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Incidence of Malignant Mesothelioma, 1999–2018

Mesothelioma is a rare cancer – 2,875 cases were reported in the United States in 2018. Exposure to asbestos causes most cases of mesothelioma.

Mesothelioma is a cancer that forms in the mesothelium, the thin tissue that lines many internal organs. A diagnosis of mesothelioma is based on histology codes. These include *International Classification of Diseases for Oncology, Third Edition* (ICD-O-3) histology codes 9050 (mesothelioma); 9051 (fibrous mesothelioma); 9052 (epithelioid mesothelioma); 9053 (mesothelioma, biphasic); and 9055 (multicystic mesothelioma).

Mesothelioma is also defined by the part of the body it is found in, using ICD-O-3 anatomic site codes. The most common kind of mesothelioma forms in the tissue around the lungs, called the pleura (ICD-O-3 anatomic site code C38.4). Mesothelioma may also form in the tissue in the abdomen (peritoneum; C48.0–C4.8); the tissue around the heart (pericardium; C38.0); and the tissue around the testicles (tunica vaginalis; C63.7).

Table 1. Number and Percentage of New Malignant Mesothelioma Cases¹ by Sex and Type, United States, ² 1999-2018

	Male		Female		Total	
Subsite (ICD-O-3 anatomic code)	Count	Percentage	Count	Percentage	Count	Percentage
All cases	48,073	100.0%	14,477	100.0%	62,550	100.0%
Pleura (C38.4)	40,824	84.9%	10,514	72.6%	51,338	82.1%
Peritoneum (C48.0-C48.8)	3,463	7.2%	2,706	18.7%	6,169	9.9%
Pericardium (C38.0)	62	0.1%	49	0.3%	111	0.2%
Tunica vaginalis (C63.7)	114	0.2%	0	0.0%	114	0.2%
Other ³	3,610	7.5%	1,208	8.3%	4,818	7.7%

¹ Based on cases with ICD-O-3 histology codes 9050, 9051, 9052, 9053 or 9055. 94% of cases were based on microscopic confirmation.

Asbestos was used in many consumer products, automobile parts, and building materials in the 20th century, before scientists learned about its dangers to health. The potential for asbestos exposure in the United States peaked in the 1970s but has since declined as U.S. asbestos mines were closed and asbestos-containing products and materials were withdrawn from the market. The decline in asbestos exposure is reflected by declines in mesothelioma rates. However, people can still be exposed to asbestos. Although asbestos is no longer mined in the United States, it is imported from other countries to make some products. It is also still present in some older homes and buildings.

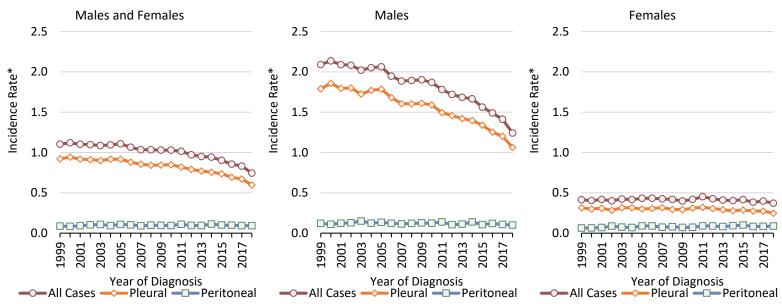


² Based on 47 registries that met high-quality data criteria for all years 1999–2018, covering 97% of the U.S. population.

³Includes all other anatomic sites. The most common were lung and bronchus (C34.0–C34.9; 66% of "other" cases); unknown primary site (C80.9; 14%); overlapping lesion of heart, mediastinum and pleura (C38.8; 2%); and testis, not otherwise specified (C62.9; 2%). Other sites made up less than 2% of "other" cases.

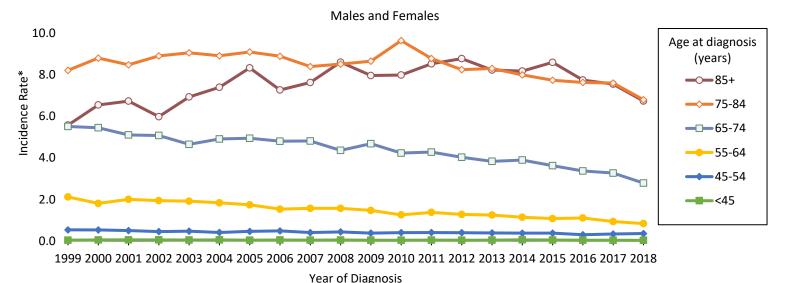


Figure 1. Rate of New Malignant Mesothelioma Cases by Sex and Type, United States, 1999–2018



^{*}New mesothelioma cases per 100,000 standard population. Based on 47 registries that met high-quality data criteria for all years 1999–2018, covering 97% of the U.S. population.

Figure 2. Rate of New Malignant Mesothelioma Cases by Age at Diagnosis, United States, 1999–2018



*New mesothelioma cases per 100,000 population. Based on 47 registries that met high-quality data criteria for all years 1999–2018, covering 97% of the U.S. population.

Data Source

Data in this brief come from $\underline{\text{U.S. Cancer Statistics}}$, the official federal cancer statistics.

U.S. Cancer Statistics incidence data are from population-based registries that participate in CDC's National Program of Cancer Registries (NPCR) and/or the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program and met high-quality data criteria during 1999—2018 for the 2020 data submission period, covering 97% of the U.S. population.

More Information

U.S. Cancer Statistics
Mesothelioma
Health Effects of Asbestos

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