Guidelines for Identification and Management of Lead Exposure in Pregnant Women

Alicia Fletcher, M.P.H.
Bureau of Occupational Health and Injury Prevention
Pregnant Women Case Management

HMR informed of pregnancy via interview

- Local Health Departments (LHDs)
- Health Care Provider (HCP) Offices
- Childhood Lead Poisoning Prevention - NYSDOH
Woman Identified as Pregnant during interview

Confirm Due Date with OB/GYN

Discuss case details with OB/GYN

Exposure Source Identified

- Share exposure source
- Remind to lead test mom through pregnancy
- Provide RLRC resources

Send case informational brochure on exposure

- Request exposure source from OB/GYN (if known)
- Remind to lead test mom through pregnancy
- Provide RLRC resources
- Inform LHD
- LHD provides expected follow-up activities
- Work with LHD to ID PEDS HCP

Call OB/GYN to remind them to share BLL information with PEDS HCP

Confirm PEDS HCP is aware of maternal BLL

Obtain birthdate from Childhood Lead data or OB/GYN office

NYSDOH follow to ensure newborn testing occurs

Very few Pediatricians aware of maternal BLL
### Number of Cases for BLL 5-9 mcg/dL by Year and Gender, 2015-2019

<table>
<thead>
<tr>
<th>Year</th>
<th># Cases</th>
<th># Women</th>
<th># Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>5,269</td>
<td>1,381</td>
<td>3,833</td>
</tr>
<tr>
<td>2016</td>
<td>5,131</td>
<td>1,549</td>
<td>3,530</td>
</tr>
<tr>
<td>2017</td>
<td>5,277</td>
<td>1,374</td>
<td>3,856</td>
</tr>
<tr>
<td>2018</td>
<td>4,500</td>
<td>1,240</td>
<td>3,211</td>
</tr>
<tr>
<td>2019</td>
<td>4,403</td>
<td>1,136</td>
<td>3,225</td>
</tr>
</tbody>
</table>
What's been done?

**Recommendations for Follow-up Blood Lead Level (BLL) Testing in Pregnant and Lactating Women**

<table>
<thead>
<tr>
<th>BLL (µg/dl)</th>
<th>Recommendation for Follow-up after Receiving Test Results*</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5</td>
<td>No follow-up testing is indicated.</td>
</tr>
<tr>
<td>5-14</td>
<td>Within 1 month: Obtain a maternal BLL or cord BLL at delivery and perform newborn follow-up testing.</td>
</tr>
<tr>
<td>15-24</td>
<td>Within 1 month and then every 2-3 months: More frequent testing may be indicated based on risk factor history. Obtain a maternal BLL or cord BLL at delivery and perform newborn follow-up testing.</td>
</tr>
<tr>
<td>25-44</td>
<td>Within 1-4 weeks and then every month: Obtain a maternal BLL or cord BLL at delivery and perform newborn follow-up testing.</td>
</tr>
<tr>
<td>≥45</td>
<td>Within 24 hours and then at frequent intervals depending on clinical interventions and trend in BLLs: Obtain a maternal BLL or cord BLL at delivery and perform newborn follow-up testing.</td>
</tr>
</tbody>
</table>

*Centers of Disease Control and Prevention and NYS Department of Health recommendations. The higher the BLL, the stronger the recommendation is for a consultation. Consult with your Regional Lead Resource Center.

**Lead Exposure Risk Factors and Sources**

- Foreign-born, poor nutritional status, evidence of pica, occupational exposure, use of alternative remedies, some imported spices, foods and cosmetics, and traditional lead glazed pottery.
- Evidence of possible lead paint exposure prior to or during pregnancy from renovating or remodeling a home built before 1978.

**Community Lead Exposure Data**

[health.ny.gov/epiTracker](http://health.ny.gov/epiTracker)

[healthdata.ny.gov](http://healthdata.ny.gov)

---

**NYS Regional Lead Resource Centers**

**Metropolitan/Hudson Valley Region**
Montefiore Medical Center
(718) 547-2789

**Central/Eastern Region**
SUNY Upstate Medical University
(315) 464-7584

Albany Medical College**
(518) 262-8602

**Western Region**
Kaleida Health/Women & Children's Hospital of Buffalo
(716) 758-7624

University of Rochester Medical Center**
(585) 276-3105

**Subcontractors**

---

[New York State Department of Health](http://www.health.ny.gov)
Talk to your doctor about a lead test if you...

- use imported spices and Ayurvedic medicines
- recently moved to the United States from a foreign country
- or someone you live with works with lead
- renovated or remodeled a pre-1978 home; sanded and scraped paint
- know your drinking water has lead
- have urges to and eat dirt, chalk, pottery, plaster, or paint chips
- have lead-risk hobbies, such as target shooting, casting fishing sinkers or bullets, stained glass making or pottery making
- live near lead mines, smelters, battery recycling facilities or other facilities that use lead
- have a history of lead levels of 5 micrograms per deciliter or above

Tips to Protect Your New Baby from Lead

Pregnant?

What you need to know:
Lead is a metal that can hurt pregnant women and their developing fetuses. It can damage the brain, kidneys, nerves and other parts of the body. It can cause miscarriage, stillbirth or difficulty getting pregnant. Lead can affect children’s behavior and make it harder for them to learn.

Lead can be stored in a woman’s body for years, and then passed from mother to baby. A product can contain lead, even if it is not listed as an ingredient.

Some pregnant women have the urge to eat nonfood items. This behavior is called pica.

What you can do:
If you are pregnant or planning to become pregnant, ask your doctor about a blood lead test.
If you have ever had a blood lead test result of 5 micrograms per deciliter or above, your new baby should get a lead test before leaving the hospital.
Resist the urge to eat nonfood items. These items can contain lead:

Avoid products imported from the Middle East, Latin America, South Asia, and China that may contain lead:

- Spices, including turmeric.
- Many types of candy.
- Skin creams, including Yisaoguang Yaogua, Hondan and Thanaka.
- Cosmetics like Kohl (also known as surma or kajal).
- Lead-glazed pottery. Do not use for food preparation or serving.
- Costume jewelry, including gold or silver plated.
- Herbal and Ayurvedic medicines.

Questions?
health.ny.gov/Lead
Regulations and Guidance

- Examining regulatory and guidance options for the identification and management of lead exposure in pregnant women. Next steps include:
  - Collecting and examining data
  - Evaluating literature and policies
  - Consultation with stakeholders

- Two Parts:
  - Screening for lead exposure in pregnant women
  - Management of elevated blood lead levels in pregnant women
Next Steps

Should I get a lead test?

1. Do you live in or regularly visit a building built before 1978 with potential lead hazards, such as peeling or chipping paint, recent or ongoing renovation or remodeling, or high levels of lead in the drinking water?
   - YES
   - NO
   - NOT SURE

2. Do you live near lead mines, smelters, battery recycling facilities or other facilities that use lead?
   - YES
   - NO
   - NOT SURE

3. Have you spent any time outside the United States in the past year?
   - YES
   - NO
   - NOT SURE

4. Have you ever had an abdominal lead test?
   - YES
   - NO
   - NOT SURE

5. Do you have the urge to eat dirt, chalk, paint, paint chips, or other non-food items?
   - YES
   - NO
   - NOT SURE

6. Do you or someone you live with work lead from a job or hobby such as: house painting, plumbing, renovation, construction, auto repair, welding, electronics repair, battery recycling, lead smelting, jewelry, stained glass or pottery making, fishing (weights, “sinkers”), firearms, or collecting lead or pewter figurines?
   - YES
   - NO
   - NOT SURE

7. Does your family use traditional medicines, health remedies, cosmetics, powders, spices, or food from other countries?
   - YES
   - NO
   - NOT SURE

8. Does your family cook, store, or serve food in crystal, pewter, or pottery from other countries?
   - YES
   - NO
   - NOT SURE

If you answered “YES” or “NOT SURE” to any of these questions, let’s talk about a blood lead test.

Lead is a concern for pregnant women and their developing fetuses. Lead can be stored in a woman’s body for years, and then passed from mother to child.

www.health.ny.gov/environmental/lead/pregnant_women
Questions?