



## Blood Lead Level Test Results for Selected Flint Zip Codes, Genesee County, and the State of Michigan Executive Summary as of April 27, 2018\*

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.

### Summary of Findings

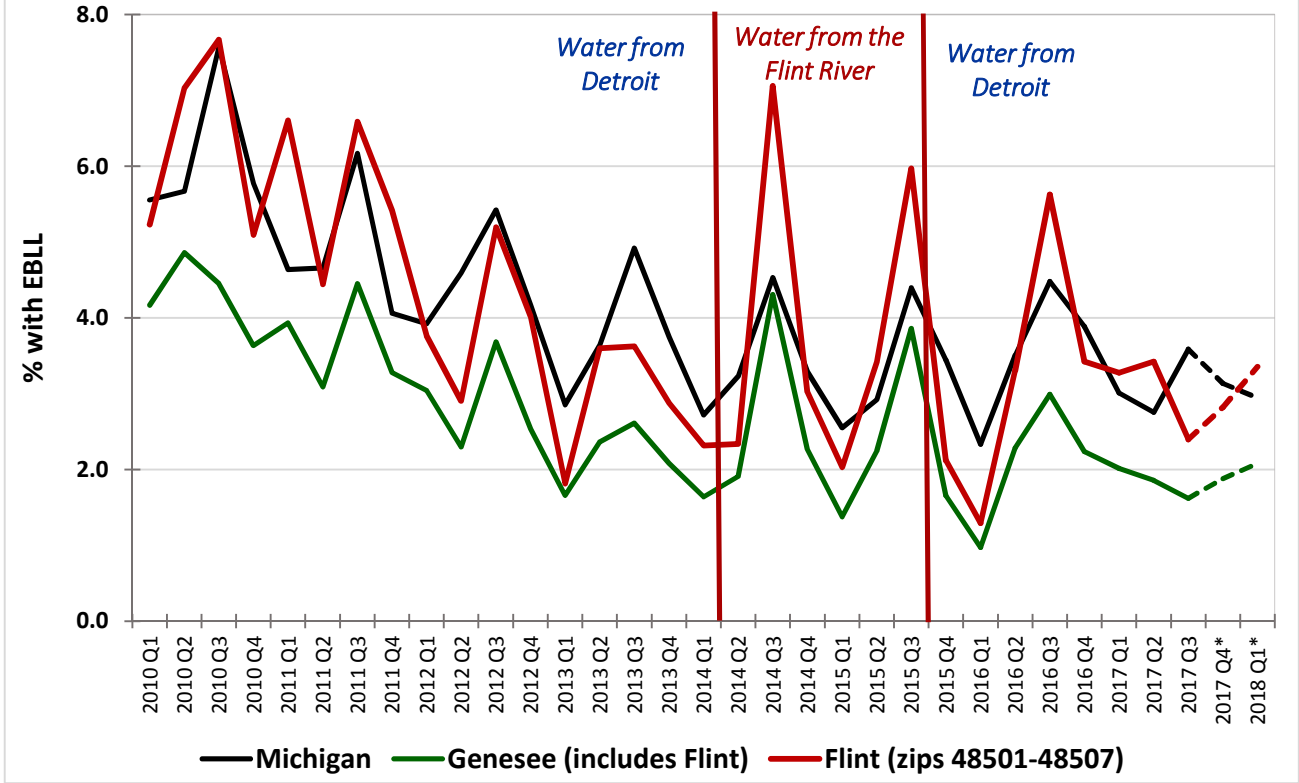
- Between 10/1/2015 and 04/27/2018, 37,687 people had a blood lead test in Flint (zip codes 48501-48507).
- Since 10/1/2015, 297 children under age 18 in the Flint zip codes 48501-48507 had elevated blood lead levels: blood lead levels greater than or equal to 5 µg/dL (micrograms lead per deciliter of blood).
- Of the 8,951 children younger than 6 years old tested since 10/1/2015, 2.7% had blood lead levels greater than or equal to 5 µg/dL.
- Of the 88 children younger than 6 from the Flint zip codes that had elevated blood lead levels in 2017, 24 (27.3%) had a previous elevated blood lead test.

### PLEASE NOTE: Changes in numbers of test results due to algorithm change

\* Starting February 1, 2018, this report includes blood lead test counts that are based on the use of a new algorithm for assigning unique identifiers to individuals in the surveillance database. This new algorithm is more efficient and accurate than the previous system used, and the numbers of test results reported in the current and future Blood Lead Level Test Results may be different than those presented in reports produced before February 1, 2018.

**Percentage of Children < 6 Years of Age with Elevated Blood Lead Levels ( $\geq 5 \mu\text{g}/\text{dL}$ ) by Quarter<sup>†</sup>, Michigan, 2010 - 2018\***

\*Data as of April 27, 2018



† People who have had multiple tests are counted only once per year; if they are tested in more than one year, they will be counted in each year they were tested.  
Counts on this report include both capillary and venous blood tests.

\* Data for Quarter 4 of 2017 and Quarter 1 of 2018 are provisional and subject to change.

**Table 1. Percentage of elevated blood lead levels ( $\geq 5 \mu\text{g/dL}$ ) among tested children less than 6 years of age, 2014 – 2018**

			Michigan	Genesee County	Flint 48501-48507
<b>Annual Results</b>	01/01/2018 to 04/27/2018	Total # of children tested for lead	6,162	268	149
		Children with test results $\geq 5 \mu\text{g/dL}$	226	3	3
		<b>% of children with results <math>\geq 5 \mu\text{g/dL}</math></b>	<b>3.7%</b>	<b>1.1%</b>	<b>2.0%</b>
	1/1/2017 to 12/31/2017	Total # of children tested for lead	147,281	6,554	3,001
		Children with test results $\geq 5 \mu\text{g/dL}$	4,625	120	88
		<b>% of children with results <math>\geq 5 \mu\text{g/dL}</math></b>	<b>3.1%</b>	<b>1.8%</b>	<b>2.9%</b>
	1/1/2016 to 12/31/2016	Total # of children tested for lead	154,322	10,809	5,977
		Children with test results $\geq 5 \mu\text{g/dL}$	5,551	201	162
		<b>% of children with results <math>\geq 5 \mu\text{g/dL}</math></b>	<b>3.6%</b>	<b>1.9%</b>	<b>2.7%</b>
	1/1/2015 to 12/31/2015	Total # of children tested for lead	139,385	6,865	3,327
		Children with test results $\geq 5 \mu\text{g/dL}$	4,730	157	109
		<b>% of children with results <math>\geq 5 \mu\text{g/dL}</math></b>	<b>3.4%</b>	<b>2.3%</b>	<b>3.3%</b>
	1/1/2014 to 12/31/2014	Total # of children tested for lead	141,686	6,689	3,042
		Children with test results $\geq 5 \mu\text{g/dL}$	4,986	178	121
		<b>% of children with results <math>\geq 5 \mu\text{g/dL}</math></b>	<b>3.5%</b>	<b>2.7%</b>	<b>4.0%</b>
<b>During Flint River Use</b>	4/1/2014 to 9/30/2015	Total # of children tested for lead	194,403	9,096	4,076
		Children with test results $\geq 5 \mu\text{g/dL}$	6,867	251	166
		<b>% of children with results <math>\geq 5 \mu\text{g/dL}</math></b>	<b>3.5%</b>	<b>2.8%</b>	<b>4.1%</b>
<b>After Flint River Use</b>	10/01/2015 to 04/27/2018	Total # of children tested for lead	307,006	17,485	8,951
		Children with test results $\geq 5 \mu\text{g/dL}$	9,919	318	246
		<b>% of children with results <math>\geq 5 \mu\text{g/dL}</math></b>	<b>3.2%</b>	<b>1.8%</b>	<b>2.7%</b>

**Table 2. Percentage of elevated blood lead levels ( $\geq 5 \mu\text{g/dL}$ ) among tested children 6 to 17 years of age, 2014 – 2018**

			Michigan	Genesee County	Flint 48501-48507
<b>Annual Results</b>	01/01/2018 to 04/27/2018	Total # of children tested for lead	755	116	76
		Children with test results $\geq 5 \mu\text{g/dL}$	0	2	2
		<b>% of children with results <math>\geq 5 \mu\text{g/dL}</math></b>	<b>0.0%</b>	<b>1.7%</b>	<b>2.6%</b>
	1/1/2017 to 12/31/2017	Total # of children tested for lead	16,267	2,576	1,726
		Children with test results $\geq 5 \mu\text{g/dL}$	381	20	17
		<b>% of children with results <math>\geq 5 \mu\text{g/dL}</math></b>	<b>2.3%</b>	<b>0.8%</b>	<b>1.0%</b>
	1/1/2016 to 12/31/2016	Total # of children tested for lead	27,637	10,288	7,735
		Children with test results $\geq 5 \mu\text{g/dL}$	539	62	46
		<b>% of children with results <math>\geq 5 \mu\text{g/dL}</math></b>	<b>2.0%</b>	<b>0.6%</b>	<b>0.6%</b>
	1/1/2015 to 12/31/2015	Total # of children tested for lead	12,706	1,690	1,145
		Children with test results $\geq 5 \mu\text{g/dL}$	344	12	10
		<b>% of children with results <math>\geq 5 \mu\text{g/dL}</math></b>	<b>2.7%</b>	<b>0.7%</b>	<b>0.9%</b>
	1/1/2014 to 12/31/2014	Total # of children tested for lead	12,965	913	428
		Children with test results $\geq 5 \mu\text{g/dL}$	388	6	5
		<b>% of children with results <math>\geq 5 \mu\text{g/dL}</math></b>	<b>3.0%</b>	<b>0.7%</b>	<b>1.2%</b>
<b>During Flint River Use</b>	4/1/2014 to 9/30/2015	Total # of children tested for lead	18,228	1,344	658
		Children with test results $\geq 5 \mu\text{g/dL}$	486	9	7
		<b>% of children with results <math>\geq 5 \mu\text{g/dL}</math></b>	<b>2.7%</b>	<b>0.7%</b>	<b>1.1%</b>
<b>After Flint River Use</b>	10/01/2015 to 04/27/2018	Total # of children tested for lead	47,197	13,068	9,461
		Children with test results $\geq 5 \mu\text{g/dL}$	861	65	51
		<b>% of children with results <math>\geq 5 \mu\text{g/dL}</math></b>	<b>1.8%</b>	<b>0.5%</b>	<b>0.5%</b>

**Table 3. Percentage of elevated blood lead levels ( $\geq 5 \mu\text{g}/\text{dL}$ ) among tested adults at least 18 years of age, 2014 - 2018**

			Michigan	Genesee County	Flint 48501-48507
<b>Annual Results</b>	01/01/2018 to 04/27/2018	Total # of adults tested for lead	1,081	298	171
		Adults with test results $\geq 5 \mu\text{g}/\text{dL}$	68	4	2
		<b>% of adults with results <math>\geq 5 \mu\text{g}/\text{dL}</math></b>	<b>6.3%</b>	<b>1.3%</b>	<b>1.2%</b>
	1/1/2017 to 12/31/2017	Total # of adults tested for lead	20,285	5,439	3,275
		Adults with test results $\geq 5 \mu\text{g}/\text{dL}$	1,283	91	58
		<b>% of adults with results <math>\geq 5 \mu\text{g}/\text{dL}</math></b>	<b>6.3%</b>	<b>1.7%</b>	<b>1.8%</b>
	1/1/2016 to 12/31/2016	Total # of adults tested for lead	37,415	20,511	15,962
		Adults with test results $\geq 5 \mu\text{g}/\text{dL}$	1,646	308	246
		<b>% of adults with results <math>\geq 5 \mu\text{g}/\text{dL}</math></b>	<b>4.4%</b>	<b>1.5%</b>	<b>1.5%</b>
	1/1/2015 to 12/31/2015	Total # of adults tested for lead	13,825	1,260	817
		Adults with test results $\geq 5 \mu\text{g}/\text{dL}$	1,370	48	21
		<b>% of adults with results <math>\geq 5 \mu\text{g}/\text{dL}</math></b>	<b>9.9%</b>	<b>3.8%</b>	<b>2.6%</b>
	1/1/2014 to 12/31/2014	Total # of adults tested for lead	12,687	440	112
		Adults with test results $\geq 5 \mu\text{g}/\text{dL}$	1,421	44	12
		<b>% of adults with results <math>\geq 5 \mu\text{g}/\text{dL}</math></b>	<b>11.2%</b>	<b>10.0%</b>	<b>10.7%</b>
<b>During Flint River Use</b>	4/1/2014 to 9/30/2015	Total # of adults tested for lead	18,502	683	208
		Adults with test results $\geq 5 \mu\text{g}/\text{dL}$	1,860	56	15
		<b>% of adults with results <math>\geq 5 \mu\text{g}/\text{dL}</math></b>	<b>10.1%</b>	<b>8.2%</b>	<b>7.2%</b>
<b>After Flint River Use</b>	10/01/2015 to 04/27/2018	Total # of adults tested for lead	61,791	26,343	19,275
		Adults with test results $\geq 5 \mu\text{g}/\text{dL}$	2,932	390	294
		<b>% of adults with results <math>\geq 5 \mu\text{g}/\text{dL}</math></b>	<b>4.7%</b>	<b>1.5%</b>	<b>1.5%</b>

**Table 4. Percentage of elevated blood lead levels ( $\geq 5 \mu\text{g}/\text{dL}$ ) among tested residents of all ages, 2014 – 2018**

			Michigan	Genesee County	Flint 48501-48507
<b>Annual Results</b>	01/01/2018 to 04/27/2018	Total # of people tested for lead	7,998	682	396
		People with test results $\geq 5 \mu\text{g}/\text{dL}$	326	9	7
		<b>% of people with results <math>\geq 5 \mu\text{g}/\text{dL}</math></b>	<b>4.1%</b>	<b>1.3%</b>	<b>1.8%</b>
	1/1/2017 to 12/31/2017	Total # of people tested for lead	183,833	14,569	8,002
		People with test results $\geq 5 \mu\text{g}/\text{dL}$	6,289	231	163
		<b>% of people with results <math>\geq 5 \mu\text{g}/\text{dL}</math></b>	<b>3.4%</b>	<b>1.6%</b>	<b>2.0%</b>
	1/1/2016 to 12/31/2016	Total # of people tested for lead	219,374	41,608	29,674
		People with test results $\geq 5 \mu\text{g}/\text{dL}$	7,736	571	454
		<b>% of people with results <math>\geq 5 \mu\text{g}/\text{dL}</math></b>	<b>3.5%</b>	<b>1.4%</b>	<b>1.5%</b>
	1/1/2015 to 12/31/2015	Total # of people tested for lead	165,916	9,815	5,289
		People with test results $\geq 5 \mu\text{g}/\text{dL}$	6,444	217	140
		<b>% of people with results <math>\geq 5 \mu\text{g}/\text{dL}</math></b>	<b>3.9%</b>	<b>2.2%</b>	<b>2.6%</b>
	1/1/2014 to 12/31/2014	Total # of people tested for lead	167,338	8,042	3,582
		People with test results $\geq 5 \mu\text{g}/\text{dL}$	6,795	228	138
		<b>% of people with results <math>\geq 5 \mu\text{g}/\text{dL}</math></b>	<b>4.1%</b>	<b>2.8%</b>	<b>3.9%</b>
<b>During Flint River Use</b>	4/1/2014 to 9/30/2015	Total # of people tested for lead	231,133	11,123	4,942
		People with test results $\geq 5 \mu\text{g}/\text{dL}$	9,213	316	188
		<b>% of people with results <math>\geq 5 \mu\text{g}/\text{dL}</math></b>	<b>4.0%</b>	<b>2.8%</b>	<b>3.8%</b>
<b>After Flint River Use</b>	10/01/2015 to 04/27/2018	Total # of people tested for lead	415,994	56,896	37,687
		People with test results $\geq 5 \mu\text{g}/\text{dL}$	13,712	773	591
		<b>% of people with results <math>\geq 5 \mu\text{g}/\text{dL}</math></b>	<b>3.3%</b>	<b>1.4%</b>	<b>1.6%</b>