Appendix A: OSHA Fact Sheet, *Occupational Exposure to Hazardous Chemicals in Laboratories*

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**Laboratory Safety OSHA Laboratory Standard**

OSHA’s Occupational Exposure to Hazardous Chemicals in Laboratories standard (29 CFR 1910.1450), referred to as the Laboratory standard, covers laboratories where chemical manipulation generally involves small amounts of a limited variety of chemicals. This standard applies to all hazardous chemicals meeting the definition of “laboratory use” and having the potential for worker exposure.

Hazardous chemicals present physical and/or health threats to workers in clinical, industrial, and academic laboratories. Hazardous laboratory chemicals include cancer-causing agents (carcinogens), toxins that may affect the liver, kidney, or nervous system, irritants, corrosives, and sensitizers, as well as agents that act on the blood system or damage the lungs, skin, eyes, or mucous membranes. OSHA rules limit all industry exposures to approximately 400 substances.

**Elements of the Laboratory Standard**

This standard applies to employers engaged in laboratory use of hazardous chemicals. The Laboratory standard applies to hazardous chemical use which does not meet this definition is regulated under other standards. This includes other hazardous chemical use within a laboratory. For instance:

- Chemicals used in building maintenance of a laboratory are not covered under the Laboratory standard.
- The production of a chemical for commercial sale, even in small quantities, is not covered by the Laboratory standard.
- Quality control testing of a product is not covered under the Laboratory standard.
- If the Laboratory standard applies, employers must develop a Chemical Hygiene Plan (CHP). A CHP is the laboratory's program which addresses all aspects of the Laboratory standard.
- The employer is required to develop and carry out the provisions of a written CHP.
- A CHP must address virtually every aspect of the procurement, storage, handling, and disposal of chemicals in use in a facility.
- Primary elements of a CHP include the following:
  - Minimizing exposure to chemicals by establishing standard operating procedures, requirements for personal protective equipment, engineering controls (e.g., chemical fume hoods, air handlers, etc.) and waste disposal procedures.
  - For some chemicals, the work environment must be monitored for levels that require action or medical attention.
  - Procedures to obtain free medical care for work-related exposures must be stated.

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<tr>
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Additional Information

The following OSHA Interpretations of the Laboratory standard provide additional information:


OSHA’s Safety and Health Topics Page entitled Laboratories, provides more detailed information about the Laboratory standard and is available at: www.osha.gov/SLTC/laboratories/index.html.

This is one in a series of informational fact sheets highlighting OSHA programs, policies or standards. It does not impose any new compliance requirements. For a comprehensive list of compliance requirements of OSHA standards or regulations, refer to Title 29 of the Code of Federal Regulations. This information will be made available to sensory-impaired individuals upon request. The voice phone is (202) 693-1999; the teletypewriter (TTY) number is (877) 889-5627.

For assistance, contact us. We can help. It's confidential.