



## BLOOD LEAD TESTING

Improper technique for collecting capillary blood lead specimens can easily produce false positive results. To help prevent this from happening in your clinic, please be mindful of possible sources of contamination and remind staff to use proper technique. The following tips may help to decrease the number of false positives your clinic receives:

### **Tips for reducing Contamination:**

- Use only certified lead-free collection tubes, usually with a tan or royal blue top
- The patient and staff member collecting the specimen should remove jewelry and wash their hands thoroughly
- Allow hands to air dry. Avoid using recycled paper towels
- Collection area should not be near windows that open onto streets, air conditioning vents, and fans
- Handle collection equipment with gloved hands (use powder-free exam gloves)
- Wipe first droplet of blood with sterile gauze or cotton ball. (The first drop of blood contains tissue fluids which, if collected, will produce inaccurate results.)
  - Blood will flow better if the punctured finger is kept lower than the heart
  - Do not let the blood run down the finger or onto the fingernail; this may contaminate the sample
- Collection should be completed within 2-3 minutes

Capillary lead levels  $\geq 4.5$  mcg/dL need to be confirmed with a venous blood lead level analyzed at a reference lab using a method such as mass spectrometry or atomic absorption methods. Magellan analyzers should not be used. The Food and Drug Administration (FDA) has issued a warning about the use of Magellan Diagnostics' LeadCare® analyzers (Lead Care, LeadCare II, LeadCare Ultra and LeadCare Plus) with venous blood samples, because their use might cause falsely low blood lead test results. Additional information about the recall can be found at:

<https://www.fda.gov/MedicalDevices/Safety/AlertsandNotices/ucm558733.htm>