

Safety-Gram

Title 45, Chapter 11

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How Are You Controlling Dust On Your Mine Site?

Title 45, Chapter 11, § 913 (14) Dust control measures shall be taken where dust significantly reduces visibility of equipment operators. Haulage roads shall be wet down as necessary unless dust is controlled by other methods.



The Effects of Dust On Mine Workers:

Health

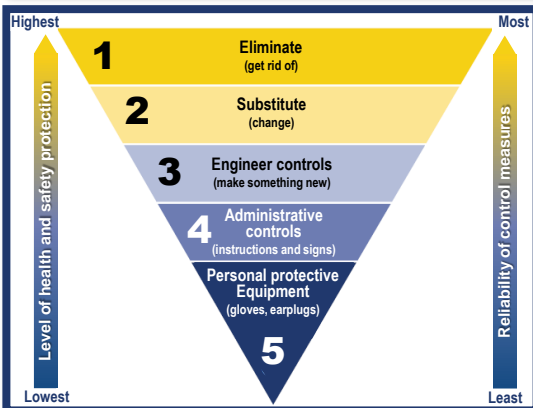
Exposure to **hazardous respirable dust** is a common problem in the mining industry. Each year, more than one million miners and other workers are exposed to dangerous levels of disabling dust.

Silica is an abundant mineral in the earth's crust, which means that any occupation – such as mining – that involves chipping, cutting, drilling, or grinding soil, granite, slate, sandstone, or other natural material can cause exposure to silica dust.

A worker's actual exposure is based on the **concentration of dust** in the air and the **length of time** workers spend in dusty conditions. Extreme dust inhalation may cause silicosis, a form of pneumoconiosis, a lung disease caused by **breathing dust** containing tiny silica particles. MSHA's rule, *Lowering Miners' Exposure to Respirable Crystalline Silica*, can be found at <https://www.msha.gov/regulations/rulemaking/silica>.

Safety

Excessive dust in the air **reduces visibility** which can cause accidents and other safety issues. Dust can also compromise safety by **lowering vehicle traction**, while accumulated dust inside vehicles and other machines can **reduce working efficiency** and increase the chance of malfunction or mishap.



Creating an Effective Dust Prevention Program:

- Use engineering controls to reduce worker exposure to dust. Sample workplace air to determine dust levels and monitor the effectiveness of engineering controls.
- Suppress dust on mine sites using methods appropriate for the area, such as watering or misting roadways.
- Train workers on the hazards of respirable mine dust and silica, control measures, and proper sampling procedures.
- Put a respiratory protection program in place and initiate medical screening for early evidence of respiratory diseases.