



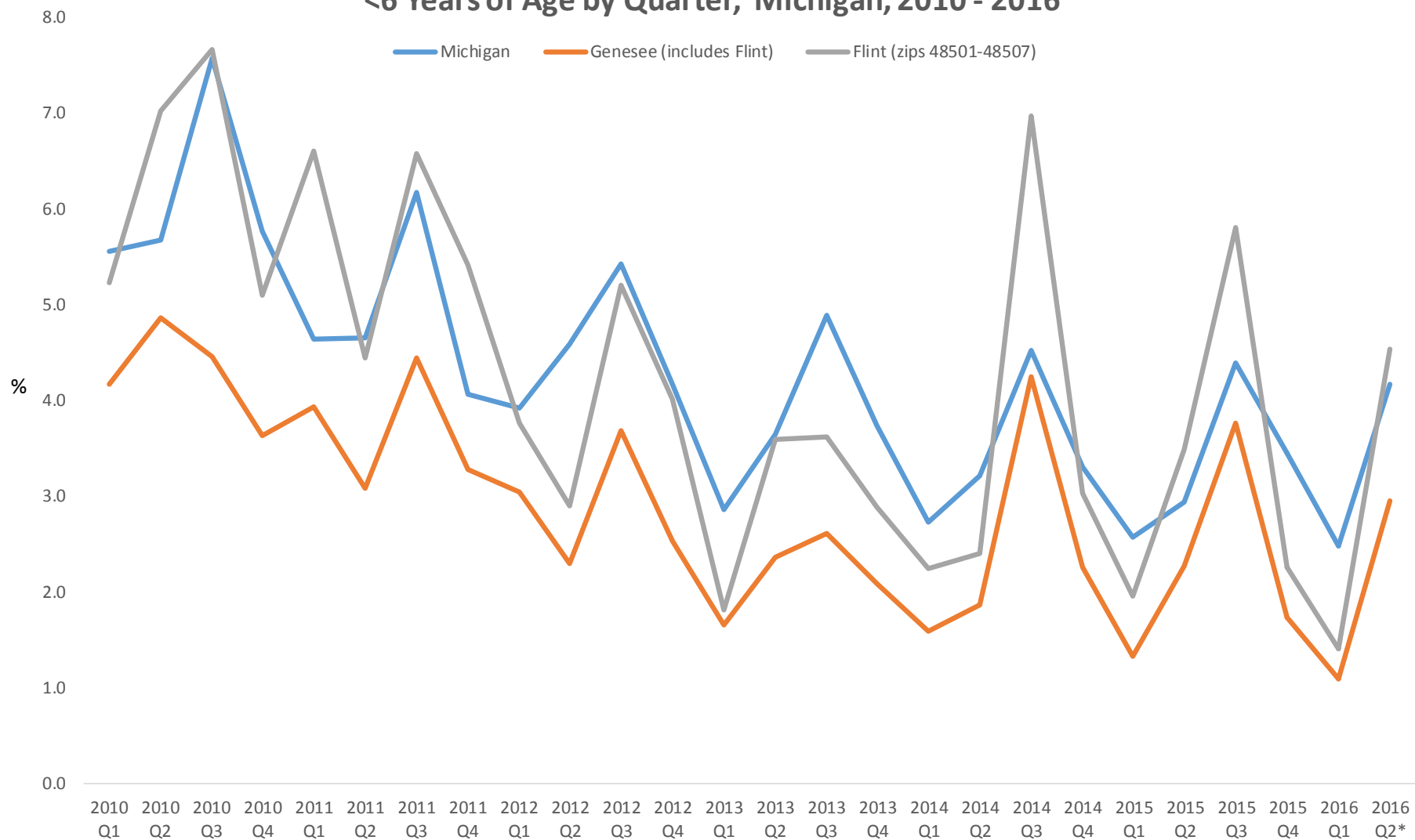
# Michigan Department of Health and Human Services (MDHHS) Blood Lead Level Test Results for Selected Flint Zip Codes, Genesee County, and the State of Michigan Summary as of July 15, 2016

## 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 7/15/2016, an additional 27,053 people were tested in Flint zip codes 48501-48507.
- Continued testing efforts by Genesee County Health Department, MDHHS, and local medical personnel have identified 179 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 7/15/2016, 2.3% from Flint zip codes 48501-48507 had blood lead levels greater than or equal to 5 mcg/dL.
- Twenty-three of the 62 (37.1%) children younger than 6 years old from Flint zip codes 48501-48507 with an elevated blood lead level (tested between 4/1/2016 and 7/15/2016) in Quarter 2 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

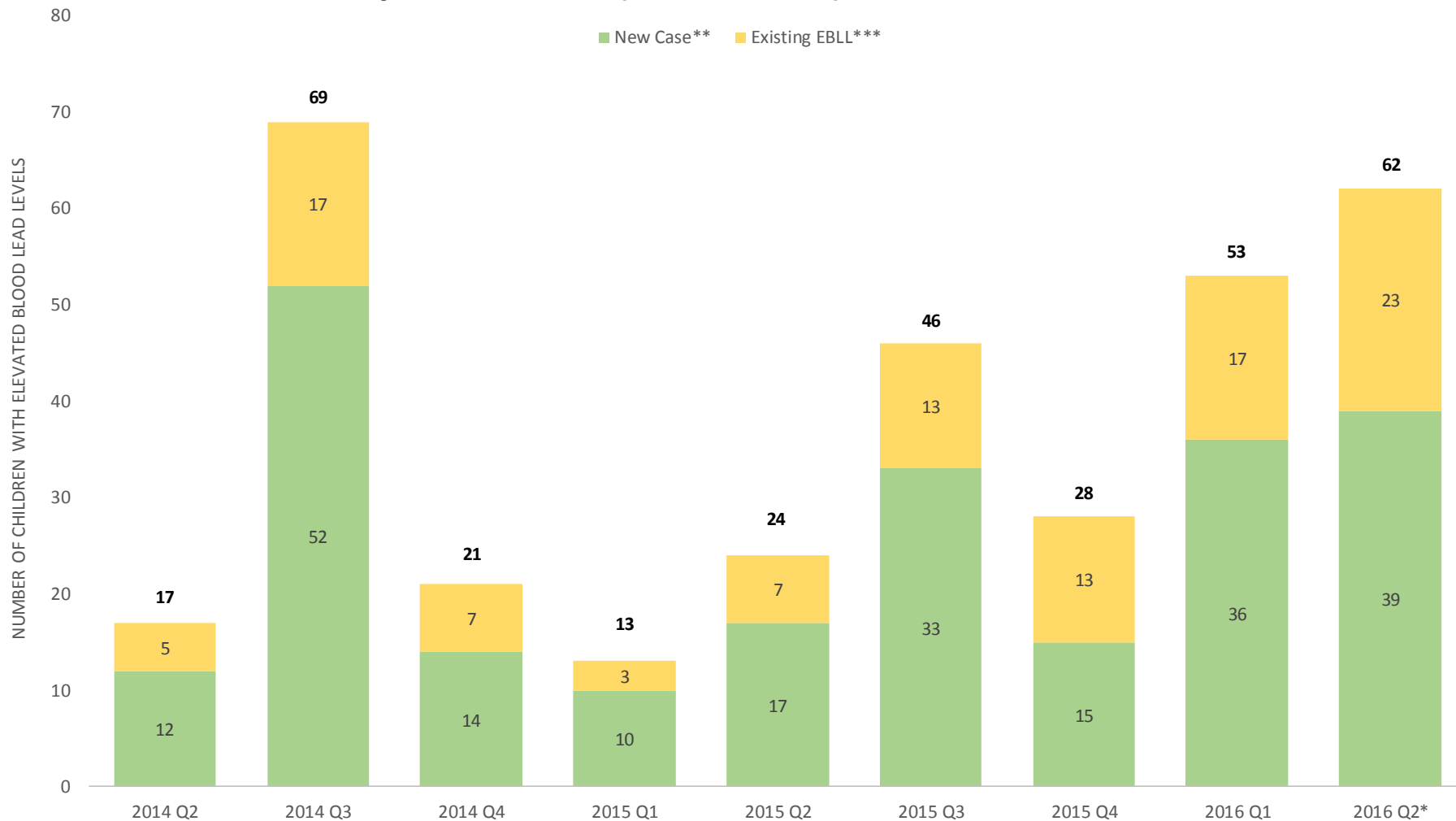


\*Data for Quarter 2 of 2016 are incomplete and subject to change. Data for Quarter 3 of 2016 (July 1-14) are not presented.

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 - 7/15/16



\* Data for Quarter 2 of 2016 are incomplete subject to change. Data for Quarter 3 of 2016 (July 1-14) are not presented.

\*\* 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*	140,827	6,983	3,387
	Number of test results $\geq 5$ mcg/dL	4,786	159	111
	Percent of test results $\geq 5$ mcg/dL	3.4%	2.3%	3.3%
10/1/2015 to 7/15/2016	Total tested for lead*	115,287	10,152	6,130
	Number of test results $\geq 5$ mcg/dL	3,810	175	142
	Percent of test results $\geq 5$ mcg/dL	3.3%	1.7%	2.3%
4/1/2014 to 7/15/2016	Total tested for lead*	279,107	16,314	8,253
	Number of test results $\geq 5$ mcg/dL	9,852	351	247
	Percent of test results $\geq 5$ mcg/dL	3.5%	2.2%	3.0%
1/1/2016 to 7/15/2016	Total tested for lead*	83,610	8,392	5,196
	Number of test results $\geq 5$ mcg/dL	2,840	147	122
	Percent of test results $\geq 5$ mcg/dL	3.4%	1.8%	2.3%

\* 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>	10,416	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 7/15/2016</b>	<b>Total tested for lead*</b>	18,600	8,881	6,889
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	310	46	37
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	1.7%	0.5%	0.5%
<b>4/1/2014 to 7/15/2016</b>	<b>Total tested for lead*</b>	32,143	9,708	7,225
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	579	49	39
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	1.8%	0.5%	0.5%
<b>1/1/2016 to 7/15/2016</b>	<b>Total tested for lead*</b>	15,698	8,053	6,248
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	255	42	32
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	1.6%	0.5%	0.5%

\* 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**

		<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 7/15/2016</b>	<b>Total tested for lead*</b>	30,264	17,370	14,034
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	1,328	265	221
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	4.4%	1.5%	1.6%
<b>4/1/2014 to 7/15/2016</b>	<b>Total tested for lead*</b>	46,670	17,974	14,195
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	2,856	311	232
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	6.1%	1.7%	1.6%
<b>1/1/2016 to 7/15/2016</b>	<b>Total tested for lead*</b>	26,718	16,607	13,457
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	1,029	243	209
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	3.9%	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>	164,919	9,803	5,282
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	6,407	217	140
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	3.9%	2.2%	2.7%
<b>10/1/2015 to 7/15/2016</b>	<b>Total tested for lead*</b>	164,151	36,403	27,053
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	5,448	486	400
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	3.3%	1.3%	1.5%
<b>4/1/2014 to 7/15/2016</b>	<b>Total tested for lead*</b>	357,920	43,996	29,673
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	13,287	711	518
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	3.7%	1.6%	1.7%
<b>1/1/2016 to 7/15/2016</b>	<b>Total tested for lead*</b>	126,026	33,052	24,901
	<b>Number of test results <math>\geq 5</math> mcg/dL</b>	4,124	432	363
	<b>Percent of test results <math>\geq 5</math> mcg/dL</b>	3.3%	1.3%	1.5%

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