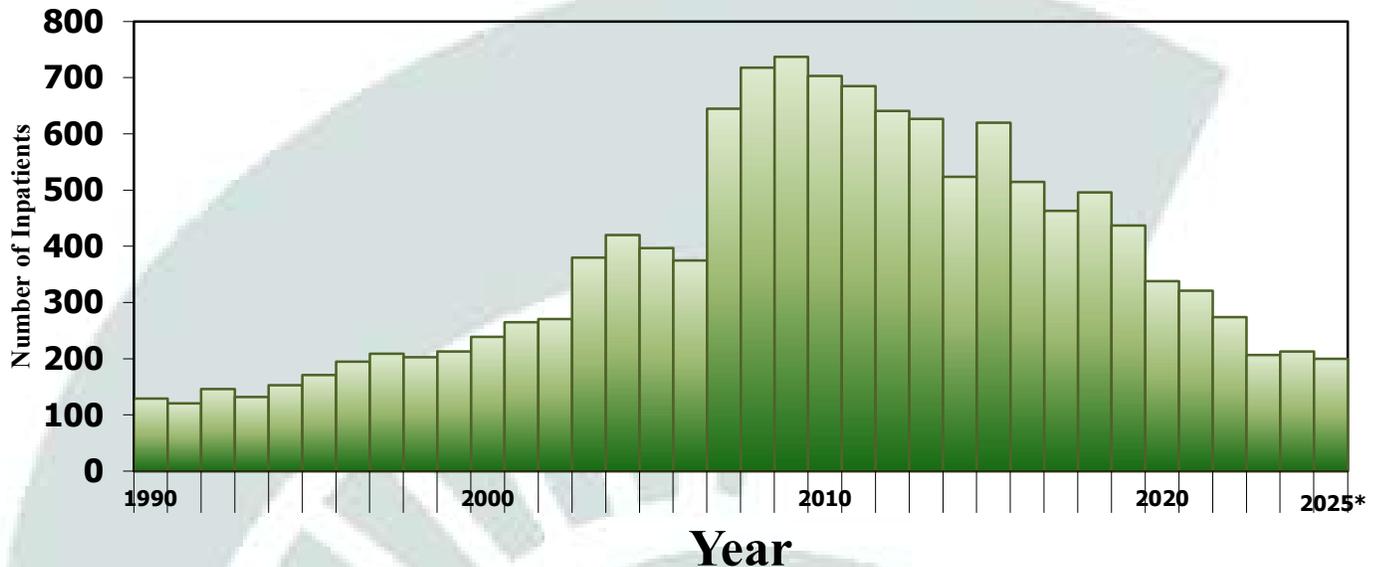


# Tracking Asbestos-Related Lung Disease in Michigan

Additional Information Available at: [www.oem.msu.edu](http://www.oem.msu.edu)

## Summary Statistics

### Hospital Discharges of Inpatients with Asbestosis, Michigan: 1990-2025



## Background

\*2025 is a preliminary estimate.

In 1978, the State of Michigan instituted an occupational disease reporting law. To help administer the law and encourage reporting, funding was obtained from the National Institute for Occupational Safety and Health (NIOSH) in 1988. This is a joint project of the Michigan Occupational Safety and Health Administration (MIOSHA) and the Michigan State University (MSU) Department of Medicine. In an effort to continue to identify, understand and prevent work-related disease, the tracking program was expanded in 2010 to include all work-related lung diseases such as **Asbestosis**, Chronic Beryllium Disease, Hypersensitivity Pneumonitis (HP) and others. Newly identified cases of occupational lung disease are interviewed about their work exposure history; MIOSHA enforcement inspections may be conducted to determine if others are at similar risk.

From 1993 to 2006 there was a steady increase in hospitalizations for asbestosis; from 2007 to 2014 the overall increase in hospitalizations is largely due to the availability of additional secondary discharge diagnosis codes from up to six codes through 2006, to up to 29 codes since 2007. The number of patients hospitalized with asbestosis has trended downward since 2009. Data for 2025 is provisional.

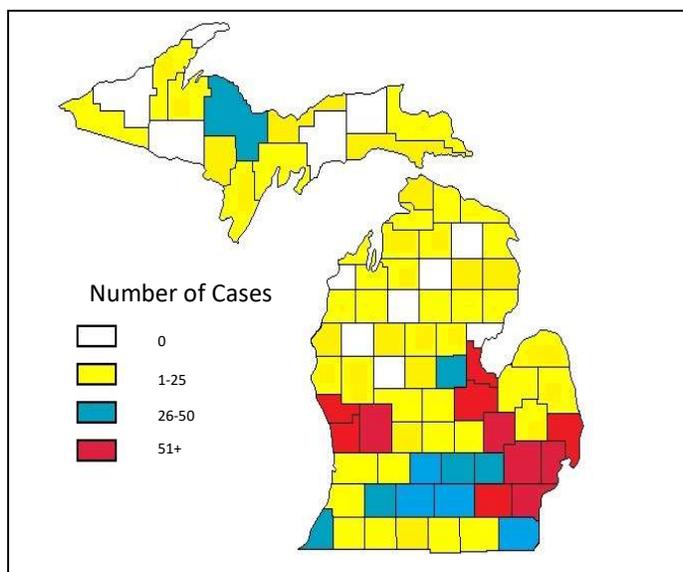
### Program Highlights: Asbestosis

- 99% of asbestos-related hospitalizations in 2024 in Michigan were men; 89% were white.
- The top five counties with the greatest number of asbestos-related cases in Michigan in 2024 were: Wayne, Saginaw, Bay, Oakland and Macomb.
- No asbestos-related hospitalization in 2024 was paid for by Workers' Compensation. Medicare paid for 84%, private insurance covered 9% and the remaining 7% were covered by other insurance, self-pay or auto insurance.
- Construction and Manufacturing are the industries that are most frequently associated with asbestos exposure. Plumbing and pipefitting are the most frequently reported occupations.
- Individuals with asbestos exposure are at increased risk of developing lung cancer.

## Asbestos-Related Lung Disease Case Narratives

- A male in his 70s died from asbestos-related lung disease. He had acute on chronic respiratory failure with emphysema and pneumonia. His death certificate mentioned silicosis, but an expert B Reading of his chest radiograph showed changes more consistent with asbestos exposure. He worked at a foundry for over 30 years with jobs including grinding, painting, and operating an overhead crane. He was exposed to asbestos from the furnaces at the foundry. He formerly smoked a pack and a half of cigarettes per day for over 30 years but quit in his 50s. His FVC was 51% of predicted and his FEV1 was 19% of predicted.
- A female in her 60s was diagnosed with mesothelioma. She was a taxidermist. Until the late 1970s, taxidermy routinely used ground asbestos mixed with plaster to form a putty. The putty was then used to shape the animal; the dried form could then be sanded to further shape the form.

### Distribution of MI Residents Diagnosed with Mesothelioma, by County: 2002-2021



Asbestos-covered pipes. As asbestos pipe lagging ages, it deteriorates and asbestos fibers can be inhaled, especially during repair work to pipes.

## Summary

- The latency from first exposure to development of asbestos-related disease is long, generally 20 to over 40 years. Accordingly, despite the marked reduction in asbestos use in the United States since the 1970s and implementation of work regulations, asbestos-related conditions continue to occur. Some projections estimate that mortality from asbestos will peak in 2025.
- The top six counties with the highest rates of mesothelioma are: Marquette, Bay, Midland, St. Clair, Muskegon and St. Joseph; the top six counties with the largest number of cases are: Wayne, Oakland, Macomb, Kent, Genesee and St. Clair. These counties are associated with the historical location of a large shipyard, underground mining, chemical facilities and foundries.
- Although most asbestos-related lung disease is caused by exposure to asbestos at work, most individuals never apply for workers' compensation; because of this, Medicare or private insurance companies typically end up covering the medical costs associated with asbestos exposure.
- Studies indicate that chest CT scan screening for lung cancer is of benefit to asbestos-exposed workers (2024 Asbestos Updates Including Recommendations for Lung Cancer Screening. Project SENSOR News 2024;35(1):1-4 oem.msu.edu/images/newsletter/Winter2024Vol35n1newsletterRecent12.20.23.pdf).