

# Living with silicosis

## What is silicosis?

Silicosis is an occupational lung disease caused by breathing in small particles of silica dust. Inhaling this dust causes inflammation which over time, leads to scarring of the lung tissue. This causes stiffening of the lungs, which can make it difficult to breathe.

Exposure to silica dust can also cause:

- Chronic Obstructive Pulmonary Disease (COPD) (which includes emphysema and chronic bronchitis)
- Lung cancer
- Chronic kidney disease
- Scleroderma and other autoimmune conditions
- An increased risk of infections such as tuberculosis and fungal diseases.

## Who develops silicosis?

Silica dust is generated when silica-containing materials are cut, crushed, drilled, ground, polished, sanded, sawed – or disturbed with force. If you are exposed to silica dust, you are at risk of developing silicosis.

The risk of developing silicosis primarily depends on how much silica dust you have been exposed to, and for how long you were exposed to it. For example, you may have been exposed to a high level of silica dust over a short duration (weeks or months) or been exposed to a low level of silica dust over a long duration (years).

## Engineered stone-related silicosis

Engineered (or artificial) stone benchtops have a very high silica content, sometimes up to 97 per cent. Modifying engineered stone, such as by cutting, grinding, sanding or polishing the product, can generate high levels of silica dust, putting you at greater risk of developing silicosis.

Many workers in the engineered stone benchtop industry have been diagnosed with silicosis in recent years. This is due to the rapid increase in the popularity of engineered stone since its introduction in the early 2000s. Silicosis, as a result of working with engineered stone, may be more severe and have more rapid progression than silicosis which results from working with natural sources of silica exposure, such as in the quarrying industry.

## Types of silicosis

Silicosis is typically classified into three types:

- **Acute silicosis**
- **Simple silicosis**
- **Complicated silicosis – also referred to as Progressive Massive Fibrosis (PMF)**

The type of silicosis you have may have been diagnosed with will depend on the radiological features of the disease, such as the amount of nodules in your lungs. Silicosis can develop anywhere from months to years of your first exposure to silica dust. Ask your treating respiratory physician to explain what type of silicosis you have and how severe it is, as each individual is unique.

## Symptoms of silicosis

In most cases, people with silicosis will not experience any symptoms in the early stages. Over time, if the disease progresses, symptoms may slowly develop, even if exposure to silica dust has ceased. Progression of the disease can vary considerably among individuals.

Common symptoms of silicosis include:

 No symptoms

 Shortness of breath, which you may notice more when participating in daily tasks of living such as playing with your children or walking upstairs

 Cough

 Tiredness

 Chest pain

 Weight loss.

## Diagnosis

If your health is at significant risk because of exposure to silica dust in the workplace, your employer should organise and pay for you to undergo health monitoring. Health monitoring involves periodic check-ups by a certified doctor to monitor any possible changes in your health due to your exposure to hazardous agents, like silica dust, in the workplace. Health monitoring is important, particularly as a means of identifying workers with silicosis who often have no symptoms, and providing appropriate management. If changes are identified during health monitoring, you should be referred to a respiratory physician for further investigation and to confirm a diagnosis.

If you are no longer working or participating in workplace health monitoring, the first step to diagnosing silicosis is a discussion with your GP about your work history, known exposures and symptoms (if present). To confirm a diagnosis, you will most probably need a referral to a respiratory physician.

## Prognosis

Progression of silicosis is highly variable, and is typically related to the level of exposure to silica dust and influenced by many other individual factors, such as a history of smoking. Information about your prognosis is best provided by your treating respiratory physician. They will monitor you over time and be able to identify the progression of your disease through regular check-ups.

Preventing further exposure to silica dust is the best way to reduce the risk of further damage to your lungs. In some circumstances, this could mean changing your job or leaving the industry entirely. This is a challenging and complex decision which should be discussed with your treating healthcare team.

## Management

There is currently no treatment to reverse silicosis. However, there are management and treatment options available that may slow progression of the disease and may also help to reduce your symptoms. Management of silicosis is based on each person's individual circumstances. Your treating healthcare team will work with you to determine the most appropriate options for you.

## Management options



### Access mental health support

Living with silicosis can significantly impact your mental health and emotional wellbeing.

Accessing support for your mental health is an important part of your disease management. Whether it's a trusted friend, family member, mental healthcare professional such as a psychologist or social worker or a mental health organisation like Beyond Blue, talking about how you feel and expressing your worries and concerns can help.



### Exercise

Exercise can help reduce symptoms like breathlessness and improve your ability to do everyday activities. It can also relieve stress and help with feelings of anxiety and depression. It may be hard to know how much or what type of exercise is suitable, so speak to your treating healthcare team about what is right for you. An exercise physiologist or physiotherapist can provide advice on a personal exercise program for you. You may also be able to participate in a Pulmonary Rehabilitation program. If you haven't seen a health professional to support you with a personal exercise program, ask your treating healthcare team or GP for a referral.



### Quit smoking and vaping

Smoking can make silicosis worse and can also cause other lung diseases. If you smoke or vape, quitting is critical to help you improve your lung health. For support to quit, talk to your GP or connect with a Quitline counsellor or an online service like QuitCoach.



### Ensure your vaccinations are up to date

People with silicosis can have more difficulty recovering from respiratory illnesses, so it is important to protect yourself with available vaccinations. Talk to your treating healthcare team about which vaccinations are suitable for you, including flu, COVID-19 and pneumonia vaccinations. If you do start to develop a respiratory illness, see your GP as soon as possible for management and treatment, to prevent any worsening of your disease.



### Make healthy choices

Healthy ways to look after your body include maintaining a healthy diet with lots of fruit and vegetables and getting plenty of rest. Less healthy choices, such as smoking or vaping and excessive alcohol and illicit substance use, may seem like they are helping you to cope, but are likely to ultimately make you feel worse. If you are engaging in these activities, try and find some more healthy ways to cope.

## Current treatment options



### Medication

- **Anti-fibrotic medication:** Anti-scarring tablets may be used in some people with progressive silicosis. This medication has been shown to help slow the rate of progression of lung disease in other lung conditions such as Idiopathic Pulmonary Fibrosis and involves taking a tablet twice a day
- **Inhaled reliever medications:** These may assist with other co-existing lung diseases, such as asthma or Chronic Obstructive Pulmonary Disease
- **Inhaled corticosteroids:** These may assist with other co-existing lung diseases.



### Whole lung lavage

This is not a treatment that is readily available or recommended for all cases of silicosis and will depend on individual circumstances, such as disease stage, type and progression. Your treating respiratory physician may consider if this is a possible treatment option for you – it will require referral to a specialist centre with expertise in this procedure. This procedure involves a general anaesthetic and flushing several litres of a salt-water solution through each lung with the aim of “washing out” damaging silica crystals.



### Oxygen therapy

Oxygen therapy may be prescribed by your GP or respiratory physician if you have low blood oxygen levels. It can assist with shortness of breath and to help you stay active. Some people only use oxygen when walking or exercising; others may need to use it overnight or on a continuous basis.



### Lung transplantation

Lung transplantation is not common and may be discussed by your respiratory physician based on your individual circumstances.



### Clinical trials

Clinical trials may be an option for some people with silicosis. Ask your treating respiratory physician if there are any clinical trials that may be available for you to participate in.

## Working after a silicosis diagnosis

Working is an important part of life for most people. Going back to work with silicosis will be different to other return-to-work arrangements. Your treating respiratory physician and healthcare team can provide

advice about working with a silicosis diagnosis. A doctor's recommendation to leave a workplace should only be made if it is likely that remaining at that job will increase the risk of your silicosis progressing or, if you no longer have the physical capability to undertake the work. If it is recommended that you change your job, finding suitable, alternative work may be an important part of your silicosis management. Discussing vocational rehabilitation services and retraining with your treating healthcare team, along with anyone else involved in your management such as a workers compensation insurer, is recommended to assist you with this process. You will require ongoing respiratory physician monitoring both if it is decided that you can remain in your job or you need to leave your job.

## Legal and financial advice

Financial loss from changes in work are often a real challenge for people living with silicosis. If you intend to make a worker's compensation claim, you should do this as soon as possible after your diagnosis, as time limits may apply in most Australian states and territories. Compensation schemes, which also differ in each state and territory, may help you with medical expenses, loss of income or compensate you for pain and suffering. For more information about compensation, access Lung Foundation Australia's **Occupational Lung Disease and Compensation fact sheet**.



Regardless of whether you choose to seek compensation or not, it is recommended you obtain independent legal and financial advice, to make sure your financial future is managed in the best way possible.

## FURTHER INFORMATION AND SUPPORT

### Lung Foundation Australia Services

- Information and Support Team
- Lung disease information resources
- Education webinars
- Silicosis Support Nurse and Social Worker
- Support groups
- Peer-to-peer connections
- Referral to pulmonary rehabilitation and Lungs in Action exercise programs

### External Links

- **Silicosis Support Network**  
silicosissupport.org.au
- **Safe Work Australia**  
safeworkaustralia.gov.au
- **European Lung Foundation**  
europeanlung.org/en/
- **Health and Safety Executive**  
hse.gov.uk

[Lungfoundation.com.au](http://Lungfoundation.com.au) | Freecall 1800 654 301 | [enquiries@lungfoundation.com.au](mailto:enquiries@lungfoundation.com.au)

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