



PREVENTING CHILDHOOD LEAD EXPOSURE

HEALTHY HOMES AND COMMUNITIES

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Free Water Testing for Lead and Copper

- Provides free water testing for child care and early learning sites.
- Tests for lead and copper in water used for drinking, formula and food preparation.
- Funded through the Environmental Protection Agency's (EPA's) Water Infrastructure Improvement for the Nation (WIIN) Grant.
- Testing may fulfill your Tribe's child care requirements.
- **Overall goal:** Protect youth from lead exposure


How Does It Work?

- Child care and early learning providers register through a [Survey Monkey link](#) on the Department of Health (DOH) [webpage](#).
- **Mail in Program:** DOH staff follows up and sends out testing supplies.
- Participants collect their own water samples and send them to accredited lab for testing.
- Detailed water collection and shipping instructions provided.
- After the lab receives the samples, results can take 2 to 3 weeks.


Water Sampling Instructions

Included Materials: Sampling bottles, barcode stickers, a "blank" sample (small sample bottle with water already in it), chain of custody form, plastic bag (to keep form dry).


- 1 Identify all water fixtures that are used for drinking, cooking, or making formula.
- 2 Give each water fixture a unique name for easy identification. Write that name on the sample bottle AND the chain of custody form. Each sample has two barcode stickers. Place one sticker directly on the bottle (use tape if needed) and the other on the chain of custody form next to the fixture's name.



3 Prepare the "blank sample," the small bottle that is already filled with water. Pour the water from the blank sample into an empty sample bottle and throw away the bottle it came in. Place one barcode sticker directly on the blank sample bottle and the other on the chain of custody form by the pre-filled column "blank sample." This sample helps us know your test results are accurate.



4 Collect COLD water samples from fixtures that have not been used for 8-18 hours. Collect first-draw samples in the morning after the water has been sitting still the night before. Collect the water sample immediately after turning on the faucet or valve, not allowing any water to spill. Fill each sample bottle with COLD water up to the 250ml mark on the bottle.



Sampling tips:


- Do not use the water fixture for 8-18 hours before taking the samples.
 - To prevent people from accidentally using the water before sampling, you can tape off the area and post "do not use" signs.
- Do not use the facility's restrooms, sinks, or other water-using appliances or fixtures the morning before sampling as this can disrupt the water we want to sample.
- Do not collect a sample from a fixture that has not been used in over 18 hours. If your facility is closed on the weekend, do not sample on Monday, and do not sample on the first day after a holiday or facility closure.
- Do not remove aerators or clean them before sampling.
- Water samples are time sensitive. Get the samples back in the mail to the DOH lab within a day or two after collecting them.

5 Make sure the chain of custody form is completed and make a copy or take a photo of the form for your records.


Shipping Instructions

Included Materials: Pre-filled FedEx shipping return label, box for shipping (use the same box your supplies arrived in), absorbent pads, packing paper.



- 1 Place the yellow absorbent pad on the bottom of the box and place tightly sealed bottles in the box. Use the packing paper to keep the water samples from moving around.



2 Make sure the chain of custody form is complete and place in plastic bag. Place the bag on top of sample bottles in box.



3 Remove old mailing labels. Seal box shut with packing tape, stick the pre-filled FedEx return label on box (keep the top copy for your records), and take box to the nearest FedEx location or call FedEx to have them come pick up the package.



4 Send us an email at leadfreekids@doh.wa.gov so that we can notify the lab that samples are the way.

5 We will contact you with your water test results and they will be posted on our [website](#) by license number. This typically takes 2-3 weeks after the lab receives the samples.

Questions? Need Help?
Contact us at leadfreekids@doh.wa.gov or 564-669-1098.

Results – What Happens Next?

- Based on individual results, participants receive an email with official results from DOH. It will let them know either:
 - No action is needed
 - Action is needed
- Actionable levels are 15 parts per billion (ppb) for lead and 1300 ppb for copper.
- The Environmental Protection Agency sets these levels.
- We want results **BELOW** these levels.
- Testing data is shared with the EPA in alignment with grant requirements.

No Action Needed

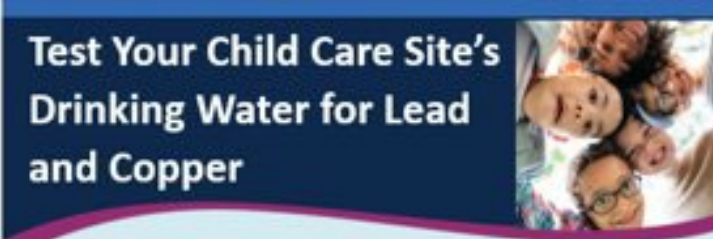
- Keep a copy of the results at the child care or early learning site.
- You should test your water again in six (6) years unless conditions change.
- NOTE: Any data shared with the EPA will be in aggregate form. No child care or early learning sites will be identified individually. Tribal data will not be shared publicly on the DOH website. Test results will only be shared with the tribal site requesting the testing.

Action Needed

- Take problem fixtures out of use and post “do not use for drinking or cooking” signs.
- DOH will reach out to discuss immediate and long-term solutions.
- DOH has funding to “fix” outlets that test at or above 15ppb for lead.
- DOH can provide follow up testing after remediation efforts take place.
- **Overall goal:** Make this process as simple as possible for child care and early learning providers.

Spread the Word

- Feel free to share:
 - Our flyer
 - Our SurveyMonkey [registration link](#)
 - Link to our [webpage](#)
 - Contact info
 - Ashley.Davies@doh.wa.gov
 - Leadfreekids@doh.wa.gov



Test Your Child Care Site's Drinking Water for Lead and Copper

Did you know Tribal [child care](#) and early learning providers may be required to test for lead and copper in their drinking water? Testing may fulfill your Tribe's [child care](#) requirements.

The Department of Health (DOH) offers a free mail in water testing program. All needed supplies and instructions are provided for [child care](#) sites to collect their own water samples and send back to the lab for testing. DOH also provides:

ACTION STEPS
To prevent and lower lead and copper levels in drinking and cooking water.

RECOMMENDATIONS AND RESOURCES
For correcting high lead levels.

GUIDANCE
For communicating with families and community members.

FOLLOW UP
Sampling and testing.

FREE water testing is funded through the Environmental Protection Agency's Water Infrastructure Improvements for the Nation Act (WIIN) [grant](#). Testing data is shared with the EPA and the public in alignment with grant requirements.

WANT TO PARTICIPATE?
Fill out our [registration form](#).

HAVE QUESTIONS OR WANT MORE INFORMATION?
Reach out to leadfreekids@doh.wa.gov or check out our [website](#).

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 **DOH 311-004 2024**
To request this document in another format, call 1-800-525-0127. Deaf or hard of hearing customers, please call 711 (Washington Relay) or email doh.information@doh.wa.gov.

Image by freepress.com

Child Lead Prevention and Response Program

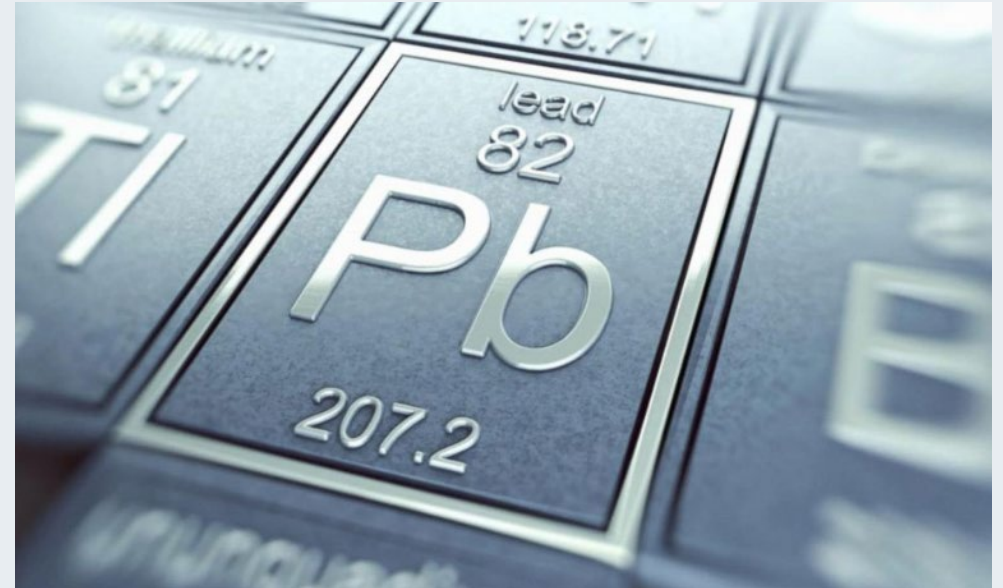
- **Primary bodies of work include:**
- Testing Promotion
- Case management coordination with local health jurisdictions (LHJs)
 - Notifiable Conditions rule designates LHJs as primary response
 - Tribal Public Health connections have not yet been established
- Partnerships

Health Effects of Lead



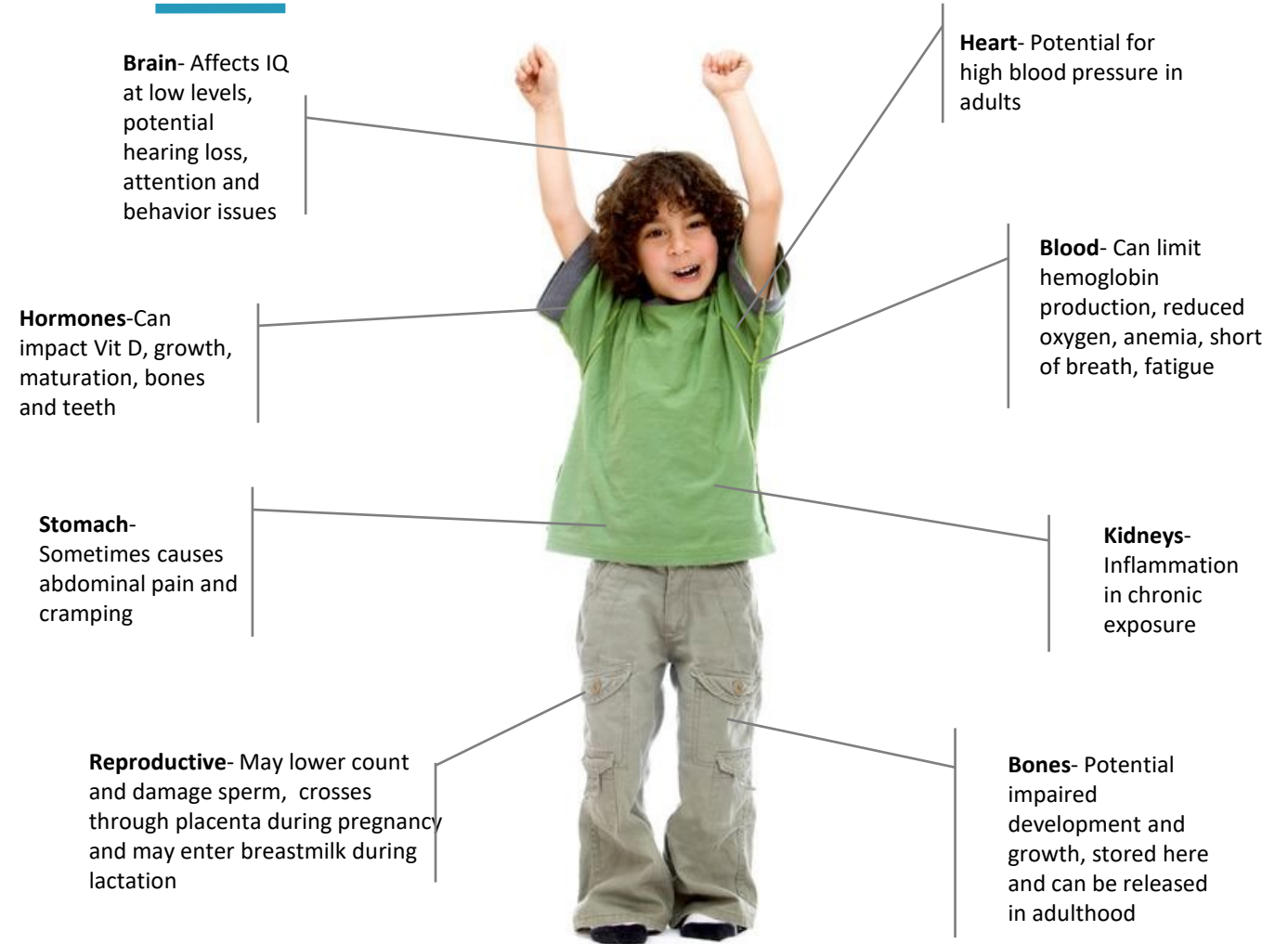
Lead

- Soft, blue-gray heavy metal; persistent in the environment.
- Occurs naturally but much of its presence in the environment stems from historic use in paint, gasoline, and from industry.
- The most widespread source of lead exposure for children is in lead-based paint and dust that remain in older buildings.



Children are the Most Vulnerable

- Developing children are much more sensitive to the adverse effects of lead.
- Especially harmful to developing brains and nervous systems.
- Children absorb more of the lead they are exposed to.
- Young children exhibit more hand-to-mouth behavior, increasing their exposure and intake.



Sources of Lead

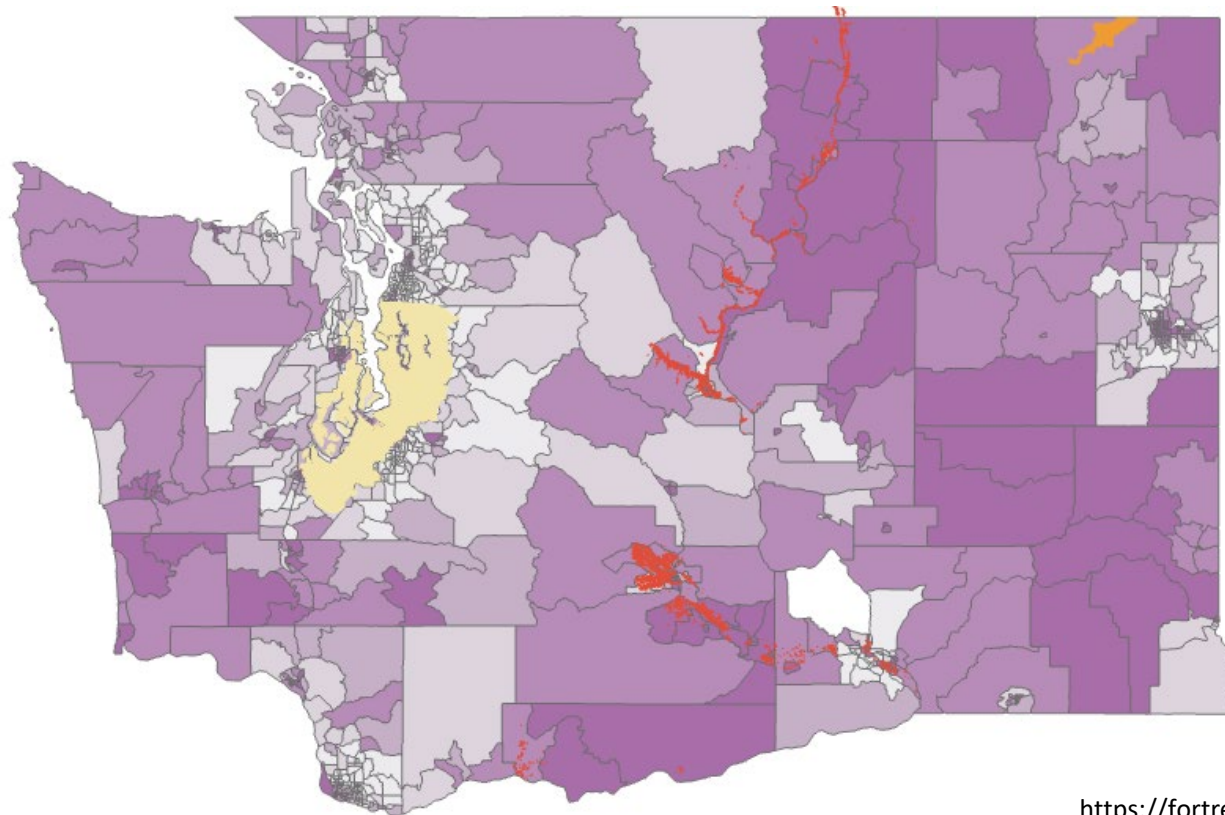


Exposures Risks



- Paint in pre-1978 homes
- Lead dust
- Dirt and soil
- Job exposures
- Drinking water
- Hobbies and sports
- Traditional remedies
- Spices
- Traditional cosmetics
- Costume jewelry
- Recalled toys
- Imported pottery
- Imported aluminum cookware

Lead Exposure Risk Mapping



The Washington Tracking Network (WTN) Lead Risk Indicator is calculated using data on **age of homes** and **poverty** within census tracts.

Legend

- Historical Orchards
- Upper Columbia Plume
- Tacoma Smelter Plume

Lead Risk - WTN

- 1-2
- 3-4
- 5-6
- 7-8
- 9-10

<https://fortress.wa.gov/doh/wtn/WTNIBL/Map/LeadRisk>

Unique Sources of Lead Exposure for Refugee Communities

➤ Exposure in country of origin to:

- Leaded gasoline
- Industrial emissions
- Ammunition manufacturing



➤ Continued use post-arrival:

- Traditional remedies
- Cultural products
- Imported spices
- Imported aluminum cookware

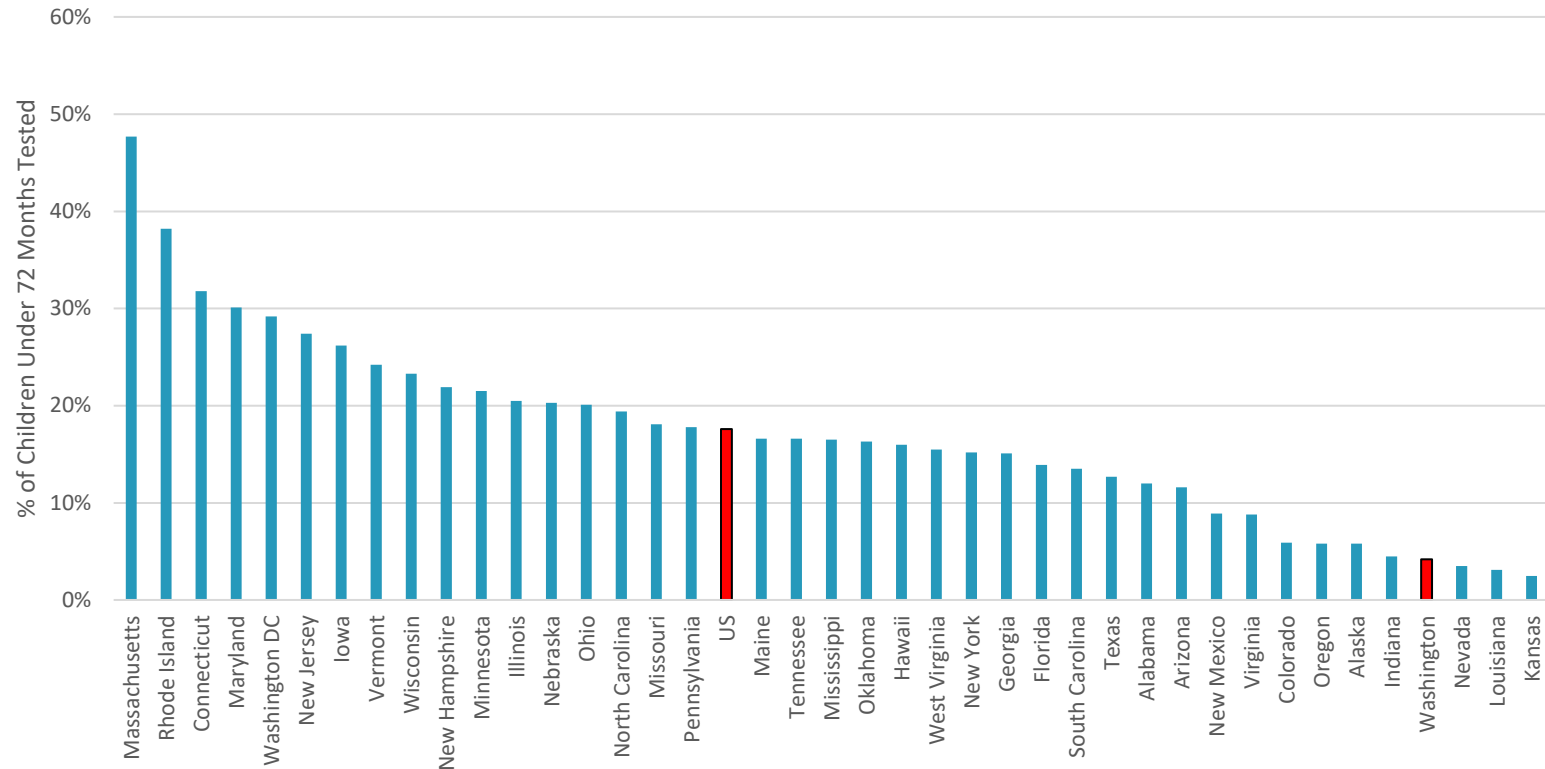


Testing for Lead Exposure



Testing Rates by States, 2018

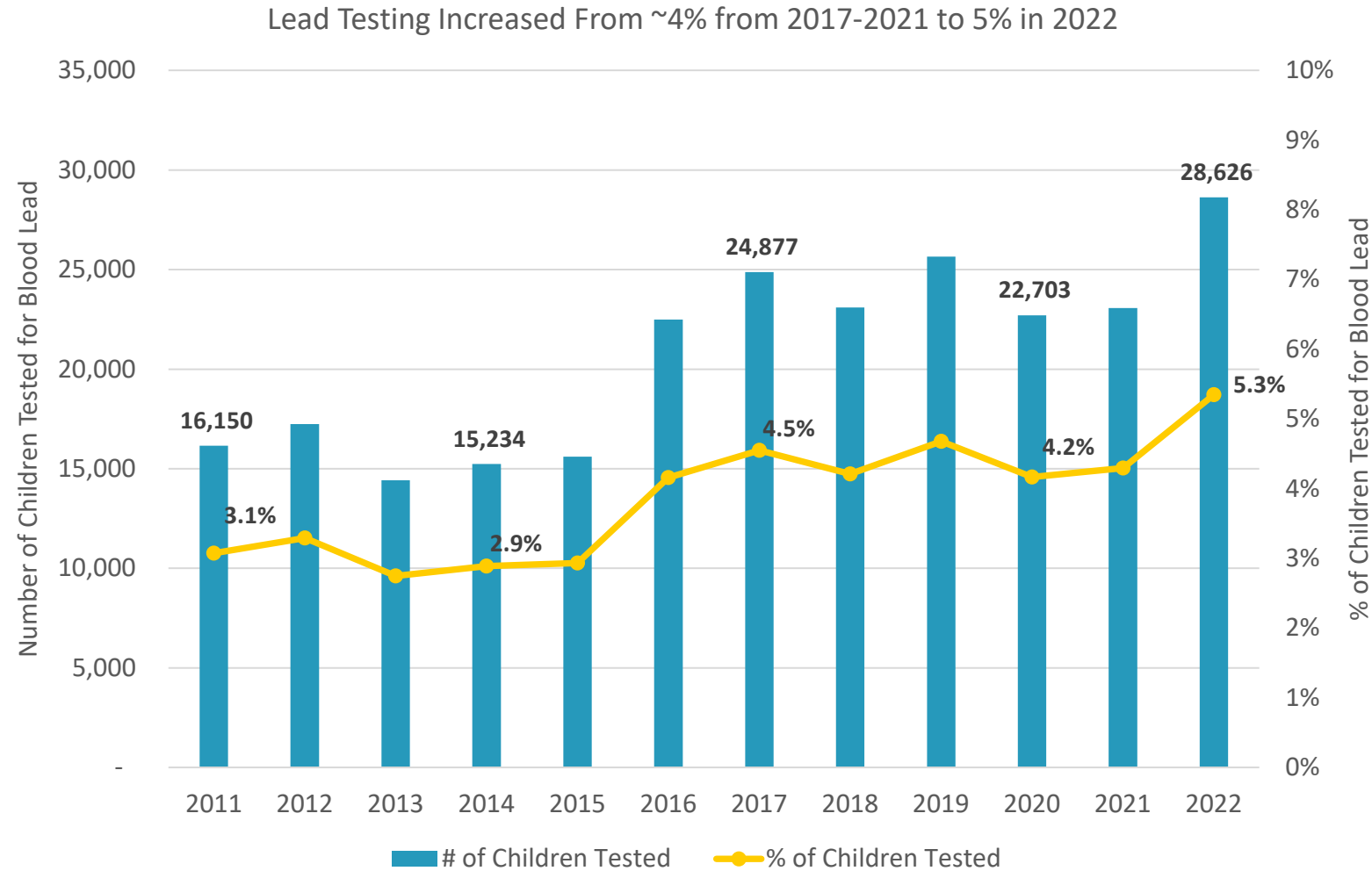
Annual Testing Rate of Children Under 72 Months of Age, 2018
in states reporting annually to CDC



Source: CDC National Childhood Blood Lead Surveillance Data

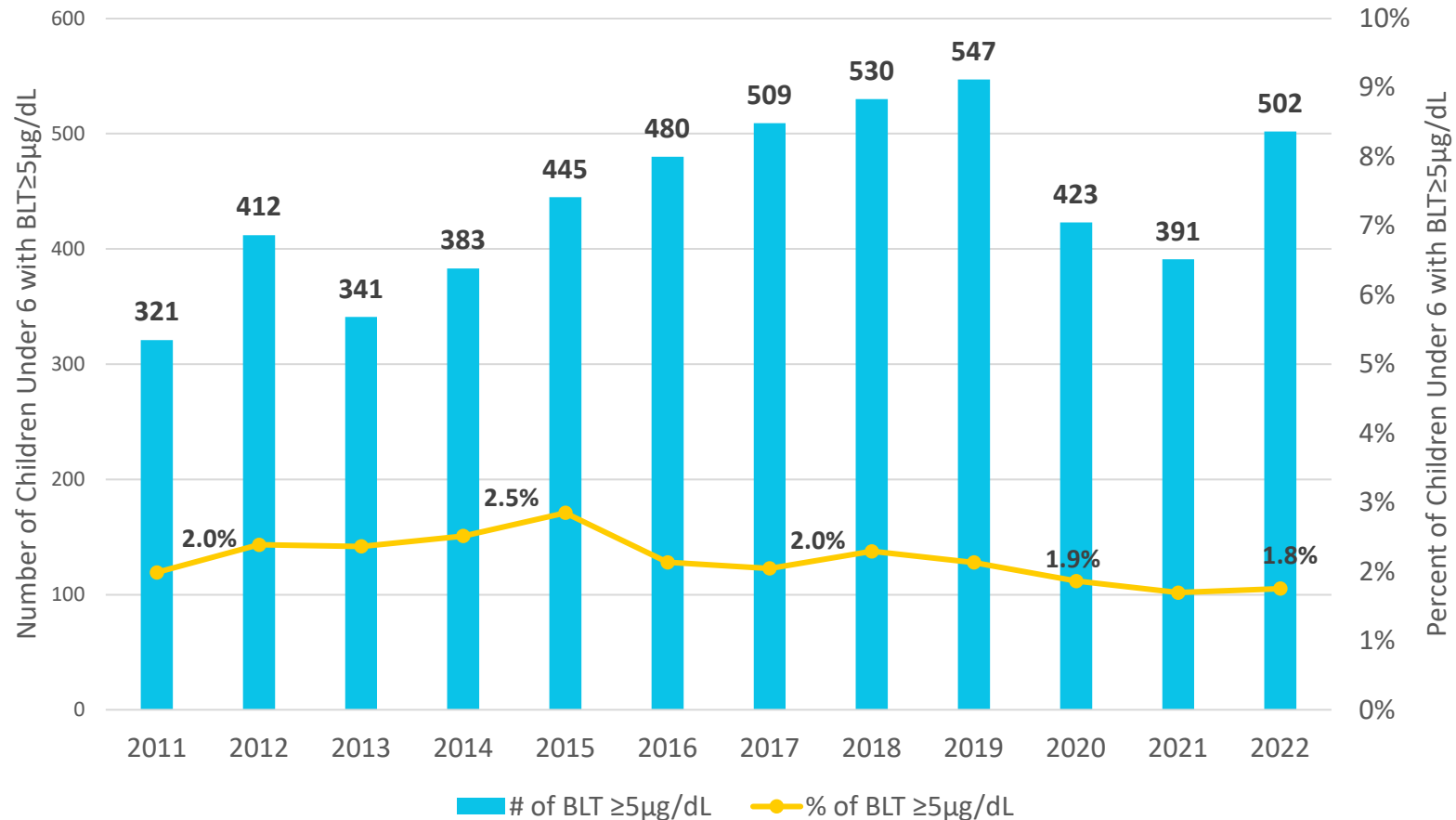
<https://www.cdc.gov/nceh/lead/data/national.htm>

Number and Percent of Children Under 6 Years of Age Tested for Lead in Washington State, 2011-2022



Number and Percent of Children Under 6 Years of Age with BLT Results $\geq 5\mu\text{g/dL}$, 2011-2022

While the number of test results at $5\mu\text{g/dL}$ or higher increases, they represent a smaller proportion of testing over time



CMS Requirement for Lead Testing Medicaid-Enrolled Children

- Providers seeing children enrolled in Medicaid are required to test blood lead at 12 and 24 months, or at least once by 72 months of age.
- In addition, any child aged 24-72 months with no record of a previous blood lead test must receive a test
- Completion of a risk assessment questionnaire does **not** meet the federal Medicaid requirement



RECOMMENDATIONS FOR BLOOD LEAD TESTING OF CHILDREN IN WASHINGTON STATE

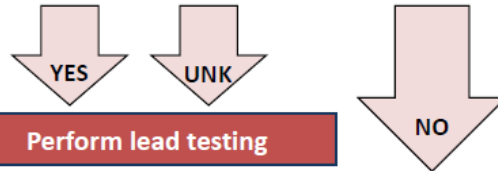
The Department of Health recommends screening children using the below algorithm at 12 and 24 months of age.

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

Healthcare providers are encouraged to use the [Department of Health's Lead Risk Index Map](#) to better understand which areas in their community are at higher risk for lead exposure. See <https://fortress.wa.gov/doh/wtn/WTNIBL/>

Interpretation and Medical Management of Blood Lead Levels:

If blood lead level is ≥ 5 mcg/dL: See [PEHSU Recommendations on Medical Management of Childhood Lead Poisoning](#)



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Case Management of EBLL



Response to Elevated Blood Lead (EBLL) Cases

- Cases reported to the state are provided to LHJ for response.
- Response may include telephone contact, a home assessment, and other services.
- DOH provides technical assistance and can conduct response to EBLL cases at local health request.

Goals of response:

- Identify likely source(s) of lead exposure.
- Provide education on reducing exposure.
- Encourage follow-up blood lead testing.
- Connect families to appropriate resources.



Lead Resources Available

- DOH has multiple lead publications available to download for free on our website: [Lead Publications | Washington State Department of Health](#).
- Print versions of the Lead Test Card can be ordered for free by emailing lead@doh.wa.gov or calling 800-909-9898.
- Print versions of the Lead Testing Poster and Lead and Your Child – Family Quick Guide will be available for free soon. You can pre-order print copies by emailing lead@doh.wa.gov or calling 800-909-9898.
- Many publications are available in multiple languages.
- Contact lead@doh.wa.gov for information on the LeadCare II Loaner Program.

Thank you!
Any questions?

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