



# A Roadmap to Eliminating Childhood Lead Exposure





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# Message from the Mayor



My fellow New Yorkers,

As a parent, I know how frightening lead exposure is for families. There is nothing we won't do in this city to protect our children.

Last fall, I ordered a full review of every policy and resource we have in City government that can be used to prevent childhood lead exposure. The result is the report you are holding in your hands.

Lead exposure is 100 percent preventable. Because of strong laws and the work of public health professionals, the number of children younger than six years of age with elevated blood lead levels has plummeted 90 percent since 2005.

We are now embracing a new goal within our reach: to eliminate childhood lead exposure entirely.

Today, we are launching LeadFreeNYC. It's a roadmap to identify and eradicate lead health risks at their source, no matter how small.

We are toughening standards, adding resources and ratcheting up the intensity of every agency's response to lead. We are making sure inspectors, nurses and public health professionals work seamlessly together to protect every child and support every parent.

The only acceptable number of children exposed to lead in our city is zero. That goal is within our reach.

Sincerely,

A handwritten signature in black ink that reads "Bill de Blasio". The signature is fluid and cursive, with a long horizontal stroke at the end.

Bill de Blasio

# Message from the Senior Advisor for Citywide Lead Prevention



Fellow New Yorkers,

Today, we are taking on the next step in our efforts to eliminate childhood lead exposure in New York City. Lead exposure can affect mental and physical development. The most vulnerable among us are the most at risk: our young children. But, lead exposure is preventable.

For the last 90 days, I have met with advocates, elected officials, colleagues in the administration and staff on the front lines to develop this roadmap to a LeadFreeNYC.

In this roadmap, we commit to an aggressive set of policies and operational changes to go further than any other city or state in the country. We are taking our legacy of lead head on. We will expand our outreach to ensure every child is tested for lead, support families of children with elevated blood lead levels, reduce the threshold for lead paint and dust, enhance our enforcement of safe work practices, seek to eliminate unsafe products, and educate the public on simple steps to protect themselves against other lead hazards.

This work will take on-going dedication and resources, and I invite you to learn more and track our progress at [nyc.gov/leadfree](https://nyc.gov/leadfree), which will launch in the coming weeks.

I want to thank the members of my team, our agency partners, our elected officials, members of the advocacy community and others that have contributed to this plan. It would not have been possible without their thoughtful guidance, creativity and dedication to this singular goal: create a LeadFreeNYC.

Sincerely,

A handwritten signature in black ink that reads "Kathryn Garcia". The signature is cursive and elegant, with a long, sweeping tail on the "a" at the end.

Kathryn Garcia

# Executive Summary

## Childhood lead exposure is preventable.

Since the advent of New York City's stringent Local Law 1 fifteen years ago, childhood lead exposure has plummeted 90 percent.

Now, New York City is adopting a new goal: **reduce that exposure to zero.**

New York City's protections and procedures are strong, but they need to change and expand to go the last mile and eliminate lead exposure entirely. This report details a comprehensive set of policies and proposals that will now serve as New York City's roadmap to ending childhood lead exposure, following a 90-day review of all agencies' policies related to lead prevention and response.

Under LeadFreeNYC, New York City will:

- **Reduce the amount of lead in paint and dust that triggers remediation and abatement** to the lowest level of any major US city
- **Require annual inspections of apartments in 1- and 2-family homes** previously excluded from the City's lead paint regime
- **Expand the use of stop work orders** from the Department of Buildings when the Health Department finds lead exposure risks during construction
- **Ensure children are immediately provided with access to blood lead level testing** in any home where housing inspectors identify a lead paint hazard
- **Provide a dedicated nurse to** any child with an elevated blood lead level to coordinate care
- **Launch ad campaigns** promoting testing for children in communities with low testing rates, to raise awareness about free water testing kits provided by the City, and promoting awareness of harmful consumer products like ceramics and cosmetics containing lead.
- **Test all 135,000 NYCHA apartments** where lead has not been ruled out, and remove all lead hazards
- **Step in and proactively test for and remove lead hazards from all family shelter units**
- **Establish a new Lead-Free Designation** for homes where all lead has been eliminated
- **Publish a Lead Products Index** of consumer goods like spices and ceramics that contain lead, consolidating rules to protect retailers and consumers
- **Publish a map of all privately-owned lead service lines** that carry water into private homes and expedite their replacement for low-income homeowners
- **Remove lead exposure risks from soil** by providing clean topsoil to community gardens and surveying all NYCHA playgrounds, covering exposed soil when needed

**These combined initiatives will eliminate childhood lead exposure by 2029. This represents the most aggressive and holistic approach to protecting kids from lead of any city or state in the nation.**



# Introduction: Building on Our Progress



## Our Legacy of Lead

By the mid-twentieth century, despite the growing recognition of lead as a health hazard, the United States was producing and consuming more refined lead and lead-based products than anywhere else in the world. Companies aggressively marketed lead paint to the unsuspecting American public. Only in the last 60 years did the federal and local governments take steps to reduce human exposure to lead from the most common exposure sources. In New York City and other cities, lead is particularly pervasive due to its widespread historical uses in paint, gasoline, and industrial processes.

Elevated blood lead levels (EBLL) can cause irreversible developmental effects in children, including adversely affecting physical and mental growth and causing learning and behavioral problems. Young children and pregnant women are most at risk to the effects of high lead exposure. People are exposed to

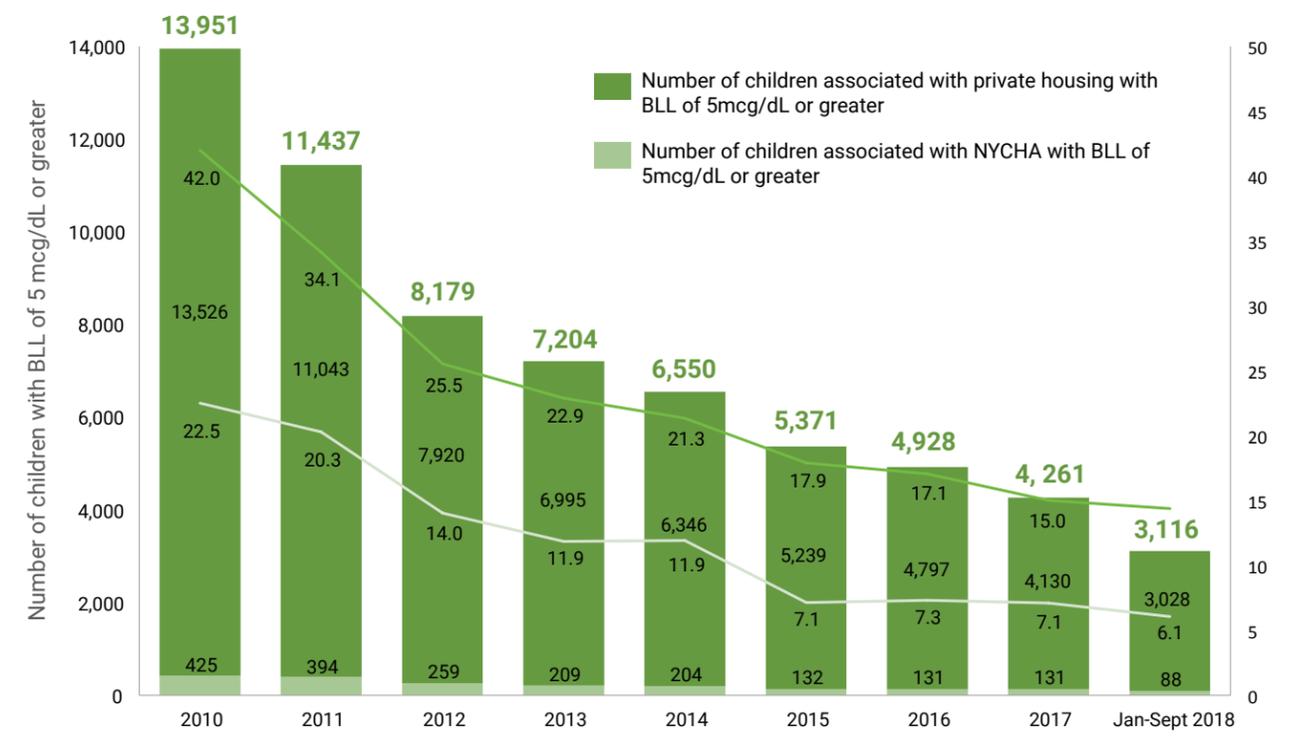
lead primarily through ingestion – such as chewing on toys covered in lead dust. Children under 3 are particularly prone to lead exposure because they explore the world with their hands and mouths.

Though New York City prohibited the use of lead paint in homes in 1960, older buildings may still have lead paint on walls, windows, doors, and other surfaces. When young children play on the floor or by windows and put their hands and toys in their mouths, they can swallow lead dust. Children are also more susceptible to lead absorption because their bodies are still developing. A child absorbs 4-5 times more lead than an adult from the same source. An elevated blood lead level in a child can have lasting adverse effects on a child’s mental and physical development.

## New York City as a Leader

New York City has long been a national leader of protective policies to reduce childhood lead exposure. In 1960, the New York City Board

**Number and rate of children under 6 years old with blood lead levels of 5 mcg/dL or greater by year and housing type, New York City 2010-2018\***



\*2018 data are preliminary and available for January-September (9 months)

Note: The data above represents unique children per year. Adding across years will result in duplicate counts of individual children over time. Between 2010 and September 2018 there were 53,043 children under the age of 6 who had a blood lead level of 5 mcg/dL or greater, 1,704 of these children were associated with NYCHA.

of Health made New York City one of the first jurisdictions to prohibit the use of lead paint in residential buildings, 18 years before it was banned by the federal government in 1978. Since then, New York City has developed increasingly aggressive public health policies to reduce lead exposure. In 1993, New York State began mandating that medical providers screen all children for blood lead levels at ages one and two, and assess lead exposure risk annually in all children between six months and six years of age. A decade later, New York City passed sweeping legislation – New York City Local Law 1 of 2004, the Childhood Lead Poisoning Prevention Act – to curb childhood exposure to lead. And in July 2018, Mayor Bill de Blasio announced that New York City would become one of the first jurisdictions in the country to conduct environmental investigations for children with a blood lead level of 5 micrograms per deciliter (mcg/dL) and above.

**Since 2005, New York City has seen a 90 percent decline in children with elevated blood lead levels.**

Local Law 1 has resulted in a dramatic decline in childhood lead exposure. Since 2005, New York City has seen a 90 percent decline in the number of children under 6 who have elevated blood lead levels of 5 mcg/dL or higher. Each year we see further declines – a trend that continued in 2018. The declines are a testament to protective measures created by the City Council in Local Law 1 and the work of our Departments of Health and Mental Hygiene (DOHMH) and Housing Preservation and Development (HPD).

However, even a single child with an elevated blood lead level in New York City is one too many. As we work with our partners in the City Council and across the city toward the Mayor’s vision to make New York City the fairest big city in the country, our goal is to eliminate childhood lead exposure in New York City and create a LeadFreeNYC.

New York City is now undertaking a new goal: eliminate childhood lead exposure entirely.

Lead exposure is preventable.

We have the data. We have the tools. And now we have the Roadmap to a LeadFreeNYC.



# Protect our Kids: Screen and Support our Children

New York City is one of the first jurisdictions in the country to conduct environmental investigations for children with a blood lead level of 5mcg/DL and above.



## Deepen support when kids are exposed to lead hazards

When a child is found to have elevated blood levels, we must do everything in our power to get them the services they need. DOHMH currently coordinates follow-up care for kids with high elevated blood lead levels and performs an environmental investigation for all children with a blood lead level of 5mcg/dL or above. This high standard of follow-up care should be provided across the board for all kids with elevated blood lead levels. DOHMH is expanding staffing for both follow-up care and environmental investigations by the end of the year, investing over \$5 million a year to serve six times as many children as before.

**Expand coordinated nursing care to every kid with EBLs.** For all children with an elevated blood lead level above 5 mcg/dL, DOHMH will now assign a care coordination nurse to ensure blood lead level monitoring and coordinate the

child's ongoing care. The effects of exposure to lead can vary widely by child. Nurses will work in partnership with families and health care providers – including connecting the family to a provider if one is not in place – to understand the child's developmental and nutritional status, and to promote proper monitoring and management until their lead level declines. The work won't stop there: nurses will refer children for all appropriate support services, such as early intervention, nutritional counseling, and other care as needed. And with new enhancements to the Citywide Immunization Registry that emphasize lead testing data, healthcare providers, childcare providers and schools will be able to follow the child's lead history throughout their life.

## Increase the number of children screened for elevated blood lead levels

A child testing positive for an elevated blood lead level triggers a swift response of protective actions by DOHMH. These actions include a home

investigation with a comprehensive interview of the family and child, environmental sampling, an inspection of the child's home for lead paint hazards and of other locations where the child may have been exposed to hazards, and – when warranted – the issuance of a Commissioner's Order to Abate (COTA), which mandates a landlord take action to abate the hazard.

New York State Law requires a child's blood lead levels be tested twice before age three. Eighty percent of children in the City are tested at least once by age three. We must enhance our efforts to get all NYC children tested two times by the age of three.

In addition to continuing to distribute information to both parents and over 30,000 healthcare providers about lead testing requirements and elevated blood lead level prevention, the City will implement new strategies to improve provider compliance with the law, and target outreach to communities most at risk for elevated blood lead levels and those with lower blood testing rates.

## Improve the Citywide Immunization Registry (CIR).

DOHMH will enable parents and doctors to track a child's blood lead level history. Regardless of whether a parent changes doctors or changes schools, healthcare professionals will have access to the child's history, the same way they do for vaccinations. By fall 2019, DOHMH will improve its software to better engage both parents and providers through the CIR, a citywide database for immunization records. These innovations will include an expansion of the CIR's existing text message reminder tool for notifying parents and developing an interface to display lead data and recommendations for providers, which will include recommendations about lead testing for the individual child. These improvements will help ensure children are tested twice before the age of three.

**Expand outreach to parents.** Beginning in early 2019, DOHMH initiated cross-referencing of birth records and blood lead test results to identify children who have not been tested for

lead. If a child has not been tested, DOHMH will contact the family by mail and by phone repeatedly to encourage testing. In addition, a citywide campaign highlighting the importance of blood lead testing and the requirement for testing at ages one and two has just launched. The campaign encourages parents to ask their child's health care provider about testing for lead.

**Reach more communities through targeted campaigns.** In order to reach communities with higher rates of EBLs and lower rates of testing, DOHMH is running several campaigns, including one targeted at the South Asian community and another in partnership with trusted community leaders in Williamsburg. DOHMH is spending a combined \$750,000 on marketing campaigns that focus on raising awareness about risks, preventing elevated blood lead levels, and the importance of screening for lead exposure.

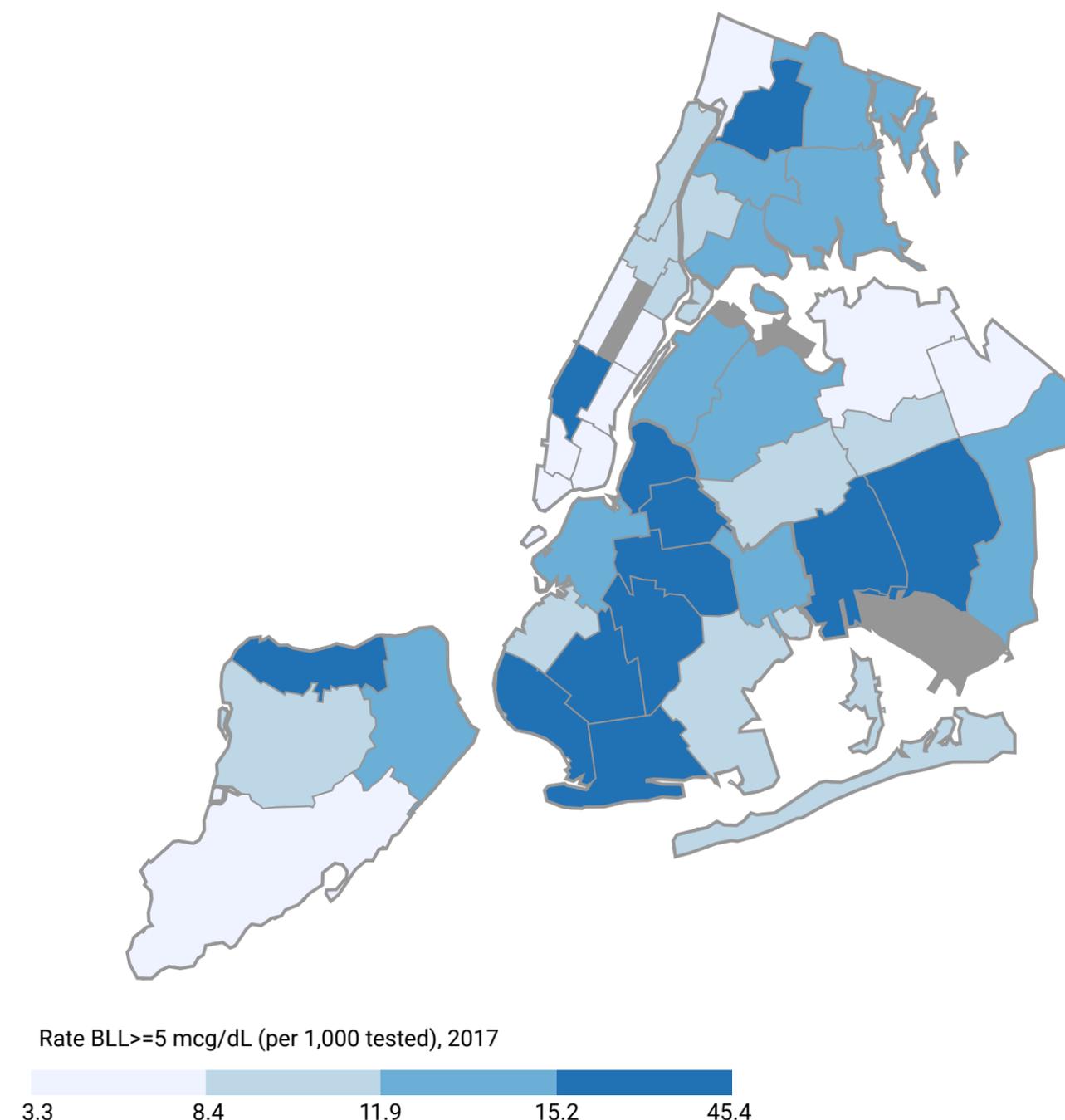
**Enhancing coordination and resources for families during peeling paint complaints.** Each year, approximately 2,500 apartments are inspected by HPD in response to a peeling paint complaint, and are identified to have a lead paint hazard. In order to better protect the children residing in these apartments, we propose improvements to the coordination between DOHMH and HPD, including a direct referral to DOHMH while HPD is on site for the peeling paint inspection. A positive lead paint inspection result will immediately trigger a DOHMH database search to determine if children in the apartment have been recently tested, and repeated follow-up via phone and letter to secure testing if needed.

**Offer free blood lead testing for children under 6 who do not have health care providers.** Lack of access to a regular provider or insurance should not be a barrier to ensuring children are connected to care and testing. The City will continue to link children who do not have a health care provider with Health + Hospitals (H+H), where they will be connected to a provider who can administer a free blood test and provide proper follow up if necessary. Connecting children to a regular healthcare provider is critical to ensure continuity of care if an elevated blood lead level is detected. Families can call 311 or find information on the DOHMH Healthy Homes webpage.

**Continue to enforce the blood lead testing requirement for child care admission.** During inspections of child care programs, DOHMH checks records for compliance with all mandated vaccines and blood lead testing. If a program does not have a complete record for the child, it is issued a summons subject to fines.

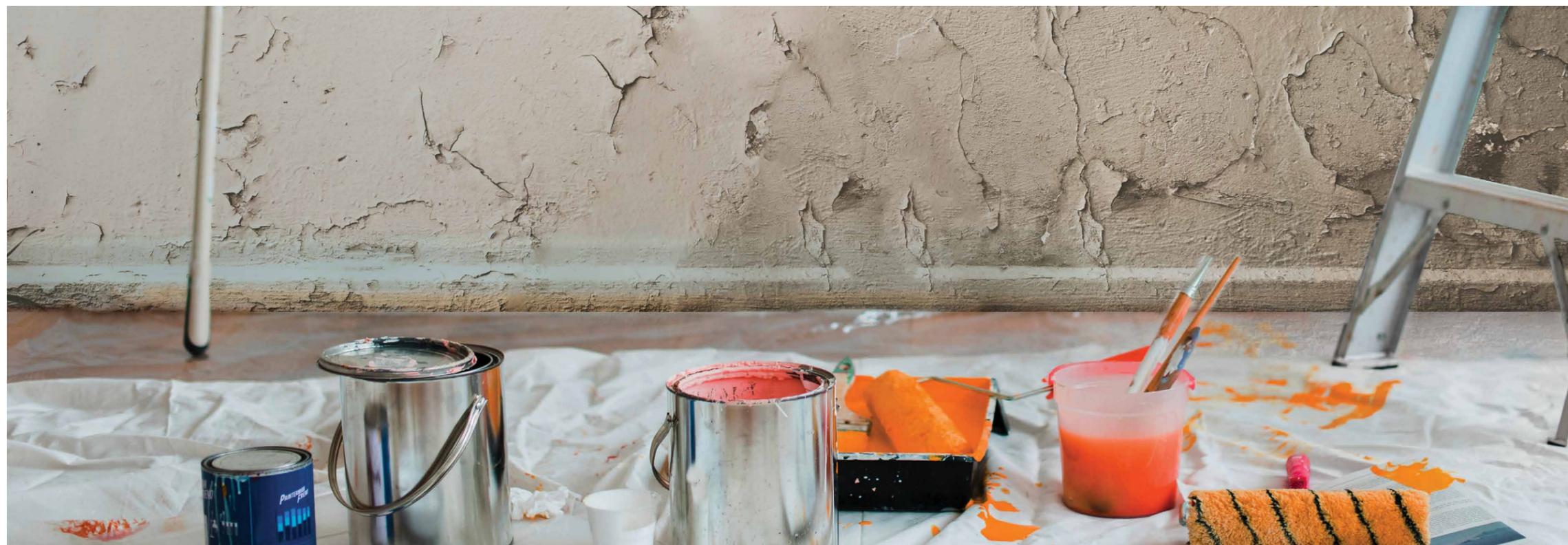
**Strengthen testing protocols at NYC Health + Hospitals.** Despite high rates of compliance among providers with the State testing requirement, NYC H+H will continue to strengthen system-wide efforts around testing at their facilities. H+H will perform real-time monitoring of the number of children tested by visit, facility, and age, and will make improvements to electronic medical records to notify doctors when lead testing should happen for children in their care. H+H will also enhance education provided during the newborn visit with new parents to ensure they are aware of testing requirements and EBL prevention strategies.

**Children under 6 years with EBL of 5 mcg/dL or greater (per 1,000 tested), 2017**



Source: DOHMH Environment & Health Data Portal

# Paint is the Problem: Eliminate Lead Paint Hazards



New York City banned the use of lead paint nearly 60 years ago. Despite this, lead paint remains the most commonly identified source of childhood lead exposure in New York City. When lead paint deteriorates, children can ingest lead from peeling or chipped paint, chewing on windowsills, and playing on floors covered in lead dust. Under Local Law 1 – which has been critical to reducing the number of children under 6 with elevated blood lead levels by 90 percent – landlords are responsible for determining if a child under the age of 6 resides in an apartment, inspecting for lead hazards on at least a yearly basis and remediating them, and making apartments lead safe upon turnover. To eliminate the lead risks in New York City, we must build on progress by increasing the enforcement and scope of Local Law 1 to address lead hazards in more places and at lower levels of lead.

## Expand the Reach of Local Law 1

Lead paint and the dust created by disturbing it – often through construction work – are the most common causes of elevated blood lead levels in children. Expanded reach and stricter standards

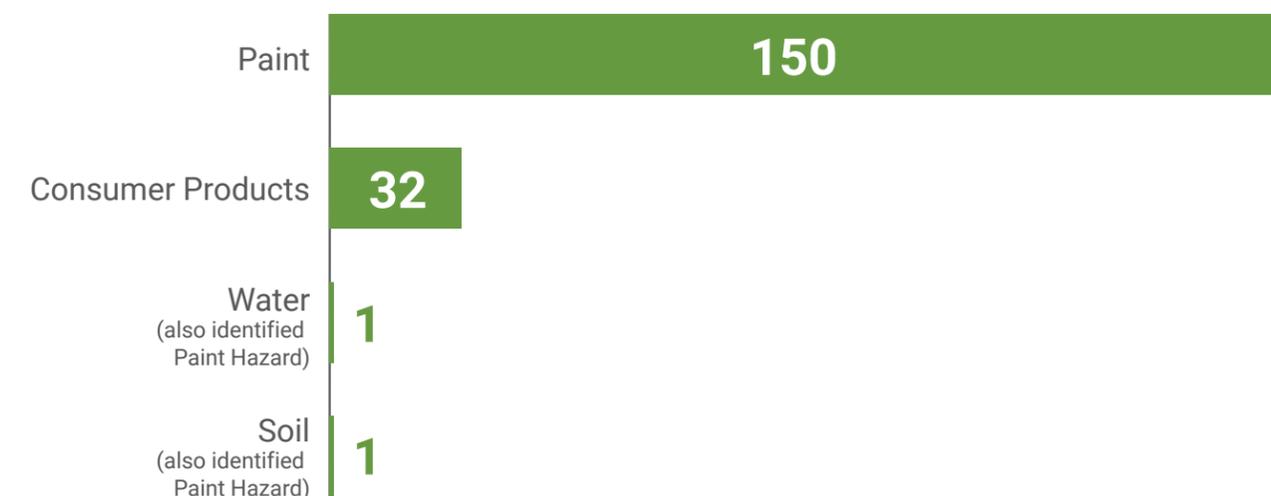
around what constitutes a lead hazard in the form of paint or dust will further our lead prevention efforts to eliminate childhood lead exposure. The administration will work closely with the City Council to strengthen Local Law 1.

**Lower the definitions of lead paint and lead dust.** As the City moves toward a lead-free future, increasingly lower levels of lead must be remediated or abated.

**Lead Paint:** Currently, lead paint is defined as having a lead content of 1 mcg/cm<sup>2</sup>. We are proposing to lower this to 0.5 mcg/cm<sup>2</sup>. Under this new standard, New York City's lead paint definition will be the most stringent of any big city, and even more homes will be subject to the enforcement powers already set forth in Local Law 1.

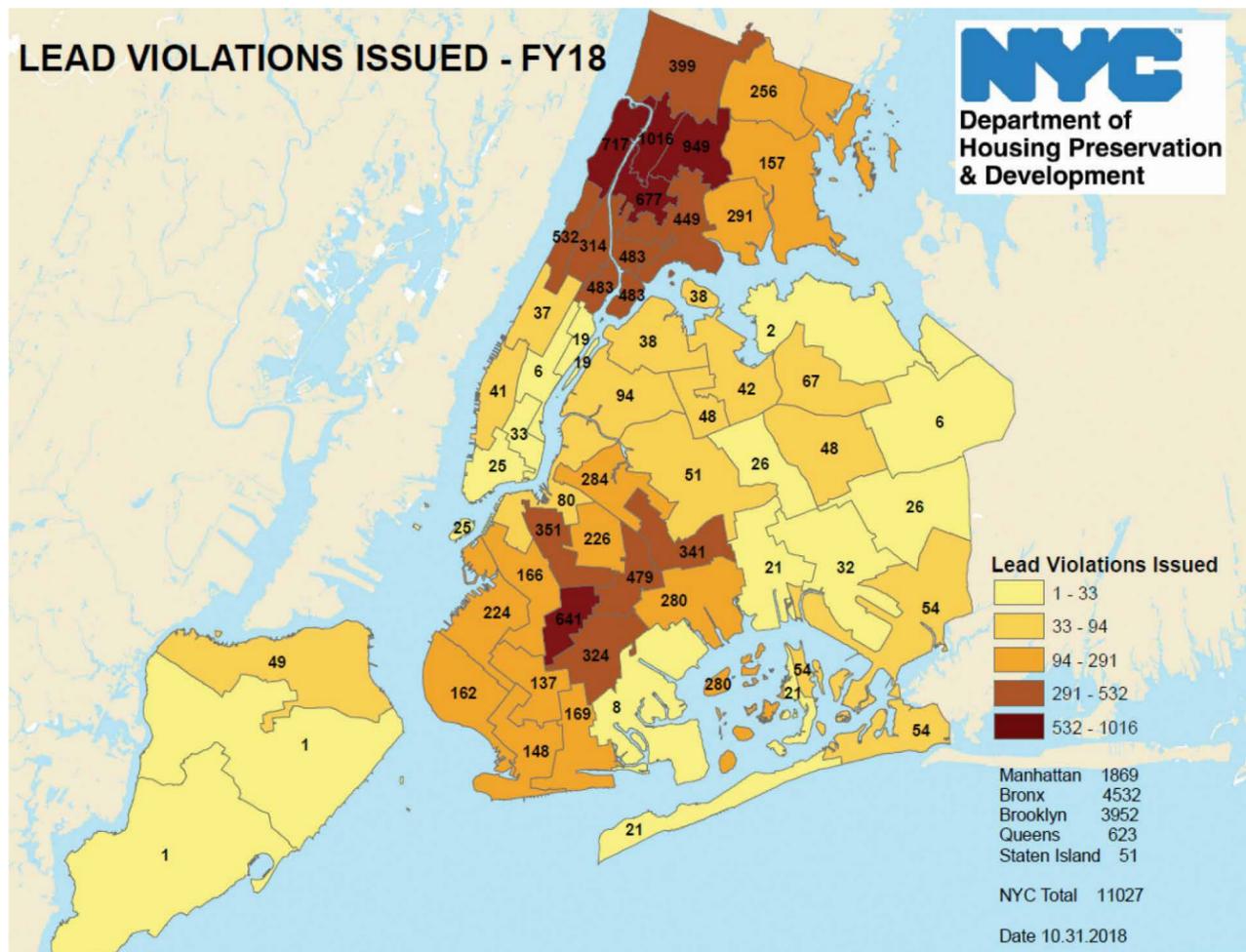
**Lead Dust:** Currently defined at 40 mcg/ft<sup>2</sup> for floors and 250 mcg/ft<sup>2</sup> for windows, we are proposing lowering the lead dust definition to 10 mcg/ft<sup>2</sup> for floors and 100 mcg/ft<sup>2</sup> for windows. We are proposing that this protective new legal

**In a group of 219 children who had a blood lead level at or above 15 mcg/dL in 2017, the following lead hazards were identified based on a home inspection and child-specific, comprehensive risk assessment results.**



Note: For children that do not have an identified detectable lead hazard in the child's environment, DOHMH works with the child and their family until the child's blood lead level drops below 5 mcg/dL. Of the 2 home inspections that identified water or soil with detectable levels of lead, both had a secondary source of paint identified. Soil is sampled and tested only when a child has a risk factor identified for (i) playing outside of the building where there is bare soil or (ii) eating soil. A residential water test is sent to each family, but it is not always returned.

Source: NYC Department of Health and Mental Hygiene



standard be used to assess all lead dust hazards, including from construction work in residential buildings and cleanup verification, which is a significant step further than what the EPA recently proposed.

**Expand Local Law 1 to include 1- and 2-family homes with children under 6.** Most provisions in the law currently only cover homes with three units or more. Children live in all types of housing and should be protected regardless of building size. We propose expanding requirements of Local Law 1 legislatively to include one- and two-family home rentals, which will result in an estimated additional 2,500 annual inspections of homes with kids under 6 with potential lead paint. For one year after the passage of the law, no violations will be issued and HPD will conduct extensive outreach to make sure all landlords understand and are able to fulfill these responsibilities. The goal of this expansion is education and safety, not punitive action.

### Hold “bad actor” landlords accountable

At the end of 2017, HPD initiated litigation against landlords who failed to produce adequate documentation that they were in compliance with inspection requirements in buildings referred by DOHMH. HPD has initiated 23 total cases and will expand its litigation efforts against the city’s worst landlords.

### Strengthen enforcement of Local Law 1

Currently, enforcement of Local Law 1 is primarily driven by complaints from tenants or when DOHMH has been notified of a child with an elevated blood lead level. We will now add resources and staff to proactively enforce against landlords and contractors who fail to meet the law’s requirements. The increase in overall enforcement efforts will result in more apartments inspected, more remediation and abatement of lead paint, and ultimately, a reduction in lead hazards throughout the city.

### Create a “Building Lead Index” to better target proactive inspections.

By this summer, HPD and DOHMH will create a Building Lead Index to identify 200 buildings each year that pose the highest lead exposure risk, using data such as prior violations, the age of the building, and whether the building is in an area with higher rates of children with elevated blood lead levels. The “Building Lead Index” will be used to prioritize proactive inspections and outreach efforts.

### Proactively audit lead-related records kept by landlords.

HPD will invest \$1.2 million per year to conduct proactive audits of compliance records from Building Lead Index buildings. Buildings that produce insufficient records will be proactively targeted for inspections, with violations and fines issued where needed.

### Aggressively increase oversight for work that poses a risk of lead dust.

Common renovation activities like sanding, cutting, and demolition can create hazardous lead dust and paint chips that can harm occupants, especially children under 6. In addition to contributing to elevated blood lead levels in children, the release of lead dust from uncontrolled construction can be a form of “toxic tenant harassment,” used as a mechanism to displace rent-regulated tenants.



## IS LEAD DUST POISONING YOUR CHILD?

LEAD DUST IS A SERIOUS HEALTH THREAT. CALL 311 TO REPORT DUST FROM CONSTRUCTION. IT’S YOUR RIGHT.

LEARN MORE AT [NYC.GOV/LEADFREE](http://NYC.GOV/LEADFREE).



The City will undertake expanded enforcement activities related to federal and state safe work practices. This approach will focus on prevention of unsafe practices and make enforcement more robust to address bad actors:

### Safe Work Practices

Safe work practice regulations are codified in both federal and local laws. Taken together, these laws form enforceable safe work practices, including pre-notification to DOHMH for work potentially disturbing lead paint, measures to control dispersal of lead dust, and cleaning protocols.

- Requiring proof of EPA-certification for home improvement contractors, plumbers and electricians who conduct renovation work.
- DOB, HPD, and DOHMH will conduct monthly interagency inspections of buildings under construction in high-risk areas to ensure work is being done safely.
- DOHMH currently issues stop work orders when they respond to a complaint and identify lead paint hazards, including dust hazards. In order to ensure that unsafe work does not continue, a DOHMH stop work order will now trigger a DOB stop work order, which will prohibit all or certain work at the building from continuing. By taking a unified approach to enforcement, DOHMH and DOB can work together to ensure that dangerous conditions are remediated before work is allowed to proceed.
- Expanded public outreach, including a \$500,000 citywide ad campaign from DOHMH encouraging New Yorkers to report any unsafe work practices or suspected lead paint hazards.

**Ensure lead paint hazards are addressed in public housing and City-housing programs**

Over 400,000 New Yorkers live in public housing, and many others reside in shelters, foster homes, or federally subsidized housing. The City has developed a robust plan to inspect these homes and address identified lead paint hazards.

**In the New York City Housing Authority (NYCHA): Test 135,000 NYCHA units for lead hazards by the end of 2020.**

The City has committed \$80 million for NYCHA to test over 135,000 units built before 1978, prioritizing buildings with higher concentrations of children. Testing will be conducted using X-Ray Fluorescence analyzers to test for lead paint on every surface of each apartment.

During these inspections, NYCHA will identify and document mold/mildew conditions, leaks/moisture problems, and paint conditions in each apartment. NYCHA will also conduct an integrated system of activities involving planning, quality control, quality

assessment, reporting and quality improvement to ensure that its lead inspection initiative is as strong as possible. NYCHA will perform necessary work to abate any hazards found in these units, the costs of which will be determined by the results of the 135,000 inspections. Developments with a high percentage of units that test positive for lead that require major capital work to abate will be added to the Permanent Affordability Commitment Together (PACT) pipeline or included in NYCHA's capital plan.

**Make lead testing results and progress on this effort available to residents and the public in a timely manner.** In addition to ensuring individual residents are receiving clear and rapid communication about results for their own apartments once inspected, NYCHA will report its lead-free units online each month by mid-2019.

**Ensure staff are trained on lead safe work practices.** NYCHA continues to work towards compliance with lead safe work practice requirements, including prioritizing training/certifications, IT integration, guidance and procedures, and compliance monitoring. Currently, 97 percent of required NYCHA staff are RRP-certified. With staff turnover, there will always be a small portion of staff whose certification is in progress; NYCHA will offer regular trainings to ensure that new staff are certified. NYCHA is conducting quality assurance spot checks to audit compliance with safe work practices.

**In our shelters: Invest an initial \$7 million to test for and eliminate lead hazards from all family shelter units.** Currently, nonprofit providers and landlords are responsible for remediating lead hazards and documenting compliance with Local Law 1. For the next four years, DHS and HRA will hire contractors to test family units in shelters and abate any lead paint. Contracting for this work will remove the burden from nonprofit providers and

landlords while ensuring this work is being done effectively, efficiently and uniformly, and that all children are safe. Fully eliminating lead paint risks in shelters is an investment in the long-term health and development of the city's most vulnerable children.

**From 2014 to present, of 120,000 sheltered children, just 25 had elevated blood lead levels.**

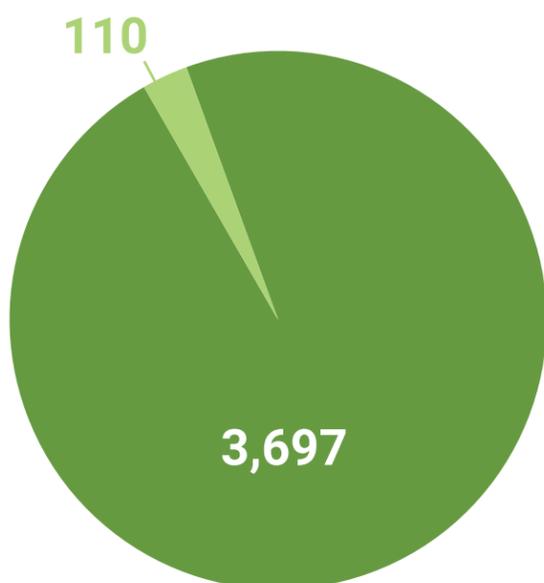
**In other subsidized housing: Robust lead processes for rental assistance programs.** Recently, DSS consolidated seven of its rental assistance programs into a single streamlined program called CityFHEPS. A key component of CityFHEPS is the establishment of standardized tools and processes to address health and safety violations, including lead hazards. Units to which clients are moving with CityFHEPS are checked for outstanding violations and must also clear a standardized walkthrough review, which includes a visual check for peeling paint. Additionally, landlords must certify compliance with Local Law 1.

**Lead hazard inspections in Section 8 housing.** HPD and NYCHA administer Housing Choice Voucher programs, also referred to as Section 8, to provide assistance to eligible low- and moderate-income families to rent housing. Administering agencies conduct Housing Quality Standards inspections which includes adherence to HUD Lead Safe Housing Rule and, for multiple dwellings, Local Law 1 of 2004 regulations. HPD and NYCHA each perform thousands of inspections to ensure safe living environments for the families in their respective programs.

**Help private owners become lead-free** Under Local Law 1, landlords are responsible for identifying and remediating lead hazards. The

**Elevated Blood Lead Levels by NYC Housing Type**

Children in New York City with blood lead levels of 5 mcg/dL or greater (2018)



From January through September 2018, there were 3,807 children younger than 18 years old with blood lead levels of 5 mcg/dL or greater in New York City; 110 of these children were associated with public housing. Compared to the same period in 2017, that's a decline of 9% for children associated with private housing and 12% for children associated with NYCHA housing.

- Number of children associated with private housing with blood lead levels of 5 mcg/dL or greater
- Number of children associated with NYCHA with blood lead levels of 5 mcg/dL or greater

City is committed to making it easier to follow the law to keep homes safe. We are taking steps to make compliance and abatement costs more manageable for landlords by expanding financial assistance, and increasing outreach and language access services to ensure landlords understand the requirements and the options available to them.

**Expand financial assistance for landlords who abate hazards while preserving affordability.** In addition to pursuing recently announced federal and State lead hazard abatement opportunities, HPD will invest an additional \$5 million a year to expand the Lead Hazard Reduction and Healthy Homes Primary Prevention Program (PPP). PPP provides grants to owners of pre-1960, low-income residential buildings for the reduction of lead paint hazards through forgivable loans with affordability agreements. This funding assists owners and landlords of lower-income buildings to afford the expense of abating lead hazards while keeping their units affordable for tenants.

**Expand landlord outreach and language services.** HPD will invest \$500,000 to conduct a multifaceted outreach campaign to NYC landlords, both small and large, to ensure that the requirements of Local Law 1 are well understood. Outreach will be performed in multiple languages. HPD will target neighborhoods that have historically had higher levels of lead paint and where increased landlord engagement is more likely to improve compliance outcomes.

**Require landlords to maintain lead-related records and paperwork online.** Landlords will be required to file all lead-related paperwork and be able to apply for exemptions to Local Law 1 in a centralized HPD web portal. By 2020, this portal will require proactive certification of the annual visual inspections, and that landlords verify friction surfaces have been abated when the apartment was vacated. The portal will also accept all documentation needed for an exemption.

**Restructure the exemption process to create a Lead Paint Free certification.** Currently, pre-1960 buildings are presumed to have lead paint and are subject to Local Law 1 requirements. Building owners can receive a Local Law 1 exemption if they demonstrate to HPD they do not have lead paint or have encapsulated or enclosed lead paint hazards. We are restructuring the exemption process so that pre-1960 buildings can apply to be certified Lead Paint Free (LPF) or Lead Paint Safe (LPS). Units will only be certified Lead Paint Free if they have fully eliminated the underlying lead paint.



# Eliminate Dangerous Consumer Products



These images are part of a marketing campaign being sponsored by DOHMH

City data points to unsafe consumer products – including certain ceramics, jewelry, cosmetics, toys and spices sourced from other countries – to be the second most common source of lead exposure in New York City. DOHMH testing of products reveals some items for sale in New York City, such as certain eyeliners and Sindoor hair powder, may contain dangerous levels of lead. DOHMH needs additional resources to further regulate, and raise awareness around, lead levels in consumer products.

**Create a “Lead Products Index” for unsafe products.** DOHMH will propose an amendment to the New York City Health Code to establish more stringent lead standards for these products, and consolidate all lead consumer standards into one comprehensive set of rules that will clarify the products deemed unsafe.

**Require mandatory “Safe Products Awareness training” for businesses that sell unsafe products.** Business may unwittingly sell products containing lead. Instead of a fine, first-time offenders will be required to complete a new mandatory online Safe Products Awareness Training program. The training will include information on best practices to detect and avoid high-risk items before they reach customers.

**Require high penalties for businesses that willfully sell harmful products.** Fines for selling hazardous products will be elevated where the seller is a repeat offender, specifically markets the harmful product to children, or sells multiple hazardous items. Additionally, DOHMH will expand enforcement actions against importers, wholesalers, and other parts of the supply chain.

**Invest \$750,000 annually to add inspection and testing resources.** DOHMH will have more staff to increase enforcement around sale and distribution of harmful products. DOHMH will also increase proactive sweeps and testing for lead products in neighborhoods with a higher risk for elevated blood lead levels or where unsafe products have previously been found.

**Target education and outreach about unsafe products to high-risk communities.** DOHMH will conduct outreach to those most likely to come into contact with these products and ensure that all materials are translated into languages spoken in these communities.

## Manage Other Potential Hazards



### New York City's Water is Virtually Lead-Free

New York City's water supply is safe and delivered virtually lead-free to buildings. Our water is tested over 600,000 times each year at various points throughout the system. However, privately-owned infrastructure – like water service lines and internal plumbing and fixtures – may contain lead that can cause elevated lead levels in water from a tap. In New York City, plumbers could legally install lead service lines until 1961, and patch repairs to lead lines were allowed until 2009. Lead service lines were typically manufactured in diameters of two inches or less and therefore are typically found in buildings with fewer than six units. The Department of Environmental Protection estimates that there are up to 130,000 potential privately-owned lead service lines throughout New York City.

Elevated blood lead levels in children are rarely associated with water. In the majority of homes with lead service lines or lead plumbing, running the water for 30 seconds reduces the presence of lead.

Any New Yorker who is concerned with their drinking water quality can request a free lead in water test kit from DEP through 311. DEP will provide testing results and –in the extremely rare cases elevations are detected from private infrastructure – DEP will provide a free, certified water pitcher and filter.



**Take action when lead levels in water exceed EPA guidelines.** The federal Lead and Copper Rule does not require landlords to fix plumbing issues that could be causing elevated levels of lead in a tenant's drinking water. To protect these tenants, the City will launch a program to provide free drinking water filters to tenants with elevated lead levels in their drinking water caused by internal plumbing issues. We propose a legislative change that would require landlords to communicate the exceedance in the unit to other tenants through public posting and lease disclosure requirements.

**Expand efforts to replace lead service lines.** The City will pilot a program using \$5.3 million in grant funding from the State Health Department to help low-income, single-family homeowners replace lead service lines. The City will supplement any funding necessary to extend this program to the estimated 1,900 eligible homeowners. If successful, this pilot will be used to inform a citywide program to replace lead service lines during routine water main construction.

**Publish a map of all lead service lines.** To promote transparency, the City will publish a web map with the location of all potential lead service lines on the LeadFreeNYC website, making clear to owners and tenants whether their building uses one.

**Continue efforts to survey and replace any City-owned water infrastructure containing lead.** Efforts are now underway to test every public water fountain in parks and playgrounds. DOE tests all water fountains and faucets in schools, makes those results available to parents, and ensures our kids' safety.

**Promote free water testing kits.** DEP will undertake a marketing campaign over the next two years to inform more New Yorkers that the City offers free water testing kits for any resident who calls 311 or requests one online.

**Actively participate in ongoing water research.** DEP will expand its current lead research program to identify opportunities to further improve

corrosion control treatment in the distribution system, better understand the relationship between tap lead concentrations and different premise plumbing configurations, and seek out the best practices for water supply operations as more stringent drinking water regulations are developed.

### NYC Water Supply Protections

The federal Lead and Copper Rule (LCR) requires water utilities, including DEP, to regularly monitor the tap water in a representative group of homes that have lead plumbing. Water utilities use this monitoring data to optimize their corrosion-control procedures to reduce the release of lead from privately-owned plumbing. The LCR specifies that ninety percent of water samples collected at the monitored homes have less than 15 parts per billion (ppb) of lead, which NYC's water continuously achieves.

DEP fully complies with federal drinking water standards by ensuring water is (i) pH balanced to be minimally corrosive and (ii) treated with orthophosphate, a food grade additive that creates a protective lining on the inside of pipes, minimizing the release of lead to the water. Water in lead service lines is most likely to exceed 15 ppb when it has been allowed to stagnate for a period of time. Running tap water for 30 seconds when water has not been used for a few hours significantly reduces lead in most cases.

### Educate the public about lead in soil

Lead paint remains the most common source of elevated blood lead levels in NYC, but decades of use of lead paint, leaded petroleum and industrial practices have resulted in detectable lead levels in soil throughout the City. Lead also occurs naturally in soil, and it cannot be fully eradicated, but the associated risks of lead in soil can be managed and reduced.

**Educate the public on safe soil practices.** Though not a primary exposure source, soil with detectable levels of lead can pose a risk if a child ingests dirt with high levels of lead. The City will partner with the Legacy Lead Coalition to raise awareness of the simple steps people can take to reduce any chance of exposure; such as, gardening in raised beds, testing soil and covering with clean soil or wood chips, planting ground cover plants, and washing hands after gardening or playing outside.

**Provide clean soil to communities impacted by high levels of lead in soil.** The NYC Clean Soil Bank is a program that diverts clean native soil from construction sites and makes it available as clean backfill for use at private and public construction projects, wetland restoration projects, coastal resiliency projects and community gardens. The City will work to make this material freely available to community gardens.

**Survey NYCHA playgrounds to identify and address bare soil risks.** NYCHA has 822 playgrounds. City staff will survey all NYCHA playgrounds by summer 2019 to identify bare soil that could pose a risk. Playgrounds with bare soil will be covered with wood chips, gravel, or rubberized mats.

# The NYC Clean Soil Bank and PURE Soil Program



In the past five years, the Clean Soil Bank has delivered approximately 500,000 tons of pristine soil to in-city uses rather than have it shipped out-of-state for disposal. Because Clean Soil Bank soil was deposited by the last glacier more than 10,000 years ago and has been untouched by human activity, it is the cleanest soil that can be found in New York City and is tested through a 12-step process.

Soil from the Clean Soil Bank is delivered free of charge. Last year, the City launched the Progressive Urban Resource Exchange Soil Program- which delivers Clean Soil to community groups- to retain our precious, natural, and recyclable resources right here in NYC. The NYC Department of Transportation recently executed a two-year lease with East New York Farms for a PURE Soil stockpile, which is expected to open this spring. Community groups can request more information on the PURE Soil Program by calling 311.

# Make LeadFreeNYC a Reality



## Communicate clearly about lead hazards and prevention strategies

It should be easy to understand whether your apartment contains a hazard, what a test result means, or what your landlord is required to do next. Educational materials, notifications, and updates on the City's progress on lead prevention efforts should be clear, straightforward, and easily accessible. New York City's lead legacy requires clarity and vigilance to ensure children are not exposed.

## Ensure public-facing communications use simple infographics and plain language so New Yorkers understand potential risks.

Creating informative and consistent metrics as well as simple steps everyday New Yorkers can take to reduce their children's exposure to lead hazards, empowers all of us to ensure a lead-free future.

## Launch the LeadFreeNYC website to show maps, data, and progress on lead prevention initiatives.

The LeadFreeNYC website, which will go live in February 2019, is a one-stop shop for all things lead. It will contain helpful information and guidance for parents, tenants, landlords, and all New Yorkers. The site will include a public-facing data dashboard to illustrate progress toward a LeadFreeNYC and on the plan's specific initiatives.

## Continuously strengthen lead prevention efforts

A Citywide Lead Compliance Officer will ensure the execution of this roadmap's recommendations, along with coordinating data-sharing efforts and overall compliance with lead-related regulations. Additionally, an advisory board of external partners will be convened to consult on the latest best practices and keep the City accountable to its mission.

## Hire a Citywide Lead Compliance Officer.

This officer will manage interagency data-sharing efforts and agency coordination; ensure compliance with all City, State, and federal regulations related to lead; and work across City agencies to deepen our progress in reducing and eliminating lead hazards in New York City.

**Partner with external advisors.** We need environmental advocates, community groups, and experts to lend their expertise in building on the City's lead prevention efforts, holding ourselves accountable, and leaving no stone unturned in the mission to eliminate lead exposure in New York City. DOHMH currently organizes an advisory board, which will be expanded to include a wider range of stakeholders and will convene on a more frequent, quarterly basis. This group will help hold the City accountable to its commitment to eliminate childhood lead exposure in New York City.

# Glossary of Key Terms

These definitions are intended to provide a basic summary of the key terms for readers of this report. They are not legal definitions. The legal definitions of these terms are available in the respective laws, regulations, and official guidance documents.

**Abatement:** Abatement is a measure or set of measures designed to permanently eliminate lead based paint hazards or lead based paint. Abatement may include the removal of the building component (such as a windowsill), the removal of lead paint, the enclosure or encapsulation of lead paint hazards, the removal of lead contaminated dust or soil, or the overlaying of soil with a durable cover material covering.

**COTA: Commissioners Order to Abate:** DOHMH issues a Commissioner's Order to Abate (COTA) mandating the abatement of a lead paint hazard if a blood test demonstrates a child has been exposed to unsafe levels of lead and an investigation reveals the presence of lead paint in his/her school and/or residence.

**Elevated Blood Lead Level:** Elevated blood lead level (EBLL) means a confirmed concentration of lead in a blood sample greater than or equal to 5 mcg/dL. An EBLL triggers a series of protective actions by the City, including a home investigation



with a comprehensive interview of the family and child, an inspection of the child's unit for lead paint hazards and supplemental addresses, environmental sampling, and- when warranted- the issuance of a Commissioner's Order to Abate (COTA).

**Encapsulation:** Encapsulation is a barrier technique used to control lead paint hazards through which materials that are applied over lead paint to seal the paint to a surface and prevent the release of paint chips or dust. The material may be either a liquid or an adhesive.

**Enclosure:** Enclosure is a barrier technique to control lead paint hazards via the use of rigid, durable construction materials that are mechanically fastened to the lead substrate.

**Lead Paint Hazard:** A lead paint hazard means lead paint that is deteriorated and could result in adverse human health effects.

**Local Law 1:** Local Law 1 of 2004 (the Childhood Lead Poisoning Prevention Act) is New York City's law requiring landlords to identify and fix lead-based paint hazards in apartments where children under the age of 6 reside. Local Law 1 includes three main provisions:

- Local Law 1 also requires that residents inform their landlord if a child under 6 years old resides or will reside in the apartment. Child-occupied homes are required to be visually inspected for lead paint hazards annually.
- Before renting a vacant apartment, a landlord must remediate lead paint hazards and permanently remove lead paint from "friction surfaces," including door frames, doors, and windows.
- Construction and renovation activities that may disrupt lead paint must adhere to safe work practices, which include cleanup protocols, dust containment procedures, and the prohibition of certain lead paint activities, like dry scraping.

**Remediation:** Remediation includes both permanent abatement actions AND less permanent measures like scraping and repainting. Remediation (as defined by NYC's Local Law 1) is the reduction or elimination of a lead paint hazard through the wet scraping and repainting, removal, encapsulation, enclosure, or replacement of lead paint, or other method approved by DOHMH.

**XRF (X-ray Fluorescence) Analyzer:** An XRF analyzer is a portable instrument that determines lead concentration in milligrams per square centimeter (mcg/cm<sup>2</sup>).

## More Information

This report and more information about preventing childhood lead exposure are available through the LeadFreeNYC website at: [nyc.gov/leadfree](http://nyc.gov/leadfree)

The text of the New York City Childhood Lead Poisoning Prevention Act (Local Law 1) is available at: [www1.nyc.gov/assets/hpd/downloads/pdf/lead-local-local1-2004.pdf](http://www1.nyc.gov/assets/hpd/downloads/pdf/lead-local-local1-2004.pdf)

More information on the US EPA's Renovation, Repair and Painting (RRP) Rule and Program is available at: [www.epa.gov/lead/renovation-repair-and-painting-program](http://www.epa.gov/lead/renovation-repair-and-painting-program)

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