



By Doug Dalsing



Many contractors tend to think the issue of lead poisoning went away years ago, or that they are doing all that needs to be done to avoid it. But lead poisoning isn't just about the familiar vision of children eating paint chips, and even contractors who think they are doing a good job may not be working in a lead-safe manner. In fact, research shows that renovation contractors like carpenters, plumbers, electricians, painters, and even wood flooring experts, can inadvertently expose others to harmful levels of lead from invisible dust disturbed during jobs they perform every day.

Lead can affect almost every organ and system in your body. Children six years old and younger are most susceptible to the effects of lead. Even low levels of lead in the blood of children can result in behavior and learning problems, lower IQ, hyperactivity, slowed growth, hearing problems, and anemia. In rare cases, ingestion of lead can cause seizures, coma, and even death.

"The greatest risk is for young children living in homes during renovations," said Jim Jones, Assistant Administrator of the EPA's Office of Chemical Safety and Pollution Prevention. "One study found that they were 30 percent more likely to have unsafe levels of lead in their blood than children in homes where renovations were not occurring.

So it's very important that renovation contractors learn how to work lead-safe and that families hire Lead-Safe Certified contractors."

Lead is also harmful to adults, especially pregnant women. Adults exposed to lead can suffer from cardiovascular effects, increased blood pressure and incidence of hypertension, decreased kidney function, and reproductive problems (in both men and women).

On the job site

When sanding a previously finished floor, it's important to determine whether the floor finish contains lead. Any floor finishes applied before 1978 may contain lead. Prior to 1978, metals

(including lead) were used in some oil-modified urethane finishes and stains as a drying agent. Also, it's important to consider the presence of lead paint on the walls and other painted surfaces when conducting any sort of flooring remodel project. Removal of baseboards and old radiators that could be coated in lead also requires EPA Certification to remediate. Test kits are available to determine the presence



of lead in floor finishes and other architectural coatings, including any painted floor surface. However, while these test kits are approved, they are not always accurate. There are other technologies for testing that are considered much more accurate. Understandably, one major advantage to the test kits is that a certified person can complete the testing on their own. But, to use the more advanced technology on the job site, the testing would need to be hired out. In my opinion, lead testing is going to place the wood floor contractor far outside of their expertise and, in the long run, will cost time and money that could be put to better use by doing wood floor work instead of environmental consulting.

The EPA's 2010 Renovation, Repair & Painting (RRP) rule mandates that all contractors working in pre-1978 homes and child-occupied facilities who disrupt more than six square feet of lead paint are required to become EPA Certified in lead-safe work practices. If not, they could face thousands of dollars in fines, and – even worse – be responsible for poisoning their customers.

Federal law requires that a "certified renovator" be assigned to each job and that all involved individuals are trained in the use of lead-safe work practices. To become a certified renovator, a person must complete a lead-renovator training course accredited by the EPA that will teach them how to work lead safe. Workers helping the certified renovator must also be trained. They can either be a certified renovator (meaning they successfully completed the accredited training) or they must have been trained on the job by a certified renovator at a minimum (such training must be documented and the documents must be retained).

"Getting lead-safe certified is the right thing to do for renovation contractors, their customers, and their employees, and especially for children who spend time in or near spaces that are being renovated," said Jones.

Protect you and your crew

Read *Renovate Right*, EPA and HUD's Lead Hazard Information Pamphlet. Contractors are required by law to give clients in pre-1978 homes and child-occupied facilities a copy of *Renovate Right*. *Renovate Right* explains the danger of lead-based paint and its associated hazards. You can get copies

of *Renovate Right* by calling 1-800-424-LEAD (5323), or you can download it at epa.gov/lead.

Use lead-safe work practices. Follow practices that will protect you and residents from exposure to lead. These practices may take a small amount of additional time and money, but they are necessary to protect children, residents, workers, and workers' families from exposure to lead dust.

Remember that as you sand floors, remove old floors, remove base trim, etc., you are creating dust. You can keep dust down by using the right tools and following some simple practices that minimize and control the spread of dust such as collecting all dust when sanding a floor and sealing doorways to further help contain dust.

Workers should also protect themselves. Without the right personal protective equipment, workers may ingest or inhale lead from the job and may risk bringing lead from the worksite home to their families.

Conduct lead testing before and/or after the work is performed. Pre-job testing can identify any lead paint in the home and allow workers to target lead-safe work practices to the areas where there is lead paint. Using the cleaning verification procedure or clearance testing at the end of the job ensures that no dust has been left behind.

Learn more about lead. To learn more about working safely with lead, including how your firm can get Lead-Safe Certified and where to find an EPA-accredited trainer in your area, visit epa.gov/getleadsafe, or call 800.424.LEAD. Check with local Canadian Province regulations for specific lead laws.

Source: EPA.gov/lead

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