

# CDC Childhood Lead Poisoning Prevention Program

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# Health Effects of Lead

## Prevent Childhood Lead Poisoning

Exposure to lead can seriously harm a child's health.



Damage to the brain and nervous system



Slowed growth and development



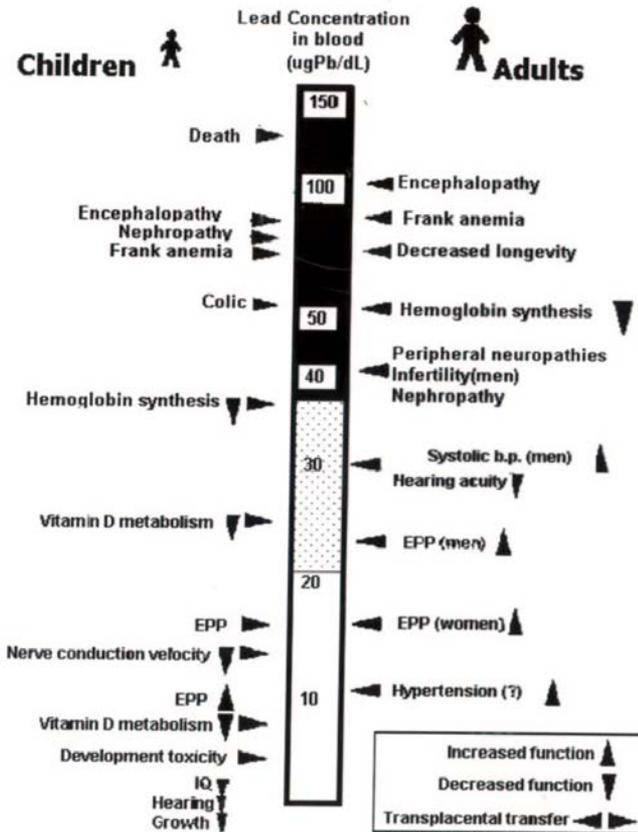
Learning and behavior problems



Hearing and speech problems

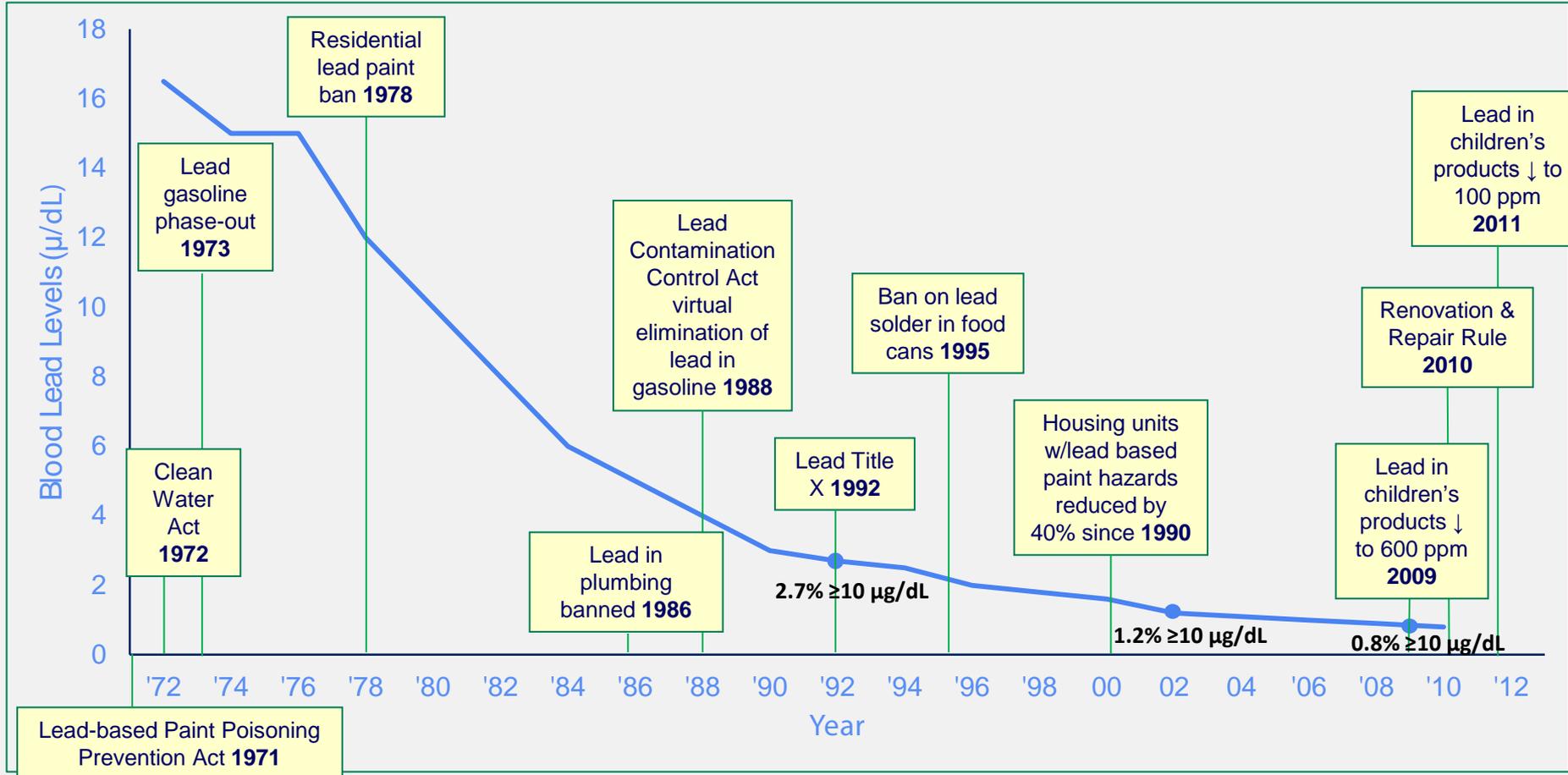
This can cause:

- Lower IQ
- Decreased ability to pay attention
- Underperformance at school



Effects of inorganic lead on children and adults - lowest observable adverse health effects  
 Source: ATSDR, 1992

# Impact of Lead Poisoning Prevention on Reducing Children's Blood Lead Levels



# Prevent Childhood Lead Poisoning

## The Impact

**535,000**

U. S. children ages 1 to 5 years have blood lead levels high enough to damage their health.



**24 million**

homes in the U.S. contain deteriorated lead-based paint and elevated levels of lead-contaminated house dust.



**4 million** of these are home to young children.

It can cost

**\$5,600**



# Sources of Lead

- **Children are exposed to lead from different sources**
  - Such as paint, gasoline, solder, and consumer products
- **Children are exposed through different pathways**
  - Such as air, food, water, dust, and soil.
- **Traditionally, lead-based paint is the most widespread source of lead exposure for young children.**
- **Water could be an issue.**
- **We want to eliminate lead from all sources.**



# Childhood Lead Poisoning Prevention: CDC's Comprehensive Program

- **To develop programs and policies to prevent childhood lead poisoning and other housing-related health hazards**
- **To educate the public and health care providers about childhood lead poisoning and other housing-related health hazards**
- **To provide funding to state and local health departments to determine the extent of childhood lead poisoning by**
  - Screening children for elevated blood lead levels
  - Helping ensure lead-poisoned infants and children receive medical and environmental follow-up
  - Developing neighborhood-based efforts to prevent childhood lead poisoning



# CDC Childhood Lead Poisoning Prevention Milestones

## 1980s–2010: Full funding

- Comprehensive program
- Universal screening
- Case management

## 2012: Decreased funding

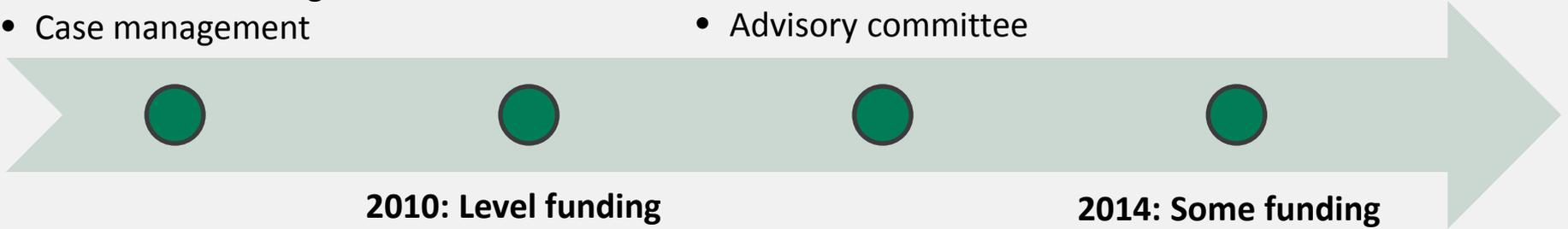
- Loss of extramural program
- Advisory committee

## 2010: Level funding

- Targeted screening

## 2014: Some funding restored

- Surveillance only
- Community-based strategies to target high-risk children
- Partnerships



# Where We Are Now: Some Funding Restored for Childhood Lead Poisoning Prevention Surveillance

- **29 states, 5 cities, and D.C. funded (2014–2016)**
  - Build and strengthen lead surveillance systems to identify neighborhoods and populations of children disproportionately affected by high blood lead levels
  - Educate parents and clinical providers in target areas about importance of blood lead testing for children under 6 years of age
  - Collaborate with institutional and community-based partners to initiate, promote, and evaluate childhood lead poisoning prevention activities
- **Each funded jurisdiction works to eliminate childhood lead poisoning by creatively targeting resources and implementing effective program initiatives**



# Strategic Partnerships

- **Local health**
- **Local housing**
- **Advocates/foundations**
- **HUD**
- **EPA**
- **CDC**
- **DOE**
- **Health plans**
- **Legislators**
- **Academics**
- **Researchers**
- **Pediatricians**



# Cross-Sector Collaboration

## ■ Partners

- Department of Housing and Urban Development
- Environmental Protection Agency
- American Water Works Association
- State and local water utilities
- State and local departments of environmental quality (or other appropriate department)

## ■ Issues

- Housing
- Health-based changes to Lead and Copper Rule
- Health department notifications
- Changes in water source or water chemistry
- Exceedances of 15-ppb standard

# Secondary and Tertiary Prevention

- **Identify and help implement policies, systems, and environmental changes to soften lasting effects of lead exposure in children**
  - Case management
  - Social services
  - Education intervention



**The last part is the  
hardest part...**



For more information, contact NCEH  
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