



**TO:** Physicians and other Health Care Providers

# Please distribute a copy of this information to each provider in your organization.

Questions regarding this information may be directed to the office of:

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# Alert categories:

**Health Alert:** conveys the highest level of importance; warrants immediate action or attention.

**Health Advisory:** provides important information for a specific incident or situation; may not require immediate action.

**Health Update:** provides updated information regarding an incident or situation; no immediate action necessary.

HEALTH ADVISORY June 10, 2016 Possible Lead Exposure at Image Elementary School



## Please share with colleagues and networks as appropriate

On June 9, 2016 the Evergreen School District informed parents of students at Image Elementary School that drinking water showed lead levels higher than recommended by the Environmental Protection Agency. The letter to parents is attached.

Clark County Public Health does not have enough information to provide a comprehensive risk assessment at this time. Based on the information made publicly available by the school district, however, the risk of serious lead toxicity appears low. This assessment might change as more information becomes available.

Parents of students attending Image Elementary School might contact their children's health care providers for medical advice and consideration of blood lead testing. If parents express concern, consider blood lead testing in students attending Image Elementary School. All elevated venous blood lead levels are automatically reported to local health departments, including Clark County Public Health, for investigation to identify and eliminate ongoing exposure. Until more information becomes available, screening for elevated blood lead levels in students attending schools other than Image Elementary because of water concerns is not necessary.

Primary care clinicians can also help by always following Washington Guidelines to screen by questionnaire all children between ages 1 and 2. The recommended questions are attached. The majority of elevated blood lead levels in children come from paint dust, hobbies, and folk remedies containing lead.

Lead is toxic at all ages but especially to young children and pregnant women because of harm to the developing brain. Acute lead toxicity is caused by highly elevated blood lead levels (>50 micrograms/dL); symptoms include abdominal pain, other non-specific complaints, and, at very high levels, seizure and coma. In this situation we are concerned about chronic lead exposure which can cause decreased IQ and developmental/ behavioral problems in children. Other findings from chronic lead toxicity include encephalopathy, anemia, hearing loss, peripheral neuropathy, hypertension, and damage to bone, kidney, liver, and teeth.

## Additional information on lead toxicity

Clark County Public Health: https://www.clark.wa.gov/public-health/lead-poisoning

Washington State Department of Health: <a href="http://www.doh.wa.gov/YouandYourFamily/HealthyHome/Contaminants/Lead">http://www.doh.wa.gov/YouandYourFamily/HealthyHome/Contaminants/Lead</a>

<u>http://www.doh.wa.gov/ForPublicHealthandHealthcareProviders/HealthcareProfessions</u> andFacilities/ProfessionalResources/BloodLeadTestingandReporting

Centers for Disease Control and Prevention: http://www.cdc.gov/nceh/lead/



June 9, 2016

Dear Image families:

As you may be aware, Evergreen Public Schools, as part of a statewide program directed by Governor Jay Inslee and the Washington State Department of Health, have been testing water in our schools for lead.

Over the last several weeks, drinking water samples were taken across the district, including at Image Elementary. We just received results back that indicate we have elevated levels of lead in our Image school water. The levels range from 20 to 50 parts per billion which exceeds the Washington state school rule of 20 parts per billion and/or the Federal limit of 15 parts per billion.

As soon as we received notification, we closed all water sources in the school for drinking, have brought in bottled water, and will continue to have the bottled water available until the last day of school. Over the summer, we will be retesting all drinking water sources with a more stringent testing process to pinpoint exact levels as well as to determine whether the lead is in the plumbing fixtures or the water supply in the school, and will make the necessary repairs to ensure the problem is corrected. In addition, we will be completing a project already approved, to install filtered water bottle filling stations in all schools.

If you would like to have more information about the water testing process, the best source is the <u>www.doh.wa.gov</u>.

If you have any questions, please contact me.

Sincerely,

theen Keller

Kathleen Keller



## Lead Screening Recommendations for Children in Washington State

The prevalence and severity of elevated blood lead levels in children have been greatly reduced since the removal of lead from paint and gasoline in the 1970s. However, legacy lead paint remains in some homes in Washington and continues to serve as the primary source of lead exposure in our children. At the present time, housing age, as an indication of potential residential lead hazards, is the most established risk factor for lead poisoning.

Even relatively low levels of blood lead (<10  $\mu$ g/dl) have been shown to have effects on the developing central nervous system in children resulting in IQ loss, learning difficulties, poor school performance, decreased attention span, and inappropriate behavior.

**Anticipatory Guidance:** Healthcare providers should educate parents of children 6 months to 6 years of age by providing lead anticipatory guidance during routine check-ups. Prevention requires reducing environmental exposures from paint, dust, soil, and water. Efforts to increase awareness of lead hazards and nutritional interventions to increase iron and calcium, which can reduce lead absorption, are other key components of a successful prevention strategy.

**Targeted Screening:** Healthcare providers should assess all children for risk of lead poisoning at 12 and 24 months of age. The Department of Health recommends performing a blood lead test based on the guidance in the attached algorithm for all children not covered by Medicaid (Apple Health). Federal regulations require that all children covered by Medicaid receive screening for elevated lead levels<sup>1</sup>. If the parent or caregiver does not know if the child has one of the following risk factors, a blood lead test should be performed. Testing for blood lead levels is the only way to definitely know if a child is being exposed to lead.

**Testing Methods:** Blood lead testing is the only acceptable laboratory test for screening and confirming lead poisoning. Venipuncture is preferred for specimen collection, but finger stick (capillary) collection is acceptable if care is taken to properly clean and prepare the finger. Capillary samples are easier to contaminate because of the possibility of lead containing dust and dirt on the hand or under the fingernails. Children with capillary specimens testing  $\geq 5 \ \mu g/dL$  on a point of care test should undergo confirmatory testing, ideally with a venous specimen.

## **Confirmatory Testing:**

Blood Lead Level	Recommendations on confirmatory screening
≤5 mcg/dL	Repeat the blood lead level in 12 months if the child is at high risk or risk changes during the timeframe.
5-14 mcg/dL	Re-test venous blood lead level within 1-3 months to ensure the lead level is not rising. If it is stable or decreasing, retest the blood lead level in 3 months.
15-44 mcg/dL	Confirm the blood lead level with repeat venous sample within 1 to 4 weeks.
≥45 mcg/dL	Confirm the blood lead level with repeat venous lead level within 48 hours.



<sup>&</sup>lt;sup>1</sup> <u>http://www.hca.wa.gov/medicaid/billing/documents/guides/epsdt\_bi.pdf</u>

# **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 screening for all children covered by Medicaid.



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

- Child whose parents have concerns 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.

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

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

#### 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

