Oregon Childhood Lead Poisoning Prevention Program Advisory Committee

10/10/2023

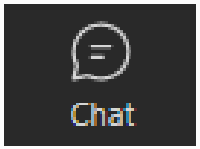
Oregon Health Authority

PUBLIC HEALTH DIVISION
Environmental Public Health

Welcome

Who are we?

Type in the chat your:



- Name
- Organization/Agency
- Interest or work with Lead

Welcome

What is the role of this advisory group?

Welcome

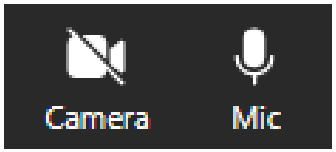
Feedback, recommendations, and concerns from the Advisory Committee will be documented

Decisions on changes might not be finalized during this meeting

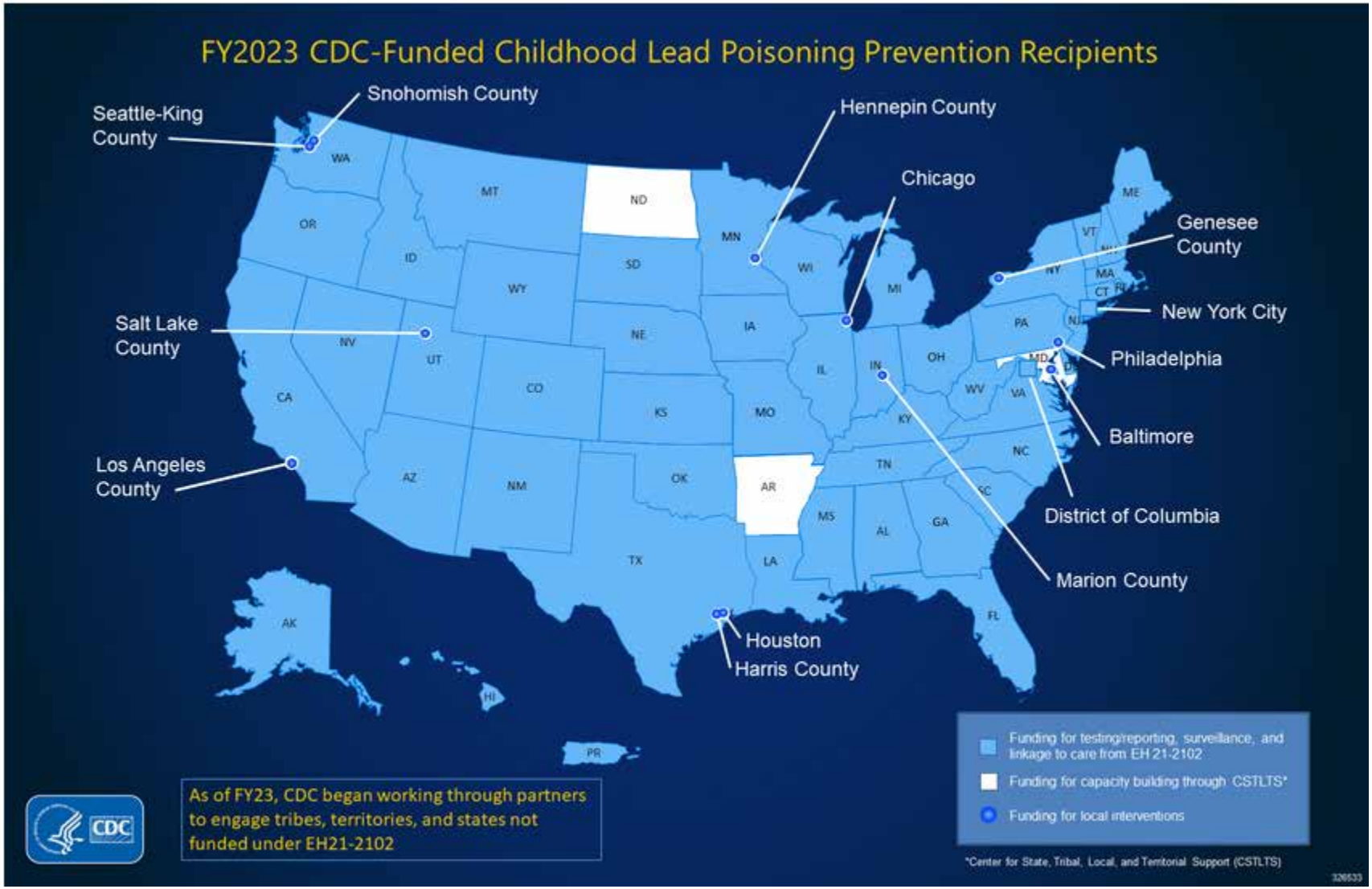
Smaller workgroups or follow-up discussions might be needed to address identified issues

Welcome

Please feel free to ask questions or provide feedback throughout the meeting by raising your hand in Teams, un-muting yourself or typing into the chat



All questions, concerns and feedback are welcomed


FY2023 CDC-Funded Childhood Lead Poisoning Prevention Recipients
Seattle-King County
Snohomish County
Hennepin County
Chicago
Genesee County
New York City
Philadelphia
Baltimore
District of Columbia
Marion County
Houston
Harris County
Salt Lake County
Los Angeles County
WA
OR
CA
ID
NV
MT
WY
UT
AZ
CO
NM
ND
SD
NE
KS
OK
TX
MN
IA
MO
AR
LA
WI
IL
MS
MI
IN
KY
TN
AL
OH
WV
GA
FL
SC
NC
VA
PA
NY
ME
VT
MA
CT
RI
NJ
MD
DE
AK
HI
PR
As of FY23, CDC began working through partners to engage tribes, territories, and states not funded under EH21-2102
Funding for testing/reporting, surveillance, and linkage to care from EH 21-2102
Funding for capacity building through CSTLTS*
Funding for local interventions
*Center for State, Tribal, Local, and Territorial Support (CSTLTS)
326533

FY 2021* Childhood Lead Poisoning Prevention Recipients

- Develop and sustain a statewide lead advisory committee comprised of appropriate stakeholders (e.g., representatives from academia, healthcare, non-profit or community- based organizations, clinical laboratories, state and local housing agencies, tribes or tribal organizations).

- Develop or update and implement an appropriate statewide screening and testing plan based on local data in collaboration with statewide lead advisory committee.

Meeting Agenda

- Review of OR Childhood Lead Poisoning Prevention Program (CLPPP) Lead Screening and Testing Plan
- CDC Blood Lead Reference Value and 2023 Oregon Case Definition Rulemaking
- Revisions to the Health Care Provider Lead Screening Questionnaire and Review of 2022 Feedback
- Increasing Medicaid/OHP Testing Rates
- Geographic Lead Screening Tool to Identify High-Risk Children
- Communications Plan/Strategy for Provider Awareness
- Next Steps (Workgroup, Investigative Guidelines, staff training)
- EPA Updates and Proposals

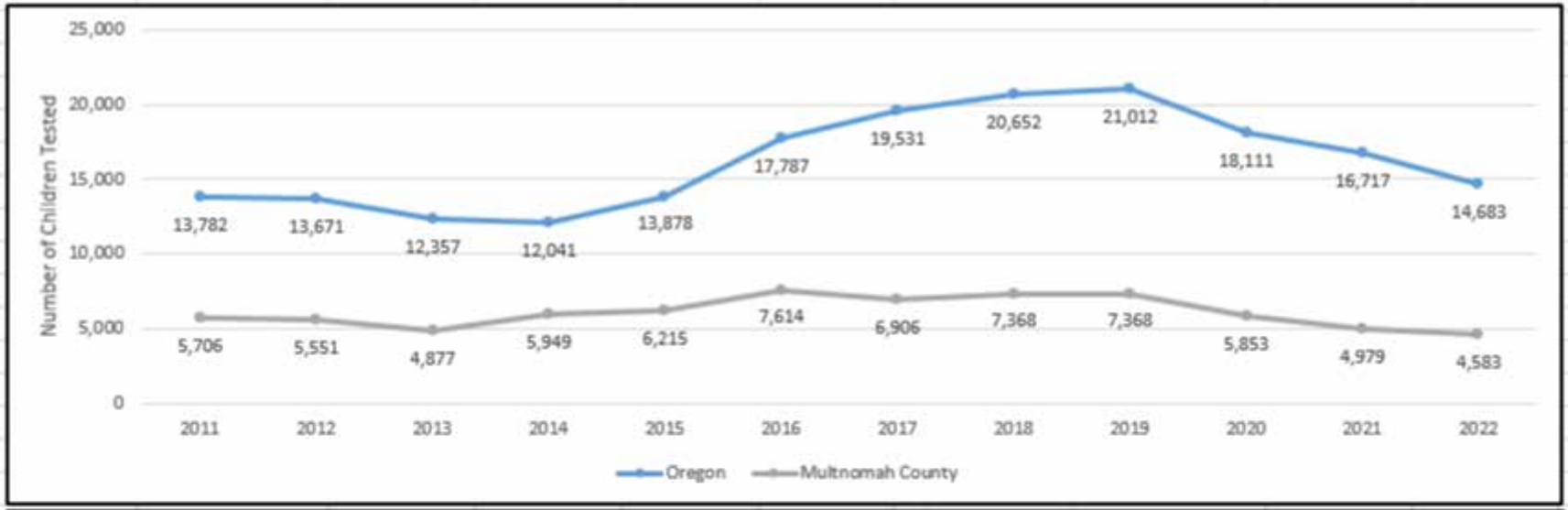
TODAY WE NEED INPUT ON THE FOLLOWING

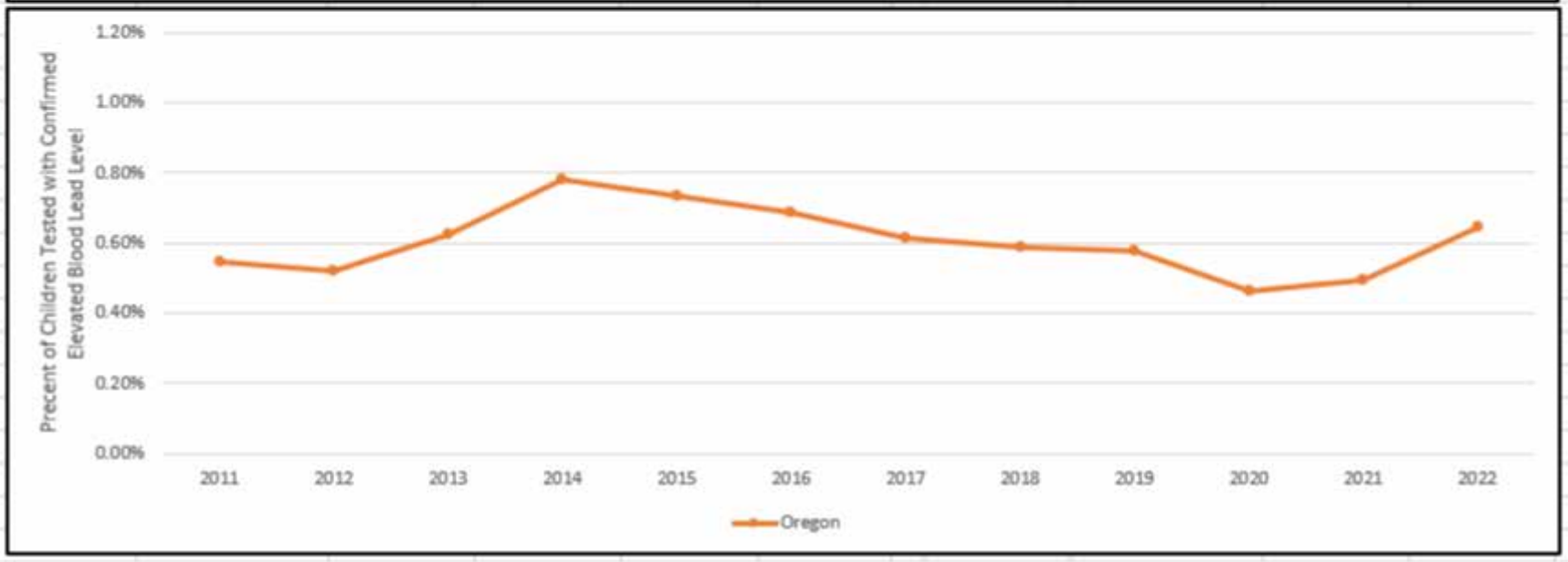
- Revisions to the Oregon Lead Screening Questionnaire to identify children at risk for lead exposure
- Improving rates of confirmatory and follow-up lead testing
- Ways to increase blood lead testing rates for children enrolled in Medicaid
- Use of a geographic screening tool to further identify children at risk for lead exposure
- Strategies to improve outreach and communications to the medical community

Oregon Childhood Lead Poisoning Prevention Program (CLPPP) Lead Screening and Testing Plan


Lead-Free Kids for a Healthy Future
Kids under the age of 6 are still at risk for lead poisoning.
Get tested!
What are some non-paint sources of lead?
Keys
Traditional ceramics
Children's jewelry
Some imported spices and candles
Some traditional makeup (Kohl, surma)
Some folk remedies (Azarcon, greta)
For more information visit healthoregon.org/lead
Oregon Health Authority


Lead-Free Kids for a Healthy Future
Ask your doctor to test your child for lead.
All kids should have a blood test at ages 1 and 2.
Kids may be exposed to lead through household dust or contaminated soil in newer or older homes.
Homes built before 1978 often used lead-based paint that becomes a danger when it chips, flakes or peels.
Renovation, repair or painting activities can create toxic lead dust in pre-1978 homes. Use a certified contractor.
For more information visit healthoregon.org/lead
Oregon Health Authority


Number of Children Tested
25,000
20,000
15,000
10,000
5,000
0
13,782
13,671
12,357
12,041
13,878
17,787
19,531
20,652
21,012
18,111
16,717
14,683
5,706
5,551
4,877
5,949
6,215
7,614
6,906
7,368
7,368
5,853
4,979
4,583
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
Oregon
Multnomah County


Precent of Children Tested with Confirmed Elevated Blood Lead Level
1.20%
1.00%
0.80%
0.60%
0.40%
0.20%
0.00%
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
Oregon

	STATE OF OREGON				
Year	Oregon	Number of Children with Confirmed BLL ≥5 µg/dL	Oregon	Population < 72 months old	Percent of Population <72 months old Tested
2011	13,782	75	0.54%	283,300	4.9%
2012	13,671	71	0.52%	280,534	4.9%
2013	12,357	77	0.62%	278,438	4.4%
2014	12,041	94	0.78%	278,663	4.3%
2015	13,878	102	0.73%	279,371	5.0%
2016	17,787	122	0.69%	280,492	6.3%
2017	19,531	120	0.61%	280,410	7.0%
2018	20,652	121	0.59%	280,451	7.4%
2019	21,012	121	0.58%	279,134	7.5%
2020	18,111	84	0.46%	276,349	6.6%
2021	16,717	83	0.50%	271,878	6.1%
2022	14,683	95	0.65%	257,738	5.7%

Lead Screening and Testing in Oregon

Childhood Lead Poisoning Prevention Program
Health Care Provider Lead Screening Questionnaire

Name of patient: _____ Date: _____ Age of child: _____

Anticipatory guidance regarding lead hazard identification and risk reduction measures should be a routine part of an ongoing educational approach for pregnant women, children and their families. The goal of lead screening is to identify children who may have been exposed to lead, provide interventions and reduce the risk of exposure. **This questionnaire should be administered at 1 and 2 years of age, or between 3 and 5 years of age if not previously screened.** If the answer to any of these questions is "Yes" or "Don't know" a blood lead test should be performed. Follow up questions may be needed to clarify responses. Per OAR 410-130-0246, all children on Medicaid/Oregon Health Plan must be blood tested at 12 and 24 months, or between 24 and 72 months if there is no record of a previous blood test.

Please circle the answers to the following questions:

Has your child lived in or regularly visited a home, child care or other building built before 1950?	**Yes** **Don't Know**	**No**
Has your child lived in or regularly visited a home, child care or other building built before 1978 with recent or ongoing painting, repair and/or remodeling?	**Yes** **Don't Know**	**No**
Is your child enrolled in or attending a Head Start program?	**Yes** **Don't Know**	**No**
Does your child have a brother, sister, other relative, housemate or playmate with lead poisoning?	**Yes** **Don't Know**	**No**
Does your child spend time with anyone that has a job or hobby where they may work with lead? *Examples: see list on back of this questionnaire*	**Yes** **Don't Know**	**No**
Do you have pottery or ceramics made in other countries or lead crystal or pewter that are used for cooking, storing or serving food or drink?	**Yes** **Don't Know**	**No**
Has your child ever taken any traditional home remedies or used imported/foreign cosmetics? *Remedies: Azarcon, Alarcon, Greta* *Cosmetics: Kohl, Surma, Sindoor, or KumKum*	**Yes** **Don't Know**	**No**
Has your child been adopted from, lived in or visited another country?	**Yes** **Don't Know**	**No**
Do you have concerns about your child's development? **Concern(s):** _____	**Yes**	**No**

Blood lead testing should also be considered as part of a diagnostic work-up of any child regardless of age with the following symptoms:

- **Behavioral problems:** aggression, hyperactivity, attention deficit, school problems, learning disabilities, excessive mouthing or pica behavior and other behavior disorders.
- **Developmental problems:** growth, speech and language delays and/or hearing loss.
- **Symptoms or signs consistent with lead poisoning:** irritability, headaches, vomiting, seizures or other neurological symptoms, anemia, loss of appetite, abdominal pain and cramping or constipation.
- **Ingestion of foreign body**

Children not enrolled in Medicaid/Oregon Health Plan (OHP) should be screened using the Lead Screening Questionnaire at 12 months and again at 24 months of age, or between 3 and 5 years of age if not previously screened.

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN®

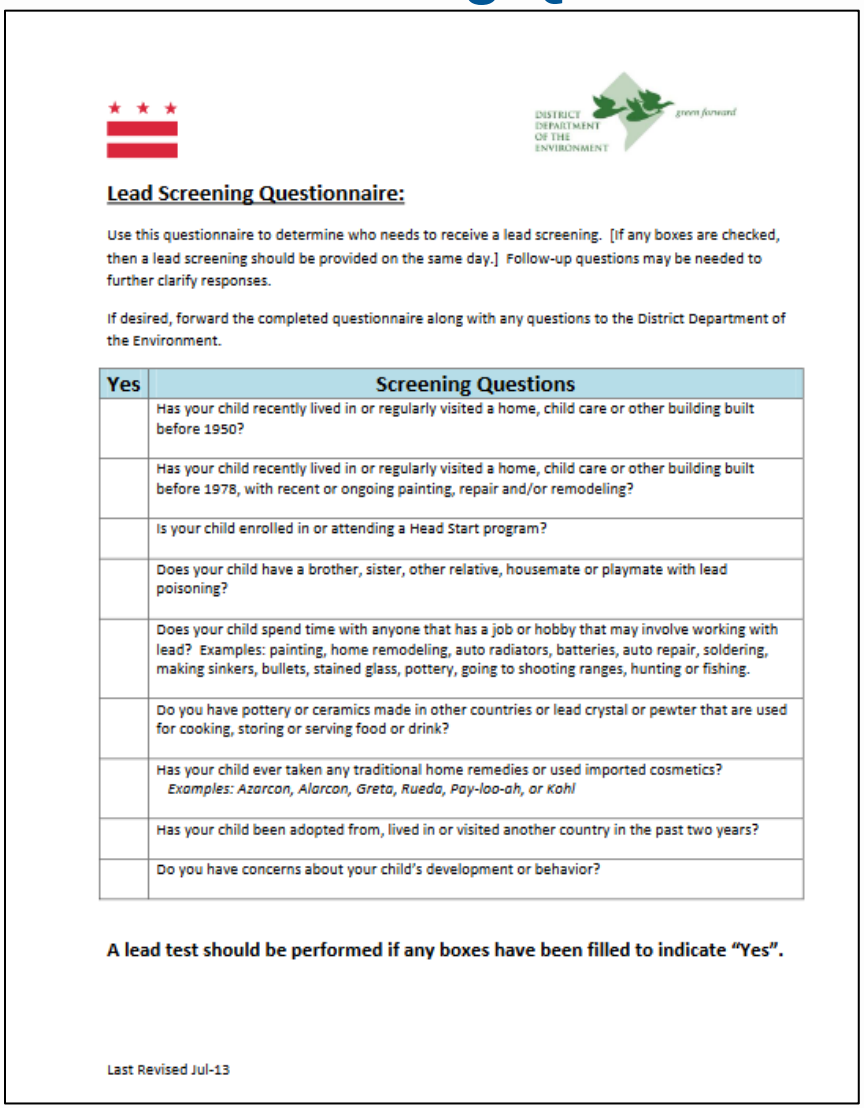
Patient Care

Detection of Lead Poisoning

Home / Patient Care / Lead Exposure / Detection of Lead Poisoning

The current **Bright Futures/AAP Periodicity Schedule** recommends a risk assessment at the following well-child visits: 6 months, 9 months, 12 months, 18 months, 24 months, and at 3, 4, 5 and 6 years of age. The recommendation is to do a risk assessment, and do a blood lead level test only if the risk assessment comes back positive. According to the AAP and CDC, universal screens or blood lead level tests are not recommended anymore except for high prevalence areas with increased risk factors as described in a **2012 CDC report**, such as older housing.

Lead Screening Questionnaire



DISTRICT DEPARTMENT OF THE ENVIRONMENT
green forward

Lead Screening Questionnaire:

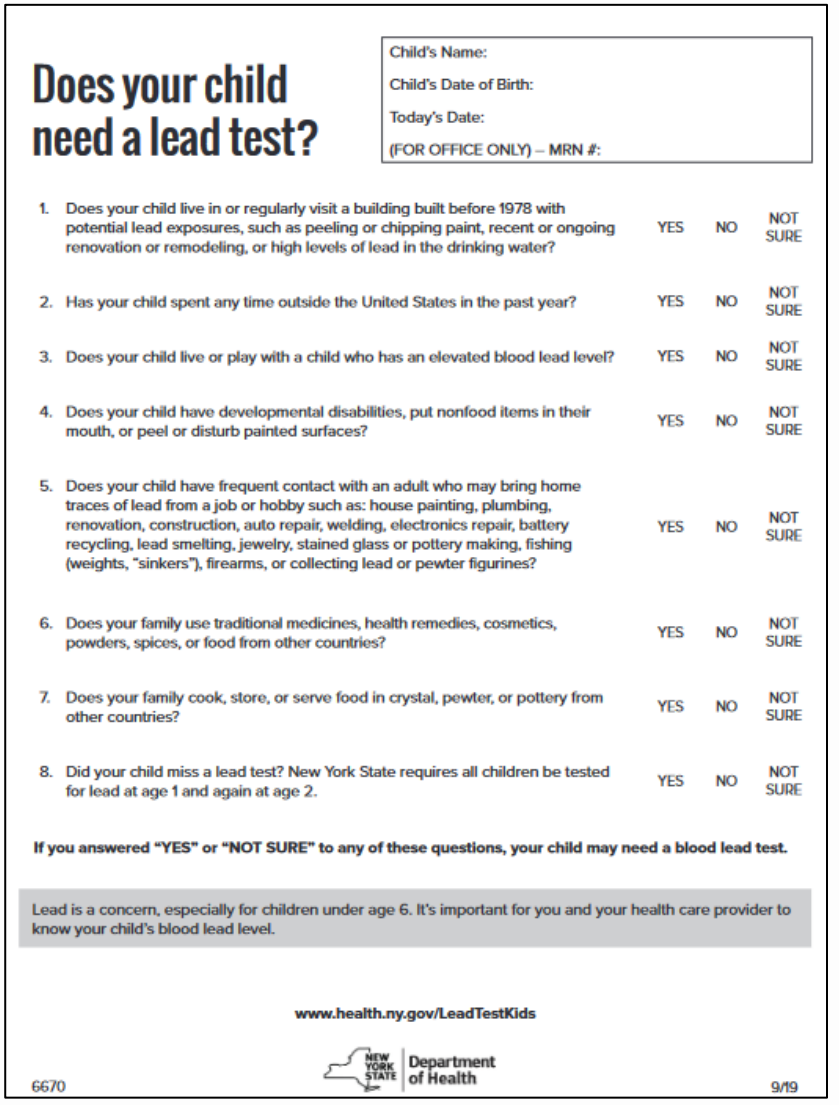
Use this questionnaire to determine who needs to receive a lead screening. [If any boxes are checked, then a lead screening should be provided on the same day.] Follow-up questions may be needed to further clarify responses.

If desired, forward the completed questionnaire along with any questions to the District Department of the Environment.

Yes	Screening Questions
	Has your child recently lived in or regularly visited a home, child care or other building built before 1950?
	Has your child recently lived in or regularly visited a home, child care or other building built before 1978, with recent or ongoing painting, repair and/or remodeling?
	Is your child enrolled in or attending a Head Start program?
	Does your child have a brother, sister, other relative, housemate or playmate with lead poisoning?
	Does your child spend time with anyone that has a job or hobby that may involve working with lead? Examples: painting, home remodeling, auto radiators, batteries, auto repair, soldering, making sinkers, bullets, stained glass, pottery, going to shooting ranges, hunting or fishing.
	Do you have pottery or ceramics made in other countries or lead crystal or pewter that are used for cooking, storing or serving food or drink?
	Has your child ever taken any traditional home remedies or used imported cosmetics? *Examples: Azarcon, Alarcon, Greta, Rueda, Pay-loo-ah, or Kohl*
	Has your child been adopted from, lived in or visited another country in the past two years?
	Do you have concerns about your child's development or behavior?

A lead test should be performed if any boxes have been filled to indicate "Yes".

Last Revised Jul-13



Does your child need a lead test?

Child's Name:
Child's Date of Birth:
Today's Date:
(FOR OFFICE ONLY) – MRN #:

1. Does your child live in or regularly visit a building built before 1978 with potential lead exposures, such as peeling or chipping paint, recent or ongoing renovation or remodeling, or high levels of lead in the drinking water?	YES	NO	NOT SURE
2. Has your child spent any time outside the United States in the past year?	YES	NO	NOT SURE
3. Does your child live or play with a child who has an elevated blood lead level?	YES	NO	NOT SURE
4. Does your child have developmental disabilities, put nonfood items in their mouth, or peel or disturb painted surfaces?	YES	NO	NOT SURE
5. Does your child have frequent contact with an adult who may bring home traces of lead from a job or hobby such as: house painting, plumbing, renovation, construction, auto repair, welding, electronics repair, battery recycling, lead smelting, jewelry, stained glass or pottery making, fishing (weights, "sinkers"), firearms, or collecting lead or pewter figurines?	YES	NO	NOT SURE
6. Does your family use traditional medicines, health remedies, cosmetics, powders, spices, or food from other countries?	YES	NO	NOT SURE
7. Does your family cook, store, or serve food in crystal, pewter, or pottery from other countries?	YES	NO	NOT SURE
8. Did your child miss a lead test? New York State requires all children be tested for lead at age 1 and again at age 2.	YES	NO	NOT SURE

If you answered "YES" or "NOT SURE" to any of these questions, your child may need a blood lead test.

Lead is a concern, especially for children under age 6. It's important for you and your health care provider to know your child's blood lead level.

www.health.ny.gov/LeadTestKids

NEW YORK STATE | Department of Health

6670 9/19

Lead Screening and Testing in Oregon

Oregon Health Authority

Health Systems Division: Medical Assistance Programs - Chapter 410

Division 130
MEDICAL-SURGICAL SERVICES

410-130-0246
Lead Screening

(1) All children enrolled in the Oregon Health Plan, including Fee-for-Service and MCEs, must have blood lead screening tests. Children with Medical Assistance Program coverage must have blood lead screening tests at age 12 months and 24 months. Any child between ages 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 lead screening requirement for children under Medicaid.

Lead Screening and Testing in Oregon

Medicaid.gov
Keeping America Healthy

Lead Screening

- 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.

DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Medicare & Medicaid Services
7500 Security Boulevard, Mail Stop S2-26-12
Baltimore, MD 21244-1850

CMS
CENTERS for MEDICARE & MEDICAID SERVICES

Center for Medicaid and CHIP Services

CMCS Informational Bulletin

DATE: June 22, 2012

FROM: Cindy Mann, Director
Center for Medicaid and CHIP Services (CMCS)

SUBJECT: Targeted Lead Screening Plans

As announced in our Information Bulletin dated March 30, 2012, the Centers for Medicare & Medicaid Services (CMS) is revising its policy with respect to screening Medicaid eligible children for lead poisoning to align with the recommendations of the Centers for Disease Control and Prevention (CDC). CDC encourages targeted screening in states that have sufficient data to demonstrate that universal screening is not the most effective method of identifying exposure to lead.

DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Medicare & Medicaid Services
7500 Security Boulevard, Mail Stop S2-26-12
Baltimore, MD 21244-1850

CMS
CENTERS for MEDICARE & MEDICAID SERVICES

Center for Medicaid and CHIP Services

CMCS Informational Bulletin

DATE: June 22, 2012

FROM: Cindy Mann, Director
Center for Medicaid and CHIP Services (CMCS)

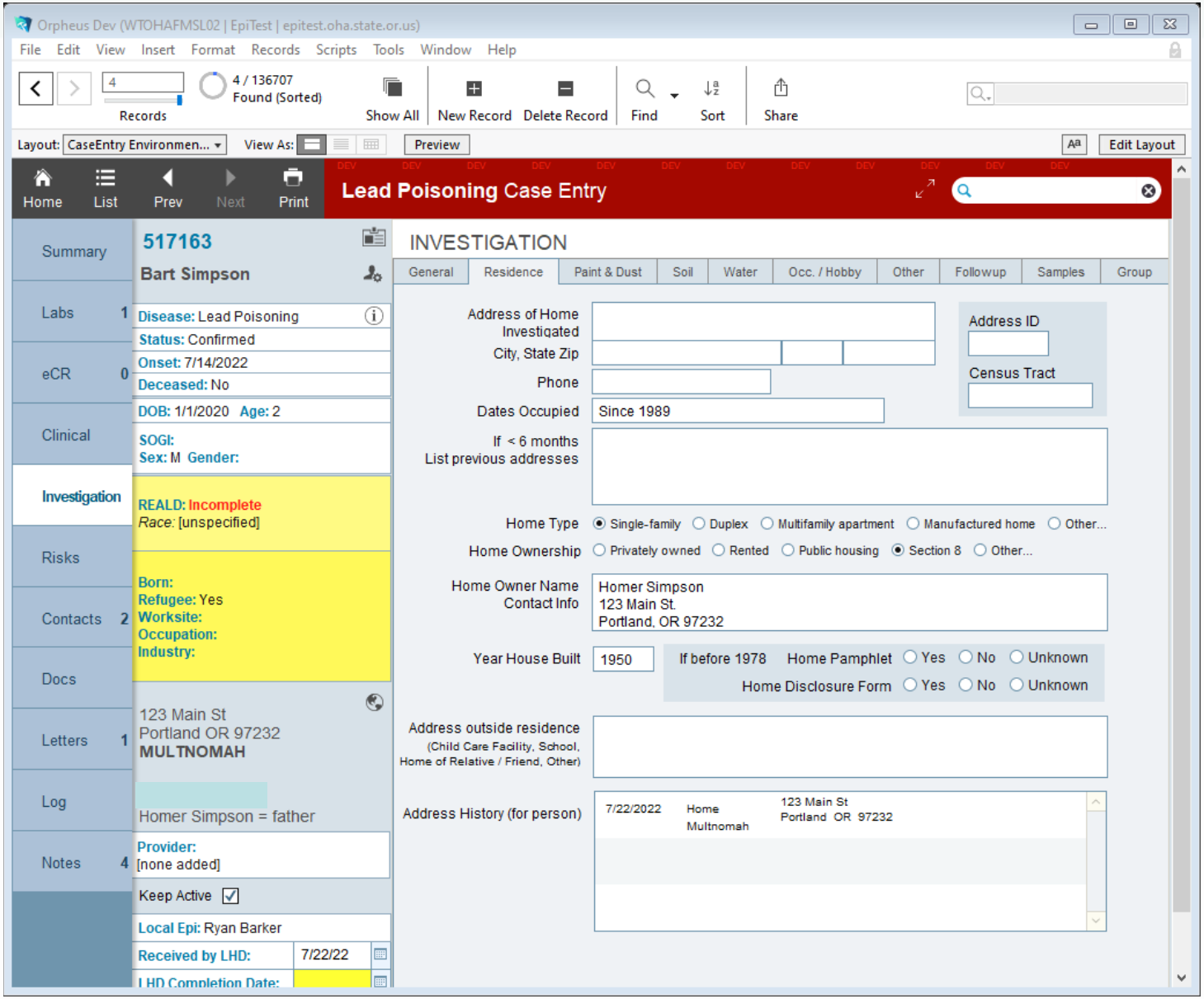
SUBJECT: Targeted Lead Screening Plans

In addition to being consistent with CDC's recommendations, this change will allow states' limited resources to be used for children most needing the screening. A state may now request to include Medicaid eligible children in its targeted lead screening plan, rather than continuing to universally screen all Medicaid eligible children ages 1 and 2.

Any feedback, questions, concerns, or clarifications needed

Should OR consider requesting a target testing approach for children on Medicaid?

Case Management


Orpheus Dev (WTOHAFMSL02 | EpiTest | epitest.oha.state.or.us)
File Edit View Insert Format Records Scripts Tools Window Help
4 / 136707 Found (Sorted)
Records
Show All
New Record
Delete Record
Find
Sort
Share
Layout: CaseEntry Environmen...
View As:
Preview
Edit Layout
Home
List
Prev
Next
Print
Lead Poisoning Case Entry
Summary
Labs 1
eCR 0
Clinical
Investigation
Risks
Contacts 2
Docs
Letters 1
Log
Notes 4
517163
Bart Simpson
Disease: Lead Poisoning
Status: Confirmed
Onset: 7/14/2022
Deceased: No
DOB: 1/1/2020 Age: 2
SOGI:
Sex: M Gender:
REALD: Incomplete
Race: [unspecified]
Born:
Refugee: Yes
Worksite:
Occupation:
Industry:
123 Main St
Portland OR 97232
MULTNOMAH
Homer Simpson = father
Provider:
[none added]
Keep Active
Local Epi: Ryan Barker
Received by LHD: 7/22/22
LHD Completion Date:
INVESTIGATION
General Residence Paint & Dust Soil Water Occ. / Hobby Other Followup Samples Group
Address of Home Investigated
City, State Zip
Phone
Dates Occupied
Since 1989
If < 6 months List previous addresses
Address ID
Census Tract
Home Type
Single-family Duplex Multifamily apartment Manufactured home Other...
Home Ownership
Privately owned Rented Public housing Section 8 Other...
Home Owner Name Contact Info
Homer Simpson
123 Main St.
Portland, OR 97232
Year House Built
1950
If before 1978 Home Pamphlet Yes No Unknown
Home Disclosure Form Yes No Unknown
Address outside residence
(Child Care Facility, School, Home of Relative / Friend, Other)
Address History (for person)
7/22/2022 Home Multnomah 123 Main St Portland OR 97232

Presumptive vs. Confirmed Blood Lead Test

Capillary test (Presumptive)
Susceptible to contamination.
Should be confirmed by venous test

Venous test (Confirmatory)
Recommended before continuing with case management and investigation

Oregon's Current Lead Poisoning Disease Definition

Oregon Health Authority

Public Health Division - Chapter 333

Division 19

INVESTIGATION AND CONTROL OF DISEASES: GENERAL POWERS AND RESPONSIBILITIES

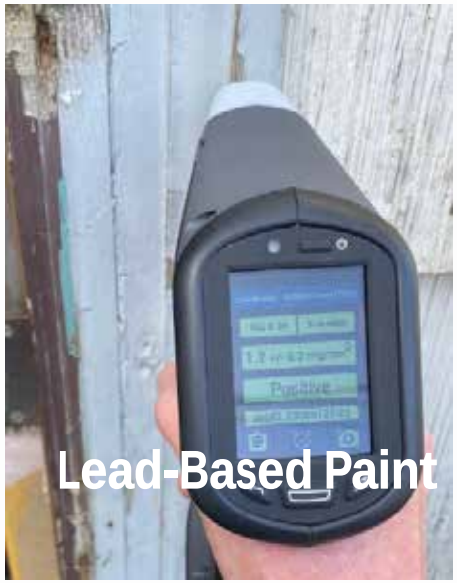
333-019-0000

Responsibility of Public Health Authorities to Investigate Reportable Diseases

(1) The local public health administrator shall use all reasonable means to investigate in a timely manner all reports of reportable diseases, infections, or conditions. To identify possible sources of infection and to carry out appropriate control measures, the local public health administrator shall investigate each report following procedures outlined in the Authority's Investigative Guidelines or other procedures approved by the Authority. The Authority may provide assistance in these investigations.

Investigation

Investigation



An official website of the United States government Here's how you know

FDA U.S. FOOD & DRUG ADMINISTRATION

COMPANY ANNOUNCEMENT

Shop Me Ca Recalls "Diep Bao Cream" Because of Possible Health Risk

When a company announces a recall, market withdrawal, or safety alert, the FDA posts the company's announcement as a public service. FDA does not endorse either the product or the company.

Read Announcement | View Product Photos

CẢNH BÁO: MỘT SỐ KEM DƯỠNG DA TRẺ EM CÓ THỂ CHỨA CHÌ

CHÌ TRONG KEM DƯỠNG DA EM BÉ

Một **kem trị chàm** phổ biến **sản xuất tại việt nam gọi là Diệp Bảo** có thể chứa chì. Quý vị hoặc con quý vị có thể tiếp xúc với chì khi vô tình nuốt phải chì sau khi bôi lên da.

TẠI SAO CHÌ LẠI NGUY HIỂM?

Chì là kim loại độc có thể gây hại cho con người nếu xâm nhập vào cơ thể. **Trẻ nhỏ và người mang thai có nguy cơ** vì chì có thể làm tổn thương sự phát triển bình thường của não bộ.

BẠN CÓ THỂ LÀM GÌ VỀ NÓ?

- **Tránh dùng Diệp Bảo.**
- **Kiểm tra chì trong gia đình quý vị.** Yêu cầu xét nghiệm chì trong máu từ bác sĩ của quý vị.
- **Kiểm tra kem của quý vị bằng cách gọi** Đường dây chì theo số 503-988-4000 để biết các tùy chọn.

Follow-up Case Management

Community Action Partnership of Oregon
Helping People. Changing Lives.

Oregon Health Authority
Home Visiting
Oregon's Public Health Home Visiting System

WIC IS HERE TO HELP!

OREGON DEPARTMENT OF EDUCATION
Oregon achieves . . . together!

OREGON EARLY CHILDHOOD INCLUSION
Building Equitable Futures

Flexible Services Information for Oregon Health Plan Members in Coordinated Care Organizations

U.S. Department of Housing and Urban Development

Any feedback, questions, concerns, or clarifications needed

Medicaid/OHP Testing Rates

Oregon Medicaid-Enrolled Lead Testing Rates : < 36 months

CY2019

	Total Distinct Number of Children Enrolled in Medicaid	Number of Children Enrolled in Medicaid Tested	% Of Children Enrolled in Medicaid Tested
Age Group			
0 -12 months	29475	549	1.86%
12 - 24 months	28722	6749	23.50%
24 - 36 months	29540	2731	9.25%
0 - 24 months	58197	7262	12.48%

CY2020

	Total Distinct Number of Children Enrolled in Medicaid	Number of Children Enrolled in Medicaid Tested	% Of Children Enrolled in Medicaid Tested
Age Group			
0 -12 months	26740	427	1.60%
12 - 24 months	28541	6772	23.73%
24 - 36 months	27482	2647	9.63%
0 - 24 months	55281	7156	12.94%

Oregon Medicaid-Enrolled Lead Testing Rates : < 36 months

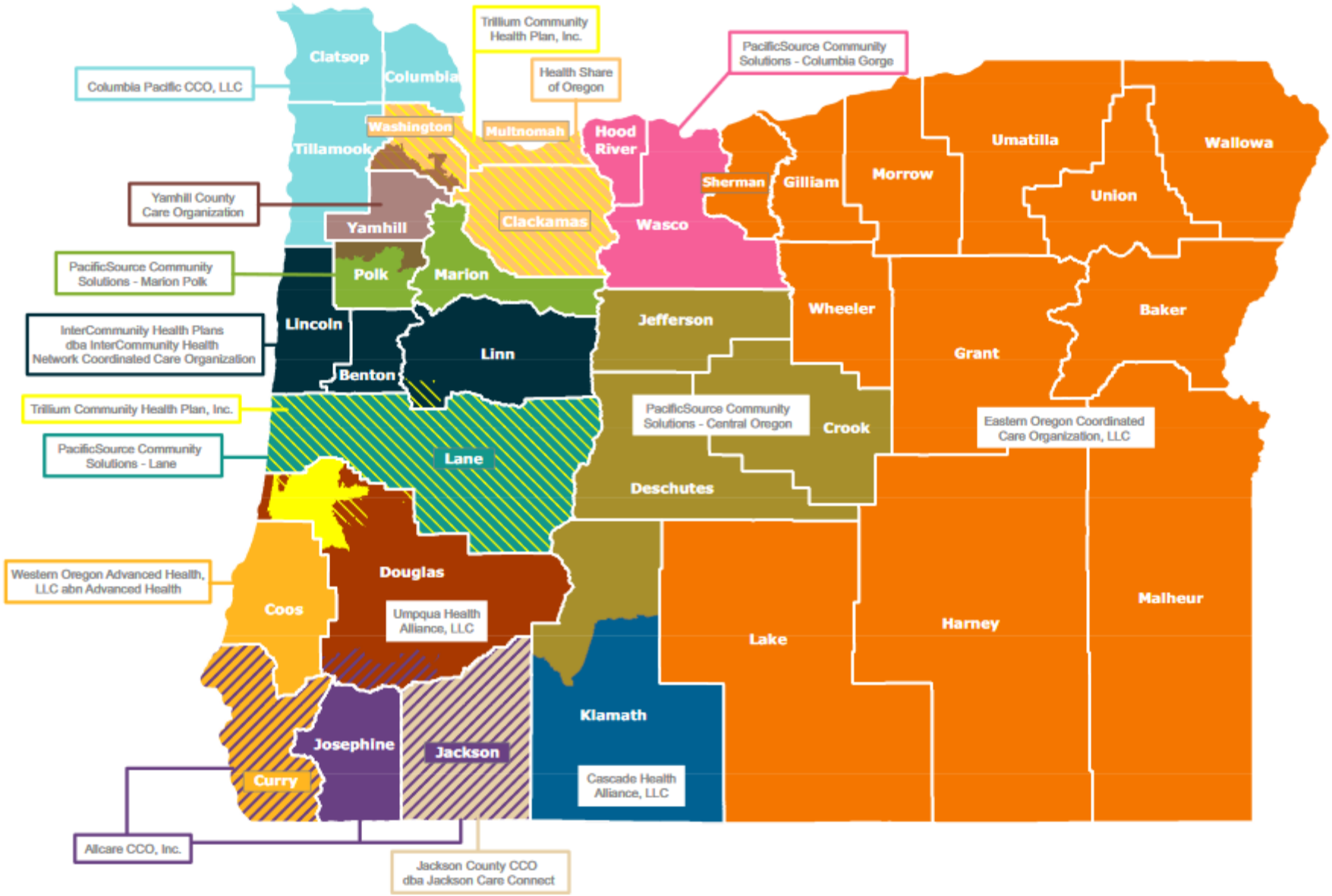
CY2021

	Total Distinct Number of Children Enrolled in Medicaid	Number of Children Enrolled in Medicaid Tested	% Of Children Enrolled in Medicaid Tested
Age Group			
0 -12 months	25236	342	1.36%
12 - 24 months	25515	6270	24.57%
24 - 36 months	27228	3222	11.83%
0 - 24 months	50751	6590	12.98%

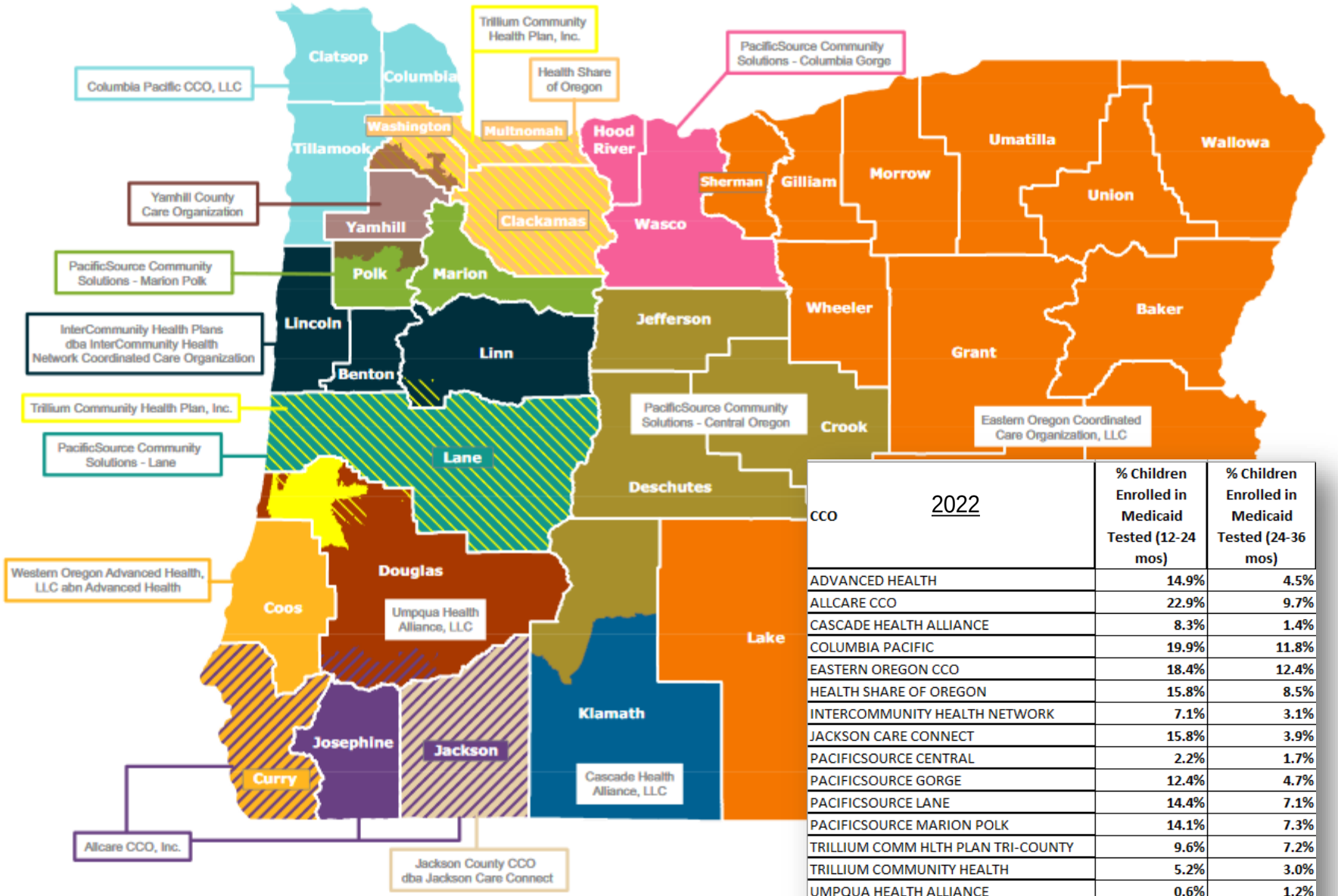
CY2022

	Total Distinct Number of Children Enrolled in Medicaid	Number of Children Enrolled in Medicaid Tested	% Of Children Enrolled in Medicaid Tested
Age Group			
0 -12 months	22845	286	1.25%
12 - 24 months	24046	5882	24.46%
24 - 36 months	24164	2585	10.70%
0 - 24 months	46891	6138	13.09%

Coordinated Care Organization 2.0 Service Areas



Coordinated Care Organization 2.0 Service Areas



CCO 2022	% Children Enrolled in Medicaid Tested (12-24 mos)	% Children Enrolled in Medicaid Tested (24-36 mos)
ADVANCED HEALTH	14.9%	4.5%
ALLCARE CCO	22.9%	9.7%
CASCADE HEALTH ALLIANCE	8.3%	1.4%
COLUMBIA PACIFIC	19.9%	11.8%
EASTERN OREGON CCO	18.4%	12.4%
HEALTH SHARE OF OREGON	15.8%	8.5%
INTERCOMMUNITY HEALTH NETWORK	7.1%	3.1%
JACKSON CARE CONNECT	15.8%	3.9%
PACIFICSOURCE CENTRAL	2.2%	1.7%
PACIFICSOURCE GORGE	12.4%	4.7%
PACIFICSOURCE LANE	14.4%	7.1%
PACIFICSOURCE MARION POLK	14.1%	7.3%
TRILLIUM COMM HLTH PLAN TRI-COUNTY	9.6%	7.2%
TRILLIUM COMMUNITY HEALTH	5.2%	3.0%
UMPQUA HEALTH ALLIANCE	0.6%	1.2%
YAMHILL COMMUNITY CARE	7.5%	3.4%

CENTERS FOR MEDICARE & MEDICAID SERVICES
CENTER FOR MEDICAID & CHIP SERVICES DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Medicare & Medicaid Services
7500 Security Boulevard, Mail Stop S2-26-12
Baltimore, Maryland 21244-1850

CMCS Informational Bulletin

DATE: November 15, 2022

FROM: Daniel Tsai, Deputy Administrator and Director
Center for Medicaid and CHIP Services

SUBJECT: 2023 and 2024 Updates to the Child and Adult Core Health Care Quality Measurement Sets

This Center for Medicaid and CHIP Services (CMCS) Informational Bulletin (CIB) describes the 2023 and 2024 updates to the Core Set of children's health care quality measures for Medicaid and the Children's Health Insurance Program (CHIP) (the Child Core Set) and the Core Set of health care quality measures for adults enrolled in Medicaid (the Adult Core Set). In order to support states' efforts to meet the upcoming 2024 mandatory reporting requirements and to provide sufficient time for states to prepare, we are now releasing both the 2023 and 2024 Child and Adult Core Health Care Quality Measurement Sets.

CENTERS FOR MEDICARE & MEDICAID SERVICES
CENTER FOR MEDICAID & CHIP SERVICES DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Medicare & Medicaid Services
7500 Security Boulevard, Mail Stop S2-26-12
Baltimore, Maryland 21244-1850

Child Core Set Updates

No measures will be retired.

Two measures will be added:

- *Lead Screening in Children (LSC-CH)*[17]. This measure assesses the percentage of children who had one or more capillary or venous lead blood tests to screen for lead poisoning by their second birthday. It complements efforts to improve blood lead screening rates for children in Medicaid, and will improve the understanding of the health disparities experienced by Medicaid and CHIP beneficiaries as children who live in low-income households are at higher risk of lead exposure.

HEALTH SYSTEMS DIVISION

Kate Brown, Governor

500 Summer St NE E35
Salem, OR, 97301
Voice: 800-527-5772
Fax: 503-373-7689
TTY: 711
www.oregon.gov/OHA/HSD

Date: December 1, 2022

To: Providers who render, refer or seek approval for services for OHP members under age 21.

From: Donny Jardine, Manager
Medicaid Behavioral Health, Safety Net and Children's Programs

Subject: Provider guide regarding services to OHP Children and Youth: Early and Periodic Screening, Diagnosis and Treatment (EPSDT)

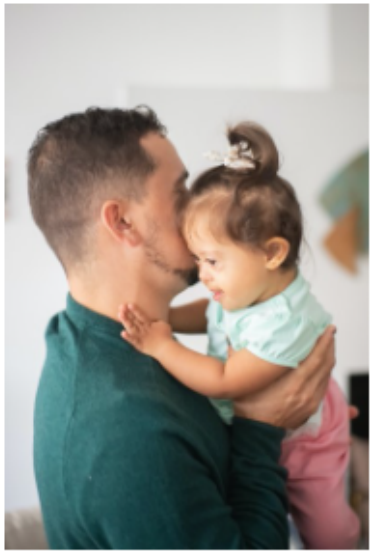
Effective January 1, 2023, the Oregon Health Authority (OHA) and coordinated care organizations (CCOs) are required to cover the full scope of Early and Periodic Screening, Diagnostic and Treatment (EPSDT) services for children from birth until their 21st birthday. **Under EPSDT, the Oregon Health Plan (OHP) covers any medically necessary and medically appropriate service for enrolled children and youth until their 21st birthday, regardless of the Prioritized List.**

About EPSDT

Who Qualifies for EPSDT in Oregon?

All children and youth in Oregon up to age 21 who are enrolled in OHP. This includes children and youth under age 21 who enrolled in OHP through OHP Covers Me! (Cover All Kids) and Healthier Oregon.

EPSDT coverage ends on a member's 21st birthday.



What Services Are Provided?

Screening visits and health exams

Screening visits (also known as well child visits or adolescent well visits) at age-appropriate intervals following the American Academy of Pediatrics and Bright Futures guidelines and periodicity schedule. These visits must include:

- Full physical exam
- Full health and developmental history (including assessment of both physical and mental health development)
- Developmental screening
- Preventive laboratory tests (including lead toxicity testing and genetic testing)
- Appropriate immunizations
- Assessment of nutritional status
- Anticipatory guidance and health counseling for parents and children
- Referrals for medically necessary health and mental health treatment

Oregon Medicaid-Enrolled Lead Testing Rates : < 36 months

CCO	% Children Enrolled in Medicaid Tested (12-24 mos)	% Children Enrolled in Medicaid Tested (24-36 mos)
ADVANCED HEALTH	14.9%	4.5%
ALLCARE CCO	22.9%	9.7%
CASCADE HEALTH ALLIANCE	8.3%	1.4%
COLUMBIA PACIFIC	19.9%	11.8%
EASTERN OREGON CCO	18.4%	12.4%
HEALTH SHARE OF OREGON	15.8%	8.5%
INTERCOMMUNITY HEALTH NETWORK	7.1%	3.1%
JACKSON CARE CONNECT	15.8%	3.9%
PACIFICSOURCE CENTRAL	2.2%	1.7%
PACIFICSOURCE GORGE	12.4%	4.7%
PACIFICSOURCE LANE	14.4%	7.1%
PACIFICSOURCE MARION POLK	14.1%	7.3%
TRILLIUM COMM HLTH PLAN TRI-COUNTY	9.6%	7.2%
TRILLIUM COMMUNITY HEALTH	5.2%	3.0%
UMPQUA HEALTH ALLIANCE	0.6%	1.2%
YAMHILL COMMUNITY CARE	7.5%	3.4%

U.S. Department of Health and Human Services

Office of Inspector General

Report in Brief

October 2021, OEI-07-18-00371

Key Takeaway

In the 5 States we reviewed, 38 percent of 1 million Medicaid-enrolled children did not receive a blood lead screening test at 12 months or 24 months of age, as required by Medicaid's schedule.

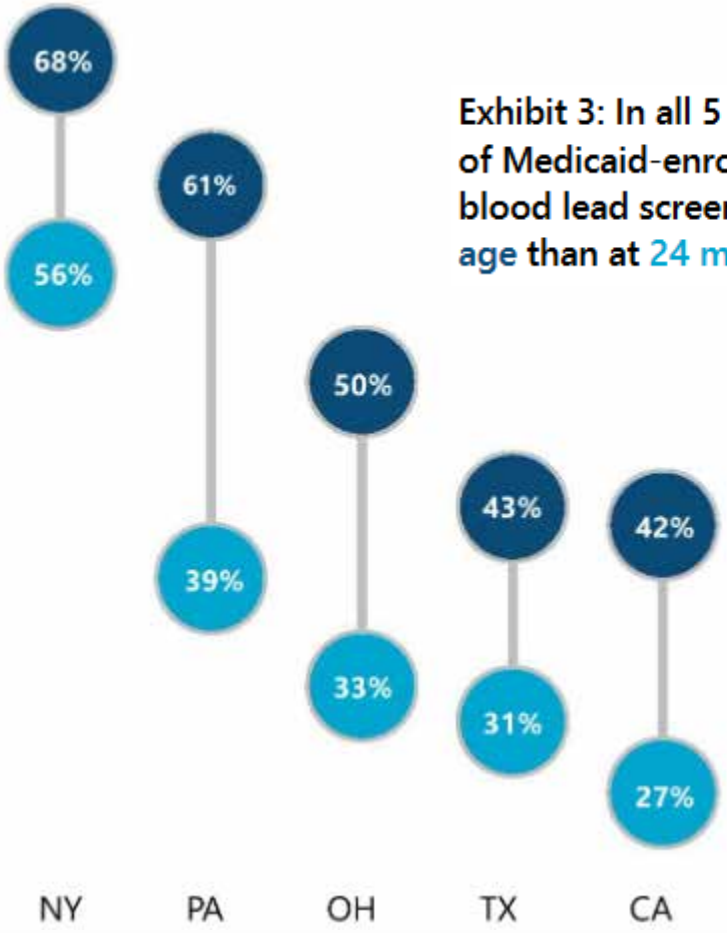


Exhibit 3: In all 5 States, a higher proportion of Medicaid-enrolled children received a blood lead screening test at 12 months of age than at 24 months of age.

U.S. Department of Health and Human Services

Office of Inspector General

Report in Brief

October 2021, OEI-07-18-00371

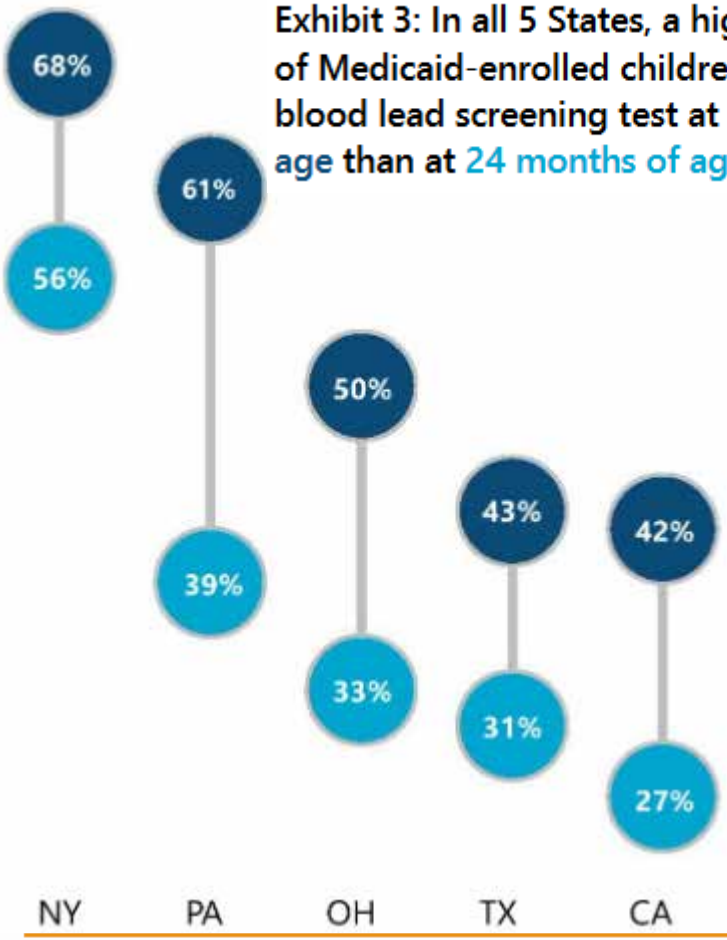


Exhibit 3: In all 5 States, a higher proportion of Medicaid-enrolled children received a blood lead screening test at 12 months of age than at 24 months of age.

CY2021

	% Of Children Enrolled in Medicaid Tested
Age Group	
0 -12 months	1.36%
12 - 24 months	24.57%
24 - 36 months	11.83%
0 - 24 months	12.98%

CY2022

	% Of Children Enrolled in Medicaid Tested
Age Group	
0 -12 months	1.25%
12 - 24 months	24.46%
24 - 36 months	10.70%
0 - 24 months	13.09%

Oregon Health Authority

Caregiver and Clinician Perspectives on Missed Well-Child Visits

Elizabeth R. Wolf, MD, MPH[1,2]
Jennifer O'Neil, BS[3]
James Pecsok, BS[3]
Rebecca S. Etz, PhD[3]
Douglas J. Opel, MD, MPH[4]
Richard Wasserman, MD, MPH[5]
Alex H. Krist, MD, MPH[3]

[1]Department of Pediatrics, Virginia Commonwealth University, Richmond, Virginia

[2]Children's Hospital of Richmond at VCU, Richmond, Virginia

[3]Department of Family Medicine and Population Health, Virginia Commonwealth University, Richmond, Virginia

ABSTRACT

PURPOSE Despite the benefits of well-child care visits, up to one-half of these visits are missed. Little is known about why children miss them, so we undertook a qualitative study to elucidate these factors.

METHODS We interviewed 17 caregivers whose children had missed well-child visits and 6 clinicians, focusing on 3 areas: the value of well-child visits, barriers to attendance, and facilitators of attendance. Transcripts were analyzed with a grounded theory approach and thematic analysis.

RESULTS Caregivers and clinicians identified similar important aspects of well-child visits: immunizations, detection of disease, and monitoring of growth and development. Both groups identified similar barriers to attendance: transportation, difficulty taking time off from work, child care, and other social stressors.

CONCLUSIONS Further work to explore how addressing social determinants of health might improve attendance of well-child visits is needed.

Ann Fam Med 2020;18:30-34. https://doi.org/10.1370/afm.2466.

HEALTH MANAGEMENT ASSOCIATES

Potential Medicaid Strategies to Improve Services to Children at Risk of Lead Exposure

PREPARED WITH

Green & Healthy Homes Initiative®

OCTOBER 11, 2020

1. Medicaid strategies that leverage current state authority

    - Utilize "performance improvement projects" or alternatively, value-based payments, to improve rates of lead screening and follow-up, including case management, home and environment lead investigations, and linkages to abatement resources
    - Update Medicaid MCO contract requirements to increase reporting, include sanctions for failure to screen or link eligible children to services addressing lead exposure, and require that they include parallel provisions with their contracting providers
    - Improve state oversight and monitoring to include more frequent audits and meaningful enforcement of corrective action plans

2. Medicaid strategies that require federal engagement

    - Adopt targeted case management or Section 1115 waiver to focus on impacted communities and support home lead and environmental investigations in impacted communities
    - Increase scope of case management to include specialized outreach, scheduling assistance, and transportation support in order to increase testing rates
    - Combine state Medicaid information technology improvements with improved tracking and data sharing with state registries that are utilized by companion public health and housing inspection agencies that are equipped to remediate environmental hazards

U.S. Department of Health and Human Services

Office of Inspector General

Report in Brief

October 2021, OEI-07-18-00371

CONCLUSION AND RECOMMENDATIONS

Monitor national EPSDT performance data for blood lead screening tests and target efforts toward low-performing States to develop action plans for increasing the provision of blood lead screening tests, according to Medicaid's schedule

Ensure consistency across CMS guidance related to actionable blood lead reference values and blood lead screening test definitions

Coordinate with partners to develop and disseminate to State Medicaid agencies educational resources that reaffirm requirements and schedules for blood lead screening tests

State Actions to Improve Blood Lead Screening Rates

- The following are examples of state actions to improve blood lead screening rates that were highlighted in CMS' 2016 Informational Bulletin:
  - Understand where your state stands: review state lead screening data (both Form CMS-416 and T-MSIS)
  - Review language explaining screening requirements in all coverage materials, manuals, periodicity schedules and websites
  - Collaborate with state health departments and lead poisoning and prevention programs on initiatives to increase lead screening rate and to ensure consistency across programs.
  - Leverage partnerships with pediatric providers, local AAP chapters, WIC programs, local health clinics, FQHCs
  - Implement a managed care performance improvement project (PIP)
  - Include blood lead screening improvements as a quality metric for managed care plans under the Quality Assessment and Performance Improvement Programs (QAPI) and in the Managed Care Quality Strategy

Some of the things that were stated during the Community of Practice (CoP) Meeting on August 31 discussion include:

- Providers aren't aware of Medicaid federal testing requirements (MI, OR, CA, IN)
- Conflicting guidelines between pediatrician and family practitioners (ME)
- Different testing requirements and recommendations for different groups regarding who would be tested (WI)
- Who is responsible for blood lead testing (doctors, nurses, or administrative staff, etc.) (IN)

Blood Lead Reference Value and Oregon Case Definition Update

During the May 2022 CLPPP Advisory Committee meeting, members agreed that Oregon should reduce its case definition to align with the CDC's blood lead reference value (BLRV)

In 2023, CLPPP and OHA's Acute and Communicable Disease Prevention program proposed revisions to the definition of the "lead poisoning" case definition to align with the CDC BLRV

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.

Blood Lead Reference Value

- Beginning in 2012, CDC began using a population-based blood lead reference value (BLRV) to identify children with higher levels in their level compared to most children.
  - This reference level is based on the 97.5th percentile of the blood lead values among U.S. children ages 1–5 years, according to data from the National Health and Nutrition Examination Survey (NHANES).
  - In 2012, the BLRV was established to be 5 micrograms per deciliter (µg/dL) based on NHANES data from 2007–2010. In 2021, the BLRV was updated to 3.5 µg/dL based on NHANES data from 2015–2018.
  - The BLRV is a population-based screening tool and should not serve as a health-based threshold. Children with BLLs at or above the BLRV represent those at the top 2.5% with the highest BLLs.

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

Oregon's Previous 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.

Oregon Administrative Rule Case Definition

"Blood lead level at or above the blood lead reference value" means a lead level, in at least one venous blood sample or in two capillary blood samples drawn within 12 weeks of each other, of at least 3.5 micrograms per deciliter.

CDC's Recommended Terminology When Discussing Children's Blood Lead Levels

No safe level of lead in children's blood has been identified. Therefore, the Centers for Disease Control and Prevention (CDC) does not use the term "elevated blood lead levels" when recommending what actions to take based on a child's blood lead level (BLL). CDC encourages healthcare providers, public health professionals, and others to follow CDC's recommended actions based on blood lead level when initiating follow-up actions and case management for children with lead in their blood

Alternative terms for discussing children's blood lead levels

- "blood lead levels greater than ____ µg/dL"
- "blood lead levels greater than most children"
- "blood lead levels above CDC's BLRV"
- "blood lead levels above the state's level that triggers follow-up care"

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

Changes in Case Definition: Health Systems Division

Oregon Health Authority

Health Systems Division: Medical Assistance Programs - Chapter 410

Division 130
MEDICAL-SURGICAL SERVICES

410-130-0246
Lead Screening

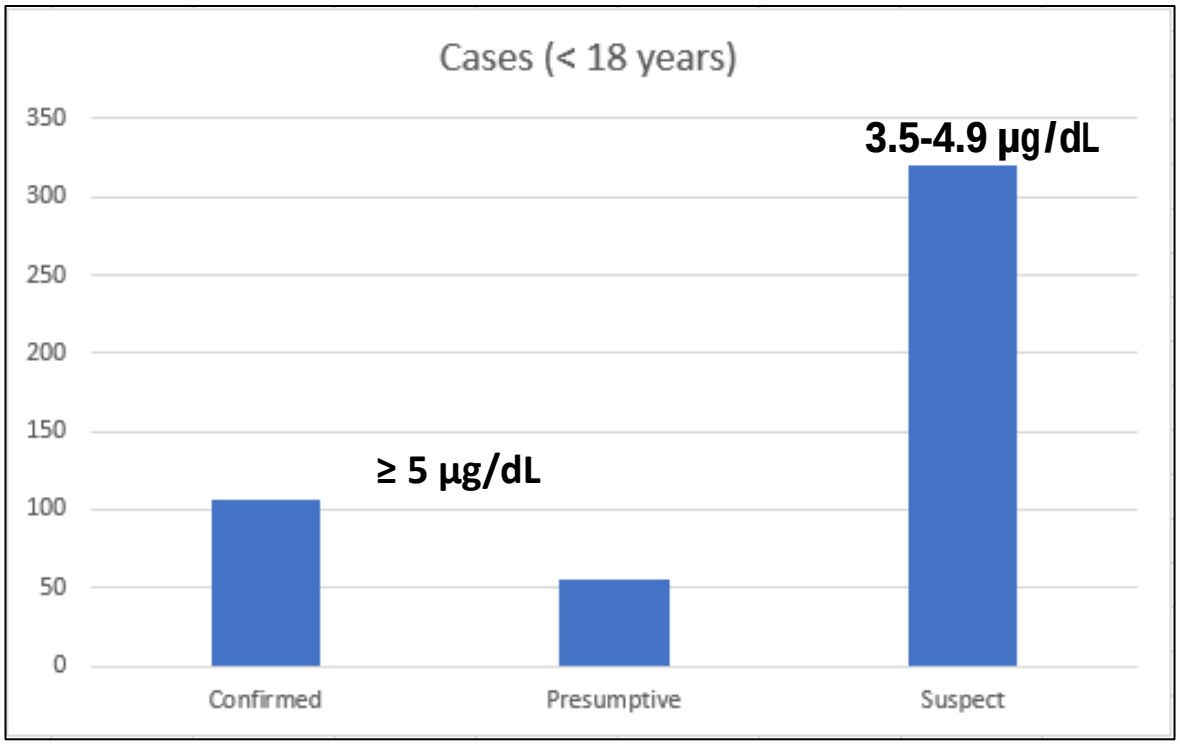
(3) Lead poisoning in children under 18 years of age and pregnant or lactating women is defined as a blood lead level greater than or equal to 3.5 micrograms per deciliter from a venous draw or two capillary blood lead tests greater than or equal to 3.5 micrograms per deciliter drawn within 12 weeks of each other.

Childhood Lead Poisoning Prevention

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

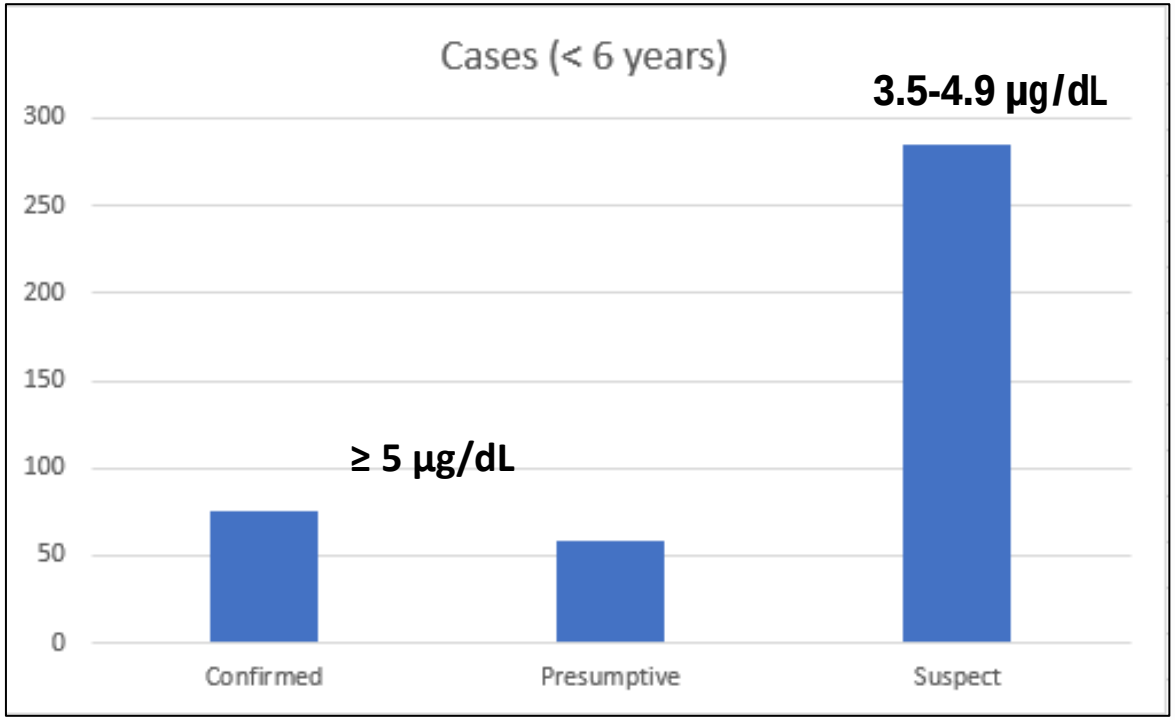
- Follow the recommendations above for BLL < 3.5 µg/dL.
- Report the test result to your state or local health department.
- Obtain an environmental exposure history to identify potential sources of lead.
- Arrange for an environmental investigation of the home to identify potential sources of lead, 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.

Increases in Case Management (< 18 years of age)



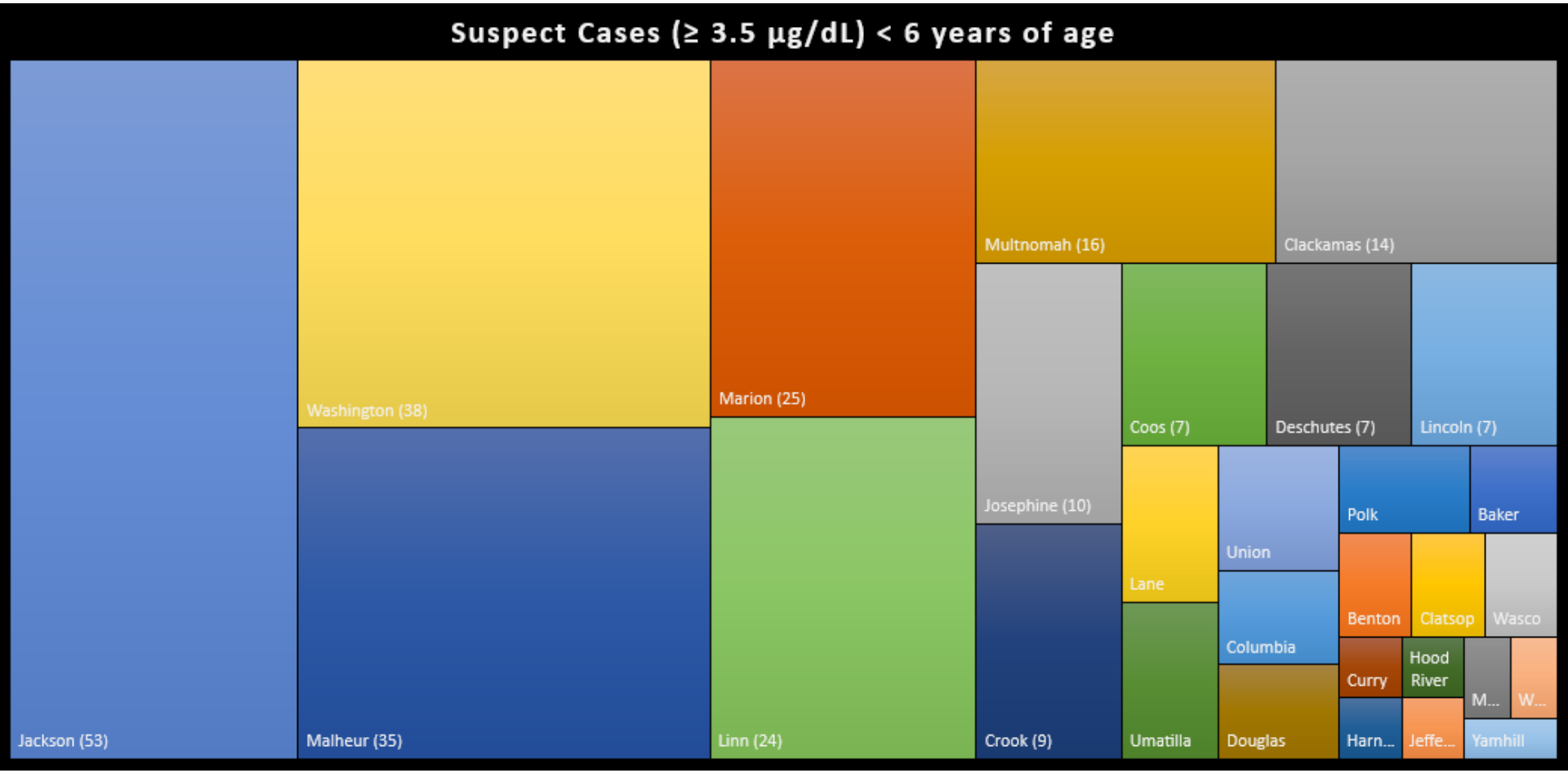
2023 (As of 9/28/2023)

Increases in Case Management (< 6 years of age)



2023 (As of 9/28/2023)

Increases in Case Management (< 6 years of age)



Presumptive vs. Confirmed Blood Lead Test

Capillary test (Presumptive)
Susceptible to contamination.
Should be confirmed by venous test

Venous test (Confirmatory)
Recommended before continuing with case management and investigation

Retesting of Children with Blood Lead Levels >=3.5 ug/dL

RETESTING OF CHILDREN WITH INITIAL BLOOD LEAD LEVELS ABOVE 3.5 ug/dL (2021 through Q2 of 2022)

			Intial BLL Result Category	
			3.5 through 4.9	5.0 or greater
Date Difference Initial and Followup	Less than a month (0-31 days)	Count	70	185
		% within Intial Result Category	18.1%	50.0%
	1 - 3 months (32-92 days)	Count	28	49
		% within Intial Result Category	7.2%	13.2%
	4 - 6 months (93-183 days)	Count	24	53
		% within Intial Result Category	6.2%	14.3%
	6 - 12 months (184 - 365 days)	Count	30	24
		% within Intial Result Category	7.8%	6.5%
	More than a year (>=365 days)	Count	15	8
		% within Intial Result Category	3.9%	2.2%
	Child was not retested	Count	220	51
		% within Intial Result Category	56.8%	13.8%
Total Cases within Initial Result Category		Count	387	370

Oregon Health Authority

Questions, concerns, or feedback on the revision of the “lead poisoning” case definition to align with the new CDC blood lead reference value (BLRV)

What are some effective strategies to convince medical providers to perform follow-up testing?

What are some effective ways to communicate to families about the importance of re-testing to ensure declining blood lead levels?

Oregon Lead Screening Questionnaire

CLPPP is considering revising the Health Care Provider Lead Screening Questionnaire

Considerations include additional questions, a change in flow, or revisions to current questions

Lead Screening Questionnaire

Childhood Lead Poisoning Prevention Program
Health Care Provider Lead Screening Questionnaire

Name of patient: _____ Date: _____ Age of child: _____

Anticipatory guidance regarding lead hazard identification and risk reduction measures should be a routine part of an ongoing educational approach for pregnant women, children and their families. The goal of lead screening is to identify children who may have been exposed to lead, provide interventions and reduce the risk of exposure. **This questionnaire should be administered at 1 and 2 years of age, or between 3 and 5 years of age if not previously screened.** If the answer to any of these questions is "Yes" or "Don't know" a blood lead test should be performed. Follow up questions may be needed to clarify responses. Per OAR 410-130-0246, all children on Medicaid/Oregon Health Plan must be blood tested at 12 and 24 months, or between 24 and 72 months if there is no record of a previous blood test.

Please circle the answers to the following questions:

Has your child lived in or regularly visited a home, child care or other building built before 1950?	**Yes** **Don't Know**	**No**
Has your child lived in or regularly visited a home, child care or other building built before 1978 with recent or ongoing painting, repair and/or remodeling?	**Yes** **Don't Know**	**No**
Is your child enrolled in or attending a Head Start program?	**Yes** **Don't Know**	**No**
Does your child have a brother, sister, other relative, housemate or playmate with lead poisoning?	**Yes** **Don't Know**	**No**
Does your child spend time with anyone that has a job or hobby where they may work with lead? ***Examples:*** *see list on back of this questionnaire*	**Yes** **Don't Know**	**No**
Do you have pottery or ceramics made in other countries or lead crystal or pewter that are used for cooking, storing or serving food or drink?	**Yes** **Don't Know**	**No**
Has your child ever taken any traditional home remedies or used imported/foreign cosmetics? ***Remedies****: Azarcon, Alarcon, Greta* ***Cosmetics****: Kohl, Surma, Sindoor, or KumKum*	**Yes** **Don't Know**	**No**
Has your child been adopted from, lived in or visited another country?	**Yes** **Don't Know**	**No**
Do you have concerns about your child's development? **Concern(s):** _____	**Yes**	**No**

Lead Screening Questionnaire

Blood lead testing should also be considered as part of a diagnostic work-up of any child regardless of age with the following symptoms:

- **Behavioral problems:** aggression, hyperactivity, attention deficit, school problems, learning disabilities, excessive mouthing or pica behavior and other behavior disorders.
- **Developmental problems:** growth, speech and language delays and/or hearing loss.
- **Symptoms or signs consistent with lead poisoning:** irritability, headaches, vomiting, seizures or other neurological symptoms, anemia, loss of appetite, abdominal pain and cramping or constipation.
- **Ingestion of foreign body**

Lead Screening Questionnaire

- Has your child lived in or regularly visited a home, child care or other building built before 1950?
- Has your child lived in or regularly visited a home, child care or other building built before 1978 with recent or ongoing painting, repair and/or remodeling?
- Is your child enrolled in or attending a Head Start program?
- Does your child have a brother, sister, other relative, housemate or playmate with lead poisoning?
- Does your child spend time with anyone that has a job or hobby where they may work with lead?
- Do you have pottery or ceramics made in other countries or lead crystal or pewter that are used for cooking, storing or serving food or drink?
- Has your child ever taken any traditional home remedies or used imported/foreign cosmetics?
- Has your child been adopted from, lived in or visited another country?
- Do you have concerns about your child's development?

Lead Screening Questionnaire

- Has your child lived in or regularly visited a home, child care or other building built before 1950?
- Has your child lived in or regularly visited a home, child care or other building built before 1978 with recent or ongoing painting, repair and/or remodeling?

- If answering yes I would have them skip question 2
- Because during the decade from 1940-1950 was WWII and the immediate post war years, my experience has been that it's not a high lead paint use time. Pre-1940 seems to make more sense here if we're not going to default to pre-1978 and plan to take a more targeted approach to assessing risk based on home age.
- I think it would be difficult for a parent to actually answer this question based on the "child care or other building". I think you might gain accuracy/utility from this question by focusing on the child's home. So would suggest:

  Has your child ever lived in a house or apartment that was built before 1950?
- Not sure it's fully necessary, more so an observation - WA state's screener includes a caveat to this risk factor that says “screening may not be indicated if the home has previously undergone lead abatement or tested negative for lead after remodeling”

Lead Screening Questionnaire

- Has your child lived in or regularly visited a home, child care or other building built before 1950?
- Has your child lived in or regularly visited a home, child care or other building built before 1978 with recent or ongoing painting, repair and/or remodeling?

- My experience has been that even a single visit to a home where recent remodeling has taken place can produce a bad acute exposure. So I'm not sure they have to "regularly" visit the home. Perhaps simply saying "visited" is sufficient.
- same issue as #1. and think #1 and #2 could be combined:

  Has your child ever lived in a house or apartment that was built before 1978?
- same comment as #1

Lead Screening Questionnaire

- Is your child enrolled in or attending a Head Start program?

• I would like this to include info on why this is asked or be expanded to capture a wider array of low income families if that is the goal.
• Is this question relevant for screening? Is this just a way to ask if they are low income? And, if that is the case, wouldn't it be easiest to just phrase this as a household income question?
• I wonder if it would be better to spell out what this question is [I think] trying to do - identify children at greater risk for lead exp because they are living below FPL, have certain health issues or disabilities, in foster care, etc - since it may miss people who are eligible but aren't enrolled in/attending the program currently.

HEAD START | ECLKC
Early Childhood Learning & Knowledge Center

Strategies for Meeting the Lead Screening Requirement in Head Start

Local Primary Care Providers

Work in partnership with your local primary care providers to obtain blood lead tests for all Head Start-enrolled children. Clarify that Head Start references the Early and Periodic Screening, Diagnostic and Treatment (EPSDT) requirements for Medicaid-eligible children as a standard of well-child care and is applied to all children enrolled in Head Start and Early Head Start programs. Head Start follows the lead screening requirement under the EPSDT program of the Centers for Medicare and Medicaid Services which states: "CMS requires that all children receive a screening blood lead test at 12 months and 24 months of age. 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." EPSDT Benefits

Lead Screening Questionnaire

- Is your child enrolled in or attending a Head Start program?

• I would like this to include info on why this is asked or be expanded to capture a wider array of low income families if that is the goal.
• Is this question relevant for screening? Is this just a way to ask if they are low income? And, if that is the case, wouldn't it be easiest to just phrase this as a household income question?
• I wonder if it would be better to spell out what this question is [I think] trying to do - identify children at greater risk for lead exp because they are living below FPL, have certain health issues or disabilities, in foster care, etc - since it may miss people who are eligible but aren't enrolled in/attending the program currently.

Lead Screening Questionnaire

- Does your child spend time with anyone that has a job or hobby where they may work with lead?
  - *Examples: see list on back of this questionnaire*

- I love this really comprehensive list (compared to the one on WA screener), and pleasantly surprised to see that it already includes leaded gasoline/racing/vintage vehicles since that's on our mind right now with the PIR. It makes me wonder if racing should be included under hobbies or if living near / frequently attending PIR events should be captured on there somewhere, or if that would be more appropriate as its own info page/document.

Lead Screening Questionnaire (*back of questionnaire*)

Possible Sources of Lead

Occupational

- Painters
- Home remodelers/renovators
- Construction/demolition workers
- Bridge maintenance/repair
- Auto body repairers/painters
- Battery manufacturers/recyclers
- Radiator repairers/manufacturing
- Furniture refinishers
- Plumbers, pipe fitters
- Roofers
- Lead miners, smelters, & refiners
- Glass, copper and brass manufacturers
- Boat builders/painters/repair
- Ceramics making /glaze mixing
- Printers (ink)
- Plastic & rubber manufacturers
- Police officers
- Firing range instructors
- Steel welders or cutters
- Jewelry-making
- Gas station attendants
- Aircraft repair
- X-ray shielding/film radiology

Environmental/Other

- Lead-based paint (pre-1978)
- Soil/dust near lead industries, roadways, lead-painted houses
- Plumbing and solder
- Cosmetics & hair dye
- Vinyl mini blinds (pre-1997)
- Imported ceramic tiles for the kitchen/bathroom
- Handle building materials
- Gutters, flashing, tile, window glazing
- Ceramicware/glazed pottery
- Porcelain bathtubs
- Leaded glass/pewter
- Leaded gasoline (race/collector cars)
- Soldered copper pipes
- Submersible pumps in wells
- Brass plumbing fixtures
- Bronze, pewter, leaded crystal
- Electronics manufacturers
- Pesticides
- Imported crayons
- Storage batteries
- Plastic insulation on electrical wiring and old telephone wiring
- Candle wicks
- Imported/foreign cosmetics or religious powders (kohl, sindoor, surma, tiro, kajal, vibuhti ash)

Hobbies and Related Activities

- Home remodeling/renovation
- Car or boat repair
- Glazing/making pottery
- Reloading/target shooting at ranges
- Eating rifle-hunted game meat
- Furniture refinishing
- Making/handling lead shot and fishing weights/sinkers
- Using lead soldering/welding
- Oil painting (artistic)
- Making stained glass
- Jewelry making
- Repairing old painted wooden or metal toys

Ingested Sources

- Traditional/home remedies (Azarcon, Greta, Pay-loo-ah, Ayurvedic).
- Mexican candy (containing tamarind or chili peppers) and *chapulines*
- Spices (turmeric, saffron, curry)

Lead Screening Questionnaire

- Do you have pottery or ceramics made in other countries or lead crystal or pewter that are used for cooking, storing or serving food or drink?

6. Do you have pottery or ceramics made in other countries or lead crystal or pewter that are used for cooking, storing or serving food or drink?

- Maybe include the word "barro" here since other questions include specific names and barro pottery related cases are a legitimate issue in Oregon because of the Latino/a population.
- This is good - but do you want to name the regions where pottery is suspect like "pottery or ceramics made in Latin America or South America?"

Lead Screening Questionnaire

- Has your child ever taken any traditional home remedies or used imported/foreign cosmetics?
  - *Remedies: Azarcon, Alarcon, Greta*
  - *Cosmetics: Kohl, Surma, Sindoor, or KumKum*

- This is good but would expand this to include South Asian temple powders.
- Split into multiple questions with specific examples as part of the question. We have had many Washington County cases associated with religious powders, supplemental/health remedies/herbal medicine, and spices. Mexican candy and chapulines have also been associated with cases. I would recommend creating multiple questions here - one for traditional home remedies/supplements/medicine, one for cosmetics and religious powders and another for spices, especially if brought from abroad.

Lead Screening Questionnaire (*back of questionnaire*)

Possible Sources of Lead

Occupational

- Painters
- Home remodelers/renovators
- Construction/demolition workers
- Bridge maintenance/repair
- Auto body repairers/painters
- Battery manufacturers/recyclers
- Radiator repairers/manufacturing
- Furniture refinishers
- Plumbers, pipe fitters
- Roofers
- Lead miners, smelters, & refiners
- Glass, copper and brass manufacturers
- Boat builders/painters/repair
- Ceramics making /glaze mixing
- Printers (ink)
- Plastic & rubber manufacturers
- Police officers
- Firing range instructors
- Steel welders or cutters
- Jewelry-making
- Gas station attendants
- Aircraft repair
- X-ray shielding/film radiology

Environmental/Other

- Lead-based paint (pre-1978)
- Soil/dust near lead industries, roadways, lead-painted houses
- Plumbing and solder
- Cosmetics & hair dye
- Vinyl mini blinds (pre-1997)
- Imported ceramic tiles for the kitchen/bathroom
- Handle building materials
- Gutters, flashing, tile, window glazing
- Ceramicware/glazed pottery
- Porcelain bathtubs
- Leaded glass/pewter
- Leaded gasoline (race/collector cars)
- Soldered copper pipes
- Submersible pumps in wells
- Brass plumbing fixtures
- Bronze, pewter, leaded crystal
- Electronics manufacturers
- Pesticides
- Imported crayons
- Storage batteries
- Plastic insulation on electrical wiring and old telephone wiring
- Candle wicks
- Imported/foreign cosmetics or religious powders (kohl, sindoor, surma, tiro, kajal, vibuhti ash)

Hobbies and Related Activities

- Home remodeling/renovation
- Car or boat repair
- Glazing/making pottery
- Reloading/target shooting at ranges
- Eating rifle-hunted game meat
- Furniture refinishing
- Making/handling lead shot and fishing weights/sinkers
- Using lead soldering/welding
- Oil painting (artistic)
- Making stained glass
- Jewelry making
- Repairing old painted wooden or metal toys

Ingested Sources

- Traditional/home remedies (Azarcon, Greta, Pay-loo-ah, Ayurvedic).
- Mexican candy (containing tamarind or chili peppers) and *chapulines*
- Spices (turmeric, saffron, curry)

Lead Screening Questionnaire

- Has your child been adopted from, lived in or visited another country?

- Would add a time period for "visited". Is there a list of counties that can be references similar to how the list of hobbies was provided?
- "..been adopted from or recently lived in or visited.."
- No change. We have also had cases associated with amulets and jewelry. Wondering if that could be incorporated here?

Sources of Lead Exposure

Lead can be found throughout a child's environment.

- Homes built before 1978 (when lead-based paints were banned) probably contain lead-based paint. When the paint peels and cracks, it makes lead dust. Children can be exposed to lead when they swallow or breathe in lead dust.
- Certain water pipes may contain lead.
- Lead can be found in some products such as toys and jewelry.
- Lead is sometimes in candies or traditional home remedies.
- Certain jobs and hobbies involve working with lead-based products, like stain glass work, and may cause parents to bring lead into the home.
- Children who live near airports may be exposed to lead in air and soil from aviation gas.

Please provide any recommendations on additional questions or lead exposure sources that should be considered for the lead screening questionnaire. You can also provide any additional feedback on the questionnaire that might be helpful for the Oregon Health Authority to evaluate its use and effectiveness.

· Add a question "do you have any concerns about other possible sources of lead not asked about in this questionnaire?"
· Does your child regularly or occasionally put objects or items in their mouth that are not specifically made for children (for example: keys, jewelry, metal items like bells)?
· I would advocate for universal screening vs this questionnaire. In the families we work with it is extremely rare to have a child not screen positive on any of these questions.
· I think you should add a question about tumeric purchased in South East Asian countries.
· 1. Do you live near an airport. 2. Have you received a notice from your water supplier or from your child's school stating the water system is in violation for exceeding the lead action level?

Please provide any recommendations on additional questions or lead exposure sources that should be considered for the lead screening questionnaire. You can also provide any additional feedback on the questionnaire that might be helpful for the Oregon Health Authority to evaluate its use and effectiveness.

- Proximity to an airport.
- A specific question for religious powders and having separate questions to fully capture kids who have risks from imported/purchased abroad foods, spices, powders and cosmetics.
- The WA screener includes a note that providers should consider testing if a parent has concerns or requests testing, or if living within a km of an airport or lead emitting industry (thinking PIR could be an OR specific example here..) or on former orchard land
- The WA screener is just a little more visually pleasing, and I think the workflow layout (if this --> do this) really appeals to healthcare workers (we love a good workflow!) and may be more easily integrated into practice and the EMR.
- Although probable exposure for ingestion is included in the second portion of the sheet, it would be helpful to include it in the checklist of questions to insure, this is receiving attention and not being overlooked. In addition proximity to factories or airports should be considered based on existing literature.

EPA United States Environmental Protection Agency

Search EPA.gov

Environmental Topics | Laws & Regulations | Report a Violation | About EPA

News Releases: Headquarters | Air and Radiation (OAR)

CONTACT US

EPA Proposes Endangerment Finding for Lead Emissions from Aircraft Engines that Operate on Leaded Fuel

Proposed Endangerment Finding, if finalized, is an important step forward to address the largest remaining source of lead pollution to air

October 7, 2022

"This proposed endangerment finding will undergo public notice and comment, and after evaluating comments on the proposal, EPA plans to issue any final endangerment finding in 2023."

Emissions of Lead from Aircraft Engines

The majority of aircraft that operate on leaded aviation gasoline are piston-engine aircraft. These are typically small aircraft that carry 2-10 passengers. Jet aircraft used for commercial transport do not operate on a fuel containing lead.

Piston-engine aircraft are the largest single source of lead emissions to the air in the U.S., contributing 70% of the lead entering the air annually. The emissions of lead from aircraft operating on leaded fuel cause elevated levels of lead in air near airports.

Potential Sources of Lead	Guidance for Families
Lives or spends time near: • Major roadways or freeways • A former or current lead or steel smelter • A foundry or industrial facility that historically emitted or currently emits lead • A general aviation airport used by small aircraft	• Tell your healthcare provider if your children live or spend time near these types of roadways or facilities. • Do not let children play or spend time near these types of roadways or facilities.

Healthcare providers should consider testing additional children per clinical judgment, such as:

- Child whose parents have concern or request testing (including older children that have risk of exposure.)
- Child living within a kilometer of an airport or lead emitting industry or on former orchard land.
- Child with pica behavior.
- Child with neurodevelopmental disabilities or conditions such as autism, ADHD, and learning delays.

Please provide any recommendations on additional questions or lead exposure sources that should be considered for the lead screening questionnaire. You can also provide any additional feedback on the questionnaire that might be helpful for the Oregon Health Authority to evaluate its use and effectiveness.

- Proximity to an airport.
- A specific question for religious powders and having separate questions to fully capture kids who have risks from imported/purchased abroad foods, spices, powders and cosmetics.
- The WA screener includes a note that providers should consider testing if a parent has concerns or requests testing, or if living within a km of an airport or lead emitting industry (thinking PIR could be an OR specific example here..) or on former orchard land
- The WA screener is just a little more visually pleasing, and I think the workflow layout (if this --> do this) really appeals to healthcare workers (we love a good workflow!) and may be more easily integrated into practice and the EMR.
- Although probable exposure for ingestion is included in the second portion of the sheet, it would be helpful to include it in the checklist of questions to insure, this is receiving attention and not being overlooked. In addition proximity to factories or airports should be considered based on existing literature.

Washington State Department of Health

RECOMMENDATIONS FOR BLOOD LEAD TESTING OF CHILDREN IN WASHINGTON STATE

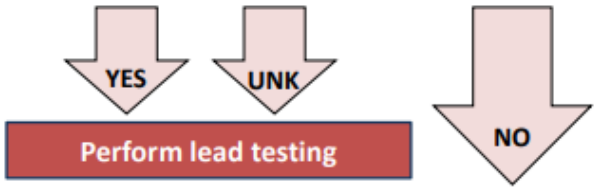
The Department of Health recommends screening children using the below algorithm at 12 and 24 months of age.

Does the child have any of the following risk factors:

- Lives in or regularly visits any house built before 1950.*
- Lives in or regularly visits any house built before 1978 that has recent or ongoing renovations or remodeling.
- From a low income family (defined as incomes <130% of the poverty level.)**
- Known to have a sibling or frequent playmate with elevated blood lead level.
- Is a recent immigrant, refugee, foreign adoptee, or child in foster care.
- Has a parent or principal caregiver who works professionally or recreationally with lead. (See sidebar for examples.)
- Uses traditional, folk, or ethnic remedies or cosmetics (such as Greta, Azarcon, Ghasard, Ba-baw-san, Sindoor or Kohl.)

* Screening may not be indicated if the home has previously undergone lead abatement or tested negative for lead after remodeling.

** Federal law mandates testing for all children covered by Medicaid.



Healthcare providers should consider testing additional children per clinical judgment, such as:

- Child whose parents have concern or request testing (including older children that have risk of exposure.)
- Child living within a kilometer of an airport or lead emitting industry or on former orchard land.
- Child with pica behavior.
- Child with neurodevelopmental disabilities or conditions such as autism, ADHD, and learning delays.

LEAD RISK EXPOSURE EXAMPLES:

Occupations and Hobbies:

- *Remodeling and demolition*
- *Painting*
- *Work or visit gun range*
- *Mining, smelting, battery recycling*
- *Making lead fishing weights or ammunition*
- *Stained glass*
- *Soldering and welding*

Consumer Products:

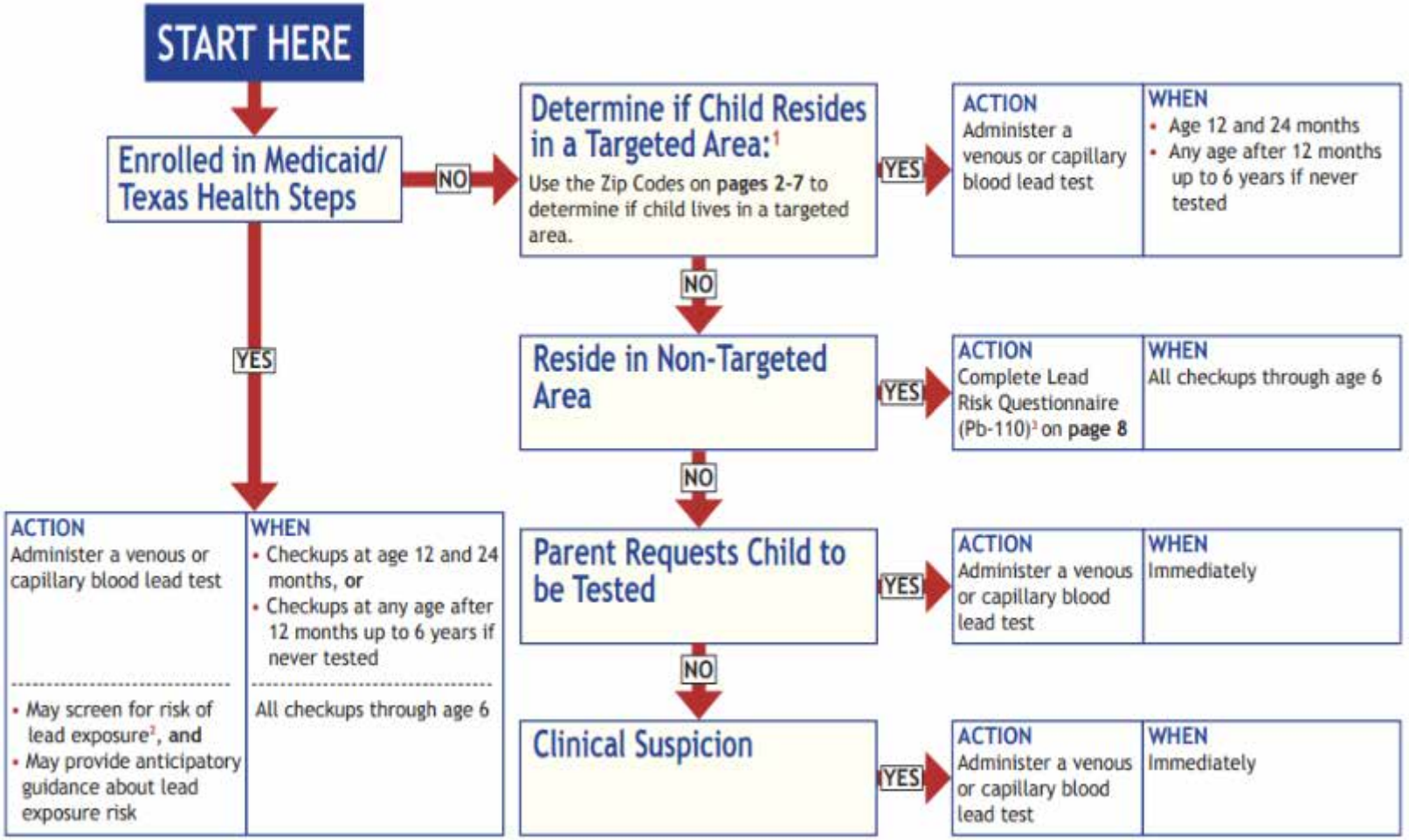
- *Pottery or porcelain with lead glaze*
- *Informally imported foods, candies and spices*
- *Antique furniture and inexpensive jewelry*

TEXAS Health and Human Services

Texas Department of State Health Services

Childhood Blood Lead Screening Guidelines

Form Pb-120



NOTE: After a blood lead test is administered and you receive the results; use Pb-109 Form[4], *Reference for Follow-up Testing and Medical Case Management*, to determine if or when follow-up testing and medical case management is necessary.

Questions, concerns, or feedback on revisions or additions to the Lead Screening Questionnaire

Lead Screening Questionnaire

- Has your child lived in or regularly visited a home, child care or other building built before 1950?
- Has your child lived in or regularly visited a home, child care or other building built before 1978 with recent or ongoing painting, repair and/or remodeling?
- Is your child enrolled in or attending a Head Start program?
- Does your child have a brother, sister, other relative, housemate or playmate with lead poisoning?
- Does your child spend time with anyone that has a job or hobby where they may work with lead?
- Do you have pottery or ceramics made in other countries or lead crystal or pewter that are used for cooking, storing or serving food or drink?
- Has your child ever taken any traditional home remedies or used imported/foreign cosmetics?
- Has your child been adopted from, lived in or visited another country?
- Do you have concerns about your child's development?

Avé Gray

Modifying the OHA Lead Screening Questionnaire to Assess Parental Risk Perception of Childhood Lead Exposure

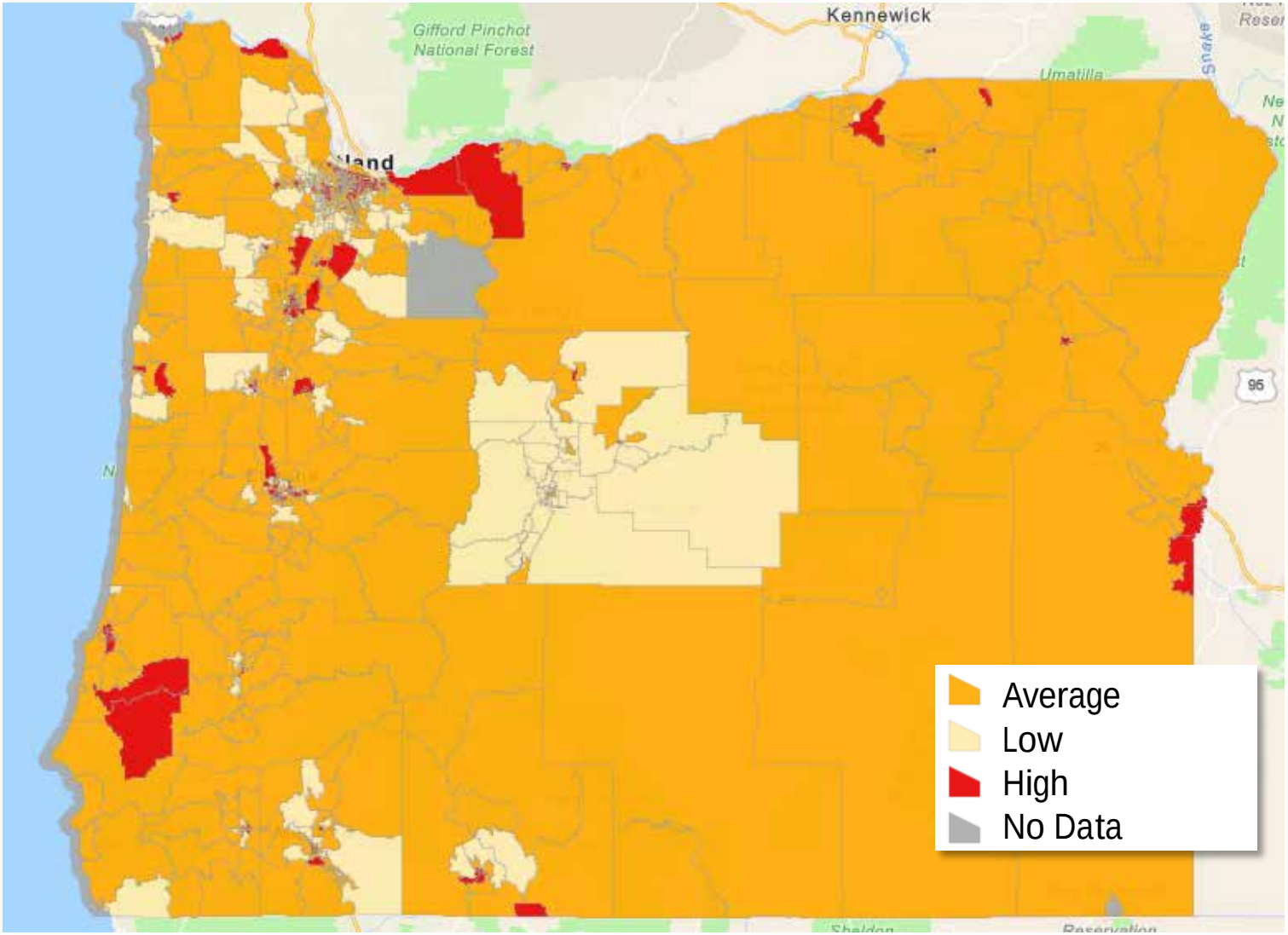
Lead Hazard Vulnerability Analysis as a Geographic Screening Tool

Lead Hazard Vulnerability Factors

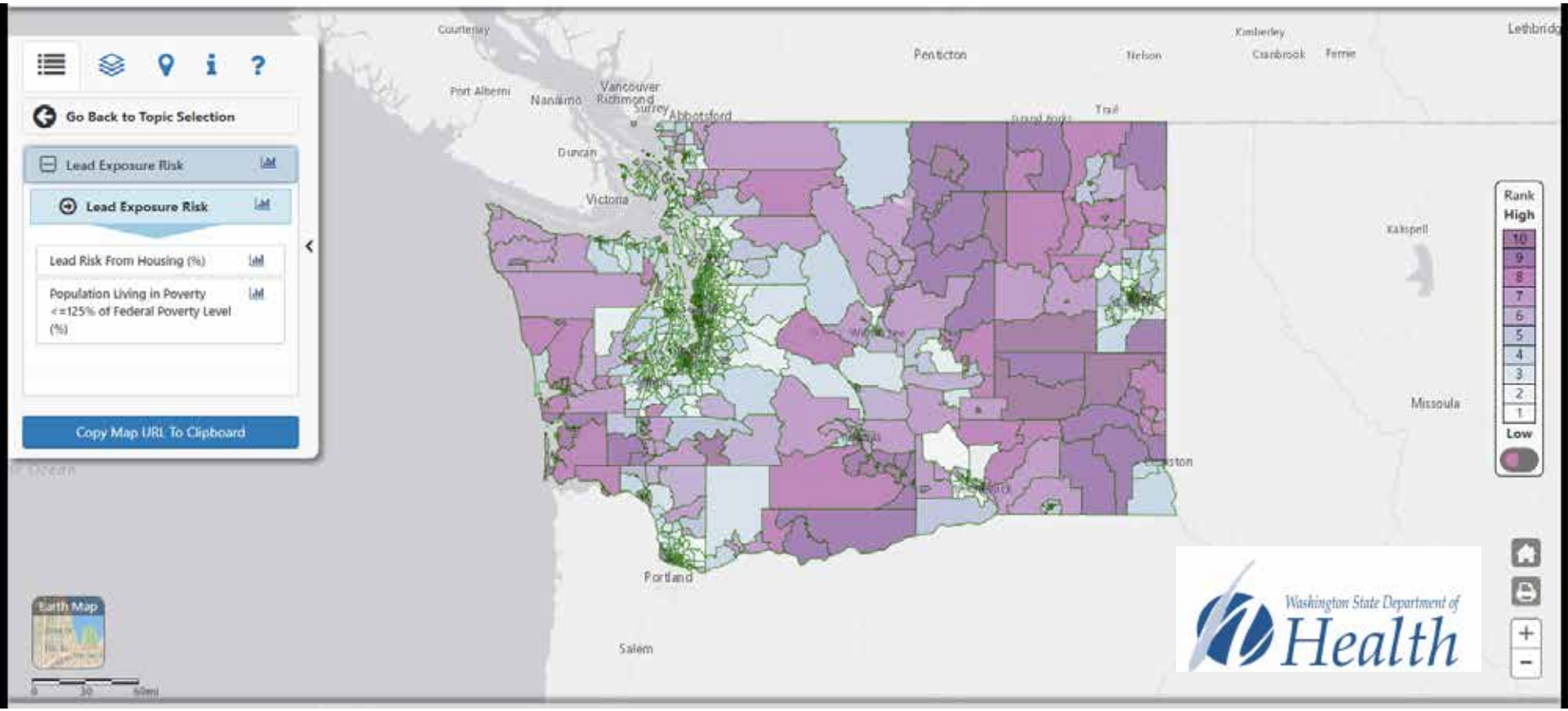
Oregon CLPP Risk Model

- Housing Age
  - Percent of housing built prior to 1980
- Poverty
  - Percent of households below the FPL
- Young children
  - Percent of children 0-5 years old
- Foreign-born population
  - Percent of population that is foreign born

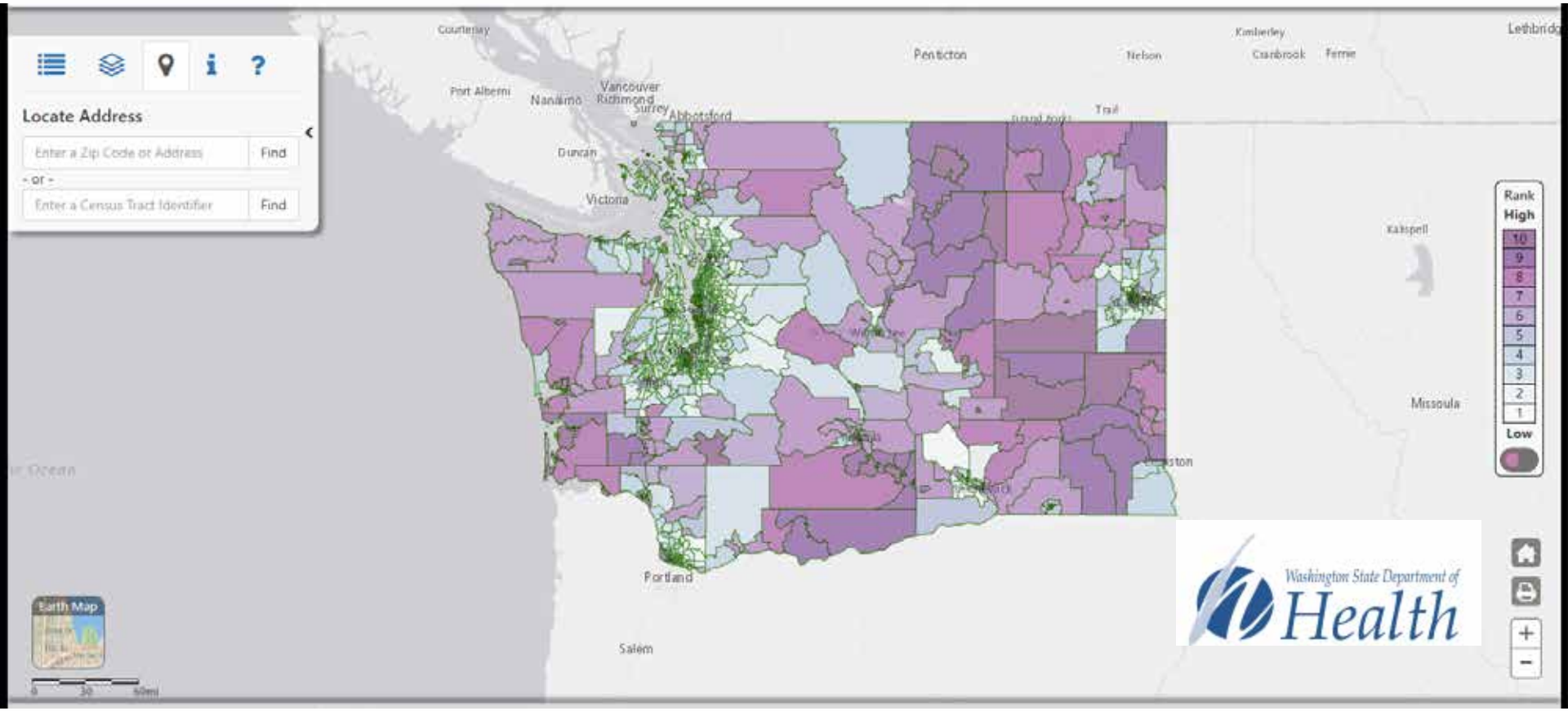
Lead Hazard Vulnerability Map



Other States/Municipalities Using a Geographic-Based Targeted Approach

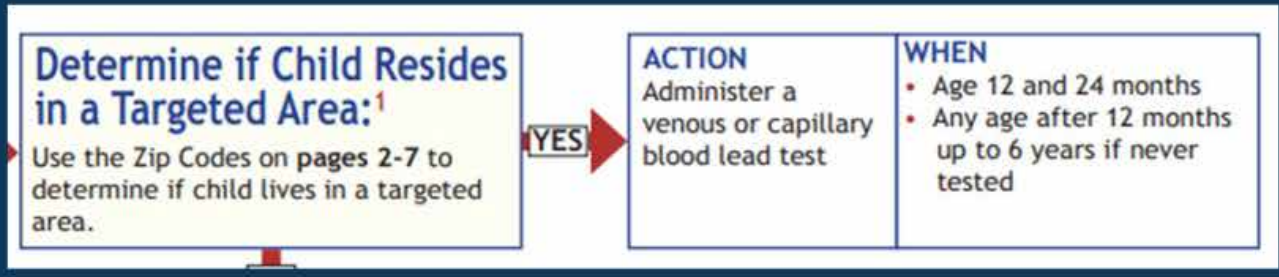


Other States/Municipalities Using a Geographic-Based Targeted Approach



Other States/Municipalities Using a Geographic-Based Targeted Approach

Screening in Houston: Targeted Zip Codes

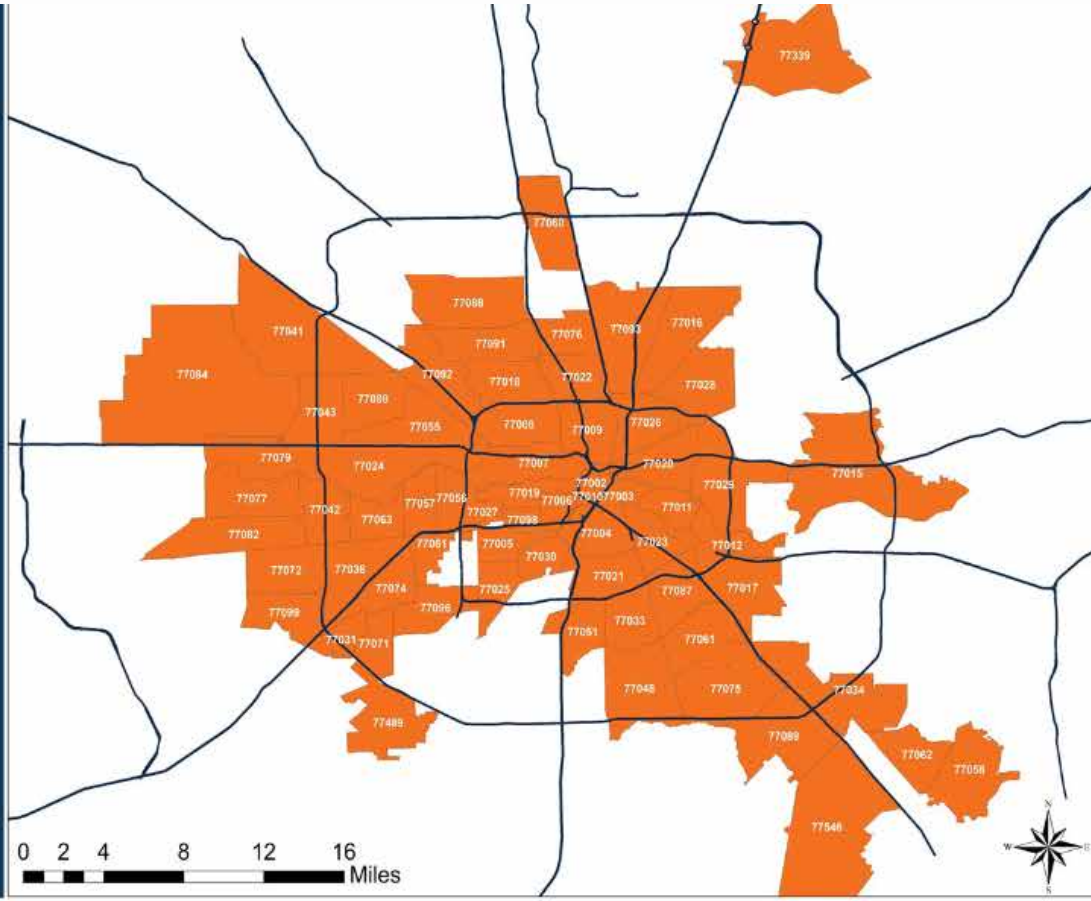


- The City of Houston has targeted screening for lead in children under the age of 6 years based on zip code of residence.
- Any child residing in identified targeted zip codes must be blood lead tested at checkups at age 12 AND 24 months (or any checkup through age 6, if never been tested).

Other States/Municipalities Using a Geographic-Based Targeted Approach

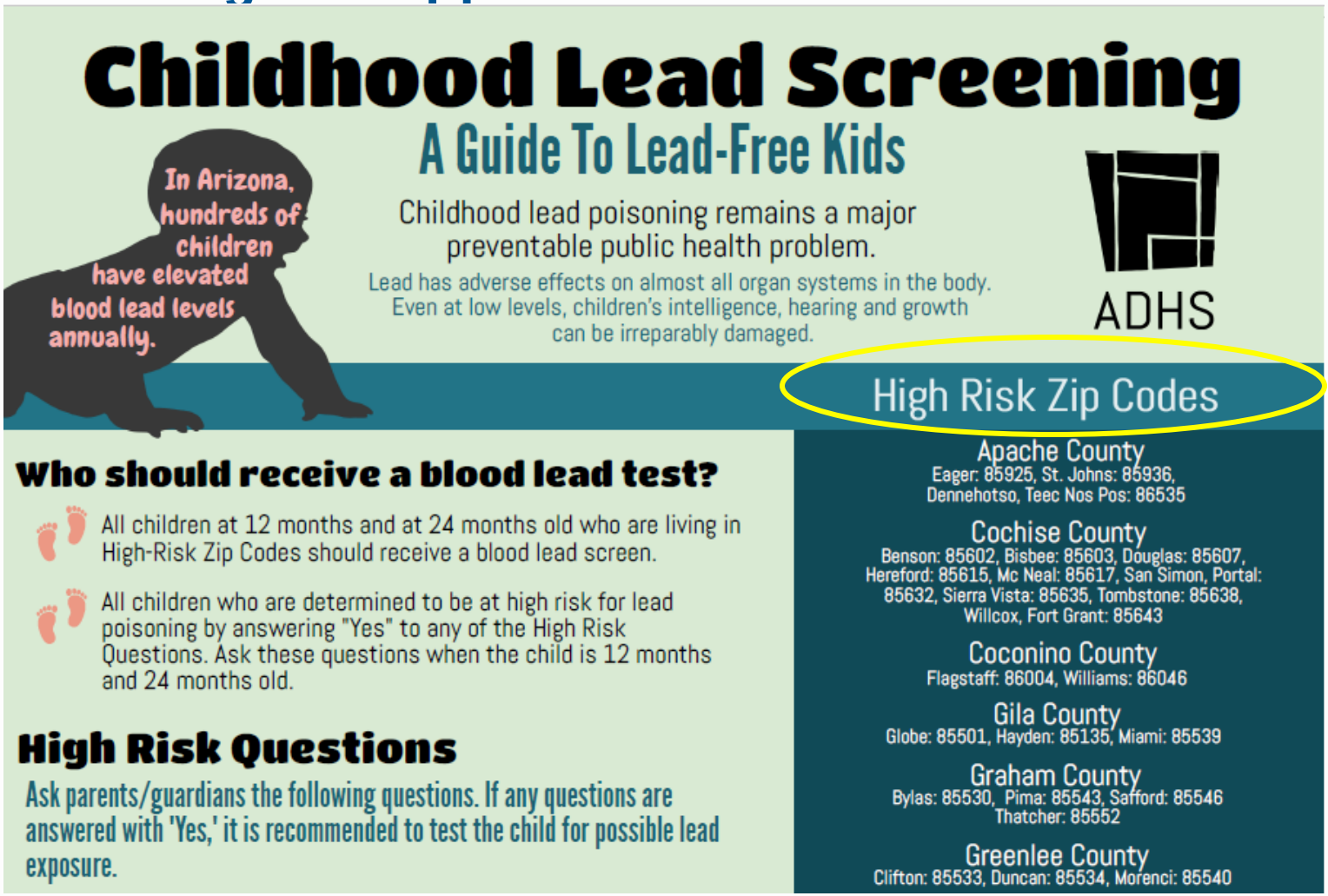
Houston's Targeted Zip Codes

- A targeted zip code has at least one associated census tract in which:
  1. The percentage of children age 1-2 years old with a blood lead level ≥ 5 mcg/dL is ≥ 3% among those tested in 2016; OR
  2. The percentage of residential structures built before 1950 ≥ 27%.
- There are 67 targeted zip codes in the City of Houston (shown to the right).

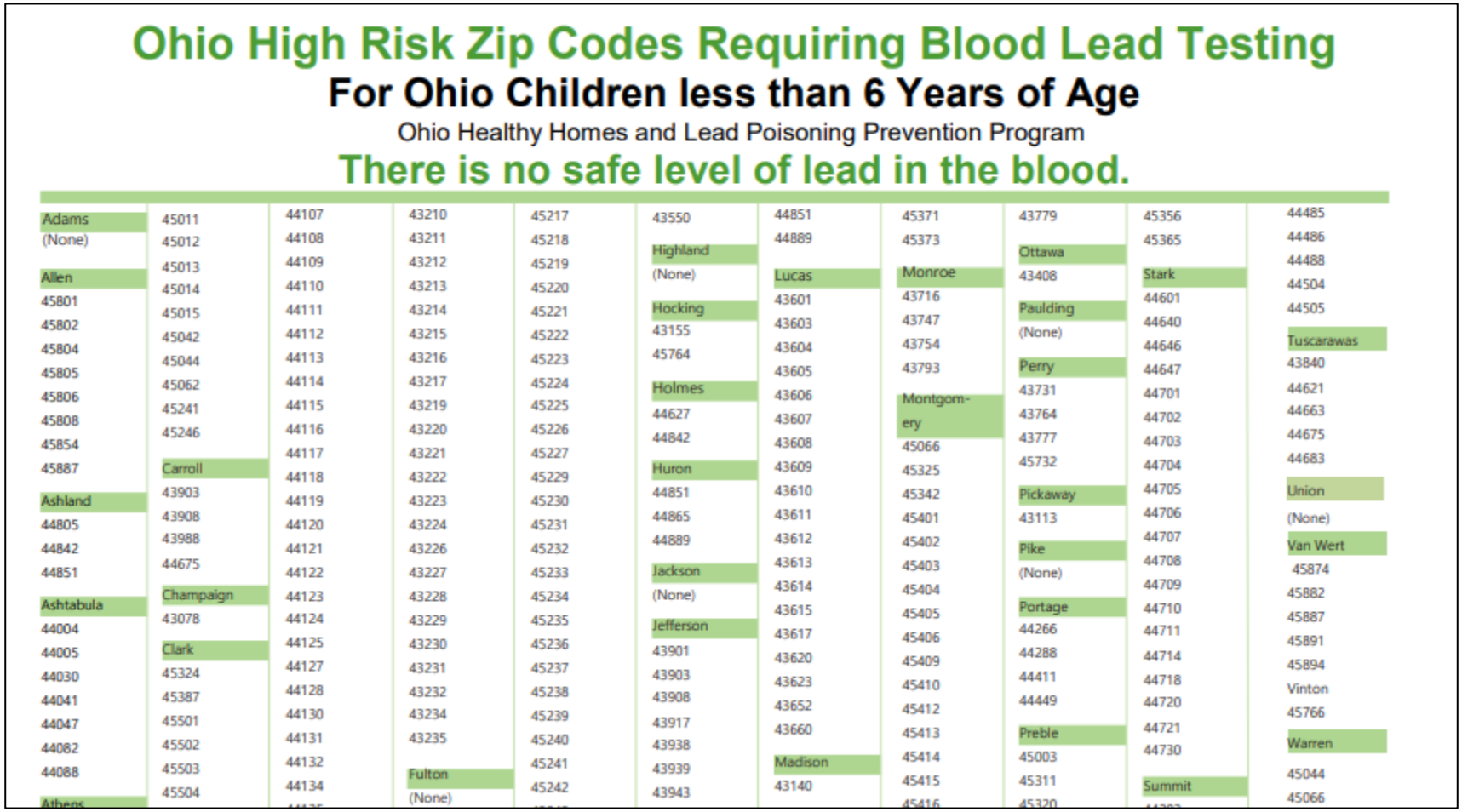


HOUSTON HEALTH DEPARTMENT

Other States/Municipalities Using a Geographic-Based Targeted Approach



Other States/Municipalities Using a Geographic-Based Targeted Approach



Ohio High Risk Zip Codes Requiring Blood Lead Testing

For Ohio Children less than 6 Years of Age

Ohio Healthy Homes and Lead Poisoning Prevention Program

There is no safe level of lead in the blood.

Adams
(None)

Allen
45801
45802
45804
45805
45806
45808
45854
45887

Ashland
44805
44842
44851

Ashtabula
44004
44005
44030
44041
44047
44082
44088

Athens
45011
45012
45013
45014
45015
45042
45044
45062
45241
45246

Carroll
43903
43908
43988
44675

Champaign
43078

Clark
45324
45387
45501
45502
45503
45504

44107
44108
44109
44110
44111
44112
44113
44114
44115
44116
44117
44118
44119
44120
44121
44122
44123
44124
44125
44127
44128
44130
44131
44132
44134

43210
43211
43212
43213
43214
43215
43216
43217
43219
43220
43221
43222
43223
43224
43226
43227
43228
43229
43230
43231
43232
43234
43235

Fulton
(None)

45217
45218
45219
45220
45221
45222
45223
45224
45225
45226
45227
45229
45230
45231
45232
45233
45234
45235
45236
45237
45238
45239
45240
45241
45242

43550

Highland
(None)

Hocking
43155
45764

Holmes
44627
44842

Huron
44851
44865
44889

Jackson
(None)

Jefferson
43901
43903
43908
43917
43938
43939
43943

44851
44889

Lucas
43601
43603
43604
43605
43606
43607
43608
43609
43610
43611
43612
43613
43614
43615
43617
43620
43623
43652
43660

Madison
43140

45371
45373

Monroe
43716
43747
43754
43793

Montgomery
45066
45325
45342
45401
45402
45403
45404
45405
45406
45409
45410
45412
45413
45414
45415

43779

Ottawa
43408

Paulding
(None)

Perry
43731
43764
43777
45732

Pickaway
43113

Pike
(None)

Portage
44266
44288
44411
44449

Preble
45003
45311

45356
45365

Stark
44601
44640
44646
44647
44701
44702
44703
44704
44705
44706
44707
44708
44709
44710
44711
44714
44718
44720
44721
44730

Summit

44485
44486
44488
44504
44505

Tuscarawas
43840
44621
44663
44675
44683

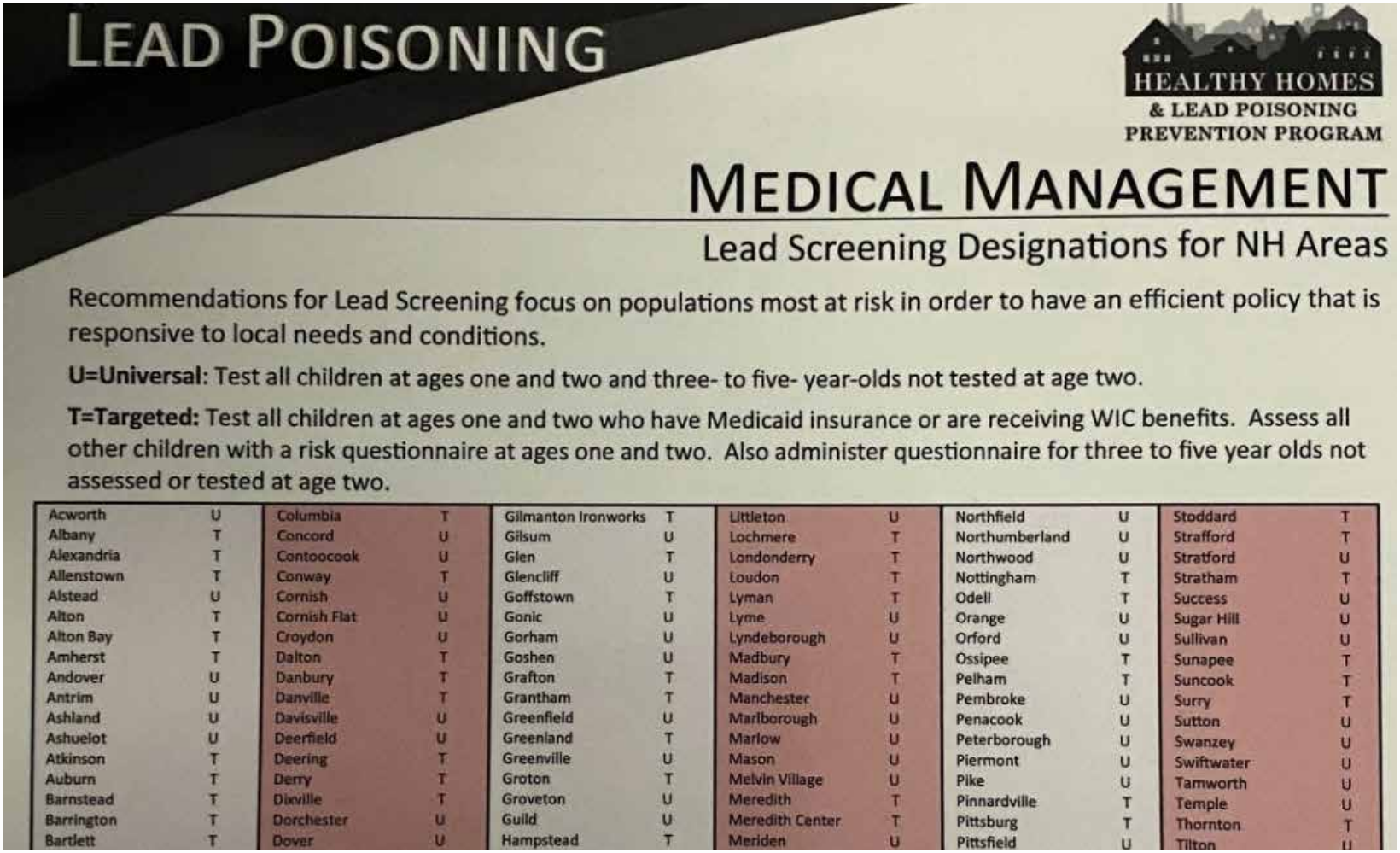
Union
(None)

Van Wert
45874
45882
45887
45891
45894

Vinton
45766

Warren
45044
45066

Other States/Municipalities Using a Geographic-Based Targeted Approach



LEAD POISONING

HEALTHY HOMES & LEAD POISONING PREVENTION PROGRAM

MEDICAL MANAGEMENT

Lead Screening Designations for NH Areas

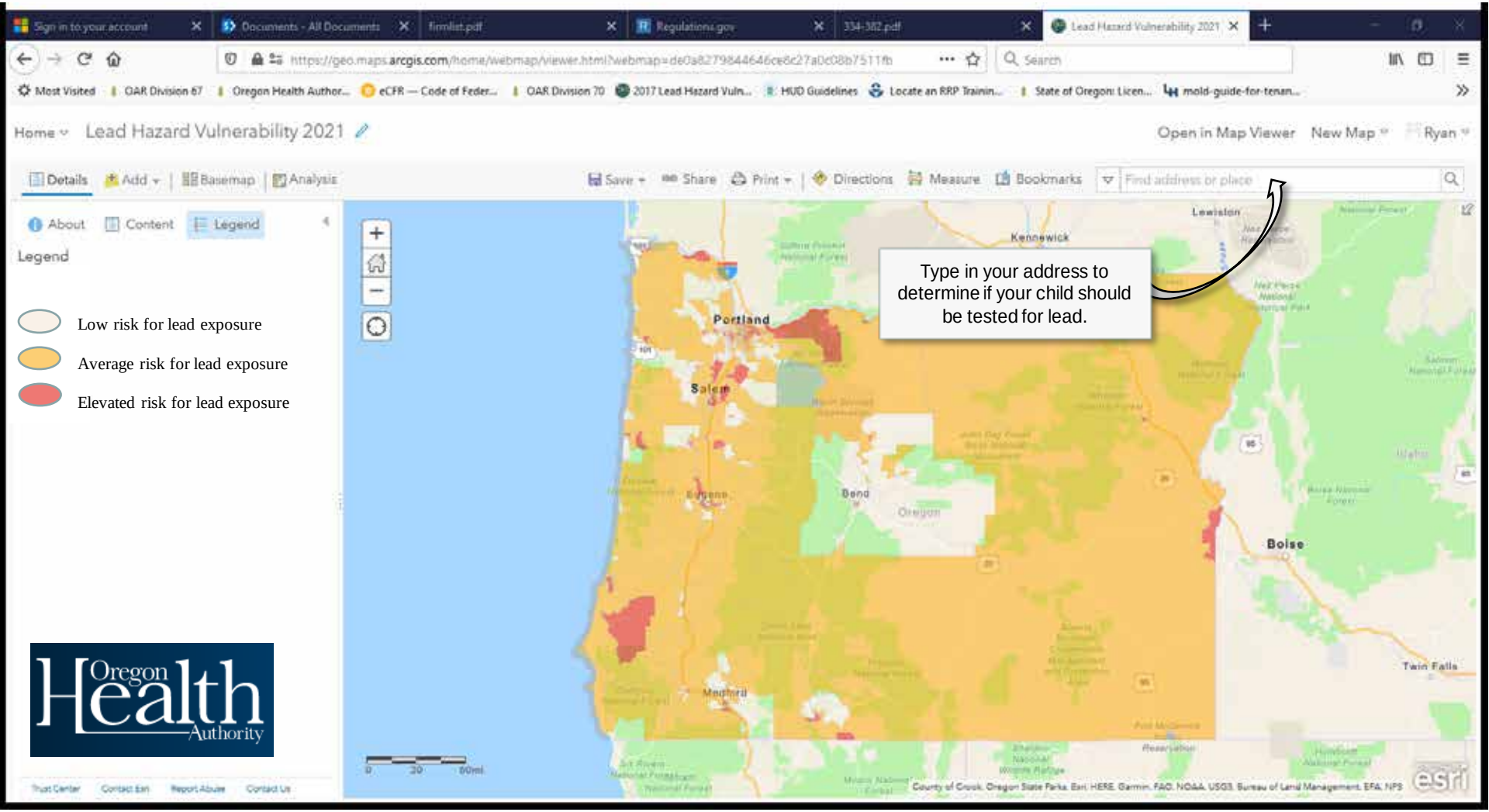
Recommendations for Lead Screening focus on populations most at risk in order to have an efficient policy that is responsive to local needs and conditions.

U=Universal: Test all children at ages one and two and three- to five- year-olds not tested at age two.

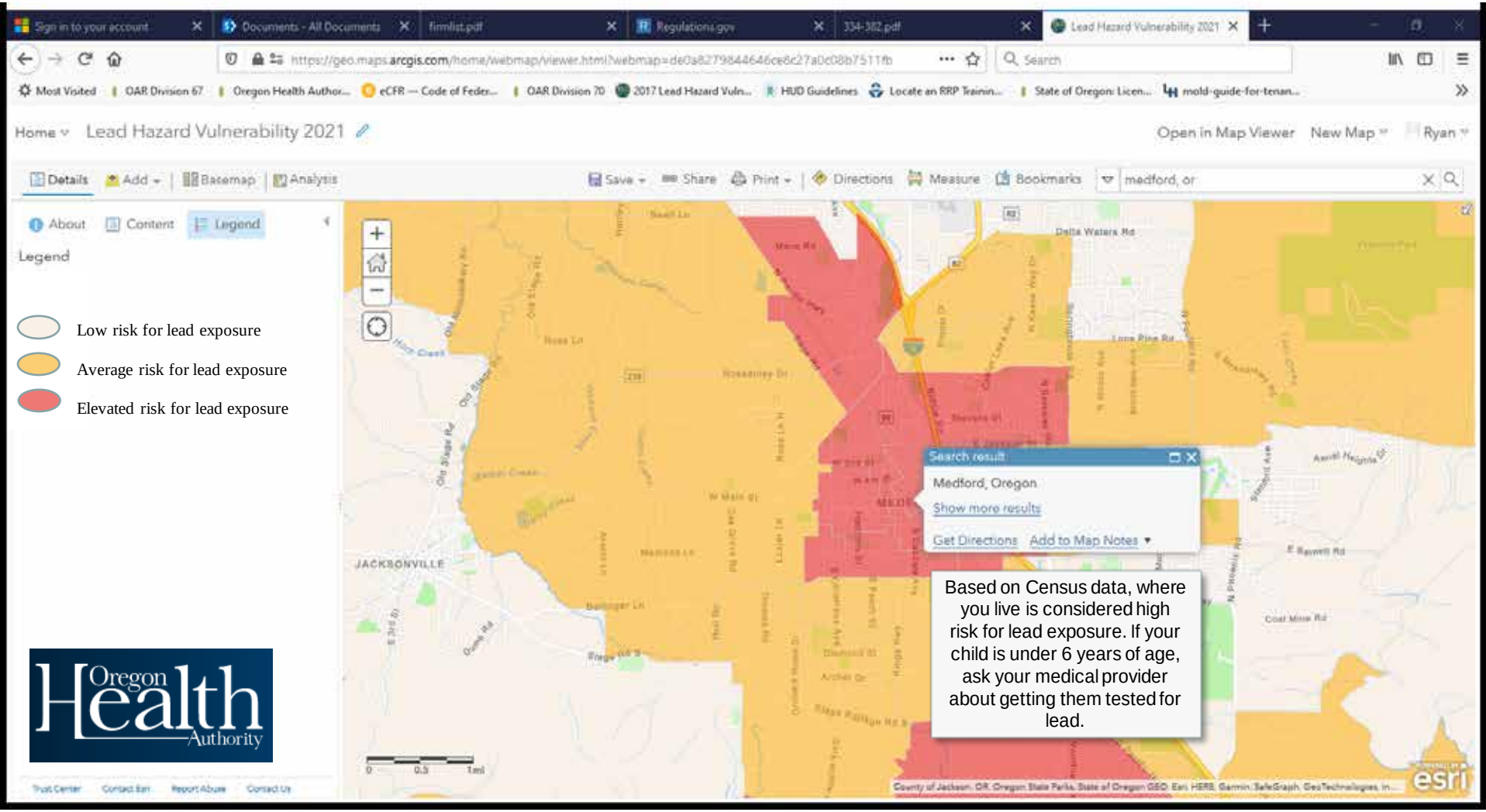
T=Targeted: Test all children at ages one and two who have Medicaid insurance or are receiving WIC benefits. Assess all other children with a risk questionnaire at ages one and two. Also administer questionnaire for three to five year olds not assessed or tested at age two.

Acworth	U	Columbia	T	Gilmanton Ironworks	T	Littleton	U	Northfield	U	Stoddard	T
Albany	T	Concord	U	Gilsum	U	Lochmere	T	Northumberland	U	Strafford	T
Alexandria	T	Contoocook	U	Glen	T	Londonderry	T	Northwood	U	Stratford	U
Allenstown	T	Conway	T	Glencliff	U	Loudon	T	Nottingham	T	Stratham	T
Alstead	U	Cornish	U	Goffstown	T	Lyman	T	Odell	T	Success	U
Alton	T	Cornish Flat	U	Gonic	U	Lyme	U	Orange	U	Sugar Hill	U
Alton Bay	T	Croydon	U	Gorham	U	Lyndeborough	U	Orford	U	Sullivan	U
Amherst	T	Dalton	T	Goshen	U	Madbury	T	Ossipee	T	Sunapee	T
Andover	U	Danbury	T	Grafton	T	Madison	T	Pelham	T	Suncook	T
Antrim	U	Danville	T	Grantham	T	Manchester	U	Pembroke	U	Surry	T
Ashland	U	Davisville	U	Greenfield	U	Marlborough	U	Penacook	U	Sutton	U
Ashuelot	U	Deerfield	U	Greenland	T	Marlow	U	Peterborough	U	Swanzey	U
Atkinson	T	Deering	T	Greenville	U	Mason	U	Piermont	U	Swiftwater	U
Auburn	T	Derry	T	Groton	T	Melvin Village	U	Pike	U	Tamworth	U
Barnstead	T	Dixville	T	Groveton	U	Meredith	T	Pinnardville	T	Temple	U
Barrington	T	Dorchester	U	Guild	U	Meredith Center	T	Pittsburg	T	Thornton	T
Bartlett	T	Dover	U	Hampstead	T	Meriden	U	Pittsfield	U	Tilton	U

Using High-Risk Census Tracts as an Additional Lead Screening Option



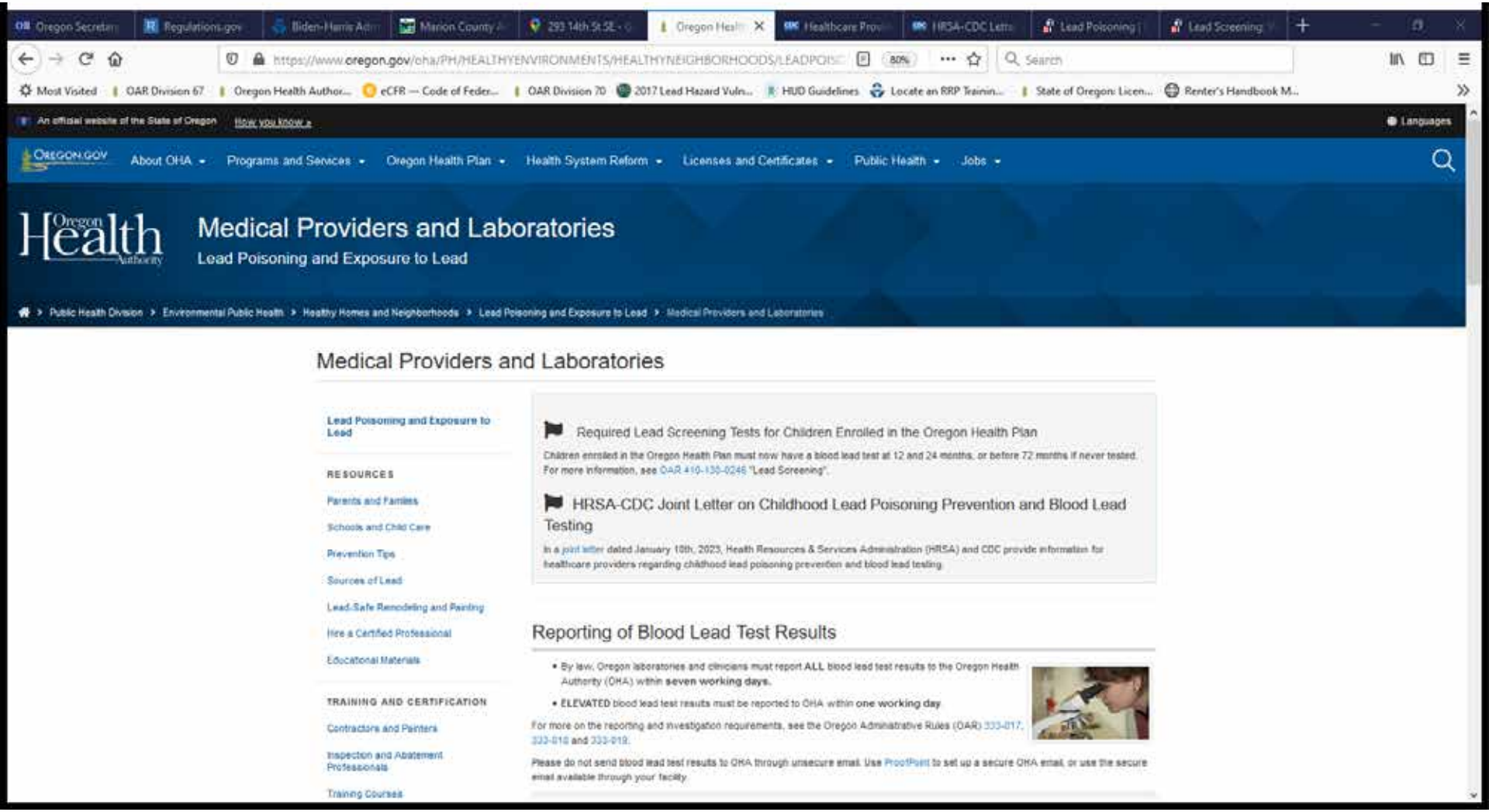
Using High-Risk Census Tracts as an Additional Lead Screening Option



Oregon Health Authority

Questions, concerns, or feedback on Oregon CLPPP recommending use of a geographic screening tool to further identify children at risk for lead exposure

Recommendations for Communication to Providers


Oregon Health Authority
Medical Providers and Laboratories
Lead Poisoning and Exposure to Lead
Medical Providers and Laboratories
Lead Poisoning and Exposure to Lead
RESOURCES
Parents and Families
Schools and Child Care
Prevention Tips
Sources of Lead
Lead-Safe Remodeling and Painting
Hire a Certified Professional
Educational Materials
TRAINING AND CERTIFICATION
Contractors and Painters
Inspection and Abatement Professionals
Training Courses
Required Lead Screening Tests for Children Enrolled in the Oregon Health Plan
HRSA-CDC Joint Letter on Childhood Lead Poisoning Prevention and Blood Lead Testing
Reporting of Blood Lead Test Results

HRSA Health Resources & Services Administration

CDC Centers for Disease Control and Prevention

ATSDR Agency for Toxic Substances and Disease Registry

HRSA-CDC Letter on Childhood Lead Poisoning Prevention and Blood Lead Testing

January 10, 2023

Dear Colleagues:

Childhood exposure to lead is preventable. As healthcare providers, you can help by:

- Learning about childhood lead exposure and appropriate prevention strategies.
- Educating parents/guardians about the ways to prevent children from becoming exposed to lead.
- Following CDC's Recommended Actions Based on Blood Lead Levels.
- Ensuring all Medicaid recipients in your practice are tested for lead according to federal requirements.
- Ensuring all children at higher risk for lead poisoning are tested.
- Ensuring all children with confirmed blood lead levels at or above 3.5 micrograms per deciliter and their families connect with follow-up services for case management.

State of Oregon
Health Alert Network

IMPORTANT - PLEASE REVIEW THIS UPDATED ADVISORY FROM THE CDC.

View the PDF of this CDC HAN Health Update: https://emergency.cdc.gov/han/2021/pdf/CDC_HAN_457.pdf

This is an official

CDC HEALTH UPDATE

Distributed via the CDC Health Alert Network

November 5, 2021, 10:00 AM ET

CDCHAN-00457

Michigan Department of Health and Human Services / Childhood Lead Poisoning Prevention Program

Lead Testing/Lead Screening Plan for Flint, Michigan

	Testing Criteria	Specifics
Criterion 1	**GEOGRAPHY** Children who live in the City of Flint, live in a home using City of Flint water, or who attend school, childcare or often spend time with a caregiver in the City of Flint.	***MDHHS strongly recommends that all children meeting one or more of these criteria have a blood lead test.***
Criterion 2	**MEDICAID and WIC** **Medicaid**: **ALL CHILDREN INSURED BY MEDICAID MUST BE TESTED—NO EXCEPTIONS OR WAIVERS EXIST.** **WIC:** **ALL CHILDREN ENROLLED IN WIC** **MUST BE TESTED** —pursuant to state law (Public Act 286 of 2006).	***Medicaid***: "CMS (Centers for Medicare and Medicaid Services) requires that all children receive a screening **blood lead test at 12 months and 24 months of age**. 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. A blood lead test must be used when screening Medicaid-eligible children." http://www.michigan.gov/mdhhs/0,5885,7-339-71551_2945_5100-87572--,00.html ***WIC:*** "[T]he department of community health shall require that all children participants in the special supplemental food program for women, infants, and children (WIC program) receive lead testing." (http://www.legislature.mi.gov/documents/2005-2006/publicact/pdf/2006-PA-0286.pdf) *MDHHS recommends the testing schedule be 12 and 25 months of age, or not later than 30 months (this is intended to coincide with WIC hemoglobin tests).*
Criterion 3	**FAMILY** Does the child live with a member of the household who has an elevated blood lead level?	***MDHHS strongly reccomends that all family members living in the home have a blood lead test.***
Criterion 4	**QUESTIONNAIRE** for **Children who do NOT meet Criterion 1 -3** The child's parents/guardians should be asked specific exposure questions (see questionnaire at right) to determine each child's risk.	**QUESTIONNAIRE** ***If the answer is "yes" or "don't know" for any question, the child should be tested.*** 1. Does the child live in or often visit a house, daycare, preschool, home of a relative, etc., built before 1950? 2. Does the child live in or often visit a house built before 1978 that has been remodeled within the last year? 3. Does the child have a playmate or close relative with lead poisoning? 4. Does the child live with an adult whose job or hobby involves lead? 5. Does the child's family use any home remedies or cultural practices that may contain or use lead? 6. Is the child included in a special population group, i.e., foreign adoptee, refugee, migrant, immigrant, foster?

Revised 1.8.2016

LEAD POISONING

CHILD MEDICAL MANAGEMENT
Quick Guide for Lead Testing & Treatment

HEALTHY HOMES & LEAD POISONING PREVENTION PROGRAM

Initial Capillary Blood Lead Level
Schedule For Obtaining Venous Sample

Capillary Blood Lead	Confirm With Venous Test
<5mcg/dL	Confirmation not necessary unless other risk factors. Test children less than 12 mos. old in 3 to 6 months as BLL may increase with mobility. Retest child at 1 and 2 years old.
5-7.4 mcg/dL	Within 3 months.
7.5-19 mcg/dL	Within 1 month
20-44 mcg/dL	Within in 1 week
45-69 mcg/dL	Within 48 hours
70+ mcg/dL	Immediately as an emergency test

The **higher** the capillary test result, the more urgent the need for a **confirmatory venous test**

Initial Venous Blood Lead Level
Schedule For Venous Re-testing

Venous Blood Lead	Follow-Up and Re-testing
< 5 mcg/dL	Retest child at 1 and 2 years old. Retest child in 6 – 12 months if child is at high risk or risk changes during time frame.
5-9 mcg/dL	Within 3 months *May necessitate frequent follow-up testing.
10-19 mcg/dL	Every 3 months
20-39 mcg/dL	Every 1-2 months
40-69 mcg/dL	Every 1-2 weeks (even after chelation)
70+ mcg/dL	Initiate chelation and re-test within 1-2 weeks

*Some providers may choose to repeat BLL tests within 1 month to ensure BLL is not rising more quickly than anticipated.

Clinical Treatment Guidelines for Venous Confirmed Blood Lead Levels

3 - 7.4 mcg/dL

- Provide parents three factsheets
  - Lead & Children
  - Lead & Nutrition
  - Lead Hazards
- Follow-up BLL monitoring
- Retest infants earlier than 1-6 months
- Test siblings for EBLL
- The HHLPPP sends letter notifying parents of EBLL

7.5 - 44 mcg/dL

Continue management, AND

- Rule out iron deficiency & prescribe iron if needed
- Neurodevelopmental monitoring & consider referral for evaluation
- Patients with BLL of 25-44 mcg/dL need aggressive environmental intervention
- For BLL 25 - 44mcg/dL, CHEMET (succimer) is NOT recommended as there is no cognitive benefit
- The HHLPPP provides nurse case management & an environmental lead investigation

45 - 69 mcg/dL

- Contact PEHSU at Boston Children's Hospital at (617) 355-8177 for immediate consultation on lead toxicity therapy
- Confirm BLL within 2 days
- Stop iron therapy prior to chelation
- Begin chelation in consultation with clinician experienced in lead toxicity therapy
- Consider directly observed therapy with CHEMET (succimer)
- Ensure child is discharged to a lead-free environment

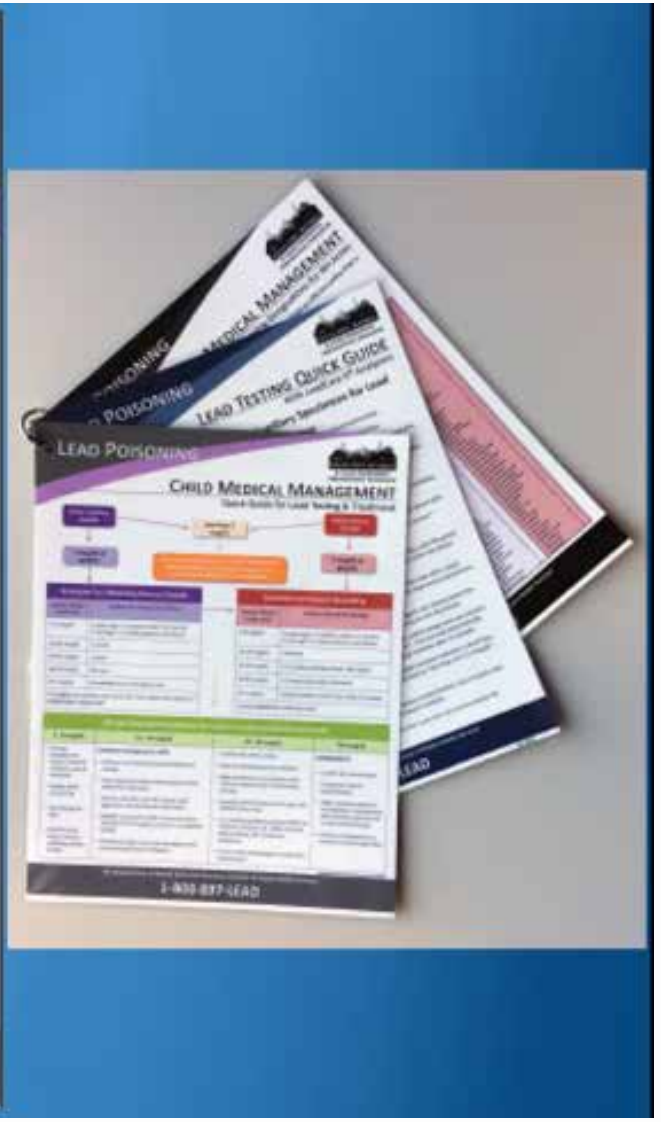
70+ mcg/dL

EMERGENCY!

- Confirm BLL immediately
- Hospitalize even if asymptomatic
- Contact PEHSU at Boston Children's Hospital at (617) 355-8177 for immediate consultation on lead toxicity therapy
- Stop iron therapy prior to chelation
- Ensure child is discharged to a lead-free environment

NH Department of Health & Human Services, Division of Public Health Services

1-800-897-LEAD (5323) or LeadRN@dhhs.nh.gov



The Identification and Management of Childhood Lead Poisoning

ASSESS THE RISK

- Use a blood lead test to screen all children 1-6 who live in the Salt Lake County Target Area (see map).
- Use a blood lead test to screen any children 1-6 outside the target area who answer "yes" OR "don't know" to either of the following questions:
  - **Q.** During the past 6 months has the child lived in or regularly visited a home, childcare or other building built before 1960?
  - **Q.** During the past 6 months has the child lived in or regularly visited a home, childcare or other building built before 1978 with recent or ongoing repair, remodeling or damage (such as water damage or chipped paint)?
- **Utah State Medicaid** requires all Medicaid enrolled children to have a blood lead test at 12 and 24 months of age. Children between 12-72 months must be tested if they have not previously been tested. This is a federally mandated component of the CHEC screening.

Common Sources and Pathways of Lead Exposure

Deteriorated lead-based paint and lead in dust and soil are the most common sources of exposure.

Parental occupations and associated materials:

- Interior and exterior renovation, repair and demolition
- Bridge, tunnel and highway construction
- Plumbing fixtures, fittings and trim
- Valve and pipe fittings
- Automotive repair
- Pottery
- Firing ranges
- Batteries (wet and dry) and storage of batteries
- Lead-containing artists' paint or ceramic glazes
- Lead solder (e.g. for electronics)
- Secondary smelting and refining of metals
- Brass and copper foundries

Parental hobbies and associated materials:

- Home repair, repainting or remodeling
- Furniture refinishing
- Car repair
- Making fishing weights, sinkers or toy solders
- Casting ammunition
- Making stained glass
- Imported or antique dishes and ceramics
- Traditional medicines and cosmetics:
  - **Asian:** Chuifong tokuwan, pay-loo-ah, ghasard, bali goli, kandu
  - **Mexican:** Azarcon and greta (a.k.a. liga, Maria Luisa, alarcon, coral and rueda)
  - **Middle Eastern:** Alkohl, kohl, surma, saoot

Nutrition

A diet rich in calcium and iron may help minimize the gastrointestinal absorption of lead.

Some foods with calcium:

Dairy: Milk, breast milk, cheese, yogurt
Greens: Collard, kale, mustard, spinach, turnip
Bok choy
Broccoli
Tofu
Fortified orange juice

Some foods with iron:

Meat: Red meat, liver, poultry
Grains: Enriched cereal, bread, pasta, rice
Greens: Collard, spinach
Beans
Nuts
Raisins
Molasses

See Reverse >

Follow-up Schedule for Elevated Blood Lead Levels

Blood Lead Level	Response
<10µg/dL	• Negative result. No intervention. No additional action necessary unless exposure sources change.
For all Elevated Blood Lead Levels	• Report all lead levels ≥10 µg/dL to the Salt Lake Valley Health Department (SLVHD) at 534-4607. • SLVHD nurse case manager will conduct family lead education and environmental assessment at levels of 10 µg/dL and above. • The higher the blood lead level, the more timely and extensive the intervention.
10-14 µg/dL	• Venous retesting in 3 months; blood lead testing every 3 months until two consecutive BLL <10 µg/dL.
15-19µg/dL	• Venous retesting in 3 months; blood lead testing every 3 months until two consecutive BLL <10 µg/dL. • If BLLs persist (two follow up BLL in this range at least 3 months apart) or worsen, recommend environmental investigation.
20-44µg/dL	• Venous retesting within 1 week to 1 month. The higher the screening BLL, the more urgent the need for a timely diagnostic test. • Blood lead testing as indicated until BLL < 20 µg/dL for at least 6 months. • Perform history, physical exam and nutritional assessment. • Evaluate iron status.
45-69µg/dL	• Same as 20-44 µg/dL. • In addition: Consider chelation therapy in consultation with clinicians experienced in lead toxicity treatment.
>70µg/dL	HOSPITALIZE CHILD AND BEGIN MEDICAL CARE IMMEDIATELY • Venous retesting within 24 hours of referral. • Perform history, physical exam and nutritional assessment. • Consider chelation therapy in consultation with clinicians experienced in lead toxicity treatment. • Blood lead testing as indicated until BLL < 20 µg/dL for at least 6 months.

Frequently Asked Questions

What are the symptoms?
A child may present with one or several non-specific symptoms, such as fatigue, loss of appetite or colic. Most children with elevated lead levels are asymptomatic and will not be diagnosed unless they are tested.

What health effects are associated with lead poisoning in young children?
Some large population-based studies have found statistical association between blood lead levels as low as 10 µg/dL and adverse effects such as impaired cognitive development.

Which children should be tested?
Those children younger than 6, especially 1 to 3 year olds (see Assess the Risk). While pica (ingestion of non-food substances) has been implicated in childhood lead poisoning, it is much more common for young children to ingest lead-contaminated dust through their normal hand-to-mouth activity. They also absorb a significant amount due to the high efficiency of their gastrointestinal tracts.

How would I test a child for lead poisoning?
Venous collection is considered the gold standard but it is acceptable to test using capillary collection (finger-stick or heel-stick), especially if your practice is set up to perform hematocrits.

What is considered an 'elevated' blood lead level?
10 µg/dL or greater is an elevated blood lead level and must be reported to the Salt Lake Valley Health Department at 534-4607.

Why all these requirements about testing?
Because lead poisoning is generally asymptomatic, the only way to identify a child with lead poisoning is by testing.

What happens if a child tests positive for lead?
For levels 10-15 µg/dL a Salt Lake Valley Health Department public health nurse will follow up by phone to determine the possible sources of exposure and give suggestions for remediation of the lead hazard. The nurse will talk with the family about nutritional measures to minimize absorption of lead and provide information on the dangers of lead poisoning. For levels >15-19 µg/dL the nurse will conduct a home visit for education and environmental assessment. If the lead level is at or above 20 µg/dL, the nurse and the Health Department's environmental scientist go to the home to conduct lead risk assessment. This investigation pinpoints the source of exposure so measures can be taken to reduce lead hazards in the child's environment. The nurse remains in contact with the primary care provider's office to coordinate care.

SALT LAKE COUNTY

lead free kids

(801) 534-4582
www.slvhealth.org

SLVHD
Salt Lake Valley Health Department

Feedback or recommendations to increase provider awareness of lead screening/testing

Next Steps

Lead Poisoning

1. DISEASE REPORTING

1.1 Purpose of Reporting and Surveillance

1. To assess the magnitude of lead exposure in Oregon.
2. To identify all tested individuals with elevated blood lead levels (EBLL).
3. To identify the sources of lead exposure for individuals with EBLL and to identify, notify, and evaluate others who may be at risk from those sources.
4. To ensure that individuals with EBLL receive proper medical management, including follow-up, until their blood lead concentration drops to acceptable levels.
5. To ensure that adequate environmental follow-up occurs, to reduce or eliminate the risk of further lead exposure from identified sources for the affected child and any family members, playmates, etc. who could also be exposed to the same source.
6. For occupational exposures, to ensure that the Oregon Occupational Safety and Health Division (OR-OSHA) is aware in a timely manner.

1.2 Laboratory Disease Reporting Requirements

1. Laboratories must report all blood lead test results directly to the local health authority or Oregon Health Authority (OHA) within seven days [333-018-0015 4(d)]. Lead poisoning (>= 5ug/dL under 18 years of age, >= 10 µg/dL over 18 years) must be reported within one local health department working day [333-018-0015 4(c)]; results may be sent electronically or faxed to (971) 673-0457.
2. Oregon law requires labs that send an average of >30 records per month to OHA to submit the data electronically. Please contact OHA at 971-673-1111 for Electronic Laboratory Reporting (ELR) initiation, assistance and approval.

1.3 Clinician Disease Reporting Requirements

1. Clinicians using point-of-care portable analyzers for blood lead testing are required to report all blood lead test results directly to the local health authority or OHA within seven days [333-018-0015 4(d)]. Lead poisoning (see definition) must be reported within one local health department working day [333-018-0015 4(c)]; results can be sent electronically or faxed to (971) 673-0457. For more information on reporting, contact OHA at 971-673-0440.

1.4 Local Health Authority Reporting and Follow-Up Responsibilities

Table 3. Follow-up Schedule for Blood Lead Results in Children

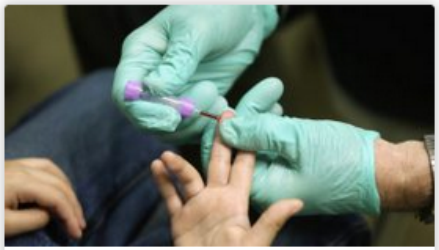
BLL (µg/dL)	Confirmation Testing (venous)	Follow-Up Testing (venous)	Case Management for BLLs in Children
5-9	As soon as possible, or within 7-14 days	3 months	**Clinician case management:** • Perform confirmatory testing. Confirm recent known exposure as soon as possible. • Provide risk reduction education • Provide nutritional education and refer to WIC as needed. If WIC enrolled, notify local WIC program of EBLL for nutritional assessment. • Ensure follow-up testing by established timeframe. • Include history of EBLL in problem list of child's permanent medical record. • See CDC guidelines for more medical management recommendations. **LPHA case management:** • Contact caregiver regarding child's BLL. • Ensure case is confirmed with venous test **before** investigating, either with physician or parent. • Complete *Elevated Blood Lead Investigation Questionnaire* over phone to explore possible exposure sources. • Complete on-site investigation to identify lead hazards. Follow procedures outlined in Section 7, *Environmental Investigation Procedures*. If on-site investigation is not practical or feasible (as determined on a case-by-case basis), a phone interview using the *Elevated Blood Lead Investigation Questionnaire* may be acceptable. • Refer to housing remediation services if applicable and/or available.

Recommended Actions Based on Blood Lead Level

Print

Summary of Recommendations for Follow-up and Case Management for Children

CDC recommends testing blood for lead exposure. Two types of blood collection tests may be used:



Capillary sample: A finger-prick or heel-prick is used to take a small amount of blood to test for lead.

Venous sample: A small amount of blood is taken after a needle is inserted into the patient's vein to test for lead.

A patient's blood lead level (BLL) is measured in micrograms of lead per deciliter of blood (µg/dL). Recommendations are provided for initial screening capillary and confirmed* venous BLLs.

Risk Assessor Training for Local Public Health Authorities

Early Intervention Referral

Oregon's EI/ECSE program has defined the following categories of eligibility for Part C:

2. **Children with Diagnosed Physical or Mental Conditions Associated with Significant Delays in Development:** Children birth through two years of age with a diagnosed physical or mental condition known to have a high probability of resulting in significant delays in development, and who may or may not be exhibiting delays in development at the time of

Conditions Associated with a High Probability of Significant Developmental Delay:
Examples include but are not limited to:

e) Infections, conditions, or events, occurring prenatally through 36 months, resulting in significant medical problems known to be associated with significant delays in development, such as:

- Recurring seizures or other forms of ongoing neurological injury (e.g. Epilepsy, where seizures are frequent or difficult to control, or the underlying condition is frequently associated with cognitive impairment, e.g. infantile spasms),
- APGAR score of five or less at five minutes,
- Evidence of significant exposure to known teratogens (e.g. Fetal Alcohol Syndrome),
- Severe encephalopat… such as trauma, drow…
- HIV infection
- Lead poisoning, with lead level of 5 µg/dL or greater
- Intraventricular hemorrhage – Grades III or IV

• Lead poisoning, with lead level of 5 µg/dL or greater

EPA Updates and Proposed Changes

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 745

[EPA–HQ–OPPT–2023–0231; FRL–8524–01–OCSPP]

RIN 2070–AK91

Reconsideration of the Dust-Lead Hazard Standards and Dust-Lead Post-Abatement Clearance Levels

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

EPA's Proposal to Strengthen Dust-Lead Standards

	Current Standards	Proposed Changes
Dust-Lead Hazard Standards	10 µg/ft^2 and 100 µg/ft^2 on floors and window sills	**Any level greater than zero reported by an EPA-recognized laboratory**
Dust-Lead Clearance Levels	10 µg/ft^2 and 100 µg/ft^2 on floors and window sills	**3 µg/ft^2** on floors, **20 µg/ft^2** on windows sills, and **25 µg/ft^2** on window troughs

- EPA's current hazard standards are 10 micrograms µg/ft² for floors and 100 µg/ft² for windowsills.
- EPA's current clearance levels are 10 µg/ft² for floors, 100 µg/ft² for windowsills and 400 µg/ft² for window troughs.

Lead Poisoning in Oregon

> Lead poisoning is a significant environmental health problem.

Laws and regulations are in place to protect people; however lead poisoning is still a risk for many Oregonians, especially children. The Lead Poisoning Prevention Program enforces state regulations, oversees professional training and certification, and responds to concerns about lead and its effect on public health.

Thank you!