



# Preventing Lead Exposure in US Children:

## A BLUEPRINT FOR ACTION



National Center for  
Healthy Housing

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## ABOUT THIS DOCUMENT

The National Center for Healthy Housing (NCHH) used the opportunity of its 20th anniversary meeting in 2013 to convene leading experts and advocates in public health and affordable housing for a strategic dialogue to develop the next generation of lead poisoning prevention strategies. Meeting participants recommended actions to include in strategic agenda for policy, education, capacity building, and research. This blueprint, which summarizes many recommendations, is intended to provide a cohesive agenda for protecting children from lead poisoning.

NCHH would like to thank all who participated in the experts-advocates meeting: *Roberta Aaronson, John Belt, Mary Jean Brown, Pierre Erville, Kim Foreman, Warren Friedman, Marcheta Gillam, Perry Gottesfeld, Lauren Graham, Tala Henry, Dave Jacobs, Sandra Jibrell, Linda Kite, Katrina Korfmacher, Ronnie Levin, Jane Malone, Colleen McCauley, Deb Nagin, Ed Norman, Ruth Ann Norton, Jack Paster, Doris Paster, Mike Piepsny, Elyse Pivnick, Stephanie Pollack, Wes Priem, Dave Reynolds, Don Ryan, Jay Schneider, Peter Simon, Ellen Tohn, Howard Varner, Tom Vernon, Lee Wasserman, Anita Weinberg, Michael Weitzman, and Jonathan Wilson.* Special thanks for facilitation to *Stephanie Pollack, Associate Director of Research, Kitty and Michael Dukakis Center for Urban and Regional Policy; Professor of Practice, School of Public Policy and Urban Affairs, Northeastern University.*

## THE LANDSCAPE

### Housing

Despite the progress over the 20 years since Title X was enacted, 37.1 million homes (35% of 106 million total housing units) contain some lead-based paint and 23.2 million homes (22%) pose lead hazards, according to the American Healthy Housing Survey. Although a child under age six resides in nearly one in every six homes with lead-based paint hazards (3.6 million), the vast majority of homes with leaded paint are not subject to requirements or incentives to prevent and control lead hazards.

### Health

At one level, the progress made on childhood lead poisoning over the past quarter century is an environmental health success story: Taking lead out of gasoline, canned food, new paint, printing ink, and drinking water supplies and preventing and controlling lead-based paint hazards in our housing significantly reduced both average lead levels in US children and the number of children with blood lead elevations at all levels. At the same time, the science has progressed steadily to confirm the toxicity of lead at very low levels in young children. Federal agencies now agree there is no safe level of lead exposure for children, and in 2012 CDC changed its 1992 “level of concern” of 10 µg/dL in favor of a “reference level” of 5 µg/dL. Based on national surveillance data, an estimated 535,000 children have blood leads at or above this level.

### Education

Both neurological and epidemiological research studies provide conclusive evidence that even at low dose, lead exposure adversely affects young children’s developing brains, intelligence, learning, and behavior. Even after adjusting for socioeconomic status, language spoken, and other demographic factors, there is a clear dose-response relationship between early-life lead exposure and both kindergarten reading readiness and other measures of school success. The disproportionate risk facing children from low-income families in neighborhoods with older, poorly maintained housing especially burdens urban school systems with many students whose learning is impaired.



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**Early lead  
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# HOUSING

## Outcomes:

- The number of homes with lead based paint hazards is reduced by 50%.
- No home that has poisoned a child poisons again.

## OBJECTIVES FOR PRE-1978 HOUSING:

### Congress

- Require testing for lead paint at sale of every residential property.
- Offer a federal income tax credit for owners of properties for lead hazard control work.
- Pass Amendments to Title X of the 1992 Housing and Community Development Act.

### Federal Agencies

- Require that weatherization programs perform a visual assessment, test lead dust where peeling paint is found and post-work. *US DOE*
- Prioritize energy upgrades that also reduce lead hazards (e.g., replace windows that have lead-based paint). *US DOE*
- Require visual assessment, paint repair, and clearance testing for FHA-insured single family homes. *US HUD*
- Require documentation of lead safe status as a condition for HUD-issued refinancing of multi-family properties. *US HUD*
- Publish health protective lead dust standards. *US EPA*

### State and Local Government

- Prohibit lead-based paint hazards in rental housing. *State and local environmental, health, or housing agencies*
- Require evidence of RRP compliance as a condition for building permits. *State and local building code agencies*
- Prioritize energy upgrades that also reduce lead hazards (e.g., replace windows that have lead-based paint). *State energy offices*
- Finance lead hazard control with energy savings achieved by utility-funded energy programs. *State utility commissions*
- Prohibit occupancy of a home that has poisoned a child unless it has been declared lead-safe. *State and local environmental, health or housing agencies*
- Adopt a building condemnation/demolition standard and replacement policy that considers the lead poisoning prevention benefits of removing a structure from the housing stock. *State and local government*

### Private Sector

- Require documentation of lead safe status for private refinancing of multi-family properties. *Financial institutions*
- Add a visual assessment for lead hazards and repairs to privately financed energy upgrades. *Utility companies*
- Provide relocation assistance to renters affected by an order to vacate a home due to lead. *Private property owners*

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# HEALTH

## Outcomes:

- Lead sources are identified and controlled before a child is exposed.
- Data pinpoint neighborhoods at greatest risk to target resources and action.
- Children with elevated blood lead level test results receive home-based services to prevent further exposure.

## OBJECTIVES FOR HEALTH:

### Congress

- Fully fund CDC's healthy homes and lead poisoning prevention branch to support state and local health departments' primary prevention and surveillance activities.

### Federal Agencies

- Ensure that targeted blood lead screening plans cover exposure risk factors. *CMS and CDC*
- Ensure state compliance with the Early, Periodic, Screening, Diagnosis and Treatment requirement that children with elevated blood lead levels receive appropriate follow up. *CMS*
- Update evidence regarding the benefits of BLL screening to position this service for 100% Medicaid reimbursement. *US Preventive Services Task Force*

### State and Local Government

- Ensure that providers include screening in cost-capitated benefits. *State Medicaid offices*
- Consistently and completely cover environmental investigation and case management responses to children with EBLs. *State Medicaid offices*
- Educate health professionals on effective messages for parents and how to integrate childhood lead poisoning prevention into clinical and community-based services. *State and local health departments*
- Use data to target high-risk areas and cite non-compliant and repeat offender properties. *Local health departments and code agencies*

### Private Sector

- Consistently and completely cover environmental investigation and case management responses to children with EBLs. *Accountable care organizations, medical homes, managed care organizations*
- Assess homes of high-risk families for lead hazards. *Accountable care organizations, medical homes*
- Provide visual assessment and lead poisoning prevention education during visits to homes of high risk children. *Home visiting programs, community health worker services, medical homes*

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# EDUCATION

## Outcomes:

- Key education leaders, elected officials, the business community, and the voting public understand the educational benefits of preventing childhood lead poisoning.
- Children affected by lead exposure receive needed attention including assessment and intervention services to improve their likelihood of school and life success.

## OBJECTIVES FOR EDUCATION:

### Federal Agencies

- Identify effective educational interventions to overcome learning impairments caused by lead exposure. *ED - National Institute on Disability and Rehabilitation Research*
- Educate state and municipal boards of education, associations of superintendents and school principals, teacher federations and unions, early childhood educators, parent organizations, and school nurse organizations about the impact of lead exposure on educational outcomes. *US CDC and ED*
- Inform state and local agencies that the Individuals with Disabilities Education Act applies to children affected by lead exposure. *US ED*
- Evaluate states' use of IDEA to address learning needs of children exposed to lead. *US ED*

### State and Local Government

- Map blood lead level data and use the information to target early childhood education program resources as well as outreach to parents. *State and local health departments*
- Add childhood lead poisoning prevention to health education curricula for students and continuing education for teachers. *State and local education agencies*
- Require blood lead test results and developmental assessment results at school entry, in the model of school immunization requirements. *State and local education agencies*
- Add lead exposure to state-level policies defining developmental delay and established risk condition. *State education agencies*

### Private Sector

- Pilot local partnerships between education and public health organizations. *Philanthropic organizations.*
- Recommend and cover comprehensive neuropsychological assessments for children with history of blood lead level above the reference value and provide appropriate educational intervention services. *Providers, accountable care organizations, medical homes, managed care organizations, and other systems*

### Public-private Sector Partnership

Convene the public health and education communities to develop the action agenda to improve educational outcomes through the prevention of childhood lead poisoning and early intervention. *Federal agencies, national non-profit organizations, and state and local stakeholders*

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## Acronyms and Abbreviations

CDC	Centers for Disease Control and Prevention
CMS	Centers for Medicare and Medicaid Services
DOE	Department of Energy
EBL	Elevated blood lead
ED	Department of Education
EPA	Environmental Protection Agency
HUD	Department of Housing and Urban Development
RRP	Renovation, Repair and Painting Rule (EPA)
TRE	Department of Treasury
µg/dL	micrograms per deciliter

## Other Resources

### **Preventing Lead Exposure in Young Children: A Housing-Based Approach to Primary Prevention of Lead Poisoning. (2006)**

Recommendations from the Advisory Committee on Childhood Lead Poisoning Prevention of the Centers for Disease Control and Prevention.

[www.cdc.gov/nceh/lead/publications/PrimaryPreventionDocument.pdf](http://www.cdc.gov/nceh/lead/publications/PrimaryPreventionDocument.pdf)

### **Low Level Lead Exposure Harms Children: A Renewed Call for Primary Prevention. (2012)**

Report of the Advisory Committee on Childhood Lead Poisoning Prevention of the Centers for Disease Control and Prevention

[www.cdc.gov/nceh/lead/ACCLPP/Final\\_Document\\_030712.pdf](http://www.cdc.gov/nceh/lead/ACCLPP/Final_Document_030712.pdf)

### **Issue Brief: Childhood Lead Exposure and Educational Outcomes. (2013)**

National Center for Healthy Housing.

[www.nchh.org/Portals/0/Contents/Childhood\\_Lead\\_Exposure.pdf](http://www.nchh.org/Portals/0/Contents/Childhood_Lead_Exposure.pdf)

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