## National Collaborative on Education + Health

## Leading Health Conditions Impacting Student Attendance

Central to the connection between health and learning is students attending schools. Many students have one or more health problems that compromise their ability to learn and put them at risk for missing school. The prevalence of many of these conditions, including both physical and behavioral health conditions, has increased significantly over the past two decades. This has implications not only for children's long-term health but also for their opportunities to learn and succeed at school. The chart below identifies health conditions that have high prevalence among children, disproportionately impact children of color and have a direct impact on student attendance. Fortunately, research shows that there are proven or promising school-based programs to address each of these health conditions.

This chart was prepared by the National Collaborative on Education and Health, an initiative co-convened by Healthy Schools Campaign and Trust for America's Health that is working to transform the health and education sectors to support the conditions of health in schools across the country. The National Collaborative on Education and Health has brought together over 100 stakeholders representing federal, state and local government agencies, health and education professionals, advocates and foundations.

| Health Condition | Health Disparities | Impact on Attendance | Sample Intervention (s) | Potential Partners |
| :---: | :---: | :---: | :---: | :---: |
| Asthma <br> - $8.3 \%$ of children (< age 18) are currently diagnosed with asthma - $4.2 \%$ of children $0-4$ <br> - 9.9\% of children 4-14 <br> - $8.6 \%$ of children 15-19 | Compared to Caucasian children, asthma prevalence is higher in children who are Puerto Rican (2.4 times), African American (1.6 times), and American Indian/Alaska Native ( 1.3 times). | Asthma is one of the leading causes of school absenteeism, accounting for $1 / 3$ of all days missed instruction. ${ }^{\text {iii }}$ <br> Children with persistent asthma are 3.2 times as likely to have 10 or more absences as their peers. ${ }^{\text {iv }}$ | Asthma Friendly <br> Environments: <br> - Asthma Friendly Schools Initiative, <br> - Asthma Friendly Homes <br> - Environmental assessments and remediation in schools and homes | - Community health providers <br> - School staff, including school health team and maintenance team <br> - School-based health centers <br> - Regional EPA office <br> - Local American Lung Association chapter <br> - Housing advocates <br> - Before and after school programs |

## Bullying, Violence and

Abuse

- $20 \%$ of high school students report being bullied on school property in the past year ${ }{ }^{\vee}$
- $24.7 \%$ of high school students report being in a fight in the past year. ${ }^{\text {vi }}$
- $20 \%$ of children witnessed violence in their family or the neighborhood during the previous year. ${ }^{\text {vii }}$
- $16.6 \%$ of children experience physical abuse, $9.3 \%$ experience sexual abuse and 7.1\%
experience
emotional/psychological abuse. ${ }^{\text {viii }}$


## Oral health

- $20 \%$ of children aged 5 to 11 years have at least one untreated decayed tooth. ${ }^{\text {xii }}$
- $13 \%$ of adolescents aged 12 to 19 years have at least one untreated decayed tooth. ${ }^{\text {xiii }}$
- Among school-age children, tooth decay is the most common chronic disease, five times more prevalent than asthma.
34.7\% of African American students, $28.4 \%$ of Hispanic students and $20.8 \%$ of Caucasian students report being in a physical fight in the past year.
9.8\% of Hispanic students, $7.9 \%$ of African American students and $5.6 \%$ of Caucasian students report missing school in the past month because of feeling unsafe either at, or traveling to or from school. ${ }^{\text {ix }}$

African American children have higher rates of maltreatment than Caucasian and Hispanic children. ${ }^{\mathrm{x}}$
Untreated caries are nearly twice as prevalent in Hispanic children ( $26 \%$ ) compared to non-Hispanic white children ( $14 \%$ ) aged 6-9, and are more than twice as prevalent for nonHispanic black adolescents (25\%) compared with nonHispanic white adolescents (9\%) aged 13-15. ${ }^{\text {xiv }}$

The percentage of children 5 to 19 years with untreated tooth decay is twice as high for those from low-income families ( $25 \%$ ) compared with children from higher-income families (11\%). ${ }^{\mathrm{xv}}$
7.1\% of students report not going to school at least 1 day during the past 30 days because they felt unsafe at school or on their way to or from school. ${ }^{\text {xi }}$

Safe Routes to Schools
School and communitybased health, counseling and social services

Bullying education programs, including playground-based and cyber-bullying

School support groups such as Gay/Straight Alliance clubs

School discipline policy reform and protective school climates

Children between 5 and 17 years miss nearly two million school days in a single year nationwide due to dental healthrelated problems. ${ }^{\text {xvi }}$

Children with poor oral health status are nearly 3 times more likely than were their counterparts to miss school as a result of dental pain. ${ }^{\text {xvii }}$

- PTA
- City agencies: transportation, public works, health, public health, police department
- Neighborhood associations
- Community health providers
- Local child trauma program
- School staff, including school health team
- Youth and after-school programs
- City/county health departments
- Hospitals and health centers
- School-based clinics
- Dental schools and programs
- Local dental health providers
- WIC or Head Start programs
- Well child clinics
- Community centers
- School staff, including school health team


## Food insecurity and <br> nutrition

- $21 \%$ of children (<age 18) live in households that have been
food-insecure at some point during the year. ${ }^{\text {xviii }}$
- $31.8 \%$ of children and adolescents are overweight or obese. - $18 \%$ of children aged 611 years old are obese. - $21 \%$ of children aged 12-19 years old are obese. ${ }^{\text {xix }}$

Food insecurity is more than twice as prevalent among children in households headed by African Americans (36\%) or Hispanics (30\%), than in those headed by Caucasians (15\%). The proportion of households where children had "very low food security," is between three and four times as high in African American or Hispanic households as it was in Caucasian households. ${ }^{\mathrm{xx}}$
$32.5 \%$ of African American children and $38.9 \%$ of Hispanic children are overweight or obese compared to $28.5 \%$ of Caucasian children. ${ }^{\text {xi }}$

## Mental health and

 substance use disorders- A total of $13 \%-20 \%$ of children experience a mental disorder in a given year. ${ }^{\mathrm{xxv}}$
- ADHD (6.8\%) is the most prevalent parent-reported current diagnosis among children aged $3-17$ years, followed by behavioral or conduct problems (3.5\%),

Children who come from food-insecure families are more likely to be suspended from school, have higher absenteeism rates and have poor health compared to children who come from foodsecure homes. ${ }^{\text {xxii }}$

Children who are obese are 1.7 times more likely to have 10 or more absences in a given year than their non-obese peers. ${ }^{\text {xxiii }}$

Overweight children are exposed to negative social experiences such as peer rejection and bullying which may lead to low self-esteem, anxiety disorders and depression. ${ }^{\text {xxiv }}$
When students' mental health needs are met, they are less likely to be absent and more likely to be engaged in and have a sense of connectedness to school. ${ }^{\text {xxi }}$

Children affected by ADHD are more likely to exhibit tardiness and

Access to healthy school meals, including universal school breakfast programs, and water School Pantry Program

## Backpack programs

School-based physical activity programs

Programs to reduce screen time

Programs to promote appropriate sleep

School-based mental health programs.

Screening, Brief
Intervention, and Referral to Treatment (SBIRT)

Universal interventions such as the Good Behavior Game

- Local departments of health and public health
- Teachers unions
- Food service directors
- Local food banks
- Local anti-hunger groups, including Feeding America
- School staff, including food services team and facility and maintenance team
- Community food and fitness organizations
- Local health care providers
- Farmers markets
- Community mental health providers and agencies
- Local departments of health and public health
- Local courts and legal system
- Local child trauma program
- School staff, including school nurses, guidance counselors and
anxiety (3.0\%), depression (2.1\%) and autism spectrum disorders (1.1\%). ${ }^{\mathrm{xxvi}}$
- $25 \%$ of children in need of mental health care get the help they need.
- $8.8 \%$ of adolescents report current illicit drug users
- $20.8 \%$ of adolescents report binge-drinking (five or more drinks of alcohol in a row within two hours) in the past 30 days.
- $8.6 \%$ of students tried marijuana for the first time before age 13 .xvii
Teen and unplanned pregnancies
3 in 10 teen American girls will get pregnant at least once before age 20 . ${ }^{\text {xxiv }}$

| Vision |
| :--- |
| 25 percent of school-aged | children have some form of vision impairment. ${ }^{\text {xxxvii }}$

African American and Latino youth are more likely to drink alcohol for the first time before age 13 ( $21.0 \%$ and $21.8 \%$ vs. 16.7\%).

African American and Latino youth are more likely to try marijuana for the first time before age 13 ( $11.5 \%$ and $11.7 \%$ vs. $6.6 \%$. ${ }^{\text {xx }}$
$\left.\begin{array}{|l|l|l|}\hline \begin{array}{l}\text { absenteeism due to sleep } \\ \text { problems caused by the } \\ \text { disorder. }\end{array} & & \begin{array}{c}\text { behavioral health team } \\ \text { - School-based mental } \\ \text { health centers }\end{array} \\ \text { Reduction of alcohol } \\ \text { and drug use is } \\ \text { associated with better } \\ \text { attendance rates. }\end{array} \quad \begin{array}{l}\text { Community Anti-Drug } \\ \text { Coalitions of America } \\ \text { - School staff, including } \\ \text { school health team }\end{array}\right]$

Please contact Alex Mays at alex@healthyschoolscampaign.org with questions about this chart. For more information about the National Collaborative on Education and Health visit healthinmind.org.
${ }^{i}{ }^{i}$ National Health Interview Survey. Centers for Disease Control and Prevention; 2013. http://www.cdc.gov/asthma/most_recent_data.htm Accessed May 1, 2015
${ }_{i i}{ }_{i i}$ Akinbami LJ, Moorman JE, Garbe PL, Sondik EJ. Status of Childhood Asthma in the United States, 1980-2007. Pediatrics. 2009 Mar; 123 Suppl 3:S131-45.
${ }^{\text {iii }}$ Krenitsky-Korn S. High school students with asthma: attitudes about school health, absenteeism, and its impact on academic achievement. Journal of Pediatric Nursing. 2011.
Mar-Apr;37(2):61-8.
${ }^{\text {iv }}$ National Health Interview Survey. Centers for Disease Control and Prevention; 2013. http://www.cdc.gov/asthma/most_recent_data.htm Accessed May 1, 2015
${ }^{\mathrm{v}}$ Centers for Disease Control and Prevention. 2013. Youth Risk Behavior Survey. Available at: www.cdc.gov/yrbs. Accessed on May 1, 2015.
${ }^{v i}{ }_{i}$ bid
${ }^{\text {vii }}$ Finkelhor D, Turner H, Ormrod R, Hamby S, Kracke K. Children's Exposure to Violence: a Comprehensive National Study. Juvenile Justice Bulletin. October, 2009.
Available at: Children's Exposure to Violence: A Comprehensive National Survey
${ }^{\text {viii }}$ U.S. Department of Health and Human Services, Administration on Children, Youth, and Families. (2007). Child maltreatment 2005. Washington, DC: U.S.
Government Printing Office.
${ }^{i x}$ ibid
${ }^{x}$ US Department of Health and Human Services. Child maltreatment 2004 Washington, DC: US Government Printing Office; [Accessed April 26,
2015].http://www.acf.hhs.gov/programs/cb/pubs/cm04/cm04.pdf.
${ }^{x i}$ ibid
xii Dye BA, Xianfen L, Beltrán-Aguilar ED. Selected Oral Health Indicators in the United States 2005-2008. NCHS Data Brief, no. 96. Hyattsville, MD: National Center for Health Statistics, Centers for Disease Control and Prevention; 2012.
xiii ibid
${ }^{\text {xiv }}$ Centers for Disease Control and Prevention (CDC). National Center for Health Statistics (NCHS). National Health and Nutrition Examination Survey Data. Hyattsville, MD:
U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2009-2010.
${ }^{\mathrm{xv}}$ Dye BA, Xianfen L, Beltrán-Aguilar ED. Selected Oral Health Indicators in the United States 2005-2008. NCHS Data Brief, no. 96. Hyattsville, MD: National Center for Health Statistics, Centers for Disease Control and Prevention; 2012.
${ }^{\text {xvi }}$ Pourat N., Nicholson G. Unaffordable Dental Care is Linked to Frequent School Absences. UCLA Health Policy Res Brief. 2009;(November):1-6.
xvii Jackson, S. L., Vann, W. F., Kotch, J. B., Pahel, B. T., \& Lee, J. Y. (2011). Impact of Poor Oral Health on Children's School Attendance and Performance.American Journal of Public Health, 101(10), 1900-1906. doi:10.2105/AJPH.2010.200915
${ }_{\text {xviii }}$ Coleman-Jensen,A., Gregory, C., and Singh, A. (2014).Household food security in the United States in 2013: Statistical supplement. United
States Department of Agriculture. Economic Research Service. Table S-3. Available at: http://www.ers.usda.gov/publications/ap-
administrative-publication/ap066.aspx
${ }^{\text {xix }}$ National Center for Health Statistics. Health, United States, 2011: With Special Features on Socioeconomic Status and Health. Hyattsville, MD; U.S. Department of Health and Human Services; 2012.
${ }^{\mathrm{xx}}$ ibid
${ }^{\text {xxi }}$ Wang Y and Beydoun MA. The Obesity Epidemic in the United States - Gender, Age, Socioeconomic, Racial/Ethnic, and Geographic Characteristics: A Systematic Review and Meta-Regression Analysis. Epidemiol Rev, 29: 6-28, 2007.
xxii Jyoti D.F., Frongillo E.A., Jones S.J., Al JET. Community and International Nutrition Food Insecurity Affects School Children's Academic Performance, Weight Gain, and Social Skills. J Nutr. 2005;135:2831-9.
xxiii Geier AB, Foster GD, Womble LG. The relationship between relative weight and school attendance among elementary schoolchildren.Obesity,
15(8):2157-2161, 2007.
${ }^{x}$ xiv Taras H, Potts-Datema W. Obesity and student performance at school. Journal of School Health 2005; 75(8):291-295.
${ }^{\mathrm{xxv}}$ National Research Council and Institute of Medicine. Preventing mental, emotional, and behavioral disorders among young people: progress and possibilities. Washington, DC: The National Academic Press; 2009.
${ }^{\text {xxvi }}$ CDC. Mental health surveillance among children - United States, 2005-2011. MMWR. 2013. 62(2): 1-35.
${ }^{\text {xxvii }}$ Centers for Disease Control and Prevention. 2013. Youth Risk Behavior Survey. Available at: www.cdc.gov/yrbs. Accessed on May 1, 2015.
${ }^{\text {xxviii }}$ Basch CE. Healthier Students Are Better Learners: A Missing Link in School Reforms to Close the Achievement Gap. Equity Matters: Research Review No. 6. New York: Columbia University; 2010.
${ }^{\text {xxix }}$ US DHHS. Executive Summary. Mental Health: Culture, Race, and Ethnicity. A supplement to Mental Health: A Report of the Surgeon General. Rockville, MD: US Department of Health and Human Services, Substance Abuse and Mental Health Services Administration
${ }^{x x x}$ ibid
${ }^{\text {xxxi }}$ Woodruff, D.W., Osher, D., Hoffman, C.C., Gruner, A., King, M.A., Snow, S.T., \& Melntire, J.C. (1999). The role of education in a system of care: Effectively serving children with emotional or behavioral disorders. Systems of Care: Promising Practices in Children's Mental Health, 1998 Series, Volume III. Washington, D.C.: Center for Effective Collaboration and Practice, American Institutes for Research.
xxxii Basch CE. Healthier Students Are Better Learners: A Missing Link in School Reforms to Close the Achievement Gap. Equity Matters: Research Review No. 6. New York: Columbia University; 2010.
${ }^{\text {xxxiii }}$ Engberg J., Morral A.R. Reducing substance use improves adolescents' school attendance. Addiction. 2006 Dec; 101(12):1741-51.
${ }^{\text {xxxiv }}$ Basch CE. Healthier Students Are Better Learners: A Missing Link in School Reforms to Close the Achievement Gap. Equity Matters: Research Review No. 6. New York: Columbia University; 2010.
${ }^{\text {xxxv }}$ Martin, J.A., Kung, H.C., Mathews, T.J., Hoyert, D. L.,Strobino, D. M., Guyer, B.. Annual summary of vital statistics: 2006. Pediatrics. 2008. 121(4), 788-801.
${ }^{\text {xxxvi }}$ Basch CE. Healthier Students Are Better Learners: A Missing Link in School Reforms to Close the Achievement Gap. Equity Matters: Research Review No. 6. New York: Columbia University; 2010.
xxxvii Improving the Nation's Vision Health: A Coordinated Public Health Approach. Atlanta, GA: Centers for Disease Control; 2006. Available at: www.visionandhealth.org/documents/ReportImprovingtheNationsVisionHealth.pdf. Accessed January 10, 2011.
xxxviii What Is Vision Impairment? Atlanta, GA: National Center on Birth Defects and Developmental Disabilities, Centers for Disease Control and Prevention; 2004.
Available at: www.cdc.gov/ncbddd/dd/vision2.htm.
${ }^{x} \times x$ Heslin, K.C., Casey, R., Shaheen, M.A., Cardenas, F., \& Baker, R.S. Racial and ethnic differences in unmet need for vision care among children with special health care needs. Archives of Ophthalmology. 2006. 124, 895-902.
${ }^{\text {xI }}$ Basch CE. Healthier Students Are Better Learners: A Missing Link in School Reforms to Close the Achievement Gap. Equity Matters: Research Review No. 6. New York: Columbia University; 2010.

