WRITTEN TESTIMONY OF

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BEFORE THE

Joint

Senate Standing Committee on Health Senate Standing Committee on Housing, Construction and Community Development

Regarding the Joint Public Hearing: To discuss Childhood Lead Poisoning Prevention in New York State

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My Background

I am a scientist and a low-income housing provider. I am currently the Chief Scientist at the National Center for Healthy Housing (NCHH) and also board president of Lincoln Westmoreland Housing, a non-profit inter-racial faith-based housing organization in Washington DC providing low-income housing for 150 families.

I am experienced in risk assessment and risk management in housing insurance, described in more detail later. I also serve as director of a World Health Organization Collaborating Center on Healthy Housing in the US, an adjunct professor at the University of Illinois at Chicago School of Public Health and a board member of the nation's only professional association of lead paint inspectors and remediation businesses, the Lead and Environmental Hazards Association. Today I represent NCHH.

NCHH is a national technical, scientific and policy non-profit organization dedicated to developing and promoting practical scientifically validated measures to protect children from residential environmental hazards while preserving affordable housing and reducing inequities. NCHH develops valid and practical strategies to make homes safe from hazards, to alert low- income families and occupants about housing-related health risks, and to help parents protect their children from unhealthy housing. We have been actively involved in lead paint issues in New York for decades.

Previously, I served as the Director of the Office of Healthy Homes and Lead Hazard Control at the U.S. Department of Housing and Urban Development from 1995 – 2004. I was the principal author of the first federal interagency strategy to address childhood lead poisoning for the President's Task Force on Environmental Health and Safety Risks to Children in 2000, a report to Congress launching the healthy homes initiative and I have published many peer-reviewed scientific studies and policy analysis.¹ I was responsible for the reform of all federally assisted housing lead paint regulations, including insurance.

Summary

Thank you for the opportunity to discuss lead poisoning prevention. My remarks today will show why lead paint in housing continues to be an important issue and why new initiatives are needed. Those initiatives should include lead inspections/risk assessments at the time of sale to ensure that disclosure contains information on known lead paint hazards that will enable financing of corrective measures (similar to how other building deficiencies are treated). Another important initiative is to make lead paint an insurable risk not subject to a "pollution exclusion" provision. I will outline the key success stories on how lead paint insurance came about in public and other housing, the data proving its success, and why the New York Senate can act on the evidence in a thoughtful enlightened manner.

As a leading national research, policy, and advocacy organization focused on addressing home environmental health hazards, the National Center for Healthy Housing (NCHH) recognizes that lead poisoning continues to be one of the most severe childhood environmental health risks, and that housing in its primary source. Lead poisoning's lifelong effects on children cannot be treated medically, but it can be readily prevented through addressing lead hazards in housing. In this context, action in New York is of critical national priority, because New York is among the states with the largest number of high lead-risk homes and the highest number and rate of lead poisoned children in the country. Yet New York's policy infrastructure is woefully behind the times. At the same time, experience at the federal level and in other states points the way to crucial improvements in New York's lead prevention system. This testimony outlines some of these key learnings and crucial next steps

The original version of the 1992 federal lead paint disclosure law required a risk assessment at the time of sale. However, this provision was removed from the final bill, requiring only disclosure of "known lead-based paint and/or lead-based paint hazards." Because most homes in both New York and across the nation remain uninspected, there is nothing to disclosure because the presence or absence of lead paint remains "unknown." This makes financing corrective measures for lead paint unlike other property deficiencies, preventing the housing market from working correctly. The New York Legislature should eliminate this loophole to enable action before children are poisoned, instead of the status quo, which mainly requires action only after a child's blood lead has increased.

Similarly, the insurance industry's position that ending the pollution exclusion clause will somehow cause property owners to not correct lead paint hazards, will harm the public health of children, and will destabilize the insurance market by creating a wave of lawsuits is not consistent with the evidence. It is also illogical. Instead, insurance companies can and must include lead paint risk identification and control in their underwriting standards, just as they do with other property deficiencies.

Lead paint risks are known, quantifiable, and corrective methods are well-established with validated exposure and remediation standards already in place for decades. Although lead paint exposures remain a significant problem, most children are not in fact lead poisoned in New York and most houses do not contain lead paint hazards, as I will demonstrate with the evidence. Insurance actuarial professionals should sharpen their pencils, calculate the true (not feared) risks, and produce evidence-based insurance policies that will stimulate remediation in the same way other property deficiency corrections are stimulated by insurance.

The time has come for the housing, health and insurance industries to become part of the solution, and not continue to claim that it is only up to someone else, such as landlords or parents or the government to solve it.

The Right To Know

I helped to write the implementing regulations for the federal lead-based paint disclosure law and testified at several Congressional hearings on the bill in 1991. The Congressman who introduced the disclosure part of that bill intended that it require inspections so that families and owner understood exactly where lead paint and lead paint hazards were located in their homes so they could act to protect their children. However, the bill was watered down. Instead, the nation's current law on disclosing lead paint in housing does not require determining whether lead paint, contaminated dust or contaminated soil is actually present,² but New York State could correct this loophole.

Instead, the federal law only requires disclosure of already known lead hazards; that is, the results of tests previously conducted (if any). But because most homes have not been inspected, there is usually nothing to be disclosed. This means that both occupants and owners do not have the information they need to properly manage the risk. Furthermore, the current federal law does not cover drinking water and disclosure of lead pipes.

The New York Legislature should require, prior to obligation under a sale or lease contract, testing (if not previously performed) of paint, dust, and soil, and a visual inspection of the service line and where available a report from the water utility to assess if it contains lead. This information must be disclosed to sellers, buyers and renters. The disclosure will allow remediation to be financed through mortgages or other financial means in much the same way that other property deficiencies are typically corrected at the time of financing or sale. We urge the New York Senate to pass S 2142a.

Lead Paint Insurance

Although the private insurance market has excluded lead paint from their housing insurance policies under a general "pollution exclusion clause," there have been at least two nationwide programs that have now been in place for decades, proving how lead paint can be insured and how it can be included in underwriting standards. These two efforts include insurance policies issued by the Housing Authority Risk Retention Group (HARRG) and for Multi-Family Mortgage Insurance for federally assisted housing.

I was approached years ago by HARRG to help devise a way to manage lead paint risks in public housing. At the time, public housing was the first class of housing to be regulated for existing lead paint. Congress mandated that virtually all family public housing be inspected for lead paint. But at the time, the only way housing authorities could remediate lead paint was at the time of comprehensive modernization, which in some cases was decades away for a given public housing development.

This placed public housing authorities in an untenable position: They had knowledge on where lead paint was located in their housing units, but no funding to address it quickly. Lawsuits were predicable, and quickly grew in the 1980s before scientifically validated exposure and remediation standards were promulgated. In the face of this crisis, a number of housing authorities banded together and decided to self-insure against lead paint risks. My task as a scientist was to develop a method of measuring and remediating the immediate risks from lead paint for the insurance. Out of this grew a risk assessment protocol that is now practiced across the country by licensed lead paint risk assessors for all housing, not only public housing. In order to obtain the lead paint insurance, housing authorities were required to undergo the risk assessment and to remediate lead paint hazards using interim controls, which they could do using their maintenance budgets, and to monitor the condition of that paint to ensure that hazards did not reappear until it could be permanently abated.

In short, lead paint in public housing was treated like any other insurable housing deficiency: Underwriting standards were put in place that incentivized immediately controlling lead paint hazards. The program has been in place since the late 1980s and despite attempts to prove it somehow disrupted the insurance market, there has been no such evidence.

Instead, the data show it was a tremendous success. Public housing (with some notable exceptions) has some of the lowest levels of both elevated blood lead levels in children and residential lead paint hazards. One study found that only 0.25% of children residing in public housing had blood lead level exceeding the CDC reference limit (which at the time was 5 micrograms per deciliter), compared with 2.76% of children residing in private low-income housing. After adjustments for various confounding factors, public housing was associated with a 92% lower odds of children having a high blood lead level.³ Another nationwide study found the same thing: Children living in assisted housing had a 20% significantly lower blood lead level than comparable children who did not receive housing assistance.⁴ HUD's most recent national survey shows that the percent of federally assisted housing.⁵

In addition to the public housing program, HUD required that multifamily mortgage insurance programs include lead paint, starting in 1999. Specifically, if HUD received a new application for mortgage insurance or already owned the mortgage, a risk assessment, control of hazards and on-going monitoring were all required before a firm commitment of that insurance was permitted.⁶

In both public housing and the multifamily mortgage insurance programs, the requirements to include lead paint as part of insurance has stood the test of time.

Childhood Lead Poisoning and Lead Paint Hazards In New York State

Although childhood lead poisoning and lead paint remain important problems, the risk is actually much lower than what the industry claims, making the risk insurable and manageable. The most recent publicly available 2017 surveillance data for New York from CDC shows that only 4.7% of young children had confirmed blood lead levels above the CDC 2012 reference value of $5 \mu g/dL$ (this excludes NY city, which was 1.4%). In other words, 95% of children in New York State are **not** lead poisoned. Furthermore, we know that approximately 30% of children with elevated blood lead are exposed to non-lead paint sources, such as food, diet, hobbies, take home exposure from paint and others.⁷

Clearly, this is still far too many children. But from an insurance perspective, the risk of injury is comparable to or lower than other housing defects that are already covered in housing insurance policies. For example, many policies require smoke alarms. Although the risk of fire for a given housing unit is low, the insurance industry incentivizes smoke alarm installation across the board. This makes sense and has produced enormous benefits.

The insurance industry's claim that they will be swamped by claims for lead poisoning is without merit. In fact, the evidence shows exactly the opposite because most New York children are not poisoned. Furthermore, their claim that owners would defer maintenance and shift the burden to the insurance industry is simply illogical. No building owner (and I run large housing developments in Washington DC for low-income families) wants to have to submit a claim to an insurance company. In the vast majority of cases, building owners do maintenance, and comply with insurance and other requirements. The few that do not are subject to the higher insurance premiums that the industry already knows how to quantify.

Indeed, a "Memorandum in Opposition" to this bill from the New York Insurance Association acknowledges the well-known "virtuous economic cycle," in which property owners repair defects to avoid loss of liability insurance.⁸ But the Association claims that lead paint is somehow different, pointing to lawsuits that occurred in the 1980s and 1990s. Respectfully, that was a long time ago and occurred precisely because lead standards had not been put in place. I and many others produced the evidence and promulgated such standards, which have now been in place for decades. As a result, lawsuits on lead paint have in fact plummeted. Of course, the risk is not zero, and that risk needs to be quantified and managed, just like any other property liability risk. Lead paint is in fact part of the "virtuous economic cycle," the same cycle the insurance industry itself champions.

If the insurance industry were to implement appropriate underwriting standards that required risk assessments, claims for lead poisoning will be very few, because there would be scientific evidence that a home occupied by a young child with an elevated blood lead level did not have lead paint hazards, proving the exposure came from somewhere else. The fear that the industry would be swamped by claims like they were in the 1980s is groundless, because today we have risk assessments, exposure limits and well-validated remediation procedures that have already been applied to millions of housing units across the country. This bill would simply require the industry to act on the evidence.

The Find It Fix It Fund It Campaign and Childhood Lead Poisoning Policies

My group and others have put forward various policy recommendations, which are embodied in a "Find It Fix It Fund It" campaign, and that I helped to write.⁹ The campaign includes various actions for both public and private sectors and the proposed New York State bill is consistent with the recommendations. One recent letter to a Buffalo newspaper from the insurance industry voices support for this campaign, stating: "New Yorkers would be better served if policymakers focused on the "Find it, Fix it, Fund it" blueprint developed by the National Center for Healthy Housing and National Safe and Healthy Housing Coalition.¹⁰ implying that the campaign somehow is at odds with private sector actions, such as lead paint insurance. That is simply incorrect. Government at all levels and the private sector are taking new action to address the problem of childhood lead poisoning.

For example, Congress appears to be poised to appropriate record funding for lead hazard control, to the tune of \$5 billion in the Build Back Better Act and even more in the annual HUD appropriations bill, which would both be record levels. Indeed, the House has already approved the Build Back Better Act. The National Safe and Healthy Housing Coalition, a group of over 600 organizations, has sent several letters to Congress on the subject and has played a key role in this progress.¹¹

Housing Is the Largest and Most Important Source of Childhood Lead Poisoning

The evidence is overwhelmingly clear that the major high dose source for most children in the U.S. today is existing lead-based paint in older housing and the contaminated dust and soil it generates.^{12, 13} The existing limit for lead in new residential house paint set by the Consumer Product Safety Commission in the U.S. is 90 parts per million (ppm). But older paints already coating surfaces in housing can be more than 500,000 ppm. These older paints can produce extraordinarily high levels of lead dust, exceeding 9,300 micrograms of lead per square foot (μ g/ft²) from only a single square foot of lead paint in an average sized room.¹⁴ This is much, much higher than the existing EPA floor dust lead standard of 10 micrograms of lead dust per square foot (μ g/ft²).

Together with others, I published a study showing that the reduction in childhood lead poisoning can be largely explained by trends in housing demolition, window replacement and other renovation, and lead paint hazard control.¹⁵ If housing was not the main contributor, then demolition, window replacement and abatement trends would not have tracked the trend in childhood lead poisoning as closely as it actually has.

Trends in Childhood Lead Poisoning and Environmental Justice

Lead poisoning is a major example of environmental injustice. In 1987, a major report on hazardous waste sites showed that Black and other minority communities were more highly exposed to lead.¹⁶ CDC data show that the average (geometric mean) blood lead levels in micrograms of lead per deciliter of blood (μ g/dL) for Black children is 40% higher than for white children (1.8 μ g/dL and 1.3 μ g/dL, respectively). For low-income children vs other children, the difference was 1.6 μ g/dL and 1.2 μ g/dL, respectively.¹⁷ The differences in blood lead levels by race, ethnicity and income have remained statistically (and stubbornly) significant.¹⁸ ¹⁹

This inequity has been reduced as has the overall population blood lead level, due primarily to modern lead hazard control efforts and policies that stopped the production of new residential lead paint in the US, eliminated lead from food canning and gasoline, reduced industrial emissions and others. From 1976-1980 to 2015-2016, the blood lead level of the US population aged 1 to 74 years declined 93.6%, from 12.8 to 0.82 μ g/dL. In 2015-2016, 0.2% of children aged 1 to 5 years had blood lead levels of 10 μ g/dL or higher, and 1.3% were 5 μ g/dL or higher (these were the two blood lead trigger levels used in the 1990s and 2010s).²⁰

Blood lead levels are higher among younger children, those belonging to low-income families, and those enrolled in Medicaid. Furthermore, blood lead levels for non-Hispanic black children were significantly higher compared with either non-Hispanic white or Mexican American children.²¹



EPA. America's Children and the Environment, Third Edition, Updated February 2016

Background on Lead Toxicity and Remediation

Lead is one of the most extensively studied poisons, with over 25,000 studies and publications. The evidence is clear that lead causes a large number of health problems, particularly in young children. Perhaps the most recent review of lead toxicity is from EPA,²² but others are also available.^{23 24} Lead is a metal with no useful biological function in the body, unlike other metals such as zinc or iron. Its principal adverse health effects in young children include:

- Mental and thought impairment, such as declines in cognition (as measured by Full Scale IQ, academic performance, and executive function);
- Attention, Impulsivity and Hyperactivity disorders, Conduct Disorders in Children and Young Adults (criminal offenses in young adults ages 19-24 years and higher parent and teacher ratings of behaviors related to conduct disorders in children ages 8-17 years);
- Behavior problems, as shown in higher parent and teacher ratings of depression or anxiety or other related problems such as withdrawn behavior in children ages 8-13 years;
- Reduced hearing;
- Reduced coordination and stability;
- Delayed pubertal onset;
- Lower birth weight and increased spontaneous abortion (miscarriages).
- Higher probability of asthma and allergy;
- At higher exposures, death, coma, encephalopathy (brain dysfunction) and many other effects;
- In adults lead exposure is linked to reduced executive function (decision making skills), visual, learning and memory problems, depression and anxiety, reduced hearing, hypertension incidence and increased blood pressure, peripheral artery disease, coronary heart disease, reduced kidney function, decreased red blood cells, altered heme (blood forming) synthesis, and reduced function in both male and female reproductive systems; and
- Cancer.²⁵

The American Academy of Pediatrics states that there are no effective medical treatments for lead poisoning and that prevention of exposure is needed. ²⁶ The bills before the New York Senate would help to prevent such exposures.

The association between lead paint and blood lead has been extensively reviewed²⁷ and the National Academy of Sciences stated, "Lead-based paint is the largest source of high-dose lead exposure for children."²⁸

In general, there are two methods of identifying lead paint problems and two means of eliminating them.²⁹ The presence of lead paint in a home is determined by a lead-based paint inspection that examines most painted surfaces to determine if it is present within a given home. The second method is to conduct a lead paint risk assessment, which measures lead in deteriorated paint, dust and soil. The two methods can be combined.

There are also two broad methods of remediating lead paint problems—long term "abatement" and shorter term "interim controls." These two methods can also be combined, and both produce proven results in eliminating lead paint hazards. The identification step informs the remediation step, so effectiveness of identification and remediation cannot be separated.

Evidence for abatement effectiveness can be gleaned from several studies: The largest is the Evaluation of the HUD Lead Hazard Control Grant program,³⁰ a study covering over 3,000 housing units in 14 jurisdictions. Blood lead levels declined 37% two years after treatment. But because blood lead levels are affected by all sources of exposure, dust lead levels are likely a better metric of abatement effectiveness because they are less confounded by other sources of lead. Blood lead and dust lead are well correlated with each other in numerous studies.^{31 32} Another smaller scale study³³ compared three types of intervention and compared them to homes in two comparison groups. One type (which is similar to abatement) had median dust lead levels that declined dramatically before treatment to two years later and the interim control option also had median dust lead levels that declined by an order of magnitude two years later. This study also measured blood lead and showed the same trend as dust lead. These and many other studies constitute proof that modern lead hazard controls work.

Other Health Issues in Housing

The solutions recommended above can and should be applied to other housing-related diseases and injuries, such as asthma, mold-induced illnesses, carbon monoxide poisoning and fire related injuries, trips and falls, and others.

These other housing-related health issues can be grouped around 10 key principles that make a home healthy and can guide future New York policy. They are:

- 1. Free of excessive moisture and leaks
- 2. Adequately ventilated, both with fresh air and proper air distribution and exhaust
- 3. Free of excessive exposure to contaminants, such as lead, radon, and organic compounds such as formaldehyde
- 4. Free of pests
- 5. Clean
- 6. Well-maintained
- 7. Safe and free of injury hazards
- 8. Affordable
- 9. Energy Efficient
- 10. Accessible for persons with disabilities³⁴

Conclusion

President Franklin Roosevelt, in dedicating the National Archives Building in 1941, said: "A Nation must believe in three things: It must believe in the past. It must believe in the future. It must, above all, believe in the capacity of its own people to learn from the past so that they can gain in judgment in creating their own future."³⁵

Lead poisoning is ugly. It robs us of our most precious gift—our future and the children who inherit it. It has been over a century since the first medical diagnosis of lead paint poisoning in children occurred.³⁶ We have learned from that past by establishing the knowledge and systems to end the disease.

The insurance, real estate and other housing, health and environmental entities and industries should be required to be part of the solution, not continue to hide behind a now-antiquated "pollution exclusion" clause for lead paint or allow homes that are being sold not to have lead paint identified and corrected.

Endnotes

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