



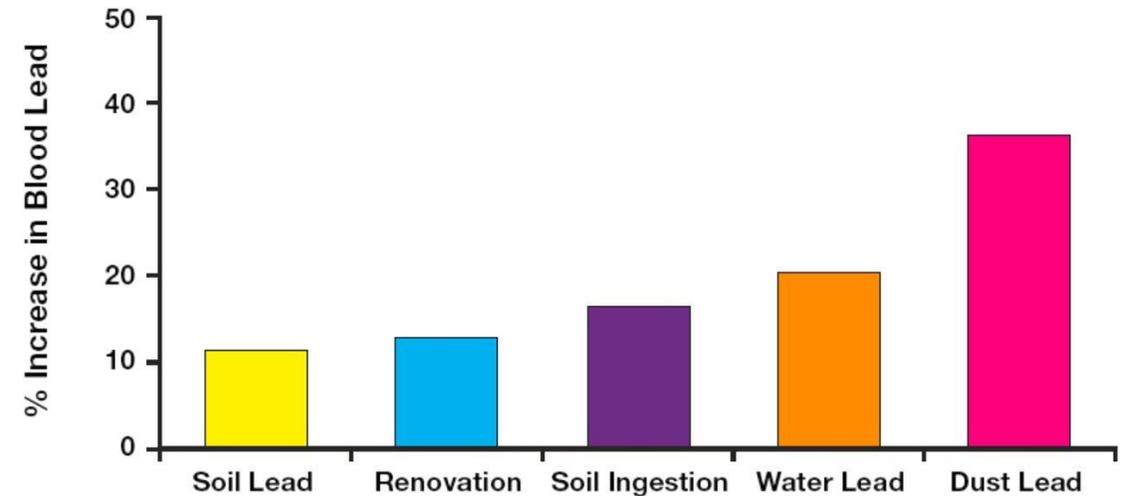
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# Blood Lead Screening

## 2023

# Sources of Lead Exposure

- Higher risk with homes or buildings built before 1978 (per AAP & CDC)
- Soil: including playgrounds, yard, dirt from shoes
- Dust: vinyl blinds, windowsills, renovation
- Water: plumbing that used lead solder to connect
- Lead crystal or lead-glazed dishes
- Old painted furniture and toys
- Fishing sinkers, shotgun shells, tobacco products, match tips, metal keys and batteries



*Resource: American Academy of Pediatrics : From Prevention of Childhood Lead Toxicity  
Pediatrics. 2016;138(1). doi:10.1542/peds.2016-1493*

# Effects of Lead: Signs of Lead Poisoning

- Behavioral & Learning Deficits
- Lower IQ & Developmental Delay
- Sleep disturbances
- Headaches
- Poor growth
- GI disruption: vomiting, abdominal pain, diarrhea, constipation
- Anemia
- Seizures
- Hearing deficits

*Resources: KanCare & Wyandotte County Health Department*

## Economic Burden of Lead

The average annual cost of special education is estimated at \$14,317 per child (Korfmacher 2003)

It is estimated that for each 1  $\mu\text{g}/\text{dL}$  increase in BLL, a child's IQ decreases by 0.23-0.46 points (Canfield et al.2003).

Health care for a child with elevated lead levels can include lab testing, monitoring of lead levels, follow-up appointments, home inspections, and chelation therapy.

*Resource: Kansas Blood Lead Surveillance Report 2022*

# Legal Economic Burden of Lead

Crime	Number of Lead Linked Crimes, Nationally	Direct Costs Per Crime	Total Direct Costs
Burglaries	116,541	\$4,010	\$467,329,410
Robberies	2,499	\$22,871	\$57,154,379
Aggravated Assaults	53,904	\$20,363	\$1,097,628,286
Rape	4,186	\$28,415	\$118,945,567
Murder	717	\$31,110	\$22,305,512
Total	177,847		\$1,763,363,153

**Notes:** Table derived from Gould, 2009 and Nevin R. Understanding international crime trends: the legacy of preschool lead exposure. Environmental Research. 2006;104:315-336. Statistics calculated using Bureau of Justice Statistics (2004), inflated to 2006 USD

Resource: Statewide Blood Lead Surveillance Report 2022

# Kansas Lead Numbers

Top 10 counties in Kansas with children with confirmed elevated blood lead level in 2020

- Sedgwick – 103
- Wyandotte – 84
- Shawnee – 40
- Saline – 35
- Johnson – 29
- Seward – 24
- Leavenworth – 22
- Montgomery – 21
- Reno – 21
- Crawford - 21

*Confidential and Proprietary Information: Resource Kansas Environmental Public Health Tracking Program website (<https://keap.kdhe.ks.gov/ephtm/>)*

# Medicaid Lead Screening Guidelines

All children enrolled in Medicaid, regardless of whether coverage is funded through Title XIX or XXI, are required to receive blood lead screening tests at ages 12 months and 24 months.

Any child between 24 and 72 months with no record of a previous blood lead screening test must receive one.

Completion of a risk assessment questionnaire **does not meet** the Medicaid requirement. The Medicaid requirement is met only when the **two** blood lead screening tests identified above (or a catch-up blood lead screening test) are conducted.

# HEDIS Guidelines for Lead Screening

## **Description:**

- The percentage of children 2 years of age who had one or more capillary or venous lead blood test for lead poisoning by their second birthday.

## **Inclusion criteria:**

- Children on Medicaid insurance who turn 2 years old during the measurement year.

## **Exclusion criteria:**

- Members in hospice or using hospice services any time during the measurement year.
- Members who died any time during the measurement year.

# American Academy of Pediatrics Bright Futures Guidelines

Risk assessments for sources of lead in the child's environment should be completed at well-child visits between 6 months and 6 years.

- ANY concern for exposure, obtain BLL and provide family with anticipatory guidance on reducing sources of lead exposure.
- ALL children with developmental disorders, pica behavior or poor cognitive abilities are at risk for lead exposure and may warrant periodic monitoring with BLLs.
- ALL recent immigrants, refugees or international adoptees should be tested at the earliest opportunity.

*Resource [www.aap.org/en/patient-care/environmental-health/promoting-healthy-environments-for-children/lead/](http://www.aap.org/en/patient-care/environmental-health/promoting-healthy-environments-for-children/lead/)*

# High Performing Practice Suggestions

- All providers adhere to standardized office guidelines by utilizing standardized order sets at WCVs between 12- and 24-month WCVs.
- Follow up with lab completion at WCVs between 12 and 24 months.
  - RN reviews chart at 15- & 18-month WCVs
  - Automated alert/ reminder if no result is on chart at WCVs between 12 and 24 months
- Member (patient) outreach between visits
  - RN calls parent/guardian if no lab is drawn within 3 weeks of lab order

# Standard Practices

- Venous blood draw is gold standard
  - If capillary draw done and high, confirm with venous sample
- All lead screening test results (normal or abnormal) must be reported to KDHE
- Confirmed abnormal lead levels must be reported to the local county (or area) health department



Questions?

## Resources

American Academy of Pediatrics (Lead Exposure/ Key points about lead):  
<https://www.aap.org/en/patient-care/environmental-health/promoting-healthy-environments-for-children/lead/>

CDC: [www.cdc.gov/nceh/lead/default.htm](http://www.cdc.gov/nceh/lead/default.htm)

KDHE: [www.kdhe.ks.gov/1107/Childhood-Lead-Poisoning-Prevention](http://www.kdhe.ks.gov/1107/Childhood-Lead-Poisoning-Prevention)

# Resources

## Lead Screening in Children (LSC) \*\*

Children 0-2 years

**Line of business: Medicaid**

Look Back Dates: 1/1/2021-12/31/2023

**The following may be found in medical record:**

- Evidence of blood test for lead
- Lab results

**\*\* = P4P MEASURE**

# Resources

## Lead Screening in Children (LSC)

The percentage of children 2 years of age who had one or more capillary or venous lead blood test for lead poisoning by their second birthday.

**Line of business: Medicaid (P4P)**

**Claims/Encounter Dates: 1/1/2021-12/31/2023**

This measure requires claims/encounter data submission. Acceptable documentation includes progress/encounter notes stating blood test for lead with date drawn and results or lab results for blood test for lead completed during medical record dates.

**CPT:**

83655

**CPT-CAT II**

**HCPCS:**

**ICD-10:**