

CHILDHOOD LEAD EXPOSURE IN NEW JERSEY

ANNUAL REPORT

STATE FISCAL YEAR 2019
(July 1, 2018– June 30, 2019)

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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 as defined as the threshold for public health intervention in New Jersey Administrative Code Title 8, Chapter 51 (N.J.A.C. 8:51). 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.

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.

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 2019 includes the period of July 1, 2018 to June 30, 2019.

Testing Number/Percent: Where each test is counted during a reporting timeframe, even if there are multiples 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.

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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) 2019 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 including the following:

- Ninety percent of children born in New Jersey who turned three during SFY 2019 received at least one blood lead test in their lifetime. *From Chapter One, which describes blood lead screening of children less than 17 years of age in New Jersey.*
- A total of 77,845 children between the ages of six and 26 months were screened for lead in SFY 2019. While this number is lower than the 84,211 children aged six to 26 months who were tested in SFY 2018, a decrease in the number of children screened may be due in part to a decrease in the population of children eligible for screening. For example, in 2000 the live birth rate in New Jersey was 13.7 births per 1,000 women, and by 2018, this rate dropped to 11.4 births per 1,000 women. *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 2019, the percent of children less than six years of age with an EBLL dropped from 2.5 to 2.3%. 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.*
- Two new figures were added to the annual report for SFY 2019, including one describing the gender of children less than six years of age with an EBLL (53% male and 46% female) and one describing the peak month of screening for children less than six years of age (August) and the highest month when EBLLs are detected (May through September). *From Chapter Two, which describes blood lead screening of children by age group, geographic location, gender and month of test.*
- The five large municipalities with the highest percent children with an EBLL at or above 5 ug/dL in SFY 2019 include three urban centers in Essex County and are as follows: East Orange (6.6%), Trenton, Atlantic City and Irvington (each 5.9%), and West Orange (4.3%). 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 2019, 1,127 environmental investigations were conducted by local health departments in response to new EBLL cases. Over half (55%) of those environmental investigations resulted in the local health department issuing an order of abatement. Of the 621 new abatements ordered in SFY 2019, the highest volume were in Jersey City (58) and Paterson (56), and a total of 85% were completed. *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 2019 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 2020, 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.

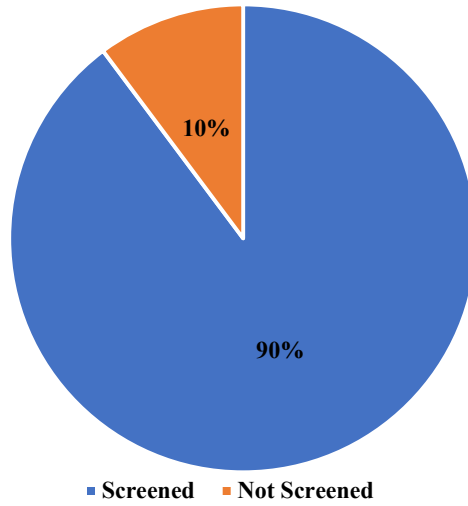
Figures 1a and 1b represent the percentage of children who were born in New Jersey and had at least one blood lead test performed by the year when they turned three or six, respectively, during SFY 2019. To generate statistics for these figures, each child is counted only once, regardless of the number 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 2019. 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, 90% of children who were born in New Jersey and turned three during SFY 2019 had at least one blood lead test in their lifetime. This represents an increase of 6% compared to the same analysis included in the SFY 2018 report. In Figure 1b, 88% of children who were born in New Jersey and turned six during SFY 2019 had at least one blood lead test in their lifetime. Again, this number reflects an increase compared to the SFY 2018 report, where 86% of children who turned six during SFY 2018 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

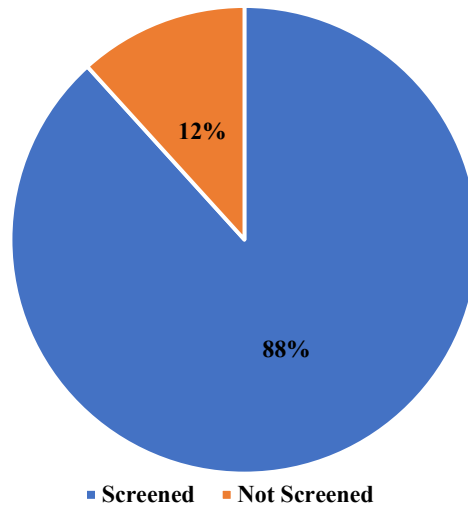
Percentage of Children* Who Turned Three (3) Years of Age During SFY 2019 and Had at Least One Blood Lead Test in their Lifetime



*Number of children born in New Jersey between July 1, 2015 and June 30, 2016 (n = 96,657)
Source: New Jersey Department of Health, Center for Health Statistics, New Jersey Birth Certificate Database

Figure 1b

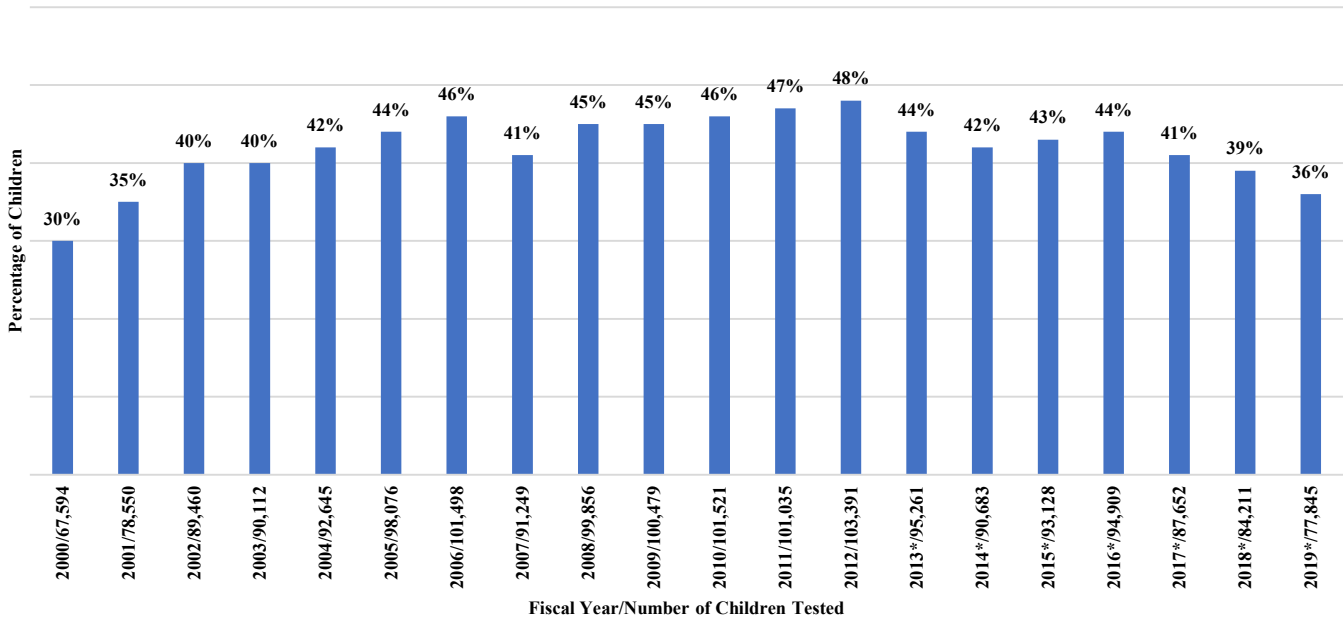
Percentage of Children* Who Turned Six (6) Years of Age During SFY 2019 and Had at Least One Blood Lead Test in their Lifetime



*Number of children born in New Jersey between July 1, 2012 and June 30, 2013 (n = 103,089)
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**



For SFY 2000 through SFY 2010:

- Total Children = 2000 U.S. Census for Children 0-2 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 2019:

- 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
- Percent Screened = (Total Screened / Total Children) * 100

*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.

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 EBL is counted only once, using the highest EBL. The number of children with an EBL 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 2019, the average percentage of children six to 26 months screened by county was 33.4%, with a range of 19.6% (Sussex) to 47.4% (Essex), and the average percentage of children six to 26 months with an EBL by county was 2.0%, with a range of 0.5% (Ocean and Sussex) to 6.8% (Salem). Table 2 shows that in SFY 2019, the average percentage of children six to 26 months screened in large municipalities was 34.8%, with a range of 17.3% (Marlboro Township) to 75.1% (Lakewood), and the average percentage of children six to 26 months with an EBL by large municipality was 1.7%, with a range of no cases (Berkley, Fort Lee, Freehold, Hoboken, Manchester, Teaneck, Toms River, Washington Township in Gloucester County and Winslow) to 6.7% (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 2019, the average percentage of children less than six years of age screened by county was 19.8%, with a range of 9.3% (Sussex) to 39.6% (Essex), and the average percentage of children less than six years of age with an EBL by county was 2.4%, with a range of 0.4% (Sussex) and 7.6% (Salem). Table 4 shows that in SFY 2019, the average percentage of children less than six years of age screened in large municipalities was 23.4%, with a range of 9.3% (Marlboro) to 53% (Irvington and Newark), and the average percentage of children less than six years of age with an EBL by large municipality was 1.7%, with a range of no cases (Freehold and Manchester) to 6.6% (East Orange). Tables 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 EBL and Figure 3b shows children without an EBL (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.

New in this Chapter:

Figure 4a displays the percentage of children with an EBL compared to children without an EBL and shows that in SFY 2019, 97.8% of all children had a BLL less than 5 µg/dL. Figure 4b includes all children with an EBL and compares categories of EBLs. In SFY 2019, 78.9% of children with an EBL had a blood lead level in the lowest category of results (5-9 µg/dL) and 0.1% 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 2019, 53% of children less than six years of age with an EBLL were male and 46% were female.

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

Table 1

SFY 2019: 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	28.5%	1,817	32	4	2	1	0	39	2.1%	1,856
BERGEN	19,955	32.7%	6,469	48	10	5	3	0	66	1.0%	6,535
BURLINGTON	10,166	28.3%	2,819	41	8	2	3	0	54	1.9%	2,873
CAMDEN	13,215	30.8%	3,996	53	13	4	2	0	72	1.8%	4,068
CAPE MAY	1,822	24.0%	430	4	2	2	0	0	8	1.8%	438
CUMBERLAND	4,368	31.2%	1,313	44	6	0	1	0	51	3.7%	1,364
ESSEX	21,569	47.4%	9,838	310	47	11	12	0	380	3.7%	10,218
GLOUCESTER	6,862	22.7%	1,536	16	4	1	0	0	21	1.3%	1,557
HUDSON	17,288	40.0%	6,758	114	31	8	7	0	160	2.3%	6,918
HUNTERDON	2,316	40.0%	908	15	3	1	0	0	19	2.0%	927
MERCER	8,591	37.8%	3,136	89	14	3	3	0	109	3.4%	3,245
MIDDLESEX	19,965	33.5%	6,555	105	19	5	3	0	132	2.0%	6,687
MONMOUTH	13,371	26.7%	3,509	48	5	3	2	0	58	1.6%	3,567
MORRIS	10,700	34.9%	3,704	27	5	2	0	0	34	0.9%	3,738
OCEAN	15,532	45.7%	7,072	27	3	2	0	0	32	0.5%	7,104
PASSAIC	13,727	45.6%	6,081	147	17	7	5	0	176	2.8%	6,257
SALEM	1,549	25.6%	369	22	4	1	0	0	27	6.8%	396
SOMERSET	7,581	33.3%	2,490	30	2	4	1	0	37	1.5%	2,527
SUSSEX	3,099	19.6%	605	3	0	0	0	0	3	0.5%	608
UNION	14,148	44.2%	6,102	114	26	5	3	0	148	2.4%	6,250
WARREN	2,382	29.5%	684	15	2	1	1	0	19	2.7%	703
Unknown address	N/A	N/A	8	1	0	0	0	0	1	11.1%	9
Total	214,727	36.3%	76,199	1,305	225	69	47	0	1,646	2.1%	77,845

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 2019

Total EBLL = Frequency of Children 6-26 Months of Age with an EBLL ≥ 5ug/dL Reported in SFY 2019

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 2019: 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%	413	19	3	2	1	0	25	5.7%	438
BAYONNE	1,528	46.3%	696	7	5	0	0	0	12	1.7%	708
BELLEVILLE	869	42.9%	364	5	4	0	0	0	9	2.4%	373
BERKELEY	509	27.3%	139	0	0	0	0	0	0	0.0%	139
BLOOMFIELD	1,224	43.6%	526	6	2	0	0	0	8	1.5%	534
BRICK	1,531	20.1%	306	1	0	0	0	0	1	0.3%	307
BRIDGEWATER	978	33.5%	324	2	0	2	0	0	4	1.2%	328
CAMDEN	2,838	34.9%	965	22	1	2	1	0	26	2.6%	991
CHERRY HILL	1,449	33.1%	472	6	1	1	0	0	8	1.7%	480
CLIFTON	2,123	44.7%	932	12	3	1	1	0	17	1.8%	949
EAST BRUNSWICK	860	32.9%	281	2	0	0	0	0	2	0.7%	283
EAST ORANGE	1,916	42.8%	768	37	11	2	2	0	52	6.3%	820
EDISON	2,560	33.0%	813	27	4	1	1	0	33	3.9%	846
EGG HARBOR	1,038	28.3%	291	3	0	0	0	0	3	1.0%	294
ELIZABETH	3,943	48.0%	1,832	45	14	0	0	0	59	3.1%	1,891
EVESHAM	1,016	26.7%	269	2	0	0	0	0	2	0.7%	271
EWING	600	43.3%	256	4	0	0	0	0	4	1.5%	260
FORT LEE	725	31.3%	227	0	0	0	0	0	0	0.0%	227
FRANKLIN	1,759	30.3%	528	5	0	0	0	0	5	0.9%	533
FREEHOLD	652	18.1%	118	0	0	0	0	0	0	0.0%	118
GALLOWAY	724	26.7%	190	3	0	0	0	0	3	1.6%	193
GLOUCESTER	1,520	23.4%	352	2	2	0	0	0	4	1.1%	356
HACKENSACK	1,118	37.1%	404	9	1	0	1	0	11	2.7%	415
HAMILTON	1,814	36.6%	656	6	1	0	1	0	8	1.2%	664
HILLSBOROUGH	866	33.0%	281	4	0	1	0	0	5	1.7%	286
HOBOKEN	1,467	23.6%	346	0	0	0	0	0	0	0.0%	346
HOWELL	1,125	23.5%	261	3	0	0	0	0	3	1.1%	264
IRVINGTON	1,692	55.4%	891	43	3	0	0	0	46	4.9%	937
JACKSON	1,100	35.9%	394	1	0	0	0	0	1	0.3%	395
JERSEY CITY	7,192	46.2%	3,214	76	19	5	6	0	106	3.2%	3,320
KEARNY	895	35.4%	313	2	1	1	0	0	4	1.3%	317
LAKEWOOD	6,556	75.1%	4,895	23	1	2	0	0	26	0.5%	4,921
LINDEN	911	41.3%	373	1	1	1	0	0	3	0.8%	376
MANALAPAN	778	22.2%	172	1	0	0	0	0	1	0.6%	173
MANCHESTER	448	22.3%	100	0	0	0	0	0	0	0.0%	100
MARLBORO	767	17.3%	132	1	0	0	0	0	1	0.8%	133

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	1,444	28.5%	409	2	0	0	0	0	2	0.5%	411
MONROE (Gloucester County)	898	22.0%	197	0	1	0	0	0	1	0.5%	198
MONROE (Middlesex County)	655	35.1%	225	3	2	0	0	0	5	2.2%	230
MONTCLAIR	869	32.2%	273	4	3	0	0	0	7	2.5%	280
MOUNT LAUREL	886	25.2%	219	3	0	0	1	0	4	1.8%	223
NEW BRUNSWICK	1,573	46.5%	721	8	2	1	0	0	11	1.5%	732
NEWARK	8,382	54.5%	4,372	163	19	5	8	0	195	4.3%	4,567
NORTH BERGEN	1,498	33.8%	506	1	0	0	0	0	1	0.2%	507
NORTH BRUNSWICK	1,220	31.8%	386	1	1	0	0	0	2	0.5%	388
OLD BRIDGE	1,478	24.2%	356	0	1	0	1	0	2	0.6%	358
PARSIPPANY-TROY HILLS	1,207	31.4%	371	6	2	0	0	0	8	2.1%	379
PASSAIC	2,767	48.8%	1,299	43	5	1	1	0	50	3.7%	1,349
PATERSON	4,632	56.0%	2,501	79	9	4	3	0	95	3.7%	2,596
PENNSAUKEN	845	35.7%	299	1	2	0	0	0	3	1.0%	302
PERTH AMBOY	1,584	44.6%	700	6	1	0	0	0	7	1.0%	707
PISCATAWAY	1,361	31.4%	422	4	1	0	1	0	6	1.4%	428
PLAINFIELD	1,628	61.0%	950	37	4	2	0	0	43	4.3%	993
SAYREVILLE	1,137	28.3%	316	5	0	1	0	0	6	1.9%	322
SOUTH BRUNSWICK	935	20.7%	190	3	1	0	0	0	4	2.1%	194
TEANECK	1,075	26.0%	280	0	0	0	0	0	0	0.0%	280
TOMS RIVER	1,816	29.1%	528	0	0	0	0	0	0	0.0%	528
TRENTON	2,786	44.2%	1,150	68	11	1	2	0	82	6.7%	1,232
UNION	1,250	37.1%	457	4	2	0	1	0	7	1.5%	464
UNION CITY	1,880	33.0%	600	15	4	1	0	0	20	3.2%	620
VINELAND	1,729	31.1%	529	7	2	0	0	0	9	1.7%	538
WASHINGTON (Gloucester County)	900	24.1%	217	0	0	0	0	0	0	0.0%	217
WAYNE	995	38.8%	384	2	0	0	0	0	2	0.5%	386
WEST NEW YORK	1,523	35.0%	527	4	0	1	1	0	6	1.1%	533
WEST ORANGE	1,263	35.3%	433	8	2	1	2	0	13	2.9%	446
WINSLOW	1,122	20.1%	226	0	0	0	0	0	0	0.0%	226
WOODBIDGE	2,495	33.9%	823	19	3	1	0	0	23	2.7%	846

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 2019

Total EBLL = Frequency of Children 6-26 Months of Age with an EBLL ≥ 5ug/dL Reported in SFY 2019

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 2019: Number of Children (<6 years of age) by BLL and County of Residence

County	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	19,909	17.3%	3,372	58	15	5	2	0	80	2.3%	3,452	
BERGEN	61,192	19.4%	11,759	79	17	7	4	0	107	0.9%	11,866	
BURLINGTON	31,546	13.2%	4,072	86	14	3	3	0	106	2.5%	4,178	
CAMDEN	40,195	15.1%	5,968	86	20	7	5	0	118	1.9%	6,086	
CAPE MAY	5,423	12.2%	645	11	5	2	0	0	18	2.7%	663	
CUMBERLAND	12,963	23.1%	2,905	77	10	1	2	0	90	3.0%	2,995	
ESSEX	64,591	39.6%	24,581	819	119	40	33	0	1,011	4.0%	25,592	
GLOUCESTER	21,059	10.6%	2,214	21	5	1	1	0	28	1.2%	2,242	
HUDSON	49,759	32.8%	15,981	264	56	17	11	0	348	2.1%	16,329	
HUNTERDON	7,484	14.1%	1,032	18	3	4	1	0	26	2.5%	1,058	
MERCER	26,052	22.5%	5,647	172	26	6	6	0	210	3.6%	5,857	
MIDDLESEX	60,249	22.2%	13,137	201	42	10	11	1	265	2.0%	13,402	
MONMOUTH	42,404	14.3%	5,969	80	10	4	3	0	97	1.6%	6,066	
MORRIS	33,493	17.0%	5,647	47	11	2	3	0	63	1.1%	5,710	
OCEAN	46,657	25.5%	11,813	50	7	5	2	0	64	0.5%	11,877	
PASSAIC	41,179	34.4%	13,779	311	46	20	16	0	393	2.8%	14,172	
SALEM	4,625	13.7%	585	38	8	2	0	0	48	7.6%	633	
SOMERSET	23,622	16.3%	3,789	56	5	4	1	0	66	1.7%	3,855	
SUSSEX	9,701	9.3%	901	4	0	0	0	0	4	0.4%	905	
UNION	43,085	30.2%	12,720	228	41	13	12	1	295	2.3%	13,015	
WARREN	7,434	13.2%	942	27	7	1	1	0	36	3.7%	978	
Unknown address	N/A	N/A	20	1	0	0	0	0	1	4.8%	21	
Total	652,622	23.1%	147,478	2,734	467	154	117	2	3,474	2.3%	150,952	

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 2019

Total EBLL = Frequency of Children 0-72 Months of Age with an EBLL ≥ 5µg/dL Reported in SFY 2019

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 2019: 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	25.8%	892	39	10	5	2	0	56	5.9%	948	
BAYONNE	4,576	34.2%	1,539	19	6	0	0	0	25	1.6%	1,564	
BELLEVILLE	2,601	33.1%	847	9	4	1	0	0	14	1.6%	861	
BERKELEY	1,565	15.1%	235	1	0	0	0	0	1	0.4%	236	
BLOOMFIELD	3,575	31.8%	1,114	21	2	1	0	0	24	2.1%	1,138	
BRICK	4,558	12.2%	556	2	0	0	0	0	2	0.4%	558	
BRIDGEWATER	3,052	15.0%	452	5	0	2	0	0	7	1.5%	459	
CAMDEN	8,525	20.2%	1,667	42	6	4	1	0	53	3.1%	1,720	
CHERRY HILL	4,588	14.8%	670	7	1	1	0	0	9	1.3%	679	
CLIFTON	6,187	31.4%	1,909	22	6	4	2	0	34	1.7%	1,943	
EAST BRUNSWICK	2,725	18.1%	492	2	0	0	0	0	2	0.4%	494	
EAST ORANGE	5,534	40.8%	2,111	108	27	9	4	0	148	6.6%	2,259	
EDISON	7,774	22.9%	1,721	43	9	4	3	0	59	3.3%	1,780	
EGG HARBOR	3,341	14.7%	486	3	1	0	0	0	4	0.8%	490	
ELIZABETH	11,792	39.8%	4,560	105	22	2	3	0	132	2.8%	4,692	
EVESHAM	3,117	11.4%	351	3	0	0	0	0	3	0.8%	354	
EWING	1,797	22.0%	390	6	0	0	0	0	6	1.5%	396	
FORT LEE	2,171	19.3%	418	1	0	0	0	0	1	0.2%	419	
FRANKLIN	5,182	16.8%	857	11	0	0	0	0	11	1.3%	868	
FREEHOLD	2,156	9.5%	205	0	0	0	0	0	0	0.0%	205	
GALLOWAY	2,240	14.3%	317	3	0	0	0	0	3	0.9%	320	
GLOUCESTER	4,647	10.8%	498	3	2	0	0	0	5	1.0%	503	
HACKENSACK	3,223	28.8%	912	13	2	0	1	0	16	1.7%	928	
HAMILTON	5,480	21.1%	1,136	16	5	0	1	0	22	1.9%	1,158	
HILLSBOROUGH	2,736	14.7%	395	6	0	1	0	0	7	1.7%	402	
HOBOKEN	3,779	14.3%	539	0	1	0	0	0	1	0.2%	540	
HOWELL	3,591	12.5%	446	3	0	0	0	0	3	0.7%	449	
IRVINGTON	4,993	53.3%	2,505	136	14	3	3	0	156	5.9%	2,661	
JACKSON	3,649	19.0%	688	3	1	0	0	0	4	0.6%	692	
JERSEY CITY	20,393	36.8%	7,277	174	37	11	10	0	232	3.1%	7,509	
KEARNY	2,681	32.5%	861	5	4	1	0	0	10	1.1%	871	
LAKEWOOD	18,872	42.8%	8,037	38	3	4	2	0	47	0.6%	8,084	
LINDEN	2,726	30.7%	827	7	1	0	3	0	11	1.3%	838	
MANALAPAN	2,541	11.3%	287	1	0	0	0	0	1	0.3%	288	
MANCHESTER	1,372	13.1%	180	0	0	0	0	0	0	0.0%	180	
MARLBORO	2,606	9.3%	242	1	0	0	0	0	1	0.4%	243	

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	12.5%	575	4	0	0	0	0	4	0.7%	579
MONROE (Gloucester County)	2,794	10.9%	304	0	1	0	0	0	1	0.3%	305
MONROE (Middlesex County)	2,082	16.6%	335	8	2	1	0	0	11	3.2%	346
MONTCLAIR	2,701	19.8%	524	6	3	0	1	0	10	1.9%	534
MOUNT LAUREL	2,705	10.9%	290	5	0	0	1	0	6	2.0%	296
NEW BRUNSWICK	4,753	28.0%	1,305	19	5	1	0	0	25	1.9%	1,330
NEWARK	24,831	53.1%	12,669	431	51	19	20	0	521	3.9%	13,190
NORTH BERGEN	4,473	27.6%	1,229	4	1	1	0	0	6	0.5%	1,235
NORTH BRUNSWICK	3,502	20.6%	710	7	4	0	1	0	12	1.7%	722
OLD BRIDGE	4,548	15.4%	690	7	2	0	2	0	11	1.6%	701
PARSIPPANY-TROY HILLS	3,671	16.3%	583	11	2	0	1	0	14	2.3%	597
PASSAIC	8,226	43.5%	3,491	70	12	3	4	0	89	2.5%	3,580
PATERSON	13,987	45.6%	6,141	201	25	10	6	0	242	3.8%	6,383
PENNSAUKEN	2,696	17.1%	458	1	2	0	1	0	4	0.9%	462
PERTH AMBOY	4,756	41.4%	1,951	17	1	0	1	0	19	1.0%	1,970
PISCATAWAY	3,903	21.2%	815	8	2	0	1	1	12	1.5%	827
PLAINFIELD	4,961	52.3%	2,511	67	9	6	1	0	83	3.2%	2,594
SAYREVILLE	3,338	19.0%	619	10	2	2	1	0	15	2.4%	634
SOUTH BRUNSWICK	3,130	11.9%	365	5	2	0		0	7	1.9%	372
TEANECK	3,142	15.5%	486	0	0	0	1	0	1	0.2%	487
TOMS RIVER	5,617	17.3%	967	3	0	1	0	0	4	0.4%	971
TRENTON	7,998	34.4%	2,588	135	19	4	5	0	163	5.9%	2,751
UNION	3,701	23.9%	871	8	2	1	2	0	13	1.5%	884
UNION CITY	5,742	32.2%	1,811	33	5	2		0	40	2.2%	1,851
VINELAND	5,058	21.7%	1,084	11	2	0	0	0	13	1.2%	1,097
WASHINGTON (Gloucester County)	2,968	10.1%	299	0	1	0	0	0	1	0.3%	300
WAYNE	3,105	19.1%	591	2	1	0	0	0	3	0.5%	594
WEST NEW YORK	4,258	34.7%	1,466	11	0	1	1	0	13	0.9%	1,479
WEST ORANGE	3,635	24.2%	840	29	4	2	3	0	38	4.3%	878
WINSLOW	3,336	10.8%	360	1	0	0	0	0	1	0.3%	361
WOODBIDGE	7,326	24.6%	1,760	34	7	1	0	0	42	2.3%	1,802

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 2019

Total EBLL = Frequency of Children 0-72 Months of Age with an EBLL ≥ 5µg/dL Reported in SFY 2019

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 5

SFY 2019: 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	3,654	58	17	5	2	0	82	2.2%	3,736
BERGEN	13,634	88	20	7	6	0	121	0.9%	13,755
BURLINGTON	4,381	90	14	3	3	0	110	2.4%	4,491
CAMDEN	6,455	93	22	7	5	0	127	1.9%	6,582
CAPE MAY	709	11	6	2	0	0	19	2.6%	728
CUMBERLAND	3,292	84	12	3	3	0	102	3.0%	3,394
ESSEX	30,234	931	128	46	41	0	1,146	3.7%	31,380
GLOUCESTER	2,353	26	5	1	1	0	33	1.4%	2,386
HUDSON	19,796	307	62	21	11	0	401	2.0%	20,197
HUNTERDON	1,082	18	3	4	1	0	26	2.3%	1,108
MERCER	7,630	194	26	7	7	0	234	3.0%	7,864
MIDDLESEX	16,386	248	49	11	13	1	322	1.9%	16,708
MONMOUTH	7,325	94	10	4	3	0	111	1.5%	7,436
MORRIS	6,269	54	11	3	3	0	71	1.1%	6,340
OCEAN	12,914	56	8	6	2	0	72	0.6%	12,986
PASSAIC	16,248	340	53	22	17	0	432	2.6%	16,680
SALEM	629	41	8	2	0	0	51	7.5%	680
SOMERSET	4,469	65	7	5	1	1	79	1.7%	4,548
SUSSEX	1,030	5	0	0	0	0	5	0.5%	1,035
UNION	15,406	254	45	15	12	1	327	2.1%	15,733
WARREN	1,032	28	7	1	1	0	37	3.5%	1,069
Unknown address	24	1	0	0	0	0	1	4.0%	25
Total	174,952	3,086	513	175	132	3	3,909	2.2%	178,861

Total Screened = Frequency of Children < 17 Years of Age with a Blood Lead Test Reported in SFY 2019

Total EBLL = Frequency of Children < 17 Years of Age with an EBLL ≥ 5µg/dL Reported in SFY 2019

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

Figure 3a

**SFY 2019: Frequency of Children with an EBLL by Age
(n=3,909)**

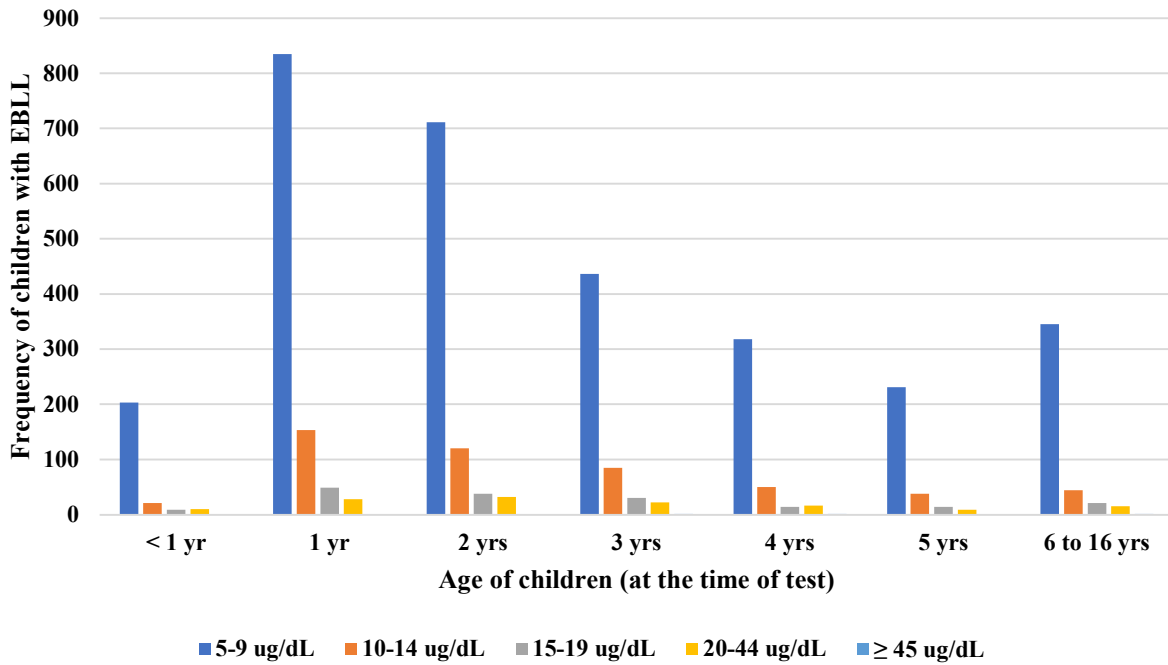


Figure 3b

**SFY 2019: Frequency of Children without an EBLL by Age
(n=174,952)**

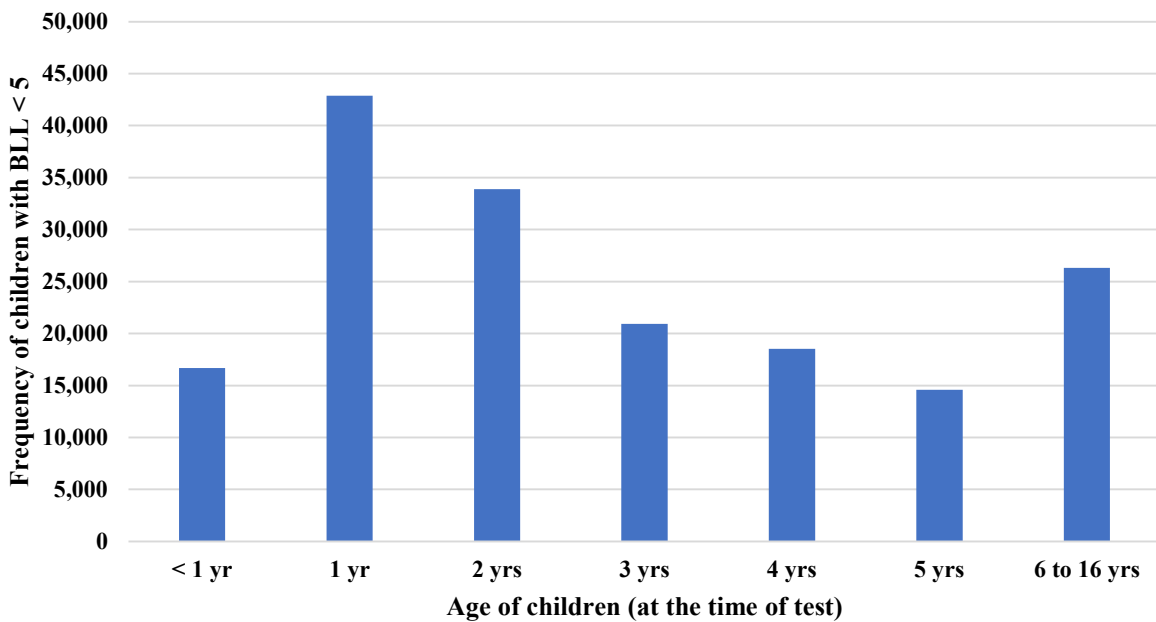


Figure 4a

**SFY2019: Percentage of Children with an EBLL
(n=178,861)**

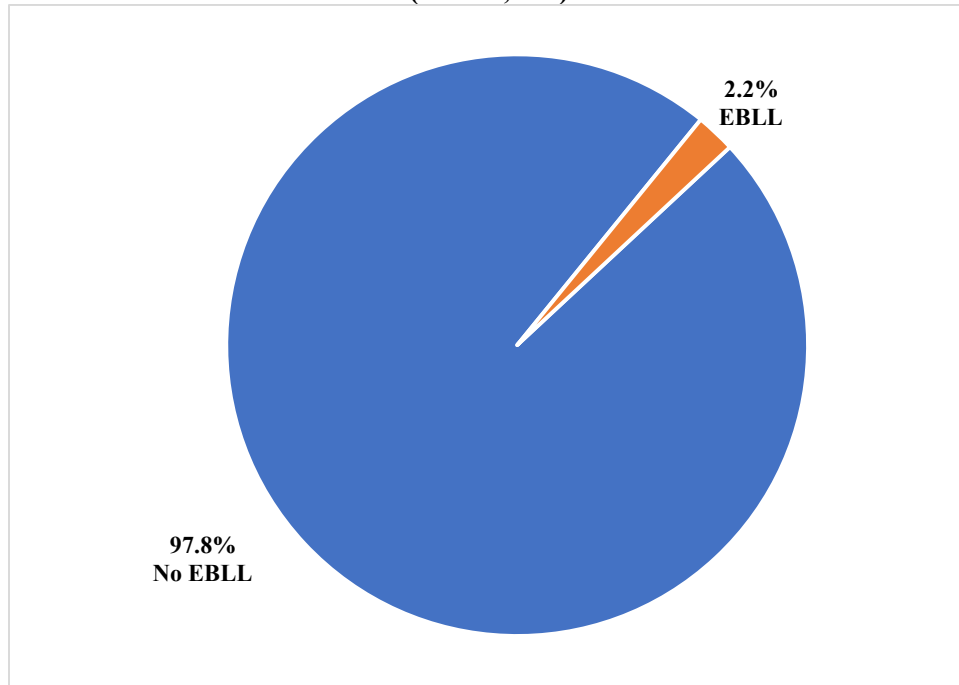


Figure 4b

**SFY 2019: Percentage of Children by Category of EBLL
(n=3,909)**

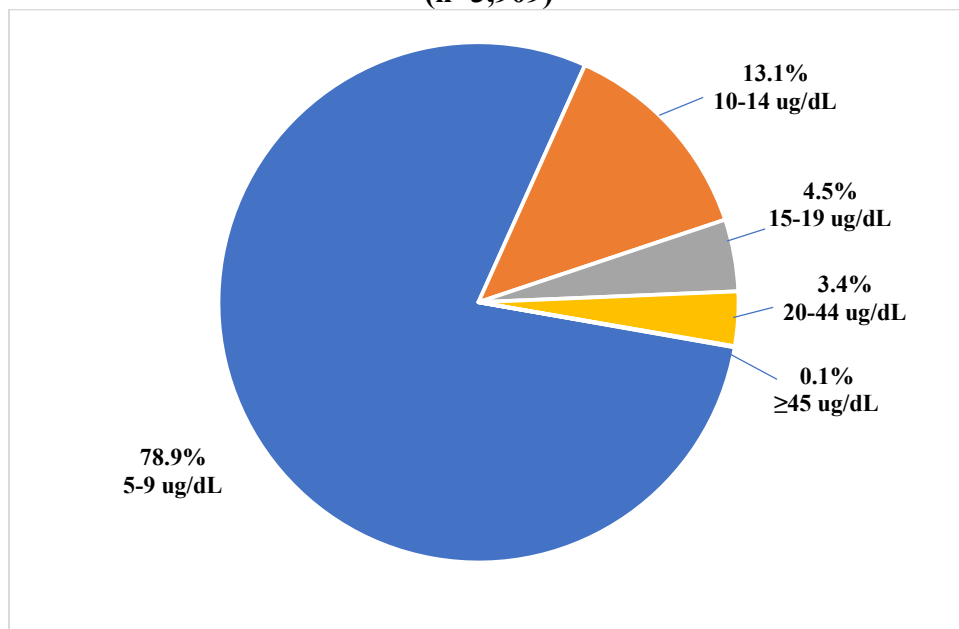


Figure 5

SFY 2019: Percentage of Children Less Than Six Years of Age with an EBLL by Gender (n=3,474)

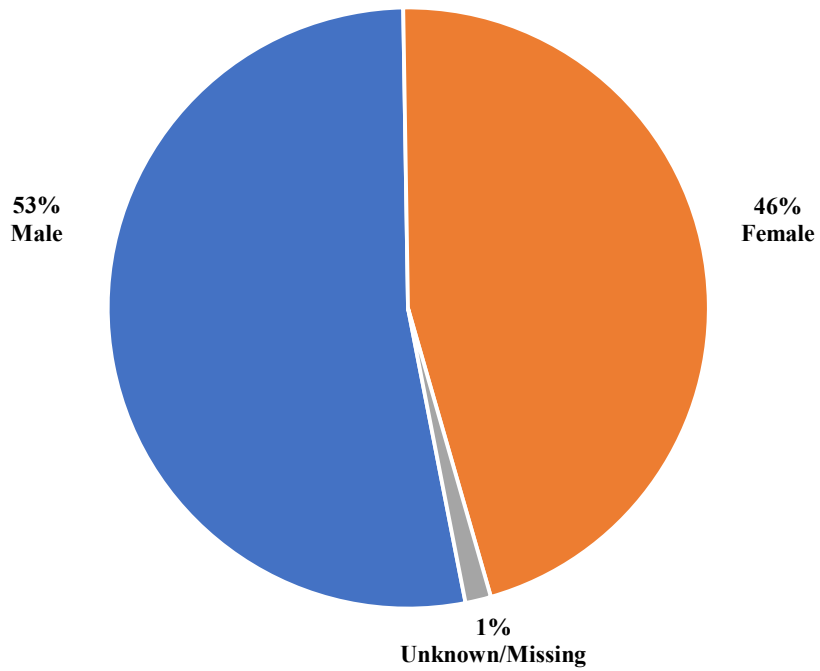
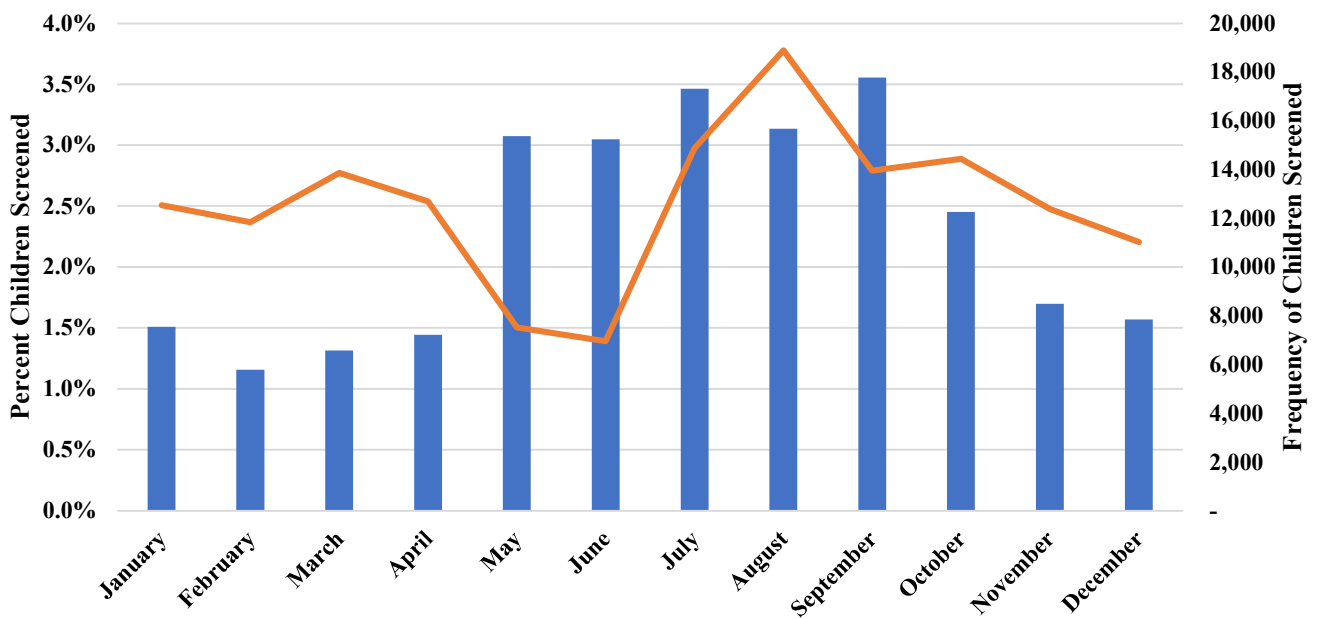


Figure 6

SFY 2019: Percentage of Children Less Than Six Years of Age with EBLL by Month of Test (n=3,474)



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 2019, 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 2019. Irvington and Newark had the highest percentage of children less than six years of age screened in SFY 2019 (53%), followed by Plainfield (52%), Paterson (46%), and the City of Passaic (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 percent children with an EBL at or above 5 $\mu\text{g}/\text{dL}$ in SFY 2019 include East Orange (6.6%), Trenton, Atlantic City, and Irvington (each 5.9%), and West Orange (4.3%). 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 2019**

Municipality (County)	% Children < 6 Years Screened for Lead
Irvington (Essex)	53%
Newark (Essex)	53%
Plainfield (Union)	52%
Paterson (Passaic)	46%
City of Passaic (Passaic)	44%
Lakewood (Ocean)	43%
Perth Amboy (Middlesex)	41%
East Orange (Essex)	41%
Elizabeth (Union)	40%
Jersey City (Hudson)	37%

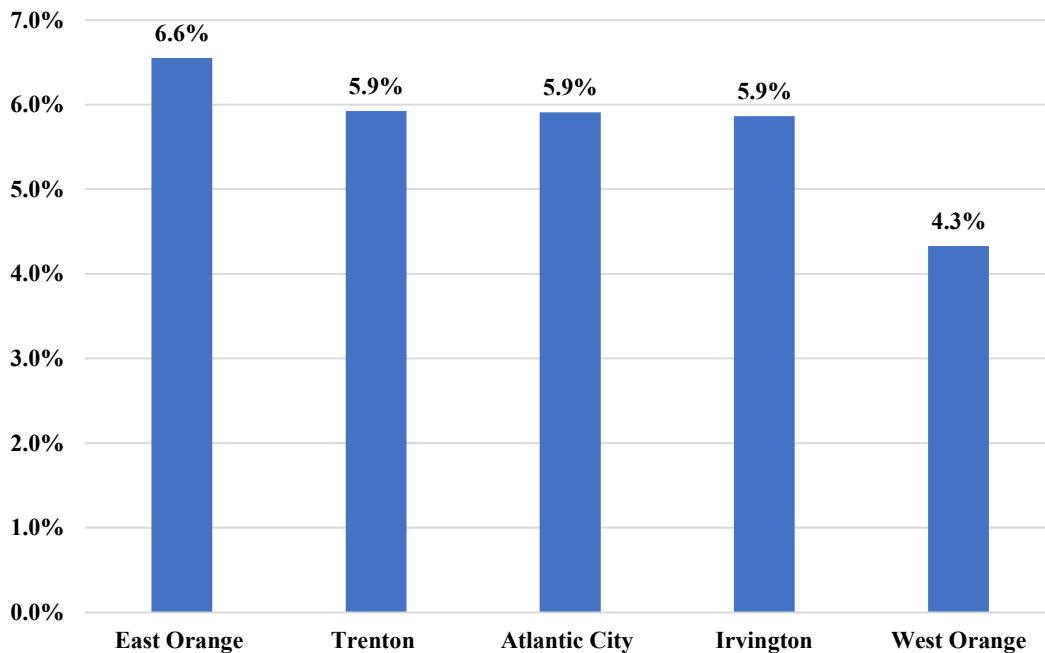
Table 8

Top Ten Large Municipalities Ranked by Highest Percentage of Children Less Than Six (6) Years of Age with an EBLL in SFY 2019

Municipality (County)	% Children < 6 Years with an EBLL
East Orange (Essex)	6.6%
Trenton (Mercer)	5.9%
Atlantic City (Atlantic)	5.9%
Irvington (Essex)	5.9%
West Orange (Essex)	4.3%
Newark (Essex)	3.9%
Paterson (Passaic)	3.8%
Edison (Middlesex)	3.3%
Plainfield (Union)	3.2%
Monroe (Middlesex)	3.2%

Figure 7

Top Five Large Municipalities with the Highest Percentage of Children Less Than Six (6) Years of Age with an EBLL in SFY 2019



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 to be performed by certified lead abatement contractors; and 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 2019, Essex County had the highest number of environmental case referrals (407), followed by Hudson (171), Passaic (158) and Union (142), whereas Cape May had the fewest number of environmental case referrals (0), followed by Sussex (2), Gloucester (4) and Hunterdon. As shown in Table 9, nearly half of the cases referred for environmental investigation resulted in a new order of abatement, where 621 new abatements were issued throughout New Jersey (all counties except Cape May) in SFY 2019. With the exception of Hunterdon and Sussex, all counties reported that at least 80% of abatements ordered in SFY 2019 had been completed.

Table 10 and Figure 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 (226) in SFY 2019, followed by the Jersey City Department of Health & Human Services (113) and the City of Paterson Division of Health (100).

Figure 9 compares the top ten LHDs with the highest environmental case burden to all other LHDs, where the

Table 9

SFY 2019: Environmental Case Activity Status by County

County	Cases Referred*	Investigation Required**	% Investigation Required	Investigation Completed***	% Investigation Completed	Abatement Required	Abatement Completed	% Abatement Completed
ATLANTIC	28	17	60%	7	41%	8	8	100%
BERGEN	52	52	100%	42	81%	42	41	98%
BURLINGTON	22	21	96%	9	43%	12	12	100%
CAMDEN	36	34	94%	27	79%	13	12	92%
CAPE MAY	0	0	N/A	N/A	N/A	N/A	N/A	N/A
CUMBERLAND	43	43	100%	38	88%	33	27	82%
ESSEX	407	297	73%	129	43%	134	125	93%
GLOUCESTER	4	4	100%	4	100%	1	1	100%
HUDSON	171	135	79%	102	76%	93	91	98%
HUNTERDON	7	5	71%	1	20%	4	1	25%
MERCER	118	86	73%	35	41%	36	35	97%
MIDDLESEX	117	55	47%	40	73%	34	33	97%
MONMOUTH	47	44	94%	25	57%	30	25	83%
MORRIS	30	22	73%	11	50%	8	8	100%
OCEAN	15	9	60%	0	0%	0	N/A	N/A
PASSAIC	158	145	92%	113	78%	89	79	89%
SALEM	12	12	100%	6	50%	5	4	80%
SOMERSET	26	19	73%	11	58%	11	11	100%
SUSSEX	2	1	50%	0	0%	1	0	0%
UNION	142	118	83%	54	46%	64	57	89%
WARREN	9	8	89%	2	25%	3	3	100%
TOTAL	1,446	1,127	78%	656	58%	621	573	92%

*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.

***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 28, 2019. If a local health department completed an investigation or abatement but did not update data in LeadTrax, it will be not be counted as completed in this report.

Table 10

SFY 2019: 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	20	10	1	10%	1	1	100%
Atlantic County Division of Public Health	8	7	6	86%	7	7	100%
Bayonne Health Department	42	40	33	83%	27	27	100%
Bergen County Department of Health Services	22	22	18	82%	18	18	100%
Bernards Township Health Department	1	1	0	0%	0	N/A	N/A
Bloomfield Department of Health & Human Services	17	16	15	94%	14	14	100%
Borough of Roselle	8	4	0	0%	1	0	0%
Bridgewater Township Health Department	2	0	N/A	N/A	0	N/A	N/A
Burlington County Health Department	22	21	9	43%	12	12	100%
Camden County Department of Health & Human Services	36	34	27	79%	13	12	92%
City of Elizabeth, Department of Health & Human Services	48	41	17	41%	20	18	90%
City of Orange Township	20	15	11	73%	11	11	100%
City of Paterson, Division of Health	100	99	82	83%	56	48	86%
City of Plainfield Health Department	52	49	27	55%	30	26	87%
City of Trenton, Department of Health & Human Services	87	69	30	43%	31	30	97%
City of Vineland	11	11	10	91%	6	3	50%
Clark Health Department	1	1	1	100%	1	1	100%
Clifton Health Department	54	42	28	67%	32	30	94%
Colts Neck Township Health Department	1	0	N/A	N/A	0	N/A	N/A
Cumberland County Department of Health	32	32	28	88%	27	24	89%
East Hanover Health Department	5	3	1	33%	1	1	100%
East Orange Department of Health	57	53	39	74%	40	39	98%
Edison Department of Health & Human Services	21	4		0%	1	1	100%
Englewood Health Department	1	1	1	100%	1	1	100%
Fair Lawn Health Department	1	1		0%	1	1	100%
Fort Lee Health Department	2	2	1	50%	2	1	50%
Freehold Health Department	4	3	2	67%	1	1	100%
Gloucester County Department of Health & Senior Services	4	4	4	100%	1	1	100%

Local Health Department	Cases Referred*	Investigation Required**	Investigation Completed***	% Investigation Completed	Abatement Required	Abatement Completed	% Abatement Completed
Hackensack Department of Health	10	10	10	100%	10	10	100%
Hamilton Township Division of Health	22	10	1	10%	1	1	100%
Hillsborough Township Health Department	1	0	N/A	N/A	0	N/A	N/A
Hoboken Health Department	1	1	1	100%	1	1	100%
Hunterdon County Department of Health	7	5	1	20%	4	1	25%
Irvington Health Department	60	56	16	29%	11	11	100%
Jersey City Department of Health & Human Services	113	79	57	72%	58	56	97%
Kearny Department of Health	2	2	1	50%	1	1	100%
Lawrence Township Health Department	3	3	2	67%	2	2	100%
Linden Board of Health	6	3	0	0%	0	N/A	N/A
Livingston Health Department / Millburn Health Department	1	1	1	100%	1	1	100%
Long Branch Department of Health	5	5	3	60%	3	3	100%
Madison Health Department	3	3	3	100%	3	3	100%
Maplewood Health Department	4	4	3	75%	3	3	100%
Mercer County Division of Public Health	3	1	0	0%	0	N/A	N/A
Mid-Bergen Regional Health Commission	11	11	7	64%	6	6	100%
Middle-Brook Regional Health Commission	2	1	0	0%	0	N/A	N/A
Middlesex County Office of Health Services	66	47	40	85%	33	32	97%
Monmouth County Board of Health	24	23	12	52%	17	12	71%
Monmouth County Regional Health Commission # 1	13	13	8	62%	9	9	100%
Montclair Health Department	7	7	4	57%	7	6	86%
Morris County Office of Health Management	4	4	3	75%	4	4	100%
Mount Olive Township Health Department	9	9	5	56%	1	1	100%
N.W. Bergen Regional Health Commission	2	2	2	100%	1	1	100%
Newark Department of Health & Community Wellness	226	132	33	25%	40	33	83%
Ocean County Health Department	15	9	0	0%	0	N/A	N/A
Palisades Park Health Department	1	1	1	100%	1	1	100%
Passaic County Department of Health	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
Pequanock Township Health Department	3	0	N/A	N/A	0	N/A	N/A
Rahway Health Department	11	7	2	29%	3	3	100%
Randolph Township Health Department	2	1	0	0%	0	N/A	N/A
Rockaway Township Health Department	4	2	0	0%	0	N/A	N/A
Salem County Department of Health	12	12	6	50%	5	4	80%
Somerset County Department of Health	21	18	11	61%	11	11	100%
South Brunswick Health Department	7	1	0	0%	0	N/A	N/A
Sussex County Department of Health and Human Services, Division of Health	2	1	0	0%	1	0	0%
Township of North Bergen	13	13	10	77%	6	6	100%
Township of South Orange	3	2	2	100%	2	2	100%
Township of West Milford Department of Health	1	1	1	100%	1	1	100%
Union Township Health Department	10	7	1	14%	3	3	100%
Village of Ridgewood Health Department	2	2	2	100%	2	2	100%
Warren County Health Department	9	8	2	25%	3	3	100%
Washington Township Health Department	1	1	1	100%	1	1	100%
Wayne Health Department	2	2	2	100%	0	N/A	N/A
West Orange Health Department	12	11	5	45%	5	5	100%
West Windsor Health Department	3	3	2	67%	2	2	100%
Westfield Regional Health Department	4	4	4	100%	4	4	100%
Woodbridge Township Health & Human Services	23	3	0	0%	0	N/A	N/A

*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.

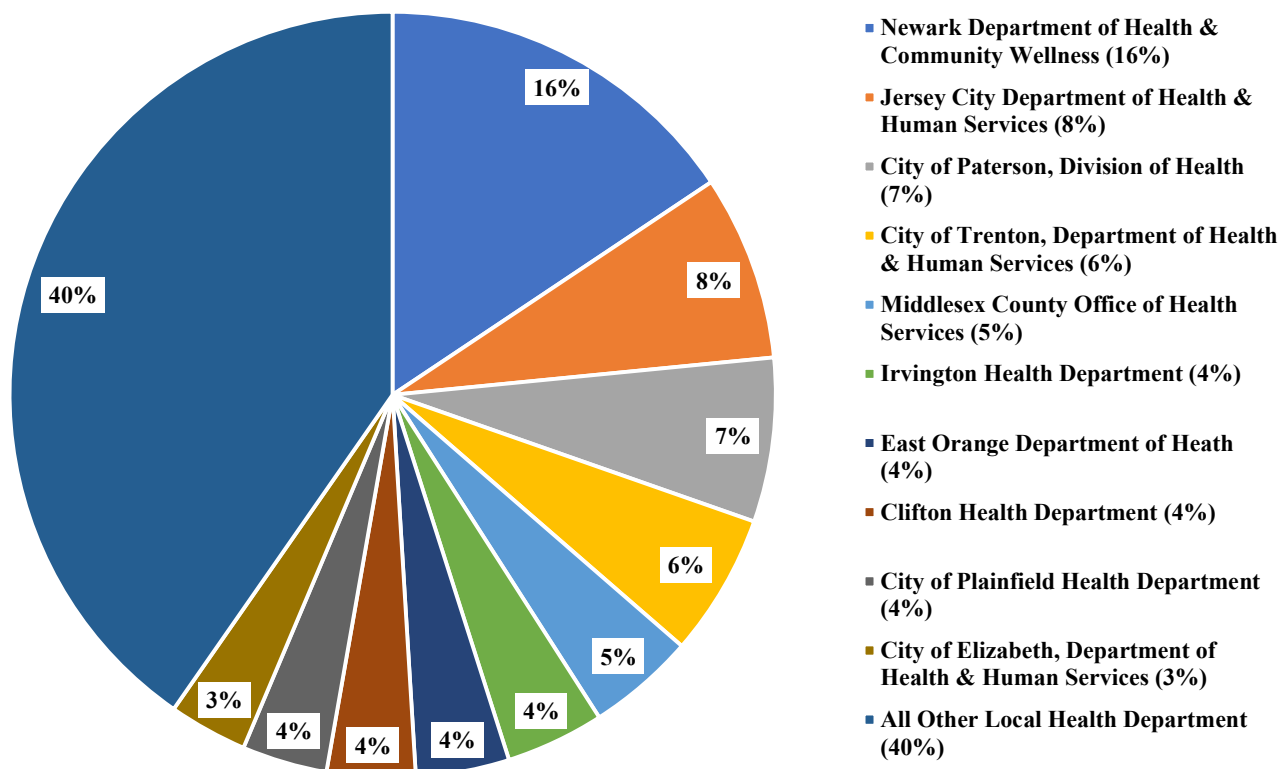
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***An environmental investigation is completed when abatement is completed and a child's blood lead level is below 5 ug/dL.

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Figure 8

SFY 2019: Top Ten Local Health Departments with the Highest Percentage of New Environmental Case Referrals* Compared to All Other Local Health Departments

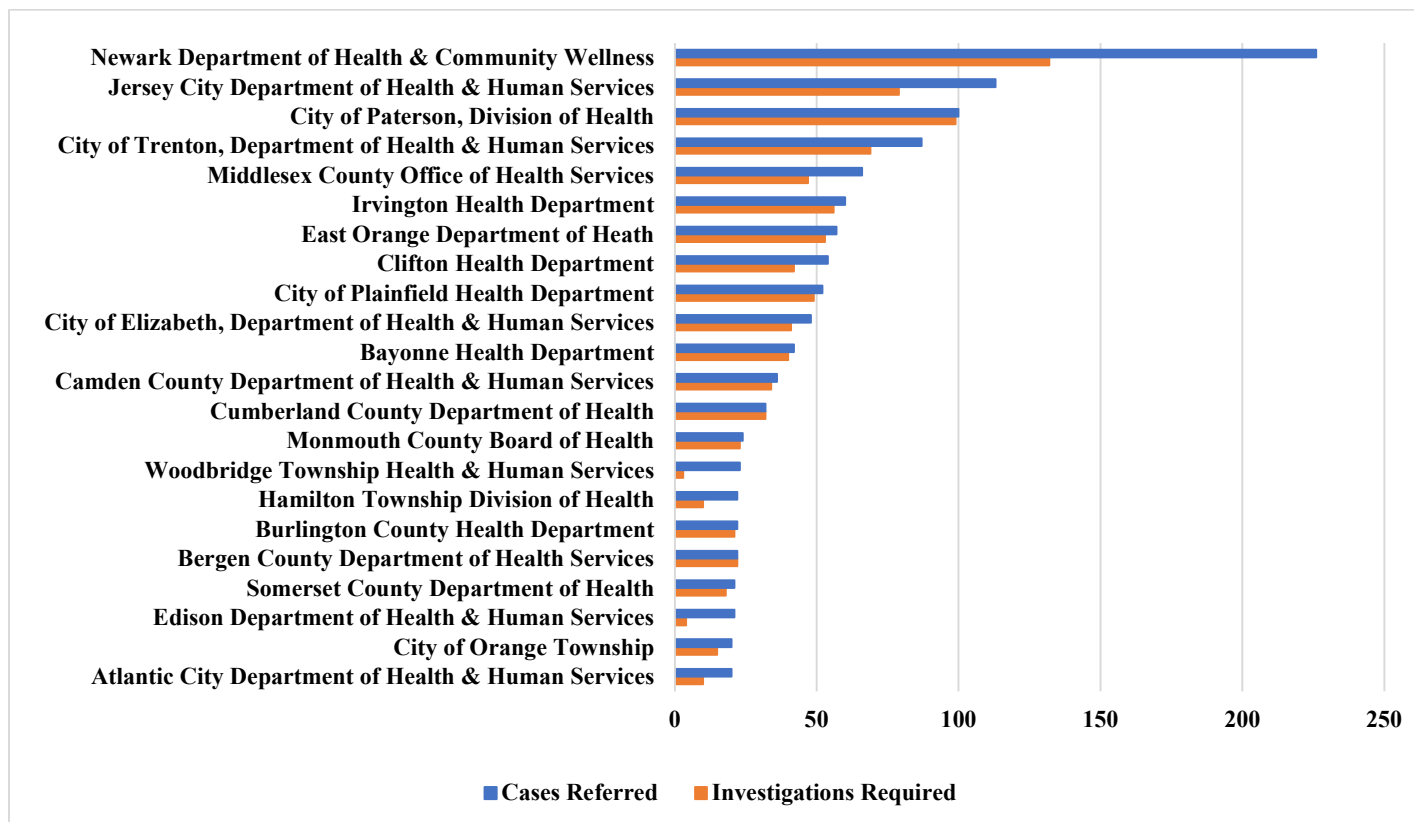


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Figure 9

**Local Health Departments with ≥ 20 New Environmental Case Referrals* in SFY 2019
Compared to Environmental Investigations Required****



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