

CHILDHOOD LEAD EXPOSURE IN NEW JERSEY

ANNUAL REPORT

STATE FISCAL YEAR 2021
(July 1, 2020– June 30, 2021)

New Jersey Department of Health
Office 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.....	3
LIST OF FIGURES AND TABLES.....	5
EXECUTIVE SUMMARY.....	7
CHAPTER ONE: TESTING CHILDREN FOR ELEVATED BLOOD LEAD LEVELS.....	9
CHAPTER TWO: PROFILE OF BLOOD LEAD TESTS PERFORMED AND PREVALENCE OF ELEVATED BLOOD LEAD LEVELS IN CHILDREN.....	12
CHAPTER THREE: SPOTLIGHT ON LARGE MUNICIPALITIES IN NEW JERSEY.....	24
CHAPTER FOUR: ENVIRONMENTAL INVESTIGATIONS BY LOCAL HEALTH DEPARTMENT...27	
NEW FIGURES 10 AND 11: COMPARASING OF BLOOD LEAD SCREENING 2017-2021.....	34

GLOSSARY OF TERMS AND ACRONYMS

Abatement: Refers to long-term removal of an environmental lead hazard by a certified lead abatement contractor.

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 healthcare providers should test children at age one (within the age range six to 16 months) and again at age two (within the age range 18 to 26 months).

Children less 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.

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: Elevated blood lead level is defined as the threshold for public health intervention in New Jersey Administrative Code Title 8, Chapter 51 (N.J.A.C. 8:51). EBLL in this surveillance report is defined as BLL greater than or equal to 5 µg/dL. Beginning in SFY 2018, the threshold for public health intervention was lowered from any blood lead level greater than or equal to 10 µg/dL to 5 µg/dL. In October 2021, the CDC lowered the blood lead reference value from 5 µg/dL to 3.5 µg/dL.

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.

LeadTrax: The Department's secure, online central database used for childhood lead test results.

LHD: Local health department.

Population Data: Refers to 2010 data from the U.S. Census, unless otherwise specified. Census 2020 population data for single age at municipality and county level have not been published at the time of this analysis.

Presumptive BLL: A blood lead level obtained from a capillary (i.e., finger stick) blood sample. A venous sample is needed to confirm a presumptive BLL greater than or equal to 5 µg/dL.

Screening 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 2021 includes the period of July 1, 2020, to June 30, 2021.

Testing Number/Percent: Where each test is counted during a reporting timeframe, even if there are multiple tests for the same child.

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

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

Unknown Address: An address that could not be geocoded for the annual report.

Geocoding: NJ Office of GIS (NJOGIS) updated address locator in 2021. Addresses from LeadTrax were geocoded using ESRI and NJOGIS address locators in ArcGIS Pro allowing for a substantial decrease in unknown addresses.

LIST OF FIGURES AND TABLES

Figure 1a	10
Percentage of Children Who Turned Three (3) Years of Age During SFY 2021 and Had At least One Blood Lead Test in their Lifetime	
Figure 1b	10
Percentage of Children Who Turned Six (6) Years of Age During SFY 2021 and Had At least One Blood Lead Test in their Lifetime	
Figure 2	11
Trend in Percentage of Children Six to 26/29 Months of Age Screened by SFY	
Table 1	14
SFY 2021: Number of Children (six (6) to 26 months of age) by BLL and County of Residence	
Table 2	15
SFY 2021: Number of Children (six (6) to 26 months of age) by BLL and Municipality of Residence	
Table 3	17
SFY 2021: Number of Children (<6 years of age) by BLL and County of Residence	
Table 4	18
SFY 2021: Number of Children (<6 years of age) by BLL and Municipality of Residence	
Table 5	20
SFY 2021: Number of Children by BLL and County of Residence	
Figure 3a	21
SFY 2021: Frequency of Children with an EBLL ≥ 5 $\mu\text{g/dL}$ by Age	
Figure 3b	21
SFY 2021: Frequency of Children without an EBLL by Age	
Figure 4a	22
SFY 2021: Percentage of Children with an EBLL	
Figure 4b	22
SFY 2021: Percentage of Children by Category of EBLL	
Figure 5	23
SFY 2021: Percentage of Children Less Than Six Years of Age with an EBLL by Gender	
Figure 6a	23
SFY 2021: Percentage of Children Less Than Six Years of Age with an EBLL by Month of Test	
Figure 6b	24

Number of children aged <6 years who received blood lead test, by month, 2019–2021

Table 626
Top Ten Large Municipalities Ranked by Largest Population of Children Less than Six (6) Years of Age

Table 726
Top Ten Large Municipalities Ranked by Highest Percentage of Children Less than Six (6) Years of Age Screened in SFY 2021

Table 827
Top Ten Large Municipalities Ranked by Highest Percentage of Children Less than Six (6) Years of Age with an EBLL in SFY 2021

Figure 7.....27
Top Five Large Municipalities Ranked by Highest Percentage of Children Less than Six (6) Years of Age with an EBLL in SFY 2021

Table 9.....29
SFY 2021: Environmental Case Activity by County

Table 10.....30
SFY 2021: Environmental Case Activity by Local Health Department

Figure 8.....33
SFY 2021: Top Ten Local Health Departments with the Highest Percentage of New Environmental Case Referrals Compared to All Other Local Health Departments

Figure 9.....34
Local Health Departments with ≥ 20 New Environmental Case Referrals in SFY 2021 Compared To Environmental Investigations Required

New Figure 10.....35
Number of Blood Lead Screenings in NJ for Children <6 years of age, 2017-2021

New Figure 11.....35
Number of EBLL Screenings in NJ for Children <6 years of age, 2017-2021

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 (EBLLs), 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) 2021 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 from the report include the following:

- Seventy-two percent of children born in New Jersey who turned three during SFY 2021 received at least one blood lead test in their lifetime. This represents a lower percentage compared to the same analysis included in the SFY 2020 report (78%). *From Chapter One, which describes blood lead screening of children less than 17 years of age in New Jersey.*
- A total of 86,737 children between the ages of six and 26 months were screened for lead in SFY 2021. This number is higher than the 78,847 children aged six to 26 months who were tested in SFY 2020. *From Chapter Two, which describes blood lead screening of children by age group, geographic location, gender, and month of test.*
- Between SFY 2018 and SFY 2021, the percentage of children less than six years of age with an EBLL dropped from 2.5 to 1.9%. 5 ug/dL. EBLL comparisons cannot be made with annual reports prior to SFY 2018, as the percent EBLL was lowered from 10 ug/dL to 5 ug/dL in SFY 2018. This change strengthened the standard for intervening in cases of child lead exposure, enabling public health officials and medical providers to intervene earlier with education, case management, home visits, 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 2021, 57% of children less than six years of age with an EBLL were male, and 43% were female. The peak month of screening for children less than six years of age was September and March, and the highest month when EBLLs are detected was June. *From Chapter Two, which describes blood lead screening of children by age group, geographic location, gender, and month of test.*
- A review of blood lead screening data from SFY 2017 to SFY 2021 indicates that the lowest screening is seen in 2020 due to the COVID-19 pandemic. Number of screenings increased in 2021 compared to screenings in 2020 (Figure 10). There is also an increase in number of EBLLs reported as a result of increased screening in 2021 (Figure 11). This demonstrates how COVID-19 pandemic restrictions disrupted lead testing in 2020 and highlight the importance of continued lead screening in 2021. The Department continues to strengthen blood lead screening and surveillance by raising awareness of New Jersey's universal blood lead screening law and supporting public health partners.
- The five large municipalities with the highest percent of children less than six years of age with an EBLL at or above 5 ug/dL in SFY 2021 include two urban centers in Essex County and are as follows: Trenton (6.4%), East Orange (5.3%), Irvington (5.2%), Plainfield (4.0%) and Paterson (3.6%). While the percent 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). *From Chapter Three, which compares blood lead screening and elevated blood lead levels in large municipalities.*

- In SFY 2021, 791 environmental investigations were required by local health departments in response to new EBLL cases. Less than half (46%) of those environmental investigations resulted in the local health department issuing an order of abatement. Of the 360 new abatements ordered in SFY 2021, the highest volume were in Newark City (59) and Jersey City Department of Health & Human Services (37), and a total of 89% were completed statewide. *From Chapter Four, which describes volume and completion of environmental investigations conducted by local health departments.*

Preventing childhood lead exposure remains a priority for the Department. In SFY 2021, the Department continued its #kNOwLEAD prevention campaign to increase awareness of all lead hazards in homes, schools, and on the job; to educate parents about what they can do to prevent exposure, and to encourage parents to have their children tested. In addition, the Department mailed letters to pediatricians to raise awareness of New Jersey's universal blood lead screening law, and throughout the SFY, the Department provided grant support to local health departments to support screening, environmental investigations and nursing case management, and childhood lead partners including regional coalitions, to support primary prevention, outreach and education initiatives; Isles, to support the New Jersey Health Homes Training Center; and Green and Healthy Homes Initiative (GHHI) to provide technical assistance to public health and community partners.

In the upcoming SFY 2022, the Department of Health will continue with its public health mission to prevent, screen, and intervene to ensure the health and safety of New Jersey children.

Previous SFY annual reports can be found online at www.nj.gov/health/childhoodlead.

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 both 12 and 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 age one and two years. Laboratories are required to report all blood lead tests to the Department. This chapter describes statewide blood lead screening among children in New Jersey.

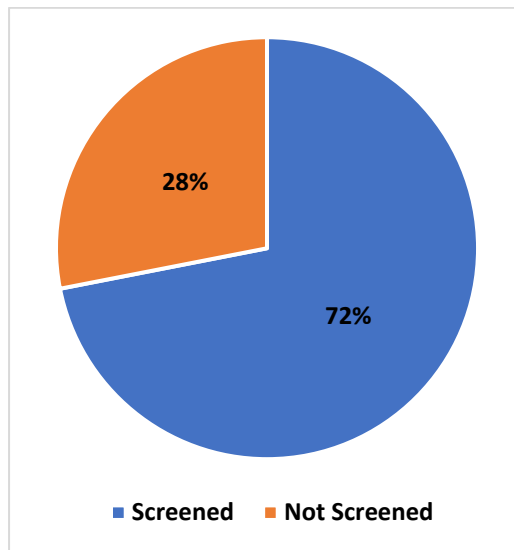
Figures 1a and 1b represent the percentage of children who were born in New Jersey and had at least one blood lead test performed by the year when they turned three or six, respectively, during SFY 2021. To generate statistics for these figures, each child is counted only once, regardless of the number 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 during SFY 2021. 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, 72% of children who were born in New Jersey and turned three during SFY 2021 had at least one blood lead test in their lifetime. This represents a lower percentage compared to the same analysis included in the SFY 2020 report. Residual effects of the Covid-19 pandemic and a nationwide recall of the point-of-care blood lead analyzer LeadCare was experienced during SFY 2021. Such factors may have contributed to the reduction in blood lead screening throughout the State. In Figure 1b, 92% of children who were born in New Jersey and turned six during SFY 2021 had at least one blood lead test in their lifetime. This number reflects an increase compared to the SFY 2020 report, where 88% of children who turned six during SFY 2020 had at least one blood lead test in their lifetime.

Figure 2 represents annual trends in children six to 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, or during the range of six to 17 months of age, and a child's second blood lead test should be when they turn two, or during the range of 18 to 26 months. Given the requirement that children be tested twice, data generated for Figure 2 includes children who were tested more than once. The number of tests is then divided by the total population of children six to 26 months, as reported in the 2000 or 2010 U.S. Census. This method generates screening rates that are less precise than using birth records, as ten-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 in the population or screening saturation, where children were already tested in the previous year.

Figure 1a

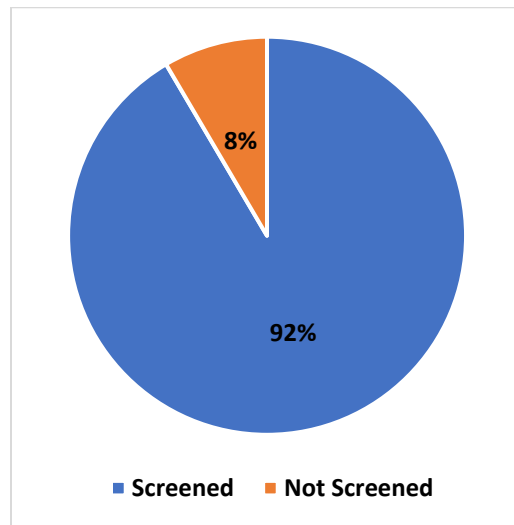
Percentage of Children* Who Turned Three (3) Years of Age During SFY 2021 and Had at Least One Blood Lead Test in their Lifetime



*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 1b

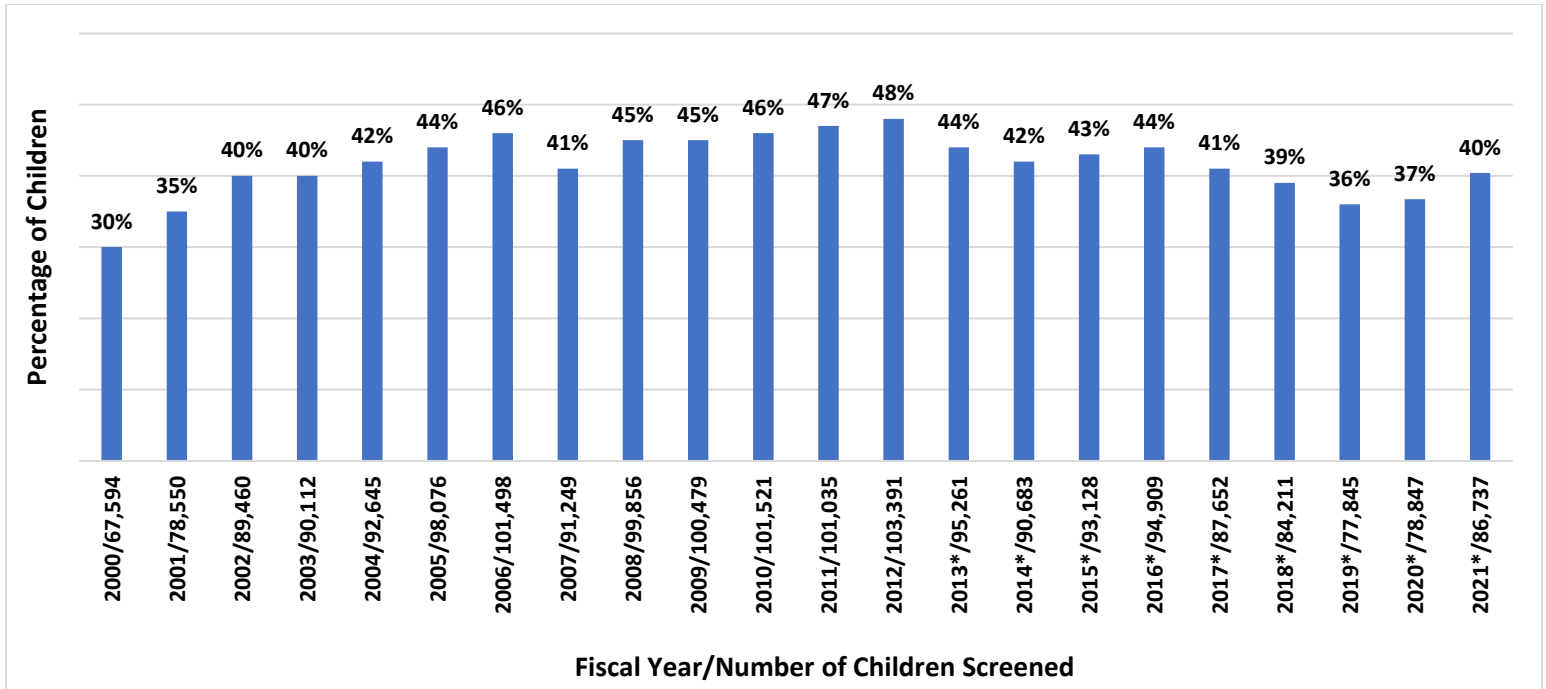
Percentage of Children* Who Turned Six (6) Years of Age During SFY 2021 and Had at Least One Blood Lead Test in their Lifetime



*Number of children born in New Jersey between July 1, 2014, and June 30, 2015 (n = 102,215)
Source: New Jersey Department of Health, Center for Health Statistics, New Jersey Birth Certificate Database

Figure 2

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



*Caution is advised when interpreting these numbers, as percentages calculated using the ten-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 2021:

- 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

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 at or above 5 µg/dL, as defined in N.J.A.C. 8:51. This chapter provides a more in-depth look at blood lead screening data and EBLL prevalence by county/municipality of residence (which may differ from the county/municipality of exposure), the gender of children screened, and the month that the sample was taken. To protect patient confidentiality, only municipalities with a population at or above 35,000 residents (i.e., large municipalities) are included in this report, as the proportion of children in the blood lead screening age range comprises a 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 a given age group, as reported in the 2010 U.S. Census. This method generates screening and prevalence statistics that may not reflect the size of the current population, as ten-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 to 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 2021, the average percentage of children six to 26 months screened by county was 38.2%, with a range of 25.4 % (Sussex) to 53.4% (Ocean), and the average percentage of children six to 26 months with an EBLL by county was 1.9%, with a range of 0.4% (Ocean) to 4.2% (Salem). Table 2 shows that in SFY 2021, the average percentage of children six to 26 months screened in large municipalities was 39.1%, with a range of 17.6% (Freehold) to 80.3 % (Lakewood), and the average percentage of children six to 26 months with an EBLL by large municipality was 1.6%, with a range of no cases (Berkeley, Brick, Evesham, Freehold, Manalapan, Middletown and Washington Township in Gloucester County) to 8.2% (Trenton).

Tables 3 and 4 display screening numbers and results by county and large municipality, respectively, for children less 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 2021, the average percentage of children less than six years of age screened by county was 21.0%, with a range of 12.1% (Sussex) to 35.3% (Essex), and the average percentage of children less than six years of age with an EBLL by county was 1.9%, with a range of 0.4% (Ocean) and 4.4% (Salem). Table 4 shows that in SFY 2021, the average percentage of children less than six years of age screened in large municipalities was 24.4%, with a range of 9.8% (Freehold) to 54.7% (Plainfield), and the average percentage of children less than six years of age with an EBLL by large municipality was 1.5%, with a range of no cases (Brick, Freehold, Manalapan and Washington Township in Gloucester County) to 6.4% (Trenton). Table 5 displays EBLs by county for all children.

Figures 3a and 3b compare 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 1 and 3 years of age comprise the largest category EBLs.

Figure 4a displays the percentage of children with an EBLL compared to children without an EBLL and shows that in SFY 2021, 98.1% of all children had a BLL less than 5 µg/dL. Figure 4b includes all children with an EBLL and compares categories of EBLs. In SFY 2021, 74.5% 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 gender distribution of children less than six years of age with an EBLL. In SFY 2021, 57% of children less than six years of age with an EBLL were male, and 43% were female.

Figure 6a shows the seasonal distribution of screening and percent of EBLL among children less than six years of age. Here, the highest percentage of children less than six years of age with an EBLL were screened between June and September, 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.

Figure 6b describes BLL screening trends among children less than six years old during the coronavirus disease 2019 (COVID-19) pandemic; NJDOH compared the screening conducted during January–May 2019 to January–May 2020 and 2021. The number of children aged <6 years who had BLL tests during January–May 2020 (42,362) was lower than the number who had BLL tests during January–May 2019 and 2021.

Table 1

SFY 2021: Number of Children (six (6) to 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	6,521	31.9%	2,056	19	4	1	2	0	26	1.2%	2,082
BERGEN	19,955	38.5%	7,592	66	10	3	5	0	84	1.1%	7,676
BURLINGTON	10,166	35.9%	3,610	31	4	1	0	0	36	1.0%	3,646
CAMDEN	13,215	33.6%	4,381	50	7	4	1	0	62	1.4%	4,443
CAPE MAY	1,822	30.0%	537	4	3	2	1	0	10	1.8%	547
CUMBERLAND	4,368	36.9%	1,557	39	10	3	3	0	55	3.4%	1,612
ESSEX	21,569	44.7%	9,331	228	52	18	14	1	313	3.2%	9,644
GLOUCESTER	6,862	28.4%	1,928	18	3	2	0	0	23	1.2%	1,951
HUDSON	17,288	45.6%	7,725	103	29	11	10	0	153	1.9%	7,878
HUNTERDON	2,316	46.0%	1,051	11	1	3	0	0	15	1.4%	1,066
MERCER	8,591	42.9%	3,552	108	17	5	6	0	136	3.7%	3,688
MIDDLESEX	19,965	37.9%	7,433	98	24	6	6	0	134	1.8%	7,567
MONMOUTH	13,371	30.2%	4,004	25	8	3	1	0	37	0.9%	4,041
MORRIS	10,700	43.4%	4,592	34	7	4	5	0	50	1.1%	4,642
OCEAN	15,532	53.4%	8,254	26	5	2	1	0	34	0.4%	8,288
PASSAIC	13,727	45.3%	6,042	139	27	7	6	2	181	2.9%	6,223
SALEM	1,549	32.2%	478	16	4	1	0	0	21	4.2%	499
SOMERSET	7,581	38.5%	2,880	23	9	2	2	0	36	1.2%	2,916
SUSSEX	3,099	25.4%	778	8	0	0	0	0	8	1.0%	786
UNION	14,148	47.6%	6,599	102	16	4	13	2	137	2.0%	6,736
WARREN	2,382	33.7%	781	19	2	0	0	1	22	2.7%	803
Unknown address	N/A	N/A	3	0	0	0	0	0	0	-	3
Total	214,727	40.4%	85,164	1,167	242	82	76	6	1,573	1.8%	86,737

Total Children = 2010 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 2021

Total EBLL = Frequency of Children 6-26 Months of Age with an EBLL ≥ 5ug/dL Reported in SFY 2021

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 ten-year census counts do not capture annual changes in the population.

Table 2

SFY 2021: Number of Children (six (6) to 26 months of age) by BLL and Large Municipality

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	1,249	35.1%	427	10	1	0	0	0	11	2.5%	438
BAYONNE	1,528	45.9%	692	7	1	0	1	0	9	1.3%	701
BELLEVILLE	869	43.0%	371	2	0	0	1	0	3	0.8%	374
BERKELEY	509	38.7%	197	0	0	0	0	0	0	0.0%	197
BLOOMFIELD	1,224	46.9%	566	6	1	0	1	0	8	1.4%	574
BRICK	1,531	28.7%	439	0	0	0	0	0	0	0.0%	439
BRIDGEWATER	978	41.1%	399	1	1	1	0	0	3	0.7%	402
CAMDEN	2,838	29.9%	823	22	2	1	0	0	25	2.9%	848
CHERRY HILL	1,449	38.4%	555	2	0	0	0	0	2	0.4%	557
CLIFTON	2,123	45.8%	959	8	6	0	0	0	14	1.4%	973
EAST BRUNSWICK	860	42.3%	360	2	1	0	1	0	4	1.1%	364
EAST ORANGE	1,916	39.4%	710	31	9	1	4	0	45	6.0%	755
EDISON	2,560	37.2%	924	24	2	1	1	0	28	2.9%	952
EGG HARBOR	1,038	32.5%	336	1	0	0	0	0	1	0.3%	337
ELIZABETH	3,943	45.5%	1,738	43	6	2	3	2	56	3.1%	1,794
EVESHAM	1,016	32.1%	326	0	0	0	0	0	0	0.0%	326
EWING	600	46.0%	274	2	0	0	0	0	2	0.7%	276
FORT LEE	725	44.6%	322	0	0	1	0	0	1	0.3%	323
FRANKLIN (Somerset County)	1,759	33.1%	577	4	0	0	1	0	5	0.9%	582
FREEHOLD	652	17.6%	115	0	0	0	0	0	0	0.0%	115
GALLOWAY	724	32.6%	235	0	0	1	0	0	1	0.4%	236
GLOUCESTER	1,520	31.8%	481	2	1	0	0	0	3	0.6%	484
HACKENSACK	1,118	36.9%	403	6	1	0	3	0	10	2.4%	413
HAMILTON (Mercer County)	1,814	43.9%	787	8	0	1	0	0	9	1.1%	796
HILLSBOROUGH	866	39.3%	338	1	1	0	0	0	2	0.6%	340
HOBOKEN	1,467	55.1%	801	4	2	0	1	0	7	0.9%	808
HOWELL	1,125	28.4%	317	1	1	0	0	0	2	0.6%	319
IRVINGTON	1,692	44.7%	712	36	6	1	2	0	45	5.9%	757
JACKSON	1,100	56.6%	620	3	0	0	0	0	3	0.5%	623
JERSEY CITY	7,192	50.1%	3,521	53	19	7	5	0	84	2.3%	3,605
KEARNY	895	40.0%	355	2	0	1	0	0	3	0.8%	358
LAKESWOOD	6,556	80.3%	5,240	18	2	2	0	0	22	0.4%	5,262
LINDEN	911	43.6%	394	2	0	0	1	0	3	0.8%	397
MANALAPAN	778	23.3%	181	0	0	0	0	0	0	0.0%	181
MANCHESTER	448	26.6%	117	1	0	0	1	0	2	1.7%	119

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	
MARLBORO	767	21.9%	165	2	0	1	0	0	3	1.8%	168
MIDDLETOWN	1,444	31.0%	447	0	0	0	0	0	0	0.0%	447
MONROE (Gloucester County)	898	29.7%	264	3	0	0	0	0	3	1.1%	267
MONROE (Middlesex County)	655	32.2%	210	1	0	0	0	0	1	0.5%	211
MONTCLAIR	869	40.4%	342	8	0	0	1	0	9	2.6%	351
MOUNT LAUREL	886	41.0%	361	2	0	0	0	0	2	0.6%	363
NEW BRUNSWICK	1,573	41.1%	630	13	4	0	0	0	17	2.6%	647
NEWARK	8,382	46.3%	3,731	107	23	10	5	1	146	3.8%	3,877
NORTH BERGEN	1,498	35.4%	518	10	2	0	1	0	13	2.4%	531
NORTH BRUNSWICK	1,220	37.8%	455	5	1	0	0	0	6	1.3%	461
OLD BRIDGE	1,478	30.1%	442	3	0	0	0	0	3	0.7%	445
PARSIPPANY-TROY HILLS	1,207	39.4%	467	5	1	1	1	0	8	1.7%	475
PASSAIC	2,767	42.4%	1,127	37	4	2	3	0	46	3.9%	1,173
PATERSON	4,632	52.4%	2,326	77	16	5	2	1	101	4.2%	2,427
PENNSAUKEN	845	34.3%	286	3	1	0	0	0	4	1.4%	290
PERTH AMBOY	1,584	51.9%	800	14	5	2	1	0	22	2.7%	822
PISCATAWAY	1,361	36.2%	482	8	3	0	0	0	11	2.2%	493
PLAINFIELD	1,628	70.3%	1,101	34	4	1	5	0	44	3.8%	1,145
SAYREVILLE	1,137	31.3%	354	0	1	0	1	0	2	0.6%	356
SOUTH BRUNSWICK	935	26.3%	240	5	0	0	1	0	6	2.4%	246
TEANECK	1,075	32.6%	344	5	1	0	0	0	6	1.7%	350
TOMS RIVER	1,816	41.2%	745	1	2	0	0	0	3	0.4%	748
TRENTON	2,786	49.2%	1,259	87	17	3	5	0	112	8.2%	1,371
UNION CITY	1,880	33.6%	609	17	4	0	2	0	23	3.6%	632
UNION	1,250	40.6%	499	6	2	0	1	0	9	1.8%	508
VINELAND	1,729	34.4%	583	8	3	0	1	0	12	2.0%	595
WASHINGTON (Gloucester County)	900	27.6%	248	0	0	0	0	0	0	0.0%	248
WAYNE	995	48.8%	481	5	0	0	0	0	5	1.0%	486
WEST NEW YORK	1,523	39.6%	600	2	0	1	0	0	3	0.5%	603
WEST ORANGE	1,263	40.5%	500	8	1	2	0	0	11	2.2%	511
WINSLOW	1,122	26.9%	300	2	0	0	0	0	2	0.7%	302
WOODBRIIDGE	2,495	39.0%	954	13	2	3	1	0	19	2.0%	973

Total Children = 2010 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 2021

Total EBLL = Frequency of Children 6-26 Months of Age with an EBLL ≥ 5µg/dL Reported in SFY 2021

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 ten-year census counts do not capture annual changes in the population.

Table 3

SFY 2021: Number of Children (<6 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	19,909	18.5%	3,628	36	10	2	3	0	51	1.4%	3,679
BERGEN	61,192	22.0%	13,328	105	16	5	7	0	133	1.0%	13,461
BURLINGTON	31,546	14.9%	4,656	46	5	1	2	0	54	1.1%	4,710
CAMDEN	40,195	14.8%	5,856	80	13	4	1	0	98	1.6%	5,954
CAPE MAY	5,423	13.7%	729	6	3	2	1	1	13	1.8%	742
CUMBERLAND	12,963	23.7%	2,973	70	17	6	5	0	98	3.2%	3,071
ESSEX	64,591	35.3%	22,069	558	124	39	38	4	763	3.3%	22,832
GLOUCESTER	21,059	12.8%	2,671	26	4	2	0	0	32	1.2%	2,703
HUDSON	49,759	32.6%	15,937	202	42	14	24	0	282	1.7%	16,219
HUNTERDON	7,484	16.4%	1,210	13	1	3	0	0	17	1.4%	1,227
MERCER	26,052	24.1%	6,059	173	33	13	10	0	229	3.6%	6,288
MIDDLESEX	60,249	23.9%	14,146	174	37	10	12	0	233	1.6%	14,379
MONMOUTH	42,404	15.1%	6,314	49	14	3	2	0	68	1.1%	6,382
MORRIS	33,493	20.1%	6,641	54	10	4	6	1	75	1.1%	6,716
OCEAN	46,657	28.0%	13,011	42	8	3	1	0	54	0.4%	13,065
PASSAIC	41,179	32.7%	13,098	263	53	8	22	3	349	2.6%	13,447
SALEM	4,625	16.1%	712	21	9	3	0	0	33	4.4%	745
SOMERSET	23,622	18.2%	4,233	39	15	2	2	1	59	1.4%	4,292
SUSSEX	9,701	12.2%	1,174	10	1	0	0	0	11	0.9%	1,185
UNION	43,085	31.0%	13,011	254	32	13	25	4	328	2.5%	13,339
WARREN	7,434	14.0%	1,004	29	3	2	1	1	36	3.5%	1,040
Unknown address	N/A	N/A	5	0	0	0	0	0	0	0.0%	5
Total	652,622	23.8%	152,465	2,250	450	139	162	15	3,016	1.9%	155,481

Total Children = 2010 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 2021

Total EBLL = Frequency of Children 0-72 Months of Age with an EBLL ≥ 5ug/dL Reported in SFY 2021

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 ten-year census counts do not capture annual changes in the population.

Table 4

SFY 2021: Number of Children (<6 years of age) by BLL and Large Municipality

Municipality	Total Children	% Screened*	BLL (µg/dL)	EBLL (µg/dL)						Total EBLL	% EBLL	Total Screened
			<5	5-9	10-14	15-19	20-44	≥45				
ATLANTIC CITY	3,677	25.7%	925	19	2	0	0	0	21	2.2%	946	
BAYONNE	4,576	34.5%	1,558	16	1	2	1	0	20	1.3%	1,578	
BELLEVILLE	2,601	33.1%	849	9	0	1	1	0	11	1.3%	860	
BERKELEY	1,565	19.6%	306	1	0	0	0	0	1	0.3%	307	
BLOOMFIELD	3,575	31.9%	1,125	12	1	0	2	0	15	1.3%	1,140	
BRICK	4,558	15.2%	694	0	0	0	0	0	0	0.0%	694	
BRIDGEWATER	3,052	17.8%	533	4	4	1	0	0	9	1.7%	542	
CAMDEN	8,525	14.8%	1,222	38	4	1	0	0	43	3.4%	1,265	
CHERRY HILL	4,588	15.7%	717	3	0	0	0	0	3	0.4%	720	
CLIFTON	6,187	33.3%	2,034	15	9	0	1	0	25	1.2%	2,059	
EAST BRUNSWICK	2,725	23.2%	625	4	1	0	3	0	8	1.3%	633	
EAST ORANGE	5,534	36.5%	1,914	78	19	3	8	0	108	5.3%	2,022	
EDISON	7,774	23.3%	1,766	36	6	1	1	0	44	2.4%	1,810	
EGG HARBOR	3,341	15.6%	521	1	0	0	0	0	1	0.2%	522	
ELIZABETH	11,792	36.9%	4,223	103	14	6	7	3	133	3.1%	4,356	
EVESHAM	3,117	12.8%	398	1	0	0	0	0	1	0.3%	399	
EWING	1,797	23.7%	417	6	2	0	0	0	8	1.9%	425	
FORT LEE	2,171	25.9%	560	0	1	1	0	0	2	0.4%	562	
FRANKLIN (Somerset County)	5,182	17.7%	911	6	0	0	1	0	7	0.8%	918	
FREEHOLD	2,156	9.8%	212	0	0	0	0	0	0	0.0%	212	
GALLOWAY	2,240	16.4%	366	0	0	1	0	0	1	0.3%	367	
GLOUCESTER	4,647	13.1%	604	3	1	0	0	0	4	0.7%	608	
HACKENSACK	3,223	27.2%	863	8	2	0	3	0	13	1.5%	876	
HAMILTON (Mercer County)	5,480	24.6%	1,330	15	2	2	1	0	20	1.5%	1,350	
HILLSBOROUGH	2,736	17.0%	462	1	2	0	0	0	3	0.6%	465	
HOBOKEN	3,779	28.8%	1,081	5	2	0	1	0	8	0.7%	1,089	
HOWELL	3,591	15.3%	544	3	1	0	0	0	4	0.7%	548	
IRVINGTON	4,993	44.0%	2,082	87	16	2	7	3	115	5.2%	2,197	
JACKSON	3,649	28.6%	1,041	3	0	0	0	0	3	0.3%	1,044	
JERSEY CITY	20,393	34.0%	6,771	112	27	8	14	0	161	2.3%	6,932	
KEARNY	2,681	31.3%	832	4	1	1	0	0	6	0.7%	838	
LAKEWOOD	18,872	43.1%	8,098	30	5	3	0	0	38	0.5%	8,136	
LINDEN	2,726	31.1%	837	8	1	0	2	0	11	1.3%	848	
MANALAPAN	2,541	11.2%	284	0	0	0	0	0	0	0.0%	284	
MANCHESTER	1,372	15.4%	209	1	0	0	1	0	2	0.9%	211	
MARLBORO	2,606	12.0%	308	3	0	1	0	0	4	1.3%	312	

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	
MIDDLETOWN	4,615	12.9%	592	1	1	0	0	0	2	0.3%	594
MONROE (Gloucester County)	2,794	14.5%	401	3	0	0	0	0	3	0.7%	404
MONROE (Middlesex County)	2,082	16.4%	338	4	0	0	0	0	4	1.2%	342
MONTCLAIR	2,701	21.4%	561	13	1	0	2	0	16	2.8%	577
MOUNT LAUREL	2,705	16.6%	446	2	0	0	0	0	2	0.4%	448
NEW BRUNSWICK	4,753	24.4%	1,125	25	8	2	1	0	36	3.1%	1,161
NEWARK	24,831	44.5%	10,669	284	62	23	14	1	384	3.5%	11,053
NORTH BERGEN	4,473	29.2%	1,286	16	2	0	1	0	19	1.5%	1,305
NORTH BRUNSWICK	3,502	23.2%	808	5	1	0	0	0	6	0.7%	814
OLD BRIDGE	4,548	16.7%	749	8	1	0	0	0	9	1.2%	758
PARSIPPANY-TROY HILLS	3,671	18.9%	684	6	1	1	1	1	10	1.4%	694
PASSAIC	8,226	40.0%	3,201	65	11	2	10	1	89	2.7%	3,290
PATERSON	13,987	40.1%	5,411	160	27	6	8	1	202	3.6%	5,613
PENNSAUKEN	2,696	15.1%	402	5	1	0	0	0	6	1.5%	408
PERTH AMBOY	4,756	45.0%	2,109	20	8	2	3	0	33	1.5%	2,142
PISCATAWAY	3,903	23.4%	894	16	3	1	0	0	20	2.2%	914
PLAINFIELD	4,961	54.7%	2,607	86	8	5	9	0	108	4.0%	2,715
SAYREVILLE	3,338	21.7%	720	3	1	0	1	0	5	0.7%	725
SOUTH BRUNSWICK	3,130	13.4%	408	11	0	0	1	0	12	2.9%	420
TEANECK	3,142	19.1%	595	5	1	0	0	0	6	1.0%	601
TOMS RIVER	5,617	22.7%	1,270	3	2	0	0	0	5	0.4%	1,275
TRENTON	7,998	35.7%	2,672	138	28	9	8	0	183	6.4%	2,855
UNION	3,701	24.3%	878	15	4	0	3	0	22	2.4%	900
UNION CITY	5,742	29.0%	1,626	26	6	0	6	0	38	2.3%	1,664
VINELAND	5,058	22.2%	1,102	14	4	0	1	0	19	1.7%	1,121
WASHINGTON (Gloucester County)	2,968	10.8%	321	0	0	0	0	0	0	0.0%	321
WAYNE	3,105	22.0%	676	6	0	0	0	0	6	0.9%	682
WEST NEW YORK	4,258	35.8%	1,513	7	1	1	1	0	10	0.7%	1,523
WEST ORANGE	3,635	24.4%	871	11	2	2	0	0	15	1.7%	886
WINSLOW	3,336	12.3%	406	2	1	0	0	0	3	0.7%	409
WOODBIDGE	7,326	25.7%	1,862	17	2	4	1	0	24	1.3%	1,886

Total Screened = Frequency of Children < 17 Years of Age with a Blood Lead Test Reported in SFY 2021
Total EBLL = Frequency of Children < 17 Years of Age with an EBLL ≥ 5ug/dL Reported in SFY 2021
Percent EBLL = (Total EBLL / Total Screened) * 100

Table 5

SFY 2021: Number of Children by BLL and County of Residence

County	BLL (µg/dL)	EBLL (µg/dL)						Total EBLL	% EBLL	Total Screened
	<5	5-9	10-14	15-19	20-44	≥45				
ATLANTIC	3,898	43	10	2	4	0	59	1.5%	3,957	
BERGEN	14,764	112	17	6	9	0	144	1.0%	14,908	
BURLINGTON	4,888	47	5	2	2	0	56	1.1%	4,944	
CAMDEN	6,137	85	14	4	2	0	105	1.7%	6,242	
CAPE MAY	775	7	3	2	1	1	14	1.8%	789	
CUMBERLAND	3,205	76	18	8	6	0	108	3.3%	3,313	
ESSEX	27,158	638	138	46	43	4	869	3.1%	28,027	
GLOUCESTER	2,763	29	4	2	0	0	35	1.3%	2,798	
HUDSON	19,101	231	49	17	26	0	323	1.7%	19,424	
HUNTERDON	1,255	13	1	3	0	0	17	1.3%	1,272	
MERCER	7,405	187	34	14	11	0	246	3.2%	7,651	
MIDDLESEX	17,011	202	42	12	14	0	270	1.6%	17,281	
MONMOUTH	7,341	60	16	5	2	0	83	1.1%	7,424	
MORRIS	7,203	56	13	4	6	1	80	1.1%	7,283	
OCEAN	13,887	47	8	3	1	0	59	0.4%	13,946	
PASSAIC	15,042	288	58	10	23	3	382	2.5%	15,424	
SALEM	741	24	10	3	0	0	37	4.8%	778	
SOMERSET	4,847	45	15	4	2	1	67	1.4%	4,914	
SUSSEX	1,300	10	1	0	0	0	11	0.8%	1,311	
UNION	15,497	277	38	18	25	5	363	2.3%	15,860	
WARREN	1,052	29	3	2	1	1	36	3.3%	1,088	
Unknown address	5	0	0	0	0	0	-	0.0%	5	
Total	175,275	2,506	497	167	178	16	3,364	1.9%	178,639	

Total Screened = Frequency of Children < 17 Years of Age with a Blood Lead Test Reported in SFY 2021

Total EBLL = Frequency of Children < 17 Years of Age with an EBLL ≥ 5µg/dL Reported in SFY 2021

Percent EBLL = (Total EBLL / Total Screened) * 100

Figure 3a

SFY 2021: Frequency of Children with an EBLL by Age
(n=3,364)

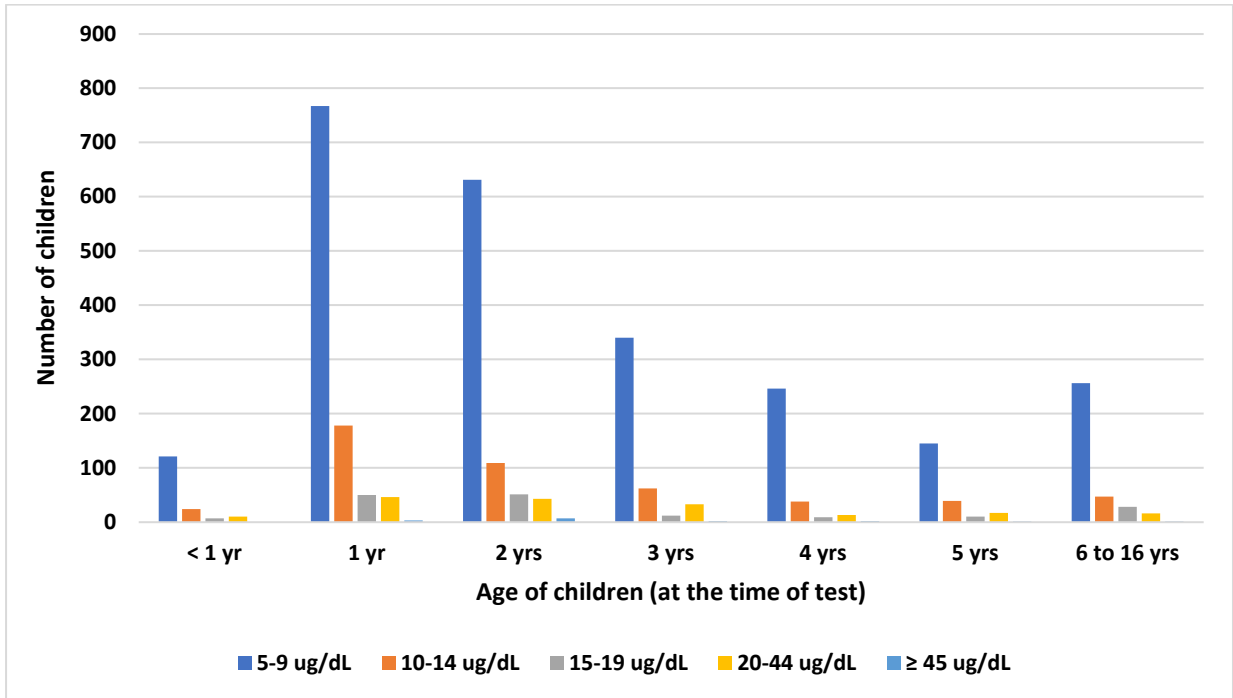


Figure 3b

SFY 2021: Frequency of Children without an EBLL by Age
(n=175,275)

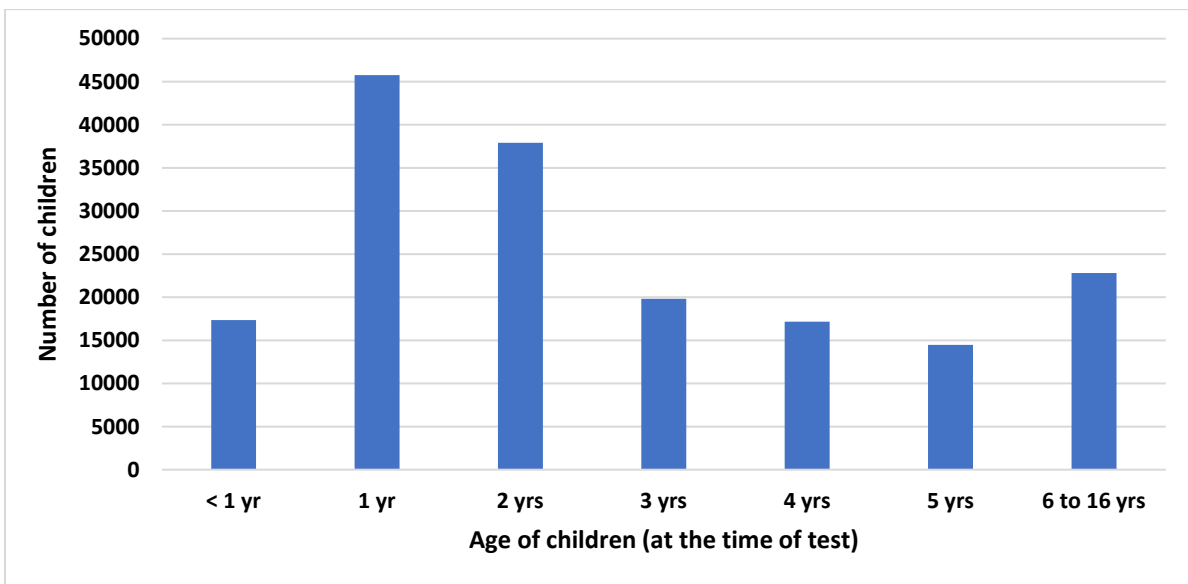


Figure 4a

**SFY2021: Percentage of Children with an EBLL
(n=3,364)**

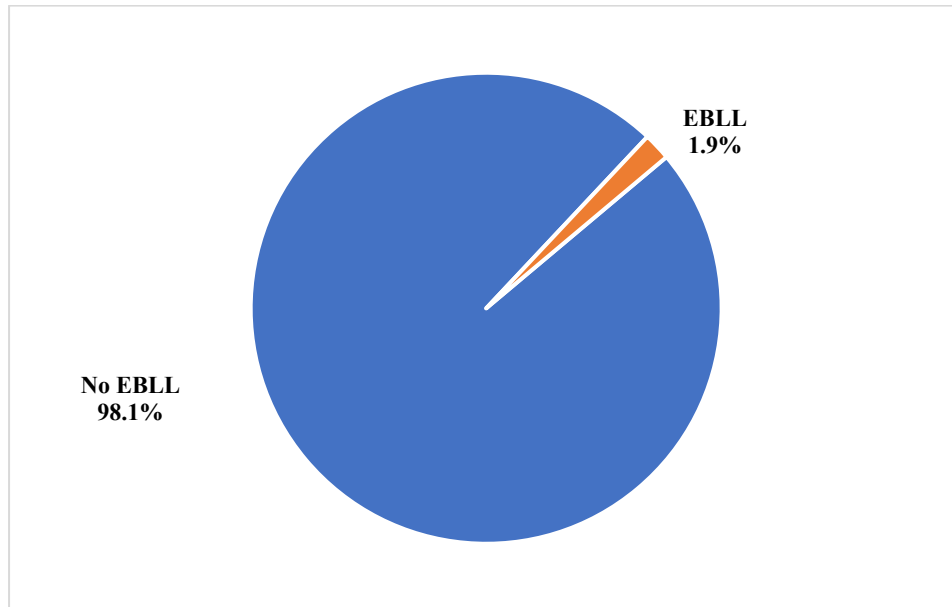


Figure 4b

**SFY 2021: Percentage of Children by Category of EBLL
(n=3,364)**

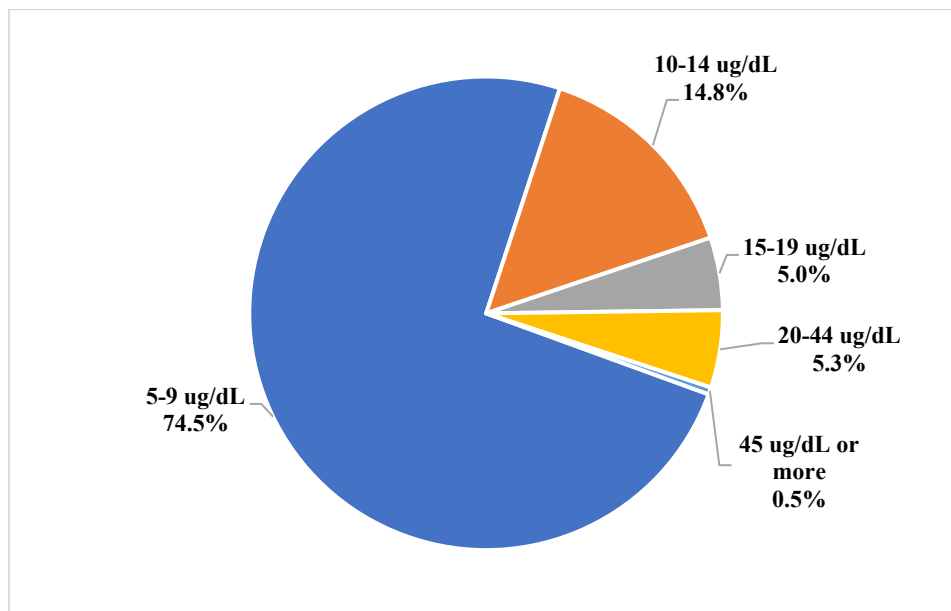


Figure 5

SFY 2021: Percentage of Children Less Than Six Years of Age with an EBLL by Gender (n=3,016)

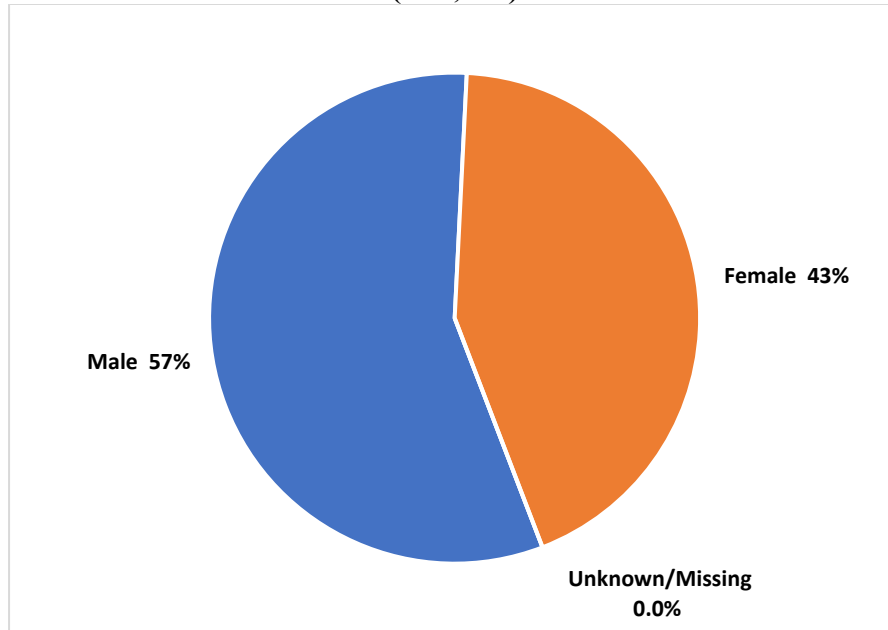


Figure 6a

SFY 2021: Total Children Screened and Percentage of EBLL for Children Less Than Six Years of Age by Month of Test (n=3,016)

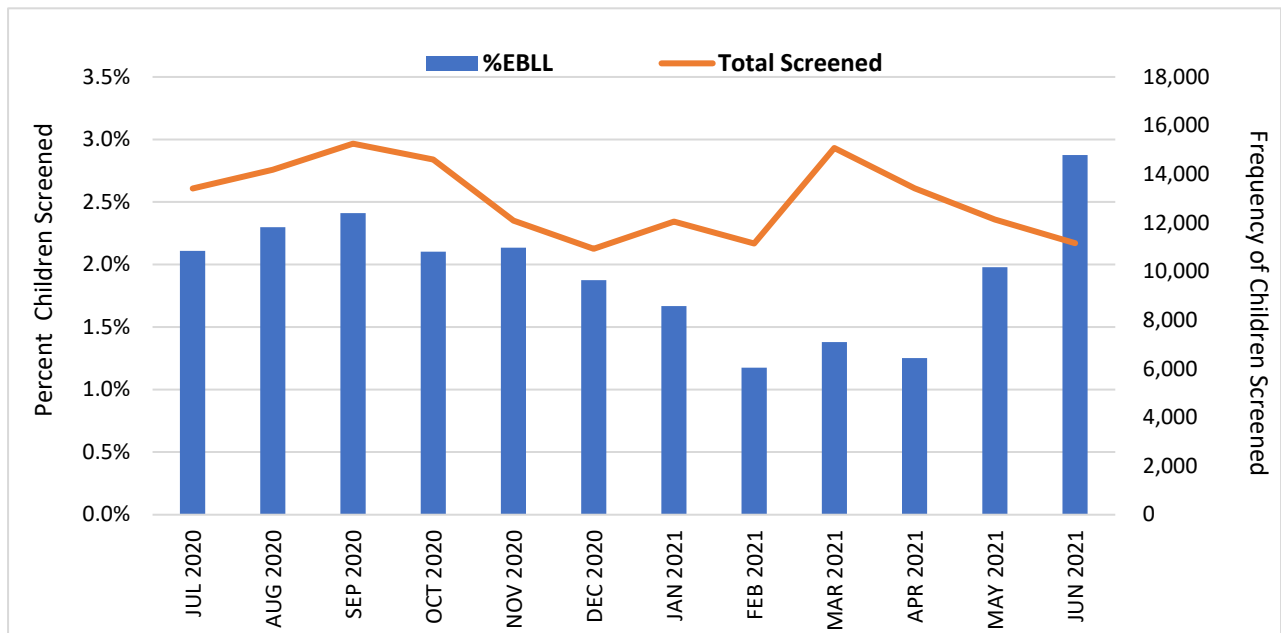
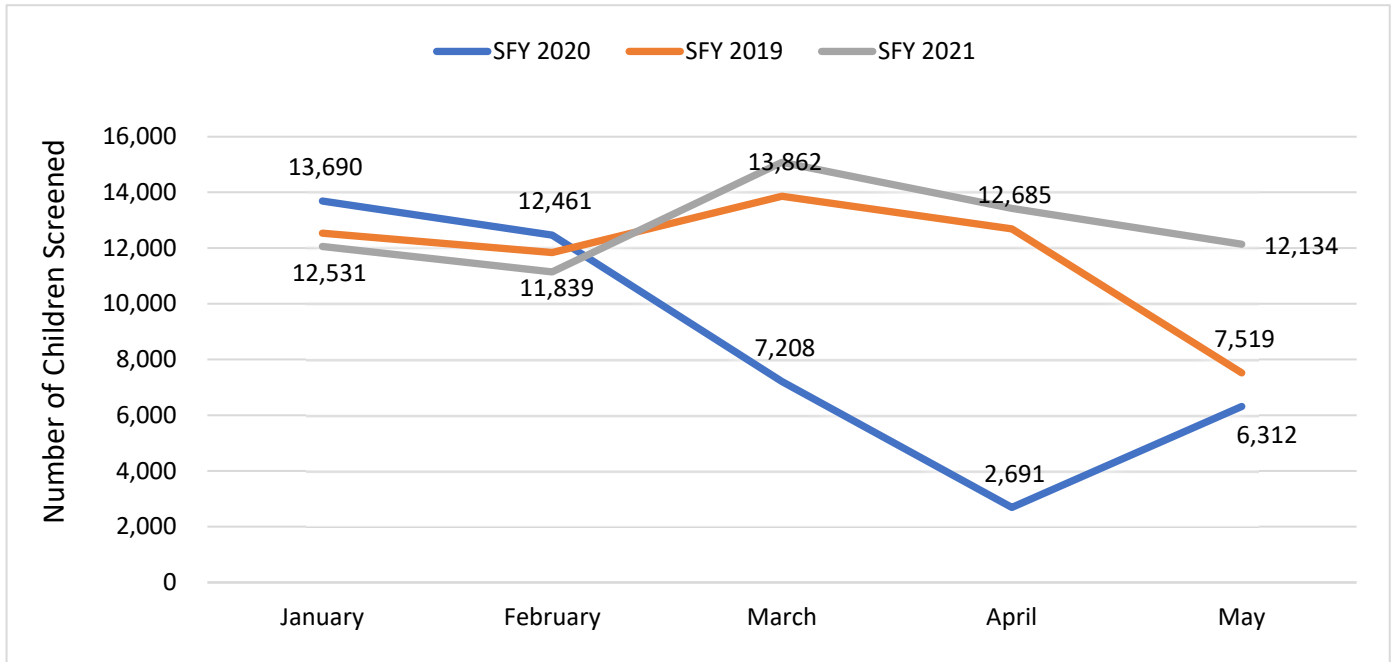


Figure 6b

Number of children aged <6 years who received blood lead test, by month, 2019–2021



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 of the large municipalities and how they rank according to attributes such as the population of children less than six years of age, percentage of children screened in SFY 2021, and percent EBLs.

Many of New Jersey's large municipalities also have the highest number of children less than six years of age. Table 6 ranks the top ten large municipalities by the largest population of children less than six years of age (based on data from the 2010 U.S. Census). The City of Newark has the largest population of children less than six years of age (24,831), followed by Jersey City (20,393) and Lakewood (18,872).

Since N.J.A.C. 8:51A requires that children are screened for lead at least once before they turn six, Table 7 ranks the top ten large municipalities by the highest percentage of children less than six years of age who were screened in SFY 2021. Plainfield (55%) had the highest percentage of children less than six years of age screened in SFY 2021, followed by Perth Amboy (45%), Newark (44%), and Irvington (44%).

Table 8 and Figure 7 rank the top large municipalities by the highest percentage of children less than six years of age with an EBL at or above 5 $\mu\text{g}/\text{dL}$. The five large municipalities with the highest percentage of children with an EBL at or above 5 $\mu\text{g}/\text{dL}$ in SFY 2021 include Trenton (6.4%), East Orange (5.3%), Irvington (5.2%), Plainfield (4.0%), and Paterson (3.6%). While the percentage of children with an EBL 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 Ten Large Municipalities Ranked by
Largest Population of Children Less Than Six Years of Age**

Municipality (County)	Population < 6 Years
Newark (Essex)	24,831
Jersey City (Hudson)	20,393
Lakewood (Ocean)	18,872
Paterson (Passaic)	13,987
Elizabeth (Union)	11,792
Camden (Camden)	8,525
City of Passaic (Passaic)	8,226
Trenton (Mercer)	7,998
Edison (Middlesex)	7,774

Table 7

**Top Ten Large Municipalities Ranked by
Highest Percentage of Children Less Than Six Years of Age Screened in SFY 2021**

Municipality (County)	% Children < 6 Years Screened for Lead
Plainfield (Union)	54.7%
Perth Amboy (Middlesex)	45.0%
Newark (Essex)	44.5%
Irvington (Essex)	44.0%
Lakewood (Ocean)	43.1%
Paterson (Passaic)	40.1%
City of Passaic (Passaic)	40.0%
Elizabeth (Union)	36.9%
East Orange (Essex)	36.5%
West New York (Hudson)	35.8%

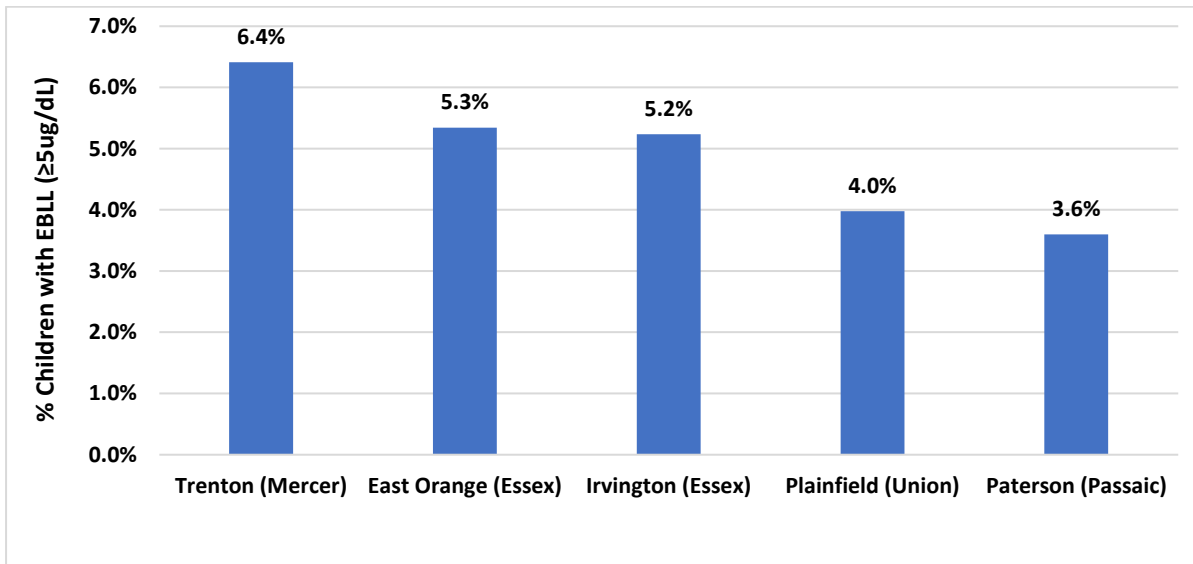
Table 8

Top Ten Large Municipalities Ranked by Highest Percentage of Children Less Than Six (6) Years of Age with an EBLL in SFY 2021

Municipality (County)	% Children < 6 Years with an EBLL
Trenton (Mercer)	6.4%
East Orange (Essex)	5.3%
Irvington (Essex)	5.2%
Plainfield (Union)	4.0%
Paterson (Passaic)	3.6%
Newark (Essex)	3.5%
Camden (Camden)	3.4%
New Brunswick (Middlesex)	3.1%
Elizabeth (Union)	3.1%
South Brunswick (Middlesex)	2.9%

Figure 7

Top Five Large Municipalities with the Highest Percentage of Children Less Than Six (6) Years of Age with an EBLL in SFY 2021



CHAPTER FOUR

ENVIRONMENTAL INVESTIGATIONS BY LOCAL HEALTH DEPARTMENTS

N.J.A.C. 8:51 requires LHDs to investigate reported cases of EBLs that meet or exceed the threshold for public health intervention within their jurisdiction and to order the abatement of lead hazards identified in the course of 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 child care center, the home of a relative or other 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.

In addition to environmental investigations, for all reported cases of EBLs 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 EBLs and the steps that he or she can take to protect the child from further exposure. The public health nurse case manager also provides ongoing assistance to the family, including but not limited to follow-up testing, medical treatment, and social services that may be necessary to address the effects of the child's exposure to lead. Statistics describing nursing case management are not included in the annual report.

The data listed in this chapter reflects the frequency and results of environmental investigations, as reported by LHDs. The data are accurate to the extent that LHDs enter complete and timely information in LeadTrax before the date by which this report was generated. Furthermore, open investigations/abatement may reflect the fact that it can take several years to complete the abatement process for a property where lead hazards are identified. The length of time between the initial report of an EBL and the completion of the abatement process can be affected by 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.

Table 9 shows environmental case activity by county. In SFY 2021, Essex County had the highest number of environmental case referrals (304), followed by Hudson (141), Passaic (118), and Union (112), whereas Sussex had the fewest number of environmental case referrals (2), followed by Hunterdon (3), Cape May (6) and Gloucester (6). As shown in Table 9, less than half of the cases referred for environmental investigation resulted in a new order of abatement, where 360 new abatements were issued throughout New Jersey (all counties except Hunterdon and Sussex) in SFY 2021.

Table 10 and Figures 8 and 9 display environmental case activity by LHD. As shown in Table 10 and Figure 8, the Newark Department of Community Health & Wellness had the highest number of environmental case referrals (164) in SFY 2021, followed by the Jersey City Department of Health & Human Services (82) and the City of Paterson Division of Health (64).

Table 9

SFY 2021: Environmental Case Activity Status by County

County	Cases Referred *	Investigation Required**	% Investigation Required	Investigation Completed***	% Investigation Completed	Abatement Required	Abatement Completed	% Abatement Completed
ATLANTIC	13	10	77%	6	60%	7	7	100%
BERGEN	38	36	95%	33	92%	20	20	100%
BURLINGTON	14	10	71%	7	70%	3	0	0%
CAMDEN	20	16	80%	8	50%	10	8	80%
CAPE MAY	6	6	100%	4	67%	2	1	50%
CUMBERLAND	39	36	92%	23	64%	20	19	95%
ESSEX	304	289	95%	209	72%	130	124	95%
GLOUCESTER	6	6	100%	4	67%	5	5	100%
HUDSON	141	108	77%	91	84%	74	73	99%
HUNTERDON	3	0	0%	N/A	N/A	0	N/A	N/A
MERCER	77	15	19%	5	33%	2	1	50%
MIDDLESEX	77	14	18%	8	57%	8	5	63%
MONMOUTH	27	15	56%	12	80%	8	7	88%
MORRIS	31	22	71%	10	45%	4	1	25%
OCEAN	19	8	42%	2	25%	1	1	100%
PASSAIC	118	94	80%	52	55%	25	22	88%
SALEM	7	7	100%	6	86%	1	0	0%
SOMERSET	24	18	75%	13	72%	11	6	55%
SUSSEX	2	1	50%	0	0%	0	N/A	N/A
UNION	112	72	64%	44	61%	25	19	76%
WARREN	10	8	80%	8	100%	4	2	50%
TOTAL	1,088	791	73%	545	69%	360	321	89%

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

**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 ug/dL.

Data for this table are based on case updates entered in LeadTrax as of August 6, 2021. If a local health department completed an investigation or abatement but did not update data in LeadTrax, it will not be counted as completed in this report.

Table 10

SFY 2021: Environmental Case Activity by Local Health Department

Local Health Department	Cases Referred*	Investigation Required**	Investigation Completed***	% Investigation Completed	Abatement Required	Abatement Completed	% Abatement Completed
Atlantic City Department of Health & Human Services	3	1	0	0%	0	N/A	N/A
Atlantic County Division of Public Health	10	9	6	67%	7	7	100%
Bayonne Health Department	11	11	9	82%	7	7	100%
Bergen County Department of Health Services	16	15	14	93%	7	7	100%
Bernards Township Health Department	1	0	N/A	N/A	0	N/A	N/A
Bloomfield Department of Health & Human Services	11	8	8	100%	7	5	71%
Borough of Roselle	5	2	1	50%	0	N/A	N/A
Bridgewater Township Health Department	5	2	1	50%	0	N/A	N/A
Burlington County Health Department	14	10	7	70%	3	0	0%
Camden County Department of Health & Human Services	20	16	8	50%	10	8	80%
Cape May County Health Department	6	6	4	67%	2	1	50%
City of Elizabeth, Department of Health & Human Services	37	19	13	68%	11	10	91%
City of Orange Township	25	25	24	96%	22	22	100%
City of Passaic Division of Health	35	19	14	74%	9	7	78%
City of Paterson, Division of Health	64	64	32	50%	13	12	92%
City of Plainfield Health Department	39	29	18	62%	6	4	67%
City of Trenton, Department of Health & Human Services	54	5	1	20%	1	1	100%
City of Vineland	9	8	7	88%	5	5	100%
Clifton Health Department	12	5	1	20%	0	N/A	N/A
Cumberland County Department of Health	30	28	16	57%	15	14	93%
East Hanover Health Department	4	1	0	0%	0	N/A	N/A
East Orange Department of Health	37	31	28	90%	22	20	91%
East Windsor Health Department	3	2	0	0%	0	N/A	N/A
Edison Department of Health & Human Services	10	4	1	25%	0	N/A	N/A
Englewood Health Department	2	2	2	100%	1	1	100%
Ewing Health Department	2	1	0	0%	0	N/A	N/A
Fort Lee Health Department	3	3	2	67%	3	3	100%
Freehold Health Department	5	2	2	100%	2	1	50%
Gloucester County Department of Health & Senior Services	6	6	4	67%	5	5	100%
Hackensack Department of Health	5	4	4	100%	2	2	100%
Hamilton Township Division of Health	10	4	3	75%	0	N/A	N/A
Harrison Health Department	3	3	3	100%	3	3	100%
Hillsborough Township Health Department	1	1	0	0%	0	N/A	N/A

Local Health Department	Cases Referred*	Investigation Required**	Investigation Completed***	% Investigation Completed	Abatement Required	Abatement Completed	% Abatement Completed
Hillside Health Department	1	1	1	100%	1	1	100%
Hoboken Health Department	4	3	3	100%	2	2	100%
Hopewell Township Health Department	1	1	0	0%	0	N/A	N/A
Hunterdon County Department of Health	3	0	N/A	N/A	0	N/A	N/A
Irvington Health Department	39	37	14	38%	2	2	100%
Jersey City Department of Health & Human Services	82	51	44	86%	37	36	97%
Kearny Department of Health	3	3	2	67%	2	2	100%
Lawrence Township Health Department	3	0	N/A	N/A	0	N/A	N/A
Linden Board of Health	4	3	2	67%	0	N/A	N/A
Livingston Health Department / Millburn Health Department	1	1	1	100%	1	1	100%
Long Beach Island Health Department	1	1	0	0%	0	N/A	N/A
Long Branch Department of Health	5	5	5	100%	5	5	100%
Madison Health Department	5	2	2	100%	1	0	0%
Maplewood Health Department	4	4	4	100%	4	4	100%
Mid-Bergen Regional Health Commission	7	7	7	100%	4	4	100%
Middlesex County Office of Health Services	54	6	5	83%	5	5	100%
Monmouth County Board of Health	12	7	4	57%	1	1	100%
Monmouth County Regional Health Commission # 1	5	1	1	100%	0	N/A	N/A
Montclair Health Department	5	4	4	100%	2	1	50%
Montgomery Township Health Department	1	0	N/A	N/A	0	N/A	N/A
Montville Township Health Department	1	0	N/A	N/A	0	N/A	N/A
Morris County Division of Public Health	9	8	5	63%	3	1	33%
Mount Olive Township Health Department	7	7	1	14%	0	N/A	N/A
N.W. Bergen Regional Health Commission	3	3	2	67%	1	1	100%
Newark Department of Health & Community Wellness	164	164	112	68%	59	58	98%
Ocean County Health Department	18	7	2	29%	1	1	100%
Palisades Park Health Department	1	1	1	100%	1	1	100%
Passaic County Department of Health	3	3	3	100%	2	2	100%
Pequannock Township Health Department	2	0	N/A	N/A	0	N/A	N/A
Princeton Health Department	1	0	N/A	N/A	0	N/A	N/A
Rahway Health Department	7	5	2	40%	2	1	50%
Randolph Township Health Department	3	3	2	67%	0	N/A	N/A
Rockaway Township Health Department	1	1	0	0%	0	N/A	N/A
Salem County Department of Health	7	7	6	86%	1	0	0%

Local Health Department	Cases Referred*	Investigation Required**	Investigation Completed***	% Investigation Completed	Abatement Required	Abatement Completed	% Abatement Completed
Secaucus Health Department	3	3	2	67%	1	1	100%
Somerset County Department of Health	16	15	12	80%	11	6	55%
South Brunswick Health Department	1	0	N/A	N/A	0	N/A	N/A
Sussex County Department of Health and Human Services, Division of Health	2	1	0	0%	0	N/A	N/A
Township of Morris Health Department	2	1	1	100%	1	0	0%
Township of North Bergen	8	8	7	88%	5	5	100%
Township of South Orange	5	5	4	80%	2	2	100%
Township of West Milford Department of Health	2	1	1	100%	1	1	100%
Union City Health Department	22	21	18	86%	15	15	100%
Union County Office of Health Management	1	1	1	100%	1	0	0%
Union Township Health Department	8	5	0	0%	0	N/A	N/A
Village of Ridgewood Health Department	1	1	1	100%	1	1	100%
Warren County Health Department	10	8	8	100%	4	2	50%
Wayne Health Department	2	2	1	50%	0	N/A	N/A
Weehawken Health Department	1	1	1	100%	1	1	100%
West Caldwell Health Department	3	2	2	100%	2	2	100%
West New York Health Department	4	4	2	50%	1	1	100%
West Orange Health Department	10	8	8	100%	7	7	100%
West Windsor Health Department	3	2	1	50%	1	0	0%
Westfield Regional Health Department	7	6	5	83%	3	3	100%
Woodbridge Township Health & Human Services	12	4	2	50%	3	0	0%

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

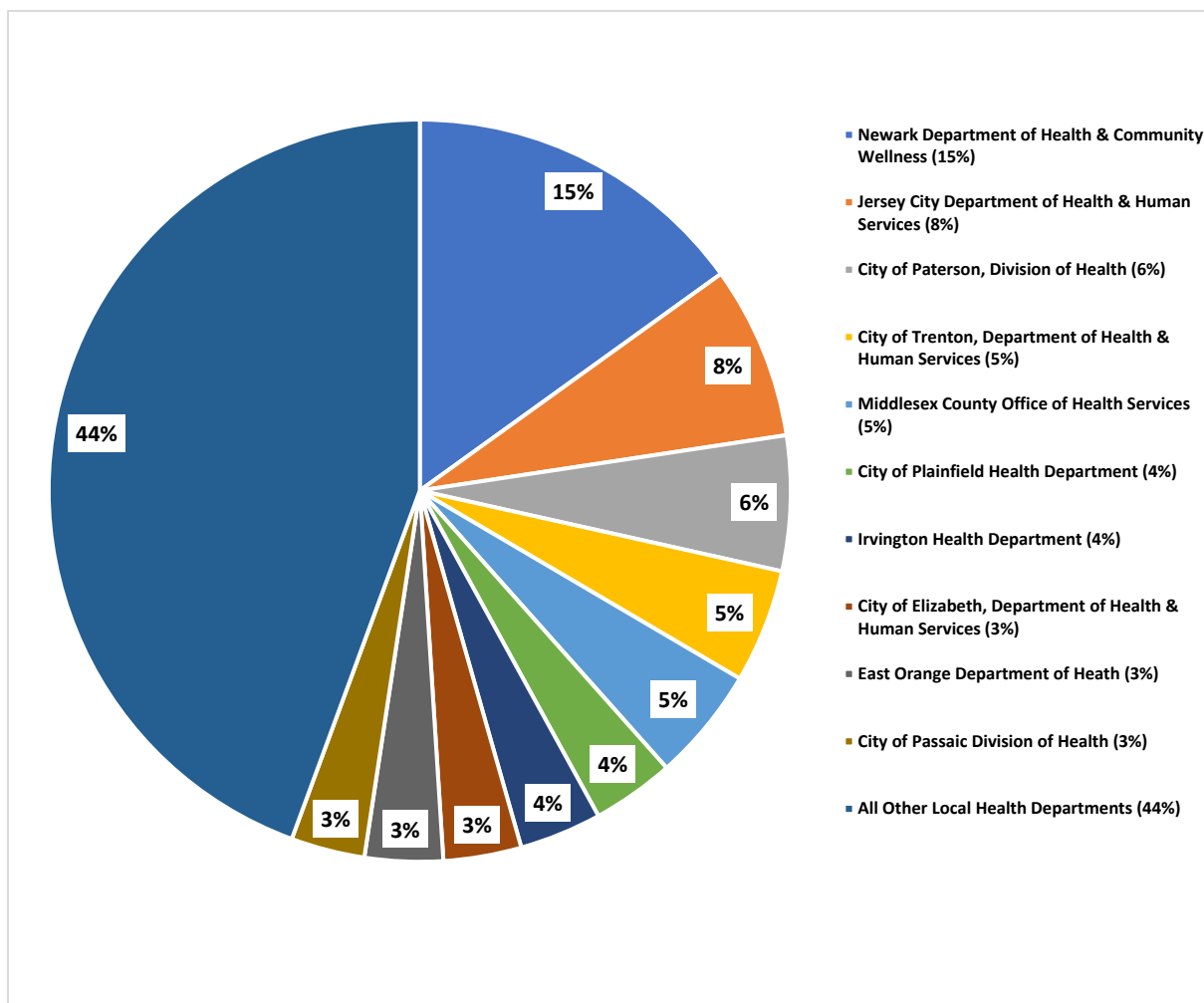
**An environmental investigation is required for all environmental cases referred unless the property was built after 1978 or the property has a lead-free certificate. Click here for [N.J.A.C. 8:51-4.1](#)

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

Data for this table are based on case updates entered in LeadTrax as of August 6, 2021. If a local health department completed an investigation or abatement but did not update data in LeadTrax, it will not be counted as completed in this report.

Figure 8

SFY 2021: Top Ten Local Health Departments with the Highest Percentage of New Environmental Case Referrals* Compared to All Other Local Health Departments

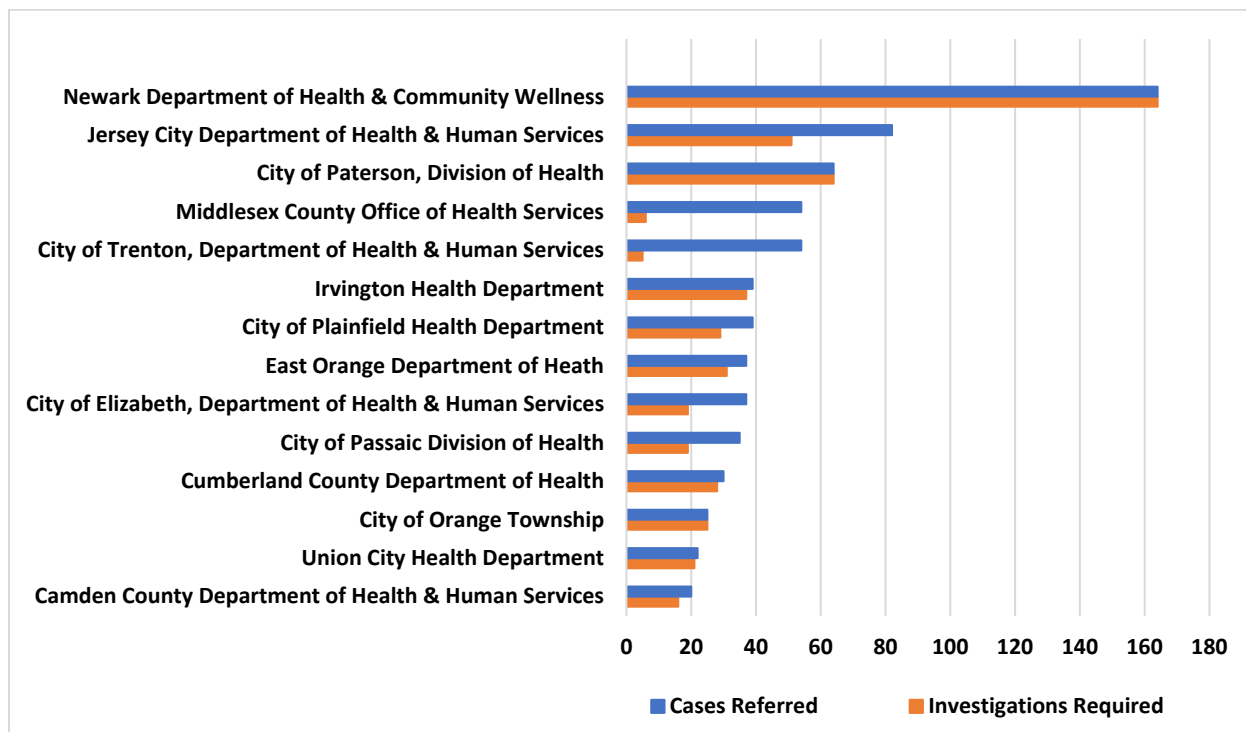


*An environmental case is referred to a local health department when a child with an EBLL is reported who resides at an address that does not have an existing environmental case open.

Data for this table are based on case updates entered in LeadTrax as of August 6, 2021. If a local health department completed an investigation or abatement but did not update data in LeadTrax, it will not be counted as completed in this report.

Figure 9

Local Health Departments with ≥ 20 New Environmental Case Referrals* in SFY 2021 Compared to Environmental Investigations Required**



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

**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. [N.J.A.C. 8:51-4.1](#).

Data for this table are based on case updates entered in LeadTrax as of August 6, 2021. If a local health department completed an investigation or abatement but did not update data in LeadTrax, it will not be counted as completed in this report.

Figure 10

Number of Blood Lead Screenings in NJ for Children <6 years of age, SFY 2017-2021

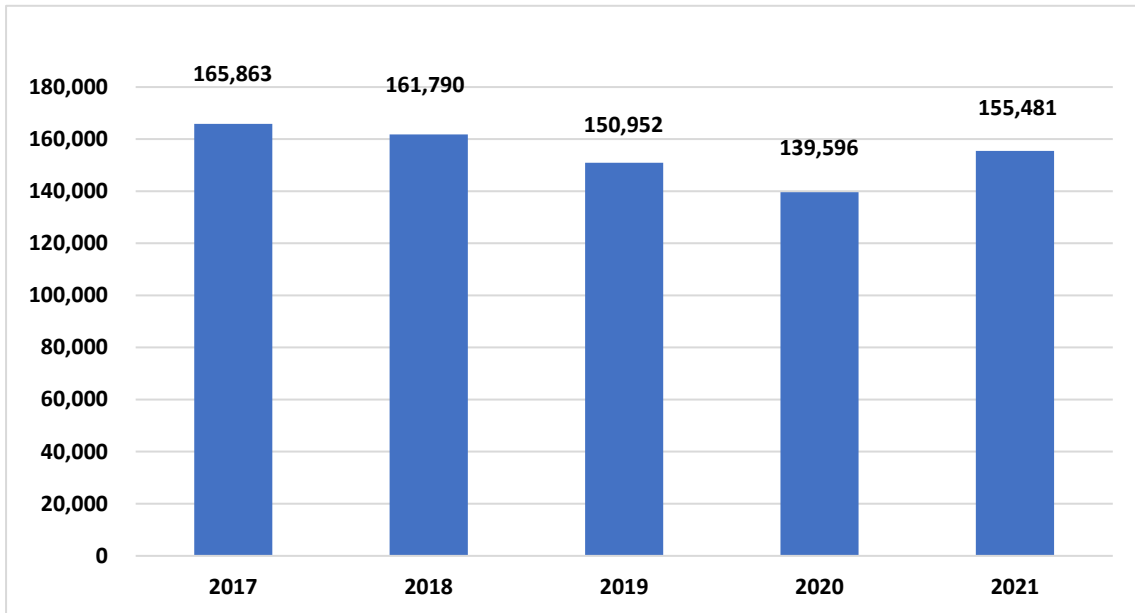


Figure 11

Number of EBLL Screenings in NJ for Children <6 years of age, SFY 2017-2021

