

Blood Lead Level Test Results for Selected Flint Zip Codes, Genesee County, and the State of Michigan Executive Summary as of June 30, 2017*

This report is generated by MDHHS to track Blood Lead Level test results in Flint, Michigan.

Background

- Blood lead level testing is an important part of efforts to identify people who have been harmed by drinking water that contained lead, and from other sources of lead exposure in the home. MDHHS recognizes that the full community of Flint must be the focus of the public health response.

Data Presentation

- Counts in this report include both capillary and venous blood tests.
- People who have had multiple tests are counted only once per year or in the tables, per time period in the tables. People counted in one calendar year/time period who were tested again in the next calendar year/time period are counted in both years/time periods.
- Since blood lead levels peak every summer, the incidence of elevated blood lead levels over time are presented using moving averages.
 - o Moving averages are commonly used to smooth out short-term fluctuations in trends, and to make long-term trends more apparent (http://en.wikipedia.org/Moving_average).
 - o The moving average for each quarter is the average of the incidence in current quarter and the incidence in the previous 3 quarters.

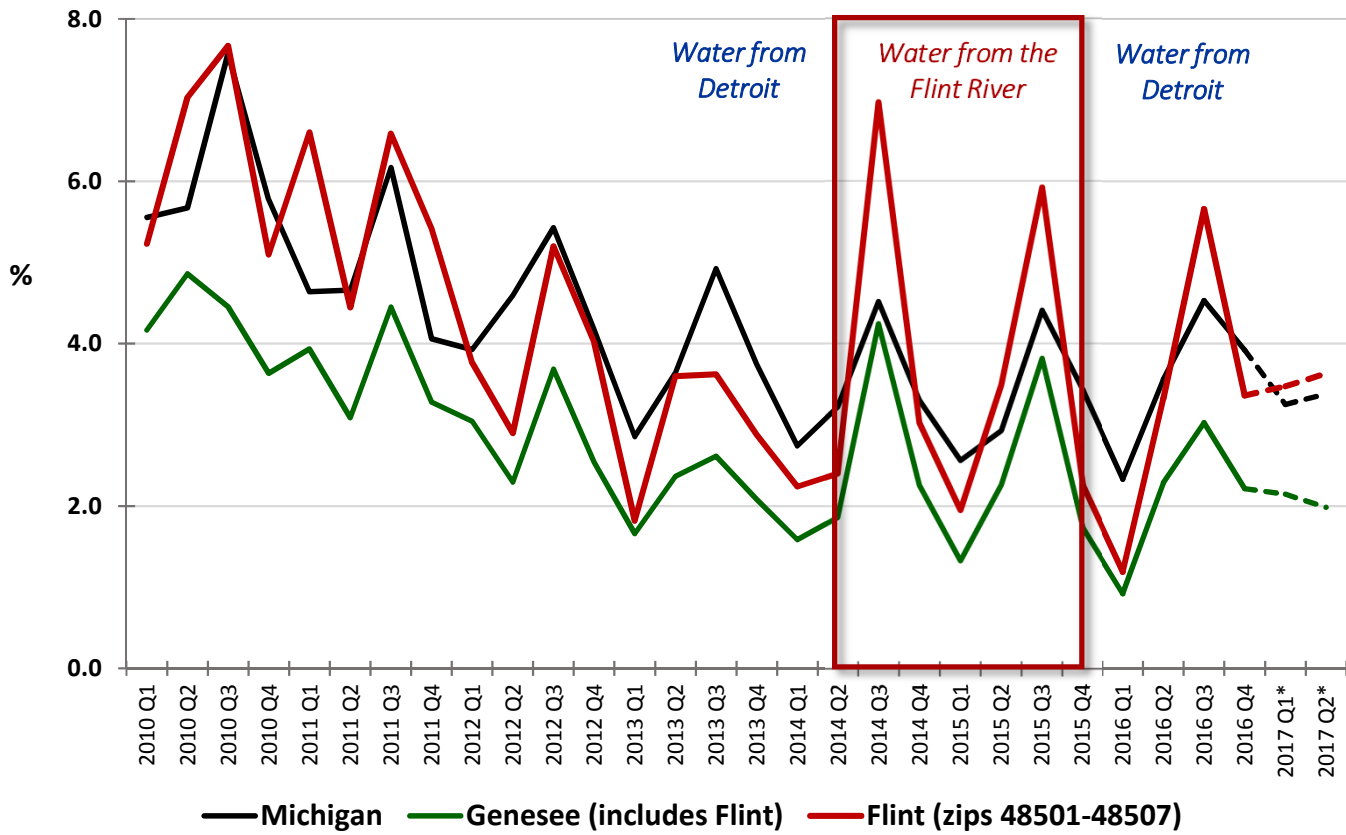
Summary of Findings

- Between 10/1/2015 and 06/30/2017, 34,331 people had a blood lead test in Flint (zip codes 48501-48507).
- Since 10/1/2015, 258 children under age 18 in the Flint zip codes 48501-48507 had elevated blood lead levels: blood lead levels greater than or equal to 5 mcg/dL (micrograms lead per deciliter of blood).
- Of the 8,283 children younger than 6 years old tested since 10/1/2015, 2.6% had blood lead levels greater than or equal to 5 mcg/dL.
- Of the 28 children younger than 6 from the Flint zip codes that had elevated blood lead levels in the first quarter of 2017 (January – March), 13 (46.4%) had a previous elevated blood lead test.

* **Starting July 11, 2017**, this report includes the following revisions: 1) The graph of the annual incidence of EBLL in Flint children under six now includes lines marking the time period when Flint River water was in use. 2) The bar chart of the numbers of new and existing EBLL cases is removed. 3) The tables of EBLL percentages no longer include data before 2014, and they now include numbers specifically for the time periods during and after Flint water usage, rather than the reporting period from April 2014 to the present.

Annual Incidence of Elevated Blood Lead ≥ 5 mcg/dL among Children <6 Years of Age by Quarter, Michigan, 2010 - 2017*

*Data as of June 30, 2017



† Blood lead levels greater than 5 $\mu\text{g}/\text{dL}$ (micrograms per deciliter of blood) are classified as elevated. People who have had multiple tests are counted only once per year for annual counts. Counts on this report include both capillary and venous blood tests.

* Data for Quarters 1 and 2 of 2017 are provisional and subject to change. Data for Quarter 3 of 2017 will be presented after the end of the quarter (September 2017).

Table 1. Incidence of elevated blood lead levels (≥ 5 mcg/dL) among children less than 6 years of age, 2014 – 2017

			Michigan	Genesee County	Flint 48501-48507
Annual Results	01/01/2017 to 06/30/2017	Total tested for lead	74,838	3,386	1,522
		Number of test results ≥ 5 mcg/dL	2,482	70	54
		Percent of test results ≥ 5 mcg/dL	3.3%	2.1%	3.5%
	1/1/2016 to 12/31/2016	Total tested for lead	158,040	11,732	6,640
		Number of test results ≥ 5 mcg/dL	5,723	211	171
		Percent of test results ≥ 5 mcg/dL	3.6%	1.8%	2.6%
	1/1/2015 to 12/31/2015	Total tested for lead	141,416	6,984	3,388
		Number of test results ≥ 5 mcg/dL	4,804	160	112
		Percent of test results ≥ 5 mcg/dL	3.4%	2.3%	3.3%
	1/1/2014 to 12/31/2014	Total tested for lead	143,987	6,820	3,102
		Number of test results ≥ 5 mcg/dL	5,063	178	122
		Percent of test results ≥ 5 mcg/dL	3.5%	2.6%	3.9%
During Flint River Use	4/1/2014 to 9/30/2015	Total tested for lead	200,616	9,419	4,263
		Number of test results ≥ 5 mcg/dL	7,227	264	177
		Percent of test results ≥ 5 mcg/dL	3.6%	2.8%	4.2%
After Flint River Use	10/01/2015 to 06/30/2017	Total tested for lead	235,877	15,393	8,283
		Number of test results ≥ 5 mcg/dL	7,902	273	215
		Percent of test results ≥ 5 mcg/dL	3.4%	1.8%	2.6%

Table 2. Incidence of elevated blood lead levels (≥ 5 mcg/dL) among children 6 to 17 years of age, 2014 – 2017

			Michigan	Genesee County	Flint 48501-48507
Annual Results	01/01/2017 to 06/30/2017	Total tested for lead	6,317	1,187	830
		Number of test results ≥ 5 mcg/dL	138	7	5
		Percent of test results ≥ 5 mcg/dL	2.2%	0.6%	0.6%
	1/1/2016 to 12/31/2016	Total tested for lead	24,393	9,681	7,313
		Number of test results ≥ 5 mcg/dL	422	56	40
		Percent of test results ≥ 5 mcg/dL	1.7%	0.6%	0.5%
	1/1/2015 to 12/31/2015	Total tested for lead	10,431	1,569	1,083
		Number of test results ≥ 5 mcg/dL	254	9	7
		Percent of test results ≥ 5 mcg/dL	2.4%	0.6%	0.6%
	1/1/2014 to 12/31/2014	Total tested for lead	10,563	788	372
		Number of test results ≥ 5 mcg/dL	285	6	5
		Percent of test results ≥ 5 mcg/dL	2.7%	0.8%	1.3%
During Flint River Use	4/1/2014 to 9/30/2015	Total tested for lead	14,934	1,189	593
		Number of test results ≥ 5 mcg/dL	363	8	6
		Percent of test results ≥ 5 mcg/dL	2.4%	0.7%	1.0%
After Flint River Use	10/01/2015 to 06/30/2017	Total tested for lead	32,505	11,250	8,417
		Number of test results ≥ 5 mcg/dL	550	57	43
		Percent of test results ≥ 5 mcg/dL	1.7%	0.5%	0.5%

			Michigan	Genesee County	Flint 48501-48507
Annual Results	01/01/2017 to 06/30/2017	Total tested for lead	10,389	3,105	1,953
		Number of test results ≥ 5 mcg/dL	727	54	37
		Percent of test results ≥ 5 mcg/dL	7.0%	1.7%	1.9%
	1/1/2016 to 12/31/2016	Total tested for lead	37,015	20,247	15,760
		Number of test results ≥ 5 mcg/dL	1,654	310	249
		Percent of test results ≥ 5 mcg/dL	4.5%	1.5%	1.6%
	1/1/2015 to 12/31/2015	Total tested for lead	13,696	1,250	811
		Number of test results ≥ 5 mcg/dL	1,369	48	21
		Percent of test results ≥ 5 mcg/dL	10.0%	3.8%	2.6%
	1/1/2014 to 12/31/2014	Total tested for lead	12,576	436	111
		Number of test results ≥ 5 mcg/dL	1,419	44	12
		Percent of test results ≥ 5 mcg/dL	11.3%	10.1%	10.8%
During Flint River Use	4/1/2014 to 9/30/2015	Total tested for lead	18,513	679	204
		Number of test results ≥ 5 mcg/dL	1,912	56	15
		Percent of test results ≥ 5 mcg/dL	10.3%	8.2%	7.4%
After Flint River Use	10/01/2015 to 06/30/2017	Total tested for lead	48,341	23,221	17,631
		Number of test results ≥ 5 mcg/dL	2,320	365	285
		Percent of test results ≥ 5 mcg/dL	4.8%	1.6%	1.6%

			Michigan	Genesee County	Flint 48501-48507
Annual Results	01/01/2017 to 06/30/2017	Total tested for lead	91,544	7,678	4,305
		Number of test results ≥ 5 mcg/dL	3,347	131	96
		Percent of test results ≥ 5 mcg/dL	3.7%	1.7%	2.2%
	1/1/2016 to 12/31/2016	Total tested for lead	219,448	41,660	29,713
		Number of test results ≥ 5 mcg/dL	7,799	577	460
		Percent of test results ≥ 5 mcg/dL	3.6%	1.4%	1.5%
	1/1/2015 to 12/31/2015	Total tested for lead	165,543	9,803	5,282
		Number of test results ≥ 5 mcg/dL	6,427	217	140
		Percent of test results ≥ 5 mcg/dL	3.9%	2.2%	2.7%
	1/1/2014 to 12/31/2014	Total tested for lead	167,126	8,044	3,585
		Number of test results ≥ 5 mcg/dL	6,767	228	139
		Percent of test results ≥ 5 mcg/dL	4.0%	2.8%	3.9%
During Flint River Use	4/1/2014 to 9/30/2015	Total tested for lead	234,063	11,287	5,060
		Number of test results ≥ 5 mcg/dL	9,502	328	198
		Percent of test results ≥ 5 mcg/dL	4.1%	2.9%	3.9%
After Flint River Use	10/01/2015 to 06/30/2017	Total tested for lead	316,723	49,864	34,331
		Number of test results ≥ 5 mcg/dL	10,772	695	543
		Percent of test results ≥ 5 mcg/dL	3.4%	1.4%	1.6%