

# 2014 Alignment Nashville Children's Health Impact Report

Addressing Health Inequities to Improve our Children's Academic Success.



# Addressing Health Inequities To Improve Our Children’s Academic Success

*“Healthy children learn better. If we as a community can make progress on some very basic issues in children’s health, we can improve not only their well-being and health outcomes, but also their school performance.”*

Dr. Bill Paul, Director of Health, Metro Public Health Department, Nashville, Tennessee

The strong link between education and health is well recognized by leaders in both fields. A healthy student has a much better chance of achieving academic success than a student who is affected by inadequate diet, chronic illness, or an unsafe or unhealthy environment. The Centers for Disease Control and Prevention states: “Healthy students are better learners. They are better on all levels of academic achievement: academic performance, education behavior and cognitive skills and attitudes.”<sup>1</sup> Conversely, an academically successful student has a much better chance of living a healthy and productive life. The longitudinal benefit of education on health is not just a matter of quality of life, but also quantity of life. According to authors David Cutler and Adriana Lleras-Muney in their paper, “Education and Health: Evaluating Theories and Evidence,” for every one year of education completed, a person’s life expectancy increases by 0.6 years.<sup>2</sup> Currently in Davidson County, comprehensive efforts are being put in place to improve the education for all students in the Metropolitan Nashville Public Schools (MNPS), but a significant achievement gap persists in which students living in concentrated poverty are lagging. We must be sure to address health disparities that contribute to the achievement gap, giving all students the foundation needed for academic success.

In 2010, the Campaign for Educational Equity developed a research initiative entitled, “Healthier Students Are Better Learners: A Missing Link in School Reforms to Close the Achievement Gap.” Author Dr. Charles Basch put forth a compelling framework that highlighted the need to focus on certain health conditions as being educationally relevant. Seven conditions in particular were identified as significant contributors to the achievement gap for children in urban school districts like MNPS. These seven include:

1. Vision
2. Asthma
3. Teen pregnancy
4. Aggression and Violence

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<sup>1</sup>CDC “Health and Academic Achievement.” CDC - Healthy Youth. CDC, May 2014. Web. 11 Aug. 2014.

<sup>2</sup>Cutler, David M., and Adriana Lleras-muney. “EDUCATION AND HEALTH: EVALUATING THEORIES AND EVIDENCE.” JEL I1.I2 (2006): 21. Web. 11 Aug. 2014.

5. Physical Activity
6. Breakfast
7. Inattention and Hyperactivity



It is Dr. Basch’s hypothesis that these seven educationally-relevant health inequities are barriers to academic success. They, “impede motivation and ability to learn through at least five causal pathways: sensory perceptions; cognition; connectedness; and engagement with school; absenteeism and dropping out.”<sup>3</sup>

In 2014, the Alignment Nashville Children’s Health Executive Oversight Team (CHEO), which also serves as the School Health Advisory Council for Coordinated School Health for Metropolitan Nashville Public Schools (MNPS), seeks to focus on the health issues that serve as barriers to our students’ success in school. For each of these health issues, we will assess national context, school policies, and available data in order to develop strategies to best support our schools, our students and our families.

How do these health inequities impact academic success? Below are brief introductions to each of our seven focus areas and questions that will help us in developing strategies.

## VISION



Vision is an essential part of everyday life, influencing how children learn, communicate, work, play and interact with the world. Children who have undiagnosed visual difficulty are at risk for poor performance

<sup>3</sup>Basch, Charles E. "Healthier Students Are Better Learners: a Missing Link in School Reforms to Close the Achievement Gap." *Equity Matters* 6(2010): 4. Web. 11 Aug. 2014.

in the classroom as well as difficulty with assignments. As required by Tennessee law<sup>4</sup>, Metropolitan Nashville Public Schools (MNPS) provide vision screenings annually to students in grades Pre-K, Kindergarten, and 2nd, 4th, 6th and 8<sup>th</sup> grades. During the 2012-2013 school year, 20% of students screened were referred to a health care provider through parental notification as a result of the vision screening<sup>5</sup>.

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- How can we be sure every child referred for further evaluation after vision screening completes it?
  - What barriers may be in place to completing eye examinations for children and making sure children who need them have eyeglasses?
  - How can we be sure that a child who is determined to need eye glasses is reliably wearing them in the classroom? Are additional community resources needed to make this happen?
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## ASTHMA

Asthma is a chronic lung disease that represents a significant public health burden. The number of children with asthma has been increasing. Children with poorly controlled asthma are at risk for increased absenteeism and may be limited in their ability to engage in many school activities. MNPS students who are identified with asthma have an individual health plan (IHP) developed by a registered nurse that serves as their Asthma Action Plan / Safety Plan<sup>6</sup>. During the 2012-2013 school year, 6.8% of MNPS students (5519) were identified with asthma, 559 students had controller substances at school and more than 1500 emergency treatments were administered to 465 students<sup>7</sup>.

According to Kids Count, from 2011 to 2012, 12% of children under aged 18 experienced problems with asthma<sup>8</sup>. In 2013, the state of Tennessee participated in the Youth Risk Behavioral Surveillance System Survey (YRBS). According to the survey, 22.6% of high school students had been

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<sup>4</sup>[http://www.tn.gov/education/health\\_safety/csh/HealthScreeningGuidelines.pdf](http://www.tn.gov/education/health_safety/csh/HealthScreeningGuidelines.pdf) March 2008

<sup>5</sup> Data provided by MNPS

<sup>6</sup> MNPS Student/School Health Services SP 6.129

<sup>7</sup> Data provided by MNPS

<sup>8</sup> [www.kidscountdata.org](http://www.kidscountdata.org)

told by a nurse or doctor at some point in their lifetime that they had asthma. This was lower than the 23% reported nationally<sup>9</sup>

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- How many students are missing school days due to asthma?
  - What barriers prevent students with asthma from participating fully in physical education, sports and other activities in school?
  - How do air quality or other school environment factors impact students with asthma?
  - What can schools, community allies, and medical providers do to lessen the impact of asthma on school performance?
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### TEEN PREGNANCY

Teens that experience an unintended pregnancy are at an increased risk of not graduating from high school and are also at risk for many negative health and economic consequences. The MNPS Family Life and Sexuality Education Policy (FLSE) is a comprehensive sexuality education program which promotes and encourages abstinence but also focuses on providing students with knowledge regarding the male and female reproductive systems, pregnancy, HIV and other sexually transmitted infections/diseases (STIs/STDs), healthy and unhealthy relationships, self-esteem, and contraception as a means to protect against unwanted pregnancy and STIs/STDs. In 2012, the teen pregnancy rate for Davidson County was 21.6 per 1,000 females aged 15-17<sup>10</sup>. For the 10,000 girls at MNPS high schools, this rate would amount to about 200 pregnancies per year. Teen pregnancy has been declining in Nashville and across the country in recent years, but the US teen birth rate remains higher than many other developed countries.

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- What barriers prevent teen parents from graduating from high school?
  - What supports are available for parenting students and their babies?

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<sup>9</sup>[http://www.tn.gov/education/health\\_safety/yrbs.shtml](http://www.tn.gov/education/health_safety/yrbs.shtml)

<sup>10</sup> TDOH [http://health.state.tn.us/statistics/pdffiles/V5\\_Rate\\_Sheets\\_2012/births15-172012.pdf](http://health.state.tn.us/statistics/pdffiles/V5_Rate_Sheets_2012/births15-172012.pdf)

- How can we support adolescents in our community to prevent unintended pregnancies?
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## AGGRESSION AND VIOLENCE

Aggression and violence are symptoms associated with Disruptive Behavior Disorder. Disruptive behavior hinders effective teaching and learning. Indicators can include injuries to teachers or students, discipline problems, bullying, physical fighting, perceived safety and school avoidance. U.S.

Healthy People 2020 targets include a reduction in physical fighting among adolescents to 28.4% and a reduction in bullying among adolescents to 17.9%<sup>11</sup>. In 2013, according to the Tennessee Youth Risk Behavior Survey (YRBS), 10.4% of high school students in Tennessee were in a physical fight on school property and 21.8% of high school students were bullied on school property<sup>12</sup>.



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- What are national best practices for reducing violent behavior in children? Is Nashville doing all it can?
  - Have community and school efforts to reduce bullying had an impact? Which ones?
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## PHYSICAL ACTIVITY



Low levels of physical activity contribute to obesity and other preventable physical health conditions among youth. Physical activity affects all major body systems and impacts emotional stability, physical health and ability to learn. According to Tennessee Law, each school must integrate a minimum of 90 minutes of physical activity per week into the instructional school day for all students<sup>13</sup>. This can include time spent in physical education, participating in physical activity in class and time spent at recess. Many

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<sup>11</sup>[www.healthypeople.gov](http://www.healthypeople.gov)

<sup>12</sup>[http://www.tn.gov/education/health\\_safety/yrebs.shtml](http://www.tn.gov/education/health_safety/yrebs.shtml)

<sup>13</sup> TDOE Physical Activity/Physical Education Report [http://www.tn.gov/education/data/health\\_safety/CSH\\_PE-PA-annual\\_report\\_2012-13.pdf](http://www.tn.gov/education/data/health_safety/CSH_PE-PA-annual_report_2012-13.pdf)

schools do not routinely provide recess.

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- Do schools that offer recess see a positive impact in the classroom?
  - What are the barriers to providing more physical activity during the school day?
  - Do out-of-school programs incorporate valuable opportunities for physical activity?
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## **BREAKFAST**

Research suggests that skipping breakfast may lead to adverse cognitive effects impacting alertness, attention, memory, problem solving abilities and processing of complex visual display. Beginning in the 2014-2015 school year, ALL students in Metropolitan Nashville Public Schools will have access to free breakfast each school day. Prior to this change, MNPS Elementary schools reported a breakfast participation rate of 39.8% of students and MNPS Secondary (middle / high) schools reported a participation rate of 26.5% of students<sup>14</sup>.



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- Will free breakfast for all students increase the participation rate among Elementary and Secondary students?
  - How could increased breakfast participation impact student performance across our district?
  - What barriers prevent students from eating breakfast in the classroom?
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## **INATTENTION AND HYPERACTIVITY**

Children exhibiting problems with inattention or hyperactivity are at a greater risk for lower reading and math test scores, grade repetition and placement in special education. According to the American Academy of Pediatrics, adolescents with Attention Deficit Hyperactivity Disorder

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<sup>14</sup> Information provided by MNPS

(ADHD) frequently procrastinate, may also do poorly on tests, be careless when doing their schoolwork and have trouble tracking and turning their assignments in on time. National experts estimate that 11% of children in the U.S. are diagnosed with ADHD<sup>15</sup>. At the time of this report, 1,859 (2.2%) MNPS students have identified as affected by some form of inattention / hyperactivity<sup>16</sup>.

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- What can educators and community supporters do to address this challenge?
  - Are inattention and hyperactivity simply a matter of medical diagnosis and treatment?
  - Do we understand the gap between national estimates and MNPS numbers?
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The Alignment Nashville Children’s Health Executive Oversight Team and the Children’s Health Alignment Teams have grappled with these seven health issues in various ways. Over the last seven years, they have been dedicated to the building of networks and identifying resources to enable MNPS to better address health as part of the academic achievement plan for the district. The MNPS School District as a whole, educators and school staff, students and families have benefited from these efforts:

#### Strategic Alignment of Stakeholders

- Children’s Health Alignment Teams bring together school and community leaders and experts to design and implement efforts that lead to systemic change.

#### Identification and Coordination of Community Supports through Resource Guides

- The Social Emotional Learning Handbook, providing tools and resources to all levels of MNPS educators and school staff
- Healthier Cafes Toolkit and Training Guide for MNPS School Nutrition professional development
- Healthy Families Handbook, a resource guide and toolkit for families to promote healthy child development and wellness.

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<sup>15</sup> [CDChttp://www.cdc.gov/ncbddd/adhd/features/key-findings-adhd72013.html](http://www.cdc.gov/ncbddd/adhd/features/key-findings-adhd72013.html)

<sup>16</sup> Data provided by MNPS



## Collaboration among Partners to Build Awareness of Children's Health

- Children's Health Executive Oversight (CHEO) partnership with Nashville Public Television toward the creation of the Emmy-award winning NPT Reports: Children's Health Crisis
- Adolescent Sexual Responsibility Conference for MNPS educators, counselors and community youth-serving organizations
- Social Emotional Learning Conference, providing professional development to all levels of MNPS educators and school staff

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*The Children's Health Alignment Teams, along with the Coordinated School Health program from MNPS, are focusing in on these crucial health issues that create barriers to success for our students. Will you join us in addressing health inequities in order to improve our children's academic success?*

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## JOIN US ON NATIONAL CHILD HEALTH DAY

On October 6, 2014, we will hold a CHILDREN'S HEALTH IMPACT SUMMIT at Lentz Health Center to kick off this campaign. The Alignment Nashville Children's Health Teams will bring a concerted focus to each of these seven areas in the coming months. We need additional community stakeholders with expertise in these areas and a vested interest in the children of Nashville to join us in addressing these health inequities. This half-day event will include an expert panel discussion around health inequities and their impact on student success. We'll also spend time working in smaller groups to address specific community needs in each of these seven areas and jump start this important work!

RSVP at [CHISummit.eventbrite.com](http://CHISummit.eventbrite.com)

## **Alignment Nashville Children's Health Executive Oversight (CHEO) Team**

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## **2014 Alignment Nashville Children's Health Impact Report Subcommittee**

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## **Alignment Nashville Children's Health Team Staff**

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