CHILDHOOD LEAD EXPOSURE IN NEW JERSEY

REVISED ANNUAL REPORT

STATE FISCAL YEAR 2017 (July 1, 2016 – June 30, 2017)

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Introduction

In March 2019, the New Jersey Department of Health (the Department) issued the Childhood Lead Exposure in New Jersey Annual Report for SFY 2017. Subsequent evaluation of the report and the Department's childhood lead data collection system revealed some coding inconsistencies, and in October 2019, the Department issued the following Revised Annual Report for State Fiscal Year 2017.

Frequently asked Questions (FAQ) about the Revised Report

Why did the Department issue a revised report for State Fiscal Year (SFY) 2017?

A quality control review of SFY 2017 data revealed inconsistencies with the coding of certain information in the Department's data collection system. Although there were no major changes in measures such as the total number of children screened for lead and the total number of children reported with elevated blood lead levels, the Department decided to issue a full revised report as a measure of transparency.

What are some of the differences between the original and revised report?

In the revised report, tables showing municipal-level data were updated, as improvements were made to the method used to geographically map the data and the numbers from some, but not all, municipalities were impacted. Tables showing the status of environmental case investigations were updated. Measures such as statewide screening rates and the total number of children reported with elevated blood lead levels remain largely unchanged

How does this impact children who were tested for lead?

There was no impact to the children tested for lead as there were no discrepancies identified in the blood lead test results reported to Department. In addition, all children with elevated blood lead test results reported to the Department were referred to local health departments for investigation. The opportunities for improvement in the SFY 2017 annual report were limited to data analysis and summary tables only, not the actual blood lead test result or intervention that followed.

How did these discrepancies occur?

The Department identified opportunities for improvement in the way certain information was coded in its data collection system. These improvements have been made and the Department will continue to conduct regular quality control analyses to ensure data accuracy and integrity.

Are any of the older annual reports affected?

As the data collection system reflects ongoing updates, it is not possible to evaluate data from older reports.

How will you ensure accurate reporting in the future?

The Department will continue to conduct regular quality control analyses to ensure data accuracy and integrity.

GLOSSARY OF TERMS AND ACRONYMS

BLL: Blood lead level.

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

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 2017, the threshold for public health intervention was any blood lead level greater than or equal to $10 \mu g/dL$.

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

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

Population Data: Refers to 2010 data from the U.S. Census, unless otherwise specified.

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 2017 includes the period of July 1, 2016 to June 30, 2017.

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.

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) 2017 is submitted as required by N.J.S.A. 26:2-135, which tasks the Commissioner of Health to issue 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.

The Department maintains all childhood blood lead test results in a secure, online database called LeadTrax. In SFY 2017, the Department witnessed an increase of traditional laboratories and point-of-care test users who electronically reported blood lead test results to LeadTrax, the Department's data collection system. A total of 99.8% of blood lead test results were reported electronically while the remainder were reported via facsimile or regular mail. Electronic reporting allows for more timely reporting to local health departments when public health intervention is required.

The number of children less than 17 years of age who were screened for lead in SFY 2017 was 199,254, which represents a decrease from the number of children screened during SFY 2016. However, the Superstorm Sandy recovery project was in full-force in SFY 2016, resulting in increased access to blood lead screenings in the nine most-impacted counties. Funding for the temporary Superstorm Sandy screening initiative ended prior to SFY 2017, and as such, screening numbers returned to levels observed prior to the initiative.

The number of children six to 26 months of age who were screened for lead in SFY 2017 was 87,652. This age group represents the screening range specified in N.J.A.C. 8:51A, where healthcare providers are required to test children for lead at one year (within the range of six to 17 months) and two years (within the range 18 to 26 months). A total of 40.8% of children in the target age range were screened for lead.

While 198,198 (99.5%) of the 199,254 children screened during SFY 2017 had BLLs below the threshold for public health intervention of 10 μ g/dL, a total of 1,056 (0.50%) children had a test result at or above this threshold and were provided nursing case management and/or environmental investigation by local health departments. The SFY 2017 annual report will be the last to display figures and tables where EBLLs are defined at or above 10 μ g/dL. On September 18, 2017, two and half months after the close of SFY 2017, N.J.A.C. 8:51 was amended to require public health intervention by local health departments for blood lead screening results at or above 5 μ g/dL. The SFY 2018 annual report will reflect this change and include figures and tables using the lower EBLL threshold.

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 test 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. This chapter describes and depicts the testing statistics and trends based on the reports of blood lead tests received by the Department from clinical laboratories.

Figures 1a and 1b represent the percentages of children who had a lead test performed prior to turning three and six years of age, respectively, during SFY 2017. One child is counted once, regardless of the number of tests the child has received. These figures closely represent the blood lead screening rate, or how many children get an initial blood lead test as required by N.J.A.C. 8:51A. A total of 77% of children who turned three years of age during SFY 2017 had at least one blood lead test in their lifetime, and a total of 84% of children who turned six years of age during SFY 2017 had at least once blood lead test in their lifetime.

Figure 2 shows the trend in the percentage of children ages six to 26 months screened in each State Fiscal Year.

Percentage of Children* Who Turned Three (3) Years of Age During SFY 2017 and Had at Least One Blood Lead Test in their Lifetime



*Number of children born in New Jersey between July 1, 2013 and June 30, 2014 (n = 102,975) Source: New Jersey Department of Health, Center for Health Statistics, New Jersey Birth Certificate Database

Revised Figure 1b

Percentage of Children* Who Turned Six (6) Years of Age During SFY 2017 and Had at Least One Blood Lead Test in their Lifetime



*Number of children born in New Jersey between July 1, 2010 and June 30, 2011 (n = 106,244) Source: New Jersey Department of Health, Center for Health Statistics, New Jersey Birth Certificate Database

Trend in Percentage of Children (six (6) to 26*/29 months of age) Tested by SFY (n=222,837¹ and n=214,727²)



^{*I*} The denominator for SFY 2000 through SFY 2010 uses the number of children who were one (1) and two (2) years of age, based on US Census 2000 data (n = 222,837).

²The denominator for SFY 2011 to SFY 2017 uses the number of children who were one (1) and two (2) years of age, based on US Census 2010 data (n = 214,727).

* For SFY 2013 and onward, the methodology used to define the age group changed from six to 29 months to six to 26 months, as New Jersey blood lead screening regulations (N.J.A.C. 8:51A) specify the screening age ranges of six to 16 months for the first test and 18 to 26 months for the second test.

Note: Data prior to SFY 2017 could not be revised since LeadTrax reflects ongoing updates to cases reported in previous years.

CHAPTER TWO

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

In this chapter, the figures and tables describe screening and BLLs among various age groups in SFY 2017. The analyses behind the formulation of these tables are based on the number of children with blood lead tests reported during SFY 2017, including only the highest BLL reported per child.

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 2017, the average percentage of children six to 26 months screened by county was 38% and the average percentage of children six to 26 months with EBLLs by county was 0.6%. Table 2 shows that in SFY 2017, the percentage of children six to 26 months screened in large municipalities ranged from 14.4% in Bloomfield (Essex County) to 81.5% in Lakewood (Ocean County). Figure 3 shows statewide trends over time in the prevalence of EBLLs among children six to 26 months of age.

Tables 3 and 4 display screening numbers and results by county and large municipality, respectively, for children less than six years of age. Table 3 shows that in SFY 2017, the average percentage of children less than six years of age with EBLLs by county was 0.6%. Table 4 shows that in SFY 2017, the large municipalities with the highest percentage of children less than six years of age screened included 56.7% in Plainfield (Union County), 52.6% in Irvington (Essex County) and 52.3% in Newark (Essex County).

Figures 4a, 4b, 5 and Table 5 focus on the entire population of children less than 17 years of age who were screened during SFY 2017, including a breakdown of BLL by county.

Figures 6a and 6b depict the trend in the number of children reported with an EBLL by SFY. Table 6 depicts BLLs of children (<5 years of age) by academic year of entering kindergarten.

Revised Table 1

	Total	%	BL (ug/	L dL)			Total				
County	Children	Screened	<5	5-9	10-14	15- 19	20- 44	≥45	Total EBLL	% EBLL*	Screened
ATLANTIC	6,521	32.9%	2,076	58	8	3	2	0	13	0.6%	2,147
BERGEN	19,955	41.7%	8,188	103	17	5	4	0	26	0.3%	8,319
BURLINGTON	10,166	29.9%	2,976	54	4	4	2	0	10	0.3%	3,040
CAMDEN	13,215	31.4%	4,073	64	8	0	3	0	11	0.3%	4,149
CAPE MAY	1,822	38.2%	683	10	1	0	2	0	3	0.4%	696
CUMBERLAND	4,368	34.9%	1,454	53	12	4	1	1	18	1.2%	1,525
ESSEX	21,569	46.5%	9,563	381	62	15	13	0	90	0.9%	10,036
GLOUCESTER	6,862	24.4%	1,657	17	1	1	0	0	2	0.1%	1,676
HUDSON	17,288	50.0%	8,383	193	41	12	13	1	67	0.8%	8,648
HUNTERDON	2,316	46.6%	1,061	9	5	2	3	0	10	0.9%	1,080
MERCER	8,591	40.1%	3,285	132	12	11	5	0	28	0.8%	3,445
MIDDLESEX	19,965	36.9%	7,205	120	19	7	13	2	41	0.6%	7,367
MONMOUTH	13,371	29.0%	3,793	62	11	3	1	1	16	0.4%	3,871
MORRIS	10,700	33.4%	3,521	45	6	2	3	0	11	0.3%	3,578
OCEAN	15,532	50.8%	7,785	85	11	6	1	1	19	0.2%	7,889
PASSAIC	13,727	50.7%	6,694	211	25	9	9	1	44	0.6%	6,956
SALEM	1,549	35.1%	512	24	3	1	2	0	6	1.1%	543
SOMERSET	7,581	39.2%	2,924	30	14	3	2	0	19	0.6%	2,974
SUSSEX	3,099	20.1%	615	7	0	0	0	0	0	0.0%	622
UNION	14,148	48.3%	6,637	145	23	13	14	1	51	0.7%	6,838
WARREN	2,382	31.4%	722	19	2	2	2	0	6	0.8%	747
Unknown Address	N/A	N/A	1,472	34	0	0	0	0	0	0.0%	1,506
Total	214,727	40.8%	85,279	1856	285	103	95	8	491	0.6%	87,652

SFY 2017: Number of Children (six (6) to 26 months of age) by BLL and County of Residence

*Based on the number of children screened.

Revised Table 2

	Total	9/	BLL (μ _ξ	g/dL)			EBLL (µg/dL)			Total
Municipality	Children	Screened	<5	5-9	10-14	15-	20-	≥45	Total	%	Screened
	1 240	46.0%	E22	22	6	19	44	0	10	EBLL**	575
	1,249	40.0%	166	0	2	1	2	0	2	1.7%	373 477
	1,526	51.2%	201	0 C	2	1	0	0	5	0.0%	4//
	509	45.7%	391	2	0	0	0	0	0	0.0%	397
BERKELEY	509	35.2%	1//	2	0	0	0	0	0	0.0%	179
BLOOMFIELD	1,224	14.4%	565	/	1	2	1	0	4	2.3%	1/6
BRICK	1,531	24.2%	370	1	0	0	0	0	0	0.0%	3/1
BRIDGEWATER	978	42.5%	411	2	2	1	0	0	3	0.7%	416
CAMDEN	2,838	34.6%	961	19	2	0	1	0	3	0.3%	983
CHERRY HILL	1,449	32.2%	460	5	2	0	0	0	2	0.4%	467
CLIFTON	2,123	48.4%	1,002	24	2	0	0	0	2	0.2%	1,028
EAST BRUNSWICK	860	30.2%	257	1	2	0	0	0	2	0.8%	260
EAST ORANGE	1,916	40.6%	721	45	4	3	3	0	10	1.3%	777
EDISON	2,560	36.6%	903	31	2	0	1	1	4	0.4%	938
EGG HARBOR	1,038	31.7%	325	2	1	1	0	0	2	0.6%	329
ELIZABETH	3,943	52.2%	1,961	76	10	8	3	0	21	1.0%	2,060
EVESHAM	1,016	25.1%	253	2	0	0	0	0	0	0.0%	255
EWING	600	39.0%	229	3	1	1	0	0	2	0.9%	234
FORT LEE	725	31.3%	226	0	1	0	0	0	1	0.4%	227
FRANKLIN	1,759	38.2%	659	6	6	1	0	0	7	1.0%	672
FREEHOLD	652	21.9%	143	0	0	0	0	0	0	0.0%	143
GALLOWAY	724	29.6%	210	4	0	0	0	0	0	0.0%	214
GLOUCESTER	1,520	27.1%	409	3	0	0	0	0	0	0.0%	412
HACKENSACK	1,118	53.3%	583	12	0	1	0	0	1	0.2%	596
HAMILTON	1,814	36.6%	642	20	0	1	1	0	2	0.3%	664
HILLSBOROUGH	866	34.9%	300	1	0	1	0	0	1	0.3%	302
HOBOKEN	1,467	40.5%	588	5	1	0	0	0	1	0.2%	594
HOWELL	1,125	21.5%	241	1	0	0	0	0	0	0.0%	242
IRVINGTON	1,692	52.1%	824	50	5	2	0	0	7	0.8%	881
JACKSON	1,100	29.9%	326	2	1	0	0	0	1	0.3%	329
JERSEY CITY	7,192	54.0%	3,716	115	29	8	10	1	48	1.2%	3,883
KEARNY	895	44.9%	394	6	2	0	0	0	2	0.5%	402
LAKEWOOD	6,556	81.5%	5,262	66	6	6	0	0	12	0.2%	5,340
LINDEN	911	43.9%	393	5	0	2	0	0	2	0.5%	400
MANALAPAN	778	21.6%	167	1	0	0	0	0	0	0.0%	168
MANCHESTER	448	23.4%	102	2	1	0	0	0	1	1.0%	105
MARLBORO	767	20.2%	154	0	1	0	0	0	1	0.6%	155
MIDDLETOWN	1,444	26.9%	385	4	0	0	0	0	0	0.0%	389

SFY 2017: Number of Children (six (6) to 26 months of age) by BLL and Municipality* of Residence

	Total	%	BLL (μį	g/dL)			EBLL (µg/dL)			Total
Municipality	Children	Screened	<5	5-9	10-14	15- 19	20- 44	≥45	Total EBLL	% EBLL**	Screened
MONROE											
(Gloucester	898	26.6%	235	3	1	0	0	0	1	0.4%	239
County)											
Middlesev	655	3/1 2%	223	1	0	0	0	0	0	0.0%	224
County)	055	54.270	225	-	0	0	0	0	0	0.070	224
MONTCLAIR	869	33.6%	281	7	3	0	1	0	4	1.4%	292
MOUNT LAUREL	886	33.3%	292	3	0	0	0	0	0	0.0%	295
NEW	1 572		027	1 Г	2	4	_	_	c	0.70/	050
BRUNSWICK	1,575	54.5%	057	15	2	4	0	0	0	0.7%	020
NEWARK	8,382	52.6%	4,152	207	37	5	4	0	46	1.0%	4,405
NORTH BERGEN	1,498	49.1%	717	15	2	1	1	0	4	0.5%	736
NORTH BRUNSWICK	1,220	35.7%	429	4	1	0	0	0	1	0.2%	435
OLD BRIDGE	1,478	24.5%	357	3	1	1	0	0	2	0.6%	362
PARSIPPANY- TROY HILLS	1,207	32.2%	378	8	1	1	0	0	2	0.5%	389
PASSAIC	2,767	59.3%	1,568	53	7	4	5	1	17	1.0%	1,641
PATERSON	4,632	60.0%	2,643	110	15	2	4	0	21	0.8%	2,777
PENNSAUKEN	845	32.0%	267	3	0	0	0	0	0	0.0%	270
PERTH AMBOY	1,584	47.3%	728	17	1	4		0	5	0.7%	750
PISCATAWAY	1,361	36.8%	491	7	1	0	2	0	3	0.6%	501
PLAINFIELD	1,628	69.6%	1,083	33	7	3	3	1	14	1.2%	1,133
SAYREVILLE	1,137	30.3%	340	5	0	0	0	0	0	0.0%	345
SOUTH BRUNSWICK	935	24.3%	223	1	1	0	2	0	3	1.3%	227
TEANECK	1,075	30.3%	322	4	0	0	0	0	0	0.0%	326
TOMS RIVER	1,816	31.0%	557	4	0	1	1	0	2	0.4%	563
TRENTON	2,786	47.8%	1,214	100	8	8	2	0	18	1.4%	1,332
UNION CITY	1,880	51.5%	946	17	2	2	1	0	5	0.5%	968
UNION	1,250	40.1%	494	5	1	1		0	2	0.4%	501
VINELAND	1,729	34.5%	584	11	1	0	0	0	1	0.2%	596
WASHINGTON											
(Gloucester	900	23.1%	208	0	0	0	0	0	0	0.0%	208
County)											
WAYNE	995	41.2%	408	1	1	0	0	0	1	0.2%	410
YORK	1,523	51.3%	768	10	2	1	0	0	3	0.4%	781
WEST ORANGE	1,263	37.5%	465	4	1	3	1	0	5	1.1%	474
WINSLOW	1,122	22.6%	251	2	1	0	0	0	1	0.4%	254
WOODBRIDGE	2,495	37.1%	900	17	3	1	3	1	8	0.9%	925

*Large Municipalities only. ** Based on the number of children screened.



Trend in Percentage of Children (six (6) to 26 months of age*) with BLL ≥10 µg/dL by SFY

*Screening regulations (N.J.A.C. 8:51A) require that each child be screened for lead at the age of 12 months and again at 24 months. The regulations specify the qualifying screening age ranges of six to 16 months for the first test and 18 to 26 months for the second test.

Note: Data prior to SFY 2017 could not be revised since LeadTrax reflects ongoing updates to cases reported in previous years.

Revised Table 3

	Total	%	BLI (ug/	L dL)			El (ug	BLL /dL)			Total
County	Children	Screened	<5	5-9	10- 14	15- 19	20- 44	≥45	Total EBLL	% EBLL*	Screened
ATLANTIC	19,909	20.1%	3,878	100	14	5	3	0	22	0.5%	4,001
BERGEN	61,192	22.9%	13,831	162	29	7	5	1	42	0.3%	14,041
BURLINGTON	31,546	14.1%	4,339	74	12	4	4	0	20	0.5%	4,434
CAMDEN	40,195	15.1%	5,915	116	16	2	8	0	26	0.4%	6,060
CAPE MAY	5,423	19.3%	1,031	13	1	0	2	0	3	0.3%	1,047
CUMBERLAND	12,963	23.5%	2,910	102	22	6	2	1	31	1.0%	3,042
ESSEX	64,591	39.3%	24,180	968	150	48	35	6	239	0.9%	25,395
GLOUCESTER	21,059	12.1%	2,501	33	6	2	2	0	10	0.4%	2,544
HUDSON	49,759	38.1%	18,418	395	73	26	29	1	129	0.7%	18,948
HUNTERDON	7,484	16.8%	1,237	12	5	2	5	0	12	1.0%	1,261
MERCER	26,052	23.5%	5,847	232	29	14	8	0	51	0.8%	6,130
MIDDLESEX	60,249	24.0%	14,134	236	37	12	19	2	70	0.5%	14,443
MONMOUTH	42,404	15.0%	6,236	112	17	4	3	1	25	0.4%	6,373
MORRIS	33,493	16.4%	5,419	64	10	3	6	0	19	0.3%	5 <i>,</i> 503
OCEAN	46,657	28.5%	13,123	130	16	6	1	1	24	0.2%	13,277
PASSAIC	41,179	36.4%	14,465	423	48	18	19	1	86	0.6%	14,986
SALEM	4,625	17.9%	759	56	7	2	3	0	12	1.4%	828
SOMERSET	23,622	19.6%	4,540	59	15	5	3	0	23	0.5%	4,623
SUSSEX	9,701	9.3%	894	8	1	0	0	0	1	0.1%	903
UNION	43,085	32.2%	13,458	320	43	17	28	1	89	0.6%	13,875
WARREN	7,434	13.2%	945	31	3	2	4	0	9	0.9%	985
Unknown Address	N/A	N/A	3,083	81	0	0	0	0	0	0.0%	3,164
Total	652,622	25.4%	161,143	3,727	554	185	189	15	943	0.6%	165,863

SFY 2017: Number of Children (<6 years of age) by BLL and County of Residence

*Based on the number of children screened.

Revised Table 4

	Total	%	BLL (µg	g/dL)			EBLL (μg/dL)			Total
Municipality	Children	⁷⁶ Screened	<5	5-9	10-14	15- 19	20- 44	≥45	Total EBLL	% EBLL**	Screened
ATLANTIC CITY	3,677	31.2%	1,064	67	10	4	2	0	16	1.4%	1,148
BAYONNE	4,576	27.4%	1,230	17	3	2	0	0	5	0.4%	1,252
BELLEVILLE	2,601	36.1%	920	14	2	1	1	0	4	0.4%	938
BERKELEY	1,565	18.4%	284	4	0	0	0	0	0	0.0%	288
BLOOMFIELD	3,575	33.0%	1,161	14	1	3	2	0	6	0.5%	1,181
BRICK	4,558	13.9%	629	3	0	0	0	0	0	0.0%	632
BRIDGEWATER	3,052	19.2%	579	3	2	1	0	0	3	0.5%	585
CAMDEN	8,525	20.0%	1,645	47	6	1	3	0	10	0.6%	1,703
CHERRY HILL	4,588	13.4%	610	5	2	0	0	0	2	0.3%	617
CLIFTON	6,187	31.6%	1,919	33	3	1	0	0	4	0.2%	1,957
EAST BRUNSWICK	2,725	17.5%	474	2	2	0	0	0	2	0.4%	478
EAST ORANGE	5,534	38.1%	1,965	114	13	7	5	1	26	1.2%	2,106
EDISON	7,774	24.5%	1,840	49	7	1	5	1	14	0.7%	1,903
EGG HARBOR	3,341	16.0%	531	2	2	1	0	0	3	0.6%	536
ELIZABETH	11,792	41.5%	4,699	160	14	9	7	0	30	0.6%	4,891
EVESHAM	3,117	10.6%	328	2	0	0	0	0	0	0.0%	330
EWING	1,797	21.9%	387	5	1	1	0	0	2	0.5%	394
FORT LEE	2,171	19.5%	423	0	1	0	0	0	1	0.2%	424
FRANKLIN	5,182	20.6%	1,047	14	6	1	0	0	7	0.7%	1,068
FREEHOLD	2,156	10.9%	233	1	0	0	0	0	0	0.0%	234
GALLOWAY	2,240	16.7%	368	5	0	0	0	0	0	0.0%	373
GLOUCESTER	4,647	11.9%	546	5	0	0	0	0	0	0.0%	552
HACKENSACK	3,223	37.7%	1,188	23	2	1	0	0	3	0.2%	1,215
HAMILTON	5,480	22.4%	1,195	28	1	2	3	0	6	0.5%	1,229
HILLSBOROUGH	2,736	15.6%	425	1	0	1	0	0	1	0.2%	427
HOBOKEN	3,779	22.4%	839	6	1	1	0	0	2	0.2%	847
HOWELL	3,591	11.7%	417	3	0	0	0	0	0	0.0%	420
IRVINGTON	4,993	52.6%	2,416	155	32	9	10	3	54	2.1%	2,627
JACKSON	3,649	15.9%	576	4	2	0	0	0	2	0.3%	582
JERSEY CITY	20,393	42.1%	8,240	248	53	19	19	1	92	1.1%	8,585
KEARNY	2,681	34.7%	916	11	2	0	0	0	2	0.2%	929
LAKEWOOD	18,872	46.4%	8,641	99	9	6	0	0	15	0.2%	8,755
LINDEN	2,726	34.3%	917	13	2	3	0	0	5	0.5%	935
MANALAPAN	2,541	11.2%	284	1	0	0	0	0	0	0.0%	285
MANCHESTER	1,372	14.7%	197	3	1	0	0	0	1	0.5%	201
MARLBORO	2,606	11.4%	295	1	1	0	0	0	1	0.3%	297
MIDDLETOWN	4,615	11.7%	534	4	0	0	0	0	0	0.0%	538

SFY 2017: Number of Children (<6 years of age) by BLL and Municipality* of Residence

	Total	%	BLL (µĮ	g/dL)			EBLL (µg/dL)			Total
Municipality	Children	Screened	<5	5-9	10-14	15- 19	20- 44	≥45	Total EBLL	% EBLL**	Screened
MONROE (Gloucester County)	2,794	12.3%	341	3	1	0	0	0	1	0.3%	345
MONROE (Middlesex County)	2,082	17.1%	351	5	0	0	0	0	0	0.0%	356
MONTCLAIR	2,701	20.7%	535	16	4	1	2	0	7	1.3%	558
MOUNT LAUREL	2,705	13.5%	361	4	1	0	0	0	1	0.3%	366
NEW BRUNSWICK	4,753	33.5%	1,555	27	4	5	1	0	10	0.6%	1,593
NEWARK	24,831	52.3%	12,316	548	78	19	10	2	109	0.8%	12,977
NORTH BERGEN	4,473	34.1%	1,501	22	2	1	1	0	4	0.3%	1,527
NORTH BRUNSWICK	3,502	22.7%	785	7	1	0	0	0	1	0.1%	794
OLD BRIDGE	4,548	15.4%	693	3	2	1	0	0	3	0.4%	699
PARSIPPANY- TROY HILLS	3,671	16.5%	589	11	4	1	0	0	5	0.8%	606
PASSAIC	8,226	50.3%	4,002	105	13	7	6	1	27	0.7%	4,137
PATERSON	13,987	46.6%	6,214	250	29	8	12	0	49	0.8%	6,519
PENNSAUKEN	2,696	16.4%	435	6	0	0	0	0	0	0.0%	441
PERTH AMBOY	4,756	42.4%	1,970	36	6	5	0	0	11	0.5%	2,018
PISCATAWAY	3,903	24.0%	918	12	2	1	2	0	5	0.5%	935
PLAINFIELD	4,961	56.7%	2,690	84	17	6	8	1	32	1.1%	2,812
SAYREVILLE	3,338	21.1%	692	12	0	0	0	0	0	0.0%	704
SOUTH BRUNSWICK	3,130	13.5%	406	9	3	1	2	0	6	1.4%	421
TEANECK	3,142	17.5%	543	7	0	0	0	0	0	0.0%	550
TOMS RIVER	5,617	19.7%	1,097	6	1	1	1	0	3	0.3%	1,106
TRENTON	7,998	35.7%	2,639	184	23	10	3	0	36	1.3%	2,859
UNION CITY	5,742	40.8%	2,291	38	5	4	5	0	14	0.6%	2,343
UNION	3,701	25.5%	927	12	4	2	0	0	6	0.6%	945
VINELAND	5,058	22.4%	1,110	20	2	1	1	0	4	0.4%	1,134
WASHINGTON (Gloucester County)	2,968	9.7%	289	0	0	0	0	0	0	0.0%	289
WAYNE	3,105	19.5%	601	3	1	0	0	0	1	0.2%	605
WEST NEW YORK	4,258	43.4%	1,817	24	4	1	1	0	6	0.3%	1,847
WEST ORANGE	3,635	26.4%	933	16	3	5	1	0	9	0.9%	958
WINSLOW	3,336	11.3%	370	3	3	1	0	0	4	1.1%	377
WOODBRIDGE	7,326	25.0%	1,789	35	3	1	3	1	8	0.4%	1,832

* Large Municipalities only. ** Based on the number of children screened.



SFY 2017: Breakdown of Children by Years of Age with BLLs ≥10 µg/dL

Revised Figure 4b

SFY 2017: Breakdown of Children by Years of Age with BLLs <10 µg/dL



SFY 2017: Percentage of Children by BLL (n=199,254)



Revised Table 5

	BLL (µ	ıg/dL)			EBLL (µg/dL)			Total
County	<5	5-9	10-14	15-19	20-44	≥45	Total EBLL	% EBLL*	Screened
ATLANTIC	4,242	108	14	6	3	0	23	0.5%	4,373
BERGEN	16,044	178	33	9	7	1	50	0.3%	16,272
BURLINGTON	4,777	78	13	4	4	0	21	0.4%	4,876
CAMDEN	6,625	125	17	2	8	0	27	0.4%	6,777
CAPE MAY	1,120	13	1	1	2	0	4	0.4%	1,137
CUMBERLAND	3,528	115	23	6	2	1	32	0.9%	3,675
ESSEX	31,114	1,126	170	58	38	6	272	0.8%	32,512
GLOUCESTER	2,676	35	6	2	2	0	10	0.4%	2,721
HUDSON	23,067	450	84	27	35	2	148	0.6%	23,665
HUNTERDON	1,311	12	5	2	5	0	12	0.9%	1,335
MERCER	7,462	249	33	15	8	0	56	0.7%	7,767
MIDDLESEX	17,732	273	44	15	20	2	81	0.4%	18,086
MONMOUTH	7,524	134	18	4	3	1	26	0.3%	7,684
MORRIS	6,127	71	10	4	6	0	20	0.3%	6,218
OCEAN	14,448	142	18	6	1	1	26	0.2%	14,616
PASSAIC	17,616	468	57	21	21	1	100	0.5%	18,184
SALEM	800	56	8	2	3	0	13	1.5%	869
SOMERSET	5,335	69	19	6	3	0	28	0.5%	5,432
SUSSEX	1,050	8	2	0	0	0	2	0.2%	1,060
UNION	16,534	348	49	17	29	1	96	0.6%	16,978
WARREN	1,014	33	3	2	4	0	9	0.9%	1,056
Unknown Address	3,873	88	0	0	0	0	0	0.0%	3,961
Total	194,019	4,179	627	209	204	16	1056	0.5%	199,254

SFY 2017: Number of Children by BLL and County of Residence

*Based on the number of children screened.



Number of Children with BLLs $\geq 10 \ \mu g/dL$ by SFY

The two bars in this graph do not represent discrete age groups.

Note: Data prior to SFY 2017 could not be revised since LeadTrax reflects ongoing updates to cases reported in previous years.

Figure 6b



Trends for Children <6 Years of Age: Testing Rates and Percentages of Newly Reported BLLs by SFY

Over the past decade, while the screening percentage (purple double line) is generally remaining steady, the percentage of children with any blood lead level (blue, red dotted and green lines) is generally declining.

Note: Figure 6b could not be revised since LeadTrax reflects ongoing updates to cases reported in previous years.

Table 6

Academic	BLL (µg/dL)											
Year of Entering Kindergarten	10 to 14	15 to 19	20 to 44	<u>≥</u> 45	Total # of Children with BLLs ≥10 µg/dL	% of Children with BLLs ≥ 10 µg/dL	Total # of Children Tested					
2003-'04	1,454	423	415	40	2,332	2.41%	96,683					
2004-'05	1,375	435	363	22	2,195	2.17%	101,091					
2005-'06	1,301	468	357	34	2,160	2.03%	106,286					
2006-'07	1,328	460	368	20	2,176	2.07%	105,294					
2007-'08	1,209	417	308	27	1,961	1.80%	108,955					
2008-'09	1,044	332	281	16	1,673	1.52%	109,913					
2009-'10	824	266	254	15	1,359	1.24%	109,604					
2010-'11	670	232	208	14	1,124	1.02%	110,420					
2011-'12	541	187	167	24	919	0.83%	111,126					
2012-'13	434	173	184	18	809	0.75%	107,183					
2013-'14	419	139	170	15	743	0.72%	103,434					
2014-'15	342	119	131	10	602	0.63%	95,864					
2015-'16	319	116	127	10	572	0.62%	91,651					
2016-'17	318	120	109	12	559	0.62%	90,762					

Children 5 Years of Age and their EBLLs by Academic Year of Entering Kindergarten

The above table depicts blood lead levels of children (<5 years of age) by academic year of entering kindergarten. It shows the decline in the percentage of children entering kindergarten with an EBLL, indicating the effectiveness of timely screening, case management and primary prevention.

Note: Table 6 could not be revised since LeadTrax reflects ongoing updates to cases reported in previous years.

CHAPTER THREE

SPOTLIGHT ON THE CITY OF NEWARK

The City of Newark has the greatest number of children with EBLLs compared to any other large municipality in New Jersey. In this Chapter, Figure 7 shows that in SFY 2017, Newark comprised 12% of the State's children less than six years of age with an EBLL. Figure 10 shows the Newark Department of Health & Community Wellness had the highest volume of environmental cases in SFY 2017.

Newark addresses the issue of elevated blood lead levels in children through several means and has been allocated funding and continues to seek grants from governmental and non-governmental sources. In the past decade, Newark established and locally administers the State's only Lead-Safe Houses, which are municipally-owned properties. The Lead-Safe Houses are used to relocate residents who have a child with an EBLL when the family has no other temporary lead-safe housing alternatives. This is a great accomplishment that other municipalities have expressed an interest in also achieving. Further, Newark provides a primary prevention focused, community-based presence through the Newark Partnership for Lead-Safe Children. This partnership provides outreach, education and professional development opportunities to parents, property owners, child care providers and health, social services and housing professionals.

Although the Department's annual report has historically featured a chapter highlighting the City of Newark, given that the risk of lead exposure is present throughout New Jersey, future annual reports will have a broadened focus to highlight data from other large municipalities as well.





Revised Figure 8

SFY 2017: Percentage of Children (<6 years of age) with BLL $\geq 10 \mu g/dL$ in the City of Newark Compared to Other Large Municipalities in NJ (*n*=681)



City of Newark All other Large Municipalities





The data are based on the percentage of children with EBLLs in large municipalities where the number of children screened for lead in SFY 2017 exceeds 40% of the total children in that age group.



SFY 2017: Local Health Departments with ≥20 New Environmental Cases

The data are based on the total number of new environmental cases opened during SFY 2017. A new environmental case is opened based on a child's BLL. Once a case is opened, the local health department is required to conduct an environmental investigation per N.J.A.C. 8:51.

SFY 2017: Top Ten Local Health Departments Comprising the Highest Percentages* of New Children Reported with EBLL ≥10 µg/dL Compared to All Other Local Health Departments



- Newark Department of Health & Community Wellness (10%)
- Jersey City Division of Health (9%)
- Trenton Department of Health & Human Services (6%)
- Irvington Department of Health & Welfare (5%)
- Paterson Division of Health (5%)
- Plainfield Health Department (5%)
- Middlesex County Public Health Department (4%)
- Cumberland County Health Department (4%)
- Montclair Health Department (4%)
- Passaic City Health Department (4%)
- All other local health departments (43%)

CHAPTER FOUR

ENVIRONMENTAL INVESTIGATIONS BY LOCAL HEALTH DEPARTMENTS

N.J.A.C. 8:51 requires local health departments to investigate reported cases of EBLLs that meet or exceed the threshold for public health intervention (defined as greater than or equal to 10 ug/dL during SFY 2017) within their jurisdiction and to order the abatement of all lead hazards identified in the course of the 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 including from water and consumer products.

In addition to environmental investigations, the local health department 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 Tables 7, 8, 9 and 10 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 is 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.

Revised Table 7

County Name	Cases Referred*	Investigation(s) Required**	Investigation(s) Completed	% Investigations Completed	Abatement(s) Required	Abatement(s) Completed	% Abatement Completed
ATLANTIC	9	9	7	78%	5	5	100%
BERGEN	15	11	9	82%	6	5	83%
BURLINGTON	13	10	9	90%	9	6	67%
CAMDEN	16	16	14	88%	10	10	100%
CAPE MAY	2	1	1	100%	1	0	0%
CUMBERLAND	24	23	19	83%	23	22	96%
ESSEX	132	113	72	64%	64	49	77%
GLOUCESTER	4	4	3	75%	2	2	100%
HUDSON	74	63	53	84%	51	49	96%
HUNTERDON	6	5	3	60%	1	0	0%
MERCER	43	34	27	79%	19	19	100%
MIDDLESEX	44	35	20	57%	17	15	88%
MONMOUTH	19	17	12	71%	11	9	82%
MORRIS	15	12	9	75%	8	7	88%
OCEAN	7	4	0	0%	1	1	100%
PASSAIC	52	49	38	78%	34	34	100%
SALEM	12	12	7	58%	10	9	90%
SOMERSET	13	10	4	40%	6	5	83%
UNION	58	48	41	85%	32	28	88%
WARREN	4	4	3	75%	3	2	67%
Total	562	480	351	73%	313	277	88%

SFY 2017: Environmental Case Activity Status by County

*A new environmental case is generated and referred to the appropriate 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.

**Reasons for investigation not required include property built after 1978 or property has a lead-free certificate.

Note: The data for this table are based on case updates entered in LeadTrax as of March 15, 2019. Time frames may vary for the completion of abatements.

Revised Table 8 SFY 2017: Local Health Departments with ≥20 New Environmental Cases

Local Health Department	Cases Referred*	Investigation(s) Required**	Investigation(s) Completed	% Investigation Completed	Abatement(s) Required	Abatement(s) Completed	% Abatement Completed
Cumberland County Health Department	22	21	17	81%	21	20	95%
Irvington Department of Health & Welfare	30	26	23	88%	14	8	57%
Jersey City Division of Health	53	44	37	84%	36	35	97%
Middlesex County Public Health Department	25	24	15	63%	12	12	100%
Montclair Health Department	21	21	17	81%	13	13	100%
Newark Department of Health & Community Wellness	59	45	15	33%	21	13	62%
Passaic City Health Department	21	19	15	79%	15	15	100%
Paterson Division of Health	29	28	21	75%	18	18	100%
Plainfield Health Department	26	23	21	91%	16	16	100%
Trenton Department of Health & Human Services	35	29	23	79%	15	15	100%

*A new environmental case is generated and referred to the appropriate 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.

**Reasons for investigation not required include property built after 1978 or property has a lead-free certificate.

Note: The data for this table are based on case updates entered in LeadTrax as of March 15, 2019. Time frames may vary for the completion of abatements.

Table 9

SFY	Environmental Cases Opened	Investigations Required	Investigations Completed	% Investigation Completed	Investigations Pending	Abatements Completed	Abatements Pending	% Abatements Completed
1997	2168	1499	1468	98%	31	767	12	98%
1998	2014	1455	1405	97%	50	725	13	98%
1999	1517	1044	952	91%	92	558	29	95%
2000	1144	815	705	87%	110	484	29	94%
2001	932	648	562	87%	86	374	12	97%
2002	867	601	546	91%	55	363	7	98%
2003	796	527	495	94%	32	288	21	93%
2004	748	526	471	90%	55	289	20	94%
2005	718	542	481	89%	61	277	24	92%
2006	688	494	494	100%	0	229	40	85%
2007	1008	728	728	100%	0	356	18	95%
2008	750	581	581	100%	0	260	18	94%
2009	583	500	500	100%	0	337	35	91%
2010	450	411	411	100%	0	245	70	78%
2011	573	554	554	100%	0	273	95	74%
2012	874	435	406	93%	29	186	84	69%
2013	502	354	353	99%	1	174	58	75%
2014	424	381	348	91%	33	117	54	68%
2015	483	303	301	99%	2	138	35	80%
2016	568	338	289	86%	49	71	114	38%
2017	589	359	323	90%	36	91	99	47%

Abatement Status of Cases by SFY: 1997-2017

A new environmental case is generated and referred to the appropriate 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.

Reasons for investigation not required include property built after 1978 or property has a lead-free certificate.

Note: Table 9 could not be revised since LeadTrax reflects ongoing updates to cases reported in previous years.

Revised Table 10

Local Health Department	Cases Referred*	Investigation(s) Required**	Investigation(s) Completed	Abatement(s) Required	Abatement(s) Completed
ATLANTIC CITY HEALTH DEPARTMENT	6	6	5	3	3
ATLANTIC COUNTY HEALTH DEPARTMENT	3	3	2	2	2
BAYONNE DEPARTMENT OF HEALTH	4	4	1	1	1
BERGEN COUNTY DEPARTMENT OF HEALTH SERVICES	2	2	1	1	1
BERNARDS TOWNSHIP HEALTH DEPARTMENT	1	1	0	0	0
BLOOMFIELD DEPARTMENT OF HEALTH	2	1	0	0	0
BRIDGEWATER TOWNSHIP DEPARTMENT OF HEALTH	1	0	0	0	0
BURLINGTON COUNTY HEALTH DEPARTMENT	13	10	9	9	6
CAMDEN COUNTY DEPARTMENT OF HEALTH	16	16	14	10	10
CAPE MAY COUNTY HEALTH DEPARTMENT	2	1	1	1	0
CLIFTON HEALTH DEPARTMENT	1	1	1	0	NA
CUMBERLAND COUNTY HEALTH DEPARTMENT	22	21	17	21	20
DOVER HEALTH DEPARTMENT	2	2	2	2	2
EAST HANOVER HEALTH DEPARTMENT	1	0	0	0	0
EDISON DEPARTMENT OF HEALTH & HUMAN RESOURCES	8	7	2	2	0
ELIZABETH DEPARTMENT OF HEALTH & HUMAN SERVICES	1	0	0	0	0
ENGLEWOOD HEALTH DEPARTMENT	2	0	0	0	0
EWING TOWNSHIP HEALTH DEPARTMENT	1	0	0	0	0
FORT LEE DEPARTMENT OF HEALTH	1	0	0	0	0
FRANKLIN TOWNSHIP HEALTH DEPARTMENT	3	3	2	2	1
FREEHOLD AREA HEALTH DEPARTMENT	3	3	2	2	1
GLOUCESTER COUNTY DEPARTMENT OF HEALTH	4	4	3	2	2
HACKENSACK HEALTH DEPARTMENT	4	3	3	3	3
HAMILTON TOWNSHIP DIVISION OF HEALTH	4	3	3	3	3
HARRISON BOARD OF HEALTH	1	1	1	1	1

Local Health Department	Cases Referred*	Investigation(s) Required**	Investigation(s) Completed	Abatement(s) Required	Abatement(s) Completed
HILLSBOROUGH TOWNSHIP HEALTH DEPARTMENT	2	0	0	0	0
HOBOKEN HEALTH DEPARTMENT	2	1	1	1	1
HOPEWELL TOWNSHIP HEALTH DEPARTMENT	1	0	0	0	0
HUNTERDON COUNTY DEPARTMENT OF HEALTH	6	5	3	1	0
IRVINGTON DEPARTMENT OF HEALTH & WELFARE	30	26	23	14	8
JERSEY CITY DIVISION OF HEALTH	53	44	37	36	35
MADISON BORO BOARD OF HEALTH	2	2	1	2	2
MAPLEWOOD HEALTH DEPARTMENT	2	2	2	2	2
MID-BERGEN REGIONAL HEALTH COMMISSION	1	1	1	1	0
MIDDLE-BROOK REGIONAL HEALTH COMMISSION	2	2	0	2	2
MIDDLESEX COUNTY PUBLIC HEALTH DEPARTMENT	25	24	15	12	12
MONMOUTH COUNTY HEALTH DEPARTMENT	14	13	10	9	8
MONMOUTH COUNTY REGIONAL HEALTH COMMISSION	2	1	0	0	0
MONTCLAIR HEALTH DEPARTMENT	21	21	17	13	13
N.W. BERGEN REGIONAL HEALTH COMMISSION	1	1	1	0	0
NEWARK DEPARTMENT OF HEALTH AND COMMUNITY WELLNESS	59	45	15	21	13
NORTH BERGEN HEALTH DEPARTMENT	12	11	11	10	9
OCEAN COUNTY HEALTH DEPARTMENT	7	4	0	1	1
PARAMUS BOARD OF HEALTH	2	2	2	0	NA
PARSIPPANY HEALTH DEPARTMENT	2	2	2	2	2
PASSAIC CITY HEALTH DEPARTMENT	21	19	15	15	15
PATERSON DIVISION OF HEALTH	29	28	21	18	18
PEQUANNOCK TOWNSHIP BOARD OF HEALTH	2	1	1	0	0
PISCATAWAY TOWNSHIP HEALTH DEPARTMENT	3	3	3	3	3
PLAINFIELD HEALTH DEPARTMENT	26	23	21	16	16
RAHWAY HEALTH DEPARTMENT	2	2	2	2	1
RANDOLPH TOWNSHIP BOARD OF HEALTH	1	1	1	1	0
RIDGEFIELD HEALTH DEPARTMENT	1	1	1	1	1

Local Health Department	Cases Referred*	Investigation(s) Required**	Investigation(s) Completed	Abatement(s) Required	Abatement(s) Completed
ROSELLE HEALTH DEPARTMENT	1	0	0	0	0
ROXBURY TOWNSHIP BOARD OF HEALTH	2	2	1	0	0
SALEM COUNTY DEPARTMENT OF HEALTH	12	12	7	10	9
SOMERSET COUNTY HEALTH DEPARTMENT	3	3	2	2	2
SOMERVILLE HEALTH DEPARTMENT	1	1	0	0	0
SOUTH BRUNSWICK HEALTH DEPARTMENT	2	0	0	0	0
SOUTH ORANGE HEALTH DEPARTMENT	1	1	1	1	1
SUMMIT HEALTH DEPARTMENT	1	1	1	1	0
TOWNSHIP OF HANOVER HEALTH DEPARTMENT	3	2	1	1	1
TOWNSHIP OF UNION DEPARTMENT OF HEALTH	9	7	6	2	1
TRENTON DEPT OF HEALTH & HUMAN SERVICES	35	29	23	15	15
VINELAND DEPARTMENT OF HEALTH	2	2	2	2	2
WARREN COUNTY HEALTH DEPARTMENT	4	4	3	3	2
WEST CALDWELL HEALTH DEPARTMENT	1	1	1	1	1
WEST MILFORD TOWNSHIP HEALTH DEPARTMENT	1	1	1	1	1
WEST NEW YORK HEALTH DEPARTMENT	2	2	2	2	2
WEST ORANGE HEALTH DEPARTMENT	16	16	13	12	11
WEST WINDSOR TOWNSHIP HEALTH DEPARTMENT	2	2	1	1	1
WESTFIELD REGIONAL HEALTH DEPARTMENT	18	15	11	11	10
WESTWOOD HEALTH DEPARTMENT	1	1	0	0	0
WOODBRIDGE TOWNSHIP DEPT OF HEALTH & HUMAN SERV	6	1	0	0	0

*A new environmental case is generated and referred to the appropriate 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.

**Reasons for investigation not required include property built after 1978 or property has a lead-free certificate.

Note: The data for this table are based on case updates entered in LeadTrax as of March 15, 2019. Time frames may vary for the completion of abatements.

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 <u>www.healthypeople.gov</u>. Note: Revisions in this section refer to historical updates made by HP2020 and are not related to revisions made to the SFY 2017 annual report.

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: $5.2 \mu g/dL$ of lead.

Target-Setting Method: 10 percent improvement.

Current Metric: $4.3 \mu g/dL$ 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 μ g/dL—This was the average BLL in children aged 1-5 years in 2003–04. Target: 1.6 μ g/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 <u>www.state.nj.us/health/chs/hnj2020</u>. Note: Revisions in this section refer to historical updates made by HNJ2020 and are not related to revisions made to the SFY 2017 annual report.

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. SFY2017: 5.0 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 $\leq 1.5 \ \mu g/dL$.

Baseline: $3.2 \ \mu g/dL$ —This was the average BLL in children aged 1-5 years in 2005–08. Target: $1.5 \ \mu g/dL$ average BLL (U.S. target is $1.6 \ \mu g/dL$ average BLL). Target-Setting Method: 10 percent improvement. Definition of Metric: Mean (average) BLL in children aged 1 to 5 years. SFY2017: $1.5 \ \mu g/dL$ 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* $\leq 2.9 \ \mu g/dL$.