Examples of Silica Dust-Producing Tasks
Highway/Road Construction and Repair

- milling
- sawing
- drilling
- chipping
- scabbling
- jackhammering
- grinding
- sandblasting
- grooving
- clean-up

Occupational Health Surveillance Program
Silicosis Surveillance & Intervention Project
• Many of the following photos show exposure measurements results for certain job tasks.

• The NIOSH* REL (Recommended Exposure Limit) is used as the metric of exposure.

• The REL is defined here as a Time-Weighted-Average (TWA) or the average amount of silica a worker can be exposed to over an 10-hour workday during a 40-hour workweek.

• NIOSH recommends an exposure limit of 0.05 mg/m³ TWA for respirable crystalline silica.

• Exposure measurements were conducted in collaboration with the New Jersey Silicosis Outreach and Research (SOAR) Alliance partners.

*National Institute for Occupational Safety and Health
Asphalt Milling

machine operator
1.8 X REL

ground tender
1.4 X REL
Concrete Milling

operator
22.8 X REL

ground laborer
25.8 X REL

Concrete milling machine
Scabbling

Scabblem
Sweeper-Vacuum-Dust Collector

ineffective water spray
Concrete Saws

demo saw

walk-behind saw
Concrete Sawing

- demo saw
  - 11 X REL

- walk-behind saw
  - 10.2 X REL
Co-Workers Can Also be Exposed
Jackhammer
Jackhammer

7.2 X REL
Jackhammer

7.6 X REL
Dowel Drilling
Dowel Drilling

4.4 X REL

1.4 X REL

4.4 X REL
Worker Using a Demo Saw to Cut a Drainage Box Along a Highway
Worker Using a Demo Saw While Doing Bridge Work
Compressed-Air Cleaning

over 100 mg/m$^3$
Compressed-Air Cleaning

flag person

air lance
Compressed Air Cleaning

jackhammer crew