

Protecting Employees from Exposure to Silica During Roof Tile Cutting Operations

THE PROBLEM:

Recent monitoring conducted by both the Arizona Division of Occupational Safety and Health (ADOSH) and the National Institute for Occupational Safety and Health (NIOSH) has shown that employees cutting roofing tiles as well as employees in the vicinity of the cutting operations, can be exposed to respirable silica and noise in amounts exceeding the OSHA Permissible Exposure Limits (PEL).

The inhalation of silica can lead to silicosis, an incurable, progressive lung disease that can be fatal. Exposure to silica dust can cause scar tissue to form in the lungs, which reduces the lungs' ability to extract oxygen from the air we breathe. There is no cure for silicosis, but it is 100% preventable if employers and employees work together to reduce exposures.

Overexposure to noise can result in permanent hearing loss.

PROTECTIVE MEASURES:

Unless and until proper engineering controls can be implemented reducing employee exposures to silica and noise below the PEL, those employees engaged in tile cutting, as well as those employees working on the same side of the roof as the cutting operations, must comply with the following:

- Wear an N-95 or more protective respirator;
- Be properly trained on the use and care of respirators, the hazards associated with silica exposure and the methods to reduce exposure;
- Be trained on how to fit check their respirator;



- Be required to utilize effective hearing protection;
- Be included within the scope of an effective hearing conservation program;
- Be aware of the location of the tile cutting operations;
- Be aware of the work practices that can help minimize their exposure to noise and dust containing silica.

For additional information, contact the ADOSH consultation sections at 602-542-1769 or 520-628-5478.