

MISSOURI SCHOOL HEALTH PROFILES: 2018 KEY FINDINGS



Missouri Department of Health and Senior Services
Randall W. Williams, MD, FACOG, Director

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER
Services provided on a nondiscriminatory basis.

Table of Contents

The School Health Profiles.....	3
The 2018 School Health Profiles Key Findings	3
School Health Coordination and Leadership.....	4
School Health Program Assessment and Planning.....	5
School Health Policies and Practices:	
Tobacco-use Prevention.....	6
Nutrition.....	6
Parent and Family Education and Engagement.....	9
Opportunities for Physical Activity outside of Physical Education.....	10
Health Services.....	11
HIV Prevention and Sexual Orientation.....	13
Curriculum and Instruction:	
Health Education.....	14
Physical Education.....	16
HIV, other STDs and Pregnancy Prevention.....	17
Professional Development.....	19
Acknowledgements.....	21

The School Health Profiles

The School Health Profiles survey has been conducted every even-numbered year since 1994 by the Missouri Department of Elementary & Secondary Education (DESE) in collaboration with the U.S. Centers for Disease Control and Prevention (CDC). School buildings with any of the grades six through 12 in which grade six is not the highest grade in the building are randomly selected to participate. Two different questionnaires are sent to the building principal – one for the principal and another for the person designated as the lead health education teacher. The principal survey addresses school health policies and programs while the teacher survey focuses on health-related curriculum and instruction. Both surveys were developed by the CDC.

In 2018, 391 secondary schools were randomly selected to participate, from which 306 principals (78 percent) and 313 lead health education teachers (80 percent) completed questionnaires. The response rates were sufficient to generalize results to regular and charter public secondary schools each year the survey has been conducted in Missouri.

Analysis of the School Health Profiles data was conducted by the CDC in SAS 9.4. Complex survey procedures accounting for the sample design were used to calculate the frequencies presented in this report. Logistic regression was used to calculate statistical significance.

A special thank you is extended to the principals and teachers for completing the questionnaires, and to the staff at DESE who administered the survey. Without their cooperation, this important information would not be available.

Key Findings

This report highlights changes in Missouri School Health Profiles (SHP) results in order to raise awareness about the areas where efforts may be improved to support the health of students. The years for which data are reported are based on the presence, absence, or addition of questions throughout the years. Trends are identified in key indicators that provide important information about the state of school health programs and policies in Missouri public secondary schools.

In summary, the 2018 SHP found an increase in the percentage of secondary schools that:

- ✓ prohibit tobacco use by students, staff, and visitors on school property and at off-site events
- ✓ limit the types of snacks, candy, or non-nutritious drinks being sold to students
- ✓ informed students or families of nutritional content of foods
- ✓ provided services or referrals to health professionals for HIV and pregnancy testing
- ✓ identify “safe spaces” (e.g., counselor’s office) where LGBTQ youth can receive support from administrators, teachers or other staff
- ✓ encourage staff to attend professional development on safe and supportive environments for all students, regardless of sexual orientation or gender identity
- ✓ the lead health education teacher received professional development

The 2018 SHP revealed a decline in the percentage of secondary schools that:

- had a school health advisory council or other group providing guidance on school health issues
- used the School Health Index or other tool to assess physical activity and nutrition
- taught on health topics such as how HIV and other STDs are transmitted and the health consequences of HIV, other STDs, and pregnancy

School Health Coordination and Leadership

The percentage of schools that had a **school health advisory** council or other group providing guidance on school health issues decreased significantly from 2008 - 2018:



Among the secondary schools that had a school health advisory group, the percentage of schools that did any of the following activities during the past year:

	2012	2014	2016	2018
Identified student health needs using relevant data	67.2	74.0	72.9	77.6**
Recommended new or revised health and safety policies and activities to school administrators	69.8	73.8	78.1	77.7
Sought funding or leveraged resources to support health and safety priorities for students and staff	53.6	54.0	55.6	59.6
Communicated the importance of health and safety policies and activities to administrators, parents, teachers or community members	81.9	79.1	89.2	89.4**
Reviewed health-related curricula or materials	79.0	70.1	84.5	83.0**

Why these findings are important

“Impacting long-term health risks is not a simple task relegated exclusively to schools. Planning and implementing activities directed toward child and adolescent health needs, as well as school employees, requires that many people be involved. Collaborative efforts among family, community, and schools are the most effective approaches for both prevention and intervention.” - Missouri Coordinated School Health Coalition

Key Resources

A Guide for Incorporating Health & Wellness into School Improvement Plans. National Association of Chronic Disease Directors. 2016. Available at https://c.ymcdn.com/sites/chronicdisease.site-ym.com/resource/resmgr/school_health/NACDD_SIP_Guide_2016.pdf

School Health Advisory Council Guide. Missouri Coordinated School Health Coalition publication. August 2017. Available at http://www.healthykidsmo.org/resources/docs/SHAC/SHAC_Guide.pdf

The Whole School, Whole Community, Whole Child Model: A Guide to Implementation. National Association of Chronic Disease Directors. 2017. Available at: http://www.ashaweb.org/wp-content/uploads/2017/10/NACDD_WSCC_Guide_Final.pdf

*Statistically significant decrease 2008-2018

**Statistically significant increase 2012-2018

School Health Program Assessment and Planning

The percentage of schools that used the School Health Index or other self-assessment tool to assess school policies, activities, and programs decreased significantly from 2008 – 2018 for physical activity and nutrition:

Percentage of schools that had assessed:	2008	2010	2012	2014	2016	2018
Physical activity	59.2	50.3	43.9	48.8	55.0	51.4*
Nutrition	59.0	47.0	44.4	46.5	55.8	50.3*
Tobacco-use prevention	54.3	45.4	42.8	40.0	51.4	54.3
Injury and violence prevention	38.5	39.2	40.7	40.7	44.4	42.2

Why these findings are important

Conducting an assessment of school health programs and policies is essential for identifying areas to address in a school improvement plan.

Key Resources

The *School Health Index (SHI): Self-Assessment & Planning Guide 2017*. U.S. Centers for Disease Control and Prevention Division of Adolescent and School Health. Available at <http://www.cdc.gov/healthyyouth/shi/index.htm>

School Health Index Training Manuals available at:
<https://www.cdc.gov/healthyschools/shi/training/index.htm>

Training Tools for Healthy Schools e-Learning Series available at:
https://www.cdc.gov/healthyschools/professional_development/e-learning/shi.html

*Statistically significant decrease 2008-2018

School Health Policies and Practices

Tobacco-use Prevention

The percentage of secondary schools that prohibited tobacco use by students, staff and visitors on school property and at off-site school events increased significantly from 33.1% in 2008 to 55.6% in 2018.

Percentage of schools that:	2008	2010	2012	2014	2016	2018
Adopted a policy prohibiting tobacco use	99.7	96.7	99.0	96.8	96.9	97.1
Prohibit tobacco use by students, staff and visitors on school property and at off-site school events, among schools with policies	33.1	33.0	42.4	45.2	43.0	55.6*

Why these findings are important

Eliminating tobacco use on school property and at off-campus events reduces exposure to secondhand smoke as well as decreasing role modeling of use for young people. Schools that provide for tobacco cessation services for students and staff produce an immediate health benefit and are among the most cost effective preventive services available.

Key Resources

A school tobacco policy index is available at

https://cphss.wustl.edu/Products/ProductsDocuments/CPW_SchoolTobaccoPolicyIndex.pdf

Making the Connection: Tobacco Product Use and Academic Grades Fact Sheet. Available at:

https://www.cdc.gov/healthyschools/health_and_academics/pdf/factsheetTobacco.pdf

Tobacco use prevention and cessation resources available at

<https://www.cdc.gov/healthyschools/tobacco/publications.htm>

Nutrition

There was no significant change in the percentage of secondary schools that prohibit advertisements for candy, fast food restaurants, or soft drinks in buildings, publications, and vehicles from 2008 – 2016.

Percentage of schools prohibiting advertising:	2008	2010	2012	2014	2016	2018
In school building	54.5	53.2	48.0	57.5	56.3	58.7
On school grounds	46.6	45.0	41.7	48.6	46.7	50.5
In school publications	55.7	50.7	46.5	56.0	50.6	53.4
On school buses or other vehicles	64.5	61.4	58.4	66.8	61.4	63.5

*Statistically significant trend 2008-2018

The percentage of secondary schools in which students could purchase snack foods or beverages from one or more vending machines at the school or at a school store, canteen or snack bar decreased significantly from 2008 to 2018.



There were several significant positive trends in the types of snacks, candy, or non-nutritious drinks schools offered to students, from both 2008 - 2018 and from 2016 - 2018.

Percentage of schools allowing students to purchase:	2008	2010	2012	2014	2016	2018
Chocolate candy	31.3	33.2	38.3	30.8	10.4	11.2*
Other kinds of candy	36.4	37.5	39.9	34.0	16.2	15.0*
Salty snacks not low in fat (e.g., regular potato chips)	38.9	38.7	41.4	36.8	18.7	18.4*
2% or whole milk (plain or flavored)	47.3	37.2	33.3	28.7	17.1	20.5*
Soda pop or fruit drinks that are not 100% juice	54.9	43.8	46.0	36.2	23.1	29.0*
Sports drinks (e.g., Gatorade)	75.6	63.9	65.8	56.0	47.3	47.5*
Foods or beverages containing caffeine	47.9	38.4	39.8	31.9	26.3	25.4*
Fruits (not fruit juice)	33.9	31.0	34.9	26.6	23.6	29.7
Non-fried vegetables (not vegetable juice)	25.0	21.0	23.3	20.0	15.2	23.0**
Crackers, pastries and other baked goods not low in fat	42.7	41.9	43.3	34.1	16.3	19.5*
Ice cream or frozen yogurt not low in fat	26.3	18.3	20.5	17.4	9.3	11.9*
Water ices or frozen slushes that do not contain juice	19.7	14.7	17.5	11.9	9.1	20.2**
Low sodium or “no salt added” pretzels, chips, crackers				43.4	43.4	45.9
Nonfat or 1% (low fat) milk (plain)				40.7	31.9	34.6
Energy drinks (e.g., Red Bull, Monster)				3.6	1.4	3.1
Bottled water				64.7	61.1	63.9
100% fruit or vegetable juice				43.5	40.6	45.2

*Statistically significant trend 2008-2018

**Statistically significant trend 2016-2018

There were several significant upward trends in health-related activities conducted by schools from 2008 – 2018:

The percentage of secondary schools that achieved any of the following in the current school year:	2008	2010	2012	2014	2016	2018
Priced nutritious foods lower than less nutritious foods	11.4	7.2	8.9	14.2	11.0	14.8
Asked students, families and staff for food preferences	55.5	48.4	46.8	44.2	46.4	52.3
Informed students or families of nutritional content of foods	47.6	44.1	52.3	54.3	56.0	64.1*
The percentage of secondary schools that achieved any of the following in the current school year:	2008	2010	2012	2014	2016	2018
Allowed students to visit the cafeteria to learn about nutrition	17.9	18.7	17.5	22.1	20.3	30.2*
Conducted taste tests for food preferences for nutritious items	20.5	17.2	24.2	28.2	33.4	36.4*
Served locally or regionally grown foods in cafeteria or classes			32.0	32.4	36.9	36.0
Planted a school food or vegetable garden			14.3	24.5	27.7	26.5*
Placed fruits and vegetables near the cafeteria cashier for easy access			60.8	68.7	65.2	74.9*
Used attractive displays for fruits and vegetables in the cafeteria			50.6	60.8	63.6	70.2*
Offered a self-serve salad bar to students			53.4	55.1	58.2	61.8*
Labeled healthful foods with appealing names			28.8	36.9	33.3	41.0*
Encouraged students to drink plain water				71.7	76.4	83.9*
Prohibited staff from giving students food or food coupons as rewards				23.5	25.7	30.8*
Prohibited less nutritious foods and beverages to be sold for fundraising				25.9	42.2	44.7*

*Statistically significant trend 2012-2018

There was no significant change in the percentage of secondary schools that always or almost always offered fruits or non-fried vegetables at school celebrations when foods or beverages were offered from 2008 – 2018.



Why these findings are important

When providing foods and beverages for students, schools have an obligation to offer that which is nutritious. Good nutrition contributes to students’ ability to learn. The statistically significant downward trends in the types of snacks, candy, or non-nutritious drinks schools offered to students shows that Missouri schools are complying with USDA’s Smart Snacks in School regulation that was implemented in School Year 2014-2015. Additionally, foods and beverages high in calories and low in nutritional value contribute to obesity, which is a growing concern in Missouri.

Key Resources

Alliance for a Healthier Generation resources available at: <https://www.healthiergeneration.org>

CDC Health Schools Nutrition resources available at:

<https://www.cdc.gov/healthyschools/nutrition/schoolnutrition.htm>

School wellness resources and wellness policy resources available from the Department of Education

Food and Nutrition Services at <https://dese.mo.gov/financial-admin-services/food-nutrition-services/wellness>

Team Nutrition is an initiative of the USDA Food and Nutrition Service to support the Child Nutrition Programs. Information available at: <https://www.fns.usda.gov/tn/team-nutrition>

The Smart Snacks in School regulation and information on the nutrition requirements that all foods sold in school are required to meet can be found at <https://dese.mo.gov/financial-admin-services/food-nutrition-services/smart-snacks>

Parent and Family Education and Engagement

From 2016 through 2018, there was a significant increase in the percentage of secondary schools that during the current school year provided parents and families with health information designed to increase parent and family knowledge about tobacco-use prevention. Other health information topics did not significantly change from 2008 – 2018:

	2008	2010	2012	2014	2016	2018
HIV, STD, or teen pregnancy prevention	30.6	25.7	14.4	21.6	19.7	23.6
Tobacco-use prevention	37.2	32.9	23.0	25.2	23.1	32.2*
Physical activity	44.1	46.8	38.0	40.6	38.2	41.9
Nutrition and healthy eating	45.6	46.7	35.5	40.9	31.5	41.9
Asthma	21.1	24.5	22.8	23.6	22.6	28.3

*Statistically significant increase 2016-2018

Why these findings are important

“School efforts to promote health among students have been shown to be more successful when parents are involved.” - Strategies for Involving Parents in School Health, Centers for Disease Control and Prevention.

Key Resources

Centers for Parent & Teen Communication. Available at: <https://parentandteen.com/>

Connect with Me Cards. Missouri Department of Health and Senior Services. Available at: <https://health.mo.gov/living/families/connectwithme/>

Parent Engagement: Strategies for Involving Parents in School Health. CDC. Available at: http://www.cdc.gov/healthyyouth/protective/pdf/parent_engagement_strategies.pdf

Parents for Healthy Schools. Available at: <https://www.cdc.gov/healthyschools/parentengagement/parentsforhealthyschools.htm>

Opportunities for Physical Activity outside of Physical Education Class

There have been no significant trends in the opportunities for physical education outside of the classroom, from 2008 – 2018.

	2008	2010	2012	2014	2016	2018
Offer intramural sports or physical activity clubs	58.8	62.8	51.8	54.2	61.4	59.3
Offer interscholastic sports			90.0	79.7	88.9	85.5
Have physical activity breaks in classrooms other than PE			37.7	42.6	39.9	49.7
Have a joint use agreement for shared use of school or community physical activity facilities			60.8	56	58.4	64.9

Why these findings are important

Schools play a critical role in improving the physical activity behaviors of children and adolescents. Because students may not attend physical education classes daily, students need opportunities to be physically active before, during or after school. Schools can create environments that are supportive of physical activity by implementing policies and practices.

Key Resources

Alliance for a Healthier Generation Physical Activity resources available at: <https://www.cdc.gov/healthyschools/physicalactivity/index.htm>

CDC Health Schools Physical Education and Physical Activity resources available at: <https://www.healthiergeneration.org/take-action/schools/wellness-topics/physical-activity>

KCHealthyKids.org has information on community use policies and programs that allow Missourians to use school facilities and equipment for physical or recreational activities when facilities are not being used by the school districts. These guides, webinars and other tools are designed to help advocates increase community use of school property.

School Health Guidelines and the Morbidity and Mortality Weekly Report (MMWR) can be found at: <https://www.cdc.gov/healthyschools/npao/strategies.htm>

Springboard to Active Schools resources available at: <https://schoolspringboard.org/>

Health Services

The percentage of secondary schools that had a full-time registered nurse who provided health services to students did not change significantly from 2008 to 2018.



The percentage of secondary schools that linked parents and families to health services and programs in the community did not change significantly from 2014 – 2018:



From 2012 – 2018 and 2016 – 2018, there were several significant increases in the percentage of secondary schools that either provided services or referrals to health professionals not on school property for:

	Provided services				Provided referrals			
	2012	2014	2016	2018	2012	2014	2016	2018
Human immunodeficiency virus (HIV) testing	4.1	4.0	0.0	0.7**	47.7	45.0	27.6	23.6**
Pregnancy testing	3.9	4.4	0.3	1.5**	51.1	48.9	29.8	25.3**
Provision of condoms	1.7	2.1	0.0	1.0*	33.0	30.4	21.8	20.0**
Provision of contraceptives other than condoms	1.4	1.0	0.0	1.0*	33.5	30.6	21.3	20.4**
Prenatal care	6.7	6.1	0.6	1.3**	53.5	45.4	29.3	25.6**
Human papillomavirus (HPV) vaccine administration	1.3	2.9	1.5	1.3	40.9	40.5	34.0	31.4**

*Statistically significant trend 2016-2018

**Statistically significant trend 2012-2018

From 2014 – 2018, there was no change in the percentage of school health service programs that use school records to identify, track and refer students with diagnosed or suspected chronic conditions to health care professionals not on school property.

	Tracked			Referred		
	2014	2016	2018	2014	2016	2018
Asthma	97.9	97.6	95.6	56.2	52.2	47.7
Food allergies	97.9	97.9	96.9	55.9	51.1	47.1
Diabetes	97.5	97.2	95.6	55.9	51.8	47.6
Epilepsy or seizure disorder	97.4	97.0	95.4	55.9	51.1	47.3
Obesity	53.8	41.3	38.4	46.9	42.1	35.4
Hypertension/high blood pressure	84.6	77.7	74.2	53.9	48.0	45.0

The percentage of secondary schools that had a protocol which ensured students with a chronic condition who may require daily or emergency management were enrolled in private, state, or federally funded insurance programs, if eligible, decreased significantly from 2016 (70.1 percent) to 2018 (62.2 percent).

Why these findings are important

School health programs provide students and their families with support that keeps students in school. For students with chronic health conditions, school nurses and other health care providers play a large role in the daily management of their conditions.

Key Resources

School health services resources available at:
<https://www.cdc.gov/healthyschools/schoolhealthservices.htm>

Teen Pregnancy & Prevention Partnership. Available At: <https://www.teenpregnancy-mo.org/>

HIV Prevention and Sexual Orientation

Since 2010, there have been several significant increases in the percentage of schools that engage in HIV prevention and sexual orientation practices.

The percentage of secondary schools that engage in any of the following practices	2010	2012	2014	2016	2018
Offer a student-led club that aims to create a safe and accepting school environment for all youth regardless of sexual orientation and gender identity	19.1	14.1	20.1	26.0	28.0*
Identify “safe spaces” (e.g., counselor’s office) where LGBTQ youth can receive support from administrators, teachers or other staff	41.9	48.2	56.9	68.1	73.6*
Prohibit harassment based on a student’s perceived or actual sexual orientation or gender identity	81.6	85.1	84.9	93.3	95.1*
Encourage staff to attend professional development on safe and supportive environments for all students, regardless of sexual orientation or gender identity	49.1	50.8	55.7	65.9	76.7**
Facilitate off-campus access to providers who have experience in providing health services including HIV/STD testing and counseling to LGBTQ youth	40.3	40.0	42.2	43.9	49.5*
Facilitate access to providers not on school property who have experience in providing social and psychological services to LGBTQ youth	41.3	44.8	45.7	51.1	54.1*

Why these findings are important

A safe and supportive school environment is essential for all students to be able to learn. Discrimination against all students and staff, regardless of sexual orientation or gender identity must be prevented.

Key Resources

Gay, Lesbian and Straight Education Network (GLSEN) Missouri Chapters in Kansas City and Springfield. Available at: <http://www.glsen.org/>

Missouri Gay Straight Alliance (GSA) Network. Available at: <http://www.mogsanet.dreamhosters.com/>

Teaching Tolerance. Available at: <https://www.tolerance.org/topics/gender-sexual-identity>

*Statistically significant trend 2010-2018

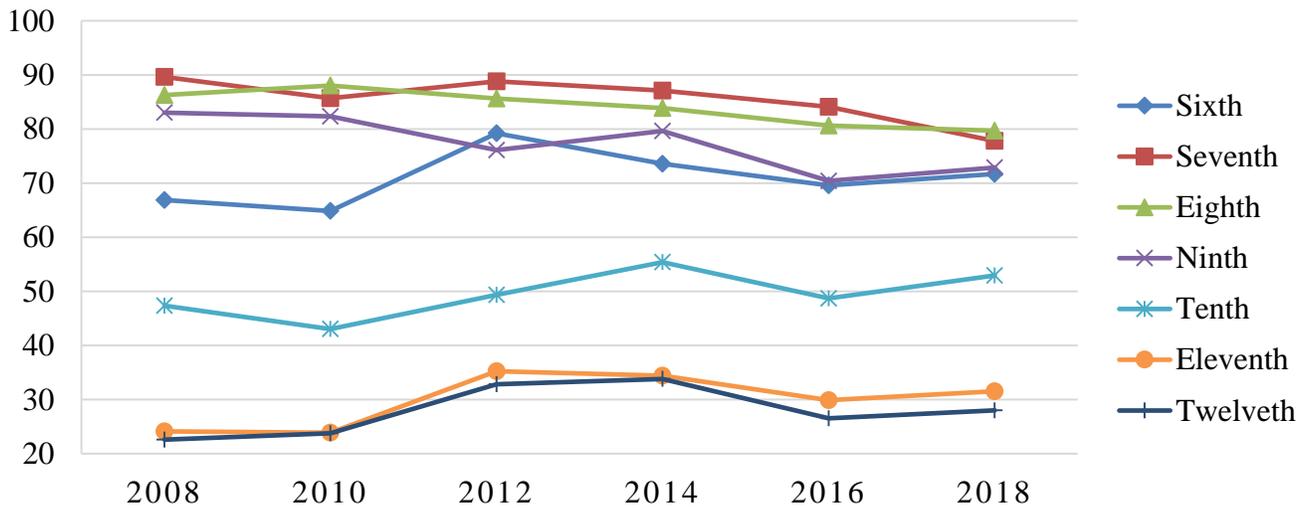
**Statistically significant trend 2016-2018

Curriculum and Instruction

Health Education

Health education has declined or remained the same for secondary schools between 2008 – 2018. Among schools that taught that grade in their building, there was a statistically significant decline in the percentage of seventh, eighth, and ninth grade classes that were required to take at least one health education course. Sixth, and tenth – twelfth grades did not significantly change.

Percentage of Secondary Schools that Taught a Required Health Education Course at Each Grade, 2008-2018



Since 2008, there has been an increase in the percentage of secondary schools in which students must repeat a failed health education course, among schools that require health education.



From 2008 – 2018 there was a statistically significant decrease in the percentage of health educators being provided with a written education curriculum.

The percentage of secondary schools in which those who teach health education were provided the following:

	2008	2010	2012	2014	2016	2018
Goals, objectives and expected outcomes for health education	94.1	94.3	90.9	88.4	86.5	90.5
Annual scope and sequence of instruction for health education	76.3	70.6	70.8	64.7	59.7	68.2
Plans for how to assess student performance in health education	81.7	76.6	76.0	71.8	65.6	72.4
A written health education curriculum	90.1	87.2	87.6	78.1	75.0	80.5*

*Statistically significant decrease 2008-2018

There were a few significant differences in the percentage of secondary schools that taught several of the following health topics in a required course in any of grades six through 12, from 2008 – 2018.

Percentage of schools teaching health topic:	2008	2010	2012	2014	2016	2018
Alcohol or other drug use prevention	98.1	98.3	96.7	90.6	96.3	96.7
Asthma	60.5	72.2	66.0	63.7	70.6	68.7
Emotional and mental health	95.2	94.1	94.7	87.8	96.7	95.4
Foodborne illness prevention	83.3	83.7	81.3	76.6	80.0	79.1
Human immunodeficiency virus (HIV) prevention	93.1	93.4	92.7	86.5	86.0	85.4*
Human sexuality	82.8	84.6	79.8	71.3	74.9	73.9*
Infectious disease prevention (e.g., flu prevention)			92.9	87.7	90.1	93.2
Injury prevention and safety	94.5	94.4	92.2	87.5	92.3	93.0
Nutrition and dietary behavior	99.7	99.0	98.3	95.3	98.1	98.7
Physical activity and fitness	100.0	100.0	99.3	96.1	98.9	100.0
Pregnancy prevention	83.0	86.6	83.1	76.3	77.4	79.5
Sexually transmitted disease (STD) prevention	91.7	91.9	92.2	85.5	86.3	84.6*
Suicide prevention	80.3	79.2	78.6	78.9	83.0	83.9
Tobacco-use prevention	98.4	97.9	97.4	91.8	96.1	97.0
Violence prevention (e.g., bullying, fighting, or dating violence prevention)	92.1	91.4	93.1	90.2	94.7	92.1
The percentage of secondary schools in which the health curriculum addresses the following skills:	2008	2010	2012	2014	2016	2018
Analyzing the influence of family, peers, culture, media, technology, and other factors on health behaviors	93.7	95.9	97.1	90.5	90.1	92.8
Accessing valid information, products and services to enhance health	89.2	91.0	90.5	86.7	87.8	87.8
Using interpersonal communication skills to enhance health and avoid or reduce health risks	93.1	93.2	96.1	89.7	90.5	91.1
Using decision-making skills to enhance health	96.0	98.3	96.7	91.3	91.2	93.1
Using goal-setting skills to enhance health	92.8	96.4	94.7	87.3	85.5	92.1
Practicing health-enhancing behaviors	95.6	97.7	96.4	90.2	92.5	93.4
Advocating for personal, family and community health	92.2	93.9	91.2	86.0	89.0	89.8

*Statistically significant decrease 2008-2018

Why these findings are important

A planned, sequential health education curriculum from kindergarten through grade twelve is essential for ensuring that students acquire the knowledge and skills to live a healthy, productive life.

Key Resources

Characteristics of Effective Health Education Curriculum is available at:

<https://www.cdc.gov/healthyschools/sher/characteristics/index.htm>

Health education and health literacy resources available at: <https://www.shapeamerica.org>

Physical Education

There was no significant increase in the percentage of secondary schools that taught required physical education from 2008 – 2018.

Percentage of schools that taught required PE in following grades:	2008	2010	2012	2014	2016	2018
6 th	98.7	99.0	99.3	97.5	96.6	98.5
7 th	99.1	100.0	100.0	97.3	98.4	100.0
8 th	98.7	100.0	100.0	97.3	98.9	99.4
9 th	92.7	94.3	93.3	92.4	92.0	92.0
10 th	52.8	63.1	53.0	58.5	53.2	53.8
11 th	38.4	50.4	41.7	52.1	42.9	47.2
12 th	39.2	49.9	41.0	52.5	42.5	47.2

There was no significant difference in the percentage of secondary schools that provided physical education teachers with several essential curriculum materials, from 2008 – 2018.

The percentage of secondary schools that provided physical education teachers the following for physical education instruction:

	2008	2010	2012	2014	2016	2018
Goals, objectives and expected outcomes	97.9	96.1	97.0	93.2	96.7	96.9
Annual scope and sequence of instruction	84.7	80.6	83.3	75.1	82.3	84.2
Plans for how to assess student performance	88.6	88.9	89.6	85.5	89.1	92.2
A written physical education curriculum	96.3	92.3	92.4	88.9	92.4	88.1

Why these findings are important

“The goal of physical education is to develop physically educated individuals who have the knowledge, skills and confidence to enjoy a lifetime of physical activity.” Physical Education is Critical to Educating the Whole Child position statement. Society of Health and Physical Educators (SHAPE). Accessed August 25, 2014, at <http://www.shapeamerica.org/advocacy/positionstatements/pe/>

Key Resources

Physical Education Curriculum Analysis Tool. Centers for Disease Control and Prevention Division of Adolescent and School Health. Available at <https://www.cdc.gov/healthyschools/pecat/index.htm>

Physical Education resources. Society of Health and Physical Educators (SHAPE) website at <http://www.shapeamerica.org/>

HIV, other STDs and Pregnancy Prevention

There were several significant trends in the percentage of secondary schools in which teachers taught HIV, STDs, pregnancy prevention topics, or condom acquisition and use in a required course for students in any of **grades 6, 7, or 8** between 2008 - 2018.

Percentage of secondary schools in which teachers taught several HIV, other STDs, or pregnancy prevention topics in a required course for students in any of grades <u>6, 7, or 8</u> during the current school year	2008	2010	2012	2014	2016	2018
How HIV and other STDs are transmitted	85.0	79.1	77.8	69.8	76.1	73.9*
Health consequences of HIV, other STDs and pregnancy	83.2	79.0	74.7	71.5	75.4	73.4*
The benefits of being sexually abstinent	81.1	79.3	80.9	71.6	76.8	76.7*
How to access valid and reliable information, products and services related to HIV, other STDs and pregnancy	71.5	64.9	61.3	61.3	66.1	66.9*
Communication and negotiation skills related to eliminating or reducing risk for HIV, STDs & pregnancy	73.2	66.8	63.6	62.3	68.3	67.8*
Goal-setting and decision-making skills for reducing the risk for HIV, other STDs and pregnancy	75.0	71.3	65.3	61.2	66.6	69.1*
Efficacy of condoms (how well they work and don't work)		40.4	41.9	43.8	46.8	54.6*
Importance of using condoms consistently and correctly		32.1	31.0	31.0	39.0	42.3*
How to obtain condoms		19.8	11.8	22.2	23.4	33.0*
How to correctly use a condom		16.0	7.3	15.3	18.5	24.5*
Importance of using a condom with another contraceptive to prevent both STDs and pregnancy			20.3	31.5	34.5	43.8*

*Statistically significant trend 2008-2018 | 2010-2018 | 2012-2018

The percentage of secondary schools that provide curricula or supplemental materials that include HIV, STD or pregnancy prevention information that is relevant to lesbian, gay, bisexual, transgender and questioning youth increased significantly from 2010 to 2018.



Why these findings are important

“Evaluations of comprehensive sexuality education programs show that many of these programs can help youth delay the onset of sexual activity, reduce the frequency of sexual activity, reduce the number of sexual partners, and increase condom and contraceptive use.” National Sexuality Education Standards Core Content and Skills K-12, p. 7.

Key Resources

CDC Adolescent and School Health resources available at:
<https://www.cdc.gov/healthyyouth/wsc/index.htm>

National Sexuality Education Standards Core Content and Skills K-12. January 2012. American School Health Association. Available at <http://www.futureofsexed.org/nationalstandards.html>

Sexuality Information and Education Council of the United States available at:
<http://www.siecus.org/index.cfm?fuseaction=Feature.showFeature&FeatureID=2342>

Professional Development

There was a no significant difference in the percentage of secondary schools in which **physical education teachers** received professional development on physical education or physical activity between 2008 and 2018.



From 2008 to 2018, there were significant upward trends in the percentage of secondary schools in which the **lead health education teacher** *received* professional development on certain topics during the past two years as well as the percentage of schools in which teachers *would like* to receive training.

For each topic, percentage of schools in which the lead health teacher:

	Received training				Would like training			
	2008	2014	2016	2018	2008	2014	2016	2018
Alcohol or other drug-use prevention	43.6	29.9	25.6	32.4	76.1	61.4	60.1	66.9
Asthma	25.1	21.2	22.4	27.8	55.3	42.8	41.0	41.5
Emotional and mental health	44.5	33.2	30.7	48.9*	66.9	63.6	64.0	73.6*
Foodborne illness prevention	23.4	17.2	18.2	24.6	47.3	40.5	34.8	41.7
HIV prevention	35.6	16.8	16.8	22.8	66.2	50.1	46.9	51.4
Human sexuality	29.1	13.9	15.6	22.4*	60.7	49.4	55.1	56.1
Infectious disease prevention	37.5 (2012)	28.6	28.3	33.9	51.9	49.5	47.6	52.1
Injury prevention and safety	52.0	41.4	43.0	43.2	61.4	53.5	50.4	57.9
Nutrition and dietary behavior	46.9	30.0	24.4	33.8*	71.3	61.4	58.8	68.9*
Physical activity and fitness	60.4	38.8	40.6	44.8	69.0	61.6	59.7	65.8
Pregnancy prevention	29.1	12.9	10.0	20.3*	62.3	49.8	47.1	51.8
STD prevention	32.5	17.2	15.8	21.3	68.9	53.5	48.6	54.8
Suicide prevention	33.1	29.4	25.9	46.0*	74.2	65.8	61.2	75.3*
Tobacco-use prevention	34.6	18.2	14.1	23.9	69.0	54.0	50.5	58.3
Violence prevention (bullying, fighting)	66.6	54.9	47.2	56.2	77.0	69.6	65.1	73.7*

*Statistically significant trend 2016-2018

For most of the following instructional strategies, the percentage of secondary schools in which the **lead health education teacher received** professional development within the past two years was considerably less than the percentage of schools in which the teacher **would like to receive** training. However, there was a significant increase from 2016 – 2018 in the number of lead health teachers who received training in teaching students with limited English proficiency and using interactive teaching methods, while there was a significant decrease in the percentage of teachers who received training on using interactive teaching methods.

For each strategy, the percentage of schools in which the lead health teacher:

	Received training			Would like training		
	2014	2016	2018	2014	2016	2018
Teaching students with disabilities	49.7	54.5	57.5	59.4	57.2	65.0
Teaching students of various cultural backgrounds	39.5	41.5	45.9	43.6	47.3	50.5
Teaching students with limited English proficiency	20.3	21.5	31.6*	39.3	36.8	42.4
Teaching students of different sexual orientations or gender identities	11.2	17.8	25.6*	42.3	51.6	49.6
Encouraging family or community involvement	35.3	47.1	46.4	60.5	64.3	67.2
Using interactive teaching methods	53.0	67.6	59.0*	57.1	53.2	60.7
Teaching skills for behavior change	42.7	47.9	46.5	61.0	63.0	69.9
Classroom management techniques	65.7	65.9	68.1	59.2	55.6	60.6
Assessing or evaluating students in health education	27.3	35.3	38.9	62.5	60.9	64.6

Why these findings are important

Professional development is essential for teachers to remain current in effective teaching methods and course content.

Key Resources

Missouri Coordinated School Health Coalition annual conference. <http://www.healthykidsmo.org/>

Missouri Society of Health and Physical Educators. <https://www.moahperd.org/>

Missouri Department of Health and Senior Services Health, Physical Education and School Wellness information available at: <https://dese.mo.gov/college-career-readiness/curriculum/health-physical-education-school-wellness>

Resources for health education professionals. American School Health Association. <https://netforum.avectra.com/eWeb/DynamicPage.aspx?Site=ASHA1&WebCode=ASHAResources>

Shape America resources for online professional development available at: <https://www.shapeamerica.org/>

*Statistically significant trend 2016-2018

Acknowledgements

Missouri 2018 School Health Profile Survey Administration

Laura Beckmann, Director of Health, Physical Education and School Wellness, Missouri Department of Elementary and Secondary Education (DESE)

Missouri 2018 School Health Profile Key Findings Report Preparation

Katie Long, MBA, Youth Risk Behavior Survey (YRBS) Manager, Office of Epidemiology, Missouri Department of Health and Senior Services (DHSS)

Kyle Waller, PhD, Senior Epidemiology Specialist, Office of Epidemiology, DHSS

Report Reviewers

Laura Beckmann, Director of Health, Physical Education and School Wellness, DESE

Marjorie Cole, State School Nurse Consultant, DHSS

Andra Jungmeyer, Adolescent Health Coordinator, DHSS

Megan Moore, Adolescent Health Educator, DHSS

Suggested Citation: 2018 Missouri School Health Profiles Key Findings Report. Missouri Department of Elementary & Secondary Education and Missouri Department of Health and Senior Services. Jefferson City, MO. June 2019.

The 2018 Missouri School Health Profile Survey was conducted by the Missouri Department of Elementary and Secondary Education (DESE) and supported by a cooperative agreement with the U.S. Centers for Disease Control and Prevention (CDC). This report was prepared by staff of the Missouri Department of Health and Senior Services and the contents are solely the responsibility of the authors.