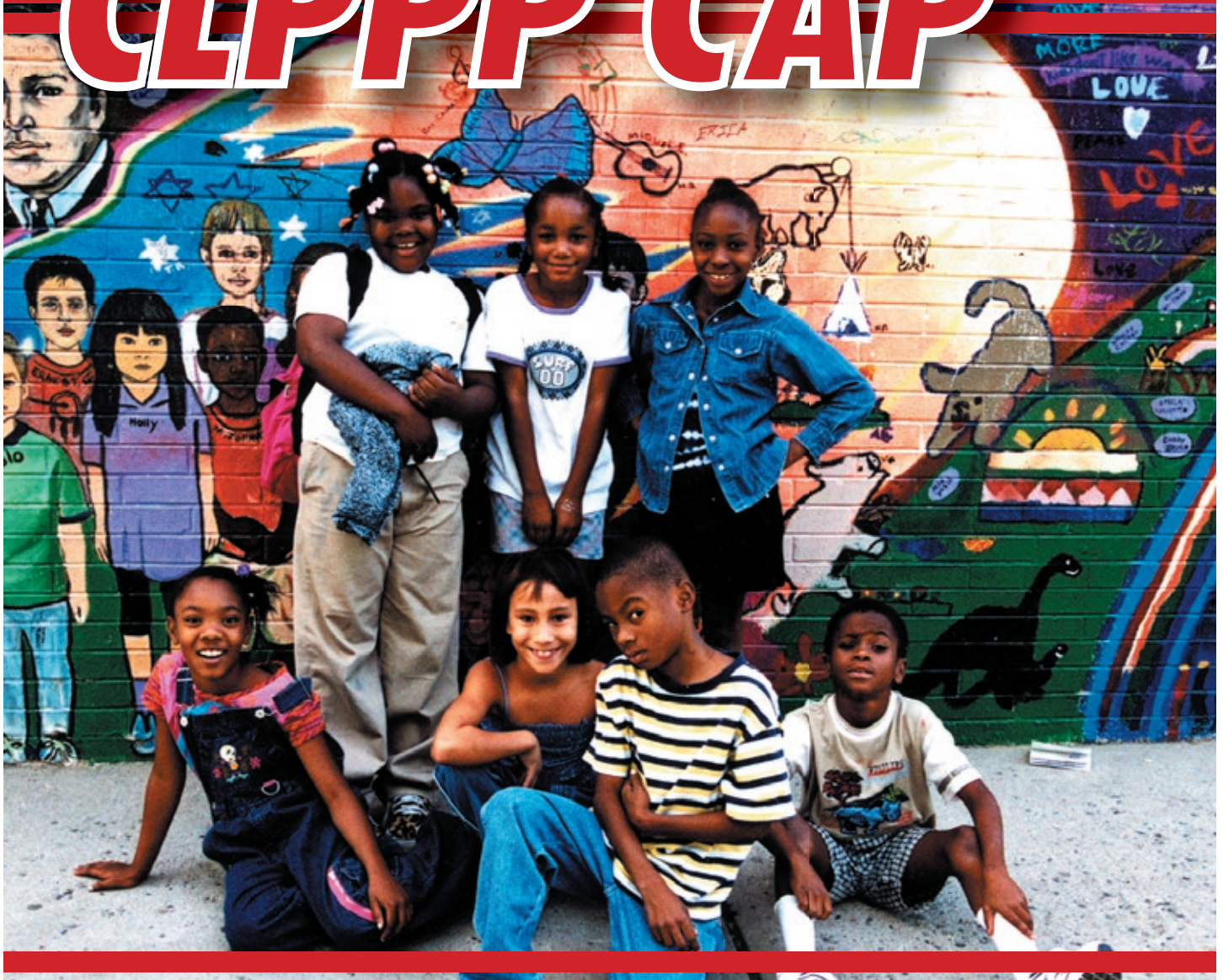


Childhood Lead Poisoning Prevention Program Community Awareness Pilot

CLPPP CAP





THE GOOD NEWS-

Exposure to Lead is Preventable

Lead Poisoning Is a REAL Problem; Did You Know?

Lead is a highly toxic substance, and exposure to lead can cause a range of adverse health effects. Children as well as adults can be sick from the effects of lead poisoning, but lead poisoning is much more frequent in children than in adults. For many years we have known about the hazards of lead poisoning, and tens of millions of children have experienced adverse health effects from exposure to lead. Even today, in 2005, more than 300,000 children less than 6 years of age have too much lead in their blood.

Where Is Lead Found and Is Lead Poisoning Preventable?

People are exposed to lead in many ways: through deteriorating paint, household dust, bare soil, air, drinking water, food, ceramics, home remedies, hair dyes, and cosmetics. Much of this lead is too small for people to see. Children with elevated blood lead levels are most likely to have been exposed to lead in their own homes. However, the good news is that lead poisoning is preventable.

Today, the major source of lead poisoning in children is the lead paint that is found in much of the nation's older housing.

Until 1978, lead paint was commonly used on the interiors and exteriors of our homes. Today, the U.S. Department of Housing and Urban Development (HUD) estimates that about 38 million homes in the United States still contain some lead paint. Although lead paint that is still intact (not peeling or flaking) does not pose an immediate concern, lead paint that is allowed to deteriorate creates a lead-based paint hazard. The deteriorating paint can contaminate household dust as well as bare soil around the house where children may play. A young child's normal hand-to-mouth activity is a common pathway for exposure. The lead-dust equivalent of a single grain of salt is enough to cause an elevated blood lead level in a child.

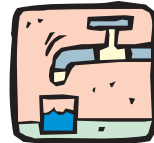
Both children and adults can have high levels of lead in their blood when homes that contain lead paint are being renovated or remodeled. Following are some important reminders about lead exposure:



1. The past use of leaded gasoline, which was banned in this country in 1978, contributed greatly to the number of cases of childhood lead poisonings in the United States during the last 60 years. The lead emitted from vehicle emissions in the past continues to be a hazard today because much of that lead still remains in soil where it was deposited over the years. The heaviest concentrations of the lead that was emitted from vehicles is near well-traveled roads and highways. Children who play in dirt contaminated by lead, whether that lead is from gasoline emissions or from deteriorated house paint, can get lead-contaminated soil under their fingernails or on their toys, or they can track the soil into their homes. Even pets can come into contact with lead-contaminated soil and cause human exposure to lead when people, especially children, pet or play with the animals. Such everyday activities can cause elevated blood lead levels.



2. Any time anyone works on a surface that contains lead paint, the debris and dust created by the work must be contained and thoroughly cleaned up. Workers must have adequate personal protection to prevent them from breathing in any of the lead dust generated by the work. Because of the hazards of working with lead-painted surfaces, these surfaces must be identified before beginning any renovation or remodeling work. Workers must follow lead-safe work practices. In addition, steps must be taken to ensure that children, pets, and personal belongings, including furniture, are protected from exposure to lead during the renovation or remodeling.



3. Drinking water can sometimes contribute to elevated blood lead levels. Lead can leach into drinking water from certain types of plumbing materials (lead pipes, copper pipes with lead solder, and brass faucets). Although water is usually not the primary source of lead exposure for children who have elevated blood lead levels, parents should be aware that babies fed formula made with water are at special risk of lead poisoning if their formula is made with lead-contaminated water.



What About the Health Effects of Lead?

Pregnant Women

Pregnant women who have elevated blood lead levels can easily transfer the lead to their fetuses because lead crosses the placenta. In fact, pregnancy itself can cause lead to be released from the mothers' bones, where lead is stored—often for decades after it first enters the woman's blood stream. Once the lead is released from the mothers' bones, it re-enters the blood stream and can travel to the fetus. In other words, if a woman had been exposed to high levels of lead as a child, and some of the lead had been stored in her bones, her pregnancy could trigger the release of that lead

in her bones and could cause the fetus to be exposed. In such cases, the baby is born with an elevated blood lead level.

Exposure to lead is estimated by measuring levels of lead in the blood (in micrograms of lead per deciliter of blood). We at the Centers

no level of lead exposure that can be considered safe

for Disease Control and Prevention (CDC) have set a “level of concern” for children at 10 micrograms per deciliter of blood.

At this level, adverse health effects can begin to occur. Recent research published in the New England Journal of Medicine provides new evidence that harmful effects can occur at even lower levels of exposure, even as low as 5 micrograms of lead per deciliter of blood. In other words, science is now telling us that there is no level of lead exposure that can be considered safe.

Children under 6 years of age

Many health effects are associated with elevated blood lead levels.

Our focus is young children under 6 years of age who are especially vulnerable to lead's harmful health effects because their brains and central nervous systems are still being formed.

For these children, even very low levels of exposure can result in reduced IQs, learning disabilities, attention deficit disorders, behavioral problems, stunted growth, impaired hearing, and kidney damage. At high levels of exposure, a child may become mentally retarded, fall into a coma, and even



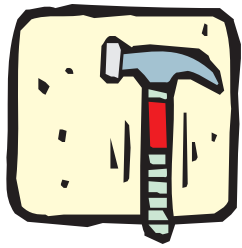
die from lead poisoning. In the last 10 years, children in New Hampshire and Alabama have died from lead poisoning. Lead poisoning has also been associated with juvenile delinquency and criminal behavior. The Gruter Institute for Law and Behavioral Research Web site (<http://www.gruterinstitute.org/news/vls.html>) includes the Report of a Symposium on Biology, Behavior, and The Criminal Law. The symposium was held in April 1997.

“Professor Deborah Denno drew on her Philadelphia data once again to argue for The Unfamiliar Link Between Lead and Crime. Her work also shows a highly significant link between observed lead toxicity and the likelihood of criminal activity. The rich nature of the data allowed her to explore some 3,000 factors for links to criminal behavior in 1000 children who were followed from birth to age 22. The researchers found that the best predictor (when the children are 7 years old) for aggressive behavior in school, juvenile delinquency, and eventual criminal violence is the degree of lead poisoning. The second best predictor was anemia, which, being related to deficits in calcium, zinc and other essential minerals, is associated with uptake of toxins from the environment.”

A Dietrich et al. study (Dietrich KN, Ris MD, Succop PA, Berger OG, Bornschein RL. “Early exposure to lead and juvenile delinquency.” *Neurotoxicology and Teratology* 2001;23:511-518.) confirmed earlier clinical observations and recent retrospective studies that have linked lead exposure with antisocial behavior in children and adolescents. Both prenatal and postnatal exposure to lead were associated with reported antisocial acts and may play a measurable role in juvenile delinquency independent of other social and biomedical factors.”

In adults, lead can increase blood pressure and cause fertility problems, nerve disorders, muscle and joint pain, irritability, and memory or concentration problems. Unlike children, adults must be exposed to much higher levels of lead to experience adverse health effects. Most adults who are poisoned by lead are exposed to lead at work. People at high risk are those who work in jobs related to painting houses, welding, renovating and remodeling houses and buildings, working in or around smelters, firing ranges, manufacturing and disposing of car batteries, and maintaining and repairing bridges and water towers. Workers in these jobs must take care not to leave their work site with potentially contaminated clothing, tools, and facial hair or with unwashed hands. Otherwise, these workers can spread the lead contamination to their family vehicles and even to their family members.

I Want to Renovate My Home. How can I Find Out Whether My Home Contains Lead-based Paint Hazards?



If you live in a home built before 1960, your home very likely contains some lead paint. Homes built between 1960 and 1978 may also contain lead-

based paint, but in 1978, the Consumer Product Safety Commission banned lead in paint. If you live in a home built before 1978 that has deteriorated, you may have a problem with lead-contaminated dust. To find out whether your home contains lead paint or a lead-based paint hazard, you should hire a professional.

If you want to find out whether your home has lead paint, you should hire a lead inspector to test all the paint in your home. Depending on the size of your home, this usually takes between 1 and 4 hours. You will know the results of the inspection immediately. The inspector will be able to tell you whether lead-based paint is in your home, where that paint is in your home, and what the paint's concentration of lead is. Older homes contain higher concentrations of lead-based paint than do homes built after the early 1950s. The higher the concentration of lead in the paint, the greater the hazard once the paint deteriorates.

If you want to find out whether your home contains lead paint, you should hire a lead inspector to test all of the paint in your home.

Depending on the size of your home, this inspection usually takes from 1 to 4 hours. You will know the results of the inspection immediately. The inspector will be able to tell you whether lead paint is in your home, where the lead paint is, and how strong the lead concentration is in the paint. Concentrations of lead in paint are higher in older homes than they are in homes built after the early 1950s. The higher the concentration, the greater the hazard once the paint deteriorates.



If you also want to find out whether your home contains any lead-contaminated dust—the most dangerous of all lead-based paint hazards—you should hire either a risk assessor or a sampling technician. The assessor or technician will take samples of dust throughout your home and will send the samples to a laboratory for analysis. You should be able to learn the results within 3 to 7 days, including whether any lead-contaminated dust is in your home and where the dust was found. A risk assessor can also tell you what you should do to take care of

the problem. If you prefer, you can buy a dust sampling kit and carefully do the sampling yourself, send the samples to an appropriate laboratory for analysis, and get the results directly from the lab. Using the do-it-yourself sampling kit is a less expensive way to find out about lead-contaminated dust in your home.

Various manufacturers also offer what is called a “spot test kit,” which is basically a sampling tool that uses a chemical process to help consumers determine whether lead is present in household paint, on toys, or in ceramic ware. However, spot test kits are not completely accurate or reliable, and they should not be relied on for definitive answers about the presence of lead paint.

Tips to Prevent or Reduce Lead Exposure

Maintain the paint in your home and clean up any lead dust.

If you live in a home built before 1978, the most important step to take to reduce the risk for exposure to lead is to make sure that the paint is well maintained. Before repainting, renovating, or doing certain repair work that may disturb a painted surface, wet the surface first to prevent the work from generating dust. Similarly, if debris from the work contains paint, the debris should be contained to prevent it from spreading beyond the work area. Carefully gather the debris and safely get rid of it.

Take care of a lead dust problem immediately.



You can clean up lead-contaminated dust on the floor yourself by carefully and thoroughly mopping the contaminated area with a mop and soapy water. A general all-purpose cleaner is adequate, but dishwasher soap containing phosphates or a lead-specific detergent may be more effective. A three-bucket

system is ideal, with one bucket holding the soapy water, a second bucket holding the rinse water, and the third bucket containing only clean water. After you wash a section of the floor with the soapy water, rinse

the mop in the rinse bucket, then dunk the mop in the bucket of clean water, and finally dip the mop back in the bucket of soapy water before mopping the next area. For smaller areas such as window sills, a rag should be used instead of a mop. Once done with the cleaning, throw the mop or rag away.

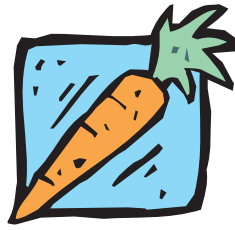
When cleaning lead-contaminated dust, vigorous wiping is most effective in removing the lead.

However, wiping should never be done in a back-and-forth manner, but rather from left to right (or vice-versa), or from the top of a wall downwards.

Once a room has been cleaned, rinse again using only clean water.

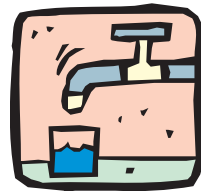
Use a new mop head if possible. Remember that if you do have a lead dust problem, you will also need to address the source of the lead dust. In many instances, lead dust particles are generated by friction caused by the opening and closing of old windows. With old, deteriorating windows, outright window replacement may be the best option. In addition to solving your lead-dust problem, this window replacement usually results in significantly increased energy efficiency, higher property values, and lower heating and cooling bills.

If you have young children in your home and you suspect that you may have a lead problem, take the recommended steps to eliminate any lead-contaminated dust, and make sure children wash their hands frequently. Also, clean any toys that have been lying about in areas that you suspect may contain lead-contaminated dust.



Eat right.

You can reduce the amount of lead retained in your children's bodies if you make sure that your children's diets include plenty of foods that contain iron, calcium, and zinc. Foods rich in iron include eggs, raisins, greens, beans, peas, and other legumes. Dairy products such as milk, cheese, and yogurt are high in calcium. Lean red meat and oysters are examples of foods that contain zinc. Avoid giving children fried or fatty foods—although a certain amount of dietary fat is vital for children under 2 years of age. Make sure your children always wash their hands before eating.



Check the water.

To ensure your drinking water does not contain a hazardous level of lead, test the water at your faucets. Call the EPA Safe Drinking Water Hotline at 1-800-426-4791 for more information. Kits and instructions on how to test water are available from a number of providers.



Check your ceramic ware.

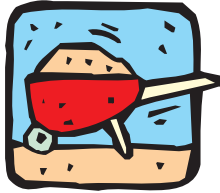
Some pottery may contain lead that can leach into food and drinks. Avoid eating from colorfully painted ceramic plates, and avoid drinking from any ceramic mugs unless you know that they do not leach lead. Particularly use caution if the pottery was made in Asia, Mexico, or other Latin American countries. In general, pottery made in the United States, Canada, or Western Europe tends to be safe.



Do not store alcohol in crystal containers.

Crystal decanters and glasses are often made with lead.

When an acidic substance or alcohol is left in these containers for longer than a few hours, lead can leach into the liquid.



Cover bare soil play areas.

Do not allow your child to play in bare soil areas unless you know that these areas

are lead free. Often, bare soil contains some lead deposited there by vehicle emissions from leaded gasoline or from deteriorated exterior paint. Frequently, soil in vacant lots where old buildings once stood is contaminated with lead, and soil in neighborhoods where extensive renovation work occurred may also be contaminated. If you have a bare soil problem, the easiest way to reduce the risk is to cover the soil with mulch (such as pebbles, shrubbery, or grass). Children who play in lead-contaminated bare soil are likely to get some soil on their hands and under their fingernails. This soil will likely get into the mouths of the children, on their toys, and on their shoes. Lead-contaminated soil on children's shoes can be tracked into the home. Similarly, a dog that rolls around in lead-contaminated bare soil may transport some of that lead into the home.



Using Laws to Help Prevent Lead Poisoning

At the federal level, the Lead-Based Paint Hazard Reduction Act of 1992, known as Title X (Title ten), is the source of much of the law of the land on lead paint. One of its most important requirements is the disclosure of



known lead hazards at the time of the sale or lease of a home built before 1978. Sellers and landlords must also provide a pamphlet on lead poisoning to the buyer or renter before the pre-1978 property is sold or rented. Federal lead hazard disclosure laws have been vigorously enforced by the U.S. Department of Housing and Urban Development (HUD), the U.S. Environmental Protection Agency (EPA), and the U.S. Department of Justice (DOJ). For the past

5 years, these federal agencies have worked together to help ensure that property owners and real estate agents comply with the Title X disclosure requirements.

Similarly, Title X also requires renovators, remodelers, and others who conduct such activities for pay in homes built prior to 1978 to provide the pamphlet "Protect Your Family From Lead in Your Home" to the owners and occupants of affected housing prior to beginning the work.



At the state or local level, additional laws may have been enacted to protect you from lead poisoning. **If you live in a state other than Georgia, check with your state and local health and housing departments for information on laws about preventing lead poisoning.**

Code enforcement is another important legal tool that can be used to prevent lead poisoning. Most local codes already prohibit chipping or peeling paint conditions. Generally, under what is called "common law," or the implied warranty of habitability, tenants have a right to live in safe housing. Premises that contain lead-based paint hazards are inherently unsafe places to live. If you can demonstrate that your rented home contains a lead-based paint hazard, you should immediately contact your landlord or property manager and notify them of the presence of a lead hazard. Do it in writing and keep dated copies of your all correspondence.

Let's put the CAP on Lead



Contact: Rose M. Glass-Pue, MA
Lead Poisoning Prevention Program
Emergency and Environmental Health Services
Centers for Disease Control and Prevention
770-488-7609