

LEAD PAINT IN OHIO HOMES

The share of homes built before 1950 is the most important predictor of elevated blood lead levels (EBLLs) in Ohio children under age 6, according to a report from the Ohio State University. An increase of one percentage point in the proportion of housing units built before 1950 is equivalent to a 2.7% increase in the prevalence of five or more micrograms of lead per deciliter of blood ($\mu\text{g}/\text{dL}$)—the current CDC definition of EBLLs—with all other variables held constant.¹

Research has shown, however, that a blood lead level as low as 2 $\mu\text{g}/\text{dL}$ is sufficiently dangerous to early childhood development to lower the CDC standard.² A recent study from the nonprofit research firm Altarum estimates that 10% of children born in Ohio in 2019 will have blood lead levels in excess of 2 $\mu\text{g}/\text{dL}$. According to the study, this will cost Ohio \$2.8 billion in reduced productivity, added health care, social assistance and education spending and premature mortality.³

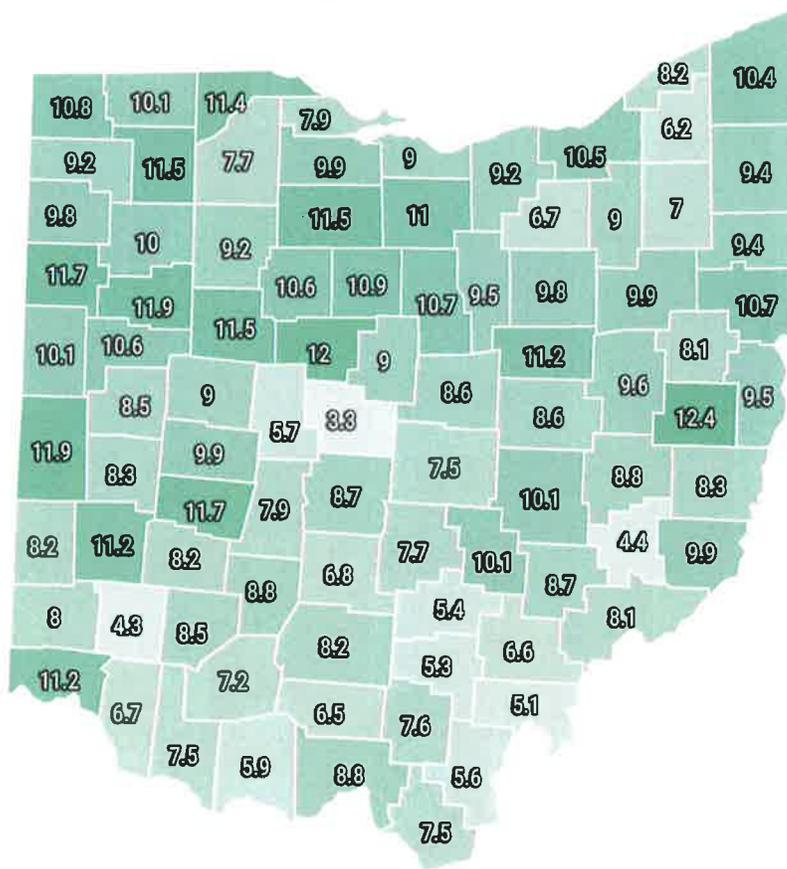
Other lead paint-related housing data from the Ohio Housing Needs Assessment:

- Ohio's housing stock is relatively old. Half of Ohio's housing units were built before 1965 and nearly one third were built before 1950, including 38% of the state's vacant housing.⁴
- More than two-thirds of Ohio homes were built before 1980, making them old enough to contain lead-based paint, including 9.3% of homes with young children present (425,235 homes).⁵
- In 2017 4,707 children in Ohio under age 6 were confirmed to have EBLLs, or 2.8% of those tested. The prevalence rate was highest in Cuyahoga County (8.4%).⁶

The Ohio Housing Needs Assessment can be found online at: ohiohome.org/research/housingneeds.aspx

Prevalence of Risk of Lead-Based Paint Hazard

(percentage of housing units with children under age 7 present at least 8 hours per week that were built before 1980)



Source: 2011–2015 Comprehensive Housing Affordability Strategy Data, Table 13

1. Ohio State University Statistical Consulting Service, The. (2013, April). *Final Report on Targeted Testing Plan for Childhood Lead Poisoning*. Prepared for the Ohio Department of Health and the Ohio Healthy Homes and Lead Poisoning Prevention Program.

2. Gilbert, S.G. and Weiss, B. (2006, September). A rationale for lowering the blood lead action level from 10 to 2 $\mu\text{g}/\text{dL}$. *Neurotoxicology*. 27(5). 693-701.

3. Altarum. (2019). *Preventing Childhood Lead Exposure: Costs and Benefits*. Retrieved from <http://valueofleadprevention.org/>.

4. 2015 American Housing Survey, U.S. Census Bureau

5. 2011–2015 Comprehensive Housing Affordability Strategy Data, Table 13

6. Ohio Public Health Data Warehousing, Ohio Department of Health (based on 2017 data)

Questions? Contact Katie Fallon at kfallon@ohiohome.org

THE COST OF CHILDHOOD LEAD POISONING IN OHIO

The scientific evidence is clear: no amount of lead in the blood is safe. Yet, the majority of state and federal policies require children to develop lead poisoning and suffer permanent brain damage *before* any meaningful lead hazard inspection or remediation is triggered.

Age of Ohio's Housing Stock

Over 66.41% of Ohio's housing stock was built before 1980, meaning there are 3,077,048 occupied housing units in Ohio that contain possible lead-based paint hazards.ⁱ Of these housing units, approximately 339,320 occupied units contain both children under six and possible lead hazards.ⁱⁱ

Extent of Childhood Lead Poisoning in Ohio

According to the Centers for Disease Control and Prevention (CDC), 5.99% of Ohio's children under six had blood lead levels above the CDC reference value of 5 micrograms per deciliter ($\mu\text{g}/\text{dL}$) in 2014.ⁱⁱⁱ Applying this percentage to the state's under six population, it is estimated that approximately 51,926 children are likely to have elevated blood lead levels (EBLL) above the CDC's reference value.^{iv}

Societal Costs of Lead Poisoning in Ohio

For one cohort of children ages one to two years old who are estimated to have EBLLs above the CDC reference value, the costs could be as high as **\$588,066,956.74** with children in Housing Choice Voucher (HCV) program accounting for **\$78,737,595.18** of these costs.^v These costs accrue each year to children when they first develop lead poisoning and repeat themselves every year as new children ages one to two years old develop lead poisoning. The potential costs for a single birth cohort of children in Ohio age one to two years old include:

- \$618,702.20 in costs associated with immediate medical intervention,^{vi}
- \$2,075,786.32 in costs associated with treatment of lead-related ADHD,^{vii}
- \$1,757,436.48 in parental work loss due to time taken off to care for child with an EBLL above 5 $\mu\text{g}/\text{dL}$,^{viii}
- \$1,979,897.62 in costs associated with additional special education services for children with lead poisoning,^{ix}
- \$581,635,134.12 in potential earnings over a lifetime.^x

Taxpayers would shoulder up to **24%**, or **\$140,975,686.31**, of these total costs.^{xi}

These cost estimates do not include pain and suffering for the child or criminal justice costs. Additionally, these estimates do not include EBLLs between 2 $\mu\text{g}/\text{dL}$ and 5 $\mu\text{g}/\text{dL}$ and, according to a 2019 study by Altarum, the costs associated with children who have EBLLs above 2 $\mu\text{g}/\text{dL}$ could be as high as **\$2.8 billion**, including \$1.2 billion of local, state, and government spending, and impact **10%** of all births in Ohio in 2019.^{xii}

Societal Costs of Lead Poisoning in the Housing Choice Voucher Program

Under current regulations, in the Housing Choice Voucher (HCV) program and project-based Section 8 receiving less than \$5,000, meaningful lead hazard inspections are only triggered after a child is lead poisoned. In all other federally assisted housing programs, lead hazards must be identified and addressed before children are exposed. Applying the CDC's state BLL percentage^{xiii} to the state's under five population of children in the HCV program, approximately 5,793 children in the program are estimated to have EBLLs above the CDC reference value.^{xiv, xv} The potential costs for a single cohort of children aged 1-2 years old in HCV program units in Ohio are **\$78,737,595.18**, including:

- \$83,276.76 in costs associated with immediate medical intervention,^{xvi}
- \$277,826.25 in costs associated with treatment of lead-related ADHD,^{xvii}
- \$235,250.95 in parental work loss due to time taken off to care for a child with an EBLL above 5 $\mu\text{g}/\text{dL}$,^{xviii}
- \$267,255.53 in costs associated with additional special education services for children with lead poisoning,^{xix}
- \$77,873,985.69 in potential earnings over a lifetime.^{xx}

Taxpayers would shoulder up to **24%**, or **\$18,885,763.56**, of these costs for children in the HCV program.^{xxi}

Cost of Identifying Lead Hazards Before a Child is Lead Poisoned

The cost of lead poisoning prevention is a fraction of the individual, family, and societal costs incurred annually due to lead poisoning. In fact, it would cost between \$152.7 million and \$237.5 million to perform a lead hazard risk assessment in these units in order to identify lead hazards *before* a child develops lead poisoning.^{xxii} This cost could be lower due to any laws in Ohio that already require pre-occupancy lead inspection and remediation of homes. More importantly, no amount of spending can account for the

THE COST OF CHILDHOOD LEAD POISONING IN OHIO

preservation of, or recover the loss of, a child's quality of life. Identifying lead hazards *before* a child is poisoned is the only way to protect children from lead poisoning and the permanent harm it causes.



Out of
Reach



NATIONAL LOW INCOME
HOUSING COALITION

Average Columbus renter earns \$15.73/hr.
Need:

- \$18.40/hr to afford 2BR
- \$23.56/hr to afford 3BR

Average Cleveland renter earns \$14.91/hr.
Need:

- \$16.08/hr to afford 2 BR
- \$21.19/hr to afford 3 BR

Ohio Housing Wage:

2 BR = \$15.73/hr
3 BR = \$20.72/hr

Most Common Ohio Jobs and

Median Hourly Wages:

1. Food Prep, Fast Food \$9.31
2. Retail Salespersons \$11.06
3. **Registered Nurses \$30.87**
4. Cashiers \$9.71
5. Laborers/Freight Movers \$13.67
6. **Office Clerks \$15.74**
7. **Customer Service Reps \$16.18**
8. Waiters/Waitresses \$9.37
9. Janitors/Cleaners \$12.03
10. Stock Clerks \$11.96

Source: Bureau of Labor Statistics, Occupational
Employment Statistics Survey, May 2018

Ohio's Housing Needs

- Nearly 400,000 households spend over half their income on rent = 1 out of 4 renters
- Over 70,000 homeless Ohioans in 2017 = a 20% increase in 5 years
- Homeless babies among fastest growing age group = increased 53% to 3,000

Health

- Housing the chronically homeless reduced hospital ER visits up to 78%
- Supportive housing reduced costs for mental health services by 57%

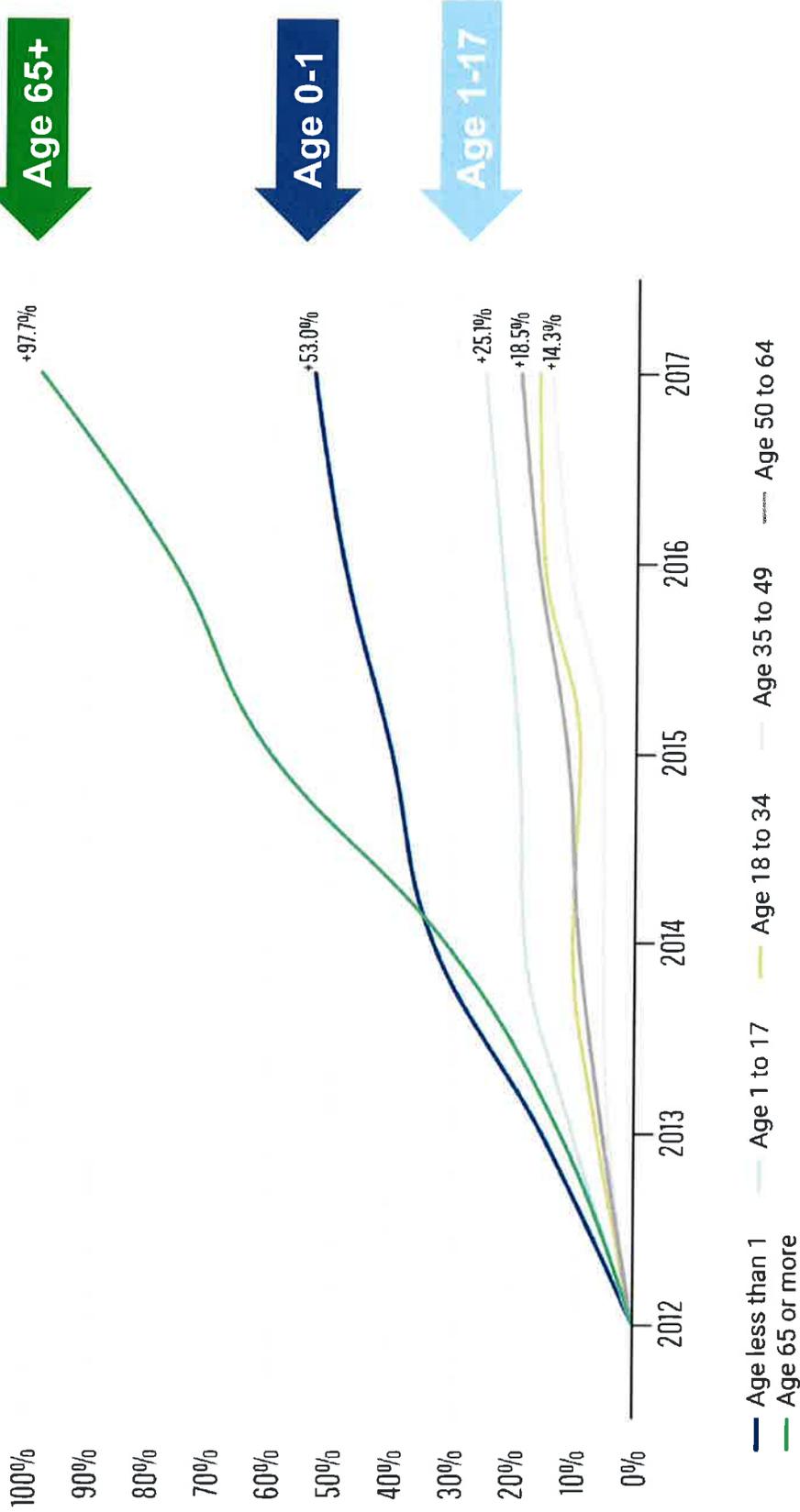
Child Welfare

- Children from homeless families 34 times more likely to enter foster care

Criminal Justice

- Housing homeless people reduced arrests up to 78%
- Supportive housing reduced overnight jail stays up to 86%

Ohio's Growing Homeless Population



Ohio Housing Trust Fund

