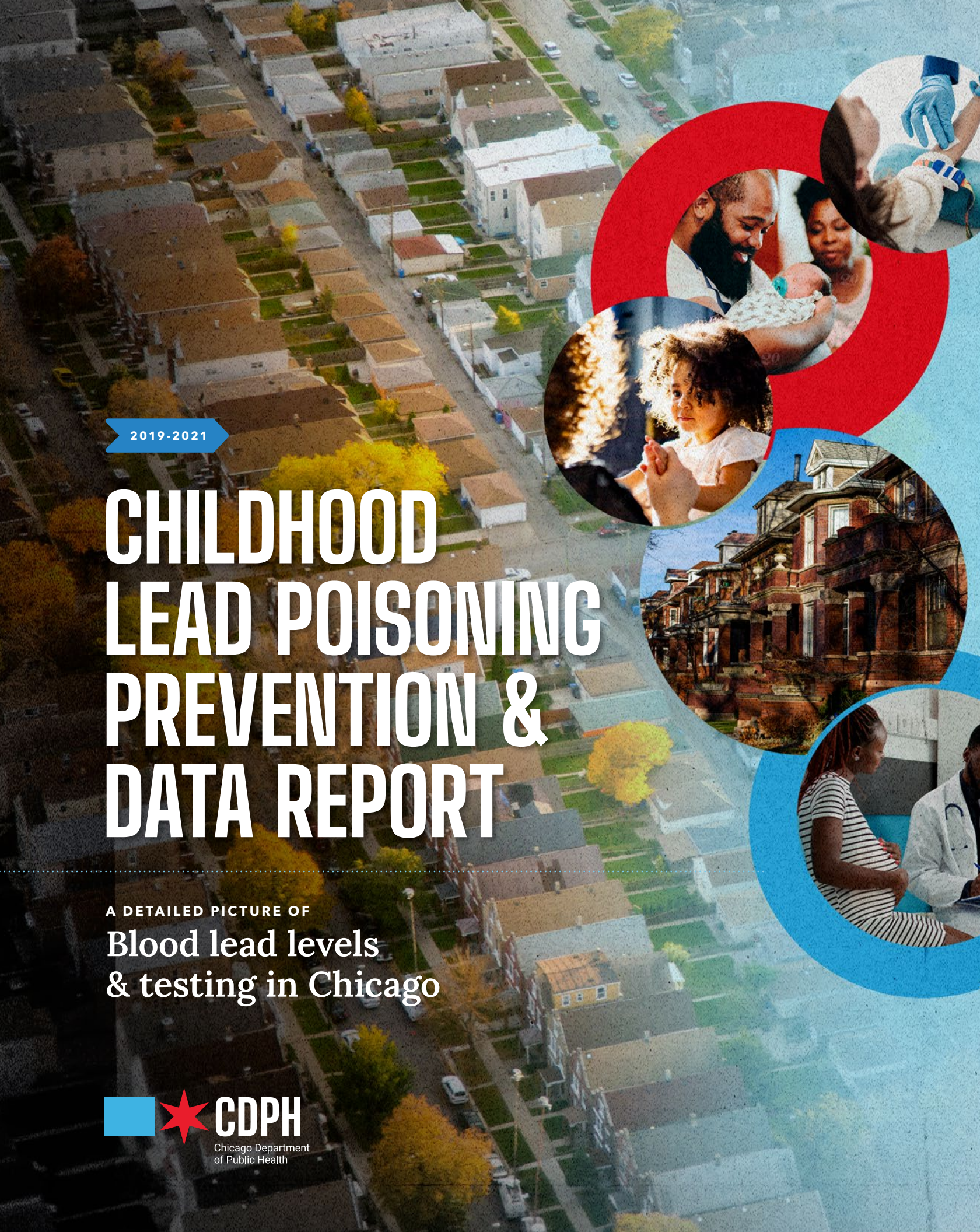


2019-2021

# CHILDHOOD LEAD POISONING PREVENTION & DATA REPORT

A DETAILED PICTURE OF

## Blood lead levels & testing in Chicago

CDPH
Chicago Department of Public Health

# BACKGROUND

The Chicago Department of Public Health's (CDPH) mission is to work with communities and partners to create an equitable, safe, resilient and Healthy Chicago. CDPH's vision is that everyone in Chicago thrives and achieves their optimal health and wellness. A healthy and lead-free home is an important part of health and wellness, particularly for Chicago's children. CDPH works to detect and address exposures to lead hazards. Through data monitoring, case management, strategic inspection and abatement, partnership with healthcare providers and community organizations, and public education, CDPH is leading efforts to permanently eliminate childhood lead poisoning in Chicago.

This report presents recent data related to blood lead testing and the prevalence of elevated blood lead levels in children. CDPH uses this data to understand how well our strategies to eliminate childhood lead poisoning are working and to guide our future actions.

# EXECUTIVE SUMMARY

Chicago has made great progress in reducing childhood lead poisoning. In 1996, the estimated prevalence of blood lead levels of 5 ug/dL or greater among Chicago children was 70.2%, by 2021 it had decreased to 1.8% (see Figure A).[1] This success is a result of strong policies and a comprehensive approach to lead poisoning prevention, including home inspections and abatement of lead hazards by the Chicago Department of Public Health (CDPH).[2,3] Residing in older, poorly maintained housing with lead-based paint hazards continues to be the most common source of exposure in Chicago children.



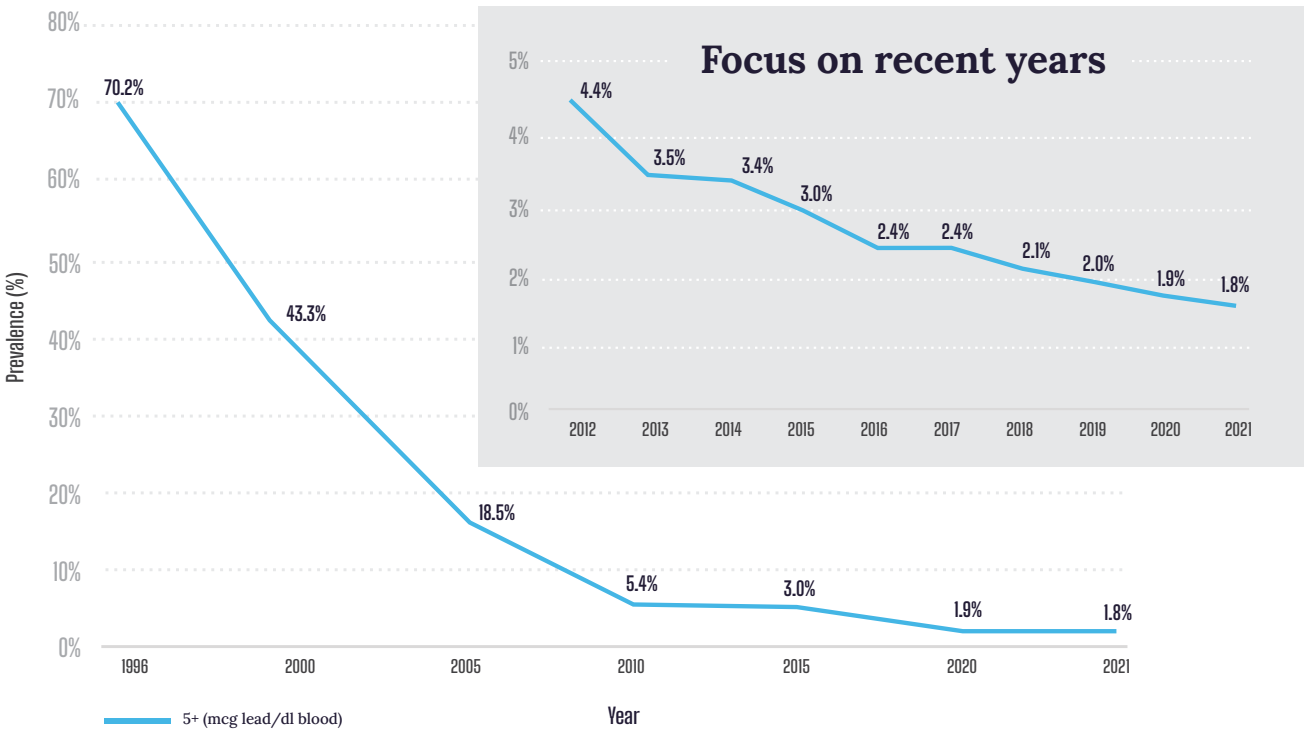


## Current data

- The prevalence of children with elevated blood lead levels continues to decline. Between 2017 and 2021, the prevalence of blood lead levels at or above 5 µg/dL decreased from 2.4% to 1.8%.
- All children in Chicago should receive blood lead testing at ages 1, 2 and 3 years. Among children born between 2015 through 2017, 74% were tested at least once before 4 years of age. Only 11% of Chicago children were tested at all three ages (1, 2, and 3 years) (Figure 1A).
- Blood lead testing was impacted by the COVID-19 pandemic. Blood lead testing decreased by 33% in 2020 when compared to the same time period pre-pandemic. When compared to the same time period in 2021, blood lead testing was 22% lower than testing in the pre-pandemic time period (Figure 3).
- In 2021, only 26% of children who had a capillary blood test with a blood lead level of 5 ug/dL had a confirmatory venous test, despite the Centers for Disease Control and Prevention (CDC) recommendations to perform confirmatory testing (Figure 8).
- Geographically, the majority of community areas with high lead prevalence are located on Chicago's south and west sides where the population is predominately non-Hispanic Black. These areas also have high prevalence of pre-1940's rental housing (Map 3).

FIGURE A

## Reduction in the prevalence of venous blood lead levels, 5+µg/dL, in Chicago children <1-5 years of age, 1996-2021




This chart describes the prevalence (percent) of venous blood lead levels of 5+ µg/dL in children aged 0-5 who recieved blood lead testing during 1996-2021. For the years 1996-2016, prevalence was imputed by multiplying the prevalence of blood lead levels of 6+ by 1.42. During this time period, many testing laboratories did not measure blood lead levels less than 6 µg/dL. By 2017, laboratories routinely measured blood lead levels down to 5 µg/dL. For the years 2017 to 2022, the prevalence of blood lead levels 5+ was determined by observation rather than imputation.



# Next steps

- **Work with healthcare providers** to ensure that testing of children for lead in blood at ages 1,2 and 3 years returns to, and exceeds, pre-pandemic rates.
- **Work with community-based organizations** to provide direct outreach and education to pregnant people and families with young children, particularly in community areas where there are the highest levels of blood poisoning among children. Continue to provide lead prevention education for building owners and families through workshops and to raise public awareness through lead and healthy homes media campaigns.
- **Expand access to lead hazard abatement and other healthy home repairs** by leveraging new and existing funding from the Chicago Recovery Plan ($47 million) and from the U.S. Department of Housing and Urban Development ($8.7 million) to increase abatement of lead and other health hazards in homes with pregnant people and young children, particularly in communities with the highest rates of childhood lead poisoning.

# INTRODUCTION

Lead is a highly toxic metal that may cause a range of health problems, especially in young children.

## In Chicago, lead-based paint is the most common source of lead exposure for children.

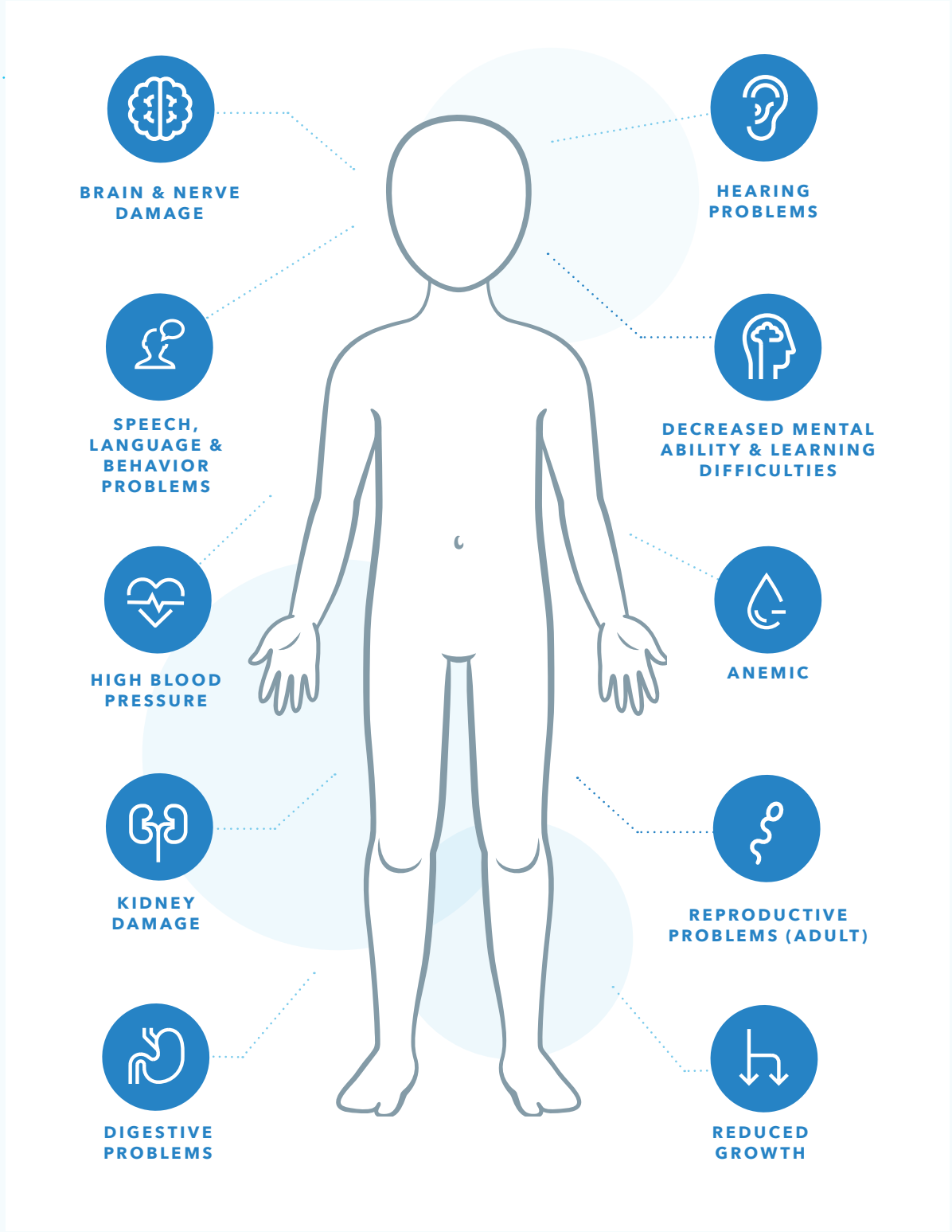
**Lead-based paints were banned for residential use in 1978.**
Homes built in the U.S before 1978 are likely to contain some lead-based paint. When the lead-based paint peels and cracks, it makes lead dust and lead paint chips.

**Certain jobs (e.g., battery manufacturers) and hobbies (e.g., stained glass work) involve working with lead-based products and exposure may occur if parents bring lead from their work or hobby into the home.**

**Lead can also be found in some products such as toys and jewelry and is sometimes in candies, spices and cosmetics imported from other countries or traditional home remedies.**

**Additionally, lead contamination can be found in soil, and certain water pipes may contain lead.[4]**

# THE TOXIC EFFECTS OF LEAD




SOURCE: WORLD HEALTH ORGANIZATION

Lead poisoning occurs when lead builds up in the body as a result of swallowing, ingesting, inhaling, or absorbing lead in contaminated materials. There is no level of lead in the blood that is considered safe. Lead exposure can cause adverse health outcomes in children, including damage to the brain and nervous system, slowed growth and development, learning and behavior problems, and hearing and speech problems, which can then lead to lower IQ, decreased ability to pay attention, and underperformance in school.[5] Younger children, those under 6 years of age, are at greatest risk for the health problems caused by lead exposure. The 5-year American Community Survey, 2016-2020, estimates that there are over 195,000 children in Chicago in this age group.

There are often no apparent or visible symptoms when a child is exposed to lead. Because of this, the Centers for Disease Control (CDC) recommends testing children for lead exposure. A blood test is the main way to determine if a child has been exposed to lead. In Chicago, all zip codes are considered high risk zip codes for lead according to the Illinois Department of Public Health.[6] Therefore, all children in Chicago should be tested for lead at 1, 2, and 3 years of age.

The amount of lead in blood is referred to as the blood lead level. In February 2019, Illinois adopted a reference value of 5 µg/dL to identify children who have a blood lead level higher than most children in the US. In May 2021, CDC adopted a blood lead reference value (BLRV) of 3.5µg/dL to identify children with blood lead levels that are higher than most children's levels.[7] At this time, the Chicago Department of Public Health (CDPH) continues to align with the Illinois Department of Public Health and uses the 5 µg/dL reference blood lead value to identify children who have elevated blood lead levels.

All children in Chicago should be

**TESTED FOR LEAD AT**

**1 - 2 - 3**

**YEARS OF AGE**

# CDPH's Childhood Lead Poisoning Prevention Program

CDPH's Childhood Lead Poisoning Prevention Program works to prevent, detect and address exposures to lead hazards. The goal is to eliminate lead poisoning among children and those who are pregnant and nursing using intervention methods such as lead testing, lead environmental inspection, case management, lead remediation and abatement and public education.

### CASE MANAGEMENT

Children with a confirmed elevated blood lead level of at least 5µg/dL are referred to the case management unit. A public health nurse will meet with the family to conduct a social developmental assessment, provide nutritional counseling, coordinate with the lead inspector, and refer the child for additional services, as needed.

### ENVIRONMENTAL INSPECTION

A licensed lead-risk assessor inspects the interior/exterior of the residence where a child with a confirmed elevated blood lead level resides. The risk assessor inspects the home environment to find any lead hazards.



### ENFORCEMENT

CDPH assures that property owners appropriately address lead hazards through the enforcement of the city and state lead laws via the court system.

### HEALTHY HOMES GRANT PROGRAM

The Lead Poisoning Prevention and Healthy Homes Grant Program assists low and moderate-income families in Chicago who occupy privately-owned housing units built before 1978, where lead hazards have been identified, to address the lead hazards in their homes. The grant program provides lead remediation services to income-eligible participants, prioritizing units where children under six years old or pregnant persons reside. The grant program aims to ensure all eligible families and children have a lead-safe and healthy home in the City of Chicago.

### COMMUNITY ENGAGEMENT

The CDPH Lead Poisoning Prevention Program provides educational outreach about lead poisoning prevention to Chicagoans, through media campaigns, and community workshops.

# DATA

The data presented in this section is from the Illinois Department of Public Health Healthy Homes and Lead Poisoning Prevention Surveillance System. Healthcare providers in Illinois are required to report blood lead levels to the Illinois Department of Public Health, which then provides the information to local health departments, such as CDPH. CDPH uses this data to determine who needs lead-related services, including case management and environmental inspections.

# The following figures, graphs, and maps will display information describing:

The ages when children are receiving blood lead testing and how that has changed over time—especially during the pandemic

How lead exposure prevalence and incidence has changed over time by blood lead levels and by age

How elevated blood lead prevalence, blood lead testing and high-risk housing varies geographically

FIGURE 1A

## Proportion of 2017 birth cohort receiving an annual blood lead test at ages 1, 2, and 3 years

By frequency of annual test

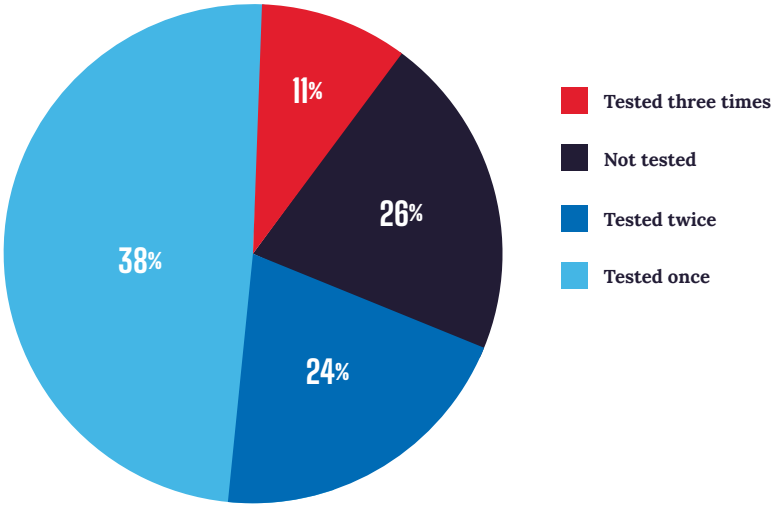
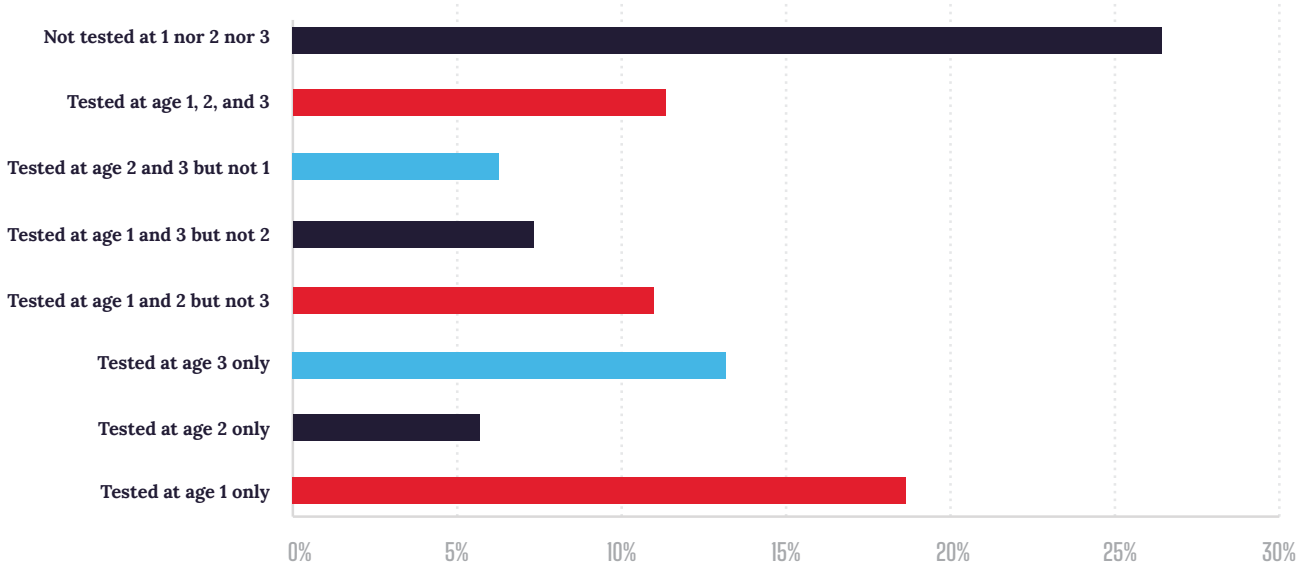



FIGURE 1B

## Percentage of 2017 birth cohort receiving an annual blood lead test at ages 1, 2, and 3 years, all combinations of test history

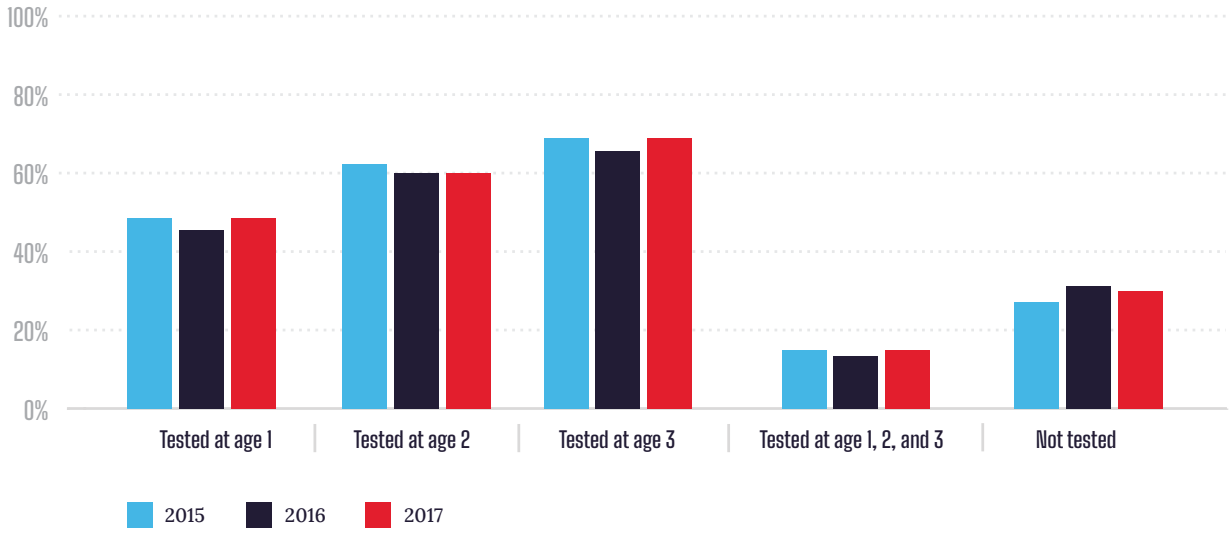



Among children born in 2017, the majority (74%) were tested at least once at ages 1, 2 or 3 years, while 26% of children in the cohort were not tested at any age. (Figure 1A). Only 11% of this birth cohort was tested at all 3 ages (1, 2, and 3 years) (Figure 1B).

**Source:** Healthy Homes and Lead Poisoning Prevention Surveillance System, Illinois Department of Public Health and Vital Records, Illinois Department of Public Health

FIGURE 2

# Annual blood lead level testing experience, ages 1 to 3 years, 2015 to 2017 birth cohorts, % of cohort

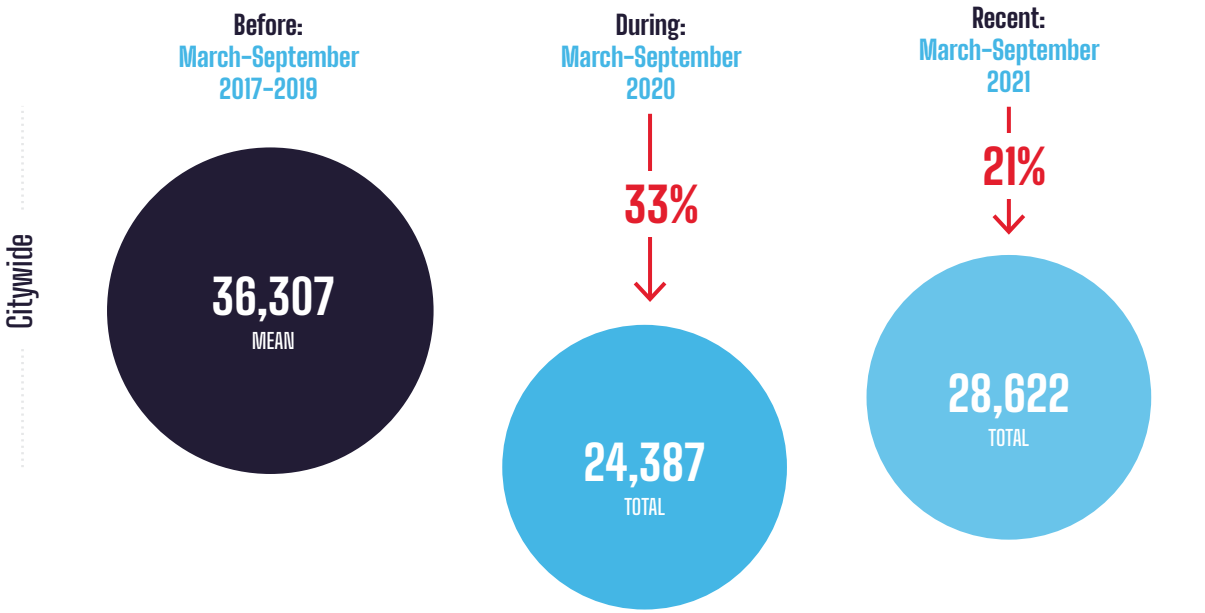





**Source:** Healthy Homes and Lead Poisoning Prevention Surveillance System, Illinois Department of Public Health

FIGURE 3

# Percent decrease in blood lead level testing during the COVID-19 pandemic and recent time period compared with before the pandemic






Disruption in primary care was reported during the COVID-19 pandemic onset. Nationwide, a decrease in blood lead testing during the pandemic was noted among children.[8] Comparing March–September 2020 (during pandemic) and March–September 2021 (recent time period), with mean of tests performed during March–September 2017-2019 (the pre-pandemic time period); during the pandemic, blood lead testing decreased 33% when compared to the pre-pandemic time period (24,387 tests during vs 36,307 tests pre-pandemic).

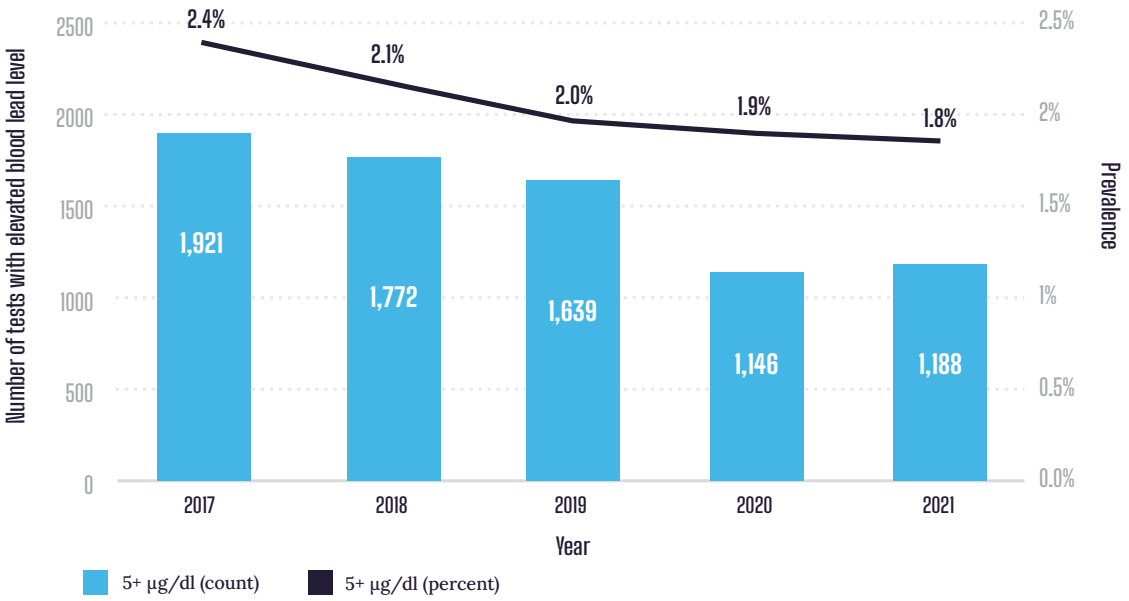
During the recent period, testing remained 21% below the pre-pandemic levels (28,622 tests for the recent period vs 36,307 tests pre-pandemic). Pediatric blood lead testing decreased during the pandemic. And although testing volume has increased in recent months, it remains lower than pre-pandemic. This may also be impacting the number of total tests seen in table 1.



**Source:** Healthy Homes and Lead Poisoning Prevention Surveillance System, Illinois Department of Public Health

FIGURE 4

# Prevalence of blood lead levels of 5µg/dL or higher in children ages <1-5 years, 2017-2021




Between 2017 and 2021, the prevalence of blood levels at or above the blood reference level (i.e. a blood level of 5 µg/dL or higher) has decreased from 2.4% to 1.8% (Figure 4).



TABLE 1

# Prevalence of blood lead level categories in children ages 1-5 years old who received a blood lead test, 2019-2021

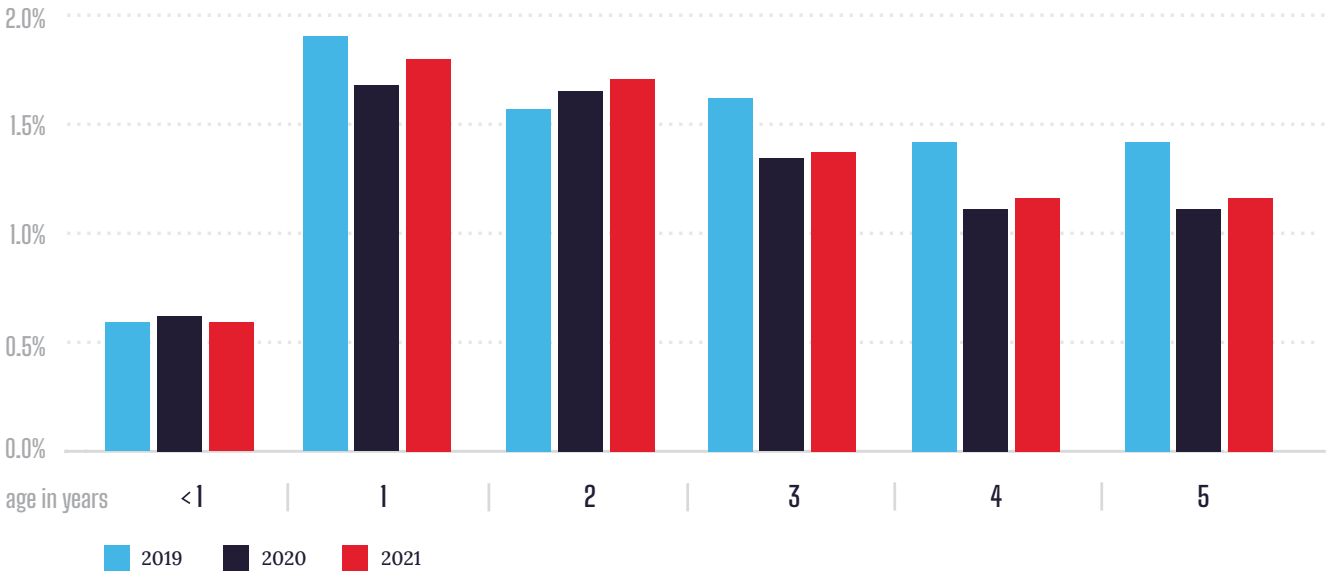
| | 2019 | | 2020 | | 2021 | |
|---|---|---|---|---|---|---|
| Blood lead level category (µg/dL blood lead) | Count | Percent | Count | Percent | Count | Percent |
| 0-4 | 70,361 | 97.86% | 53,164 | 98.01% | 55,798 | 98.00% |
| 5-9 | 1,130 | 1.57% | 776 | 1.43% | 836 | 1.47% |
| 10-15 | 220 | 0.31% | 169 | 0.31% | 157 | 0.28% |
| 15-24 | 119 | 0.17% | 92 | 0.17% | 93 | 0.16% |
| 25-44 | 58 | 0.08% | 37 | 0.07% | 42 | 0.07% |
| 45+ | 12 | 0.02% | 7 | 0.01% | 9 | 0.02% |
| **Total:** | **71,900** | **100%** | **54,245** | **100%** | **56,935** | **100%** |

A total of 71,900 children were tested in 2019, 54,245 in 2020, and 56,935 in 2021. Of all the children who were tested for lead, greater than 97% in each year between 2019–2021 had a blood lead level less than 5µg/dL. A total of 1,539 children in 2019, 1,081 children in 2020 and 1,137 children in 2021 had a blood lead level of 5µg/dL or greater. Less than 1% of children in each year had a blood lead level of 10µg/dL or higher (Table 1).

**Source:** Healthy Homes and Lead Poisoning Prevention Surveillance System, Illinois Department of Public Health

FIGURE 5

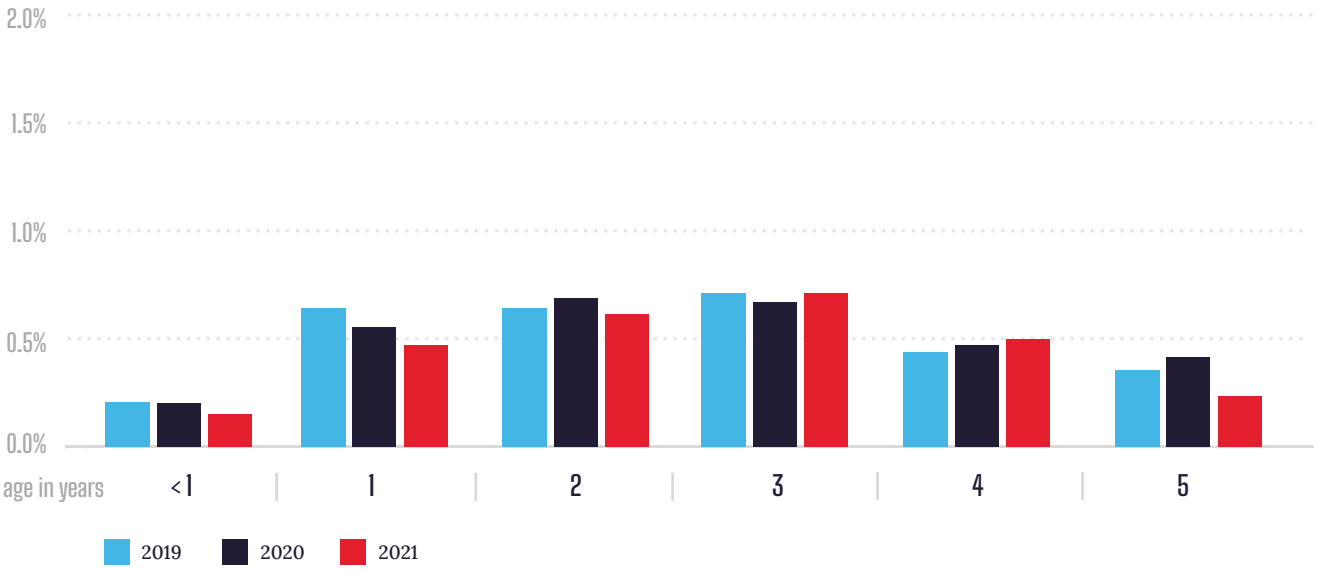
# Age-specific prevalence of blood lead levels 5-9 µg/dL in children <1-5 years old, 2019-2021




**Source:** Healthy Homes and Lead Poisoning Prevention Surveillance System, Illinois Department of Public Health

FIGURE 6

# Age-specific prevalence of blood lead levels 10+ µg/dL in children <1-5 years old, 2019-2021

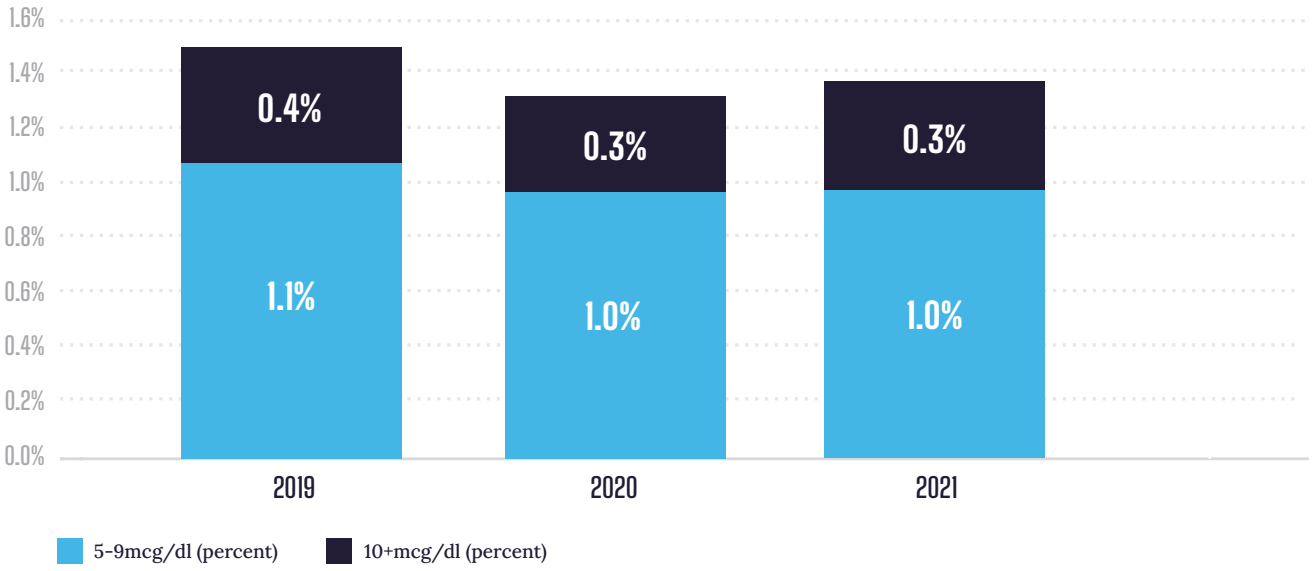





**Source:** Healthy Homes and Lead Poisoning Prevention Surveillance System, Illinois Department of Public Health

FIGURE 7

# Incident elevated blood lead levels as a percent of at-risk children tested, 2019-2021



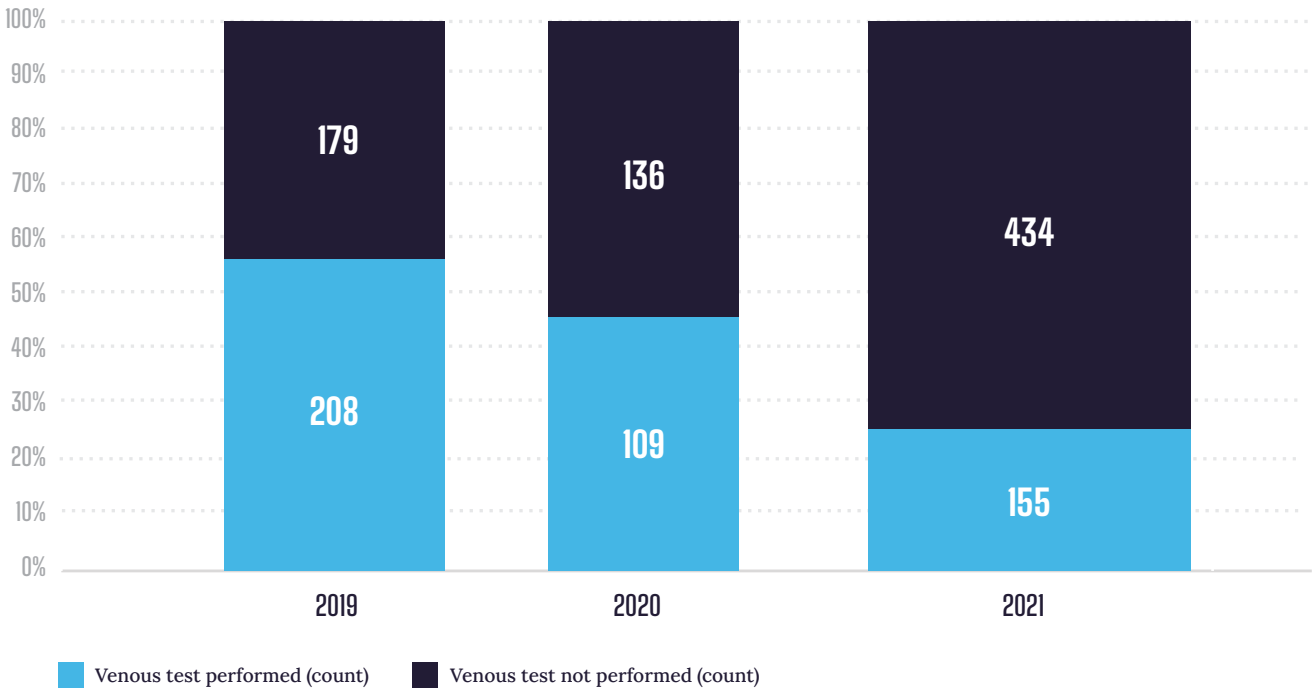





**Source:** Healthy Homes and Lead Poisoning Prevention Surveillance System, Illinois Department of Public Health

FIGURE 8

# Confirmatory venous blood lead test completion and incompletion in children with capillary blood lead levels of 5+ µg/dl, 2019-21

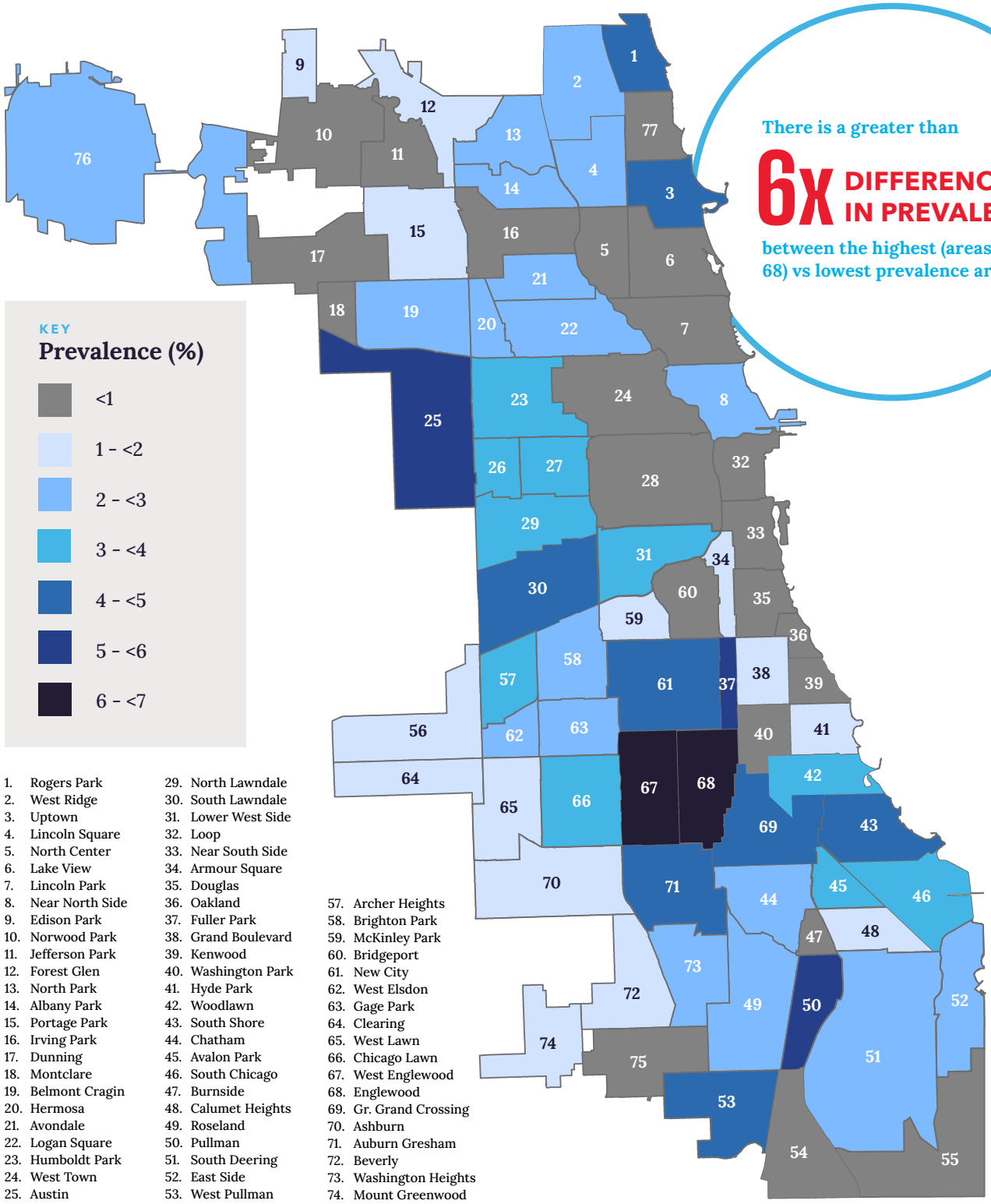



In 2019, of the 387 children with capillary blood lead levels of 5µg/dL or higher, 208 (54%) received confirmatory venous testing. In 2020 and 2021, 109 (44%) of 245 and 155 (26%) of 589 children who had a capillary blood lead levels of 5µg/dL or higher received a confirmatory venous test, respectively. (Figure 8)

**Source:** Healthy Homes and Lead Poisoning Prevention Surveillance System, Illinois Department of Public Health

MAP 1

# Prevalence (%) of elevated blood lead levels (5+ µg/dl) in tested 1 and 2 year olds, 2021



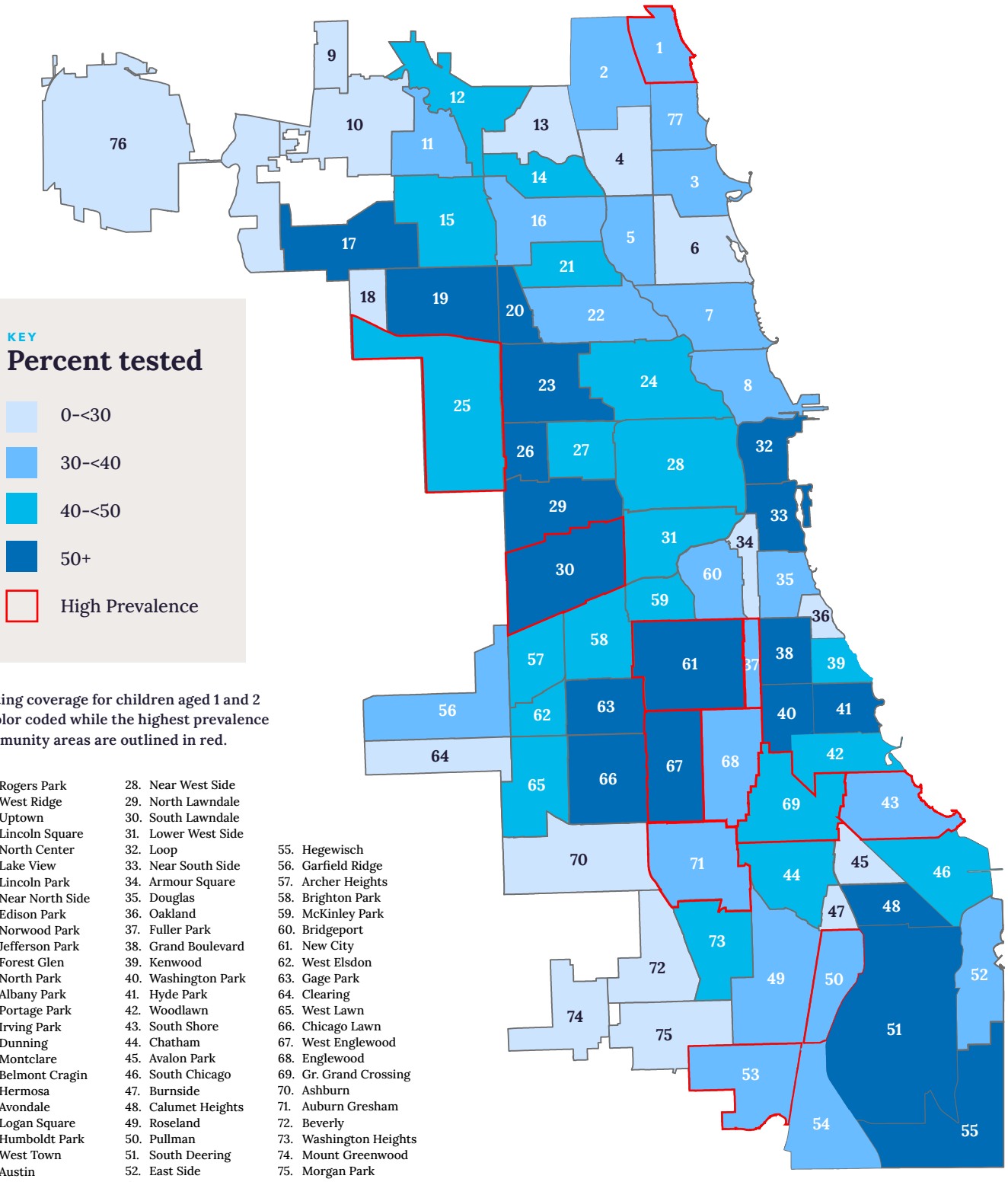

1. Rogers Park
2. West Ridge
3. Uptown
4. Lincoln Square
5. North Center
6. Lake View
7. Lincoln Park
8. Near North Side
9. Edison Park
10. Norwood Park
11. Jefferson Park
12. Forest Glen
13. North Park
14. Albany Park
15. Portage Park
16. Irving Park
17. Dunning
18. Montclare
19. Belmont Cragin
20. Hermosa
21. Avondale
22. Logan Square
23. Humboldt Park
24. West Town
25. Austin
26. West Garfield Park
27. East Garfield Park
28. Near West Side
29. North Lawndale
30. South Lawndale
31. Lower West Side
32. Loop
33. Near South Side
34. Armour Square
35. Douglas
36. Oakland
37. Fuller Park
38. Grand Boulevard
39. Kenwood
40. Washington Park
41. Hyde Park
42. Woodlawn
43. South Shore
44. Chatham
45. Avalon Park
46. South Chicago
47. Burnside
48. Calumet Heights
49. Roseland
50. Pullman
51. South Deering
52. East Side
53. West Pullman
54. Riverdale
55. Hegewisch
56. Garfield Ridge
57. Archer Heights
58. Brighton Park
59. McKinley Park
60. Bridgeport
61. New City
62. West Elsdon
63. Gage Park
64. Clearing
65. West Lawn
66. Chicago Lawn
67. West Englewood
68. Englewood
69. Gr. Grand Crossing
70. Ashburn
71. Auburn Gresham
72. Beverly
73. Washington Heights
74. Mount Greenwood
75. Morgan Park
76. O'Hare
77. Edgewater

**Data Source:** Healthy Homes and Lead Poisoning Prevention Surveillance System, Illinois Department of Public Health

Map prepared by the Office of Epidemiology, 5/23/2022

MAP 2

# Blood lead testing coverage in neighborhoods with high prevalence (>=4.0%) of elevated blood lead levels (5+ µg/dl), 2021




Testing coverage for children aged 1 and 2 is color coded while the highest prevalence community areas are outlined in red.

1. Rogers Park
2. West Ridge
3. Uptown
4. Lincoln Square
5. North Center
6. Lake View
7. Lincoln Park
8. Near North Side
9. Edison Park
10. Norwood Park
11. Jefferson Park
12. Forest Glen
13. North Park
14. Albany Park
15. Portage Park
16. Irving Park
17. Dunning
18. Montclare
19. Belmont Cragin
20. Hermosa
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23. Humboldt Park
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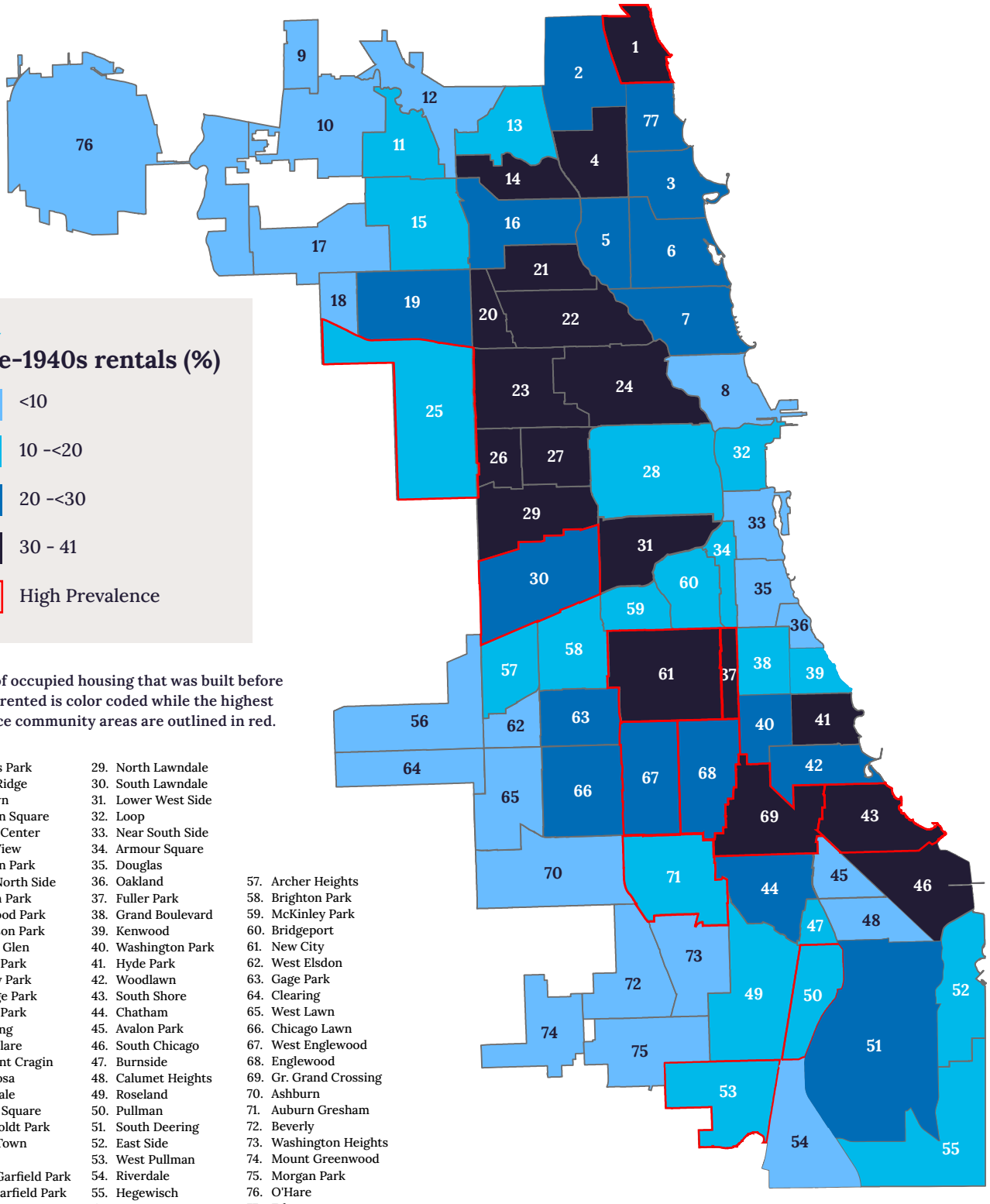
41. Hyde Park
42. Woodlawn
43. South Shore
44. Chatham
45. Avalon Park
46. South Chicago
47. Burnside
48. Calumet Heights
49. Roseland
50. Pullman
51. South Deering
52. East Side
53. West Pullman
54. Riverdale
55. Hegewisch
56. Garfield Ridge
57. Archer Heights
58. Brighton Park
59. McKinley Park
60. Bridgeport
61. New City
62. West Elsdon
63. Gage Park
64. Clearing
65. West Lawn
66. Chicago Lawn
67. West Englewood
68. Englewood
69. Gr. Grand Crossing
70. Ashburn
71. Auburn Gresham
72. Beverly
73. Washington Heights
74. Mount Greenwood
75. Morgan Park
76. O'Hare
77. Edgewater

**Data Source:** Healthy Homes and Lead Poisoning Prevention Surveillance System, Illinois Department of Public Health and American Community Survey, U.S. Census Bureau

Map prepared by the Office of Epidemiology, 5/23/2022

MAP 3

# Older (pre-1940) rental housing in neighborhoods with high prevalence (>=4.0%) of elevated blood lead levels (5+ µg/dl), 2021




Percent of occupied housing that was built before 1940 and rented is color coded while the highest prevalence community areas are outlined in red.

1. Rogers Park
2. West Ridge
3. Uptown
4. Lincoln Square
5. North Center
6. Lake View
7. Lincoln Park
8. Near North Side
9. Edison Park
10. Norwood Park
11. Jefferson Park
12. Forest Glen
13. North Park
14. Albany Park
15. Portage Park
16. Irving Park
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23. Humboldt Park
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27. East Garfield Park
28. Near West Side
29. North Lawndale
30. South Lawndale
31. Lower West Side
32. Loop
33. Near South Side
34. Armour Square
35. Douglas
36. Oakland
37. Fuller Park
38. Grand Boulevard
39. Kenwood
40. Washington Park
41. Hyde Park
42. Woodlawn
43. South Shore
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58. Brighton Park
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74. Mount Greenwood
75. Morgan Park
76. O'Hare
77. Edgewater

**Data Source:** Healthy Homes and Lead Poisoning Prevention Surveillance System, Illinois Department of Public Health and American Community Survey, U.S. Census Bureau

Map prepared by the Office of Epidemiology, 5/23/2022

Map 1 shows the prevalence of elevated blood lead levels in Chicago's 77 community areas. A navy blue or dark blue indicates a higher prevalence of elevated blood lead levels. In general, areas with a higher prevalence of elevated blood lead levels are noted on the south and west sides of the city. Of the 12 communities with high prevalence of elevated blood lead levels, 6 communities had testing rates of less than 40%. (Map 2). Of the 12 community areas with high prevalence of elevated blood lead levels, 6 had pre-1940 rental housing constituting less than 30% of occupied housing. None of the high prevalence community areas had the lowest level of pre-1940 rental housing (Map 3).

# DISCUSSION

Between 2017 and 2021, the prevalence of blood lead levels in Chicago at or above the reference range decreased from 2.4% to 1.8% (Figure 4).

CDPH's Childhood Lead Poisoning Prevention Program continues its mission of preventing lead poisoning by maximizing the availability of affordable, lead-safe housing in the city, through lead case management, environmental inspection and lead abatement and enforcement.

# CDPH Lead Case Management Team

The CDPH Childhood Lead Poisoning Prevention Program Case Management team provides nursing support for families with children ages 6 years and younger who have an elevated blood lead level of 5ug/dL or higher. A public health nurse will meet with the family to conduct a social developmental assessment, provide nutritional counseling, coordinate with the lead inspector, and refer the child for additional services, as needed.

In 2021, the CDPH Lead Case Management Team opened 780 cases for children 6 years and under with blood lead levels of 5ug/dL or higher. COVID restrictions limited in-home visits. However, the nursing staff, through telephone interviews and letters, provided relevant education (e.g., on lead poisoning prevention and follow-up testing recommendations), assessed needs, ensured medication adherence for lead treatment, and provided necessary resources (e.g. referrals for medical or household needs).



**CDPH Lead Case Management Team of public health nurses opened**

**780 cases**

**FOR CHILDREN WITH BLOOD LEAD LEVELS OF 5µg/dL OR HIGHER**

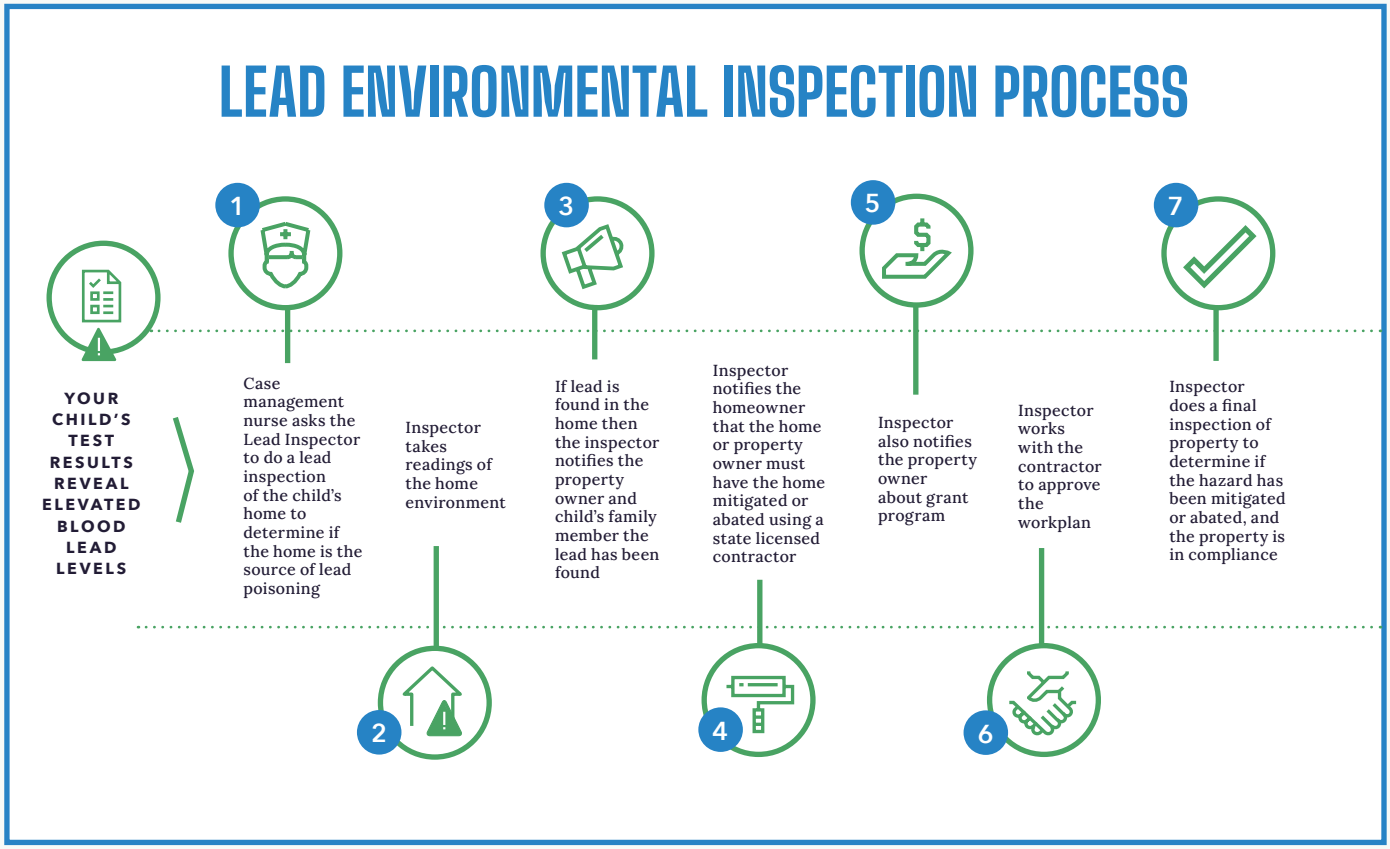
# CDPH Childhood Lead Poisoning Prevention Program Environmental Inspection Team

The CDPH Childhood Lead Poisoning Prevention Program Environmental Inspection Team ensures the homes (or other locations) where children with elevated blood lead levels lived or spent time were inspected for lead hazards, and these hazards were mitigated.

When a child has an elevated blood lead level, they are referred to the CDPH Lead Poisoning Prevention Program for an environmental inspection. Each case is assigned an environmental inspector. These CDPH lead inspectors serve as facilitators throughout the mitigation or abatement process. The CDPH inspectors contacts the owner/tenant of the property to schedule and complete an inspection of the property. If lead hazards are found during the inspection, the property owner/tenant is notified, and a meeting is scheduled to plan for mitigation. Once the plans for mitigation are complete, a timeline for the work to be completed is set. Each property is re-inspected multiple times throughout the process. Once the work on the property is complete, the inspector returns to the property to ensure the mitigation or abatement was successful and the property in cleared.







**456** homes INSPECTED

**4,251** re-inspections PERFORMED

**229** homes CLEARED

**18** lead safety workshops FOR LANDLORDS & FAMILIES

In 2021, A total of 456 homes were inspected. Following an initial inspection and assessment for lead hazards, re-inspections were performed to ensure the homes were properly maintained or required remediation was completed. During 2021, 4,251 re-inspections were performed. The final step of the lead inspections and assessments is to ensure that the home is cleared of the hazard; 229 homes were cleared. The program also conducted 18 lead safe practices workshops for landlords and families. Landlords and families who are interested in attend a future workshop should contact the CDPH Lead hotline at **(312) 747-LEAD** (747-5323).



## Abatement

*Complete removal of any lead bearing components from a home environment; permanent elimination of lead-based paint hazard (e.g. removal of windows with lead-based paint and replacement with windows that do not contain lead-based paint).*

## Mitigation

*Remediation of a lead hazard so that lead bearing competent does not pose an immediate health risk to the occupants. (e.g wet scraping the loose lead-based paint from a door and repainting with a non-lead-based paint).*

# NEXT STEPS

While great progress has been made in the decline of the prevalence of elevated blood lead levels among Chicago's children, lead poisoning prevention work continues.

**CDPH is committed to continued data monitoring and evaluation of lead testing and prevalence of elevated blood lead levels.** CDPH plans to release updated data reports in the future.

**CDPH works closely with the Illinois Chapter of the American Academy of Pediatrics (ICAAP).** In recent years, ICAAP has completed a quality improvement project with local providers to increase provider documentation of blood lead test orders and documentation of family notification of blood lead test results. ICAAP has also developed webinars and other materials to raise awareness and educate healthcare providers about testing and response.

**CDPH contracts with community-based organizations to provide direct outreach and education** to pregnant people and families with young children, particularly in community areas where there are the highest levels of blood poisoning among children.

**To raise public awareness, CDPH launches lead and healthy homes media campaigns,** previously in the month of June for National Healthy Homes Month and in October to coincide with National Lead Poisoning Prevention Week.

**In 2022, CDPH was allocated $47 million in bond funds from the City of Chicago Recovery Plan and $8.7 million from the Department of Housing and Urban Development.** Both funding sources will be used over the next four years to expand home inspections and mitigation of lead and other healthy homes related hazards in Chicago homes.

This investment will allow for:

- Expanded income eligibility for lead mitigation
- Additional investment in healthy homes repairs
- Exploration of proactive lead abatement in neighborhoods with higher lead poisoning prevalence

# In addition to the CDPH Childhood Lead Poisoning Prevention Program activities, healthcare providers, building owners and parents each play a unique role in lead poisoning prevention and response:

## Healthcare Providers

- Perform a blood lead test on Chicago children at ages 1, 2, and 3 years according to the recommendations of the Illinois Department of Public Health.
- If screening capillary blood lead test results are ≥5 µg/dL, collect a venous sample for confirmatory testing. Consider replacing capillary blood draws with venous blood draws, when possible and appropriate, in order to reduce the number of children with unconfirmed elevated blood lead levels from an initial capillary blood lead test.
- Perform follow-up blood lead testing for children with elevated blood lead levels as outlined below:

| Capillary Blood Lead Level (µg/dL) | Confirm with Venous Blood Test Within: | Venous Blood Lead Level (µg/dL) | Perform Follow-up Testing within: |
|---|---|---|---|
| 5-24 | 1 month | 5-14 | 3 months |
| 25-44 | 2 days | 15-19 | 2 months |
| ≥45 | 1 day | 20-29 | 1 month |
| | | 30-39 | 2 weeks |
| | | ≥40 | 1 week |

**Source:** https://dph.illinois.gov/content/dam/soi/en/web/idph/files/publications/clrq-algorithm.pdf

# Building owners

- Tell new tenants about the presence of lead-based paint in the home or unit.
- In homes built before 1978:
  - Find out if there is lead-based paint by hiring a qualified professional.
  - Remove peeling or chipping lead-based paint by hiring qualified professionals.
  - Do not disturb lead-based paint, never use dry sanding on painted surfaces, and for home renovations ensure contractors have EPA Renovation, Repair, and Painting certification.
- Reduce bare soil in the yard by planting grass or covering with grass seed, mulch or wood chips.
- In homes built before 1986, consider installing a water filter that removes lead from drinking water. See https://www.leadsafechicago.org/water for more information about reducing lead in water.

# Chicago Parents

- Talk with your child's doctor about testing your child's blood lead level at ages 1, 2 and 3 years.
- Persons who are pregnant and breastfeeding should also avoid exposure to lead. If you are pregnant or breastfeeding, talk with your doctor about exposure to sources of lead.
  - Learn more about lead and pregnancy and ways to avoid lead exposure during pregnancy.
- Try to control or eliminate sources of lead in your child's environment, including:
  - If you rent a home built before 1978, ask your landlord to follow the instructions for building owners (page 31).
  - If you own a home built before 1978, follow the instructions for building owners (page 31).
- Remove toys, toy jewelry, imported candy, imported spices, and any other items recalled due to lead contamination from children and discard as appropriate. Stay up-to-date on current recalls by visiting the Consumer Product Safety Commission's website: www.cpsc.gov.





# General Resources

^ More resources available here

CDPH Lead Poisoning Prevention website
https://www.chicago.gov/lead

Lead-Safe Chicago
leadsafechicago.org

HUD's Healthy Homes Program
hud.gov/program_offices/healthy_homes/hhi

Lead service line replacement
leadsafechicago.org/lead-service-line-replacement

Centers for Disease Control and Prevention Lead Information for Parents and Caregivers
cdc.gov/nceh/lead/audience/parents.html

# Resources for Providers

Chicago Health Alert Network Lead Poisoning Prevention Program Page
chicagohan.org/programs/lead

Illinois Department of Public Health Lead Poisoning Prevention Professional Education & Training
dph.illinois.gov/topics-services/environmental-health-protection/lead-poisoning-prevention/education-training.html

Centers for Disease Control and Prevention Lead Information for Healthcare Providers
cdc.gov/nceh/lead/audience/healthcare-providers.html



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# APPENDIX

# Methodology and Data Sources

All blood lead test data was drawn from the Illinois Healthy Homes and Lead Poisoning Surveillance System (HHLPSS). The American Community Survey was the data source for housing tenure and housing age in Map 3 (5-year survey 2016-2020) and for the population of 1 and 2 year olds by community area used in Table A1.

Multiple tests were assigned to the same child by using a probabilistic matching method using name and date of birth.

For Figures 1 and 2, after assigning a child to a birth year, the child was given a testing status for years of age. A child tested in months of age 12 to 23 was assigned to year one; a child tested between ages 24 to 35 months was assigned to year two; and a child tested between ages 36 to 47 months was assigned to year three. The denominator to calculate the percent is the count of children born in Chicago in that birth year. For example, children born in 2017 and tested in 2018/Chicago births in 2018 = percent of children receiving a blood lead test at age 1. Note that the tacit assumption is that all children born in Chicago stay in Chicago until they turn 4 years old and no child born outside of Chicago moves into Chicago.

For Figures 4,5,6, and Table 1, and Map 1 and 2, every tested child was assigned a peak blood lead level from venipuncture (ie, venous blood). If there was no venous blood drawn, (ie, the blood draw method was a fingerstick or unknown) then the blood lead level was specified as <5 µg/dL. Every blood lead level of 5 µg/dL or greater is 'venous'. The child's address corresponding to that peak blood lead level was used to assign their community area. In most years, 20% of blood draws are fingerstick whereas unknown blood draws range from <1% to <5% per year.

For Figure 7, the above methods for assigning multiple tests to the same child and determining blood lead levels of ≥5 µg/dL were used. Children with a blood lead level ≥5 in the preceding calendar year were assigned 'not at-risk' status. For example, to determine the children at risk in 2019, only children who were tested in 2019 and did not have a blood lead level ≥5 µg/dL in 2018 were included.

For Figure 8, a child in a calendar year who received a capillary (fingerstick blood draw) blood lead level ≥5 µg/dL was assigned to confirmatory venous test completed status if they had a subsequent venous blood lead level measured in the same calendar year. Otherwise, they were assigned to incompletion status.

The blood lead tests described here are not performed as a random sample and therefore are not representative of the entire population of Chicago children under age 6. Since the geographic distribution of per capita testing is similar from year to year, we can infer that a similar population with similar risks of lead exposure are being tested year after year. Therefore, these blood lead test findings provide a reasonably accurate picture of the broadest changes over time.

**Note:** *Following their 2022 conference, The Council of State and Territorial Epidemiologists (CSTE) has changed the name of the condition under surveillance from "elevated blood lead level" to "lead in blood," updating the criteria for reporting, the case definition, and case classifications. For the purposes of this report, the term "elevated blood lead level" was used. Future reports will reflect the updated language and term "lead in blood" will be used.*

These cleaning techniques will not remove lead hazards. If you are concerned about lead in your home, contact the Chicago Department of Public Health.

# CHICAGO DEPARTMENT OF PUBLIC HEALTH
# LEAD DUST CLEAN-UP AND CONTROL **TEMPORARY** HAZARD REDUCTION

**SUPPLIES:**

2 Tablespoons Automatic Dish washing Soap or Detergent

I Gallon Warm Water in a bucket

1 Gallon Warm Water for rinsing

Disposable rags or paper towels

Mop

Latex Gloves

Scrubber

Spray bottle ( optional)

**WHAT YOU SHOULD DO:**

1. Start where your child spends the most time.
2. Pick up all clothes and toys and throw away all trash.
3. Put on gloves.
4. Mix soap in the bucket of water.
5. Wipe off window sills, wells, molding and baseboards with soap.
6. Rinse well with clean water and clean rags.
7. Mop floors, steps, comers and under furniture
8. Rinse well with clean warm water.
9. Repeat steps 6 and 7 as often as needed.
10. Flush all dirty water down the toilet.
11. Wash all toys, blankets, sheets, rugs, curtains, etc.

**Notes:**

1. Always Wet Sweep before mopping by spraying the floor with above cleaning solution or water, and then sweep.
2. DO NOT use bleach with soap.
3. Steam Clean or throw away old carpet. (Steam Cleaners can be rented at various grocery or hardware stores.) May need to be done more than once.

## CLEAN UP CHECK LIST

| CHORES | TO-DO | DONE |
|---|---|---|
| LIVING ROOM | | |
| vacuum/wet sweep floors | | |
| wet wipe window sills | | |
| wet mop | | |
| BEDROOMS | | |
| wash toys | | |
| wash bedding | | |
| vacuum/wet sweep | | |
| wet mop and rinse floors | | |
| wash baseboards and rinse | | |
| wash window sills and rinse | | |

| CHORES | TO-DO | DONE |
|---|---|---|
| MISC | | |
| vacuum furniture | | |
| carpet cleaned | | |
| wash curtains & wet dust blinds | | |
| wash ceiling fans | | |
| wash knickknacks | | |
| FAMILY ROOMS | | |
| vacuum/wet sweep floors | | |
| wet wipe window sills | | |
| wet mop and rinse floors | | |

| CHORES | TO-DO | DONE |
|---|---|---|
| KITCHEN | | |
| wash dishes | | |
| wet mop and rinse floors | | |
| wash counters and rinse floors | | |
| stove wash | | |
| refrigerator wash | | |
| scrub sinks | | |
| wash window sills and rinse | | |
| BATH | | |
| scrub sink | | |
| wash tub | | |
| wash toilet | | |
| wet mop and rinse floors | | |
| wash window sills and rinse | | |



## PERSONAL HYGIENE

- Wash child's hands and face before eating snacks, meals and before bedtime.
- Keep child's fingernails short and clean.
- Keep child's hands away from mouth and face as much as possible.
- Wash toys often in warm, soapy water and rinse in clear water.
- Store food in plastic, glass or stainless steel containers. Not in pottery.
- Children should not eat food dropped on the floor or ground.
- Always eat at a table that has been washed before eating.
- Use only cold water to drink or to cook with. Run water for several minutes to remove lead particles.
- Store outdoor toys away from painted building and wash off dust and dirt.
- Wash bedclothes, sheets and pillow covers often.
- Keep "diaper wipe" type cleaners where the child can clean his/her own hands.
- Put a small amount of dish soap in a plastic soap bottle, add water and set on the side of the bathtub for the child to wash his/her own hands.
- Use a vinyl tablecloth or mat on which a child can sit and watch TV or play.
- Do not allow children to chew or suck on toys.
- Keep children away from windowsills, doors, railings and furniture with paint that is peeling, chipping or fading.
- Adults should shower and change before coming home if they work at a job where there is lead exposure.
- Wash baby bottles, pacifiers and "sippy" cups when they have been dropped on the floor.

TABLE A.1

# Percentage of children aged 1 and 2 years old receiving a blood lead test, by Chicago community area, 2019-21*

| Community Area | | Children aged 1 and 2 | Children aged 1 or 2 receiving a blood lead test (%) | | |
|---|---|---|---|---|---|
| | | | 2019 | 2020 | 2021 |
| 1 | Rogers Park | 1181 | 56% | 39% | 37% |
| 2 | West Ridge | 2603 | 47% | 39% | 39% |
| 3 | Uptown | 1243 | 47% | 31% | 32% |
| 4 | Lincoln Square | 1377 | 37% | 27% | 28% |
| 5 | North Center | 1370 | 46% | 33% | 32% |
| 6 | Lake View | 2573 | 40% | 32% | 29% |
| 7 | Lincoln Park | 1356 | 51% | 50% | 40% |
| 8 | Near North Side | 1473 | 47% | 49% | 33% |
| 9 | Edison Park | 350 | 49% | 30% | 27% |
| 10 | Norwood Park | 1041 | 33% | 25% | 27% |
| 11 | Jefferson Park | 623 | 40% | 33% | 32% |
| 12 | Forest Glen | 433 | 53% | 46% | 40% |
| 13 | North Park | 692 | 46% | 27% | 28% |
| 14 | Albany Park | 1162 | 60% | 48% | 49% |
| 15 | Portage Park | 1445 | 52% | 44% | 42% |
| 16 | Irving Park | 1382 | 49% | 41% | 38% |
| 17 | Dunning | 671 | 43% | 46% | 52% |
| 18 | Montclare | 473 | 29% | 25% | 27% |
| 19 | Belmont Cragin | 1919 | 62% | 48% | 52% |
| 20 | Hermosa | 542 | 69% | 58% | 56% |
| 21 | Avondale | 890 | 46% | 40% | 42% |
| 22 | Logan Square | 2004 | 52% | 45% | 38% |
| 23 | Humboldt Park | 1451 | 61% | 55% | 53% |
| 24 | West Town | 2177 | 55% | 55% | 43% |
| 25 | Austin | 2592 | 61% | 44% | 44% |
| 26 | West Garfield Park | 424 | 57% | 50% | 57% |
| 27 | East Garfield Park | 597 | 50% | 36% | 44% |
| 28 | Near West Side | 1497 | 49% | 46% | 41% |
| 29 | North Lawndale | 785 | 73% | 61% | 58% |
| 30 | South Lawndale | 1583 | 54% | 53% | 50% |
| 31 | Lower West Side | 557 | 59% | 49% | 50% |
| 32 | Loop | 366 | 58% | 78% | 61% |
| 33** | Near South Side | 164 | 110% | 239% | 173% |
| 34 | Armour Square | 333 | 51% | 32% | 29% |
| 35 | Douglas | 527 | 44% | 31% | 30% |
| 36 | Oakland | 292 | 33% | 27% | 27% |
| 37** | Fuller Park | 38 | 100% | 55% | 45% |
| 38 | Grand Boulevard | 411 | 58% | 64% | 63% |
| 39 | Kenwood | 414 | 49% | 43% | 41% |
| 40 | Washington Park | 219 | 63% | 79% | 76% |

| | Community Area | Children aged 1 and 2 | Children aged 1 or 2 receiving a blood lead test (%) | | |
|---|---|---|---|---|---|
| | | | 2019 | 2020 | 2021 |
| 41 | Hyde Park | 282 | 81% | 60% | 65% |
| 42 | Woodlawn | 563 | 52% | 38% | 43% |
| 43 | South Shore | 1606 | 50% | 32% | 34% |
| 44 | Chatham | 601 | 45% | 38% | 47% |
| 45 | Avalon Park | 277 | 24% | 17% | 23% |
| 46 | South Chicago | 710 | 37% | 37% | 47% |
| 47** | Burnside*** | 0 | 182% | 0% | 0% |
| 48 | Calumet Heights | 143 | 71% | 52% | 68% |
| 49 | Roseland | 948 | 46% | 29% | 32% |
| 50 | Pullman | 163 | 48% | 34% | 36% |
| 51 | South Deering | 222 | 51% | 52% | 62% |
| 52 | East Side | 723 | 45% | 27% | 33% |
| 53 | West Pullman | 657 | 47% | 31% | 35% |
| 54 | Riverdale | 371 | 32% | 31% | 35% |
| 55 | Hegewisch | 149 | 41% | 36% | 54% |
| 56 | Garfield Ridge | 803 | 31% | 31% | 32% |
| 57 | Archer Heights | 382 | 47% | 47% | 46% |
| 58 | Brighton Park | 1141 | 58% | 49% | 49% |
| 59 | McKinley Park | 343 | 44% | 45% | 44% |
| 60 | Bridgeport | 698 | 63% | 45% | 49% |
| 61 | New City | 1029 | 54% | 52% | 53% |
| 62 | West Elsdon | 482 | 44% | 39% | 45% |
| 63 | Gage Park | 1022 | 51% | 48% | 52% |
| 64 | Clearing | 679 | 29% | 26% | 27% |
| 65 | West Lawn | 941 | 55% | 37% | 41% |
| 66 | Chicago Lawn | 1524 | 61% | 47% | 50% |
| 67 | West Englewood | 612 | 85% | 62% | 62% |
| 68 | Englewood | 962 | 65% | 32% | 31% |
| 69 | Gr. Grand Crossing | 674 | 88% | 45% | 49% |
| 70 | Ashburn | 1053 | 31% | 25% | 32% |
| 71 | Auburn Gresham | 1263 | 50% | 29% | 31% |
| 72 | Beverly | 445 | 26% | 26% | 29% |
| 73 | Washington Heights | 486 | 41% | 31% | 42% |
| 74 | Mount Greenwood | 496 | 16% | 17% | 15% |
| 75 | Morgan Park | 545 | 28% | 22% | 23% |
| 76 | O'Hare | 616 | 21% | 22% | 22% |
| 77 | Edgewater | 1127 | 55% | 35% | 33% |
| **CHICAGO TOTAL[1]** | | **65968** | **51%** | **42%** | **41%** |

**Source:** Healthy Homes and Lead Poisoning Prevention Surveillance System, Illinois Department of Public Health and American Community Survey, U.S. Census Bureau

+A darker color indicated a lesser percentage of children tested

* The population of 1 and 2 year olds is estimated as two-thirds of under 3 population from the 5-year American Community Survey, 2016-2020

**Community Areas with a small number of children aged 1 and 2, such as community areas numbered 33, 37, and 47 can generate unrealistic percentages of 100% or greater and 0% testing because the estimated number of children in the community area is too small or the tested child is assigned to the wrong community area.

***The population of 0 children aged 1 and 2 year olds in the Burnside Community is an underestimate of the small number of children living there.

TABLE A.2

# Prevalent elevated blood lead levels, 1- 2 years old, in children who received a blood lead test, by community area, 2019- 2021

| Community Area | | 5+ µg/dL (percent) | | |
|---|---|---|---|---|
| | | 2019 | 2020 | 2021 |
| 1 | Rogers Park | 3.8 | 3.4 | 4.6 |
| 2 | West Ridge | 3.4 | 3.6 | 2.6 |
| 3 | Uptown | 0.6 | 0.5 | 1.3 |
| 4 | Lincoln Square | 1.3 | 0.8 | 2.1 |
| 5 | North Center | 0.4 | 0.2 | 0.0 |
| 6 | Lake View | 0.2 | 0.2 | 0.1 |
| 7 | Lincoln Park | 0.1 | 0.0 | 0.0 |
| 8 | Near North Side | 0.4 | 0.3 | 1.0 |
| 9 | Edison Park | 0.0 | 0.0 | 1.1 |
| 10 | Norwood Park | 0.0 | 0.8 | 0.0 |
| 11 | Jefferson Park | 2.2 | 1.9 | 0.5 |
| 12 | Forest Glen | 0.0 | 1.0 | 1.1 |
| 13 | North Park | 1.6 | 1.6 | 2.6 |
| 14 | Albany Park | 3.3 | 3.1 | 2.4 |
| 15 | Portage Park | 1.9 | 1.6 | 1.1 |
| 16 | Irving Park | 1.8 | 1.6 | 0.9 |
| 17 | Dunning | 1.1 | 1.0 | 0.9 |
| 18 | Montclare | 0.0 | 0.0 | 0.0 |
| 19 | Belmont Cragin | 1.9 | 2.2 | 2.1 |
| 20 | Hermosa | 2.2 | 2.6 | 3.0 |
| 21 | Avondale | 0.6 | 2.5 | 1.9 |
| 22 | Logan Square | 0.9 | 1.2 | 1.3 |
| 23 | Humboldt Park | 3.3 | 3.1 | 3.0 |
| 24 | West Town | 0.9 | 0.7 | 0.8 |
| 25 | Austin | 3.9 | 4.8 | 5.2 |
| 26 | West Garfield Park | 5.2 | 4.7 | 3.4 |
| 27 | East Garfield Park | 1.9 | 3.3 | 3.8 |
| 28 | Near West Side | 0.8 | 0.7 | 0.7 |
| 29 | North Lawndale | 5.4 | 4.2 | 3.7 |
| 30 | South Lawndale | 5.1 | 5.5 | 4.9 |
| 31 | Lower West Side | 2.6 | 4.0 | 3.2 |
| 32 | Loop | 0.6 | 0.0 | 0.0 |
| 33 | Near South Side | 0.0 | 0.0 | 0.4 |
| 34 | Armour Square | 0.0 | 0.0 | 1.0 |
| 35 | Douglas | 0.9 | 1.9 | 0.6 |
| 36 | Oakland | 0.0 | 1.3 | 0.0 |
| 37 | Fuller Park | 17.5 | 4.8 | 5.9 |
| 38 | Grand Boulevard | 1.2 | 1.1 | 1.6 |
| 39 | Kenwood | 0.9 | 1.1 | 0.0 |
| 40 | Washington Park | 3.1 | 1.7 | 0.6 |
| 41 | Hyde Park | 0.8 | 1.8 | 1.6 |

| Community Area | | 5+ µg/dL (percent) | | |
|---|---|---|---|---|
| | | 2019 | 2020 | 2021 |
| 42 | Woodlawn | 1.0 | 2.3 | 3.3 |
| 43 | South Shore | 4.2 | 2.9 | 4.6 |
| 44 | Chatham | 4.9 | 3.9 | 2.5 |
| 45 | Avalon Park | 2.2 | 4.2 | 3.1 |
| 46 | South Chicago | 7.1 | 5.5 | 3.6 |
| 47 | Burnside | 0.0 | 0.0 | 0.0 |
| 48 | Calumet Heights | 2.0 | 2.7 | 1.0 |
| 49 | Roseland | 4.2 | 5.4 | 2.3 |
| 50 | Pullman | 9.0 | 3.6 | 5.1 |
| 51 | South Deering | 1.9 | 0.0 | 2.9 |
| 52 | East Side | 1.6 | 3.6 | 2.1 |
| 53 | West Pullman | 3.6 | 3.9 | 4.4 |
| 54 | Riverdale | 0.7* | 0.0* | 0.8* |
| 55 | Hegewisch | 2.6 | 0.0 | 0.0 |
| 56 | Garfield Ridge | 0.7 | 0.0 | 0.8 |
| 57 | Archer Heights | 2.3 | 1.1 | 2.3 |
| 58 | Brighton Park | 1.6 | 3.4 | 3.2 |
| 59 | McKinley Park | 2.3 | 2.0 | 1.3 |
| 60 | Bridgeport | 0.5 | 0.9 | 0.4 |
| 61 | New City | 4.3 | 5.1 | 4.4 |
| 62 | West Elsdon | 2.5 | 0.0 | 0.0 |
| 63 | Gage Park | 2.7 | 2.9 | 3.6 |
| 64 | Clearing | 1.0 | 0.6 | 0.6 |
| 65 | West Lawn | 0.7 | 1.1 | 1.8 |
| 66 | Chicago Lawn | 4.2 | 3.5 | 2.2 |
| 67 | West Englewood | 5.9 | 8.9 | 6.9 |
| 68 | Englewood | 6.8 | 6.5 | 6.4 |
| 69 | Gr. Grand Crossing | 3.7 | 2.6 | 4.9 |
| 70 | Ashburn | 0.6 | 1.9 | 1.2 |
| 71 | Auburn Gresham | 5.6 | 4.1 | 4.0 |
| 72 | Beverly | 0.9 | 0.9 | 1.6 |
| 73 | Washington Heights | 3.4 | 2.6 | 2.5 |
| 74 | Mount Greenwood | 0.0 | 0.0 | 1.4 |
| 75 | Morgan Park | 2.5 | 1.7 | 0.8 |
| 76 | O'Hare | 2.1 | 0.8 | 2.2 |
| 77 | Edgewater | 1.6 | 1.0 | 0.8 |
| CHICAGO TOTAL[1] | | 2.4 | 2.3 | 2.3 |

**Source:** Healthy Homes and Lead Poisoning Prevention Surveillance System, Illinois Department of Public Health

Most community areas have similar prevalence of blood lead levels 5 µg/dL or greater over time from 2019 to 2021. Reductions in testing in 2020 and 2021 concurrent with the COVID-19 pandemic make comparisons to 2019 more uncertain. Darker red indicates higher prevalence.

*These values are inaccurate because blood lead level test result reporting to Chicago Department of Public Health for community area 54 (Riverdale) is incomplete.

TABLE A.3

# Renter-occupied housing built before 1940, as counts and percentage of all occupied housing, by community area, 2016-2020*

| | Community Area | Housing units | Pre-1940 rental (count) | Pre-1940 rental (percent) |
|---|---|---|---|---|
| 1 | Rogers Park | 24,916 | 8,007 | 32% |
| 2 | West Ridge | 25,869 | 5,418 | 21% |
| 3 | Uptown | 30,970 | 8,624 | 28% |
| 4 | Lincoln Square | 18,481 | 5,586 | 30% |
| 5 | North Center | 14,237 | 3,170 | 22% |
| 6 | Lake View | 53,490 | 12,315 | 23% |
| 7 | Lincoln Park | 32,020 | 6,533 | 20% |
| 8 | Near North Side | 59,093 | 4,893 | 8% |
| 9 | Edison Park | 4,461 | 28 | 1% |
| 10 | Norwood Park | 16,916 | 1,032 | 6% |
| 11 | Jefferson Park | 10,521 | 1,185 | 11% |
| 12 | Forest Glen | 7,082 | 142 | 2% |
| 13 | North Park | 6,728 | 1,229 | 18% |
| 14 | Albany Park | 16,782 | 6,537 | 39% |
| 15 | Portage Park | 22,569 | 4,508 | 20% |
| 16 | Irving Park | 20,916 | 6,098 | 30% |
| 17 | Dunning | 15,886 | 676 | 4% |
| 18 | Montclare | 4,612 | 389 | 8% |
| 19 | Belmont Cragin | 22,723 | 5,434 | 24% |
| 20 | Hermosa | 7,178 | 2,475 | 34% |
| 21 | Avondale | 13,735 | 4,804 | 35% |
| 22 | Logan Square | 31,191 | 12,075 | 39% |
| 23 | Humboldt Park | 17,767 | 5,843 | 33% |
| 24 | West Town | 38,269 | 11,698 | 31% |
| 25 | Austin | 33,461 | 8,973 | 27% |
| 26 | West Garfield Park | 5,473 | 2,249 | 41% |
| 27 | East Garfield Park | 6,855 | 2,112 | 31% |
| 28 | Near West Side | 29,519 | 3,186 | 11% |
| 29 | North Lawndale | 10,690 | 3,558 | 33% |
| 30 | South Lawndale | 18,717 | 5,9515 | 31% |
| 31 | Lower West Side | 12,632 | 5,120 | 41% |
| 32 | Loop | 13,601 | 1,890 | 14% |
| 33 | Near South Side | 2,432 | 58 | 2% |
| 34 | Armour Square | 5,454 | 1,070 | 20% |
| 35 | Douglas | 10,140 | 813 | 8% |
| 36 | Oakland | 3,144 | 131 | 4% |
| 37 | Fuller Park | 1,133 | 359 | 32% |
| 38 | Grand Boulevard | 8,633 | 1,717 | 20% |
| 39 | Kenwood | 9,834 | 1,304 | 13% |
| 40 | Washington Park | 4,695 | 1,181 | 25% |
| 41 | Hyde Park | 13,676 | 4,599 | 34% |
| 42 | Woodlawn | 10,985 | 2,571 | 23% |

| | Community Area | Housing units | Pre-1940 rental (count) | Pre-1940 rental (percent) |
|---|---|---|---|---|
| 43 | South Shore | 23,023 | 7,123 | 31% |
| 44 | Chatham | 14,368 | 3,136 | 22% |
| 45 | Avalon Park | 4,069 | 275 | 7% |
| 46 | South Chicago | 9,579 | 3,007 | 31% |
| 47 | Burnside | 992 | 118 | 12% |
| 48 | Calumet Heights | 5,456 | 392 | 7% |
| 49 | Roseland | 12,360 | 1,640 | 13% |
| 50 | Pullman | 3,317 | 515 | 16% |
| 51 | South Deering | 5,385 | 1,236 | 23% |
| 52 | East Side | 6,981 | 1,119 | 16% |
| 53 | West Pullman | 9,063 | 1,034 | 11% |
| 54 | Riverdale | 2,757 | 145 | 5% |
| 55 | Hegewisch | 3,507 | 517 | 15% |
| 56 | Garfield Ridge | 12,340 | 440 | 4% |
| 57 | Archer Heights | 4,132 | 398 | 10% |
| 58 | Brighton Park | 12,320 | 3,240 | 26% |
| 59 | McKinley Park | 5,366 | 1,130 | 21% |
| 60 | Bridgeport | 12,906 | 3,549 | 27% |
| 61 | New City | 12,171 | 3,756 | 31% |
| 62 | West Elsdon | 5,401 | 90 | 2% |
| 63 | Gage Park | 8,959 | 1,454 | 16% |
| 64 | Clearing | 8,654 | 519 | 6% |
| 65 | West Lawn | 9,176 | 447 | 5% |
| 66 | Chicago Lawn | 16,645 | 2,303 | 14% |
| 67 | West Englewood | 9,449 | 2,372 | 25% |
| 68 | Englewood | 9,166 | 2,133 | 23% |
| 69 | Gr. Grand Crossing | 12,260 | 3,963 | 32% |
| 70 | Ashburn | 12,939 | 75 | 1% |
| 71 | Auburn Gresham | 17,253 | 2,802 | 16% |
| 72 | Beverly | 7,390 | 264 | 4% |
| 73 | Washington Heights | 9,331 | 802 | 9% |
| 74 | Mount Greenwood | 6,945 | 30 | 0% |
| 75 | Morgan Park | 10,589 | 775 | 7% |
| 76 | O'Hare | 7,991 | 62 | 1% |
| 77 | Edgewater | 28,890 | 7,429 | 26% |
| **CHICAGO TOTAL[1]** | | **1,058,616** | **223,831** | **21%** |

*There is large variation across community areas in the percentage of occupied housing that are older (built before 1940) rental units. The percentage ranges from 0% to 41%. It is unknown how many of those units are occupied by young children at risk of lead exposure from deteriorated lead-based paint. Darker red indicates a higher percentage of higher-risk housing.

## LEAD REPORT RESOURCES

Chicago.gov/leadpoisoningprevention

## SUGGESTED CITATION

Chicago Department of Public Health. *Lead Poisoning Prevention Report, 2019-2021*. Chicago, IL: City of Chicago; February 2023.

CDPH
Chicago Department of Public Health