CHILDHOOD LEAD EXPOSURE IN NEW JERSEY

ANNUAL REPORT

STATE FISCAL YEAR 2018
(July 1, 2017– June 30, 2018)

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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.

Confirmed BLL: A blood lead level obtained from a venous blood sample.

Department: Refers to 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). In SFY 2018, the threshold for public health intervention was any blood lead level greater than or equal 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.

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 2018 includes the period of July 1, 2017 to June 30, 2018.

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.

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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 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) 2018 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:

- A total of 84% of children born in New Jersey who turned three during SFY 2018 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 191,077 children less than 17 years of age were tested for lead in SFY 2018. While this number is lower than the 199,254 children tested for lead in SFY 2017, these screening statistics may be impacted by factors such as change in population, where there may be fewer children in the screening age group, and screening saturation, where children may have already been tested in a previous year. *From Chapter Two, which describes blood lead screening of children by age group and geographic location.*

- In SFY 2018, 4,472 or 2.3% of all children less than 17 years of age had an EBLL. It is not valid to compare this number to the percent EBLL reported in previous years because in SFY 2018 the definition of an EBLL was lowered from 10 ug/dL to 5 ug/dL. 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 elevated blood lead levels in children by age group and geographic location.*

- The five large municipalities with the highest percent children with an EBLL at or above 5 ug/dL in SFY 2018 include Irvington and Trenton (each 6.4%), East Orange (5.0%), Atlantic City (4.8%) and the City of Newark (4.4%). 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 2018, more than 1,000 new EBLL cases were referred to local health departments for environmental investigations, and of the local health departments that received at least 20 new cases, an average of 81% of environmental investigations were completed and an average of 90% of abatements 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. On September 18, 2017, the Department modified its childhood lead regulations to lower the EBLL threshold by which local health departments are required to intervene. On October 23, 2017, in recognition of National Lead Poisoning Prevention Week, the Department expanded 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 recognition of the increased number of children who would be identified with elevated blood levels under the new standard, $10 million in new state support was approved for county and local health agencies to test more children for lead exposure and intervene earlier with education, environmental home inspections, and nurse case management.

In addition, throughout the SFY, the Department provided grant support to childhood lead partners including regional coalitions, to support primary prevention, outreach and education initiatives; Isles, to support the New Jersey Health Homes Training Center; the New Jersey Chapter of the American Academy of Pediatrics (NJAAP), to increase screening awareness among pediatricians; and Green and Healthy Homes Initiative (GHHI) to provide technical assistance to public health and community partners.

In the upcoming SFY 2019, 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.

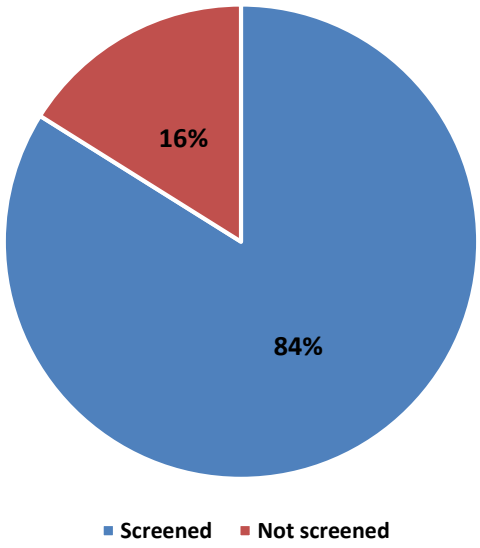
Figures 1a and 1b represent the percentage of children who had at least one blood lead test performed by the year when they turned three or six, respectively, during SFY 2018. To generate statistics for these figures, each child is counted only once, regardless of the number of tests the child has received. 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 2018. 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, 84% of children who turned three during SFY 2018 had at least one blood lead test in their lifetime. This represents an increase of 7% compared to the same analysis included in the SFY 2017 report. In Figure 1b, 86% of children who turned six during SFY 2018 had at least one blood lead test in their lifetime. Again, this number reflects an increase compared to the SFY 2017 report, where 84% of children who turned six during SFY 2017 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 a previous year.

Figure 1a

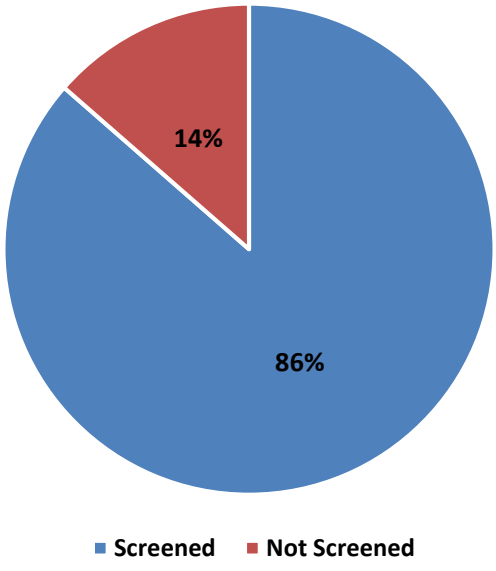
Percentage of Children* Who Turned Three (3) Years of Age During SFY 2018 and Had at Least One Blood Lead Test in their Lifetime



*Number of children born in New Jersey between July 1, 2014 and June 30, 2015 (n = 99,678)
Source: New Jersey Department of Health, Center for Health Statistics, New Jersey Birth Certificate Database

Figure 1b

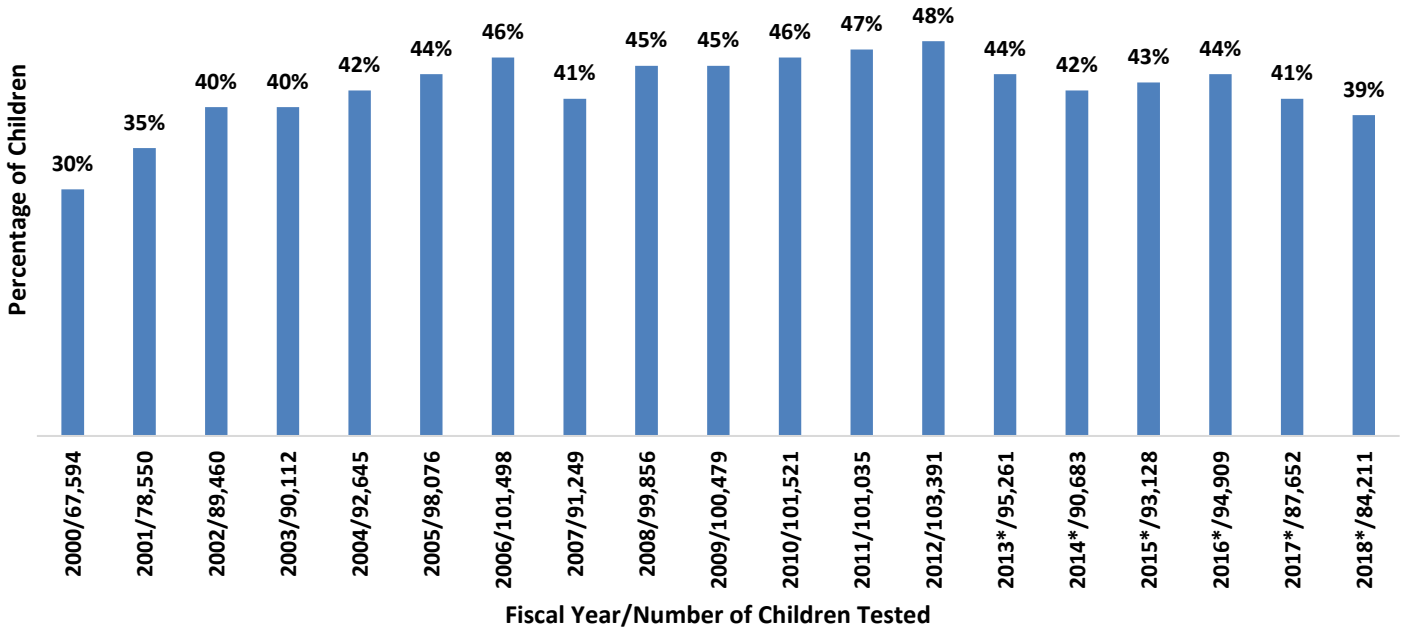
Percentage of Children* Who Turned Six (6) Years of Age During SFY 2018 and Had at Least One Blood Lead Test in their Lifetime



*Number of children born in New Jersey between July 1, 2011 and June 30, 2012 (n = 104,093)
Source: New Jersey Department of Health, Center for Health Statistics, New Jersey Birth Certificate Database

Figure 2

Trend in Percentage* of Children (six (6) to 26*/29 months of age) Tested 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 2018:

- 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 as defined in N.J.A.C. 8:51. This chapter describes blood lead screening and EBLL prevalence among children by age and county/municipality of residence (which may differ from the county/municipality of exposure). To protect 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 this 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 2000 or 2010 U.S. Census. This method generates screening and prevalence statistics that may not reflect the current population, as ten-year census counts do not capture annual changes in the population.

It is important to note, prior to SFY 2018, EBLLs were defined as any BLL at or above 10 μg/dL, but in SFY 2018, the Department lowered the threshold requiring public health intervention to 5 μg/dL, as recommended by the Centers for Disease Control and Prevention Advisory Committee for Childhood Lead Poisoning Prevention. Since the definition of EBLLs has changed, the number/percent EBLLs from this chapter ***cannot*** be compared with the number/percent EBLLs from previous annual reports.

Tables 1 and 2 show screening numbers and results by county and large municipality, respectively, for children six to 26 months of age. Table 1 shows that in SFY 2018, the average percentage of children six to 26 months screened by county was 36% and the average percentage of children six to 26 months with EBLLs by county was 2%. Table 2 shows that in SFY 2018, the percentage of children six to 26 months screened in large municipalities ranged from 20.2% (Washington Township, Gloucester County) to 73.9% (Lakewood, Ocean County). Tables 3 and 4 display screening numbers and results by county and large municipality, respectively, for children less than six years of age.

Figures 3a, 3b and 4 and Table 5 display screening numbers and results for children less than 17 years of age. Table 5 shows that 97.7% of all children had a BLL less than 5 μg/dL in SFY 2018.

Table 1

SFY 2018: 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	32.2%	2,056	32	8	2	0	0	42	2.0%	2,098
BERGEN	19,955	38.9%	7,672	70	18	1	5	0	94	1.2%	7,766
BURLINGTON	10,166	29.8%	2,966	48	8	2	4	1	63	2.1%	3,029
CAMDEN	13,215	32.1%	4,184	51	3	1	3	0	58	1.4%	4,242
CAPE MAY	1,822	25.9%	464	4	2	1	0	0	7	1.5%	471
CUMBERLAND	4,368	34.6%	1,454	51	2	1	2	0	56	3.7%	1,510
ESSEX	21,569	47.3%	9,782	345	59	10	13	1	428	4.2%	10,210
GLOUCESTER	6,862	22.8%	1,548	13	1	1	0	0	15	1.0%	1,563
HUDSON	17,288	45.2%	7,585	165	36	13	10	1	225	2.9%	7,810
HUNTERDON	2,316	40.7%	921	17	4	0	0	0	21	2.2%	942
MERCER	8,591	40.3%	3,354	91	6	2	5	0	104	3.0%	3,458
MIDDLESEX	19,965	36.3%	7,085	119	24	20	4	0	167	2.3%	7,252
MONMOUTH	13,371	28.7%	3,775	54	13	1	0	1	69	1.8%	3,844
MORRIS	10,700	34.2%	3,603	36	10	5	2	1	54	1.5%	3,657
OCEAN	15,532	49.1%	7,562	58	5	1	1	0	65	0.9%	7,627
PASSAIC	13,727	49.0%	6,501	172	36	7	8	1	224	3.3%	6,725
SALEM	1,549	29.2%	431	20	2	0	0	0	22	4.9%	453
SOMERSET	7,581	35.0%	2,617	26	6	2	2	0	36	1.4%	2,653
SUSSEX	3,099	20.2%	626	1	0	0	0	0	1	0.2%	627
UNION	14,148	47.5%	6,546	134	17	6	14	0	171	2.5%	6,717
WARREN	2,382	28.9%	664	18	4	2	1	0	25	3.6%	689
Unknown address	N/A	N/A	863	4	1	0	0	0	5	0.6%	868
Total	**214,727**	**39.2%**	**82,259**	**1,529**	**265**	**78**	**74**	**6**	**1,952**	**2.3%**	**84,211**

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 2018
Total EBLL = Frequency of Children 6-26 Months of Age with an EBLL ≥ 5ug/dL Reported in SFY 2018
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 2018: 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	44.4%	529	16	7	2	0	0	25	4.5%	554
BAYONNE	1,528	40.9%	608	14	3	0	0	0	17	2.7%	625
BELLEVILLE	869	44.3%	376	6	1	2	0	0	9	2.3%	385
BERKELEY	509	29.5%	148	2	0	0	0	0	2	1.3%	150
BLOOMFIELD	1,224	42.5%	507	12	0	1	0	0	13	2.5%	520
BRICK	1,531	22.3%	341	1	0	0	0	0	1	0.3%	342
BRIDGEWATER	978	39.3%	380	1	0	1	2	0	4	1.0%	384
CAMDEN	2,838	35.3%	976	24	1	0	1	0	26	2.6%	1,002
CHERRY HILL	1,449	34.2%	491	2	2	0	0	0	4	0.8%	495
CLIFTON	2,123	47.5%	984	20	2	0	2	0	24	2.4%	1,008
EAST BRUNSWICK	860	37.9%	324	2	0	0	0	0	2	0.6%	326
EAST ORANGE	1,916	41.1%	743	34	8	1	1	1	45	5.7%	788
EDISON	2,560	38.1%	950	18	3	2	3	0	26	2.7%	976
EGG HARBOR	1,038	32.2%	332	2	0	0	0	0	2	0.6%	334
ELIZABETH	3,943	52.6%	2,004	57	5	4	5	0	71	3.4%	2,075
EVESHAM	1,016	27.7%	277	3	0	0	1	0	4	1.4%	281
EWING	600	44.7%	264	3	1	0	0	0	4	1.5%	268
FORT LEE	725	35.0%	251	2	0	0	1	0	3	1.2%	254
FRANKLIN	1,759	32.5%	564	5	3	0	0	0	8	1.4%	572
FREEHOLD	652	20.6%	134	0	0	0	0	0	0	0.0%	134
GALLOWAY	724	22.8%	164	1	0	0	0	0	1	0.6%	165
GLOUCESTER	1,520	25.1%	380	1	0	0	0	0	1	0.3%	381
HACKENSACK	1,118	48.4%	530	10	1	0	0	0	11	2.0%	541
HAMILTON	1,814	39.6%	706	12	0	0	0	0	12	1.7%	718
HILLSBOROUGH	866	34.9%	301	0	1	0	0	0	1	0.3%	302
HOBOKEN	1,467	22.6%	332	0	0	0	0	0	0	0.0%	332
HOWELL	1,125	24.9%	277	3	0	0	0	0	3	1.1%	280
IRVINGTON	1,692	54.3%	862	48	6	0	2	0	56	6.1%	918
JACKSON	1,100	70.9%	778	2	0	0	0	0	2	0.3%	780
JERSEY CITY	7,192	51.3%	3,544	105	23	10	9	0	147	4.0%	3,691
KEARNY	895	41.7%	364	6	2	0	0	1	9	2.4%	373
LAKEWOOD	6,556	73.9%	4,797	43	5	0	1	0	49	1.0%	4,846
LINDEN	911	42.5%	385	1	1	0	0	0	2	0.5%	387
MANALAPAN	778	23.8%	184	1	0	0	0	0	1	0.5%	185
MANCHESTER	448	25.7%	114	1	0	0	0	0	1	0.9%	115

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	21.4%	159	4	0	1	0	0	5	3.0%	164
MIDDLETOWN	1,444	28.1%	405	1	0	0	0	0	1	0.2%	406
MONROE (Gloucester County)	898	26.6%	239	0	0	0	0	0	0	0.0%	239
MONROE (Middlesex County	655	35.4%	231	1	0	0	0	0	1	0.4%	232
MONTCLAIR	869	32.0%	270	7	1	0	0	0	8	2.9%	278
MOUNT LAUREL	886	29.0%	255	1	1	0	0	0	2	0.8%	257
NEW BRUNSWICK	1,573	46.2%	709	15	3	0	0	0	18	2.5%	727
NEWARK	8,382	53.9%	4,285	190	36	5	6	0	237	5.2%	4,522
NORTH BERGEN	1,498	41.4%	611	7	0	1	1	0	9	1.5%	620
NORTH BRUNSWICK	1,220	31.9%	385	2	0	2	0	0	4	1.0%	389
OLD BRIDGE	1,478	27.3%	400	4	0	0	0	0	4	1.0%	404
PARSIPPANY-TROY HILLS	1,207	41.6%	482	13	3	3	1	0	20	4.0%	502
PASSAIC	2,767	56.5%	1,496	48	12	3	4	0	67	4.3%	1,563
PATERSON	4,632	58.0%	2,571	88	21	4	1	0	114	4.2%	2,685
PENNSAUKEN	845	35.6%	297	4	0	0	0	0	4	1.3%	301
PERTH AMBOY	1,584	48.9%	758	12	2	2	1	0	17	2.2%	775
PISCATAWAY	1,361	38.6%	511	10	2	3	0	0	15	2.9%	526
PLAINFIELD	1,628	63.8%	992	37	5	1	3	0	46	4.4%	1,038
SAYREVILLE	1,137	30.3%	336	6	1	1	0	0	8	2.3%	344
SOUTH BRUNSWICK	935	24.1%	219	5	1	0	0	0	6	2.7%	225
TEANECK	1,075	30.1%	320	2	2	0	0	0	4	1.2%	324
TOMS RIVER	1,816	31.6%	569	3	0	1	0	0	4	0.7%	573
TRENTON	2,786	44.1%	1,155	64	4	1	4	0	73	5.9%	1,228
UNION CITY	1,880	42.3%	779	15	1	1	0	0	17	2.1%	796
UNION	1,250	39.4%	487	4	1	0	1	0	6	1.2%	493
VINELAND	1,729	35.6%	609	6	0	0	0	0	6	1.0%	615
WASHINGTON (Gloucester County)	900	20.2%	182	0	0	0	0	0	0	0.0%	182
WAYNE	995	45.8%	455	1	0	0	0	0	1	0.2%	456
WEST NEW YORK	1,523	43.3%	655	4	0	0	0	0	4	0.6%	659
WEST ORANGE	1,263	38.1%	470	9	1	0	1	0	11	2.3%	481
WINSLOW	1,122	21.1%	235	2	0	0	0	0	2	0.8%	237
WOODBRIDGE	2,495	37.3%	897	22	7	5	0	0	34	3.7%	931

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 2018
Total EBLL = Frequency of Children 6-26 Months of Age with an EBLL ≥ 5ug/dL Reported in SFY 2018
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 2018: 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	19.3%	3,744	70	20	3	1	0	94	2.4%	3,838
BERGEN	61,192	22.4%	13,523	128	27	7	6	0	168	1.2%	13,691
BURLINGTON	31,546	13.4%	4,130	74	11	4	4	1	94	2.2%	4,224
CAMDEN	40,195	15.6%	6,164	92	10	4	5	0	111	1.8%	6,275
CAPE MAY	5,423	14.0%	746	8	2	1	0	0	11	1.5%	757
CUMBERLAND	12,963	24.1%	3,009	111	6	2	2	0	121	3.9%	3,130
ESSEX	64,591	39.7%	24,553	871	124	27	35	2	1,059	4.1%	25,612
GLOUCESTER	21,059	11.2%	2,329	21	5	1	2	0	29	1.2%	2,358
HUDSON	49,759	36.1%	17,519	346	72	23	21	1	463	2.6%	17,982
HUNTERDON	7,484	14.7%	1,077	18	5	0	0	0	23	2.1%	1,100
MERCER	26,052	22.9%	5,737	207	13	4	6	1	231	3.9%	5,968
MIDDLESEX	60,249	23.5%	13,837	244	43	27	7	1	322	2.3%	14,159
MONMOUTH	42,404	15.3%	6,358	88	21	2	3	1	115	1.8%	6,473
MORRIS	33,493	16.9%	5,563	73	15	6	3	1	98	1.7%	5,661
OCEAN	46,657	28.0%	12,934	101	10	2	1	2	116	0.9%	13,050
PASSAIC	41,179	36.4%	14,570	345	55	10	16	3	429	2.9%	14,999
SALEM	4,625	15.4%	672	34	6	0	0	0	40	5.6%	712
SOMERSET	23,622	17.5%	4,077	49	7	7	2	0	65	1.6%	4,142
SUSSEX	9,701	9.8%	952	2	0	0	0	0	2	0.2%	954
UNION	43,085	32.5%	13,657	269	34	16	19	0	338	2.4%	13,995
WARREN	7,434	12.5%	886	32	5	5	3	0	45	4.8%	931
Unknown address	N/A	N/A	1,763	15	1	0	0	0	16	0.9%	1,779
Total	**652,622**	**24.8%**	**157,800**	**3,198**	**492**	**151**	**136**	**13**	**3,990**	**2.5%**	**161,790**

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 2018
Total EBLL = Frequency of Children 0-72 Months of Age with an EBLL ≥ 5ug/dL Reported in SFY 2018
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 2018: Number of Children (<6 years 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	3,677	31.1%	1,090	38	13	3	1	0	55	4.8%	1,145
BAYONNE	4,576	33.3%	1,494	25	3	0	0	0	28	1.8%	1,522
BELLEVILLE	2,601	33.7%	863	11	1	2	0	0	14	1.6%	877
BERKELEY	1,565	19.0%	294	3	0	0	0	0	3	1.0%	297
BLOOMFIELD	3,575	32.1%	1,125	18	2	4	0	0	24	2.1%	1,149
BRICK	4,558	13.0%	590	3	1	0	0	0	4	0.7%	594
BRIDGEWATER	3,052	17.3%	521	2	0	3	2	0	7	1.3%	528
CAMDEN	8,525	20.9%	1,728	45	5	2	2	0	54	3.0%	1,782
CHERRY HILL	4,588	14.9%	675	8	2	0	0	0	10	1.5%	685
CLIFTON	6,187	33.8%	2,054	31	4	0	3	1	39	1.9%	2,093
EAST BRUNSWICK	2,725	20.1%	543	4	0	0	0	0	4	0.7%	547
EAST ORANGE	5,534	37.7%	1,982	81	17	2	4	1	105	5.0%	2,087
EDISON	7,774	24.7%	1,862	46	7	3	4	0	60	3.1%	1,922
EGG HARBOR	3,341	15.7%	519	2	2	0	0	0	4	0.8%	523
ELIZABETH	11,792	42.6%	4,878	126	12	8	5	0	151	3.0%	5,029
EVESHAM	3,117	11.8%	363	4	0	0	1	0	5	1.4%	368
EWING	1,797	24.0%	424	6	1	0	0	0	7	1.6%	431
FORT LEE	2,171	21.4%	460	3	0	1	1	0	5	1.1%	465
FRANKLIN	5,182	18.0%	922	10	3	0	0	0	13	1.4%	935
FREEHOLD	2,156	11.0%	238	0	0	0	0	0	0	0.0%	238
GALLOWAY	2,240	13.4%	298	2	1	0	0	0	3	1.0%	301
GLOUCESTER	4,647	11.1%	516	1	1	0	0	0	2	0.4%	518
HACKENSACK	3,223	37.7%	1,193	17	4	0	0	0	21	1.7%	1,214
HAMILTON	5,480	22.5%	1,200	29	1	1	0	0	31	2.5%	1,231
HILLSBOROUGH	2,736	14.9%	406	1	1	0	0	0	2	0.5%	408
HOBOKEN	3,779	14.1%	532	1	0	0	0	0	1	0.2%	533
HOWELL	3,591	12.9%	458	5	0	0	0	0	5	1.1%	463
IRVINGTON	4,993	53.5%	2,498	144	15	7	5	0	171	6.4%	2,669
JACKSON	3,649	37.4%	1,357	7	0	0	0	0	7	0.5%	1,364
JERSEY CITY	20,393	40.8%	8,002	238	49	16	16	0	319	3.8%	8,321
KEARNY	2,681	35.3%	931	13	2	0	0	1	16	1.7%	947
LAKEWOOD	18,872	43.1%	8,058	70	7	1	1	2	81	1.0%	8,139
LINDEN	2,726	33.2%	898	3	1	1	1	0	6	0.7%	904
MANALAPAN	2,541	12.6%	320	1	0	0	0	0	1	0.3%	321
MANCHESTER	1,372	15.1%	206	1	0	0	0	0	1	0.5%	207

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	2,606	11.3%	290	4	0	1	0	0	5	1.7%	295
MIDDLETOWN	4,615	12.1%	556	1	1	0	0	0	2	0.4%	558
MONROE (Gloucester County)	2,794	12.0%	335	1	0	0	0	0	1	0.3%	336
MONROE (Middlesex County	2,082	16.2%	334	3	1	0	0	0	4	1.2%	338
MONTCLAIR	2,701	19.8%	519	13	3	0	1	0	17	3.2%	536
MOUNT LAUREL	2,705	12.1%	321	4	1	0	0	0	5	1.5%	326
NEW BRUNSWICK	4,753	28.0%	1,304	22	6	1	0	0	29	2.2%	1,333
NEWARK	24,831	53.3%	12,636	492	71	9	14	1	587	4.4%	13,223
NORTH BERGEN	4,473	33.3%	1,471	12	2	1	2	0	17	1.1%	1,488
NORTH BRUNSWICK	3,502	20.0%	692	7	0	2	0	0	9	1.3%	701
OLD BRIDGE	4,548	16.1%	723	10	1	0	0	0	11	1.5%	734
PARSIPPANY-TROY HILLS	3,671	20.5%	721	23	4	4	2	0	33	4.4%	754
PASSAIC	8,226	49.0%	3,920	81	15	6	7	0	109	2.7%	4,029
PATERSON	13,987	46.6%	6,264	206	33	4	4	0	247	3.8%	6,511
PENNSAUKEN	2,696	16.7%	441	8	1	0	0	0	9	2.0%	450
PERTH AMBOY	4,756	44.3%	2,074	24	3	3	1	0	31	1.5%	2,105
PISCATAWAY	3,903	24.3%	922	17	5	3	1	0	26	2.7%	948
PLAINFIELD	4,961	55.3%	2,646	77	11	4	6	0	98	3.6%	2,744
SAYREVILLE	3,338	21.6%	700	15	3	1	1	0	20	2.8%	720
SOUTH BRUNSWICK	3,130	12.8%	385	13	1	1	0	0	15	3.8%	400
TEANECK	3,142	16.9%	527	3	2	0	0	0	5	0.9%	532
TOMS RIVER	5,617	19.3%	1,077	7	0	1	0	0	8	0.7%	1,085
TRENTON	7,998	32.9%	2,466	150	10	2	5	1	168	6.4%	2,634
UNION CITY	5,742	35.7%	2,009	29	6	4	2	0	41	2.0%	2,050
UNION	3,701	25.1%	919	6	3	1	1	0	11	1.2%	930
VINELAND	5,058	24.7%	1,232	15	0	0	0	0	15	1.2%	1,247
WASHINGTON (Gloucester County)	2,968	8.9%	264	1	0	0	0	0	1	0.4%	265
WAYNE	3,105	21.7%	670	3	1	0	0	0	4	0.6%	674
WEST NEW YORK	4,258	39.7%	1,679	10	1	1	1	0	13	0.8%	1,692
WEST ORANGE	3,635	25.6%	892	32	2	0	4	0	38	4.1%	930
WINSLOW	3,336	10.2%	336	3	0	0	0	0	3	0.9%	339
WOODBRIDGE	7,326	24.7%	1,757	42	8	6	0	0	56	3.1%	1,813

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 2018
Total EBLL = Frequency of Children 0-72 Months of Age with an EBLL ≥ 5ug/dL Reported in SFY 2018
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 2018: Number of Children by BLL and County of Residence

County	BLL (µg/dL)	EBLL (µg/dL)							Total Screened
	<5	5-9	10-14	15-19	20-44	≥45	Total EBLL	% EBLL	
ATLANTIC	4,081	73	22	3	1	0	99	2.4%	4,180
BERGEN	15,729	140	31	7	6	0	184	1.2%	15,913
BURLINGTON	4,459	77	12	4	4	1	98	2.2%	4,557
CAMDEN	6,708	99	12	4	6	0	121	1.8%	6,829
CAPE MAY	816	10	3	1	0	0	14	1.7%	830
CUMBERLAND	3,438	118	6	2	2	0	128	3.6%	3,566
ESSEX	30,170	1,003	151	29	38	2	1,223	3.9%	31,393
GLOUCESTER	2,480	22	6	3	2	0	33	1.3%	2,513
HUDSON	21,552	388	84	26	23	1	522	2.4%	22,074
HUNTERDON	1,135	18	5	0	0	0	23	2.0%	1,158
MERCER	7,499	225	14	5	8	1	253	3.3%	7,752
MIDDLESEX	17,029	282	55	31	7	2	377	2.2%	17,406
MONMOUTH	7,750	107	22	3	3	1	136	1.7%	7,886
MORRIS	6,237	81	16	6	4	1	108	1.7%	6,345
OCEAN	14,178	110	10	2	1	2	125	0.9%	14,303
PASSAIC	17,406	380	59	14	19	3	475	2.7%	17,881
SALEM	721	36	7	0	0	0	43	5.6%	764
SOMERSET	4,766	57	9	7	3	0	76	1.6%	4,842
SUSSEX	1,069	4	0	0	0	0	4	0.4%	1,073
UNION	16,338	292	35	18	20	0	365	2.2%	16,703
WARREN	962	33	5	5	3	0	46	4.6%	1,008
Unknown address	2,082	18	1	0	0	0	19	0.9%	2,101
Total	**186,605**	**3,573**	**565**	**170**	**150**	**14**	**4,472**	**2.3%**	**191,077**

Total Screened = Frequency of Children < 17 Years of Age with a Blood Lead Test Reported in SFY 2018
Total EBLL = Frequency of Children < 17 Years of Age with an EBLL ≥ 5ug/dL Reported in SFY 2018
Percent EBLL = (Total EBLL / Total Screened) * 100

Figure 3a

SFY 2018: Breakdown of Children by Years of Age with EBLLs ≥5 µg/dL

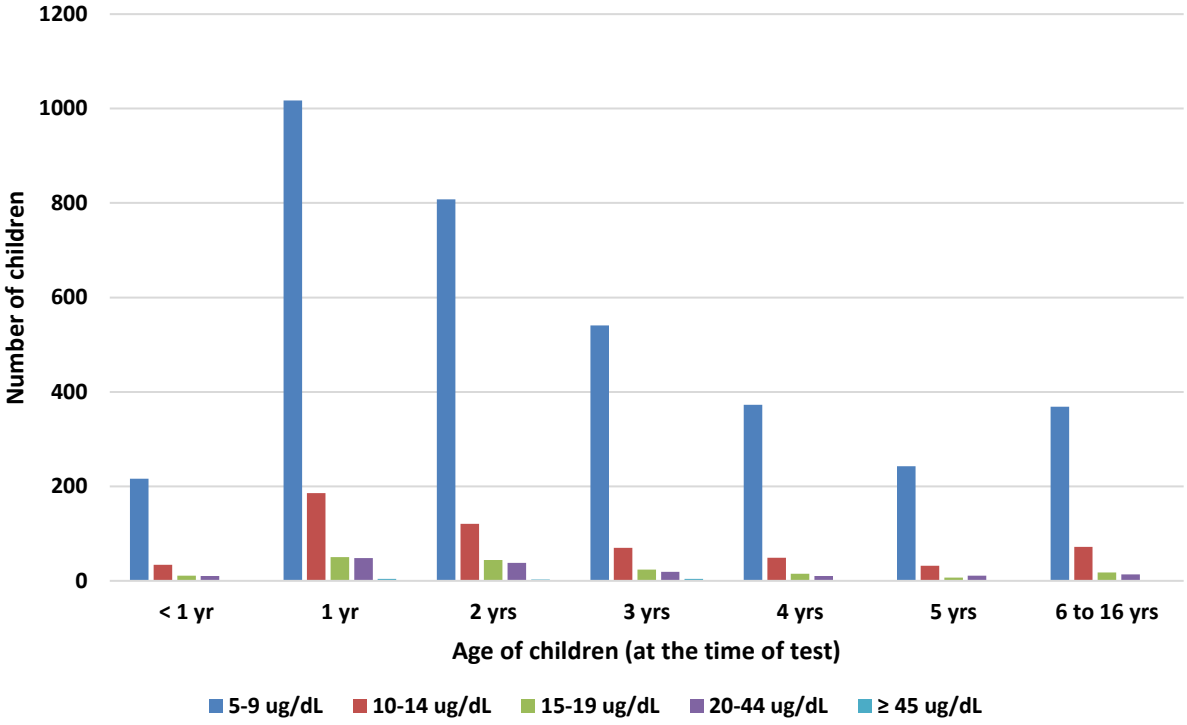


Figure 3b

SFY 2018: Breakdown of Children by Years of Age with BLL <5 µg/dL

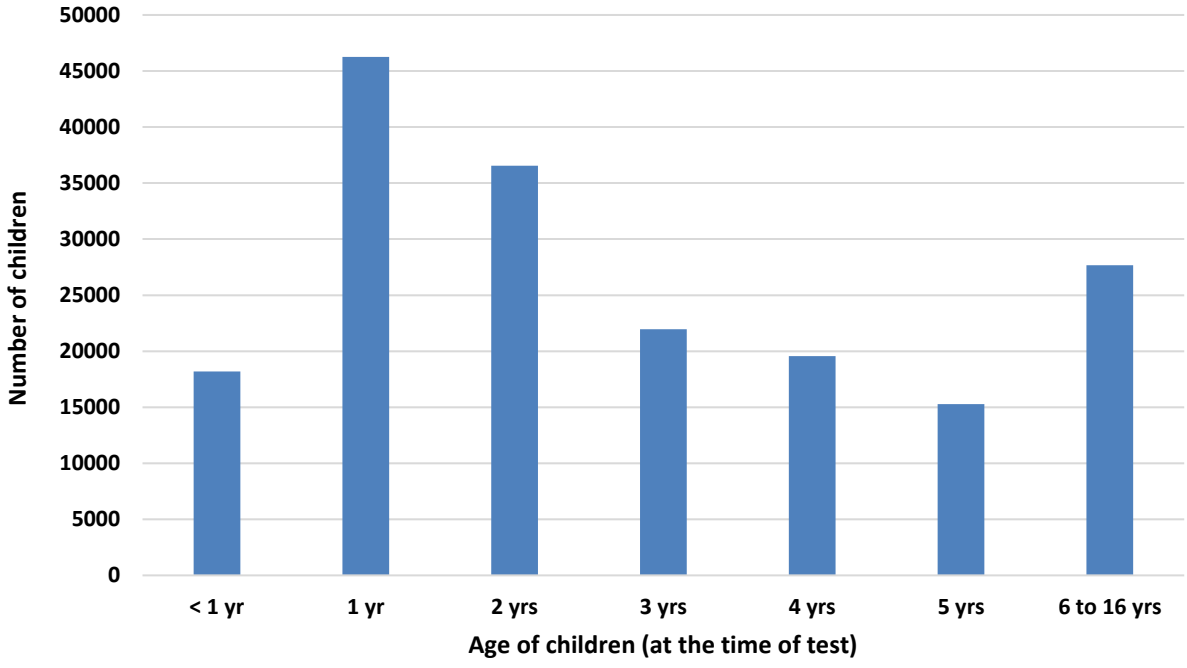
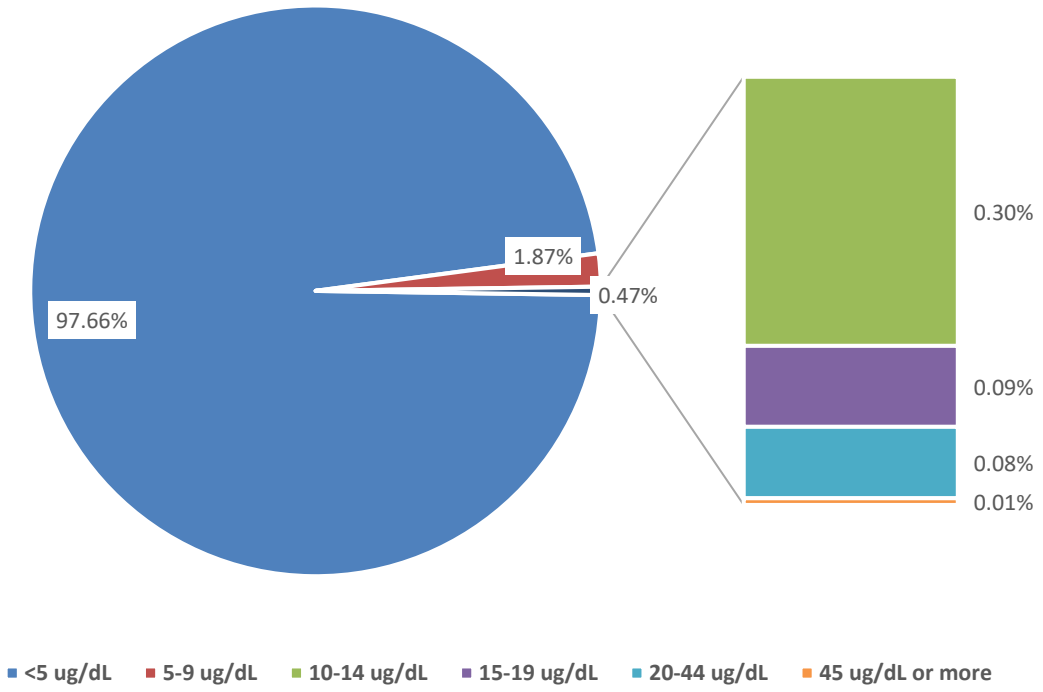


Figure 4

SFY 2018: Percentage of Children by BLL
(*n=191,077*)



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 population of children less than six years of age, percentage of children screened in SFY 2018 and percent EBLLs.

Many of New Jersey's large municipalities also have the largest 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 be 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 2018. Plainfield had the highest percentage of children less than six years of age screened in SFY 2018 (55%), followed by Irvington (54%) and the City of Newark (53%).

Table 8 and Figure 5 rank the top large municipalities by the highest percent of children less than six years of age with an EBLL at or above 5 μg/dL. The five large municipalities with the highest percent children with an EBLL at or above 5 ug/dL in SFY 2018 include Irvington and Trenton (each 6.4%), East Orange (5.0%), Atlantic City (4.8%) and the City of Newark (4.4%). 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).

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 2018

Municipality (County)	% Children < 6 Years Screened for Lead
Plainfield (Union)	55%
Irvington (Essex)	54%
Newark (Essex)	53%
City of Passaic (Passaic)	49%
Paterson (Passaic)	47%
Perth Amboy (Middlesex)	44%
Lakewood (Ocean)	43%
Elizabeth (Union)	43%
Jersey City (Hudson)	41%
West New York (Hudson)	40%

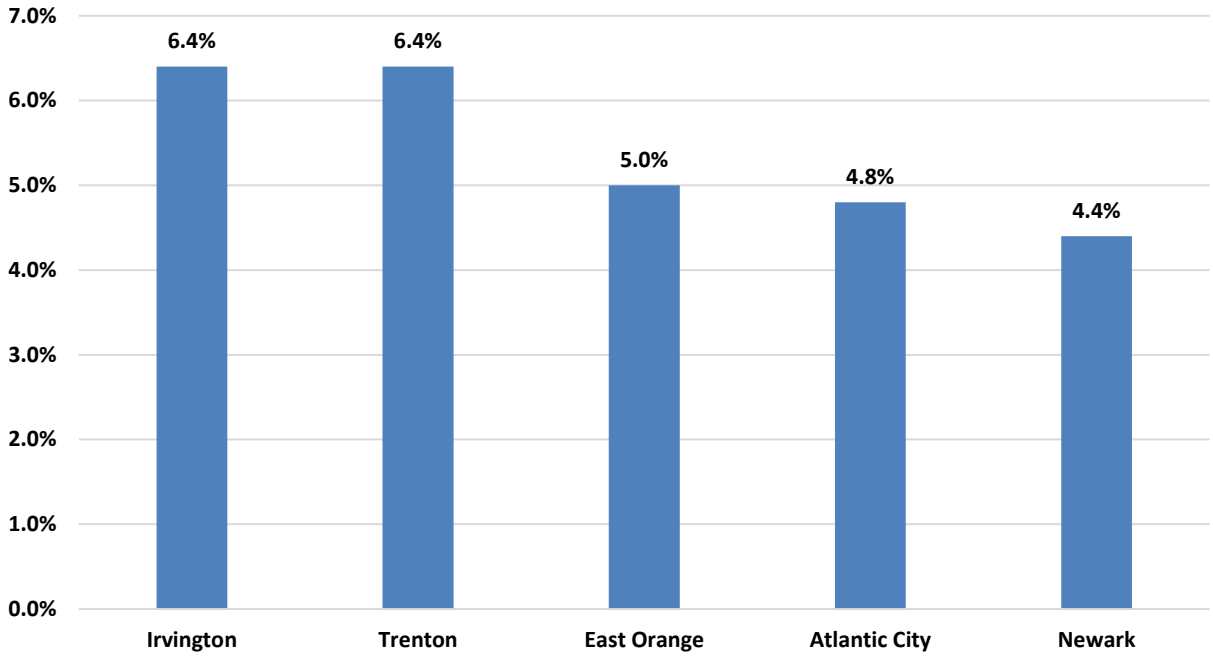
Table 8

Top Ten Large Municipalities Ranked by Highest Percentage of Children Less Than Six Years of Age with an EBLL (≥ 5 µg/dL) in SFY 2018

Municipality (County)	% Children < 6 Years with an EBLL
Irvington (Essex)	6.4%
Trenton (Mercer)	6.4%
East Orange (Essex)	5.0%
Atlantic City (Atlantic)	4.8%
Newark (Essex)	4.4%
Parsippany (Morris)	4.4%
West Orange (Essex)	4.1%
Jersey City (Hudson)	3.8%
Paterson (Passaic)	3.8%
South Brunswick (Middlesex)	3.8%

Figure 5

Top Five Large Municipalities with the Highest Percentage of Children Less Than Six Years of Age with an EBLL (≥ 5 µg/dL) in SFY 2018



CHAPTER FOUR

ENVIRONMENTAL INVESTIGATIONS BY LOCAL HEALTH DEPARTMENTS

N.J.A.C. 8:51 requires LHDs to investigate reported cases of EBLLs 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 EBLLs 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 EBLLs 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 reflect 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. In addition, open investigations/abatements may reflect the fact that it can take several years to complete the abatement process for a property where lead hazards are identified. The length of time between the initial report of an EBLL 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.

In SFY 2018, the legislature allocated $10 million for the Department to distribute to LHDs to support childhood lead prevention, screening and response efforts. A total of 24 LHDs were awarded funding through a competitive grant process, including the Atlantic County Division of Public Health; the Bergen County Department of Health Services; the Bloomfield Department of Health & Human Services; the Burlington County Health Department; the Camden County Department of Health & Human Services; the Cumberland County Department of Health; the East Orange Department of Health; the City of Elizabeth, Department of Health & Human Services; the Gloucester County Department of Health & Human Services; the Hudson Regional Health Commission; the Irvington Health Department; the Jersey City Department of Health & Human Services; the Middlesex County Office of Health Services; the Monmouth County Board of Health; the Montclair Health Department; the Newark Department of Health & Community Wellness; the Ocean County Health Department; the City of Paterson, Division of Health; City of Passaic, Health Division; the City of Plainfield Health Department; the Salem County Department of Health; the Somerset County Department of Health; the City of Trenton, Department of Health & Human Services; and the Warren County

Health Department. Although some of these grantees have interlocal agreements and/or subcontracts to provide childhood lead services for additional areas, it is the responsibility of each LHD to ensure investigations are conducted in their jurisdiction as required by N.J.A.C. 8:51.

Table 9

SFY 2018: Local Health Departments with ≥20 New Environmental Cases

Local Health Department	Cases Referred*	Investigation Required**	Investigation Completed	% Investigation Completed	Abatement Required	Abatement Completed	% Abatement Completed
Newark Department of Health & Community Wellness	159	84	25	30%	38	24	63%
Jersey City Department of Health & Human Services	98	73	66	90%	60	58	97%
City of Paterson, Division of Health	76	76	56	74%	44	44	100%
Middlesex County Office of Health Services	70	49	40	82%	29	29	100%
Cumberland County Department of Health	54	54	45	83%	42	40	95%
Clifton Health Department	53	44	41	93%	38	33	87%
Somerset County Department of Health	52	47	41	87%	34	30	88%
City of Trenton, Department of Health & Human Services	50	34	30	88%	23	23	100%
East Orange Department of Heath	44	40	38	95%	31	31	100%
Irvington Health Department	44	39	25	64%	11	9	82%
City of Orange Township	39	37	37	100%	25	25	100%
City of Elizabeth, Department of Health & Human Services	33	21	16	76%	12	9	75%
Camden County Department of Health & Human Services	30	30	28	93%	18	18	100%
Bayonne Health Department	26	26	25	96%	23	22	96%
Hamilton Township Division of Health	24	18	15	83%	13	10	77%
Ocean County Health Department	23	13	0	0%	0	0	0
Bergen County Department of Health Services	21	17	17	100%	14	13	93%
Burlington County Health Department	21	20	19	95%	11	8	73%
Monmouth County Board of Health	20	20	17	85%	17	14	82%
Township of North Bergen	20	19	19	100%	15	15	100%

*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.

Data for this table are based on case updates entered in LeadTrax as of June 12, 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.

Figure 7

SFY 2018: Local Health Departments with ≥20 New Environmental Cases

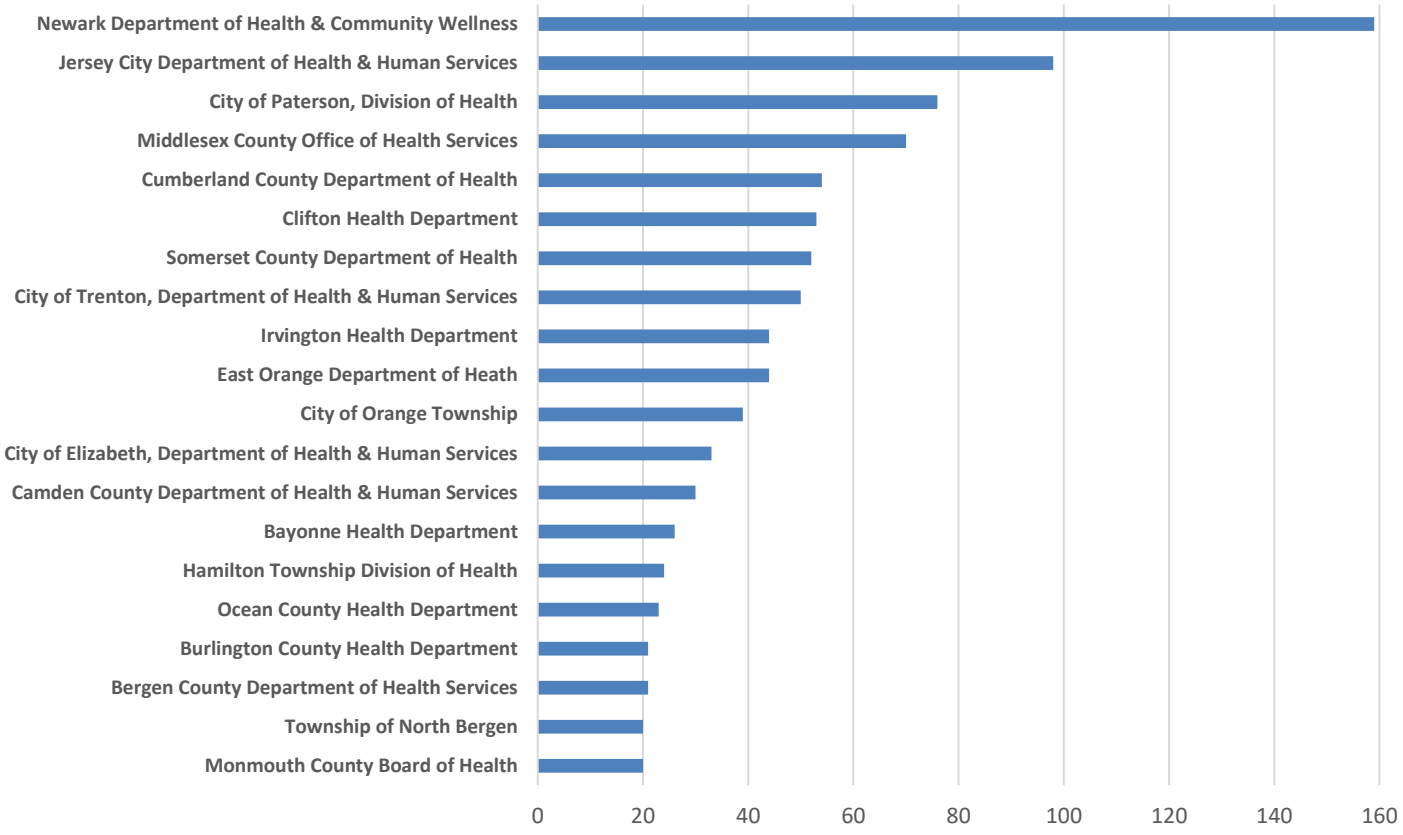


Figure 8

SFY 2018: Top Ten Local Health Departments with the Highest Percentage of New Environmental Cases Compared to All Other Local Health Departments

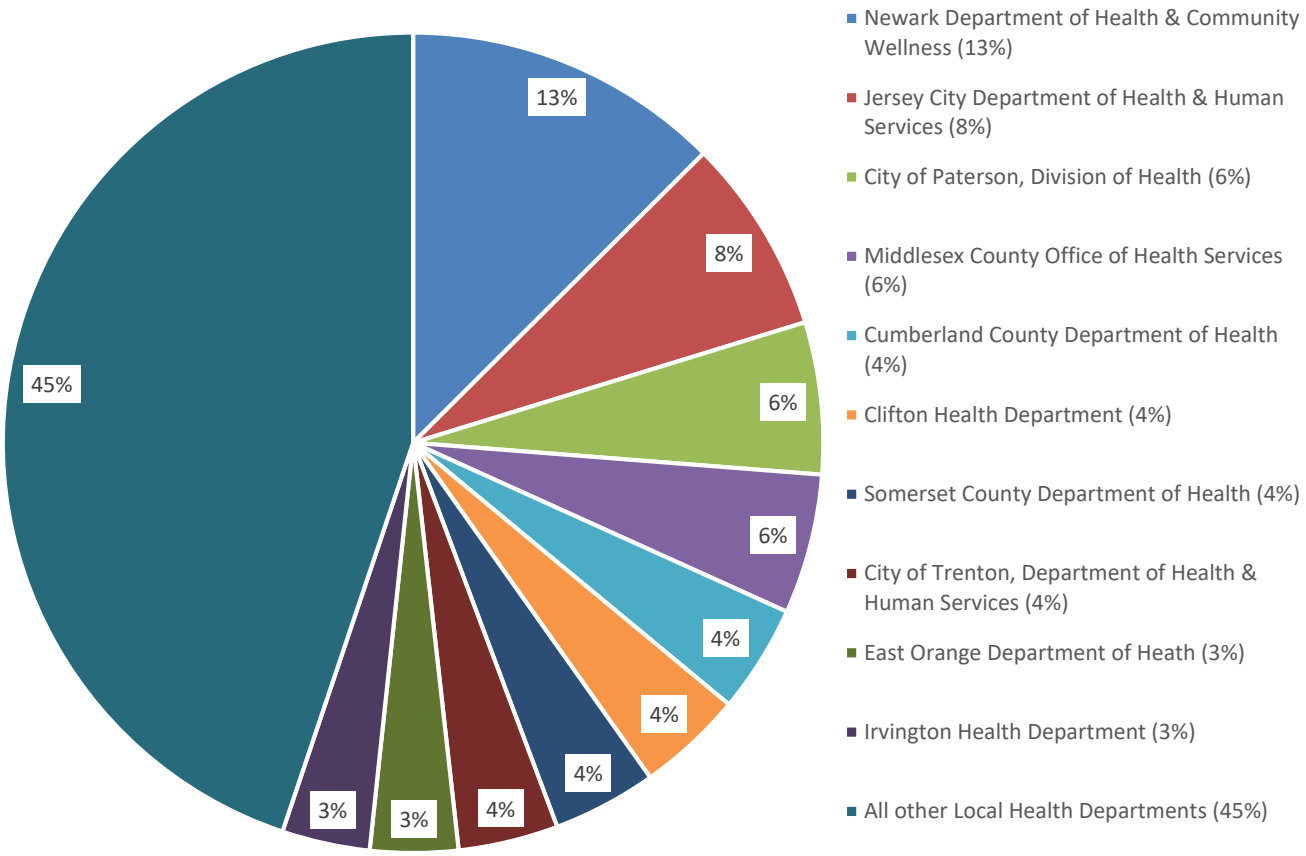


Table 10

SFY 2018: Environmental Case Activity Status by County

County	Cases Referred*	Investigation Required**	Investigation Completed	% Investigation Completed	Abatement Required	Abatement Completed	% Abatement Completed
ATLANTIC	24	21	10	48%	11	9	82%
BERGEN	49	45	39	87%	35	33	94%
BURLINGTON	19	18	16	89%	9	6	67%
CAMDEN	28	28	26	93%	17	17	100%
CAPE MAY	3	2	2	100%	2	1	50%
CUMBERLAND	49	49	38	78%	39	37	95%
ESSEX	279	202	137	68%	114	96	84%
GLOUCESTER	10	10	3	30%	4	3	75%
HUDSON	137	112	105	94%	94	91	97%
HUNTERDON	3	3	2	67%	2	1	50%
MERCER	76	56	47	84%	38	34	89%
MIDDLESEX	97	56	44	79%	30	30	100%
MONMOUTH	38	36	34	94%	31	26	84%
MORRIS	27	21	16	76%	14	13	93%
OCEAN	21	12	0	0%	0	N/A	N/A
PASSAIC	113	107	88	82%	76	71	93%
SALEM	3	3	3	100%	3	3	100%
SOMERSET	21	15	13	87%	8	8	100%
UNION	98	74	59	80%	54	45	83%
WARREN	11	11	9	82%	8	8	100%
TOTAL	**1,106**	**881**	**691**	**78%**	**589**	**532**	**90%**

*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.

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Table 11

SFY 2018: 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	19	15	5	33%	6	4	67%
Atlantic County Division of Public Health	9	9	5	56%	6	6	100%
Bayonne Health Department	26	26	25	96%	23	22	96%
Bergen County Department of Health Services	21	17	17	100%	14	13	93%
Bernards Township Health Department	2	1	1	100%	1	1	100%
Bloomfield Department of Health & Human Services	10	7	7	100%	7	7	100%
Borough of Roselle	6	3	0	0%	0	0	0
Branchburg Health Department	1	1	1	100%	1	1	100%
Bridgewater Township Health Department	4	1	1	100%	1	1	100%
Burlington County Health Department	21	20	19	95%	11	8	73%
Camden County Department of Health & Human Services	30	30	28	93%	18	18	100%
Cape May County Health Department	4	2	2	100%	2	1	50%
City of Elizabeth, Department of Health & Human Services	33	21	16	76%	12	9	75%
City of Orange Township	39	37	37	100%	25	25	100%
City of Paterson, Division of Health	76	76	56	74%	44	44	100%
City of Plainfield Health Department	14	14	14	100%	13	11	85%
City of Trenton, Department of Health & Human Services	50	34	30	88%	23	23	100%
City of Vineland	8	8	3	38%	8	8	100%
Clifton Health Department	53	44	41	93%	38	33	87%
Colts Neck Township Health Department	1	1	1	100%	1	1	100%
Cumberland County Department of Health	54	54	45	83%	42	40	95%
East Hanover Health Department	9	6	5	83%	4	4	100%
East Orange Department of Heath	44	40	38	95%	31	31	100%
Edison Department of Health & Human Services	13	6	4	67%	0	0	0
Englewood Health Department	1	1	1	100%	1	1	100%
Fort Lee Health Department	4	4	4	100%	3	3	100%
Freehold Health Department	12	12	12	100%	10	8	80%

Local Health Department	Cases Referred*	Investigation Required**	Investigation Completed	% Investigation Completed	Abatement Required	Abatement Completed	% Abatement Completed
Gloucester County Department of Health & Senior Services	14	14	6	43%	6	6	100%
Hackensack Department of Health	9	7	4	57%	5	3	60%
Hamilton Township Division of Health	24	18	15	83%	13	10	77%
Hillsborough Township Health Department	1	0	0	0	0	0	0
Hoboken Health Department	1	1	1	100%	1	1	100%
Hunterdon County Department of Health	3	3	2	67%	2	1	50%
Irvington Health Department	44	39	25	64%	11	9	82%
Jersey City Department of Health & Human Services	98	73	66	90%	60	58	97%
Kearny Department of Health	6	6	6	100%	5	5	100%
Lawrence Township Health Department	6	6	6	100%	2	1	50%
Linden Board of Health	3	1	0	0%	0	0	0
Livingston Health Department / Millburn Health Depatment	2	2	2	100%	2	2	100%
Long Branch Department of Health	4	4	4	100%	4	4	100%
Madison Health Department	4	3	3	100%	3	3	100%
Maplewood Health Department	7	7	7	100%	5	5	100%
Mercer County Division of Public Health	1	1	0	0%	0	0	0
Mid-Bergen Regional Health Commission	12	12	11	92%	10	9	90%
Middle-Brook Regional Health Commission	5	3	1	33%	1	1	100%
Middlesex County Office of Health Services	70	49	40	82%	29	29	100%
Monmouth County Board of Health	20	20	17	85%	17	14	82%
Monmouth County Regional Health Commission # 1	5	4	4	100%	4	4	100%
Montclair Health Department	11	11	9	82%	8	6	75%
Montgomery Township Health Department	1	1	0	0%	0	0	0
Morris County Office of Health Management	5	4	3	75%	3	2	67%
Mount Olive Township Health Department	2	2	1	50%	1	1	100%
N.W. Bergen Regional Health Commission	6	6	5	83%	5	4	80%
Newark Department of Health & Community Wellness	159	84	25	30%	38	24	63%
Ocean County Health Department	23	13	0	0%	0	0	0
Palisades Park Health Department	1	1	0	0%	0	0	0
Paramus Board of Health	1	1	0	0%	0	0	0

Local Health Department	Cases Referred*	Investigation Required**	Investigation Completed	% Investigation Completed	Abatement Required	Abatement Completed	% Abatement Completed
Rahway Health Department	10	9	7	78%	7	4	57%
Randolph Township Health Department	4	2	0	0%	0	0	0
Rockaway Township Health Department	7	5	5	100%	4	4	100%
Salem County Department of Health	4	4	4	100%	4	4	100%
Somerset County Department of Health	52	47	41	87%	34	30	88%
South Brunswick Health Department	4	2	1	50%	1	1	100%
Teaneck Department of Health & Human Services	1	1	1	100%	1	1	100%
Township of North Bergen	20	19	19	100%	15	15	100%
Township of South Orange	3	3	3	100%	1	1	100%
Union Township Health Department	6	5	3	60%	3	1	33%
Village of Ridgewood Health Department	1	1	1	100%	1	1	100%
Warren County Health Department	15	15	10	67%	9	9	100%
Wayne Health Department	1	1	1	100%	1	1	100%
West Orange Health Department	8	8	6	75%	6	6	100%
West Windsor Health Department	2	1	0	0%	1	1	100%
Westfield Regional Health Department	4	4	4	100%	3	2	67%
Woodbridge Township Health & Human Services	15	4	0	0%	0	0	0

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**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.

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CHAPTER FIVE

HEALTHY NEW JERSEY 2020 OBJECTIVE ADDRESSING ELEVATED BLOOD LEAD LEVELS IN NEW JERSEY'S CHILDREN

Healthy People 2020:

In October 2011, the U.S. Department of Health and Human Services released ***Healthy People 2020*** (HP2020) that established health objectives for the Nation for the next 10 years. The information below describes health objectives relative to childhood lead. Additional information about HP2020, can be found online at www.healthypeople.gov.

Environmental Health 8 (EH-8) Reduce blood lead levels in children.

- **Revised* Objective EH-8.1** Reduce blood lead levels in children aged 1–5 years.
  Baseline: 5.8 µg/dL—Concentration level of lead in blood samples at which 97.5% of the population aged 1-5 years is below the measured level in 2005–08.
  Target: 5.2 µg/dL of lead.
  Target-Setting Method: 10 percent improvement.
  Current Metric: 4.3 µg/dL of lead (2009-2012).
  Data Sources: National Health and Nutrition Examination Survey (NHANES), Centers for Disease Control and Prevention (CDC)/National Center for Health Statistics (NCHS).
  **Revision History: At launch, this objective was informational only. In 2014, the measure was changed from "elevated blood lead levels ≥10 micrograms/dL in children aged 1 to 5 years" to the "concentration of blood lead among children aged 1 to 5 years in the 97.5 percentile." As a result, the original baseline was revised from 0.9 percent to 5.8 µg/dl. The target-setting method was changed from "not applicable" to "10 percent improvement" and a target of 5.2 µg/dl was established.*

- **Revised* Objective EH-8.2:** Reduce the mean BLLs in children.
  Baseline: 1.8 µg/dL—This was the average BLL in children aged 1-5 years in 2003–04.
  Target: 1.6 µg/dL average BLL.
  Target-Setting Method: 10 percent improvement.
  Current Metric: 1.0 µg/dL average BLL (2011-2012).
  Data Sources: NHANES, CDC/NHCS.
  **Revision History: In 2014, the original baseline was revised from 1.5 (2005-2008) to 1.8 (2003-2004) to align with other NHANES biomonitoring objectives. The target was adjusted from 1.4 to 1.6 to reflect the revised baseline using the original target-setting method. Periodicity was revised to biennial.*

Healthy New Jersey 2020:

Healthy New Jersey 2020 (HNJ2020) is the state's health improvement plan that establishes the health promotion and disease prevention agenda for New Jersey for the next 10 years. The information below describes health objectives relative to childhood lead. Additional information about HNJ2020 can be found online www.state.nj.us/health/chs/hnj2020.

Maternal Child Health (MCH) Objectives

- **Revised* Objective MCH-11**: Reduce blood lead levels in children aged 1-5 years to 4.5 µg/dL.
  Baseline: 8.0 µg/dL—This was the average BLL in children aged 1-5 years in 2005-08.
  Target: 4.5 µg/dL (U.S. target is 5.2 µg/dL).
  Target-Setting Method: 10 percent improvement.
  Definition of Metric: Concentration of blood lead in children aged 1 to 5 years in the 97.5 percentile.
  SFY2018: 4.9 µg/dL.
  Data Source: New Jersey Childhood Lead Information Database (LeadTrax).
  **Revision History: The original HNJ2020 objective was to reduce the proportion of children aged 1-5 years who have a blood lead level ≥ 10 µg/dL to 0.9%. The target was achieved early and maintained, so the objective was replaced.*

- **Revised* Objective MCH-12:** Reduce the mean blood lead levels in children aged 1-5 years to an average blood lead level of ≤ 1.5 µg/dL.
  Baseline: 3.2 µg/dL—This was the average BLL in children aged 1-5 years in 2005–08.
  Target: 1.5 µg/dL average BLL (U.S. target is 1.6 µg/dL average BLL).
  Target-Setting Method: 10 percent improvement.
  Definition of Metric: Mean (average) BLL in children aged 1 to 5 years.
  SFY2018: 1.8 µg/dL average BLL.
  Data Source: LeadTrax.
  **Revision History: The original HNJ2020 objective was to reduce the mean BLLs in children aged 1-5 years to an average of ≤ 2.9 µg/dL.*