

Recommended Medical Screening Protocol for Silica Exposed Workers

Background

The silica standard for both general industry/maritime and construction employers specifies which employees must be offered medical surveillance, when and how often the examinations must be offered, and the tests that make up medical examinations.

Medical screening is mandated for construction workers required to wear a respirator for ≥ 30 days per year. If the employer does not fully adhere to the task requirements in Table 1 of the Silica in Construction standard, then medical screening is required if exposure to airborne respirable silica is $> 50 \mu\text{g}/\text{m}^3$ (PEL).

For General Industry and Maritime, medical surveillance must be offered to employees who will be exposed above the PEL ($50 \mu\text{g}/\text{m}^3$) for 30 or more days a year. **Starting on June 23, 2020**, medical surveillance must be offered to employees who will be exposed at or above the action level ($25 \mu\text{g}/\text{m}^3$) for 30 or more days a year.

(MIOSHA construction silica standard

http://www.michigan.gov/documents/lara/lara_miosha_part690_553349_7.pdf

MIOSHA general industry and maritime silica standard

http://www.michigan.gov/documents/lara/lara_miosha_part590_553335_7.pdf)



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It should always be kept in mind that medical surveillance is not a substitute for good dust control in the workplace. Controlling exposure is the only effective primary prevention strategy.

Required Testing – The baseline testing is required within 30 days after initial assignment, unless the employee has had an examination, which meets these requirement within the last 3 years. Periodic testing is required every three years except for testing for tuberculosis.

- Medical and work history, with emphasis on: past, present, and anticipated exposure to respirable crystalline silica, dust, and other agents affecting the respiratory system; any history of respiratory system dysfunction, including signs and symptoms of respiratory disease (e.g., shortness of breath, cough, wheezing); history of TB; and smoking status and history.
- Physical examination, with special emphasis on the respiratory system - Initial examination and every three years.
- Tuberculosis (TB) testing - Initial examination (blood or skin test).
- Breathing test (spirometry) - Initial examination and every three years. The breathing test must be administered by a spirometry technician with a current certificate from a National Institute for Occupational Safety and Health (NIOSH) approved course.

- Posterior-Anterior (PA) (lateral not required) chest x-ray of the chest at full inspiration - Initial examination and every three years. The chest x-ray must be classified according to the International Labor Organization (ILO) Classification of Radiographs by a NIOSH-certified B Reader (see Appendix I for Michigan B readers).
- Additional testing the provider deems appropriate.

Information, which must be provided by the Employer, to the Health Care Provider

- A copy of the silica standard
- A description of the employee's former, current, and anticipated duties as they relate to the employee's occupational exposure to respirable crystalline silica;
- The employee's former, current, and anticipated levels of occupational exposure to respirable crystalline silica;
- A description of any personal protective equipment used or to be used by the employee, including when and for how long the employee has used or will use that equipment; and
- Information from records of employment-related medical examinations previously provided to the employee and currently within the control of the employer.

A written medical report, which must be provided to the employee, within 30 days of the examination and must include:

- The results of the medical examination, including any medical condition(s) that would place the employee at increased risk of material impairment to health from exposure to respirable crystalline silica and any medical conditions that require further evaluation or treatment;
- Any recommended limitations upon the use of a respirator;
- Any recommended limitations on exposure to respirable crystalline silica;
- A statement that the employee should be examined by a Board Certified Specialist in Pulmonary Disease or Occupational Medicine, where the B reading is 1/0 or higher for rounded opacities or where the health care provider has determined such a referral is necessary.

A written medical report, which must be provided to the employer, within 30 days of the examination and must include:

- Date of the examination;
- A statement that the examination has met the requirements of this section; and
- Any recommended limitations on the employee's use of a respirator.

If the employee provides written authorization, the written opinion shall also contain either or both of the following:

- Any recommended limitations on the employee's exposure to respirable crystalline silica
- A statement that the employee should be examined by a specialist, if the chest X-ray is classified as 1/0 or higher by the B Reader, or if referral to a specialist is otherwise deemed appropriate by the health care provider.

If the health care provider has written medical opinion indicates that an employee should be examined by a specialist, the employer shall make available a medical examination by a specialist within 30 days after receiving the written opinion.

- The employer shall ensure that the examining specialist is provided with all of the information that the employer is obligated to provide to the initial health care provider.
- The employer shall ensure that the specialist explains to the employee the results of the medical examination and provides each employee with a written medical report within 30 days of the examination.
- The employer shall obtain a written opinion from the specialist within 30 days of the medical examination.

Other considerations:

All cigarette smokers should be strongly advised to stop smoking since the risk of many of the adverse effects of silica are increased in individuals who smoke cigarettes. Programs to help smokers stop smoking are not required but can be highly effective.

Not required but a policy that transfers individuals who develop silicosis to silica free areas is effective in reducing the likelihood of progression of disease. In order for this transfer option not to be punitive, the individuals should be allowed to maintain his/her pay rate and benefits at the new job.

**For more information or
questions contact:
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APPENDIX I

NIOSH B Reader List

MI Michigan, United States of America

Five reader(s) were found.

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