

# Summary

## → → → WHAT IS THE DANGER?

Abrasive blasters using silica sand as an abrasive may contract a dust disease of the lung called silicosis. The common silicosis symptoms may be virtually unnoticeable in the beginning. Over time, silica can damage the lung tissue. This damage can cause permanent disability, secondary disease and death. Recently, there has been agreement that silica can also cause lung cancer.

## → → → WORKSITE CONDITIONS WHERE SILICOSIS MAY BE A PROBLEM:

- ⇒ **Failure to substitute non-silica abrasives**
- ⇒ **Inadequate engineering controls (such as ventilation) and work practices**
- ⇒ **Inadequate respiratory protection for workers**
- ⇒ **Failure to conduct adequate medical surveillance programs**

## → → → CAN SILICOSIS BE PREVENTED?

**Yes.** Technology for protecting you and your coworkers has been on the market for several years. In the majority of cases, the easiest steps can solve the most arduous problems. Many owners discover unexpected benefits from changing to non-silica abrasive substitutes and are surprised to find out that the long-range costs are affordable.

This manual was produced by Michigan State University to help you and abrasive blasting shop owners protect themselves from silicosis. We believe you and your shop will choose to develop a safe and healthy workplace if you are given the basic knowledge and resources. To help you create your health and safety program, this manual includes information and instructions, which are easy to follow. The manual focuses on the most important steps and presents easy hints for getting cost-effective results.

## → → → WHY ARE THERE SO MANY REGULATIONS?

**This manual does not add new regulations.** MIOSHA and OSHA have required most of the steps since 1973, and they will enforce their standards and regulations when applicable. Of course, other federal, state and local agencies also have regulations dealing with the safe use, handling and storage of silica sand, including hazardous waste disposal, waste water treatment, and air pollution.