

# Exposure to Coal Mine Dust Containing Quartz



**U.S. Department of Labor  
Mine Safety and Health Administration**

**Health Hazard Information Card HH-47**

Breathing mine air containing quartz particles can cause black lung or silicosis, both disabling and sometimes fatal lung diseases. Because quartz dust is more toxic to the lung than coal dust, a miner exposed to high levels of quartz can develop silicosis in as little as three years.

## **What You Should Know About Quartz Dust**

- Quartz is one of the most common minerals on Earth and is found in most rock.
- Quartz particles are 20 times more toxic to the lungs than coal dust alone.
- Quartz-containing dust reduces the lung's ability to help you breathe.
- Exposure to quartz-containing dust puts a miner at risk of developing a potentially fatal lung disease.
- MSHA lowers the dust limit when coal mine dust contains more than 5 percent quartz.

## **The Symptoms of Silicosis**

- Early stages – may be no symptoms
- After continued exposure – shortness of breath, especially with exercise, cough, and chest tightness and pain.

- A person with silicosis is more susceptible to conditions such as pneumonia and tuberculosis.
- Exposure to high levels of quartz-containing dust may cause silicosis in as little as three years.
- Long-term, low level exposure has caused silicosis, and in some cases death, after 10 or more years of exposure.
- Silicosis often continues to progress once exposure ends.
- Treatment is available to reduce symptoms, but there is no cure for silicosis.

**—Remember—**  
**Black lung is NOT curable, but it is preventable!**

If you have questions about coal mine health matters please contact your local MSHA office or see the MSHA website at [www.msha.gov](http://www.msha.gov).