CHILDHOOD LEAD EXPOSURE IN NEW JERSEY

ANNUAL REPORT

STATE FISCAL YEAR 2024
(July 1, 2023 – June 30, 2024)

New Jersey Department of Health
Division of Local Public Health
Childhood Lead Program
P.O. Box 360
Trenton, NJ 08625-0360

(609) 633-2937

www.nj.gov/health/childhoodlead

TABLE OF CONTENTS

GLOSSARY OF TERMS AND ACRONYMS

Abatement: Refers to long-term removal of an environmental lead hazard by a certified lead abatement contractor, such as removing lead-based paint and repairing a cracked wall or surface. N.J.A.C. 8:51 requires lead hazards to be abated (i.e., not remediated) when identified in the home of a lead-burdened child.

BLL: Blood lead level.

Children: Refers to children who are younger than 17 years of age, unless otherwise specified.

Children six to 26 months of age: Includes children in the age range for universal blood lead testing required by N.J.A.C. 8:51A, where health care providers should test children at or around age one (within the age range six to 18 months) and again at or around age two (within the age range 18 to 26 months).

Children younger than 72 months of age: Refers to children who are younger than six years, which is the age by which N.J.A.C. 8:51A requires that all children should have received at least one blood lead test.

CLP: The Department's Childhood Lead Program.

Communicable Disease Reporting and Surveillance System (CDRSS): The Department's secure, online central database for reportable conditions including childhood lead test results. As of August 2021, CDRSS has been the repository for all nurse case management and environmental investigation data; prior to this, childhood lead data was managed in a Department database called Lead Trax.

Confirmed BLL: A blood lead level obtained from a venous blood sample (i.e., blood drawn from a vein).

Department: The New Jersey Department of Health.

EBLL: Refers to an elevated blood lead level test result above the minimum threshold, as established by New Jersey Administrative Code Title 8, Chapter 51 (N.J.A.C. 8:51). Since SFY 2018, N.J.A.C. 8:51 defines this threshold as any BLL greater than or equal to 5 µg/dL; prior to SFY 2018, the minimum threshold EBLL was 10 µg/dL. During SFY 2025, the Department lowered the minimum threshold EBLL from 5 µg/dL to 3.5 µg/dL to align with recommendations from the Centers for Disease Control and Prevention (CDC). This report encompasses data before this drop in threshold. All EBLLs require a public health response, such as nurse case management or environmental investigation.

Geocoding: Before SFY 2022, addresses were geocoded in ArcGIS Pro. Starting SFY 2022, addresses are geocoded within CDRSS. For more information on how cases are coded in CDRSS, please visit: https://cdrs.doh.state.nj.us/cdrss/common/geocodingNotes.

Large Municipality(ies): Municipality(ies) with a population greater than 35,000 residents.

Lead inspector/risk assessor: Someone who is certified to conduct an environmental inspection to identify lead hazards and order lead hazard removal.

LHD: Local health department.

Population Data: The CLP uses decennial population counts from the U.S. Census to calculate rates and other metrics. The U.S. Census 2020 was used for this report, unless otherwise specified, as this is the most recent decennial population count.

Unconfirmed BLL: A blood lead level obtained from a capillary (i.e., finger stick) blood sample. A venous sample is needed to confirm an unconfirmed BLL greater than or equal to 5 µg/dL according to N.J.A.C. 8:51.

Remediation: Refers to temporary measures to disrupt lead exposure, such as re-painting a cracked wall. Remediation may be used and/or required by other programs, but when a lead hazard is identified in a home with a lead-burdened child (i.e., a child with an elevated blood lead level), N.J.A.C. 8:51 requires the hazard must be abated, not remediated.

Screening/Testing Number Percent: Where each child is counted only once, regardless of the number of tests that the child has had during the reporting timeframe.

SFY: Refers to the State Fiscal Year in New Jersey, which for SFY 2024 includes the period of July 1, 2023, to June 30, 2024.

µg/dL: Micrograms of lead per deciliter of whole blood.

Universal screening: Requires health care providers and local health departments to test all children for lead, regardless of where they live, whether they have health insurance, or whether there is any risk factors present.

Unknown Address: An address that could not be geocoded in CDRSS or an address that was not reported to the Department.

LIST OF FIGURES AND TABLES

EXECUTIVE SUMMARY

N.J.A.C. 8:51 and N.J.A.C. 8:51A protect children from the toxic effects of lead exposure by requiring a universal lead screening program in New Jersey and, for children with elevated blood lead levels (EBLL), public health intervention, including nursing case management and environmental investigation. This Annual Report on Childhood Lead Exposure in New Jersey for State Fiscal Year (SFY) 2024 is submitted as required by N.J.S.A. 26:2-135, which tasks the Commissioner of Health with issuing an annual report to the Governor and the Legislature that includes a summary of blood lead testing and environmental investigation activities in the State during the preceding SFY. Highlights of the report include the following:

- Eighty percent (80%) of children born in New Jersey who turned three years of age during SFY 2024 received at least one blood lead test in their lifetime. This represents the same percentage of children tested as reported for SFY 2023 data. *From Chapter One, which describes blood lead screening of children younger than 17 years of age in New Jersey.*

- Twenty-five percent (25%) of children born in New Jersey who turned three years of age during SFY 2024 received at least one blood lead test at age one year and age two years. *From Chapter One, which describes blood lead screening of children younger than 17 years of age in New Jersey.*

- A total of 106,034 children between the ages of six months and 26 months were screened for lead in SFY 2024, an increase over the 93,879 children screened in SFY 2023. *From Chapter Two, which describes blood lead screening of children by age group, geographic location, gender, and month of test.*

- In the five years between SFY 2020 and SFY 2024, the percentage of children younger than six years of age with an EBLL dropped from 2.1% to 1.4%. Trend data for EBLLs cannot be generated using annual reports prior to SFY 2018, as the minimum threshold for an EBLL was higher before SFY 2018 (i.e., the actionable level was lowered from 10 µg/dL to 5 µg/dL in SFY 2018). During SFY 2025, the minimum threshold for an EBLL was lowered again, from 5 µg/dL to 3.5 µg/dL. These changes strengthen the standard for intervening in cases of child lead exposure, enabling public health officials and health care providers to intervene earlier with education, case management, and other steps at the earliest possible time. *From Chapter Two, which describes blood lead screening of children by age group, geographic location, gender, and month of test.*

- In SFY 2024, 56% of children younger than six years of age with an EBLL were male, and 44% were female. The peak months of screening for children younger than six years of age were July and August, and the months when the most EBLLs were detected were July through September. During warmer months exposure increases from lead dust produced from friction impact surfaces such as opening and closing windows. An uptick in testing occurs in the summer months due to an increase in testing during back-to-school medical visits. The increase in testing identifies more children with elevated blood lead

levels. *From Chapter Two, which describes blood lead screening of children by age group, geographic location, gender, and month of test.*

- The eight large municipalities with the highest percentage of children younger than six years of age with an EBLL in SFY 2024 are the following:

    - the City of Trenton in Mercer County (49.7% screened, 5.1% EBLL),
    - the Township of Irvington in Essex County (60.5% screened, 4.1% EBLL),
    - the City of East Orange in Essex County (46.1% screened, 3.1% EBLL),
    - the Township of South Brunswick in Middlesex County (25.0% screened, 2.9% EBLL),
    - Atlantic City in Atlantic County (35.6 % screened, 2.5% EBLL),
    - the City of Plainfield in Union County (64.9 % screened, 2.5% EBLL),
    - the City of Newark in Essex County (53.3% screened, 2.4% EBLL),
    - the Township of Edison in Middlesex County (28.2% screened, 2.4% EBLL).

    While the percentage of children with an EBLL is the most widely used metric to represent the burden of childhood lead in a specific geographic area, comparisons of this metric between municipalities are not appropriate as they may be misleading. The variability in population size and the percentage screened can have a significant impact on the percentage of EBLLs (e.g., the smaller the population, the more dramatic the change to the percentage). Additionally, the causes of EBLL can vary by municipality. Such causes may include community demographics [e.g., cultural practices (such as folk medicine, traditional remedies, herbal supplements, spices, candies with lead in the wrappers, cosmetics, jewelry, cooking items, etc.) and socioeconomics, etc.] and environmental sources of exposure (e.g., the age and/or condition of housing in a geographic area). *From Chapter Three, which compares blood lead screening and elevated blood lead levels in large municipalities.*

- In SFY 2024, local health departments (LHDs) required 894 environmental investigations (approximately 31% of EBLL cases); 362 (approximately 41%) of those that required environmental investigations resulted in the LHD issuing an order of abatement. Of these 362 new abatements ordered in SFY 2024, the LHDs with the largest number of orders of abatement were the City of Trenton, Trenton Department of Health and Human Services (n=42), and the City of Newark, Newark Department of Health & Community Wellness (n=30). *From Chapter Four, which describes the volume and completion of environmental investigations conducted by local health departments.*

Preventing childhood lead exposure remains a priority for the New Jersey Department of Health. In SFY 2024, the Department continued its prevention campaign with a new slogan, ***"Stay Lead Free, Test Twice Before Three,"*** to increase awareness of all lead hazards in homes, schools, and on the job, and to educate parents about what they can do to prevent exposure and have their children tested. Throughout SFY 2024, the Department provided funding, technical support, and subject matter expertise to a variety of grantees. These included local health departments to support screening, environmental investigations, and nursing case management; regional childhood lead coalitions to support primary prevention, outreach, and education initiatives; Isles

Inc, to support the New Jersey Healthy Homes Training Center; and Green and Healthy Homes Initiative (GHHI) to provide technical assistance to public health and community partners. Also, the Department implemented several Data Use Agreements (DUAs) with other governmental programs and agencies to allow for the exchange of data to ensure lead-burdened children receive timely medical care and early intervention services and to support regulatory programs in lead remediation, safe housing, and safe drinking water. Lastly, the Department participated in several interagency working groups to evaluate data sources and improve data transparency for all stakeholders addressing childhood lead exposure.

In addition, during SFY 2025, through the rulemaking process in New Jersey, the Department updated N.J.A.C. 8:51 to lower the minimum threshold for an EBLL from 5 to 3.5 µg/dL, as recommended by the Centers for Disease Control and Prevention (CDC). Please note that this change was not in effect during the data year of this SFY 2024 report.

Previous SFY annual reports can be found online at https://www.nj.gov/health/childhood-lead/reports-data/.

CHAPTER ONE

TESTING CHILDREN FOR ELEVATED BLOOD LEAD LEVELS

In New Jersey, N.J.A.C. 8:51A requires healthcare providers to screen all children for lead at or around 12 months and at or around 24 months of age. Children three years of age or older must be tested at least once before their sixth birthday if they had not already been screened at ages one year or two years. Laboratories are required to report all blood lead tests to the Department. This chapter describes statewide blood lead screening findings among children in New Jersey.

Figures 1a and 1b represent the percentage of children who were born in New Jersey and had at least one blood lead test performed by the year when they turned three or six years of age, respectively, during SFY 2024. To generate statistics for these figures, each child is counted only once, regardless of the number of tests the child has received. The number of tests in a specific age group is then compared to the number of children who were born in New Jersey and are turning three or six years of age during SFY 2024. Because this method uses birth records to calculate screening rates, these statistics closely reflect the population of children in New Jersey who were eligible for and received screening.

As depicted in Figure 1a, 80% of children who were born in New Jersey and turned three years of age during SFY 2024 had at least one blood lead test in their lifetime. This represents the same percentage seen in the SFY 2023 report. In Figure 1b, 95% of children who were born in New Jersey and turned six years old during SFY 2024 had at least one blood lead test in their lifetime. This number reflects an increase compared to the SFY 2023 report, where 93% of children who turned six years old during SFY 2023 had at least one blood lead test in their lifetime.

Figure 1c represents the percentage of children who were born in New Jersey and turned three years old during SFY 2024 and had at least two blood lead tests, including one blood lead test performed between the age of six months of age through younger than 24 months of age and at least one blood lead test performed between the ages of 24 months through younger than 36 months. To generate statistics for this figure, each child is counted only once in their age group, regardless of the number of tests the child has received.

Of the children who were born in New Jersey and turned three years old during SFY 2024, 25% had at least two blood lead tests.

Young children absorb more lead than adults when ingested. As children become more mobile, the exposure risk increases. Early identification of children with elevated blood lead levels allows for timely nurse case management and environmental investigation to identify the sources of exposure.

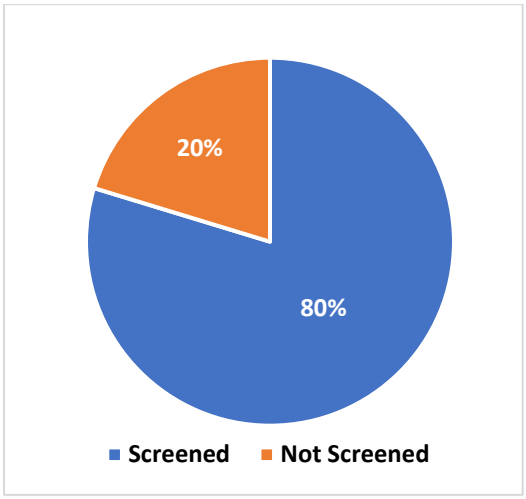
Figure 1d represents the number of children who were born in New Jersey and turned six years old during SFY 2024 and had at least two blood lead tests, including one blood lead test performed prior to age 48 months and at least one blood lead test performed between 48 months and younger than 72 months. To generate the statistics represented in this figure, each child is counted only once in their age group, regardless of the number of tests they received. Of the children who were

born in New Jersey and turned six years old during SFY 2024, 17% had at least two blood lead tests.

Figure 2 represents annual trends in children six months through 26 months. This age range is used throughout the annual report and was selected to match N.J.A.C. 8:51A, which states a child's first blood lead test should be when they turn one year or during the range of when they are six months to 18 months of age, and a child's second blood lead test should be when they turn two years, or during the range of when they are 18 through 26 months. Given the requirement that children be tested twice, data generated for Figure 2 includes children tested at ages six through 26 months. The number of tests is then divided by the total population of children one year and two years, as reported in the U.S. Census. This method generates screening rates that are less precise than using birth records, as 10-year census counts may not capture annual changes in the population. For example, a decrease in the annual percent screened may reflect factors other than screening practices, such as fewer children eligible for screening that year or screening saturation, where children were already tested in a previous year and do not require testing again.

Figure 1a

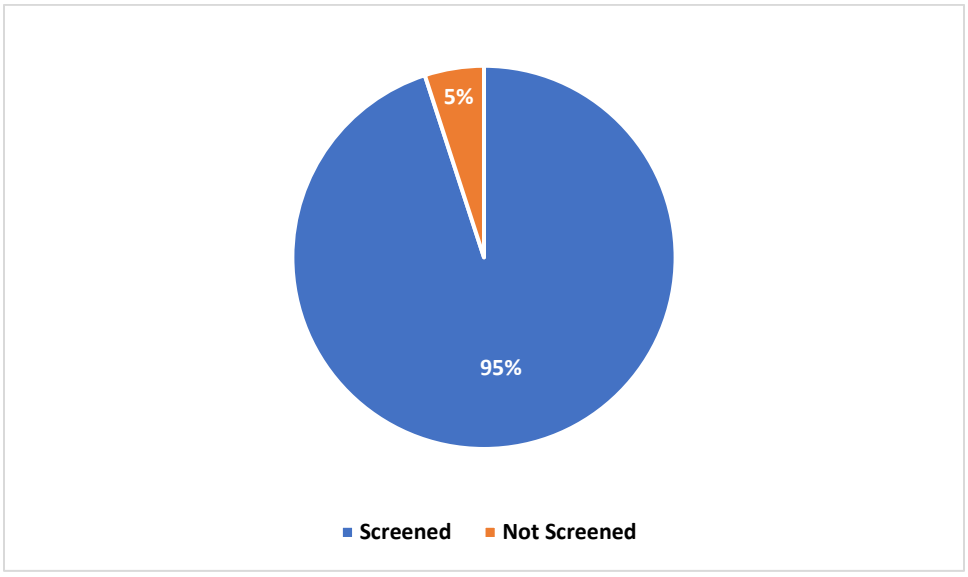
Percentage of Children* Who Turned Three Years of Age During SFY 2024 and Had At Least One Blood Lead Test in their Lifetime



*Number of children born in New Jersey between July 1, 2020, and June 30, 2021 (n =97,671)
Source: New Jersey Department of Health, Center for Health Statistics, New Jersey Birth Certificate Database

Figure 1b

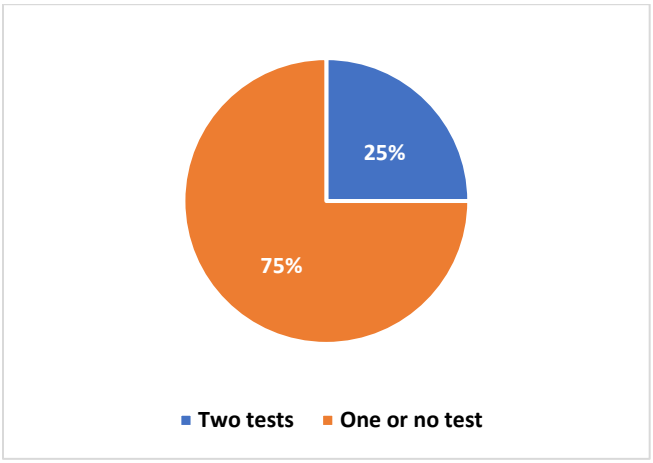
Percentage of Children* Who Turned Six Years of Age During SFY 2024 and Had At Least One Blood Lead Test in their Lifetime



*Number of children born in New Jersey between July 1, 2017, and June 30, 2018 (n =101,784)
Source: New Jersey Department of Health, Center for Health Statistics, New Jersey Birth Certificate Database

Figure 1c

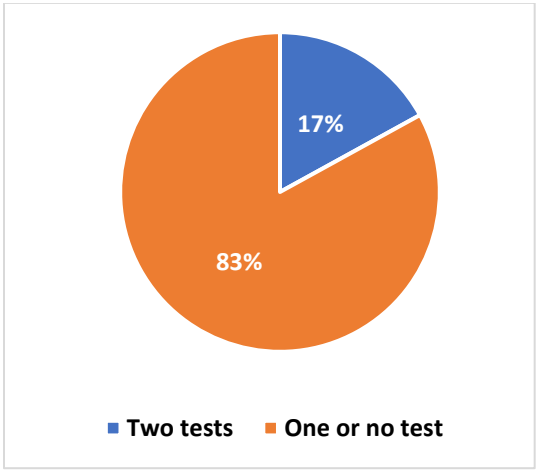
Percentage of Children* Who Turned Three Years of Age During SFY 2024 and Had Two Blood Lead Tests in their Lifetime



*Number of children born in New Jersey between July 1, 2020, and June 30, 2021 (n = 97,671)
Source: New Jersey Department of Health, Center for Health Statistics, New Jersey Birth Certificate Database

Figure 1d

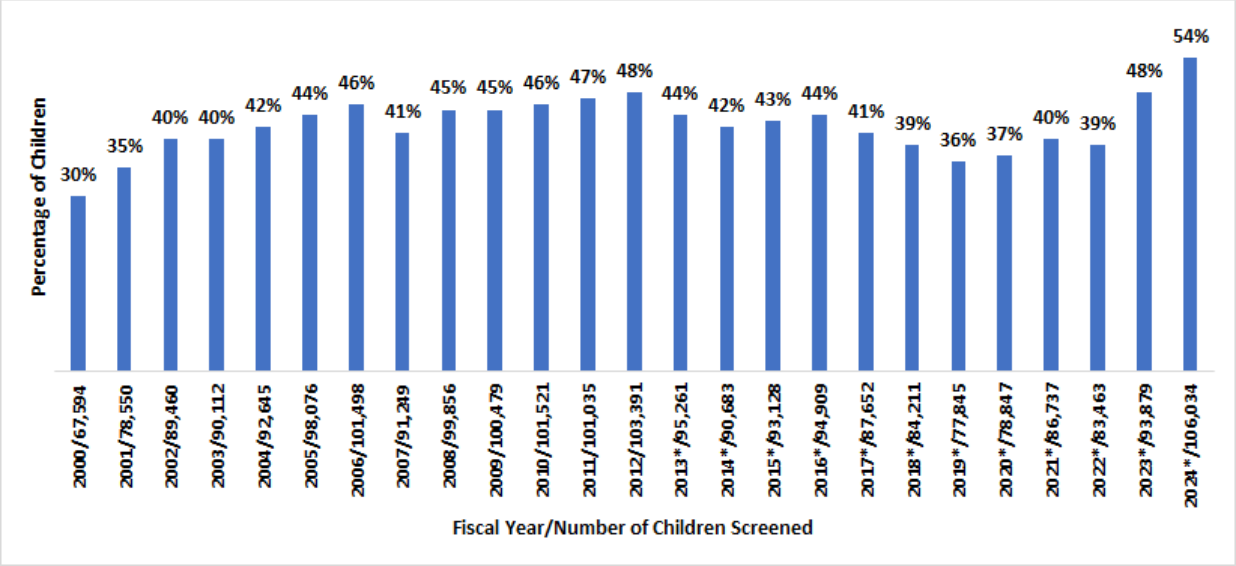
Percentage of Children* Who Turned Six Years of Age During SFY 2024 and Had Two Blood Lead Tests in their Lifetime



*Number of children born in New Jersey between July 1, 2017, and June 30, 2018 (n =101,784)
Source: New Jersey Department of Health, Center for Health Statistics, New Jersey Birth Certificate Database

Figure 2

Trend in Percentage* of Children Six Months Through 26/29*** Months of Age Screened by SFY**



*Caution is advised when interpreting these numbers, as percentages calculated using the 10-year census counts do not capture annual changes in the population.

**For SFY 2000 through SFY 2016, the number of blood lead tests used to calculate percentages may include duplicate records.

***For SFY 2000 through SFY 2010:

- Total Children = 2000 U.S. Census for Children 1 and 2 Years of Age
- Total Screened = Frequency of Children 6-29 Months of Age with a Blood Lead Test
- Percent Screened = (Total Screened / Total Children) * 100

For SFY 2011 through SFY 2022:

- Total Children = 2010 U.S. Census for Children 1 and 2 Years of Age
- Total Screened = Frequency of Children 6-26 Months of Age with a Blood Lead Test
- Percent Screened = (Total Screened / Total Children) * 100

For SFY 2023 through SFY 2024:

- Total Children = 2020 U.S. Census for Children 1 and 2 Years of Age
- Total Screened = Frequency of Children 6-26 Months of Age with a Blood Lead Test
- Percent Screened = (Total Screened / Total Children) * 100

CHAPTER TWO

PROFILE OF BLOOD LEAD TESTS PERFORMED AND PREVALENCE OF ELEVATED BLOOD LEAD LEVELS IN CHILDREN

In addition to universal blood lead testing required by N.J.A.C. 8:51A, New Jersey requires public health intervention for all children with an EBLL of 5 μg/dL, as defined in N.J.A.C. 8:51 (Note: This number was lowered to 3.5 μg/dL during SFY 2025 to align with the federal Centers for Disease Control and Prevention standard). This chapter provides a more in-depth look at blood lead screening data and EBLL prevalence by county and by municipality of residence (which may differ from the county/municipality of exposure), the gender of children screened, and the month the sample was taken.

To protect patient confidentiality, only municipalities with a population of 35,000 or more residents (i.e., large municipalities) are included in this report, as the proportion of children in the blood lead screening age range comprises an even smaller part of each municipal population. For each table in this chapter, a child with an EBLL is counted only once, using the highest EBLL. The number of children with an EBLL is then divided by the total population of children in each age group, as reported in the 2020 U.S. Census. This method generates screening and prevalence statistics that may not reflect the size of the current population, as 10-year census counts do not capture annual changes such as decreases in the population.

Tables 1 and 2 show screening numbers and results by county and large municipality, respectively, for children six through 26 months of age. As per N.J.A.C. 8:51A, children in this age group must be screened twice, at ages 12 and 24 months. Table 1 shows that in SFY 2024, the average percentage of children ages six through 26 months screened by county was 36.3%, with a range of 28.5% (Sussex County) to 46.1% (Mercer County). The average percentage of children ages six through 26 months with an EBLL by county was 1.1%, ranging from 0.2% (Ocean County) to 2.6% (Mercer County). Table 2 shows that in SFY 2024, the average percentage of children ages six through 26 months screened in large municipalities was 35.7%, with a range of 15.3% (City of Hoboken in Hudson County) to 58.0% (City of Plainfield in Union County). In large municipalities in New Jersey, the average percentage of children six to 26 months of age with an EBLL was 1.1%. The range includes zero cases reported in several municipalities— the Township of Berkeley (Ocean County), the Township of Howell (Monmouth County), the Township of Manalapan (Monmouth County), the Township of Marlboro (Monmouth County), the Township of Middleton (Monmouth County), and the Township of Washington (Gloucester County)— and up to 5.7% in the City of Trenton (Mercer County).

Tables 3 and 4 display screening numbers and results by county and by large municipality, respectively, for children younger than six years of age. As per N.J.A.C. 8:51A, children must be screened at least once by six years of age. Table 3 shows that in SFY 2024, the average percentage of children younger than six years of age screened by county was 27.9%, with a range of 17.6% (Cape May County) to 43.5% (Essex County). The average percentage of children younger than six years of age with an EBLL by county was 1.2%, with a range of 0.3%

(Ocean County) to 2.8% (Mercer County). Table 4 shows that in SFY 2024, the average percentage of children younger than six years of age screened in large municipalities was 30.7%, with a range of 11.6% (the City of Hoboken in Hudson County) to 64.9% (the City of Plainfield in Union County), and the average percentage of children younger than six years of age with an EBLL by large municipality was 1.2%, with a range of zero cases (Townships of Berkeley, Manalapan, and Middleton in Monmouth County and the Township of Washington in Gloucester County) to 5.1% (the City of Trenton in Mercer County).

Table 5 displays EBLLs by county for all children <17 years of age. A total of 210,957 children were screened for lead in SFY 2024 compared to the 194,133 children screened in SFY 2023.

Figures 3a and 3b compare the statewide BLL results among children by year of age. Figure 3a shows children with an EBLL and Figure 3b shows children without an EBLL (i.e., BLL is less than 5 μg/dL). As illustrated in Figure 3a, children between one year and three years of age comprise the largest category of EBLL.

Figure 4a displays the percentage of children statewide with an EBLL compared to children without an EBLL and shows that in SFY 2024, 98.6% of all children had a BLL less than 5 μg/dL. Figure 4b includes all children with an EBLL and compares categories of EBLL. In SFY 2024, 74.3% of children with an EBLL had a blood lead level in the lowest category of results (5-9 μg/dL), and 0.5% of children had a blood lead level in the highest category of results (at or above 45 μg/dL).

Figure 5 shows the statewide gender distribution of children younger than six years of age with an EBLL. In SFY 2024, 56% of children younger than six years of age with an EBLL were male, and 44% were female.

Figure 6 shows the seasonal distribution of screening and percent of EBLLs among children younger than six years of age. Here, the highest percentage of children younger than six years of age with an EBLL were detected between July and August, which may be due in part to increased exposure to lead dust in and/or around the home, such as frequent opening and closing of windows contaminated with lead-based paint, home renovations, and yard maintenance that occur during warmer months.

Table 1

SFY 2024: Number of Children Six Months Through 26 Months of Age by BLL and County of Residence

County	Total Children	% Screened*	BLL (µg/dL)	EBLL (µg/dL)							Total Screened
			<5	5-9	10-14	15-19	20-44	≥45	Total EBLL	% EBLL	
ATLANTIC	7,862	33.0	2,570	23	2	0	1	0	26	1.0	2,596
BERGEN	27,354	31.0	8,431	46	8	2	2	0	58	0.7	8,489
BURLINGTON	13,309	39.2	5,184	26	3	2	2	0	33	0.6	5,217
CAMDEN	17,334	34.3	5,912	31	3	2	1	1	38	0.6	5,950
CAPE MAY	2,198	28.6	622	4	2	0	1	0	7	1.1	629
CUMBERLAND	5,007	40.9	1,998	31	9	2	5	1	48	2.3	2,046
ESSEX	29,682	41.5	12,028	221	41	12	11	0	285	2.3	12,313
GLOUCESTER	8,894	33.6	2,969	15	4	0	0	0	19	0.6	2,988
HUDSON	27,477	29.5	7,986	98	12	4	4	0	118	1.5	8,104
HUNTERDON	3,167	45.1	1,420	4	2	0	1	0	7	0.5	1,427
MERCER	11,517	46.1	5,175	105	12	9	9	0	135	2.5	5,310
MIDDLESEX	25,615	35.1	8,873	88	16	10	4	0	118	1.3	8,991
MONMOUTH	16,899	32.3	5,423	18	8	1	3	1	31	0.6	5,454
MORRIS	14,044	40.6	5,668	27	5	2	1	0	35	0.6	5,703
OCEAN	26,823	32.6	8,728	9	5	1	1	0	16	0.2	8,744
PASSAIC	17,855	41.7	7,359	58	13	6	4	1	82	1.1	7,441
SALEM	2,032	34.5	689	8	3	0	1	0	12	1.7	701
SOMERSET	9,450	38.9	3,640	26	4	4	2	0	36	1.0	3,676
SUSSEX	3,699	28.5	1,051	3	0	0	0	0	3	0.3	1,054
UNION	19,596	41.5	8,032	75	22	5	4	0	106	1.3	8,138
WARREN	2,899	33.5	961	9	0	0	1	0	10	1.0	971
Unknown Address	NA	NA	92	0	0	0	0	0	0	0.0	92
Total	292,713	36.2	104,811	925	174	62	58	4	1,223	1.2	106,034

Total Children = 2020 U.S. Census for Children 0-2 Years of Age
Total Screened = Frequency of Children 6-26 Months of Age with a Blood Lead Test Reported in SFY 2024
Total EBLL= Frequency of Children 6-26 Months of Age with an EBLL ≥ 5 µg/dL Reported in SFY 2024
Percent Screened = (Total Screened / Total Children) * 100
Percent EBLL = (Total EBLL / Total Screened) * 100
*Caution is advised when interpreting these numbers, as percentages calculated using 10-year census counts do not capture annual changes in the population.

Table 2

SFY 2024: Number of Children Six Months Through 26 Months of Age by BLL and Large Municipality of Residence

Municipality	Total Children	% Screened*	BLL (µg/dL)	EBLL (µg/dL)							Total Screened
			<5	5-9	10-14	15-19	20-44	≥45	Total EBLL	% EBLL	
ATLANTIC CITY	1,455	35.7	505	14	1	0	0	0	15	2.9	520
BAYONNE	2,510	34.4	851	12	1	0	0	0	13	1.5	864
BELLEVILLE	1,155	43.2	496	2	1	0	0	0	3	0.6	499
BERKELEY	717	30.5	219	0	0	0	0	0	0	0.0	219
BLOOMFIELD	1,839	36.0	657	4	0	0	1	0	5	0.8	662
BRICK	1,866	30.3	563	0	2	0	0	0	2	0.4	565
BRIDGEWATER	1,213	35.4	426	2	0	1	0	0	3	0.7	429
CAMDEN	3,041	40.7	1,228	8	1	1	1	0	11	0.9	1,239
CHERRY HILL	2,254	31.0	696	2	0	0	0	0	2	0.3	698
CLIFTON	2,870	40.3	1,146	7	2	2	0	0	11	1.0	1,157
EAST BRUNSWICK	1,238	40.1	494	2	0	0	0	0	2	0.4	496
EAST ORANGE	2,503	37.9	919	26	3	0	1	0	30	3.2	949
EDISON	3,172	31.9	986	18	2	5	1	0	26	2.6	1,012
EGG HARBOR	1,314	30.2	396	1	0	0	0	0	1	0.3	397
ELIZABETH	5,357	39.9	2,103	24	6	1	1	0	32	1.5	2,135
EVESHAM	1,359	29.8	404	1	0	0	0	0	1	0.2	405
EWING	906	49.2	438	6	1	1	0	0	8	1.8	446
FORT LEE	1,102	20.8	228	1	0	0	0	0	1	0.4	229
FRANKLIN (Somerset County)	2,077	32.6	673	2	1	1	0	0	4	0.6	677
FREEHOLD	797	29.0	230	0	1	0	0	0	1	0.4	231
GALLOWAY	942	33.2	312	1	0	0	0	0	1	0.3	313
GLOUCESTER	2,036	33.0	668	2	1	0	0	0	3	0.4	671
HACKENSACK	1,383	38.7	531	3	1	0	0	0	4	0.7	535
HAMILTON (Mercer County)	2,665	45.1	1,189	11	0	1	0	0	12	1.0	1,201
HILLSBOROUGH	1,088	36.7	394	4	1	0	0	0	5	1.3	399
HOBOKEN	2,910	15.3	443	2	0	0	0	0	2	0.4	445
HOWELL	1,523	33.9	517	0	0	0	0	0	0	0.0	517
IRVINGTON	2,523	47.0	1,130	40	8	4	3	0	55	4.6	1,185
JACKSON	2,137	47.2	1,006	2	0	0	0	0	2	0.2	1,008
JERSEY CITY	11,822	28.8	3,345	46	7	3	2	0	58	1.7	3,403
KEARNY	1,284	33.3	427	0	1	0	0	0	1	0.2	428
LAKEWOOD	14,032	31.1	4,361	2	3	1	1	0	7	0.2	4,368

Municipality	Total Children	% Screened*	BLL (µg/dL)	EBLL (µg/dL)							Total Screened
			<5	5-9	10-14	15-19	20-44	≥45	Total EBLL	% EBLL	
LINDEN	1,438	31.8	454	2	1	0	0	0	3	0.7	457
MANALAPAN	898	29.4	264	0	0	0	0	0	0	0.0	264
MANCHESTER	565	42.7	241	1	0	0	0	0	0	0.0	242
MARLBORO	796	27.8	221	0	0	0	0	0	0	0.0	221
MIDDLETOWN	1,964	26.9	529	0	0	0	0	0	0	0.0	529
MONROE (Gloucester County)	1,088	30.0	325	1	0	0	0	0	1	0.3	326
MONROE (Middlesex County	721	42.6	303	4	0	0	0	0	4	1.3	307
MONTCLAIR	1,192	31.9	377	2	1	0	0	0	3	0.8	380
MOUNT LAUREL	1,160	43.3	500	1	1	0	0	0	2	0.4	502
NEW BRUNSWICK	1,909	35.1	660	8	3	0	0	0	11	1.6	671
NEWARK	11,685	42.3	4,809	103	22	6	5	0	136	2.8	4,945
NORTH BERGEN	1,978	34.6	675	9	0	0	1	0	10	1.5	685
NORTH BRUNSWICK	1,491	35.4	524	2	2	0	0	0	4	0.8	528
OLD BRIDGE	1,837	32.8	602	1	0	0	0	0	1	0.2	603
PARSIPPANY-TROY HILLS	1,610	32.6	514	5	4	1	1	0	11	2.1	525
PASSAIC	3,043	41.7	1,248	15	2	3	1	1	22	1.7	1,270
PATERSON	6,573	45.4	2,946	28	8	1	3	0	40	1.3	2,986
PENNSAUKEN	1,126	32.9	367	3	0	0	0	0	3	0.8	370
PERTH AMBOY	2,126	35.7	752	5	1	0	0	0	6	0.8	758
PISCATAWAY	1,610	35.7	569	5	0	0	0	0	5	0.9	574
PLAINFIELD	2,498	58.0	1,402	31	11	4	1	0	47	3.2	1,449
SAYREVILLE	1,475	29.9	432	8	0	0	1	0	9	2.0	441
SOUTH BRUNSWICK	997	34.7	338	7	1	0	0	0	8	2.3	346
TEANECK	1,217	33.3	402	2	1	0	0	0	3	0.7	405
TOMS RIVER	2,855	27.8	794	1	0	0	0	0	1	0.1	795
TRENTON	3,868	47.8	1,741	78	11	6	9	0	104	5.6	1,845
UNION CITY	2,317	36.8	839	11	1	1	0	0	13	1.5	852
UNION	1,574	42.7	668	3	0	0	1	0	4	0.6	672
VINELAND	1,930	38.1	728	5	1	0	1	0	7	1.0	735
WASHINGTON (Gloucester County)	1,411	27.3	385	0	0	0	0	0	0	0.0	385
WAYNE	1,315	40.2	526	2	1	0	0	0	3	0.6	529
WEST NEW YORK	1,832	35.5	644	4	1	0	1	0	6	0.9	650
WEST ORANGE	1,500	40.4	597	9	1	0	0	0	10	1.7	607
WINSLOW	1,257	28.6	358	2	0	0	0	0	2	0.6	360

Municipality	Total Children	% Screened*	BLL (µg/dL)	EBLL (µg/dL)							Total Screened
			<5	5-9	10-14	15-19	20-44	≥45	Total EBLL	% EBLL	
WOODBRIDGE	3,389	34.7	1,157	15	2	2	0	0	19	1.6	1,176

Total Children = 2020 U.S. Census for Children 0-2 Years of Age
Total Screened = Frequency of Children 6-26 Months of Age with a Blood Lead Test Reported in SFY 2024
Total EBLL = Frequency of Children 6-26 Months of Age with an EBLL ≥ 5 µg/dL Reported in SFY 2024
Percent Screened = (Total Screened / Total Children) * 100
Percent EBLL= (Total EBLL / Total Screened) * 100
*Caution is advised when interpreting these numbers, as percentages calculated using 10-year census counts do not capture annual changes in the population.

Table 3

SFY 2024: Number of Children Younger Than Six Years of Age by BLL and County of Residence

County	Total Children	% Screened*	BLL (µg/dL)	EBLL (µg/dL)							Total Screened
			<5	5-9	10-14	15-19	20-44	≥45	Total EBLL	% EBLL	
ATLANTIC	16,460	25.8	4,201	40	2	0	3	1	46	1.1	4,247
BERGEN	58,669	23.6	13,743	87	16	5	4	0	112	0.8	13,855
BURLINGTON	27,792	25.4	7,003	47	6	2	3	0	58	0.8	7,061
CAMDEN	35,735	22.9	8,112	65	7	2	4	1	79	1.0	8,191
CAPE MAY	4,796	17.6	839	4	2	0	1	0	7	0.8	846
CUMBERLAND	10,582	34.7	3,572	63	20	4	8	1	96	2.6	3,668
ESSEX	62,977	43.5	26,779	460	98	39	34	6	637	2.3	27,416
GLOUCESTER	18,721	22.3	4,147	28	6	0	0	0	34	0.8	4,181
HUDSON	52,967	30.1	15,702	181	33	12	13	2	241	1.5	15,943
HUNTERDON	6,624	25.2	1,656	7	2	0	1	0	10	0.6	1,666
MERCER	24,217	37.7	8,879	197	26	17	18	0	258	2.8	9,137
MIDDLESEX	54,448	30.8	16,507	191	35	17	8	0	251	1.5	16,758
MONMOUTH	36,120	24.7	8,859	44	9	3	3	1	60	0.7	8,919
MORRIS	29,610	27.2	8,005	47	9	4	2	0	62	0.8	8,067
OCEAN	54,003	25.9	13,951	28	9	2	1	0	39	0.3	13,991
PASSAIC	37,215	39.0	14,306	150	33	12	18	1	214	1.5	14,520
SALEM	4,242	24.6	1,016	21	5	0	3	0	29	2.8	1,045
SOMERSET	20,085	26.6	5,277	44	10	5	4	0	63	1.2	5,340
SUSSEX	7,866	18.7	1,463	5	0	0	0	0	5	0.4	1,468
UNION	40,772	37.4	15,041	150	35	9	10	2	206	1.4	15,247
WARREN	6,030	22.0	1,306	21	0	0	2	0	23	1.7	1,329
Unknown Address	NA	NA	167	0	0	0	0	0	0	0.0	167
Total	609,931	30.0	180,531	1,880	363	133	140	15	2,531	1.4	183,062

Total Children = 2020 U.S. Census for Children 0-6 Years of Age
Total Screened = Frequency of Children 0-72 Months of Age with a Blood Lead Test Reported in SFY 2024
Total EBLL = Frequency of Children 0-72 Months of Age with an EBLL ≥ 5 µg/dL Reported in SFY 2024
Percent Screened = (Total Screened / Total Children) * 100
Percent EBLL = (Total EBLL / Total Screened) * 100
*Caution is advised when interpreting these numbers, as percentages calculated using 10-year census counts do not capture annual changes in the population.

Table 4

SFY 2024: Number of Children Younger Than Six Years of Age by BLL and Large Municipality of Residence

Municipality	Total Children	% Screened*	BLL (µg/dL)	EBLL (µg/dL)							Total Screened
			<5	5-9	10-14	15-19	20-44	≥45	Total EBLL	% EBLL	
ATLANTIC CITY	2,979	35.6	1,033	26	1	0	0	0	27	2.5	1,060
BAYONNE	5,150	35.2	1,787	19	5	1	0	0	25	1.4	1,812
BELLEVILLE	2,384	41.7	986	5	1	0	0	1	7	0.7	993
BERKELEY	1,592	22.0	350	0	0	0	0	0	0	0.0	350
BLOOMFIELD	3,590	34.3	1,218	10	1	1	3	0	15	1.2	1,233
BRICK	3,812	22.9	868	2	3	0	0	0	5	0.6	873
BRIDGEWATER	2,653	21.0	554	3	0	1	0	0	4	0.7	558
CAMDEN	6,406	30.3	1,903	31	3	1	3	0	38	2.0	1,941
CHERRY HILL	4,697	19.0	890	3	0	0	0	0	3	0.3	893
CLIFTON	5,873	37.0	2,149	13	5	2	2	0	22	1.0	2,171
EAST BRUNSWICK	2,770	29.2	801	5	1	1	1	0	8	1.0	809
EAST ORANGE	5,217	46.1	2,331	58	7	7	3	0	75	3.1	2,406
EDISON	7,160	28.2	1,969	40	2	6	1	0	49	2.4	2,018
EGG HARBOR	2,804	21.3	594	2	0	0	1	0	3	0.5	597
ELIZABETH	11,055	43.5	4,745	52	9	1	2	1	65	1.4	4,810
EVESHAM	2,801	18.7	522	1	0	0	0	0	1	0.2	523
EWING	1,783	38.9	682	10	1	1	0	0	12	1.7	694
FORT LEE	2,301	17.4	399	1	0	0	0	0	1	0.3	400
FRANKLIN (Somerset County)	4,238	25.6	1,074	5	4	2	0	0	11	1.0	1,085
FREEHOLD	1,777	23.5	417	0	1	0	0	0	1	0.2	418
GALLOWAY	1,979	21.3	419	2	0	0	0	0	2	0.5	421
GLOUCESTER	4,123	21.3	875	2	1	0	1	0	4	0.5	879
HACKENSACK	2,701	40.1	1,065	16	1	1	0	0	18	1.7	1,083
HAMILTON (Mercer County)	5,499	36.0	1,955	16	2	2	2	0	22	1.1	1,977
HILLSBOROUGH	2,428	22.7	543	5	1	0	1	0	7	1.3	550
HOBOKEN	5,112	11.6	591	2	0	0	0	0	2	0.3	593
HOWELL	3,240	26.7	865	1	0	0	0	0	1	0.1	866
IRVINGTON	5,184	60.5	3,008	88	20	8	8	3	127	4.1	3,135
JACKSON	4,594	37.5	1,716	6	1	0	0	0	7	0.4	1,723
JERSEY CITY	22,701	28.9	6,408	104	22	9	8	1	144	2.2	6,552
KEARNY	2,523	36.3	908	5	1	0	0	1	7	0.8	915
LAKEWOOD	26,780	25.3	6,747	11	5	2	1	0	19	0.3	6,766
LINDEN	2,838	31.3	881	5	2	0	0	0	7	0.8	888
MANALAPAN	2,087	22.5	470	0	0	0	0	0	0	0.0	470

Municipality	Total Children	% Screened*	BLL (µg/dL)	EBLL (µg/dL)							Total Screened
			<5	5-9	10-14	15-19	20-44	≥45	Total EBLL	% EBLL	
MANCHESTER	1,198	34.5	411	3	0	0	0	0	3	0.5	414
MARLBORO	1,945	20.6	399	0	0	1	0	0	1	0.3	400
MIDDLETOWN	4,102	17.8	731	0	0	0	0	0	0	0.0	731
MONROE (Gloucester County)	2,276	20.3	460	2	0	0	0	0	2	0.4	462
MONROE (Middlesex County	1,762	26.7	462	9	0	0	0	0	9	1.9	471
MONTCLAIR	2,613	22.5	579	6	1	0	1	0	8	1.4	587
MOUNT LAUREL	2,485	25.2	622	3	1	0	0	0	4	0.6	626
NEW BRUNSWICK	3,919	32.5	1,249	18	3	2	1	0	24	1.9	1,273
NEWARK	24,625	53.3	12,801	228	54	18	16	2	318	2.4	13,119
NORTH BERGEN	3,984	35.6	1,405	12	1	0	1	0	14	1.0	1,419
NORTH BRUNSWICK	2,961	31.2	915	4	4	0	0	0	8	0.9	923
OLD BRIDGE	3,839	27.3	1,045	3	0	0	0	0	3	0.3	1,048
PARSIPPANY-TROY HILLS	3,389	22.5	744	8	7	1	1	0	17	2.2	761
PASSAIC	6,427	45.2	2,854	34	7	4	3	1	49	1.7	2,903
PATERSON	13,711	46.4	6,236	90	18	6	13	0	127	2.0	6,363
PENNSAUKEN	2,398	23.0	547	4	0	0	0	0	4	0.7	551
PERTH AMBOY	4,563	43.9	1,986	12	3	0	1	0	16	0.8	2,002
PISCATAWAY	3,394	30.5	1,024	10	1	0	0	0	11	1.1	1,035
PLAINFIELD	5,132	64.9	3,245	56	17	5	4	1	83	2.5	3,328
SAYREVILLE	3,047	27.3	817	11	1	1	1	0	14	1.7	831
SOUTH BRUNSWICK	2,378	25.0	578	14	2	1	0	0	17	2.9	595
TEANECK	2,653	23.9	628	4	2	0	1	0	7	1.1	635
TOMS RIVER	6,062	22.0	1,332	2	0	0	0	0	2	0.1	1,334
TRENTON	8,022	49.7	3,781	153	21	13	16	0	203	5.1	3,984
UNION	3,182	38.0	1,764	13	1	1	1	0	16	1.0	1,780
UNION CITY	4,691	35.8	1,125	9	2	0	2	0	13	1.1	1,138
VINELAND	4,151	30.6	1,256	10	2	0	2	0	14	1.1	1,270
WASHINGTON (Gloucester County)	2,886	17.2	495	0	0	0	0	0	0	0.0	495
WAYNE	2,926	26.0	758	2	1	0	0	0	3	0.4	761
WEST NEW YORK	3,598	40.2	1,433	9	1	1	3	0	14	1.0	1,447
WEST ORANGE	3,086	34.0	1,033	14	1	1	1	0	17	1.6	1,050
WINSLOW	2,575	19.7	503	4	0	0	0	0	4	0.8	507
WOODBRIDGE	7,005	31.0	2,133	28	11	2	0	0	41	1.9	2,174

Total Screened = Frequency of Children < 17 Years of Age with a Blood Lead Test Reported in SFY 2024
Total EBLL = Frequency of Children < 17 Years of Age with an EBLL ≥ 5 µg/dL Reported in SFY 2024
Percent EBLL = (Total EBLL / Total Screened) * 100

Table 5

SFY 2024: Number of Children by BLL and County of Residence

County	BLL (µg/dL)	EBLL (µg/dL)							Total Screened
	<5	5-9	10-14	15-19	20-44	≥45	Total EBLL	% EBLL	
ATLANTIC	4,559	47	2	0	4	1	54	1.2	4,613
BERGEN	15,280	94	17	5	5	0	121	0.8	15,401
BURLINGTON	7,339	52	7	2	3	0	64	0.9	7,403
CAMDEN	8,506	73	9	3	6	1	92	1.1	8,598
CAPE MAY	960	5	2	0	1	0	8	0.8	968
CUMBERLAND	4,090	75	20	4	8	1	108	2.6	4,198
ESSEX	33,286	527	114	45	39	6	731	2.1	34,017
GLOUCESTER	4,322	29	7	0	0	0	36	0.8	4,358
HUDSON	18,618	213	38	14	15	2	282	1.5	18,900
HUNTERDON	1,735	8	2	1	1	0	12	0.7	1,747
MERCER	10,706	221	29	18	20	0	288	2.6	10,994
MIDDLESEX	19,815	228	47	18	9	0	302	1.5	20,117
MONMOUTH	10,492	55	9	4	3	1	72	0.7	10,564
MORRIS	8,852	53	10	6	2	0	71	0.8	8,923
OCEAN	15,202	39	12	2	1	0	54	0.4	15,256
PASSAIC	16,331	163	38	12	20	1	234	1.4	16,565
SALEM	1,062	22	5	1	3	0	31	2.8	1,093
SOMERSET	6,059	52	10	6	4	0	72	1.2	6,131
SUSSEX	1,647	6	1	0	0	0	7	0.5	1,654
UNION	17,533	177	39	10	11	2	239	1.4	17,772
WARREN	1,460	22	0	0	2	0	24	1.6	1,484
Unknown address	192	0	0	0	0	0	0	0.0	192
Total	208,046	2,161	418	151	157	15	2,902	1.4	210,948

Total Screened = Frequency of Children < 17 Years of Age with a Blood Lead Test Reported in SFY 2024
Total EBLL = Frequency of Children < 17 Years of Age with an EBLL ≥ 5 µg/dL Reported in SFY 2024
Percent EBLL = (Total EBLL/ Total Screened) * 100

Figure 3a

SFY 2024: Statewide Frequency of Children with an EBLL by Age (n=2,902)

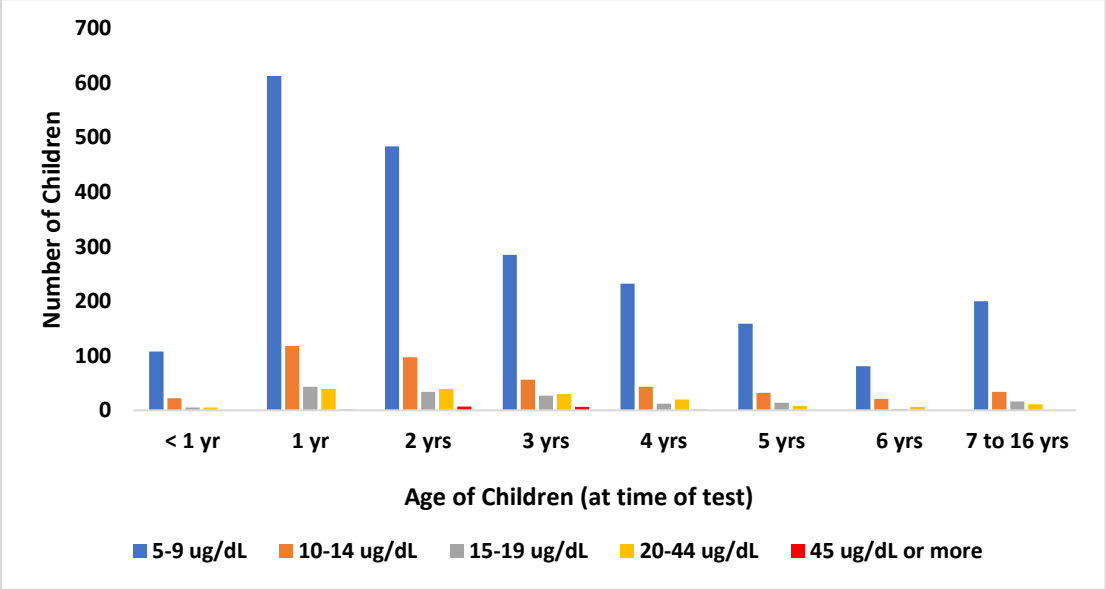


Figure 3b

SFY 2024: Statewide Frequency of Children Without an EBLL Age (n= 208,046)

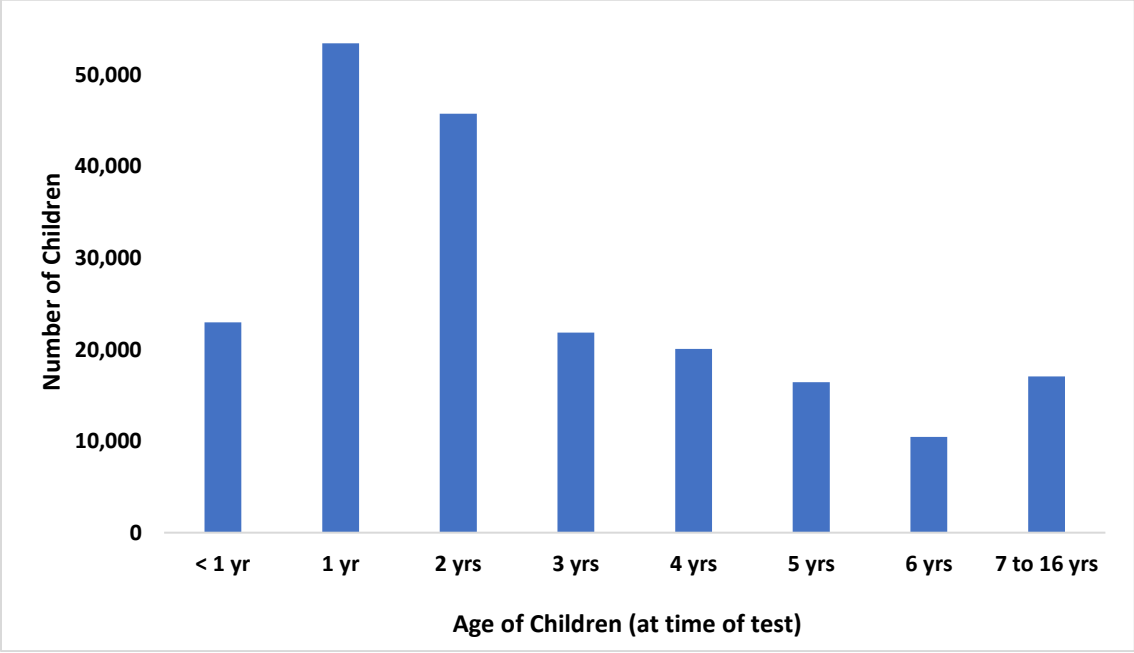


Figure 4a

SFY 2024: Statewide Percentage of Children with an EBLL (n=2,902)

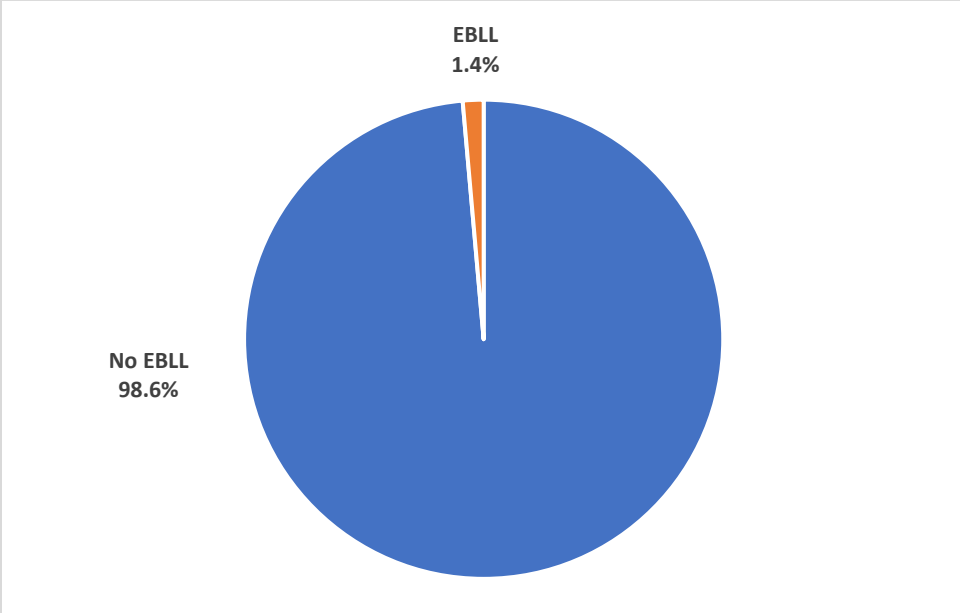


Figure 4b

SFY 2024: Statewide Percentage of Children by Category of EBLL (n=2,902)

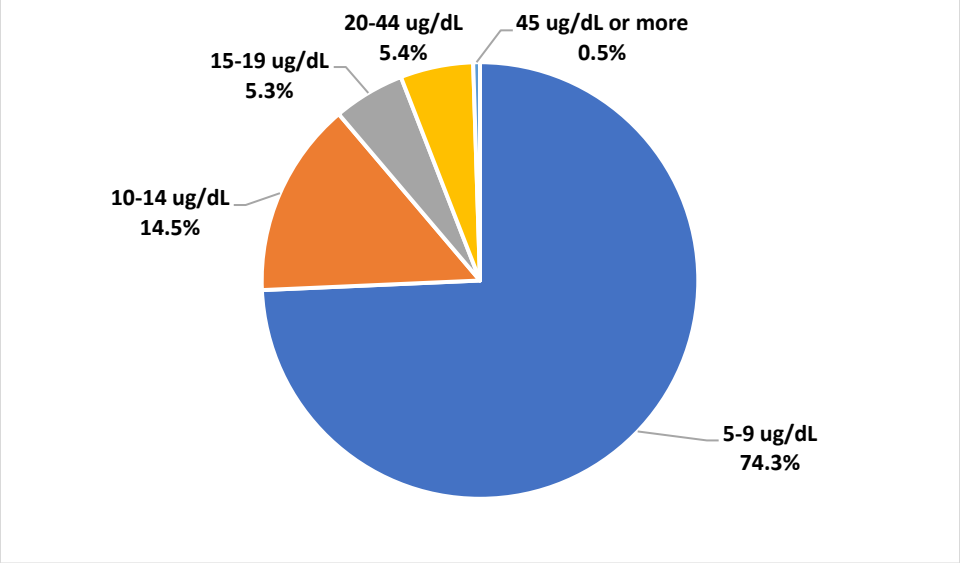
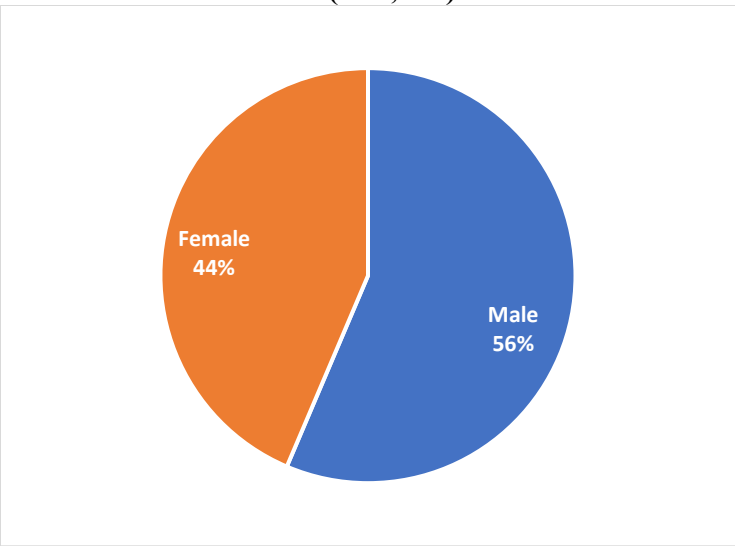


Figure 5

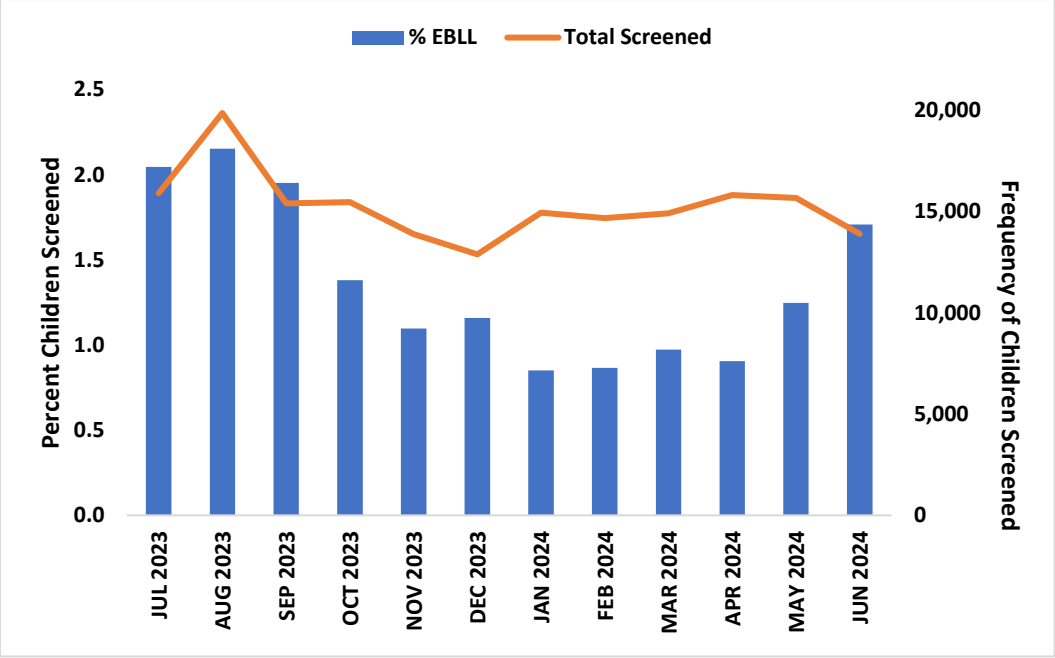
SFY 2024: Statewide Percentage of Children Younger Than Six Years of Age with an EBLL by Gender*
(n=2,531)



*Gender is self-reported and provided through lab data.

Figure 6

SFY 2024: Statewide Total Children Screened and Percentage of EBLL for Children Younger Than Six Years of Age by Month of Test
(n=2,531)



CHAPTER THREE

SPOTLIGHT ON LARGE MUNICIPALITIES IN NEW JERSEY

Childhood lead exposure is an issue that affects all municipalities in New Jersey. This chapter provides a closer look at some large municipalities and how they rank according to attributes such as the population of children younger than six years of age, percentage of children screened in SFY 2024, and percent EBLL.

Many of New Jersey's large municipalities also have the highest number of children younger than six years of age. Table 6 ranks the top 10 large municipalities by the largest population of children younger than six years of age (based on data from the 2020 U.S. Census). The Township of Lakewood has the largest population of children younger than six years of age (26,780), followed by the City of Newark (24,625) and then by Jersey City (22,701).

Because N.J.A.C. 8:51A requires that children are screened for lead at least once before they turn six years of age, Table 7 ranks the top 10 large municipalities by the highest percentage of children younger than six years of age who were screened in SFY 2024. The City of Plainfield in Union County (64.9%) had the highest percentage of children younger than six years of age screened in SFY 2024, followed by the Township of Irvington in Essex County (60.5%), the City of Newark in Essex County (53.3%), and the City of Trenton in Mercer County (49.7%). It is important to note that despite the Township of Lakewood in Ocean County having the largest number of children younger than six years of age, only 25.3% of this population were screened for lead exposure in SFY 2024.

Table 8 ranks the top 10 large municipalities by the lowest percentage of children younger than six years of age who were screened in SFY 2024. The City of Hoboken in Hudson County (11.6%) had the lowest percentage of children younger than six years of age screened in SFY 2024, followed by the Township of Washington in Gloucester County (17.2%), the Borough of Fort Lee in Bergen County (17.4%), the Township of Middletown in Monmouth County (17.8%), and the Township of Evesham in Burlington County (18.7%).

Table 9 ranks the top large municipalities by the highest percentage of children younger than six years of age with an EBLL at or above 5 μg/dL. The six large municipalities with the highest percentage of children with an EBLL at or above 5 μg/dL in SFY 2024 were the City of Trenton in Mercer County (5.1%), the Township of Irvington in Essex County (4.1%), the City of East Orange in Essex County (3.1%), the Township of South Brunswick in Middlesex County (2.9%), and Atlantic City in Atlantic County and the City of Plainfield in Union County (both at 2.5%). While the percentage of children with an EBLL is one metric that examines the burden of childhood lead in a geographic area, it does not account for factors that may vary from place to place such as population size, screening rates, and sources of exposure (e.g., age of housing).

Table 6

Top 10 Large Municipalities Ranked by Largest Population of Children Younger Than Six Years of Age

Municipality (County)	Population <6 Years
Lakewood Township (Ocean)	26,780
Newark City (Essex)	24,625
Jersey City (Hudson)	22,701
Paterson City (Passaic)	13,711
Elizabeth City (Union)	11,055
Trenton City (Mercer)	8,022
Edison Township (Middlesex)	7,160
Woodbridge Township (Middlesex)	7,005
Passaic City (Passaic)	6,427
Camden City (Camden)	6,406

Total Children = 2020 U.S. Census for Children 0-6 Years of Age

Table 7

Top 10 Large Municipalities Ranked by Highest Percentage of Children Younger Than Six Years of Age Screened in SFY 2024

Municipality (County)	% Children <6 Years Screened for Lead
Plainfield City (Union)	64.9%
Irvington Township (Essex)	60.5%
Newark City (Essex)	53.3%
Trenton City (Mercer)	49.7%
Paterson City (Passaic)	46.4%
East Orange City (Essex)	46.1%
Passaic City (Passaic)	45.2%
Perth Amboy City (Middlesex)	43.9%
Elizabeth City (Union)	43.5%
Belleville Township (Essex)	41.7%

Total Children = 2020 U.S. Census for Children 0-6 Years of Age
Total Screened = Frequency of Children 0-72 Months of Age with a Blood Lead Test Reported in SFY 2024

Table 8

Top 10 Large Municipalities Ranked by Lowest Percentage of Children Younger Than Six Years of Age Screened in SFY 2024

Municipality (County)	% Children <6 Years Screened for Lead
Hoboken City (Hudson)	11.60%
Washington Township (Gloucester)	17.20%
Fort Lee Borough (Bergen)	17.40%
Middletown Township (Monmouth)	17.80%
Evesham Township (Burlington)	18.70%
Cherry Hill Township (Camden)	19.00%
Winslow Township (Camden)	19.70%
Monroe Township (Gloucester)	20.30%
Marlboro Township (Monmouth)	20.60%
Bridgewater Township (Somerset)	21.00%

Total Children = 2020 U.S. Census for Children 0-6 Years of Age
Total Screened = Frequency of Children 0-72 Months of Age with a Blood Lead Test Reported in SFY 2024

Table 9

Top 10 Large Municipalities Ranked by Highest Percentage of Children Younger Than Six Years of Age with an EBLL in SFY 2024

Municipality (County)	% Children < 6 Years with an EBLL
Trenton City (Mercer)	5.1%
Irvington Township (Essex)	4.1%
East Orange City (Essex)	3.1%
South Brunswick Township (Middlesex)	2.9%
Atlantic City (Atlantic)	2.5% (tie with Plainfield City)
Plainfield City (Union)	2.5% (tie with Atlantic City)
Newark City (Essex)	2.4% (tie with Edison Township)
Edison Township (Middlesex)	2.4% (tie with Newark City)
Parsippany-Troy Hills Township (Morris)	2.2% (tie with Jersey City)
Jersey City (Hudson)	2.2% (tie with Parsippany-Troy Hills Township)

Total Children = 2020 U.S. Census for Children 0-6 Years of Age
Percent EBLL = (Total EBLL / Total Screened) * 100

CHAPTER FOUR

ENVIRONMENTAL INVESTIGATIONS BY LOCAL HEALTH DEPARTMENTS

N.J.A.C. 8:51 requires LHDs to investigate reported cases of EBLL that meet or exceed the threshold for public health intervention within their jurisdiction and to order the abatement of lead hazards identified during an investigation. The procedures for conducting environmental investigations are specified in N.J.A.C. 8:51 and include an inspection of the child's primary residence and any secondary addresses, such as a childcare center, the home of a relative or caregiver, or wherever the child spends at least 10 hours per week. If the child has recently moved, the property where the child resided when the blood lead test was performed must be inspected. The environmental inspection includes a determination of the presence of lead-based paint and leaded dust; the identification of locations where that paint is in a hazardous condition, such as peeling, chipping, or flaking; and, as appropriate, the presence of lead on the dwelling's exterior or soil. The licensed lead inspector/risk assessor, with a public health nurse case manager, speaks to the child's parent/legal guardian and completes a questionnaire to help determine any other potential sources of exposure to lead such as water and/or consumer products.

The data in this chapter reflects the frequency and results of environmental investigations conducted by LHDs. The data are accurate to the extent that LHDs enter complete and timely information in the New Jersey Communicable Disease Reporting and Surveillance System (CDRSS) before August 15 of each SFY (i.e., the date when data for the annual report is captured). Open investigations/abatements may reflect the fact that it can take several years to complete the abatement process for a property where lead hazards are identified due to factors such as difficulty in identifying and communicating with property owners, lengthy enforcement actions and court proceedings against recalcitrant property owners, delays in contracting with and/or scheduling work by certified lead abatement contractors, and the inability of property owners to obtain financial assistance to pay for the cost of the required abatement. The New Jersey Department of Community Affairs provides lead abatement assistance funding throughout the State to low-to-moderate income landlords and tenants to offset abatement costs; more information is available online at https://www.nj.gov/dca/dhcr/offices/leadsafe.shtml.

Note: Starting in SFY 2022, the data source for *Abatement Completed* changed from *Date Referred* to *Abatement Completed Date*. This change has resulted in the removal of *Percentage Abatement Completed* from Tables 10 and 11 as abatements completed during the current fiscal year may have been initiated in previous fiscal years and therefore cannot be linked to the number of ordered abatements.

Table 10 shows environmental case activity by county. In SFY 2024, Essex County had the highest number of environmental cases requiring investigation (210), followed by Hudson County (95), Passaic County (94), and Mercer County (85), whereas Sussex County (2) and Cape May County (4) had the fewest number of environmental cases requiring investigation, followed by Hunterdon County (5), Warren County (6), and Gloucester County (7). Environmental case activity is based on crude data and is not adjusted for factors such as

population size, population density, or differences in blood lead screening rates. As shown in Table 10, of the 894 cases requiring an environmental investigation in SFY 2024, over one-third (41%) resulted in an LHD issuing an order of abatement.

Table 11 and Figures 7 and 8 display environmental case activity by LHD. As shown in Table 11 and Figure 8, the Newark Department of Community Health & Wellness had the highest number of cases requiring environmental investigation (107) in SFY 2024, followed by Trenton City, Department of Health & Human Services (69), and Jersey City, Department of Health and Human Services (63).

In addition to environmental investigations, for all reported cases of EBLL that meet or exceed the threshold for public health intervention, the LHD arranges for a home visit by a public health nurse case manager to educate the child's parent/legal guardian about how to reduce their child's EBLL and the steps that he/she/they can take to protect the child from further exposure. The public health nurse case manager also provides ongoing assistance and the coordination of interventions including but not limited to follow-up testing, medical treatment, and social services to the family that may be necessary to address the effects of the child's exposure to lead. Nurse case management for children with EBLLs requires individualized care plans and services for each child and are not part of the annual report.

Table 10

SFY 2024: Environmental Case Activity Status by County

County	Cases Referred *	Investigation Required**	% Investigation Required	Investigation Completed***	% Investigation Completed	Abatement Required	Abatement Completed ****
ATLANTIC	15	15	100.0	8	53.3	3	3
BERGEN	50	48	96.0	48	100.0	25	30
BURLINGTON	14	13	92.9	11	84.6	4	2
CAMDEN	25	21	84.0	15	71.4	11	16
CAPE MAY	4	4	100.0	4	100.0	2	0
CUMBERLAND	43	43	100.0	42	97.7	27	25
ESSEX	235	210	89.4	174	82.9	90	68
GLOUCESTER	8	7	87.5	7	100.0	3	1
HUDSON	96	95	99.0	87	91.6	27	25
HUNTERDON	5	5	100.0	3	60.0	1	1
MERCER	86	85	98.8	70	82.4	52	53
MIDDLESEX	90	71	78.9	55	77.5	6	2
MONMOUTH	29	28	96.6	28	100.0	15	11
MORRIS	25	25	100.0	24	96.0	8	8
OCEAN	11	10	90.9	8	80.0	2	5
PASSAIC	97	94	96.9	87	92.6	33	62
SALEM	10	9	90.0	8	88.9	1	3
SOMERSET	26	24	92.3	23	95.8	6	4
SUSSEX	2	2	100.0	2	100.0	1	0
UNION	80	79	98.8	69	87.3	45	43
WARREN	6	6	100.0	6	100.0	0	8
Total	957	894	93.4	779	87.1	362	370

*An environmental case is referred to a local health department when a child with an EBLL, who resides at an address that does not have an existing environmental case open, is reported.

**An environmental investigation is required for all environmental cases referred unless the property was built after 1978, or the property has a lead-free certificate. Click here for N.J.A.C. 8:51-4.1.

***An environmental investigation is completed when abatement is completed, and a child's blood lead level is below 5 µg/dL.

****Abatement Completed is cumulative to include abatements from previous years.

Data for this table are based on case updates entered in CDRSS as of August 15, 2024. If a local health department completed an investigation or abatement but did not update data in CDRSS, it will not be counted as completed in this report.

Table 11

SFY 2024: Environmental Case Activity by Local Health Department

Local Health Department	Cases Referred*	Investigation Required**	Investigation Completed***	% Investigation Completed	Abatement Required	Abatement Completed ****
Atlantic City Department of Health & Human Services	7	7	0	0.0	0	0
Atlantic County Division of Public Health	8	8	8	100.0	3	3
Bayonne Health Department	6	6	6	100.0	1	2
Bergen County Department of Health Services	18	17	17	100.0	7	9
Bernards Township Health Department	2	2	2	100.0	1	1
Bloomfield Department of Health & Human Services	5	5	5	100.0	5	2
Burlington County Health Department	14	13	11	84.6	4	2
Camden County Department of Health & Human Services	25	21	15	71.4	11	16
Cape May County Health Department	4	4	4	100.0	2	0
City of Elizabeth, Department of Health & Human Services	18	17	16	94.1	15	15
City of Orange Township	21	20	20	100.0	7	8
City of Passaic Division of Health	27	27	22	81.5	11	19
City of Paterson, Division of Health	51	49	48	98.0	13	31
City of Plainfield Health Department	35	35	33	94.3	17	15
City of Trenton, Department of Health & Human Services	69	69	56	81.2	42	45
City of Vineland	11	11	11	100.0	4	4
Clifton Health Department	11	11	11	100.0	7	7
Cumberland County Department of Health	32	32	31	96.9	23	21
East Hanover Health Department	10	10	10	100.0	2	2
East Orange Department of Health	25	25	25	100.0	15	15
Edison Department of Health & Human Services	17	11	4	36.4	0	0
Englewood Health Department	3	3	3	100.0	1	1
Ewing Health Department	1	1	1	100.0	0	2
Fair Lawn Health Department	2	2	2	100.0	2	1
Freehold Health Department	4	4	4	100.0	2	1
Gloucester County Department of Health & Senior Services	8	7	7	100.0	3	1
Guttenberg Health Department	2	2	2	100.0	1	0
Hackensack Department of Health	5	5	5	100.0	4	3
Hamilton Township Division of Health	13	12	12	100.0	9	6
Harrison Health Department	1	1	1	100.0	0	1
Hillsborough Township Health Department	5	5	5	100.0	2	1
Hillside Health Department	5	5	5	100.0	2	4
Hunterdon County Department of Health	5	5	3	60.0	1	1
Irvington Health Department	49	43	34	79.1	29	5
Jersey City Department of Health & Human Services	63	63	55	87.3	17	16

Local Health Department	Cases Referred*	Investigation Required**	Investigation Completed***	% Investigation Completed	Abatement Required	Abatement Completed ****
Jersey Shore Regional Health Commission	2	1	1	100.0	1	1
Kearny Department of Health	4	4	4	100.0	2	2
Lawrence Township Health Department	1	1	0	0.0	0	0
Linden Board of Health	4	4	2	50.0	2	1
Livingston Health Department / Millburn Health Department	1	1	1	100.0	0	0
Long Branch Department of Health	6	6	6	100.0	2	3
Maplewood Health Department	2	2	2	100.0	1	2
Mid-Bergen Regional Health Commission	9	8	8	100.0	6	10
Middle-Brook Regional Health Commission	1	1	1	100.0	0	0
Middlesex County Office of Health Services	54	41	32	78.0	5	1
Monmouth County Board of Health	17	17	17	100.0	10	6
Montclair Health Department	1	0	0	NA	0	5
Montgomery Township Health Department	1	1	1	100.0	0	0
Montville Township Health Department	2	2	2	100.0	1	1
Morris County Division of Public Health	1	1	1	100.0	1	0
Morristown Division of Health	7	7	7	100.0	2	1
Mount Olive Township Health Department	0	0	0	NA	0	1
N.W. Bergen Regional Health Commission	5	5	5	100.0	2	1
Newark Department of Health & Community Wellness	124	107	80	74.8	30	27
Nutley Health Department	2	2	2	100.0	1	1
Ocean County Health Department	11	10	8	80.0	2	5
Palisades Park Health Department	3	3	3	100.0	0	0
Paramus Health Department	0	0	0	NA	0	1
Pequannock Township Health Department	1	1	0	0.0	0	0
Passaic County Department of Health	4	4	3	75.0	2	5
Princeton Health Department	1	1	0	0.0	0	0
Rahway Health Department	2	2	2	100.0	1	1
Salem County Department of Health	10	9	8	88.9	1	3

Local Health Department	Cases Referred*	Investigation Required**	Investigation Completed***	% Investigation Completed	Abatement Required	Abatement Completed ****
Somerset County Department of Health	17	15	14	93.3	3	2
South Brunswick Health Department	3	3	3	100.0	0	0
Sussex County Department of Health and Human Services, Division of Health	2	2	2	100.0	1	0
Teaneck Department of Health & Human Services	4	4	4	100.0	2	2
Town of Dover Health Department	1	1	1	100.0	1	2
Township of Morris Health Department	2	2	2	100.0	1	1
Township of North Bergen Health Department	3	3	3	100.0	1	1
Union City Health Department	6	5	5	100.0	3	1
Union County Office of Health Management	8	8	8	100.0	6	5
Union Township Health Department	5	5	0	0.0	0	0
Village of Ridgewood Health Department	1	1	1	100.0	1	2
Warren County Health Department	6	6	6	100.0	0	8
Washington Township Health Department	1	1	1	100.0	0	0
Wayne Health Department	4	3	3	100.0	0	0
Weehawken Health Department	3	3	3	100.0	0	0
West New York Health Department	8	8	8	100.0	2	2
West Orange Health Department	5	5	5	100.0	2	3
Westfield Regional Health Department	3	3	3	100.0	2	2
Woodbridge Township Health & Human Services	16	16	16	100.0	1	1

*An environmental case is referred to a local health department when a child with an EBLL, who resides at an address that does not have an existing environmental case open, is reported.

**An environmental investigation is required for all environmental cases referred unless the property was built after 1978, or the property has a lead-free certificate. Click here for N.J.A.C. 8:51-4.1.

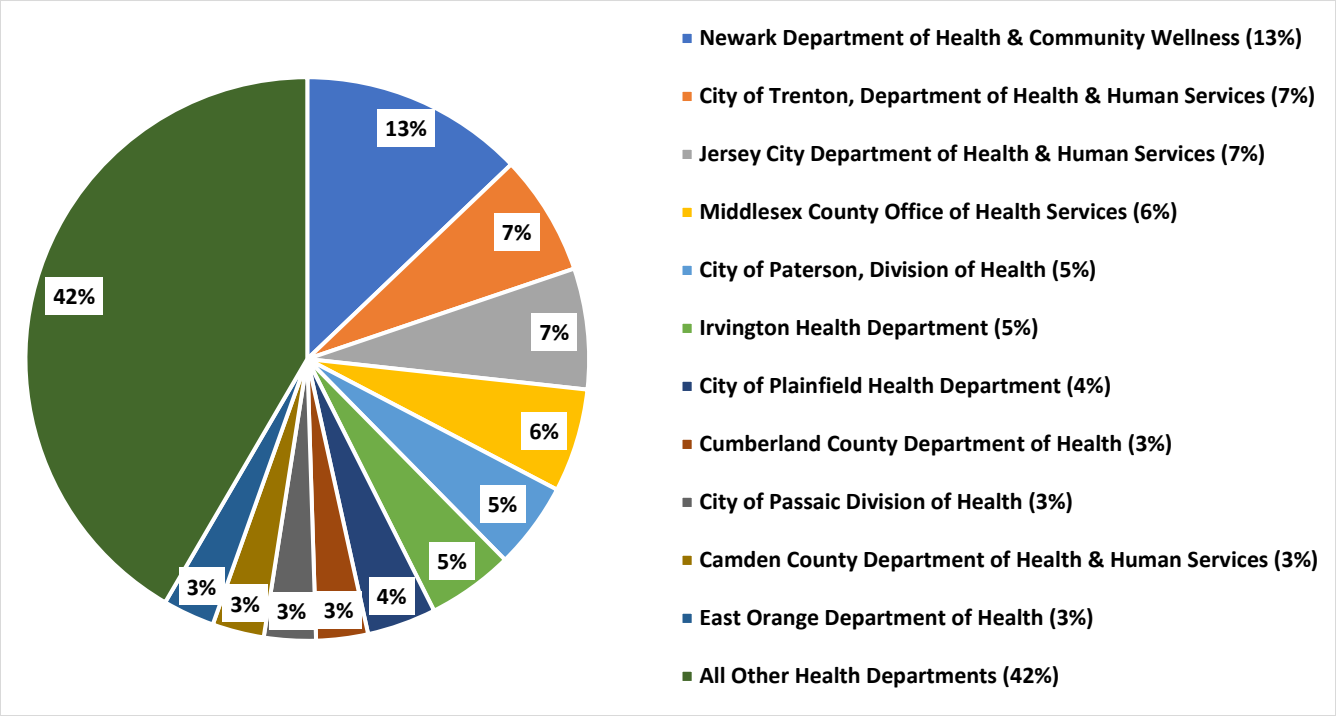
***An environmental investigation is completed when abatement is completed.

****Abatement Completed is cumulative to include abatements from previous years.

Data for this table are based on case updates entered in CDRSS as of August 15, 2024. If a local health department completed an investigation or abatement but did not update data in CDRSS, it will not be counted as completed in this report.

Figure 7

SFY 2024: Top 11 Local Health Departments with the Highest Percentage of New Environmental Case Referrals* Compared to All Other Local Health Departments

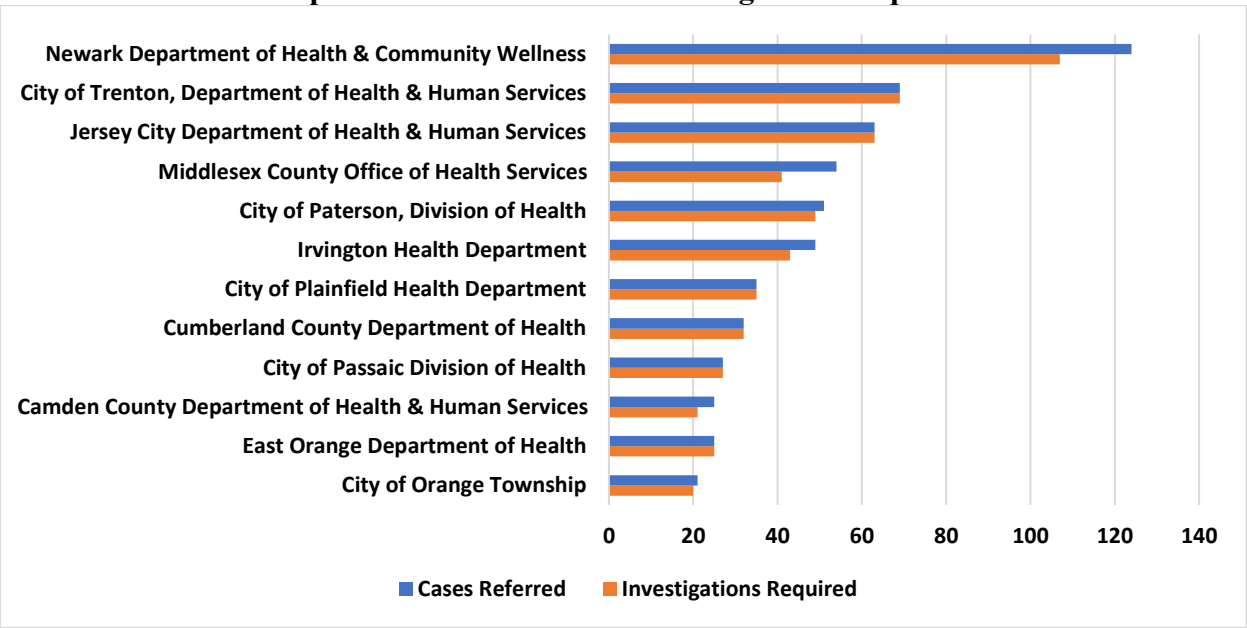


*An environmental case is referred to a local health department when a child with an EBLL, who resides at an address that does not have an existing environmental case open, is reported.

Data for this table is based on case updates entered in CDRSS as of August 15, 2024. If a local health department completed an investigation or abatement but did not update data in CDRSS, it will not be counted as completed in this report.

Figure 8

Local Health Departments with ≥ 20 New Environmental Case Referrals* in SFY 2024 Compared to Environmental Investigations Required**



*An environmental case is referred to a local health department when a child with an EBLL, who resides at an address that does not have an existing environmental case open, is reported.

**An environmental investigation is required for all environmental cases referred unless the property was built after 1978, or the property has a lead-free certificate. Click here for N.J.A.C. 8:51-4.1.

Data for this table is based on case updates entered in CDRSS as of August 15, 2024. If a local health department completed an investigation or abatement but did not update data in CDRSS, it will not be counted as completed in this report.