

***EXAM***  
***OSHA AWARENESS SERIES***

***COURSE 13875***  
***LEAD IN CONSTRUCTION***

***4 Hour Continuing  
Education Course***



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We would like to thank you for ordering Course 13875 OSHA Awareness-Lead in Construction. This course has been approved for 4 Hours of continuing education by the Wisconsin Department of Safety and Professional Services.

**This course has been approved for 17 Licenses/Certifications/Registrations which are administered by the Wisconsin Department of Safety and Professional Services.**

<b>Automatic Fire Sprinkler Contractors License</b>	<b>Journeyman Plumber License</b>
<b>Automatic Fire Sprinkler Contractor-Maintenance Registration</b>	<b>Master Electrician License</b>
<b>Boiler-Pressure Vessel Inspector Certification</b>	<b>Master Plumber License</b>
<b>Commercial Electrical Inspector Certification</b>	<b>Registered Electrician Registration</b>
<b>Commercial Plumbing Inspector Certification</b>	<b>Residential Journeyman Electrician License</b>
<b>Dwelling Contractor Qualifier Certification</b>	<b>Residential Master Electrician License</b>
<b>Industrial Journeyman Electrician License</b>	<b>UDC-HVAC Inspector Certification</b>
<b>Journeyman Automatic Fire Sprinkler Fitter License</b>	<b>UDC-Plumbing Inspector Certification</b>
<b>Journeyman Electrician License</b>	

**Materials included**

1. REVIEW MATERIALS
2. EXAM
3. ANSWER SHET

**Once you complete the course**

Return the bubble answer sheets to our company. Fax: (608) 571-0096  
E-mail: [michael@uscontractorlicense.com](mailto:michael@uscontractorlicense.com)  
US Mail: Above address

We will grade your exam, notify you of the results and also notify the State of Wisconsin of your completion of the course.

The State of Wisconsin requires that you attain a passing score of 70%. In the event that you did not attain the required score we will notify you of the incorrect answers. You will need to retake only the incorrect questions and resubmit them to us for grading purposes.

**After you are notified that you passed the course**

Save the Certificate of Completion from our company for your records. The State of Wisconsin will notify you approximately 30 days prior to the expiration of your License/Certification that you need to renew the license/certification.

Please feel free to contact us with any questions and/or suggestions on improving this course or future educational courses you would like to see us offer.

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## OSHA AWARENESS TRAINING – LEAD IN CONSTRUCTION

1. HEALTH HAZARDS OF LEAD EXPOSURE: Lead can damage the \_\_\_\_\_.
  - a. kidneys
  - b. hematological and reproductive system
  - c. cardiovascular and central nervous system
  - d. All of the above
  
2. REPRODUCTIVE RISKS: Lead can alter the structure of sperm cells and there is evidence of miscarriage and stillbirth in women exposed to lead or whose partners have been exposed.
  - a. True
  - b. False
  
3. PERCENT OF CHILDREN WITH ELEVATED BLOOD LEAD LEVELS BY COUNTY – WISCONSIN, 2008: In 2008 Wisconsin had \_\_\_\_\_ counties with children that had an elevated blood lead levels of 1.8 -2.8% percent.
  - a. One
  - b. Two
  - c. Three
  - d. Four
  
4. WORKER EXPOSURE: A significant portion of the lead inhaled or ingested gets into the bloodstream. Once in the bloodstream, lead circulates through the body and \_\_\_\_\_. Some of this lead is filtered out of the body quickly and excreted, but some remains in the blood and tissues. As exposure continues, the amount stored will increase if the body absorbs more lead than it excretes.
  - a. stored in organs only
  - b. stored in body tissue only
  - c. stored in organs and body tissue
  - d. is filtered out
  
5. HOW WIDESPREAD IS LEAD BASED PAINT IN HOUSING? \_\_\_\_\_ of homes built during 1940 to 1959 have lead based paint components.
  - a. 87%
  - b. 69%
  - c. 24%
  - d. None of the above

6. MOST VULNERABLE WORKERS: Workers potentially at risk for lead exposure include those involved in iron work; demolition work; painting; lead-based paint abatement; plumbing; heating and air conditioning maintenance and repair; electrical work; and carpentry, renovation, and remodeling work. \_\_\_\_\_ are among those workers most exposed to lead.

- a. Plumbers
- b. Welders
- c. Painters
- d. All of the above

7. EXPOSURE LIMITS: PEL is the abbreviation for:

- a. Permissible Exposure Limit
- b. Probable Exposure Limit
- c. Possible Exposure Limit
- d. None of the above

8. EXPOSURE LIMITS: AL is the abbreviation for:

- a. Allowable level
- b. Appropriate level
- c. Action Level
- d. Accountability level

9. WORKER PROTECTION: Because lead is a cumulative and persistent toxic substance and health effects will result from a onetime exposure, employers may use these precautions where feasible to maximize employee exposure to lead.

- a. True
- b. False

10. ELEMENTS OF A COMPLIANCE PROGRAM: For each job where employee exposure is below the PEL, the employer can implement a compliance program to increase employee exposure to stay under the PEL.

- a. True
- b. False

11. INITIAL EMPLOYEE EXPOSURE ASSESSMENT: According to the Wisconsin Dept. of Health Services (DHS 163) "Lead exposure" means a level of lead in the blood of 10 or more micrograms per \_\_\_\_\_.

- a. 100 milliliters of blood
- b. 125 milliliters of blood
- c. 150 milliliters of blood
- d. 200 milliliters of blood

12. BIOLOGICAL MONITORING TESTS: Analysis of blood lead samples must be conducted by an OSHA approved lab and be accurate (to a confidence level of 95 percent) \_\_\_\_\_, or 6 µg/dl, whichever is greater.

- a. within plus or minus 10 percent
- b. within plus or minus 15 percent
- c. within plus or minus 20 percent
- d. within plus or minus 25 percent

13. TEST RESULTS SHOWING NO OVEREXPOSURES: If the initial assessment indicates that no employee is exposed above the AL, the employer may discontinue monitoring.

- a. True
- b. False

14. EMPLOYEE NOTIFICATION OF MONITORING RESULTS: The employer must notify each employee in writing of employee exposure assessment results within \_\_\_\_\_ of receiving them.

- a. ten working days
- b. ten days
- c. five working days
- d. five days

15. MEDICAL SURVEILLANCE: When an employee's airborne exposure is at or above the AL for more than 30 days in any consecutive 12 months, an immediate medical consultation is required when the employee notifies the employer that he or she:

- a. Has developed signs or symptoms commonly associated with lead-related disease;
- b. Has demonstrated difficulty in breathing during respirator use or a fit test;
- c. Desires medical advice concerning the effects of past or current lead exposure on the employee's ability to have a healthy child.
- d. All of the above

16. WHEN MONITORING SHOWS NO EMPLOYEE EXPOSURES ABOVE THE AL: Which renovation activity creates the most airborne lead dust?

- a. Hand Sanding
- b. Interior Demolition
- c. Power Sanding
- d. All of the above

17. **WORKER PROTECTIONS AND BENEFITS:** The employer must provide up to 6 months of medical removal protection (MRP) benefits only the first time an employee is removed from lead exposure or medically limited.

- a. True
- b. False

18. **RECORDS REQUIREMENTS INVOLVING MEDICAL REMOVAL:** In the case of medical removal, the employer's records must include:

- a. The worker's name and social security number,
- b. The date of each occasion that the worker was removed from current exposure to lead and the date when the worker was returned to the former job status,
- c. A brief explanation of how each removal was or is being accomplished, and a statement indicating whether the reason for the removal was an elevated blood lead level.
- d. All of the above

19. **EMPLOYER REQUIREMENTS:** The employer must maintain any employee exposure and medical records to document ongoing employee exposure, medical monitoring, and medical removal of workers. This data provides a baseline to evaluate the employee's health properly.

- a. True
- b. False

20. **EMPLOYER REQUIREMENTS RELATED TO OBJECTIVE DATA:** The employer must maintain the record of objective data relied on for \_\_\_\_\_.

- a. at least 7 years
- b. at least 15 years
- c. at least 20 years
- d. at least 30 years

21. **WHEN CLOSING A BUSINESS:** When an employer ceases to do business, the successor employer must receive and retain all required records. If no successor is available, these records must be sent to the Director of NIOSH.

- a. True
- b. False

22. **EXHAUST VENTILATION:** Equip power tools used to remove lead-based paint with dust collection shrouds or other attachments so that paint is exhausted through a \_\_\_\_\_.

- a. Central Air vacuum system
- b. high-efficiency particulate air (HEPA) vacuum system
- c. Shop vac system
- d. None of the above

23. ENCLOSURE OR ENCAPSULATION: One way to reduce the lead inhalation or ingestion hazard posed by lead-based paint is to encapsulate it with a material that bonds to the surface, such as \_\_\_\_ (1) \_\_\_\_\_ or flexible wall coverings. Another option is to enclose it using systems such as gypsum wallboard, plywood paneling, and aluminum, \_\_\_\_ (2) \_\_\_\_\_. Floors coated with lead-based paint can be covered using \_\_\_\_ (3) \_\_\_\_\_.

	1	2	3
a.	acrylic and epoxy coating	vinyl tile or linoleum	carpeting
b.	vinyl tile or linoleum	fiber cement siding	6 mil plastic
c.	vinyl or wood exterior siding	or Tyvek	fiber cement
d.	acrylic or epoxy coating	vinyl or wood exterior siding	vinyl tile or linoleum

24. SUBSTITUTION: Using a paint stripper containing methylene chloride is a prohibited practice in Wisconsin.

- a. True
- b. False

25. PROCESS OR EQUIPMENT MODIFICATION: When using a heat gun to remove lead-based paints in \_\_\_\_\_, be sure it is of the flameless electrical softener type. Heat guns should have electronically controlled temperature settings to allow usage below 700 degrees F. Equip heat guns with various nozzles to cover all common applications and to limit the size of the heated work area.

- a. Commercial units
- b. Residential housing units
- c. Commercial and residential units
- d. None of the above

26. HOUSEKEEPING PRACTICES: An effective housekeeping program involves a regular schedule to remove accumulations of lead dust and lead-containing debris.

- a. True
- b. False

27. HOUSEKEEPING PRACTICES: Put all lead-containing debris and contaminated items accumulated for disposal into \_\_\_\_\_. Label bags and containers as lead-containing waste.

- a. Sealed, impermeable bags only
- b. closed impermeable containers only
- c. Sealed, impermeable bags or other closed impermeable containers
- d. None of the above



28. PERSONAL HYGIENE PRACTICES: Provide and ensure that workers \_\_\_\_\_ washing facilities.

- a. are aware of
- b. know about
- c. are informed about the
- d. use

29. CHANGE AREAS: The employer \_\_\_\_\_ provide a clean change area for employees whose airborne exposure to lead is above the PEL. The area \_\_\_\_\_ be equipped with storage facilities for street clothes and a separate area with facilities for the removal and storage of lead-contaminated protective work clothing and equipment.

- a. must/must
- b. may / can
- c. should/ may
- d. can/ may

30. PERSONAL PRACTICES: In all areas where employees are exposed to lead above the \_\_\_\_\_, employees must observe the prohibition on the presence and consumption or use of food, beverages, tobacco products, and cosmetics.

- a. AL
- b. PEL
- c. MSDS
- d. None of the above

31. END-OF-DAY PROCEDURES: Employers must ensure that workers who are exposed to lead above the permissible exposure limit follow these procedures at the end of their workday:

- a. Place contaminated clothes, including work shoes and personal protective equipment to be cleaned, laundered, or disposed of, in a properly labeled closed container.
- b. Take a shower and wash their hair. Where showers are not provided, employees must wash their hands and face at the end of the work shift.
- c. Change into street clothes in clean change areas.
- d. All of the above

32. EMPLOYER REQUIREMENTS: Employers must provide workers who are exposed to lead above the PEL or for whom the possibility of skin or eye irritation exists with clean, dry protective work clothing and equipment that are appropriate for the hazard. Employers must \_\_\_\_\_ to employees.

- a. provide these items at no cost
- b. offer these items at a reduced rate
- c. provide a vendor name
- d. None of the above

33. PREVENTING HEAT STRESS: When heat stress is a concern, the employer should choose lighter, less insulating protective clothing over heavier clothing, as long as it provides adequate protection. Other measures the employer \_\_\_\_\_ take include: discussing the possibility of heat stress and its signs and symptoms with all workers; using appropriate work/rest regimens; and providing heat stress monitoring that includes measuring employees' heart rates, body temperatures, and weight loss.

- a. shall
- b. will
- c. can
- d. must

34. RESPIRATORY PROTECTION: Respirators also must be provided upon employee request. A requested respirator is included as a requirement to provide increased protection for those employees who wish to reduce their lead burden below what is required by the standard, particularly if they intend to have children in the near future. In addition, respirators must be used when performing previously indicated high exposure or "trigger" tasks, before completion of the initial assessment.

- a. True
- b. False

35. PROVIDING ADEQUATE RESPIRATORY PROTECTION: Before any employee first starts wearing a respirator in the work environment, the employer must perform a fit test. For all employees wearing \_\_\_\_\_ tight-fitting face piece respirators, the employer must perform either qualitative or quantitative fit tests using an OSHA-accepted fit testing protocol.

- a. only negative pressure
- b. only positive pressure
- c. negative or positive pressure
- d. None of the above

36. SELECTING A RESPIRATOR: A NIOSH-certified respirator may be selected and may be used in compliance with the conditions of its certification.

- a. True
- b. False

37. WARNING SIGNS: Employers are required to post warning signs in each work area where employee exposure to lead is above the PEL:

- a. Warning / Lead Work Area
- b. Poison / No Smoking or Eating
- c. Both a. and b. are needed
- d. No special signs are needed

38. CONSULTATION ASSISTANCE: Consultation assistance is available on request to employers who want help establishing and maintaining a safe and healthful workplace. Funded largely by OSHA, the service is provided \_\_\_\_\_ to small employers and is delivered by state authorities through professional safety and health consultants.

- a. for a minimal fee
- b. at no cost
- c. at a \$25.00 per hour fee
- d. in conjunction with a larger employer

39. COOPERATIVE PARTNERSHIPS: OSHA has learned firsthand that voluntary, cooperative partnerships with employers, employees, and unions can be a useful alternative to traditional enforcement and an \_\_\_\_\_ way to reduce worker deaths, injuries, and illnesses. This is especially true when a partnership leads to the development and implementation of a comprehensive workplace safety and health management system.

- a. effective
- b. forceful
- c. weak
- d. unproductive

40. BLOOD LEAD LABORATORIES – WISCONSIN (AS OF 2/17/2012): Monitoring \_\_\_\_\_ for lead and zinc protoporphyrin (or free erythrocyte protoporphyrin) in blood. The employer is required to have these analyses performed by a laboratory that meets accuracy requirements specified by OSHA.

- a. must be provided
- b. can be provided
- c. should be provided
- d. may be provided