



Photo by fstop123, courtesy iStockphoto

SCHOOL-BASED HEALTH CENTERS: Improving Health, Well-being and Educational Success



AMERICAN PUBLIC HEALTH ASSOCIATION
For science. For action. For health.

FEBRUARY 2018

The best teachers and schools cannot compensate for poor health, hunger, fear, violence, bullying or poverty. When students wrestle with these and other social barriers, they are more likely to miss school, do poorly on tests and drop out.¹

In fact, nearly 20 percent of all students in the United States do not graduate from high school on time.² For black, Latino and American Indian students, that number jumps to nearly 30 percent.² Low educational attainment is a destructive cycle: students who do not graduate face lifelong health risks and medical costs, and are more likely to engage in risky health behaviors.^{3,4} They are less likely to be employed and insured, and earn less — all of which continues the cycle of poverty and disparities.^{3,4}



Photo by asiseeit, courtesy iStockphoto

School-based health centers are “one of the multiple strategies to turn the tide – the tsunami of educational and health issues that many of the nation’s children face as they navigate their elementary and secondary schools, while simultaneously facing the stresses often experienced by their families, peers, and communities.”¹²

At the end of the day, school dropout is much more than an educational crisis. It is a public health epidemic. For a more in depth discussion see “The Dropout Crisis: A Public Health Problem and the Role of School-Based Health Care,” available on the [Center for School, Health and Education’s](#) website.

In 2015, over 13 percent of adults 25 years and older in the U.S. had less than a high school education, and nearly 28 percent of those without a high school diploma lived below the poverty line.⁵ The fall of the middle class has left many families homeless and hungry for the first time, and children are disproportionately affected — while children under 18 years represent 23 percent of the U.S. population, they represent 32 percent of all people in poverty.⁶ These children struggle in school, distracted by empty bellies and the pressure to quit school, find a job and help their families.

And for girls, teen pregnancy remains the number one reason for quitting school.¹ Teen pregnancy and birth significantly increase dropout rates, with

50 percent of teen mothers graduating from high school versus 90 percent of girls who do not give birth as a teen.⁷ Those children of teenage mothers, in turn, are more likely to drop out themselves, have more health problems, be incarcerated at some time during adolescence, give birth as a teenager, and face unemployment as a young adult.⁸

Fortunately, partnerships between education, health and other sectors can change these trajectories. School-based health centers, or SBHCs, increase educational success by providing physical and mental health care that creates a more positive overall school climate that allows students to stay in school and learn.¹⁰ SBHC staff have the trust of students, parents, teachers and other school staff, putting them in an ideal position to identify and address these social barriers to educational success — for the entire student body.¹¹

This brief explores the most common barriers to high school graduation and discusses opportunities for SBHCs and their partners to address them at the school-wide population level.

COMMON REASONS STUDENTS DROP OUT OF SCHOOL⁹

| | BOYS | GIRLS |
|--|--|--|
| | <ul style="list-style-type: none"> • Disciplinary issues • Employment to support their families or start a career • Being held back because of course failure, poor academic performance, low credit accumulation • Chronic absenteeism • Disengagement from school | <ul style="list-style-type: none"> • Pregnancy • Parenting • Caregiving responsibilities • Employment to support their families or start a career • Vulnerability to harassment at school |

THE ROLE OF SCHOOL-BASED HEALTH CENTERS IN KEEPING STUDENTS IN SCHOOL

Students who use SBHCs have better grade point averages and attendance compared to students who do not use such centers.¹³ As students' health and emotional well-being improves, so does their academic performance. At the most basic level, they also do better in school because they miss less school; students enrolled in a SBHC have lower rates of chronic absenteeism than their peers.¹⁴

Numerous studies have conclusively linked SBHC use to educational and health-related outcomes.¹⁵ Use of SBHCs is associated with:¹⁵

- Improved educational achievement and attainment
 - Higher GPA
 - Higher grade promotion
 - Reduced suspension rates
 - Reduced non-completion rates
- Improved health and well-being
 - Increased use of vaccination and preventive services
 - Reduced asthma morbidity
 - Fewer emergency department visits and hospital admissions
 - Higher contraceptive use among females
 - Improved prenatal care and higher birth weights
 - Lower illegal substance use and alcohol consumption
 - Reduced violence

Much of the research on school-based health care's impact on educational success is based on students who come to the school-based health center. Increasingly, though, researchers are looking at the impact of such centers on the overall school population and the community.

SBHCs offer a variety of services and are often open after school, thus addressing the cultural, financial, privacy, and transportation-related barriers to clinical and preventive health care services faced by vulnerable populations.¹⁵

SBHCs have tremendous potential to improve the health and well-being of the entire student population. By moving outside of the clinic, the centers may have an impact across the overall school learning environment and the community, potentially promoting social mobility and improving health equity.^{15, 16}

SCHOOL-BASED HEALTH CARE REMOVES THE BARRIERS TO EDUCATION

"For all kids, and particularly vulnerable kids, we need to pay attention to whether they ate last night, whether they have electricity at home to do their homework, whether they even have a home," says Terri D. Wright, PhD, MPH, Founder of the Center for School, Health and Education at the American Public Health Association. "School-based health center staff are in the best position to see the social factors and stressors that affect students, and to work with the school and community to remove those barriers so students can learn."

Social and behavioral factors that affect education include bullying and school violence, nutrition, teen pregnancy, mental health and chronic stress. The following examples illustrate how SBHCs can address each of these factors.

Bullying and school violence

In 2015, over 20 percent of high school students were bullied on school property, and nearly 16 percent were cyber-bullied, resulting in adverse educational and health effects.¹⁷ Evidence



Photo by FotiCamera, courtesy Getty Images

School-based health centers help to address health-related obstacles to educational achievement, while also overcoming traditional barriers to community services such as working parents who are unable to take time off from work for preventive visits, or who lack transportation that enables their children to access care without losing too much 'academic seat time.' By having these elements in place, fewer children will be lost between the 'cracks' of the intersection of health and education."¹²

supports the association between being bullied, higher rates of absenteeism, and lower grades; students who experienced both in-person and cyberbullying were five to six times more likely to miss school because of safety concerns.¹⁸⁻²⁰ In addition, students who are bullied have higher rates of emotional and physical distress, likely due to elevated levels of cortisol in bully victims.²⁰

SBHCs and their school partners can address bullying and violence:



At the **clinic level**, by providing services and programs to help children cope with, prevent or stop bullying of all forms and violence in school, and by connecting youth to resources.



At the **school-wide population level**, by proactively identifying needs and creating policies and programs (e.g., school safety plans, better physical and emotional school climates), and early intervention programs and services (e.g., mediation and conflict resolution, anti-bullying, gang reduction, suicide prevention).



At the **systems level**, by advocating for safe school and anti-bullying legislation, and by collaborating with community agencies to provide support for students outside of school.

Hunger, obesity and access to quality food

Food insecurity and hunger are persistent problems in America. Nearly 21 percent of American children live in food-insecure households, meaning that they do not have access to enough food to fully meet basic needs at all times due to lack of financial resources.²¹ While poverty is most often associated with food insecurity,

many food-insecure children live in households with an annual income too high for food assistance programs.²¹ Hungry children are sick more often, suffer physical and cognitive development impairments, and struggle to concentrate. Consequently, these children tend to miss school and have lower educational attainment.^{21,22} In addition, hungry children tend to have more social and behavioral problems as they have less energy for complex social interactions and cannot adapt as effectively to environmental stresses.²²

Paradoxically, food insecurity and poverty often go hand in hand with obesity, as families seek out the most accessible and least expensive calories to fill their children's bellies.²¹ Obesity, along with lack of physical education, impacts academic success by causing serious health consequences that can keep kids out of school and lead to mental and emotional health problems.^{21,22}

SBHCs and their school partners can address hunger and obesity:



At the **clinic level**, by helping students cope with stressors related to social determinants influencing obesity and providing physical and mental health services to support healthy weight management.



At the **school-wide population level**, by establishing programs and policies that increase physical activity and access to healthy food and free or reduced-cost breakfast, lunch and snacks.



At the **systems level**, by advocating for district, state and national policies that increase physical activity, access to healthy food options and food security.

Teen pregnancy prevention

More pregnant young women drop out of high school than graduate.²³ Teenage pregnancy is the leading cause of dropping out of school for adolescent women; an estimated 30 to 40 percent of female teenage dropouts are mothers. Early parenting also affects young men who drop out to support a child.¹

SBHCs and their school partners can impact teen pregnancy:



At the **clinic level** (not all centers provide reproductive health services), by providing counseling on making better choices, staying safe and avoiding risky situations; and by providing reproductive health care or referring students to community organizations. In some cases, students and their parents advocate for services. For example, the School-Community Alliance of Michigan and Baldwin Teen Center worked with students and parents to persuade the school board to make family planning services available in schools.



At the **school-wide population level**, by providing a perspective on students' sexual activity, risks and needs, then working with the school to create authentic and effective prevention programs that students trust.



At the **systems level**, by advocating for policies that ensure students' right to receive reproductive health information and services. For example, young leaders from Balboa High School, supported by their school-based health center, successfully advocated to place information about students' rights to receive confidential health care under California law in the curriculum for all San Francisco public schools.

Mental health, depression and suicide

Nearly 45 percent of children and adolescents in the U.S. meet the criteria for at least one mental health disorder, and up to 18 percent experience significant functional impairment due to a mental health disorder.²³ However, 75 percent to 80 percent of youth in need of mental services do not receive them.^{24,25} Barriers to access and follow-up with mental health services include family economic resources, availability of transportation, lack of a formal diagnosis, racial and ethnic minority status, and cultural beliefs and practices.^{24,25}

SBHCs and their school partners can address mental health:



At the **clinic level**, by providing assessments, mental health and social services, individual and group counseling, and referrals to community resources as needed.



At the **school-wide population level**, by conducting school-wide assessments of needs, providing programs that ease emotional distress and teach coping skills, promote positive youth development, and create opportunities for youth leadership and peer-to-peer support.



At the **systems level**, by collaborating with parents and other social and health care providers to identify risk factors and signs of mental health disorders, reduce the barriers to accessing mental health services, and address chronic stressors that may contribute to poor mental health.

Chronic Stress

Chronic stress makes it increasingly difficult for students to be academically successful. Students who live in urban

areas are often faced with multiple barriers to educational success, and are at increased risk for poor brain development, and not completing high school.²⁶ More than half of all absences are linked to chronic stress.¹⁹ Nearly 1 in 4 minority students has missed three or more days of school in the past month due to factors relating to poverty exposure (e.g., transportation, drug use, school safety).¹⁹ Children impacted by chronic stress may be impulsive, distracted, distrustful and/or hyperactive.²⁶ All of these behaviors ultimately hinder a child's ability to interact with others and successfully progress through school.

SBHCs and their school partners can address chronic stress:



At the **clinic level**, by screening all students for food and housing insecurity and other unmet needs and connecting students to support services.



At the **school-wide population level**, by utilizing a cool-down room for students to prevent outbursts and resultant disciplinary action.



At the **systems level**, by revising school-wide policies and practices to be less reactive and punitive and more reflective of recent research on the impact of chronic stress on adolescent brain development, behavior, cognition and health.

THE NEXT STEP: LINKING THESE ISSUES INTO A COMPREHENSIVE STRATEGY

These are but a few of the obstacles that affect student success. Often school-based solutions consist of isolated programs, prompted by an incident or crisis. For example, a school might create a limited-term suicide prevention curriculum in reaction to a student

suicide. Ideally, comprehensive programs should be developed proactively to reduce potential barriers to learning, increase graduation rates, and improve the health and well-being of all students. By continuing to integrate and evaluate this work, we can strengthen the evidence base and foster adoption by other schools and communities.

WHAT SCHOOL-BASED HEALTH CENTERS CAN DO TO INCREASE EDUCATIONAL SUCCESS AND REDUCE SCHOOL DROPOUT

SBHCs provide excellent, accessible, trusted health care and information for students across the country. They also have the capacity to impact the obstacles that derail students from educational success through programs and policies that benefit every student in the school. Now it is time for SBHCs to be catalysts for change by eliminating or reducing barriers to graduation and preventing school dropout.

It will take collaboration across the school and community to fully realize the potential of SBHCs to bolster educational success and prevent dropout, but there is support for this endeavor. A 2016 poll of parents nationwide found that over two-thirds of respondents want schools to cover physical activity, substance abuse, healthy eating, sex education, basic first aid, and emotional and mental health.²⁷ Parents support child education, health care and nutrition, and voice concern about racial and ethnic inequities, unsafe neighborhoods and stress. With this support, SBHCs can work with schools, parents, the community, public health and other partners to address the whole needs of their children and improve graduation.¹⁶ SBHCs can:



School-based health centers, together with schools, must be aware of what's happening in students' lives, and must know that they can make a difference. We can't give the parents a job, make the home safe or put food on the dinner table. But we can make sure students get healthy food—maybe all three meals—at school, and we can be aware of the situations they come from. It's our job to provide supports and opportunities to help them deal with all that's on their shoulders, and to help them do the best they can."

— Terri D. Wright, PhD, MPH, Founder, Center for School, Health and Education

1. Partner with the school and community to identify needs and set the vision for increased graduation rates.

- Identify concerns and problems in the school that are impeding students' ability to be in class, learn and graduate.
- Be proactive, with a big vision focused on the health and well-being of the school population and with the goal of graduation, rather than reacting to an issue in isolation.
- Develop policies and programs that can improve the school climate and benefit all students.
- Identify a strong leader to coordinate stakeholders and community resources into a comprehensive school-wide strategy to increase graduation rates.

2. Engage teachers and staff.

- Instill in every staff member a dedication to helping students graduate.
- Provide health liaisons to assist teachers with supplemental activities for their health curriculum, such as exercises to improve attention or support groups to decrease teacher stress and burnout.

3. Engage youth and parents.

- Ensure that youth and parents are part of the whole strategy, not just isolated programs.

- Create a cadre of students at each grade level to be the eyes, ears and ambassadors of their peer group.
- Engage a group of parents and community organizations and make it easy for them to participate in group sessions.

4. Partner with school and public health professionals to measure impact in terms of health outcomes and educational success, especially the impact on dropout rates.

- Track educational metrics such as absenteeism, suspensions and drop-out along with health indicators.
- Reframe school dropout as a public health issue and encourage public officials to think of the dropout problem as central to community health.

SBHCs have made great strides in improving public and community health. Still, we sit at the convergence of a national school dropout crisis, obesity epidemic, and exponential increase in bullying and school violence. Bolstered by their successes and support, SBHCs must continue to create and measure programs that serve the students, the school and the community. At the same time, communities must continue to create and sustain SBHCs to fulfill their promise of improving the health, well-being and educational success of all students.

REFERENCES

1. Freudenberg N, Ruglis J. Reframing school dropout as a public health issue. *Prev Chronic Dis.* 2007;4(4). http://www.cdc.gov/pcd/issues/2007/oct/07_0063.htm.
2. Digest of Education Statistics. Washington, DC: National Center for Education Statistics. [Tables 219.46 and 215.10]. http://nces.ed.gov/programs/digest/current_tables.asp. Accessed June 7, 2017.
3. Zimmerman EB, Woolf SH, Haley A; Association for Healthcare Research and Quality. Population Health: Understanding the Relationship Between Education and Health. <http://www.ahrq.gov/professionals/education/curriculum-tools/population-health/zimmerman.html>. Published September 2015. Accessed June 7, 2017.
4. DeBaun B, Roc M; Alliance for Excellent Education. Well and Well-Off: Decreasing Medicaid and Health-Care Costs by Increasing Educational Attainment. <http://all4ed.org/wp-content/uploads/2013/08/WellWellOff.pdf>. Published July 2013. Accessed June 7, 2017.
5. 2010-2014 American Community Survey 5-Year Estimates: Educational Attainment [S1501]. Washington, DC: United States Census Bureau. https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_14_5YR_S1501&src=pt. Accessed June 7, 2017.
6. Jiang Y, Ekono M, Skinner C. Basic facts about Low-Income Children: Children under 18 Years, 2014. http://www.nccp.org/publications/pub_1145.html. Published February 2016. Accessed June 7, 2017.
7. Perper K, Peterson K, Manlove J; Child Trends Trends. Diploma attainment among teen mothers. Publication #2010-01. https://www.childtrends.org/wp-content/uploads/2010/01/child_trends-2010_01_22_FS_diplomaattainment.pdf. Published January 2014. Accessed June 7, 2017.
8. Hoffman SD, Maynard RA. Kids Having Kids, Economic Costs & Social Consequences of Teen Pregnancy. The Urban Insitute; 2008.
9. Rumberger RW. Dropping Out. Cambridge, MA: Harvard University Press; 2011.
10. 2013-2014 Digital Census Report. School-Based Health Alliance website. <http://censusreport.sbh4all.org/>. Accessed June 7, 2017.
11. Highlighting Hallways to Health: Why Widespread Wellness Works. School-Based Health Alliance website. <http://www.sbh4all.org/highlighting-hallways-health-widespread-wellness-works/>. Published August 3, 2016. Accessed June 7, 2017.
12. Brindis CD. The "State of the State" of School-Based Health Centers: Achieving Health and Educational Outcomes. *Am J Prev Med.* 2016;51(1):139-40. doi:10.1016/j.amepre.2016.03.004.
13. Student Success. School-Based Health Alliance website. <http://www.sbh4all.org/school-health-care/healthand-learning/student-success/>. Accessed June 7, 2017.
14. Chronic Absenteeism. School-Based Health Alliance website. <http://www.sbh4all.org/school-health-care/health-and-learning/chronic-absenteeism/>. Accessed June 7, 2017.
15. Knopf JA, Finnie RK, Peng Y, et al. School-Based Health Centers to Advance Health Equity: A Community Guide Systematic Review. *Am J Prev Med.* 2016;51(1):114-26. doi:10.1016/j.amepre.2016.01.009.
16. Lewallen TC, Hunt H, Potts-Datema W, Zaza S, Giles W. The Whole School, Whole Community, Whole Child model: a new approach for improving educational attainment and healthy development for students. *J Sch Health.* 2015;85(11):729-39. doi:10.1111/josh.12310.
17. Kann L, McManus T, Harris WA, et al; Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance — United States, 2015. *MMWR Surveill Summ.* 2016;65(6). http://www.cdc.gov/healthyyouth/data/yrbs/pdf/2015/ss6506_updated.pdf. Published June 10, 2016. Accessed June 7, 2017.
18. Centers for Disease Control and Prevention. Bullying and Absenteeism: Information for State and Local Education Agencies. http://www.cdc.gov/healthyyouth/health_and_academics/pdf/fs_bullying_absenteeism.pdf. Accessed June 7, 2017.
19. Student Absenteeism. Child Trends website. <https://www.childtrends.org/indicators/student-absenteeism/>. Updated December 2015. Accessed June 7, 2017.
20. Graham S. Victims of Bullying in Schools. *Theory Pract.* 2016;55(2):136-144. doi:10.1080/00405841.2016.1148988.
21. Gunderson C, Dewey A, Crumbaugh AS, et al; Feeding America. Map The Meal Gap 2016: Highlights Of Findings For Overall And Child Food Insecurity. <http://www.feedingamerica.org/hunger-in-america/our-research/map-the-meal-gap/2014/map-the-meal-gap-2014-exec-summ.pdf>. Accessed June 7, 2017.
22. Cook J, Jeng K. Child Food Insecurity: The Economic Impact on our Nation. <https://www.nokidhungry.org/sites/default/files/child-economy-study.pdf>. Published 2009. Accessed June 7, 2017.
23. Hoffman SD. By the Numbers: The Public Costs of Teen Childbearing. Published October 2006. As cited in Ruglis J, Freudenberg N. Toward a healthy high schools movement: strategies for mobilizing public health for educational reform. *Am J Public Health.* 2010;100(9):1565-71. doi:10.2105/AJPH.2009.186619.
24. Langer DA, Wood JJ, Wood PA, Garland AF, Landsverk J, Hough RL. Mental Health Service Use in Schools and Non-School-Based Outpatient Settings: Comparing Predictors of Service Use. *School Ment Health.* 2015;7(3):161-173. doi:10.1007/s12310-015-9146-z.
25. Mental Health. Youth.gov website. <http://youth.gov/youth-topics/youth-mental-health>. Accessed June 7, 2017.
26. Yu E, Cantor P. TurnAround for Children: Poverty, Stress, Schools: Implications for Research, Practice, and Assessment. <http://www.turnaroundusa.org/wp-content/uploads/2016/05/Turnaround-for-Children-Poverty-Stress-Schools.pdf>. Published May 2016. Accessed June 7, 2017.
27. Clark SJ, Freed GL, Singer DC, Matos-Moreno A, Kauffman AD, Schultz SL. C.S. Mott Children's Hospital National Poll on Children's Health. Beyond sex ed: Parents want more health topics covered in school. 2016;27(4). http://mottnpch.org/sites/default/files/documents/091916_schoolhealth.pdf. Accessed June 7, 2017.

ABOUT APHA

APHA champions the health of all people and all communities. We strengthen the public health profession, promote best practices and share the latest public health research and information. We are the only organization that influences federal policy, has a nearly 150-year perspective and brings together members from all fields of public health. Learn more at www.apha.org.

ABOUT CSHE

APHA's Center for School, Health and Education advances school-based health care as a proven strategy for preventing school dropout. We work with health and education partners to develop and implement public health strategies school-wide to improve the well-being and educational success of all students. Learn more at www.schoolbasedhealthcare.org.

ACKNOWLEDGEMENTS

CSHE gratefully acknowledges everyone who contributed to the development of this issue brief.



AMERICAN PUBLIC HEALTH ASSOCIATION

For science. For action. For health.