# **Healthy School Environments, Healthy Hoosiers**

An investment in healthy K-12 facilities yields long-term economic advantages including reduced healthcare costs, enhanced educational outcomes leading to viable economic stability, reduction of aggressive student behavior, and higher teacher retention. A whitepaper highlights how improving Indiana's school building quality can lead to positive outcomes for students, educators, and communities.

### **Report Highlights:**

### **Environmental Challenges**



In Indiana, 2 in 5 people will develop cancer during their life.<sup>1</sup> Throughout the state, radon levels are high, putting students and faculty at risk. Unhealthy levels of radon can be addressed with improved ventilation in schools.



Like most states, Indiana has an older building portfolio, which limits access and inclusion of nearly 146,000 students with physical disabilities.



Teachers are more than twice as likely to have a voice disorder than the general population.<sup>2</sup> Improving classroom acoustics may save Indiana \$5.5- \$9.1 million in educator vocal strain.



In 2019, the Indiana Finance Authority found 62% of Indiana schools had high lead levels in drinking water. The average cost to replace a contaminated fixture is about \$550.12.3



It is cheaper to improve air quality for every student in Indiana, than buying everyone a movie ticket. That's not including popcorn!<sup>4,5</sup>

### **Positive Outcomes**

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A research study of 5 million students in a large, urban district found investment in school facilities, on average, was associated with a 10% increase in math scores, and a 5 % increase in English Language arts. 6



New school buildings improve property values. Studies show property values increase by 6% in communities that received new school buildings.<sup>7</sup>

Investing in facilities can reduce

This can save small and rural districts up to \$10,00 per teacher

urban districts.<sup>8</sup>

educator shortages and turnover.

and up to \$20,000 per teacher for



Funding exists: Federal dollars are allocated to address school building needs, such as the Bipartisan Infrastructure Law and the Inflation Reduction Act. <sup>9</sup> After the COVID-19 pandemic, Indiana received \$2.8 billion in ESSER funds. 10



**SAME IN For more information and** state guidance, please check out our full report at healthyk12.perkinswill.com

## **Hoosier Students and Chronic Absenteeism**

Indiana code defines chronic absenteeism as being absent for 10% or more of a school year for any reason."<sup>1</sup> For the 2022-2023 school year, the Indiana Department of Education reported nearly one in five Hoosier students were absent at least 18 days, making approximately 221,000 Hoosier students chronically absent.<sup>2.3</sup> There is a growing movement among schools and the state and federal government to address chronic absenteeism. Addressing the issue requires understanding the leading causes, complexity, and resulting impacts.

#### Leading Causes



Childhood asthma is a leading cause of school absenteeism. As of 2021, 6.3% of Hoosier children were diagnosed.<sup>4</sup> As Indiana ranks 46th for "most polluted air", respiratory illnesses are a major health concern.<sup>5</sup> Children with persistent asthma are three times more likely to be absent than peers.<sup>6</sup>Addressing indoor air quality may reduce absences.<sup>7</sup>



Students who experience bullying are at higher risk of being chronically absent. These students are more likely to experience anxiety and depression and stay home.<sup>8</sup> Students of two or more races are more likely to be bullied compared to white students.<sup>9</sup> These disparities persist in chronic absenteeism. Black and American Indian students reported high rates, compared to Asian and White students.<sup>2</sup>



Nearly half of Indiana districts have school bus driver shortages.<sup>10</sup> Transportation is a frequent barrier to school attendance. A 2021 study of Detroit schools found transportation issues arise as a combination of unreliable or inconsistent transportation schedules, weak social networks, parents' work schedules, and unsafe conditions.<sup>11</sup> Transportation instability is a large factor in absenteeism.



Chronic absenteeism is high among vulnerable populations.<sup>12</sup> A study showed low-income kindergartners were four times more likely to be chronically absent.<sup>13</sup> Students who are homeless or in foster care are also likely to be absent.<sup>14</sup> In 2019, 34.6% of homeless Hoosier students were chronically absent.<sup>15</sup>

#### Impacts on Education and Beyond

Attendance impacts grades and standardized test scores. In 2023, 18.1% of third graders did not pass the Indiana Reading Evaluation and Determination (IREAD-3) test.<sup>16</sup> Students who missed less than 5 days had higher ISTEP scores than chronically absent students.<sup>17,18</sup> Targeting absenteeism of low performing students could narrow the gap.



Chronic absenteeism is a predictor of high school graduation. A student who is chronically absent in any year between 8th and 12th grade is 7.4 times more likely to drop out.<sup>19</sup> Hoosier high schoolers have some of the highest rates of chronic absenteeism.<sup>20</sup> Addressing attendance would maintain high graduation rates, as 2023 saw the highest numbers since 2016.<sup>21</sup>



Education level impacts adulthood. High school dropouts were four times more likely to experience negative outcomes, including being arrested, fired, using illicit substances, and having poor health.<sup>22</sup> Students who are chronically absent are at higher risk for these outcomes. Conversely people with higher education secure higher paying jobs, report better health outcomes, and live longer.23

Addressing chronic absenteeism requires a multi-faceted approach. Targeted interventions, such as parental outreach and the Indiana Early Warning Dashboard can help at-risk students.<sup>24, 25</sup> Implementing the EPA's IAQ Tools for Schools can reduce absences related to respiratory illnesses.<sup>26</sup>

## References



#### Healthy School Environments, Healthy Hoosiers:

1. Indiana Cancer Facts and Figures. 2021. indianacancer.org/wp-content/uploads/2021/10/ICC\_FF\_Intro\_2021.pdf.

2. Martins RH, Pereira ER, Hidalgo CB, Tavares EL. Voice disorders in teachers. A Review. Journal of Voice. 2014;28(6):716-724. doi:10.1016/j.jvoice.2014.02.008.

3. Indiana Finance Authority. Indiana Lead Sampling Programs for Public Schools. 2019. www.in.gov/ifa/files/Indiana-School-Lead-Sampling-Program\_FinalReport\_IFA2019.pdf.

4. Fisk WJ. The ventilation problem in schools: literature review. 2017. Indoor Air 2017;27:1039–51. doi.org/10.1111/ina.12403
5. Statista. Average ticket price at movie theaters in the United States from 2001 to 2021. 2023. statista.com/statis-

#### tics/187091/average-ticket-price-at-north-american-movie-theaters-since-2001/

6. Haverinen-Shaughnessy U, et al., Association between substandard classroom ventilation rates and students' academic achievement. Indoor Air. 2011 Apr;21(2):121-31. doi: 10.1111/j.1600-0668.2010.00686.

7. Lafortune J, Schonholzer, D., Do school facilities matter? Measuring the effects of capital expenditures on student and neighborhood outcomes. 2018. www.aeaweb.org/articles?id=10.1257/app.20200467

8. Gerald, V., Teacher retention: A growing problem. 2019. NSBA. <u>www.nsba.org/ASBJ/Issues/October/Teacher-Retention</u>

9. White House. White House toolkit: Federal resources for addressing school infrastructure needs. 2022. **charterschool-**

center.ed.gov/sites/default/files/upload/toolkits/White-House-School-Infrastructure-Toolkit-04.04.22.pdf

10. FutureEd. (2023). EXPLAINER: Progress in Spending Federal K-12 Covid Aid: State by State. **www.future-ed.org/prog**ress-in-spending-federal-k-12-covid-aid-state-by-state/



## References

#### Hoosier Students and Chronic Absenteeism:

1. Indiana General Assembly. Code Search. 2024. iga.in.gov/laws/2020/ic/titles/20#20-20-8-8

2. Indiana State Board of Education. Student attendance & Indiana's new early warning dashboard. 2023. www.

in.gov/sboe/files/10.4.23-SBOE-slides.pptx.pdf?utm\_content=&utm\_medium=email&utm\_name=&utm\_

#### source=govdelivery&utm\_term=

3. Kelly, N. Absenteeism: All hands on deck for silent educational crisis. 2023. Indiana Capital Chronicle.

#### indianacapital chronicle.com/2023/10/20/absentee ism-is-a-silent-educational-crisis/

4. Indiana Department of Health. Asthma. 2024. www.in.gov/health/cdpc/respiratory-health/asthma/#Fact\_Sheets\_ and\_Infographics

5. United Health Foundation. Explore air pollution in Indiana: AHR. America's Health Rankings. 2024. www.

#### americashealthrankings.org/explore/measures/air/IN

6. Qin X, et al., Trends in Asthma-related school health policies and practices in the US States. Journal of School of Health. 2021. www.ncbi.nlm.nih.gov/pmc/articles/PMC8831575/

7. Eitland, E. Klingensmith, L., MacNaughton, P., Cedeno Laurent, J., Spengler, J., Bernstein, A., & Allen, J. (2017). Schools for Health. Foundations for Student Success. Harvard T.H. Chan School of Public Health. forhealth.org/Harvard.Schools\_

#### For\_Health.Foundations\_for\_Student\_Success.pdf

8. Swearer, S.M., Hymel, S. Understanding the psychology of bullying: Moving towards a social-ecological diathesisstress model. American Psychologist, VOI 70, p. 344.

9. US Department of Education, National Center for Education Statistics. Report on Indicators of School Crime and Safety: 2020. NCES, Bullying at School and Electronic Bullying. **nces.ed.gov/fastfacts/display.asp?id=719#** 

10. Putman, C., School children late, miss class due to school bus driver shortage. 13 WTHR. 2023. <u>www.wthr.com/article/</u> news/investigations/13-investigates/school-children-late-miss-class-due-to-school-bus-driver-shortage-centralindiana-bonus-training-13-investigates/531-ca00cbe4-efe5-4d73-97fc-3838e23d5fe8

11. Lenhoff, S., Singer, J., Stokes, K., Mahowald, J. Why do Detroit students miss school? Implications for returning to school after COVID-19. Wayne State College of Education. 2021. detroitpeer.org/wp-content/uploads/2022/09/10.-Why-Do-Detroit-Students-Miss-School-Implications-for-Returning-to-School-After-COVID-19-ACCESSIBLE.pdf

12. Robert Wood Johnson Foundation. The relationship between school attendance and health. 2016. Health Policy Snapshot. **files.eric.ed.gov/fulltext/ED592870.pdf** 

13. Chang, H., Romero, M., Present, engaged and account for: The critical importance of addressing chronic absence in the early grades. 2008. National Center for Children in Poverty. Columbia University Mailman School of Public Health. www.nccp.org/wp-content/uploads/2008/09/text\_837.pdf

14. Smith, C. Thousands of Hoosier kids missed between 10 and 18 days of school last year, per new data. 2023. Indiana Capital Chronicle. indianacapitalchronicle.com/2023/10/05/thousands-of-hoosier-kids-missed-between-10-and-18-days-of-school-last-year-per-new-data/

15. Gropp, S., Lopez, A., Schorten, A., Stephens, L., Assessment of Indiana Youth Needs. 2020. Boys & Girls Clubs of America. www.indianabgc.org/wp-content/uploads/2024/01/Assessment-of-IN-Youth-Needs.pdf

16. Williams, M., Nearly one in five Hoosier third graders still struggling to read. 2023. IDOE. <u>www.in.gov/doe/about/</u> news/indiana-department-of-education-releases-iread-3-results3/

17. Spradlin, T., Cierniak, K., Shi, D., Chen, M., Attendance and Chronic Absenteeism in Indiana: The Impact on

Student Achievement. 2012. Center for Evaluation & Education Policy. scholarworks.iu.edu/iuswrrest/api/core/ bitstreams/025a324d-f865-4db1-a31b-963554458bc0/content

IDOE. ISTEP+ Passage Specifications. 2020. www.in.gov/doe/files/istep-ela-passage-specifications-092520.pdf
 Utah Education Policy Center. Research Brief: Chronic Absenteeism. 2012. The University of Utah. ies.ed.gov/ncee/
 edlabs/regions/west/relwestFiles/pdf/508\_UEPC\_Chronic\_Absenteeism\_Research\_Brief.pdf

### References

20. Utah Education Policy Center. Research Brief: Chronic Absenteeism. 2012. The University of Utah. Utah Education Policy Center. Research Brief: Chronic Absenteeism. 2012. The University of Utah. **ies.ed.gov/ncee/edlabs/regions/west/** 

#### relwestFiles/pdf/508\_UEPC\_Chronic\_Absenteeism\_Research\_Brief.pdf

21. Williams, M., 2023 State graduate rate is highest since 2016, third highest on record. 2023. IDOE. www.in.gov/doe/ about/news/more-indiana-students-are-graduating-from-high-school/

22. Lansford, J., Dodge, K., Pettit, G., Bates, J., A public health perspective on school dropout and adult outcomes: A prospective study of risk and protective factors from age 5 to 27. 2016. Journal of Adolescent Health. **www.ncbi.nlm.nih.** gov/pmc/articles/PMC4877222/

23. US Department of Health and Human Services. Education access and quality. 2024. Office of Disease Prevention and Health Promotion. Healthy People 2030. <u>health.gov/healthypeople/objectives-and-data/browse-objectives/</u>education-access-and-quality

24. Appleton, A., Pak-Harvey, A., Indiana legislators may turn to law enforcement to reduce absences. Some schools have other ideas. 2023. Chalkbeat Indiana. www.chalkbeat.org/indiana/2023/12/19/indiana-chronic-absenteeism-lawmakers-seek-enforcement-family-engagement/

25. Williams, M., As academic recovery continues, fewer Indiana students are coming to school. 2023. IDOE. <u>www.</u> in.gov/doe/about/news/new-early-warning-dashboard-in-indiana-seeks-to-elevate-the-importance-of-studentattendance-to-academic-and-long-term-success/

26. Fleming, P., EPA gives indoor air quality award to Hamden schools in Connecticut. 2003. EPA Press Office. **www.epa.** gov/archive/epapages/newsroom\_archive/newsreleases/dc9f809ccbbead0885257381006f0a12.html

