



# What Causes Silicosis?

Silicosis is caused by exposure to crystalline silica, which comes from chipping, cutting, drilling, or grinding soil, sand, granite, or other minerals. Any occupation where the earth's crust is disturbed can cause silicosis. A long list of occupations is known to expose workers to crystalline silica that is inhaled.

### These include:

- Various forms of mining, such as coal and hard
- rock mining
- Construction work
- Tunnel work
- Masonry
- Sand blasting
- Glass manufacturing
- Ceramics work
- Steel industry work
- Quarrying
- Stone cutting

What Are Risk Factors of Silicosis?

Breathing crystalline silica causes silicosis and the main risk factor is exposure to silica dust. You can prevent silicosis by limiting exposure. There are national guidelines on exposure limits over a lifetime of working. If you work in a job that exposes you to silica dust, your employer must, by law, give you the correct equipment and clothing you need to protect yourself. You are responsible for using it—always—and for taking other steps to protect yourself and your family as you leave your job site and head home. NIOSH also recommends that medical examinations occur before job placement or upon entering a trade, and at least every 3 years thereafter.

Patients with silicosis have an increased risk of other problems, such as tuberculosis, lung cancer, and chronic bronchitis. If you are a smoker, quitting may help, as smoking damages the lungs.

### **MEETINGS ARE HELD**

#### Metro

2nd Monday of the month - 1.30 -3.30pm Venue: Amaroo Neighbourhood Centre 34 Amaroo Street. Chadstone

Mobile: 0481 987 953

# Regional

Last Tuesday of the month  $-1.30 \, \text{pm} - 3.30 \, \text{pm}$ 

Venue: ACV/GARDS office 211 Lloyd Street, Moe Mobile: 0407 274 173

#### PLEASE CONTACT

Asbestos Council of Victoria/GARDS Inc. 211 Lloyd Street, Moe, Vic. 3825 Ph: 0407274173 (24/7)

Email: gards@wideband.net.au or enquiries@gards.org

Web: www.gards.org

# OFFICE HOURS

Monday - Thursday, 10.00am - 4:00pm Friday by Appointment Call in for a chat and cuppa - please note no office at Chadstone.

ACV/GARDS is a not for profit organisation and is an endorsed charity with tick of approval. Donations of \$2 and above are tax deductible.

# Silicosis Support Group

Our Silicosis Support groups were established in response to the increase in diagnosis of dust related lung disease in the engineered stone bench top (silicosis) and coal mining industries (coal workers pneumoconiosis).

The support groups are a part of Asbestos Council of Victoria/ GARDS, which was established in 1991 to help and support sufferers of asbestos related diseases, their families and carers and now we are helping silicosis sufferers and their families. It is a not-for profit charity registered with the Australian Charities and Not-For-Profit Commission (ACNC).

As a result of the emergence of these dust related lung diseases, our organisation is determined to expand support beyond asbestos related diseases to other dust related lung diseases firstly Silicosis





Over many decades ACV/GARDS has had a proud history of providing support through:

- Meetings of members to share experiences, enjoy the support and company of other members and make connections with those who may be facing similar challenges;
- Facilitation of community meetings to provide current information and hear from a variety of people who are in the asbestos arena & now silica for medical, environmental, OH&S and many more
- Access to Allied Health workers and medical specialists;
- Telephone support
- Referral to personal injury lawyers in relation to potential compensation claims.

The support group operates on the same long-standing principles and services that has supported those suffering from asbestos related diseases. We will meet that same high standard for silicosis sufferers

## What is Crystalline Silica?

Crystalline silica (silica) is found in sand, stone, concrete and mortar. It is also used as the primary filler for engineered (artificial stone, which has become very popular for the fabrication of kitchen and bathroom benchtops) When workers cut, crush, drill, polish, saw or grind products that contain silica, tiny dust particles are generated that are small enough to lodge deep in the lungs and cause diseases including silicosis. Different types of rock and rock products can contain different amounts of silica

The amount of crystalline silica in products can vary. Examples include:

brick: 5-15% ceramic tiles: 5-45% **Demolition Dust** 3 - 4%Shale 22% 15 - 27%Clay bricks Aggregates in concrete 30% Fibre cement bricks 10 - 30%Granite 25-40% Natural sandstone 67% Engineered artificial or reconstituted stone 90% (The above represents typical concentrations) If you're not sure if a product contains crystalline silica,

check the safety data sheet (SDS).

#### What can Silica do?

Dust related lung disease occurs when the human body is unable to break-down or remove certain types of dust once it has entered deep into the lungs. When silica dust lies within the lung tissues, chemical reactions can occur which result in tissue injury followed by the healing response of the lung. This is like an injury to the skin, such as a cut, which usually heals leaving a small scar. Dust lodged in the lungs can cause an inflammatory process, scarring in the lungs and reducing the body's ability to take oxygen into the blood and remove carbon dioxide. Damage to the lung tissue initially causes areas of small scars, in the form of nodules which can be seen on a chest x-ray. Lung scarring caused by silica is silicosis.

## How much exposure does it take?

Development of dust related lung disease depends on several factors, such as the amount, how often and for how long a worker is exposed to silica containing dust. Some people are more susceptible than others to developing disease even though they may have had similar patterns of workplace exposure.

#### What is Silicosis?

There are three types of silicosis:

- Acute silicosis, which causes cough, weight loss, and fatigue within a few weeks or years of exposure to inhaled silica.
- Chronic silicosis, which appears 10 to 30 years after exposure and can affect upper lung areas and sometimes causes extensive scarring.
- Accelerated silicosis, which occurs within 10 years of high-level exposure

Silicosis can develop within a few weeks to even decades after exposure. When people breathe silica dust, they inhale tiny particles of the mineral silica. This silica dust can cause fluid build-up and scar tissue in the lungs that cuts down your ability to breathe. This can lead to lung scarring and cough, weight loss, and fatigue.

#### **How Silicosis Affects Your Body**

Silicosis affects the lungs by damaging the lining of the lung air sacs. Once this begins, it leads to scarring and, in some situations, to a condition called progressive massive fibrosis. This condition happens when there is severe scarring and stiffening of the lung, which makes it difficult to breathe.

People with acute silicosis experience cough, weight loss, tiredness, and may have fever or a sharp chest pain. You may also have shortness of breath over time, especially with chronic silicosis. Your health-care provider might hear crackles or wheezing when listening to your lungs. Having silicosis increases the risk of other problems, such as tuberculosis, lung cancer, and chronic bronchitis.

Each type of silicosis affects the body somewhat differently:

- In acute silicosis, the lungs become very inflamed and can fill with fluid, which causes severe shortness of breath and low blood oxygen levels.
- In chronic silicosis, the silica dust causes areas of swelling in the lungs and chest lymph nodes, which makes breathing more difficult.
- In accelerated silicosis, swelling in the lungs and symptoms occur faster than in chronic silicosis.

Over time, lung capacity decreases, and people with silicosis may need support with oxygen and other devices to help them breathe.

Silicosis Symptoms, Causes, and Risk Factors

### What Are the Symptoms of Silicosis?

Symptoms of silicosis can appear from a few weeks to many years after exposure to silica dust. Symptoms typically worsen over time as scarring in the lungs occurs.

Cough is an early symptom and develops over time with exposure to silica that is inhaled.

In acute silicosis, you may experience fever and sharp chest pain along with breathing difficulty. These symptoms can come on suddenly.

In chronic silicosis, you may only have an abnormal chest x-ray in the beginning and then slowly develop a cough and breathing difficulty. More than a third of people with silicosis have phlegm production and cough. Chronic bronchitis like symptoms may occur, and the lungs have additional sounds called wheezes and crackles. As extensive scarring progresses over time, you may see signs of chronic lung disease, such as leg swelling, increased breathing rate, and bluish discolouration of the lips. If you are concerned you have Silicosis see your doctor. Also contact a personal injury lawyer.