



**Philadelphia Childhood
Lead Poisoning Prevention
Advisory Group:**

FINAL REPORT AND RECOMMENDATIONS

June 20, 2017



EXECUTIVE SUMMARY

“LEAD-FREE KIDS” AND ADVISORY GROUP PROCESSES

Childhood lead poisoning is a persistent problem in Philadelphia as in other cities, the legacy of decades of industrial use of lead, particularly in paint. In December 2016, Philadelphia Mayor Jim Kenney released “Lead-Free Kids: Preventing Lead Poisoning in Philadelphia,” a plan to improve the city’s efforts to prevent lead poisoning in Philadelphia’s children. This plan included new commitments by City departments, including the Philadelphia Department of Public Health (PDPH) and Department of Licenses & Inspections (L&I), to prevent lead exposure and minimize its effects when children are exposed.

In addition to releasing this plan, the Mayor convened a Childhood Lead Poisoning Prevention Advisory Group to review the City’s commitments and offer additional recommendations on how the City and other entities can reduce lead poisoning in Philadelphia. This Advisory Group included representatives of city and state government agencies, healthcare providers, landlord organizations, advocacy groups, philanthropy, City departments, and other stakeholders. The Advisory Group released draft recommendations in early March, and accepted public comment on those recommendations by email and in person at a public comment session.

This report presents the final recommendations from the Lead Advisory Group, which were informed by public comment and subsequent internal discussion. Because these recommendations are intended to complement the City’s existing commitments in “Lead-Free Kids,” they are presented here together. However, the Mayor and City Council will need to consider the Advisory Group’s recommendations before taking legislative, regulatory, or programmatic actions to implement them.

Lead poisoning has affected the learning and development of many Philadelphia children. By implementing the commitments in “Lead-Free Kids” and those recommendations from the Lead Advisory Group approved by the Mayor and City Council, the City hopes to reduce the number of children with blood lead levels greater than or equal to 5 µg/dL by 40% from 2,106 children in 2011 to 1,200 children in 2020.



OVERVIEW OF RECOMMENDATIONS

Both the “Lead-Free Kids” commitments and the Advisory Group’s recommendations are split into two sections: actions to prevent children from being exposed to lead (also called primary prevention), and actions to prevent additional exposure for children who have elevated blood lead levels (also called secondary prevention).

In the “Lead-Free Kids” plan, the City committed to:

PRIMARY PREVENTION

- > Increase door-to-door outreach in high-risk neighborhoods,
- > Educate about lead risks during home visits,
- > Conduct public education campaigns,
- > Increase coordination between PDPH and L&I to encourage landlords to comply with the Lead Paint Disclosure Law, and
- > Introduce education and possible enforcement for landlords believed to be subject to the Lead Paint Disclosure Law.

SECONDARY PREVENTION

- > Work with physicians to improve their lead screening rates, and
- > Strengthen efforts to ensure that landlords and owner-occupants remediate properties where children with elevated blood lead levels live.

The Advisory Group recommends that the City take the following additional actions:

PRIMARY PREVENTION

- > Expand the Lead Paint Disclosure Law to all rental units built before 1978,
- > Increase funding for landlords to remediate properties if they show financial hardship, and
- > Explore a pilot program for proactive housing inspections in high-risk areas.

SECONDARY PREVENTION

- > Seek state cooperation to submit a Medicaid waiver to increase funding for home remediation as well as maximize billing of Medicaid under current rules, and
- > Monitor research on lead exposure and modify PDPH protocols as appropriate.

The full list of “Lead-Free Kids” commitments and Advisory Group recommendations are on pages 9–14 of this report.

BACKGROUND

LEAD POISONING

Medical effects of lead exposure

Lead poisoning in childhood is a cause of learning and behavior problems. Even small amounts of lead can cause harm to the brain and other parts of the nervous system.

Lead in a child's body can:

- Slow down growth and development
- Damage hearing and speech
- Cause behavior problems
- Make it hard to pay attention and learn

Some of the health problems caused by lead poisoning are permanent. As a result, solutions to this problem should emphasize preventing children from initial exposure to lead.

Changes in federal guidelines

Public understanding of the effects of lead poisoning and the consequent approach to prevention of lead exposure has changed markedly over the years. In 1960, developmental problems were recognized at blood levels above 60 micrograms per deciliter ($\mu\text{g}/\text{dL}$), but in the decades since then studies have shown that subtle damage is seen at much lower levels that were once thought to be safe. Because of this, levels for action on lead exposure have fallen repeatedly over the years. In 1991, the Centers for Disease Control and Prevention (CDC) lowered its threshold for action for children's blood lead levels from 25 $\mu\text{g}/\text{dL}$ to 10 $\mu\text{g}/\text{dL}$, calling the new threshold not "lead poisoning" but instead a "level of concern."

Additional studies since then have identified possible risks at even lower blood lead levels. Based on these findings, the CDC in 2012 changed its approach and terminology again. Since that time, a blood lead level of 5 $\mu\text{g}/\text{dL}$ has been called a "reference" level. This reference level, which will likely to be adjusted downward as population levels of lead fall, is meant to be used:

- 1) in individual children as a trigger to assess risk and monitor for further increases in lead levels, and
- 2) in the aggregate to target primary prevention activities.

Sources of lead exposure

By far the most important source of childhood lead poisoning in Philadelphia is lead paint and lead-contaminated dust from paint. Lead was added to paint in the U.S. from the early part of the 20th century to 1978, so any housing unit that was built before 1978 is likely to have lead-containing paint on the walls. However, lead levels in paint were reduced over time before it was banned in 1978, so housing built before 1950 poses a greater risk than housing built between 1950 and 1978. Regardless of housing age, intact paint containing lead poses very little risk, but when that paint chips, peels, or is ground by friction on doors and windows, it creates flakes and dust that can be ingested by children, especially toddlers with regular hand-to-mouth behavior.

Children can also be exposed to lead through other sources, including soil, water, folk remedies, and ceramics. However, the primary source of lead exposure for most children in Philadelphia is dust or flakes from old paint.

HOUSING CONDITIONS IN PHILADELPHIA

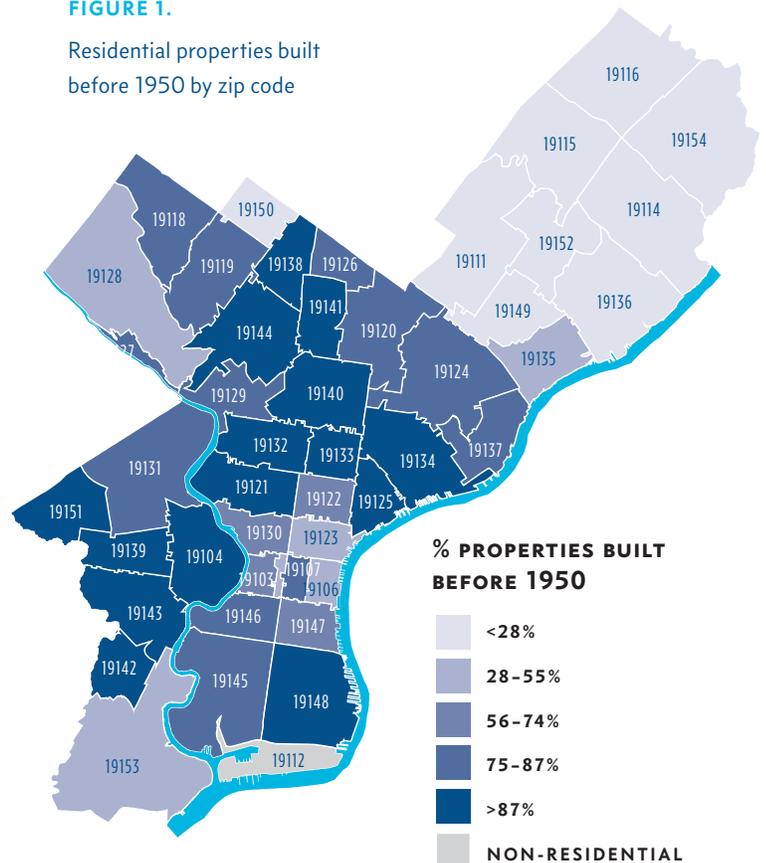
Orientation to primary prevention

Based on evidence of learning and other challenges at very low lead levels, national bodies including the Centers for Disease Control and Prevention (CDC) and the American Academy of Pediatrics (AAP) now acknowledge that there is no safe level of lead exposure.¹ In addition, there is limited evidence for the effectiveness of measures like cleaning and repainting on reducing blood lead levels among children who have already been exposed to lead paint or lead dust.² Full lead paint abatement, when lead paint is removed from walls as well as from friction surfaces like windows and doors, is more effective but also very expensive.³

Because of the limited benefit of remediation of lead paint hazards after exposure, PDPH has increasingly oriented its programs towards primary prevention of lead poisoning. PDPH will continue to work with homeowners to remediate properties where children with elevated blood lead levels live, but it is shifting its focus to ensuring that children live and play in spaces that are free of lead risks.

According to the U.S. Census, there are 580,000 occupied housing units in Philadelphia, of which 306,000 (53%) are owner-occupied and 273,000 (47%) are rentals.⁴ Philadelphia estimates that about 551,000 (95%) of these housing units have the potential of lead-based paint because they were built before 1978;⁵ approximately 406,000 (70%) are at greater risk because they were built before 1950, when the amount of lead in paint was higher (see Figure 1).⁶ PDPH estimates that approximately 56,000 units built before 1978 house children aged 6 or under, of which a little more than half are owner-occupied and a little less than half are rentals.⁷

FIGURE 1.
Residential properties built before 1950 by zip code



TRACKING LEAD POISONING

PDPH recommends, and Medicaid requires for its beneficiaries, that children be tested for lead at 12 months and 24 months of age. In practice, lead testing for children is often delayed. In Philadelphia in 2015, among children born in 2012, 76% of children were tested by their second birthday and 88% were tested by their third birthday.⁸ Forty one percent of children born in 2012 were tested twice by the age of three.

Nationally, lead exposure in children has declined markedly since the federal ban on lead in paint in 1978. In the 1976-1980 survey period, 88.2% of children included in the National Health and Nutrition Examination Survey had blood lead levels $\geq 10 \mu\text{g}/\text{dL}$ ⁹; by the 2007-2008 survey period, that proportion dropped to 1.2% of all children screened.

In Philadelphia, the number of children newly identified as having blood lead levels $\geq 10 \mu\text{g}/\text{dL}$ through venous blood samples* has fallen from 1,413 (4.5% of those tested) in 2006 to 341 (0.9%) in 2016. Furthermore, the number of children with blood lead levels between 5 and 9 $\mu\text{g}/\text{dL}$ has fallen from 3,527 (11.2%) to 1,302 (3.4%) during the same time period (see Figure 2). Those children with elevated blood lead levels are concentrated in North and West Philadelphia (see Figure 3). This striking decline in children with elevated blood lead levels is a public health success, though city, state, and federal agencies can and should work to reduce lead exposure rates further.

* Lead levels can be measured by blood sample taken from a vein (venous sample) or from a fingerstick (capillary sample). Capillary samples can yield false positive results from small amounts of lead on the skin (e.g. from lead-containing dust), so venous samples are considered more valid.

FIGURE 2.

Trend of newly identified blood lead levels from venous specimens among children <6 years old screened for lead poisoning, 2006-2016

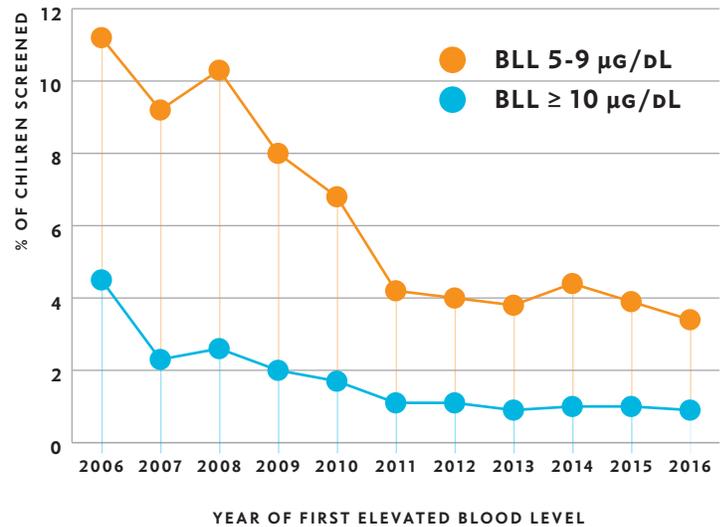
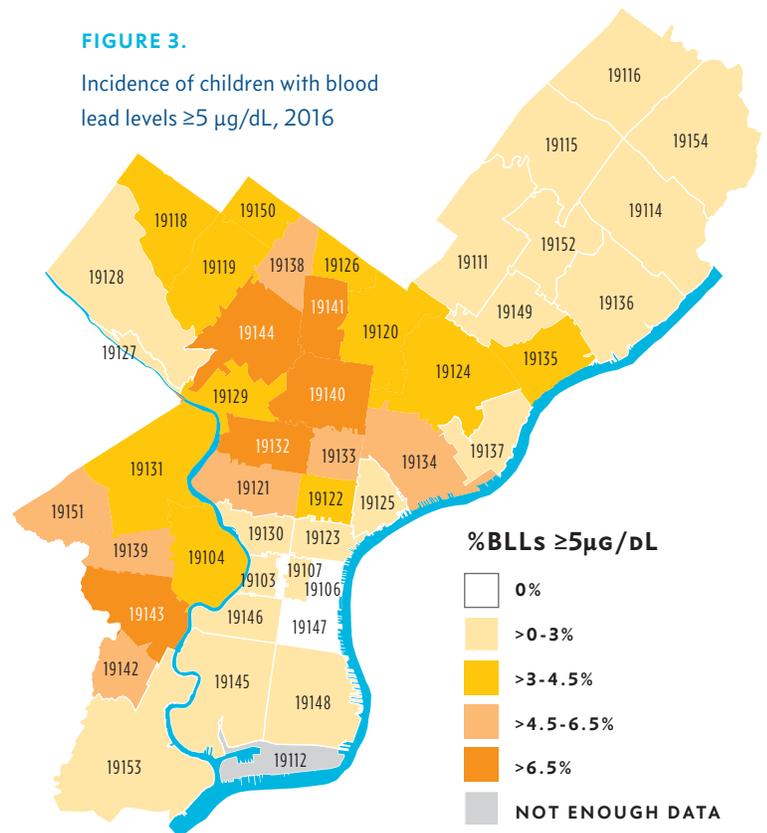


FIGURE 3.

Incidence of children with blood lead levels $\geq 5 \mu\text{g}/\text{dL}$, 2016



PHILADELPHIA LAWS

Residential Hygiene Law

The Philadelphia Health Code section on “Residential and Occupancy Hygiene” (6-403) states that “no person shall permit...exterior or interior surfaces...in or on any dwelling...where the [lead paint] may be readily accessible to children under the age of 6.” If the presence of lead is identified by testing, PDPH “shall issue an order to the owner, his agent, or occupant to eliminate the hazard.” If that person does not eliminate the hazard, PDPH may contract with others to eliminate the hazard and charge the costs to the owner. This is the law that is used by PDPH’s Lead and Healthy Homes Program after identifying children with elevated blood lead levels to enter homes, test for lead, and order owners to remediate hazards.

Property Maintenance Code

The Philadelphia Property Maintenance Code addresses interior and exterior property maintenance standards, including chipping and peeling paint. Section 305.3 of the code requires that all interior surfaces, including windows, doors, wood, and plaster, be properly maintained, and that “peeling, chipping, flaking, or abraded paint [...] be repaired, removed or covered.” L&I inspectors issue violations to the property owner if any of these conditions are found upon inspection, which are done on a complaint-driven basis. These violations can be used to compel landlords to remediate hazards if the chipping or peeling paint is found to contain lead, which, in turn, can ensure that more rental units are safe for children.

Lead Paint Disclosure Law

As of 2012, Philadelphia’s Lead Paint Disclosure Law (6-803) requires that landlords renting residences built before March 1978 in which children aged six or under are residing:

- 1) have the residence inspected and certified as “lead free” or “lead safe,”
- 2) provide this certificate to tenants for their signature, and
- 3) provide a copy of this certificate signed by the tenant to PDPH.

In addition, owners selling residences are required to notify buyers of potential lead risks. Between December 2012 and May 2017, PDPH received approximately 2,000 lead free or lead safe certificates from landlords, of an estimated more than 18,000 licensed rental properties for which these certificates are required.* The Lead Paint Disclosure Law includes provisions for fines or penalties of up to \$2,000 per day for landlords who fail to comply, but PDPH began taking steps toward proactive enforcement of this requirement only in late 2016.

* *Approximately 18,000 rental licenses are likely to have a unit where a child aged six or under lives, but the total number of units requiring lead free or lead safe certificates is probably higher because rental licenses may each cover up to 10 units in a single property. The Lead Paint Disclosure Law requires that each unit built before 1978 where a young child lives be certified; certificates cannot cover multiple units at the same address.*

PDPH LEAD POISONING ACTIVITIES

Primary prevention

PDPH seeks to prevent lead exposure through a combination of outreach and education to families of young children and education for landlords coupled with enforcement of the Lead Paint Disclosure Law. During the summer of 2016, PDPH conducted an advertising campaign on public transit and social media, which focused on educating tenants with young children about their rights to a lead safe home (see Figure 4). In addition, PDPH is conducting door-to-door outreach to both homeowners and renters in Kensington to educate them about the risks of lead paint hazards. Through this Healthy Neighborhoods Project, PDPH is also testing homes for lead paint and offering remediation to some homes with lead paint hazards.

PDPH has also begun to proactively enforce the Lead Paint Disclosure Law's requirements that landlords certify their properties as lead free or lead safe. This effort includes landlord education through individual letters and enforcement activities such as issuing Code Violation Notices for those landlords who do not meet the law's requirements after several notification attempts.

Secondary prevention

For many years, PDPH's Lead and Healthy Homes Program (LHHP) has addressed lead poisoning in children by identifying children with elevated blood lead levels and working with families, homeowners, and landlords to reduce lead hazards in homes. LHHP currently offers a full spectrum of secondary prevention services to children with blood lead levels of 10 µg/dL and above. For these children, LHHP attempts to contact their families, provides education, conducts inspections and assesses the risk of lead paint, issues orders to property owners to remediate lead paint hazards, and works with the City of Philadelphia Law Department to bring enforcement actions against property owners who fail to remediate their properties.

In addition, when possible, LHHP provides education for families of children with blood lead levels between 5 and 9 µg/dL, takes dust wipe samples to determine whether inspection and remediation is needed and contacts their doctor's offices to recommend follow-up testing.

FIGURE 4. PDPH advertising message on lead poisoning prevention, 2016

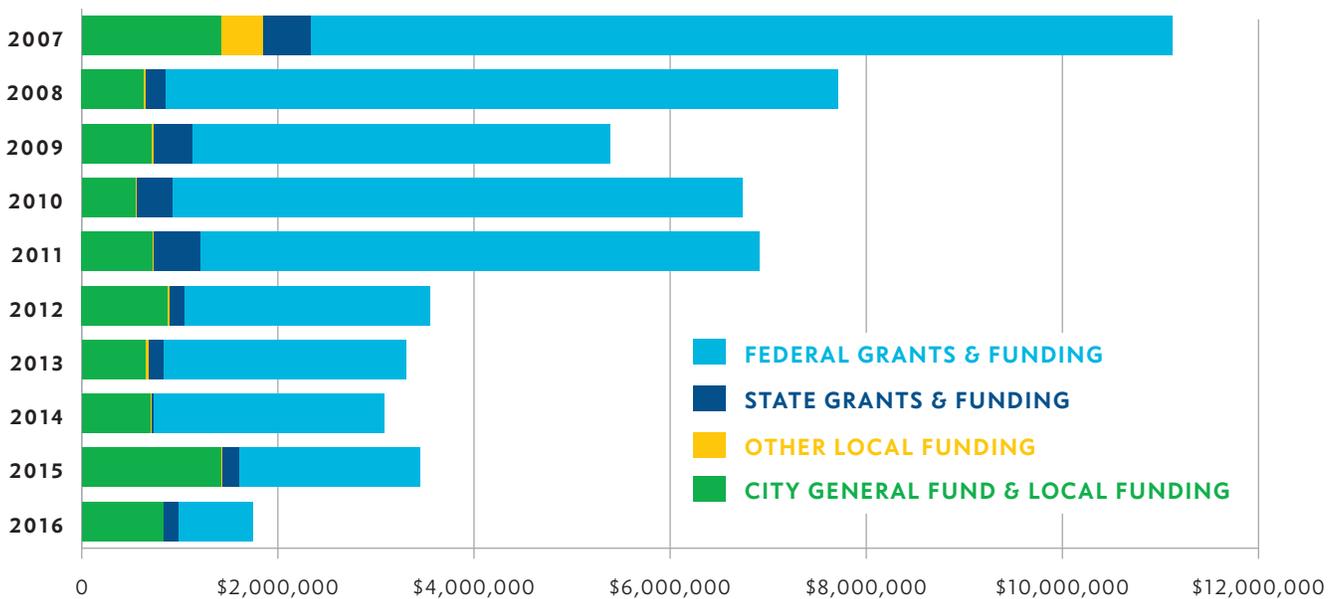


FUNDING FOR LEAD POISONING PREVENTION

Historically, much of the funding for lead poisoning prevention in Philadelphia has come from federal grants, particularly from the Department of Housing and Urban Development (HUD) and from the CDC. In FY 2007, overall funding for LHHP was approximately \$11 million, much of which was used for remediation of properties. With federal budget cuts, overall funding for lead poisoning prevention in FY 2016 fell to less than \$2 million (see Figure 5).

Mayor Kenney requested an additional \$900,000 for PDPH’s lead poisoning prevention activities in the City’s Fiscal Year 2018 budget. These potential additional funds can help implement the commitments and recommendations of this report, but will still leave resource constraints in lead poisoning prevention.

FIGURE 5.
Funding for lead poisoning prevention at the Philadelphia Department of Public Health, Fiscal Years 2007 - 2016



RECOMMENDATIONS

Recommendations are divided into two sections: primary prevention and secondary prevention. Within each section, the City's commitments from the December 2016 "Lead-Free Kids" plan are listed first, followed by the recommendations from the Childhood Lead Poisoning Prevention Advisory Group. Comments regarding implementation of commitments from the December 2016 "Lead-Free Kids" plan are shown in italics.

RECOMMENDATIONS: PRIMARY PREVENTION

"Lead-Free Kids" commitments:

PDPH will:

- 1** Incorporate education about lead risks and identification of potential lead risks from peeling paint into protocols for various infant home visiting programs.
- 2** Increase door-to-door outreach to an additional 400 families per year in neighborhoods with the highest prevalence of lead poisoning cases in the city, offering inspections and testing for lead.
- 3** Develop and disseminate advertising messages warning about the risks of lead and the requirements of the Lead Paint Disclosure Law.

PDPH completed a successful marketing campaign during the summer of 2016, which included transit posters and digital ads, and will repeat that campaign during the summer of 2017.

- 4** Provide additional training for L&I inspectors to look for property maintenance violations that may be indicative of potential lead paint hazards, such as chipping and peeling paint, when responding to housing complaints in homes with pregnant women and/or children aged six or under. If L&I inspectors find such violations, they will refer that home to LHHP for follow-up.

This training occurred in early 2017, and PDPH and L&I are now formalizing a referral process from L&I inspectors to PDPH's LHHP when chipping and peeling paint is found in any unit inspected.

5 Partner with L&I on initiatives to increase the number of landlords who submit the required lead free or lead safe certificates. The agencies will collaborate to:

- > Update L&I materials, including the “Partners for Good Housing” handbook, to include more information about the Lead Paint Disclosure Law.

Complete.

- > Modify the rental license application and online renewal form to require that landlords attest to whether the rental unit was built before 1978 and whether a child aged six or under is or will be living there. If so, the application and online renewal form will require that landlords certify that they have submitted the required lead free or lead safe certificate.

L&I modified the online rental license application and renewal form to include these additional questions and attestations, beginning with the February 2017 license renewal period. However, analysis of recent rental license data indicates that the addition of these questions and attestations had little to no impact on lead certification collection and that many applicants submitted inaccurate information. This supports the argument that the requirement for lead certificates should not be tied to a criterion like child residence that is not easily verified.

- > Improve data collection and data sharing between PDPH and L&I, including the creation of a process allowing PDPH to determine if landlords who certify on their rental license applications and renewals that they have submitted lead free or lead safe certificates have done so.

L&I has manually shared information on landlord responses to the additional questions on the rental license application and renewal form during the February 2017 rental license renewal period, which PDPH is checking against its lead free and lead safe certification records. However, given the issues with these responses and attestations, PDPH and L&I will need to reconsider how and when to use this data.

- > Over the longer term, automate data-sharing across PDPH and L&I by requiring that all rental license applications and renewals be completed online or in-person and implementing technological changes that allow for real-time checks of lead free and lead safe certificates. By creating this real-time check, PDPH will allow L&I to automatically deny license renewals for landlords not in compliance with the Lead Paint Disclosure Law.

PDPH is in the process of developing a database to track landlord outreach efforts (described below) and landlord compliance with the Lead Paint Disclosure Law. This database will also allow L&I to automatically check whether licensed landlords have submitted lead free or lead safe certificates.

6 Take enforcement actions against landlords who do not submit lead free or lead safe certificates as required by the Lead Paint Disclosure Law.

- > Send notices to landlords who rent older properties in which young children are thought to be living, reminding them of their obligations under the Lead Paint Disclosure Law.

As of June 2017 PDPH has sent notices to the landlords of 4,440 properties, of an estimated 18,000 total properties that are likely subject to the law.

- > Issue Code Violation Notices (CVNs) to landlords required to submit lead free or lead safe certificates who do not do so after repeated notices.

PDPH has begun issuing CVNs to landlords who do not submit lead free or lead safe certificates or document that they are exempt from the Lead Paint Disclosure Law, after multiple letters from the City.

- > Pursue court-ordered fines for landlords who do not submit lead free or lead safe certificates despite receiving CVNs.
- > Conduct additional enforcement, including issuing Notices of Violation and pursuing court-ordered remediation, fines, liens, and other remedies, for non-compliant landlords with multiple properties, higher-risk properties, or repeated noncompliance.
- > Make landlords with outstanding Notices of Violation ineligible for rental license renewal.

Landlords with outstanding Notices of Violation are already ineligible for rental license renewal. This item clarifies that Notices of Violation issued for failure to provide lead free or lead safe certificates would be subject to this same ineligibility as landlords with Notices of Violation for other problems.

Additional recommendations from Advisory Group

The Childhood Lead Poisoning Prevention Advisory Group recommends that the City take the following additional actions to prevent lead poisoning:

- > Expand the Lead Paint Disclosure Law to all rental units built before 1978, including PHA and Section 8 units, and require renewal of lead safe certification every two years regardless of changes in tenancy.
- > Explore funding for landlords to remediate properties built before 1978 if they show financial hardship.
- > Build an online database to easily access lead certification information, contingent upon the expansion of the Lead Paint Disclosure Law to all rental units built before 1978.
- > Explore a pilot program for proactive housing inspections in high-risk areas by L&I and PDPH, supported by appropriate enforcement activities by both agencies and funding for landlords to remediate if they show financial hardship.
- > Conduct outreach and environmental lead testing in selected housing units based on established risk factors, such as: units with prior lead exposure in occupant children; age of housing (e.g., housing built before 1950); neighborhood poverty rate; possible unlicensed units.
- > Explore ability to increase rental license fee to provide financial support for lead paint remediation for landlords that show financial need.
- > Explore incentives such as tax abatements for owners of properties built before 1978 to get their units certified as lead free or lead safe.
- > Advocate for state legislation requiring lead free or lead safe certification at point of property sale.
- > Advocate for a statewide paint tax to support the cost of remediation of properties that contain lead paint.
- > Partner with existing programs that reach pregnant women or families with young children to educate tenants about their rights to a lead free or lead safe home.

RECOMMENDATIONS: SECONDARY PREVENTION

“Lead-Free Kids” commitments

PDPH will:

- 1 Identify pediatric health care providers with low rates of blood lead screening in children under their care and work with them to increase screening.
- 2 Identify rental properties containing lead in which children with elevated blood lead levels (≥ 10 $\mu\text{g}/\text{dL}$) are currently living and strengthen efforts to require landlords to remediate these properties, or remediate properties at landlords’ expense if landlords do not fulfill their obligations.
 - > Identify children under the age of 6 with an elevated blood lead level using data from the state’s surveillance system. Promptly contact families of children with elevated blood lead levels and inspect their homes for lead hazards.
Underway as part of normal LHHP activities.
 - > Improve acceptance of services by affected families by offering families incentives to allow visits for education and inspections.
 - > Issue orders to landlords to remediate lead from their rental properties.
Underway as part of normal LHHP activities.
 - > For properties that landlords do not remediate within 30 days of the order, PDPH will either remediate immediately or seek court-ordered remediation. If PDPH remediates the property, the department will pursue court-ordered reimbursement for remediation costs plus fines and place municipal liens if landlords do not repay PDPH voluntarily.
PDPH seeks court-ordered remediation as part of normal LHHP activities, but is seeking to expedite the process and increase the number of properties that get remediated, in part by doing more remediations itself (see below).
 - > In cooperation with Lead Court, PDPH and the City of Philadelphia Law Department will streamline the adjudication process by reducing the number of times individual cases get continued to additional appearances and requiring more immediate compliance by uncooperative landlords, and increase recovery of remediation costs and fines.
 - > Refer all unreimbursed costs to the City of Philadelphia Department of Revenue and Law Department for aggressive collection actions.
Fines ordered by judges for non-compliance with the Residential and Occupancy Hygiene Law are currently referred to a collections agency for follow-up action. In the future, PDPH will also seek to recoup its own costs from conducting remediations.
 - > Request Health Code changes to strengthen enforcement of existing requirements for landlords to remediate properties and hold landlords accountable to those requirements.
 - > Seek to establish a fund for the City to cover remediation costs that are ultimately unreimbursed by landlords.

3 Identify privately-owned homes in which a child with elevated blood lead level (≥ 10 $\mu\text{g}/\text{dL}$) lives and ensure that they are remediated.

- > As with rental properties, promptly contact families of children with elevated blood lead levels, conduct education and inspection activities, and refer families for additional supportive services as appropriate.
Underway as part of normal LHHP activities.
- > As with rental properties, order remediation for homes with lead-based paint hazards.
Underway as part of normal LHHP activities.
- > Work to increase financial assistance, using grants and/or low-interest loans, to help low-income homeowners defray costs of remediation.

Additional recommendations from Advisory Group

The Advisory Group recommends the following additional actions to prevent further exposure in children who already have elevated blood lead levels:

- > Seek state cooperation to submit a Medicaid waiver to use Medicaid funds to pay for remediation in homes of children with elevated blood lead levels.
- > Explore ways to maximize the City's ability to bill Medicaid for services provided by LHHP for children with blood lead levels ≥ 5 $\mu\text{g}/\text{dL}$, including inspections and case management.
- > Continue to monitor research on lead exposure and lead paint remediation and modify PDPH procedures as appropriate.

IMPLEMENTATION & MONITORING

This report restates the City’s commitments from the “Lead-Free Kids” plan released in December 2016 and makes new recommendations from the Childhood Lead Poisoning Prevention Advisory Group for additional actions that governmental and non-governmental entities can take to reduce lead poisoning in Philadelphia. PDPH, L&I, and other City agencies have already made progress on the “Lead-Free Kids” commitments and will continue their work to meet each of them. By taking these actions and additional ones as recommended by the Advisory Group, the City hopes to reduce the number of children with blood lead levels greater than or equal to 5 µg/dL by forty percent from 2,106 children in 2011 to 1,200 children in 2020.

Listed below are additional metrics the City will use to evaluate the implementation of the “Lead-Free Kids” commitments and the impact that work ultimately has on lead poisoning rates.

PRIMARY PREVENTION:

Primary prevention activities will be evaluated by tracking measures of educational activities (for example, the number of materials distributed, number of home visits in which lead risks are discussed, number of visits to the website) and progress on compliance with the Lead Paint Disclosure Law (number of licensed properties estimated to be subject to the Lead Paint Disclosure Law, number of licensed properties reached through landlord outreach, number of lead free and lead safe certificates received from landlords).

Below are estimates for progress on compliance with the Lead Paint Disclosure Law as of May 2017.

LHHP Primary Prevention Measures	Baseline (As of May 2017)
Licensed properties subject to law	18,000
Licensed properties reached so far	4,300
Lead safe / lead free certificates on file	2,000

SECONDARY PREVENTION:

Secondary prevention activities will be evaluated by tracking measures of lead screening and measures of home-based interventions. The reporting of lead screening will include the proportion of children in each age cohort who are screened twice, as is currently recommended. Measures of home-based interventions will include the number of children provided education, number of children receiving lead inspections in their home, number of homes remediated overall and number of homes remediated after enforcement in Lead Court. Below are estimates for these lead screening measures for children born in 2012, and case management measures for active cases in 2015.

Lead Screening Measures	Outcomes for Children Born in 2013
Children screened by age 2	73%
Children screened by age 3	83%
Children screened twice by age 3	43%

ONGOING SURVEILLANCE:

Overall lead exposure and risk factors in children will be monitored through surveillance of blood lead screening results. In December 2016, PDPH released its first annual lead poisoning surveillance report, which included information on lead screening and lead exposure rates for Philadelphia children in 2015 as well as over time. PDPH will continue to release annual surveillance reports with this information in the future.

LHHP Case Management Measures	Outcomes for 2015 Cases
Active cases (children with BLL ≥ 10 $\mu\text{g/dL}$)	403
Home visits	305
Initial inspections	241
Completed remediations	234
Lead Court filings	119
Lead Court filings resulting in remediation	107

PDPH’s Lead and Healthy Homes Program does not recoup remediation costs today, but will do so in the future and track those recouped costs as well.

The City will also evaluate the implementation of the programs, policies, and advocacy efforts that the Mayor and City Council approve from the Lead Advisory Group’s recommendations. The format and frequency of this evaluation will be dependent on the recommendations that the Mayor and City Council choose to take forward.

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- ⁵ ACS estimates adjusted using Philadelphia Office of Property Assessment (OPA) and Philadelphia Department of Licenses and Inspections (L&I) data
- ⁶ ACS estimates adjusted using OPA data
- ⁷ Estimated based on ACS and OPA data
- ⁸ Philadelphia Department of Public Health, 2015 Childhood Lead Poisoning Prevention Surveillance Report.
- ⁹ Brown MJ, Margolis S; Centers for Disease Control and Prevention. Lead in drinking water and human blood lead levels in the United States. *MMWR Suppl*. 2012;61(4 suppl 1):1-9

ACKNOWLEDGEMENTS

Mayor Kenney gratefully acknowledges the work of the Philadelphia Childhood Lead Poisoning Prevention Advisory Group, which met seven times from January through April 2017. The Advisory Group members' names are listed here:

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Children's Hospital of Philadelphia

Danielle Casher
St. Christopher's Hospital for Children

Donna Cooper
Pennsylvania Citizens for Children and Youth

Thomas Farley
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State Senator (Senatorial District 7)

Hans Kersten
St. Christopher's Hospital for Children

Ben Laudermitch
Pennsylvania Department of Human Services

Mitch Little
Mayor's Office of Community Empowerment and Opportunity

Phil Lord
Tenant Union Representative Network

Martin McNulty
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David Perri
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Rashanda Perryman
William Penn Foundation

Rasheedah Phillips
Community Legal Services

Blondell Reynolds-Brown
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Jill Roberts
Healthy Rowhouse Project

Lora Werner
Agency for Toxic Substances and Disease Registry

