

Putting Lead Poisoning on the Community Agenda
Lead Poisoning – It's Your Problem Too

Overall, about 20% of children tested in Cleveland are lead-poisoned – one child in five. In some neighborhoods the rate is as high as one child in three. It is no exaggeration to say lead poisoning is epidemic.

Lead poisoning is a personal and family tragedy. It robs children of their potential – they enter the race of life weighed down by lead:

Johnny can't read, sit still, or stop hitting his playmates.
It may be lead poisoning.

Johnny drops out of school, can't get a job, uses drugs, sells drugs.
It may be lead poisoning.

Lead poisoning makes it tough for Johnny and his family. When there are lots of Johnnys, it makes it tough for the entire community.

Worried about children's poor school performance – low proficiency scores and high drop-out rates?
It may be lead poisoning.

Worried about poor workforce preparation – inadequate work skills and low productivity?
It may be lead poisoning.

Lead poisoning is not just a problem for the poisoned child and their family. Lead poisoning is a problem that impacts the entire community. It's your problem too.

Part of the problem and part of the solution:

Of course, lead poisoning is not the only cause, or even the major cause of school failure, an unskilled workforce and crime.

But there is strong, accumulating scientific research evidence that it plays a significant role in these problems.

And lead poisoning is a cause that we can do something about – we know how to prevent lead poisoning by reducing lead hazards.

What We Know About Lead Poisoning and Lead Hazards

We know about the childhood lead poisoning rate:

- The rate in Cleveland is about 20%; in some neighborhoods it is up to 38%
- The rate in East Cleveland is 28%; in Cleveland Heights it is 11%
- The rate has declined dramatically over the past several years
- The rate is likely to level-off near the current rate, without further action

We know lead poisoning makes it –

- Hard to learn
- Hard to pay attention
- Hard to do well in school
- Hard to stay out of trouble

We know lead poisoning is linked to –

- Lowered IQ
- Poor school performance
- High drop-out rates
- Delinquency, crime and violence

We know for lead poisoning –

- There is no medical treatment to reverse the brain damage
- There is brain damage at blood lead levels even lower than the current definition of lead poisoning
- Reduction of lead hazards in a child's environment can prevent lead poisoning

We know lead hazard reduction works –

- It can be done safely
- It can last
- It can be done at moderate cost, especially if done preventively – during renovation, repair, repainting and regular maintenance

Childhood Lead Poisoning in Cleveland

Lead's Damage

- Lead poisoning can damage a young child's developing brain, causing learning and behavioral disabilities.
- Lead poisoning is associated with poor school performance, lowered employability and delinquent behavior.
- The Centers for Disease Control has established 10 micrograms of lead per deciliter of blood (10 ug/dl) as a level of concern. There is evidence of lead's damage to intellectual functioning at even lower blood-lead levels.
- Children between the ages of six months and three years are at the greatest risk. They have a high degree of exposure to lead in household dust because of normal hand-to-mouth activity. Their developing nervous system is at a heightened vulnerability to lead toxicity.

Rate of Lead Poisoning – Dramatic Declines/Continuing Problem

- Nationally and locally, lead poisoning rates have fallen dramatically over the past 20 years, (due primarily to the removal of lead from gasoline) but remain high in many communities.
- In Cleveland, the lead poisoning rate has been dropping also, but is still disturbingly high – about one in five children tested is found to be poisoned (from 38% in 1994 to 20% in 2000, based on testing about 18,000-20,000 children per year).
- The decline in poisoning rates is not likely to continue at the same pace. Most of the major lead control actions – elimination from gasoline, paint, plumbing and food cans and reductions in industrial releases – have already had their effect.

Testing Children for Lead Poisoning

- There are generally no specific signs or symptoms of lead poisoning in young children.
- A blood test is required to identify children with elevated lead levels, so their exposure can be reduced and so they can be treated, although the damage may be irreversible.
- Testing is also necessary to identify high risk areas for public health interventions.
- All children on Medicaid are required to be tested for lead at ages 1 and 2, yet fewer than 50% receive a blood test for lead.

How Children Are Poisoned

- Children are usually poisoned by exposure to lead in peeling paint, dust and soil.
- Children swallow the lead that gets on their hands and toys in normal mouthing behavior.
- Lead paint was used in most houses and apartments built prior to the 1950s and in some until 1973. Deteriorated or improperly removed lead paint contaminates dust and soil.
- Lead used in gasoline until the 1980s still contaminates soil, which children play in and which gets tracked and blown into the house.

Interventions for Lead-Poisoned Children

- Reduce exposure to lead hazards – move to lead-safe housing or remediate lead hazards, educate landlords and parents on exposure reduction.
- At high levels, medical treatment may be needed to try to remove some of the lead from the body.
- Improve nutrition to reduce lead absorption.
- Assess and treat cognitive and behavioral deficits.

Prevention of Childhood Lead Poisoning – Reducing Lead Hazards in Low-Income Housing

- Screening identifies children who already have an elevated blood lead level and may be irreversibly damaged, so preventing exposure is critical.
- Focus on pregnant women and newborns living in the highest risk housing in the highest risk neighborhoods.
- Provide access to lead-safe housing or lead hazard remediation.
- Provide education and assistance for lead hazard reduction in the home.
- New HUD rules require lead hazard reduction in housing that receives federal assistance.
- New Ohio law creates a standard-of-care for lead-safe housing, focuses on pre-1950 rental units, and promotes lead-safe work practices in home repair, renovation and maintenance.

City Childhood Lead Poisoning Prevention Program

- Promotes blood testing
- Provides case management and parent education for poisoned children.
- Inspects homes of lead poisoned children for lead hazards and orders repairs.
- Operates a grant program for lead hazard reduction with funds from HUD.
- Provides community education on lead poisoning.