentage of all middle schools and high schools that worked on health education activities with physical education, school health services, and nutrition or food service staff. Coordination between health education and other school staff may improve the implementation of health education activities.

CDC guidelines, *Healthy People 2010* objectives, and NASPE standards recommend required daily physical education to promote active, productive, and healthy lifestyles among youth.^{10,27,29} In 2006, the median percentage of all schools across states and cities that required physical education for students in any of grades 6 through 12 was more than 90%. Across states and cities, however, the median percentage of all schools that taught a required PE course in a particular grade decreased as grade level increased. This is a cause for concern because as students' grade increases, the amount of physical activity they engage in tends to decrease.⁵⁵

School health services help students appraise, protect, and improve their health. One major aspect of health services is helping students with asthma manage their illness. In 2006, more than 65% of all schools across states and cities provided all students having asthma with an Asthma Action Plan, permitted students to carry and self-administer a prescription quick-relief inhaler, and provided identification or school-based management of chronic health conditions, such as asthma.

Across states and cities, the median percentage of all schools in which the lead health education teacher received staff development during the two years preceding the survey on asthma awareness was 19.2% and 33.8%, respectively. However, the median percentage of

all schools in which the lead health education teacher wanted to receive staff development on asthma awareness was 56.5% across states and 66.2% across cities.

The Child Nutrition and WIC Reauthorization Act of 2004 requires school districts that participate in the National School Lunch Program or the School Breakfast Program to develop a local wellness policy that must address nutrition education and provide nutrition guidelines for all foods available on school campuses.⁴⁶ The Institute of Medicine report, *Nutrition Standards for Foods in Schools: Leading the Way Toward Healthier Youth*⁴⁷ provides specific recommendations for foods and beverages sold outside of the school meal programs that schools, districts, and states should consider when developing or strengthening policies related to nutrition in schools.

Across states a significant increase was noted between 2004 and 2006 in the median percentage of all schools that had a policy stating that if food is served at student parties, at after-school or extended-day programs, or at concession stands, then fruits and vegetables would be among the foods offered. During this same period, a significant decrease was detected in the median percentage of all schools across states that allowed students to purchase chocolate candy, other kinds of candy, and salty snacks that are not low in fat from vending machines or at the school store, canteen, or snack bar. In addition, a decrease was noted between 2004 and 2006 in the median percentage of all schools across states that allowed students to purchase candy; snacks that are not low in fat; soda pop, sports drinks, fruit drinks that are not 100% juice; or 2% or whole milk during school lunch periods.

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 chil-

dren.^{52,71} The Pro-Children Act is generally limited to indoor facilities in an attempt to protect children from secondhand smoke. CDC's *Guidelines for School Health Programs to Prevent Tobacco Use and Addiction* identified key elements of a school tobacco-use prevention policy.⁵⁰ Such a policy should prohibit tobacco use by students, faculty, staff, and visitors on school property; in all school vehicles; and at school-sponsored functions away from school property. Across states and cities, the median percentage of all schools that prohibited all tobacco use in all locations was 53.8% and 56.0%, respectively. More schools should adopt and enforce components of a tobacco-use prevention policy to meet the *Healthy People 2010* objective of 100% tobacco-free school environments.¹⁰ Another strategy identified in CDC's guidelines to aid schools in preventing tobacco use among youth is the prohibition of tobacco advertising in school buildings, on school property, and in school publications. In 2006, more than 90% of all schools across states and cities prohibited tobacco advertising in school buildings, on school grounds, on all school vehicles, and in school publications. In addition, more than 90% of all schools across states and cities prohibited tobacco advertising through sponsorship of school events and prohibited students from wearing tobacco brand-name apparel or carrying merchandise with tobacco company names, logos, or cartoon characters on it.

The No Child Left Behind Act of 2001 also authorized schools to use federal funds for programs to prevent violence in and around schools.⁵² In 2006, the median percentage of all schools that used metal detectors and had uniformed police, undercover police, or security guards during the regular school day varied greatly between states and cities.

School policies should address the needs of students and staff with HIV infection and AIDS. Across states and cities, a decrease occurred from 1996 to 2006 in the median percentage of all schools that had adopted a

policy on students and/or staff who have HIV infection or AIDS. However, across states, among schools that had adopted a policy, increases were found in the median percentage of schools that had a policy that addressed several key issues, including procedures to protect HIV-infected students and staff from discrimination; maintenance of confidentiality of HIV-infected students and staff; workplace safety; communication of the HIV policy to students, school staff, and parents; and procedures for implementing the policy.

Collaboration between schools and families is essential to the success of CSHPs. More than 65% of all schools across states and cities provided information on school health education to families. However, less than 35% of schools met with a parents' organization, such as the PTA, to discuss school health education, or invited family members to attend health education classes.

Several limitations should be noted. The data presented in this report apply only to public middle schools and high schools and are limited to these school populations. Because the data were combined across both school levels, program and policy differences between the two levels may be masked. Second, 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.²

State and local education and health agencies use Profiles data to advocate for health and physical education programs, promote curricula or program modifications, support school health legislation, and identify staff development needs. For example, the Rhode Island Departments of Education and Health used Profiles data to plan and prioritize technical assistance activities with school districts to support health and physical education curriculum development. In addition, both agencies used data from Profiles in support of a legislative

bill to require that only healthier snacks and beverages be sold or distributed in schools. The State of Alaska Department of Education and Early Development used 2006 Profiles data to identify the staff development needs of health education and physical education teachers. In response, the department conducted statewide training on several health topics. The Montana Office of Public Instruction used Profiles data to support several legislative bills and recommendations to increase the amount of time spent by students in physical education classes. In addition, Montana schools used Profiles data in their School Wellness policy development and implementation efforts.

Profiles data help state and local education and health agencies promote program strengths and advocate for resources to address weaknesses. Numerous resources exist to help states and districts address weaknesses identified through their Profiles data. For example, for states and districts needing to improve their policies, *The Food-Safe Schools Action Guide* helps schools identify gaps in food safety and develop policies to prevent foodborne illness.⁷² *Fit, Healthy, and Ready to Learn* is another guide to help schools develop policies to address physical activity, healthy eating, tobacco-use prevention, asthma control, and a healthy school environment.^{73,74} The guide includes information on the policy development process, general school health policies, and examples of specific policies for all topic areas. CDC's School Health Index (SHI) is a tool to help schools identify strengths and weakness of their health and safety policies and practices through a self-assessment process and to develop an action plan for improvement. The process engages teachers, parents, students, and the community to help promote positive health behaviors.⁷⁵ Finally, *Making it Happen: School Nutrition Success Stories* describes how schools across the United States improved the types of foods and beverages sold and offered outside of the USDA school meal program to provide more healthy choices for students.⁷⁶

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