# Oregon Childhood Lead Poisoning Prevention Program


PUBLIC HEALTH DIVISION
Environmental Public Health

# Blood Lead Reference Value and Lead Poisoning Case Definition

Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

# Childhood Lead Poisoning Prevention

Exposure to lead can seriously harm a child's health and cause well-documented adverse effects such as:

- Damage to the brain and nervous system
- Slowed growth and development
- Learning and behavior problems
- Hearing and speech problems

This can cause:

- Lower IQ
- Decreased ability to pay attention
- Underperformance in school

## Health Effects of Lead Exposure

There is also evidence that childhood exposure to lead can cause long-term harm.

# Blood Lead Reference Value

CDC uses a blood lead reference value (BLRV) of 3.5 micrograms per deciliter (µg/dL) to identify children with blood lead levels that are higher than most children's levels.

CDC's BLRV is a screening tool to identify children who have higher levels of lead in their blood compared with most children. The reference value is not health-based and is not a regulatory standard. States independently determine action thresholds based on state laws, regulations, and resource availability. CDC encourages healthcare providers and public health professionals to follow the recommended follow-up actions based on confirmed blood lead levels.

# Childhood Lead Poisoning Prevention

## If the patient's BLL is 3.5–19 micrograms per deciliter (µg/dL)

- Follow the recommendations above for BLL < 3.5 µg/dL.
- Report the test result to your state or local health department.
- Obtain an environmental exposure history to identify potential sources of lead.
- Arrange for an environmental investigation of the home to identify potential sources of lead, as required.
  - During an environmental investigation, professionals check the child's environment for possible causes of lead exposure and recommend ways to prevent further lead exposure.
- Check the child's development [PDF – 646 KB] to ensure appropriate milestones are being met per AAP guidelines. Refer caregivers to supportive services, as needed (e.g., developmental specialists, Early Intervention Program).
- Provide follow-up BLL testing at recommended intervals. See schedule shown in Table 2.

# Childhood Blood Lead Levels: EBLL Case Definition

## Oregon

| Population | Surveillance | Reference Value/Case Definition |
|---|---|---|
| Children (< 18 years old) | All BLLs | ≥ 5 µg/dL |
| Pregnant and Lactating Women | ≥ 5 µg/dL | **≥ 5 µg/dL** |
| Adults (≥ 18 years old) | ≥ 5 µg/dL | ≥ 10 µg/dL* |

# Oregon's Current Lead Poisoning Disease Definition


## Oregon Health Authority

### Public Health Division - Chapter 333

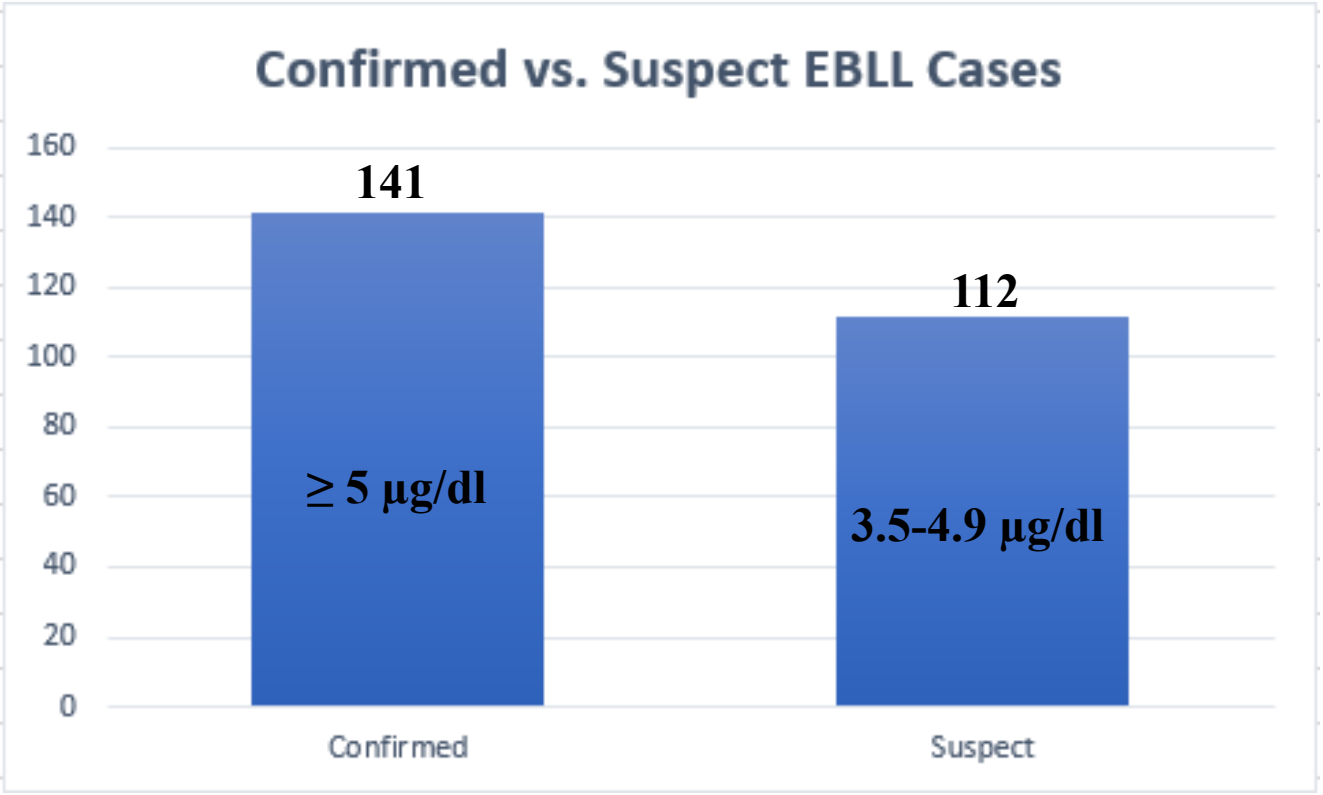
Division 17
DISEASE CONTROL (DEFINITIONS AND REFERENCES)

333-017-0000
**Definitions**

For purposes of OAR chapter 333, divisions 17, 18 and 19, unless the context requires otherwise or a rule contains a more specific definition, the following definitions shall apply.

(21) "Lead poisoning" means a confirmed blood lead level of at least five micrograms per deciliter.

# Increases in Case Management




**Oct. 2021-Sept. 2022**

# Timeline to Adopt New BLRV as Case Definition

- May 2022 — Notified CLPPP Advisory Committee
- Fall 2022 — OHA presents to CLHO and CLEHS on the case definition change to the BLRV
- Winter 2022 — CLPPP sending rulemaking invitations to CBOs and affected communities
- Winter/Spring 2023 — Rules Advisory Committee
- Spring 2023 — OHA's Acute and Communicable Disease Prevention (ACDP) program revises the definition of "lead poisoning" to "elevated blood lead level" found in OAR 333-017-0000(21)

# Lead Exposure Screening for Newly Arrived Refugees

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Childhood Lead Poisoning Prevention

Lead Home > Populations at Higher Risk

- Lead Home
- Overview
- Lead Poisoning Prevention
- Sources of Lead Exposure
- Health Effects of Lead Exposure
- Testing Children for Lead Poisoning
- Blood Lead Levels in Children
- **Populations at Higher Risk**

# Refugees and Other Newcomer Persons Resettled to the United States

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Lead poisoning disproportionately impacts refugee and other newcomer children resettled in the United States. Refugee children arriving in the United States have higher blood lead levels (BLL) than U.S.-born children [1,8], though this varies among sub-populations.

Reports suggest that country of origin and country of last residence are strong predictors of BLLs among refugee children [7,8]. Furthermore, in some circumstances these children may experience a rise in BLLs after arriving and resettling in the United States.

https://www.cdc.gov/nceh/lead/prevention/refugees.htm

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## Immigrant, Refugee, and Migrant Health

CDC > Immigrant, Refugee, and Migrant Health > Refugee Health Guidance > Domestic Guidance

Immigrant, Refugee, and Migrant Health

About Immigrant, Refugee, and Migrant Health +

# Screening for Lead during the Domestic Medical Examination for Newly Arrived Refugees

| Recommended Screening Measures | Population |
|---|---|
| Initial lead exposure screening with blood test | • All refugee infants and children ≤ 16 years of age<br>• Refugee adolescents > 16 years of age if there is a high index of suspicion, or clinical signs/symptoms of lead exposure<br>• All pregnant and lactating women and girls* |

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Immigrant, Refugee, and Migrant Health

About Immigrant, Refugee, and Migrant Health +

# Screening for Lead during the Domestic Medical Examination for Newly Arrived Refugees

| | |
|---|---|
| Follow-up testing with blood test, 3-6 months after initial testing | • All refugee infants and children ≤ 6 years of age, regardless of initial screening result<br>• Refugee children and adolescents 7–16 years of age who had BLLs at or above 3.5 µg/dL, and for any child older than 7 years of age who has a risk factor (e.g., sibling with BLL at or above 3.5 µg/dL, environmental exposure risk factors) regardless of initial test result.<br>• Pregnant or lactating adolescents (<18 years of age) who had BLLs at or above 3.5 µg/dL at initial screening. |

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Centers for Disease Control and Prevention

**News/Updates: Updates to the domestic lead screening guidance for newly arrived refugees**

*November 8, 2021*

Dear State Refugee Health Coordinator and Refugee Health Partners:

The Centers for Disease Control and Prevention (CDC) has updated its blood lead reference value (BLRV) in children from 5 µg/dL to 3.5 µg/dL in response to the Lead Exposure Prevention and Advisory Committee (LEPAC) recommendation made on May 14, 2021.

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Centers for Disease Control and Prevention

**News/Updates: Updates to the domestic lead screening guidance for newly arrived refugees**

*November 8, 2021*

The following guidance for screening newly arrived refugee children and pregnant and lactating women and adolescent girls remains unchanged:

1. All refugee infants and children ≤16 years of age should be screened for lead exposure with a blood test. Repeat testing with a blood test 3-6 months after initial testing is recommended for all refugee infants and children ≤6 years, regardless of initial screening result. Repeat testing is also recommended for children and adolescents 7-16 years of age with blood lead levels above the BLRV at initial screening.

AJPH
A PUBLICATION OF THE AMERICAN PUBLIC HEALTH ASSOCIATION

**Blood Lead Level Testing and Retesting Among Newly Arriving Refugee Children, Pennsylvania, 2015–2019**

Leena AnilPhD, Zhen-qiang MaMD, MPH, MS, Atmaram NambiarMD, MPH, and Sharon M. WatkinsPhD

*"Health care providers should be frequently reminded about the importance of repeat lead screening of children aged 6 years and younger, irrespective of their initial blood test results, and retesting of children aged 7 to 16 years with EBLLs. Health care provider education on the importance of follow-up testing needs to be enhanced to ensure compliance with CDC recommendations, especially for this high-risk refugee population."*

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**Blood Lead Level Testing and Retesting Among Newly Arriving Refugee Children, Pennsylvania, 2015–2019**

**Leena Anil**PhD, **Zhen-qiang Ma**MD, MPH, MS, **Atmaram Nambiar**MD, MPH, and **Sharon M. Watkins**PhD

*"The CDC's recommended screening is especially important in the case of refugee children because they often arrive in the United States with significant overseas exposure and are more likely to have continued exposure to lead because of sociocultural issues after resettlement."*

# Questions?

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