

CONSTRUCTION BASICS OF A LEAD HEALTH & SAFETY PROGRAM

All of the following protective measures are important for preventing work-related lead poisoning. Review each item and check the box if the statement is true for your workplace. Unchecked boxes may indicate problems that should be corrected, and possible violations of the Cal/OSHA lead in construction standard (Title 8 CCR Section 1532.1).

Identification of Lead Hazards and Employee Training

- If work involves disturbing paint or handling other lead materials on metal structures, buildings or pre-1978 housing, the coatings are tested for lead (or assumed to contain lead) and all necessary precautions are taken. Employees are informed of the results.
- Safety Data Sheets and labels for all raw materials or products you use are reviewed, to determine if they contain lead. Employees are informed of the hazards.
- All employees potentially exposed to lead dust, mist, or fumes are trained in the hazards of lead, how to protect themselves, and the worker protections required by the Cal/OSHA lead in construction standard.
- Employees exposed over 50 micrograms per cubic meter of air ($\mu\text{g}/\text{m}^3$) while working on residences or public access buildings, and their supervisors, have additional training and are state-certified (CA Dept of Public Health).
- Written notification to Cal/OSHA at least 24 hours before lead work begins.

Exposure Controls

- Lead-free materials are substituted, and high exposure tasks are eliminated where possible.
- Airborne lead levels over $50 \mu\text{g}/\text{m}^3$ are reduced by using safer tools, mechanical ventilation (e.g., HEPA vacuum), or changing work practices.
- The work area is kept as free as possible from lead contamination, through regular cleaning by safe methods (e.g., wet methods or vacuuming with a toxic dust HEPA vacuum). Dry sweeping is not done.
- Use vertical and horizontal containment to keep lead dust and paint chips inside work area, dispose of lead waste properly, and leave the job site free of lead contamination.
- There is a written lead compliance program for reducing exposures over $50 \mu\text{g}/\text{m}^3$.

Respirators

- Respirators are used to protect against airborne lead exposure during all disturbance of lead and related cleanup.
- The appropriate respirator is initially selected based on the task being performed and its assumed exposure level and the assigned protection factor (APF) of the respirator. Air monitoring results are then consulted to ensure that adequate protection is being provided.
- A complete respirator program is in place where respirators are used, including: annual face seal fit-testing, regular face seal checking, training, medical determination of fitness for respirator wearing, and provisions for cleaning and storage.

Wash-up Facilities, Personal Hygiene, and Protective Clothing

- No eating, drinking, using tobacco products, or applying cosmetics occurs in work areas where lead may be present.
- Clean protective work clothing (disposable or regularly laundered) and work shoes are provided to employees. They are not taken home from the job site.
- Wash-up facilities, with water, soap, and clean towels, are available and consistently used by workers to clean up before breaks and at the end of the shift. Showers are made available where feasible.
- Workers change their clothes and shoes in a clean change area. Their street clothes/shoes are stored in a separate container from their work clothes/shoes.
- There is a clean area, away from the work area, for workers to take breaks and eat lunch.

Medical Program

- A lead-specific medical program is in place and under the supervision of a licensed physician who is knowledgeable about the Cal/OSHA lead in construction standard.
- Blood lead and zinc protoporphyrin (ZPP) testing are done at least every 2 months for the first 6 months and every 6 months after that for employees exposed to lead. [A more frequent monitoring schedule is recommended, e.g., at the start and finish of each major job and at least every 2 months in between.]
- Blood lead and ZPP results are provided in writing to employees within 5 days of receiving them from the laboratory.
- BLL and ZPP results are reviewed and, where increases of 10 µg/dL or more are noted over time, protective measures are evaluated and improved as needed.
- Medical exams specific to the potential health effects of lead are provided to any employee with a blood lead level of 40 µg/dL or higher.
- Employees with blood lead levels of 50 µg/dL or above are removed from further exposure to lead, and provided with alternate work or medical leave with full pay and benefits. The employee is removed from exposure until at least two consecutive monthly blood lead levels are below 40 µg/dL.

Air Sampling

- Personal air sampling is conducted to determine the 8-hour average airborne lead exposure level for all employees potentially exposed to lead dust or fumes.
- Employees are informed in writing of air sampling results representative of their airborne lead exposure within 5 days of receiving results from the lab.
- Air sampling is repeated when there is any significant change in materials, process, control, personnel, or tasks that may result in higher employee exposure.
- When exposures are above the Action Level but below the Permissible Exposure Limit (PEL), air monitoring is repeated at least every six months.
- When exposures are above the PEL, air monitoring is repeated quarterly.