

# INTRODUCTION

In the United States, more than 55 million young people are enrolled in elementary and secondary schools.<sup>1</sup> Because young people attend school about six hours a day approximately 180 days per year, schools are in a unique position to help improve the health status of children and adolescents throughout the United States. 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 school health policies and practices. Profiles helps state, territorial, and local education and health agencies monitor and assess characteristics of and trends in school health education; physical education; school health policies related to human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) prevention, tobacco-use prevention, and competitive foods (foods and beverages sold outside of the U. S. Department of Agriculture [USDA] school meal programs); asthma management activities; and family and community involvement in school health programs. Profiles has been conducted biennially since 1996 and includes state, territorial, 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 coordinated school health:<sup>2</sup>

- **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 various 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 Profiles 2008

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 2008 Profiles data. For each middle or high school that was 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 and lead health education teacher data from the 47 state, 20 local, and 4 territorial surveys with weighted data are included in this report. Principal and lead health education teacher data from the remaining 3 state, 1 local, and 1 territorial survey with unweighted data are not included in this report. This report also examines both long-term (1996–2008) and short-term (2006–2008) trends in school health programs and policies.

# METHODS

## SAMPLING

Profiles uses 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 jurisdictions, the sampling frame consists of all regular secondary public schools with one or more of grades 6 through 12. In 2008, 11 states, 18 cities, and all 4 territories modified this sampling procedure and invited all secondary schools, rather than just a sample, to participate.

## DATA COLLECTION

For the 2008 Profiles cycle, 43 states, 14 cities, and 4 territories included in this report collected data from each sampled school during the spring semester. The remaining 4 states and 5 cities collected data during fall 2008. Both the principal and lead health education teacher questionnaire booklets are mailed by the state, local, or territorial 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, emails, and written reminders are used to encourage participation. The principal and teacher record their responses in the computer-scannable questionnaire booklets and return them directly to the state, local, or territorial education or health agency.

In 2008, three states (Hawaii, Indiana, and Wisconsin) and one city (Orange County, FL) conducted Profiles using Web-based software supplied by CDC. In these four sites, letters were mailed to principals to introduce the survey along with sample questionnaires respondents could use to gather information in advance. Principals were asked to provide contact information for lead health education teachers. CDC then sent email noti-

fications with specific instructions for logging into the survey. The Web-based versions of the questionnaires were identical to the paper versions, with the exception of three questions on the Principal questionnaire. On the paper version, these three questions allowed respondents to mark all applicable responses, but because the survey software did not support this type of response, these three questions had to be modified for the Web-based version.

Respondents who had difficulty with the Web-based system or did not want to use it were offered paper questionnaires. Responses to these paper questionnaires were then entered into the Web-based system.

## 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 47 states, 18 cities, and 4 territories with weighted data from both principal and lead health education teacher surveys, 1 city with weighted data from the principal survey only, and 1 city with weighted data from the teacher survey only (Table 1).

Across states, the sample sizes of the principal surveys ranged from 76 to 500, and response rates ranged from 70% to 93%; across cities, the sample sizes ranged from 15 to 280, and response rates ranged from 70% to 94%; and across territories, the sample sizes ranged from 7 to 26, and response rates ranged from 88% to 100%. The sample sizes of the lead health education teacher surveys across states ranged from 71 to 472, and response rates

ranged from 70% to 93%; across cities, the sample sizes ranged from 14 to 111, and the response rates ranged from 71% to 100%; and across territories, the sample sizes ranged from 6 to 25, and the response rates ranged from 75% to 100%. SAS software was used to compute point estimates.<sup>3</sup> Medians and ranges are presented separately for states, cities, and territories.

Analyses of long-term and short-term trends included only the states and cities with weighted data available for both years. Long-term trend analyses included 26 states and 8 cities for the principal questionnaire and 23 states and 7 cities for the teacher questionnaire. Short-term trend analyses included 35 states and 11 cities for the principal questionnaire and 33 states and 11 cities for the teacher questionnaire. The Wilcoxon rank-sum test was used to test for differences between 1996 and 2008 data and between 2006 and 2008 data across states and cities.<sup>4</sup> This is a nonparametric analogue to a two sample t-test. This statistical procedure (a) rank ordered all sites for both years separately for states and cities, (b) summed the ranks separately by year and for states

and cities, and (c) compared the rank sums separately for states and cities to determine whether the distribution of a variable was the same for 1996 and 2008, or for 2006 and 2008. Assuming the percentages have an underlying continuous distribution, the distribution of ranks is approximately normal; however, because of the small sample sizes, 2-tailed  $p$  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 or equal to 0.01.

To analyze long-term trends, some variables from the 1996 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 Profiles might differ from those reported here. In addition, because trend analyses were restricted to the states and cities with weighted data available for both years, percentages reported in the trend results differ from those reported elsewhere.

# BACKGROUND

## HEALTH EDUCATION

### Requirements

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

### Standards and Guidelines

The *National Health Education Standards* are written expectations for what students should know and be able to do by specified grade levels to promote personal, family, and community health.<sup>8</sup> The standards provide a framework for curriculum development and selection, instruction, and student assessment in health education. The most recent version of the *National Health Education Standards* was released in 2007 and includes the following:

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*,<sup>9</sup> 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.

### Professional Preparation and Professional Development

The quality of school health education is determined, in part, by teacher preparation.<sup>7</sup> Professional development for teachers through continuing education and training is critical for the implementation of effective school health education.<sup>10-12</sup> Professional development for health education teachers should focus on strategies that actively engage students and help students master important health information and skills.<sup>7</sup> 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.<sup>13</sup>

### PHYSICAL EDUCATION

Young people should participate daily in at least 60 minutes of physical activity.<sup>14</sup> Regular physical activity can reduce risk for the development of chronic diseases among adults, including cardiovascular disease, cancer, and diabetes. 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. 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.<sup>15</sup> Further, regular physical activity reduces risk for the development of overweight among youth. As of 2006, 17.0% of 6-year-olds to 11-year-olds and 17.6% of 12-year-olds to 19-year-olds were considered obese.<sup>16</sup> Many youth become less active as they move from childhood into adolescence and adulthood.<sup>17-20</sup>

Schools can play an important role in providing opportunities for physical activity, and by 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*<sup>21</sup> 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.<sup>22</sup> 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.

Quality physical education includes: 1) the opportunity to learn, which is supported by daily physical education and qualified teachers; 2) meaningful content, supported by quality curriculum; and 3) appropriate instruction for all students. The National Association for Sport and Physical Education published the second edition of the *National Standards for Physical Education* in 2004.<sup>23</sup> These standards identify what students should know and be able to do as a result of quality physical education. The importance of physical education and activity in promoting the health of young people is also supported by the following *Healthy People 2010*<sup>9</sup> 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.

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\*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.

- **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.

## HEALTHY AND SAFE SCHOOL ENVIRONMENT

### Competitive Foods

Competitive foods are any foods and beverages sold at school separately from the USDA school meal programs.<sup>24</sup> Although foods and beverages sold through the school meal programs must meet federal nutrition requirements, competitive foods are not subject to any federal nutrition standards unless they are sold inside the food service area during mealtimes.<sup>25</sup>

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.<sup>26-28</sup> For both boys and girls aged 9 to 13 years, 21% derive more than one quarter of their energy intake from added sugars.<sup>29</sup> 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.<sup>30</sup> A 2007 Institute of Medicine report, *Nutrition Standards for Foods in Schools: Leading the Way Toward Healthier Youth*<sup>31</sup> provides specif-

ic 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. The implementation of these recommendations, the USDA local wellness policy, and other initiatives helps support the achievement of the *Healthy People 2010*<sup>9</sup> 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, particularly cigarette smoking, remains the leading preventable cause of death in the United States,<sup>32</sup> accounting for approximately one of every five deaths (438,000 people) each year.<sup>33,34</sup> Approximately 82% of adults who ever smoked daily tried their first cigarette before age 18 years.<sup>35</sup> Each day in the United States, approximately 3,600 young people between the ages of 12 and 17 years initiate cigarette smoking, and an estimated 1,100 young people become daily cigarette smokers.<sup>36</sup> Thus, to be most effective, school-based programs must target young people before they initiate tobacco use or drop out of school. CDC’s *Best Practices for Comprehensive Tobacco Control Programs—2007* provides evidence-based guidance to assist in planning and establishing comprehensive and effective tobacco control programs that include efforts to prevent youth initiation and reduce youth tobacco use.<sup>37</sup> Additionally, CDC’s *Guidelines for School Health Programs to Prevent Tobacco Use and Addiction*<sup>38</sup> recommends strategies to aid schools in preventing initiation and reducing 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 non-school hours; in school buildings; on school grounds; in school buses or all vehicles used to transport students; and at off-campus, school-sponsored events.<sup>38</sup> Instituting such a policy can assist schools in achieving *Healthy People 2010*<sup>9</sup> Objective 27-11: to increase tobacco-free environments in schools, including all school facilities, property, vehicles, and events.

### HEALTH SERVICES

According to the American Academy of Pediatrics (AAP), at a minimum, schools should provide 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.<sup>39</sup> 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.<sup>40</sup> The importance of having sufficient school nurses for all students is reflected in *Healthy People 2010*<sup>9</sup> 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 leading chronic illness among children and youth in the United States.<sup>41</sup> Low-income populations; racial and ethnic minorities; and children—particularly boys, living in inner cities experience more emergency department visits, hospitalizations, and deaths from asthma than the general population.<sup>42-44</sup> In 2007, more than 9.5 million U.S. children under 18 years of age (13%) had ever been diagnosed with asthma, and almost 6.7 million children (9%) still had asthma.<sup>41</sup> In 2004, children made seven million visits to doctors' offices and hospital outpatient departments, made 754,000 visits to hospital emergency departments, and had 198,000 hospitalizations because of asthma. An estimated 12.8 million lost school days were attributed to asthma among school-aged children in 2003.<sup>43</sup>

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 that create safe and supportive learning environments for students with asthma. In *Strategies for Addressing Asthma Within a Coordinated School Health Program, with Updated Resources*,<sup>45</sup> CDC recommends obtaining a written action plan for all students with asthma and ensuring that students have immediate access to medications, including allowing students to carry and self-administer medications. *Healthy People 2010*<sup>9</sup> 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.

## SCHOOL HEALTH COORDINATION

To ensure that the components of school health are coordinated, it is critical to have one person appointed to oversee the school health program.<sup>5</sup> This individual coordinates school health activities; leads a school health council, committee, or team; and integrates community-based programs with school-based programs.<sup>46,47</sup> Administration and management of school health programs requires devoted time, attention, training, and expertise.<sup>48,49</sup> School health councils, committees, or teams also are integral parts of a coordinated school health program. The school health committee or team should represent a coalition of representatives from within and outside of the school community interested in improving the health of youth in schools.<sup>48,50</sup> Participation on such committees or teams can empower others through increased awareness and knowledge of the school health program, increase the chance of ownership and commitment, activate channels of communication, and increase involvement in decision making.<sup>46,48,50-54</sup>

## 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 therefore have a direct impact upon schools as they enter the school system. In 2007, in the 34 states with confidential name-based HIV infection reporting, an estimated 6,559 persons aged 13 to 19 years were living with HIV/AIDS, including an estimated 1,743 cases diagnosed that year.<sup>55</sup> Abstinence, consistent condom

use among sexually active students, and HIV testing are important strategies for preventing the transmission of HIV. Nationwide, 47.8% of students in grades 9 through 12 had ever had sexual intercourse and 61.5% of currently sexually active students had used a condom during their last sexual intercourse, while only 12.9% of students had been tested for HIV infection.<sup>56</sup>

School health policies can help protect the rights of HIV-infected students and school staff members and reduce the likelihood of transmission of HIV infection. The National Association of State Boards of Education provides policy recommendations to guide educators on addressing these issues,<sup>57</sup> 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.<sup>58</sup> 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.<sup>57,59</sup> Interventions aimed at preventing and

treating childhood obesity,<sup>60</sup> school-based tobacco-use prevention programs,<sup>61</sup> and asthma interventions<sup>62,63</sup> 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 HIV infection, other STDs, and pregnancy prevention.<sup>64</sup> Without parental support of policies and programs to prevent HIV infection, other STDs, and pregnancy, they cannot be sustained.<sup>64-66</sup>

# 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.

The percentage of schools that required health education for students in any of grades 6 through 12 ranged from 30.6% to 99.4% across states (median: 90.6%) and from 3.5% to 97.3% across cities (median: 78.4%). Across territories, 100.0% of schools required health education for students in any of grades 6 through 12 (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 schools that required students to take only one required health education course ranged from 11.5% to 63.5% across states (median: 38.2%), from 3.5% to 74.6% across cities (median: 47.1%), and from 20.0% to 100.0% across territories (median: 56.3%) (Table 2). The percentage of all schools that required students to take two or more required health education courses ranged from 11.9% to 86.1% across states (median: 50.6%), from 0.0% to 49.1% across cities (median: 16.4%), and from 0.0% to 80.0% across territories (median: 43.8%) (Table 2).

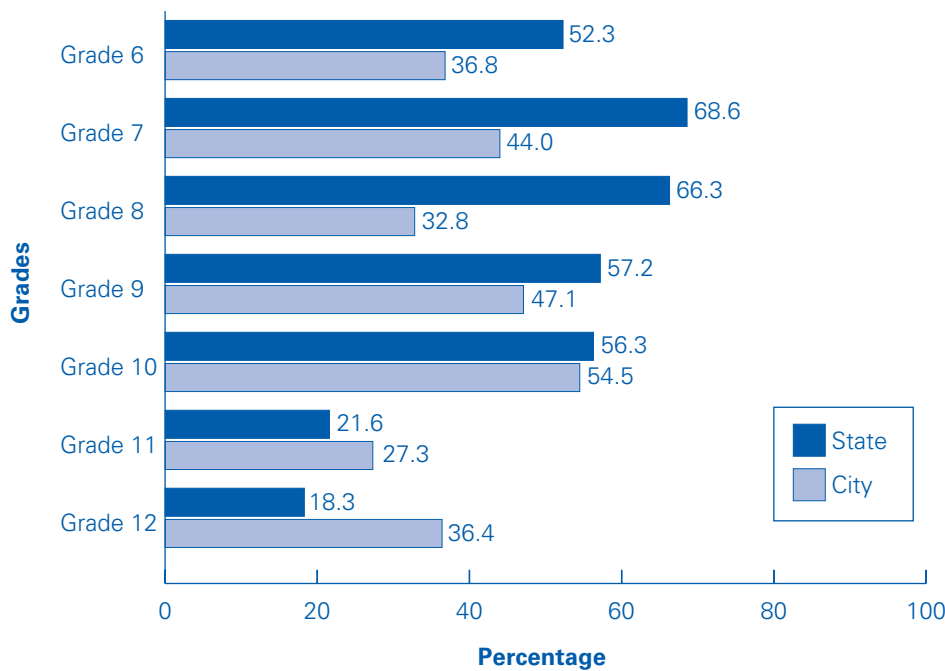
Among schools that required a health education course for students in any of grade 6 through grade 12, some schools required that students who fail the course repeat it. The percentage of these schools that required students to repeat a required health education course ranged from 16.3% to 81.2% across states (median: 59.8%), from 0.0% to 81.8% across cities (median: 55.2%), and from 0.0% to 100.0% across territories (median: 47.8%) (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 12.5% to 97.7% (median: 52.3%) in grade 6, 22.2% to 100.0% (median: 68.6%) in grade 7, 20.9% to 100.0% (median: 66.3%) in grade 8, 4.6% to 97.7% (median: 57.2%) in grade 9, 3.5% to 91.2% (median: 56.3%) in grade 10, 1.7% to 97.5% (median: 21.6%) in grade 11, and from 1.7% to 96.7% (median: 18.3%) 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 92.3% (median: 36.8%) in grade 6, 0.0% to 95.3% (median: 44.0%) in grade 7, 0.0% to 92.3% (median: 32.8%) in grade 8, 0.0% to 94.2% (median: 47.1%) in grade 9, 0.0% to 100.0% (median: 54.5%) in grade 10, 0.0% to 84.6% (median: 27.3%) in grade 11, and from 0.0% to 84.6% (median: 36.4%) in grade 12 (Table 3, Figure 1). Among schools with students in particular grades, the percentage of schools across territories that taught a required health education course in that grade ranged from 0.0% to 100.0% (median: 78.6%) in grade 6, 85.7% to 100.0% (median: 100.0%) in grade 7, 42.9% to 100.0% (median: 100.0%) in grade 8, 100.0% to 100.0% (median: 100.0%) in grade 9, 75.0% to 100.0% (median: 100.0%) in grade 10, 50.0% to 100.0% (median: 100.0%) in grade 11, and from 50.0% to 100.0% (median: 100.0%) in grade 12 (Table 3).

### Materials for Health Education Teachers

Schools can provide materials to health education teachers to help them teach. The percentage of schools that provided the following materials to those who teach health education ranged as follows (Table 4):

FIGURE 1. Median percentage of schools that taught a required health education course in each grade,\* School Health Profiles, 2008



\*Among schools with students in each grade.

- **Goals, objectives, and expected outcomes for health education:** from 63.3% to 99.4% across states (median: 85.6%) and from 48.8% to 100.0% across cities (median: 85.8%). Across territories, 100.0% of schools provided teachers with goals, objectives, and expected outcomes for health education.
- **A chart describing the annual scope and sequence of instruction for health education:** from 37.6% to 84.0% across states (median: 61.7%), from 3.7% to 98.2% across cities (median: 65.4%), and from 36.4% to 83.3% across territories (median: 55.0%).
- **Plans for how to assess student performance in health education:** from 46.0% to 89.8% across states (median: 65.9%), from 5.6% to 96.4% across cities (median: 62.2%), and from 45.5% to 83.3% across territories (median: 77.7%).

- **A written health education curriculum:** from 53.9% to 93.7% across states (median: 78.0%), from 53.4% to 100.0% across cities (median: 70.7%), and from 90.9% to 100.0% across territories (median: 98.0%).
- **All four types of materials:** from 31.0% to 71.9% across states (median: 50.3%), from 3.7% to 96.4% across cities (median: 50.0%), and from 33.3% to 83.3% across territories (median: 46.2%).

### Content of Required Health Education

Required health education aims to increase student knowledge about a variety of health-related topics. The percentage of schools that tried to increase student knowledge on specific health-related topics in a required course during the 2007–2008 school year ranged as follows (Table 5a, b):

- **Alcohol- or other drug-use prevention:** from 80.9% to 99.6% across states (median: 96.2%), from 33.3% to 100.0% across cities (median: 86.9%), and from 96.0% to 100.0% across territories (median: 100.0%).
- **Asthma awareness:** from 25.8% to 76.4% across states (median: 47.0%), from 23.8% to 81.0% across cities (median: 58.1%), and from 14.3% to 60.0% across territories (median: 52.3%).
- **Emotional and mental health:** from 60.8% to 99.4% across states (median: 91.3%), from 33.3% to 98.2% across cities (median: 83.0%), and from 84.0% to 100.0% across territories (median: 92.9%).
- **Foodborne illness prevention:** from 44.4% to 86.2% across states (median: 69.8%), from 24.5% to 79.2% across cities (median: 57.5%), and from 71.4% to 83.3% across territories (median: 78.4%).
- **HIV prevention:** from 62.2% to 97.3% across states (median: 90.3%), from 59.7% to 100.0% across cities (median: 87.8%), and from 85.7% to 100.0% across territories (median: 100.0%).
- **Human sexuality:** from 58.1% to 93.7% across states (median: 86.3%), from 61.2% to 100.0% across cities (median: 81.4%), and from 57.1% to 92.0% across territories (median: 74.3%).
- **Injury prevention and safety:** from 67.2% to 96.0% across states (median: 87.9%), from 50.0% to 92.2% across cities (median: 83.1%), and from 90.9% to 100.0% across territories (median: 98.0%).
- **Nutrition and dietary behavior:** from 77.4% to 99.7% across states (median: 96.9%) and from 33.0% to 100.0% across cities (median: 93.1%). Across territories, 100.0% of schools tried to increase student knowledge on this topic.
- **Physical activity and fitness:** from 84.0% to 100.0% across states (median: 98.7%) and from 33.0% to 100.0% across cities (median: 96.6%). Across territories, 100.0% of schools tried to increase student knowledge on this topic.
- **Pregnancy prevention:** from 49.1% to 91.3% across states (median: 81.8%), from 55.4% to 100.0% across cities (median: 75.3%), and from 72.7% to 100.0% across territories (median: 89.7%).
- **STD prevention:** from 56.3% to 96.1% across states (median: 88.0%), from 57.5% to 100.0% across cities (median: 84.9%), and from 84.0% to 100.0% across territories (median: 92.9%).
- **Suicide prevention:** from 39.7% to 91.2% across states (median: 72.8%), from 26.3% to 81.3% across cities (median: 64.0%), and from 72.7% to 100.0% across territories (median: 90.0%).
- **Tobacco-use prevention:** from 78.8% to 99.6% across states (median: 95.8%), from 33.3% to 100.0% across cities (median: 90.0%), and from 90.9% to 100.0% across territories (median: 100.0%).
- **Violence prevention, such as bullying, fighting, or homicide:** from 74.0% to 97.7% across states (median: 90.2%), from 33.3% to 100.0% across cities (median: 87.5%), and from 81.8% to 100.0% across territories (median: 88.9%).

Health education curricula should address student skills that correspond to the *National Health Education Standards*.<sup>8</sup> The percentage of schools with a health education curriculum that addressed specific skills ranged as follows (Table 6):

- **Comprehending concepts related to health promotion and disease prevention to enhance health:** from 91.0% to 100.0% across states (median: 98.4%) and from 25.0% to 100.0% across cities (median: 97.4%). Across territories, 100.0% of schools had a health education curriculum that addressed this skill.
- **Analyzing the influence of family, peers, culture, media, technology, and other factors on health behaviors:** from 86.3% to 100.0% across states (median: 97.5%) and from 14.3% to 100.0% across cities (median: 94.4%). Across territories, 100.0% of schools had a health education curriculum that addressed this skill.
- **Accessing valid information and products and services to enhance health:** from 76.6% to 99.0% across states (median: 90.8%), from 44.4% to 98.3% across cities (median: 91.6%), and from 81.8% to 100.0% across territories (median: 100.0%).
- **Using interpersonal communication skills to enhance health and avoid or reduce health risks:** from 87.6% to 100.0% across states (median: 96.8%) and from 60.0% to 100.0% across cities (median: 95.7%). Across territories, 100.0% of schools had a health education curriculum that addressed this skill.
- **Using decision-making skills to enhance health:** from 93.6% to 100.0% across states (median: 98.6%) and from 73.8% to 100.0% across cities (median: 98.0%). Across territories, 100.0% of schools had a health education curriculum that addressed this skill.
- **Using goal-setting skills to enhance health:** from 87.8% to 99.4% across states (median: 95.6%), from 63.3% to 100.0% across cities (median: 95.4%), and from 90.9% to 100.0% across territories (median: 100.0%).
- **Practicing health-enhancing behaviors to avoid or reduce health risks:** from 92.7% to 100.0% across states (median: 98.0%) and from 83.3% to 100.0% across cities (median: 96.6%). Across territories, 100.0% of schools had a health education curriculum that addressed this skill.
- **Advocating for personal, family, and community health:** from 80.3% to 99.0% across states (median: 93.8%), from 28.6% to 98.1% across cities (median: 93.1%), and from 90.0% to 100.0% across territories (median: 98.0%).
- **All eight skills:** from 38.0% to 86.8% across states, (median: 66.1%), from 12.5% to 94.6% across cities (median: 61.8%), and from 63.6% to 100.0% across territories (median: 85.7%).

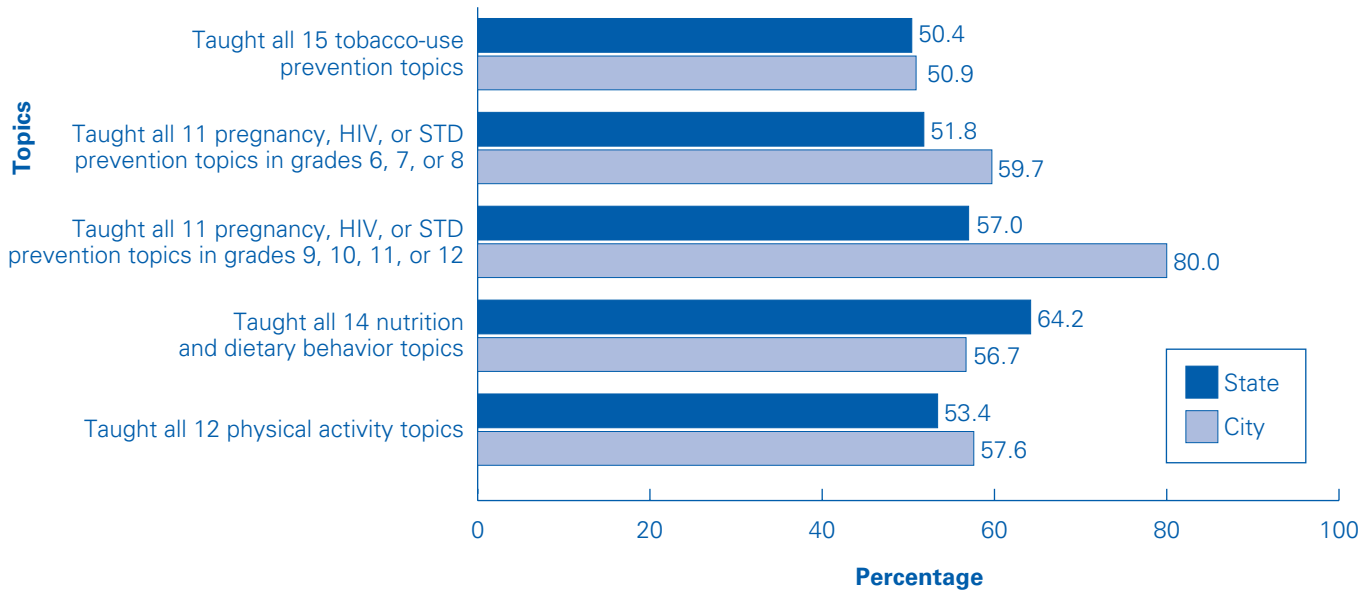
### *Tobacco-Use Prevention Topics*

Tobacco-use prevention topics taught in a required course included consequences of tobacco use, external influences on tobacco use, and skills to avoid and stop using tobacco. The percentage of schools that taught specific tobacco-use prevention topics in a required course during the 2007–2008 school year ranged as follows (Table 7a, b, c):

- **Identifying tobacco products and the harmful substances they contain:** from 64.9% to 98.3% across states (median: 91.9%), from 35.6% to 98.2% across cities (median: 82.6%), and from 83.3% to 100.0% across territories (median: 93.5%).
- **Identifying short and long-term health consequences of tobacco use:** from 66.5% to 98.3% across states (median: 93.2%), from 47.5% to 98.2% across cities (median: 82.6%), and from 83.3% to 100.0% across territories (median: 91.5%).

- **Identifying legal, social, economic, and cosmetic consequences of tobacco use:** from 56.3% to 96.1% across states (median: 88.1%), from 32.5% to 95.5% across cities (median: 74.3%), and from 81.8% to 88.0% across territories (median: 83.3%).
- **Understanding the addictive nature of nicotine:** from 63.8% to 98.3% across states (median: 91.8%), from 45.2% to 98.2% across cities (median: 80.9%), and from 83.3% to 100.0% across territories (median: 87.5%).
- **Effects of tobacco use on athletic performance:** from 59.1% to 95.7% across states (median: 84.3%), from 41.3% to 92.4% across cities (median: 76.9%), and from 66.7% to 100.0% across territories (median: 95.5%).
- **Effects of second-hand smoke and benefits of a smoke-free environment:** from 61.7% to 98.8% across states (median: 91.5%), from 23.8% to 95.4% across cities (median: 78.3%), and from 83.3% to 100.0% across territories (median: 95.5%).
- **Understanding the social influences on tobacco use, including media, family, peers, and culture:** from 58.0% to 97.2% across states (median: 90.1%), from 32.5% to 96.4% across cities (median: 75.3%), and from 66.7% to 100.0% across territories (median: 91.5%).
- **Identifying reasons why students do and do not use tobacco:** from 60.3% to 96.6% across states (median: 90.5%), from 32.5% to 94.6% across cities (median: 78.3%), and from 83.3% to 100.0% across territories (median: 91.5%).
- **Making accurate assessments of how many peers use tobacco:** from 46.3% to 87.1% across states (median: 69.2%), from 23.8% to 87.4% across cities (median: 64.6%), and from 50.0% to 80.0% across territories (median: 67.5%).
- **Using interpersonal communication skills to avoid tobacco use (e.g., refusal skills, assertiveness):** from 57.0% to 97.7% across states (median: 86.9%), from 32.5% to 95.5% across cities (median: 76.7%), and from 71.4% to 92.0% across territories (median: 85.5%).
- **Using goal-setting and decision-making skills related to not using tobacco:** from 55.8% to 97.1% across states (median: 84.3%), from 32.5% to 93.5% across cities (median: 73.7%), and from 90.9% to 100.0% across territories (median: 96.0%).
- **Finding valid information and services related to tobacco-use prevention and cessation:** from 47.4% to 93.7% across states (median: 76.7%), from 35.6% to 92.7% across cities (median: 68.3%), and from 63.6% to 100.0% across territories (median: 73.7%).
- **Supporting others who abstain from or want to quit using tobacco:** from 51.2% to 93.5% across states (median: 76.1%), from 32.5% to 88.9% across cities (median: 67.1%), and from 54.5% to 83.3% across territories (median: 73.7%).
- **Supporting school and community action to support a tobacco-free environment:** from 55.2% to 95.3% across states (median: 77.2%), from 32.5% to 92.7% across cities (median: 68.4%), and from 63.6% to 100.0% across territories (median: 81.7%).
- **Identifying harmful effects of tobacco use on fetal development:** from 52.8% to 96.6% across states (median: 82.9%), from 47.5% to 96.2% across cities (median: 74.1%), and from 71.4% to 90.9% across territories (median: 81.7%).
- **All 15 tobacco-use prevention topics:** from 33.4% to 78.6% across states (median: 50.4%), from 23.8% to 79.4% across cities (median: 50.9%), and from 50.0% to 68.0% across territories (median: 60.6%) (Table 7c, Figure 2).

FIGURE 2. Median percentage of schools that taught all 15 tobacco-use prevention topics; all 11 pregnancy, HIV,\* or STD† prevention topics; all 14 nutrition and dietary behavior topics; or all 12 physical activity topics in a required course during the 2007–2008 school year, School Health Profiles, 2008



\*Human immunodeficiency virus.  
 †Sexually transmitted disease.

### HIV, STD, or Pregnancy Prevention Topics

HIV, STD, or pregnancy prevention topics taught in a required course varied by grade level. The percentage of schools that taught specific HIV, STD, or pregnancy prevention topics in a required course for students in any of grades 6, 7, or 8 during the 2007–2008 school year ranged as follows (Table 8a, b):

- **The differences between HIV and AIDS:** from 46.9% to 94.5% across states (median: 82.8%), from 47.0% to 100.0% across cities (median: 84.0%), and from 85.7% to 100.0% across territories (median: 93.5%).
- **How HIV and other STDs are transmitted:** from 47.6% to 95.3% across states (median: 84.8%), from 51.9% to 100.0% across cities (median: 84.0%), and from 85.7% to 100.0% across territories (median: 93.5%).
- **How HIV and other STDs are diagnosed and treated:** from 37.2% to 91.8% across states (median: 77.2%), from 43.9% to 100.0% across cities (median: 80.0%), and from 82.6% to 100.0% across territories (median: 92.9%).
- **Health consequences of HIV, other STDs, and pregnancy:** from 45.2% to 93.8% across states (median: 82.8%), from 45.8% to 100.0% across cities (median: 83.3%), and from 85.7% to 100.0% across territories (median: 95.7%).
- **The benefits of being sexually abstinent:** from 44.5% to 94.3% across states (median: 81.6%), from 48.4% to 100.0% across cities (median: 77.0%), and from 85.7% to 100.0% across territories (median: 92.9%).
- **How to prevent HIV, other STDs, and pregnancy:** from 44.8% to 94.2% across states (median: 82.9%), from 47.0% to 100.0% across cities (median: 83.3%), and from 85.7% to 100.0% across territories (median: 97.8%).



- **How to access valid and reliable health information, products, and services related to HIV, other STDs, and pregnancy:** from 35.0% to 82.3% across states (median: 69.0%), from 11.8% to 100.0% across cities (median: 67.9%), and from 77.3% to 100.0% across territories (median: 100.0%).
  - **The influences of media, family, and social and cultural norms on sexual behavior:** from 43.4% to 89.2% across states (median: 75.4%), from 8.8% to 100.0% across cities (median: 67.9%), and from 71.4% to 86.4% across territories (median: 77.5%).
  - **Communication and negotiation skills related to eliminating or reducing risk for HIV, other STDs, and pregnancy:** from 43.1% to 87.8% across states (median: 72.7%), from 42.5% to 100.0% across cities (median: 70.8%), and from 71.4% to 100.0% across territories (median: 78.6%).
  - **Goal-setting and decision-making skills related to eliminating or reducing risk for HIV, other STDs, and pregnancy:** from 40.9% to 87.1% across states (median: 74.8%), from 39.2% to 100.0% across cities (median: 75.0%), and from 71.4% to 100.0% across territories (median: 93.2%).
  - **Compassion for persons living with HIV or AIDS:** from 34.2% to 83.4% across states (median: 63.6%), from 12.1% to 100.0% across cities (median: 69.4%), and from 71.4% to 100.0% across territories (median: 90.9%).
  - **All 11 HIV, STD, and pregnancy prevention topics:** from 27.7% to 71.9% across states (median: 51.8%), from 8.8% to 100.0% across cities (median: 59.7%), and from 42.9% to 83.3% across territories (median: 76.4%) (Table 8b, Figure 2).
- The percentage of schools that taught specific HIV, STD, or pregnancy prevention topics in a required course for students in any of grades 9, 10, 11, or 12 during the 2007–2008 school year ranged as follows (Table 9):
- **The relationship among HIV, other STDs, and pregnancy:** from 69.2% to 100.0% across states (median: 94.1%) and from 92.3% to 100.0% across cities (median: 100.0%). Across territories, 100.0% of schools taught this topic.
  - **The relationship between alcohol and other drug use and risk for HIV, other STDs, and pregnancy:** from 68.0% to 100.0% across states (median: 94.8%), from 60.0% to 100.0% across cities (median: 97.0%), and from 50.0% to 100.0% across territories (median: 100.0%).
  - **The benefits of being sexually abstinent:** from 66.6% to 100.0% across states (median: 94.8%), from 92.3% to 100.0% across cities (median: 100.0%), and from 50.0% to 100.0% across territories (median: 100.0%).
  - **How to prevent HIV, other STDs, and pregnancy:** from 73.2% to 100.0% across states (median: 94.8%) and from 92.3% to 100.0% across cities (median: 100.0%). Across territories, 100.0% of schools taught this topic.
  - **How to access valid and reliable health information, products, and services related to HIV, other STDs, and pregnancy:** from 63.9% to 100.0% across states (median: 90.6%) and from 80.0% to 100.0% across cities (median: 95.7%). Across territories, 100.0% of schools taught this topic.

- **The influences of media, family, and social and cultural norms on sexual behavior:** from 65.7% to 99.1% across states (median: 91.2%) and from 40.0% to 100.0% across cities (median: 100.0%). Across territories, 100.0% of schools taught this topic.
- **Communication and negotiation skills related to eliminating or reducing risk for HIV, other STDs, and pregnancy:** from 63.1% to 100.0% across states (median: 90.3%), from 80.0% to 100.0% across cities (median: 100.0%), and from 50.0% to 100.0% across territories (median: 100.0%).
- **Goal-setting and decision-making skills related to eliminating or reducing risk for HIV, other STDs, and pregnancy:** from 64.1% to 100.0% across states (median: 90.9%) and from 80.0% to 100.0% across cities (median: 95.8%). Across territories, 100.0% of schools taught this topic.
- **All 8 HIV, STD, and pregnancy prevention topics:** from 45.7% to 95.8% across states (median: 79.6%), from 31.1% to 100.0% across cities (median: 81.7%), and from 50.0% to 100.0% across territories (median: 100.0%).

The percentage of schools that taught topics related to condom use in a required course for students in any of grades 9, 10, 11, or 12 during the 2007-2008 school year ranged as follows (Table 10):

- **Efficacy of condoms, that is, how well condoms work and do not work:** from 44.5% to 100.0% across states (median: 81.4%), from 62.5% to 100.0% across cities (median: 94.1%), and from 50.0% to 100.0% across territories (median: 100.0%).

- **The importance of using condoms consistently and correctly:** from 29.1% to 100.0% across states (median: 72.9%), from 70.8% to 100.0% across cities (median: 95.5%), and from 50.0% to 100.0% across territories (median: 100.0%).
- **How to obtain condoms:** from 12.6% to 95.6% across states (median: 62.9%), from 0.0% to 100.0% across cities (median: 84.6%), and from 50.0% to 100.0% across territories (median: 100.0%).
- **All 3 condom use topics:** from 10.4% to 93.6% across states (median: 58.8%), from 0.0% to 100.0% across cities (median: 68.7%), and from 50.0% to 100.0% across territories (median: 100.0%).

The percentage of schools that taught all 11 HIV, STD, and pregnancy prevention topics, including all three condom use topics, in a required course for students in any of grades 9, 10, 11, or 12 during the 2007–2008 school year ranged from 9.6% to 88.7% across states (median: 57.0%), from 0.0% to 100.0% across cities (median: 80.0%), and from 50.0% to 100.0% across territories (median: 100.0%) (Table 10, Figure 2).

### *Nutrition and Dietary Behavior Topics*

Nutrition and dietary behavior topics taught in a required course included choosing healthful foods, food safety, and behaviors that contribute to maintaining a healthy weight. The percentage of schools that taught specific nutrition and dietary behavior topics in a required course during the 2007–2008 school year ranged as follows (Table 11a, b):

- **Benefits of healthy eating:** from 68.6% to 99.4% across states (median: 94.7%) and from 50.0% to 98.2% across cities (median: 86.7%). Across territories, 100.0% of schools taught this topic.

- **Food guidance using MyPyramid:** from 56.4% to 96.7% across states (median: 87.8%), from 38.7% to 94.5% across cities (median: 80.0%), and from 96.0% to 100.0% across territories (median: 100.0%).
- **Using food labels:** from 56.1% to 97.2% across states (median: 89.4%), from 32.0% to 96.4% across cities (median: 78.8%), and from 96.0% to 100.0% across territories (median: 100.0%).
- **Balancing food intake and physical activity:** from 64.3% to 99.3% across states (median: 93.2%), from 50.0% to 96.4% across cities (median: 84.7%), and from 96.0% to 100.0% across territories (median: 100.0%).
- **Eating more fruits, vegetables, and whole grain products:** from 65.0% to 98.4% across states (median: 93.0%) and from 48.0% to 98.2% across cities (median: 84.4%). Across territories, 100.0% of schools taught this topic.
- **Choosing foods that are low in fat, saturated fat, and cholesterol:** from 63.4% to 97.9% across states (median: 92.3%), from 41.3% to 95.5% across cities (median: 80.8%), and from 88.0% to 100.0% across territories (median: 95.5%).
- **Using sugars in moderation:** from 60.9% to 96.7% across states (median: 90.1%), from 41.3% to 93.9% across cities (median: 80.3%), and from 80.0% to 100.0% across territories (median: 84.5%).
- **Using salt and sodium in moderation:** from 58.4% to 93.9% across states (median: 88.1%), from 41.3% to 93.6% across cities (median: 74.6%), and from 80.0% to 100.0% across territories (median: 84.5%).
- **Eating more calcium-rich foods:** from 57.1% to 94.1% across states (median: 85.2%), from 41.3% to 93.7% across cities (median: 74.9%), and from 83.3% to 100.0% across territories (median: 91.5%).
- **Food safety:** from 57.6% to 92.5% across states (median: 77.0%), from 32.0% to 89.3% across cities (median: 72.6%), and from 83.3% to 100.0% across territories (median: 93.5%).
- **Preparing healthy meals and snacks:** from 57.2% to 94.3% across states (median: 84.7%), from 41.3% to 94.7% across cities (median: 76.8%), and from 71.4% to 100.0% across territories (median: 93.5%).
- **Risks of unhealthy weight control practices:** from 60.3% to 96.9% across states (median: 90.4%), from 50.0% to 96.2% across cities (median: 78.9%), and from 92.0% to 100.0% across territories (median: 100.0%).
- **Accepting body size differences:** from 53.8% to 96.6% across states (median: 86.3%), from 38.2% to 90.9% across cities (median: 77.5%), and from 80.0% to 100.0% across territories (median: 87.1%).
- **Signs, symptoms, and treatment for eating disorders:** from 52.7% to 96.0% across states (median: 85.4%), from 34.7% to 93.7% across cities (median: 72.6%), and from 83.3% to 100.0% across territories (median: 87.5%).
- **All 14 nutrition and dietary behavior topics:** from 41.7% to 85.0% across states (median: 64.2%), from 25.3% to 80.7% across cities (median: 56.7%), and from 66.7% to 72.7% across territories (median: 69.4%) (Table 11b, Figure 2).

### *Physical Activity Topics*

Physical activity topics taught in a required course included the benefits of physical activity, guidance for engaging in physical activity, and the challenges to engaging in physical activity. The percentage of schools that taught specific

physical activity topics in a required course during the 2007–2008 school year ranged as follows (Table 12a, b):

- **Physical, psychological, or social benefits of physical activity:** from 67.2% to 98.9% across states (median: 95.8%), from 50.0% to 100.0% across cities (median: 92.0%), and from 85.7% to 100.0% across territories (median: 92.9%).
- **Health-related fitness (i.e., cardiorespiratory endurance, muscular endurance, muscular strength, flexibility, and body composition):** from 67.3% to 98.5% across states (median: 94.5%), from 66.7% to 98.3% across cities (median: 91.8%), and from 88.0% to 100.0% across territories (median: 95.0%).
- **Phases of a workout (i.e., warm-up, workout, and cool down):** from 66.3% to 97.6% across states (median: 91.2%), from 50.0% to 100.0% across cities (median: 88.8%), and from 80.0% to 100.0% across territories (median: 97.9%).
- **How much physical activity is enough (i.e., determining frequency, intensity, time, and type of physical activity):** from 60.1% to 95.7% across states (median: 89.7%), from 61.1% to 100.0% across cities (median: 86.7%), and from 80.0% to 100.0% across territories (median: 90.0%).
- **Developing an individualized physical activity plan:** from 46.1% to 87.7% across states (median: 75.4%), from 41.3% to 100.0% across cities (median: 78.2%), and from 60.0% to 84.0% across territories (median: 77.4%).
- **Monitoring progress toward reaching goals in an individualized physical activity plan:** from 47.8% to 86.2% across states (median: 72.3%), from 51.4% to 100.0% across cities (median: 80.8%), and from 54.5% to 85.7% across territories (median: 77.7%).
- **Overcoming barriers to physical activity:** from 56.7% to 89.4% across states (median: 80.1%), from 52.9% to 100.0% across cities (median: 79.0%), and from 63.6% to 100.0% across territories (median: 71.7%).
- **Decreasing sedentary activities such as television viewing:** from 58.8% to 96.2% across states (median: 88.4%), from 50.7% to 100.0% across cities (median: 87.1%), and from 71.4% to 100.0% across territories (median: 85.0%).
- **Opportunities for physical activity in the community:** from 53.9% to 92.3% across states (median: 81.6%), from 48.0% to 100.0% across cities (median: 81.9%), and from 72.7% to 100.0% across territories (median: 98.0%).
- **Preventing injury during physical activity:** from 66.9% to 96.3% across states (median: 89.6%), from 71.2% to 100.0% across cities (median: 89.5%), and from 85.7% to 100.0% across territories (median: 97.9%).
- **Weather-related safety (e.g., avoiding heat stroke, hypothermia, and sunburn while physically active):** from 61.0% to 93.2% across states (median: 80.8%), from 52.0% to 100.0% across cities (median: 79.5%), and from 66.7% to 100.0% across territories (median: 87.9%).
- **Dangers of using performance-enhancing drugs such as steroids:** from 58.5% to 96.7% across states (median: 86.2%), from 47.1% to 100.0% across cities (median: 79.9%), and from 60.0% to 85.7% across territories (median: 79.2%).
- **All 12 physical activity topics:** from 34.9% to 75.3% across states (median: 53.4%), from 25.3% to 76.6% across cities (median: 57.6%), and from

36.4% to 83.3% across territories (median: 59.8%) (Table 12b, Figure 2).

### HIV, STD, or Pregnancy Prevention Programs for Ethnic/Racial Minority Youth at High Risk

During the 2007–2008 school year, some schools provided HIV, STD, or pregnancy prevention programs for ethnic/racial minority youth at high risk (e.g., black, Hispanic, or American Indian youth), including after-school or supplemental programs. The percentage of schools that did specific activities for ethnic/racial minority youth at high risk ranged as follows (Table 13):

- **Provided curricula or supplementary materials that include pictures, information, and learning experiences that reflect the life experiences of these youth in their communities:** from 7.6% to 42.8% across states (median: 24.1%), from 1.9% to 77.0% across cities (median: 40.9%), and from 27.3% to 85.7% across territories (median: 65.7%).
- **Provided curricula or supplementary materials in the primary languages of the youth and families:** from 4.7% to 36.4% across states (median: 20.8%), from 1.9% to 91.1% across cities (median: 40.4%), and from 9.1% to 71.4% across territories (median: 45.0%).
- **Facilitated access to direct health services or arrangements with providers not on school property who have experience in serving these youth in the community:** from 10.6% to 41.1% across states (median: 24.9%), from 1.9% to 90.7% across cities (median: 43.2%), and from 9.1% to 83.3% across territories (median: 39.5%).
- **Facilitated access to direct social and psychological services or arrangements with providers not on school property who have experience in serving these youth in the community:** from 8.5% to 38.5% across states (median: 23.9%), from 1.9% to 92.5%

across cities (median: 45.0%), and from 9.1% to 83.3% across territories (median: 39.5%).

- **Required professional development (such as workshops, conferences, continuing education, or any other kind of in-service) on HIV, STD, or pregnancy prevention issues and resources for ethnic/racial minority youth at high risk:** from 9.2% to 49.4% across states (median: 22.5%), from 27.4% to 88.7% across cities (median: 62.7%), and from 28.6% to 71.4% across territories (median: 50.4%).
- **Did all five of these activities:** from 0.0% to 16.4% across states (median: 3.4%), from 5.1% to 39.9% across cities (median: 15.4%), and from 0.0% to 28.6% across territories (median: 14.9%).

### Collaboration

During the 2007–2008 school year, health education staff worked on health education activities with other school staff. The percentage of schools in which health education staff worked on health education activities with others ranged as follows (Table 14):

- **Physical education staff:** from 57.7% to 93.0% across states (median: 79.9%), from 38.8% to 94.3% across cities (median: 70.2%), and from 63.6% to 84.0% across territories (median: 77.4%).
- **School health services staff (e.g., nurses):** from 30.6% to 87.0% across states (median: 67.5%), from 0.0% to 85.7% across cities (median: 66.4%), and from 14.3% to 72.7% across territories (median: 28.4%).
- **School mental health or social services staff (e.g., psychologists, counselors, and social workers):** from 41.4% to 76.1% across states (median: 60.2%), from 38.1% to 83.9% across cities (median: 63.6%), and from 36.4% to 57.1% across territories (median: 52.1%).

- **Nutrition or food service staff:** from 21.6% to 57.7% across states (median: 37.8%), from 17.5% to 68.5% across cities (median: 37.3%), and from 9.1% to 58.3% across territories (median: 32.2%).

### Health Information to Increase Parent and Family Knowledge

During the 2007–2008 school year, schools provided parents and families with health information designed to increase parent and family knowledge. The percentage of schools that provided this information on specific health topics ranged as follows (Table 15):

- **HIV prevention, STD prevention, or pregnancy prevention:** from 16.3% to 47.5% across states (median: 27.8%), from 19.3% to 100.0% across cities (median: 40.3%), and from 27.3% to 57.1% across territories (median: 52.1%).
- **Asthma:** from 4.7% to 35.3% across states (median: 17.8%), from 13.9% to 61.5% across cities (median: 39.5%), and from 14.3% to 33.3% across territories (median: 19.1%).
- **Tobacco-use prevention:** from 23.7% to 55.4% across states (median: 34.4%), from 15.0% to 65.1% across cities (median: 46.8%), and from 27.3% to 71.4% across territories (median: 42.7%).
- **Physical activity:** from 29.5% to 55.9% across states (median: 42.4%), from 19.3% to 79.6% across cities (median: 53.8%), and from 27.3% to 72.0% across territories (median: 61.9%).
- **Nutrition and healthy eating:** from 28.2% to 58.0% across states (median: 42.3%), from 28.9% to 70.5% across cities (median: 55.9%), and from 27.3% to 66.7% across territories (median: 54.6%).

The percentage of schools that provided information on tobacco-use prevention, physical activity, or nutrition and healthy eating ranged from 39.6% to 67.0% across states (median: 54.3%), from 35.8% to 82.9% across cities (median: 61.8%), and from 45.5% to 72.0% across territories (median: 69.1%) (Table 15). The percentage of schools that provided information on all three of these topics ranged from 14.9% to 41.8% across states (median: 25.7%), from 8.4% to 56.8% across cities (median: 37.5%), and from 18.2% to 44.0% across territories (median: 38.1%) (Table 15).

### Professional Preparation and Professional Development

Lead health education teachers reported professional preparation in many disciplines. The percentage of schools in which the major emphasis of the lead health education teacher's professional preparation was in each specific discipline ranged as follows (Table 16):

- **Health and physical education combined:** from 16.2% to 88.1% across states (median: 49.0%), from 0.0% to 78.6% across cities (median: 25.0%), and from 16.7% to 61.9% across territories (median: 46.7%).
- **Health education only:** from 0.6% to 37.9% across states (median: 6.4%), from 0.0% to 46.4% across cities (median: 8.4%), and from 0.0% to 20.0% across territories (median: 10.8%).
- **Physical education only:** from 3.8% to 36.6% across states (median: 14.5%), from 0.0% to 53.4% across cities (median: 13.7%), and from 0.0% to 10.0% across territories (median: 0.0%).
- **Other education degree:** from 0.0% to 30.8% across states (median: 5.8%), from 0.0% to 26.1% across cities (median: 2.8%), and from 0.0% to 33.3% across territories (median: 15.5%).

- **Kinesiology, exercise science, or exercise physiology; home economics or family and consumer science; or biology or other science:** from 0.0% to 27.4% across states (median: 9.6%), from 0.0% to 94.6% across cities (median: 14.3%), and from 0.0% to 33.3% across territories (median: 8.4%).
- **Nursing or counseling:** from 0.4% to 27.9% across states (median: 2.3%), from 0.0% to 80.4% across cities (median: 2.9%), and from 0.0% to 16.7% across territories (median: 2.4%).
- **Public health, nutrition, or another discipline:** from 0.0% to 13.2% across states (median: 2.3%), from 0.0% to 14.7% across cities (median: 3.6%), and from 0.0% to 16.7% across territories (median: 12.2%).
- **2 to 5 years:** from 13.5% to 38.9% across states (median: 23.8%), from 1.8% to 52.7% across cities (median: 21.8%), and from 0.0% to 33.3% across territories (median: 12.9%).
- **6 to 9 years:** from 12.2% to 24.9% across states (median: 16.5%), from 8.9% to 36.9% across cities (median: 17.4%), and from 18.2% to 50.0% across territories (median: 38.1%).
- **10 to 14 years:** from 9.0% to 22.4% across states (median: 15.2%), from 0.0% to 46.4% across cities (median: 13.6%), and from 0.0% to 28.6% across territories (median: 11.2%).
- **15 years or more:** from 13.9% to 54.9% across states (median: 34.0%), from 13.9% to 58.0% across cities (median: 36.6%), and from 14.3% to 36.4% across territories (median: 18.8%).

The percentage of schools that required newly hired staff who teach health topics to be certified, licensed, or endorsed by the state in health education ranged from 30.3% to 96.4% across states (median: 85.3%), from 1.8% to 96.9% across cities (median: 73.8%), and from 0.0% to 72.7% across territories (median: 27.2%) (Table 17).

The percentage of 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 28.2% to 96.6% across states (median: 81.9%), from 34.3% to 98.2% across cities (median: 73.3%), and from 14.3% to 90.9% across territories (median: 43.8%) (Table 17).

The percentage of 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 17):

- **1 year:** from 1.2% to 21.0% across states (median: 7.9%), from 0.0% to 22.6% across cities (median: 7.7%), and from 8.3% to 18.2% across territories (median: 15.5%).
- **Alcohol- or other drug-use prevention:** from 29.7% to 63.6% across states (median: 45.3%), from 12.5% to 87.0% across cities (median: 54.1%), and from 45.5% to 100.0% across territories (median: 81.7%).
- **Asthma awareness:** from 8.8% to 48.8% across states (median: 17.3%), from 6.3% to 66.8% across cities (median: 36.4%), and from 0.0% to 28.0% across territories (median: 14.6%).
- **Emotional and mental health:** from 23.8% to 73.2% across states (median: 35.5%), from 6.3% to 80.9% across cities (median: 41.3%), and from 27.3% to 100.0% across territories (median: 73.7%).

Lead health education teachers received professional development during the two years before the survey on many health topics. The percentage of schools in which the lead health education teacher received professional development on specific topics ranged as follows (Table 18a, b):

- **Foodborne illness prevention:** from 11.2% to 36.9% across states (median: 20.3%), from 6.3% to 100.0% across cities (median: 28.3%), and from 14.3% to 48.0% across territories (median: 17.5%).
- **HIV prevention:** from 11.4% to 71.6% across states (median: 40.9%), from 45.7% to 100.0% across cities (median: 68.7%), and from 83.3% to 100.0% across territories (median: 89.5%).
- **Human sexuality:** from 13.3% to 68.1% across states (median: 33.7%), from 32.0% to 100.0% across cities (median: 54.9%), and from 42.9% to 68.0% across territories (median: 52.3%).
- **Injury prevention and safety:** from 28.8% to 65.9% across states (median: 44.7%), from 18.5% to 85.2% across cities (median: 51.3%), and from 9.1% to 83.3% across territories (median: 73.4%).
- **Nutrition and dietary behavior:** from 23.3% to 62.6% across states (median: 44.0%), from 6.3% to 81.1% across cities (median: 50.0%), and from 36.4% to 84.0% across territories (median: 77.4%).
- **Physical activity and fitness:** from 31.6% to 76.6% across states (median: 55.1%), from 12.5% to 94.4% across cities (median: 66.7%), and from 27.3% to 96.0% across territories (median: 63.1%).
- **Pregnancy prevention:** from 10.3% to 57.4% across states (median: 29.1%), from 25.0% to 97.8% across cities (median: 44.7%), and from 36.4% to 84.0% across territories (median: 54.8%).
- **STD prevention:** from 12.4% to 67.5% across states (median: 37.2%), from 39.9% to 100.0% across cities (median: 63.6%), and from 72.7% to 100.0% across territories (median: 79.7%).
- **Suicide prevention:** from 14.5% to 57.8% across states (median: 27.3%), from 12.5% to 69.7% across cities (median: 36.7%), and from 16.7% to 71.4% across territories (median: 56.8%).
- **Tobacco-use prevention:** from 21.0% to 61.8% across states (median: 36.1%), from 6.3% to 83.8% across cities (median: 46.2%), and from 50.0% to 85.7% across territories (median: 71.8%).
- **Violence prevention:** from 38.9% to 80.8% across states (median: 55.7%), from 12.5% to 83.2% across cities (median: 63.6%), and from 45.5% to 100.0% across territories (median: 75.7%).
- **Alcohol- or other drug-use prevention:** from 58.5% to 86.6% across states (median: 74.9%), from 42.9% to 90.1% across cities (median: 75.9%), and from 57.1% to 90.9% across territories (median: 85.7%).
- **Asthma awareness:** from 46.0% to 75.7% across states (median: 60.1%), from 14.3% to 90.6% across cities (median: 72.6%), and from 66.7% to 100.0% across territories (median: 97.9%).
- **Emotional and mental health:** from 56.4% to 84.7% across states (median: 72.6%), from 33.3% to 92.3% across cities (median: 75.8%), and from 66.7% to 92.0% across territories (median: 88.3%).
- **Foodborne illness prevention:** from 35.2% to 71.3% across states (median: 54.4%), from 14.3% to 84.6% across cities (median: 69.8%), and from 66.7% to 100.0% across territories (median: 88.9%).

The percentage of schools in which the lead health education teacher wanted to receive professional development on specific health topics ranged as follows (Table 19a, b):



- **HIV prevention:** from 57.4% to 83.1% across states (median: 69.0%), from 49.3% to 98.0% across cities (median: 74.2%), and from 66.7% to 90.9% across territories (median: 79.7%).
  - **Human sexuality:** from 53.7% to 84.1% across states (median: 67.6%), from 45.7% to 98.2% across cities (median: 73.2%), and from 83.3% to 96.0% across territories (median: 88.3%).
  - **Injury prevention and safety:** from 47.0% to 80.6% across states (median: 62.4%), from 25.0% to 89.8% across cities (median: 70.5%), and from 50.0% to 100.0% across territories (median: 84.9%).
  - **Nutrition and dietary behavior:** from 56.3% to 87.4% across states (median: 74.8%), from 16.7% to 90.6% across cities (median: 78.1%), and from 57.1% to 90.9% across territories (median: 77.4%).
  - **Physical activity and fitness:** from 41.2% to 82.5% across states (median: 69.0%), from 16.7% to 94.4% across cities (median: 72.0%), and from 57.1% to 90.9% across territories (median: 83.7%).
  - **Pregnancy prevention:** from 47.4% to 78.8% across states (median: 66.2%), from 57.3% to 97.3% across cities (median: 72.2%), and from 83.3% to 100.0% across territories (median: 87.5%).
  - **STD prevention:** from 60.0% to 83.4% across states (median: 69.9%), from 52.0% to 98.1% across cities (median: 73.1%), and from 66.7% to 90.9% across territories (median: 79.7%).
  - **Suicide prevention:** from 65.0% to 84.4% across states (median: 75.4%), from 33.3% to 96.2% across cities (median: 79.2%), and from 66.7% to 90.9% across territories (median: 86.9%).
  - **Tobacco-use prevention:** from 46.9% to 78.9% across states (median: 67.4%), from 28.6% to 83.4% across cities (median: 69.1%), and from 83.3% to 90.9% across territories (median: 84.9%).
  - **Violence prevention:** from 62.9% to 83.3% across states (median: 77.2%), from 28.6% to 95.4% across cities (median: 85.8%), and from 66.7% to 100.0% across territories (median: 89.5%).
- Lead health education teachers also received professional development during the two years before the survey on critical topics related to HIV and STD prevention. The percentage of schools in which the lead health education teacher received professional development on these topics ranged as follows (Table 20):
- **Describing how widespread HIV and other STD infections are and the consequences of these infections:** from 12.7% to 65.4% across states (median: 38.3%), from 42.3% to 100.0% across cities (median: 64.7%), and from 66.7% to 100.0% across territories (median: 74.9%).
  - **Understanding the modes of transmission and effective prevention strategies for HIV and other STDs:** from 11.3% to 66.3% across states (median: 38.8%), from 44.1% to 100.0% across cities (median: 64.7%), and from 60.0% to 81.8% across territories (median: 69.1%).
  - **Identifying populations of youth who are at high risk of being infected with HIV and other STDs:** from 12.5% to 61.7% across states (median: 32.8%), from 10.7% to 79.1% across cities (median: 60.7%), and from 64.0% to 81.8% across territories (median: 69.1%).
  - **Implementing health education strategies using prevention messages that are likely to be effective in reaching youth:** from 17.1% to 56.3% across states (median: 36.3%), from 10.7% to 76.7% across cities

(median: 51.1%), and from 56.0% to 85.7% across territories (median: 65.2%).

- **All four of these topics:** from 7.6% to 46.2% across states (median: 24.1%), from 8.9% to 69.7% across cities (median: 48.4%), and from 48.0% to 66.7% across territories (median: 60.4%).

Lead health education teachers also received professional development during the two years before the survey on other specific topics related to HIV prevention. The percentage of schools in which the lead health education teacher received professional development on these topics ranged as follows (Table 21a, b):

- **Teaching HIV prevention education to students with physical, mental, or cognitive disabilities:** from 7.0% to 32.2% across states (median: 17.2%), from 12.5% to 52.2% across cities (median: 36.8%), and from 27.3% to 52.0% across territories (median: 31.0%).
- **Teaching HIV prevention education to students of various cultural backgrounds:** from 7.5% to 36.6% across states (median: 19.1%), from 12.5% to 63.5% across cities (median: 48.8%), and from 56.0% to 100.0% across territories (median: 65.2%).
- **Using interactive teaching methods, such as role plays or cooperative group activities, for HIV prevention education:** from 9.8% to 54.4% across states (median: 28.0%), from 28.6% to 96.4% across cities (median: 57.6%), and from 50.0% to 85.7% across territories (median: 65.8%).
- **Teaching essential skills for health behavior change related to HIV prevention and guiding student practice of these skills:** from 9.5% to 52.4% across states (median: 28.9%), from 31.9% to 100.0% across cities (median: 55.0%), and from 50.0% to 72.7% across territories (median: 67.7%).
- **Teaching about health-promoting social norms and beliefs related to HIV prevention:** from 8.1% to 50.4% across states (median: 27.6%), from 16.1% to 75.1% across cities (median: 57.5%), and from 60.0% to 100.0% across territories (median: 69.7%).
- **Strategies for involving parents, families, and others in student learning of HIV prevention education:** from 6.6% to 36.5% across states (median: 17.2%), from 10.7% to 63.3% across cities (median: 33.3%), and from 16.7% to 57.1% across territories (median: 39.7%).
- **Assessing students' performance in HIV prevention education:** from 8.4% to 39.0% across states (median: 22.0%), from 22.5% to 98.2% across cities (median: 41.5%), and from 33.3% to 85.7% across territories (median: 53.3%).
- **Implementing standards-based HIV prevention education curriculum and student assessment:** from 9.1% to 48.7% across states (median: 24.8%), from 29.1% to 100.0% across cities (median: 45.1%), and from 45.5% to 60.0% across territories (median: 49.0%).
- **Using technology to improve HIV prevention education instruction:** from 8.7% to 37.5% across states (median: 20.8%), from 16.1% to 56.9% across cities (median: 47.4%), and from 16.7% to 54.5% across territories (median: 36.7%).
- **Teaching HIV prevention education to students with limited English proficiency:** from 4.7% to 24.7% across states (median: 11.4%), from 8.9% to 53.4% across cities (median: 28.1%), and from 27.3% to 85.7% across territories (median: 42.7%).
- **Addressing community concerns and challenges related to HIV prevention education:** from 5.1% to 32.9% across states (median: 14.6%), from 12.5% to 53.6% across cities (median: 35.6%), and from 52.0% to 72.7% across territories (median: 65.7%).

- **At least six of these 11 topics:** from 5.6% to 35.4% across states (median: 19.1%), from 12.7% to 65.2% across cities (median: 42.1%), and from 50.0% to 85.7% across territories (median: 57.8%).

Lead health education teachers also received professional development during the two years before the survey on specific teaching methods. The percentage of schools in which the lead health education teacher received professional development on specific teaching methods ranged as follows (Table 22):

- **Teaching students with physical, medical, or cognitive disabilities:** from 26.5% to 59.7% across states (median: 40.3%), from 19.7% to 58.8% across cities (median: 35.5%), and from 27.3% to 64.0% across territories (median: 39.3%).
- **Teaching students of various cultural backgrounds:** from 12.2% to 59.2% across states (median: 35.2%), from 31.5% to 71.4% across cities (median: 50.3%), and from 36.4% to 83.3% across territories (median: 65.7%).
- **Teaching students with limited English proficiency:** from 6.6% to 68.0% across states (median: 22.6%), from 12.6% to 95.0% across cities (median: 49.3%), and from 9.1% to 83.3% across territories (median: 75.7%).
- **Using interactive teaching methods, such as role plays or cooperative group activities:** from 36.6% to 68.7% across states (median: 53.0%), from 43.6% to 100.0% across cities (median: 62.5%), and from 27.3% to 100.0% across territories (median: 80.9%).
- **Encouraging family or community involvement:** from 20.0% to 65.2% across states (median: 32.7%), from 21.7% to 60.0% across cities (median: 40.7%), and from 9.1% to 56.0% across territories (median: 46.5%).
- **Teaching skills for behavior change:** from 31.7% to 57.2% across states (median: 45.1%), from 36.3% to 100.0% across cities (median: 55.0%), and from 18.2% to 71.4% across territories (median: 62.5%).
- **Classroom management techniques, such as social skills training, environmental modification, conflict resolution and mediation, and behavior management:** from 38.5% to 76.2% across states (median: 56.3%), from 40.1% to 100.0% across cities (median: 58.5%), and from 36.4% to 85.7% across territories (median: 77.7%).
- **Assessing or evaluating students in health education:** from 21.9% to 60.5% across states (median: 35.2%), from 15.4% to 100.0% across cities (median: 40.0%), and from 9.1% to 71.4% across territories (median: 65.4%).

The percentage of all schools in which the lead health education teacher wanted to receive professional development on specific teaching methods ranged as follows (Table 23):

- **Teaching students with physical, medical, or cognitive disabilities:** from 48.2% to 76.2% across states (median: 62.3%), from 42.5% to 92.4% across cities (median: 73.7%), and from 85.7% to 100.0% across territories (median: 93.5%).
- **Teaching students of various cultural backgrounds:** from 36.9% to 69.7% across states (median: 57.5%), from 37.4% to 90.3% across cities (median: 73.0%), and from 83.3% to 100.0% across territories (median: 84.9%).
- **Teaching students with limited English proficiency:** from 26.0% to 70.4% across states (median: 52.0%), from 37.4% to 83.3% across cities (median: 67.5%), and from 71.4% to 100.0% across territories (median: 84.0%).

- **Using interactive teaching methods, such as role plays or cooperative group activities:** from 51.5% to 77.9% across states (median: 64.7%), from 40.0% to 86.1% across cities (median: 73.5%), and from 66.7% to 92.0% across territories (median: 81.2%).
- **Encouraging family or community involvement:** from 56.6% to 80.4% across states (median: 69.8%), from 48.8% to 89.9% across cities (median: 76.0%), and from 83.3% to 100.0% across territories (median: 88.9%).
- **Teaching skills for behavior change:** from 67.9% to 86.9% across states (median: 75.7%), from 50.0% to 92.7% across cities (median: 80.6%), and from 66.7% to 100.0% across territories (median: 88.9%).
- **Classroom management techniques:** from 52.6% to 80.4% across states (median: 66.6%), from 0.0% to 89.1% across cities (median: 71.5%), and from 66.7% to 100.0% across territories (median: 88.9%).
- **Assessing or evaluating students in health education:** from 60.5% to 83.8% across states (median: 72.7%), from 50.0% to 86.3% across cities (median: 72.4%), and from 50.0% to 100.0% across territories (median: 88.9%).

## 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. The percentage of schools that required physical education for students in any of grades 6 through 12 ranged from 52.4% to 100.0% across states (median: 97.1%) and from 55.1% to 100.0% across cities (median: 94.2%). Across territories, 100.0% of schools required physical education for students in any of grades 6 through 12 (Table 24).

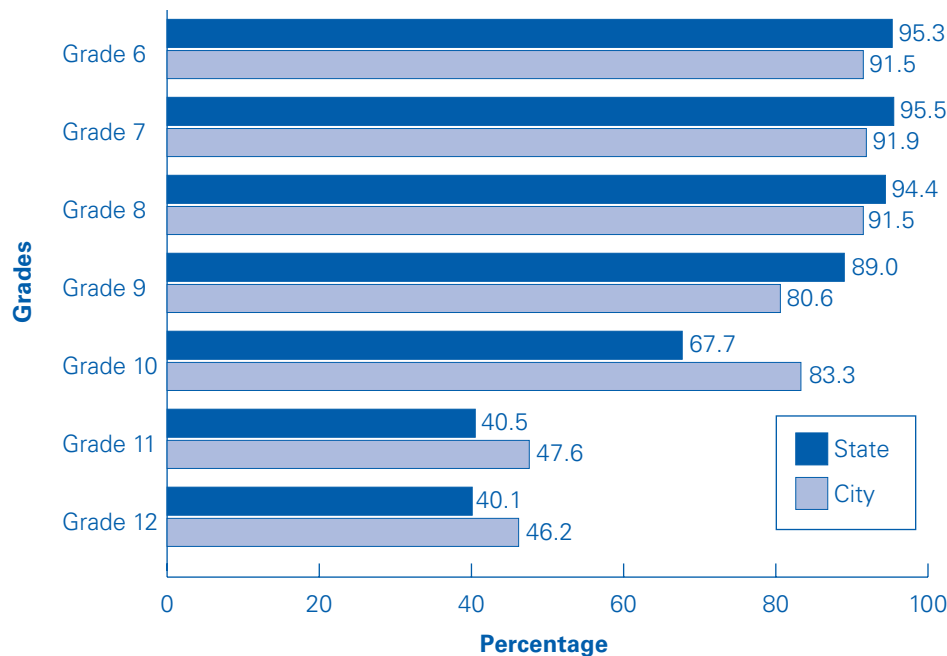
Among schools with students in particular grades, the percentage of schools across states that taught a required physical education course in that grade ranged from 49.2% to 100.0% (median: 95.3%) in grade 6, 47.8% to 100.0% (median: 95.5%) in grade 7, 48.6% to 100.0% (median: 94.4%) in grade 8, 6.8% to 100.0% (median: 89.0%) in grade 9, 6.4% to 100.0% (median: 67.7%) in grade 10, 6.4% to 100.0% (median: 40.5%) in grade 11, and from 6.4% to 100.0% (median: 40.1%) in grade 12 (Table 25, 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 37.7% to 100.0% (median: 91.5%) in grade 6, 26.7% to 100.0% (median: 91.9%) in grade 7, 25.1% to 100.0% (median: 91.5%) in grade 8, 31.8% to 100.0% (median: 80.6%) in grade 9, 30.0% to 100.0% (median: 83.3%) in grade 10, 19.4% to 100.0% (median: 47.6%) in grade 11, and from 20.0% to 100.0% (median: 46.2%) in grade 12 (Table 25, Figure 3).

Among schools with students in particular grades, the percentage of schools across territories that taught a required physical education course in that grade ranged from 87.0% to 100.0% (median: 100.0%) in grade 6, 85.7% to 100.0% (median: 93.5%) in grade 7, 57.1% to 100.0% (median: 93.2%) in grade 8, 100.0% to 100.0% (median: 100.0%) in grade 9, 75.0% to 100.0% (median: 100.0%) in grade 10, 50.0% to 100.0% (median: 58.4%) in grade 11, and from 50.0% to 100.0% (median: 58.4%) in grade 12 (Table 25).

Among schools that required physical education for students in any of grades 6 through 12, the percentage of schools that allowed students to be exempted from required physical education for specific reasons ranged as follows (Table 26):

- **Religious reasons:** from 19.4% to 62.3% across states (median: 38.2%), from 26.8% to 60.1% across cities (median: 48.2%), and from 0.0% to 50.0% across territories (median: 24.5%).

FIGURE 3. Median percentage of schools that taught a required physical education course in each grade,\*  
School Health Profiles, 2008



\*Among schools with students in each grade.

- **Long-term physical or medical disability:** from 61.5% to 94.2% across states (median: 81.5%), from 69.5% to 97.7% across cities (median: 79.0%), and from 61.5% to 83.3% across territories (median: 76.6%).
- **Cognitive disability:** from 15.7% to 61.0% across states (median: 31.0%), from 8.5% to 57.3% across cities (median: 32.9%), and from 14.3% to 66.7% across territories (median: 47.1%).
- **Enrollment in other courses (i.e., math or science):** from 1.1% to 48.0% across states (median: 19.2%), from 0.0% to 68.1% across cities (median: 18.8%), and from 0.0% to 26.9% across territories (median: 7.2%).
- **Participation in school sports:** from 0.0% to 78.5% across states (median: 6.9%), from 0.0% to 42.3% across cities (median: 9.5%), and from 0.0% to 33.3% across territories (median: 29.7%).
- **Participation in other school activities (i.e., ROTC, band, or chorus):** from 0.0% to 57.6% across states (median: 10.4%), from 2.3% to 64.6% across cities (median: 38.4%), and from 0.0% to 42.9% across territories (median: 20.7%).
- **Participation in community sports activities:** from 0.0% to 26.1% across states (median: 2.8%), from 0.0% to 15.3% across cities (median: 4.5%), and from 0.0% to 15.4% across territories (median: 7.2%).
- **High physical fitness competency test score:** from 0.0% to 15.9% across states (median: 1.4%), from 0.0% to 17.3% across cities (median: 3.4%), and from 0.0% to 7.7% across territories (median: 0.0%).
- **Participation in vocational training:** from 0.7% to 16.0% across states (median: 3.5%), from 0.0% to 14.1% across cities (median: 4.9%), and from 0.0% to 11.5% across territories (median: 0.0%).

- **Participation in community service activities:** from 0.0% to 10.5% across states (median: 1.9%), from 0.0% to 8.8% across cities (median: 3.4%), and from 0.0% to 7.7% across territories (median: 0.0%).

The percentage of schools that did not allow students in any of grades 6 through 12 to be exempted from required physical education 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 14.0% to 95.6% across states (median: 71.6%), from 9.3% to 85.6% across cities (median: 54.3%), and from 28.6% to 81.8% across territories (median: 66.1%) (Table 26).

### Certification and Professional Development

Certification and professional development for physical education teachers is an important component of a quality physical education program. The percentage of schools that required newly hired staff who teach physical education to be certified, licensed, or endorsed by the state in physical education ranged from 41.7% to 98.8% across states (median: 90.1%), from 87.3% to 100.0% across cities (median: 95.6%), and from 76.0% to 100.0% across territories (median: 87.1%) (Table 24). The percentage of schools in which at least one physical education teacher or specialist at the school received professional development on physical education during the two years before the survey ranged from 39.4% to 100.0% across states (median: 96.2%), from 79.7% to 100.0% across cities (median: 97.3%), and from 0.0% to 81.8% across territories (median: 41.7%) (Table 24).

### Materials for Physical Education Teachers

Schools can provide materials to physical education teachers to help them teach. The percentage of schools that provided the following materials to those who teach physical education ranged as follows (Table 27):

- **Goals, objectives, and expected outcomes for physical education:** from 79.4% to 100.0% across states (median: 95.4%), from 91.7% to 100.0% across cities (median: 98.1%), and from 83.3% to 100.0% across territories (median: 96.2%).
- **A chart describing the annual scope and sequence of instruction for physical education:** from 47.4% to 93.6% (median: 79.3%) across states, from 63.9% to 98.0% across cities (median: 90.6%), and from 65.4% to 83.3% across territories (median: 72.1%).
- **Plans for how to assess student performance in physical education:** from 55.6% to 97.1% across states (median: 80.8%), from 76.4% to 100.0% across cities (median: 96.0%), and from 71.4% to 83.3% across territories (median: 74.8%).
- **A written physical education curriculum:** from 60.7% to 98.4% across states (median: 86.2%), from 66.4% to 100.0% across cities (median: 93.7%), and from 80.0% to 100.0% across territories (median: 88.3%).
- **All four types of materials:** from 37.9% to 92.0% across states (median: 68.8%), from 50.7% to 96.0% across cities (median: 86.4%), and from 42.9% to 83.3% across territories (median: 57.8%).

### Physical Activity

To promote physical activity, schools may offer students the opportunity to participate in intramural activities or physical activity clubs. These were defined on the questionnaire as any physical activity programs that are voluntary for students, in which students are given an equal opportunity to participate regardless of physical ability. The percentage of schools that offered opportunities for students to participate in intramural activities or physical activity clubs ranged from 40.1% to 85.1% across states (median: 66.0%), from 63.1% to 100.0%

across cities (median: 83.9%), and from 80.0% to 100.0% across territories (median: 94.3%) (Table 24).

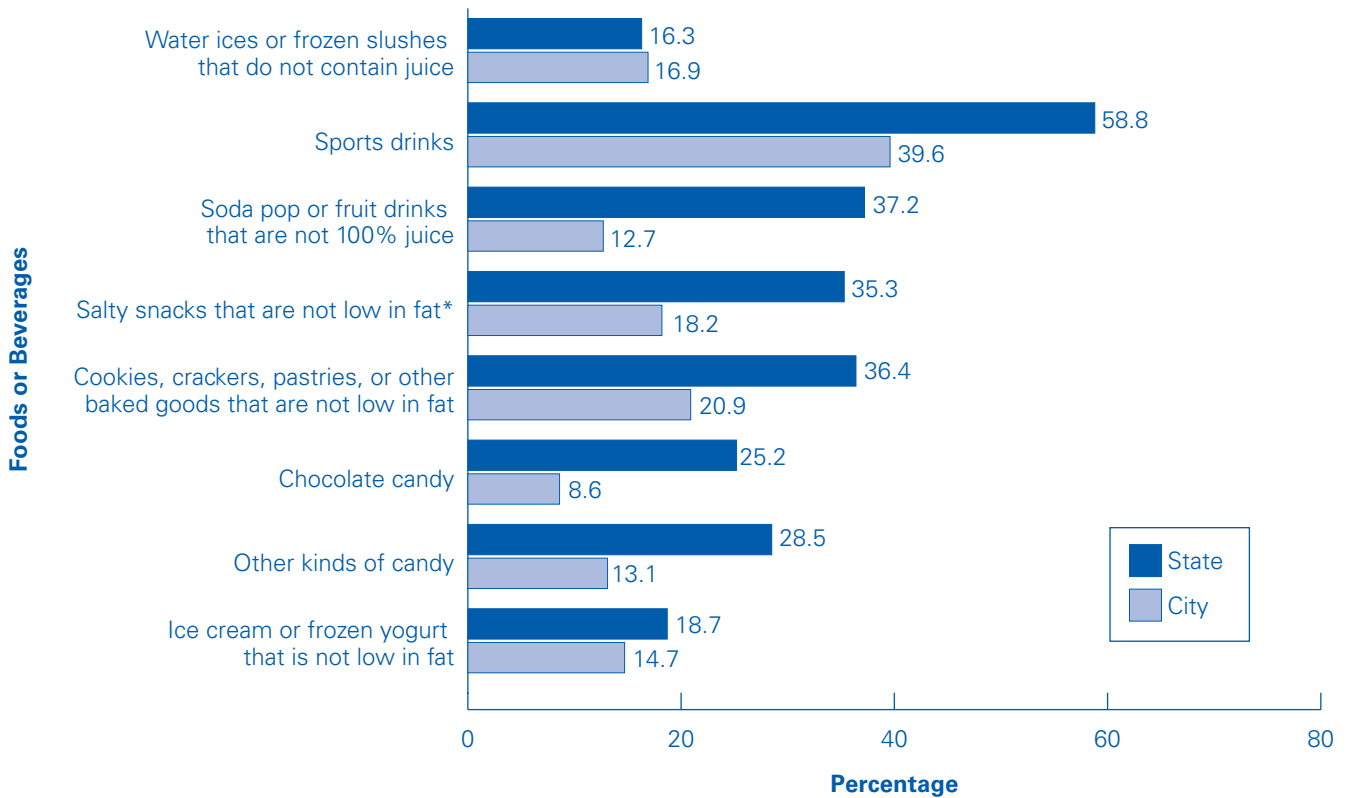
## HEALTHY AND SAFE SCHOOL ENVIRONMENT

### Nutrition-Related Policies and Practices

The school nutrition environment includes not only the federal school meal programs, but also foods and beverages sold at school separately from these programs. The percentage of 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 47.8% to 90.8% across states (median: 78.1%), from 24.0% to 90.2% across cities (median: 73.8%), and from 0.0% to 57.1% across territories (median: 48.4%) (Table 28). The percentage of schools that limited the package or serving size of any individual food or beverage items sold in vending machines or at the school store, canteen, or snack bar ranged from 20.4% to 78.7% across states (median: 46.9%), from 6.5% to 66.7% across cities (median: 43.3%), and from 0.0% to 42.9% across territories (median: 23.9%) (Table 28). The percentage of 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 29, Figure 4):

- **2% or whole milk (plain or flavored):** from 12.0% to 59.4% across states (median: 37.9%), from 3.5% to 74.3% across cities (median: 33.9%), and from 0.0% to 45.5% across territories (median: 19.9%).
- **Foods or beverages containing caffeine:** from 4.2% to 61.2% across states (median: 34.0%), from 2.1% to 50.8% across cities (median: 9.6%), and from 0.0% to 34.6% across territories (median: 0.0%).
- **Ice cream or frozen yogurt that is not low in fat:** from 3.6% to 40.9% across states (median: 18.7%), from 0.0% to 72.0% across cities (median: 14.7%), and from 0.0% to 18.2% across territories (median: 7.7%).
- **Sports drinks, such as Gatorade:** from 15.2% to 77.3% across states (median: 58.8%), from 7.5% to 84.5% across cities (median: 39.6%), and from 0.0% to 45.5% across territories (median: 36.9%).
- **Water ices or frozen slushes that do not contain juice:** from 5.9% to 29.5% across states (median: 16.3%), from 3.6% to 64.1% across cities (median: 16.9%), and from 0.0% to 23.1% across territories (median: 7.2%).
- **Cookies, crackers, cakes, pastries, or other baked goods that are not low in fat:** from 5.3% to 72.1% across states (median: 36.4%), from 8.7% to 57.1% across cities (median: 20.9%), and from 0.0% to 30.8% across territories (median: 11.7%).
- **Salty snacks that are not low in fat, such as regular potato chips:** from 9.0% to 71.9% across states (median: 35.3%), from 4.9% to 67.1% across cities (median: 18.2%), and from 0.0% to 26.9% across territories (median: 7.2%).
- **Chocolate candy:** from 2.5% to 75.0% across states (median: 25.2%), from 0.0% to 53.3% across cities (median: 8.6%), and from 0.0% to 26.9% across territories (median: 7.2%).
- **Other kinds of candy:** from 5.5% to 77.0% across states (median: 28.5%), from 0.0% to 61.1% across cities (median: 13.1%), and from 0.0% to 30.8% across territories (median: 7.2%).
- **Soda pop or fruit drinks that are not 100% juice:** from 7.2% to 74.4% across states (median: 37.2%), from 5.6% to 66.9% across cities (median: 12.7%), and from 0.0% to 42.3% across territories (median: 7.2%).

FIGURE 4. Median percentage of schools that allowed students to purchase less nutritious snack foods or beverages, School Health Profiles, 2008



\*Such as regular potato chips.

The percentage of schools that did not sell baked goods that are not low in fat, salty snacks that are not low in fat, candy, or soda pop or fruit drinks that are not 100% juice in vending machines or at the school store, canteen, or snack bar ranged from 12.6% to 75.0% across states (median: 46.2%), from 24.1% to 85.2% across cities (median: 72.0%), and from 57.7% to 100.0% across territories (median: 81.2%) (Table 29).

The percentage of schools that allowed students to purchase fruits (not fruit juice) from vending machines or at the school store, canteen, or snack bar ranged from 8.3% to 52.5% across states (median: 32.8%), from 7.0% to 59.5% across cities (median: 34.2%), and from 0.0% to 42.9% across territories (median: 20.0%), and the percentage of schools that allowed students to purchase non-fried vegetables (not vegetable juice) from these venues ranged from 5.1% to 40.2% across states (median: 22.3%), from 3.5%

to 47.3% across cities (median: 23.5%), and from 0.0% to 19.2% across territories (median: 11.7%) (Table 28). The percentage of schools that always or almost always offered fruits or non-fried vegetables when foods and beverages are offered at school celebrations ranged from 14.7% to 47.1% across states (median: 34.3%), from 27.5% to 59.0% across cities (median: 40.0%), and from 16.7% to 63.6% across territories (median: 27.8%) (Table 28). The percentage of schools that made fruits and vegetables available in vending machines or at the school store, canteen, or snack bar and at school celebrations ranged from 1.9% to 24.5% across states (median: 12.8%), from 3.6% to 29.8% across cities (median: 14.8%), and from 0.0% to 14.3% across territories (median: 5.8%) (Table 28).

The percentage of schools that implemented strategies to promote healthy eating during the 2007–2008 school year ranged as follows (Table 30):



- **Priced nutritious foods and beverages at a lower cost while increasing the price of less nutritious foods and beverages:** from 1.7% to 28.7% across states (median: 11.0%), from 0.0% to 20.9% across cities (median: 9.9%), and from 0.0% to 14.3% across territories (median: 4.6%).
  - **Collected suggestions from students, families, and school staff on nutritious food preferences and strategies to promote healthy eating:** from 29.0% to 70.4% across states (median: 49.4%), from 14.5% to 70.5% across cities (median: 46.3%), and from 9.1% to 57.1% across territories (median: 39.0%).
  - **Provided information to students or families on the nutrition and caloric content of foods available:** from 23.7% to 66.1% across states (median: 48.9%), from 31.1% to 62.9% across cities (median: 46.1%), and from 18.2% to 71.4% across territories (median: 57.4%).
  - **Conducted taste tests to determine food preferences for nutritious items:** from 6.1% to 46.6% across states (median: 18.7%), from 10.3% to 55.2% across cities (median: 18.8%), and from 0.0% to 28.6% across territories (median: 17.8%).
  - **Provided opportunities for students to visit the cafeteria to learn about food safety, food preparation, and other nutrition-related topics:** from 10.6% to 35.2% across states (median: 18.2%), from 8.7% to 33.9% across cities (median: 20.7%), and from 16.7% to 57.1% across territories (median: 27.9%).
  - **Implemented at least three of these five strategies during the 2007–2008 school year:** from 6.4% to 39.8% across states (median: 21.6%), from 8.4% to 41.8% across cities (median: 21.2%), and from 9.1% to 42.9% across territories (median: 16.7%).
- Another important aspect of the school nutrition environment is advertisements for and promotion of candy, fast food restaurants, and soft drinks. The percentage of schools that promoted candy, meals from fast food restaurants, or soft drinks through the distribution of products such as t-shirts, hats, and book covers to students ranged from 0.6% to 6.4% across states (median: 2.5%), from 0.0% to 7.7% across cities (median: 3.1%), and from 0.0% to 14.3% across territories (median: 4.0%) (Table 31). The percentage of schools that prohibited advertisements for candy, fast food restaurants, or soft drinks in specific locations ranged as follows (Table 31):
- **In the school building:** from 48.8% to 88.3% across states (median: 68.1%), from 60.8% to 93.6% across cities (median: 78.6%), and from 57.1% to 81.8% across territories (median: 58.9%).
  - **On school grounds, including on the outside of the school building, on playing fields, or other area of the campus:** from 38.5% to 82.9% across states (median: 57.4%), from 54.8% to 93.6% across cities (median: 71.3%), and from 20.0% to 63.6% across territories (median: 57.4%).
  - **On school buses or other vehicles used to transport students:** from 57.4% to 84.8% across states (median: 73.4%), from 58.3% to 85.5% across cities (median: 73.4%), and from 20.0% to 71.4% across territories (median: 60.7%).
  - **In school publications (e.g., newsletters, newspapers, Web sites, or other school publications):** from 46.6% to 83.8% across states (median: 64.2%), from 50.3% to 84.3% across cities (median: 72.4%), and from 40.0% to 72.7% across territories (median: 48.4%).
- The percentage of schools that prohibited advertisements for candy, fast food restaurants, or soft drinks in all locations and did not promote candy, meals from fast

food restaurants, or soft drinks through the distribution of products to students ranged from 30.2% to 75.2% across states (median: 49.5%), from 39.6% to 77.9% across cities (median: 60.8%), and from 20.0% to 54.5% across territories (median: 38.3%) (Table 31).

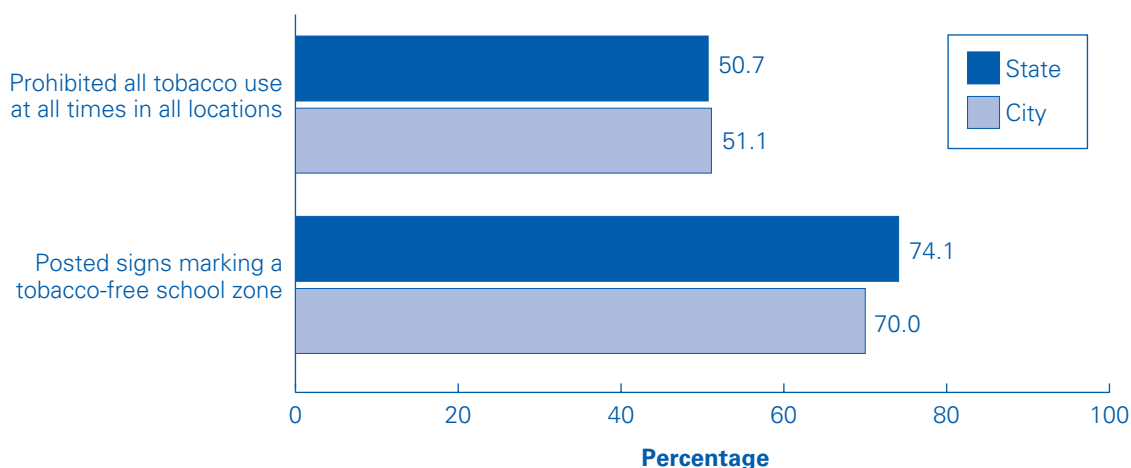
### Tobacco-Use Prevention

Policies prohibiting tobacco use at school can help prevent tobacco use among students. The percentage of schools that had a policy prohibiting tobacco use ranged from 94.2% to 100.0% across states (median: 98.1%), from 76.7% to 100.0% across cities (median: 95.9%), and from 73.1% to 100.0% across territories (median: 100.0%) (Table 32). The percentage of 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; during school hours and non-school hours ranged from 17.8% to 73.4% across states (median: 50.7%), from 17.7% to 98.1% across cities (median: 51.1%), and from 0.0% to 57.1% across territories (median: 20.2%) (Table 32, Figure 5).

Schools may take specific actions when students are caught smoking cigarettes. The percentage of schools that sometimes, almost always, or always took specific actions when students were caught smoking cigarettes ranged as follows (Table 33a, b):

- **Notified parents or guardians:** from 95.4% to 100.0% across states (median: 99.3%), from 89.9% to 100.0% across cities (median: 100.0%), and from 96.2% to 100.0% across territories (median: 100.0%).
- **Referred students to a school counselor:** from 59.7% to 92.3% across states (median: 77.9%), from 63.2% to 100.0% across cities (median: 85.7%), and from 85.7% to 100.0% across territories (median: 96.2%).
- **Referred students to a school administrator:** from 94.9% to 100.0% across states (median: 99.5%), from 91.3% to 100.0% across cities (median: 100.0%), and from 92.3% to 100.0% across territories (median: 100.0%).
- **Encouraged, but not required, students to participate in an assistance, education, or cessation program:** from 34.8% to 81.2% across states (median: 62.9%), from 40.5% to 86.3% across cities (median: 71.9%), and from 50.0% to 100.0% across territories (median: 70.5%).
- **Required students to participate in an assistance, education, or cessation program:** from 15.6% to 69.5% across states (median: 36.8%), from 25.0% to 87.2% across cities (median: 53.0%), and from 28.6% to 83.3% across territories (median: 65.8%).
- **Referred students to legal authorities:** from 13.0% to 96.0% across states (median: 56.6%), from 10.8% to 80.0% across cities (median: 37.7%), and from 33.3% to 53.8% across territories (median: 43.2%).
- **Placed students in detention:** from 44.9% to 75.2% across states (median: 63.3%), from 44.3% to 88.1% across cities (median: 73.5%), and from 40.0% to 92.3% across territories (median: 75.0%).
- **Did not allow students to participate in extra-curricular activities or interscholastic sports:** from 47.9% to 97.4% across states (median: 75.5%), from 35.3% to 81.6% across cities (median: 59.2%), and from 66.7% to 81.8% across territories (median: 74.2%).
- **Gave students in-school suspension:** from 47.6% to 90.1% across states (median: 68.4%), from 37.6% to 91.2% across cities (median: 70.5%), and from 42.9% to 84.0% across territories (median: 65.2%).

FIGURE 5. Median percentage of schools that prohibited all tobacco use at all times in all locations\* and posted signs marking a tobacco-free school zone†, School Health Profiles, 2008



\* Prohibited the use of all tobacco, including cigarettes, smokeless tobacco, cigars, and pipes; by students, faculty and school staff, and visitors; in school buildings, outside on school grounds, on school buses or other vehicles used to transport students, and at off-campus, school-sponsored events; during school hours and non-school hours.

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

- **Suspended students from school:** from 51.8% to 94.1% across states (median: 78.7%), from 39.4% to 96.9% across cities (median: 79.2%), and from 50.0% to 100.0% across territories (median: 83.9%).
- **Expelled students from school:** from 0.0% to 32.2% across states (median: 8.6%), from 0.0% to 27.6% across cities (median: 9.1%), and from 9.1% to 42.3% across territories (median: 33.3%).
- **Reassigned students to an alternative school:** from 0.0% to 42.2% across states (median: 9.0%), from 0.0% to 40.8% across cities (median: 9.3%), and from 0.0% to 36.4% across territories (median: 20.1%).

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 97.2% to 100.0% across states (median: 99.0%), from 95.8% to 100.0% across cities (median: 98.5%), and from 90.9% to 100.0% across territories (median: 100.0%) for students; from 86.9% to 100.0% across states (median: 96.5%), from 78.7% to 100.0% across cities (median: 96.8%), and

from 66.7% to 100.0% across territories (median: 89.9%) for faculty and staff; and from 74.4% to 98.2% across states (median: 88.6%), from 76.4% to 97.6% across cities (median: 89.7%), and from 20.0% to 100.0% across territories (median: 82.1%) for visitors (Table 34).

In addition to informing students, faculty and staff, and visitors about the tobacco-use prevention policy, schools can take specific actions to support such a policy. The percentage of schools that took these specific actions ranged as follows (Table 34):

- **Included guidelines in the policy on what actions the school should take when students are caught smoking cigarettes:** from 90.7% to 100.0% across states (median: 97.1%), from 91.5% to 100.0% across cities (median: 97.9%), and from 88.9% to 100.0% across territories (median: 95.5%).
- **Always or almost always notified parents or guardians when students are caught smoking cigarettes:** from 88.1% to 99.6% across states (median: 96.8%), from 79.7% to 100.0% across cities (median: 97.1%), and from 80.8% to 100.0% across territories (median: 87.1%).

- **Used the effect or severity of the violation or repeat offender status to determine actions taken when students are caught smoking cigarettes:** from 28.5% to 70.0% across states (median: 45.5%), from 16.6% to 85.0% across cities (median: 36.4%), and from 28.6% to 85.7% across territories (median: 61.4%).
- **Used remedial rather than punitive sanctions when students are caught smoking cigarettes (i.e., always or almost always took at least one of the following actions: referred to a school counselor; encouraged to participate in an assistance, education, or cessation program; or required to participate in an assistance, education, or cessation program):** from 24.1% to 78.7% across states (median: 47.8%), from 42.5% to 96.7% across cities (median: 59.4%), and from 50.0% to 88.5% across territories (median: 65.2%).
- **Had an individual responsible for enforcing the policy:** from 36.4% to 76.6% across states (median: 56.3%), from 28.7% to 70.0% across cities (median: 45.1%), and from 66.7% to 100.0% across territories (median: 72.5%).
- **Posted signs marking a tobacco-free school zone, that is, a specified distance from school grounds where tobacco use is not allowed:** from 42.0% to 95.6% across states (median: 74.1%), from 44.6% to 96.2% across cities (median: 70.0%), and from 42.3% to 100.0% across territories (median: 76.2%) (Figure 5).
- **Met all seven of these criteria:** from 1.1% to 21.7% across states (median: 7.5%), from 0.0% to 37.7% across cities (median: 5.1%), and from 0.0% to 30.0% across territories (median: 14.9%).

Tobacco cessation efforts are an important component of creating a tobacco-free environment at school. The percentage of schools that provided tobacco cessation services for faculty and staff ranged from 6.1% to 41.7% across

states (median: 15.8%), from 5.1% to 46.5% across cities (median: 20.0%), and from 0.0% to 50.0% across territories (median: 31.6%), and the percentage of schools that provided tobacco cessation services for students ranged from 13.6% to 60.6% across states (median: 32.0%), from 11.0% to 96.3% across cities (median: 34.6%), and from 27.3% to 50.0% across territories (median: 39.3%) (Table 35). The percentage of schools with arrangements with any organizations or health care professionals not on school property to provide tobacco cessation services for faculty and staff ranged from 10.7% to 50.8% across states (median: 26.8%), from 8.4% to 45.2% across cities (median: 25.4%), and from 28.6% to 50.0% across territories (median: 43.2%), and the percentage with such arrangements for students ranged from 19.7% to 61.8% across states (median: 36.7%), from 17.4% to 58.1% across cities (median: 36.4%), and from 57.1% to 90.9% across territories (median: 70.5%) (Table 35). The percentage of schools that provided tobacco cessation services at school or had arrangements with organizations or health care professionals not on school property to provide these services for faculty and staff and students ranged from 10.6% to 47.6% across states (median: 25.5%), from 10.0% to 60.5% across cities (median: 27.3%), and from 28.6% to 66.7% across territories (median: 47.1%) (Table 35).

To enhance tobacco-use prevention efforts, schools should coordinate their messages and programs with community mass-media efforts. The percentage of schools that gathered and shared information with students and families about mass-media messages or community-based tobacco-use prevention efforts during the two years before the survey ranged from 34.1% to 72.4% across states (median: 48.1%), from 30.9% to 77.5% across cities (median: 45.0%), and from 27.3% to 71.4% across territories (median: 48.1%) (Table 36). The percentage of schools that worked with local agencies or organizations to plan and implement events or programs intended to reduce tobacco use during the two years before the survey ranged from 35.6% to 83.8% across

states (median: 54.3%), from 26.6% to 71.2% across cities (median: 48.1%), and from 57.1% to 83.3% across territories (median: 67.1%) (Table 36). The percentage of schools that conducted both of these activities during the two years before the survey ranged from 22.9% to 65.5% across states (median: 39.0%), from 17.2% to 64.8% across cities (median: 32.9%), and from 27.3% to 50.0% across territories (median: 44.6%) (Table 36).

## HEALTH SERVICES

Schools can support student success by providing health services to students. Schools with a full-time nurse have a nurse at the school during all school hours, 5 days per week. The percentage of schools that had a full-time registered nurse who provided health services to students ranged from 3.8% to 99.1% across states (median: 40.2%), from 9.8% to 100.0% across cities (median: 67.3%), and from 3.8% to 90.9% across territories (median: 17.2%) (Table 37, Figure 6).

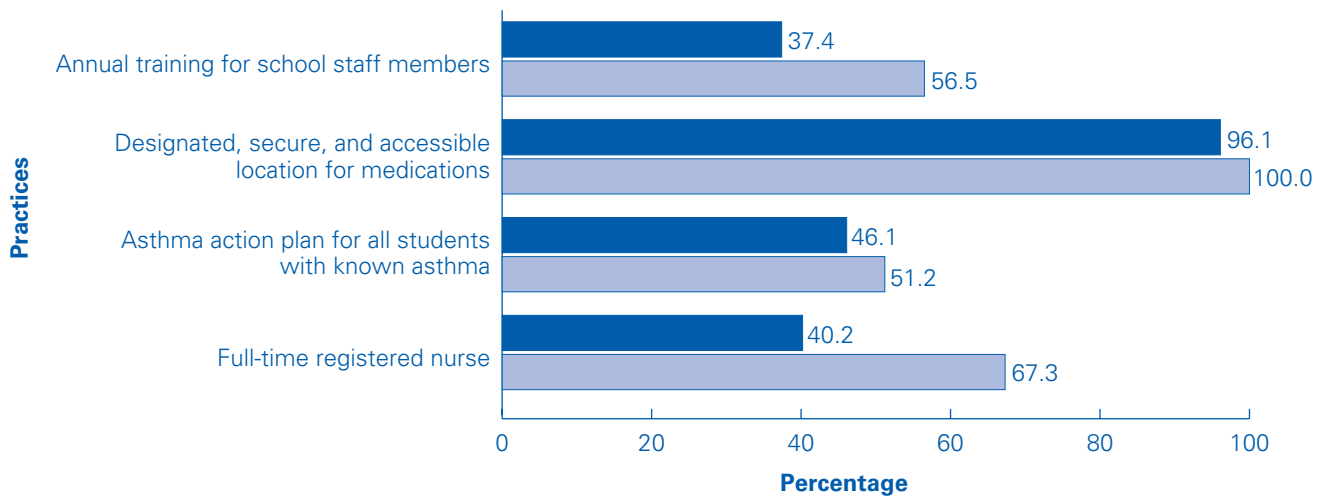
Students with known asthma are those identified by the school to have a current diagnosis of asthma as reported on student emergency cards, medication records, health room visit information, emergency care plans, physical exam forms, parent notes, and other forms of health-care clinician notification. The percentage of schools that had an asthma action plan on file for all students with known asthma ranged from 27.0% to 77.3% across states (median: 46.1%), from 22.2% to 80.3% across cities (median: 51.2%), and from 0.0% to 18.2% across territories (median: 15.5%) (Table 37, Figure 6). The percentage of schools that had a designated and secure storage location accessible at all times by the school nurse or her designee for medications, including quick-relief asthma medications, ranged from 62.9% to 100.0% across states (median: 96.1%), from 67.8% to 100.0% across cities (median: 100.0%), and from 3.8% to 100.0% across territories (median: 22.7%) (Table 37, Figure 6). The percentage of schools in which school staff members were required to receive training at least

once per year on recognizing and responding to severe asthma symptoms ranged from 11.6% to 74.5% across states (median: 37.4%), from 30.9% to 90.3% across cities (median: 56.5%), and from 12.5% to 50.0% across territories (median: 23.4%) (Table 37, Figure 6).

The percentage of schools that used specific sources of school health information to identify students diagnosed with chronic health conditions such as asthma ranged as follows (Table 38):

- **Student emergency cards:** from 37.1% to 100.0% across states (median: 84.0%), from 44.8% to 100.0% across cities (median: 89.3%), and from 30.8% to 100.0% across territories (median: 57.2%).
- **Medication records:** from 55.0% to 92.5% across states (median: 82.1%), from 59.4% to 93.9% across cities (84.5%), and from 16.7% to 63.6% across territories (median: 56.6%).
- **Health room visit information:** from 8.1% to 80.5% across states (median: 43.8%), from 12.0% to 82.5% across cities (median: 45.0%), and from 7.7% to 18.2% across territories (median: 14.3%).
- **Emergency care plans:** from 24.1% to 79.5% across states (median: 58.4%), from 6.3% to 68.5% across cities (median: 37.6%), and from 0.0% to 28.6% across territories (median: 4.6%).
- **Physical exam records:** from 21.6% to 82.5% across states (median: 50.4%), from 22.0% to 85.0% across cities (median: 38.8%), and from 24.0% to 81.8% across territories (median: 45.2%).
- **Notes from parents:** from 78.2% to 93.5% across states (median: 86.9%), from 75.2% to 93.4% across cities (median: 85.2%), and from 16.7% to 90.9% across territories (median: 82.5%).

FIGURE 6. Median percentage of schools with specific asthma management practices, School Health Profiles, 2008



- **Other sources:** from 12.6% to 39.7% across states (median: 18.3%), from 11.5% to 43.5% across cities (median: 19.9%), and from 0.0% to 28.6% across territories (median: 20.7%).

- **At least two of these seven sources:** from 83.6% to 98.3% across states (median: 94.6%), from 83.9% to 100.0% across cities (median: 93.6%), and from 25.0% to 90.9% across territories (median: 78.2%).

The percentage of schools that used specific types of information to identify students with poorly controlled asthma ranged as follows (Table 39):

- **Frequent absences from school:** from 16.1% to 58.4% across states (median: 37.5%), from 28.4% to 65.0% across cities (median: 46.9%), and from 29.2% to 63.6% across territories (median: 57.1%).

- **Frequent visits to the school health office due to asthma:** from 14.1% to 86.5% across states (median: 63.5%), from 14.9% to 92.6% across cities (median: 69.9%), and from 0.0% to 63.6% across territories (median: 25.3%).

- **Frequent asthma symptoms at school:** from 33.0% to 79.6% across states (median: 60.5%), from 43.5% to 86.3% across cities (median: 59.1%), and from 0.0% to 71.4% across territories (median: 29.8%).

- **Frequent non-participation in physical education class due to asthma:** from 22.0% to 59.5% across states (median: 41.7%), from 20.5% to 70.3% across cities (median: 42.0%), and from 14.3% to 71.4% across territories (median: 29.1%).

- **Students sent home early due to asthma:** from 15.2% to 59.8% across states (median: 43.1%), from 30.2% to 69.9% across cities (median: 47.3%), and from 14.3% to 57.1% across territories (median: 34.1%).

- **Calls from school to 911, or other local emergency numbers, due to asthma:** from 6.3% to 44.5% across states (median: 23.1%), from 13.3% to 54.9% across cities (median: 33.2%), and from 0.0% to 36.4% across territories (median: 11.5%).

- **At least three of these six types of information:** from 40.4% to 81.7% across states (median: 65.4%), from 38.6% to 92.0% across cities (median: 68.4%), and from 0.0% to 100.0% across territories (median: 52.8%).

The percentage of schools that provided specific services for students with poorly controlled asthma ranged as follows (Table 40a, b):

- **Provided referrals to primary health care clinicians or child health insurance programs:** from 25.1% to 89.0% across states (median: 57.7%), from 46.0% to 92.2% across cities (median: 76.2%), and from 16.7% to 63.6% across territories (median: 23.8%).
- **Ensured an appropriate written asthma action plan is obtained:** from 43.3% to 92.8% across states (median: 76.7%), from 47.6% to 97.6% across cities (median: 77.5%), and from 15.4% to 28.6% across territories (median: 17.5%).
- **Ensured access to and appropriate use of asthma medications, spacers, and peak flow meters at school:** from 48.8% to 93.6% across states (median: 83.3%), from 56.6% to 100.0% across cities (median: 81.5%), and from 11.5% to 63.6% across territories (median: 18.4%).
- **Offered asthma education for the student with asthma and his/her family:** from 14.6% to 78.2% across states (median: 47.1%), from 29.6% to 86.2% across cities (median: 54.7%), and from 0.0% to 16.7% across territories (median: 12.3%).
- **Minimized asthma triggers in the school environment:** from 47.7% to 86.9% across states (median: 71.3%), from 52.9% to 87.3% across cities (median: 69.5%), and from 14.3% to 54.5% across territories (median: 19.9%).
- **Addressed social and emotional issues related to asthma:** from 25.1% to 75.5% across states (median: 49.5%), from 41.0% to 83.9% across cities (median: 58.9%), and from 0.0% to 60.0% across territories (median: 38.8%).
- **Provided additional psychosocial counseling or support services as needed:** from 22.3% to 76.1% across states (median: 46.5%), from 50.5% to 78.6% across cities (median: 59.4%), and from 16.7% to 45.5% across territories (median: 19.6%).
- **Ensured access to safe, enjoyable physical education and activity opportunities:** from 64.9% to 97.6% across states (median: 88.3%), from 71.3% to 100.0% across cities (median: 87.8%), and from 0.0% to 90.9% across territories (median: 39.3%).
- **Ensured access to preventive medications before physical activity:** from 54.5% to 97.6% across states (median: 84.8%), from 57.6% to 96.9% across cities (median: 78.8%), and from 0.0% to 72.7% across territories (median: 35.5%).
- **All nine of these services:** from 5.1% to 41.6% across states (median: 19.5%), from 9.6% to 54.8% across cities (median: 26.9%), and from 0.0% to 7.7% across territories (median: 0.0%).

The percentage of schools that had adopted a policy stating that students are permitted to carry and self-administer asthma medications ranged from 46.3% to 88.6% across states (median: 76.5%), from 29.2% to 80.6% across cities (median: 70.5%), and from 3.8% to 28.6% across territories (median: 17.5%) (Table 41). Among these schools, the percentage that had procedures to inform students about the school's policy ranged from 80.7% to 99.2% across states (median: 92.6%), from 81.9% to 100.0% across cities (median: 91.6%), and from 0.0% to 100.0% across territories (median: 75.0%), and the percentage that had procedures to inform parents/families about the school's policy ranged from 81.1% to 98.4% across states (median: 92.5%), from 75.9% to 100.0% across cities (median: 91.2%), and from 0.0% to 100.0% across territories (median: 75.0%) (Table 41). Among schools with a policy, the percentage that had

an individual responsible for implementing the policy ranged from 66.7% to 95.0% across states (median: 78.0%), from 51.1% to 100.0% across cities (median: 79.1%), and from 0.0% to 100.0% across territories (median: 50.0%) (Table 41). The percentage of schools that had adopted a policy, had procedures to inform students and parents/families about the policy, and had an individual responsible for implementing the policy ranged from 25.6% to 70.7% across states (median: 53.4%), from 17.8% to 58.6% across cities (median: 43.5%), and from 0.0% to 14.3% across territories (median: 4.6%) (Table 41).

### SCHOOL HEALTH COORDINATION

To help with coordination of school health, schools may have an individual who oversees school health and safety programs or a school health council, committee, or team. The percentage of schools in which someone at the school oversees or coordinates school health and safety programs and activities ranged from 75.5% to 98.5% across states (median: 90.6%), from 78.8% to 100.0% across cities (median: 94.2%), and from 72.7% to 85.7% across territories (median: 83.3%) (Table 42). The percentage of schools with one or more than one group at the school that offers guidance on the development of policies or coordinates activities on health topics (e.g., a school health council, committee, or team) ranged from 33.5% to 82.5% across states (median: 61.9%), from 35.3% to 84.4% across cities (median: 59.0%), and from 36.4% to 100.0% across territories (median: 66.5%) (Table 43a). Among schools with school health councils, the percentage in which specific groups were represented on any council, committee, or team ranged as follows (Table 43a, b):

- **School administration:** from 86.3% to 100.0% across states (median: 94.5%) and from 83.7% to 100.0% across cities (median: 92.0%). Across territories, 100.0% of schools with councils had this group represented.
- **Health education teachers:** from 64.6% to 98.7% across states (median: 90.5%), from 55.6% to 100.0% across cities (median: 85.0%), and from 92.9% to 100.0% across territories (median: 100.0%).
- **Physical education teachers:** from 70.8% to 98.7% across states (median: 90.7%) and from 67.7% to 100.0% across cities (median: 92.0%). Across territories, 100.0% of schools with councils had this group represented.
- **Mental health or social services staff:** from 29.3% to 75.4% across states (median: 50.0%), from 50.8% to 96.1% across cities (median: 76.7%), and from 42.9% to 80.0% across territories (median: 66.1%).
- **Nutrition or food service staff:** from 43.9% to 93.4% across states (median: 73.0%), from 15.9% to 87.4% across cities (median: 61.5%), and from 0.0% to 50.0% across territories (median: 46.5%).
- **Health services staff (e.g., school nurse):** from 28.9% to 95.3% across states (median: 81.2%), from 44.9% to 100.0% across cities (median: 84.6%), and from 20.0% to 100.0% across territories (median: 39.3%).
- **Maintenance and transportation staff:** from 12.8% to 35.8% across states (median: 20.9%), from 0.0% to 45.4% across cities (median: 19.7%), and from 0.0% to 50.0% across territories (median: 21.5%).
- **Student body:** from 30.2% to 86.4% across states (median: 48.9%), from 19.2% to 85.1% across cities (median: 56.3%), and from 0.0% to 57.1% across territories (median: 34.0%).
- **Parents or families of students:** from 35.2% to 94.2% across states (median: 64.6%), from 28.6% to 85.1% across cities (median: 58.1%), and from 25.0% to 80.0% across territories (median: 71.4%).



- **Community:** from 32.2% to 77.6% across states (median: 53.6%), from 19.3% to 83.5% across cities (median: 50.4%), and from 0.0% to 85.7% across territories (median: 44.7%).
- **Local health departments, agencies, or organizations:** from 19.1% to 65.9% across states (median: 41.8%), from 19.5% to 61.5% across cities (median: 44.5%), and from 50.0% to 75.0% across territories (median: 58.6%).
- **Faith-based organizations:** from 2.5% to 45.8% across states (median: 9.6%), from 0.0% to 47.8% across cities (median: 14.2%), and from 0.0% to 28.6% across territories (median: 26.8%).
- **Businesses:** from 4.0% to 45.2% across states (median: 18.9%), from 3.1% to 52.2% across cities (median: 22.3%), and from 0.0% to 57.1% across territories (median: 19.7%).
- **Local government:** from 4.8% to 40.1% across states (median: 15.7%), from 0.0% to 40.2% across cities (median: 11.8%), and from 28.6% to 75.0% across territories (median: 41.5%).
- **Ten or more of these groups:** from 3.7% to 35.7% across states (median: 13.8%), from 0.0% to 30.1% across cities (median: 11.9%), and from 0.0% to 28.6% across territories (median: 15.0%).

Wellness policies and self-assessments also play a role in coordinating school health. The Child Nutrition and WIC Reauthorization Act of 2004 requires school districts participating in federally subsidized child nutrition programs (e.g., National School Lunch Program, School Breakfast Program) to establish a local school wellness policy. The percentage of schools that had a copy of their district's wellness policy ranged from 71.0% to 99.0% across states (median: 88.8%), from 45.0% to 97.4% across cities (median: 79.6%), and from 15.4% to

100.0% across territories (median: 41.6%) (Table 42). The percentage of schools that ever used the School Health Index or other self-assessment tool to assess their school's policies, activities, and programs in specific areas ranged as follows (Table 42):

- **Asthma:** from 7.9% to 46.9% across states (median: 21.6%), from 16.8% to 51.0% across cities (median: 31.0%), and from 0.0% to 57.1% across territories (median: 10.6%).
- **Physical activity:** from 23.5% to 75.3% across states (median: 41.2%), from 23.9% to 80.7% across cities (median: 48.4%), and from 18.2% to 100.0% across territories (median: 62.6%).
- **Nutrition:** from 24.4% to 74.3% across states (median: 41.2%), from 25.4% to 70.5% across cities (median: 42.7%), and from 18.2% to 85.7% across territories (median: 56.9%).
- **Tobacco-use prevention:** from 19.9% to 68.3% across states (median: 41.4%), from 18.5% to 64.0% across cities (median: 41.3%), and from 18.2% to 71.4% across territories (median: 53.0%).
- **Physical activity, nutrition, or tobacco-use prevention:** from 30.0% to 79.6% across states (median: 50.6%), from 34.0% to 80.7% across cities (median: 53.8%), and from 18.2% to 100.0% across territories (median: 64.6%).

## HIV INFECTION AND AIDS PREVENTION

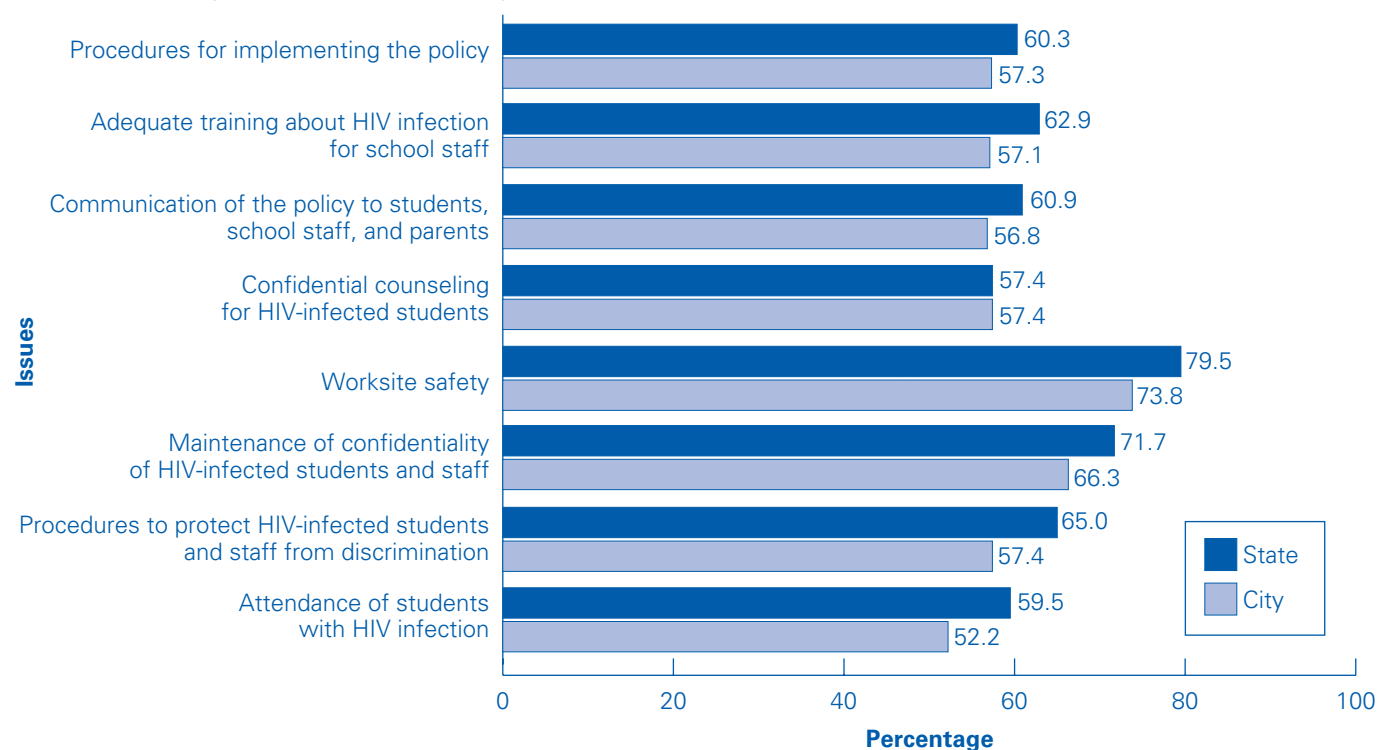
Some schools gear HIV-prevention efforts toward specific high-risk groups. The percentage of schools that required any school staff to receive professional development on HIV, STD, or pregnancy prevention issues and resources for high risk ethnic/racial minority youth (e.g., black, Hispanic, or American Indian youth) ranged from 9.2% to 49.4% across states (median: 22.5%), from

27.4% to 88.7% across cities (median: 62.7%), and from 28.6% to 71.4% across territories (median: 50.4%) (Table 44). The percentage of schools that required professional development for school staff on HIV, STD, or pregnancy prevention for youth who participate in drop-out prevention, alternative education, or GED programs ranged from 11.7% to 47.0% across states (median: 25.4%), from 21.4% to 86.2% across cities (median: 42.0%), and from 28.6% to 57.1% across territories (median: 42.8%) (Table 44). The percentage of schools with a student-led club that aims to create a safe, welcoming, and accepting school environment for all youth, regardless of sexual orientation or gender identity (e.g., a gay/straight alliance) ranged from 12.3% to 48.7% across states (median: 20.9%), from 21.8% to 87.3% across cities (median: 33.8%), and from 11.5% to 57.1% across territories (median: 30.0%) (Table 44).

School policies can provide critical support for HIV-infected students and staff. The percentage of schools with a policy that addresses specific issues for students or staff with HIV infection or AIDS ranged as follows (Table 45, Figure 7):

- **Worksite safety (i.e., universal precautions for all school staff):** from 54.7% to 92.8% across states (median: 79.5%), from 54.3% to 92.9% across cities (median: 73.8%), and from 18.2% to 71.4% across territories (median: 44.9%).
- **Confidential counseling for HIV-infected students:** from 27.4% to 72.0% across states (median: 57.4%), from 41.6% to 86.9% across cities (median: 57.4%), and from 11.5% to 71.4% across territories (median: 51.6%).
- **Communication of the policy to students, school staff, and parents:** from 29.8% to 83.4% across states (median: 60.9%), from 35.7% to 85.7% across cities (median: 56.8%), and from 18.2% to 66.7% across territories (median: 38.2%).
- **Adequate training about HIV infection for school staff:** from 27.1% to 87.0% across states (median: 62.9%), from 31.9% to 86.5% across cities (median: 57.1%), and from 0.0% to 66.7% across territories (median: 40.1%).
- **Procedures for implementing the policy:** from 30.1% to 86.2% across states (median: 60.3%), from 30.5% to 86.7% across cities (median: 57.3%), and from 0.0% to 66.7% across territories (median: 36.3%).
- **Attendance of students with HIV infection:** from 19.8% to 87.6% across states (median: 59.5%), from 32.7% to 77.8% across cities (median: 52.2%), and from 0.0% to 66.7% across territories (median: 27.2%).
- **Procedures to protect HIV-infected students and staff from discrimination:** from 32.6% to 90.7% across states (median: 65.0%), from 38.9% to 88.6% across cities (median: 57.4%), and from 9.1% to 71.4% across territories (median: 41.1%).
- **Maintenance of confidentiality of HIV-infected students and staff:** from 38.1% to 90.4% across states (median: 71.7%), from 52.0% to 91.5% across cities (median: 66.3%), and from 15.4% to 71.4% across territories (median: 51.6%).
- **Attendance of students with HIV infection, procedures to protect HIV-infected students and staff from discrimination, and maintenance of confidentiality of HIV-infected students and staff:** from 19.4% to 85.7% across states (median: 56.5%), from 31.7% to 75.8% across cities (median: 48.5%), and from 0.0% to 66.7% across territories (median: 25.3%).

FIGURE 7. Median percentage of schools with a policy that addressed specific issues for students or staff with HIV\* infection or AIDS,† School Health Profiles, 2008



\* HIV = human immunodeficiency virus.

† AIDS = acquired immunodeficiency syndrome.

## FAMILY AND COMMUNITY INVOLVEMENT

Partnerships between schools, families, and community members are important elements of a school health program. The percentage of schools in which students' families helped develop or implement policies and programs during the two years before the survey on specific topics ranged as follows (Table 46a, b):

- **HIV, STD, or teen pregnancy prevention:** from 5.2% to 40.8% across states (median: 15.6%), from 3.3% to 75.6% across cities (median: 18.8%), and from 9.1% to 83.3% across territories (median: 40.2%).
- **Asthma:** from 6.6% to 25.5% across states (median: 12.9%), from 4.4% to 72.7% across cities (median: 19.3%), and from 0.0% to 20.8% across territories (median: 8.4%).

- **Tobacco-use prevention:** from 15.1% to 41.5% across states (median: 24.3%), from 9.2% to 73.7% across cities (median: 20.3%), and from 18.2% to 83.3% across territories (median: 40.2%).
- **Physical activity:** from 19.4% to 53.2% across states (median: 31.9%), from 20.8% to 75.6% across cities (median: 30.4%), and from 18.2% to 83.3% across territories (median: 35.2%).
- **Nutrition and healthy eating:** from 24.1% to 67.3% across states (median: 45.7%), from 17.1% to 75.6% across cities (median: 37.9%), and from 18.2% to 83.3% across territories (median: 44.4%).

The percentage of schools in which community members helped develop or implement policies and programs during the two years before the survey on specific topics ranged as follows (Table 46a, b):

- **HIV, STD, or teen pregnancy prevention:** from 11.4% to 46.3% across states (median: 23.1%), from 11.0% to 61.1% across cities (median: 35.6%), and from 27.3% to 83.3% across territories (median: 68.4%).
- **Asthma:** from 7.8% to 28.4% across states (median: 15.3%), from 14.3% to 56.9% across cities (median: 27.7%), and from 0.0% to 42.9% across territories (median: 21.8%).
- **Tobacco-use prevention:** from 21.7% to 55.9% across states (median: 33.2%), from 19.8% to 59.5% across cities (median: 33.5%), and from 36.4% to 83.3% across territories (median: 66.5%).
- **Physical activity:** from 23.1% to 50.1% across states (median: 35.5%), from 21.5% to 59.6% across cities (median: 36.0%), and from 27.3% to 83.3% across territories (median: 66.5%).
- **Nutrition and healthy eating:** from 32.0% to 70.5% across states (median: 48.8%), from 21.2% to 67.7% across cities (median: 38.7%), and from 54.5% to 83.3% across territories (median: 59.3%).
- **Asthma:** from 10.4% to 31.6% across states (median: 19.2%), from 14.8% to 75.1% across cities (median: 32.5%), and from 0.0% to 42.9% across territories (median: 22.4%).
- **Tobacco-use prevention:** from 25.0% to 57.6% across states (median: 37.6%), from 21.8% to 77.5% across cities (median: 38.0%), and from 36.4% to 85.7% across territories (median: 72.4%).
- **Physical activity:** from 27.4% to 57.0% across states (median: 41.2%), from 28.2% to 77.5% across cities (median: 45.5%), and from 27.3% to 85.7% across territories (median: 74.4%).
- **Nutrition and healthy eating:** from 38.5% to 77.2% across states (median: 55.9%), from 25.6% to 79.8% across cities (median: 48.0%), and from 54.5% to 83.3% across territories (median: 68.4%).
- **Tobacco-use prevention, physical activity, or nutrition and healthy eating:** from 51.6% to 80.9% across states (median: 62.2%), from 36.3% to 79.8% across cities (median: 60.0%), and from 54.5% to 85.7% across territories (median: 78.2%).

The percentage of schools in which students' families or community members helped develop or implement policies and programs during the two years before the survey on specific topics ranged as follows (Table 46a, b):

- **HIV, STD, or teen pregnancy prevention:** from 11.8% to 50.0% across states (median: 26.1%), from 15.7% to 83.2% across cities (median: 40.3%), and from 27.3% to 85.7% across territories (median: 74.4%).

# 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 and cities with weighted data for both the 1996<sup>67</sup> and 2008 Profiles. **Short-term trends** compare median percentages across all states and cities with weighted data for both the 2006<sup>68</sup> and 2008 Profiles. Because territories have not participated consistently in previous Profiles cycles, they are not included in these trend analyses.

## LONG-TERM TRENDS

Significant improvements in school health practices and policies were detected between 1996 and 2008 in the following areas:

- Across **states**, the median percentage of schools in which health education staff worked on health education activities with physical education staff, school health services staff, school mental health and social services staff, and nutrition or food service staff increased from 67.4% to 82.1%, from 51.1% to 69.2%, from 56.1% to 62.7%, and from 18.7% to 41.2%, respectively.
- Across **states**, increases were found in the median percentage of schools in which the lead health education teacher received professional development during the two years before the survey on emotional and mental health (from 21.2% to 39.9%), injury prevention and safety (from 23.5% to 44.9%), nutrition and dietary behavior (from 28.5% to 44.7%), physical activity and fitness (from 32.8% to 52.5%), pregnancy prevention (from 20.6% to 26.0%), suicide prevention (from 15.2% to 29.5%), tobacco-use prevention (from 21.3% to 36.1%), and violence prevention (from 40.0% to 55.7%).

- Across **states**, increases were found in the median percentage of schools in which the lead health education teacher wanted to receive professional development on alcohol- or other drug-use prevention (from 52.4% to 74.8%), emotional and mental health (from 51.8% to 74.0%), HIV prevention (from 52.3% to 69.8%), human sexuality (from 50.8% to 66.3%), injury prevention and safety (from 33.7% to 61.7%), nutrition and dietary behavior (from 47.2% to 74.5%), physical activity and fitness (from 38.6% to 68.2%), pregnancy prevention (from 46.6% to 64.6%), STD prevention (from 54.7% to 71.4%), suicide prevention (from 66.6% to 75.4%), tobacco-use prevention (from 45.0% to 66.7%), and violence prevention (62.2% to 77.4%).

- Across **cities**, increases were found in the median percentage of schools in which the lead health education teacher wanted to receive professional development on alcohol- or other drug-use prevention (from 62.1% to 79.0%), emotional and mental health (from 68.5% to 83.5%), injury prevention and safety (from 43.2% to 72.0%), nutrition and dietary behavior (from 55.5% to 81.1%), physical activity and fitness (from 44.3% to 72.2%), STD prevention (from 57.1% to 74.6%), and tobacco-use prevention (from 46.7% to 69.2%).

Significant deteriorations in school health practices and policies were detected between 1996 and 2008 in the following areas:

- Across **states**, the median percentage of schools in which the lead health education teacher received professional development on HIV prevention during the two years before the survey decreased from 51.5% to 36.9%.

- Across **states**, the median percentage of schools in which the lead health education teacher had experience teaching health education classes or topics for 15 years or more decreased from 52.9% to 34.4%.

### SHORT-TERM TRENDS

Significant improvements in school health practices and policies were detected between 2006 and 2008 in the following areas:

- Across **states**, the median percentage of schools in which the lead health education teacher received professional development on physical activity and fitness during the two years before the survey increased from 48.1% to 55.6%.
- Across **states**, increases were found in the median percentage of schools in which the lead health education teacher wanted to receive professional development on asthma awareness (from 56.4% to 60.6%), HIV prevention (from 63.4% to 68.5%), human sexuality (from 56.9% to 67.0%), pregnancy prevention (from 57.6% to 64.6%), STD prevention (from 62.5% to 70.4%), suicide prevention (from 72.3% to 75.4%), and tobacco-use prevention (from 63.1% to 66.7%).
- Across **states**, the median percentage of schools in which the lead health education teacher wanted to receive professional development on encouraging family or community involvement increased from 63.9% to 70.3%.
- Across **states**, the median percentage of schools that allowed students to purchase snack foods or beverages from vending machines or at a school store, canteen, or snack bar decreased from 82.2% to 78.1%.
- Across **states**, decreases were found in the median percentage of schools that allowed students to purchase from vending machines or at the school store, canteen, or snack bar chocolate candy (from 39.3% to 21.4%), other kinds of candy (from 43.0% to 24.1%), salty snacks not low in fat (from 46.9% to 34.3%), soda pop (from 62.4% to 37.6%), and sports drinks (from 72.2% to 56.5%).
- Across **states**, the median percentage of 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 55.1% to 62.2%.

Significant deteriorations in school health practices and policies were detected between 2006 and 2008 in the following areas:

- Across **states**, among schools with required physical education, the median percentage that allowed students to be exempted from taking required physical education for a high physical fitness competency test score increased from 0.7% to 1.6%, and the percentage that allowed students to be exempted from required physical education for participation in community service increased from 1.2% to 1.9%.
- Across **states**, the median percentage of schools in which the lead health education teacher received staff development on teaching students with physical, medical, or cognitive disabilities during the two years before the survey decreased from 49.7% to 40.3%.

# DISCUSSION

By implementing coordinated school health programs (CSHPs), schools can help improve the health status of children and adolescents in the United States. CSHPs help students develop and improve health-related knowledge, attitudes, and skills and can help improve health behaviors, health outcomes, educational outcomes, and social outcomes among adolescents and young adults.<sup>69</sup> School Health Profiles provides information to help assess some aspects of five of the eight components of CSHPs. Point-in-time data from each Profiles cycle, along with long-term and short-term trends in Profiles data, illustrate not only how health policies and programs have improved over time to meet the needs of students, but also demonstrate areas for improvement.

By providing school-level data that is representative of each participating state, city, and territory, Profiles allows comparisons of school health policies and programs across states, cities, and territories. Differences in the prevalence of these policies and practices across states, cities, and territories reflect differences in how resources are allocated in each jurisdiction, which in turn reflects varying priorities in implementation of these policies and practices. Profiles also complements the School Health Policies and Programs Study (SHPPS), which provides nationally representative data on school health policies and programs related to all eight components of CSHPs.<sup>70</sup> SHPPS was conducted most recently in 2006, and plans are underway to repeat that study in 2012.

The *National Health Education Standards* provide expectations for specific student skills related to health.<sup>8</sup> A median of more than 90% of middle schools and high schools had a health education curriculum that addressed each of these skills individually, but the median

percentage of schools across states, cities, and territories addressing all eight skills was lower. Schools should strive to address all of these critical skills as part of their health education curricula.

Profiles also examined the percentage of schools in which specific topics were covered in the areas of tobacco use prevention, nutrition and dietary behaviors, physical activity, and HIV, STD, and pregnancy prevention. Across states, cities, and territories, the median percentage of middle schools and high schools addressing each individual topic was high, but far fewer schools addressed all specific topics in a particular area.

Coordination of health education activities with other components of the school health program helps ensure that health issues are addressed and reinforced at school. Since 1996, the median percentage of middle and high schools in which health education staff worked on health education activities with physical education staff, school health services staff, school mental health and social services staff, and nutrition or food service staff has increased. In addition, the median percentage of schools with a school health council has increased since 2006, another indication of improved collaboration among school staff on issues related to health.

In the area of physical education, CDC guidelines, *Healthy People 2010* objectives and NASPE standards recommend required daily physical education to promote active, productive, and healthy lifestyles among youth.<sup>9,21,23</sup> Across states, cities, and territories, the median percentage of schools that required physical education for students in any of grades 6 through 12 exceeded 90%, but schools also allowed exemptions from required

physical education for enrollment in other courses, participation in school sports, participation in other school activities, participation in community sports activities, high physical competency test scores, participation in vocational training, and participation in community service activities. Further, the median percentage of schools allowing some of these exemptions has increased since 2006. In addition, across states, cities, and territories, the median percentage of schools that taught a required physical education 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.<sup>56</sup> Schools should do more to increase physical activity among students during the school day.

In addition to increasing physical activity, schools can also help stem the obesity epidemic by making improvements in the school nutrition environment. The Institute of Medicine report, *Nutrition Standards for Foods in Schools: Leading the Way Toward Healthier Youth*<sup>31</sup> provides specific recommendations for foods and beverages sold outside of the school meal programs. Across states, cities, and territories, the median percentage of schools selling each less nutritious foods and beverages was below 40%, with the exception of sports drinks. These numbers also reflect a decrease since 2006 in the median percentage of schools that allowed students to purchase snack foods or beverages from vending machines or at a school store, canteen, or snack bar, including chocolate candy, other kinds of candy, salty snacks not low in fat, soda pop or fruit drinks that are not 100% juice, and sports drinks. Despite these decreases in the sale of less nutritious foods and beverages, however, the median percentage of schools making fruits or non-fried vegetables available in these venues and at school celebrations is still low. Increased efforts are needed to encourage greater daily consumption of fruits and vegetables whenever students have the opportunity to eat and drink.

According to CDC guidelines, a tobacco-use prevention policy should prohibit all tobacco use at all times by students, faculty and staff, and visitors on school property, in all school vehicles, and at school sponsored off-campus events.<sup>38</sup> Although the median percentage of schools across states, cities, and territories that had a policy prohibiting tobacco use exceeded 95%, the median percentage of schools that prohibited all tobacco use in all locations was far lower. More schools should adopt and enforce components of a tobacco-use prevention policy to meet the *Healthy People 2010* objective of 100% tobacco-free environments.<sup>9</sup>

Health services can help support student success. School nurses play a central role in the provision of these services, and Profiles revealed wide variability in the percentage of schools with a full-time registered nurse. The median percentage of schools across states and cities with a designated and secure storage location for medication accessible at all times exceeded 95%, but other important practices for asthma management were much less prevalent among schools. For example, the median percentage of schools that had an asthma action plan on file for all students with known asthma was 46.1% across states and 51.2% across cities, and the median percentage of schools requiring annual training for school staff on recognizing and responding to severe asthma symptoms was 37.4% across states and 56.5% across cities. Schools can use the resources in *Strategies for Addressing Asthma Within a Coordinated School Health Program* to improve their asthma management practices.<sup>45</sup>

Profiles revealed that school policies and programs related to HIV prevention could be improved. Few schools provided programs specifically for ethnic/racial minority youth at high risk. In addition, the median percentage of schools across states, cities, and territories with policies addressing specific issues for students or staff with HIV infection or AIDS was below 80% for each issue. Across states, the median percentage of schools in which the



lead health education teacher received professional development on HIV prevention during the two years before the survey decreased from 51.5% in 1996 to 36.9% in 2008. This finding is especially notable given the significant increases during the same time period in professional development on injury prevention, nutrition, and physical activity. The HIV epidemic continues to grow in many communities and will continue to do so without increased prevention efforts by schools.

Profiles provides a wealth of useful data, but several limitations should be noted. First, the data presented in this report apply only to public middle schools and high schools; policies and programs among non-public schools were not assessed. Second, because the data were combined across middle schools and high schools, policy and program differences between the two school levels may be masked. Third, the data are self-reported by school principals and lead health education teachers and may be subject to bias. Finally, the Profiles data do not provide an in-depth assessment of all elements of a CSHP.

State and local education and health agencies use Profiles data to advocate for health education and physical education programs, promote curricular or program modifications, support school health legislation, and identify professional development needs. For example, the Arkansas Department of Education used Profiles data to look at the implementation and knowledge of several components of Arkansas Act 1220 of 2003 to Combat Childhood Obesity, including the requirement that all schools conduct the School Health Index every year. The Massachusetts Department of Elementary and Secondary Education analyzed Profiles data to look at changes in school vending machine offerings over time to identify positive changes and areas needing further improvement. In Michigan, Profiles data showing that mental health was the professional development topic least often covered, but most requested, helped drive

statewide efforts to identify and provide professional development opportunities and led to partnerships with Institutes of Higher Education to provide more training on mental health in teacher preparation programs.

Profiles data help state, local, and territorial education and health agencies promote program strengths and advocate for resources to address weaknesses. Numerous resources exist to help states and cities address weaknesses identified through their Profiles data. For example, *Fit, Healthy, and Ready to Learn* is a guide to help schools develop policies to address physical activity, healthy eating, tobacco-use prevention, asthma, health services, and a healthy school environment.<sup>48,71</sup> The guide includes information on the policy development process, general school health policies, and examples of specific policies for all topic areas. In addition, *Someone at School has AIDS: A Complete Guide to Education Policies Concerning HIV Infection* offers guidance on developing policies that address important issues related to HIV/AIDS in schools.<sup>57</sup> CDC also has developed several tools designed for use at the school level. The School Health Index helps schools identify strengths and weaknesses of their health and safety policies and practices through a self-assessment process, and helps them develop an action plan for improvement.<sup>72</sup> The *Health Education Curriculum Analysis Tool* helps analyze health education curricula based on alignment with national standards and characteristics of effective health education curricula.<sup>73</sup> Similarly, the *Physical Education Curriculum Analysis Tool* helps analyze written physical education curricula based on alignment with national standards, guidelines, and best practices for quality physical education programs.<sup>74</sup> 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 the school meals program to provide more healthy choices for students.<sup>75</sup> Use of these and other resources can help schools improve their CSHPs, which in turn can help improve the health status of children and adolescents.



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