

Acceptable Levels of Lead Poisoning? **EPA Goes Lead Wild**

By DON FITZ

The U.S. Environmental Protection Agency (EPA) supposedly helps protect the environment, especially from toxins that endanger human health. But maybe not. Lead activists from across the country charge that the federal agency is missing the chance to reduce exposure to lead in paint and is actually undermining existing standards of safety.

At issue is the EPA's proposed "Lead Safe Work Requirements to Protect Children during Renovation, Repair and Painting." Blood lead levels of many children have increased after remodeling homes built before 1978 (when lead was banned from paint). Disturbing lead-based paint can release dust in lead or fumes.

Thus, Section 402 of the Toxics Substance Control Act of 1992 required the EPA to draft standards for home repairs that would minimize exposure to lead. Though Congress instructed the EPA to compile rules for lead safe practices by 1996, the agency failed to act for nearly 10 years. After being threatened with a lawsuit and receiving a warning from Senator Barak Obama, the EPA finally published a proposed rule on lead hazards on January 10, 2006.

The 10 year tardy proposal is silent on major issues that affect childhood health. According to the Sierra Club's Ed Hopkins, "EPA's rule ignores 14,200 child care centers that have significant lead-based paint hazards." These centers care for 470,000 children.

Additionally, the proposed rule says nothing concerning dangerous work practices on building exteriors. This is important for children's health because practices such as sandblasting on building exteriors can spread lead dust in streets, schoolyards and playgrounds.

It remains unclear whether lack of attention to these areas is a blessing in disguise, since so much of the EPA proposal could prove harmful. A storm of controversy is brewing over how to determine if home renovation has created a lead hazard.

For years, the accepted method for measuring the degree of lead danger in buildings has been "dust wipe samples." A cloth is used to wipe dust from key areas of a house and it is then sent for laboratory analysis. Multiple studies have confirmed that the amount of lead in dust wipes correlates with blood lead levels of children living in the homes. The more lead dust there is on the cloth, the more lead poisoned the children are.

EPA's proposed rule would toss out this tried and scientifically accepted method. And what would replace it? The EPA hopes to initiate its own "white glove methodology," which Rebecca Morley of the National Center for Healthy Housing (NCHH) calls "baby wipes on a mop." The white glove method involves wiping windowsills and floors with white disposable cleaning cloths and then looking to see if dust is visible on the cloth.

Both the dust wipe and white glove test gather dust on cloth. The major difference is that dust wipes are sent to a lab for analysis and the EPA proposes training inspectors to make a visual determination of the presence of lead from a white glove test.

It's not hard to figure out that a chemical analysis from a lab is more accurate than a person eyeballing a cloth. In fact, lead research demonstrates conclusively that visual examinations are insufficient to determine the quantity of invisible lead dust present. A 2002 NCHH study found that 54% of housing units passed a visual lead test but failed clearance levels for lead.

When the EPA developed the white glove test, it only collected data on bare floors. Consequently, the EPA specifies that the white glove test would only be used on bare floors and that carpeted rooms would only require a visual inspection for the presence of lead.

Visual inspections for lead are notoriously unreliable, with a two-thirds rate of failure to adequately identify lead dangers. About 54 million houses built before 1978 contain some wall-to-wall carpeting, with 47 million having living room carpeting and 46 million having bedroom carpeting. In all of these, the EPA's rule would expose children to lead poisoning by not requiring dust wipes following home repair.

Perhaps the most insidious aspect of the white glove test is that it could undermine laws mandating property owners to disclose records of lead contamination to buyers or renters. Since the EPA rule would not require renovation firms to provide owners with written documentation of white glove tests, there would be no records to give to buyers or renters. This loophole could result in people moving into homes with no information on their degree of lead contamination.

Even worse than not drafting rules that would require adequate testing for lead, the EPA proposes to relax rules concerning "dangerous practices." This goes to the heart of the difference between corporate and environmental approaches to dangerous materials. Whatever the toxin in question, industry spokespersons suggest ways to control and contain it. Environmentalists argue that it makes more sense to not make toxic messes than it is to assume the mess will be made and ponder how to clean it up.

For years, the EPA, the U.S. Department of Housing and Urban Development (HUD) and several other federal agencies have agreed that the best way to control the release of lead during home repair is to ban dangerous methods of paint removal. Prohibited methods of paint removal include (a) open flame burning or torching; (b) machine sanding or grinding or abrasive blasting or sandblasting without a HEPA local exhaust control; (c) heat guns operating above 1100 degrees Fahrenheit; or, (d) dry sanding or dry scraping (with some exceptions).

Using heat to remove lead paint is a good example of why a work practice can be dangerous. Lead volatilizes into a fume at temperatures typical of flame torches. A fume is not a gas. It is composed of tiny particles that are more easily absorbed into the human body than are larger particles. This is why techniques such as heat that were frequently used to remove lead paint between 1970 and 1990 often resulted in an increase (rather than a decrease) of blood lead levels of children living in the home.

EPA argues that prohibiting dangerous practices could make many jobs, such as preparing a surface for repainting, very hard or impossible. This contention is astounding, given that prohibition of dangerous practices has been increasing as people discover more and better alternatives.

It is hard to overemphasize the health hazards of going backwards and legitimizing practices that are known to generate large amounts of lead dust and fumes. Rebecca Morley is the Executive Director of the National Center for Healthy Housing (NCHH). Reviewing the potential long term effect of the proposed changes, she emphatically concluded that "The failure to prohibit dangerous work practices means that many more homes will be unnecessarily contaminated, posing risks for future generations who will occupy these homes."

On its web site, the EPA points out that there are over 310,000 children with elevated blood lead levels and over 38 million homes with lead-based paint in the U.S. Then why would it overlook the massive scientific data indicating that it is trying to move in the wrong direction? Ever since it was founded during the reign of Richard Nixon, the EPA has been criticized for being far too receptive to spokespersons of the industries it is supposed to be regulating.

In proposing its rules on lead, the EPA lent a long ear to recommendations of the Small Business Review Advocacy Panel Report. Instead of promoting a continuation of bans on dangerous work practices, the Panel urged the EPA to emphasize training, containment and clean-up concerning lead removal.

The after-the-fact thinking of the small business Panel was incorporated into the EPA proposed rule on lead. So much so that portions of the EPA proposed rule are no more than paraphrases of the business Panel's recommendations. Dr. Jack Leonard of the Environmental Management Institute noted that "No scientist who conducted the research that is the basis for much of the rule were permitted to comment on the recommendations of the Panel."

The EPA missed a great chance to offer a new definition of what "lead poisoning" means. The standard measurement is the number of micrograms of lead per deciliter of blood, or mcg/dL. As decades have gone by and bodies of research have revealed that lower levels of lead damage human health, the blood lead level used to define lead poisoning has repeatedly dropped.

The current definition of lead poisoning used by the Centers of Disease Control (CDC) is 10 mcg/dL. Since this standard was published, multiple studies have documented damage to children's reading and math ability at levels below 10 mcg/dL. In fact, there is more incremental damage for children's intelligence scores for the range 0 10 mcg/dL than for any other 10 point range. It is now time to redefine childhood lead poisoning to mean finding any lead in a child's blood.

Throughout U.S. schools, children frustrated by poor academic skills show behavioral problems. Barbara Chicherio, who is on the National Committee of the Green Party USA, is also a social worker in the public schools. She believes that "There is no question that many of the difficulties we see in children are directly or indirectly caused by their exposure to lead at an early age."

The approach of industry is always to try to convince the public that there is some "acceptable" level of toxins. Lead is one of many poisons now known to have no safe level in the human body. Proposing new rules on lead safe work requirements during renovation, repair and painting gave EPA heads a perfect opportunity to redefine lead poisoning and to draft rules based on the goal of eliminating lead from our environment. Predictably, the EPA failed to live up to the challenge.

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