



House Health Policy Committee
Room 519, House Office Building
Lansing, MI 48909

Testimony in support of House Bills 5413-5421 and HB 5423 (Lead Bill Package)

February 17, 2022

Dear Chairwoman Kahle and Members of the Health Policy Committee,

My name is Mara Herman, I am the Health Policy Specialist at the Ecology Center. I am here to testify in support of the Lead Bill Package of House Bills 5413-5421 and HB 5423. Thank you for holding this hearing on these important bills. The Ecology Center is a Michigan-based non-profit that works for innovative solutions at the local, state, and national levels to protect people from environmental threats, with a specific focus on the impact of toxic chemicals on human health. For more than 6 years my own work has focused on protecting people from exposure to toxic chemicals.

This work includes participating in the Michigan Alliance for Lead Safe Homes, a diverse group of concerned health, housing, and environmental professionals, local business owners, community and child advocates, parents, and others committed to reducing and eliminating childhood lead poisoning and its adverse effects in Michigan. The Ecology Center is also a founding member of the Great Lakes Lead Elimination Network (GLLEN), a coalition of advocates in Great Lakes states working to eliminate lead exposure in homes, schools, work places, and other areas. We coordinate our efforts to engage with decision-makers regarding local- and state-level policy. We share resources in order to educate the public about how to avoid lead.

In addition to these state and regional coalitions, I've worked closely with families impacted by lead in our state. Starting in March 2021, we worked with the Healthy Homes Coalition of West Michigan, DLEAD, and ACCESS to bring together over 30 lead-impacted families to learn how to avoid lead exposures and advocate for healthier communities over the course of an eight-month program. Together, these families developed a platform that strongly advocates for many of the policies included in this bill package. They submitted this platform and written testimony of support at the first hearing in December.

There is no safe level of lead for human exposure. Lead is a potent neurotoxin and poisonous heavy metal that can result in serious health complications. Young children are the most vulnerable to lead poisoning and suffer more severe impacts, particularly due to their rapidly developing brains and nervous systems.¹ At an early age, exposure to lead can cause irreversible brain injury, loss of intelligence, shortening of attention span and disruption of behavior.² While lead poisoning is more concerning for children, there are also health risks for adults. Lead exposure to healthy adults can result in adverse kidney and

¹ Advisory Committee on Childhood Lead Poisoning Prevention, Centers for Disease Control and Prevention, "Low Level Lead Exposure Harms Children: A Renewed Call for Primary Prevention," 2012, www.cdc.gov/nceh/lead/acclpp/final_document_030712.pdf.

² World Health Organization (WHO), "Lead Poisoning and Health," 2018, www.who.int/news-room/fact-sheets/detail/lead-poisoning-and-health.



ECOLOGYCENTER

Healthy People. Healthy Planet

cardiovascular effects, elevated blood pressure, cognitive dysfunction, and infertility.³ For pregnant women, exposure to lead can cross the placental barrier of the womb and harm the fetus. Maternal lead exposure can cause miscarriage, stillbirth, premature birth, and low birth weight.

Lead poisoning is a particularly urgent problem in Michigan, which was recently ranked third in the country for rates of childhood lead poisoning.⁴ In 2016, the Flint Water Crisis brought renewed attention to the critical issue of childhood lead poisoning in Michigan and throughout the United States. Even before the Flint crisis, Michigan was one of the worst states in the nation for childhood lead poisoning. Like many states in the Great Lakes, Michigan has a history of heavy industrial pollution, old housing stock, lead service lines in many communities, and crumbling infrastructure. These factors are closely linked to high rates of elevated blood lead levels.

However, there is good news: lead poisoning is entirely preventable. This lead bill package is an important step forward in reducing lead exposure due to the inclusion of several important primary prevention initiatives.

For starters, the bill package requires a lead paint inspection to be completed before the sale of any home that was built before 1978. This is important because paint dust from old lead paint is one of the largest sources of lead exposure for children across our state. Lead paint is an urban and a rural problem, with over 70% of Michigan's housing stock built before 1978. As you can see in the map I have here, children across our state have been found to have elevated blood lead levels. Ensuring homes are inspected and lead-safe is a vital primary prevention step to take to ensure families are not exposed to lead.

The bill package also adopts the Renovation, Repair, and Painting (RRP) Rule from the EPA, allowing the State of Michigan to regulate RRP activities. Lead advocates throughout the Great Lakes region have identified this option as an opportunity for states to streamline processes. Currently, interim controls are under HUD, RRP is EPA and Abatement under the State of Michigan. It has been difficult for the regulated community to understand work practices required for each. In addition, the bills define safer abatement practices, add interim controls such as lead dust cleaning and lead paint stabilization, and ensure lead abatements are performed by qualified professionals. These measures will provide increased protection for Michigan families from the dangers of lead-based paint hazards.

The package also expands blood lead testing by requiring children up to age 6 enrolled in MICHild and Medicaid to have coverage for blood lead tests. This is an important first step towards universal testing of children in the state of Michigan, another top priority of my organization and our partners throughout the state and region. There will be an added requirement of an automatic referral to Early On for every child who has elevated blood lead levels, an important step to ensure children exposed to lead are given access to the resources and support so they vitally need. Additionally, families who receive an automatic referral

³ Centers for Disease Control (CDC), "Lead: Health Problems Caused by Lead," June 2018, www.cdc.gov/niosh/topics/lead/health.html.

⁴ Hauptman M, Niles JK, Gudin J, Kaufman HW. Individual- and Community-Level Factors Associated With Detectable and Elevated Blood Lead Levels in US Children: Results From a National Clinical Laboratory. *JAMA Pediatr.* 2021;175(12):1252–1260. doi:10.1001/jamapediatrics.2021.3518



would then have the option to enroll and participate in Early-On to receive additional resources and support to deal with the consequences of early childhood lead poisoning.

The Ecology Center report, “Economic impacts of Lead Exposure in Michigan” evaluated the economic impacts of lead poisoning among Michigan children using four well-documented outcomes from childhood exposure to lead. Costs associated with elevated blood lead levels were found to total \$270 million for the state of Michigan in 2014. Of these costs, \$112 million were transferred to taxpayers. More recently, Altarum’s 2019 report, “The Value of Lead Prevention” calculated the lifetime economic burden of childhood lead exposure to total \$2.3 billion in Michigan. This total calculated for the 2019 birth cohort, includes costs of reduced lifetime productivity, increased health care, education, and social assistance spending; and premature mortality.

I hope that you will vote in favor of these bills. Thank you for your time and consideration.

Sincerely,

Mara Herman, MPH
Health Policy Specialist
Ecology Center
mara@ecocenter.org
(734)369-9264

Michigan

Estimate Exposure Burden Calculate Intervention Impacts

Total Cost

\$2.3B

Lifetime economic burden of childhood lead exposure in Michigan.

Calculated for the 2019 birth cohort. Includes costs of reduced lifetime productivity; increased health care, education, and social assistance spending; and premature mortality.

Number of Children Exposed ?

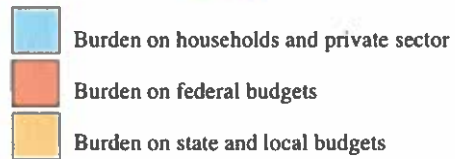
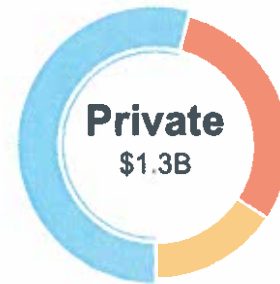
12,161

Blood levels >2 µg/dL

Children in the 2019 birth cohort predicted to have blood lead levels >2µg/dL. This is 11% of all births in Michigan.

Cost Breakdown ?

Hover for additional detail



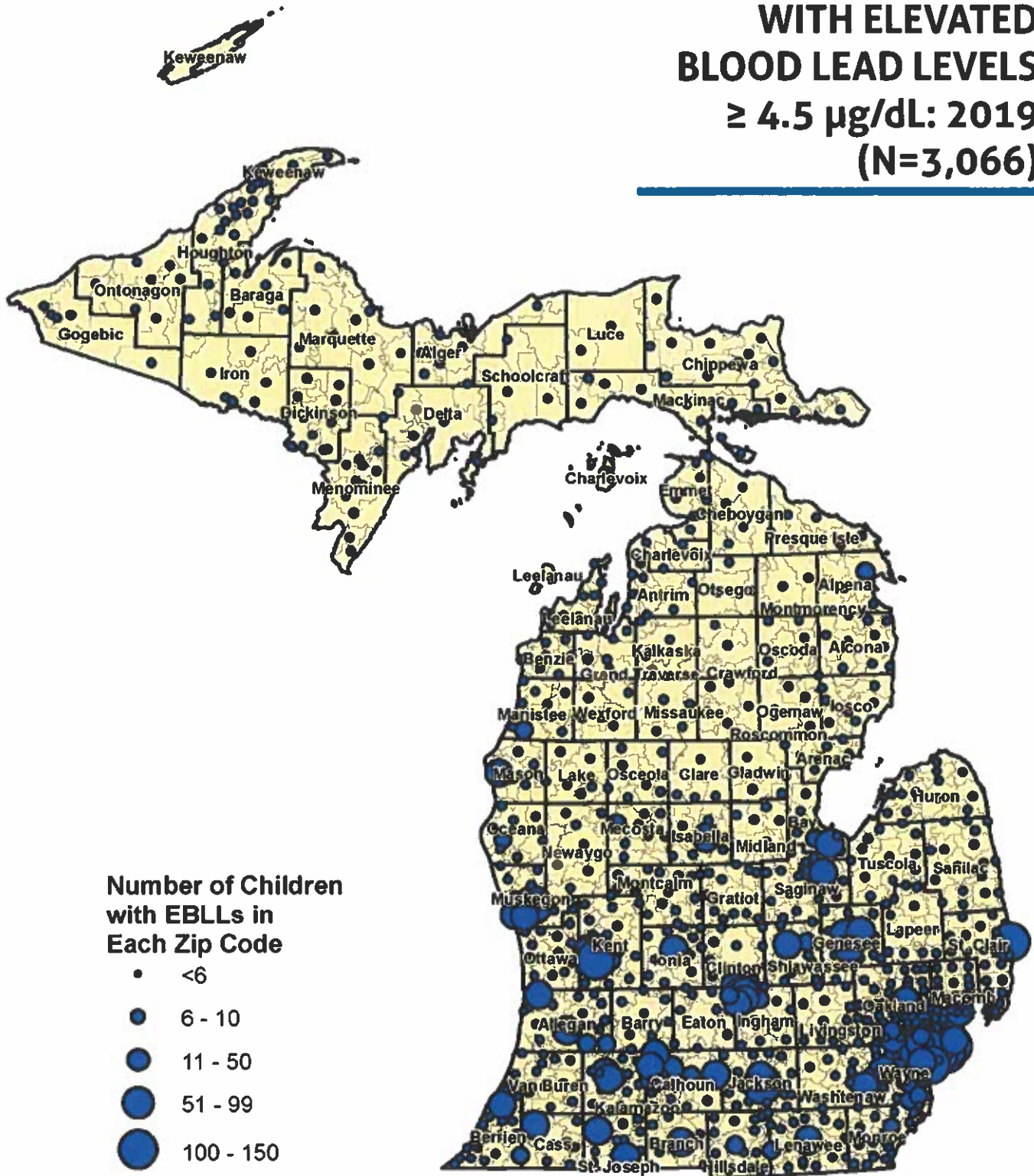
<http://valueofleadprevention.org/calculations.php?state=Michigan>



ECOLOGYCENTER

Healthy People, Healthy Planet

MICHIGAN CHILDREN LESS THAN AGE 6 WITH ELEVATED BLOOD LEAD LEVELS ≥ 4.5 µg/dL: 2019 (N=3,066)



Source: MDHHS Data Warehouse



"Economic impacts of Lead Exposure in Michigan" evaluates the economic impacts of lead poisoning among Michigan children using four well-documented outcomes from childhood exposure to lead. Data was collected in 2014 by the Michigan Department of Health and Human Services and the report was generated by the Ecology Center.

Main findings of this report:

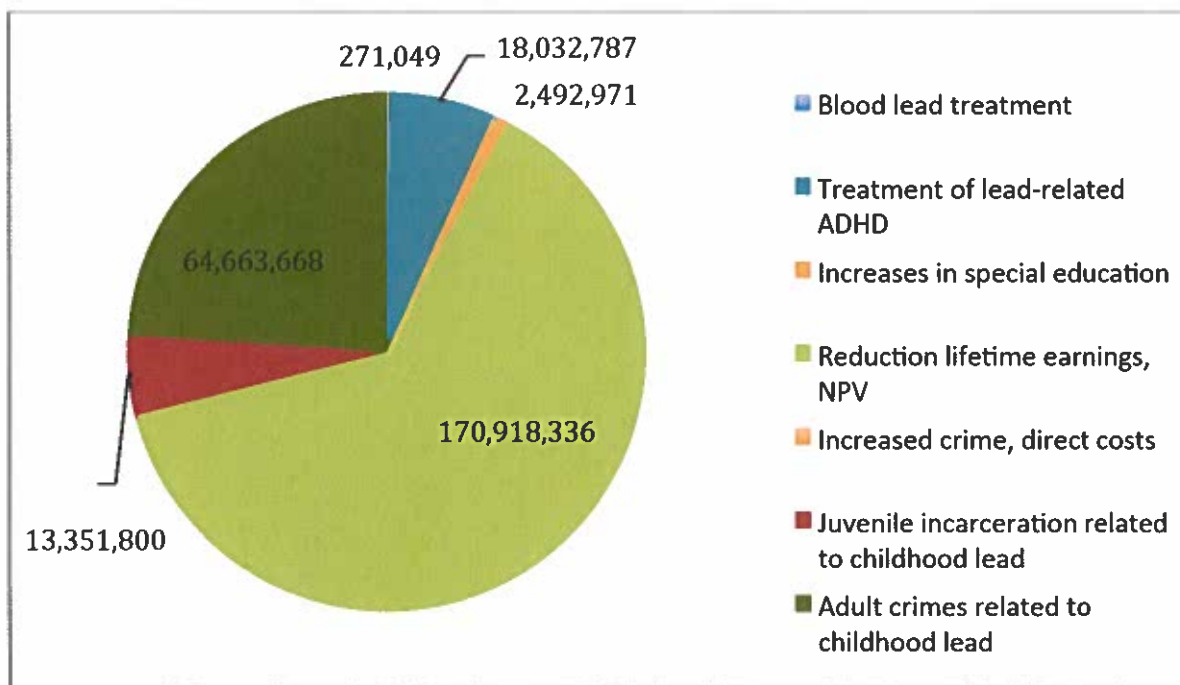
Costs associated with elevated blood lead levels were found to total \$270 million for the state of Michigan in 2014

Of these total costs, \$112 million is transferred to taxpayers.

Lead impacts a child's brain and nervous system, and has been linked to the following impacts and annual costs:

- Increased need for health care: over \$18 million
- Increased crime: over \$77 million
- Special education: approximately \$2.5 million
- Decreased lifetime earnings: approximately \$171 million

Summary of Costs Associated with Lead Exposure, 2014



*All costs were estimated outside of the Flint Water Crisis and do not include Flint-related costs.



The Solution

Reducing the cases of lead poisoning can be achieved by targeting the largest source of contamination: lead paint in homes.

The Ecology Center report found that the total costs to remediate lead-paint based hazards in 100,000 of the most at risk homes would be approximately \$600 million

- This would reduce lead exposure and associated costs by 70% in Michigan
- A \$600 million investment in remediation pays for itself in approximately three years by reducing costs of treatment and associated costs of exposure.

Breakdown of Costs Associated with Lead Exposure, 2014

Category	Amount	Costs to Taxpayer	Description of Assumed Taxpayer Costs
Increased in health care			
Blood lead treatment	271,049	243,944	Estimated 90% of children with elevated BLL are on Michigan Medicaid programs
Treatment of lead-related ADHD	18,032,787	16,229,508	Estimated 90% of children with elevated BLL are on Michigan Medicaid programs
Increases in special education	2,492,971	2,492,971	Estimated 100% of costs through public education
Reduction lifetime earnings, NPV	170,918,336	13,673,467	Estimated 8% state and local effective tax rate
		34,183,667	Estimated 20% effective federal tax rate
Increased crime			
Juvenile incarceration related to childhood lead	13,351,800	13,351,800	100% taxpayer cost
Adult crimes related to childhood lead	64,663,668	32,331,834	50% taxpayer cost
TOTAL costs of lead exposure in year (2014)	269,730,611	112,507,191	