



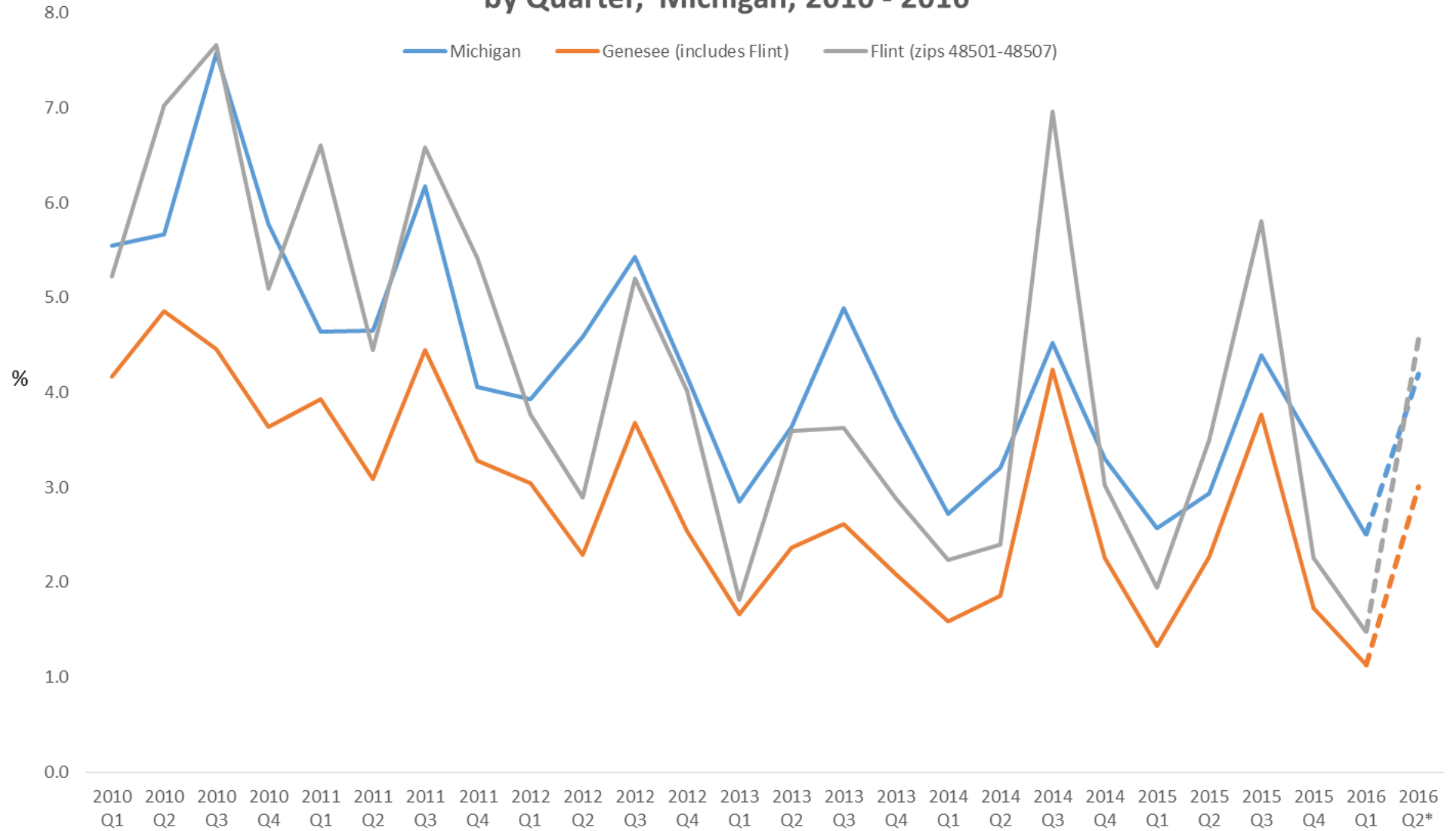
# Michigan Department of Health and Human Services (MDHHS) Blood Lead Level Test Results for Selected Flint Zip Codes, Genesee County, and the State of Michigan Summary as of July 1, 2016

## 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 7/1/2016, an additional 26,631 people were tested in Flint zip codes 48501-48507.
- Continued testing efforts by Genesee County Health Department, MDHHS, and local medical personnel have identified 170 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 7/1/2016, 2.2% from Flint zip codes 48501-48507 had blood lead levels greater than or equal to 5 mcg/dL.
- Twenty-three of the 58 children (39.7%) younger than 6 years old from Flint zip codes 48501-48507 with an elevated blood lead level (tested between 4/1/2016 and 7/1/2016) had a previous test result greater than or equal to 5 mcg/dL.

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

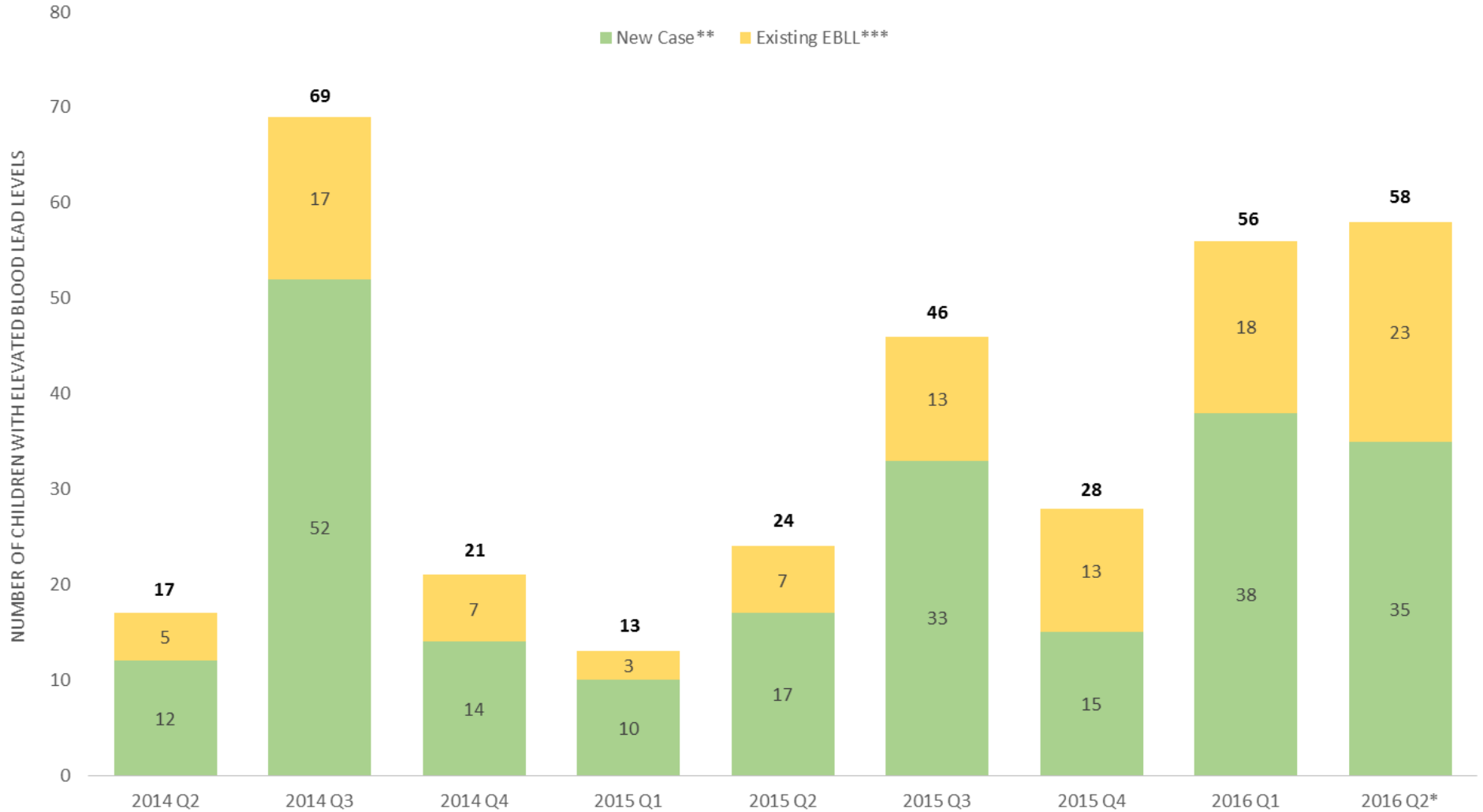


\*Data for Quarter 2 of 2016 are subject to change.

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 Quarter 2 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 - 7/1/16



\* Data for Quarter 2 of 2016 are 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 Quarter 2 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**

		<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>	156,014	7,053	3,630
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	9,754	306	230
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	6.3%	4.3%	6.3%
<b>1/1/2011 to 12/31/2011</b>	<b>Total tested for lead</b>	152,333	6,760	3,145
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	7,571	252	182
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	5.0%	3.7%	5.8%
<b>1/1/2012 to 12/31/2012</b>	<b>Total tested for lead</b>	149,037	7,152	3,198
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	6,832	210	130
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	4.6%	2.9%	4.1%
<b>1/1/2013 to 12/31/2013</b>	<b>Total tested for lead</b>	148,400	7,132	3,142
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	5,720	158	96
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	3.9%	2.2%	3.1%
<b>1/1/2014 to 12/31/2014</b>	<b>Total tested for lead</b>	143,838	6,820	3,102
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	5,051	178	122
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	3.5%	2.6%	3.9%
<b>1/1/2015 to 12/31/2015</b>	<b>Total tested for lead*</b>	140,781	6,981	3,386
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	4,784	159	111
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	3.4%	2.3%	3.3%
<b>10/1/2015 to 7/1/2016</b>	<b>Total tested for lead*</b>	110,472	9,859	6,003
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	3,590	167	135
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	3.2%	1.7%	2.2%
<b>4/1/2014 to 7/1/2016</b>	<b>Total tested for lead*</b>	275,676	16,099	8,163
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	9,667	342	239
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	3.5%	2.1%	2.9%
<b>1/1/2016 to 7/1/2016</b>	<b>Total tested for lead*</b>	78,200	8,072	5,055
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	2,590	137	114
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	3.3%	1.7%	2.3%

\* Data for Quarter 2 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>	10,416	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 7/1/2016</b>	<b>Total tested for lead*</b>	18,078	8,752	6,805
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	295	44	35
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	1.6%	0.5%	0.5%
<b>4/1/2014 to 7/1/2016</b>	<b>Total tested for lead*</b>	31,675	9,584	7,144
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	565	47	37
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	1.8%	0.5%	0.5%
<b>1/1/2016 to 7/1/2016</b>	<b>Total tested for lead*</b>	15,113	7,905	6,152
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	239	40	30
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	1.6%	0.5%	0.5%

\* Data for Quarter 2 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**

		<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>	13,681	588	188
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	1,459	42	18
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	10.7%	7.1%	9.6%
<b>1/1/2011 to 12/31/2011</b>	<b>Total tested for lead</b>	13,112	528	132
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	1,367	43	16
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	10.4%	8.1%	12.1%
<b>1/1/2012 to 12/31/2012</b>	<b>Total tested for lead</b>	12,914	539	148
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	1,414	33	11
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	10.9%	6.1%	7.4%
<b>1/1/2013 to 12/31/2013</b>	<b>Total tested for lead</b>	12,081	484	132
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	1,499	54	16
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	12.4%	11.2%	12.1%
<b>1/1/2014 to 12/31/2014</b>	<b>Total tested for lead</b>	12,574	436	111
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	1,420	44	12
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	11.3%	10.1%	10.8%
<b>1/1/2015 to 12/31/2015</b>	<b>Total tested for lead*</b>	13,676	1,250	811
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	1,367	48	21
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	10.0%	3.8%	2.6%
<b>10/1/2015 to 7/1/2016</b>	<b>Total tested for lead*</b>	29,435	17,051	13,823
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	1,291	256	214
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	4.4%	1.5%	1.5%
<b>4/1/2014 to 7/1/2016</b>	<b>Total tested for lead*</b>	45,975	17,658	13,986
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	2,829	303	226
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	6.2%	1.7%	1.6%
<b>1/1/2016 to 7/1/2016</b>	<b>Total tested for lead*</b>	25,750	16,208	13,184
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	980	234	202
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	3.8%	1.4%	1.5%

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

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

		Michigan	Genesee County	Flint 48501-48507
1/1/2010 to 12/31/2010	Total tested for lead	184,424	8,401	4,218
	Number of test results $\geq 5$ mcg/dL	11,878	365	260
	Percent of test results $\geq 5$ mcg/dL	6.4%	4.3%	6.2%
1/1/2011 to 12/31/2011	Total tested for lead	178,404	8,247	2,726
	Number of test results $\geq 5$ mcg/dL	9,412	314	211
	Percent of test results $\geq 5$ mcg/dL	5.3%	3.8%	7.7%
1/1/2012 to 12/31/2012	Total tested for lead	174,661	8,950	3,907
	Number of test results $\geq 5$ mcg/dL	8,597	256	150
	Percent of test results $\geq 5$ mcg/dL	4.9%	2.9%	3.8%
1/1/2013 to 12/31/2013	Total tested for lead	171,909	8,725	3,779
	Number of test results $\geq 5$ mcg/dL	7,488	219	115
	Percent of test results $\geq 5$ mcg/dL	4.4%	2.5%	3.0%
1/1/2014 to 12/31/2014	Total tested for lead	166,974	8,044	3,585
	Number of test results $\geq 5$ mcg/dL	6,756	228	139
	Percent of test results $\geq 5$ mcg/dL	4.0%	2.8%	3.9%
1/1/2015 to 12/31/2015	Total tested for lead*	164,873	9,801	5,281
	Number of test results $\geq 5$ mcg/dL	6,405	217	140
	Percent of test results $\geq 5$ mcg/dL	3.9%	2.2%	2.7%
10/1/2015 to 7/1/2016	Total tested for lead*	157,985	35,662	26,631
	Number of test results $\geq 5$ mcg/dL	5,176	467	384
	Percent of test results $\geq 5$ mcg/dL	3.3%	1.3%	1.4%
4/1/2014 to 7/1/2016	Total tested for lead*	353,326	43,341	29,293
	Number of test results $\geq 5$ mcg/dL	13,061	692	502
	Percent of test results $\geq 5$ mcg/dL	3.7%	1.6%	1.7%
1/1/2016 to 7/1/2016	Total tested for lead*	119,063	32,185	24,391
	Number of test results $\geq 5$ mcg/dL	3,809	411	346
	Percent of test results $\geq 5$ mcg/dL	3.2%	1.3%	1.4%

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