

Lead in Construction

OAR 437
Division 3/D
Division 2/I
Division 2/J

Lead in Construction

Why is lead so bad?

Lead can damage your nerves, stomach and intestines, kidneys, reproductive functions, and red blood cells. Workers who are exposed to high levels of lead risk long-term health problems and must be carefully monitored. Symptoms usually build up slowly from repeated exposure to small amounts of lead. You can be exposed to lead for months – or years – and not have any symptoms, but the longer you're exposed, the greater your risk of developing health problems.

How does lead enter your body?

There are two ways: You can breathe in lead from dust or fumes or you can swallow lead if it gets on your hands or face or in your food, drinks, or tobacco. Once lead gets into your body, it travels in your blood to organs such as the liver, kidneys, brain, and heart. After a few weeks, it moves into your bones and teeth where it can stay for years. Most of the lead that gets into your body is eliminated as waste in a few weeks. However, the lead that stays in your body can build up to dangerous levels if you are continually exposed.

The only way you can be exposed to lead is if you "disturb" it. Work tasks that disturb lead include:

- Heat gun work
- Manual sanding
- Manual scraping
- Spray painting
- Remodeling (including replacing dry wall, windows, and siding)
- Torch burning

Tasks such as these are called trigger tasks because they trigger a set of requirements in our lead rule – **1926.62, Lead** – that you must follow to protect your employees. (See Trigger tasks and interim protection, below.)

Is there lead where your employees will be working?

There's only one way to know: Sample the material they will be working with and find out if it contains lead. If your employees will be working on a home that was built before 1978, the best thing to do is hire a certified lead-based paint inspector or a risk assessor, who can tell you if lead is present and how much is there. Lead paint test kits are also available, but they may not be 100 percent reliable.

How to know if your employees could be overexposed

There's only one way to know: Sample the air they breathe while they're working. This is called air monitoring or exposure monitoring. You can do air monitoring yourself if you know how and if you have the equipment, which you can rent. You can also hire a consultant or your workers' compensation insurance carrier may be able to help.

- If your employees are exposed to lead at or above 30 micrograms per cubic meter of air (30 $\mu\text{g}/\text{m}^3$) averaged over an eight-hour period, they're overexposed. This is called the action level and you must follow specific requirements in our lead rule to protect them.
- A lead exposure level of 50 micrograms per cubic meter of air (50 $\mu\text{g}/\text{m}^3$) averaged over an eight-hour period is called the permissible exposure limit or PEL. You must ensure that your employees aren't exposed to lead at a level greater than the PEL – even when they're wearing respirators. You must also follow specific requirements in our lead rule to protect them.

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Trigger tasks and interim protection

If your employees do trigger tasks, you must assume they're exposed at levels above the PEL until you've done air monitoring to determine their exposures. You must also provide all of the following until you can show they're exposed below the action level:

- Appropriate respirators
- Protective clothing
- Clean areas for changing and storing clothes
- Hand-washing facilities
- Blood sampling for lead
- Training that covers lead health hazards and all parts of the lead standard

Providing appropriate respirators

Provide your employees with appropriate respirators when:

- They're doing any trigger task
- Their exposure to lead is greater than the PEL
- Engineering and administrative controls do not reduce their exposures to or below the PEL
- An employee requests a respirator

The appropriate respirators for your employees – which include tight-fitting, supplied-air, and powered air-purifying respirators – depend on their exposure levels.

If your employees use respirators, you must have a respiratory protection program that meets specific requirements of [1910.134, Respiratory protection](#) (including the medical evaluation requirement and the appendices).

Providing protective clothing

Provide your employees with protective work clothing and equipment that prevents contamination when:

- They're doing any trigger task
- They're exposed to lead above the PEL
- They're exposed to lead compounds that may cause skin or eye irritation

Protective work clothing includes:

- Coveralls or disposable full-body work clothes
- Gloves, hats, and shoes or disposable shoe coverlets
- Face shields and vented goggles

Providing clean areas for changing and storing clothes

Clean change areas are required. Change areas must have separate storage areas for protective work clothing and street clothes.

Employees can't leave the workplace wearing the protective clothing they wore during their work shift.

Providing hand washing facilities

Hand-washing facilities must include warm water and soap and meet the requirements of [437-002-0141\(5\) Washing Facilities](#).

If you can't provide showers, make sure employees wash their hands and face at the end of their shifts. Encourage them to go home and shower immediately.

Providing blood sampling

All your employees who may be exposed to lead at or above the action level must have baseline blood sampling for lead.

Providing training

All employees must understand the requirements of [1910.1200, Hazard communication](#).

Those who are exposed to lead at or above the action level must have additional training, including how their work could expose them to lead and the use of respirators.

Resources

- Division 2/I – [1910.134, Respiratory protection](#)
- Division 2/I – [1910.134, Respiratory protection, Appendices](#)
- Division 2/J – [437-002-0141\(5\) Washing Facilities](#)
- Division 2/Z – [1910.1200, Hazard communication](#)
- Division 3/D – [1926.62, Lead](#)