September 2016

SCHOOL HEALTH
ISSUE BRIEF

ADDRESSING UNMET HEALTHCARE NEEDS OF NEW YORK CITY YOUTH

INTRODUCTION

Photo by Biljana Milenkovic, Children's Defense Fund

New York City educates 1.1 million students across approximately 1,800 schools in the five boroughs. These students experience a vast array of health care needs.[1] Currently in New York City, all children receive some basic services from school nurses and other health care professionals through the Office of School Health. Still other students receive a range of more comprehensive services, varying by site, from school-based health centers (SBHCs).

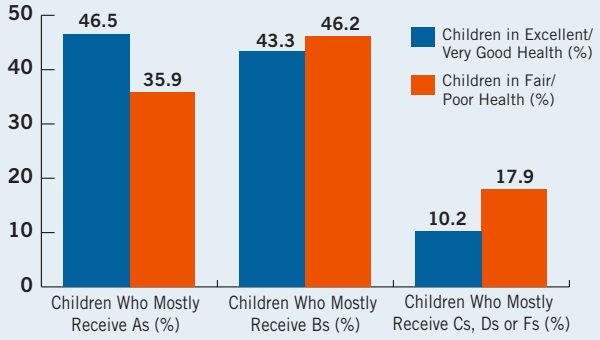
Schools offer unique advantages in their ability to improve health outcomes for children. As the capacity for health care delivery in schools increases, significant opportunities exist to expand the school-based health care infrastructure in New York City. Adequately investing in school-based health services, such as school nurses, school-based health centers, on-site social workers and health educators, along with numerous other proven effective models, will help improve both educational and health outcomes for New York City's youth.

AT THE CROSSROADS OF HEALTH AND LEARNING

Children with unmet health needs are far less likely to succeed in school.[2,3] **Figure 1** shows that New York City children who are considered to be in excellent or very good health are more likely to receive mostly As and Bs than children who are in fair or poor health. The presence of unmanaged health conditions threaten students' ability to focus on school work and often forces them to lose significant academic seat time. In New York City, neighborhoods with the highest rates of chronic elementary school absenteeism are communities where both child and adult residents continue to face overwhelming health disparities (**Table 1**).

Figure 1

Academic Success by Health Status
Children in Excellent/Very Good Health (%)



Children's Defense Fund NEW YORK

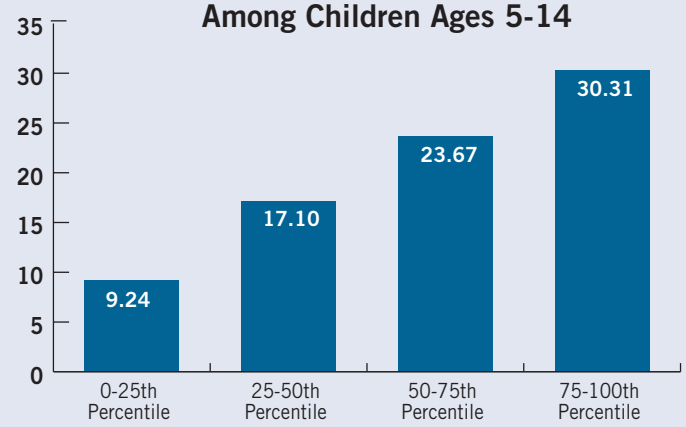
Table 1: Health Disparities Facing New York City Neighborhoods with High Elementary School Absenteeism

Rank	Borough	Neighborhood	Rate of NYC public school students, grades k-5, residing in the community district that were chronically absent during the 2013-2014 school year	Rate of asthma hospital-izations per 10,000 popula-tion ages 5-14 years	Rate of births in which mother is under 20 years old per 1,000 women ages 15-19 years	Age-adjusted percent of adults that is obese (BMI of 30 or greater) based on self-reported height and weight	Age-adjusted percent of adults reporting that their health is "excellent," "very good," or "good" on a 5-level scale (Poor, Fair, Good, Very Good or Excellent)
1	Brooklyn	Brownsville	40	61	38.5	32	81
2	Bronx	Belmont and East Tremont	37	87	39.5	35	67
3	Bronx	Hunts Point and Longwood	36	88	44.9	33	68
4	Bronx	Morrisania and Crotona	32	89	43.1	35	67
5	Bronx	Highbridge and Concourse	31	55	43.6	29	69
6	Brooklyn	Bedford Stuyvesant	31	54	34.2	33	77
7	Bronx	Mott Haven and Melrose	31	112	43	33	68
8	Brooklyn	East New York and Starrett City	30	50	34.1	31	74
9	Bronx	Williamsbridge and Baychester	30	74	28.4	35	77
10	Bronx	Fordham and University Heights	30	55	43	31	69
New York City Average			**20**	**36**	**23.6**	**24**	**78**

When an asthma attack becomes an emergency room visit, a child misses the rest of that school day and must receive more costly health care services. Additionally, a parent or caregiver must take time away from work and potentially lose wages to care for their child. Across the five boroughs, neighborhoods with the highest rates of asthma hospitalizations among children ages five to fourteen had rates of chronic elementary school absenteeism more than three times those of neighborhoods with the lowest rates of children asthma hospitalizations (**Figure 2**).

Figure 2

Average Absentee Rate by Neighborhood Rate of Asthma Hospitalization Among Children Ages 5-14



School-based health services can help mitigate these issues by providing timely care that reduces reliance on emergency rooms and quickly returns a child to the classroom. Schools are uniquely suited to deliver health care services to an often hard-to-reach population. They have direct access to nearly 98 percent of children for regular and prolonged periods of time during some of the most impressionable and habit forming years of an individual's life. A school's access to children from various socioeconomic backgrounds facilitates the provision of required health screenings (immunizations, vision and hearing) that promote early detection and treatment of conditions that may otherwise go undiagnosed. Additionally, schools offer a discreet and confidential environment in which students and providers can engage in honest and meaningful conversations that lead to improved health outcomes.

SCHOOL HEALTH OUTCOMES

While school-aged children face a wide range of health conditions, a few highly prevalent conditions affect children in such a way that they can adversely influence learning and future health and may be best addressed through school-based health intervention.[4] The Children's Defense Fund – New York previously identified six critical issues that exist at this cross roads and then supplemented this list with issues the Children's Health Fund has identified as Barriers to Learning. These critical health conditions include asthma, behavioral health, sexual health, oral health, vision, and ensuring children are well-rested, well-fed and physically fit. This brief further discusses these six issue areas and how they impact both children's opportunity for learning and long-term wellness.

Asthma: Asthma affects more than 10 percent of New York City elementary school students.[5] As previously mentioned, uncontrolled asthma can lead to increased school absences and worsened academic performance resulting from frequent trips to the emergency room during severe asthma attacks.[6] Although most children's asthma hospitalizations are preventable with proper maintenance and treatment, many New York City neighborhoods still experience disproportionately high child asthma hospitalization rates.[7] In New York City, children with asthma were more likely than their peers to receive mostly Cs, Ds and Fs (**Figure 3**).[8] A study conducted in Detroit schools found that children who received a school-based asthma intervention experience fewer daytime and nighttime symptoms, were absent less often, and even achieved higher grades in science.[9]

Behavioral Health: In the absence of appropriate school-based interventions, behavioral health issues can lead to a host of negative health and social outcomes. In New York City, an estimated 9 percent of 6 to 12 year olds have either Attention Deficit Hyperactivity Disorder, Oppositional Defiant Disorder/Conduct Disorder, Anxiety, Depression or Bipolar Disorder. In addition, parents have reported difficulties with emotions, concentration and behavior in 14 percent of 6-12 year olds with no current diagnosed mental health disorder.[10] Distressingly, 27.4 percent of high school students reported symptoms of depression in the past 12 months and 8.1 percent reported attempting suicide in the past 12 months.[11] Almost a quarter of New York City students with a mental health disorder (22 percent) received mostly Cs, Ds and Fs compared to just 12 percent among those without a mental health disorder (**Figure 4**).[12] Many school-based social-emotional education programs have demonstrated meaningful reductions in depression and anxiety among students.[13,14,15] Additionally, schools that provide mental health services have reported positive outcomes, such as declines in disciplinary referrals and distractive/rebellious behavior, increased classroom attentiveness and peer associations, and a general improvement in grades.[16]

Figure 3

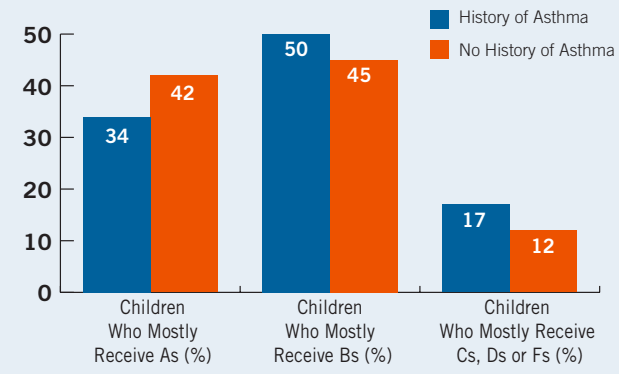
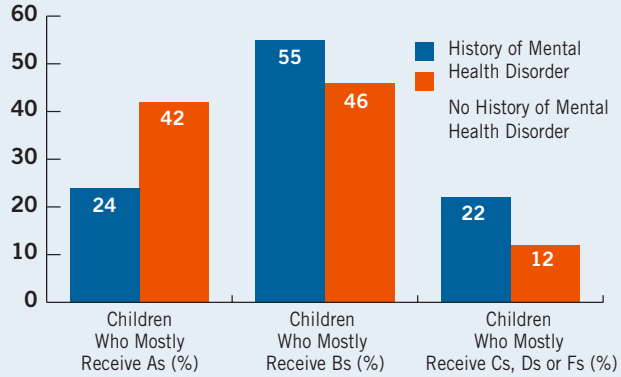


Figure 4



Sexual Health: The absence of comprehensive sexual health education and lack of awareness regarding confidentiality of services has hindered adolescents' access to appropriate sexual health care, such as contraception and testing and treatment for sexually transmitted infections (STIs). Nearly 17,000 New York City adolescent females (ages 15-19) become pregnant each year.[17] Only 40 percent of teen moms finish high school and fewer than 2 percent finish college before the age of 30,[18] often negatively impacting future employment and earnings.[19] Additionally, teen moms are more likely to receive late or no prenatal care as compared to older mothers (11.6 percent vs 3 percent for women over 19 in NYS), which can threaten the health of both the mother and the newborn.[20] In certain neighborhoods with limited access to health care services they have seen rates of chlamydia that are 40 percent higher than the city-wide average.[21] Untreated chlamydia can cause permanent damage to female reproductive systems and puts women at a higher risk of infertility.[22] With their access to youth and discrete care settings, school-based resources and preventive health education programs have demonstrated their ability to promote adolescents' awareness of safe and appropriate sexual health habits and reduce teen pregnancy and STI rates.[23,24]

Oral Health: In New York City, more than one in three third grade children (38 percent) have untreated tooth decay.[25] Repercussions of untreated tooth decay can vary from pain and infection to difficulty eating and speaking. Children in low-income areas are particularly susceptible to less preventive dental care, with roughly 50 percent of tooth decay remaining untreated in this population.[26] In New York City, approximately one in four children (23 percent) did not have a preventative dental checkup in the past twelve months.[27] As **Figure 5** shows, children with fewer dental visits are more likely to perform poorly than their peers who consistently access dental care.[28] Untreated oral health issues seriously threaten a child's ability to focus and absorb material. School-based dental programs have proven successful in connecting students to needed dental screenings and orthodontics.[29]

Vision: Vision impairment directly affects academic achievement. The vision problems most prevalent among children are blurred vision, crossed eyes and lazy eye.[30] Healthcare providers can often attribute behavior issues and low academic achievement to untreated vision problems. For example, a child suffering from nearsightedness might struggle to see the board, and a child who is farsighted might have trouble reading a text book. School-based screenings and eyeglass prescriptions can easily remedy these vision concerns, significantly improving a child's potential for academic success.

Figure 5

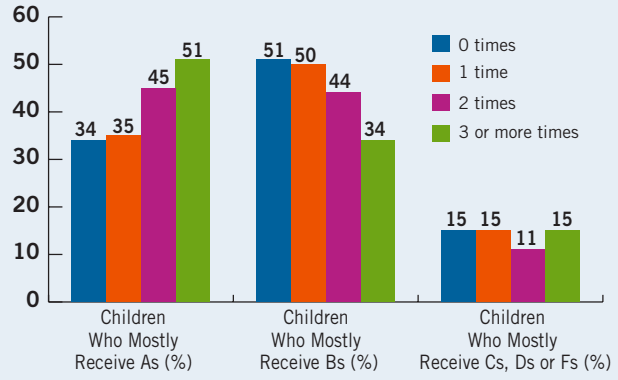
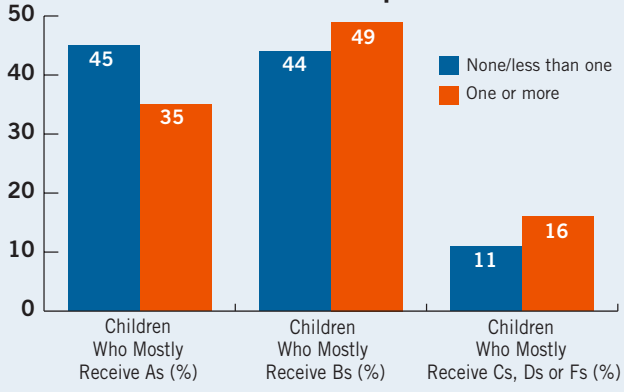


Figure 6



Well Rested, Well Fed and Physically Fit: In New York City, 1 in 5 kindergarten students and 1 in 4 children in Head Start are obese.[31] Evidence suggests that obese children are significantly more likely to repeat a grade, have higher absenteeism and have overall lower school engagement.[32] Research has consistently demonstrated that serious health concerns such as insulin resistance, type 2 diabetes, asthma, hypertension, sleep apnea, early puberty, orthopedic problems, and negative psychological outcomes are common results of childhood obesity.[33] Increased child obesity trends are linked to limited access to nutritious foods and physical inactivity. Nutritional insufficiency can also predict academic success. Children who consume at least one sugary drink a day are less likely to achieve mostly As than their peers (**Figure 6**).[34] One report suggested nearly one third of NYC schools do not have a full-time certified physical education teacher, and nearly 30 percent of the schools do not have space designated for physical education.[35] Schools manage a large portion of a child's diet and exercise. Accordingly, they are well suited to improve the physical health of students who lack sufficient nutrition and physical activity.

CONCLUSION

As New York City moves toward a future of community schools, children's advocates must discern the appropriate role of health education and health care services within schools. While schools are resource-constrained and they cannot supplant traditional care delivery models, it would be foolish to diminish the inherent advantages of school-based health education and care delivery to the simple management of daily first aid needs. New York City must develop a strategic roadmap for expanding access to health education and healthcare services in schools, particularly in neighborhoods with high rates of absenteeism. Investment in school health will yield significant positive returns for a number of health and education outcomes. The intersection of health and education may happen first for a child in their school, but these two forces will continue to cross paths long into adulthood.

ENDNOTES

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