

# Plan to **Eliminate** Childhood Lead Poisoning in Michigan



**Michigan Childhood Lead Poisoning  
Prevention and Control  
Commission  
June 30, 2007**

## Foreword

The Childhood Lead Poisoning Prevention and Control Commission convened in June 2005, pursuant to Public Act 431 of 2004. Its mission is to:

- Maximize the effectiveness of Michigan's public infrastructure
- Mobilize and enable the private sector infrastructure, and
- Integrate the capacity and effects of public and private sector strategies to prevent and control childhood lead poisoning through public awareness, testing and treatment of lead poisoned children, and prevention and remediation of lead hazards.

The Commission provided its first annual report and recommendations to Michigan's Governor and Legislature in March 2006, and another in March 2007. This report focuses on long-term strategies to close the remaining gaps in Michigan's lead poisoning prevention and control programs, in order to eliminate childhood lead poisoning caused by lead hazards in homes and day care settings.

## Commission Members and Staff

### *Commission Members*

**Carole Ann Beaman Ph.D., LLP**

Disability Services/Mental Health Coordinator,  
Detroit Public Schools

**Randy Ray Barst**

Director, Saginaw County Department of  
Human Services

**Joan R. Dyer**

Program Supervisor, Kent County Health  
Department

**Darryl K. Gallant**

Assistant Director, Michigan Laborers Training  
and Apprenticeship Institute

**Bruce C. Jeffries**

Environmental Review Officer, Michigan State  
Housing Development Authority

**Clay Powell**

**Commission Co-Chairperson**

Director, Rental Property Owners Association of  
Kent County

**Robert D. Sills**

Toxicologist Specialist, Michigan Department of  
Environmental Quality

**Laurel R. Sproul**

Maternal and Child Services Supervisor,  
Muskegon County Health Department

**Kimberlydawn Wisdom M.D., M.S.**

**Commission Chairperson**

Surgeon General, State of Michigan

*Staff*

**Mary Scoblic**

Manager, Infant and Child Health Unit, Michigan  
Department of Community Health

**Donna Strugar-Fritsch**

Principal, Health Management Associates

**Lori Weiselberg**

Senior Consultant, Health Management Associates

**Amy Wiles**

Consultant, Health Management Associates

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## EXECUTIVE SUMMARY

Childhood lead poisoning is entirely preventable, yet Michigan continues to rank 6th worst in the nation in the percentage of lead poisoned children. Lead paint hazards remain widespread and Michigan children continue to be poisoned by lead every day. Lead poisoning can cause permanent and irreversible damage. Its effects include hearing and vision loss, hyperactivity, anemia, aggressive behavior, liver and kidney damage, loss of IQ, learning disabilities, developmental delay, coma and even death.

Although lead in consumer products, contaminated soils, and water supplies can also cause lead poisoning and should continue to be diligently addressed, lead in house paint is the primary cause of childhood lead poisoning.

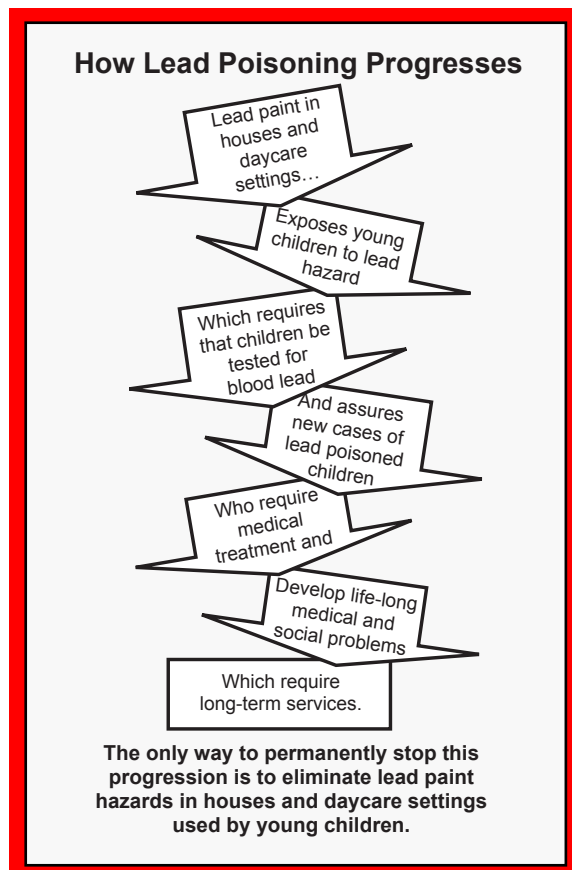
The efforts underway and those recommended for Michigan will be very effective in *controlling* childhood lead poisoning from household paint. However, the glaring truth is that the only effective means of *preventing* lead poisoning is to permanently remove lead paint hazards from homes and daycare settings used by children under age six.

The Commission strongly believes that Michigan can eliminate childhood lead poisoning caused by lead paint in homes through a comprehensive, sophisticated and strategic effort.

### **Priority 1: Eliminate Lead Hazards from All Michigan Homes and Daycare Settings Used by Children Under Age Six**

Since 1996, Michigan Department of Community Health (MDCH) Healthy Housing Division has made significant progress in remediating Michigan's housing stock and has abated nearly 1,500 homes of lead hazards. However, there are more than **1.3 million occupied housing units in Michigan containing lead paint hazards<sup>1</sup>**.

MDCH's accomplishments are building blocks toward continued progress in remediating lead hazards. However, MDCH alone cannot address the enormous scope of the housing stock still containing lead paint, nor can any state agency address local enforcement of property maintenance codes. Michigan lacks a coordinated, cross-sector, multi-stakeholder, aggressive effort to eliminate lead hazards from its housing stock. In particular, local enforcement of



property maintenance codes and incentives inducing landlords to assess and remediate lead hazards are inadequate.

Healthy homes must be the central focus of future efforts. If lead hazards were remediated in every Michigan residence and daycare setting built prior to 1978, *childhood lead poisoning from residential paint would be eliminated.*

### **Recommendation**

Under the leadership of the Commission, Michigan should convene a multi-stakeholder group to develop a comprehensive, aggressive, and practical plan for eliminating lead from the state's housing stock in which young children live or receive daycare services. The plan must integrate all of the following elements:

1. Property owner inducements and liabilities
2. Remodeling contractor training, inducements and liabilities
3. Resources for conducting assessment, abatement, inspections and training,
4. Local enforcement of penalties for violations,
5. Local and state capacity building
6. Centralized accountability and monitoring

### **Priority 2: Test All Children at High-Risk for Lead Hazard Exposure**

Since 2003, the rate of testing children who are at high-risk for lead poisoning has increased dramatically in Michigan. However, as of June 2007, the statewide average for children enrolled in Medicaid who received a blood lead test by age two was just 61 percent - far short of Michigan Medicaid's goal of 80% and farther from the federal Medicaid requirement that ALL children be tested at ages one-and-two-years, or once between ages three-and-six-years if not previously tested. Until Michigan has successfully removed lead hazards from housing and daycare settings, aggressive testing of all Medicaid-enrolled and other children at high-risk remains absolutely essential.

### **Recommendations**

1. Michigan should require that children residing in high-risk ZIP codes have a blood lead test as a condition of receiving licensed daycare/preschool services.
2. MDCH should launch a statewide public awareness campaign aimed at parents, focusing on the high-risk ZIP codes.
3. MDCH should engage state medical and nursing organizations in a large-scale provider education campaign, focusing on the web-based course currently available at <http://www.training.mihealth.org>.

4. Michigan should require each Medicaid Managed Care Organization to make a minimum 10% improvement in testing each year until it reaches the federally mandated level of 100%.
5. Local public health agencies should receive state support to develop the financial and human capacity to address local cases of elevated blood lead (EBL) at 10 mcg/dL or greater, and be held to a uniform standard for intervening with nursing visits and environmental health assessments for every child with an elevated blood lead level (EBLL) of 10 mcg/dL or greater.
6. Local public health agencies should be required to refer every child with an EBLL of 10 mcg or greater to *EarlyOn*.
7. Health insurance programs should be required to cover the cost of a home nursing assessment in a child with an EBLL of 10 mcg/dL or greater.

### **Priority 3: Develop Adequate and Sustainable Funds To Complete This Work**

Each lead poisoned child in Michigan will require at least \$45,000<sup>2</sup> in education and human services to address and learning and social problems. In addition, a child with a blood lead level of 10 mcg/dL will likely suffer a reduction in IQ of 2.5 points, which will equate to a 6 percent reduction in his life-long earning potential.<sup>3</sup> The cost/benefit is clear: Resources spent to prevent lead poisoning are an investment in each child's life-long health, quality of life, learning, and earning potential.

Michigan is in a position to eliminate childhood lead poisoning, but to do so requires additional resources. In its March 2007 Annual Report, the Commission made recommendations for new and sustainable funding streams for lead poisoning prevention and control. Given the state's dire budget constraints and the FY 2007 and FY 2008 cuts to lead poisoning efforts, these new revenue streams are absolutely essential.

### **Recommendations**

1. In order to maintain momentum in preventing and controlling lead poisoning that has been achieved in recent years, and to continue to qualify for HUD abatement funds awarded to the state, Michigan must sustain at least the current level of funding for lead poisoning.
2. Funding for lead poisoning prevention and control should be stable and secure until the problem in Michigan is resolved. To the fullest extent possible, funding should reside in the public health trust, where it can grow interest and be distributed according to community need.
3. Michigan should assess a \$.25 fee upon manufacturer of paint for each gallon of paint sold in the state. Estimated revenue: \$4,700,000 per year.
4. Michigan should assess a fee upon lending institutions on each sale of a mortgage in the secondary mortgage market for a Michigan residence. With an extremely modest fee of just

\$.35 per mortgage sale annual revenue for lead hazard remediation in Michigan housing stock would be \$1,097,000.

5. Michigan should aggressively pursue the earmarking of settlement funds for lead poisoning prevention and control, in cooperation with the public health trust. Over a ten year period, the California Trust collected \$200 million in revenue, and allocated large sums for lead hazard work.

#### **Priority 4: Continue to Monitor Progress in All Other Lead Poisoning Prevention and Control Activities**

During the Commission's tenure, excellent progress has been made in many areas. However, continued effort is needed, especially to:

- Implement the long-term recommendations in this report;
- Ensure that providers make optimal use of the web-based course on testing children at high-risk for lead poisoning currently available at <http://www.training.mihealth.org>;
- Engage and equip local public health agencies to uniformly address children with elevated blood lead levels;
- Continue to bridge gaps related to *EarlyOn*, to assure that all children below the age of three years with elevated blood lead levels receive appropriate assessment for learning difficulties;
- Enhance local capacity to prosecute rental property owners who knowingly rent housing with lead hazards to families with young children; and to
- Enhance financial incentives for property owners to remediate lead hazards.
- Continue to maximize coordination among government programs addressing lead poisoning.

#### **Recommendations**

1. The Childhood Lead Poisoning Prevention and Control Commission should continue through 2010 at a minimum, to assure that its recommendations are fully implemented with optimal effect.
2. The Commission should be provided with operating funds to support its technical assistance and staffing requirements.

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<sup>1</sup> Using HUD estimates adjusted for the Midwest, *Get the Lead Out* calculated there are 1,316,756 occupied housing units in Michigan that contain lead paint hazards.

<sup>2</sup> Marjorie Sarbaugh-Thompson, Lyke thompson, Tsvia Finman, Assessing the Costs and Benefits of Remediating lead Poisoning in Urban Areas. Wayne State University, unpublished.

<sup>3</sup> Chenoweth, David PhD, The Economic Cost of Substandard Housing Conditions Among North Carolina Children. North Carolina Housing Coalition, May 2007.

PLAN TO ELIMINATE  
CHILDHOOD LEAD POISONING IN MICHIGAN  
Michigan Childhood Lead Poisoning Prevention  
and Control Commission  
June 30, 2007

**SECTION ONE:  
BACKGROUND AND CURRENT STATE**

*Introduction*

Childhood lead poisoning is a serious environmental illness that can affect health and cognitive abilities, causing permanent and irreversible damage. Lead that accumulates in a young child's brain and body can cause hearing and vision loss, hyperactivity, anemia, aggressive behavior, liver and kidney damage, loss of IQ, learning disabilities, developmental delay, coma and even death. The damage caused by lead poisoning can generate significant medical and social costs throughout the child's life, including special education services, behavior problems, and

***What Is Lead Poisoning?***  
*According to the CDC, blood lead levels above 10 mcg/dL in a child constitutes lead poisoning. However, harmful effects have been reported from chronic low levels of blood lead, and a "safe threshold" has not been established.*

incarceration. Lead poisoned children also may experience lower earning potential as adults, due to loss of IQ.

Childhood lead poisoning is entirely preventable, yet Michigan continues to rank 6<sup>th</sup> highest in the nation in the percentage of lead poisoned children. In 2004, there were an estimated 20,000 lead poisoned children in

Michigan. Because lead paint hazards are still widespread, more young children are exposed every day, and Michigan children continue to be poisoned by lead.

It is possible to eliminate childhood lead poisoning caused by exposure to lead in household paint. Many challenges are involved because lead poisoning is a multi-dimensional public health concern and involves a large, diverse group of stakeholders, each with a different vantage point.

*Work in Michigan to Date*

Michigan has conducted significant efforts to prevent and control lead poisoning. In July 2003, Governor Granholm issued *Childhood Lead Poisoning: A Call to Action*. The report led to the establishment of the Childhood Lead Poisoning Prevention Task Force, and served as the basis of its work. The Task Force of more than 170 people and



six committees produced a report in June 2004. More than 100 recommendations were made, in the following seven priority areas.

- Create community capacity to build effective coalitions that address lead poisoning
- Assure effective case management and service coordination in children with high blood lead levels
- Establish a public health trust to assure stable, sustainable funding for lead poisoning
- Establish a mandatory lead paint status housing registry
- Develop and implement a major public awareness campaign about lead poisoning
- Establish a commission to evaluate and coordinate lead resources and activities statewide
- Expand the remediation and control of residential lead hazards

The cost for initial implementation was estimated at \$3,758,000. One million dollars were allocated in 2005-06 and \$750,000 in 2006-07.

In response to the Task Force Report, Michigan's legislature passed a series of laws that:

- Required mandatory electronic reporting of blood lead testing results by 10/1/05
- Requires Medicaid providers to increase blood lead testing of children to 80% by 10/1/07
- Established a state-wide lead paint housing registry
- Established penalties for landlords who knowingly cause lead poisoning of children
- Established the Michigan Childhood Lead Poisoning Prevention and Control Commission.

The Commission convened in June 2005, and adopted the mission to:

- Maximize the effectiveness of Michigan's public infrastructure;
- Mobilize and enable the private sector infrastructure; and
- Integrate the capacity and effects of the public and private sector strategies, in order to prevent and control childhood lead poisoning through public awareness, screening, testing and treatment of lead poisoned children, and prevention and remediation of lead hazards.

The Commission's focus has been to build on Michigan's previous efforts to prevent and control lead poisoning, rigorously evaluate continuing gaps and inefficiencies, and recommend strategies accordingly. In its March 2006 Annual Report to the Legislature, the Commission focused on the following issues

- Testing Children for Lead Poisoning
- Funding for Lead Poisoning Prevention and Control at Every Level
- Education and Enforcement of Safe Lead Hazard Abatement Practices Directed to Parents, Rental Property Owners, and Residential Contractors
- Maximizing Property Owner Inducements to Identify and Remediate Lead Hazards
- Enhancing the Effectiveness of Government Programs

Numerous recommendations were made, and the Commission also made specific requests for additional research and analysis by specific stakeholders.

Many of the March 2006 recommendations have been implemented, and all of the requests for research and analysis were completed.

In its March 2007 Annual Report to the Legislature, the Commission focused on the following six objectives to address remaining gaps and inefficiencies:

- Increase Capacities in Local Public Health Agencies to Conduct Lead Hazard Assessment
- Enhance Local Capacity to Prosecute Rental Property Owners Who Knowingly Rent Housing with Lead Hazards to Families with Young Children
- Enhance Financial Incentives for Property Owners to Remediate Lead Hazards
- Enhance the Statewide Housing Registry Containing Information on Lead Hazards
- Continue the Childhood Lead Poisoning Prevention and Control Commission
- Develop Sustainable Funding Streams to Support These Efforts

As of June, legislation has been introduced to continue the Commission, to enhance the registry, and to develop tax credits for lead hazard remediation. Other recommendations have not yet been addressed.

### *Can Michigan Eliminate Lead Poisoning?*

The Commission believes that the efforts underway and recommended as of today will be very effective in *controlling* childhood lead poisoning. However, the glaring truth is that the only effective means of *preventing* lead poisoning is to permanently remove lead paint hazards from homes and daycare settings used by children under age six. Although lead in consumer products, contaminated soils beyond residential yards, and water supplies can also cause lead poisoning and should continue to be diligently addressed, lead in house paint is the primary cause of childhood lead poisoning. The Commission has crafted long-term recommendations that can eliminate lead poisoning from house paint, and that maximize its control until elimination is achieved. The priorities are as follows:

1. Eliminate Lead from Housing and Daycare Settings Used by Children Under Age Six
2. Test All Children at High-risk for Lead Hazard Exposure
3. Develop Adequate and Sustainable Funds to Complete this Work
4. Continue to Monitor Progress in All Other Areas of Previous Reports

Throughout this report, *elimination* of lead poisoning will refer exclusively to lead poisoning caused by lead in residential paint.

## Summary of Michigan Actions to Prevent and Control Childhood Lead Poisoning

### MICHIGAN ACTIVELY ADDRESSES CHILDHOOD LEAD POISONING

**July 2003** Governor Granholm issues *Childhood Lead Poisoning:*

**October 2003** The report led to the establishment *A Call to Action.* of the Childhood Lead Poisoning Prevention Task Force is established. More than 170 people participate.

**June 2004** Childhood Lead Poisoning Prevention Task Force issues Final Report with more than 100 recommendations.

**Spring-Summer 2004** Michigan Legislature passes comprehensive package of bills addressing lead poisoning prevention and control.

**June 2005** Childhood Lead Poisoning Prevention and Control Commission convenes.

**March 2006** Commission issues first annual report to the Governor and Legislature, with recommendations in five categories.

**March 2007** Commission issues annual report focused on six objectives that address remaining gaps and inefficiencies in Michigan's public and private lead efforts to prevent and control lead poisoning.

**June 2007** Commission issues long-term recommendations to permanently eliminate childhood lead poisoning caused by residential paint.

## SECTION TWO: LONG TERM PLAN TO ELIMINATE CHILDHOOD LEAD POISONING IN MICHIGAN

The Commission strongly believes that Michigan can eliminate childhood lead poisoning caused by paint in housing and daycare settings. To do so will require a comprehensive, sophisticated and strategic effort. Based on the many efforts to date and the widespread commitment to this objective, the Commission believes there is the social and political will to tackle this problem across all stakeholder groups. The Commission's recommendations for a long-term, permanent solution to lead poisoning are based on the following cycle.

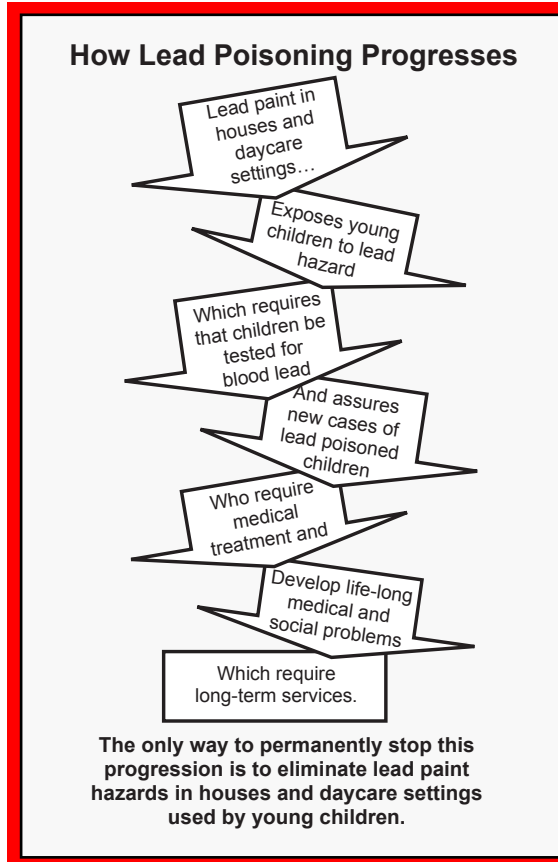
The plan identifies the ideal state for each priority (i.e., the 'perfect world' scenario), followed by an assessment of the current state and an assessment of a possible worsening scenario. Recommendations follow.

### *Priority 1: Eliminate Lead Hazards From All Michigan Homes and Daycare Settings Used by Children Under Age Six*

#### Overview

Since 1996, MDCH's Healthy Housing Division has made significant progress in remediating Michigan's housing stock and has abated nearly 1,500 homes of lead hazards. Other progress includes:

- Authorization by EPA to certify lead professionals and create a competent workforce to conduct inspections, risk assessments, investigations and abatement.
- Federal awards for local and state abatement efforts. Detroit, Grand Rapids, Saginaw, Lansing and Jackson have received federal awards.



- Coordination with Michigan State Housing Development Authority (MSHDA) regarding lead hazards in homes receiving federal Community Block Grant Dollars and HOME dollars.
- Creation of a Lead Ombudsman position
- Development and launching of the Lead Safe Housing Registry.

Each of these accomplishments is a building block toward continued success. However, **there are more than 1.3 million occupied housing units in Michigan containing lead paint hazards<sup>1</sup>.**

Efforts within MDCH cannot address the enormous scope of the housing stock still containing lead paint, nor can any state agency address local enforcement of property maintenance codes. Michigan lacks a cross-sector, multi-stakeholder, aggressive effort to eliminate lead hazards from its housing stock. In particular, local enforcement of property maintenance codes and incentives inducing landlords to assess and remediate lead hazards are inadequate.

Healthy homes must be the central focus of future efforts. **If lead hazards were remediated in every Michigan residence and daycare setting built prior to 1978, childhood lead poisoning from residential paint would be eliminated.** All the stakeholders involved in the continuum of lead poisoning must embrace that startling yet simple fact.

#### Ideal State

1. All Michigan residences built prior to 1978 and housing children under age six are assessed for lead hazards on a routine basis.
2. The status of all assessed properties is recorded in the Michigan Lead Paint Housing Registry.
3. All lead hazards found are remediated and maintained over time.
4. All daycare providers caring for children under age six who own their own property built prior to 1978 assess the property for lead hazard.
5. Daycare operators remediate all lead hazards found.
6. Property owners and daycare operators have access to low-interest loans, grants, tax credits and other financial inducements to enable achievement of the ideal state.
7. Michigan adopts an affordable, consumer-friendly assessment protocol.
8. Local, private sector capacity is sufficient to meet demand for increased assessment and remediation activities.

Current State

1. Every pre-1978 house may have the potential to poison children, and many Michigan homes have poisoned numerous children for decades.
2. While Michigan has a statewide construction code, there is no state-wide property maintenance code. Property maintenance is left to local units of government to regulate and enforce through local ordinance. Some communities require lead hazard testing if deteriorating paint is visible during inspection of rental property for occupancy permits. However, there are more than 1,700 units of government in Michigan, making uniform requirements and enforcement unlikely.
3. Local departments of public health and housing officials respond to property maintenance complaints under a complaint-driven model, and complaints most often involve infestations, blight, etc. There are no resources or strategies to systematically assess and remove lead hazards from housing.
4. Most children under age six who are at high-risk for lead poisoning live, and may also receive daycare services, in rental properties. Focus on these properties is of the utmost priority.
5. Michigan has a law that enables county prosecutors to take action against rental property owners that knowingly expose tenants to lead hazards. However, the system requires that a child be poisoned in order to initiate the process.
6. Many rental property owners are confused about liability, legal protections against liability, regulations, and obligations related to lead hazards. Many have taken a “don’t look – don’t tell” strategy, in order to avoid perceived liability.
7. Property owner requirements to assess properties for lead hazards are voluntary and have not produced adequate clean-up of Michigan’s housing stock.
8. Currently, the cost to assess a residence for lead hazards is \$600-700 in the commercial market, and the average cost of abatement is \$9,000 per unit.
9. Michigan currently provides little or no support to property owners in remediating lead hazards. Low-interest loan programs have restrictive qualifications, and little is available in funds for remediation.
10. Michigan’s Department of Human Services has new rules requiring daycare facilities to pass a visual inspection for chipping paint as a condition of licensure.

**It is feasible to permanently eliminate childhood lead poisoning caused by exposure to lead paint in Michigan.**

### Potential Worsening State

Elimination of Healthy Michigan Funds for lead poisoning and the subsequent loss of HUD and Medicaid matching funds will result in:

1. Further erosion of capacity of local health departments to address lead in homes;
2. Elimination of support of the Lead Paint Housing Registry, which became operational June 2007;
3. Reduction or elimination of lead poisoning program support to at least seven high-risk communities in Michigan;
4. Reduction of the number of homes that can have lead hazard abated; and will
5. Enable more young children to be exposed to lead hazard.

### Recommendation

It is feasible to permanently eliminate childhood lead poisoning caused by exposure to residential lead paint in Michigan.

Under the leadership of the Commission, Michigan should convene a multi-stakeholder group to develop a comprehensive, aggressive, and practical plan for eliminating lead from the state's housing stock in which young children live or receive daycare services. The plan must integrate all of the following elements, some of which may require legislation:

- Property owner inducements and liabilities
- Remodeling contractor training, inducements and liabilities
- Resources for conducting assessment, abatement, inspections and training,
- Local enforcement of penalties for violations,
- Local and state capacity building
- Time frames and measurable objectives
- Centralized accountability and monitoring
- New incentives and penalties where appropriate

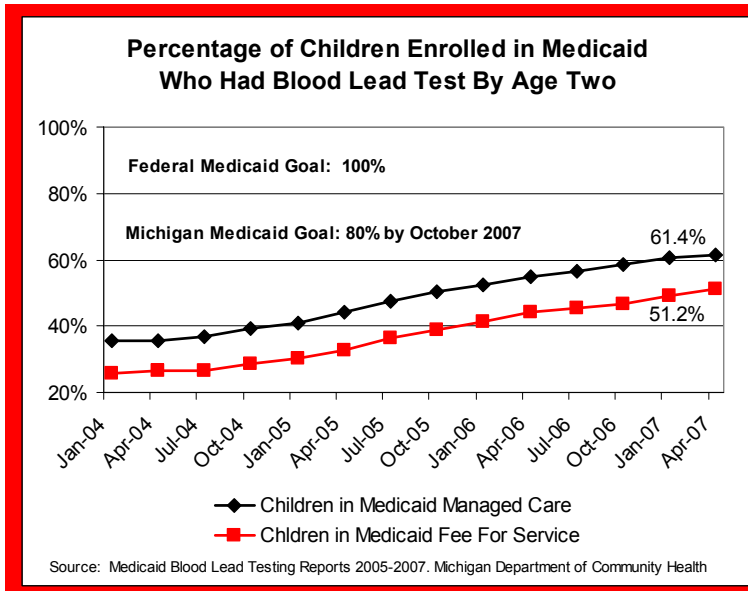
Given the numerous stakeholders and complexities involved, this process will likely require 9-12 months to complete.

## *Priority 2: Test All Children at High-Risk for Lead Hazard Exposure*

### Overview

Since 2003, the rate of testing children who are at high-risk for lead poisoning has increased dramatically in Michigan. However, we are still **far** short of Michigan

Medicaid's goal of 80% and farther from the federal Medicaid requirement that ALL Medicaid-enrolled children be tested at specified intervals, as illustrated below.



Testing high-risk children at the appropriate ages is essential to identifying rising blood lead levels and intervening before the child suffers irreversible sequelae. Until Michigan has successfully removed lead hazards from housing and daycare settings, aggressive testing of all high-risk children is absolutely essential.

### Ideal State

- 100% of children deemed as high-risk for lead poisoning are tested at appropriate points and intervals.
- All children with discernable blood lead receive follow-up testing at appropriate intervals.
  - Children with levels 1-5 mcg/dL are retested at least yearly.
  - Children with levels 5-9 mcg/dL are retested in three to six months and receive public health intervention if the level does not decrease.
  - All children with blood lead levels at 10 mcg/dL or greater receive at least two home visits from a public health nurse, first, to work with the family to evaluate the child behavioral and nutritional status and other factors and develop a treatment plan and second, to assure the family's ability to implement the plan successfully.
  - All children with blood lead levels at 10 mcg/dL or greater receive at least two environmental health visits, first to determine the source of the lead exposure, and second to assure clearance of the hazard before the child returns to the home.
- All children with blood levels at 10 mcg/dL or greater receive the prescribed medical intervention appropriate to their needs.
- Health care programs and insurers cover the cost of all medical and nursing interventions for children with detectable blood lead.



5. All children below the age of three years with EBLL of 10 mcg/dL are referred to *EarlyOn* to identify and remedy social or educational deficits.

#### Current State

1. While numerous improvements have been made, a significant number of Michigan children at high-risk for lead poisoning are not tested appropriately.
2. As of May 2007, only 60% of children receiving Medicaid were appropriately tested for lead exposure.
3. Children in WIC programs are required to be tested but the WIC clinic staff are not required to complete the testing and the mandate is not funded. At present, WIC clinics may be testing all children at one and two years of age, testing only Medicaid-enrolled children for whom there is a small reimbursement or referring all children to their primary care provider to complete the testing.
4. Local public health agencies receive reports on all blood lead testing results. There is wide variation in local public health intervention on elevated blood lead results, based on resources and capacity. A uniform standard for intervention exists, but there is no requirement to follow it in agencies where no funding is provided for a lead poisoning prevention program.
5. Most insurance programs do not cover the home nursing component of lead poisoning, which is crucial to assess the home and develop a plan with the family to minimize further risk of lead in the home. Also, insurance requirements regarding lead poisoning vary and cause confusion among health care providers.
6. Primary Care Providers are under-educated about Medicaid, Academy of Pediatrics, and CDC lead testing protocols for high-risk children, and are unaware of variations in coverage among private insurers.
7. Children below the age of three years with blood lead levels of 10 mcg/dL should be referred to *EarlyOn*, but compliance is inconsistent.

**Until Michigan has successfully removed lead hazards from housing and daycare settings, aggressive testing of all high-risk children remains absolutely essential.**

#### Potential Worsening State

As funding sources to cover the cost of blood testing continue to erode in local public health, testing levels will remain at the current inadequate levels or worsen.

Primary care providers remain unclear about the appropriate testing protocols for high-risk children, and children who should be tested will not be tested.

Children with elevated blood lead levels are not provided with adequate public health and/or medical follow-up, and develop life-long sequelae.

### Recommendations

Michigan should require that children residing in high-risk ZIP codes have a blood lead test as a condition of receiving licensed daycare/preschool services.

1. MDCH should launch a state-wide public awareness campaign aimed at parents, focusing on the high-risk ZIP codes.
2. MDCH should engage state medical and nursing organizations in a large-scale provider education campaign, focusing on the web-based course developed by the Childhood Lead Poisoning Prevention Program and available at <http://www.training.mihealth.org>.
3. Michigan should require each Medicaid Managed Care Organization to make a minimum 10% improvement in testing each year until it reaches the federally mandated level of 100%.
4. Local public health agencies should receive state support to develop the financial and human capacity to address local cases of EBLL at 10 mcg/dL or greater, and be held to a uniform standard for intervening with nursing visits and environmental health assessments for every child with an EBLL of 10 mcg/dL or greater.
5. Local public health agencies should be required to refer every child below the age of three years with an EBLL of 10 mcg/dL or above to *EarlyOn*.
6. Health insurance programs should be required to cover the cost of a home nursing assessment in a child with an EBLL of 10 mcg/dL or greater.

### *Priority 3: Develop Adequate and Sustainable Funds to Complete This Work*

#### Overview

Michigan is in a position to eliminate childhood lead poisoning, but to do so requires resources. The cost-benefit of preventing lead poisoning is clear – at least \$45,000 is spent on programs and services to each lead poisoned child.<sup>2</sup> In addition, blood lead in a child under age 4 is associated with a life-long reduction in IQ. A child with a blood lead level of 10 mcg/dL will likely suffer a reduction in IQ of 2.5 points, which will equate to a 6 percent reduction in his life-long earning potential.<sup>3</sup> As such, **resources**

***The cost benefit is clear: resources spent to prevent lead poisoning are an investment in each child's life-long health, quality of life, learning, and earning potential.***

**spent to prevent lead poisoning should be considered and investment.**

In its March 2007 annual report, the Commission made recommendations for new and sustainable funding streams for lead poisoning prevention and control. Given the state's dire budget constraints and the FY 2007 and FY 2008 cuts to lead poisoning efforts, these new revenue streams are absolutely essential.

Ideal State

To assure significant continued progress in eliminating lead poisoning in Michigan, the Commission estimates funding needs of \$7,436,790 in FY 2008 and \$7,876,790 in FY 2009. See Appendix A for detail on estimated revenue and expense.

In addition, the Commission anticipates a cost of \$50,000 to support its efforts recommended above, develop a comprehensive, aggressive, and practical plan for eliminating lead from the state's housing stock in which young children live or receive daycare services, and to continue to improve testing levels in high-risk children.

Current State

The FY 2007 funds budgeted for lead poisoning were \$2.4 million less than the cost to implement all of the Task Force's priority recommendations.

About \$250,000 of the state's \$1,000,000 allocation for lead poisoning from the Healthy Michigan Fund has been eliminated from the FY 2007 budget.

Potential Worsening State

It is possible that all the Healthy Michigan Funds will be lost in FY 2008, leaving a \$1 million deficit in the cost to just maintain current efforts.

Other reductions in matching funds from Medicaid and HUD will be associated with reduced funding, and may compromise HUD grants currently in place for lead paint abatement in homes during the next 3 years.

Recommendations

1. In order to maintain momentum in preventing and controlling lead poisoning that has been achieved in recent years, and to continue to qualify for HUD abatement funds awarded to the state, Michigan must sustain the current level of funding for lead poisoning
2. Funding for lead poisoning prevention and control should be stable and secure until the problem in Michigan is resolved. To the fullest extent possible, funding should reside in a public health trust, where it can grow interest and be distributed according to community need.

3. Michigan should assess a \$.25 fee upon manufacturer of paint for each gallon of paint sold in the state. Estimated revenue: \$4,700,000 per year. See Appendix B for a detailed analysis of this proposal.
4. Michigan should assess a fee upon lending institutions on each sale of a mortgage in the secondary mortgage market for a Michigan residence. With an extremely modest fee of just \$.35 per mortgage sale, annual revenue for lead hazard remediation in Michigan housing stock would be \$1,097,000. See Appendix C for a detailed analysis of this proposal.
5. Michigan should aggressively pursue the earmarking of settlement funds for lead poisoning prevention and control, in cooperation with a public health trust. Over a ten year period, the California Trust collected \$200 million in revenue, and allocated large sums for lead hazard work.

#### *Priority 4: Continue to Monitor Progress in All Other Lead Poisoning Prevention and Control Activities*

##### Overview

The Commission has conceived a wide variety of recommendations to close gaps and enhance the effectiveness of many activities and initiatives to prevent and control lead poisoning. Governor Granholm, MDCH, MDEQ, MDHS, and MSHDA have strongly and actively supported the recommendations. Recommendations have fallen under the following categories:

1. Testing Children at High-risk for Lead Poisoning;
2. Funding for Lead Poisoning Prevention and Control;
3. Education and Enforcement of Safe Lead Hazard Abatement Practices Directed to Parents, Rental Property Owners, and Residential Contractors;
4. Maximizing Property Owner Inducements to Identify and Remediate Lead Hazards; and
5. Enhancing the Effectiveness of Government Programs Addressing Lead Poisoning.

##### Ideal State

The Commission continues to oversee and monitor progress through 2010, at which time all of the recommendations are fully implemented, resulting in the elimination of childhood lead poisoning in Michigan.

##### Current State

Excellent progress has been made in many areas. Continued work is needed, especially to:

1. Implement the long-term recommendations in this report
2. Ensure that providers make optimal use of the web-based course on testing children at high-risk for lead poisoning
3. Engage and equip local public health agencies to uniformly address children with elevated blood lead levels
4. Continue to bridge gaps related to *EarlyOn*, to assure that all children below the age of three years with elevated blood lead levels receive appropriate assessment for learning difficulties
5. Enhance local capacity to prosecute rental property owners who knowingly rent housing with lead hazards to families with young children
6. Enhance financial incentives for property owners to remediate lead hazards
7. Continue to maximize coordination among government programs addressing lead poisoning.

**The recommended new, sustainable revenue streams for lead poisoning prevention and control are absolutely essential to eliminating childhood lead poisoning in Michigan.**

#### Potentially Worsening State

The long-term recommendations are not implemented, resulting in the continued exposure of thousands of children to lead paint hazards, and subsequently many new cases of lead poisoning.

The many efforts currently underway lose momentum and do not produce the optimal effect on lead poisoning prevention or control.

#### Recommendations

1. The Childhood Lead Poisoning Prevention and Control Commission should continue through 2010 at a minimum, to assure that its recommendations are fully implemented with optimal effect.
2. The Commission should be provided with operating funds to support its technical assistance and staffing requirements.

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<sup>1</sup> Using HUD estimates adjusted for the midwest, *Get the Lead Out* calculated there are 1,316,756 occupied housing units in Michigan that contain lead paint hazards.

<sup>2</sup> Marjorie Sarbaugh-Thompson, Lyke thompson, Tsvia Finman, Assessing the Costs and Benefits of Remediating lead Poisoning in Urban Areas. Wayne State University, unpublished.

<sup>3</sup> Chenoweth, David PhD, The Economic Cost of Substandard Housing Conditions Among North Carolina Children. North Carolina Housing Coalition, May 2007.

## SECTION THREE: APPENDICES

## Appendix A

### Funding Estimates for Lead Poisoning Prevention and Control, FY 2008 and FY 2009 REVENUE AND EXPENSE ESTIMATES FOR LEAD POISONING PREVENTION AND CONTROL ACTIVITIES

*HUD and EPA grants and activities funded are not included in this analysis as they will be stable for the period  
 Revenue represents sources of revenue expected in FY 2008 and 2009, and does NOT include revenue from the Healthy Michigan Fund*

FY 2008		FY 2009	
REVENUE		FUNDING	
CDC		CDC	\$913,608
MCH Block Grant (\$393,000 to Detroit)	\$937,034	MCH Block Grant	\$490,000
GF with match	\$100,000	GF with match	\$100,000
<b>Total</b>	<b>\$1,527,034</b>	<b>Total</b>	<b>\$1,503,608</b>
<b>EXPENSE</b>	<b>Maintenance</b>	<b>EXPENSE</b>	<b>Optimal</b>
Childhood Lead Prevention Prog. Operations*	\$937,034	Childhood Lead Prevention Prog. Operations*	\$1,000,000
Public Awareness	\$180,000	Public Awareness	\$300,000
Case Management and Coalitions	\$525,000	Case Management and Coalitions	\$595,000
Abatement	\$200,000	Abatement	\$2,000,000
Ombudsman	\$120,000	Ombudsman	\$360,000
WIC testing compliance	\$0	WIC testing compliance	
Blood lead testing & analysis	\$0	Blood lead testing & analysis	\$608,000
Public health nursing visits	\$0	Public health nursing visits	\$393,030
Env. health investigations	\$0	Env. health investigations	\$839,000
Env. health lab analysis	\$0	Env. health lab analysis	\$971,760
Lead Housing Registry Maintenance		Lead Housing Registry Maintenance	\$50,000
LPH funds @ \$70,000 X 5 additional communities	\$0	LPH funds @ \$70,000 X 5 additional communities	\$350,000
Pool for unfunded EH investigation and analysis subsequent to DHS requirements for foster homes (\$480 X 500 homes)		Pool for unfunded EH investigation and analysis subsequent to DHS requirements for foster homes (\$480 X 750 homes)	
Training private sector lead inspectors	\$30,000	Training private sector lead inspectors	\$50,000
<b>Total</b>	<b>\$1,992,034</b>	<b>Total</b>	<b>\$7,876,790</b>
<b>Deficit</b>	<b>\$465,000</b>	<b>Deficit</b>	<b>\$6,373,182</b>

#### PROPOSED NEW REVENUE

\$ .35 tax on mortgage sale	\$1,097,000
\$ .25 tax on paint sale	\$4,700,000
<b>TOTAL</b>	<b>\$5,797,000</b>

\* includes staff, fringes, travel, supplies, 2 agencies for CM, curriculum development, primary px, operations

## **Appendix B**

### **Recommended Revenue Source: Fee on Household Paint Sold in Michigan**

#### **Objectives**

- Create new, sustainable revenue for the elimination of lead poisoning in Michigan;
- Assess fee on manufacturers and wholesalers of paint, as the historical the source of most childhood lead poisoning; and
- Avoid negative effects on Michigan business and consumers.

#### **Recommendations**

Michigan should assess a \$.25 fee upon manufacturers of paint for each gallon of paint sold in the state.

#### **Mechanism**

The Commission recommends that Michigan use a mechanism successful in Maine, whereby each paint manufacturer and/or wholesaler that sells household paint (“architectural coatings”) registers with the state and makes an annual payment based on either recorded sales volume or estimated sales volume. Exemptions may be considered for low-volume sales.

The Commission further recommends that the payments be placed in the public health trust, to generate interest and be distributed for lead poisoning prevention and control.

#### **Revenue Estimate**

At least \$4,700,000 per year according to the following analysis.



## REVENUE ESTIMATE FROM TAX ON SALE OF PAINT

**DATA SOURCE: US CENSUS BUREAU Current Industrial Reports**

**Paints and Allied Products: 2005**

**MA325F(05)-1 Issued June 2006**

### STEP ONE: Extrapolate Estimated % of US Paint Sales That Are Domestic Sales

Data from Table 4					
Total Sales of Selected Paints, Varnish, and Lacquer 2005					
Gallons Sold 2005	Value Sold 2005	Average \$/Gallon 2005	Apparent US Consumption 2005	Estimated US Consumption in Gallons 2005	% US Consumption 2005
1,351,700,000	\$18,537,700,000	\$13.71	\$17,225,600,000	1,256,026,558	92.9%
		value/gallons sold	domestic sales = total sales minus exports plus imports	apparent consumption in dollars/\$13.71 per gallon	total value/apparent consumption

### STEP TWO: Estimate # Gallons of Architectural Coating Sold in Michigan in 2005

Data from Table 1			
Gallons Sold 2005			
Total All Categories	Architectural Coating	Architectural Coatings Sold Domestically	Architectural Coating Sold in MI
1,529,800,000	794,500,000	738,090,500	25,095,077
		92.9%	MI = 3.4% US pop per US Census 2000

### STEP THREE: Estimate Revenue from Tax on Gallons of Architectural Coating Sold in MI 2005

<b>ESTIMATED ANNUAL REVENUE FROM PAINT TAX:</b>	
<b>\$4,700,000</b>	
Gallons Architectural Coatings Sold in MI 2005	25,095,077
Tax @ \$.25 per gallon sold	\$6,273,769
<b>75% of tax collected</b>	<b>\$4,705,327</b>

## Appendix C

### Recommended Revenue Source: Fee on Secondary Sale of Mortgages on Michigan Residences

#### **Objectives**

- Create new, sustainable revenue for the elimination of lead poisoning in Michigan; and
- Avoid negative effects on Michigan business and consumers.

#### **Rationale**

Removing lead hazards from pre-1978 housing stock in Michigan is the only way to completely eliminate childhood lead poisoning. There are estimated to be more than 1.3 million housing units in Michigan that contain lead hazards. New, sustainable sources of funding to clear Michigan housing stock of lead hazards are challenging to identify.

A potential party to engage in this effort is the mortgage lender that sells mortgages of Michigan residences in the secondary mortgage market. This lender profits from Michigan residences in transactions exclusive of the homeowner, and without providing any improvements to the state's housing stock.

#### **Recommendation**

Michigan should assess a fee upon lending institutions on each sale of a mortgage on a Michigan residence in the secondary mortgage market. The fee would be used for lead hazard remediation across Michigan's housing stock.

#### **Mechanism**

The Commission recommends that Michigan use a mechanism whereby each mortgage lender that sells mortgages for Michigan residences in the secondary market must register with the state and make an annual payment based on the number of Michigan mortgages sold by that lender. Exemptions may be considered for low-volume sales.

The Commission further recommends that the payments be placed in the public health trust, to generate interest and be distributed for lead poisoning prevention and control.

#### **Revenue Estimate**

A very preliminary estimate is that a fee of just \$.35 per mortgage would generate annual revenue of \$1,097,000. The following calculations were used.

July 2005 # Housing units in Michigan	4,478,507
Nat'l average % housing units carrying mortgage	70%
Estimated # MI housing units carrying mortgage	3,134,955
Estimated annual MI secondary market mortgage sale	3,134,955
Estimated revenue @ \$.35 per sale	\$1,097,234
Estimated revenue @ \$1.00 per sale	\$3,134,955