

The logo for the Tennessee Department of Health, featuring the letters 'TN' in white on a red square background.

TN

Department of
Health

Tennessee Childhood Lead Poisoning
Prevention Program

Division of Family Health and Wellness

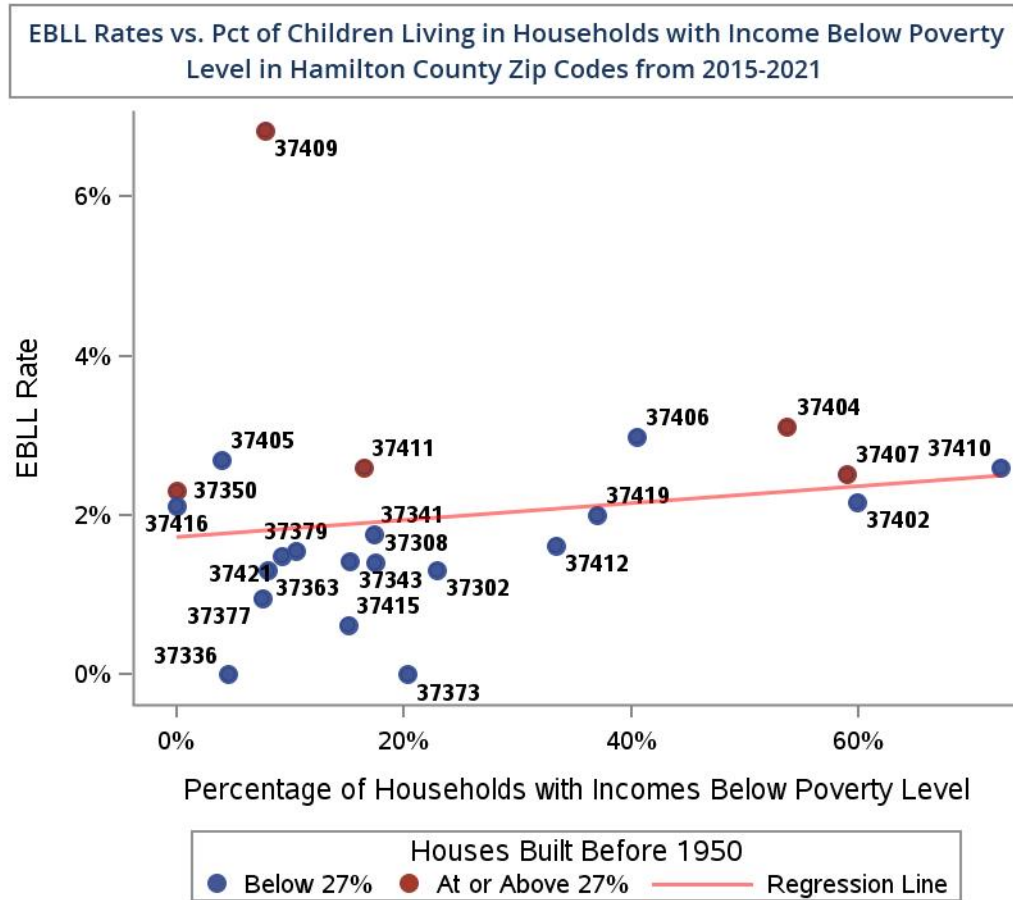
2015–2021 Lead Screening and Burden in Four Metropolitan Regions

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Click on a title to view chart.

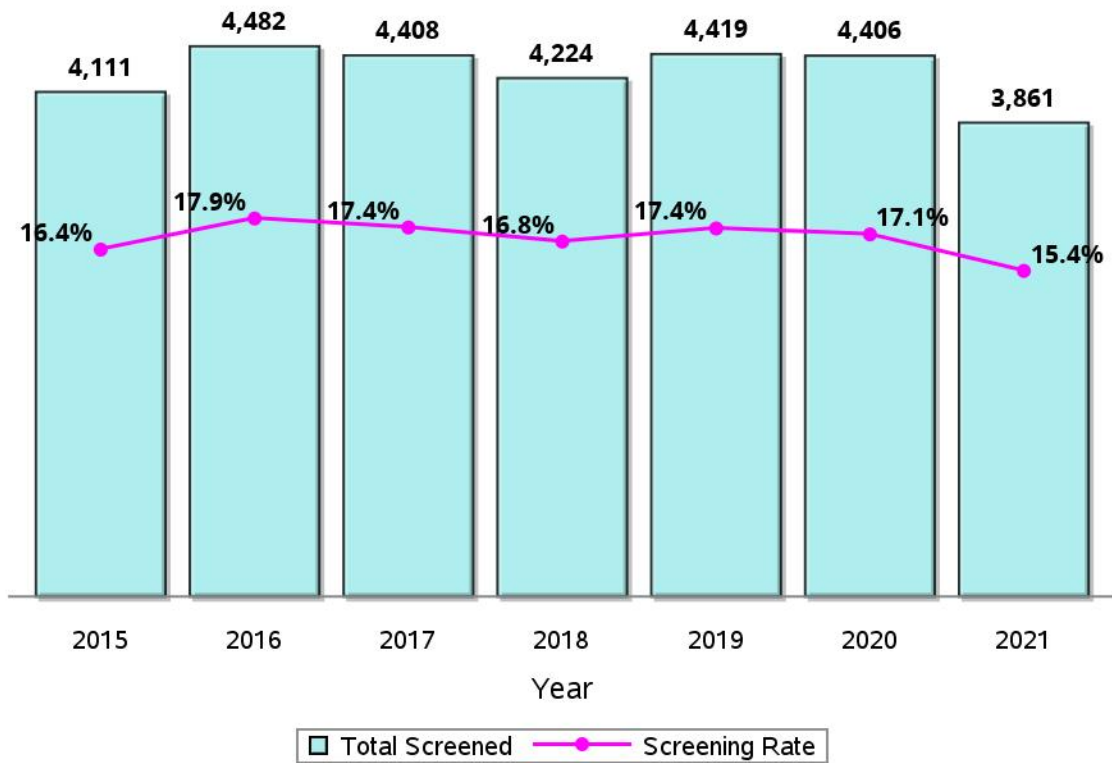


Plot includes zip codes with an Under 6 Population above 100.

Data sources: LeadTRK, TN Department of Health for EBLL rates (Updated August 27, 2022); 2019 ACS 5-year Estimates Tables B17001, B09001, and B25034.

- In Hamilton County, there are 9 zip codes with total EBLL rates of 2% or higher from 2015-2021: 37416, 37350, 37405, 37411, 37404, 37406, 37407, 37409, and 37410.
- Of these 9 zip codes, 5 have at least 27% of their housing structures built before 1950.
- There was no statistically significant correlation ($p=0.45$) between Hamilton County's total 2015-2021 EBLL Rates and 2019 Hamilton County poverty level estimates.

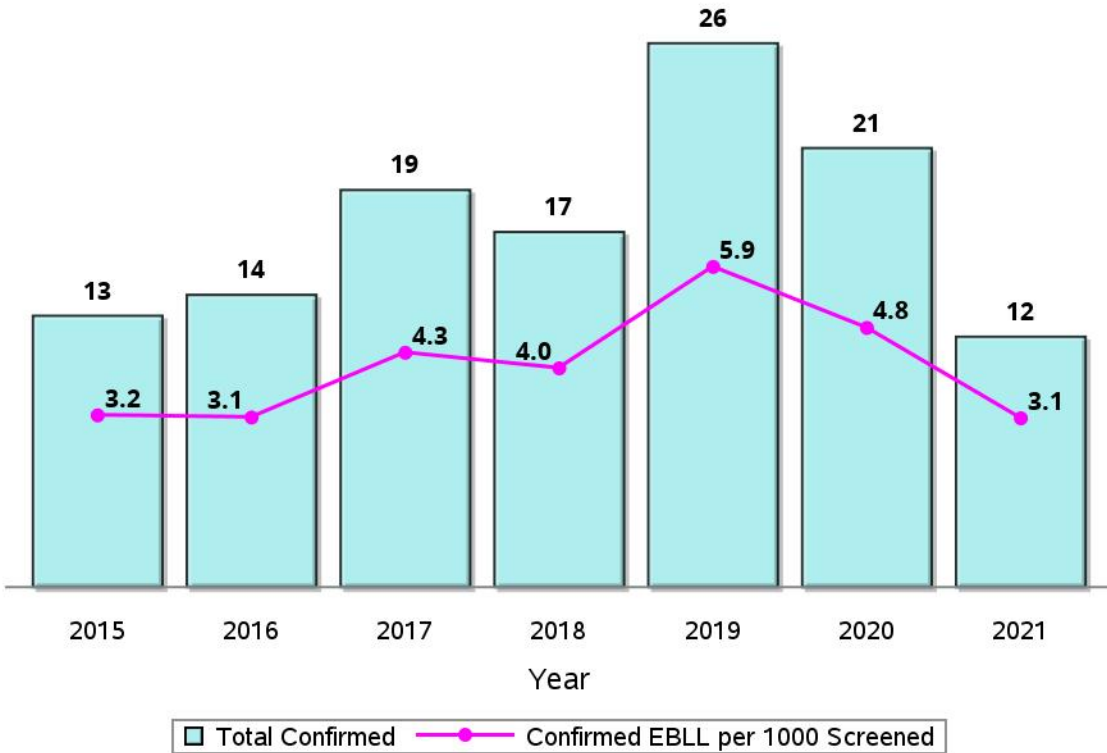
Hamilton County Annual Screening Totals and Rates: 2015-2021



Data sources: LeadTRK, TN Department of Health (Updated August 27, 2022); TN Vital Records and Statistics, TN Department of Health for county-level population statistics.

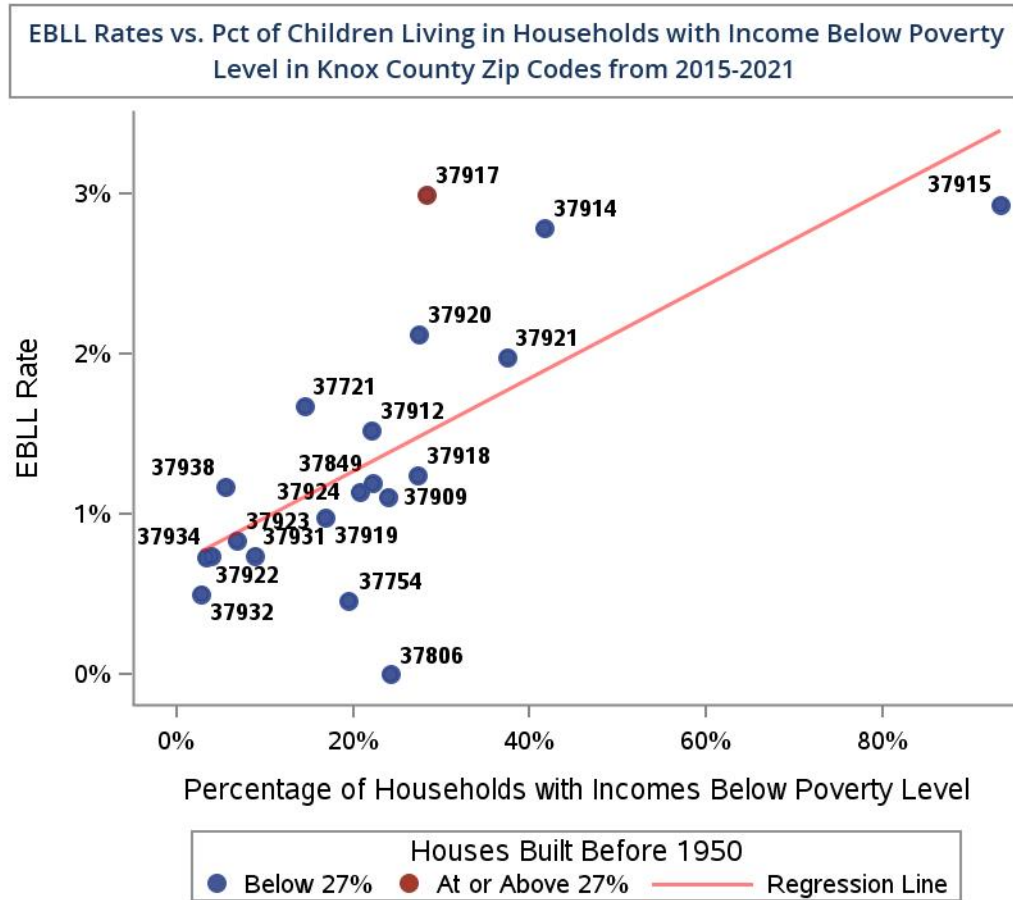
- In 2021, Hamilton County lead screenings had decreased by 6% compared to the 2015 total.
- 2021 screening rates have decreased by 6% vs. 2015.

Hamilton County Confirmed EBLL Totals and Lead Burden per 1000 Screened:
2015-2021



Data sources: LeadTRK, TN Department of Health (Updated August 27, 2022)

- In 2021, confirmed EBLL cases in Hamilton County had decreased by 8% compared to the 2015 total.
- The 2021 lead burden in Hamilton County decreased by 3% vs. 2015.

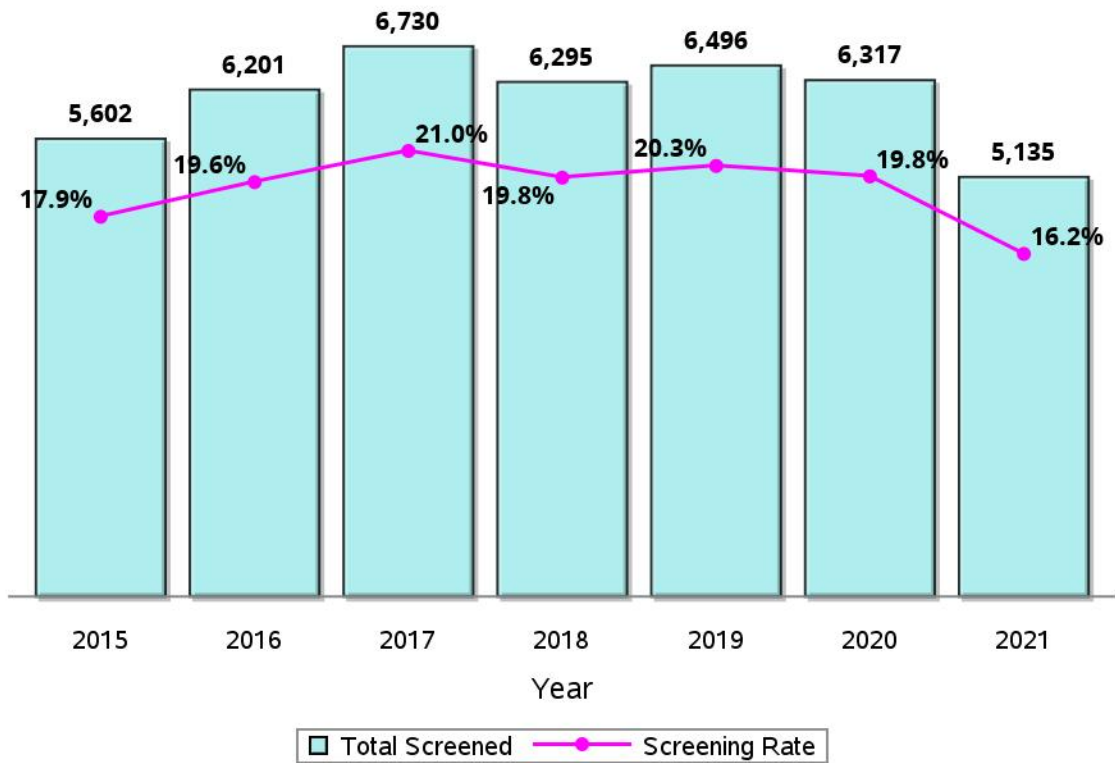


Plot includes zip codes with an Under 6 Population above 100.

Data sources: LeadTRK, TN Department of Health for EBLL rates (Updated August 27, 2022); 2019 ACS 5-year Estimates Tables B17001, B09001, and B25034.

- In Knox County, there are 4 zip codes with total EBLL rates of 2% or higher from 2015-2021: 37920, 37914, 37915, and 37917
- Of these 4 zip codes, 1 has at least 27% of its housing structures built before 1950.
- There was a statistically significant ($p=0.001$), strong ($r=0.69$), positive correlation between Knox County's total 2015-2021 EBLL rates and 2019 Knox County poverty level estimates.

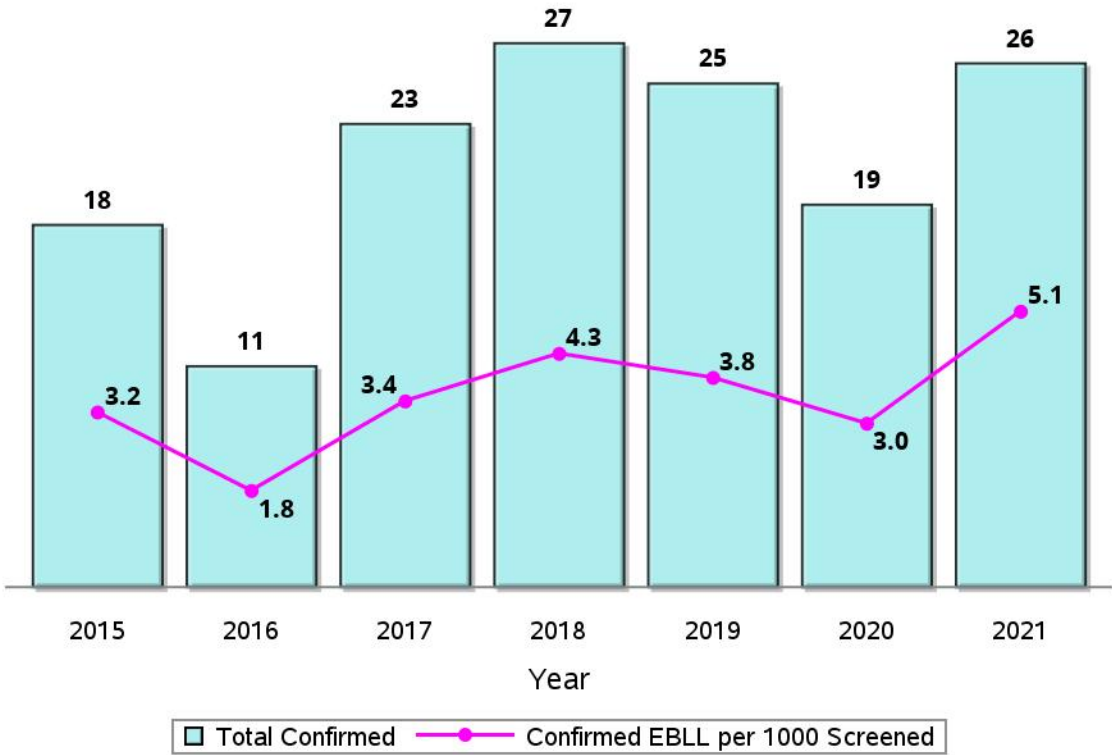
Knox County Annual Screening Totals and Rates: 2015-2021



Data sources: LeadTRK, TN Department of Health (Updated August 27, 2022); TN Vital Records and Statistics, TN Department of Health for county-level population statistics.

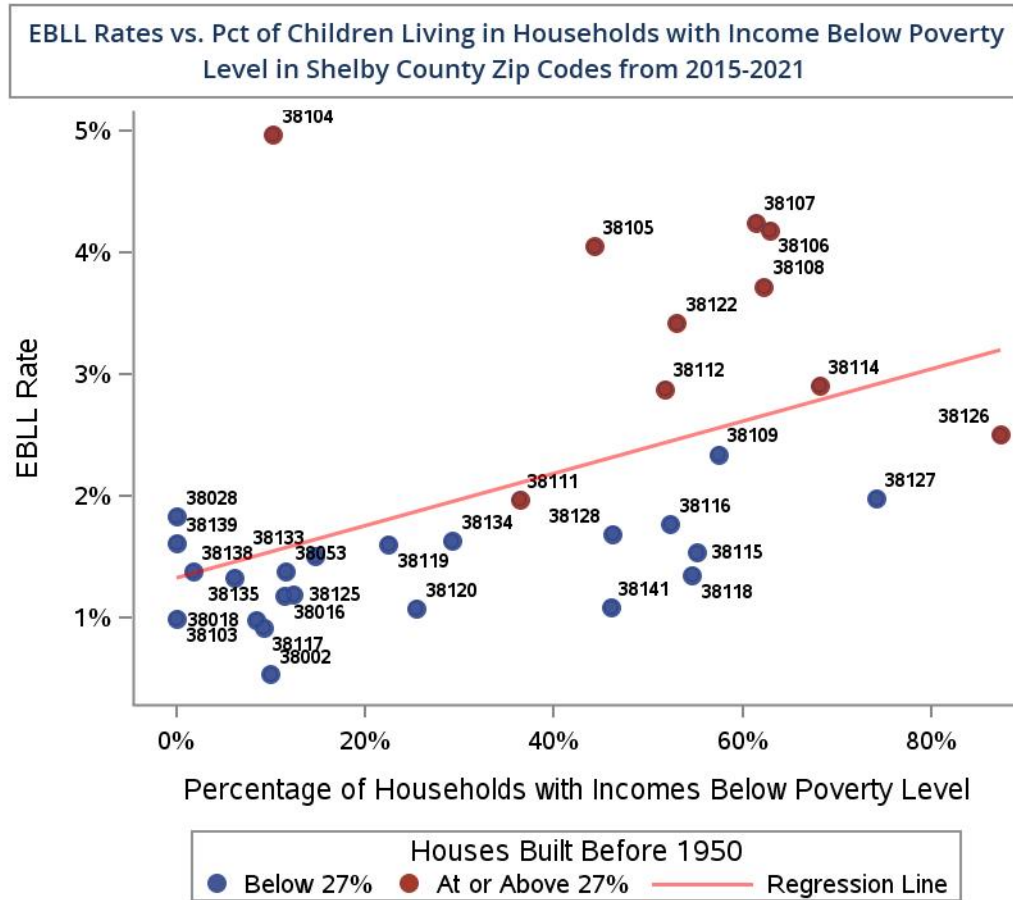
- In 2021, Knox County lead screenings had decreased by 8% compared to the 2015 total.
- 2021 screening rates have decreased by 9% vs. 2015.

Knox County Confirmed EBLL Totals and Lead Burden per 1000 Screened:
2015-2021



Data sources: LeadTRK, TN Department of Health (Updated August 27, 2022)

- In 2021, confirmed EBLL cases in Knox County increased by 44% over the 2015 total.
- The 2021 lead burden in Knox County increased by 59% compared to 2015.

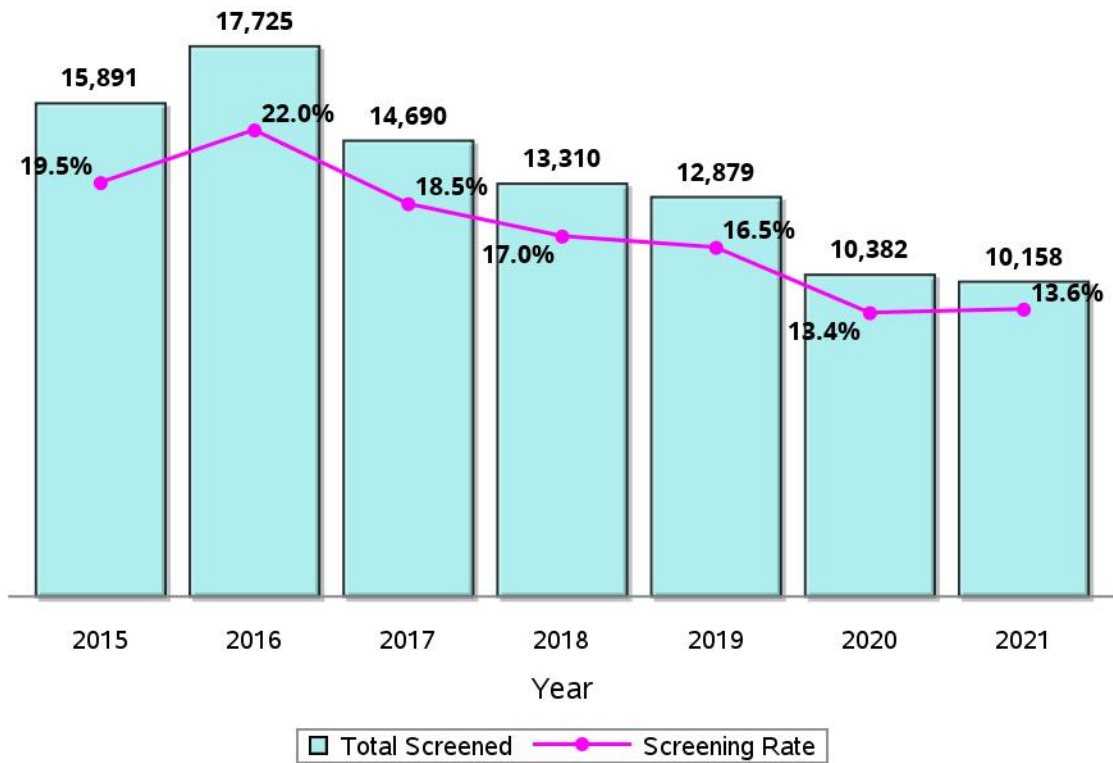


Plot includes zip codes with an Under 6 Population above 100.

Data sources: LeadTRK, TN Department of Health for EBLL rates (Updated August 27, 2022); 2019 ACS 5-year Estimates Tables B17001, B09001, and B25034.

- In Shelby County, there are 10 zip codes with total EBLL rates of 2% or higher from 2015-2021: 38104, 38105, 38106, 38107, 38108, 38109, 38112, 38114, 38122, and 38126.
- Of these 10 zip codes, 9 have at least 27% of their housing structures built before 1950.
- There was a statistically significant ($p=0.005$), moderate ($r=0.48$), positive correlation between Shelby County's total 2015-2021 EBLL rates and 2019 Shelby County poverty level estimates.

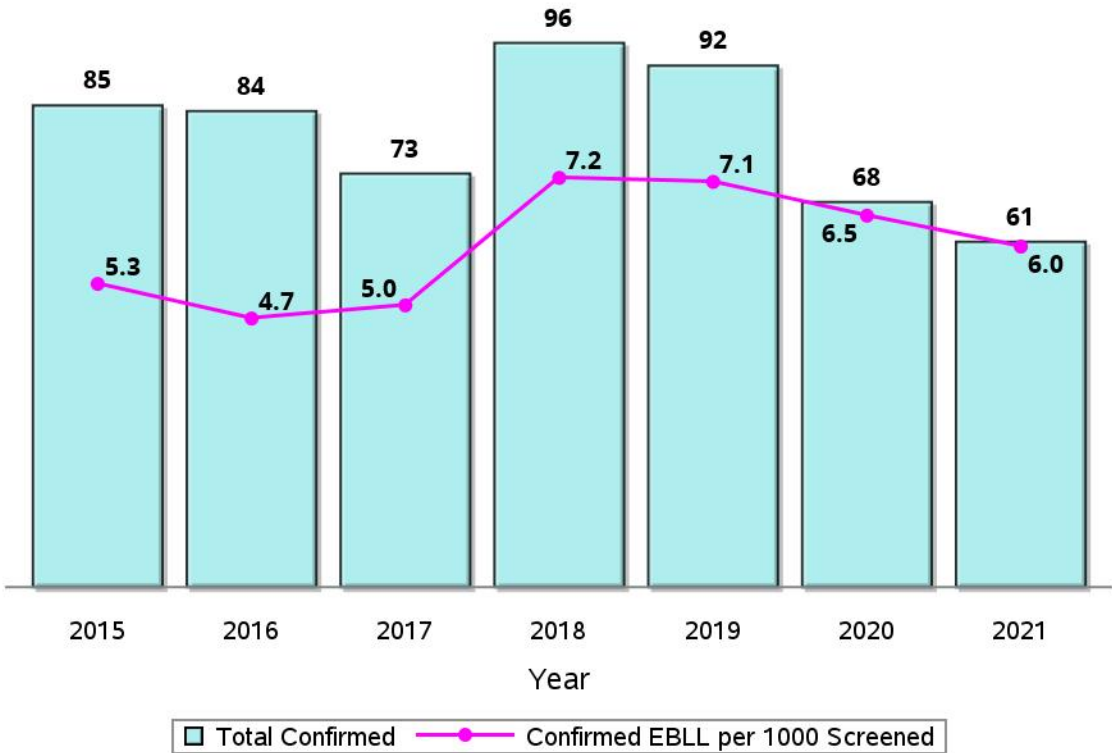
Shelby County Annual Screening Totals and Rates: 2015-2021



Data sources: LeadTRK, TN Department of Health (Updated August 27, 2022); TN Vital Records and Statistics, TN Department of Health for county-level population statistics.

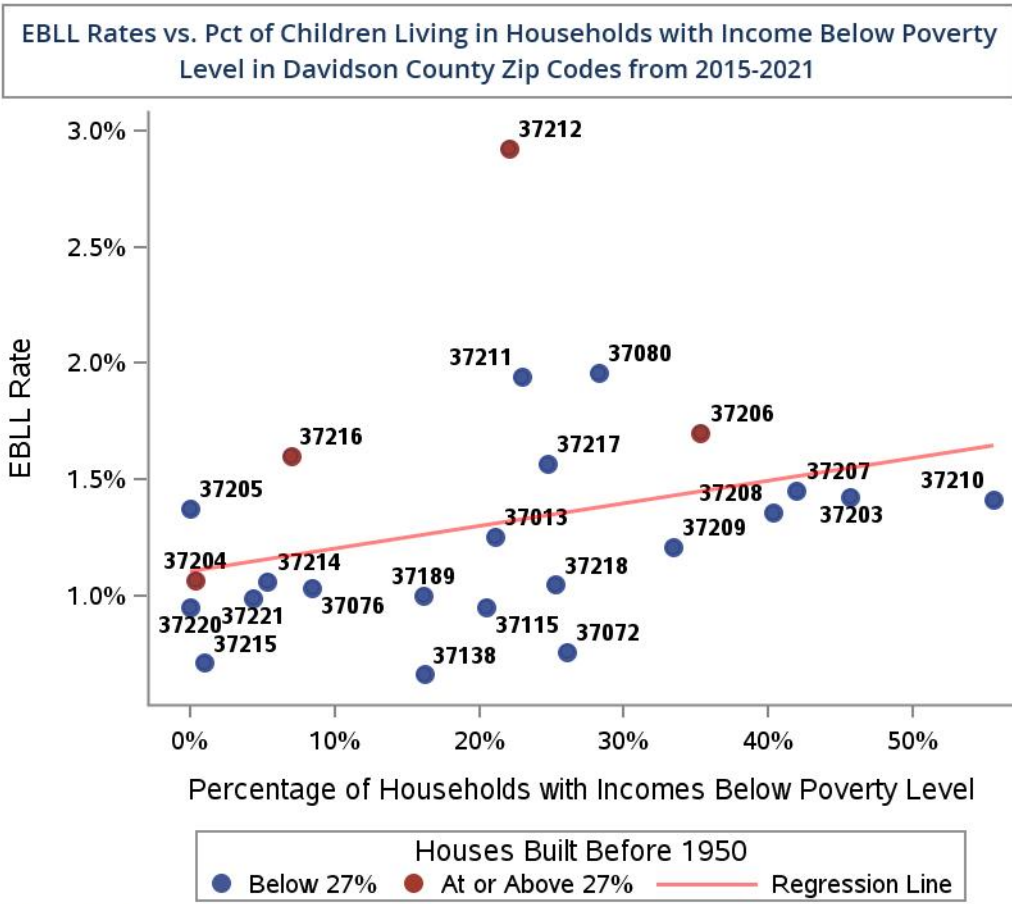
- In 2021, Shelby County lead screenings decreased by 36% below the 2015 total.
- 2021 screening rates have decreased by 30% compared to 2015.

Shelby County Confirmed EBLL Totals and Lead Burden per 1000 Screened:
2015-2021



Data sources: LeadTRK, TN Department of Health (Updated August 27, 2022)

- In 2021, confirmed EBLL cases in Shelby County decreased by 28% below the 2015 total.
- The 2021 lead burden in Shelby County increased by 13% compared to 2015 partially due to a 36% decrease in lead screenings.

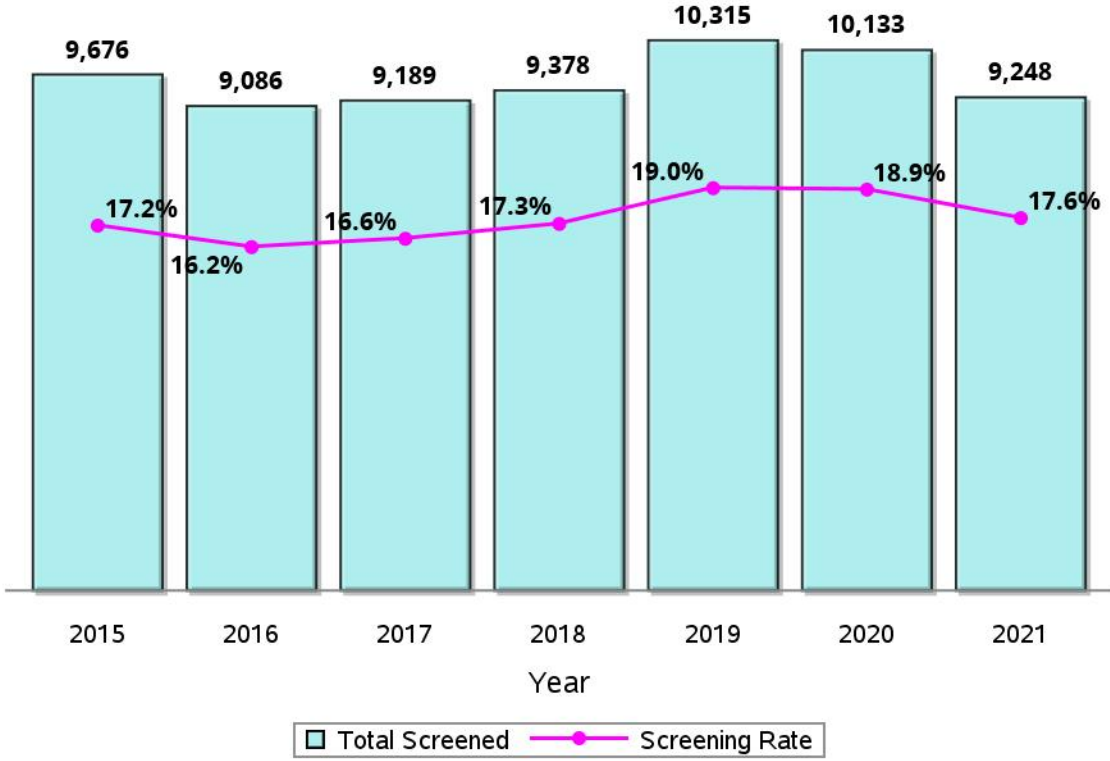


Plot includes zip codes with an Under 6 Population above 100.

Data sources: LeadTRK, TN Department of Health for EBLL rates (Updated August 27, 2022); 2019 ACS 5-year Estimates Tables B17001, B09001, and B25034.

- In Davidson County, there is 1 zip code with a total EBLL rate of 2% or higher from 2015-2021: 37212.
- This zip code did have at least 27% of its housing structures built before 1950.
- There was no statistically significant ($p=0.14$) correlation between Davidson County's total 2015-2021 EBLL rates and 2019 Davidson County poverty level estimates.

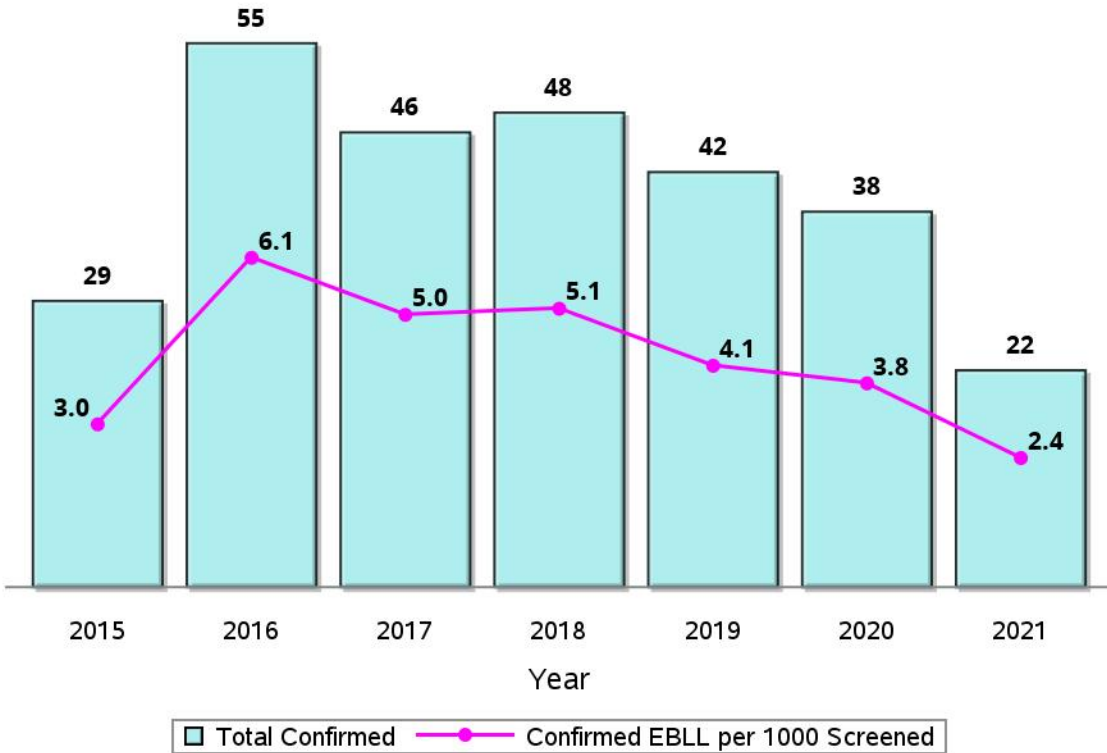
Davidson County Annual Screening Totals and Rates: 2015-2021



Data sources: LeadTRK, TN Department of Health (Updated August 27, 2022); TN Vital Records and Statistics, TN Department of Health for county-level population statistics.

- In 2021, Davidson County lead screenings decreased by 4% below the 2015 total.
- 2021 screening rates have decreased by 2.2% compared to 2015.

Davidson County Confirmed EBLL Totals and Lead Burden per 1000 Screened: 2015-2021



Data sources: LeadTRK, TN Department of Health (Updated August 27, 2022)

- In 2021, confirmed EBLL cases in Davidson County decreased by 24% below the 2015 total.
- The 2021 lead burden in Davidson County decreased by 20% compared to 2015.

Definitions:

EBLL

Elevated blood lead level. Any child who receives a lead test result of 5 µg/dL or greater and does not have a confirmed history of EBLL is counted in the EBLL total.

EBLL Rate

The percentage of unique children screened who had at least one reported lead result of 5 µg/dL or greater.

Poverty Level

The percentage of children under age six (6) living in households with income in the previous 12 months below poverty levels according to American Community Survey Table B17001.

Confirmed

Children are considered confirmed if they receive two capillary tests of 5 µg/dL or greater within 90 days or one venous test of 5 µg/dL or greater.

Screened

Children are considered screened if they receive a blood lead test and do not have a confirmed history of EBLL.

TN CLPPP Contact Information:

Website:

<https://www.tn.gov/health/health-program-areas/mch-lead.html>

State Childhood Lead Poisoning Prevention Program

630 Hart Lane
1st Floor, R.S. Gass Laboratory
Nashville, TN 37243
Phone: (615) 532-8462

Tennessee Certified Lead Based Paint Firms, Certification Process and Lead-Based Paint Pre-Renovation Education Rule:

Tennessee Department of Environment and Conservation
Toxic Substances Program – Lead Hazard Program Division of Solid/Hazardous Waste Management
William R. Snodgrass Tennessee Tower – 14th Fl
312 Rosa L. Parks Ave.
Nashville, Tennessee 37273
Lead Line: 1-888771-LEAD (5323)
Local: (615) 532-LEAD (5323)

