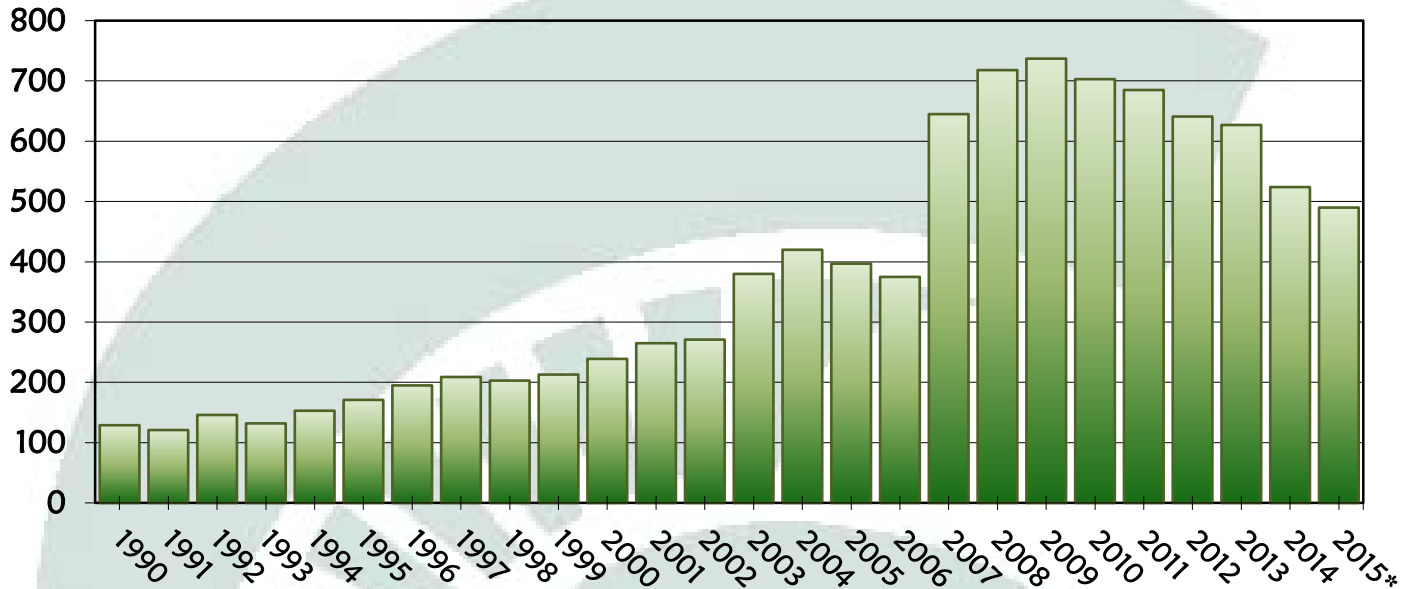


Tracking Asbestos-Related lung Disease in Michigan

Additional Information Available at: www.oem.msu.edu

Summary Statistics

Hospital Discharges of Inpatients with Asbestosis, Michigan: 1990-2015*



*Due to the shift in hospital coding from ICD-9 to ICD-10 in 2015, only the first three quarters of calendar year 2015 were available at the time of this report.

Background

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 from silicosis and work-related asthma to include all work-related lung diseases such as **Asbestosis**, Chronic Beryllium Disease, Hypersensitivity Pneumonitis (HP) and Hard Metal Lung Disease. Newly-identified cases of occupational lung disease are interviewed about their exposures and work history; MIOSHA enforcement inspections may be conducted to determine if others are at risk of developing lung disease.

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 decreased since 2009.

Program Highlights: Asbestosis

- 95% of asbestos-related hospitalizations in 2015 in Michigan were men; 91% were Caucasian.
- The counties with the greatest number of asbestos-related cases in Michigan in 2015 were: Wayne, Saginaw, Bay, and Oakland.
- One asbestos-related hospitalization in 2015 was paid for by Workers' Compensation. Medicare paid for 93%, private insurance covered 7% and Medicaid covered <1% of hospital costs.
- 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 woman in her 70s was diagnosed with asbestosis. She had worked at a paper mill for almost 20 years as an occupational health nurse. She was exposed to asbestos when it was being removed from the paper mill. Her spirometry showed a mild mixed obstructive-restrictive pattern. She had never smoked cigarettes. She was on oxygen.
- A man with asbestosis died in his 80s from respiratory infection and failure. He was a plumber for over 20 years. He had smoked two packs of cigarettes per day from his early teens.
- A man in his 50s was diagnosed with asbestosis. He had worked almost 20 years at an automotive manufacturing plant. He worked in maintenance and was exposed to asbestos from pipe insulation. He had smoked a pack of cigarettes per day from his teens to his 40s. He required a double lung transplant.

Age-Adjusted Incidence Rate of Mesothelioma Among Michigan Residents, by County

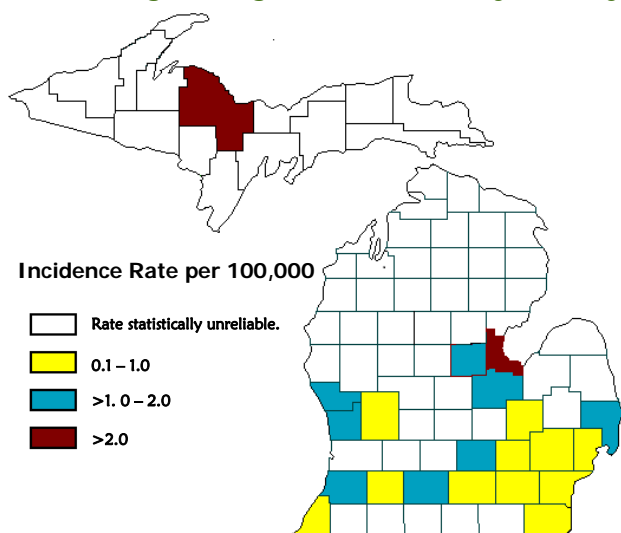


Image Source Page: <http://www.asbestos-contractors-group.com/2009/10/pipe-insulation/>

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 not peak until 2025.
- The highest rates of mesothelioma in Michigan are associated with the historical location of ship yards, 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 (Chest 2014;145:1339-1346).