Primary Prevention		General Action	Specific Actions  Require proactive lead inspection of rental housing.	MI	US
			Require lead inspection at point of sale or transfer of pre-1978 homes.	•	
			<ul> <li>Require post-1978 homes to have tests done for dust, soil, and water.</li> </ul>	-	•
		Test homes for lead, including paint, dust, soil, and water.	<ul> <li>Requires RRP clearance as part of the building permitting process.</li> </ul>	_	
			Require dust-wipe instead of "white glove test" for RRP clearance.	1	
			Conduct an analysis to determine data that can indicate homes for primary prevention.	/	
			Require lead inspection and abatement for FHA, Fannie Mae, and Freddie Mac.		1
	Homes		• Require abatement of lead hazards in pre-1978 structures, including replacement of lead service lines, for Fannie Mae, Freddie Mac and other federal mortgage underwriters.		•
			<ul> <li>Modify HUD Lead Safe Housing Rule to require lead risk assessments in the Section 8         Housing Choice Voucher Program for homes where children reside.</li> </ul>		✓
			Increase citizen access to and guidance with dust sampling.		<b>✓</b>
Identify Sources of			• Develop and launch a federally supported citizen science program to test homes for hazards.		•
Lead			<ul> <li>CMS and Title V Maternal and Child Health Services Block Grant Program provide reimbursement of home inspections/risk assessments during visits.</li> </ul>		•
	Soil	Ensure soli hazards are remediated at non-residential sites.	<ul> <li>Require lead testing and mitigation plans for urban farms, agricultural fields, parks, schools, and childcare.</li> </ul>	•	
			Require soil testing for current/former shooting ranges.	1	
	Water	Promote effective residential water	Continued development of policy/procedures for water testing in homes.	1	
		testing.	Increase citizen access to and guidance with drinking water testing.		✓
	Schools	Assess for lead hazards in all pre-1978 buildings and follow up on risk assessments.	<ul> <li>Update childcare licensing requirements to include lead inspections, water testing, and abatement of hazards.</li> </ul>	•	
			Require lead inspections for schools.	•	
	Planning	Plan at the local and federal level for lead	• Re-establish the President's Task Force on Environmental Health and Safety Risks to Children, update the 2000 plan for lead, and commence implementation.		<b>✓</b>
		hazard identification and remediation.	<ul> <li>HUD should require localities to include lead-based paint and lead service line elimination in their consolidated plans.</li> </ul>		✓
	Soil	Abate soil hazards.	Regulate soil used as fill in residential projects.	1	
Get the Lead Out			<ul> <li>Implement statewide regulations for metal content in fertilizer and soil amendment products (which include topsoil).</li> </ul>	•	
	Homes	Abate hazards in homes.	<ul> <li>Adopt a consistent, statewide code enforcement model that is proactive and explicitly addresses exposure from lead-based paint.</li> </ul>	•	
			Require that hazards be remediated before homes are rented.		1
			<ul> <li>If a poisoned child lives in a multifamily housing unit with lead hazards, then all similar child-occupied units in the building/development should be tested.</li> </ul>		1

Primary Preven	tion	General Action	Specific Actions	MI	US
	Homes	Abate hazards in homes.	<ul> <li>Require that projects receiving Low-Income Housing Tax Credits use lead-safe work practices and abate as require by Subpart J of the Lead-Safe Housing Rule</li> <li>Require that all Qualified Allocation Plans determine and eliminate lead-based paint hazards and lead service lines.</li> <li>Weatherization programs address lead hazards, especially window replacement.</li> <li>Increase enforcement EPA and HUD staffing levels and activities to enforce the Residential Lead-Based Paint Hazard Reduction Act of 1992 (Title X).</li> </ul>		<i>y y y y</i>
	Water	Abate water hazards.	<ul> <li>Adopt and implement the recommendations of the Flint Water Interagency Coordinating Committee.</li> <li>Revise the Lead and Copper Rule for drinking water to be consistent with the recommendations from the National Drinking Water Advisory Council.</li> <li>FHA, USDA, and VA should require the identification and replacement of lead service lines for government insured mortgages.</li> <li>Community Development Block Grant should allow lead service line replacement.</li> </ul>	•	<i>y y y</i>
	Schools	Abate lead hazards in schools.	<ul> <li>Remediate all lead hazards in schools, including water hazards.</li> <li>Require all schools with lead-based paint to maintain a fund for future assessment and remediation.</li> </ul>	1	
Get the Lead	Public Buildings	Abate lead hazards in public buildings.	EPA should complete its regulation of lead-based paint in public and commercial buildings, which Congress mandated in 1992.		✓
Out	Manufacturing	Reduce lead exposures in occupational areas. Improve emission standards.	<ul> <li>MIOSHA should lower allowable blood lead levels in occupational settings in industries where workers are exposed to high levels of lead.</li> <li>Provide incentives to companies to integrate the best emission-reduction technologies into their facilities.</li> <li>Rigorous enforcement of state regulations restricting lead air emissions.</li> <li>Assess whether a state standard more stringent than the EPA standard is needed for lead</li> </ul>	<i>y y y y</i>	
	Demolition and Remodeling	Provide training for lead professionals and others.	<ul> <li>Require contractors seeking a building permit on a pre-1978 home to provide proof Lead-Safe Certification as required by federal rules.</li> <li>Streamline the conversion of current RRP certified individuals and firms to full lead abatement firms.</li> <li>Add a lead module to residential builders and plumbers licensing exams.</li> <li>Increase the number of individuals available to perform abatement work by expanding training and mentoring and creating job opportunities for individuals starting out in the field.</li> <li>Interdepartmental collaboration to increase the lead abatement workforce in Michigan.</li> <li>Funding should be provided to apprenticeship programs, vocational schools, and community colleges to training non-abatement personnel in lead-safe work practices.</li> <li>Address lead poisoning prevention (abating homes, water service lines) and related worker training needs as part of federal infrastructure programs.</li> </ul>		Y Y Y Y Y Y

Primary Preven	ition	General Action	Specific Actions	MI US
Get the Lead Out	Demolition and Remodeling	Provide training for lead professionals and others.	<ul> <li>Provide funding to support the training of lead abatement professionals.</li> <li>Provide funding to support low to no cost training in lead-safe work practices required under RRP.</li> <li>Provide adequate environmental health staffing</li> </ul>	<i>y</i>
			<ul> <li>Provide adequate environmental health staffing.</li> <li>Provide technical support, increased allocation of funds for training, and additional monitoring to ensure workers from affected communities are first in line for lead remediation jobs.</li> </ul>	<i>y</i>
	Demolition and Remodeling	Sensible regulations.	<ul> <li>Have the State of Michigan assume responsibility for enforcement of RRP.</li> <li>Standardize health-based regulations and best practices for demolition and renovation to establish a baseline understanding consistent with sound scientific methodologies.</li> <li>Adopt HUD's "Prohibited Work Practices" in state law for general renovation.</li> </ul>	<i>y y</i>
	Manufacturing	Reduce lead exposures in occupational areas. Reduce emission.	<ul> <li>MIOSHA should lower allowable blood lead levels in occupational settings in industries where workers are exposed to high levels of lead.</li> <li>Provide incentives to companies to integrate the best emission-reduction technologies into their facilities.</li> <li>Rigorous enforcement of state regulations restricting lead air emissions.</li> </ul>	1
	DIY Projects	Educate consumers on safe DIY work practices.	<ul> <li>Broaden training and outreach regarding lead safety on DIY projects.</li> <li>Require paint retailers to carry lead-check swabs in their paint department, make available EPA's Protect Your Family brochure, require at least one clerk/salesperson to be lead educated for customers.</li> </ul>	<i>y</i>
Make sure there are no new sources of lead	Lead in Consumer Products	Curtail the manufacture of products containing lead.	<ul> <li>Require importers and manufacturers to disclose the presence of lead in consumer products.</li> <li>Prohibit lead in fishing tackle.</li> <li>Establish regulations to protect against lead exposures through the use of firearms.</li> <li>Ban the sale and installation of lead in wheel balancing weights.</li> <li>Reduce levels of lead in aviation fuels to meet existing commercial requirements.</li> <li>Increase the capacity of local public health, housing departments, and non-profits to operate abatement programs.</li> <li>Promote public-private partnerships and academic/private sector collaboration.</li> <li>Create a central data repository on consumer products with lead.</li> <li>Prohibit US companies from continuing to make or sell lead paint and other nonessential uses of lead in products in other countries.</li> <li>Regulatory agencies prohibit or severely restrict all nonessential uses of lead.</li> </ul>	
Sources of Funding	Non-profits	Engaging non-profits and philanthropy.	<ul> <li>Launch a "Pay for Success" strategy for paying for lead hazard control.</li> <li>Convene a funders' roundtable of national and local foundations to engaging the philanthropic community in identifying and filling gaps in a national lead elimination plan.</li> </ul>	<i>y</i>

<b>Primary Preven</b>	tion	General Action	Specific Actions	MI US
	State Funding	State investments.	Increase local match funding for federal investments.	✓
	Health Care	Engage health acre.	• Explicitly include lead elimination in the community health needs assessments required of nonprofit hospitals. Coordinate with other federal, state, and local efforts.	✓
	Paint Fee	Require that paint companies contribute.	<ul> <li>Require the paint industry to contribute to a lead elimination fund through a special fee or corporate tax.</li> </ul>	✓
			<ul> <li>Create a federal "Healthy Homes Mortgage" to finance lead abatement and other healthy housing improvements, and leverage HUD 203(k) rehabilitation loans to address lead service lines and lead-based paint abatement.</li> </ul>	•
			Increased funding for existing HUD activities.	✓
Sources of			Increased funding for existing EPA activities.	✓
Funding			Increased funding for existing CDC activities.	✓
	Federal Funds	Increase federal investment.	<ul> <li>Create a tax credit for income-qualified owners of pre-1978 homes who conduct lead hazard remediation in their property.</li> </ul>	<b>✓</b>
			<ul> <li>Allow lead abatement to be an allowable medical expense for tax purposes, including utilization of Health Savings Accounts.</li> </ul>	✓
			<ul> <li>Create a very low or no-interest loan program available as a direct loan product, as well as a program in partnership with local lenders or nonprofit agencies that can provide a turnkey solution for owners to identify, finance, and abate lead.</li> </ul>	✓
			• HHS should expand pilot programs for funding lead risk assessments, lead abatement, and lead service line replacement for Medicaid recipients otherwise unable to do so.	✓
	Homes	Create a centralized data system to track remediation and abatement, follow up on short-term remediation efforts.	<ul> <li>Create a Lead Safe Home Registry that tracks all lead exposures, remediation and abatement, and inspection history.</li> </ul>	✓
			<ul> <li>Create a centralized data system to target remediation and abatement resources, coordinate efforts, catalogue tests and home data, and improve coordination.</li> </ul>	✓
			<ul> <li>Require follow-up every 5 years with renters or homeowners who have had remediation work done in their homes to advise them that the "expected life" of the remediation is coming to an end.</li> <li>Every 2 years, remind homeowners/renters who use interim controls about the lifespan</li> </ul>	•
Track Hazards			of those controls.	✓
			<ul> <li>Link the Lead Safe Housing Registry with other publically accessible databases on available homes.</li> </ul>	✓
			<ul> <li>Require all states to report to CDC results for lead concentrations in dust, soil, paint, water, and consumer products whenever measured.</li> </ul>	✓
			<ul> <li>CDC should use GIS and other data technologies to improve childhood lead poisoning prevention and surveillance activities.</li> </ul>	•
	Soil	Monitor soil hazards.	<ul> <li>Monitor soil hazards where interim remediation measures have been implemented or where exposure control or engineered barriers have been put in place of lieu of soil removal.</li> </ul>	<b>✓</b>
	Air	Monitor air quality.	Improve access to and frequency of air quality monitoring, emissions, and testing.	✓

Secondary Prev	ention/	General Action	Specific Actions	MI	US
	Universal Testing	Require 100% of	<ul> <li>Require that 100% of children be tested for lead poisoning at 9 to 12 months and at 24 to 36 months of age. Confirmation of a capillary EBL should occur within 1 month by a venous blood sample.</li> </ul>	•	
		children be tested for lead.	<ul> <li>100% of children testing &gt;5 ug/dL receive comprehensive treatment and case management services.</li> </ul>	✓	
			<ul> <li>Design a model assigning roles to responsible parties to ensure that 100% blood testing is fully implemented.</li> </ul>	•	
	Expand	Increase screening rates through training providers, programming, and community partners.	<ul> <li>Enhance the distribution of educational toolkits distributed annually by the MDHHS         Childhood Lead Poisoning Prevention Program (CLPPP) to local and community partners.</li> <li>Ensure licensed Michigan providers caring for children receive professional education regarding lead testing and EBL management.</li> </ul>	1	
	Opportunities to Conduct Blood		Recommend the utility of routine prenatal blood lead screening for pregnant women.	1	
	Lead Testing		Utilize plan-specific and provider-specific measures to enhance screening rates.	1	
			<ul> <li>Utilize Detroit Physician Detailing Program as a model to enhance provider screening rates across the state.</li> </ul>	•	
	Remove Payment as an Obstacle	Require insurance companies to reimburse for lead tests and follow-up.	Universal blood lead testing for all children.	✓	
			<ul> <li>Require health insurance plans to cover recommended clinical preventive services without cost sharing.</li> </ul>	✓	
Identify Sources of			Require that blood lead testing follow enhanced guidelines to qualify for increased reimbursement under EPSDT.		✓
Lead			Reimburse for blood lead testing at WIC sites.		✓
			Increase the utilization of GIS to monitor, target, and deploy interventions.	1	/
	Share Data and Information		<ul> <li>Increase the dissemination of information on lead testing and lead poisoning levels at the state, county, and local levels.</li> <li>Improve information technology and infrastructure support to local health depts.</li> </ul>	1	•
		Create a system to track data of children tested, poisoned, and use maps	<ul> <li>More highly coordinate service delivery by developing a centralized data reporting system to track all activities provided to children with elevated blood lead levels.</li> </ul>	·	
			Development of a unified data system that captures data regarding child testing and results, case management, lead hazards identified and remediated in housing, and code and law enforcement status.      Develop a death board with leaving displaces of the fight to eliminate lead pointing in	•	
		to track environmental sources.	<ul> <li>Develop a dashboard with key indicators of the fight to eliminate lead poisoning in Michigan. Appoint a panel to oversee progress.</li> <li>Require states to report blood lead data to the CDC.</li> </ul>	•	
			<ul> <li>Require states to report blood lead data to the CDC.</li> <li>Federal requirement for healthcare providers and clinical laboratories to report blood</li> </ul>		<b>✓</b>
			lead levels to states.  • Provide federal resources through the CDC to local, state, and federal partners to support data and case management.		1
			Perform investigations for children with blood lead levels over 70 ug/dL.		1

<b>Secondary Prevention</b>		General Action	Specific Actions	MI	US	
	Health-Based Standards	Utilize health-based standards to guide work.	<ul> <li>Establish health-based standards for actionable levels of environmental lead exposure that meet or exceed the most stringent national standards and are based on sound science.</li> <li>Ensure the CDC reference value for children's blood lead is supported by laboratory proficiency, deployment of adequate and effective interventions, and the equitable distribution of resources.</li> <li>Provide appropriate technology and resources to local public health systems for effective</li> </ul>	•	•	
			delivery of high-quality services, outreach, and education.	•		
			<ul> <li>Provide local public health with the infrastructure and funds to create a broad coalition for case management.</li> </ul>	•		
		Provide public health resources to support services to children poisoned by lead, including case management, outreach, and abatement.	<ul> <li>Case management support offered to all children with EBL &gt;5 ug/dL with 1-2 visits from a trained educator, and nursing support is offered monthly for those with EBL &gt; 10 ug/dL.</li> </ul>	•		
			<ul> <li>Support services include comprehensive prevention education, housing abatement, micronutrient fortified foods, medical home access, and transportation support.</li> </ul>	•		
Get the Lead Out	Support Kids		• Health care and early childhood organizations work with local public health departments to remediate of all exposures to lead.	•		
			MDHHS and local public health have the tools necessary to engage all stakeholders.	1		
			<ul> <li>The state should provide funding, IT, and infrastructure support to all local departments and organizations working to reduce lead exposure.</li> <li>Case management through local public health should be comprehensive, and include a broad coalition approach to case management.</li> </ul>	7		
			<ul> <li>Hearings and/or training of local residents in zip codes with a high prevalence of lead poisoning.</li> <li>The State should provide additional supports to lead poisoning survivors and their families.</li> </ul>	·		
				CMS should incentivize all state Medicaid agencies to provide adequate reimbursement for comprehensive follow-up services		✓
			• Fund basic and applied research to identify best practices for educational interventions for children affected by lead.		✓	
			• Children with an EBL history receive remedial and enrichment educational services as soon as delays are identified.		✓	
			• Fully fund Head Start so that all eligible three and four year old children can be enrolled.		✓	
	Legal Assistance	Provide legal support for families with a lead-poisoned child	<ul> <li>Revise the Michigan "Landlord Penalty" law to allow for use in cases where the child's blood lead levels is &gt; 5 ug/dL and to allow for a presumption of non-compliance when an affirmative defense is lacking.</li> <li>Protect against predatory landlords by placing a freeze on eviction proceedings against a family within six months of a finding of an EBL child or finding any lead hazards in the</li> </ul>	1		
			home.  • Federal agencies (EPA, FDA, HUD, OSHA, and CPSC) should update, keep current, and enforce their regulations on lead to reflect CDC's blood lead reference value.	•	<b>✓</b>	

## Definitions

CDC: U.S. Centers for Disease Control and Prevention CPSC: U.S. Consumer Product Safety Commission

EBL: Elevated blood lead level. In this document, a level ≥5.0 ug/dL is elevated.

EPA: U.S. Environmental Protection Agency

EPSDT: Federal Early and Periodic Screening, Diagnostic, and Treatment program for children.

FDA: U.S. Food and Drug Administration FHA: U.S. Federal Housing Administration

HUD: U.S. Department of Housing and Urban Development MDHHS: Michigan Department of Health and Human Services MIOSHA: Michigan Occupational Safety and Health Administration

OSHA: U.S. Occupational Safety and Health Administration (Dept. of Labor)

RRP: Federal Renovation, Repair and Painting rule requiring contractors and landlords to use lead-safe work practices when renovating, remodeling, repairing or painting.

USDA: U.S. Department of Agriculture VA: U.S. Veterans Administration

WIC: U.S. Department of Agriculture's "Woman, Infants and Children" nutritional program

## **Source Documents**

State of Michigan Child Lead Poisoning Elimination Board, *A Roadmap to Eliminating Childhood Lead Exposure*, November 2016. http://gettheleadoutgr.org/uploads/files/CLPEB\_Final\_Report.pdf

National Center for Healthy Housing and the National Safe and Healthy Housing Coalition, Find It, Fix It, Fund It: A Lead Elimination Action Drive – Policy Recommendations to Congress and the New Administration, November 2016.

http://gettheleadoutgr.org/uploads/files/FFF-Action-Drive-Transition-Document\_Admin-Version\_2016-12-04.pdf