

FOUR TYPES OF SILICOSIS

Excessive exposure to respirable crystalline silica (RCS) can lead to the development of silicosis. Silicosis is a fibrotic pulmonary disease caused by the inhalation and retention of RCS. However, not all silicoses are the same.

Chronic Simple Silicosis

The most common type. Results in scarring in the lung after many years (10-30 years) of breathing excessive amounts of RCS. Initially asymptomatic. As it progresses, shortness of breath, dry cough, and reduced pulmonary function can occur.

Chronic Complicated Silicosis

Develops when the small nodules of simple silicosis conglomerate into large lesions. Cell death is observed in the central portion of the lesion. The symptoms are similar to simple silicosis but are more pronounced.

Accelerated Silicosis

Develops in a short period (5-10 years) from exposure to a very high concentration of RCS. It progresses rapidly often resulting in a fatal outcome. Early symptoms of breathlessness quickly progress to hypoxic respiratory failure.

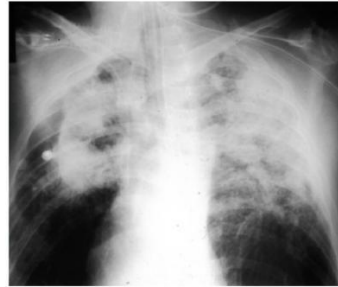
Acute Silicosis

Most destructive type. Caused by exposure to extremely high RCS concentrations. The disease is characterised by pulmonary edema and interstitial inflammation. The symptoms are cough, weight loss and rapid progression to respiratory failure over a few months.

Source: Toxicology Principles for the Industrial Hygienist, 2nd ed. by AIHA, Chapter 26.



Normal Chest X-Ray



Accelerated Silicosis



Chronic Simple Silicosis



Acute Silicosis



Chronic Complicated Silicosis

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