



Lawrence Berkeley  
National Laboratory

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## Berkeley Lab Training Program

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### EHS 0366 Working Safely With Silica

#### Course Syllabus

**Subject Category:** Construction Safety  
**Course Length:** 45 minutes  
**Delivery Mode:** Online

**Course Prerequisite:** No  
**Medical Approval:** No

**Course Purpose:** Silica (silicon dioxide) is a component of many common products and materials used in the construction industry. Sanding, drilling, grinding, or sometimes even just handling these materials can put silica dust into the air around you, creating “respirable crystalline silica,” or “RCS.” Inhaling RCS can give you silicosis, various cancers, and other serious health ailments. In this course, you will become aware of the risks that silica dust presents, as well as tools and methods for protecting yourself and others from this risk. You’ll also learn about LBNL’s medical surveillance program for employees whose jobs put them at risk for silica exposure, and LBNL’s written exposure control plan for keeping you and those around you safe from RCS.

**Who training is for:** This course is for construction trades, especially including carpenters, laborers, painters, and plumbers.

#### Objectives:

This course is meant to give you an understanding of the hazards of working with silica and the skills to protect yourself and others while performing your work.

After successfully completing this course, you should be able to:

- Describe respirable crystalline silica
- Identify the health hazards associated with exposure to respirable crystalline silica
- Identify if a product you use contains silica or not
- List common medical conditions associated with breathing silica dust
- List specific work tasks that could expose you to respirable crystalline silica if you do not take the necessary precautions
- Identify specific measures that LBNL has implemented to protect you from exposure to respirable crystalline silica
- Describe the medical surveillance program at LBNL as it relates to respirable crystalline silica exposure
- Work safely with silica by choosing the appropriate tools and PPE
- Identify your competent person
- Protect others by appropriately establishing regulated areas, including posting appropriate signs
- Use appropriate methods to clean up worksites of any remaining silica dust

**Training Compliance Requirement:** OSHA’s [Occupational Exposure to Respirable Crystalline Silica](#); and LBNL’s Pub 3000, Chapter 10 and Appendix A (the *LBNL Construction Safety Manual*).

**Retraining/Recertification:** Annual

**WEB Resource:** <http://training.lbl.gov/bltCourses.html>