

LEAD FACTS FOR GREATER CLEVELAND HEALTH CARE PROVIDERS

DID YOU KNOW?

- Recent scientific evidence indicates that children suffer from adverse effects of lead at levels below 10 µg/dL, including intellectual impairment, attention deficit hyperactivity disorder, and stunted growth.
- As a result, the Cleveland Department of Public Health, Cuyahoga County Board of Health, Lakewood Department of Human Services, and Shaker Heights Health Department recommend that 5 µg/dL be used as the new level of awareness for blood lead levels in our region.
- About 40% of tested children in Cleveland have levels of 5 µg/dL or higher. About 8% of tested children in Cleveland's inner ring suburbs have levels of 5 µg/dL or higher.

HOW DO YOU IDENTIFY CHILDREN AT RISK FOR LEAD POISONING?

- Children are at risk if the answer to any of the following is yes or unknown:
 - Have Medicaid insurance?
 - Live in Cleveland or an inner ring suburb?
 - Live in or visit a house built before 1950?
 - Live in or visit a house that has peeling, chipping, dusting, or chalking paint?
 - Live in or visit a house built before 1978 with recent, ongoing, or planned renovation or remodeling?
 - Have a sibling or playmate who has or did have lead poisoning?
 - Frequently come into contact with an adult who has a hobby or job involving lead?

HOW OFTEN SHOULD YOU TEST AT RISK CHILDREN?

- Test all at risk children at least annually between the ages of 1 year and 4 years using a venous sample (preferred) or a capillary sample if a venous sample cannot be readily obtained. Test at risk children at least once between the ages of 5 years and 6 years if they have no previously documented test.

WHAT SHOULD YOU DO WITH THE TEST RESULTS?

- If the blood lead level is 0-4 µg/dL, then repeat test annually between the ages of 1 year and 4 years for at risk children.
- If the blood lead level is 5-9 µg/dL, then carry out the following actions:
 - Provide family lead education
 - Provide follow-up testing within 2-3 months
 - Refer for social services if necessary

- If the blood lead level is 10-19 µg/dL, then carry out the following actions:
 - Provide family lead education
 - Provide follow-up testing within 2-3 months if test was performed on venous sample
 - or within 1 month if on capillary sample
 - Refer for social services if necessary
- If the blood lead level is ≥ 20 µg/dL, then carry out the following actions (depending on the level):
 - More frequent follow-up testing
 - Detailed medical evaluation
 - Social service referrals
 - Chelation therapy

HOW ARE THESE RECOMMENDATIONS DIFFERENT FROM THOSE OF THE CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC) AND THE OHIO DEPARTMENT OF HEALTH?

- Federal and state efforts focus on children with levels of ≥ 10 µg/dL. However, cities and counties can adopt lower action thresholds. Given the magnitude of the lead toxicity problem in our region and recent scientific evidence about adverse effects of lead at lower levels, we recommend a new awareness threshold of 5 µg/dL.

WHERE CAN YOU GET MORE INFORMATION?

- City of Cleveland Department of Public Health website. Available at <http://www.clevelandhealth.org/ActiveServerPages/Environment/ChildhoodLeadPoisoning.asp>
- Cuyahoga County Board of Health website. Available at http://www.ccbh.net/ccbh/opencms/CCBH/services/environmental_health/Lead.html
- Canfield et al., Intellectual impairment in children with blood lead concentrations below 10 µg/dL. *New England Journal of Medicine*. 2003;348:1517
- Gilbert et al., A rationale for lowering the blood lead action level. *Neurotoxicology*. 2006;27:693
- American Public Health Association Policy Statement. Protecting children by lowering the blood level “level of concern” standard. Available at http://www.ehw.org/Lead/LEAD_APHA_11-05.htm
- Lanphear et al., Low-level environmental lead exposure and children’s intellectual function: an international pooled analysis. *Environmental Health Perspectives*. 2005; 113: 7.

