



Addressing Health Barriers to Learning Georgia's Approach & Toolkit

Prepared by

Mary Lauren Salvatore, MPH, CHES
Health & Wellness Coordinator
Chief Turnaround Office
Georgia Department of Education

Arianne B. Weldon, MPH
Director, Get Georgia Reading Campaign
Strategy, Innovation, and Engagement Team
Georgia Family Connection Partnership

PURPOSE

This toolkit was developed to inform and support efforts that address health barriers to learning (HBLs) through a population health approach¹. **The term *health barriers to learning (HBLs)* refers to health conditions—that when unaddressed, can interfere with a child's ability to learn².**

Understanding and addressing HBLs can: (a) provide a basis for population-focused partnerships with organizations that already focus on one or more HBLs and (b) inform strategic responses to large-scale, persistent factors that negatively affect school outcomes.

BACKGROUND

In 2017, the Children's Health Fund (CHF) released a report titled *Health Barriers to Learning: The Prevalence and Educational Consequences in Disadvantaged Children*³. Shortly thereafter, leadership from the Georgia Department of Education's Chief Turnaround Office and Georgia Family Connection Partnership engaged key partner organizations to develop a plan to strategically address HBLs within our state, starting with a baseline measure of a small cohort of rural, economically disadvantaged schools in Southwest Georgia.

Through purposeful, population focused collaboration, a battery of health screenings was created and informed by the CHF publication. For the purpose of determining a baseline of this cohort, an invasive screen for lead exposure for children over age six was replaced with a screen for unidentified language skill deficits—a dominant predictor of long-term academic, social, and emotional outcomes. The content that follows provides a detailed overview of how to implement this battery of health screenings, including tools, resources, and cost. Below is a snapshot of each HBL and their respective context for students nationwide.

¹ A population health approach utilizes non-traditional partnerships among different sectors of the community to achieve positive health outcomes. Source: Centers for Disease Control and Prevention. Retrieved from <https://www.cdc.gov/pophealthtraining/whatis.html>

² Gracy, D., Fabian, A., Roncaglione, V., Savage, K., Redlener, I. (2017). *Health Barriers to Learning: The Prevalence and Educational Consequences in Disadvantaged Children, A Review of the Literature*. Retrieved from the Children's Health Fund website: <https://www.childrenshealthfund.org/hbl-literature-review/>

³ Ibid.

	HEALTH CONDITION	WHY IT MATTERS FOR LEARNING
	Uncontrolled Asthma	On average, 1 in 10 children are estimated to have asthma. ⁴ Consequences of poorly controlled asthma are Emergency Department visits, hospitalizations, and missed school. ⁵ Nationally, children with asthma miss 13.8 million days of school. ⁶
	Uncorrected Vision Problems	Common vision impairments affect up to 25% of students and can lead to physical, developmental, behavioral, and academic problems if they go uncorrected. ^{7,8,9} About 80% of learning occurs through visual tasks such as reading and writing. ¹⁰
	Unaddressed Hearing Problems	Nationally, about 10 out of every 1,000 children will have permanent hearing loss by school age. ¹¹ Significantly increases the likelihood a child will repeat a grade. ¹² Even minimal hearing loss places children at over 4 times the risk of language deficits compared with their peers. ¹³ Higher risk of social, emotional, and behavioral problems. ¹⁴
	Dental Pain	More than 50% of third grade students in Georgia have a history of tooth decay; nearly 20% are untreated and almost 3 times more likely to miss school than their peers. ¹⁵

⁴ Ibid.

⁵ Ibid.

⁶ Ibid.

⁷ Centers for Disease Control and Prevention. (2006). Improving the Nation’s Vision Health: A Coordinated Public Health Approach: Atlanta, GA.

⁸ Walker, D.K. (2009). Building a Comprehensive Child Vision Care System. *A Report of the National Commission on Vision and Health*.

⁹ National Academies of Sciences, Engineering, and Medicine. (2016). Making Eye Health a Population Health Imperative: Vision for Tomorrow. Washington, DC: The National Academies Press.

¹⁰ Gracy, D., Fabian, A., Roncaglione, V., Savage, K., Redlener, I. (2017). *Health Barriers to Learning: The Prevalence and Educational Consequences in Disadvantaged Children, A Review of the Literature*. Retrieved from the Children’s Health Fund website:

<https://www.childrenshealthfund.org/hbl-literature-review/>

¹¹ Ibid.

¹² Martin, W.H., Sobel, J., Griest, S.E., Howarth, L., Yongbing, S. (2006). Noise Induced Hearing Loss in Children: Preventing the Silent Epidemic. *Journal of Otology*.

¹³ Gracy, D., Fabian, A., Roncaglione, V., Savage, K., Redlener, I. (2017). *Health Barriers to Learning: The Prevalence and Educational Consequences in Disadvantaged Children, A Review of the Literature*. Retrieved from the Children’s Health Fund website:

<https://www.childrenshealthfund.org/hbl-literature-review/>

¹⁴ Ibid.

¹⁵ Kabore, H.J., Smith C., Bernal J., Parker D., Csukas S., Chapple-McGruder T. (2014) *The Burden of Oral Health in Georgia*. Georgia Department of Public Health, Maternal and Child Health, Office of MCH Epidemiology, Georgia Oral Health Program.

		<p>More likely to report feeling unhappy, worthless, and shy and appear antisocial.¹⁶</p> <p>Leads to trouble sleeping and eating, increased school absences, difficulty paying attention in school, and lower academic outcomes.¹⁷</p>
	Persistent Hunger	<p>Families experience food insecurity when they are unable to acquire enough food for one or more family members due to lack of resources.¹⁸</p> <p>The food insecurity rate among children in Georgia is 20%.¹⁹</p> <p>Significantly increases the risk of behavioral, academic, and emotional problems.²⁰</p>
	Lead Exposure	<p>Linked with lower academic outcomes, behavioral problems—including destructive and aggressive behavior, and mental health problems.²¹</p> <p>The main source is deteriorating lead-based paint in older, poorly maintained homes.²²</p>
	Language Skill Deficits	<p>Lower language skills are linked with higher rates of aggression and higher language skills are linked with higher rates of academic engagement.²³</p> <p>Language is the vehicle by which children and youth communicate their needs and ideas, develop and maintain relationships, and solidify their understanding of essential concepts.²⁴</p> <p>Studies show the most important factor in reaching expected levels in reading and math at age seven is a child's language skill at age five—the language factor is greater than the link to poverty or level of parental education.²⁵</p>

¹⁶ Gracy, D., Fabian, A., Roncaglione, V., Savage, K., Redlener, I. (2017). *Health Barriers to Learning: The Prevalence and Educational Consequences in Disadvantaged Children, A Review of the Literature*. Retrieved from the Children's Health Fund website: <https://www.childrenshealthfund.org/hbl-literature-review/>

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ Feeding America. (2019). *Map the Meal Gap 2019: A Report on County and Congressional District Food Insecurity and County Food Cost in the United States in 2017*. Retrieved from <https://map.feedingamerica.org/county/2017/child/georgia>.

²⁰ Shankar, P., Chung, R., Frank, D.A. (2017). Association of Food Insecurity with Children's Behavioral, Emotional, and Academic Outcomes: A Systematic Review. *Journal of Developmental & Behavioral Pediatrics*.

²¹ Gracy, D., Fabian, A., Roncaglione, V., Savage, K., Redlener, I. (2017). *Health Barriers to Learning: The Prevalence and Educational Consequences in Disadvantaged Children, A Review of the Literature*. Retrieved from the Children's Health Fund website: <https://www.childrenshealthfund.org/hbl-literature-review/>

²² Ibid.

²³ Chow, J.C. & Wehby, J.H. (2019). Profiles of Problem Behavior in Children With Varying Language Ability. *Journal of Emotional and Behavioral Disorders*.

²⁴ Law, J., Charlton, J., & Asmussen, K. (2017). Language as a Child Wellbeing Indicator. *Early Intervention Foundation*, Newcastle University.

²⁵ Ibid.

		<p>The prevalence of previously unidentified language deficits in children age 5 to 13 determined to have emotional and behavioral disorders is 81%.²⁶</p> <p>Compared to their peers, children with poor language skills at age five are 4 times as likely to have reading difficulties in adulthood, 3 times as likely to have mental health problems, and 2 times as likely to be unemployed.²⁷</p>
	<p>Behavioral and Mental Health Problems</p>	<p>Behavioral and mental health disorders in children and youth are defined as serious deviations in the ways they typically learn, behave, or manage their emotions, which can lead to distress and difficulties getting through the day.²⁸</p> <p>The most common behavioral and mental health disorders in children age 3 to 17 years are attention-deficit / hyperactivity disorder (ADHD), oppositional defiant disorder (ODD), conduct disorder, anxiety, and depression.²⁹</p> <p>Linked with absenteeism, low reading and math scores, grade retention, suspensions, placement in special education, and failure to complete high school.³⁰</p>

²⁶ Hollo, A., Wehby, J.H., Oliver, R.M. (2014). Unidentified Language Deficits in Children with Emotional and Behavioral Disorders: A Meta-Analysis. *Journal of the Council for Exceptional Children*.

²⁷ Law, J., Charlton, J., & Asmussen, K. (2017). Language as a Child Wellbeing Indicator. *Early Intervention Foundation*, Newcastle University.

²⁸ Centers for Disease Control and Prevention. (2019, March 12). What Are Childhood Mental Disorders? Retrieved from <https://www.cdc.gov/childrensmentalhealth/basics.html>

²⁹ Gracy, D., Fabian, A., Roncaglione, V., Savage, K., Redlener, I. (2017). *Health Barriers to Learning: The Prevalence and Educational Consequences in Disadvantaged Children, A Review of the Literature*. Retrieved from the Children’s Health Fund website: <https://www.childrenshealthfund.org/hbl-literature-review/>

³⁰ Ibid.