

Lead in Construction

Hazard Alert



Old paint on metal bridges, process equipment, and buildings may contain lead. Construction workers are exposed to lead when metal structures are torn down, renovated, or repainted.

When metal covered with lead paint is cut, sanded, heated, burned, or blasted with abrasives, lead gets into the air. Anyone near such work can get lead poisoning.

The Hazards

Lead is toxic if you breathe or swallow it. It can cause severe anemia and prevent your producing healthy children. It can damage your kidneys, brain, and nervous system, too.

The first signs of severe poisoning may be upset stomach (or cramps), weakness, joint pain, and/or being tired. (But lead can harm you even if you don't show these symptoms at first.)

Protect Yourself

If you are stripping, sanding, heating, cutting, or otherwise disturbing a painted surface — or you are near such work:

- **Ask your employer if the paint contains lead.** The OSHA lead standard says your employer must train you if you could be exposed to lead. (The standard is 29 CFR 1926.62.) Until you are sure there is no lead, act as if the paint contains lead.

If the paint has lead (or may have lead):

- **Follow your employer's special procedures for this work.** OSHA and some states have special rules for work on lead-coated surfaces. OSHA says an employer must first use engineering and work practice controls to reduce or prevent lead exposures.
- **Use wet methods,** if you can, to keep down any dust.
- **Before you use a torch for cutting, remove paint.** (Cutting with torches or heating lead paint produces a lead fume.) Use long-handled torches.
- **Use local-exhaust ventilation.**
- OSHA says use a respirator **only** when other controls are not possible or not enough.
- **Do not use a disposable dust mask unless it is approved by NIOSH,** the National Institute for Occupational Safety and Health.

(Please turn the page.)

- **If respirators are required, OSHA requires that your employer develop and implement a written respiratory protection program.** The employer must do an exposure assessment to find out which respirator is needed. A respirator will need at least a NIOSH-approved half-mask with high-efficiency (N-, R-, or P-100) filter protection for lead fumes. Such a mask provides protection for up to 10 times the permissible exposure limit (PEL) for lead fumes.
- A respiratory protection program must include proper selection and fitting of respirators, medical screening of workers to be sure they can wear respirators, and worker training. Correct maintenance, storage, and cleaning of respirators, and an evaluation of the program are needed also.
- **Do not smoke, eat, or drink around work on lead paint.** This is to prevent swallowing lead.
- **Always wash your hands and face before smoking, eating, or drinking.**
- **Do not wear work clothes home.** (Do not use compressed air to blow dust off your clothes.) Lead dust on your clothes and shoes can poison your family, especially your children.
- **Have your blood-lead level checked.** OSHA says your employer must test your blood-lead level if you are exposed to lead in the air at or above concentrations of 30 micrograms per cubic meter (30 $\mu\text{g}/\text{m}^3$). How often you need blood tests will depend on your exposure. If your blood-lead level is above 50 micrograms per deciliter ($\mu\text{g}/\text{dL}$), OSHA says your employer must give you a second test within 2 weeks after the employer gets the results of the first blood test. If your lead level is still above 50, your boss must remove you from lead exposure. If there is no other job you can be assigned where you are not exposed to lead, they must pay you anyway, until 2 blood-lead tests in a row are at or below 40 $\mu\text{g}/\text{dL}$. When OSHA says a medical exam is needed, your employer must arrange and pay for it.

You Should Know

Representatives of unions, management, and state and local governments have written guidelines for a safe lead-removal program for industrial structures. You can get the guidelines, *Model Specifications for the Protection of Workers from Lead on Steel Structures*, from the Center to Protect Workers' Rights (CPWR) at 301-578-8500.

For more information, call your local union, the Center to Protect Workers' Rights (CPWR) (301-578-8500 or www.cpwr.com), the National Institute for Occupational Safety and Health (1-800-35-NIOSH, 1-800-356-4674, or www.cdc.gov/niosh), or OSHA (1-800-321-OSHA or www.osha.gov). Or go to www.elcosh.org.

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