

Poisoning Our Future

**A PACC Project Finds that One-half of Central Brooklyn Homes
Tested Contain Dangerous Lead Dust Levels**

**By Gabriel Thompson
Director of Organizing, PACC**

July 2004

TABLE OF CONTENTS

Executive Summary.....	P. 3
Methodology of Project.....	P. 6
Key Findings.....	P. 7
Policy Recommendation.....	P. 9
Department of Health and Mental Hygiene should implement early intervention program, inspecting all homes where children have lead levels of 5 micrograms per deciliter and above	
Conclusion.....	P. 14
About PACC.....	P. 15

Executive Summary

One Year Later: The Crisis Continues

Last year PACC conducted a pilot project that tested 59 homes in Central Brooklyn for lead dust. Our findings were alarming, receiving widespread publicity and prompting rapid agency response: 1 out of every 3 homes tested had lead dust levels in excess of Federal safety guidelines. At the same time, a groundbreaking new study released by the *New England Journal of Medicine* found that significant damage occurred to children at lead levels previously believed to be safe.

As a follow up to our project last year, PACC initiated a large-scale doorknocking and outreach campaign in Bedford-Stuyvesant during the spring of 2004. By knocking on more than 1,000 doors and conducting presentations at churches, block associations, and schools, PACC signed up 72 families for lead tests. As in our previous report, there was no specific criteria for the type of building tested; they varied from single-family homes to buildings containing more than 30 apartments. In the end, PACC performed dust wipe tests for lead in 72 apartments in 45 separate buildings. While the majority of the homes were in the Central Brooklyn neighborhood of Bedford-Stuyvesant (52), PACC also tested units in Clinton Hill (5), Fort Greene (4), Bushwick (4), Park Slope (4), East New York (2) and Crown Heights (1).

Key Findings of Study: 1 Out of 2 Homes Contained Dangerous Lead Dust Levels

35 of the 72 homes, or 49%, were found to contain hazardous amounts of lead dust. Not only did half of the apartments have lead dust levels in excess of Federal guidelines, but the lead levels found in the failing units were extraordinarily high: one unit tested with lead levels over 450 times the Federal guidelines, *while a full 1/3 of the units tested contained at least double the lead dust safety threshold.*

Of the 35 dangerous homes, 33 had children under 7 years old spending some, or all of their time within them, and one housed a pregnant women. *Therefore, 97% of the homes containing high lead levels were a threat to the healthy development of the children—or soon to be born children—within them.* As well, *86% of the children living in danger were children of color, and more than half of the families living in lead-contaminated housing were immigrants.* Our study found that in Central Brooklyn the burden of living in unsafe housing falls disproportionately on children of color, and especially children of immigrants.

Policy Recommendation: The Need for an Early Intervention Program

Last year, the *New England Journal of Medicine* found that children with lead levels *below* 10 micrograms per deciliter ($\mu\text{g}/\text{dL}$) suffered an average drop in IQ of 7.4 points.¹ Yet health departments around the country—including New York City—have failed to revise their

¹ Richard Canfield, PhD et al., “Intellectual Impairments in Children with Blood Lead Concentrations below 10 μg per Deciliter,” *The New England Journal of Medicine* 348:16 (17 April, 2003), 1521.

intervention strategies in light of these new findings, and continue to wait until a child’s lead level reaches 15 µg/dL or higher before intervening with apartment inspections.²

This policy flaw has serious consequences. In 2002, there were 4,876 lead poisoned children (defined by the Department of Health and Mental Hygiene as having a lead level of 10 µg/dL and above), but only 628 were considered poisoned “enough” to trigger immediate apartment inspections to find the source of poisoning and remove it. Therefore, *the homes of 4,248 lead poisoned children did not have mandated inspections, and may still be lead-contaminated housing. This means that approximately 6 out of 7 lead poisoned children were not granted automatic apartment inspections.*

When children test with elevated lead levels, there is a high probability that the source of exposure is located within the home. In fact, as shown in Figure 2, of the seven parents in this study whose children tested with lead levels between 5-14 µg/dL, all seven apartment inspections uncovered lead hazards:

FIGURE 2
7 out of 7 Children with Elevated Lead Levels Below Intervention Threshold
Lived in Lead-Contaminated Housing

Name of parent	Child’s lead level (in micrograms per deciliter)	Lead dust level found in apartment (in micrograms per square foot)	Number of times over the Federal lead guidelines
C. Drysdale	13	13,070 (window sill)	52
Juana (last name withheld)	13	585.2 (window sill)	2
L. Paulino	10, then 12	10,612 (floor)	265
M. Salvatierra	7	591.4 (window sill)	2
S. Johnson	6	297.2 (window sill)	1.2
K. Judice	5	464.7 (floor)	11
C. Walsh	5	265.3 (floor)	7

Under the current NYC Health Code, none of the parents above are granted apartment inspections. As demonstrated by Figure 2, adopting an early intervention policy is an effective way to zero in on apartments where hazards are likely to be found. In a time of

² For the past decade, DOHMH’s environmental intervention threshold has been one test at 20 µg/dL, or two consecutive tests at 15 µg/dL or above over a three month period. With the passage of Local Law 1 (to be implemented in August, 2004), DOHMH will begin intervening whenever a child tests at 15 µg/dL or above. This change did not come about through a change in DOHMH’s own regularity authority, but by the actions of City Council.

shrinking budgets, an early intervention policy will help ensure that our resources are marshaled effectively towards units most likely to contain unsafe lead levels.

If we want to end lead poisoning, the Department of Health and Mental Hygiene must update the NYC Health Code, so that all children that test with lead levels of 5 µg/dL and above are granted automatic inspections. By doing so, they will ensure that these children are not further exposed to lead, and make their apartments permanently lead safe for future generations. By adopting an early intervention policy, parents will be granted the assistance they deserve, and thousands of additional hazardous homes that are currently being ignored will be identified and made safe.

Methodology of Participatory Research Project

After the publication of our last report in June 2003, “The Politics of Poison,” PACC received numerous requests for lead inspections from concerned residents. PACC conducted 10 inspections of apartments in 2003, and when our test kits ran out we referred parents to the Department of Housing Preservation and Development (HPD) and the Department of Health and Mental Hygiene (DHMH) for information and inspections.

In 2004 PACC purchased another set of testing kits from BTS Laboratories, located in Maryland, and began a doorknocking campaign in Bedford-Stuyvesant. Our doorknocking focused on a large geographic area bordered by Dekalb Avenue to the north, Hancock Street to the south, Classon Avenue to the west and Nostrand Avenue to the east. Through this effort PACC organizers knocked on more than 1,000 doors and left literature at more than 150 buildings. PACC also gave presentations to numerous family centers, schools, churches, and tenant associations to sign families up for lead tests, and tabled at street and health fairs. At these events individuals from other Central Brooklyn neighborhoods, such as East New York and Bushwick, also signed up for lead tests.

PACC organizers and leaders again completed an eight-hour course, conducted by Big Apple Occupational Safety Corporation, an EPA-certified corporation that regularly trains individuals in lead-sampling techniques. Through this training project participants were certified as “lead sampling technicians.” As in our 2003 report, there was no specific criteria for the type of building inspected; the largest contained more than 30 units, and the smallest was a single family house.

All of the 72 tests were completed by July 15, 2004, and the lab results were compiled shortly thereafter. We used the EPA’s guidelines for leaded dust clearance levels, which are as follow:

- Floors: 40 micrograms per square foot
- Interior window sills: 250 micrograms per square foot
- Window wells: 400 micrograms per square foot

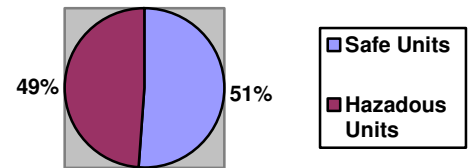
Any test that failed these Federal guidelines for safety was considered hazardous.

Key Findings of Project

1 in 2 Homes Contain Dangerous Amounts of Lead Dust

PACC tested 72 separate apartments in 45 buildings. While the majority of the homes were in the Central Brooklyn neighborhood of Bedford-Stuyvesant (52), PACC also tested homes in Clinton Hill (5), Fort Greene (4), Bushwick (4), Park Slope (4), East New York (2) and Crown Heights (1).

35 of the 72 homes were found to contain hazardous amounts of lead dust, or 49%.



Extremely High Lead Levels Discovered Few Homes “Lead Free”

Of the 35 dangerous homes, the highest lead level discovered contained amounts **450 times above the safety threshold**. 26 homes contained a level of lead at least double the safety threshold. *Therefore, more than one-third of the total homes tested contained at least twice the amount of lead deemed “safe” by the Environmental Protection Agency (EPA).*

Only 12 apartments were found to have no lead whatsoever, or 17% of the total apartments tested. 25 were found to have some lead, but not an amount in excess of the Federal safety threshold.

34 Families with Children at Risk

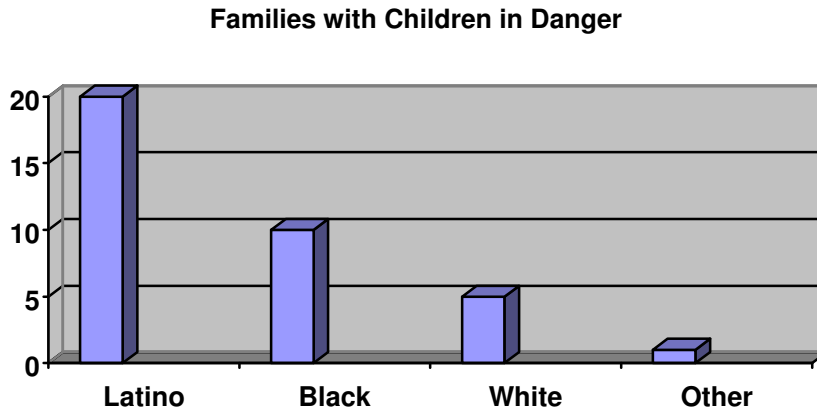
33 of the hazardous apartments were home to children under 7 and/or had children under 7 visiting regularly (defined as at least one visit each week). One of the dangerous apartments had no children, but was home to a pregnant woman. Only one of the dangerous apartments had no children, no children visiting, and no pregnant women living within it.

Therefore, 97% of the lead-contaminated homes discovered posed a serious threat to the healthy development of the young children—or soon to be born children—growing up within them.

86% of Families in Dangerous Housing are Families of Color

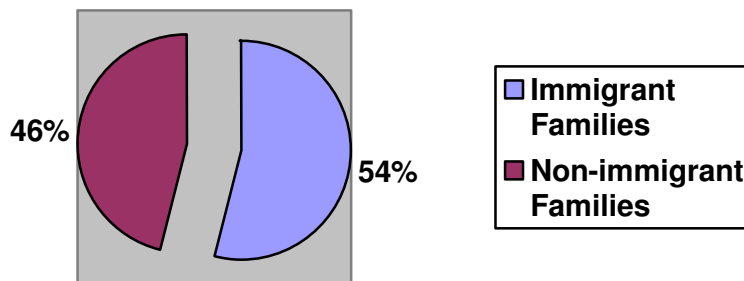
Of the 35 families found to be living in lead-contaminated housing, 30 were families of color, or 86%. This number corroborates City-wide data, which has found that 94% of lead-poisoned children are children of color—predominantly African American, Latino and Asian.³

20 of the families in housing with dangerous lead levels were Latino, 10 were African American, 4 were white, and one was other/ethnicity unknown.



Immigrant Families Bear Disproportionate Burden

19 of the 35 families in dangerous homes were immigrants, most from Central and South America. Though there has been much discussion about immigrant children entering NYC that have been poisoned abroad, our project seems to suggest that in fact immigrants are more at risk for lead poisoning because they are more likely to be living in deteriorated housing.



³ New York Public Interest Research Group, “Do You Know Where the Lead is? How Many New York City Children were Lead Poisoned Between 1995 and 2000 and Where They Live,” www.nypirg.org/lead/whereslead.

Policy Recommendation:

The Department of Health and Mental Hygiene (DOHMH) should implement an early intervention program that tests all homes of children with blood lead levels of 5 micrograms per deciliter and above

It has been well established through recent medical research that there is in fact no “safe” level of lead exposure. Last year, the *New England Journal of Medicine* found that children with lead levels *below* 10 micrograms per deciliter ($\mu\text{g}/\text{dL}$) suffered an average drop in their IQ of 7.4 points.⁴ Yet public health agencies around the country—including NYC—have failed to revise their intervention strategies in light of these new findings, and continue to wait until a child’s lead level reaches 15 $\mu\text{g}/\text{dL}$ or higher before intervening with apartment inspections.

Without an early intervention program, thousands of homes of lead poisoned children are not mandated inspections. In 2002—the most recent year for which we have lead poisoning data⁵—there were 4,876 children that tested with lead levels of 10 $\mu\text{g}/\text{dL}$ and above, though this number undercounts the real figures due to poor screening records.⁶

A well-designed lead poisoning prevention program would guarantee that in every lead poisoning case an apartment inspection is conducted, in order to determine if the source of the poisoning is in the apartment. In this way, dangerous apartments that have poisoned children would be permanently fixed, so that they no longer pose a danger to future families. If there were 4,876 lead poisoned children in 2002, then there ought to have been 4,876 apartment inspections.

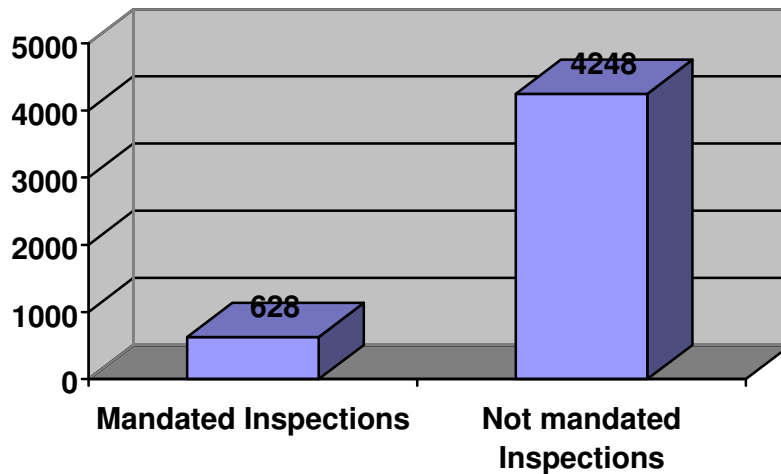
⁴ Richard Canfield, PhD et al., “Intellectual Impairments in Children with Blood Lead Concentrations below 10 μg per Deciliter,” *The New England Journal of Medicine* 348:16 (17 April, 2003), 1521.

⁵ All of the 2002 lead poisoning data comes directly from the New York City Department of Health and Mental Hygiene’s *NYC Childhood Lead Poisoning Prevention Program 2002 Annual Report*, available online at www.nyc.gov/html/doh/pdf/lead/lead-2002report.pdf.

⁶ For example, see “Lead testers failing poor tots: Spitzer,” NY Daily News, July 15, 2004, online at www.nydailynews.com/news/local/story/212291p-182826c.html.

However, in 2002 only 628 lead poisoned children were granted automatic inspections. This is because the NYC Health Code only orders apartment inspections when lead levels climb to 15 $\mu\text{g}/\text{dL}$ or above. Therefore, the homes of 4,248 lead poisoned children did not have mandated inspections, and these children may still be living in lead-contaminated housing. As we can see in Figure 1, this means that approximately 6 out of 7 lead poisoned children are not granted automatic apartment inspections.

FIGURE 1
6 out of 7 Lead Poisoned Children
Not Provided with Automatic Apartment Inspections



By failing to mandate inspections for these 4,248 lead poisoned children, the Department of Health is allowing the possibility that these children become more seriously poisoned. It is also potentially allowing 4,248 lead contaminated housing units to remain hazardous, and poison more children in the future.

It should be mentioned that these 4,248 children all tested with lead levels of 10 $\mu\text{g}/\text{dL}$ and above—and do not include children that test with elevated lead levels that are under 10 $\mu\text{g}/\text{dL}$. Despite medical evidence citing negative impacts on children with blood lead levels below 10 $\mu\text{g}/\text{dL}$, the Department of Health does not currently track such numbers, nor act upon them. By beginning to track the number of children that test with lead levels of 5 $\mu\text{g}/\text{dL}$ and above, NYC will have a more accurate picture of the impact of lead

exposure on the city's children, and be able to identify thousands of units that may need lead abatement or remediation.

The Three Benefits of Moving the Intervention Level from 15 µg/dL to 5 µg/dL

1) An early intervention strategy will provide immediate assistance to children that have dangerous levels of lead in their blood, so that they do not become further poisoned.

The most obvious benefit of the early intervention strategy is the positive impact it will have on children with lead levels from 5-14 µg/dL. By intervening early and mandating immediate apartment inspections when a child's blood lead level reaches 5 µg/dL, we will ensure that children do not become further poisoned.

Under the current intervention threshold, children can be exposed to lead dangers for prolonged periods of time. Take the case of Lourdes Paulino's one-year old daughter, Stephanie:

At seven months of age, Stephanie tested with a lead level of 12 µg/dL. Lourdes was given some vitamin supplements by her doctor to help lower Stephanie's lead level. Three months later, Lourdes returned to the doctor and found that Stephanie's lead level was still elevated, at a lead level of 10 µg/dL. Even after three months of poisoning, Stephanie was still testing under the intervention threshold of the Department of Health. When PACC tested her apartment, lead levels were found that were 265 times more than the Federal safety guidelines.

By adopting an early intervention strategy, no other parents will have to go through the same heart-wrenching experience of seeing their children lead poisoned without any corrective intervention.

Parents will also be educated about the risks of lead levels below 10 µg/dL; currently many families are incorrectly told by their doctors that any lead level below 10 µg/dL is "normal." In fact, mothers like Ms. Judice and Ms. Walsh, featured in Figure 2 below,

were told by their doctors that the lead levels of their children were “safe” and no cause for concern. By adopting an early intervention strategy, any parent whose child tests with a lead level of 5 µg/dL and above will be granted an apartment inspection and will be educated about the harmful effects of even low-level exposure.

2) An early intervention strategy focuses efforts on apartments most likely to contain lead hazards.

Two of the strategies that the DOHMH has identified in order to continue to reduce the rates of lead poisoning are to “utilize surveillance data to identify high-risk populations and target prevention programs to those groups,” and “eliminate or reduce lead paint hazards in housing.”⁷

When children test with elevated lead levels, there is a high probability that the source of exposure is located within the home. In fact, as shown in Figure 2, of the seven parents in this study whose children tested with lead levels between 5-14 µg/dL, all seven apartment inspections uncovered lead hazards:

**FIGURE 2
7 out of 7 Children with Elevated Lead Levels Below Intervention Threshold
Lived in Lead-Contaminated Housing**

Name of parent	Child’s lead level (in micrograms per deciliter)	Lead dust level found in apartment (in micrograms per square foot)	Number of times over the Federal lead guidelines
C. Drysdale	13	13,070 (window sill)	52
Juana (last name withheld)	13	585.2 (window sill)	2
L. Paulino	10, then 12	10,612 (floor)	265
M. Salvatierra	7	591.4 (window sill)	2
S. Johnson	6	297.2 (window sill)	1.2
K. Judice	5	464.7 (floor)	11
C. Walsh	5	265.3 (floor)	7

⁷ NYC Childhood Lead Poisoning Prevention Program 2002 Annual Report, p. 7

Under the current NYC Health Code, none of the parents above are granted apartment inspections. As demonstrated by Figure 2, adopting an early intervention policy is an effective way to zero in on apartments where hazards are likely to be found. In a time of shrinking budgets, an early intervention policy will help ensure that our resources are marshaled effectively towards units most likely to contain unsafe lead levels.

3) An early intervention strategy will permanently remove lead hazards so that thousands of additional units are made lead safe.

Ultimately, NYC will only end childhood lead poisoning when it no longer contains lead-contaminated homes. As our study has found, we still have substantial work to do in this area, especially in high-risk neighborhoods like Central Brooklyn.

An early intervention policy that inspects thousands of additional homes each year will uncover thousands of new lead hazards that are currently going under the radar. When the City documents these hazards, homeowners and landlords will then be in a position to correct them. With each new hazard eliminated, we move one step closer to our goal of ending childhood lead poisoning in NYC.

Conclusion

Towards the Elimination of Lead Poisoning in NYC: Prevention *and* Early Intervention

If we want to end lead poisoning in NYC, there are two key factors. First, we have to make efforts to educate residents about their right to live in safe housing, and encourage them to immediately contact NYC agencies if they have concerns about peeling paint or other lead hazards. At the same time, we have to educate landlords about their responsibility to maintain hazard-free apartments, and seriously penalize those that willfully do not. Many of these provisions are included in the recently passed lead paint legislation, Local Law 1, to go in effect in August of this year.

Secondly, we need to begin an early intervention program that mandates apartment inspections and corrective action for all children found to have blood lead levels of 5 µg/dL and above. Though the Bush administration has been actively undermining the possibility of tighter Federal guidelines for intervention, NYC has the jurisdiction to design and enact their own program.⁸ Indeed, NYC has taken such forward-thinking action in the past, as when it outlawed the use of lead paint in 1960--18 years before the Federal Government finally prohibited its production.

With the health of our children at stake, and the widespread lead hazards that our report and others have documented in NYC, now is not the time to wait for others to lead the way.⁹ Commissioner Frieden, a champion of such public health successes as the smoking ban, has an opportunity to become a national leader in the fight to end lead poisoning. By enacting an early intervention program, thousands of children will receive the help they deserve, and thousands of unsafe units will be fixed—and we will be well on our way towards eliminating childhood lead poisoning.

⁸ See “Turning Lead Into Gold: How the Bush Administration is Poisoning the Lead Advisory Committee at the CDC,” available at <http://www.mindfully.org/Health/2002/Lead-Into-Gold-MARKEY8oct02.htm>. Among the most egregious examples of politicizing the medical debate, Dr. Bruce Lamphear of the University of Cincinnati was rejected for the Advisory Committee—despite authoring numerous peer-reviewed articles on the subject of lead poisoning, while Dr. William Banner was accepted, an expert witness for the lead industry that has claimed that children with lead levels below 70 µg/dL do not suffer any negative consequences.

⁹ See our previous report, “The Politics of Poison,” available at www.prattarea.org/leadpaint.pdf and Union Comunal de Washington Heights e Inwood’s report on lead hazards in Upper Manhattan.