

Commonwealth of Virginia

School Health Profile

2010



Virginia

School Health Profile



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2010 Survey Report

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EXECUTIVE SUMMARY

2010 VIRGINIA SCHOOL HEALTH PROFILE

Overview

This report of the results of the 2010 Virginia School Health Profile (SHP) survey, developed by the Centers for Disease Control and Prevention (CDC), provides information regarding health education in Virginia public schools housing any of the grades six through twelve. The survey name was changed in 2004, from School Health Education Profile to School Health Profile. Similar, but not identical, surveys have been administered biennially since 1996. In this report, some longitudinal comparisons are made between the current results and past results. To make additional comparisons, it will be necessary to refer to copies of the earlier reports. (Note: The last Virginia SHP report that was written was in 2006. A 2008 report was not written. The structure of this report reflects the 2008 and 2010 changes in the survey and differs slightly from the 2006 report.)

Purpose and Methodology

The purpose of this survey is to assess school health policies and programs and school health curricula. It further examines changes that occur in these areas over time, providing information for developing and/or revising education programs and policies statewide. The results from this survey can be used to assist state and local education and health agencies in monitoring and assessing characteristics of school health education; physical education; school health policies related to HIV infections/AIDS, tobacco-use prevention, and nutrition; asthma management activities; and family and community involvement in school health programs. In addition, data from the SHP can be used to improve school health programs.

A descriptive design was used to determine the status of the health curriculum and health policies and practices in middle/junior high, and senior high schools in Virginia. All public schools in Virginia with at least one of the grades 6 through 12 (except schools in which the 6th grade was the final grade) were included in the population from which the sample was drawn. Two questionnaires were used to collect data; one for school principals and one for lead health education teachers. The principal and lead health education teacher (may be the only health education teacher, the department chair, or the most senior health education teacher) in each school were asked to complete different SHP questionnaires. The two questionnaires were mailed to 420 regular secondary public schools containing any of grades 6 through 12 in Virginia during the spring of 2010. Usable questionnaires were received from 85 percent of principals and percent of teachers. Because the response rates exceeded 70 percent, the results are weighted and, therefore, can be used to describe school health policies and practices of all regular secondary public schools in Virginia having at least one of grades 6 through 12. (Note: All percentages in the results of this report are rounded to the nearest whole percent.)

Major Findings

School Health Assessment and Plan

New questions were added to the 2008 and the 2010 survey that measured whether schools have conducted an assessment or diagnosis as a critical first step in improving implementation of policies, programs or environmental strategies to effect change or improvement in school health using the *School Health Index (SHI)* or a similar self-assessment tool. About one-third (34 percent) of schools indicated that they have used such a self-assessment tool for all three topics; physical activity, nutrition, or tobacco-use prevention and a little more than half (53 percent) that used the tool for one or more of the topics. *Bullying* and *student mentoring* programs have been implemented in 83 percent and 77 percent of schools respectively. The majority of schools indicated that they have a written *School Improvement Plan (SIP)*, which includes health-related goals and objectives on a variety of health topics.

Sexual Orientation and Gender Identity

New questions have been added to the survey for 2008 and 2010 that address sexual orientation and gender identity to determine how many schools create a safe school climate for *lesbian, gay, bisexual, transgender, and questioning (LGBTQ)* youth. Most schools prohibit harassment and about half identify “safe spaces” where LGBT youth can receive support from school staff. Sixty (60) percent of schools encourage staff to attend professional development on this topic and fewer schools indicated that they facilitate access to providers that have experience in providing social and psychological services (39 percent) or other health services (42 percent) to LGBT youth. About one-quarter (25%) of schools indicated that they had a “student-led club that aims to create a safe, welcoming, and accepting school environment for all youth, regardless of sexual orientation or gender identify.”

Prevention Policies and Programs

Most schools (89 percent) have a *designated individual* that is responsible for coordinating school health and safety programs and activities. There are few schools (18 percent) that have *one or more group* that offers guidance on the development of policies or coordinates activities on health topics with representation from at least 10 of 16 groups.

The majority of schools have prevention policies and programs in place for asthma management, physical education and physical activity, and for HIV or AIDS-infected students and staff. Very few school schools (3 percent) have programs that deliver HIV, STD and pregnancy prevention programs that meet the needs of high risk ethnic/racial minority youth.

About half of schools have a tobacco policy (54 percent) that mandates a “tobacco-free environment.” However, almost all schools (98 percent) responded that they have adopted a policy prohibiting tobacco use for students, for faculty/staff (93 percent), and for visitors (90 percent), but few schools indicated that they provided tobacco cessation services for students, faculty, and staff (26 percent).

Although there has been a significant increase in schools that did not sell less nutrition foods and beverages, including sport drinks, anywhere outside the school food service program (37 percent), overall there are less policies and strategies to promote healthy eating than compared to the other health topics; HIV/AIDs and pregnancy prevention, tobacco-use prevention, and asthma management.

Health Education

Among schools that taught a required health education course, the majority (63 – 78 percent) of schools taught the bulk of key prevention and promotion topics in all four health categories; HIV or AIDS, STD and pregnancy prevention (78 percent), physical education and physical activity (70 percent), nutrition (73 percent), and tobacco (63 percent). When teachers were asked if they tried to increase student knowledge about specified health topics in any of grades 6 through 12 during the current school year, over 90 percent of teachers responded that they did for alcohol- or other drug-use prevention, emotional and mental health, human immunodeficiency virus (HIV) prevention, and injury prevention and safety.

Professional Development

Almost all schools (96 percent) indicated that all staff who taught health education were licensed, certified, or endorsed by the state in health education. The majority of schools (81 percent) follow a written health education curriculum and 60 percent of health education teachers said that they were provided with key materials for teaching health education. The majority lead health education teachers indicated that they desired staff development in the past two years on a variety of health topics with significant increases in six topics; alcohol- or other drug-use prevention, HIV, human sexuality, injury prevention and safety, nutrition and dietary behavior, physical activity and fitness, and tobacco-use prevention. However, less than half (31 – 44 percent) of teachers indicated that they received the staff development in each of those categories, except for physical activity and fitness (76 percent), which may be due to almost all (96 percent) of physical education teachers receiving staff development in 2010. Few (31 percent) lead health education teachers said they received professional development on “human sexuality” in 2010. This is a negative trend compared to 2006 (41 percent).

Family and Community Involvement

About 15 percent of schools indicated that they had students’ family and community involvement that helped develop or implement policies and programs on all topics; tobacco-prevention, physical activity, and nutrition and healthy eating. Sixty percent (60 percent) of schools provide health information about all three of these topics to parents and families and 29 percent on any of the three topics, with few schools (11 percent) involving students’ family and community members in asthma management policies and programs. Students’ families and community members are most involved in nutrition and healthy eating.

Conclusion

The SHP survey has been conducted on even-numbered years since 1996. Each time, there have been some changes in the survey content. This year the most noticeably were related to the school health assessment and plan, as well as sexual orientation and gender identity. The survey was designed to monitor the characteristics of and trends in school health education and health services in middle/junior and senior high schools. Included in the survey are administrative health policies and programs related to school health assessment/plan, sexual orientation and gender identity, health and physical education requirements, health education content, physical activity, tobacco-use prevention policies, nutrition-related policies and practices, school safety and security, HIV policies, health services, teacher preparation, and staff development.

Schools may benefit from using the School Health Index (SHI) or another self-assessment tool that assesses and diagnoses the school health environment. Few schools are using the SHI for injury prevention programs or asthma management, but a majority of schools are implementing a program to prevent bullying and a student mentoring program. Since academic success is an indicator of overall student well-being and a strong predictor of adult health outcomes, schools may benefit from developing a School Improvement Plans (SIP) that include key health-related goals and objectives. In addition, schools may need to consider providing more staff development for key health topics, considering a majority of health education teachers indicated that they desired staff development on a variety of health topics. Staff development appears to be focused more on physical education teachers and physical activity and fitness, when compared to the other health topics.

Health education appears to cover all three health topics (HIV or AIDS and pregnancy prevention, physical education and physical activity, and tobacco-use prevention) in most schools. However, schools may be missing an opportunity to target youth at high risk and racial/ethnic minorities when providing HIV, STD and pregnancy prevention programs. Tobacco cessation services may be another area that schools can improve on to decrease tobacco-use among students, teachers, and staff.

Policies and programs that are related to HIV/AIDS, tobacco-use prevention, and asthma management seem to continue to improve. However, policies and programs that promote optimal nutrition and healthy eating habits need improvement. Schools appear to recognize that they have the ability to provide and promote positive health and health behaviors; however there remains to be opportunity for additional progress.

I. INTRODUCTION

The 2010 School Health Profile (SHP) survey of the public schools in the Commonwealth of Virginia was conducted in the spring of 2010. The survey, which has been conducted biennially since 1996, was renamed in 2004. Previous surveys, known as the School Health Education Profile were similar, though not identical, to the 2004 through 2010 surveys. The questionnaires used in the survey were developed by the Division of Adolescent and School Health, National Center for Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, in collaboration with representatives of state, local, and territorial departments of health and education. The survey was developed for the purpose of monitoring the characteristics of and trends in school health education and health policies in middle/junior high schools and senior high schools. Included in the survey are questions on the School Health Index, physical education and health education requirements, physical activity, tobacco-use prevention policies, nutrition-related policies and practices, violence prevention, health services, and HIV infection policies.

The department of Human Nutrition, Foods and Exercise collaborated with Virginia Department of Education to prepare the final report. WESTAT, of Rockville, Maryland, provided technical support in the sampling of schools, the scanning of survey forms, and the compilation of data. The survey and the report preparation were supported by the Virginia Department of Education through a Grant/Cooperative Agreement (U87/DP001199) from the Centers for Disease Control and Prevention, Division of Adolescent and School Health. The report contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention.

A. Purpose

This study continues a health data collection process among middle and high school principals and lead health education teachers. The investigation, conducted biennially since 1996, assess school health education policies and programs and school health curricula. It further examines changes that occur in these areas over time, providing information for developing and/or revising health education programs and policies statewide.

B. Methodology

The 2010 study used a descriptive design to determine the status of health curriculum and health policies and programs in middle and high schools in Virginia. All public schools in Virginia with at least one of the grades 6 through 12 (except schools in which the 6th grade was the final grade) were included in the population from which the sample was drawn. Systematic equal probability sampling with a random start was used to select schools for the survey. The survey was conducted by mail, with mail and phone follow-up. Two questionnaires were used

to collect data; one for school principals and one for lead health education teachers. The two questionnaires were mailed to 420 regular secondary public schools containing any of grades 6 through 12 in Virginia during the spring of 2010. School principals were asked to: (1) complete and return the principal questionnaires; and (2) to identify *lead health education teachers* in their schools and forward the teacher questionnaires to them. (Note: This teacher may be the only health education teacher, the department chair, or the most senior health education teacher.) Principals and lead health education teachers returned their survey forms independently to the Virginia Department of Education. Usable questionnaires were received from 85 percent of principals and 85 percent of teachers. Because the response rates exceeded 70 percent, the results are weighted and, therefore, can be used to describe school health policies and practices of all regular secondary public schools in Virginia having at least one of grades 6 through 12. (Note: All percentages in the results of this report are rounded to the nearest whole percent.)

The completed questionnaires were forwarded to WESTAT for processing. At WESTAT the questionnaires were scanned and the descriptive results were tabulated. The resulting data were summarized in a series of tables and graphs. It is from these tables and graphs that this report was developed.

II. 2010 Virginia School-Level Impact Measures (SLIMs)

Survey Rationale and Results

Below is a summary of the 2010 Virginia School Health Profile (SHP) survey School-Level Impact Measures and their short-term trends. Rationale for the SLIMs as described by the Centers for Disease Control and Prevention (CDC), as well as human sexuality related to sexual orientation and gender identify have also been highlighted in this section. This is a new section that has been added to the Virginia SHP report this year.

Coordinated School Health School-Level Impact Measure (SLIM)

School Health Assessment and Plan Questions about the *School Health Index (SHI)* were added to the survey in 2008 and in 2010. These questions attempt to assess whether the school has conducted an assessment or diagnosis as a critical first step in improving implementation of policies, programs, or environmental strategies to effect change or improvement in school health⁽¹⁾. Thirty-four (34) percent of principals indicated that they used the SHI or another self-assessment tool to address their policies, activities, and programs for all three topics; physical activity, nutrition, or tobacco-use prevention. This is similar to the 2008 results (38 percent). More principals for both 2008 (57 percent) and 2010 (53 percent) indicated that they used the SHI or a self-assessment tool for one or more of the topics; physical activity, nutrition, or tobacco-use prevention. The question varied slightly from 2008 to 2010 with the addition of injury and violence prevention as a category that could be assessed using the SHI. There were 38 percent of all schools that reported using the SHI or another self-assessment tool to assess their injury and violence prevention policies, activities, and programs.

A set of new questions in the 2010 survey asks Principals about whether or not various *injury prevention programs* are being implemented. The top programs being implemented are a program to prevent bullying (83 percent) and a student mentoring program (77 percent). A youth development program is being implemented in 51 percent of schools. Thirty-five (35) percent of schools indicate that they have a program to prevent dating violence and 28 percent of schools indicate that they have a safe-passages to school program. Participation in these school programs have been identified as reducing bullying or fighting, decreasing levels of victimization of injury and violence and have demonstrated a positive impact on violence-related outcomes.^(2,3)

Health related goals and objectives in schools can help ensure that health programs can have a positive impact on educational attainment and student health-risk behavior participation.⁽⁴⁻¹¹⁾ Research has suggested that academic success is an indicator of overall student well-being and a strong predictor of adult health outcomes.⁽¹²⁻¹⁵⁾ A majority of schools (78 percent) indicated that they have a written *School Improvement Plan (SIP)* that includes eight health-related goals and objectives on a variety of health topics.

School Health Council, Committee, or Team Most schools (89 percent) have a *designated individual* (e.g., faculty member or administrative personnel) that is responsible for

coordinating school health and safety programs and activities. There were two questions that addressed the school health committee or team and the composition of that team. 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.^(16,17) Such participation 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.⁽¹⁶⁻²¹⁾ Eighteen (18) percent of schools indicated that had *one or more group* (e.g., a school health council, committee, or team) that offers guidance on the development of policies or coordinates activities on health topics with representation from at least 10 of 16 groups in 2010. This is slightly less than 2008 (19 percent).

Family and Community Involvement Family and community members are important to school health and assist to produce stronger school policies and programs rather than the school working as a separate, stand-alone intervention.^(22, 23) About 15 percent of schools indicated that students' family and community members have helped develop or implement policies and programs on all of the following topics; tobacco-prevention, physical activity, and nutrition and healthy eating, which is slightly increased since 2008 (14 percent). Many schools (57 percent) in 2010 indicated that they involved students' family or community members on any of those topics, which is slightly down from 2008 (64 percent).

Health Education and Curriculum Schools were asked about the necessary *qualification of staff* that taught health education. Almost all schools (96 percent) indicated that all staff who taught health education were licensed, certified, or endorsed by the state in health education, which is slightly up from the 2008 data (93 percent). Sixty (60) percent of schools indicated that health education teachers were provided with *key materials* for teaching health education and this is also a slight increase since the 2008 survey. In 2010, more schools (81 percent) indicated that they follow a *written health education curriculum* that addresses eight skills to enhance health compared to 76 percent of schools in 2008.

Parent and Families Health Information Parents and families are provided with health information about any of the following health issues; tobacco-use prevention, physical activity, and nutrition and healthy eating in 60 percent of schools in attempt to increase their knowledge about these health topics. Twenty-nine (29) percent of schools indicated that they provided parents and families health information to increase their knowledge about all of these topics in 2010. These results are similar to the 2008 results; 61 percent and 28 percent respectively.

HIV or AIDS, STD and Pregnancy Prevention School-Level Impact Measure (SLIM)

Prevention Policies and Programs: HIV or AIDS, STD and Pregnancy Students and staff that are infected with HIV or AIDS need policies in place to protect their rights.⁽²⁴⁾ Sixty-eight (68) percent of schools in 2010 and 61 percent of schools in 2008 indicated that they have a policy on students or staff who have HIV infection or AIDS that addresses attendance of students with HIV infection, procedures to protect HIV-infected students and staff from discrimination, and maintaining confidentiality of HIV-infected students and staff.

Youth at high risk include racial/ethnic minorities and those who participate in drop-out prevention, alternative education, or GED programs. Students in racial ethnic/minority students are more likely than white students to engage in sexual risk behaviors that can lead to HIV, STDs, and unintended pregnancy.⁽²⁵⁻²⁷⁾ Very few schools (4 percent in 2008 and 3 percent in 2010), have programs (including after school or supplemental programs) that deliver HIV, STD, and pregnancy prevention programs that meet the needs of ethnic/racial minority youth at high risk.

Health Education Required Course: HIV/AIDS, STDs, and Pregnancy Prevention The majority of schools (78 percent) with grades 9, 10, 11, or 12 taught 8 key HIV, STD, and pregnancy prevention topics in a required health course and 42 percent of schools taught all 17 HIV/STD, and pregnancy prevention topics. In grades, 6, 7, or 8, 54 percent of schools taught 11 key HIV, STD, and pregnancy prevention topics in a required health course, but fewer schools (14 percent) indicated that they taught all 17 HIV, STD, and pregnancy prevention topics than the older grades. There is a slight decrease of the percent of schools that responded that they taught 3 key topics related to condom use in a required course during grades 9, 10, 11, or 12 from 2008 (56 percent) to 2010 (51 percent). More teachers responded about teaching students about how to obtain condoms (52 percent) and how to correctly use a condom (46 percent) in grades 9 through 12 than in grades 6, 7, or 8.

Professional Development: HIV or AIDS, STD and Pregnancy High risk students need tailored health education and resources related to HIV, STD, and pregnancy prevention. Educators must be trained to teach prevention to these groups and programs are most effective when educators have received professional development in health education related to HIV or AIDs, STD and pregnancy prevention.⁽²⁸⁾ The lead health education teacher in 19 percent of schools in 2010 (21 percent of schools in 2008) indicated that they received professional development during the two years before the survey on 4 key HIV prevention topics. Even less (17 percent in 2010 and in 2008) indicated that they received professional development on 6 of 11 key HIV prevention topics during the two years before the survey.

Family and Community Involvement: HIV or AIDS, STD and Pregnancy Without parental support and understanding of HIV, other STDs, and pregnancy prevention, education programs and policies cannot be sustained in schools.^(29,30) In 30 percent of schools (29 percent in 2008), parents and families were provided with health information related to HIV prevention, STD prevention, and teen pregnancy prevention to increase parent and family knowledge about these topics. In 15 percent (14 percent in 2008) of schools, students' family and community members helped develop or implement HIV prevention, STD prevention, and teen pregnancy prevention policies and programs.

Physical Activity and Physical Education School-Level Impact Measure (SLIM)

Policies and Programs: Physical Education and Physical Activity According to National Association for Sport and Physical Education (NASPE), intramural activities, physical activity clubs, and recreation clubs contribute to young people's physical and social development. In addition, intramural activities or physical activity clubs offers students the opportunity to be

involved in planning and implementing such programs and offer safe and structured opportunities to be physically active.⁽³¹⁻³⁶⁾ Sixty-eight (68) percent of schools offer opportunities for all students to participate in intramural activities or physical activity clubs.

Health Education Required Course: Physical Education and Physical Activity Physical education provides students with the knowledge, attitudes, skills, behaviors, and confidence to adopt and maintain physically active lifestyles. The importance of physical education in promoting the health of young people is supported by *Healthy People 2010* Objectives 22-28, 22-9, and 22-10.⁽³⁷⁻³⁹⁾ Seventy (70) percent of schools taught 12 key physical activity topics in a required health course. This is slightly higher than in 2008 (65 percent).

Exemptions from required physical education do not allow students to participate in comprehensive, standards-based physical education, which diminishes the importance of physical education and its role in assisting students with establishing physically active lifestyles and developing various motor, movement, and behavioral skills unique to being physically educated.⁽⁴⁰⁾ Eighty-one (81) percent of schools do not allow students to be exempted from taking required physical education for certain reasons. This is similar to 2006 and 2008 results; 81 percent and 76 percent respectively.

Family and Community Involvement: Physical Education and Physical Activity Access to school spaces and facilities before, during, and after the school day, on weekends, and during summer and other vacations increases the visibility of schools, provides youth, their families, and community members a safe place for physical activity, and might increase partnerships with community-based physical activity programs.⁽⁴¹⁻⁴³⁾ Eighty-nine (89) percent of schools allow the use of their indoor physical activity or athletic facilities for community-sponsored classes or lessons outside of school hours or when school is not in session.

Professional Development: Physical Education and Physical Activity Physical education teachers should have professional development opportunities that teach concepts of quality physical education instruction.⁽⁴⁴⁻⁴⁶⁾ Professional development for physical education teachers provides skills to increase the quality of physical education classes through student engagement in physical activity and the content of lessons taught.⁽⁴⁷⁻⁴⁹⁾ A significant increase in the percent of schools from 2008 (92 percent) to 2010 (96 percent) indicated that they had at least one physical education teacher or specialist that received professional development on physical education during the two years before they survey. However, 82 percent of physical education teachers indicated that they were provided with key materials for teaching physical education, which is a significant decrease since 2008 (87 percent).

Nutrition School-Level Impact Measure (SLIM)

Policies and Programs: Nutrition Many schools offer foods and beverages in after-school programs, school stores, snack bars, or canteens⁽⁵⁰⁾ and these foods sold in competition to school meals are often relatively low in nutrient density and relatively high in fat, added sugars, and calories.⁽⁵¹⁾ To help improve dietary knowledge and understanding and to help improve dietary behavior and reduce overweight among youths, schools should offer appealing and nutrition foods in school snack bars and vending machines and discourage sale of foods

high in fat, sodium, and added sugars, and beverages and foods containing caffeine on school grounds.⁽⁵²⁻⁵⁴⁾ A significant increase in schools in 2010 (37 percent in 2010 and 30 percent in 2008) did not sell less nutrition foods and beverages (including sport drinks) anywhere outside the school food service program. In 2008, sport drinks was not included and 38 percent in 2008 and 46 percent in 2010 (significant increase) did not sell these foods, excluding sport drinks. A relatively low amount of schools (13 percent in 2010 and 14 percent in 2008) always offered fruits or non-fried vegetables in vending machines or school stores, and during celebrations when foods and beverages are offered.

Students' food choices are influenced by the total food environment. Even when fruit and vegetable items are available, they compete in the context of a vast array of other food items, mostly high in fat and sugar, which are competitively priced.⁽⁵⁵⁾ Schools should employ effective or promising strategies in the school setting to promote healthy eating, such as pricing strategies,^(56,57) input from stakeholders,⁽⁵⁸⁾ provision of nutrition information,⁽⁵⁹⁾ taste tests, and using the cafeteria as a learning laboratory.⁽⁶⁰⁾ Twenty-seven (27) percent of schools indicated that they used at least three different strategies to promote healthy eating.

Exposure to advertisements for the promotion of candy, meals from fast food restaurants, or soft drinks may have adverse effects on children's eating habits.⁽⁶¹⁾ The Institute of Medicine (IOM) report on food marketing to children and youth recommends that schools should promote healthful diets for children and youth in all aspects of the school environment (e.g., commercial sponsorships, meals and snacks, curriculum), and outlines the importance of prohibiting advertising of less nutrition foods.⁽⁶²⁾ Forty-six (46) percent of schools indicated that they prohibited all forms of advertising and promotion of candy, fast food restaurants, or soft drinks in all locations, which is a slight negative trend since 2008 (50 percent).

Health Education Required Course: Nutrition Nutrition education should be part of a comprehensive school health education curriculum and include various concepts to promote healthy eating.^(63,64) Comprehensive, sequential nutrition education using the classroom and the lunchroom can reinforce healthful eating behaviors.^(65,66) Fourteen key nutrition and dietary behavior topics were taught in a required course by 73 percent in 2010 and 70 percent in 2008.

Professional Development: Nutrition Professional development increases educators' confidence in teaching subject matter and provides opportunities for educators to learn about new developments in the field and innovative teaching techniques, and to exchange ideas with colleagues.⁽⁶⁷⁾ Districts that have made improvements in their professional development activities have seen a rise in student achievement.^(68,69) Thirty-nine (39) percent schools indicated that they received professional development in nutrition and dietary behavior during the two years before the survey. This is up from the 2000 survey, but has decreased since the 2008 survey; 29 percent in 2000, 24 percent in 2002, 26 percent in 2006, and 45 percent in 2008.

Tobacco-Use Prevention School-Level Impact Measure (SLIM)

Policies and Programs: Tobacco-Use Prevention Because tobacco use is the most preventable contributor to mortality in the U.S., it is important to restrict use or exposure to

tobacco products at any age.⁽⁷⁰⁾ Multiple questions were asked of schools to measure the extent to which schools develop, implement, and enforce a policy that creates a totally tobacco-free environment within the school experience for both young people and adults, as outlined in the CDC Guidelines for School Health Programs to Prevent Tobacco Use and Addiction⁽⁷⁰⁾ to achieve the Health People 2010 Objective 27-11 of creating smoke-free and tobacco-free schools.⁽⁷¹⁾ Fifty-four (54) percent of schools indicated that they follow a policy that mandates a “tobacco-free environment” in 2010, which is a significant increase since 2002; 34 percent in 2002, 44 percent in 2006, and 53 percent in 2008. A significant increase in the percentage of schools in 2010 (12 percent in 2010 and 6 percent in 2008) indicated that they implement a tobacco-free environment policy in 7 ways. In addition, prohibiting any use of any tobacco product at all times, whether or not school is in session, and regardless of whether students are present, protects students and staff from the harmful effects of secondhand smoke.⁽⁷²⁾

People who begin using tobacco at an early age are more likely to develop higher levels of addiction in adulthood.⁽⁷³⁾ Adolescent tobacco users suffer similar symptoms of withdrawal to those of adults when attempting to quit.⁽⁷⁴⁾ School health providers as a routine part of care should assess the tobacco-use status of students, and if they identify a student’s use of tobacco, they should provide self-help materials and refer them to a tobacco-use cessation program provided on site or in the community.⁽⁷⁵⁻⁷⁷⁾ There were 26 percent of schools that provided tobacco cessation services for students, faculty, and staff at school or through arrangements with providers not on school property and this is similar to the 2008 results (26 percent).

Health Education Required Course: Tobacco-Use Prevention Since most smoking is initiated by persons less than 18 years old, programs that prevent onset of smoking during the school years are crucial.⁽⁷⁸⁾ School-based tobacco prevention programs that address multiple psychosocial factors related to tobacco use among youth and that teach the skills necessary to resist those influences have demonstrated consistent and significant reductions or delays in adolescent smoking.⁽⁷⁸⁻⁸⁵⁾ In addition, questions that measured the extent to which schools are complying with the components of the National Health Education Standards, which provide a framework for decisions about the lessons, strategies, activities, and types of assessment to include in a health education curriculum.⁽⁸⁶⁾ There were 63 percent of schools in both 2008 and 2010 that indicated that they taught 15 key tobacco-use prevention topics in a required course.

Family and Community Involvement: Tobacco-Use Prevention School programs can be effective, but maintaining those effects presents a challenge, especially with the many other influences encouraging tobacco use originating outside of the school environment. The strongest evidence of success for school-based tobacco-use prevention efforts has been shown with those that are coordinated or delivered in conjunction with mass media and community tobacco control efforts, creating an environment of support for a tobacco-free lifestyle and delivering messages that are mutually reinforced.⁽⁸⁷⁾ Thirty (30) percent of schools in 2010 and 33 percent of schools in 2008 indicated that they coordinate their tobacco prevention messages and programs with community and mass-media tobacco prevention efforts.

Professional Development: Tobacco-Use Prevention The Institute of Medicine's Committee on Comprehensive School Health Programs in Grades K-12 recommended that health education teachers should be expected to participate in ongoing, discipline-specific in-service programs in order to stay abreast of new developments in their field.⁽⁸⁸⁾ A fair amount of lead health education teachers received professional development during the two years before the survey on tobacco-use prevention, which is similar to the results from 2000 (33 percent), 2002 (33 percent), 2006 (31 percent), and 2008 (33 percent).

Health Services and Asthma Management School-Level Impact Measure (SLIM)

Policies and Programs: Health Services and Asthma Management Because a school nurse is an essential component of a healthy school, *Healthy People 2010* Objective 7-4 calls to increase the proportion of elementary, middle, and senior high schools with a nurse-to-student ratio of 1:750.⁽⁸⁹⁾ School nurses can also link students and schools to physician and community resources. More schools in 2010 (74 percent) had a full-time registered nurse who provides health services to students at school than in 2008 (67 percent) and this is a significant increase.

There were 24 percent of schools that indicated they used the SHI or a similar self-assessment tool to assess their asthma policies, activities, and programs, which is similar to the 2008 results (25 percent). School-based asthma management plans play an important role in providing school staff, students, and families with an understanding of an individual student's asthma management needs at school, including how to respond in an emergency.^(90,91) Additionally, the use of an asthma action plan at school results in affected students experiencing significant improvement in several health-related outcomes, including a decrease in the frequency of asthma-related nighttime awakenings, number of days of restricted activity, and frequency of acute medical treatment. A significant increase in the number of schools (66 percent in 2010 and 51 percent in 2008) had an asthma action plan on file for all students with known asthma.

Tracking and case management can contribute to the medical management of students with asthma. In addition, monitoring and then providing case management can contribute to the medical management of students with asthma.⁽⁹⁰⁻⁹⁶⁾ Case management activities help students better manage their asthma, and have been shown to decrease hospitalizations, emergency department visits, and school absences among students with severe, persistent, or poorly controlled asthma.^(95,96) A majority of schools (75 percent in 2010 and 70 percent in 2008) indicated that they identified students with poorly controlled asthma by keeping track of them in at least three ways.

Multiple questions addressed the need for schools to have policies and procedures to support students in receiving the asthma medications they may need at school. Students with asthma have had serious episodes and have died at school when they did not have access to quick-relief medicine.⁽⁹⁷⁾ To ensure compliance with federal, state, and many local laws and guidelines, schools should ensure that students have immediate access to asthma medications, as prescribed by a physician and approved by parents.⁽⁹⁸⁾ Policies should include medication

storage in a safe, controlled, and accessible location, and appropriate attention should be given to expiration dates and safe disposal.⁽⁹⁹⁻¹⁰²⁾ Sixty-one percent (61) of schools, which is a slight negative trend from 2008 (64 percent), indicated that they have implemented a policy permitting students to carry and self-administer asthma medications by communicating the policy to students, parents, and families, and by designating an individual responsible for implementing the policy.

Family and Community Involvement: Health Services and Asthma Management

Collaborative asthma interventions require a team effort and involve the whole school community: school administrators, faculty, and staff, as well as students, parents, and local community organizations.^(103,104) Eleven (11) percent of schools indicated that students' family and community members have helped develop or implement asthma management policies and programs. This is similar to the 2008 results (13 percent).

Assessments of successful school-based asthma management programs indicate that with increased knowledge, parents can assist their children in better managing their asthma.⁽¹⁰⁵⁻¹⁰⁷⁾ Twenty-five (25) percent of schools responded that they provided parents and families of students with health information to increase their knowledge of asthma, which exemplifies a slight upward trend since 2008 (20 percent).

Professional Development: Health Services and Asthma Management Because asthma can be life-threatening, it is essential to assist those involved in monitoring and managing children with asthma at school to provide timely, appropriate care. Therefore, all school staff members should be provided with basic information about asthma so that they can support students' asthma management and appropriately respond to asthma emergencies.⁽¹⁰⁸⁾ Less than half of schools (44 percent) said that they required all school staff members to receive annual training on recognizing and responding to severe asthma symptoms and this is a significant decrease since 2008 (57 percent).

III. Principal and Lead Health Educator Survey Results

This section describes the results of the 2010 Virginia School Health Profile (SHP) survey administered to principals and lead health education teachers in the schools sampled in this study. Comparisons with earlier survey results are included where the data are available and when such comparisons are relevant.

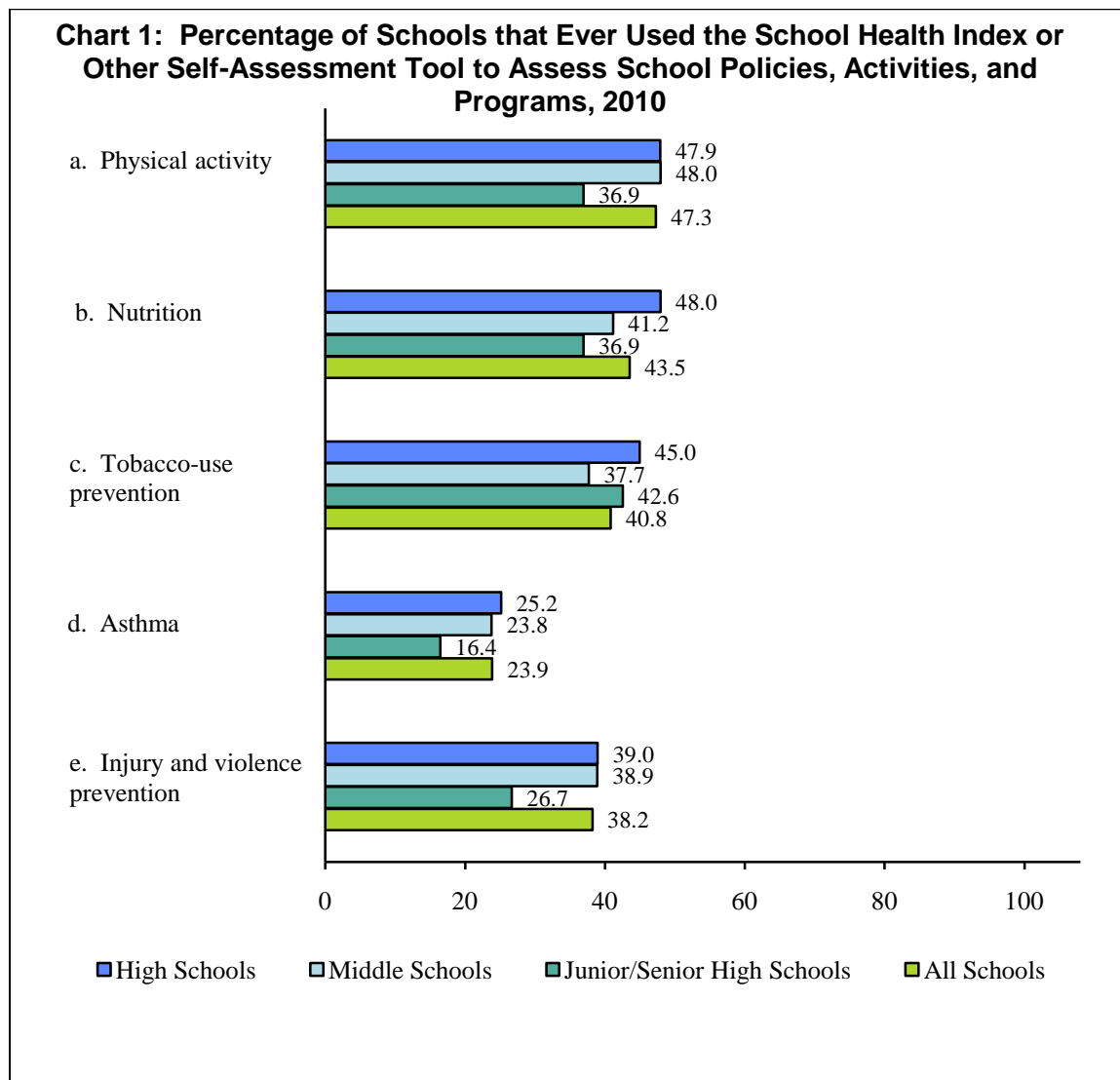
Logistic regression analyses have been used to identify significant linear trends and quadratic trends over time. This type of analysis uses all available years of data, but does not simply consider only the oldest and the most recent data points. For each variable, all data from all weighted survey years are included in the analysis of that variable. Sites that do not have weighted data or that do not have another survey since 1998 are not considered in the analysis.

A. Administrative Policies and Practices

School Health Assessment and Plan

School Health Index There are a number of new questions that were added to the 2008 and 2010 SHP survey about school health assessment and about the coordinated effort with school activities, policies, and programs about school health. In 2006, Principals were asked if their school ever used the School Health Index (SHI) from the Centers for Disease Control and Prevention (CDC) to assess their school's health and safety policies and programs. There were only 16 percent of schools that indicated that they had ever used the SHI to assess their school's health and safety policies and programs. In 2008 and 2010, there are further detailed questions about the SHI and what it was used for. *The School Health Index (SHI) or a similar self-assessment tool* was used "to assess their school's policies, activities, and programs in physical activity, nutrition, and tobacco-use prevention" in 34 percent of all schools in 2010, which is slightly less than 38 percent of schools that indicated using SHI or a similar self-assessment tool in 2008. In the 2010 survey, injury and violence prevention was added to this question, 39 percent of High Schools and Middle Schools responded that they did use the SHI or a similar self-assessment tool to assess school policies, activities, and programs. When Junior/Senior High Schools were asked about injury and violence prevention, 27 percent indicated that they did use the SHI or similar tool to assess the policies and programs for this area. There were 38 percent of all schools that reported using the SHI or another self-assessment tool to assess injury and violence prevention programs and policies.

In all schools, the SHI was used mainly to assess physical activity (47 percent), nutrition (44 percent), and tobacco-use prevention (41 percent). Asthma activities, policies, and programs were assessed using the SHI in 24 percent of schools in 2010. These percents are slightly down from the 2008 reported numbers for each area; physical activity (50 percent), nutrition (48 percent), tobacco-use prevention (41 percent), and asthma (24 percent). Chart 1 represents the percentage of schools that ever used the School Health Index or other self-assessment tool to assess school policies, activities, and programs in physical activity, nutrition, tobacco-use prevention, asthma, and injury and violence prevention in 2010.



School Wellness Policy In 2008, Principals were asked if they had a copy of the *district's wellness policy*. To that question, 85 percent of High Schools, 92 percent of Middle Schools, and 89 percent of All Schools responded yes. In 2010, Principals were asked about types of information they were required to report about implementing the local wellness policy. Most schools responded that they were required to report the number of minutes of physical education required in each grade; (High Schools: 78 percent, Middle Schools: 81 percent, Junior/Senior High Schools: 63 percent, and All Schools: 78 percent), the rates of student participation in school meal programs; (High Schools: 87 percent, Middle Schools: 93 percent, Junior/Senior High Schools: 85 percent, and All Schools: 90 percent), and revenue from sale of foods and beverages from school-sponsored fundraisers, vending machines, school stores, or a la carte lines in the school cafeteria; (High Schools: 75 percent, Middle Schools: 71 percent, Junior/Senior High Schools: 95 percent, and All Schools: 74 percent). Fewer responded that they were required to report the number of minutes of physical activity outside of physical education, such as classroom physical activity breaks, free time physical activity, or recess

(High Schools: 25 percent, Middle Schools: 39 percent, Junior/Senior High Schools: 22 percent, and All Schools: 33 percent).

School Improvement Plan In 2010, Principals were asked if they had a *School Improvement Plan* that included a variety of health topics. There were 78 percent of schools that responded that they had an improvement plan for *any* of the following topics; health education, physical education and physical activity, nutrition services and foods and beverages available at school, health services, mental health and social services, healthy and safe school environment, family and community involvement, faculty and staff health promotion. The top three topics that Principals indicated were included in their school's School Improvement Plan includes family and community involvement (68 percent), health and safe school environment (68 percent), and physical education and physical activity (45 percent). Mental health and social services ranks as one of the lowest health topics included in a School Improvement Plan for most schools (27 percent). Table 1 shows the breakdown of which health topics are included in the School Improvement Plan.

Table 1: Percentage (%) of Schools with a School Improvement Plan that Includes Health-Related Goals and Objectives on the Various Topics, 2010

	High Schools	Middle Schools	Junior/ Senior High Schools	All Schools
Health education	44	35	48	39
Physical education and physical activity	48	44	48	45
Nutrition services and foods and beverages available at school	29	26	37	28
Health services	33	23	-	28
Mental health and social services	34	22	-	27
Healthy and safe school environment	72	66	-	68
Family and community involvement	70	68	-	68
Faculty and staff health promotion	35	28	-	31

- Results are suppressed due to insufficient number of respondents in subgroup.

B. Coordination of Health Education and Health Topic Policies and Activities

Coordinator for School Health and Safety Programs and Activities According to the 2006 Virginia SHP Report, from 2000 to 2006, Principals were asked “who coordinates health education in their schools?” In each survey since 2000, the most common response given by principals was “health education teacher,” followed by “district health education or curriculum coordinator.” Starting in 2008, Principals were not asked about who coordinated health education in their schools, but instead asked if they have *someone who oversees or coordinates* school health and safety programs and activities. In 2008, 92 percent of principles responded that they had someone who oversees or coordinates such programs and activities. In 2010, there was a slight decline with 89 percent of principles indicating that their school had someone who oversees or coordinates school health and safety programs and activities.

School Health Council, Committee, or Team From 2006 to 2008, there was a significant increase in the percentage of schools that have *one or more than one group (e.g., a school health council, committee, or team) that offers guidance on the development of policies or coordinates activities on health topics*; 2006 (49 percent) and 2008 (64 percent). This seems to have slightly decreased and leveled off in 2010, with 58 percent of Principals indicating that they have one or more than one group that offers guidance on the development of policies or coordinates activities on health topics.

The top three groups that principals reported were represented on any school health council, committee, or team for 2008 and 2010 were school administrators (2008: 90 percent, 2010: 92 percent), health education teachers (2008: 91 percent, 2010: 94 percent), and physical education teachers (2008: 91 percent, 2010: 94 percent). Among the groups that were represented the least include, maintenance and transportation staff, faith-based organizations, and businesses for both 2008 and 2010. There was a significant increase in local government agencies representation between 2008 and 2010 from 18 percent of schools in 2008 to 35 percent of schools in 2010. In 2010, two new groups were added to the question and were also found to be represented the least among all of the groups. The complete distribution will be found in Table 2.

Table 2: Percentage of Schools that Have the Various Groups Represented on Any School Health Council, Committee, or Team*, 2008 and 2010

Groups Represented	2008	2010
Nutrition or food services staff	70	67
Health services staff (e.g., school nurse)	85	86
Maintenance and transportation staff	18	16
Technology staff	N/A	24
Library/media center staff	N/A	21
Student Body	46	48
Parents or families of students	61	52
Community members	50	47
Local health departments, agencies, or organizations	44	46
Faith-based organizations	9	12
Businesses	19	24
Local government agencies	18	35

* Among those schools that have one or more than one group that offers guidance on the development of policies or coordinates activities on health topics.

Family and Community Involvement Principals were asked two questions related to family and community involvement with the development or the implementation of policies and programs related to five health topics; HIV, STD, or teen pregnancy prevention, tobacco-use prevention, physical activity, nutrition and healthy eating, and asthma. Responses were relatively stable without any significant change for all categories from 2008 to 2010. Table 3 represents the percentage of students' families and the community involvement.

Table 3: Percentage of Schools in Which Students' Families and Community Members Helped Develop or Implement Policies and Programs Related to the Various Topics During the Two Years Before the Survey, 2008 and 2010

Health Topic	Students' Families		Community Members	
	2008	2010	2008	2010
HIV, STD, or teen pregnancy prevention	16	18	30	31
Tobacco-use prevention	21	22	34	33
Physical activity	32	30	41	38
Nutrition and healthy eating	40	39	52	45
Asthma	16	16	22	20

C. School Programs

A set of new questions in the 2010 survey, asks Principals about whether or not various *injury prevention programs* are being implemented. Below is the response from all schools for the five programs that principals were asked about.

- A student mentoring program 77%
- A safe-passages to school program 28%
- A program to prevent bullying 83%
- A program to prevent dating violence 35%
- A youth development program 51%

D. Sexual Orientation and Gender Identity

New questions have been added to the survey for 2008 and 2010 that address *sexual orientation and gender identity*. Twenty-five percent (25) in 2008 and 26 percent in 2010 of Principals indicated that they had 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."

Youth who are lesbian, gay, bisexual, transgender, or questioning (LGBTQ) have been added in a number of questions in the 2010 survey. According to research, students from schools with a policy that includes sexual orientation or gender report fewer problems with school safety in general (reference: rationale in principal question profile). Many of the schools indicated in the SHP survey in 2010 that they have practices related to LGBTQ youth.

The percent of principals responding to each practice related to LGBTQ youth is indicated below for All Schools.

- Identify “safe spaces” (e.g., a counselor’s office, designated classroom or student organization) where LGBT youth can receive support from administrators, teachers, or other school staff. 54%
- Prohibit harassment based on a student’s perceived or actual sexual orientation or gender identity 89%
- Encourage staff to attend professional development on safe and supportive school environments for all students, regardless of sexual orientation or gender identity 60%
- Facilitate access to providers not on school property who have experience in providing health services, including HIV/STD testing and counseling, to LGBT youth 39%
- Facilitate access to providers not on school property who have experience in providing social and psychological services to LGBTQ youth 42%

E. Professional Development and Preparation

Professional Development

Health Topics Received Since 2000, lead health education teachers were asked in what topics did they receive professional development during the two years before the survey. Almost all physical education teachers or specialists received professional development on physical education during the past two years (96 percent). A majority of lead health teachers indicated that they had received training in violence prevention (64 percent). Within the past two years, 76 percent of teachers received professional development on “physical activity and fitness” and 39 percent received professional development on “nutrition and dietary behavior.” This is a significant decrease for nutrition and dietary behavior and a significant increase for physical activity and fitness. There was a significant decrease (34 percent) of teachers that received professional development on “HIV (human immunodeficiency virus) prevention since the 2000 survey (45 percent). There is a general increase in the percent of lead health education teachers receiving professional development on “human sexuality” since the 2000 survey, but it has significantly declined since 2006 (see figure 1).

Health Topics Desired Lead health teachers were also asked they would like to receive staff development on those topics. In all categories, lead health education teachers reflected the desire for staff development (over 50 percent). Sixty (60) to 75 percent of lead health teachers indicated that they would like to receive staff development in asthma (63 percent), tobacco-use prevention (67 percent), suicide prevention (69 percent), injury and safety (69 percent), emotional and mental health (71 percent), alcohol- or other drug-use prevention (74 percent), and violence prevention (75 percent). There were 57 percent of lead health education

teachers who indicated that they would like to receive staff development on human sexuality. Eighty (80) percent of lead health education teachers indicated that they would like to receive staff development on nutrition and dietary behavior, which is a significant increase from previous surveys. Table 4 reflects the professional development that teachers received in the past two years and who desire staff development on specified health topics since 2006.



Figure 1: The percentage of schools in which the lead health education teacher received professional development on human

Teacher Topics Received Lead teachers were asked if they had received staff development in the past two years on twenty-two teaching topics, with thirteen topics related to HIV and other STDs. There were 34 percent of lead health teachers who responded that they received teaching development in implementing health education strategies using prevention messages that are likely to be effective in reaching youth. Less than 20 percent of teachers responded to receiving staff development in teaching HIV prevention education to students with physical, medical, or cognitive disabilities (17 percent), teaching HIV prevention education to students of various cultural backgrounds (19 percent), strategies for involving parents, families, and others in student learning of HIV prevention education (14 percent), assessing students' performance in HIV prevention education (17 percent), teaching HIV prevention education to students with

limited English proficiency (12 percent), and addressing community concerns and challenges related to HIV prevention education (13 percent).

Table 4: Percentage Lead Health Education Teachers Who Had Received Staff Development in the Past Two Years and Who Desire Staff Development on Specified Health Education Topics, 2006-2010

Staff Development Topics	Percent Had			Percent Desire		
	2006	2008	2010	2006	2008	2010
Physical education (for physical education teachers or specialists only)	--	92	96*	--	--	--
Alcohol- or other drug-use prevention	48	39	43	63	74	74*
Asthma	24	24	28	62	68	63
Emotional and mental health	32	34	30	61	65	71
Foodborne illness prevention	17	25	20*	46	52	52
HIV (human immunodeficiency virus) prevention	45	40	34*	47	62	56*
Human sexuality	41	37	31*	45	55	57*
Injury prevention and safety	44	54	44	55	65	69*
Nutrition and dietary behavior	36	45	39*	73	80	80*
Physical activity and fitness	64	77	76*	68	73	77*
Pregnancy prevention	29	27	26*	43	55	54
STD (sexually transmitted disease) prevention	37	32	30	46	61	57
Suicide prevention	39	30	33*	64	74	69
Tobacco-use prevention	31	32	32	56	65	67*
Violence prevention (e.g., bullying, fighting, or homicide)	67	70	64*	74	74	75

-- Questions not asked

*Significant Change (since question has been asked; between 2000 survey and 2010 survey)

Lead teachers indicated that more than 60 percent had received development in the past two years on using interactive teaching methods (61 percent) and classroom management techniques (69 percent). Only 26 percent of lead teachers indicated that they had received staff development on teaching students with limited English proficiency.

Teacher Topics Desired Lead health teachers were also asked they would like to receive staff development on those teaching topics. A majority of teachers expressed a desire to have staff development on each of the eight non-HIV or STDs teaching topics, with the most teachers indicating that they would like staff development on teaching skills for behavior change (71 percent). A summary of lead teachers who received staff development on teaching topics in the past two years and who desire staff development on specified teaching topics since 2006 is in Table 5.

Table 5: Percent of Lead Health Teachers Who Had Received Staff Development in the Past Two Years and Who Desire Staff Development on Specified Teaching Topics, 2006-2010

Teaching Topics	Percent Had			Percent Desire		
	2006	2008	2010	2006	2008	2010
Describing how widespread HIV and other STD infections are and the consequences of these infections	--	33	27	--	--	--
Understanding the modes of transmission and effective prevention strategies for HIV and other STDs	--	34	29	--	--	--
Identifying populations of youth who are at high risk of being infected with HIV and other STDs	--	27	26	--	--	--
Implementing health education strategies using prevention messages that are likely to be effective in reaching youth	--	34	34	--	--	--
Teaching HIV prevention education to students with physical, medical, or cognitive disabilities	--	19	17	--	--	--
Teaching HIV prevention education to students of various cultural backgrounds	--	19	19	--	--	--
Using interactive teaching methods for HIV prevention education (e.g., role plays or cooperative group activities)	--	23	24	--	--	--
Teaching essential skills for health behavior change related to HIV prevention and guiding student practice of these skills	--	25	23	--	--	--
Teaching about health-promoting social norms and beliefs related to HIV prevention	--	24	22	--	--	--
Strategies for involving parents, families, and others in student learning of HIV prevention education	--	15	14	--	--	--
Assessing students' performance in HIV prevention education	--	17	17	--	--	--
Implementing standards-based HIV prevention education curricula and student assessment	--	20	20	--	--	--
Using technology to improve HIV prevention education instruction	--	18	21	--	--	--
Teaching HIV prevention education to students with limited English proficiency	--	13	12	--	--	--
Addressing community concerns and challenges related to HIV prevention education	--	15	13	--	--	--
Teaching students with physical, medical, or cognitive disabilities	52	48	49*	62	69	73
Teaching students of various cultural backgrounds	43	47	40	54	60	59*
Teaching students with limited English proficiency	29	29	26*	54	57	58*
Using interactive teaching methods (e.g., role plays or cooperative group activities)	61	60	61	52	58	61
Encouraging family or community involvement	38	41	38	54	68	68*
Teaching skills for behavior change	46	45	47*	69	76	76
Classroom management techniques (e.g., social skills training, environmental modification, conflict resolution and mediation, and behavior management)	63	64	69	62	67	63
Assessing or evaluating students in health education	32	42	47*	66	67	71

*Significant Change (since question has been asked; between 2000 survey and 2010 survey)

When teachers were asked if they tried to increase student knowledge about specified health topics in any of grades 6 through 12 during the current school year, over 90 percent of teachers responded that they did for alcohol- or other drug-use prevention, emotional and mental health, human immunodeficiency virus (HIV) prevention, and injury prevention and safety. The lowest topic represented was asthma (69 percent), but still accounts for a majority of the schools that responded and represents a significant increase since 2008 (59 percent). Below is a summary of the data for the 2010 survey.

• Alcohol- or other drug-use prevention	98%
• Asthma	69%
• Emotional and mental health	91%
• Foodborne illness prevention	79%
• Human immunodeficiency virus (HIV) prevention	91%
• Human sexuality	85%
• Injury prevention and safety	95%
• Nutrition and dietary behavior	98%
• Physical activity and fitness	99%
• Pregnancy prevention	85%
• Sexually transmitted disease (STD) prevention	90%
• Suicide prevention	73%
• Tobacco-use prevention	97%
• Violence prevention (e.g., bullying, fighting, or homicide)	95%

Professional Preparation

Professional Preparation The professional preparation of lead health teachers was most likely to be health and physical education combined (88 percent) or physical education (7 percent). Health education accounted for 0.6 percent, kinesiology, exercise science, exercise physiology, home economics or family and consumer science, biology or other science accounted for 2 percent, nursing or counseling accounted for 2 percent, public health, nutrition or other accounted for 0.3 percent, and 2 percent accounted for other education degree. Since the 2000 survey, teachers have indicated that most have been prepared in health and physical education combined or physical education; no other category has been identified by as much as five percent of lead health teachers.

Teachers were asked if they are *certified, licensed, or endorsed to teach health education* in middle school or high school. Ninety-seven (97) percent indicated they were in 2010 compared with 94 percent in 2008, and 93 percent in 2006. A majority of lead health education teachers indicated that they had 15 years or more of *experience in teaching health education courses or topics* 2010 (56 percent), which is similar to the results of previous surveys since 2000. Very few lead health education teachers had less 1 year of experience (2 percent) and about 10 to 15 percent had two to fourteen years of experience; 2 to 5 years (10 percent), 6 to 9 years (15 percent), and 10 to 14 years (16 percent).

F. HIV or AIDS, STD, and Pregnancy Prevention Policies and Practices

HIV or AIDS Prevention Policy A majority of the Principals' responses indicated that they have adopted a policy that addresses many of the issues surrounding HIV. More than 80 percent of schools indicated that they had a policy to maintain confidentiality of HIV-infected students and staff (86 percent) which is a significant increase since 2008 (74 percent). Eighty-eight (88) percent of Principals indicated that they had a policy for worksite safety (i.e., universal precautions for school staff), which represents an upward trend from 2008 (83 percent). There was a significant increase in the percent of schools who indicated that they have adopted a policy for adequate training about HIV infection for school staff (76 percent in 2010, 67 percent in 2008) and for procedures for implementing the policy (73 percent in 2010, 65 percent in 2008). The results of the data are presented in Table 6 for the 2008 and the 2010 survey.

Table 6: Percentage of Schools that Have Adopted a Policy that Addresses HIV and AIDS Prevention, 2008 and 2010

HIV or AIDS Prevention Policy	2008	2010
Attendance of students with HIV infection	64	69
Procedures to protect HIV-infected students and staff from discrimination	68	78
Maintaining confidentiality of HIV-infected students and staff	74	76
Worksite safety (i.e., universal precautions for all school staff)	83	88
Confidential counseling for HIV-infected students	61	67
Communication of the policy to students, school staff, and parents	64	66
Adequate training about HIV infection for school staff	67	76
Procedures for implementing the policy	65	73

HIV, STD, or Pregnancy Prevention Topics Taught Teachers were asked about seventeen HIV, STD, and/or pregnancy prevention topics that they taught in any of *grades 6, 7, or 8* during the current school year. Over 80 percent of teachers responded that they taught seven of the listed topics; the differences between HIV and AIDS, how HIV and other STDs are transmitted, how HIV and other STDs are diagnosed and treated, health consequences of HIV, other STDs, and pregnancy, the benefits of being sexually abstinent, how to prevent HIV, other STDs, and pregnancy, as well as the influences of media, family, and social and cultural norms on sexual behavior. Over 70 percent of the teachers responded for three of the topics; how to access valid and reliable health information, products, and services, communication and negotiation skills related to eliminating or reducing risk for HIV, other STDs, and pregnancy, and goal-setting and decision-making skills related to eliminating or reducing risk for HIV, other STDs, and pregnancy, and close to 60 percent of teachers responded teaching about the topic of compassion for persons living with HIV or AIDS. Results from the 2010 survey are similar to the 2008 survey without any significant trends.

Four new questions have been added since the 2006 survey about condoms. Fewer teachers responded about teaching specifically about condoms compared to the other

categories in grades 6, 7, or 8. Fifty-three (53) percent of teachers responded that they taught about the efficacy of condoms and how well condoms work and do not work, 36 percent indicated that they taught about the importance of using condoms consistently and correctly, 22 percent responded they taught about how to obtain condoms, and even fewer (14 percent) indicated that they taught about how to correctly use a condom. Fourteen (14) percent of teachers responded that they taught all 17 HIV, STD, and pregnancy prevention topics.

For *grades 9 through 12*, teachers were asked about the same 17 HIV, STD, and pregnancy prevention topics and if they taught any of them during the current school year. Over 90 percent of teachers responded that they taught three of the listed topics; how HIV and other STDs are transmitted, how HIV and other STDs are diagnosed and treated, and health consequences of HIV, other STDs and pregnancy. Over 80 percent and close to 90 percent of teachers taught about the differences between HIV and AIDS, the benefits of being sexually abstinent, how to prevent HIV, other STDs, and pregnancy, the influences of media, family, and social and cultural norms on sexual behavior, communication and negotiation skills related to eliminating or reducing risk for HIV, other STDs, and pregnancy, and goal-setting and decision-making skills related to eliminating or reducing risk for HIV, other STDs, and pregnancy. Sixty (60) to 80 percent of teachers responded that they taught compassion for persons living with HIV or AIDs, about the efficacy of condoms, and the importance of using condoms consistently and correctly. More teachers responded about teaching students about how to obtain condoms (52 percent) and how to correctly use a condom (46 percent) in grades 9 through 12 than in grades 6, 7, or 8. Forty-two (42) percent of teachers responded that they taught all 17 HIV, STD, and pregnancy prevention topics. See Table 7 for the results for grades 6, 7, or 8 and grades 9 through 12.

G. Physical Education and Physical Activity Policies, Practices and Curriculum

Physical Education Requirement Policies

Required Physical Education Course In response to the question, “Is physical education required for students in any of grades 6 through 12?” Their responses indicated that 97 percent of schools have such a requirement. This is slightly more than in previous years; 95 percent (2002), 93 percent (2006), and 96 percent (2008).

Concerning the grades in which *required physical education courses* are taught, principals’ responses indicated that, except in grade 8, 91 to 93 percent of schools taught a *required physical education course* in each grade 6 through 12. In grade 8, the percentage was 86. This reflects a slight upward trend since 2006. In the 7th and 8th grade, there was a significant increase of since 2006, with the 7th grade response going from 86 percent in 2006 to 93 percent in 2010 and the 8th grade response going from 73 percent in 2006 to 86 percent in 2010. In grades, 11 and 12, only 6 percent and 7 percent of schools respectively, taught a required health education, which is similar to previous years. These data for the 2006 though 2010 surveys are in Table 8.

Table 7: Percentage of Schools in which Teachers Taught HIV, STD, and/or Pregnancy Prevention Topics in a Required Course, Grades 6, 7, or 8, and Grades 9 through 12, 2010.

HIV, STD, or Pregnancy Prevention Topics Taught	2010	
	Grades 6, 7, or 8	Grades 9 - 12
The differences between HIV and AIDS	84	86
How HIV and other STDs are transmitted	85	90
How HIV and other STDs are diagnosed and treated	80	92
Health consequences of HIV, other STDs, and pregnancy	82	91
The benefits of being sexually abstinent	85	89
How to prevent HIV, other STDs, and pregnancy	85	86
How to access valid and reliable health information, products, and services related to HIV, other STDs, and pregnancy	72	87
The influences of media, family, and social and cultural norms on sexual behavior	82	86
Communication and negotiation skills related to eliminating or reducing risk for HIV, other STDs, and pregnancy	78	87
Goal-setting and decision-making skills related to eliminating or reducing risk for HIV, other STDs, and pregnancy	79	87
Compassion for persons living with HIV or AIDS	62	77
Efficacy of condoms, that is, how well condoms work and do not work	53	73
The importance of using condoms consistently and correctly	36	65
How to obtain condoms	22	52
How to correctly use a condom	17	46
All 17 HIV, STD, and pregnancy prevention topics	14	42

Table 8: Percentage of schools that taught a required physical education course in the following grades*, 2006 - 2010

Grade	Percent of Schools		
	2006	2008	2010
6 th grade	86	89	91
7 th grade	86	88	93
8 th grade	73	83	86
9 th grade	87	91	91
10 th grade	86	91	91
11 th grade	6	7	7
12 th grade	6	6	6

*This data here represents the data from the trend analysis report generated by CDC. The 2008 and 2010 results published here are slightly different than how they appear in the site reports. This is because the site reports excluded data from schools that do not contain the grade in the question.

Physical Education Course Content Seventy-four (74) percent of schools indicated that they taught about all of the following in a required physical education course:

- Physical, psychological, or social benefits of physical activity.
- Health-related fitness (i.e., cardiorespiratory endurance, muscular endurance, muscular strength, flexibility, and body composition).
- Phases of a workout (i.e., warm-up, workout, cool down).
- How much physical activity is enough (i.e., determining frequency, intensity, time, and type of physical activity).
- Developing an individualized physical activity plan.
- Monitoring progress toward reaching goals in an individualized physical activity plan.
- Overcoming barriers to physical activity.
- Decreasing sedentary activities such as television viewing.
- Opportunities for physical activity in the community.
- Preventing injury during physical activity.
- Weather-related safety (e.g., avoiding heat stroke, hypothermia, and sunburn while physically active).
- Dangers of using performance-enhancing drugs such as steroids.

Student Exemption Principals were asked if students could be *exempted from taking a required physical education* course for any of the 10 reasons specified below. The top two reasons that schools allow students to be exempted from taking a required physical education are long-term physical or medical disability and religious reasons. Significant changes in trend exist for high physical fitness competency test score and for participation in community service activities as reasons that students could be exempted from taking the required physical education course. The percentages of principals indicating that their schools permit exemptions for the 10 reasons follow in Table 9.

Table 9: Percentage of Schools in Which Students Could be Exempted From Taking Required Physical Education for One Grading Period or Longer for the Following Reasons*, 2006 - 2010

Exemption Reasons	Percent of Schools		
	2006	2008	2010
Enrollment in other courses	11	16	13
Participation in school sports	0.5	3	3
Participation in other school activities (i.e., ROTC, band or chorus)	7	10	9
Participation in community sport activities	4	5	3
Religious reasons	41	42	42
Long-term physical or medical disability	80	75	74
Cognitive disability	29	34	31
High physical fitness competency test score	0	2	0.6
Participation in vocational training	1	4	3
Participation in community service activities	0.4	3	0.6

*Among those schools that require physical education for students in any of grades 6 through 12.

Teacher Support

Materials Provided Concerning those who teach physical education, principals were asked what *materials were provided* to those teachers. The majority of schools provide all of the following options; goals, objectives, and expected outcomes for physical education (97 percent), a chart describing the annual scope and sequence of instruction for physical education (89 percent), plans for how to assess student performance in physical education (90 percent), and a written physical education curriculum (93 percent). All data are similar to 2008 results, except for a significant decrease was seen in the percent of principals who responded that they provide their physical education teachers materials related to plans for how to assess student performance in physical education from 2008 (95 percent) to 2010 (90 percent).

Physical Activity Outside of Regular School Hours

Opportunities for Non-Curricular Physical Activities Principals responded to two questions related to *physical activities outside regular school hours or when school is not in session*. In 68 percent of schools, students were offered opportunities to participate in intramural activities or physical activity clubs and 89 percent of schools indicated that children or adolescents use indoor physical activity or athletic facilities for community-sponsored physical activity classes or lessons.

H. Nutrition Policies, Practices and Curriculum

Nutrition-Related Policies and Practices

School Celebrations Principals were asked if “they always or almost always offer fruits or non-fried vegetables at school celebrations when foods or beverages are offered,” to which 35 percent and 37 percent of all schools responded that they did in 2008 and 2010 respectively. Fifty (50) percent of all schools responded that they sometimes offer fruits or non-fried vegetables at school celebrations and 0 percent responded that they never do.

Vending Machines Principals indicated that students could purchase snack foods or beverages from vending machines at the school or at the school store, canteen, or snack bar in 73 percent of schools, which is a significant decrease since 2002 (81 percent). Similar to previous surveys, there was a disparity between high schools and middle schools, 90 percent of high schools allowed students to purchase snack foods and beverages and only 59 percent of middle schools allowed students to make such purchases.

Table 10, shows the percentages of schools that made the various snacks and beverages available for purchase by students in 2006 to 2010. Schools appear to continue to significantly reduce foods that are high in sugar, high in salt, high in fat (chocolate candy, other kinds of candy, salty snacks that are not low in fat, 2% or whole milk, soda pop or fruit drinks that are not 100% fruit juice and sport drinks, such as Gatorade), but schools are not improving to include fruits (not fruit juice) or non-fried vegetables (not vegetable juice) in vending machines. High schools have higher amounts of foods that are high in fat, high in salt, and high in sugar compared to Middle schools and have similarly low amounts of fruits (not fruit juice) and non-fried vegetables (not vegetable juice) in their vending machines.

Package or Serving Size Forty-six (46) percent of all schools indicated that they limit the package or serving size of any individual food and beverage items sold in vending machines or at the school store, canteen, or snack bar. This is similar across all types of schools, with more high schools (56 percent) limiting package or serving size compared to 38 percent of middle schools and 52 percent of junior/senior high schools indicate that they limit the package or serving size of any individual food and beverage items sold in vending machines or at the school store, canteen, or snack bar.

Food Costs There was a significant decline of the percent of schools who responded that they priced nutrition foods and beverages at a lower cost while increasing the price of less nutrition foods and beverages from 2008 to 2010 and the response is low (2008: 10 percent, 2010: 5 percent).

Table 10: Percent of Schools Making Various Snacks and Beverages Available for Purchase by Students, 2006-2008

Snack Foods and Beverages	Percent of Schools		
	2006	2008	2010
Chocolate candy	47	29	25*
Other kinds of candy	52	37	33*
Salty snacks that are not low in fat (e.g. regular potato chips)	60	40	35*
Cookies, crackers, cakes, pastries, or other baked goods that are not low in fat	--	44	39
Ice cream or frozen yogurt that is not low in fat	--	28	24
2% or whole milk (plain or flavored)	47	47	38*
Water ices or frozen slushes that do not contain juice	--	18	14
Soda pop or fruit drinks that are not 100% fruit juice	62	45	37*
Sport drinks, such as Gatorade	67	57	46*
Foods or beverages containing caffeine	--	34	28
Fruits (not fruit juice)	--	29	25
Non-fried vegetables (not vegetable juice)	--	47	46

-- Questions not asked

*Significant linear trend

Nutrition Activities Forty-five percent (45) of schools responded that they collected suggestions from students, families, and school staff on nutrition food preferences and strategies to promote healthy eating and 56 percent of schools provided information to students or families on the nutrition and caloric content of foods available. There was a significant increase in the percent of schools that indicated that they conducted taste tests to determine food preferences for nutrition items from 2008 (21) to 2010 (28 percent). A fair amount of schools responded that they provided opportunities for students to visit the cafeteria to learn about food safety, food preparation, or other nutrition-related topics (17 percent).

Food and Beverage Advertisement Very few schools indicated that they promote candy, meals from fast food restaurants, or soft drinks to students through the distribution of products, such as t-shirts, hats, and book covers to students (1 percent). Most schools prohibit advertisements for candy, fast food restaurants, or soft drinks in a variety of school locations; in

the school building (68 percent), on school grounds including on the outside of the school building, on playing fields, or other areas of the campus (55 percent), on school buses or other vehicles used to transport students (78 percent), and in school publications (e.g., newsletters, newspapers, web sites, or other school publications) (60 percent).

Nutrition and Dietary Behavior Topics Teachers were asked about fourteen specific nutrition and dietary behavior topics that they taught in a required health education course in any of the grades 6 through 12. Similar to previous studies, their responses indicated that a very high percentage of schools teach each of these topics, and 73 percent of schools taught all of the topics. From 2008 to 2010, four nutrition and dietary behavior topics significantly increased in the percentage of teachers that indicated they taught them during the school year; food guidance using MyPyramid, using food labels, using sugars in moderation, and preparing healthy meals and snacks. Both high school and middle schools responded at 85 percent or above for all topics, except for signs, symptoms, and treatment for eating disorders where middle schools responded with 84 percent. Seventy-three (73) percent of schools indicated that teachers taught all fourteen nutrition and dietary behavior topics. Their responses are shown in Table 11 below.

Table 11: Percent of Schools Teaching Various Nutrition and Dietary Behavior Topics in a Required Health Education Course in Grades 6-12, 2008 and 2010

Nutrition and Dietary Behavior Topics	Percent of Schools	
	2008	2010
Benefits of health eating	95	97*
Food guidance using MyPyramid	88	95
Using food labels	89	95*
Balancing food intake and physical activity	93	96
Eating more fruits, vegetables, and whole grain products	93	95
Choosing from foods that are low in fat, saturated fat, and cholesterol	92	94
Using sugars in moderation	89	94*
Using salt and sodium in moderation	89	92
Eating more calcium-rich foods	87	88
Food safety	86	85
Preparing healthy meals and snacks	86	91*
Risks of unhealthy weight control practices	91	94
Accepting body size differences	84	87
Signs, symptoms, and treatment for eating disorders	86	88
All 14 nutrition and dietary behavior topics	NA	73

*Significant linear change

NA - 2008 nutrition and dietary behavior topics varied slightly and total percent of topics taught are not represented here.

I. Tobacco Policies, Practices, and Curriculum

The 2008 survey included fourteen questions that addressed tobacco policies and curriculum, with thirteen questions on the principals' questionnaire and one on the lead health teachers' questionnaire. The questions were grouped for analysis and reporting into three topics, policies, activities, and curriculum.

Tobacco-Use Prevention Policies There were 98 percent of schools that responded that had adopted a policy prohibiting tobacco use, which is similar to previous years. These policies almost always (i.e., 95-96 percent of schools) prohibit student use of cigarettes, smokeless tobacco, cigars, and pipes. To a lesser degree (i.e., in 92-93 percent of schools), the policies prohibit faculty/staff use of tobacco and visitors use of tobacco (87-90 percent). These results are similar to previous surveys.

A little over half (54 percent) of schools responded that they follow a policy that mandates a “tobacco-free environment,” which is one that “prohibits tobacco use by students, staff, and visitors in school buildings, at school functions, in school vehicles, on school grounds, and at off-site school events, applicable 24 hours a day and seven days a week.” This is a significant increase in the number of schools that responded that they have this policy and is up from 34 percent in 2002, 44 percent in 2006 and 53 percent in 2008. Tobacco-use prevention policies tend to be highly restrictive for all groups (students, faculty/staff, and visitors) in school buildings and on schools buses (95-75%). Comparatively, schools are not as restrictive with their visitors at off-campus, school-sponsored events (67 percent). See table 12 for a summary of these results.

Table 12: Percent of Schools Prohibiting Tobacco Use by Group and Location, 2010

Location	Percent of Schools		
	Students	Faculty/Staff	Visitors
In school buildings	97	97	97
Outside on school grounds, including parking lots and playing fields	96	86	80
On school buses or other vehicles used to transport students	97	86	95
At off-campus, school-sponsored events	95	85	67

Most schools (93-97 percent) of schools have a *tobacco-use prevention policy* that specifically prohibits tobacco use during school hours for students, faculty/staff, and visitors. However, fewer schools (84-85 percent) have the same policy during non-school hours for faculty/staff, but many (93 percent) still have this policy for students.

Most schools have a procedure to inform students (100%), faculty and staff (99%), and visitors (91%) about the tobacco-use prevention policy that prohibits their use of tobacco. Among those schools that have adopted a policy prohibiting tobacco use, 43 percent of schools have a single individual responsible for enforcing the tobacco-use prevention policy, which is usually the principal (34%).

When students are *caught smoking cigarettes*, the most common actions taken are referral to a school administrator (99 percent of schools do it “always or almost always”) and informing parents or guardians (99 percent of schools do it “always or almost always”). The only other action used “always or almost always” by more than one-third of schools is

suspension from school (43 percent). The same three actions were reported to be the most frequently taken in the 2002, 2004, and the 2006 surveys as well. Table 13 expands on the actions taken in 2010.

When asked if their school provided referrals to *tobacco cessation programs* for students, 37 percent of principals said their schools did provide referrals, compared to 40 percent in 2008. For faculty and staff, 18 percent said they provided referrals, compared to 15 percent in 2008. Almost one-third of schools “have an arrangement with any organizations or health care professionals not on school property to provide tobacco cessation” for faculty and staff (30 percent) and for students (36 percent), which is similar to 2008 results.

A significant increase in the percent of schools (73 percent in 2010, 71 percent in 2008, and 61 percent in 2006) responded that they “post signs marking a tobacco-free school zone, that is, a specified distance from school grounds where tobacco use is not allowed.”

Table 13: Percent of Schools Taking Specified Actions When Students Are Caught Smoking Cigarettes, 2010

Location	Percent of Schools		
	Always or Almost Always	Sometimes	Rarely or Never
Parents or guardians are notified	99	0.5	0
Referred to a school counselor	26	51	14
Referred to a school administrator	99	0.6	0.3
Encouraged, but not required, to participate in an assistance, education, or cessation program	24	39	16
Required to participate in an assistance, education, or cessation program	20	28	20
Referred to legal authorities	36	32	19
Placed in detention	19	34	15
Not allowed to participate in extra-curricular activities or interscholastic sports	30	47	13
Given in-school suspension	21	46	9
Suspended from school	43	44	8
Expelled from school	1	8	28
Reassigned to an alternative school	0.5	14	32

Tobacco-Use Prevention Activities Forty-five (45) percent of schools “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,” which is similar to the 2008 survey. A similar amount of schools (44 percent) responded that they “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.”

Tobacco-Use Prevention Curriculum Teachers were asked about 15 specific tobacco-use prevention topics that they taught in a required course for students in any of grades 6

through 12. Over 90 percent of teachers indicated teaching 9 of the subjects; identifying tobacco products and the harmful substances they contain, identifying short- and long-term health consequences of tobacco use, identifying legal, social, economic, and cosmetic consequences of tobacco use, understanding the addictive nature of nicotine, effects of tobacco use on athletic performance, effects of second-hand smoke and benefits of a smoke-free environment, understanding the social influences on tobacco use, including media, family, peers, and culture, identifying reasons why students do and do not use tobacco, and using interpersonal communication skills to avoid tobacco use (e.g., refusal skills, assertiveness).

Over 80 percent of teachers indicated teaching 5 of the subjects; using goal-setting and decision-making skills related to not using tobacco, finding valid information and services related to tobacco-use prevention and cessation, supporting others who abstain from or want to quit using tobacco, supporting school and community action to support a tobacco-free environment, and identifying harmful effects of tobacco use on fetal development. Seventy-four (74) percent of schools indicated that they taught students about making accurate assessments of how many peers use tobacco in a required course in any grades of 6 through 12. Sixty-three (63) percent of schools indicated that they taught all 15 tobacco-use prevention topics in 2010. Results are fairly similar to the 2008 survey results. The data is summarized in table 14 for 2008 and 2010.

Table 14: Percent of Schools Teaching Various Tobacco-Use Prevention Topics in a Required Health Education Course in Grades 6-12, 2008 and 2010

Tobacco-Use Prevention Topics Taught	Any of Grades 6 - 12	
	2008	2010
Identifying tobacco products and the harmful substances they contain	94	95
Identifying short- and long-term health consequences of tobacco use	94	96
Identifying legal, social, economic, and cosmetic consequences of tobacco use	92	92
Understanding the addictive nature of nicotine	93	95
Effects of tobacco use on athletic performance	90	90
Effects of second-hand smoke and benefits of a smoke-free environment	93	94
Understanding the social influences on tobacco use, including media, family, peers, and culture	94	94
Identifying reasons why students do and do not use tobacco	92	94
Making accurate assessments of how many peers use tobacco	81	74
Using interpersonal communication skills to avoid tobacco use (e.g., refusal skills, assertiveness)	91	91
Using goal-setting and decision-making skills related to not using tobacco	88	89
Finding valid information and services related to tobacco-use prevention and cessation	82	82
Supporting others who abstain from or want to quit using tobacco	80	82
Supporting school and community action to support a tobacco-free environment	81	84
Identifying harmful effects of tobacco use of fetal development	86	85
All 15 tobacco-use prevention topics	63	63

J. Health Services and Asthma Management

Registered Nurse A significant increase in the number of schools indicated that they have a *full-time registered nurse* who provides health services to students from 2008 (67 percent) to 2010 (74 percent). This is a significant increase since 2008 (67 percent).

Asthma Action Plan Limited schools indicated that they did not have any students with known asthma (0.6 percent). When principals were asked if all their “students with known asthma have an action plan on file,” 66 percent of schools responded that they did for *all* students, which is a significant increase for schools from the 2008 survey (51 percent). Eleven (11) percent of schools responded that they have an asthma action plan *some* students, and 1 percent responded that no students with known asthma have an asthma action plan on file.

Identifying Events for Poorly Controlled Asthma Students are identified by schools as having *poorly controlled asthma* through three top *events*; frequent visits to the school health office due to asthma (80 percent), frequent asthma symptoms at school (68 percent), and students sent home early due to asthma (59 percent). The 2008 results are similar for all events that are used to identify students with poorly controlled asthma except “calls from school to 911, or other local emergency numbers, due to asthma,” where in 2010 there was a significant increase in schools that used this event to identify students with poorly controlled asthma compared to 2008; 42 percent in 2010 and 31 percent in 2008. Nine (9) percent of schools do not identify students with poorly controlled asthma for 2008 and 2010. Table 15 represents the 2008 and 2010 survey data on this topic.

Table 15: Percent of Schools Using Various Events to Identify Students with Poorly Controlled Asthma , 2008 and 2010

Events	Percent of Schools	
	2008	2010
This school does not identify students with poorly controlled asthma	9	9
Frequent absences from school	45	48
Frequent visits to the school health office due to asthma	78	80
Frequent asthma symptoms at school	67	68
Students sent home early due to asthma	54	59
Calls from school to 911, or other local emergency numbers, due to asthma	31	42*

*Significant linear trend

Poorly Controlled Asthma Services Principals were asked about nine different services for students with poorly controlled asthma. Over 95 percent of schools indicated that they provided the following services; ensuring an appropriate written asthma action plan is obtained, ensuring access to and appropriate use of asthma medications, spacers, and peak flow meters at school, ensuring access to safe, enjoyable physical education and activity opportunities, and ensuring access to preventive medications before physical activity. Over half (58 – 73 percent) of schools indicated that they offered asthma education for students with asthma, minimized

asthma triggers in the school environment, addressed social and emotional issues related to asthma, and provided additional psychosocial counseling or support services as needed. All of these services have significantly increased since 2008 except for providing referrals to primary health care clinicians or child health insurance programs (stayed the same) and addressing social and emotional issues related to asthma (slightly increased). All of this data is summarized in table 16.

Table 16: Percent of Schools That Provide Various Services for Students with Poorly Controlled Asthma, 2008 and 2010

Services	Percent of Schools	
	2008	2010
Providing referrals to primary health care clinicians or child health insurance programs	61	65
Ensuring an appropriate written asthma action plan is obtained	82	95*
Ensuring access to and appropriate use of asthma medications, spacers, and peak flow meters at school	91	95*
Offering asthma education for students with asthma	59	72*
Minimizing asthma triggers in the school environment	76	83*
Addressing social and emotional issues related to asthma	55	61
Providing additional psychosocial counseling or support services as needed	50	59*
Ensuring access to safe, enjoyable physical education and activity opportunities	93	97*
Ensuring access to preventive medications before physical activity	90	96*

*Significant linear trend

Asthma Staff Training Forty-four (44) principals indicated that their school staff members are required to receive training on recognizing and responding to severe asthma symptoms more than once per year or once per year, which is a significant decrease since 2008 (57 percent).

Self-administered Asthma Medications No significant changes occurred from 2008 to 2010 in relation to policies and procedures on self-administered asthma medications. Eighty-three (83) percent of schools indicated that they have adopted a policy stating that students are permitted to carry and self-administer asthma medications (80 percent in 2008). Among schools that have adopted such a policy, 98 percent of schools indicated they have procedures to inform students about the policy permitting students, parents and families about the policy permitting students to carry and self-administer asthma medications. There were 77 percent of schools, which is a slight trend downward from schools in 2008 (84 percent), that indicated that they have a single individual responsible for implementing the policy permitting students to carry and self-administer asthma medication. See Table 17 for the summary of this data.

Table 17: Percentage of Schools that Have Policy and Procedures for Self-Administered Asthma Medications , 2008 and 2010

Policies and Procedures	Percent of Schools	
	2008	2010
Students are permitted to carry and self-administer asthma medications	80	83
Schools inform students about the policy permitting students to carry and self-administer asthma medications	98	98
Schools inform parents and families about the policy permitting students to carry and self-administer asthma medications	98	98
There is a single individual responsible for implementing the policy permitting students to carry and self-administer asthma medications	84	77

*Significant linear trend

Conclusion

The SHP survey has been conducted on even-numbered years since 1996. Each time, there have been some changes in the survey content. This year the most noticeably were related to the school health assessment and plan, as well as sexual orientation and gender identity. The survey was designed to monitor the characteristics of and trends in school health education and health services in middle/junior and senior high schools. Included in the survey are administrative health policies and programs related to school health assessment/plan, sexual orientation and gender identity, health and physical education requirements, health education content, physical activity, tobacco-use prevention policies, nutrition-related policies and practices, school safety and security, HIV policies, health services, teacher preparation, and staff development.

Schools may benefit from using the School Health Index (SHI) or another self-assessment tool that assesses and diagnoses the school health environment. Few schools are using the SHI for injury prevention programs or asthma management, but a majority of schools are implementing a program to prevent bullying and a student mentoring program. Since academic success is an indicator of overall student well-being and a strong predictor of adult health outcomes, schools may benefit from developing a School Improvement Plans (SIP) that include key health-related goals and objectives. In addition, schools may need to consider providing more staff development for key health topics, considering a majority of health education teachers indicated that they desired staff development on a variety of health topics. Staff development appears to be focused more on physical education teachers and physical activity and fitness, when compared to the other health topics.

Health education appears to cover all three health topics (HIV or AIDS and pregnancy prevention, physical education and physical activity, and tobacco-use prevention) in most schools. However, schools may be missing an opportunity to target youth at high risk and racial/ethnic minorities when providing HIV, STD and pregnancy prevention programs. Tobacco cessation services may be another area that schools can improve on to decrease tobacco-use among students, teachers, and staff.

Policies and programs that are related to HIV/AIDS, tobacco-use prevention, and asthma management seem to continue to improve. However, policies and programs that promote optimal nutrition and healthy eating habits need improvement. Schools appear to recognize that they have the ability to provide and promote positive health and health behaviors; however there remains to be opportunity for additional progress.

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