

## **National Trends in Silicosis Mortality-United States, 1981-2000**

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This presentation describes trends in mortality from silicosis (ICD-9 code 502; ICD-10 code J62) and identifies industries and occupations with elevated silicosis mortality. We analyzed National Center for Health Statistics multiple-cause-of-death data for 1981-2000, limited to U.S. residents aged 15 years and older. Annual mortality rates were calculated and age-adjusted to the U.S. Year 2000 Standard Population. A linear regression model was used for analyzing mortality-rate trends over time. Proportionate mortality ratios (PMRs) by industry and occupation classification, adjusted for age, sex, and race, were based on 1,440 deaths restricted to certain states and years for which decedents' usual industry and occupation information was available from 1985 to 1999. A total of 5,662 deaths were attributed to silicosis. Overall age-adjusted mortality rates declined significantly ( $p < 0.0001$ ) between 1981 and 2000, from 2.4 to 0.7 per million. Industries having significantly elevated (99% lower confidence-limit greater than 1.0) PMRs for silicosis included mining and quarrying, pottery and clay products, and iron and steel processing among others. Occupations with elevated PMRs included, among others, those associated with metal and mineral processing (e.g., casting, molding, crushing, and grinding) and mining (e.g., mining machine operators). The results suggest how that considerable progress has been made towards elimination of this preventable disease. However, about 30 silicosis deaths/year have been recorded in recent years (since 1995) among those of working age (15-64), warranting continued efforts to effectively limit workplace exposures.

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