

# NEBRASKA

Good Life. Great Mission.

DEPT. OF HEALTH AND HUMAN SERVICES



Jim Pillen, Governor

January 1, 2025

Mr. Brandon Metzler  
Clerk of the Legislature  
P.O. Box 94604  
Lincoln, NE 68509

Subject: Number of Children Screened for Elevated Blood-Lead Levels Report

Dear Mr. Metzler:

In accordance with Neb. Rev. Stat. § 71-2518, please find attached a copy of the 2024 Annual Report on Elevated Blood Lead Levels for Children Aged Zero to Six Years Old. This report describes the work accomplished by the Nebraska Childhood Lead Poisoning Prevention Program and lists the number of children tested, the number of children with elevated blood lead levels in Nebraska, and revisions to the Nebraska Childhood Lead Poisoning Prevention Plan from October 1, 2023 to September 30, 2024.

Sincerely,

A handwritten signature in blue ink that reads "Charity Menefee".

Charity Menefee  
Director, Division of Public Health

Attachment

# Division of Public Health

## Number of Children Screened for Elevated Blood-Lead Levels Report

January 2025

Neb. Rev. Stat. § 71-2518

## Introduction

The statutes establish the Nebraska Childhood Lead Poisoning Prevention Program within the Nebraska Department of Health and Human Services (DHHS) Division of Public Health. DHHS is required to have a coordinated plan to prevent childhood lead poisoning and to minimize exposures to lead-based paint hazards for the public. Specifically, § 71-2518 states that the Plan shall provide a standard to be used in identifying elevated blood lead levels. The plan must also include a requirement that a child be tested for an elevated blood lead level in accordance with the Medicaid State Plan, and a recommendation that a child be tested if the child lives in a zip code with a high prevalence of children with elevated blood lead levels or if the child meets one of the criteria included in a lead poisoning prevention screening questionnaire developed by DHHS.

Other required components of the Nebraska Childhood Lead Poisoning Prevention Program include a lead poisoning prevention education and community outreach plan, initiating contact with the local health department and/or the physician to offer technical assistance, and a requirement that all blood lead tests conducted in Nebraska must be reported to DHHS. DHHS is also required to report annually to the Legislature: 1) Number of children from birth through age six who were tested for elevated blood lead levels in comparison to previous fiscal years; 2) Number of children from birth through age six who were confirmed to have elevated blood lead levels in comparison to previous fiscal years, and 3) Revisions to the Nebraska Childhood Lead Poisoning Prevention Plan.

The Nebraska Childhood Lead Poisoning Prevention Program oversees statewide lead poisoning activities, which include blood lead testing guidance, blood lead level surveillance, and coordination of public health interventions for children with elevated blood lead levels. The program is currently funded by a grant from the Centers for Disease Control and Prevention (CDC) from 2021 through 2026. This report contains the specific data requested by the Legislature by statute and includes updates to the Childhood Lead Poisoning Prevention Plan, specifically the Nebraska Statewide Blood Lead Testing Plan.

## Children Tested for Elevated Blood Lead Levels

From October 1, 2023 to September 30, 2024, 36,725 children from birth through six years old were tested for blood lead, representing 20.8% of the population in this age group.

**Number and percentage of Nebraska children aged Zero to Six years (<84 months) tested for blood lead levels, FFY 2013-2024**

Federal fiscal year	# Children tested	% Children Tested
2013	34,789	18.9%
2014	34,310	18.6%
2015	33,984	18.4%
2016	35,445	19.1%
2017	36,057	19.4%
2018	37,205	20.1%
2019	39,456	21.4%
2020	35,475	19.2%
2021	34,500	19.0%
2022	34,882	19.5%
2023	35,174	19.9%
2024	36,725	20.8%

Data are provisional and subject to change. Data are revised each year and may differ from data reported in previous years. Data Sources: Nebraska DHHS, Childhood Lead Poisoning Prevention Program, Blood Lead Surveillance System. Population data compiled from U.S. Census Bureau, Single Year of Age Annual Population Estimates.

## Children with Elevated Blood Lead Levels

From October 1, 2023 to September 30, 2024, 723 children aged zero through six years old met the definition of a confirmed elevated blood lead level case (1.97% of children tested).

**Number and percentage of Nebraska children aged Zero to Six years (<84 months) with an elevated blood lead level, by case status, FFY 2013-2024**

Federal fiscal year	Confirmed cases**		Suspect cases**		Total cases	
	#	% of tested	#	% of tested	#	% of tested
2013	447	1.28%	487	1.40%	933	2.68%
2014	515	1.50%	655	1.91%	1,169	3.41%
2015	442	1.30%	570	1.68%	1,014	2.98%
2016	448	1.26%	533	1.50%	981	2.77%
2017	515	1.43%	504	1.40%	1,020	2.83%
2018	444	1.19%	459	1.23%	908	2.44%
2019	400	1.01%	409	1.04%	808	2.05%
2020	326	0.92%	288	0.81%	617	1.74%
2021	319	0.92%	204	0.59%	523	1.52%
2022*	582	1.67%	439	1.26%	1,023	2.93%
2023*	672	1.91%	621	1.77%	1,328	3.78%
2024*	723	1.97%	693	1.89%	1,328	3.62%

Data are provisional and subject to change. Data are revised each year and may differ from data reported in previous years. Data Sources: Nebraska DHHS, Childhood Lead Poisoning Prevention Program, Blood Lead Surveillance System.

\* FY22, FY23, and FY24 data uses the new blood lead reference value of 3.5 µg/dL to define an elevated blood lead level. The blood lead reference value during FY13–FY21 was 5.0 µg/dL.

\*\* A confirmed case is defined as any child with BLL at or above reference value from a confirmatory venous sample or two capillary/unknown samples within 12 weeks. A suspect case is defined as a child with BLL at or above reference value from a capillary or unknown blood sample.

# Updates to the Nebraska Childhood Lead Poisoning Prevention Plan

## Blood Lead Reference Value for Identifying Elevated Blood Lead Levels

The blood lead reference value is a screening tool to identify children who have higher levels of lead in their blood compared with most children. DHHS currently uses a blood lead reference value of 3.5 micrograms per deciliter ( $\mu\text{g}/\text{dL}$ ) or greater to define an elevated blood lead level. The reference value was 5.0  $\mu\text{g}/\text{dL}$  from years 2012–2021 but was lowered to 3.5  $\mu\text{g}/\text{dL}$  in 2022 to align with the Centers for Disease and Prevention. Federal Fiscal Year 2022 was the first year Nebraska started using 3.5  $\mu\text{g}/\text{dL}$  reference value, and therefore the numbers of children with elevated blood lead levels significantly increased in this fiscal year.

## Nebraska Blood Lead Testing Plan

The Nebraska Childhood Lead Poisoning Prevention Program began updating the Nebraska Blood Lead Testing Plan in August 2022 and released it in December 2023. The updates were completed in partnership with the Nebraska Lead Poisoning Prevention Advisory Group, local health department staff, and key stakeholders. There were significant changes in the high prevalence zip codes based on the existing case data. The Plan was also updated to include other testing considerations for key vulnerable populations, new clinician resources such as a testing algorithm and new anticipatory guidance, and it highlighted key resources to test and manage lead poisoning.

### Testing Criteria 1: Medicaid

The first criterion of the Plan states what is currently required by the DHHS Medicaid State Plan. Required under the Nebraska Medicaid regulations (471 NAC 33), all children insured by Medicaid must be tested at 12 and 24 months. Children between the ages of 36 months and 72 months of age must receive a screening blood lead test if they have not been previously screened for lead poisoning.<sup>1</sup>

### Testing Criteria 2: High Prevalence Zip Codes

Children living in high prevalence or high-risk zip codes should receive a blood lead test at 12 and 24 months of age. Children between the ages of 36 to 72 months of age should receive a blood lead test if they have not been previously tested. DHHS identified 125 new zip codes which have high prevalence of elevated blood lead levels among children. A list of zip codes is available at:

<https://dhhs.ne.gov/LeadDocs/Lead-Testing-Guidelines.pdf>

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<sup>1</sup> CMS. <https://www.medicaid.gov/medicaid/benefits/epsdt/lead-screening/index.html>

## Testing Criteria 3: Risk Questionnaire

The third criterion of the Plan consists of a questionnaire designed to identify lead exposure risks not addressed by the other criteria. The child's parents or guardians should be asked specific exposure questions to determine each child's risk annually through age five. If the response to any of the questions is "yes" or "don't know," the child should be tested for blood lead at ages 12 and 24 months. Children between the ages of 36 to 72 months of age should receive a blood lead test if they have not been previously tested.

### Lead Exposure Risk Questionnaire for Parents and Caregivers:

1. Is your child enrolled in Medicaid?
2. Does your child live in a high-risk zip code?
3. Does your child live in or often visit a home built before 1950?
4. Does your child live in or often visit a home built before 1978 that has been remodeled or renovated within the last year?
5. Does your child have a sibling or playmate with lead poisoning or an elevated blood lead level?
6. Does child live with an adult with a job or hobby that involves exposure to lead?
7. Do child's family use products from other counties that may contain lead? Such as traditional medicines, cosmetics, spices, or glazed pottery?
8. Is your child a refugee, migrant, immigrant, foreign adoptee, or in foster care?

## Other Testing Considerations

The Nebraska Blood Lead Testing Plan update included information on testing recommendations for other populations that includes pregnant women, newly arrived refugees, Women, Infant, and Children (WIC) Program participants, and adults with occupation or hobby exposures. Other patients to consider blood lead testing includes children with history of ingesting non-food items or pica behavior, children with autism, ADHD, or learning delays, and parents who request blood lead tests.

## Dissemination of Plan

The Nebraska Blood Lead Testing Plan updates and resources were sent to approximately 23,000 recipients representing health care providers, clinicians, laboratorians, and local health department staff in December 2023 using the Nebraska Health Alert (HAN) system. Ongoing outreach continues through direct interactions with health departments and with their local clinic and laboratory contacts.

The Nebraska Blood Lead Testing Plan can be found on the DHHS Lead Website:

<https://dhhs.ne.gov/leadhcp> or directly at: <https://dhhs.ne.gov/LeadDocs/Nebraska-Blood-Lead-Testing-Plan.pdf>.