Silica: Hazards and How to Reduce Exposure

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TOPIC: Silica: Hazards and How to Reduce Exposure

Silica, which is also called quartz, is a mineral found in the earth's crust. It is a common agent of concern in the mining and construction industries. Silica causes a condition called silicosis, which is a serious and disabling lung condition.

Over exposure to silica can cause silicosis:

- ☑ Silicosis is a lung disease that can take many years to develop. Early stages may go unnoticed, but late stage silicosis is disabling and ultimately may cause death.
- ☑ Once silica is inside the lung, the body has a difficult time getting rid of it. Tiny particles of silica can stay in the lung for a long time and cause damage long after the exposure has ended.
- ☑ Silicosis is a lung condition that causes the lung to become rigid and impedes a person's ability to inhale enough air.
- ☑ There is no cure for silicosis.

What are the sources for silica exposure?

- ☑ Drilling and blasting of rock.
- ☑ Transportation of material.
- ☑ Working in mines, especially coal mines.
- ☑ Certain industrial processes, such as the operation of refractory lined furnaces (in foundries and steel mills) also have a high potential for silica exposure.
- ☑ Certain construction related jobs, such as tuck-pointing and demolition are known to result in silica exposure as well.

How can you reduce exposure to silica dust?

- ☑ Always use local exhaust ventilation systems when cutting, drilling or grinding materials that might contain silica.
- ☑ Use wet drilling and cutting techniques whenever possible.
- ☑ Clean dusty areas often. Use dust suppressants when sweeping or cleaning areas that might have silica.
- ☑ Use respiratory protection, if needed, to protect against potential exposures to silica.

Questions to Generate Discussion

- Are there areas at your worksite where silica exposure is a concern? If so, what can be done in that situation to reduce the potential for exposure?

Discussion Date: _____

Employee Participants:

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