

# Eliminating Childhood Lead Poisoning by 2010: *What Progress has Wisconsin Made?*

Wisconsin Childhood Lead Poisoning Prevention Program  
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# Part 1: Status of Lead Poisoning in Wisconsin

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## Early Effects of Childhood Lead Exposure

- Learning Disabilities
- Lowered I.Q.
- Behavioral Problems
- Hyperactivity
- Attention Deficit Disorder
- Speech Delay
- Hearing Loss
- Slowed or Reduced Growth

•Childhood lead poisoning continues to be a serious problem that threatens the health and long-term well being of children. Studies on the effects of lead poisoning on children have repeatedly found that: [read slide]

•Lead interferes with the normal development of a child's brain and can result in lower IQ, learning disabilities, and behavior problems like aggression and hyperactivity.

## Childhood Lead Poisoning Predicts Problems as Children Grow

### ■ Social Factors

- Disciplinary problems in school
- Higher rates of high school dropout
- Teen pregnancy
- Juvenile delinquency
- Violent crime

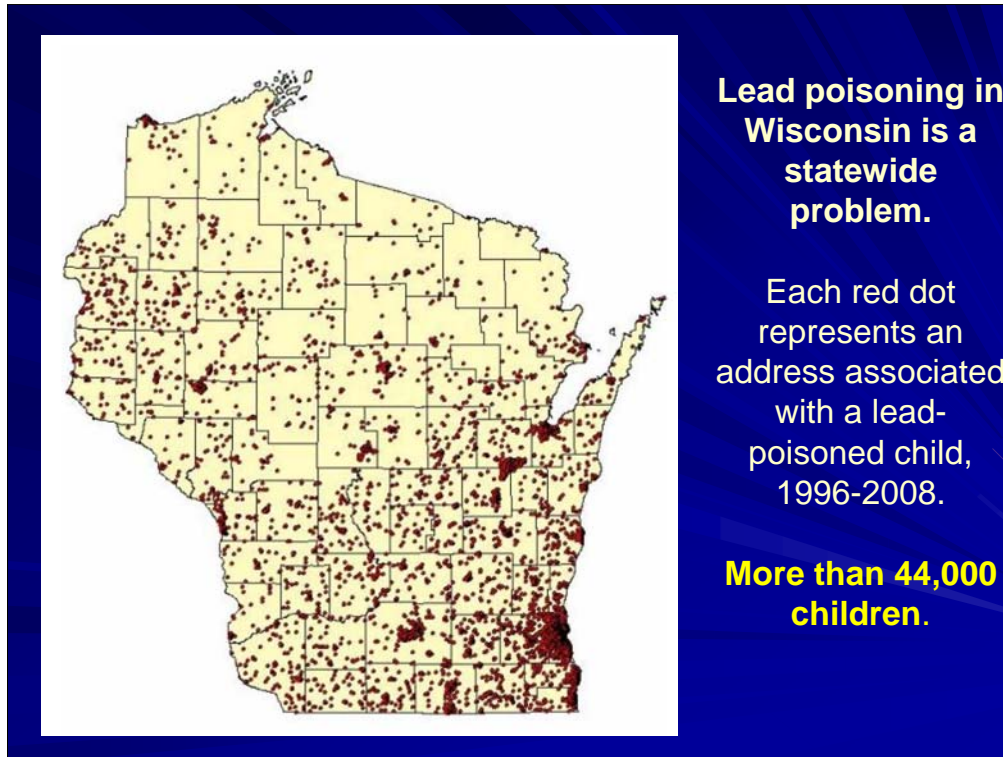
### ■ Health Factors

- Heart disease and stroke
- Adult kidney disease
- Diabetes
- Cognitive deficits such as memory loss and Alzheimer's disease

• Childhood lead poisoning is a powerful predictor of problems as children grow.

• Lead poisoning is associated with a number of adverse social and health outcomes, throughout the person's life, including those listed here.

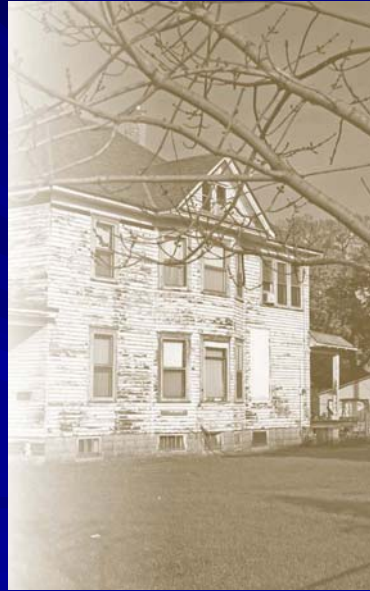
• As a result, lead poisoning during childhood can have long-lasting negative impacts not only for the child, but also for society as a whole.



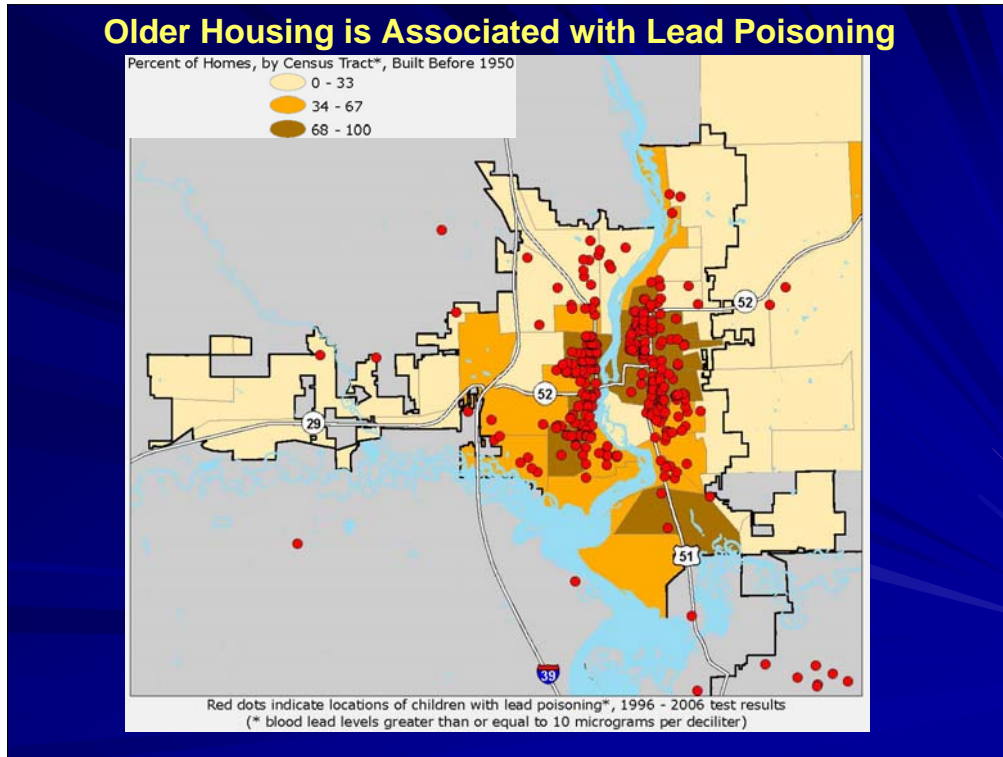
- Wisconsin ranks ninth in the nation for the number of children identified with lead poisoning.
- Since 1996, more than 44,000 children have been found to be lead poisoned.
- Lead poisoning is a statewide problem – children in each of Wisconsin’s 72 counties have been found to be lead poisoned.

## Older Housing is Associated with Lead Poisoning

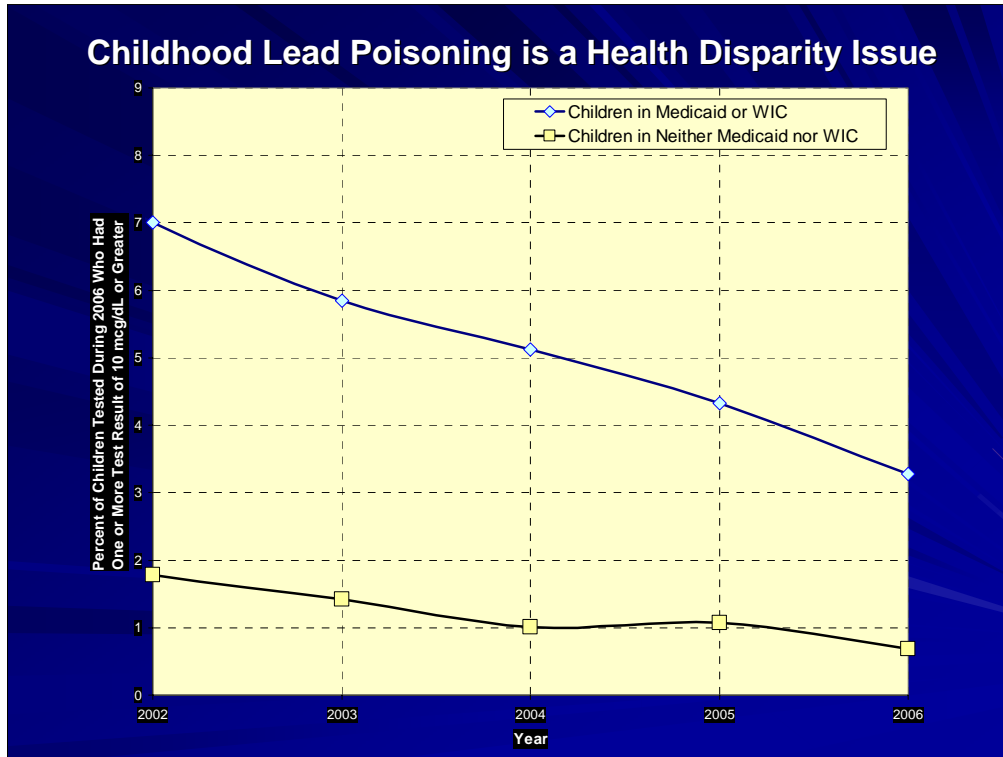
- Wisconsin has an abundance of old housing dating back to the mid-1800's
- Lead poisoning often caused by chipping and peeling lead-based paint in older homes
- More than 90% of lead poisoned children live in pre-1950 housing



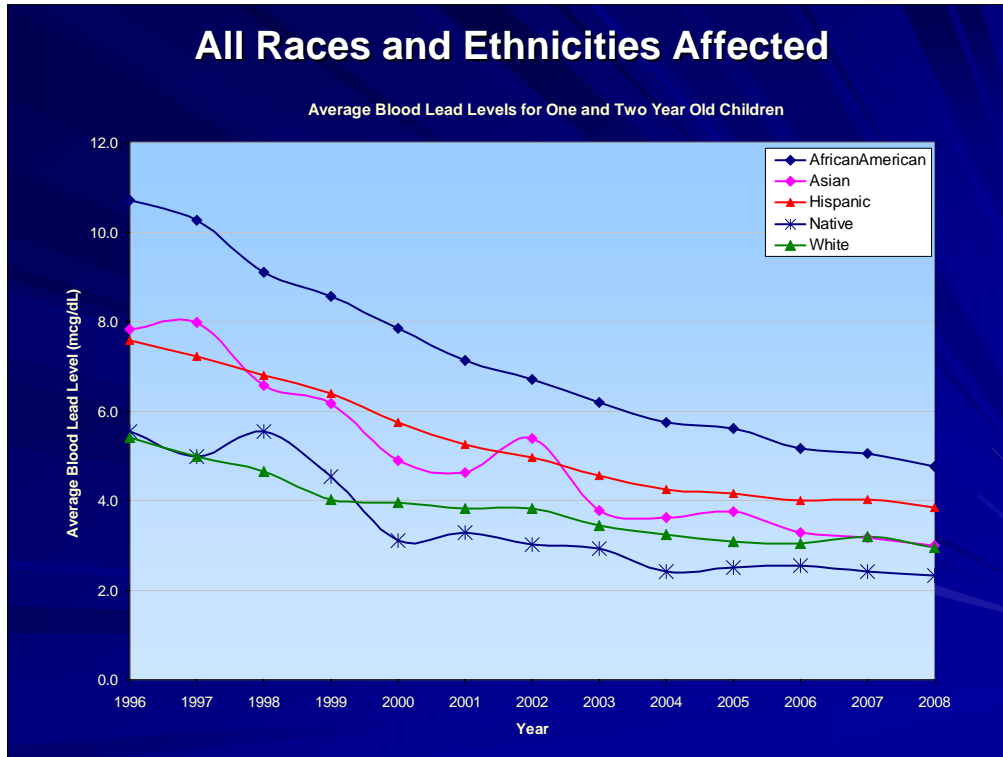
- Our high national ranking is due to the fact that Wisconsin has an abundance of old neighborhoods with housing that dates back to the mid-1800's.
- Lead poisoning is most often caused by dust created by chipping and peeling lead-based paint in these older homes, which children then ingest through normal hand-to-mouth behavior.
- More than 90% of children identified with lead poisoning in WI live in housing built before 1950.



- This is a map of the City of Wausau. The red dots indicate the addresses of children found to be lead poisoned. The brown shading represents census tracts with the highest percentage of housing built before 1950.
- As you can see, lead poisoning is clustered in neighborhoods with more old housing.



- We see obvious health disparities with childhood lead poisoning.
- Children from low income families in Wisconsin are at greater risk for lead poisoning, largely because these families have fewer options for selecting housing.
- 86% of our lead poisoned children are from low income families who are enrolled in either the Medicaid and/or WIC program.
- The prevalence rate of lead poisoning among these children continues to be more than 3 times higher than among children who were not enrolled in either of these programs.



- We also see disparities with regards to race and ethnicity.
- While children of all racial and ethnic groups are affected, minority populations share a greater burden of the lead poisoning problem.
- Lead poisoning rates are highest among African American children, followed by Hispanic and Asian children.

## Extent of the Problem

- Nearly 2/3 of our highest risk children are not tested at the required ages
- There are ~400,000 houses in WI with lead paint hazards
- Through a combination of federal and private funding we're producing about 1,500 lead safe homes per year
- At this rate it will take many years to make all of our housing lead-safe

To summarize in brief the extent of the problem: read slide  
... about 266 years

So we have enormous challenges ahead of us and need a multitude of people and strategies to achieve our goal to eliminate lead poisoning.

I described the 3 major risk factors we've identified:

- Old housing
- Poverty
- Race/ethnicity

Through statistical analyses, we've determined that among these 3 factors, old housing is the strongest predictor of risk.

Therefore, as we began to develop our 2010 elimination strategies, we knew we needed to place a major emphasis on housing-based approaches.

## Wisconsin's 2010 Lead Poisoning Elimination Plan

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- Plan developed in 2004
- Implementation and Oversight Committee – broad-based advisory committee that meets 3 times/year
- 4 key focus areas and subcommittees
  - Targeted Education
  - Correcting Lead Hazards in Housing
  - Testing High Risk Populations
  - Funding and Resources

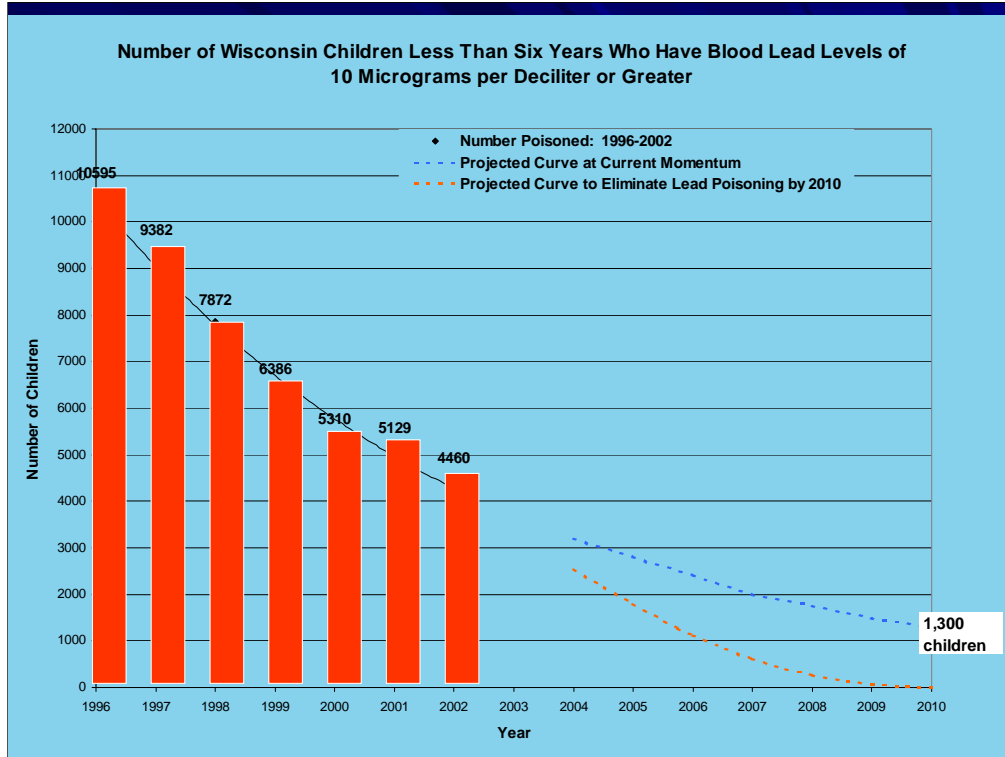
We developed our 2010 Lead Poisoning Elimination Plan in 2004 with the help of a broad based group of stakeholders, including many traditional and non-traditional partners. Goal = No new lead poisoned children by 2010.

As we moved into the implementation phase of our plan, we formed an advisory committee called the Implementation and Oversight Committee or IOC for short.

The IOC meets 3 times per year and it not only helps us evaluate our progress over time but also provides us very important feedback towards establishing priorities for the subcommittees to work on.

There are 4 implementation sub-committees, each being assigned to work on one of the focus areas of the plan. This is really the level where the majority of the work happens. The subcommittees meet every 6-8 weeks and report on their activities and progress at each IOC meeting.

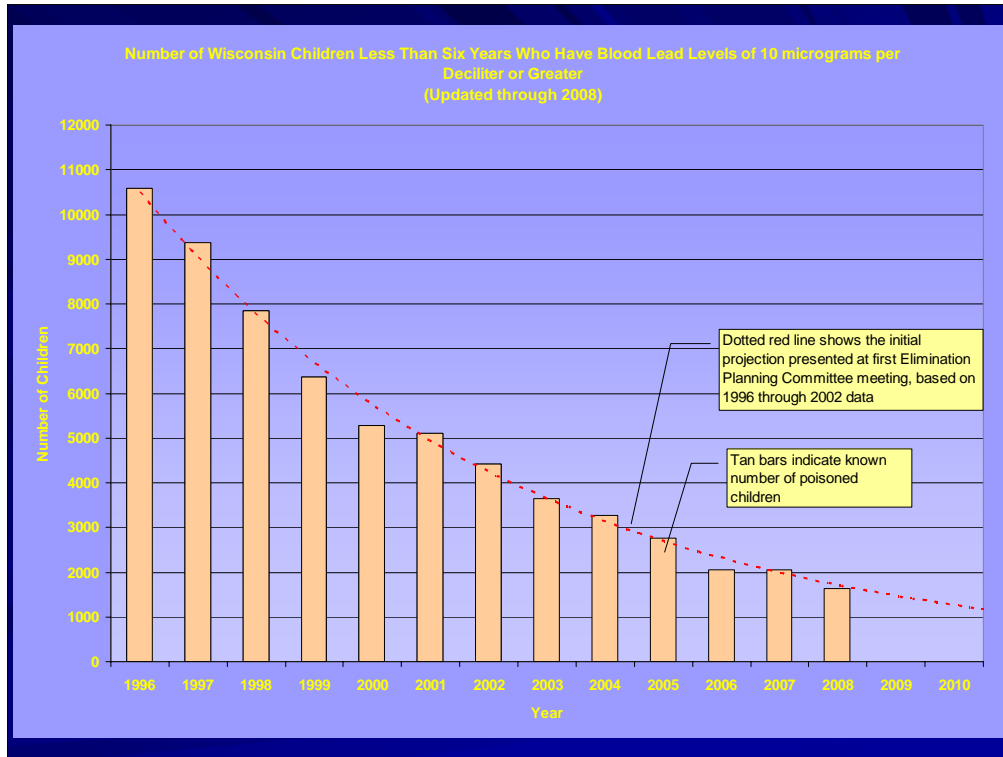
Invite everyone to attend an IOC meeting and/or join a subcommittee. We can use your help and expertise!



At the beginning of our elimination planning process we tried to project where we'd be in terms of lead poisoning in 2010, knowing that we had made tremendous progress over the years in reducing lead poisoning, assuming no new strategies were implemented and that we'd maintain our current testing rates and our current level of momentum in terms of reducing lead poisoning

The blue dotted line on this graph represents that projection. At that time (January 2004) we projected that in 2010 we would still be identifying 1,300 children with lead poisoning.

The red line represents the rate of decline needed if we were to eliminate lead poisoning by 2010. You can see it's a faster rate of decline than the previous line. We decided that as we began to implement new elimination strategies, we would be able to use this projection (red line) to evaluate our progress in future years.



Here's that same graph, now extended with 6 more years of lead poisoning data added to it.

We're continuing to track on the very same slope we were on several years ago when we did our first 2010 projection. At our current rate we'll still have approximately 1,300 children with lead poisoning. That's unacceptable.

So this is our challenge – How do we accelerate our progress to make this slope go down to zero more quickly? And how do we measure our successes along the way?

For instance, our current testing efforts fall far short of reaching all of the high risk children. If we continue to increase testing as we've done in the past couple years, the number of children identified with lead poisoning may increase, at least in the short-term, yet this indicates progress in our efforts to target high risk children.

# **Wisconsin Childhood Lead Poisoning Prevention Program**

**Our phone number: 608/266-5817**

**Our website: *dhs.wi.gov/lead***

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# Questions...

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