

Indicator 12: Incidence of Malignant Mesothelioma

Significance

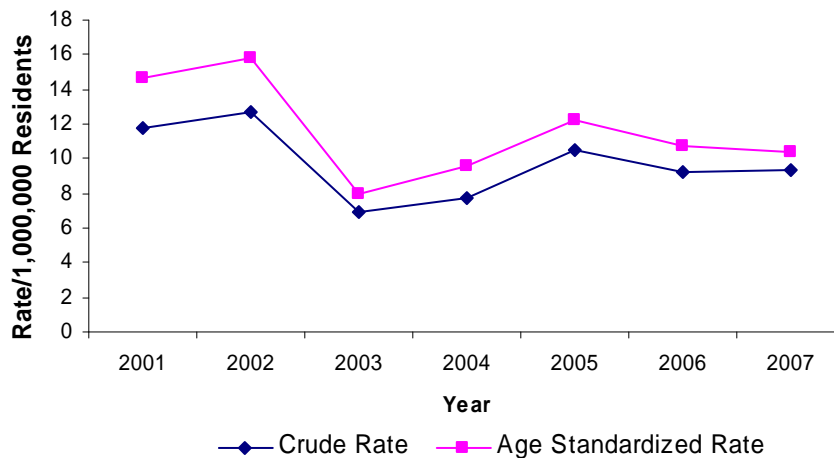
Mesothelioma is a rare, fatal cancer of the lining that surrounds the chest and abdominal cavities. Primarily attributable to asbestos exposure, onset of the disease may not occur for 20 to 40 years after exposure. Despite regulatory actions and the decline in the use of asbestos, the number of deaths from malignant mesothelioma, is still increasing in the United States; which may derive from exposures decades ago.ⁱ New cases also might result through occupational and environmental exposure to asbestos during remediation and demolition of existing asbestos in buildings, highlighting the continued need to monitor and prevent work related exposure to asbestos.

Methods

The Colorado Central Cancer Registry in the Colorado Department of Public Health and Environment collects information on the incidence, treatment, survival and deaths due to cancer. Data are collected from physicians, clinics, pathology labs, hospitals and death certificates. Annual age-standardized incidence of mesothelioma was calculated using the registry (ICD-O histology codes 9050, 9051, 9052, 9053). State population estimates were obtained from the U.S. Census Bureau. Nationwide, malignant mesothelioma estimates are not available because not all states meet current reporting standards.

Results

Figure 12.1 Incidence rate of malignant mesothelioma per 1,000,000 residents, Colorado, 2001-2007



Source: Colorado Department of Public Health and Environment Cancer Registry data (numerator); State population estimates from the U.S. Census Bureau (denominator); Year 2000 US Standard population (for age-standardization)

Table 12.1 Number and Rates of Malignant Mesothelioma per 1,000,000 residents in Colorado 2001-2007			
	Number of Cases of Malignant Mesothelioma	Crude Rate of Malignant Mesothelioma	Age-Standardized Rate of Malignant Mesothelioma
2001	41	11.7	14.6
2002	45	12.7	15.8
2003	25	7.0	8.0
2004	28	7.7	9.6
2005	39	10.5	12.2
2006	35	9.3	10.7
2007	36	9.3	10.4
Average	35.6	9.7	11.6
<i>Source: Colorado Department of Public Health and Environment Cancer Registry data (numerator); State population estimates from the U.S. Census Bureau (denominator); Year 2000 US Standard population (for age-standardization)</i>			

Results

- Based on the age-standardized incidence rates, 11.6 per 1,000,000 Colorado residents were diagnosed with mesothelioma from 2001 to 2007 annually. (Table 12.1 and Figure 12.1)
- Mesothelioma is primarily attributable to asbestos exposure. Rates have ranged from as low as 8.0 to as high as 15.8 per 1,000,000 residents in Colorado. (Table 12.1 and Figure 12.1)

Data Sources

- Colorado Department of Public Health and Environment Cancer Registry data (numerator)
- State population estimates from the U.S. Census Bureau (denominator)
- Year 2000 US Standard population (for age-standardization)

Limitations

- The estimated incidence does not necessarily represent current exposures, primarily because of the long latency associated with the disease.
- Nationwide malignant mesothelioma estimates are not available because not all states meet current reporting standards.

Recommendations

- Report the incidence of mesothelioma by age, gender, race/ ethnicity, occupation, industry and exposure history for prevention efforts.

ⁱ *Centers for Disease Control and Prevention. Malignant Mesothelioma Mortality – United States, 1999-2005. MMWR 2009; 58(15):393-396*