

Costs of Lead Exposure

"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:

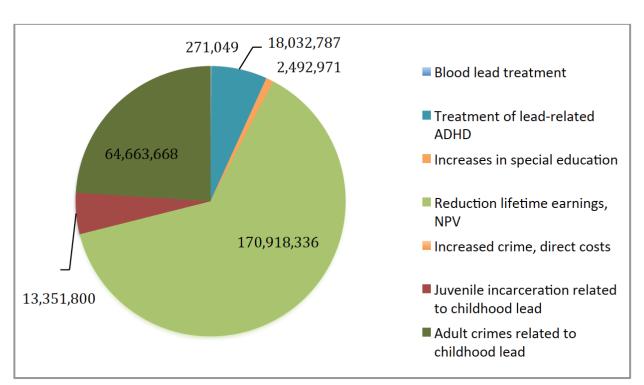
Costs associated with elevated blood lead levels were found to total \$270 million for the state of Michigan in 2014

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.



Costs of Remediation

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	