

## Indicator 10: Pneumoconiosis Mortality

### Significance

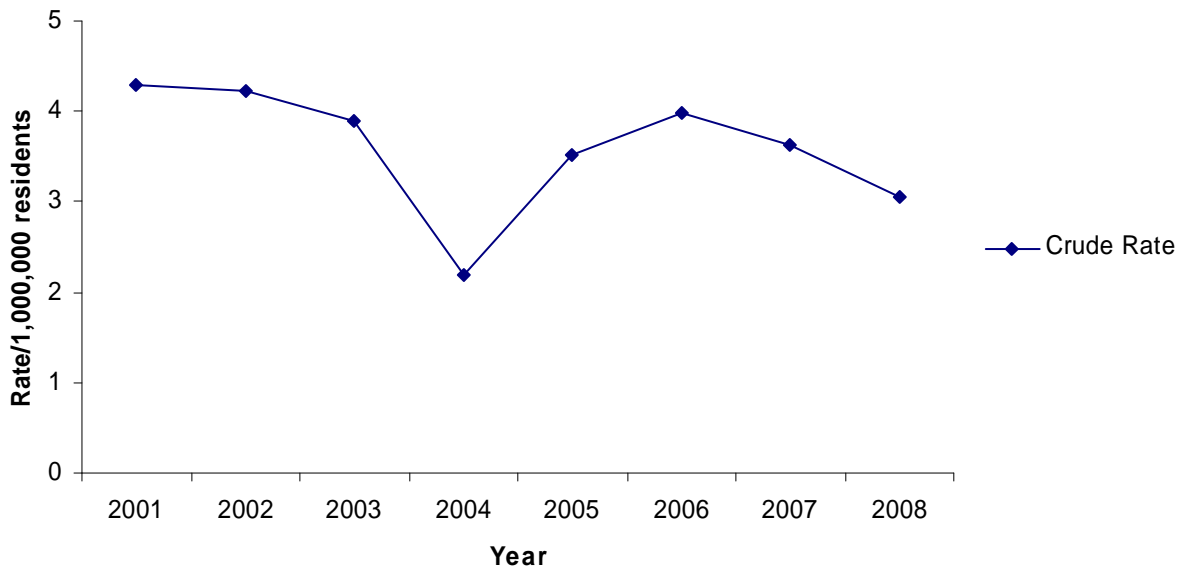
Pneumoconioses are lung diseases caused by dust exposure in the workplace. Pneumoconiosis include silicosis, asbestosis, coal workers' pneumoconiosis and pneumoconiosis exposures due to a variety of other mineral dusts, including talc, aluminum, bauxite and graphite. Controlling occupational exposure through monitoring, surveillance and prevention programs can prevent pneumoconiosis.

### Methods

The number of pneumoconiosis deaths were collected based on mortality data from the Colorado Department of Public Health and Environment, Colorado Health Information Dataset (COHID). Colorado residents, 15 years of age or older, with an underlying cause of death as 'Pneumoconiosis and Chemical Effects' were included in this calculation. Denominator data were obtained from the US Census Bureau. Due to the small number of fatalities per year, age standardized rates could not be calculated. Because each state maintains death certificate data individually, the overall US rate of mortality from pneumoconiosis could not be determined.

### Results

**Figure 10.1 Crude mortality rate from or with pneumoconiosis per 1,00,000 residents, Colorado 2001-2008**



*Source: Death certificate records from Colorado Department of Public Health and Environment Health Statistics Section (numerator); State population estimates from the US Census Bureau (denominator)*

*\*\* Age standardized death rates were not calculated because the number of fatalities in specific age groups were too small to produce reliable estimates and data can not be released due to confidentiality restrictions.*

<b>Table 10.1 Mortality From or With Pneumoconiosis, Colorado, 2001-2007</b>		
<b>Year</b>	<b>Number of Pneumoconiosis Deaths Colorado</b>	<b>Pneumoconiosis Crude Mortality Rate Per 1,000,000 Residents</b>
<b>2001</b>	15	4.3
<b>2002</b>	15	4.2
<b>2003</b>	14	3.9
<b>2004</b>	8	2.2
<b>2005</b>	13	3.5
<b>2006</b>	15	4.0
<b>2007</b>	14	3.6
<b>Average</b>	13.4	3.7
<i>Source: Death certificate records from Colorado Department of Public Health and Environment Health Statistics Section (numerator); State population estimates from the US Census Bureau (denominator)</i> <i>** Age standardized death rates were not calculated because the number of fatalities in specific age groups were too small to produce reliable estimates and data can not be released due to confidentiality restrictions.</i>		

### Results

- Between 2001 to 2007, approximately 4 workers per 1 million residents in Colorado died per year from pneumoconiosis. (Table 10.1 and Figure 10.1)

### Data Sources

- Death certificate records from Colorado Department of Public Health and Environment Health Statistics Section (numerator)
- State population estimates from the US Census Bureau (denominator)

### Limitations

- The estimated incidence of mortality from pneumoconiosis does not necessarily represent current exposures because of the long latency between a person's first dust exposure and development of disease.
- Age standardized death rates were not calculated because the number of fatalities in specific age groups were too small to produce reliable estimates and data cannot be released due to confidentiality restrictions.
- Mapping the geographic location of workers who die from pneumoconiosis may be problematic if the death and exposure do not occur in the same location.
- The causes of death listed on death certificates and coding of those causes may be inaccurate and may vary depending on who completes the certificate.
- Death certificates identify only a small percentage of those who develop pneumoconiosis.

### Recommendations

- Report mortality by type of pneumoconiosis, age, gender, race/ ethnicity.