



## Kalamazoo County Blood Lead Level Testing Update

June 2023

### Background

Lead poisoning is caused by swallowing or breathing lead and is especially problematic for children under 6 years of age. Children are at greater risk because they: absorb 4-5 times more of the lead they swallow compared to adults, they often put their hands in their mouths, sometimes chew on toys and other household objects and furniture that may contain lead, eat and drink more based on their body size when compared to adults, and breathe at faster rates when compared to adults. Fetuses and nursing babies are also at risk because lead can pass through the placenta to the fetus when the mother is exposed. Most children get lead poisoning from paint in homes built before 1978.

There is no safe level of lead in the blood. As lead exposure increases, the range and seriousness of health effects increase. Health effects of lead in children include: increased problems with behavior and attention related disorders, decreased academic achievement, decreased hearing, and decreased kidney function.

The only way to know if you have a recent or on-going exposure to lead is to get a blood lead test. During a blood lead test, a small amount of blood is taken from the finger or arm and tested for lead. All children under the age of 6 years should be screened for lead poisoning.

The Lead Poisoning Prevention Program at HCS provides nursing case management, community education, and promotes awareness to decrease the incidence of lead poisoning in Kalamazoo County's children and to facilitate the removal of lead hazards from our community.

For more information visit [MDHHS Learn about Lead](#) or call the Kalamazoo County lead prevention nurse at [269-373-5080](tel:269-373-5080).

### Data Notes

The data source for this report is the MDHHS MiTracking data portal ([www.mittracking.state.mi.us](http://www.mittracking.state.mi.us)); accessed on 6/14/23.

Report Date: 6/16//23.

## Number of Pre-1980 Housing Units in Kalamazoo County

Lead from paint, paint chips, and dust can pose health hazards if not managed properly. Homes built before 1978, when the federal government banned consumer use of lead-based paint, are likely to contain some lead-based paint. According to the EPA, the older the home, the more likely it is to contain lead-based paint.

The map below shows the percentage of homes built before 1980 in Kalamazoo County compared to other counties in Michigan. The table provides a break-down of the estimated number of housing units in the county by decade of construction.

### Number of Pre-1980 Housing Units by County

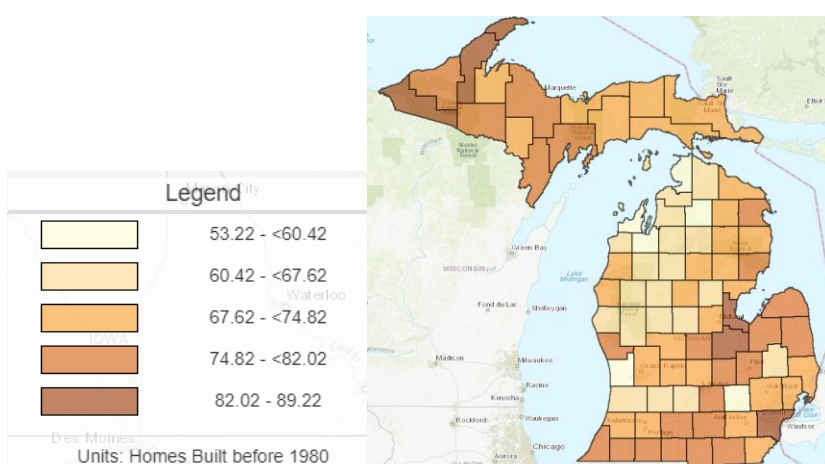


Image Source: [www.mittracking.state.mi.us](http://www.mittracking.state.mi.us)

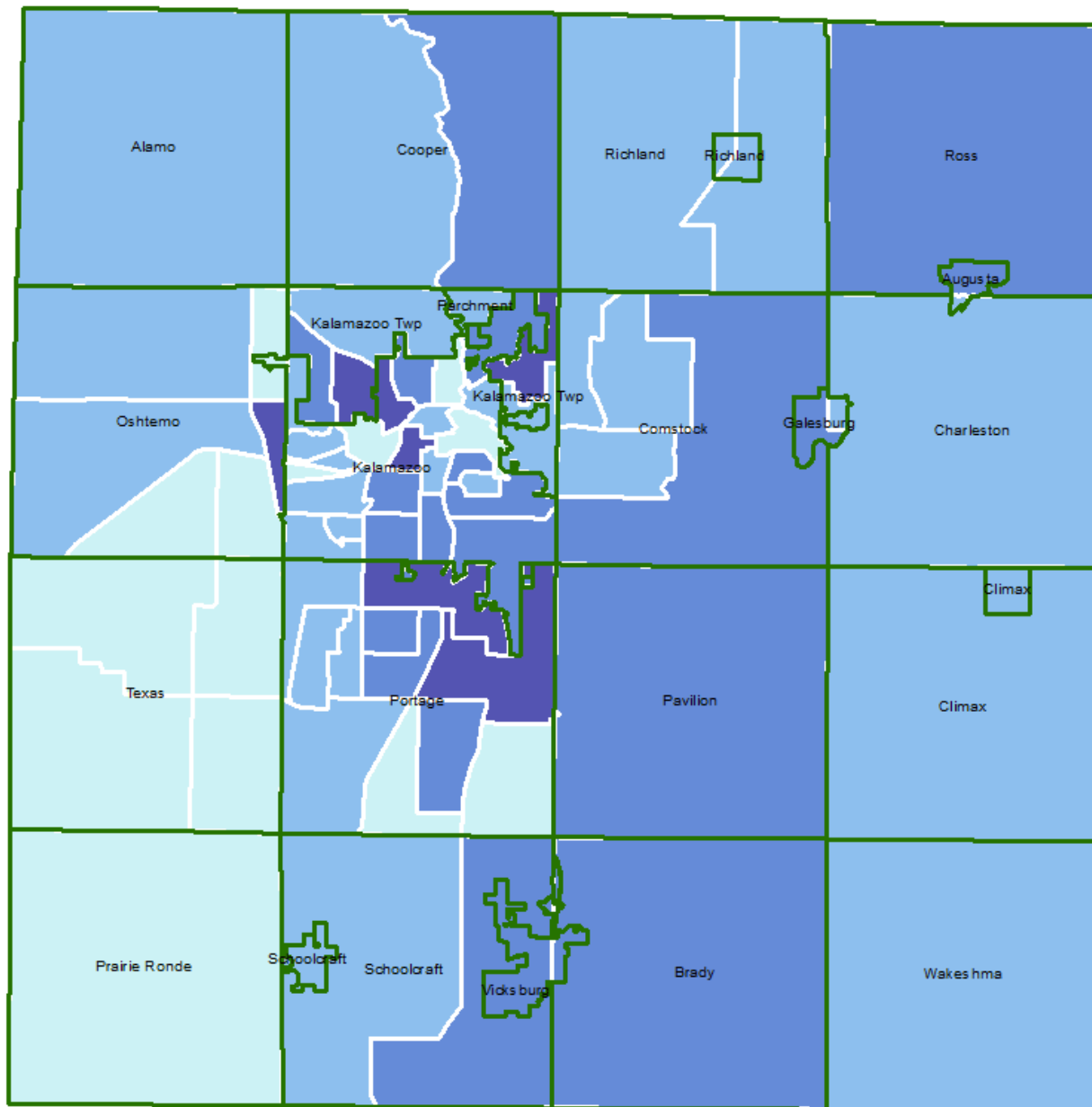
### Number of Housing Units by Year Structure Built: Kalamazoo County

# Housing Units (occupied and unoccupied)	Kalamazoo County, Michigan	
	Estimate	Margin of Error
<b>Total:</b>	114,518	±889
<b>Built 2020 or later</b>	589	±390
<b>Built 2010 to 2019</b>	5,786	±1,209
<b>Built 2000 to 2009</b>	14,396	±2,088
<b>Built 1990 to 1999</b>	13,876	±1,907
<b>Built 1980 to 1989</b>	11,805	±1,704
<b>Built 1970 to 1979</b>	17,506	±2,061
<b>Built 1960 to 1969</b>	16,297	±2,277
<b>Built 1950 to 1959</b>	13,511	±1,662
<b>Built 1940 to 1949</b>	4,594	±1,191
<b>Built 1939 or earlier</b>	16,158	±1,876

Source: 2021 U.S. Census ACS 1-Year Estimates Detailed Tables

## Pre-1980 Housing Units by Census Tract

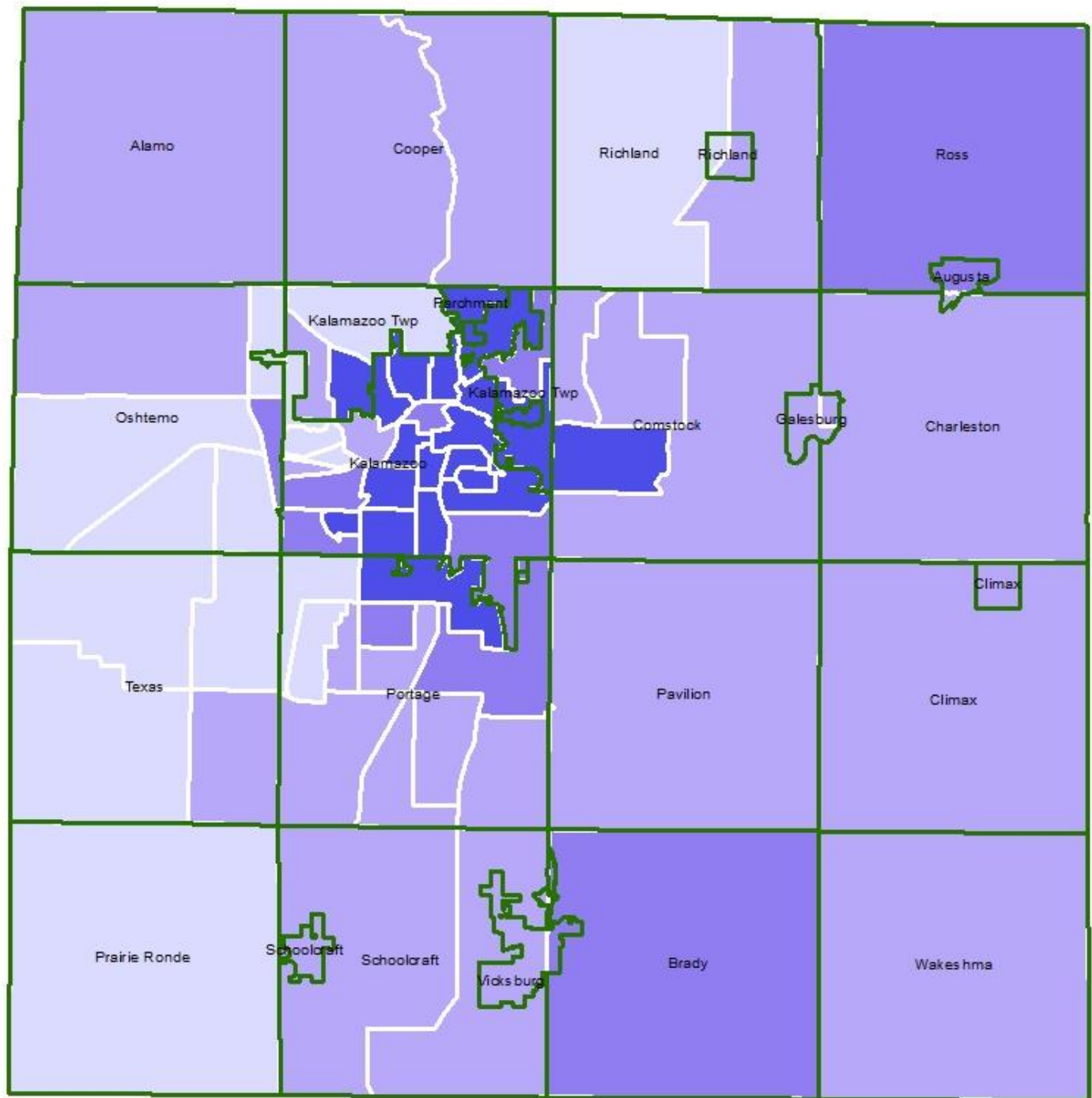
The next maps series shows the number of housing units and percentage of housing units built prior to 1980 by census tract. Census tracts with the highest percentage of pre-1980 housing are located within the city of Kalamazoo, Comstock, Parchment, and areas of Portage.



**Housing Units - Estimated Number Pre-1980 by Census Tract  
Kalamazoo County, Michigan**

190 - 578 (14) 579 - 1044 (29) 1045 - 1597 (18) 1598 - 2238 (7)

Data Source: United States Census Bureau (2021 Estimates) - Created By: Jeff Reicherts, MA (2023-02-14)



### Housing Units - Percent Pre-1980 by Census Tract Kalamazoo County, Michigan

■ 22.3% - 40.1% (15)
 ■ 40.2% - 60.3% (23)
 ■ 60.4% - 78.9% (10)
 ■ 79% - 97.9% (20)

Data Source: United States Census Bureau (2021 Estimates) - Created By: Jeff Reicherts, MA (2023-02-14)

## Testing Coverage: Number and Percent of Children Age <6 by Year

Blood lead level testing throughout MI decreased substantially starting in February 2020, due in part to the COVID-19 pandemic. Stay-at-home orders, closures of medical, WIC, and local public health clinics and the transition to virtual care limited access to preventive care services and blood lead testing.

In 2022, the percentage of children tested in the county (13.5%) was lower in Kalamazoo County compared to the state (15.8%). The county testing percentage in 2022 was at the lowest level since 2010.

### 2022 Percent of Children Tested by County

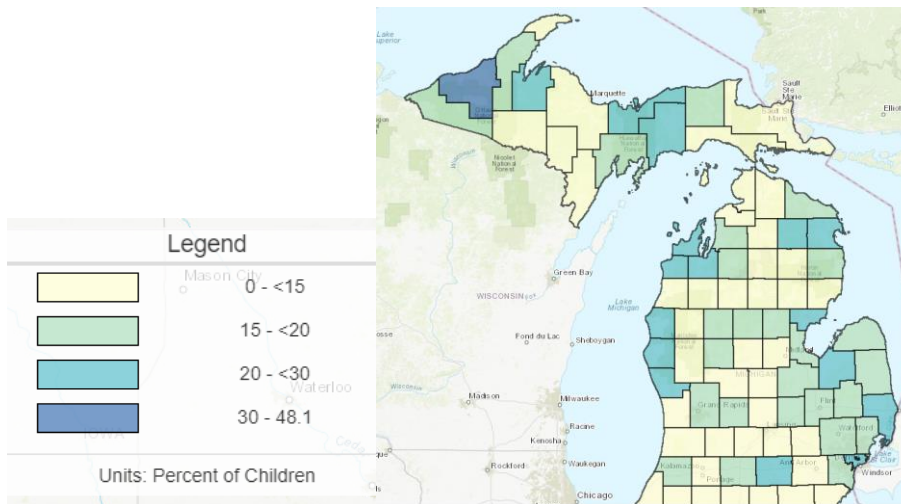
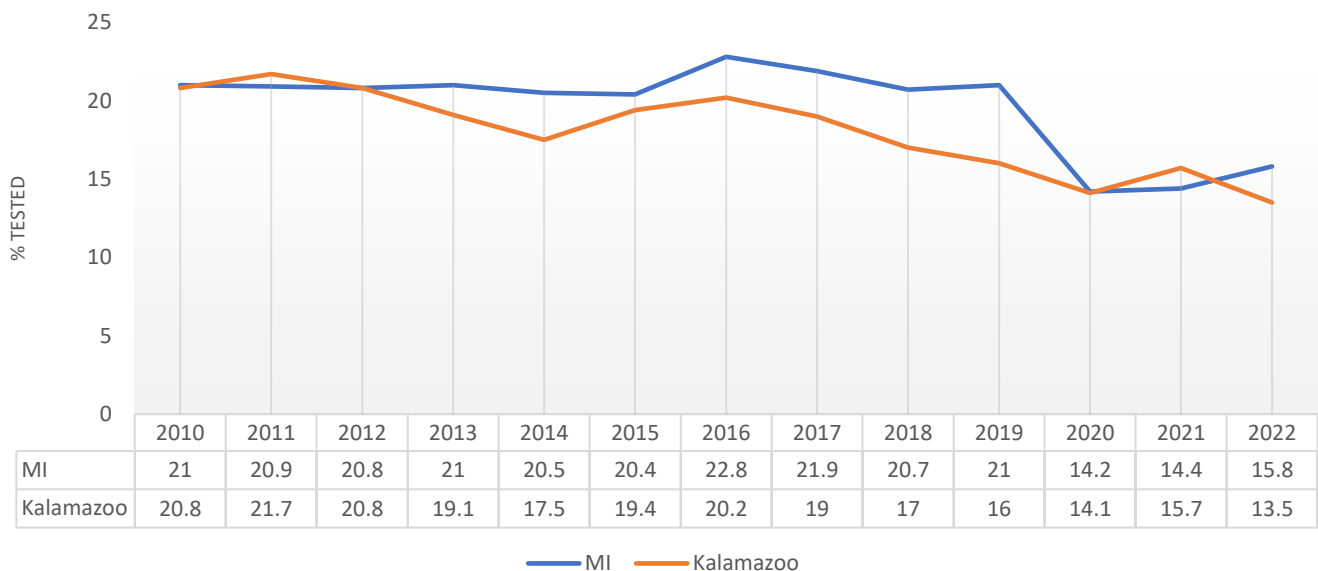
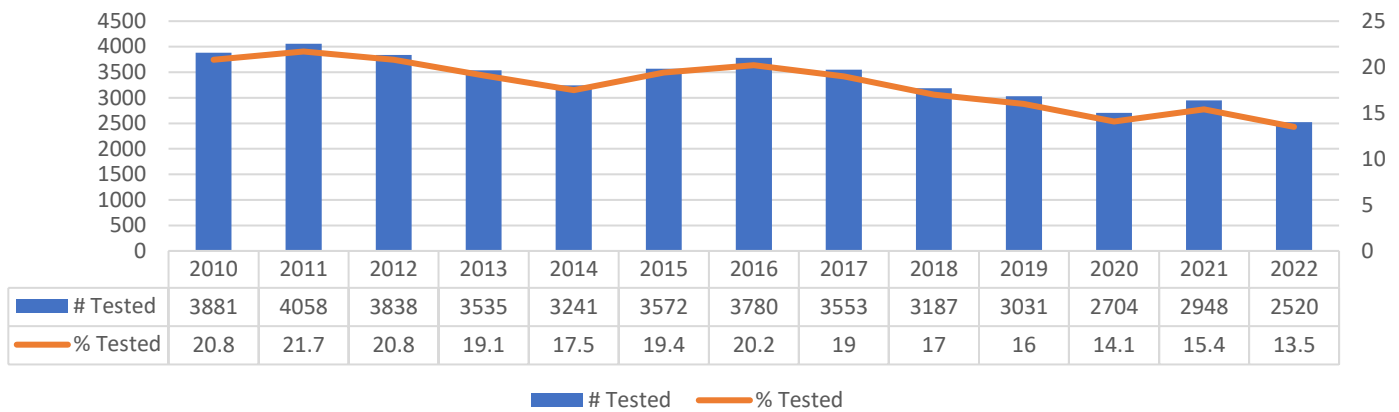


Image Source: [www.mittracking.state.mi.us](http://www.mittracking.state.mi.us)

### Percent of Children < 6 Years Tested for MI and Kalamazoo County



**Kalamazoo County: Number and Percent of Children < 6 Years Tested by Year**

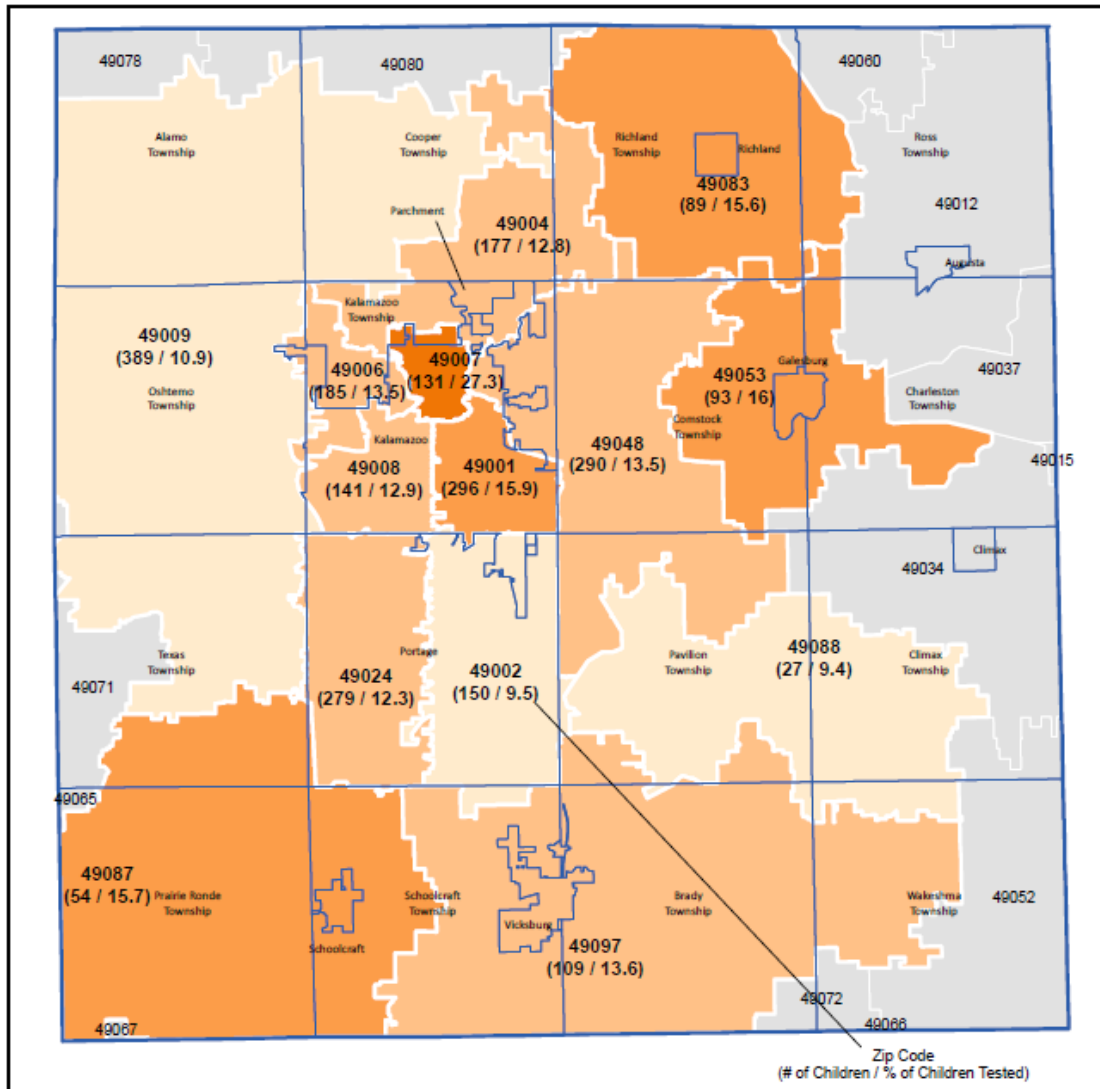


## Number and Percent of Children Age <6 Tested in 2022 by Zip Code/s

Within the county, blood lead level (BLL) testing percentages differ by zip code. In 2022, zip code 49007 had the highest percentage of children who received BLL testing (27.3%) followed by 49055 and 49067 (18.1%).

Geographic Area(s)	Total Population	Total Number of Children Tested	Percent of Children Tested
49001	1868	296	15.9
49002	1579	150	9.5
49004	1379	177	12.8
49006	1372	185	13.5
49007	480	131	27.3
49008	1097	141	12.9
49009	3557	389	10.9
49015	2086	360	17.3
49024	2274	279	12.3
49037	2048	291	14.2
49048	2149	290	13.5
49053	583	93	16.0
49055	338	61	18.1
49067	227	41	18.1
49071	979	90	9.2
49078	553	76	13.7
49080	973	114	11.7
49083	572	89	15.6
49087	344	54	15.7
49088	288	27	9.4
49097	799	109	13.6

The map below shows the percentage of children tested in 2022 by zip code within Kalamazoo County. Maps for previous years are available on the HCS DataHub page [www.kalcounty.com/hcs/datahub/](http://www.kalcounty.com/hcs/datahub/)



### Number and Percentage of Children (<6 years of age) Tested for Elevated Blood Lead Levels (EBLL) by Zip Code (2022) - Kalamazoo County, MI

- 9.4% - 10.9% (3)
- 11% - 14.2% (6)
- 14.3% - 17.3% (4)
- 17.4% - 27.3% (1)
- Zip Codes Excluded or No Data

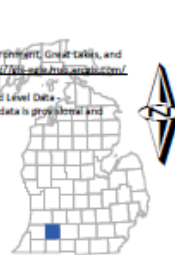


Kalamazoo County Health and Community Services Department assumes no legal responsibility for the information contained in these maps.

Data Sources:  
Michigan Department of Environment, Great Lakes, and Energy Maps and Data - <http://data.mdeq.state.mi.us/mdeq/>

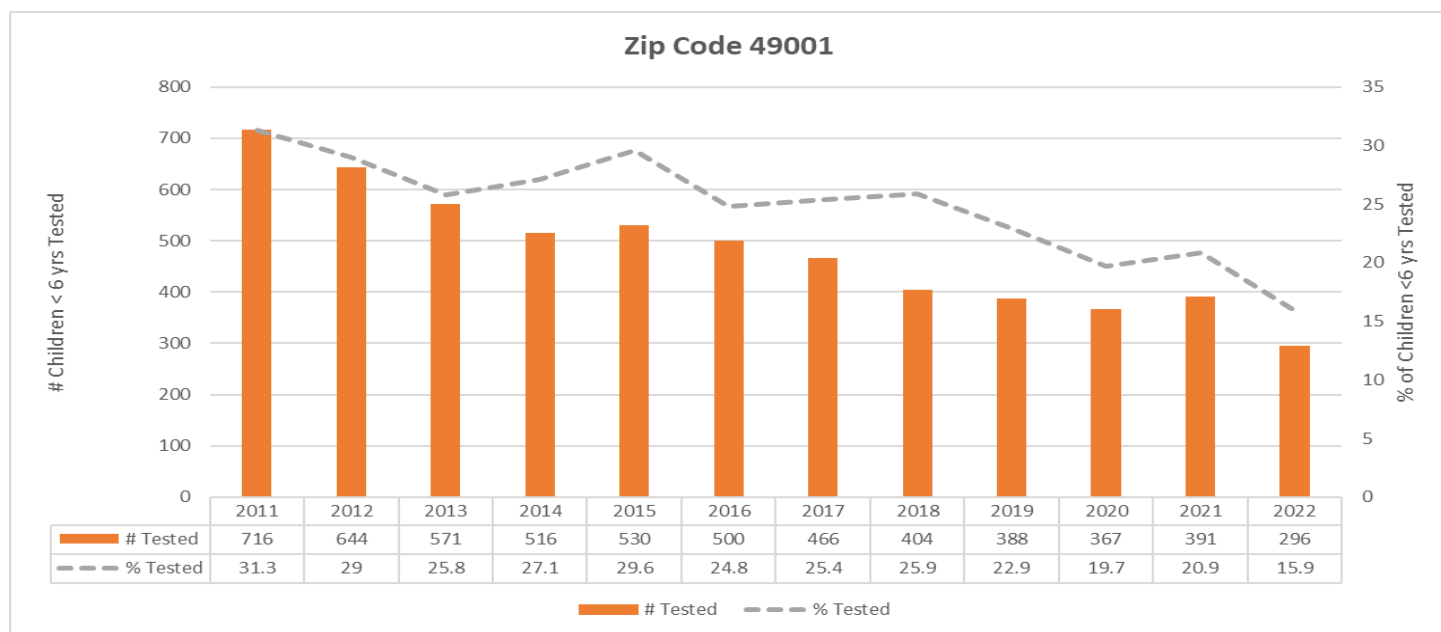
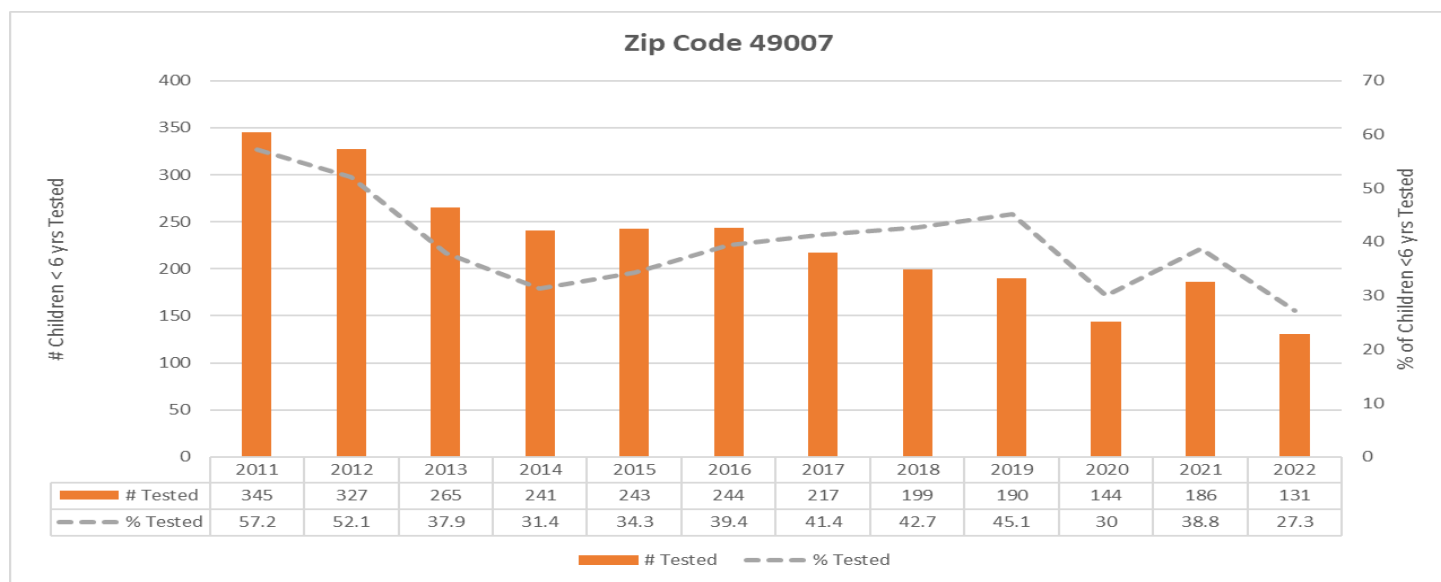
Local Health Department Lead Level Data - [www.mhtracking.state.mi.us/](http://www.mhtracking.state.mi.us/); data is provisional and subject to change.

Map Author:  
Environmental Health  
311 East Alcott Street  
Kalamazoo, Michigan 49001  
[www.kalcounty.com/eh](http://www.kalcounty.com/eh)

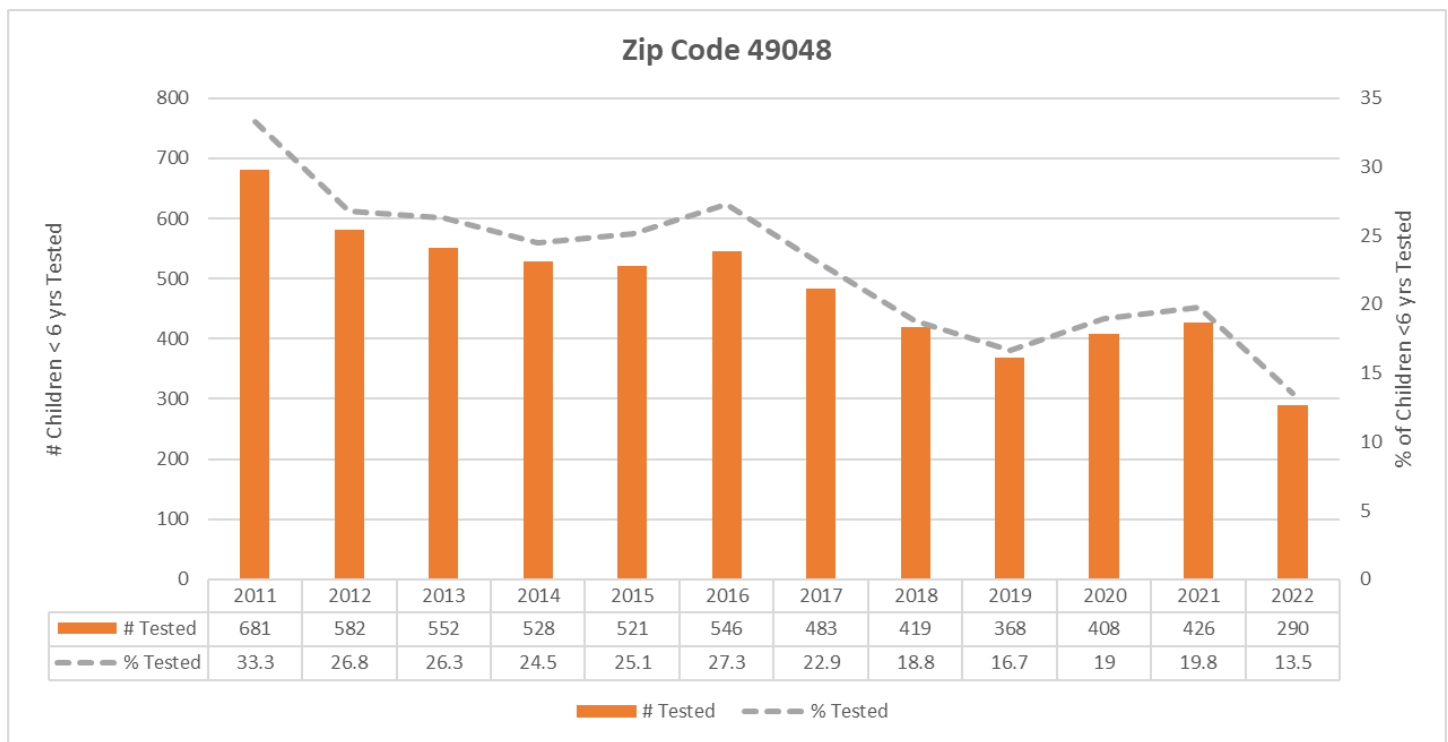


## Number and Percent of Children Age <6 Tested by Zip Code, Year

Although the 49007 zip code had the largest percentage of children tested, the 2022 percentage was the lowest percentage tested in this zip code since 2011. Between 2021 and 2022 the percent tested fell from 38.8% to 27.3%. Compared to 2021, the number of children tested decreased by approximately 30% (186 children to 131 children). Similar trends were seen in the 49001 and 49048 zip codes. Historically, zip codes 49007, 49001, and 49048 have had the highest percentages of elevated blood lead levels (EBLL) in children who were tested so increased testing levels in these areas are needed.







## Number and Percent of Children Tested with EBLs (Age <6)

In 2022, five percent of children in the county who were tested in Kalamazoo County had elevated blood lead levels. The map below shows the percentage of children tested with EBLs by county. Data showing EBLs over time for the county and for specific zip codes are also shown. However, according to the MDHHS Childhood Lead Poisoning Prevention Program, year-to-to-year comparisons of the percent of children with EBLs should be interpreted with caution.

‘Changes may be due to real change in blood lead levels, but changes can also be driven by differences in testing rates and the underlying risk factors of children that are tested. Factors influencing the testing rate may include changes in blood lead testing rules and practices, changes in confirmatory testing practices, how well physicians are following these guidelines, and public awareness, access, and demand for blood lead testing’.

Michigan does not have mandatory blood lead testing, except for children enrolled in Medicaid<sup>1</sup> and WIC<sup>2</sup>. Instead, Michigan uses a targeted testing approach, where a child’s healthcare provider recommends a blood lead test based on their professional judgement of the child’s risk. If this targeted testing approach is being followed, it means that the children most likely to have an EBL are the ones most likely to be tested. Children who are tested may have different characteristics (like age, race and ethnicity, or Medicaid status) and may have been exposed to different risk factors (like poverty and living in older housing), than children who are not tested. The true proportion of tested Michigan children with an EBL might be lower than reported due to targeted testing’. Source: MiTracking Childhood Lead Exposure Metadata, 1/4/23.

## 2022 Percent of Children Tested with EBLs by County

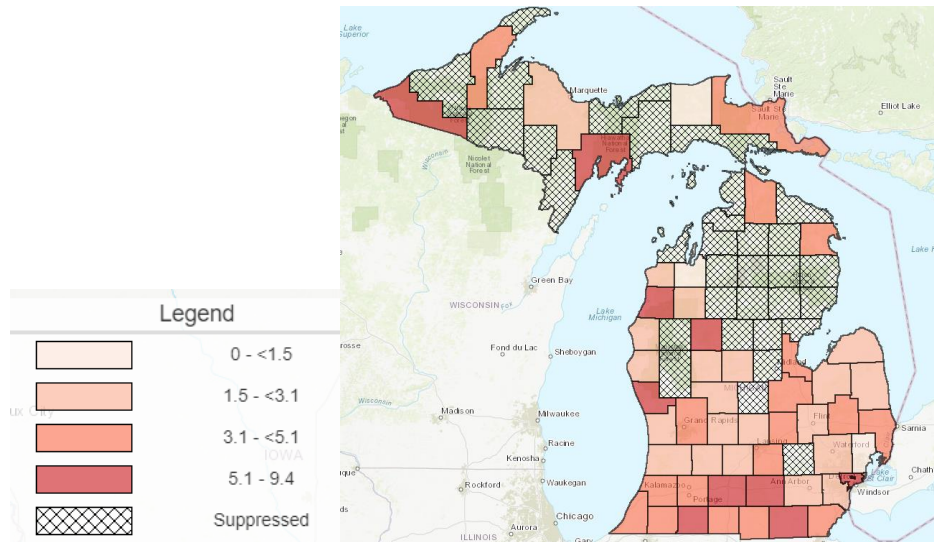
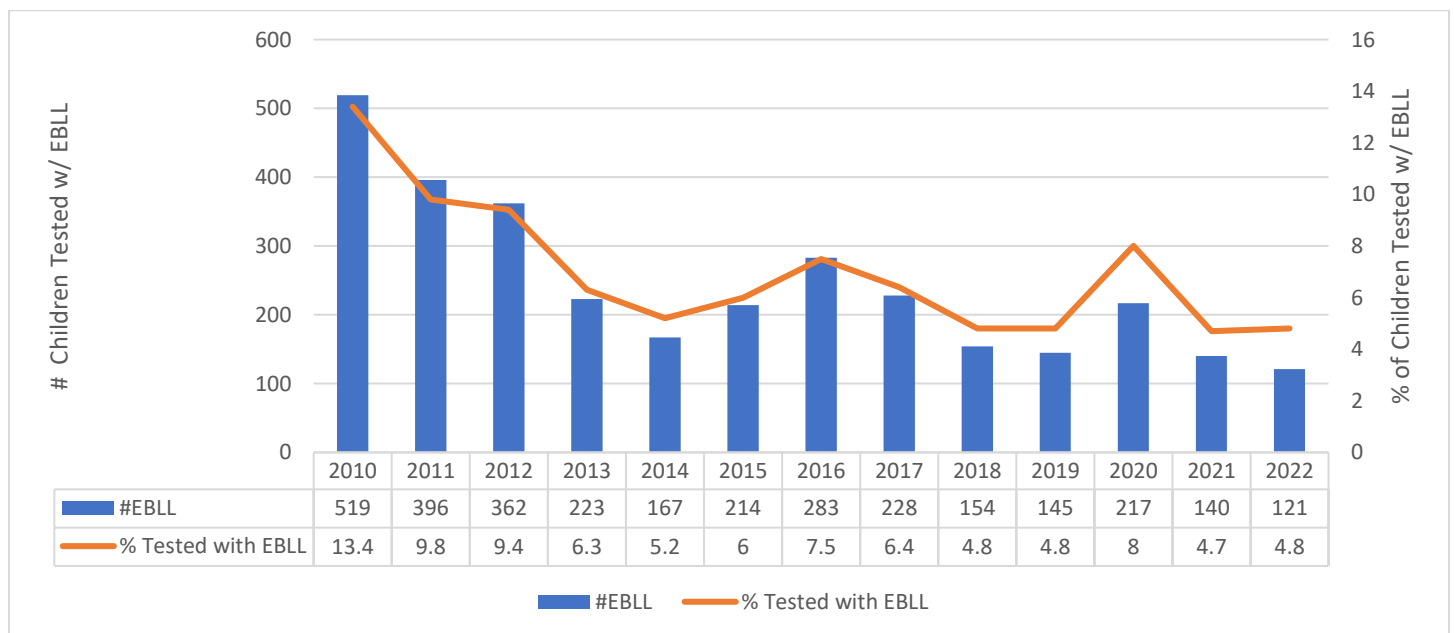


Image Source: <https://mitracking.state.mi.us/>

The percent of the county population tested found to have an EBL has been around 5% since 2018, with the exception of 2020. However, the population tested in 2020 is likely different from previous years due to the impact of the COVID-19 pandemic on access to services and the children tested may have different underlying risk for lead exposure.



## Percent of Children Age <6 Tested with EBLs by Zip Code, 2022

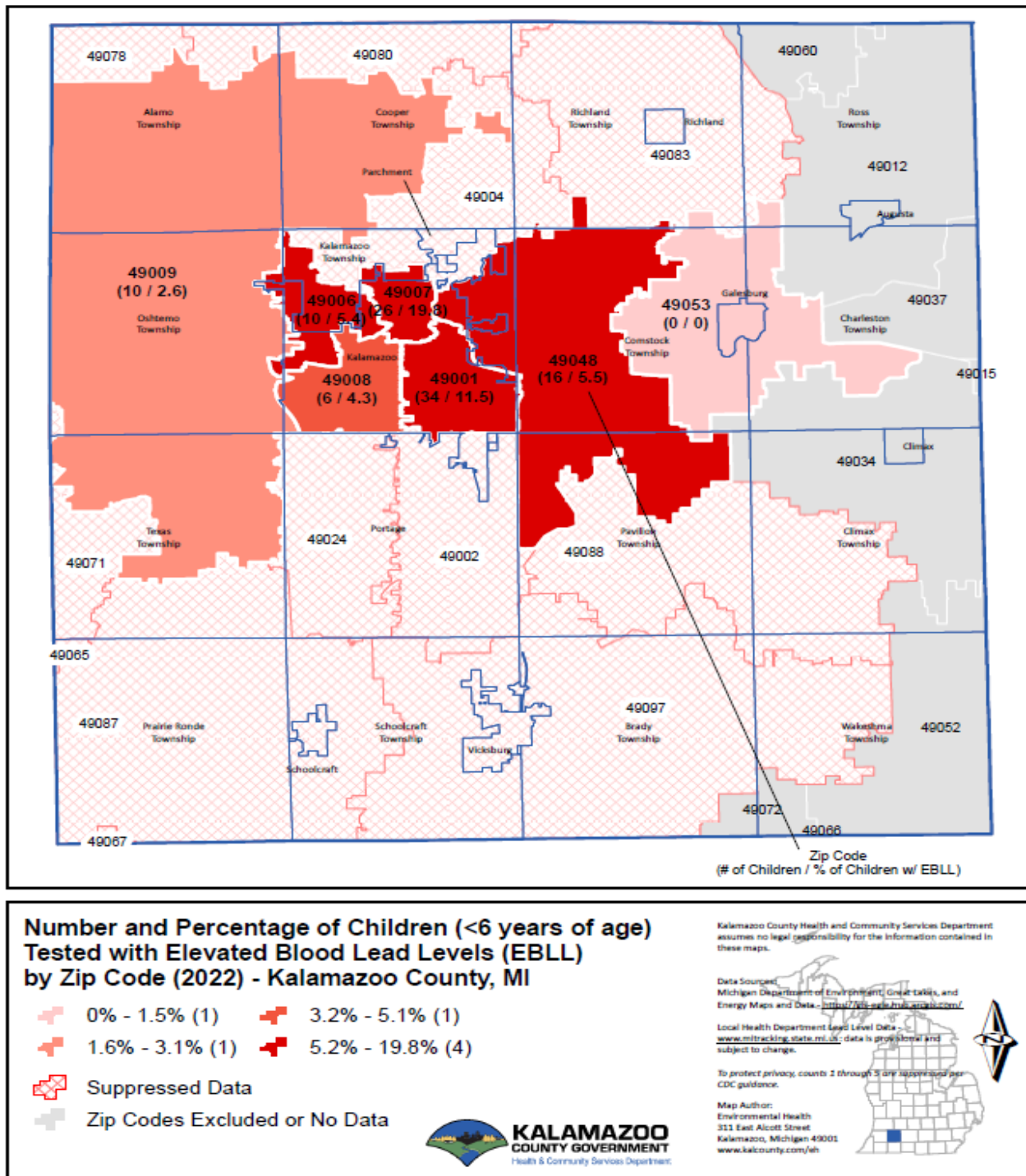
In 2022, the largest percentage of children tested found to have an EBL was in the 49007 zip code (19.8%), followed by 49001 (11.5%) and 49037 (7.6%).

Geographic Area(s)	Number of Children Tested	Number of Children with an EBL	Percent of Children Tested with an EBL
49001	296	34	11.5
49002**	150		Suppressed
49004	177		Suppressed
49006	185	10	5.4
49007	131	26	19.8
49008	141	6	4.3
49009	389	10	2.6
49015	360	6	1.7
49024**	279		Suppressed
49037	291	22	7.6
49048	290	16	5.5
49053	93	0	0
49065	54		Suppressed
49067**	41		Suppressed
49071**	90		Suppressed
49078	76		Suppressed
49080**	114		Suppressed
49083**	89		Suppressed
49087**	54		Suppressed
49088	27		Suppressed
49097**	109		Suppressed

\*\* Indicates Suppressed Data. The Michigan Environmental Public Health Tracking Program and its data partners have applied suppression rules as recommended by the data providers and/or using guidance from the CDC. To protect privacy, counts one (1) through five (5) are suppressed (not reported); other counts and corresponding rates are not reported if they can be used to calculate the suppressed counts. This is called [complementary \(or secondary\) suppression](#).

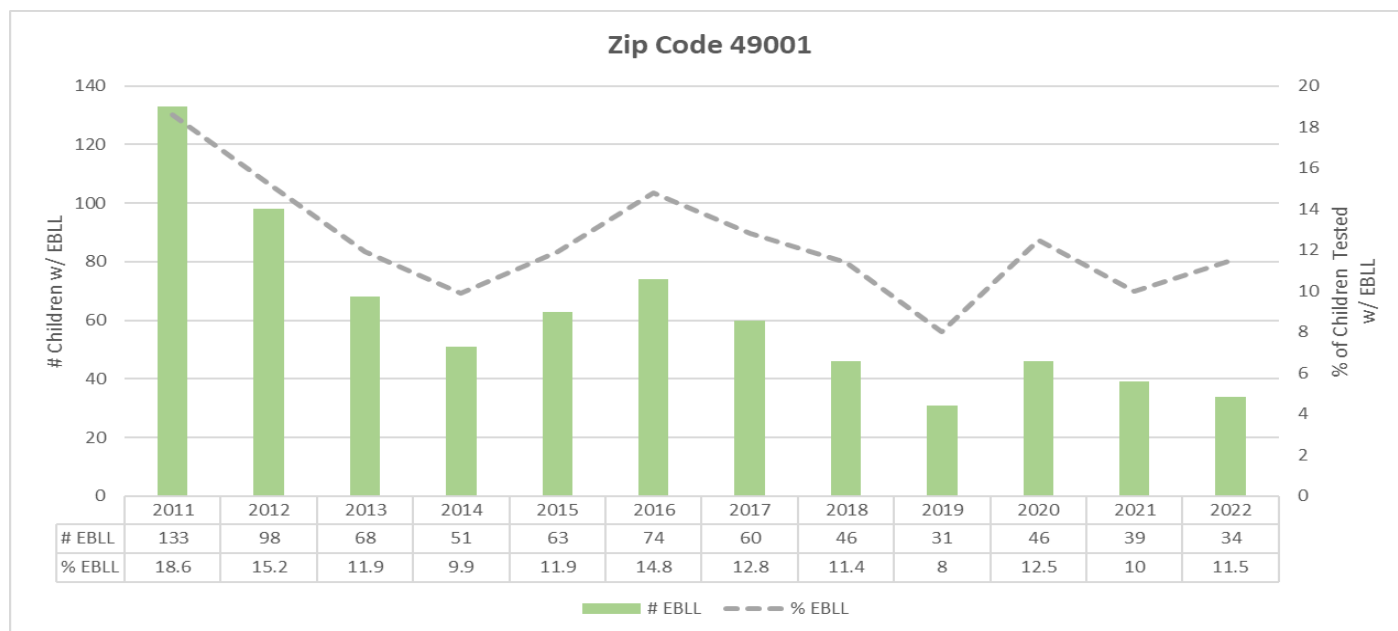
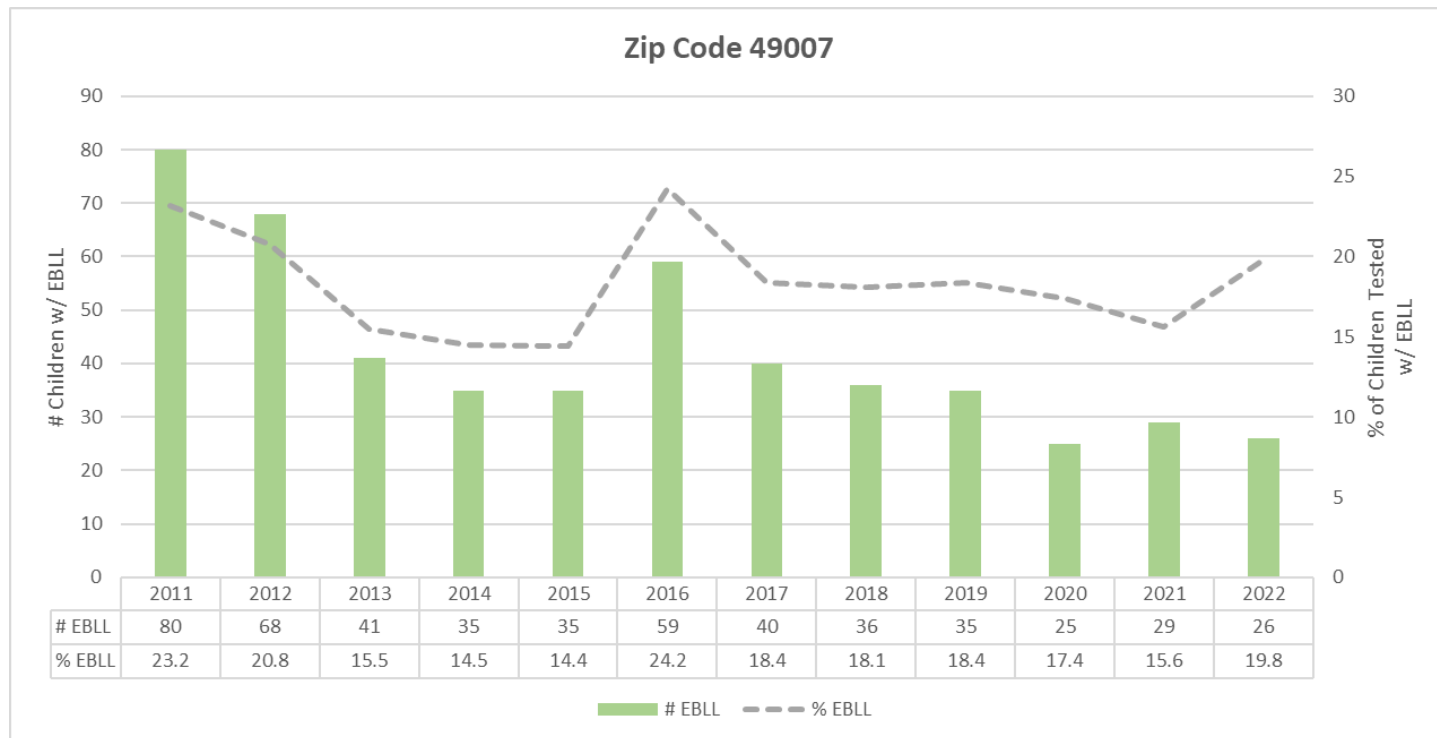
**Each child is counted only once per year in this table.** If a child had multiple tests in the year, the highest BLL from a venous test was counted. If no venous test was performed, the highest BLL from a capillary blood draw was counted. If the type of test was unknown, the highest BLL obtained from an unknown sample type was counted.

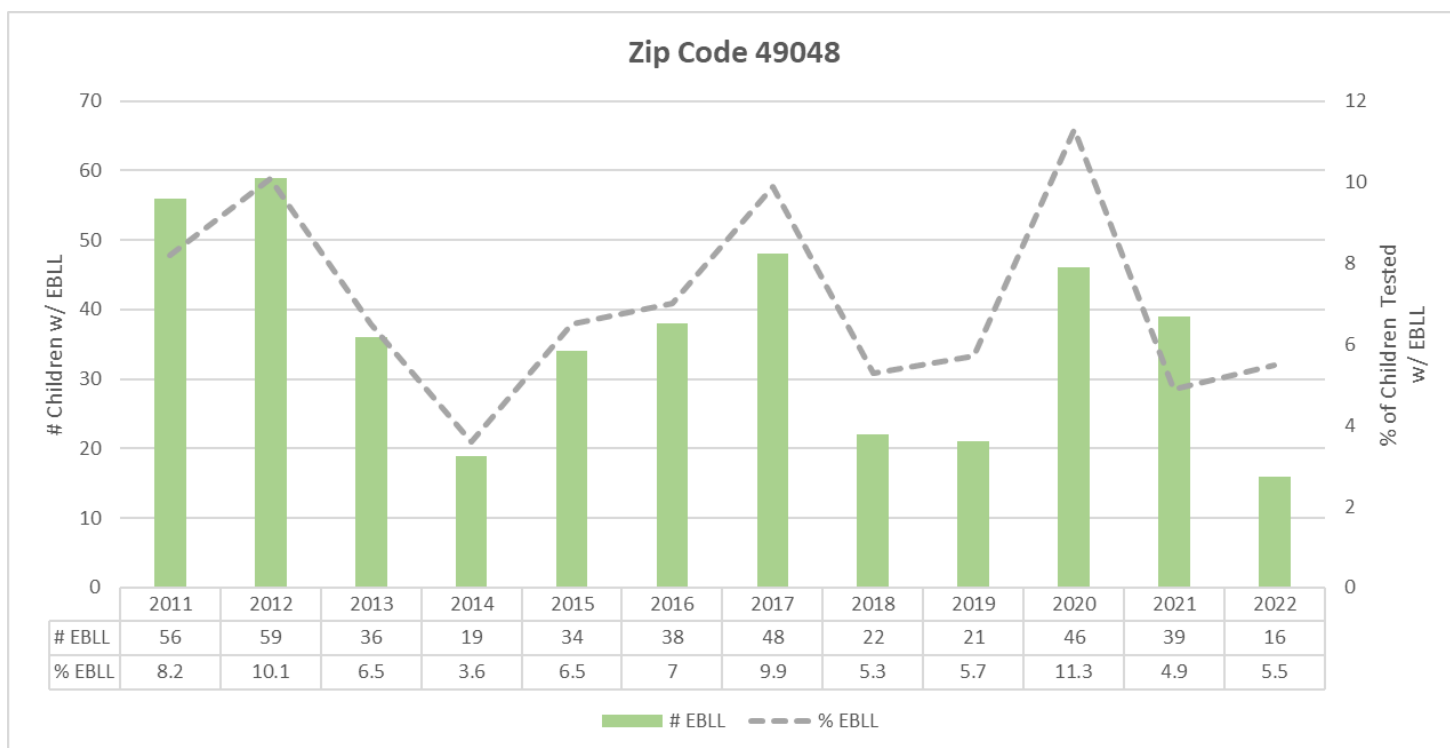
The map below shows the percentage of children tested in 2022 who had an elevated blood lead level (EBLL) by zip code within Kalamazoo County. Maps for previous years are available on the HCS DataHub page [www.kalcounty.com/hcs/datahub/](http://www.kalcounty.com/hcs/datahub/)



## Percent of Children Age <6 Tested with EBLLs by Zip Code, Year

The percent of children with EBLLs by zip code fluctuated by year. However, several limitations should be considered when interpreting this data over time. Please see page 9 for a summary of the limitations of this time trend data.





## Kalamazoo County Lead Poisoning Prevention Program

For additional information about the county lead poisoning prevention program visit

<https://www.kalcounty.com/hcs/ph/lead-poison/> or call 269-373-5080.



**Lead screenings are available at  
Kalamazoo County Health &  
Community Services Department!**

**WHEN:**

**Tuesdays & Thursdays**  
9:00 am-12:00 pm &  
1:00 pm – 4:00 pm

**WHERE:**

**Kalamazoo County HCS**  
311 East Alcott St.  
2nd Floor Clinic  
**No Appointment Needed**

For more information on the Kalamazoo County HCS  
Lead Program, call: 269-373-5080

