

# Tennessee Department of Health Childhood Lead Poisoning Prevention Screening Plan

August 2022 (Revised May 2023)

This publication was made possible (in part) by the Centers for Disease Control and Prevention grant CDC-RFA-EH21-2102. The views expressed in this document do not necessarily reflect the official policies of the Department of Health and Human Services, nor does the mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.

## Table of Contents

Plan Overview	1
Screening Guidelines	2
Reporting Requirements	5
2022 Tennessee Testing Data	6
Screening Statewide and by County	
Elevated Blood Lead Levels	
Tennessee Lead Exposure Risk	10
High Risk ZIP Codes	
Lead Exposure Risk Index	
Additional Sources of Lead Exposure	14
National and State Resources	15
Appendix A Lead Risk Assessment Questionnaire (English)	17
Appendix B Lead Risk Assessment Questionnaire (Spanish)	18
References	19

## **Plan Overview**

This plan was prepared by the Tennessee Department of Health, Childhood Lead Poisoning Prevention Program. The Centers for Disease Control and Prevention (CDC) encourages each state to develop a screening plan based on state-specific data. This document summarizes the clinical recommendations and tools for a more targeted approach to childhood lead screening in Tennessee. In 2022, an expert workgroup convened to review the program background, screening recommendations, historical screening and blood lead level data trends, and additional resources to make informed decisions for recommendations to the development of the plan.

All children in Tennessee should be screened for lead at 12 and 24 months of age, 36-72 months of age without a documented blood lead level, children whose parents request a test, or children less than six years of age whose risk status changes. Providers should consider a blood test for children living in high-risk areas.

This plan is supported with funding provided through Centers for Disease Control and Prevention 1 NUE2EH001434-01-00.

## Who Should be Screened?

- Children whose parent/guardian answers "yes" or "don't know" to any questions on the <u>risk assessment questionnaire</u> used at well-child checks between 6-72 months of age (according to <u>Bright Futures Guidelines</u><sup>1</sup>) or when child's risk status changes.
- 2. Children at 12 and 24 months old.<sup>2</sup>
- 3. Children 36-72 months old without a documented blood lead level.<sup>2</sup>
- 4. Children whose parent/guardian requests a blood lead level.
- Recent immigrants, refugees, and international adoptees under 16 years old should be screened for elevated blood lead levels within 90 days of arrival into the United States. Screening should be repeated 3-6 months later after initial testing.<sup>3</sup>

#### Lead Risk Assessment Questionnaire

A questionnaire was developed to assess a child's individual *risk* for exposure to lead and should be used as a *screening* tool. (Appendices A and B). The questionnaire is not intended to replace a test but can be used as an additional resource. In addition to living in a geographically high-risk area, children may be at increased risk for lead poisoning from a variety of sources such as parent occupation, pottery, jewelry, spices, and cookware. See links below for questionnaire:

https://www.tn.gov/content/dam/tn/health/program-areas/lead/Lead-Risk-Questionnaire-Jan-2019.PDF

https://www.tn.gov/content/dam/tn/health/program-areas/lead/PH-4416-S-Lead-Risk-Assessment-SPANISH.pdf

<sup>&</sup>lt;sup>1</sup> Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescent. <u>https://downloads.aap.org/AAP/PDF/periodicity\_schedule.pdf?\_ga=2.91740122.1112264329.16650916</u> <u>34-1999710129.1663593103</u>

<sup>&</sup>lt;sup>2</sup>Required for TennCare participants. <u>https://www.medicaid.gov/medicaid/benefits/early-and-periodic-</u> <u>screening-diagnostic-and-treatment/lead-screening/index.html</u>

<sup>&</sup>lt;sup>3</sup>CDC: Screening for Lead during the Domestic Medical Examination for Newly Arrived Refugees. <u>https://www.cdc.gov/immigrantrefugeehealth/guidelines/lead-guidelines.html</u>

## Tennessee Childhood Lead Poisoning Prevention Program Screening Guidelines

The Tennessee Childhood Lead Poisoning Prevention Program (CLPPP) screening, testing and follow-up guidelines are based on the latest recommendations of the Advisory Committee on Childhood Lead Poisoning and Prevention of the Centers for Disease Control and Prevention (CDC) and the endorsement of the CDC. More information is available at: <u>http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6120a6.htm</u>

#### Who Should Be Screened?

A lead risk assessment should be performed according to Bright Futures guidelines for children starting at 6 months old. https://downloads.aap.org/AAP/PDF/periodicity\_schedule.pdf?\_ga=2.91740122.1112264329.1665091634-1999710129.1663593103

#### Who Should Be Tested?

- 1. Children at 12 and 24 months old\*
- 2. Children 36-72 months old without a documented blood lead level\*
- 3. Children whose parent/guardian requests a blood lead level
- 4. Children whose parent/guardian answers "yes" or "don't know" to any questions on the risk assessment questionnaire used at well-child checks between 6-72 months of age or when child's risk status changes \*Required for <u>all</u> TennCare recipients.

#### **Testing Guidelines**

- 1. Blood lead test may be done as a capillary finger stick.
- 2. If the blood lead level (BLL) is 3.5 µg/dL or greater, the level must be confirmed by a venous BLL.

Screening test result (µg/dL)	Time to confirmation testing
3.5-9	0-3 months
10-44	1 week - 1 month*
45-59	48 hours
60-69	24 hours
$\geq$ 70	Urgently as emergency test

# If the Capillary Blood Lead Level is $\geq 3.5 \ \mu g/dL$ follow the Recommended Schedule for a Confirmatory Venous Sample

\*The higher the BLL on the screening test, the more urgent the need for confirmatory testing.

If the Confirmatory Venous Sample is  $\geq$  3.5 µg/dL, follow the Recommended Schedule for Follow-Up Testing <sup>a</sup>

Venous Blood Lead Level (µg/dL)	Early Follow-Up (first 2-4 tests after identification)	Late Follow-Up (after BLL begins to decline)
3.5-9	3 months <sup>b</sup>	6-9 months
10-19	1-3 months <sup>b</sup>	3-6 months
20-24	1-3 months <sup>b</sup>	1-3 months
25-44	2 weeks-1 month	1 month
$\geq$ 45	As soon as possible	As soon as possible

b Seasonal variation of BLLs exists and may be more apparent in colder climate areas. Greater exposure in the summer months may necessitate more frequent follow-ups.

Value	Recommendations
42 5 m = ( JT	Report results to TN CLPPP.
< 3.5 µg/dL	Provide lead education <sup>1.</sup>
	Continue screening per TNCLPPP screening guidelines.
	Monitor development during well child visits.
	Report results to TNCLPPP.     Deform a complete history and physical events accessing the shild for signs and superforms relations.
	<ul> <li>Perform a complete history and physical exam, assessing the child for signs and symptoms relat to lead exposure.</li> </ul>
	<ul> <li>Obtain environmental exposure history to identify potential sources.</li> </ul>
3.5 - 19 μg/dL	<ul> <li>Follow-up blood lead monitoring (see guidelines).</li> </ul>
	<ul> <li>Ensure the child does not have iron deficiency. Follow American Academy of Pediatrics (AAP) testing and treatment guidelines.</li> </ul>
	• Provide nutritional education with focus on calcium and iron intake. Refer to WIC <sup>3</sup> as applicable
	<ul> <li>Monitor the child's development per AAP guidelines.</li> </ul>
	<ul> <li>Refer to TEIS<sup>4</sup> as applicable.</li> </ul>
	• Report results to TNCLPPP.
	• Follow the recommendations for BLL 3.5-19 with addition of the following:
20 - 44 μg/dL	Environmental investigation (Venous BLL's $\geq 20$ or persistently elevated levels).
	Abdominal X-ray (if particulate lead ingestion is suspected) with bowel decontamination if indicated.
	Contact the TN Poison Center (800-222-1222) for guidance regarding management, including o chelation therapy.
	• Follow the recommendations for BLL 20-44, with addition of the following:
	Perform a complete history and physical exam, including a detailed neurological exam.
45 - 69 μg/dL	Abdominal X-ray (if particulate lead ingestion is suspected) with bowel decontamination if indicated.
10	Contact the TN Poison Control Center (800-222-1222) for guidance regarding management, including oral chelation therapy.
	Consideration hospitalization if:
	• Patient home is not lead-safe.
	• Source of lead exposure has not been identified.
	• Follow the recommendations for BLL 20-44, with addition of the following:
$\geq$ 70 µg/dL	Hospitalize and commence chelation therapy (following confirmatory venous blood lead test) in conjunction with consultation from a medical toxicologist or a pediatric health specialty unit.

<sup>4</sup>https://www.tn.gov/didd/for-consumers/tennessee-early-intervention-system-teis.html

The following actions are NOT recommended at any blood lead level:

- Searching for gingival lead lines
- •Testing of hair, teeth, or fingernails for lead •Radiographic imaging of long bones
- •Testing of neurophysiologic function
- •X-ray fluorescence of long bones (except during chelation with EDTA)
- •Evaluation of renal function
- Additional Contact Information Tennessee Department of Health: https://www.tn.gov/health/health-program-areas/mch-lead.html or Call (615) 532-8462

https://www.tn.gov/health/cedep/environmental/healthy-homes/hh/lead.html Tennessee Department of Environment and Conservation: https://www.tn.gov/environment/toxic-substances-program/leadhazard-program.html or Call (615) 532-LEAD or the in-state-only hotline at 1-888-771-LEAD Lead-based inspectors, Risk

Assessors: https://www.tn.gov/environment/toxic-substances-program/lead-hazard-program/lead-certification.html Revised: 10/2022

Tennessee Department of Health Authorization No. 343110, No. of Copies-1,000. This public publication was promulgated at a cost of \$.09 per copy. 01/12

## Tennessee Childhood Lead Poisoning Prevention Program

Lead Screening/Testing Provider Submission Instructions

The Tennessee Department of Health requires reporting to the State of all lead screening test result, both elevated and non-elevated, for both children and adults. Providers using in office testing must report. Laboratories are responsible for reporting results on any lead samples they process and analyze.

 When a provider conducts lead screenings in house via the LeadCare II machine, s/he must report all results to the University of Tennessee Extension via the Lead Input portal. Enter the URL<u>https://leadinput.tennessee.edu</u>. Notify UT Extension by email at <u>leadtrk@utk.edu</u> for technical assistance. Children at 12 and 24 months old.<sup>2</sup>

\*To the extent possible, using the Firefox browser simplifies submissions.

- Resource for Providers: The online Provider's Toolkit with information for all things lead is located at: <u>http://PBforMD.tennessee.edu</u>. This link will provide directions regarding reporting lead testing results to the Tennessee Department of Health in addition to educational resources regarding children with elevated blood lead levels and answers to frequently asked questions.
- 3. A Tennessee infographic regarding childhood lead poisoning is available by visiting: <u>https://www.tn.gov/content/dam/tn/health/program-areas/lead/Children-Blood-Lead-Poisoning-Prevention-infographic.pdf.</u>

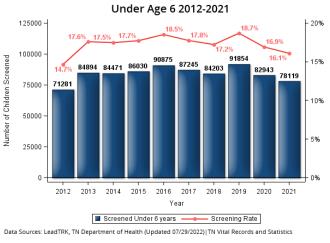
Reporting requirements stipulate that lead test results for all patients with elevated blood lead levels (3.5  $\mu$ g/dL or higher) must be reported within one week. Results under 3.5  $\mu$ g/dL must be submitted within one month.

Tennessee Childhood Lead Poisoning Prevention Program

630 Hart Lane

Nashville, TN 37216

(615) 532-8462 or (855) 202-1357



Annual Blood Lead Screening Among Tennessee Children

#### Figure 1

### **Tennessee Testing Data**

# Statewide and County Level Screening

From 2012 onward, the number and percentage of children under 6 screened for lead in Tennessee rose considerably and peaked in 2019 at 91,854 and 18.7%, respectively. In 2020, screening volume fell by nearly 10% largely due to a significant decline in screening from March–May of that year, coinciding with the initial spread of COVID-19 to the United States (Figure 1). This decrease was not limited to Tennessee

as the nationwide number of children under 6 receiving blood lead testing from January–May of 2020 fell by 33.6% compared to the number tested during the same period in 2019<sup>1</sup>. Testing volume recovered in June 2020 and monthly year-over-year drops did not exceed 15% for the remainder of 2020 (Figure 2).

Dercent of Children Screened

A new challenge emerged when Magellan Diagnostics issued a recall of all LeadCare II test kits on May 28, 2021 (Figure 3). Historically, Tennessee providers have relied heavily on LeadCare II point-of-care testing due to its unparalleled convenience and instant turnaround time. In the month following the recall announcement, LeadCare II screening volume sharply declined while the number of capillary samples submitted to laboratories began to climb; however, this increase in laboratory screening could not fully compensate for the near

#### Monthly Year-Over-Year Percent Change in Total Children Under Age 6 Screened

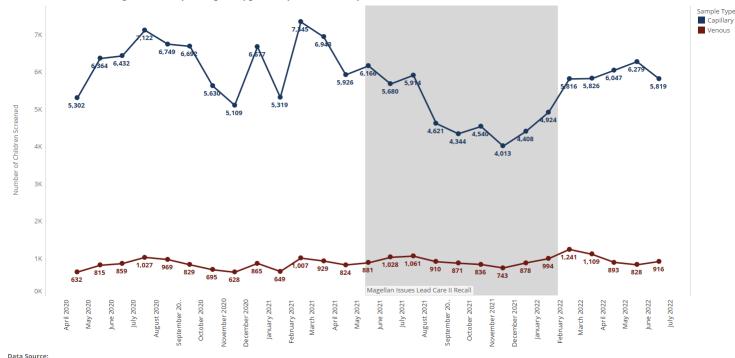
Month	2020 Percent Change from Previous Year	2021 Percent Change from Previous Year	2022 Percent Change from Previous Year
JAN	6.1%	-13.1%	-29.9%
FEB	5.3%	-20.6%	-0.8%
MAR	-20.5%	39.7%	-15.5%
APR	-42.9%	59.5%	-11.9%
MAY	-24.7%	13.7%	2.8%
JUN	-0.3%	-1.8%	0.8%
JUL	-14.2%	-8.1%	0.4%
AUG	-14.4%	-14.4%	-29.1%
SEP	0.4%	-28.3%	
ост	-2.4%	-30.7%	
NOV	1.6%	-14.9%	
DEC	1.3%	-17.0%	

total loss of all LeadCare II screening capacity (Figure 4). As a result, 2021 screening totals fell by nearly 6% compared to 2020 and nearly 15% compared to 2019 (Figure 1). Declines in screening volume were seen throughout the state and were not isolated to any region or age group (Figure 5). An analysis of



Monthly Trend of Children Under 6 Screened for Lead: January 2020 to July 2022

Tennessee Screening Trends by Sample Type: May 2020 to July 2022



Lead TRK, TN Dept. of Health, Updated August 27, 2022

Figure 3

county-level screening from 2015–2021 showed that half (47) of Tennessee's 95 counties had their lowest annual lead screening rates in 2021 among all 7 years; an additional 22% (21) of all counties had their lowest annual screening rates in 2020 (Figure 7). Among Tennessee's 6 metro regions, Shelby County has seen the largest decline in its share of the statewide screening total. From 2015–2019, Shelby County accounted for an average of 16.9% of all children under age 6 screened in Tennessee's 13 regions. From 2020–2021 Shelby County's average share of the statewide screening volume fell to 12.75% (Figure 6).



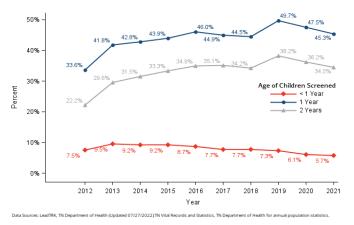
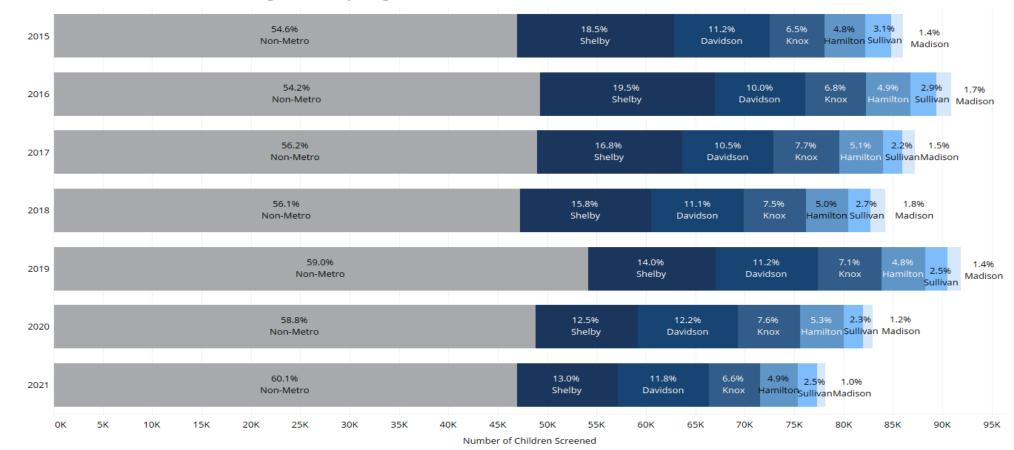


Figure 5

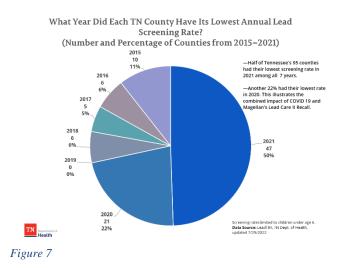


#### Distribution of Annual Screening Totals by Region: 2015-2021

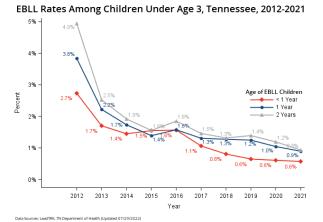
Data Source:

LeadTRK, TN Dept. of Health, Updated July 29, 2022

Figure 6



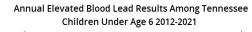
percentages of screened children exceeding the BLRV among infants, one year-old children, and two-year-old children demonstrate consistent annual declines among one- and two-year-olds from 2019–2021 with infants holding steady at 0.6% for all 3 years (Figure 9).



#### Figure 8

### Children Exceeding CDC's Blood Lead Reference Value (BLRV)

The number of children exceeding the CDC's recommended BLRV continued to decline through 2021, decreasing by 22% in comparison to the 2020 total (Figure 8). The year-over-year decline in screening volume from 2020–2021 was only 6% (Figure 1); thus, the data indicate a continued decline in the blood lead burden among the Tennessee under 6 population and is not merely attributable to the decrease in screening penetrance. An analysis of annual





## Tennessee Lead Exposure Risk

#### **High Risk ZIP Codes**

The presence of lead paint in the home remains the primary risk factor for lead toxicity among young children. Up to 70% of lead exposure cases in US

children can be traced to ingestion or inhalation of lead paint fragments and dust.<sup>2</sup> A ZIP code is considered high risk for lead exposure if 26.5% or more of the homes within its boundaries were constructed prior to 1950. There are 48 ZIP codes throughout Tennessee that meet this criterion (Figure 10). Of those 48 ZIP codes, 22 screened at least 150 children from 2019–2021. In 2020 and 2021, 7 and 8 of the 22 ZIP codes met or exceeded their 2019 screening total, respectively (Figure 11). Since 2015, high risk ZIP codes have averaged higher levels of screening penetrance than their lower risk counterparts; however, this gap has been steadily narrowing in recent years (Figure 12).

#### Additional Resources to Assess Geographic Risk

The CDC is currently developing a population-based lead exposure risk assessment tool that public health agencies, providers, and the public can utilize in the identification of census tracts at elevated risk for lead exposure.<sup>3</sup> The Lead Exposure Risk Index will be presented on an interactive, web-based dashboard that allows users to explore community-level risk for lead exposure at the national, state, and census tract levels.<sup>3</sup>

The Department of Housing and Urban Development (HUD) Office of Policy Development and Research has created a <u>web-based mapping application</u> which allows the general public to view risk levels for deteriorated paint at the state, county, and census tract levels. The tool allows local policymakers and administrators to make informed decisions regarding resource allocation for lead remediation and abatement targeting as well as exposure risk assessment.<sup>4</sup>

# Tennessee High Risk ZIP Codes for Lead Exposure in the Home

			Under 6	
			Population	% Homes
		Under 6	Percentile	Built Earlier
County	Zip Code	Population	Rankt	than 1950
county	37830	1882	87.4%	30.9%
Anderson	37830	43	14.6%	30.9%
Anderson	37828		7.4%	37.6%
Blount	37701	, 667	67.9%	32.2%
Carroll	38235	59	18.9%	31.3%
Carter	37694	46	15.1%	31.7%
carter	37206	2016	88.5%	33.2%
	37200	1298	80.0%	29.1%
Davidson	37216	1230	78.9%	31.2%
Davidson	37210	894	73.2%	32.3%
	37212	0.004	0.0%	100.0%
DeKalb	37095	301	51.5%	28.2%
Dickson	37095	0	0.0%	40.7%
Fayette	37165	0	0.0%	40.7%
Franklin	38046	155	35.8%	30.8%
	37848	0	0.0%	55.8%
Grainger				
	37407	1425	82.4%	49.9%
	37411	1272	79.4%	34.0%
Hamilton	37404	948	74.3%	44.8%
папппоп		256	47.2%	69.4% 51.7%
	37350 37403	139	33.4% 21.1%	34.4%
	37351	16	9.0%	52.7%
Inchese				
Jackson	38564	20	10.0%	27.3%
Knox	37917	1559	83.2%	50.8%
	37902	28	11.4%	49.6%
Lincoln	38459	27	11.3%	41.1%
	38453	17	9.3%	40.7%
Montgomery	37171	0	0.0%	30.7%
Overton	38543	19	9.8%	27.2%
overtoir	38542	0	0.0%	100.0%
Polk	37333	58	18.7%	28.6%
TOIR	37326	21	10.5%	49.1%
	38111	3314	95.2%	29.8%
	38122	2844	93.1%	32.5%
	38114	2199	90.2%	31.4%
	38108	2175	89.9%	28.1%
Shelby	38106	2007	88.3%	40.1%
Sheiby	38112	1544	82.9%	50.7%
	38104	1176	77.8%	54.4%
	38107	1144	77.7%	55.1%
	38126	681	68.3%	28.1%
	38105	465	60.9%	30.1%
Smith	37145	173	38.5%	33.1%
Sullivan	37665	380	56.8%	27.3%
Unicoi	37650	535	64.3%	29.7%
Weakley	38226	8	7.8%	29.2%
White	38587	54	17.6%	31.1%

Zip Codes are considered high risk if ≥ 26.5% of their homes are built before 1950.

† Inclusive percentile ranking among all Tennessee Zip Codes

**Data Source:** American Community Survey 5-Year Estimates, 2019

		2019	2020	2021	Grand Total
ANDERSON	37830	410	379	312	1,101
BLOUNT	37701	127	111	78	316
	37206	404	337	404	1,145
DAVIDSON	37216	200	194	191	585
DAVIDSON	37204	79	80	80	239
	37212	75	68	58	201
	37411	271	295	257	823
HAMILTON	37407	256	270	290	816
	37404	228	240	218	686
KNOX	37917	388	367	327	1,082
	38111	658	476	480	1,614
	38106	596	470	548	1,614
	38114	613	419	422	1,454
	38122	332	290	284	906
SHELBY	38108	220	237	220	677
SHELDT	38107	222	219	236	677
	38112	221	195	205	621
	38104	173	172	181	526
	38126	154	172	156	482
	38105	111	87	86	284
SULLIVAN	37665	70	70	81	221
UNICOI	37650	247	146	146	539

## High Risk Zip Code Screening: 2019–2021

#### Data Source:

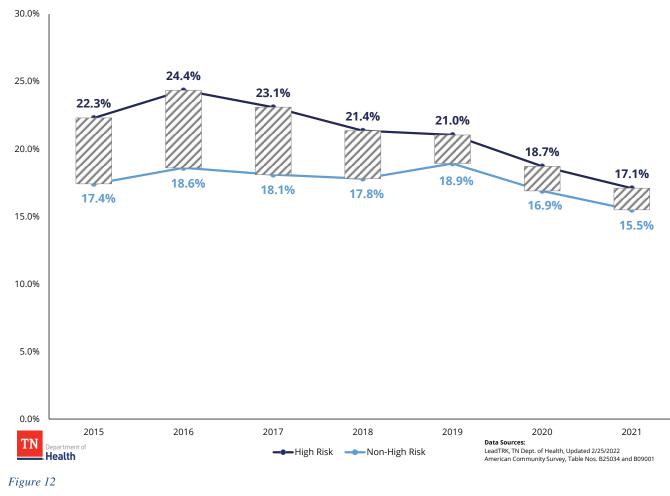
LeadTRK, TN Department of Health, Updated July 29, 2022

Limited to high risk zip codes screening at least 150 children under age 6 over the 3 year period.

% Difference from 2019

-40.89%	15.71%

Figure 11



#### Average Annual Zip Code Screening Rates: High Risk vs. Non-High Risk

## Additional Sources of Lead Exposure

While most sources of lead exposure are commonly linked to lead-based paint, water, or soil, there are some additional sources of lead exposure commonly identified. A specific list of items has been created from the Centers for Disease Control and Prevention website.

- Alternative medicines
- Candies or traditional home remedies
- Cosmetics or ceremonial powders
- Deteriorated blinds (Lead Dust)
- Hobbies (Fishing weights, stained glass, bullets)
- Jewelry
- Living near airports from exposure to lead in air and soil from aviation gas
- Paint on toys or antique toys and collectibles
- Plastics
- Pottery
- Spices

#### Specific Items Known to Contain Lead

Name	Country of Origin	Treatment/Use
Ba-baw-san	China	<ul> <li>Herbal remedy that treats colon pain or to pacify young children</li> </ul>
Daw Tway	Thailand and Myanmar (Burma)	<ul> <li>Digestive aid</li> <li>Samples from Daw Tway analysis has shown 970 parts per million (ppm) of lead</li> </ul>
Greta and Azarcon (also known as alarcon, coral, luiga, maria luisa, or rueda)	Hispanic	<ul> <li>Traditional medicines that are a fine orange powder</li> <li>Taken for an upset stomach (empacho), constipation, diarrhea, vomiting, or teething babies</li> <li>Lead content as high as 90%</li> </ul>
Ghasard	India	Folk medicine that is a brown     powder used as a tonic
Kajal (also known as kohl and surma)	Africa and the Middle East	Eye care product
Sindoor	India	<ul> <li>Traditional red or orange colored cosmetic powder - Testing of the Swad brand Sindoor product has been as high as 87% lead</li> </ul>

https://www.cdc.gov/nceh/lead/prevention/sources/foods-cosmetics-medicines.htm

## Resources

#### 1. National guidance

i.

- a. American Academy Pediatrics
  - (<u>https://www.aap.org/en/patient-care/lead-exposure/</u>)
- b. Centers for Disease Control and Prevention
  - i. (<u>https://www.cdc.gov/nceh/lead/default.htm</u>)
- c. Medicaid
  - i. (https://www.medicaid.gov/medicaid/benefits/early-and-periodicscreening-diagnostic-and-treatment/lead-screening/index.html)

#### 2. State guidance

- a. Childhood Lead Poisoning Prevention Program
  - i. (https://www.tn.gov/health/health-program-areas/mch-lead.html)
- b. Reportable Disease Matrix

- i. (<u>https://www.tn.gov/content/dam/tn/health/documents/ReportableDis</u> <u>easesList.pdf</u>)
- c. Healthy Homes
  - i. (<u>https://www.tn.gov/health/cedep/environmental/healthy-homes/hh/lead.html</u>)
- d. Electronic Providers' Toolkit
  - i. (https://pbformd.tennessee.edu/)



#### Tennessee Childhood Lead Poisoning Prevention Program: Lead Risk Questionnaire

If parent answers "Yes" or "Don't Know," test the child immediate
Children with TennCare are required to be tested at 12 and 24 mor

- Children with TennCare < 6 years old who do not have a documented blood lead level are required to be tested.</li>
- You may administer a blood lead test instead of using the questionnaire.
- For more information, contact the Tennessee Childhood Lead Poisoning Prevention Program at : 615-532-8462 or 855-202-1357.

Patient's	Name:		TennCare (		
Provider's	s Name:	Admini stered by:	Date:	<u> </u>	
How long	y year s/months has the child lived at the curre was the child at his or her previous address (a he source of drinking water for the family? City	nd where was it)?	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	<u></u>	
Questions	S.		YES	or DON'T KNOW	NO
1)	Does your child live in or regularly visit a ho (This could include a day care center, home o		e)		
2)	Does your child have a family member or a p	laymate that has or did hav	ve lead poisoning?		
3)	Is your child a newly arrived refugee or forei	gn adoptee?			
4)	Does your child live within 80 feet (or 1 bloc	k) of a heavily traveled roa	id or street?		
5)	Does your child eat or chew on non-food iter	nslike paint chips or dirt?			
6)	Does your child have low iron?				
7)	Does your child live near or visit with some plant or other industry that could release lea		melter, battery recyding		
8)	Does your family use products from other co food, or cosmetics?	untries such as pottery, he	alth remedies, spices,		
	Examples: •Traditional medicines such as Azarcon, Gre	ta, or pay-loo-ah			
	•Cosmetics such as kohl, surma, and sindor				
	<ul> <li>Imported or glazed pottery, imported cand vitamins</li> </ul>	y, and imported nutritiona	i pills other than		
	•Foods canned or packaged outside the U.S.				
9)	Does your child frequently come in contact w lead? <i>Examples</i> :	vith an adult whose job or	hobby may have with		
	•House construction or repair	•Chemical preparation	•Radiator repair		
	<ul> <li>Battery manufacturing or repair</li> <li>Burning lead-painted wood</li> </ul>	<ul> <li>Valve and pipe fitting</li> <li>Brass/copper foundry</li> </ul>	<ul> <li>Pottery making</li> <li>Lead smelting</li> </ul>	If any boxes are marked,	
	•Automotive repair shop or junk yard	Refinishing Furniture	•Welding	test	
	•Going to a firing range or reloading bullets	<ul> <li>Making fishing weights</li> </ul>		immediatel <mark>y</mark>	
Additiona	l question. Consider testing if parent answers '	'Ye s".			

1) Does your child attend a school in which elevated lead levels were detected in the drinking water? Yes \_\_\_\_ No \_\_\_\_ I don't know \_\_\_\_

Comments:\_\_\_

Division of Family Health and Wellness • R.S. Gass Building, 1<sup>st</sup> Floor • 630 Hart Lane • Nashville, TN 37243 Tel: 615-532-8462 • Fax: 615-532-8555 • <u>http://tn.gov/health/section/FHW</u>



# Programa de prevención de la intoxicación por plomo durante la niñez del estado de Tennessee: Cuestionario sobre el riesgo de exposición al plomo

- Si los padres responden "Sí" o "No sé", hágale la prueba al niño inmediatamente.
- A los niños inscritos en TennCare se les requiere hacerse la prueba a los 12 y 24 meses de edad.
- A los niños inscritos en TennCare menores de 6 años que no tengan un nivel documentado de plomo en la sangre se les requiere hacerse la prueba.
- Puede administrar una prueba de plomo en la sangre en lugar de utilizar el cuestionario.
- Si desea más información, póngase en contacto con el Programa de prevención de la intoxicación por plomo durante la niñez del estado de Tennessee al 615-532-8462 o 855-202-1357.

Nombre del paciente:	Fecha de nacimiento:	_ TennCare (Sí/No):
Nombre del proveedor de servicios de salud:	Administrado por:	Fecha:
· Cuánta a ños a marca la visida al viño en la dimenián estual?		

Preguntas:		SÍ o NO SABE	
¿Cuál es la fuente de agua potable de la familia? Sistema de agua municipal/de la ciudad	Pozo	Botella	
¿Cuántos años o meses ha vivido el niño en la dirección actual? ¿Cuánto tiempo estuvo el niño en su anterior domicilio? ¿Cuál era la dirección?			

	1)	¿Vive o visita regularmente su niño una casa construida <b>antes de 1978</b> ? (Puede ser una guardería infantil o la casa de una niñera o de un familiar)			
	2)	¿Vive su niño en una casa construida <b>antes de 1978</b> con reformas o remodelaciones recientes, en curso o previstas (en los últimos seis (6) meses)o visita una regularmente?			
	3)	¿Tiene su niño algún familiar o compañero de juegos que sufre o ha sufrido una intoxicación por plomo?			
	4)	¿Es su niño un refugiado recién llegado o un niño extranjero adoptado?			
	5)	¿Vive su niño a menos de 80 pies (1 manzana o cuadra) de una carretera o calle muy transitada?			
	6)	¿Come o mastica su niño objetos no comestibles, como trozos de pintura o tierra?			
	7)	¿Tiene su niño niveles bajos de hierro en la sangre?			
	8)	¿Vive su niño cerca de, o visita a alguien que vive cerca de, una fundidora de plomo, planta de reciclaje de baterías u otra industria que pueda liberar plomo?			
	9)	¿Utiliza su familia productos de otros países como cerámica, remedios para la salud, especias, alimentos o cosméticos? <i>Ejemplos:</i>			
		<ul> <li>Medicinas tradicionales como azarcón, greta o pei-luu-aa ("pay-loo-ah")</li> <li>Cosméticos como kohl, surma y sindor</li> <li>La cerámica importada o vidriada, los dulces importados y las píldoras nutricionales</li> </ul>			
		importadas que no sean vitaminas •Alimentos enlatados o envasados fuera de EE.UU.			
	10)	¿Está su niño en contacto frecuente con un adulto cuyo trabajo o pasatiempo puede estar relacionado con el plomo? Eiemplos:			
	•Con	strucción o reparación de viviendas • Preparación de químicos • Reparación de radiadores			
		ricación o reparación de baterías •Acoplamiento de válvulas y tuberías •Fabricación de cerámica	Si hay alguna		
		ma de madera pintada con plomo •Fundición de latón o cobre •Fundición de plomo	caja marcada, hacer la prueba		
		eres de reparación de automóviles o depósitos de chatarra •Acabado de muebles •Soldadura	inmediatamente		
	∙lr a	un campo de tiro o recargar balas •Hacer pesas de pesca			
Preg		adicional. Considere la posibilidad de realizar la prueba si el padre o la madre responde "Sí".			
	1)	¿Asiste su niño a una escuela en la que se han detectado niveles elevados de plomo en el agua po	otable? Si	No	No sé

Comentarios:

Division of Family Health and Wellness • R.S. Gass Building, 1<sup>st</sup> Floor • 630 Hart Lane • Nashville, TN 37243 Tel: 615-532-8462 • Fax: 615-532-8555 • <u>http://tn.gov/health/section/FHW</u>

PH-4416-S

RDA

NO

## References

- Courtney JG, Chuke SO, Dyke K, Lecours C, Egan KB, Leonard M. Decreases in Young Children Who Received Blood Lead Level Testing During COVID-19 — 34 Jurisdictions, January–May 2020. Morbidity and Mortality Weekly Report. 2021;70(5):155-161. doi:10.15585/mmwr.mm7005a2
- 2. Levin R, Brown MJ, Kashtock ME, et al. Lead Exposures in U.S. Children, 2008: Implications for Prevention. *Environ Health Perspect*. 2008;116(10):1285-1293. doi:10.1289/ehp.11241
- Courtney JG, Egan K. CDC-ATSDR Lead Exposure Risk Index (LERI). In: *Lead Exposure and Prevention Advisory Committee (LEPAC) Meeting*. National Center for Environmental Health; 2021. Accessed September 18, 2022. https://stacks.cdc.gov/view/cdc/114400
- US Department of Housing and Urban Development. Deteriorated Paint Index Web Map. Office of Policy Development and Research. Published 2020. Accessed September 18, 2022. https://hud.maps.arcgis.com/apps/webappviewer/index.html?id=3ed44f79ce2f4ed4af655adc37 9438b9



Department of Health Authorization No. 355937. This Electronic publication was promulgated at zero cost. May 2023