January 25, 2022

RE: Guidance for Providers Regarding New CDC Blood Lead Reference Level and Other Matters Pertaining to Lead Testing for Children

Dear Colleague,

This letter provides guidance to health care providers regarding blood lead testing in children in Maryland, including the recent change to the reference value for blood lead announced by the U.S. Centers for Disease Control and Prevention (CDC), the status of point of care (POC) testing with Magellan Diagnostics, and re-emphasizes the importance of blood lead testing in light of the impact of COVID-19 and the availability of new resources for health care providers in managing children with lead exposures.

Clinical Guidance on New CDC Blood Lead Reference Level
Following the recommendations of the federal Lead Exposure and Prevention Advisory Committee (LEPAC), the CDC announced in an October 28, 2021 press release that it was updating its blood lead reference value (BLRV) from 5 micrograms/deciliter (μg/dL) to 3.5 μg/dL. This change reflected improvements in blood lead levels in children across the country. MDH is now recommending that providers follow this guidance in clinical practice. Providers should manage children according to the CDC’s Recommended Actions Based on Blood Lead Level, which provides detailed guidance on clinical actions for a given blood lead level. In particular, MDH emphasizes the importance of obtaining a confirmatory venous sample at the recommended time interval for capillary specimens performed as point of care (POC) tests (Table 1), as well as a follow-up blood lead test at the recommended interval or sooner to ensure that there is no ongoing lead exposure (Table 2). Both of these schedules can be found in the CDC guidance, and are also shown below.

MDH and the Maryland Department of the Environment (MDE) remind providers that there is no change at this time in the legal definition of elevated blood lead level in Maryland, which remains 5 μg/dL. MDE continues to notify parents, property owners, and local health departments about children with blood lead levels of 5 μg/dL or greater, and continues to conduct environmental investigations for those children. Thus, it is essential that providers follow up on children with blood lead levels of 3.5 - 4.9 μg/dL to ensure that their blood lead levels are not increasing, indicating ongoing exposure.
Table 1: Recommended Schedule for Obtaining a Confirmatory Venous Sample for a Capillary Fingerstick or Heelstick

<table>
<thead>
<tr>
<th>Blood Lead Level (µg/dL)</th>
<th>Time to Confirmation Testing</th>
<th>Venous Blood Lead Levels (µg/dL)</th>
<th>Early follow up testing (2-4 tests after identification)</th>
<th>Later follow up testing after BLL declining</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥3.5–9</td>
<td>Within 3 months*</td>
<td>≥3.5–9</td>
<td>3 months**</td>
<td>6–9 months</td>
</tr>
<tr>
<td>10–19</td>
<td>Within 1 month*</td>
<td>10–19</td>
<td>1–3 months**</td>
<td>3–6 months</td>
</tr>
<tr>
<td>20–44</td>
<td>Within 2 weeks*</td>
<td>20–44</td>
<td>2 weeks–1 month</td>
<td>1–3 months</td>
</tr>
<tr>
<td>≥45</td>
<td>Within 48 hours*</td>
<td>≥45</td>
<td>As soon as possible</td>
<td>As soon as possible</td>
</tr>
</tbody>
</table>

*The higher the BLL on the initial screening capillary test, the more urgent the need for confirmatory testing using a venous sample.

*Seasonal variation of BLLs exists and may be more apparent in colder climate areas. Greater exposure in the summer months may necessitate more frequent follow-ups.

**Some case managers or healthcare providers may choose to repeat blood lead tests on all new patients within a month to ensure that their BLL level is not rising more quickly than anticipated.

Status of Blood Lead Testing Using Magellan Diagnostics Blood Lead Test Kits

MDE and MDH continue to monitor the expanded recall of LeadCare blood lead test kits by Magellan Diagnostics in October, 2021. Providers should follow the recommendations of the CDC on follow up testing of children tested with LeadCare test kits between October 27, 2020 and the present time. Questions about the recall or about retesting children with a lead level of <5 µg/dL should be directed to MDE (Dr. Rena Boss-Victoria at 410-537-3880 or rena.boss-victoria@maryland.gov) or MDH (toll-free 1-866-703-3266 or mdh.envhealth@maryland.gov).

New State Resources for Providers in Managing Children with Lead Exposure

The COVID-19 pandemic has resulted in a nearly 17% drop in testing children in Maryland for lead poisoning from calendar year 2020 compared to 2019. Fewer children saw their physicians for blood lead testing as well as for completing well child check-ups and updating their immunizations. Health care providers are reminded that Code of Maryland Regulations 10.11.04 requires licensed health care providers to test all children ages 1 and 2 years (12 and 24 months) for lead, either by a capillary test or a venous blood draw.

MDH, Maryland Department of the Environment, and the Maryland Commission on Lead Poisoning Prevention also remind Maryland’s health care providers and parents that there are new state resources and services for children with lead poisoning, including home visiting programs to help parents and families, and funding to remove lead from homes at no cost to families. Providers who want to refer children for these programs should contact MDH (1-866-703-3266).

Please consider these suggestions to increase blood lead testing. Delays in identifying children with elevated blood levels can result in significant impairment to a young child's developing brain. If you have questions, call the Environmental Health Help Line at 1-866-703-3266. More information is also available on the MDH Lead Poisoning Prevention home page.
the MDE Lead Poisoning Prevention home page, and the CDC Lead Poisoning Prevention Program home page.

Sincerely,

Clifford S. Mitchell, MS, MD, MPH
Director, Environmental Health Bureau