

## THE 3 SILICA TESTING CHALLENGES, SOLVED

Over **2 million American workers are exposed to silica**, making it the **second highest cause of occupational death**, after asbestos. In an effort to better protect employees from silica exposure, **OSHA** has set a **new silica standard** in place, effective June 23, 2018 – one for those in the construction field, and another for those in the maritime and general industry. The new policy **requires employers to provide testing to workers** who are exposed to a Permissible Exposure Level (PEL) of 50 µg/m<sup>3</sup>, which is half of the old PEL.

This paper will address the challenges that employers face after implementing a silica testing program, and how they may solve them with a streamlined solution.

### THE DANGER OF DUST

Roughly 100 times smaller than ordinary sand particles found at the beach, respirable crystalline **silica can become deadly when inhaled**, and cause:

- Silicosis (an irreversible lung disease that can lead to death and disability)
- Kidney disease
- Lung cancer
- Chronic Obstructive Pulmonary Disease (COPD)
- An increased risk of developing active tuberculosis (TB)

Without a properly managed silica testing program, it can cause disruption to the workforce driving a business to success.

OSHA's new silica standard requires employers to provide silica exams to cover a much greater proportion of U.S. workers than before. This has left employers overwhelmed by the challenges of how, where and "what's next" in order to **keep employees appropriately tested and treated**.

#### Some of these challenges include:

- Finding medical clinics that have the expertise and resources to perform silica exams;
- Providing medical opinions, whether or not employees have signs of silicosis, and if employees are able to continue working safely while being exposed to silica, and;
- Finding physicians with the experience and certification to read chest x-rays for silicosis.

Let's dive deeper into the three main obstacles employers face with the new silica standard, and how to mitigate each one to achieve a stronger, healthier workforce for the future.

### 1: THE SILICA EXAM

The components of a silica medical surveillance exam must include:

- Tuberculosis screening
- Physical exam, respirator fit test and chest X-ray
- Pulmonary function testing, conducted by a NIOSH-certified technician
- Offer a written medical report of recommended limitations on workplace exposure.

If an employee tests positive, they may continue to work as long as they have a managed treatment plan. The greatest challenge that comes from a silica exam is managing the care and ongoing prevention of (potentially) thousands of workers exposed to silica.

Through preventative care, an employee's illness or injury can be identified in the appropriate time to minimize healthcare costs and absence from work.

Companies that provide occupational health programs for their employees typically experience lower healthcare costs, greater productivity, and when injuries do occur, employees returning back to work faster.

## 2: LACK OF AVAILABLE B-READERS TO EVALUATE CHEST X-RAY

The second challenge occurs in being unable to meet the demand of enough B-readers required to read the results of the chest x-ray. Employers are faced with a backlog of exams needed with only a very small number of active B-reader certified physicians available to read the X-rays.

## 3: THE CHALLENGE OF EFFECTIVELY MANAGING EXPOSED WORKERS

What does an employer do with an employee who tests positive and refuses treatment, but still has the **right to work**? Continuing to work with an illness is a slippery slope. For example, an employee *can* continue to work with latent tuberculosis. But, working will increase its chance of becoming active, which **will** be contagious and spread to the other employees.

It's the responsibility of the employer to manage an employee's health before it escalates and turns into an incurable problem. Silica testing is a great start for the present. Continued, preventative care is the answer for the long term.

## THE AXIOM ADVANTAGE

Isolating the affected worker may seem like the immediate, quick fix solution to these three main challenges. Unfortunately, this doesn't solve the deeper, more complex issues of rising healthcare costs, recordable injuries and turnover rate employers are faced with. Here's how Axiom Medical addresses the silica testing problem with a **long-term solution** model:

- **The Silica Exam.** We offer **24/7 occupational health solutions** during the early stage of silica exposure with a comprehensive exam. If an employee goes on leave, our Nurse Case

Managers will review doctor's notes, manage medication, determine fitness for duty and provide ongoing communication to their employer.

- **Not enough B-readers.** Axiom provides an immediate resource to the employer by offering internally resourced B-reader certified physicians. This allows us to expedite our silica medical evaluations for our clients.
- **Manage Exposed Workers.** Our Nurse Case Managers will locate a clinic for the employee; schedule their doctor's appointments, review doctor notes, and provide communication to the employer to ensure a safe and expedited return to work.

When a silica testing program is properly managed, employers can focus on what really matters: *driving a business to success with a healthy, productive workforce.* At Axiom, we believe that 24/7 access to our Nurse Case Managers make a real difference in how employees feel – and most of all, *impacts how they heal.* Let us help protect your employees against silica exposure today. Contact us to learn how you can bypass the challenges employers face, and gets started with a long-term solution to keep your employees safe from silica.

## About the Author

Dr. Scott Cherry is a Fellow within the American College of Occupational & Environmental Medicine and dual board certified in the medical specialties of Occupational & Environmental Medicine. His professional goals and interests focus on individual, population, and workplace safety, health, wellness, productivity, and disability management. He currently serves as Chief Medical Officer for Axiom Medical whose mission is to provide comprehensive occupational health services for the total life cycle of our clients' employees.

## Resources

- [https://www.osha.gov/dsg/topics/silicacrystalline/health\\_effects\\_silica.html](https://www.osha.gov/dsg/topics/silicacrystalline/health_effects_silica.html)
- [https://www.osha.gov/pls/oshaweb/owadisp.show\\_document?p\\_table=STANDARDS&p\\_id=1270](https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=1270)
- <https://www.osha.gov/dsg/topics/silicacrystalline/>
- <https://www.osha.gov/silica/AppendixBtosect1926.1153.pdf>