Preventing Lead Exposure in U.S. Children:

A BLUEPRINT FOR ACTION

National Center for Healthy Housing

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ABOUT THIS DOCUMENT

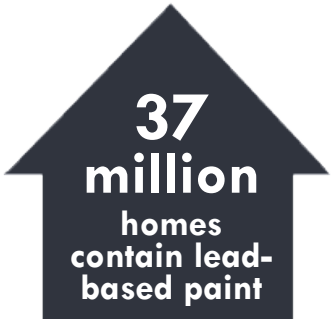
The National Center for Healthy Housing (NCHH) used the opportunity of its 20th anniversary meeting in 2013 to convene leading experts and advocates in health, affordable housing, and education for a strategic dialogue to develop the next generation of lead poisoning prevention strategies. Meeting participants recommended actions 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

Thirty-seven million U.S. homes (35% of housing units) contain lead-based paint.[1] Of those, an estimated 23 million pose an imminent threat due to the presence of contaminated soil, dust, and peeling paint. Children under age six, who are most vulnerable to the effects of lead exposure, reside in one out of every six of these 23 million homes with 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, and drinking water supplies and preventing and controlling lead-based paint hazards in our housing significantly reduced both average lead levels in U.S. children and the number of children with blood lead elevations at all levels. At the same time, scientists and the government now agree that 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. An estimated 535,000 children have blood leads at or above this level.[2]

Education

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 relationship between early-life lead exposure and both kindergarten reading readiness and other measures of school success. Children from low-income families in neighborhoods with older, poorly maintained housing are especially burdened. For example, children enrolled in Medicaid are twice as likely to have a blood lead level above CDC's reference value, a disparity that carries over into school performance.

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HOUSING

Outcomes:

- Make 11.5 million homes lead-safe.
- No home that has poisoned a child poisons again.

OBJECTIVES FOR PRE-1978 HOUSING:

Congress

- Require testing for lead paint at sale of every pre-1960 residential property.
- Modernize Title X of the 1992 Housing and Community Development Act.

Federal Agencies

- Require that weatherization programs perform a visual assessment, test lead dust when peeling paint is found and after work that disturbs paint. *DOE*
- Prioritize energy upgrades that also reduce lead hazards (e.g., replace windows that have lead-based paint). *DOE*
- Require visual assessment, paint repair, and clearance testing for FHA-insured single family homes. *HUD*
- Require documentation of lead safe status as a condition for HUD-issued refinancing of multifamily properties. *HUD*
- Enforce RRP rule and publish health protective lead dust standards. *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 acheived 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 multifamily 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*

HEALTH

Outcomes:

- Lead sources are identified and controlled before a child is exposed.
- Neighborhoods at greatest risk are identified 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

- Increase funding for CDC's Lead Poisoning Prevention efforts to $29 million to support state and local health departments' primary prevention and surveillance activities.

Federal Agencies

- Ensure public and private insurance coverage of testing and environmental follow-up care for children exposed to lead. *CMS*
- Reduce lead in drinking water by increasing the replacement of lead service lines in homes. *EPA*
- Invest in primary prevention of lead poisoning. *HUD, CDC*

State and Local Government

- All 50 states should comply with Medicaid requirements for follow-up services in the homes of children who have been exposed to lead. *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*
- Make ZIP code or finer level data publicly available. *State and local health departments and housing code agencies*
- 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*
- Follow federal and state guidelines for blood lead testing and follow-up care of children exposed to lead. *Health care providers*

EDUCATION

Outcomes:

- Key education leaders, elected officials, the business community, and the voting public understand the educational benefits of preventing childhood lead poisoning.
- All children who have been exposed to lead have undeniable access to assessment and intervention services to improve their ability to learn.

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*
- Publish a report summarizing the evidence about the impact of lead exposure on educational outcomes. *CDC and ED*
- Inform state and local agencies that the Individuals with Disabilities Education Act applies to children affected by lead exposure. *ED*
- Evaluate states' use of IDEA to address learning needs of children exposed to lead. *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 nonprofit organizations, and state and local stakeholders*

References

[1] *HUD. 2011. American Healthy Homes Survey: Lead and Arsenic Findings. http://portal.hud.gov/hudportal/documents/huddoc?id=AHHS_REPORT.pdf*
[2] *CDC. 2013. Blood Lead Levels in Children Aged 1–5 Years — United States, 1999–2010. MMWR. 62(13): 245-248.*

Acronymns 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

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

Issue Brief: Childhood Lead Exposure and Educational Outcomes. (2013)
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www.nchh.org/Portals/0/Contents/Childhood_Lead_Exposure.pdf

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