



The College of Physicians of Philadelphia

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***An Affirmative Response to the Final Report and Recommendations of the Mayor's
Philadelphia Childhood Lead Poisoning Prevention Advisory Groupⁱ***

Environmental Health Committee of the Section on Public Health and Preventive Medicine of
The College of Physicians of Philadelphia

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The mission of the Environmental Health Committee of the Section on Public Health and Preventive Medicine of The College of Physicians of Philadelphia is to raise awareness and encourage action to improve environmental health for residents and visitors to the City of Philadelphia and the surrounding communities. In particular, the Environmental Health Committee is concerned about environmental health disparities for children in Philadelphia.

By any measure, lead exposure is at the head of the list of environmental insults to children because of its potential for serious and lifelong health, educational and behavioral consequences and the lack of effective treatment once exposure occursⁱⁱ. In Philadelphia, the vast majority of children with elevated blood lead levels were exposed to lead in homes built before 1978—the year the federal government banned consumer uses of lead paint. In older homes that are not well maintained, young children are *at risk* of ingesting lead if the paint is chipped, cracked, or otherwise damagedⁱⁱⁱ.

Although the percentage of children with elevated blood lead levels has declined in recent years in Philadelphia, we have not experienced the same degree of reduction of blood lead levels among children compared to national trends. The federal Centers for Disease Control and Prevention defines a blood lead level above 5 ug/dl as elevated^{iv}. The most recent data from the Philadelphia Department of Public Health reveals 4.9% of children younger than 7 years of age in Philadelphia have blood lead levels of 5-9 ug/dl and 1.3% have levels 10 ug/dl or higher^v. Altogether, 6.2% of children have elevated blood lead levels, more than twice the national rate of blood lead elevations of 2.5%. These numbers translate to 2,392 children newly identified each year in Philadelphia who are at risk for diminished cognitive potential and adverse behavior changes. The highest rates of elevated blood lead levels are found in zip codes with the greatest povertyⁱ.

There is no effective treatment to protect children from these medical effects or reverse them once they occur. The consequences of slowed growth and development and decreased

attention and learning have lifelong effects^{vi}. Moreover, there is emerging evidence demonstrating adverse health effects even at lead levels below 5 ug/dl^{vii}. The implications reach beyond the individual children and their families and affect every citizen in Philadelphia through increased costs for special education, medical care, loss of lifetime earnings and productivity and increased involvement with the legal system^{viii}.

Exposure in inadequately maintained homes to peeling lead paint and the dust that accumulates as paint peels and flakes is the largest exposure source for most children^{ix}. The Philadelphia Department of Public Health estimates that there are 551,000 housing units built before 1978 that contain lead paint in Philadelphia³ and that 56,000 housing units, including 26,000 rental units, house young children who are at high risk for lead exposure.

Philadelphia's Lead Paint Disclosure Law, passed in 2011^x, requires landlords with properties built before 1978 (when the federal government banned consumer uses of lead paint) *and* with a young child living in them to verify their units are lead-safe. The Law defines "lead-safe" as, "The circumstance in which a property is free of a condition that causes or may cause exposure to lead from lead-contaminated dust, lead-contaminated soil, deteriorated lead-based paint, deteriorated presumed lead-based paint, or other similar threat of lead exposure due to the condition of the property itself." Determination of "lead-safe" must be made by a qualified inspector to determine whether the home contains lead paint and, if so, to assess the condition of the paint and the risks of lead exposure. Homes with lead paint can be safe for children if they are properly maintained and conditions that can lead to paint flaking, such as excessive moisture from leaks, are avoided. Renovations of homes with lead paint or remediation of homes where lead paint is deteriorated should be done by a qualified contractor^{xi}.

This law has raised awareness of lead hazards among landlords and families with young children. In addition, the establishment of Lead Court, which has the authority to order remediation on homes where children are at risk of lead exposure, has made many homes safe for children in Philadelphia^{xii}. Despite encouraging reductions in the number of children with elevated lead levels, many continue to be exposed to lead in rental properties. In practice, however, the Lead Disclosure law has been difficult to enforce because it is not easy to track whether young children live in rental properties, leaving many children unprotected. Compliance by landlords to certify rental properties as lead safe has been incomplete. According to the Philadelphia Department of Public Health, only 4,418 certificates have been issued as of January 1, 2018 for the 26,000 rental properties with young children.

In June 2017, the Mayor's Philadelphia Childhood Lead Poisoning Prevention Advisory Group recommended expansion of the Lead Paint Disclosure Law to all rental units increased funding for landlords to remediate properties if they show financial hardship and exploring a pilot program for proactive housing inspection in high risk areas¹. The effectiveness of lead-safe certification of rental properties has been shown in Rochester, NY where an ordinance established in 2005 requiring lead-safe certification of all rental properties and limited

remediation was associated with an absolute yearly rate of decline that was 2.4-fold faster than the state as a whole^{xiii}.

As public health professionals, we are concerned that current regulations and their enforcement are not adequately protecting children from the hazards of exposure to lead in homes. We applaud the City's past efforts to address this problem, and we urge the City to strengthen regulations and their enforcement to reduce the risk of lead exposure in homes. The recommendations of the Mayor's Childhood Lead Poisoning Prevention Advisory Group provide a strong basis for solutions. By reducing the lead exposure hazard in homes in Philadelphia, the City will improve opportunity for the most vulnerable children in Philadelphia to thrive. As a group of medical experts in lead poisoning, we offer our expertise and counsel to all parties engaged in improving the environmental public health in the City of Philadelphia.

ⁱ Philadelphia Childhood Lead Poisoning Prevention Advisory Group: Final Report and Recommendations, June 20, 2017

ⁱⁱ Agency for Toxic Substances and Disease Registry. Toxicological Profile: Lead. Atlanta, GA: US Department of Health and Human Services; 2007

ⁱⁱⁱ Lead-Free Kids: Preventing Lead Poisoning in Philadelphia. Philadelphia Department of Health, Philadelphia Department of Licenses and Inspections, December 2016

^{iv} Raymond J, Brown MJ. Childhood Blood Lead Levels in Children Aged <5 Years-United States, 2009-2014. *MMWR Surveill Summ* 2017;66(No. SS-3):1-10.

^v Childhood Lead Poisoning Surveillance Report. Philadelphia Department of Public Health Environmental Health Services Lead and Healthy Homes Program 2016

^{vi} Reuben, A., Caspi, A., Belsky, D. W., Broadbent, J., Harrington, H., Sugden, K., ... Moffitt, T. E. (2017). Association of childhood blood lead levels with cognitive function and socioeconomic status at age 38 years and with IQ change and socioeconomic mobility between childhood and adulthood. *JAMA*, 317(12), 1244–1251. <https://doi.org/10.1001/jama.2017.1712>

^{vii} Lanphear BP, Hornung R, Khoury J, et al. Low-level environmental lead exposure and children's intellectual function: an international pooled analysis. *Environ Health Perspect.*2005;113(7):894-899.

^{viii} Gould E. Childhood Lead Poisoning: Conservative Estimates of the Social and Economic Benefits of Lead Hazard Control. *EHP* (2019) Jul;117(7): 1162-1167.

^{ix} Lanphear B, Weitzman M, Winter M, et.al., Lead-Contaminated House Dust and Urban Children's Blood Lead Levels. *AJPH* Oct (1996) Vol 86 (10):1416-1421.

^x City of Philadelphia. Bill No. 100011-A. Philadelphia Code. Chapter 6-800. Lead Paint Disclosure and Certification. <http://legislation.phila.gov/attachments/12520.pdf>.

^{xi} Environmental Protection Agency. Protect Your Family from Exposures to Lead. <https://www.epa.gov/lead/protect-your-family-exposures-lead#maintain>.

^{xii}Campbell C, Gracely E, Cummings C, et.al., Philadelphia's Lead Court Is Making a Difference, *J Health Polit Policy Law* (2013) 38 (4):709-733

^{xiii}Kennedy B, Doniger A, Painting S, et al., Declines in Elevated Blood Lead Levels Among Children, 1997-2011.