By Carol Lamkins, CID, CMKBD



Interior Designers should be aware of this 2010 legislation concerning lead products used in our living environments. Lead is a toxic substance that is very detrimental to health. The health risks can be severe and irreversible, and it requires only a small amount to be considered hazardous. Lead exposure can harm young children and babies even before they are born. Even children who seem healthy can have high levels of lead in their bodies. A simple blood test can confirm lead exposure.

Lead can enter the body by inhaling, especially during renovations that disturb painted surfaces, or swallowing dust or by eating soil or paint chips containing lead. Contamination may be as simple as putting hands or other objects covered with lead dust in the mouth.

Lead is most likely found in lead-based paint. Many homes built before 1978 may have lead-based paint. The federal government banned lead-based paint from housing in 1978. Some states stopped its use even earlier.

The federal standard defines lead-based paint as any paint or surface coatings that contain lead equal to or in excess of 1.0 milligram per square centimeter or more than 0.5 percent by weight. Lead, which is a bluish-grey metal found in the earth's crust in small amounts, was added to paint for color and durability. Lead-based paint was banned in 1978.

Eighty-six percent of all homes built before 1940 contain lead-based paint, and sixty-six percent of homes constructed between 1940 and 1959 contain lead-based paint. The presence of this paint becomes an issue when renovation activities disturb it causing dust and debris that can be swallowed or inhaled. 24 million U.S. homes have significant lead-based paint hazards, while 38 million have some amount of lead-based paint.

In general, the older the home, whether in the city, county or suburbs, the more likely it has lead-based paint inside and outside of the house. Included are apartments, single-family homes, and both private and public housing. Federal law requires that individuals receive certain information before renting or buying a pre-1978 housing.

- 1. Landlords must disclose known information on lead-based paint and lead-based paint hazards before leases take effect. Leases must include a disclosure form about lead-based paint.
- 2. Sellers must disclose known information on lead-based paint and lead-based paint hazards before selling a house. Sales contracts must include a disclosure form about lead-based paint. Buyers have up to ten days to check for lead hazards.

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Lead-based paint that is in good condition is usually not a hazard. However, lead dust can form when lead-based paint is dry scraped, dry sanded, or heated. Dust also forms when painted surfaces bump or rub together. Lead chips and dust can get on surfaces and objects that people touch. Household dust and settled lead dust can re-enter the air when people vacuum, sweep or walk through it.

Also lead in soil can be a hazard when children play in bare soil or when people bring soil into the house on their shoes. Soil can pick up lead from exterior paint, or other sources such as past use of leaded gas in cars, and children playing in yards can ingest or inhale lead dust.

Another source can be in plumbing that has lead or lead solder. The local health department or water supplier can be contacted to find out about testing the water. Lead cannot be seen, smelled or tasted. Boiling water will not get rid of lead. If the plumbing might have lead in it, use only cold water for drinking and cooking. Run water for 15 to 30 seconds before drinking it, especially if the water has not been run through the pipes for a few hours.

Work or hobbies may use lead, such as making pottery or stained glass, or refinishing furniture. If a person works with lead, they could bring it home on their hands or clothes. The best solution is to shower and change clothing before coming home. Work clothes should always be laundered separately from the rest of the family's clothes.

Food and liquids should not be stored in lead crystal or lead-glazed pottery or porcelain. Food can become contaminated because lead can leach in from these containers.

Lead-based paint may also be a hazard when found on surfaces that children can chew or that get a lot of wear-and-tear. These areas include windows and window sills, doors and door frames, stairs, railings, and banisters, porches and fences. Lead was also used on old painted toys and furniture.

Lead is more dangerous to children because babies and young children often put their hands and other objects in their mouths. These objects can have lead dust on them. Also children's growing bodies absorb more lead and their brains and nervous systems are more sensitive to the damaging effects of lead.

The sad part is that if not detected early, children with high levels of lead in their bodies can suffer from damage to the brain and nervous system, behavior and learning problems, such as hyperactivity, slowed growth, hearing problems and headaches.

Lead is also harmful to adults. Adults can suffer from reproductive problems (in both men and women), high blood pressure and hypertension, nerve disorders, memory and concentration problems as well as muscle and joint pain.

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There are many options for reducing lead hazards. In most cases lead-based paint that is in good condition is not a hazard. If lead-based paint is removed improperly, the danger to people is increased.

The Environmental Protection Agency's (EPA) Renovation, Repair and Painting Rule (RRP) that addresses the presence and removal of lead-based paint in target housing and child-occupied facilities has reached its date of enforcement. Beginning on or after April 22, 2010 and with an enforcement date of October 1, 2010, the EPA regulation requires the use of a Certified Renovator (CR) and the incorporation of lead safe work practices in most pre-1978 residences and child-occupied properties.

Federal law requires these contractors performing renovation, repair and painting projects that disturb more than six square feet of paint in homes, child care facilities, and schools built before 1978, be certified and trained to follow specific work practices to prevent lead contamination.

Firms and contractors performing work in target housing or child-occupied facilities must be certified and implement lead-safe work practices during renovation, adhering to the following requirements:

- Firm must be certified
- Renovators must be certified through training
- Non-certified workers must work under and be trained by a Certified Renovator
- Training providers must be accredited
- Lead-safe work practices incorporated during renovations
- Pre-renovation education in target housing and child-occupied facilities

Lead abatement professionals must follow work practice standards, which include posting signs defining the work area and containing the work area to prevent visible dust or debris from leaving the area. This is accomplished by an outlined series of interior and exterior containment procedures that include containing the work area, minimizing dust and cleaning up thoroughly.

The EPA estimated that 236,000 individuals have completed the required the 8-hour certification class, prior to the rule going into effect, and that 47,000 per year will complete the required training thereafter. General contractors/renovators, window replacement contractors, and painting contractors represent the largest group of professionals impacted.

As of October 1, the EPA may suspend, revoke, or modify a firm's certification if the firm is found to be in non-compliance. Non-compliant contractors may be liable for civil penalties of up to \$37,500 for each violation. Contractors who knowingly or willfully violate this regulation may face fines up to an additional \$37,500 per violation, or imprisonment, or both. Ask the contractors who are working on your projects if they are compliant with this new law. Ignorance can be a life threatening issue as well as one punished by law.

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For additional information on the EPA's Renovation, Repair and Painting Rule, lead poisoning, lead abatement, and certification training, go to <u>http://epa.gov/lead</u> or call 1-800-424-LEAD (5323).

Other Web resources are:

http://www.epa.gov/lead/pubs/nlic.htm - National Lead Information Center http://epa.gov/lead/pubs/renovation.htm - RRP rules http://epa.gov/lead/pubs/leadbase.htm - EPA disclosure program http://epa.gov/lead/pubs/regulation.htm - rules and regulations http://epa.gov/lead/pubs/renovaterightbrochure.pdf - rennovate right http://epa.gov/lead/new.htm - lead in the news http://epa.gov/air/lead/ - air emissions http://water.epa.gov/drink/info/lead/index.cfm - drinking water http://www.epa.gov/lead/pubs/nlic.htm - paint, dust and soil