

# SUPPORTING CHILD WELL-BEING THROUGH PREVENTING CHILDHOOD LEAD POISONING

JUNE 2022

# WHY THIS MATTERS

Lead is a toxic metal that can poison humans. When a child swallows or breathes in lead or lead dust, they can be poisoned – and the damage can last a lifetime. Even low levels of lead adversely affects children's health including their mental, physical, cognitive, and social development. Lead poisoning is 100% preventable.<sup>1</sup>



CHILDREN CAN BE TESTED FOR LEAD POISONING USING A SIMPLE BLOOD TEST AT THEIR DOCTOR'S OFFICE.

## WHAT THE RESEARCH SAYS

Lead exposure damages a child's developing brain, kidneys, and nervous system. It can cause learning disabilities, behavior problems, seizures, and in extreme cases, death. Lead is particularly dangerous to children under the age of six because their growing bodies absorb more lead than adults, and their developing brains and nervous systems are more sensitive to lead's damaging effects.

Lead poisoning is an Adverse Childhood Experience (ACE). The more ACEs in a child's life, the worse health outcomes they have.<sup>2</sup> Many children who are lead poisoned never show any symptoms, causing it to go undetected. Undiagnosed lead poisoning can cause a child's intellectual or behavioral issues to be misunderstood, misdiagnosed, or ignored.

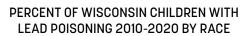
There is no safe blood lead level (BLL).<sup>3</sup> BLLs in U.S. children have steadily declined since the banning of lead-based paints and leaded gasoline. Still, an estimated 4 million U.S. children live in housing that exposes them to lead.<sup>4</sup> Elevated BLLs are more prevalent among children who live in housing built before 1978, in low-income households, and those from historically marginalized racial and ethnic communities.

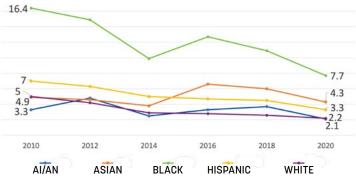
# WHAT'S HAPPENING IN WISCONSIN?

Lead exposure is a problem in all 72 counties. Children are most at-risk of lead poisoning if they live in neighborhoods with older homes, lower housing values, or a higher proportion of rental properties. There are efforts to educate residents and build awareness of the dangers of lead exposure. <u>Lead-Safe</u> <u>Wisconsin</u> is a comprehensive resource for all Wisconsinites.

Homeowners and rental property owners can receive assistance from state and local programs, like <u>Lead-Safe</u> <u>Homes</u>, to remove lead-based paint hazards; or <u>Lead Service</u> <u>Line Replacement</u>, to minimize lead in drinking water.

While rates of lead poisoning in Wisconsin have declined over time, there are dramatic differences for children of color, especially **Black children who are poisoned more than three times the rate of White children**.





Source: Wisconsin Department of Health Services, Environmental Health Data Tracker



children.wi.gov

### WHERE LEAD IS FOUND

Lead exposure mainly comes from paint, soil, and water. Lead-based paint dust is the most common source of exposure in a child's environment. Homes, schools, and daycares built before 1978 can be contaminated with lead-based paints. Lead poisoning usually happens from inhalation (breathing in lead dust) or ingestion (swallowing tiny lead particles), and can occur both inside and outside a home. Lead can also pass from a mother to her unborn baby.

Children can be poisoned by lead when they<sup>5</sup>:

- Eat tiny paint chips that peel or flake in and around the home.
- Ingest lead-contaminated dust on toys or hands.
- Play in and ingest lead-contaminated soil.
- Track lead paint mixed with dust or soil into and throughout a home.
- Drink water from lead-based pipes.

#### REFERENCES:

<sup>1</sup> Centers for Disease Control (CDC), October 2020. Lead Poisoning is 100% Preventable. <u>https://www.cdc.gov/nceh/lead/prevention/infographic-lead-poisoning-preventable.htm</u>

<sup>2</sup> Preventing ACEs could reduce many costly health conditions. For data on ACEs and health outcomes, refer to the CDC Vital Signs: <u>https://www.cdc.gov/vitalsigns/aces/index.html</u>.

 $^3$  The BLL, the amount of lead in the blood, is measured in micrograms and reported as percent 5µg/dL or higher. In 2021, the CDC lowered the threshold from 5 to 3.5 µg/dL. We do not yet have state or national data on this lower threshold. Data included here use the threshold of 5 µg/dL and are the most recent available data.

<sup>4</sup> Centers for Medicare & Medicaid Services. Early and Periodic Screening, Diagnostic, and Treatment <u>https://www.medicaid.gov/medicaid/benefits/</u> early-and-periodic-screening-diagnostic-and-treatment/lead-screening/ index.html

 <sup>5</sup> US Department of Housing and Urban Development. About Lead-Based Paint. <u>https://www.hud.gov/program\_offices/healthy\_homes/healthyhomes/lead</u>
<sup>6</sup> CDC. 5 Things you can do to help lower your child's lead level. <u>https://www.cdc.gov/nceh/lead/docs/5things-508.pdf</u>

<sup>7</sup> In an October 2021 study from the Health and Human Services Office of Inspector General, 38% of Medicaid-enrolled children in the states studied did not receive required blood lead level tests. <u>https://oig.hhs.gov/oei/reports/ 0EI-07-18-00371.asp</u>

<sup>8</sup> National Center for Healthy Housing. Proactive Rental Inspections. <u>https://nchh.org/resources/policy/proactive-rental-inspections/</u>

° 2015 Wisconsin Act 176 and 2017 Wisconsin Act 317

<sup>10</sup> Statistics likely underestimate the number of children with lead poisoning as not all kids are tested, including those at the highest risk of being exposed. See Frostenson, S. (April 27, 2017). 1.2 million children in the US have lead poisoning We're only treating half of them. Vox. <u>https://www.vox.com/science-</u> and-health/2017/4/27/15424050/us-underreports-lead-poisoning-cases-mapcommunity



# WHAT WE CAN DO

- PARENTS/CAREGIVERS: Lead poisoning is preventable but also treatable, especially if detected early.<sup>6</sup>
  - Ask your health care provider about lead testing. Many pregnant women and children under 6 years should be tested.
  - Regular cleaning can help keep lead in your home at low levels. Consider adding a certified water filter.
  - Check and test your home for lead if you live in a home built before 1978. If you rent, check with your landlord. Use a certified lead hazard investigator. Take advantage of state and local programs that assist in paying to fix lead hazards.

## HEALTH CARE PROVIDERS: Not all children are tested for lead poisoning, even when required.<sup>7</sup>

- Talk with parents and pregnant patients about lead poisoning.
- Ensure children ages 0-6 receive age-appropriate lead tests.
- Prioritize children living in high-risk areas for lead exposure.
- Comply with federal Medicaid requirements to test all Medicaid enrolled children at 12 and 24 months.
- Immediately connect parents of children with elevated BLLs to services to prevent further exposure and for treatment.
- POLICYMAKERS: No amount of lead is considered safe, yet many sources of lead can impact a child's physical and mental health. Require Housing and Rental Safety Standards
  - Allow municipalities to manage proactive rental inspection programs, ensuring properties meet minimum health and safety standards.<sup>8</sup>
  - Repeal Wisconsin law that blocks local rental licensing and certification programs, and restricts the fees collected to recoup programs costs.<sup>9</sup>

### Strengthen Prevention Efforts

- Increase funding for lead poisoning prevention efforts, particularly home lead abatement programs and lead service line replacement. Target funds to those communities with the highest risk and rates of poisoning.
- Create a grant program for in-home childcare providers, who care for a third of all infants, to remediate lead hazards in their childcare setting.

### Ensure Testing Happens<sup>10</sup>

- Make blood lead level tests for Wisconsin children free regardless of insurance coverage.
- Allocate funding for a statewide outreach campaign to pediatric health care providers to screen and conduct a blood lead level test on every at-risk child.

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