

Photo by fstop123, courtesy iStockphot

THE DROPOUT CRISIS:

A Public Health Problem and the Role of School-Based Health Care



Educational attainment is the social factor that is the single greatest predictor of a person's health and well-being across the lifespan.^{1,2} Compared to high school and college graduates, adults who do not complete high school have poorer health and are more likely to die prematurely from preventable conditions such as cardiovascular disease, diabetes and lung disease.^{2,3} Those who do not complete high school are also less likely to have health insurance; in 2014, 37 percent of dropouts were uninsured, versus 25 percent and 6 percent of high school and college graduates, respectively.⁴



chool-based health care treats health and education as two sides of the same coin. It supports students socially, physically, emotionally and mentally to stay in school and succeed, which boosts lifelong health, career opportunities and financial stability."

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

he American Public Health Association advocates reframing school dropout as a public health issue because disparities in education predict disparities in health outcomes. Promoting education and its consequent reduction in health disparities could save eight times more lives than medical treatment.3 However, tackling the complex set of reasons students leave school is no easy task. For a more in-depth discussion on the factors that contribute to high school dropout and opportunities to address them, see the issue brief "School-Based Health Centers: Improving Health, Well-Being and Educational Success."

In 2015, nearly 13 percent of adults 18 years and older in the U.S. had less than a high school education.⁶ The disparities in educational attainment by racial and ethnic background are clear. Percent of adult populations with less than a high school education in 2015:

- Hispanic 44 percent;
- American Indian/Native Alaskan 21 percent;
- Black 15 percent;

- Asian 13 percent;
- Native Hawaiian/Pacific Islander —
 12 percent;
- White 8 percent.6

In 2014, 43 percent of states were below the national average of 82 percent for graduating within four years, and 73 percent were below the Healthy People 2020 target of 87 percent.^{1,7} Perhaps more troubling, low graduation rates were reported disproportionately among black, Hispanic, and American Indian/Native Alaskan students, and in specific school districts.7 This institutionalization of dropout was cited in a 2004 study from Robert Balfanz, giving rise to the term 'dropout factories'.8 At the time, nearly 80 percent of the high schools with the highest number of dropouts were found in just 15 states (33 percent of those in the South).8 In 2013-2014, states with the lowest graduation rates clustered in the Southeast and West. while school districts with the lowest graduation rates were spread across the U.S. (see Table 1).

TABLE 1—TWENTY-FIVE SCHOOL DISTRICTS WITH LOWEST ADJUSTED COHORT GRADUATION RATES, 2013-20147

DISTRICT	CITY	STATE	DISTRICT SIZE (TOTAL STUDENTS) 2014-2015°	DISTRICT ACGR (PERCENT) 2013-2014	STATE ACGR (PERCENT) 2013-2014
Rochester City	Rochester	NY	30,014	49	78
Grand Rapids	Grand Rapids	MI	16,232	50	79
Syracuse City	Syracuse	NY	21,110	52	78
Aurora Joint District 28	Aurora	CO	41,729	56	77
Buffalo City	Buffalo	NY	35,234	56	78
District of Columbia	Washington	DC	46,155	58	61
Atlanta	Atlanta	GA	51,145	59	73
Bibb County	Macon	GA	24,354	59	73
Dougherty County	Albany	GA	15,308	59	73
Minneapolis Public Schools	Minneapolis	MN	36,999	59	81
Compton Unified	Compton	CA	22,106	60	81
Oakland Unified	Oakland	CA	48,077	60	81
Clayton County	Jonesboro	GA	53,367	60	73
Indianapolis	Indianapolis	IN	31,794	61	88
Milwaukee School District	Milwaukee	WI	77,316	61	89
Richmond County	Augusta	GA	31,823	62	73
Dekalb County	Decatur	GA	101,103	62	73
Springfield	Springfield	MA	25,645	62	86
Albuquerque	Albuquerque	NM	93,001	62	69
Denver School District 1	Denver	CO	88,839	63	77
Kansas City 33	Kansas City	МО	15,386	63	86
Tulsa	Tulsa	OK	39,999	63	83
Highline School District	Seattle	WA	19,288	63	78
Yakima	Yakima	WA	16,058	63	78
Falcon No. 49	Colorado Springs	CO	19,552	64	77

Note: Data from list of U.S. school districts enrolling at least 15,000 students, NCES

Disparities in graduation rates exist even among high-performing states. In 2014, graduation rates for black students in Wisconsin were 66 percent, compared with 89 percent overall in the state; rates for Hispanic students in Massachusetts were 69 percent, compared with 86 percent overall; and American Indians/Native Alaskans in South Dakota were nearly half as likely to graduate (47 percent) as students overall (83 percent).⁷ Racial and ethnic minority students are retained in their grade more often than white students

in elementary school and high school, and black students are suspended or expelled at more than twice the rate of white students. Grade retention, suspensions and expulsions are key indicators of school dropout.¹⁰

Lower levels of educational attainment can affect health through a cascade effect, including employment, earning capacity, incarceration and ability to secure resources that improve health.^{5,11} In 2016, workers with less than a high school diploma had:



health disparities that impact many of our nation's youth — from unmet physical and mental health needs to teen pregnancy and the impact of repeated exposure to community violence — also impedes their ability to succeed academically and graduate from school. If we do not stop dropout now, we guarantee poor adult health outcomes, joblessness and a strain to our safety net system later."

Georges Benjamin, MD
 Executive Director, APHA

- Higher unemployment rates approximately 2 percent and 5 percent higher than high school and college graduates, respectively.¹²
- Annual incomes more than 25 percent lower than high school graduates and nearly 60 percent lower college graduates.¹²

TABLE 2—SOCIETAL COST OF HIGH SCHOOL DROPOUT



FISCAL IMPACT

High school dropout costs the U.S. more than \$11 billion in lost tax revenue. Each high school dropout costs the U.S. more than \$163,000 in lost tax revenue over a lifetime.¹⁴

HEALTH CARE

If high school dropout rates were cut in half nationally, the U.S. would save an estimated \$7.3 billion annually in Medicaid spending, as well as \$12 billion on spending related to heart disease, \$11.9 billion on spending related to obesity, \$8.9 billion in smoking-related costs, and \$6.4 billion for alcoholism-related costs.²

A higher rate of poverty at 27 percent, compared to 14 percent for high school graduates and less than 5 percent for college graduates.⁶

Given the significant impact of educational attainment on individual, community and national disparities in economic and health outcomes, policymakers and educators have initiated some systems changes in attempt to close the achievement gap. These include: improvements in school climate and cultural competence: enhancements to curriculum and instruction; and provision of additional resources to at-risk students and teachers.3 Overall, graduation rates have improved by 1 percent annually since 2010-11, the first academic year in which the adjusted cohort graduation rate was used as the standard for 'dropout' calculations. But at 82 percent, the U.S. graduation rate is still below the Healthy People 2020 target of 87 percent.^{1,7} In addition, rates of improvement have progressed differently among minorities and by geography, and most interventions have not addressed the social determinants of health that impact graduation. If interventions do not focus on the biggest barriers to graduation absenteeism and developmental delay due to chronic stress, chronic illness,

poverty, hunger, homelessness and teen pregnancy — the high cost of disparities in education and health outcomes for individuals and society will persist.

AN EXPANDED ROLE FOR SCHOOL-BASED HEALTH CENTERS

By design, school-based health centers, or SBHCs, and their school partners can readily address the health dimensions of dropout, chronic absenteeism being a key factor. Nearly one in four minority students has missed three or more days of school in the past month, according to a 2015 survey. In addition to the barriers listed above, students cite transportation, drug use, school safety and community attitudes toward education as factors in absenteeism.¹⁵

SBHCs can play a significant role in by providing such services as vision and oral health care, chronic disease management, behavioral health counseling and treatment, harm reduction counseling and referrals, primary preventive health care services and nutritional counseling. Mental health counseling decreased absenteeism by 50 percent within two months according to some studies, and engagement with a SBHC has increased black male student

retention three times more than among students who were not enrolled with a SBHC.¹⁸ In addition, SBHCs offer sexual and reproductive health services including screening, testing and diagnosis of pregnancy and sexually transmitted infections and distribution of contraception.¹⁶ 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.¹⁹

SBHCs also have the capacity to benefit all students in a school by addressing barriers to learning and graduation such as school violence and hunger, and to extend wellness beyond the school walls and into the community.²⁰ As a trusted entity within the school building, such centers can uncover the sensitive challenges and obstacles that students face and impact their ability to focus on learning. SBHCs can use this insight and work with their school and community partners to address disparities in the social determinants of health and educational success.

For example, SBHCs can gauge school-wide trends through developing and implementing a needs assessment with student groups, teachers and staff.

Then, activities and programs can be introduced to the school including

cultural awareness and development for staff and students, safe school ambassadors, youth leadership development, mental and physical health services, counseling and mediation, social services and others. SBHCs may also recommend policies and processes that focus on targeted multi-dimensional support for retained students, anti-bullying and discrimination, and improved access to healthy foods. By facilitating partnerships among administrators, school staff, parents and key community stakeholders, SBHCs can help shape a comprehensive approach to improving the overall well-being of each

student. Ultimately, SBHCs investments in the health and academic success of students, integrated with efforts to promote well-being in the community, will ensure students stay in school, graduate and thrive as healthy adults.¹⁶

REFERENCES

- Leading Health Indicators:Social Determinants.
 Healthy People website. https://www.healthy-people.gov/2020/leading-health-indicators/2020-lhi-topics/Social-Determinants. Updated June 7, 2017. Accessed June 7, 2017.
- 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/up-loads/2013/08/WellWellOff.pdf. Published July 2013. Accessed June 7, 2017.
- Lansford JE, Dodge KA, Pettit GS, Bates JE. A
 Public Health Perspective on School Dropout and
 Adult Outcomes: A Prospective Study of Risk
 and Protective Factors From Age 5 to 27 Years. J
 Adolesc Health. 2016;58(6):652-8. http://www.
 jahonline.org/article/S1054-139X(16)00049-5/
 fulltext.
- 4. Vistnes JP, Lipton BJ; Association for Healthcare Research and Quality. The Uninsured in America: Estimates of the Percentage of Non-Elderly Adults Uninsured throughout Each Calendar Year, by Selected Population Subgroups and State Medicaid Expansion Status: 2013 and 2014 [Statistical Brief #488]. https://meps.ahrq.gov/data_files/publications/st488/stat488.pdf. Published June 2016. Accessed June 7, 2017.
- 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/populationhealth/zimmerman.html. Published September 2015. Accessed June 7, 2017.
- 2012-2016 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.

- 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.
- Balfanz R, Legters N. Locating the Dropout Crisis: Which High Schools Produce the Nation's Dropouts? Where Are They Located? Who Attends Them? [Report 70]. http://eric. ed.gov/?id=ED484525. Published September 2004. Accessed June 7, 2017.
- Public School Districts database. Washington, DC: National Center for Education Statistics; 2017. https://nces.ed.gov/ccd/districtsearch/. Accessed June 27, 2017.
- Status and Trends in the Education of Racial and Ethnic Groups. Washington, DC: National Center for Education Statistics; 2017. https://nces.ed.gov/ programs/raceindicators/indicator_rda.asp. Accessed June 7, 2017.
- DeBaun B, Roc M; Alliance for Excellent Education. Saving Futures, Saving Dollars: The Impact of Education on Crime Reduction and Earnings. https://all4ed.org/wp-content/uploads/2013/09/SavingFutures.pdf. Published September 2013. Accessed June 7, 2017.
- Earnings and unemployment rates by educational attainment. Bureau of Labor Statistics website. http://www.bls.gov/emp/ep_table_001.htm. Accessed June 7, 2017.
- 13. 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.
- 14. Rumberger RW, Losen DJ. The High Cost Of Harsh Discipline And Its Disparate Impact. https://www. civilrightsproject.ucla.edu/resources/projects/ center-for-civil-rights-remedies/school-to-prisonfolder/federal-reports/the-high-cost-of-harshdiscipline-and-its-disparate-impact/UCLA_High-Cost_6-2_948.pdf. Published June 2, 2016. Accessed June 7, 2017.

- Student Absenteeism. Child Trends website. https://www.childtrends.org/indicators/studentabsenteeism/. Updated December 2015. Accessed June 7, 2017.
- 16. 2013-2014 Digital Census Report. School-Based Health Alliance website. http://censusreport. sbh4all.org/. Accessed June 7, 2017.
- Student Success. School-Based Health Alliance website. http://www.sbh4all.org/school-healthcare/health-and-learning/student-success/. Accessed June 7, 2017.
- Chronic Absenteeism. School-Based Health Alliance website. http://www.sbh4all.org/school-health-care/health-and-learning/chronic-absenteeism/. Accessed June 7, 2017.
- About Teen Pregnancy. Centers for Disease Control and Prevention website. http://www.cdc. gov/teenpregnancy/about/. Updated May 9, 2017. Accessed June 7, 2017.
- Highlighting Hallways to Health: Why Widespread Wellness Works. School-Based Health Alliance website. http://www.sbh4all.org/highlightinghallways-health-widespread-wellness-works/. Published August 3, 2016. 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.

