Pneumonia and influenza is the seventh leading cause of all deaths in Michigan and the tenth leading cause of Years of Potential Life Lost (YPLL) for people below the age of 75. Michigan saw a decrease in the rate of pneumonia and influenza deaths as of 1999 due to a coding change from the use of ICD-9 codes to ICD-10 codes (see Appendix B).

Pneumonia is an inflammation of the lungs due to infection. Influenza is an infection of the respiratory tract that causes fever, muscle ache, and weakness. Pneumonia and influenza rank in the top 10 leading causes of death primarily because they are common complication of any serious illness. This indicator reflects a need to increase the use of preventive vaccines, as well as to reduce barriers to health care access.

In 2001, there were 2,064 deaths due to pneumonia and influenza in Michigan. The age-adjusted rate for pneumonia and influenza deaths was 21.7 per 100,000 population.

How does Michigan compare with the U.S.?

The age-adjusted pneumonia and influenza death rates for Michigan and the U.S. have remained close for many years. Michigan’s 2000 age-adjusted death rate of 19.3 was lower than the U.S. rate of 23.7. Pneumonia and influenza was the seventh leading cause of all deaths in the U.S. and the thirteenth leading cause of YPLL in 1999.
**How are different populations affected?**

The very young and the elderly are at higher risk of dying from pneumonia and influenza. In Michigan, 74 percent of pneumonia and influenza deaths occurred in individuals aged 75 or older in 2001. Pneumonia and influenza is the sixth leading cause of death for this age group.

The 2001 age-adjusted death rate for African-Americans (27.8) was about 33 percent higher than the rate for whites (20.9). The age-adjusted death rate for men was 28.1 and 18.2 for women.

For more state and local data on pneumonia and influenza deaths, visit the Michigan Department of Community Health Web site at [www.michigan.gov/mdch](http://www.michigan.gov/mdch).

**What other information is important to know?**

Virus-infected droplets coughed or sneezed into the air, spread influenza. It usually occurs in small outbreaks, but every few years, epidemics arise. Outbreaks tend to occur in winter and generally spread rapidly through schools and institutions for the elderly.

People aged 65 and older should be vaccinated against influenza every year and against pneumonia at least once. The 2001 Michigan Behavioral Risk Factor Survey indicates that 60.1 percent of persons over 64 years of age had a flu shot within the past year and 58.1 percent had ever had a pneumonia vaccination.

**What is the Department of Community Health doing to affect this indicator?**

The department is actively working to decrease the incidence and impact of pneumonia and influenza. With departmental assistance, 98% of all local health departments in Michigan administer flu vaccines and 96% of them administer pneumonia vaccines. Adult Immunization Record cards are provided to local health departments and private providers to help patients keep track of their immunizations.

Preventive measures include distribution of an educational brochure addressing adult immunization. Efforts are directed to those with diabetes, seniors and other high-risk groups, as well as their
physicians. The department also works with Area Agencies on Aging and senior centers throughout the state to conduct regular informational sessions on the importance of flu vaccination.

The department conducts influenza surveillance each year through a statewide network of physicians and clinical laboratories. Information about the type, frequency, and severity of illness is helpful to physicians who need to make preventive and therapeutic treatment decisions for their patients. Local health departments receive assistance from department staff in the epidemiological investigation of unusually large or severe outbreaks of influenza in health care facilities or the community.

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