



## **What You Need to Know about THE DANGERS OF LEAD-BASED PAINT**

It seems as though every season brings us a new toxin to be aware of in our homes. We've been warned about asbestos, radon, PCB's, and radiation from televisions. But, the poison most frequently found in our homes is lead. Lead has been a popular and common additive to paint since long before Van Gogh's time. (Some historians have even attributed his insanity to lead poisoning.) There are probably very few houses in older communities like Cleveland Heights that don't have lead-based paint in them.

Lead is a heavy metal. It is known to be toxic to people and other animals. It doesn't break down or go away, so it remains in whatever it is used in. You can find lead in auto batteries, and in the solder holding copper pipes together. (In fact, prior to World War II, most water lines from the street to the house were made of lead.) It's found in old-style leaded gasoline, and in the exhaust vapors from cars and trucks that use it. And, lead is found in paint, of all types and brands, made before the late-1970's.

Most houses built before the late '70's have at least some lead-based paint in them – if not on the top layers, then in the older, buried layers of paint on the inside or outside of the home. When lead-based paint flakes or gradually rubs off (each time a window is opened or closed, for example,) or when painted plaster crumbles from a roof leak or other cause, this creates leaded dust. This dust is now considered the most common source of lead poisoning – NOT eating paint chips, as was previously believed. This is the reason why grit blasting is so dangerous for the homeowner and the community. The paint that is blasted off the house turns into dust, which not only is blown around for the surrounding homeowners to breathe, but also settles into the ground around the house and stays there, posing a long-lasting health risk.

Children – including a developing child in a pregnant woman – are at greatest risk from lead. Children typically retain about 50% of the lead they ingest, while adults usually retain 8%. The effects of lead poisoning are most easily seen in children under seven, but are often hard to relate to lead. Symptoms may include anxiety, tiredness, crabbiness, behavioral difficulties, sluggishness, and general flu-like symptoms. The eventual result of continued exposure is brain damage – reading difficulties, mental retardation, and, in extreme cases, death. Brain damage from lead poisoning is believed to be permanent. Ask your pediatrician to check the lead levels in the blood of your children on a regular basis. If the level is elevated, you'll know you need to take immediate action to reduce their exposure.

Lead in paint can be detected by several types of tests, ranging from inexpensive swab kits that can be used by homeowners (these may not detect the presence of lead in all cases, but a positive result would certainly indicate the need to take precautions) to X-rays or laboratory analyses that are much more accurate, but must be performed by trained professionals. In Cleveland Heights, contact the city's Housing Preservation Office (216-291-4877) or the Cuyahoga County Board of Health (216-443-5660) for information about having paint samples checked for lead. You can also get more current information from Environmental Health Watch (216-961-4646).

After you have confirmed that you are dealing with lead, what can you do about it? The most current recommendations for getting rid of lead-based paint reflect the increased concern

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of the medical community as to acceptable levels of lead in the blood. In 1960, the acceptable level was 60 mg. In 1985, it was lowered to 25 mg, and the current medical literature states that 10 mg is a level for concern. Because of this dramatic decrease in acceptable levels of lead in the blood, experts are suggesting more care be taken in removing lead-based paint from the home.

The current thinking about getting rid of lead is as follows: First, it is not recommended that lead paint abatement (removal) be undertaken by non-trained homeowners, but only by professionals. R. M. Santucci, in the May/June, 1991, issue of **Cost Cuts** (page 4), states, "...we now know that the historic method of abating lead in occupied units by scraping, sanding, or burning the accessible paint from chewable surfaces exposes the family to a 100-fold increase in available lead dust." In any decision about removing lead from the home, you need to consider whether you are creating more contamination by removing the leaded paint, or if a better choice is to encapsulate it (seal it in), at least for the time being. Most of the reports recommend throwing away all doors, windows, and molding that have lead paint, and replacing them with new. The only trim they suggest saving would be some unusual or ornate trim, one that would be difficult or quite expensive to replace. The recommended treatment for walls and ceilings covered with lead-based paint is to cover them with a state-approved liquid encapsulant or 1/2-inch drywall, although some wallpapers may work. Special cleaning with lead-specified detergents should follow all work that disturbs lead-painted surfaces. Clearance testing (by a licensed inspector) will ensure that the lead contamination was removed.

Removing all lead-based paint can involve very dramatic and costly measures, which are far beyond the average homeowner. In fact, the costs to abate the lead-paint hazard in some three-bedroom, two-story row houses in 1991 in Maryland averaged \$17,500 per home (far higher in today's dollars), not including the walls (**Cost Cuts**, May/June, 1991, pg. 4.) What can you, the average homeowner, do to eliminate or reduce this hazard? Following the recommended precautions, you could replace doors and windows over several years, to spread the cost out. Chemical paint strippers are effective for removing paint from trim, but they must be used safely. Gradually upgrading your home with paneling or new drywall would help. Spreading these costs over several years, and including them with your remodeling/modernization plans seems to be a sensible approach. Although the experts believe total removal is the best policy, you can do it a little at a time. And certainly, doing something is better than ignoring the risk completely.

In addition, you need to consider the possibility that you can create lead dust during routine home maintenance and repair projects. Before you start any job on a house built before 1978, stop and think about whether you will be disturbing a painted surface. If so, you might wish to use a licensed lead-abatement contractor or lead-certified renovator to do the work. (There are strict lead control guidelines for any renovation work paid with federal funds.) If you decide to proceed with the project yourself or with a contractor who has not been trained in lead control, there are some relatively inexpensive and practical steps you can take to reduce the chances you will contaminate your home with lead dust. (*See separate handouts on "Controlling Lead-Based Paint during Inside/Outside Projects."*)

The danger of contamination is very real. Read more about it, and make good choices for yourself and your children. Before you undertake any work that disturbs lead-based paint, whether do-self or contracted, read the information available from the **EPA** (Environmental Protection Agency: [www.epa.gov/lead/pubs/leadinfo.htm](http://www.epa.gov/lead/pubs/leadinfo.htm)) regarding the removal process. The more you learn about lead paint, the better able you'll be to decide what you need to do to reduce or eliminate this risk from your life.