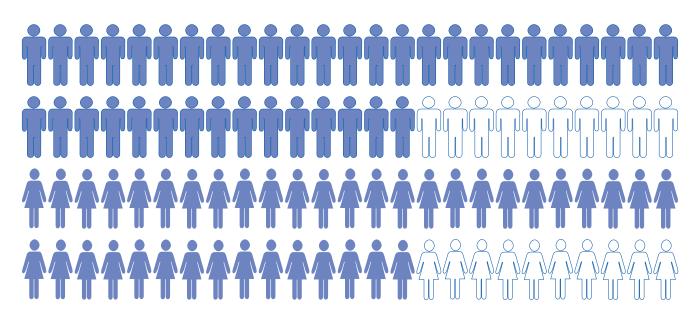
Facts & Figures

Lung Cancer and Tobacco Use in Wisconsin





80% Percentage of lung cancer deaths caused by smoking in 2020*

 16° Percentage of Wisconsin residents who are current cigarette smokers in 2017**

4,290 Number of men and women expected to be diagnosed with lung and bronchus cancer in 2020*

2,690 Number of men and women expected to die of lung and bronchus cancer in 2020*

74.9/o Percentage of lung cancer diagnosed after they have spread to beyond the lung[†]

1 in 15 Lifetime risk for men of being diagnosed with lung cancer

Source: *American Cancer Society. Cancer Facts & Figures 2020. Atlanta: American Cancer Society; 2020. **Wisconsin Behavior Risk Factor Surveillance System, Office of Health Informatics, Division of Public Health, Department of Health Services, 2019. †Statistic for 2016. Wisconsin Cancer Reporting System, Office of Health Informatics, Division of Public Health, Department of Health Services, and the National Center for Health Statistics.



Lung and Bronchus Cancer in Wisconsin

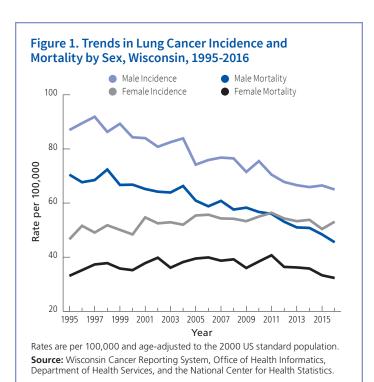
Overview

Lung cancer is the leading cause of cancer death for both men and women. Cigarette smoking causes the majority of lung cancer deaths in Wisconsin. Stopping the use of tobacco could eliminate most lung cancer. Quitting smoking reduces an individual's risk significantly, although former smokers remain at greater risk than those who never smoked.

Cancer Burden

More people die from lung cancer than from breast, prostate, and colorectal cancers combined. In Wisconsin, lung cancer killed an average of 2,896 residents per year during the five-year period 2012-2016, and an average of 4,190 new cases of lung cancer were diagnosed each year.

Both gender and race are factors in lung cancer incidence and mortality rates. Lung cancer incidence and mortality rates are significantly higher among Wisconsin males than females. The age-adjusted lung cancer incidence rate for 2012-2016 was 59.8 in the state. Among men, the rate was 67.7 per 100,000, and among women, 53.9 per 100,000. The mortality rate was 41.3 per 100,000, with the rate for males of 49.9 and for females, 34.9.



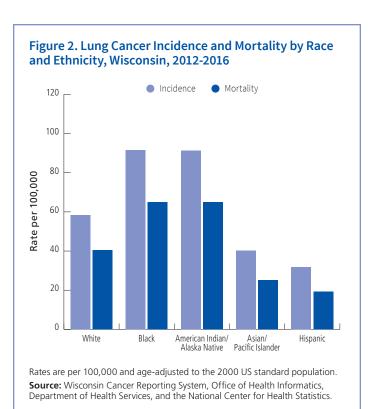
While men have traditionally experienced higher lung cancer rates, the difference has decreased in recent years. In Wisconsin, between 1995 and 2016, the incidence rate for lung cancer among women increased by 14%, compared to a 23% decrease among men (Figure 1). The 2016 male mortality rate decreased by 28% since 1995, but the female mortality rate increased by 9%. Wisconsin males had an average of 1,570 deaths from lung cancer each year, compared to an average of 1,325 deaths for Wisconsin females during 2012-2016.

American Indians/Alaska Natives and blacks in Wisconsin are more likely than other races to be diagnosed with lung cancer and die from the disease. The state's mortality rate for lung cancer for American Indians/Alaska Natives for 2012-2016 was 64.9 per 100,000, and for blacks, 65.1 per 100,000. The rate for whites was 40.4, and Asians/Pacific Islanders had a mortality rate of 25.1 per 100,000 (Figure 2).

Risk Factors

Cigarette smoking is the most important risk factor for lung cancer. Cigar and pipe smoking also increase risk.

Exposure to radon gas released by soil and building materials is estimated to be the second-leading cause of lung cancer in the US.



Other risk factors include environmental or occupational exposure to secondhand tobacco smoke, asbestos (particularly among smokers), certain metals (chromium, cadmium, and arsenic), some organic chemicals, radiation, air pollution, and diesel exhaust.

Risk Reduction

The best way to reduce the risk of lung cancer is to not smoke. Risk increases with both quantity and duration of smoking.

Screening/Early Detection

Screening with low-dose spiral computed tomography (LDCT) has been shown to reduce lung cancer mortality by 20%, compared to standard chest x-ray among current or former (quit within the past 15 years) heavy smokers. The American Cancer Society guidelines for the early detection of lung cancer recommend annual screening for lung cancer with LDCT in adults 55 to 74 years of age who are current or former heavy smokers and in relatively good health. These individuals should receive evidence-based smoking-cessation counseling and should undergo a process of informed/shared decision making that includes a description of the potential benefits, limitations, and harms associated with lung cancer screening.

Smoking-cessation counseling remains a high priority for clinical attention in discussions with current smokers, who should be informed of their continuing risk of lung cancer. Screening should not be viewed as an alternative to smoking cessation.

Stage at Diagnosis

Lung cancer in the state is most often diagnosed at an advanced stage, or distant stage (51.4% of new cases, 2012-2016), which negatively impacts the length of survival. The five-year probability of survival is highest if lung cancer is diagnosed early, with a 56% five-year survival rate for lung cancers diagnosed at the localized stage. However, only 21.8% of lung cancers in Wisconsin were diagnosed at this early stage during the recent five-year period. Typically, lung cancer has a lower survival rate compared to other major cancers; the five-year survival rate for lung cancer is 19%, but the rate is much higher for female breast cancer (90%), prostate cancer (98%), and colorectal cancer (65%).

Tobacco Use

Tobacco

Smoking remains the world's most preventable cause of death. The devastating effects of tobacco use in the health and welfare of society are now widely recognized.

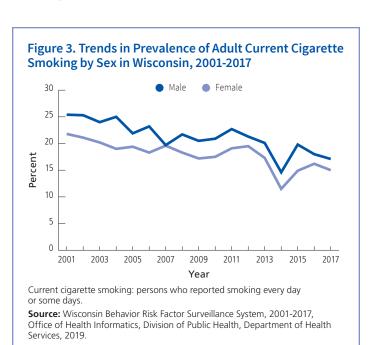
The best way to avoid lung cancer is to not start using tobacco or to quit if you do use it. Cigarette smoking also increases the risk of cancers of the oral cavity and pharynx, larynx, esophagus, pancreas, uterine cervix, kidney, bladder, stomach, colorectum, and liver, as well as acute myeloid leukemia.

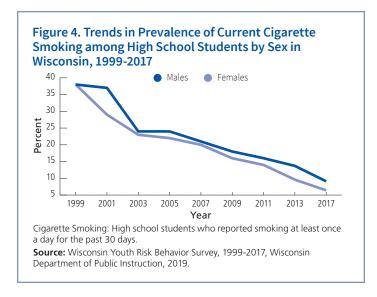
Cigar smoking increases the risk of cancers of the lung, oral cavity, larynx, esophagus, and probably pancreas.

Smokeless tobacco products include moist snuff, chewing tobacco, snus, and dissolvable nicotine products, such as strips, orbs, and sticks. These products cause oral, esophageal, and pancreatic cancers; and precancerous lesions of the mouth.

Trends in Tobacco Use

The prevalence of smoking in Wisconsin has declined since 2000, but 16% of adults ages 18 and older report current (2017) cigarette smoking. Figure 3 depicts tobacco use by sex in the state in 2001-2017. The prevalence of smoking in 2011 was 19.1% for females and 22.7% for males,

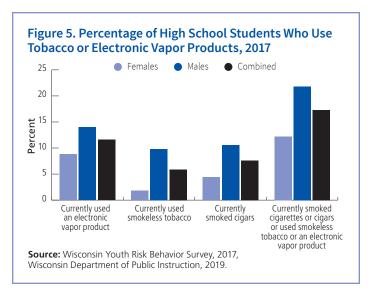




but by 2017 had declined to 15.0% among women and 17.1% among men. In 2017, for both sexes combined, the 25- to 34-year-old age group had the highest percentage of smokers at 21.1%.

According to the Wisconsin Youth Risk Behavior Survey (YRBS) for 2017, approximately 7.8% of students in Wisconsin currently smoke cigarettes (Figure 4). The YRBS also reported 1 in 5 high schoolers use e-cigarettes, with a 154% increase in e-cigarette use between 2014-2018.

E-cigarette use has risen rapidly in the US, particularly among youth and young adults, and more high school students have reported using e-cigarettes than tobacco cigarettes every year since 2014.



Quitting Smoking in Wisconsin

There are several treatments that can help tobacco users quit and thus reduce the incidence of lung and bronchus cancer. Tobacco users who are ready to quit can consult their physicians, who will conduct an intervention and prescribe an appropriate medication.

Medication combined with practical, individualized counseling provides effective nicotine dependence treatment. Resources for quitting smoking can be obtained by calling the Wisconsin Tobacco Quit Line (1-800-QUITNOW or 1-800-784-8669). The quit line provides practical advice on the process of quitting tobacco use. The free service is sponsored by the Wisconsin Department of Health Services.



