High Silica Hazards of Sandblasting

Thirty-three cases described their occupation at the time of exposure as that of sandblaster. Sandblasting can place workers at increased risk of silicosis if effective dust control measures are not in place. NJ sandblasting cases worked in three major industry sectors (Manufacturing, Construction, Services) and a wide variety of industry subsectors: electroplating, coating and engraving; construction special trades – structure painting, stonework; glass, pottery and concrete manufacturing; foundries and steel works, and; transportation equipment manufacturing. Though some were directly involved in production, many worked maintaining equipment.

Although just 33 cases described sandblasting as their most significant job related to silica exposure, other cases indicated that they had performed sandblasting at some time. Beginning in 1990, cases were asked about this during the interview. When questioned if they had “ever sandblasted,” 73 cases responded “Yes” and 121 responded “No.” Silicosis was identified at earlier ages among cases that routinely or ever sandblasted than among those who had never sandblasted.

Worker Sandblasting a Stone Wall

Sandblasting is the operation of forcibly propelling a stream of sand against a surface under high pressure to smooth a rough surface, roughen a smooth surface, shape a surface, or remove surface contaminants. A pressurized fluid, typically air, or a centrifugal wheel is used to propel the sand (often called the media).