



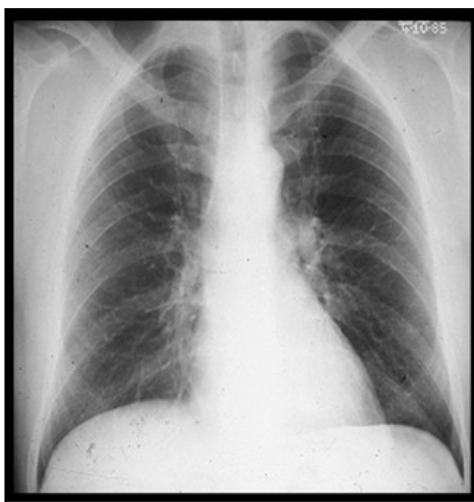
Managers Toolkit 

Let's Talk:
**Silica Dust - Health
Monitoring**



What are the health effects ?

Exposure to silica dust can lead to the development of:



PMF

- Silicosis (an irreversible scarring and stiffening of the lungs)
- Accelerated silicosis leading to Progressive Massive Fibrosis (PMF)
- Chronic Obstructive Pulmonary Disease (COPD) often observed as emphysema and bronchitis
- Lung cancer
- Kidney disease
- Auto-immune diseases such as rheumatoid arthritis

Cases of accelerated silicosis have recently been published in the news media, occurring specifically in workers in the engineered stone industry.

It is estimated that 230* people develop lung cancer each year as a result of past exposure to silica dust at work. Not all exposed workers will develop cancer; cancer risk increases with long term or repeated high level exposure.

*Cancer Council Australia



Accelerated Silicosis

Accelerated silicosis occurs following exposure to high levels of crystalline respirable silica.

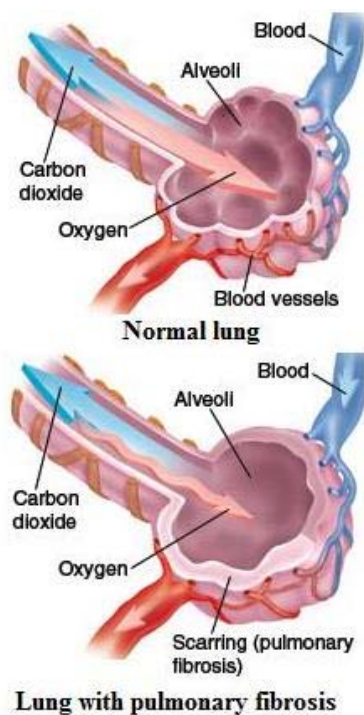
Accelerated silicosis can develop after 3-10 years of exposure.

Accelerated silicosis causes scarring of the lungs leading to progressively worsening shortness of breath.

People with accelerated silicosis usually go on to develop **progressive massive fibrosis (PMF)**

PMF results in severe shortness of breath for which there is no treatment and no cure.

Without a lung transplant, PMF is usually fatal.





Chronic Obstructive Pulmonary Disease (COPD)

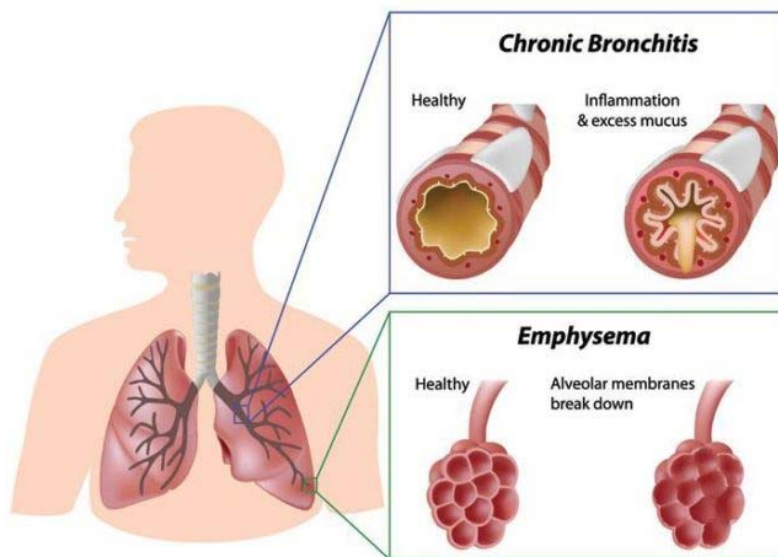


Illustration courtesy of HealthFlexHHS

COPD occurs following long term exposure to dusts like silica which damage the tissue in the upper respiratory system.

Symptoms of COPD include:

- breathlessness after exertion
- in severe cases, breathlessness on minimal exertion or even at rest
- wheezing
- coughing
- coughing up sputum (mucus or phlegm)
- fatigue
- cyanosis – a blue tinge to the skin caused by insufficient oxygen
- increased susceptibility to chest infections.



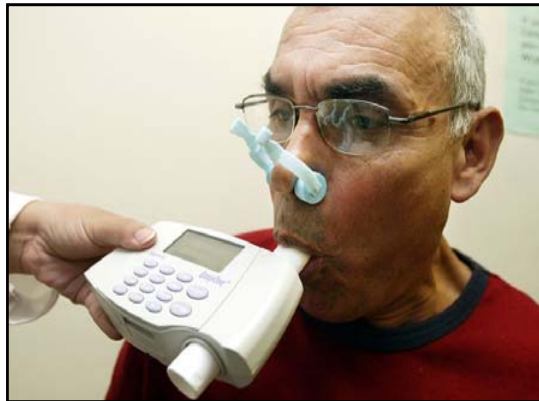
What is Health Monitoring ?



The health monitoring is the process of checking the health of a worker exposed to a hazardous substance such as crystalline silica.

The main purpose of health monitoring is to detect changes to health due to exposure to substances in the workplace as early as possible.

While health monitoring allows early detection of health changes it is NOT a substitute for using effective control measures to eliminate or minimise exposure to crystalline silica.



What happens in a health check ?

Discuss with the health practitioner which tests will be conducted and ensure they will provide a level of health monitoring that includes:

- demographic, medical and occupational history.
- records of personal exposure.
- standardised respiratory questionnaire.
- Physical examination focusing on the respiratory system.
- Standardised respiratory function test, including: FEV1, FVC, FEV1/FVC (Spirometry)

It is strongly recommended that the chosen health practitioner explains and discusses individuals results



Who pays for health monitoring?

The employer must pay the costs of health monitoring including the costs of the medical services provided and the travel and wage costs of the worker.



What to tell the health practitioner?

The following information must be supplied:

- The name and address of the business.
- The name and date of birth of the worker.
- A description of all of the worker's tasks that relate to crystalline silica. (together with any exposure monitoring results if available).
- How long the worker has been doing the work.
- Control measures in place at the workplace.
- Respiratory Protective Equipment and Personal Protective Equipment used at the workplace



The Health Monitoring Report

The health practitioner who carried out the health monitoring should provide a health monitoring report that only contains information relating to health monitoring for respirable crystalline silica.

- Name and date of birth of worker
- Practitioner details (name and registration number)
- Business details (name and address)
- Dates each aspect of health monitoring was undertaken
- Details of test results that indicate whether or not the worker has been exposed to respirable crystalline silica

The professional view regarding whether:

- The worker has contracted a disease, injury or illness as a result of work with crystalline silica
- Any remedial measures can be taken by the business
- The worker can continue in his/her current work
- Medical counselling is required for the worker.



The Health Monitoring Report



Once the practitioner has provided a health monitoring report a copy must be provided to the employer and the worker as soon as practicable, even if they leave employment at the workplace.

The employer must provide WorkSafe, a copy of any report which:

- Shows a worker may have contracted a disease or illness or
- Recommends remedial measures, including whether the worker can continue to work.

Keeping Records

Health monitoring reports must be kept for 30 years. They must be kept confidential and not released to anyone without the worker's consent



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Health monitoring is a crucial part of managing and protecting the health of workers exposed to respirable crystalline silica.

Make sure you understand your obligations under HSWA.

Current titles in the Lets Talk series

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Dust Control in Soft Strip Demolition
Housekeeping
Painting with Brushes and Rollers

Removal of Lead-Based Paint
Silica
Water Suppression on Tools
Welding Fume
Wood Dust