



# Michigan Department of Health and Human Services (MDHHS) Blood Lead Level Test Results for Selected Flint Zip Codes, Genesee County, and the State of Michigan Summary as of September 23, 2016

## Executive Summary

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

- Blood lead level testing is an important part of our efforts to identify people who have been harmed by drinking water that contained lead. However, MDHHS recognizes that the full community of Flint must be the focus of the public health response.
- People who have had multiple tests are counted only once per year for the annual counts. People counted in 2015 who were tested again after 1/1/2016 are counted in both years.
- Counts on this report include both capillary and venous blood tests.
- As of 5/2/2016, this report will no longer include test results for “Additional Impacted Locations” (48509, 48519, 48529, and 48532) because it has been demonstrated by CDC geographers that almost none of the addresses in these areas are serviced by water from the Flint River.
- Between 10/1/2015 and 9/23/2016, an additional 29,633 people were tested in Flint zip codes 48501-48507.
- Continued testing efforts by Genesee County Health Department, MDHHS, and local medical personnel have identified 216 children under age 18 in Flint zip codes 48501-48507 with blood lead levels greater than or equal to 5 mcg/dL (micrograms lead per deciliter of blood) since 10/1/2015.
- Of children younger than 6 years old tested between 10/1/2015 and 9/23/2016, 2.5% from Flint zip codes 48501-48507 had blood lead levels greater than or equal to 5 mcg/dL.
- Fifteen of the 59 (25.4%) children younger than 6 years old from Flint zip codes 48501-48507 with an elevated blood lead level (tested between 7/1/2016 and 9/23/2016) in Quarter 3 of 2016 had a previous test result greater than or equal to 5 mcg/dL.

## Annual Incidence of Elevated Blood Lead $\geq 5$ mcg/dL among Children <6 Years of Age by Quarter, Michigan, 2010 - 2016

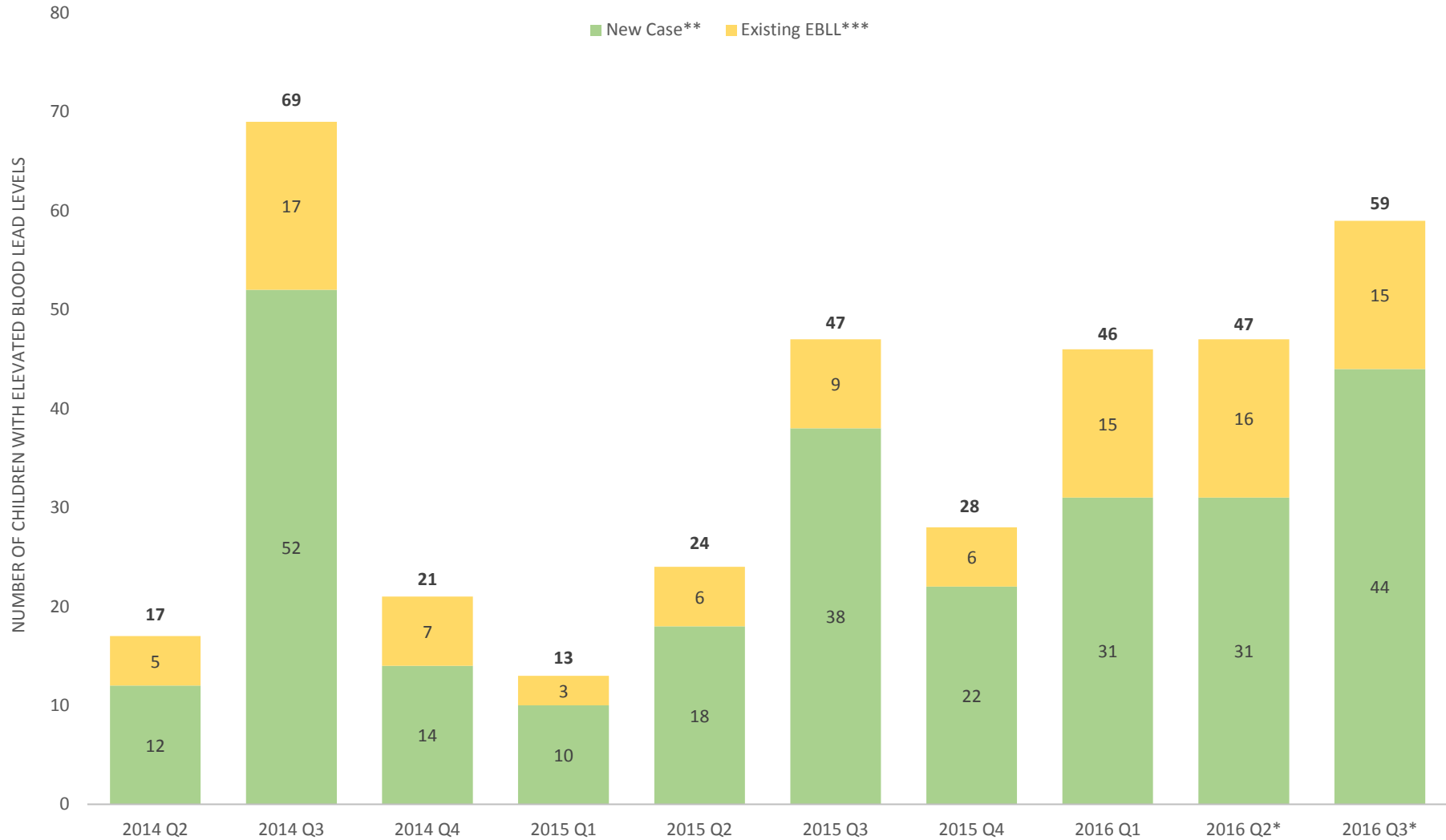


\*Data for Quarter 2 of 2016 are incomplete and subject to change. Data for Quarter 3 of 2016 will be presented when the quarter is complete.

People who have had multiple tests are counted only once per year for annual counts. People counted in 2015 who were tested again after 1/1/2016 are counted in both years. Counts on this report include both capillary and venous blood tests.

\* Data for Quarters 2 and 3 of 2016 are incomplete and subject to change.

## Elevated Blood Lead Levels ( $\geq 5$ mcg/dL) among Children <6 Years of Age by Quarter, Flint (48501-48507), 4/1/14 - 9/23/16



\* Data for Quarters 2 and 3 of 2016 are incomplete and subject to change.

\*\* Child has never had a previous elevated blood lead level

\*\*\* Child has a pre-existing elevated blood lead level that has not yet been brought down to <5 mcg/dL

People who have had multiple tests are counted only once per year for annual counts. People counted in 2015 who were tested again after 1/1/2016 are counted in both years. Counts on this report include both capillary and venous blood tests.

\* Data for Quarters 2 and 3 of 2016 are incomplete and subject to change.

**Table 1. Incidence of elevated blood lead levels ( $\geq 5$  mcg/dL) among children less than 6 years of age, 2010 – 2016**

		Michigan	Genesee County	Flint 48501-48507
1/1/2010 to 12/31/2010	Total tested for lead	156,014	7,053	3,630
	Number of test results $\geq 5$ mcg/dL	9,754	306	230
	Percent of test results $\geq 5$ mcg/dL	6.3%	4.3%	6.3%
1/1/2011 to 12/31/2011	Total tested for lead	152,333	6,760	3,145
	Number of test results $\geq 5$ mcg/dL	7,571	252	182
	Percent of test results $\geq 5$ mcg/dL	5.0%	3.7%	5.8%
1/1/2012 to 12/31/2012	Total tested for lead	149,037	7,152	3,198
	Number of test results $\geq 5$ mcg/dL	6,832	210	130
	Percent of test results $\geq 5$ mcg/dL	4.6%	2.9%	4.1%
1/1/2013 to 12/31/2013	Total tested for lead	148,400	7,132	3,142
	Number of test results $\geq 5$ mcg/dL	5,720	158	96
	Percent of test results $\geq 5$ mcg/dL	3.9%	2.2%	3.1%
1/1/2014 to 12/31/2014	Total tested for lead	143,838	6,820	3,102
	Number of test results $\geq 5$ mcg/dL	5,051	178	122
	Percent of test results $\geq 5$ mcg/dL	3.5%	2.6%	3.9%
1/1/2015 to 12/31/2015	Total tested for lead*	140,862	6,984	3,389
	Number of test results $\geq 5$ mcg/dL	4,792	160	112
	Percent of test results $\geq 5$ mcg/dL	3.4%	2.3%	3.3%
10/1/2015 to 9/23/2016	Total tested for lead*	146,471	11,692	6,803
	Number of test results $\geq 5$ mcg/dL	5,186	211	170
	Percent of test results $\geq 5$ mcg/dL	3.5%	1.8%	2.5%
4/1/2014 to 9/23/2016	Total tested for lead*	300,922	17,435	8,742
	Number of test results $\geq 5$ mcg/dL	11,040	383	272
	Percent of test results $\geq 5$ mcg/dL	3.7%	2.2%	3.1%
1/1/2016 to 9/23/2016	Total tested for lead*	116,412	10,015	5,931
	Number of test results $\geq 5$ mcg/dL	4,276	185	152
	Percent of test results $\geq 5$ mcg/dL	3.7%	1.8%	2.6%

\* Data for Quarters 2 and 3 of 2016 are incomplete and subject to change.

**Table 2. Incidence of elevated blood lead levels ( $\geq 5$  mcg/dL) among children 6 to 17 years of age, 2010 – 2016**

		<b>Michigan</b>	<b>Genesee County</b>	<b>Flint 48501-48507</b>
<b>1/1/2010 to 12/31/2010</b>	<b>Total tested for lead</b>	14,729	760	400
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	665	17	12
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	4.5%	2.2%	3.0%
<b>1/1/2011 to 12/31/2011</b>	<b>Total tested for lead</b>	12,959	959	499
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	474	19	13
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	3.7%	2.0%	2.6%
<b>1/1/2012 to 12/31/2012</b>	<b>Total tested for lead</b>	12,710	1,259	561
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	351	13	9
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	2.8%	1.0%	1.6%
<b>1/1/2013 to 12/31/2013</b>	<b>Total tested for lead</b>	11,428	1,109	505
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	269	7	3
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	2.4%	0.6%	0.6%
<b>1/1/2014 to 12/31/2014</b>	<b>Total tested for lead</b>	10,562	788	372
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	285	6	5
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	2.7%	0.8%	1.3%
<b>1/1/2015 to 12/31/2015</b>	<b>Total tested for lead*</b>	10,417	1,570	1,084
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	254	10	8
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	2.4%	0.6%	0.7%
<b>10/1/2015 to 9/23/2016</b>	<b>Total tested for lead*</b>	23,012	9,774	7,463
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	407	59	46
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	1.8%	0.6%	0.6%
<b>4/1/2014 to 9/23/2016</b>	<b>Total tested for lead*</b>	36,105	10,557	7,778
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	661	62	48
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	1.8%	0.6%	0.6%
<b>1/1/2016 to 9/23/2016</b>	<b>Total tested for lead*</b>	20,169	8,981	6,853
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	354	55	41
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	1.8%	0.6%	0.6%

\* Data for Quarters 2 and 3 of 2016 are incomplete and subject to change.

**Table 3. Incidence of elevated blood lead levels ( $\geq 5$  mcg/dL) among adults at least 18 years of age, 2010 – 2016**

		Michigan	Genesee County	Flint 48501-48507
1/1/2010 to 12/31/2010	Total tested for lead	13,681	588	188
	Number of test results $\geq 5$ mcg/dL	1,459	42	18
	Percent of test results $\geq 5$ mcg/dL	10.7%	7.1%	9.6%
1/1/2011 to 12/31/2011	Total tested for lead	13,112	528	132
	Number of test results $\geq 5$ mcg/dL	1,367	43	16
	Percent of test results $\geq 5$ mcg/dL	10.4%	8.1%	12.1%
1/1/2012 to 12/31/2012	Total tested for lead	12,914	539	148
	Number of test results $\geq 5$ mcg/dL	1,414	33	11
	Percent of test results $\geq 5$ mcg/dL	10.9%	6.1%	7.4%
1/1/2013 to 12/31/2013	Total tested for lead	12,081	484	132
	Number of test results $\geq 5$ mcg/dL	1,499	54	16
	Percent of test results $\geq 5$ mcg/dL	12.4%	11.2%	12.1%
1/1/2014 to 12/31/2014	Total tested for lead	12,574	436	111
	Number of test results $\geq 5$ mcg/dL	1,420	44	12
	Percent of test results $\geq 5$ mcg/dL	11.3%	10.1%	10.8%
1/1/2015 to 12/31/2015	Total tested for lead*	13,676	1,250	811
	Number of test results $\geq 5$ mcg/dL	1,367	48	21
	Percent of test results $\geq 5$ mcg/dL	10.0%	3.8%	2.6%
10/1/2015 to 9/23/2016	Total tested for lead*	34,711	19,298	15,367
	Number of test results $\geq 5$ mcg/dL	1,532	305	248
	Percent of test results $\geq 5$ mcg/dL	4.4%	1.6%	1.6%
4/1/2014 to 9/23/2016	Total tested for lead*	50,830	19,890	15,523
	Number of test results $\geq 5$ mcg/dL	3,038	349	258
	Percent of test results $\geq 5$ mcg/dL	6.0%	1.8%	1.7%
1/1/2016 to 9/23/2016	Total tested for lead*	31,208	18,545	14,799
	Number of test results $\geq 5$ mcg/dL	1,246	283	236
	Percent of test results $\geq 5$ mcg/dL	4.0%	1.5%	1.6%

\* Data for Quarters 2 and 3 of 2016 are incomplete and subject to change.

**Table 4. Total incidence of elevated blood lead levels ( $\geq 5$  mcg/dL), 2010 – 2016**

		<b>Michigan</b>	<b>Genesee County</b>	<b>Flint 48501-48507</b>
<b>1/1/2010 to 12/31/2010</b>	<b>Total tested for lead</b>	184,424	8,401	4,218
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	11,878	365	260
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	6.4%	4.3%	6.2%
<b>1/1/2011 to 12/31/2011</b>	<b>Total tested for lead</b>	178,404	8,247	2,726
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	9,412	314	211
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	5.3%	3.8%	7.7%
<b>1/1/2012 to 12/31/2012</b>	<b>Total tested for lead</b>	174,661	8,950	3,907
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	8,597	256	150
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	4.9%	2.9%	3.8%
<b>1/1/2013 to 12/31/2013</b>	<b>Total tested for lead</b>	171,909	8,725	3,779
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	7,488	219	115
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	4.4%	2.5%	3.0%
<b>1/1/2014 to 12/31/2014</b>	<b>Total tested for lead</b>	166,974	8,044	3,585
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	6,756	228	139
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	4.0%	2.8%	3.9%
<b>1/1/2015 to 12/31/2015</b>	<b>Total tested for lead*</b>	164,955	9,804	5,284
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	6,413	218	141
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	3.9%	2.2%	2.7%
<b>10/1/2015 to 9/23/2016</b>	<b>Total tested for lead*</b>	204,194	40,764	29,633
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	7,125	575	464
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	3.5%	1.4%	1.6%
<b>4/1/2014 to 9/23/2016</b>	<b>Total tested for lead*</b>	387,857	47,882	32,043
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	14,739	794	578
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	3.8%	1.7%	1.8%
<b>1/1/2016 to 9/23/2016</b>	<b>Total tested for lead*</b>	167,789	37,541	27,583
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	5,876	523	429
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	3.5%	1.4%	1.6%

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