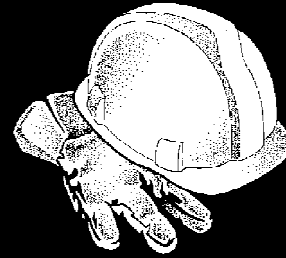



# TRAINING GUIDE

## LEAD



1994

*Before you begin the meeting...*

- Does this topic relate to the work the crew is doing? If not, choose another topic.*
- Has the crew completed basic Hazard Communication training? It will help them understand this topic.*
- Did you read this Training Guide and fill in the blanks where the  appears? (To find the information you need, look over the Safety Walkaround Checklist for this topic.)*

*Begin:* This meeting is about preventing exposure to lead on the job. You might think that the only people who have to worry are those who do lead removal work. That's just not true. There can be a problem on **any** job if you scrape, grind, cut, or disturb surfaces that contain lead. Lead is common in old surface coatings. And even today, many bridges and industrial buildings are still painted with lead-based paint.

The law says you need special training to work with any significant amount of lead. You need to learn about respirators, protective clothing, special work methods, and other safety precautions. We can't give you all this information in a few minutes. What we **can** do today is make sure everyone is aware of the dangers of lead.

*You or a crew member may want to add a personal story about lead.*

*Next, discuss with the crew where there may be a danger of lead exposure at this particular job site. Explain what testing has been done, and where the levels may be high.*



### ASK THE CREW THESE QUESTIONS:

*After each question, give the crew time to suggest possible answers. Use the information following each question to add points that no one mentions.*

#### 1. What are some symptoms you might notice if you are exposed to lead?

- headaches
- trouble sleeping
- fatigue
- reduced sex drive
- mood changes (irritability, depression)
- loss of appetite
- stomach pain
- pain, weakness, or twitching in muscles

**2. If you don't pay attention to these symptoms and reduce your lead exposure, you can get seriously ill from lead poisoning. Does anyone know what diseases can be caused by high, long-term exposure to lead?**

- anemia
- kidney damage
- reproductive problems (including impotence and infertility)
- brain and nervous system damage

**3. What are some jobs on a construction site that might expose you to lead?**

- Renovating or demolishing structures that have lead-painted surfaces.
- Spray painting with lead-based paint, or removing lead-based paint.
- Sandblasting bridges or steel structures that are painted with lead.
- Grinding, cutting, or torching metal surfaces that are painted with lead.
- Welding, cutting, or removing pipes, joints, or duct work that contain lead or are painted with lead.
- Using solder that contains lead.
- Cutting or stripping lead-sheathed cable.
- Heating some roofing products, or dissolving them with solvents. (Fumes from hypalon coatings, cover strips, flashing, splice tape, and seam tape can contain lead oxide.)
- Cleaning up sites where there is lead dust.

**4. We have already tried to identify all possible sources of lead on this job. But what if you run across something you're not sure of? How can you find out if there is lead in the material you are working with?**

- If you're working with **old** coatings, pipes, or similar materials that might contain lead, **send a sample to a lab** to be analyzed.
- If necessary, the company can bring in a qualified professional to measure the lead dust level in the air with instruments. This is called **air monitoring**.
- **When in doubt** if there is lead, **ask!**
- If you're working with a **new** product (like paint), read its **Material Safety Data Sheet** (MSDS). The MSDS should tell you the ingredients and possible health hazards.

**5. If there's lead around, what precautions can you take to avoid getting exposed?**

- Use **safe work practices**. For example, work in a well-ventilated area. To reduce dust, vacuum up debris, don't sweep it up. Use a **HEPA** filter on equipment like sanders and vacuums. Wet down paints and coatings you're removing to keep dust out of the air. Isolate any work areas that contain lead, and post warning signs.
- **Don't eat, drink, or smoke** on the job. Anything you put in your mouth may be contaminated with lead.
- If necessary, use **personal protective equipment** (PPE) like **gloves**, special **clothing**, and a **respirator**. If you use a respirator, we must provide the right type, make sure it fits properly, teach you how to use it, and give you a physical to make sure you're able to wear it safely.

*Explain all protective measures required on this job—work practices, PPE, etc.:*

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*(PPE and Respirators are covered in more detail in separate Training Guides.)*



**6. If you've been working around lead, why is it important to change your clothes and wash up *before* you go home?**

- You might accidentally take lead dust home on your clothes or in your car. At home, it could contaminate your furniture and rugs. It's especially dangerous to small kids, who like to put things into their mouths.

*Explain cleanup procedures on this site— how and where to clean up, what to do with contaminated clothing, etc.:*

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**7. Cal/OSHA says anyone who is exposed to a large amount of lead, even for a day, must get a blood test. Why are blood lead tests required?**

- They tell you how much lead is circulating in your blood. If your blood lead level is too high, Cal/OSHA says you must be given a work assignment away from lead, with no loss of pay.
- The tests **don't** tell you how much lead is stored in your bones. Lead can be stored in the bones for long periods and released into the bloodstream later.
- You should get a "baseline" blood test before you begin to work around lead, so later you can make sure your blood lead level is not going up.
- Cal/OSHA says that all required blood lead tests must be paid for by your employer.

**CAL/OSHA REGULATIONS**

*Explain:* Most of the safety measures we've talked about are required by Cal/OSHA. We have to take these precautions—it's the law. For example, Cal/OSHA requires us to have a written lead compliance program. Copies are available for you to see. Cal/OSHA also says we must make sure no one on the site is exposed to more than **50 micrograms of lead per cubic meter** of air, averaged over an 8-hour shift. This is called the **permissible exposure limit (PEL)** for lead. I have a Checklist of the Cal/OSHA regulations on lead. If you'd like to know more, see me after the meeting.

**COMPANY RULES**

*(Only if applicable.)* Besides the Cal/OSHA regulations, we have some additional company rules about working with lead.

*Discuss company rules:* \_\_\_\_\_



**COMMENTS FROM THE CREW**

*Ask:* **Do you have any other concerns about lead? Do you see any problems on our job?** *(Let the steward answer first, if there is one.)*

**What about other jobs you've worked on? Have you had any experience with lead exposure that might help us work safer on this job?**

## GENERAL SAFETY DISCUSSION

*This is a time to discuss all safety concerns, not just today's topic. Keep your notes on this page before, during, and after the safety meeting.*

**Are you aware of any hazards from other crews?** *Point out any hazards other crews are creating that this crew should know about. Tell the crew what you intend to do about those hazards.*

**Do we have any old business?** *Discuss past issues/problems. Report progress of investigations and action taken.*

**Any new business? Any accidents/near misses/complaints?** *Discuss accidents, near misses, and complaints that have happened since the last safety meeting. Also recognize the safety contributions made by members of the crew.*

**Please remember, we want to hear from you about *any* health and safety issues that come up. If we don't know about problems, we can't take action to fix them.**

*To complete the training session:*

- Circulate Sign-Off Form.*
- Assign one or more crew member(s) to help with next safety meeting.*
- Refer action items for follow-up. (Use the sample **Hazard Report Form** in the Reference Section of this binder, or your company's own form.)*

