# **Childhood Lead Poisoning**

### What Is the Problem?

Approximately 500,000 U.S. children aged 1–5 years have blood lead levels above 5 micrograms of lead per deciliter of blood, the reference level at which the Centers for Disease Control and Prevention (CDC) recommends public health actions be initiated.

Lead poisoning can affect nearly every system in the body. Because lead poisoning often occurs with no obvious symptoms, it frequently goes unrecognized. Lead poisoning can cause learning disabilities, behavioral problems, and, at very high levels, seizures, coma, and even death. No safe blood lead level has been identified.



# **How Are Children Exposed to Lead?**

The major sources of lead exposure among U.S. children are lead-based paint and lead-contaminated dust found in deteriorating buildings. Lead-based paints were banned for use in housing in 1978. However, approximately 24 million housing units in the United States have deteriorated leaded paint and elevated levels of lead-contaminated house dust. More than 4 million of these dwellings are homes to one or more young children.

Other sources of lead poisoning are related to

- home health remedies (azarcon and greta, which are used for upset stomach or indigestion; pay-loo-ah, which is used for rash or fever);
- some imported candies (particularly those from Mexico);
- imported toy jewelry and toys;
- drinking water (lead pipes, solder, brass fixtures, valves can all leach lead);
- work (recycling or making automobile batteries and home remodeling);
- hobbies (making stained-glass windows, making pottery, and painting); and
- soil contaminated by lead paint chips, dust, or particles.

#### Who Is at Risk?

- Children under the age of 6 years because they are growing so rapidly and because they tend to put their hands or other objects into their mouths.
- Children from all social and economic levels can be affected by lead poisoning, although children living at or below the poverty line who live in older housing are at greatest risk.
- Children of some racial and ethnic groups and those living in older housing are disproportionately affected by lead.

National Center for Environmental Health

Division of Emergency and Environmental Health Services



## **Can Lead Poisoning Be Prevented?**

Lead poisoning is entirely preventable. The key is stopping children from coming into contact with lead and treating children who have been poisoned by lead.

- Lead hazards in a child's environment must be identified and removed safely.
- Parents, health care professionals, educators, and the public need education about lead poisoning and how to prevent it.
- Children who are at risk for lead poisoning need to be tested and, if necessary, treated.

#### What Can Parents and the Public Do to Reduce Blood Lead Levels?

- Ask a health care provider to test your child if you are concerned about your child being exposed to lead.
- Talk to your state or local health department about testing paint and dust from your home for lead if you live in a house or apartment built before 1978, especially if young children live with you or visit you.
- Damp-mop floors; damp-wipe surfaces; and frequently wash a child's hands, pacifiers, and toys to reduce exposure to lead paint chips or lead-contaminated dust.
- Avoid using home remedies (such as azarcon, greta, pay-loo-ah) and cosmetics (such as kohl, alkohl) that contain lead.
- Avoid eating candies imported from Mexico (especially important for children and pregnant women).
- Check the Consumer Product Safety Commission (http://www.cpsc.gov/) or CDC (http://www.cdc.gov/nceh/lead/Recalls/default.htm) websites for warnings on products that contain lead.
- Use only cold water from the tap for drinking, cooking, and for making baby formula. Hot water is more likely to contain higher levels of lead, and most of the lead in household water usually comes from the plumbing in your house, not from the local water supply.
- Take basic steps to decrease your exposure to lead (for example, by showering and changing clothes after finishing the task) if you remodel buildings built before 1978 or if your work or hobbies involve working with lead-based products.

## CDC's Role in Preventing Lead Poisoning

CDC provides lead expertise and analysis at the national level and is a valuable resource to state and local agencies. CDC provides

- Software and technical assistance to support the Healthy Homes and Lead Poisoning Surveillance System, which gathers information related to lead and other health hazards in homes.
- Staff to provide expertise and epidemiological support in response to a lead poisoning outbreak.
- Collaboration with federal partners including the Environmental Protection Agency and the U.S. Department of
  Housing and Urban Development to collaborate on evidence-based healthy homes policies as available resources
  allow. This includes integration of these healthy homes policies into existing maternal and child health programs
  and supporting objectives in the interagency plan Advancing Healthy Housing:

A Strategy for Action and the Surgeon General's *Call to Action to Promote Healthy Homes*.

## **For More Information**

Visit the CDC Web site at <a href="http://www.cdc.gov/nceh/lead">http://www.cdc.gov/nceh/lead</a>

