

Peoria County  
Lead Report

2022



**Public Health**  
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Peoria City/County  
Health Department

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# 2022 Peoria County Lead Report

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### Key Terms

**Act:** Illinois Lead Poisoning Prevention Act

**Capillary blood draw:** Blood samples are collected by the finger-stick method.

**Case Management:** Activities that involve coordinating, providing, and overseeing the services required to reduce blood lead levels.

**Child:** A person under the age of 16. In this report, emphasis is placed on children 6 years of age or younger at the time of testing except as otherwise stated.

**Code:** Illinois Lead Poisoning Prevention Code

**Confirmed blood lead level:** A blood lead level resulting from a single venous blood test. Elevated capillary blood test results shall be confirmed by a venous test.

**Elevated blood lead:** Blood lead level  $\geq 5$   $\mu\text{g}/\text{dL}$ .

## **EXECUTIVE SUMMARY**

The 2022 Peoria County Lead Report focuses on childhood lead poisoning and prevention activities based on various characteristics with the purpose to educate and promote health understanding within the community. Healthy People 2030 target goals, a national health initiative has a target to reduce blood lead levels in children aged 1-5 years from 3.31 micrograms per deciliter to 1.18 micrograms per deciliter in 97.5% of the population. In 2021, CDC updated guidelines from 5ug/dL to 3.5ug/dL for blood lead reference value. This is so children within a range of 3.5-5ug/dL of blood lead levels can also receive resources and actions to mitigate health effects and address exposure sources. IDPH guidelines continue to be 5ug/dL for elevated lead level reference.

### ***Key Findings***

- There were 4,184 lead tests completed in Peoria County children aged 1-7 years in 2022.
- There were 3,420 capillary blood draws and 763 venous blood draws.
- Within the city of Peoria, the 61603-zip code had the highest percentage of elevated venous blood lead levels at 18.3% followed by 61604 at 15.7%.
- Three-year-olds had the highest percentage of confirmed tests  $\geq 5$  at 20.8%, followed by four-year-olds at 19.2%.
- Of all lead tests in Peoria County, 2.9% were confirmed elevated.
- There were 763 confirmatory venous tests completed. Of these, African American/Black children accounted for 39.2% of these tests while White children accounted for 38.4%.
- There were 120 confirmed tests with results  $\geq 5$ ug/dL. African American/Black children accounted for 57.5% of these tests while White children accounted for 25%.
- African American/Black children have an elevated blood lead rate of 7 times higher than their White counterparts.
- Non-Hispanic Other races had a rate of 6.3 times higher than their White counterparts for having high blood lead levels.
- Hispanic/Latino children have an elevated blood lead rate of 1.8 times higher than their non-Hispanic counterparts.

## ***What is Lead Poisoning***

Lead poisoning is caused by eating lead paint chips or eating or breathing in lead dust. There is no safe level of lead in the blood. Children under 6 years of age and infants are especially at risk due to absorbing lead more easily in their bodies. Any amount of lead in the body can limit a child's development. Very elevated levels of lead can lead to seizures, coma, or death and may require treatment to lower levels and prevent life-threatening conditions. There is no cure for lead poisoning and damage to the body is permanent. Lead poisoning can cause learning problems, behavioral problems, lower intelligence, impulse control problems, and slowed growth or attention problems.

Neighborhoods of poverty and low-income households increase the risk of children being exposed to lead. Research shows a positive correlation between communities with elevated blood lead levels and high crime rates. The effects on cognitive and behavioral development in children with high blood lead levels are linked to committing violent crimes. This is due to an increase in impulsive actions, social aggression, as well as the possibility of attention deficit disorder (ADHD).

## ***Sources***

- Lead Paint
- Dust
- Drinking water
- Contaminated soil
- Pottery made with lead paint.
- Fishing sinkers
- Bullets

Homes built before 1978 may contain lead paint. Removing or disturbing lead paint during remodeling or demolition can cause lead dust and be harmful if breathed in. Contact your local health department or licensed lead contractor for information on how to safely remove lead paint. Most lead sources in Peoria County come from lead paint either inside or on the home's exterior.

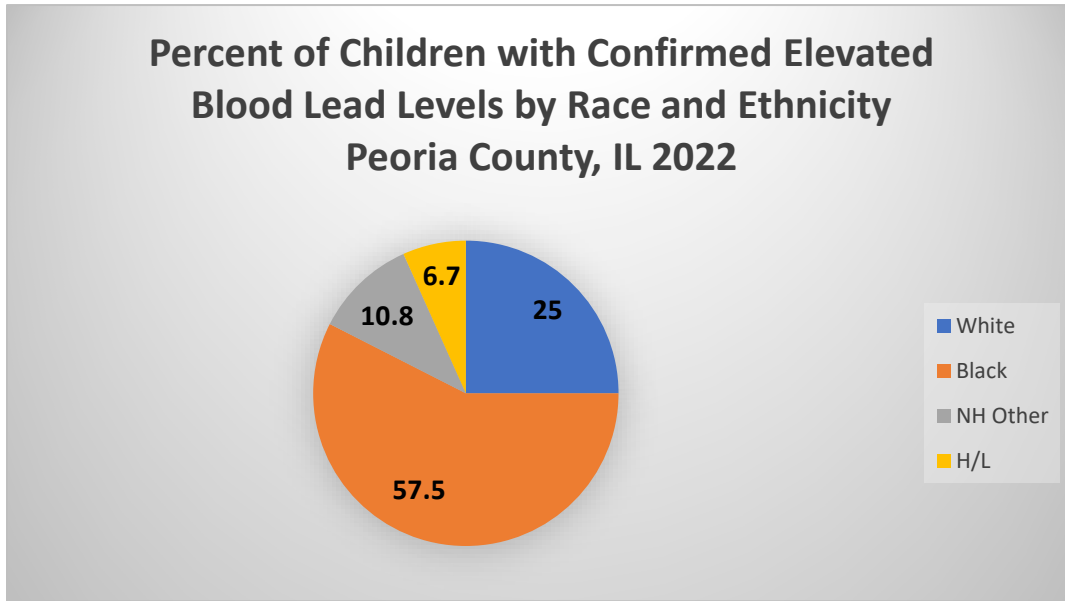
## ***Prevention***

- Wash hands before eating, especially after playing outside.
- Eat well-balanced meals.
- High iron foods can prevent lead from absorbing in the body.
- Use cold water only for drinking, cooking, and formula.
- Check your home for chipping or peeling paint.
- Have your child screened for lead from age 6 months through 6 years annually.

## ***Symptoms of Lead Poisoning***

- Stomach aches
- Irritability
- Sleeping problems
- Weight loss
- Vomiting
- Hyperactivity
- Excessive tiredness
- Constipation
- Poor appetite
- Dizziness

**Key Findings**  
**General Demographics**

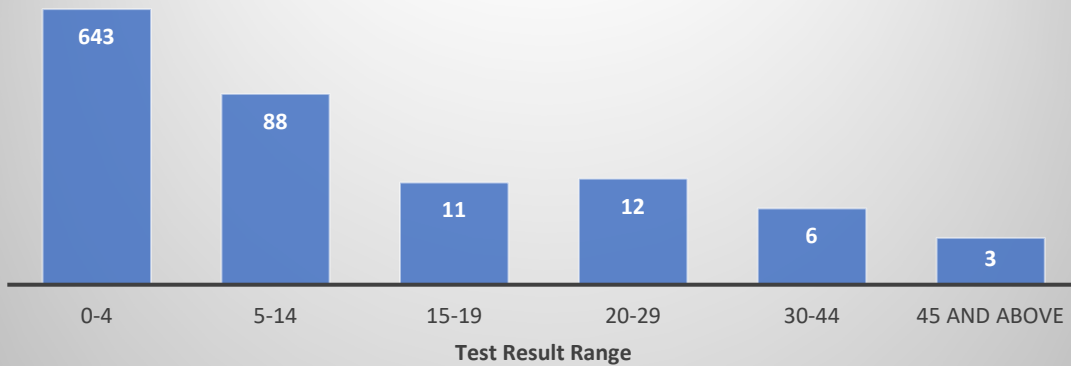


**Confirmed Elevated Blood Lead Level Rates per 100,000 Population by Race and Ethnicity 2022**

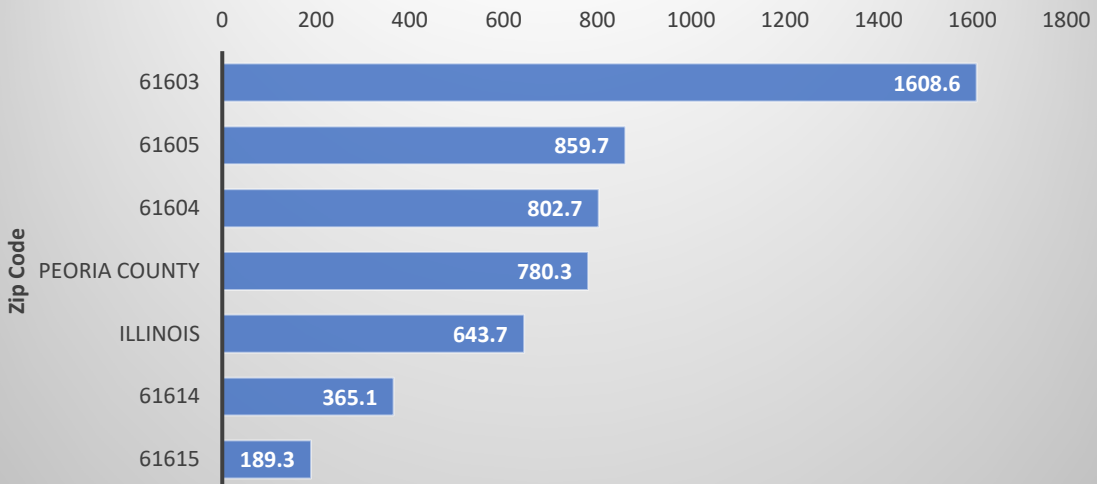
White	African American/Black	Non-Hispanic Other	Hispanic/Latino
223.3	1,403.0	243.1	387.6

Historical policies such as federal homeownership and redlining have resulted in communities of color and low-income households being disproportionately exposed to lead and other environmental health hazards. Redlining refers to policies limiting people of color and other minority groups to receive home loans and neighborhoods deemed unfit for investment. This policy also denied developers from building and investing in communities that were redlined. Over time, homes, businesses, and schools in these neighborhoods decreased in value due to lack of investment and segregation. This resulted in the large disparities that are seen today between African American/Black and White residents regarding health outcomes. Over 50% of African American/Blacks reside in homes today that were redlined before 1968 when the Fair Housing Act was signed. There have been lasting effects of redlining on children of color through generations. While Public Health is making efforts to continue to mitigate lead exposure and protect children of color in low-income communities, there is still much work to be done.

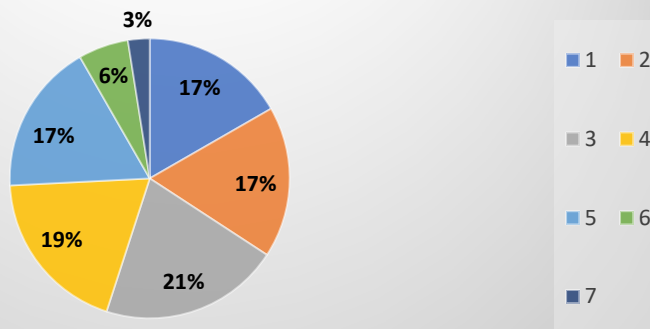
## Total Confirmed Tests, Peoria County, IL 2022



## Rate of EBLs per 100,000 Population by Zip Code



## Percent of Confirmed Elevated Blood Lead Levels by Age in Peoria County 2022



## ***Intervention***

### **Case Management**

When blood lead levels are  $\geq 5$  in children, case management services are initiated, and an environmental health specialist is notified. A home visit and inspection are conducted within the IDPH guidelines according to blood lead reference level. Education, counseling, and mitigation strategies are provided, and referrals for resources are made. Children with confirmed blood lead levels  $\geq 5$  will have case management initiated within one month and will have follow-up testing according to IDPH blood level reference guidelines. Children with blood lead levels  $\geq 20$  will have a home visit and inspection within 24-48 hours and will have follow-up testing ranging from weekly to monthly. Children with blood lead levels  $\geq 30$  will have abdominal X-rays if lead ingestion is suspected and hemoglobin lab work. Those who have blood lead levels  $\geq 45$  should be hospitalized for chelation therapy.

Peoria County is one of six environmental regional offices of IDPH that houses a lead risk assessor who conducts home inspections for children with a confirmed blood lead level of  $\geq 5\mu\text{g}/\text{dl}$ . The Environmental Health and Epidemiology and Clinical Services Departments provide environmental inspection services and case management.

The HUD (Housing and Urban Development) grant provides funding to mitigate homes with lead sources. The mission of HUD is to create strong, sustainable, inclusive communities and quality affordable homes for all. In Peoria County, on average, it costs \$17,500 to mitigate a home of lead depending on severity.

## Data Sources

HHLPSS: This is a centralized web-based system that provides more immediate access to test results and collaboration between IDPH and its delegate agencies. HHLPSS provides tools for Program and delegates agencies to track and manage blood lead surveillance; environmental investigations, abatement, or mitigation; and case management activities.

### *Population data:*

Rates were calculated using population estimates from U.S. Census Bureau's 2015-2020 American Community Survey 5-year Estimates. Information includes estimates on total population, gender, race, and age groups for Peoria County, Illinois, United States, and specific zip codes.

### *State and National Comparisons:*

Data provided for comparison to the State of Illinois was obtained from the Illinois Department of Public Health (IDPH) website. Data included for comparison to national values was obtained from the Centers for Disease Control (CDC) website.

### *Healthy People 2030 Targets:*

Lines provided in graphs referencing Healthy People 2030 (HP2030) Goals were obtained from the Office of Disease Prevention and Health Promotion's HealthyPeople.gov website, which can be found at <https://health.gov/healthypeople/objectives-and-data>

### *Data limitations:*

Testing for blood lead is required for children residing in targeted high-risk areas like Peoria, high-risk ZIP codes, and children between 12 and 24 months of age receiving Medicaid. Only venous blood lead  $\geq 5$   $\mu\text{g}/\text{dL}$  are counted as confirmed tests in Illinois. Illinois adopted the public health intervention level of  $\geq 5$   $\mu\text{g}/\text{dL}$  only in 2019 and the new blood lead reference value of  $\geq 3.5$   $\mu\text{g}/\text{dL}$  recommended by CDC in 2021 is not applicable to this report and is pending adoption by Illinois. Some providers use LeadCare to test children for lead exposure with no follow-up venous confirmatory test.

For additional information, please contact:

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