



General Requirements

An employer must begin a medical surveillance program when an employee meets the action level. The action level (AL) means employee exposure to an airborne concentration for lead of $30 \mu\text{g}/\text{m}^3$ calculated as an 8-hour Time Weighted Average (TWA).

Initial Medical Surveillance

Initial Medical Surveillance is used to check the amount of lead in an employee's blood stream. This is referred to as biological monitoring. The two blood tests used in the biological monitoring are the blood lead level test and the zinc protoporphyrin (ZPP) test. Initial medical surveillance shall be provided at no cost to employees involved in lead tasks as listed previously in this policy or if an employee is exposed to lead on the job any one day at or above the action level.

On-going Medical Surveillance

Employees shall be placed in an on-going medical surveillance program if it is anticipated that the employee will be exposed to lead on the job at or above the action level for more than 30 days in any continuous 12-month period.

The on-going medical surveillance program consists of three exams:

1. Blood test and Biological Monitoring

The blood lead level and ZPP tests are required:

- When the employee begins working with lead and every two months for the first six months and every six months thereafter for employees exposed at or above the action level for more than 30 days annually;
- When the employee's blood lead level results are at or above 40 micrograms per deciliter ($\mu\text{g}/\text{dl}$) of blood and at least every two months for employees whose last blood sampling and analysis indicated a blood lead level at or above $40 \mu\text{g}/\text{dl}$; and
- When an employee's blood lead level results are at or above $50 \mu\text{g}/\text{dl}$, the employee shall be tested again within two weeks to confirm that medical removal is necessary. If the second test result is at or above $50 \mu\text{g}/\text{dl}$, the employee must be medically removed and tested at least every month until a blood lead level of $40 \mu\text{g}/\text{dl}$ or less on two separate testing dates is reached. The tests must be taken at least 30 days apart.

Within five days of receiving biological monitoring results, the employer must notify each employee, in writing, of his/her blood lead levels.

2. Six-part Medical Exam

The employer shall make the required six-part medical exam in the medical surveillance program

available to the employee whenever the employee will be working with lead at or above the action level for 30 or more days a year and your blood lead level results are 40 µg/dl or above.

This medical exam shall consist of the following:

- Interview about the employee's work and medical history;
- Complete physical exam;
- Blood pressure check;
- Blood tests which will show blood level, ZPP, hemoglobin and hematocrit (anemia test), blood urea nitrogen and serum creatinine (kidney test);
- Routine urinalysis (kidney and protein check); and
- Any additional test that the doctor needs to do to determine how lead has or could affect the employee.

3. Medical Exam and Consultation

All employees have the right to a medical exam and consultation whenever the employee will be working with lead at or above the action level for 30 days or more and:

- Anytime the employee is working with lead and feels sick with any of the signs and symptoms of lead poisoning;
- Whenever the employee is concerned about having a healthy baby; and
- If the employee has difficulty breathing while wearing a respirator.

Employees must notify their employer of the desire for a medical exam and consultation. The contents of this medical exam and consultation are determined by the doctor.

Medical Treatment

Under certain limited circumstances, special drugs called chelating agents may be administered to remove circulating blood lead. Using chelation as a preventive measure - that is, to lower blood level but continue to expose a worker - is prohibited and therapeutic or diagnostic chelations of lead that are required must be done under the supervision of a licensed physician in a clinical setting. The employee must be notified in writing prior to treatment.

Medical Removal

Medical removal means that the employee is removed from the lead exposure job. Removing the employee from the lead exposure gives the body time to eliminate the lead.

If the employee's blood lead level reaches 50 µg/dl, for the periodic blood test and the follow-up blood test, the employee must be removed from exposure to lead. The employee will not be allowed to wear a respirator to lower the exposure when the blood lead level is at this level.

Employees shall be returned to their former job status when two consecutive blood-sampling tests indicate a blood lead level at or below 40 µg/dl.

Final medical determinations means the doctor has given a written medical opinion to remove the employee from lead exposure. The doctor believes that the employee has a medical problem that will be affected by lead exposure. The doctor believes that the risk to the employee's health is

high. The doctor must inform the employer of the medical recommendation regarding working with lead. The employee may return to working with lead when the doctor determines that he/she no longer has