School Health Research: 2017 Updates from CDC

Nancy Brener, Ph.D.
Pete Hunt, Dr.PH
Holly Hunt, M.A.
School Health at CDC

- **Split across 2 Centers**
  - National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP)
    - Division of Adolescent and School Health
    - Focuses on HIV and STD prevention
    - Houses school-based surveillance systems
  - National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP)
    - School Health Branch in Division of Population Health
    - Focuses on physical activity, nutrition, and obesity
Three Domestic Surveillance Systems

• Youth Risk Behavior Surveillance System (YRBSS)

• School Health Policies and Practices Study (SHPPS)

• School Health Profiles (Profiles)
Purposes of the YRBSS

• Focus the nation on behaviors among youth causing the most important health problems
  • Behaviors that contribute to unintentional injuries and violence
  • Sexual behaviors
  • Alcohol and other drug use
  • Tobacco use
  • Unhealthy dietary behaviors
  • Inadequate physical activity
• Assess how risk behaviors change over time
• Provide comparable data
YRBSS Components

• Ongoing
  • National school-based YRBS
  • State, territorial, and large urban school district YRBS
  • Special population surveys

• Previously
  • 2010 National Youth Physical Activity and Nutrition Study
  • Psychometric and methods studies
  • National alternative high school YRBS
  • National college YRBS
  • National household-based YRBS
<table>
<thead>
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<th>Year</th>
<th># of states</th>
<th># of cities</th>
<th># of territories</th>
<th># of tribal governments</th>
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<th>% of sites with weighted data</th>
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<td>2017</td>
<td>46</td>
<td>21</td>
<td>4</td>
<td>4</td>
<td>75</td>
<td>?</td>
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YRBSS 2017 Release
June, 2018

• Scientific products
  • *MMWR* Surveillance Summary
  • National, state, and local datasets
  • Youth Online
  • Fact sheets
  • Updated technical resources

• Social media

• Web site: [www.cdc.gov/yrbs](http://www.cdc.gov/yrbs)
What is SHPPS?

• SHPPS is a national survey periodically conducted to assess school health policies and practices at the state, district, school, and classroom levels.

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SHPPS Content Follows Whole School, Whole Community, Whole Child Model
SHPPS 2016 Release: September 18, 2017
www.cdc.gov/shpps

- Web posting of report, fact sheets, datasets, and documentation
- Presentations at national conferences

2016 Overview

About SHPPS: SHPPS is a national survey periodically conducted to assess school health policies and practices at the state, district, school, and classroom levels. SHPPS was conducted at the following levels during each cycle:

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Teens' 2013 assessed the characteristics of selected components of the Whole School, Whole Community, Whole Child model: health education; physical education and physical activity; nutrition environment and services; health services; counseling, psychological, and social services; mental health services; environmental; and employee wellness.

Methods

Data were collected via web-based questionnaires completed by designated respondents in a nationally representative sample of public school districts. The respondents had previously responded to a brief demographic questionnaire. The web-based questionnaire was designed to describe the health environment and practices specific to each school health program component, with emphasis on policies. District level data are weighted to provide national estimates. Among 957 eligible districts, 741 (77.3%), completed at least one questionnaire module.

Results

Coordination

Percentage of districts with a coordinator for selected school health program components

<table>
<thead>
<tr>
<th>Component</th>
<th>Districts</th>
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<td>Health education</td>
<td>88.0</td>
</tr>
<tr>
<td>Physical education</td>
<td>89.0</td>
</tr>
<tr>
<td>Nutrition services</td>
<td>73.0</td>
</tr>
<tr>
<td>Counseling, psychological, and social services</td>
<td>79.3</td>
</tr>
<tr>
<td>Mental health services</td>
<td>61.2</td>
</tr>
<tr>
<td>Employee wellness</td>
<td>74.0</td>
</tr>
<tr>
<td>All school health policies and practices</td>
<td>77.5</td>
</tr>
</tbody>
</table>

Trends Over Time: 2000-2016

About SHPPS: SHPPS is a national survey periodically conducted to assess school health policies and practices at the state, district, school, and classroom levels. SHPPS assessed the characteristics of selected components of the Whole School, Whole Community, Whole Child model: health education; physical education and physical activity; nutrition environment and services; health services; counseling, psychological, and social services; mental health services; environmental; and employee wellness.

Health Education

<table>
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</thead>
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<tr>
<td>Health education</td>
<td>89.6</td>
<td>90.0</td>
<td>89.0</td>
<td>89.3</td>
<td>89.4</td>
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<tr>
<td>Physical education</td>
<td>88.6</td>
<td>88.5</td>
<td>88.4</td>
<td>89.0</td>
<td>89.5</td>
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<tr>
<td>Nutrition services</td>
<td>74.0</td>
<td>74.0</td>
<td>74.0</td>
<td>74.0</td>
<td>74.0</td>
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<tr>
<td>Counseling, psychological, and social services</td>
<td>78.0</td>
<td>78.0</td>
<td>78.0</td>
<td>78.0</td>
<td>78.0</td>
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<tr>
<td>Mental health services</td>
<td>65.5</td>
<td>65.5</td>
<td>65.5</td>
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<td>65.5</td>
</tr>
<tr>
<td>Employee wellness</td>
<td>77.0</td>
<td>77.0</td>
<td>77.0</td>
<td>77.0</td>
<td>77.0</td>
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<tr>
<td>All school health policies and practices</td>
<td>77.0</td>
<td>77.0</td>
<td>77.0</td>
<td>77.0</td>
<td>77.0</td>
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</table>

* This fact sheet reports data by selected variables. More variables not included might have changed significantly, but changed insignificantly, or not been available in previous cycles. Regression analysis tools were used to control for changes in policy or practice. The change was not judged significant if the 2016 estimate was within one percentage point of the 2013 estimate increased.
Future of SHPPS
What is Profiles?

• A system of surveys assessing school health policies and practices in states, territories, and school districts
• Conducted biennially by education and health agencies with support from CDC
• Questionnaires administered to middle and high school principals and lead health education teachers
• Mail or web-based administration
What is Measured by Profiles?

• School health education requirements and content
• Physical education and physical activity
• Practices related to bullying and sexual harassment
• Policies related to tobacco use and nutrition in schools
• School-based health services
• Family engagement and community involvement
• School health coordination

<table>
<thead>
<tr>
<th>Year</th>
<th># of states</th>
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<th># of territories</th>
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<tr>
<td>2000</td>
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<td>13</td>
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<td>--</td>
<td>51</td>
<td>75%</td>
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<tr>
<td>2002</td>
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<tr>
<td>2004</td>
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<td>2006</td>
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<td>2008</td>
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<td>21</td>
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<td>20</td>
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</tr>
<tr>
<td>2012</td>
<td>49</td>
<td>19</td>
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<td>2</td>
<td>75</td>
<td>92%</td>
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<tr>
<td>2014</td>
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<td>74</td>
<td>96%</td>
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<tr>
<td>2016</td>
<td>50</td>
<td>21</td>
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<td>--</td>
<td>75</td>
<td>97%</td>
</tr>
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Profiles 2016 Release: November, 2017
www.cdc.gov/schoolhealthprofiles

- Compilation report
- PowerPoint maps
- One-page fact sheet
Future Plans

- **2018 School Health Profiles**
  - Cycle underway

- **2019 YRBS**
  - Web-based option available for state and local data collection

- **SHPPS**
  - ???
RAEB 2016 Priorities

- **Sexual health services**
  - Sexual health services web resources
  - School-based STD screening programs

- **Sexual and gender minority youth**
  - School-centered HIV prevention for adolescent sexual minority males
  - Resilience and transgender youth
  - Protective factors for sexual and gender minority youth

- **Sexual health education**
  - Sexual health education evaluation: Fort Worth Independent School District
RAEB 2016 Priorities

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  - Sexual health services web resources
  - School-based STD screening programs

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  - Protective factors for sexual and gender minority youth

- **Sexual health education**
  - Sexual health education evaluation: Fort Worth Independent School District
Part of a strategic initiative to develop online tools that help schools, parents, and providers increase adolescent use of sexual health services (SHS)

- **Health Services for Teens Landing Page**
  [https://www.cdc.gov/healthyyouth/healthservices/](https://www.cdc.gov/healthyyouth/healthservices/)

- **Time Alone Info Brief for Parents**
School-Based STD Screening Study: Detroit Schools

- Began 2010-2011 school year
- Based on Philadelphia and New Orleans programs
  - All students called to education session
- Overarching question: Is there a sustained reduction in Chlamydia positivity among participants in the Detroit school-based STD screening program?
- Programmatic Relevance: Inform strategies for improving STD screening events in high schools
Detroit’s Screening Program
Results & Discussion

- Significant decline in Chlamydia prevalence over five years from 10.24% to 6.27% among all students and 16.02% to 9.79% among girls.

- Potential reasons for Detroit’s unique results:
  - Participation in Detroit was 79%, double that of Philadelphia and much higher than New Orleans
  - Detroit’s community services much less robust
    - The Detroit SBSSP may well have been the only consistent source of free STD testing in the city
  - Anecdotal evidence suggests high treatment rates, thus Detroit identified and cleared the majority of infections within a small window of time
RAEB 2016 Priorities

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  - Sexual health services web resources
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  - School-centered HIV prevention for adolescent sexual minority males
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- **Sexual health education**
  - Sexual health education evaluation: Fort Worth Independent School District
School-Centered HIV/STD Prevention for Adolescent Sexual Minority Males (ASMM)

- **Project goal**
  - To reduce HIV infection and other STD among Black and Latino sexual minority males aged 13-19 years through school and community-based partnerships by
    - Increasing the number tested and treated for HIV and STD
    - Reducing sexual risk behaviors
    - Reducing absenteeism and school drop-out

- **Participating partners**
  - Broward County Public Schools (BCPS)—Fort Lauderdale, FL
  - Los Angeles (LA) Unified School District—Los Angeles, CA
  - San Francisco (SF) Unified School District—San Francisco, CA
  - Advocates for Youth
  - ICF International (evaluation contractor)
School-Centered HIV/STD Prevention for Adolescent Sexual Minority Males

- **Project strategies**
  - Increasing access to HIV/STD testing through
    - school-based health centers (SBHCs)
    - community partners (both on and off campus)
  - Enhancing healthy school and SBHC environments
  - Tailoring and implementing evidence-based sexual risk reduction interventions, as appropriate

- **Baseline & mid-point data collected**
  - Youth survey (BCPS students in 7 high schools)
  - Qualitative school climate assessment (BCPS staff members)
  - School staff survey (staff members in BCPS, LA, & SF)
  - CBO/SBHC survey (CBOs/SBHCs partnering with BCPS, LA, & SF)
Resilience and Transgender Youth: A Qualitative Study

- **Project Goals**
  - Describe the protective factors that transgender youth identify as important to keeping them healthy, happy, and strong.
  - Generate hypotheses about how these factors influence the health of transgender youth to inform future quantitative research.

- **Methods**
  - 48 in-depth interviews with transgender youth (age 15-24) living or using social services in the Atlanta-metro area.

- **Status**
  - Drafting thematic codebook for data analysis;
  - Possible Themes: supportive relationships, school-experiences, and navigating the medical system.
RAEB 2016 Priorities

- **Sexual health services**
  - Sexual health services web resources
  - School-based STD screening programs

- **Sexual and gender minority youth**
  - School-centered HIV prevention for adolescent sexual minority males
  - Resilience and transgender youth
  - Protective factors for sexual and gender minority youth

- **Sexual health education**
  - Sexual health education evaluation: Fort Worth Independent School District
Sexual Health Education Evaluation: Fort Worth Independent School District

- **Purpose**
  - Evaluate sexual health education in Fort Worth Independent School District

- **Approach**
  1. Review of the sexual health lessons from the adapted HealthSmart curriculum
  2. Student-level assessment
     - Focus groups with students & analysis of existing health course knowledge tests
  3. Teacher-level assessment
     - Interviews with health education teachers & analyses of PD evaluation forms
CDC Healthy Schools
(School Health Branch)

Holly Hunt, MA
Chief, School Health Branch
Division of Population Health
CDC’s Healthy Schools

Priorities

- Increase quantity and quality of physical education, health education and physical activity
- Improve the nutritional quality of foods provided in schools
- Improve the capacity of schools to manage chronic conditions

CDC’s Role

- Evidence-based guidelines and recommendations
- Tools and resources for educators and administrators
- Funding and support
- Training and professional development
Research Framework for Supporting Healthy School Environments

1. Research
2. Synthesize
3. Translate
4. Disseminate
5. Practice
6. Evaluate

A circular flow diagram illustrating the steps in the research framework.
CDC’s Morbidity and Mortality Weekly Report (MMWR): Health-related behaviors and academic achievement among high school students, United States, 2015
Characteristics of Vending Machines in US Schools, 2014

- **Purpose:** To describe the characteristics of vending machines available to students in the United States in 2014
- **Add on to SHPPS 2014 study**
- **Examined characteristics of 447 school vending machines**
Resources to Address Chronic Conditions in Schools

Research Brief

Addressing the Needs of Students with Chronic Health Conditions: Strategies for Schools

US Students and Chronic Health Conditions

Children and adolescents with chronic health conditions face many barriers in school and depend on their school health care environment to help manage the conditions. A good working partnership between students, school nurses, doctors, school staff, and administrators can help reduce absences and improve academic performance.

Introduction

This brief describes the relationship between certain chronic health conditions and academic achievement based on a review of the scientific literature. It includes a discussion of chronic health conditions, student performance, and academic achievement. This brief also identifies recommended actions for future research.

Students and Chronic Health Conditions

About 27% of children in the United States aged 3 to 17 have one or more chronic health conditions such as asthma, allergies, attention deficit hyperactivity disorder (ADHD), and other developmental and learning problems. Although these conditions can affect daily life, they can also lead to improvements in academic performance. Students with chronic health conditions may face lower academic achievement, increased absenteeism, lower grades, and special education. Higher grade point averages (GPAs) and academic performance have been shown to be associated with students with chronic health conditions who are better, which can be attributed to their ability to manage these conditions effectively. Studies show that chronic health conditions are positively related to academic achievement. Previous research suggests that the relationship between chronic health conditions and academic achievement is complex and requires further investigation.

Sources for Information in This Brief

- National Center for Chronic Disease Prevention and Health Promotion
- Centers for Disease Control and Prevention
- American Academy of Pediatrics

Managing Chronic Health Conditions in Schools: The Role of the School Nurse

Approximately 70% of children aged 2 to 17 with chronic health conditions are treated by school nurses. School nurses play a critical role in addressing chronic health conditions in schools.

Health Services in schools are key components of the Chronic Disease Alliance's Healthy Schools Program (HSP). The program trains school nurses to identify and manage chronic health conditions in schools. The National Association of School Nurses (NASN) and the Ministry of Health and Social Development (Ministry of Health) are two organizations that have provided training for school nurses.

Schools can help students enroll in health insurance programs.

Schools can help students enroll in health insurance programs by providing outreach and assistance. This can be done through partnerships with local health insurance providers, schools, and other organizations. Schools can also provide information on how to enroll in health insurance programs and how to access the necessary documentation.

DID YOU KNOW
- Chronic health conditions may lead to:
  - Absenteeism
  - Fatigue
  - Influenza or asthma attacks
  - Poor academic performance

Resources to Address Asthma in Schools

Schools can help students with asthma by providing resources and support. This can be done through partnerships with local health insurance providers, schools, and other organizations. Schools can also provide information on how to enroll in health insurance programs and how to access the necessary documentation.
School Health Index
Framework for School-based Physical Education and Physical Activity

- Provides framework
- Cross-cutting resources
- Component specific resources
New Resources for Recess in Schools
Resources Coming for Classroom Physical Activity 2018

- Completed environmental scan
- Developing strategies document
- Working with partners to develop other related resources
Evaluation of tools and resources

Assessed:

- State and district strategies to support
- Influence of contextual factors
- Characteristics that influence use
Presidential Youth Fitness Program

- Outcome evaluation underway to assess the impact of the PYFP
- 2-year study (2017 – 2019)
- 6th grade, middle school students