

# Lead Poisoning and Pregnancy

## You are the first line of defense Ask and assess before a lead test

The Centers for Disease Control and Prevention does not recommend blood lead testing of all pregnant women. However, it is important to conduct a risk assessment for lead exposure. Lead can be passed to the developing fetus during pregnancy or to the infant during breastfeeding. Those who had lead poisoning when younger may still have lead in their body.

If any risk factor for lead exposure is identified, it's time to perform a blood lead test.



### Risk Factors

### Blood Lead Level (BLL) Response Actions

The following are recommended lead risk assessment questions for pregnant women. Use a blood test if they answer "yes" or "don't know" to any of them:

1. In the last 12 months, has there been any renovation or repair work in your home or apartment building built before 1978?
2. Have you or others in your household ever had a job that involves lead exposure? (Ex: home renovation, mining, gun ranges..)
3. Do you or others in your household have any hobbies likely to cause lead exposure? (Ex: shooting, ceramics, jewelry...)
4. Were you born, or have you spent any time, outside of the United States?
5. During the past 12 months, did you use any imported spices, foods, ceramics, cosmetics, or home remedies?
6. At any time, did you eat or chew on non-food items such as clay, pottery, soil, or paint chips?

CDC 2012  
<https://www.cdc.gov/nceh/lead/publications/leadandpregnancy2010.pdf>

| BLL Test Results (µg/dL) | Follow-up Testing Retest Within   | Recommended Actions based on BLL in Pregnant and Lactating Women  |
|--------------------------|---|---|
| < 5                      | No following testing indicated  | <ul style="list-style-type: none"> <li>• CDC has not identified any allowable lead exposure level safe for mother and fetus</li> <li>• Provide dietary guidance (calcium and iron) and environmental and health education materials</li> </ul>  |
| 5 - 14                   | 1 month   | <p><b>Above Actions, plus:</b></p> <ul style="list-style-type: none"> <li>• Attempt to determine source(s) of lead exposure and counsel patients on strategies to reduce exposure, including identification and assessment of pica behavior</li> <li>• Obtain a maternal BLL or cord BLL at delivery and perform newborn follow-up testing</li> <li>• Assess nutrition adequacy and counsel on a balanced diet with adequate daily intake of iron and calcium</li> <li>• Maintain a daily intake of 2,000 mg of Calcium through diet or in combination with supplementation</li> <li>• Encourage breastfeeding consistent within safety provisos</li> <li>• If exposure is in the workplace, women should be eligible for medical removal from the exposure environment. Review proper use of personal protective equipment and recommend contacting the employer to encourage reducing exposure</li> <li>• For those above 10 µg/dL: refer to occupational medicine specialists and remove from workplace lead exposure</li> </ul> |
| 15 - 24                  | 1 month and then every 2-3 months   | <p><b>Above Actions, plus:</b></p> <ul style="list-style-type: none"> <li>• Environmental investigation of the home, lead hazard reduction, and case management by local or state health department</li> <li>• Consultation with a physician specialized in the management of blood lead levels</li> </ul>  |
| 25 - 44                  | 1-4 weeks and then every month  |   |
| ≥ 45                     | 24 hours and then at frequent intervals depending on clinical interventions and trend in BLLs | <p><b>Above Actions, plus:</b></p> <ul style="list-style-type: none"> <li>• Treat as high-risk pregnancy and consult with an expert in lead poisoning on chelation and other treatment decisions</li> <li>• Hospitalize and commence chelation therapy in conjunction with consultation from a medical toxicologist or a pediatric environmental health specialty unit</li> </ul>   |