

**TO:** Vermont Health Care Providers and Health Care Facilities  
**FROM:** Dr. Mark Levine

### **Blood Lead Collection Tube Guidance**

#### **BACKGROUND:**

In October 2022, a national diagnostic laboratory raised concerns about possible lead contamination in certain lots of 4mL EDTA lavender-top specimen collection tubes in August, potentially leading to elevated blood lead test results.

This is a reminder that capillary and venous blood lead testing should be conducted using tubes that have been manufactured specifically for trace element testing.

The manufacturer's instructions provide specific details on acceptable tubes for specimen collection. Any health care organization or laboratory using tubes that are not trace-element-free should conduct pre-screening of the tube lot. Contamination in collection tubes can contribute to inaccurate results.

#### **REQUESTED ACTION:**

- Collect all venous whole blood lead specimens in lead-free specimen collection tubes, such as EDTA tan-top tubes.
- The 4mL EDTA lavender top tube should only be used for venous blood lead testing if the lot is pre-screened for possible lead contamination.
- Avoid using trace element-free sodium heparin royal blue-top specimen collection tubes as micro clots can form in heparinized blood after 24 hours, which would make the sample unusable for testing. EDTA royal blue-top specimen collection tubes that do not contain sodium heparin can be used if tan-top tubes are unavailable.
- Collect all capillary blood lead specimens using tubes certified by the manufacturer for lead testing or pre-screened for lead. Capillary collection tubes for LeadCare II collection are certified lead-free, and capillary collection kits available for free from the Vermont Department of Health Laboratory are pre-screened for lead.
- Communicate with testing laboratories about appropriate specimen requirements as these may change over time.
- Re-test patients with venous results that were 3.5 ug/dL or higher from August through November if the specimen collected was in a lavender-top specimen collection tube that was not pre-screened. Re-test these patients in accordance with [Vermont's Pediatric Blood Lead Testing and Case Management Guidelines](#). The re-test should be a venous specimen collected in a lead-free or trace-element-free EDTA specimen collection tube.

**RESOURCES:**

[Trace Metals Screening Process of Devices Used for the Collection, Analysis, and Storage of Biological Specimens](#)

[Pediatric Blood Lead Testing and Case Management Guidelines](#)

[What your Child's Lead Test Means](#)

[Health Department's web page: Lead Poisoning Prevention Guidance for Health Care Providers](#)

If you have any questions, please contact the HAN Coordinator at 802-859-5900 or [vthan@vermont.gov](mailto:vthan@vermont.gov).

**HAN Message Type Definitions**

*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; unlikely to require immediate action.

*Info Service Message:* Provides general correspondence from VDH, which is not necessarily considered to be of an emergent nature.