# Tobacco-Related Cancers in West Virginia

#### Overview

West Virginia has one of the highest rates of cigarette smoking in the nation. In West Virginia, approximately 26.5% of the adult population (over 378,000 individuals) smokes.<sup>1</sup>

Tobacco use is the leading cause of preventable disease and death. It is responsible for numerous health problems including heart disease, stroke, emphysema, diabetes, and cancer.<sup>2</sup>

Smoking is the greatest risk factor for lung cancer and causes approximately 85% of all lung cancer cases. Breathing secondhand smoke can increase lung cancer risk in a non-smoker by 20% to 30%.<sup>2</sup>

Tobacco use also increases the risk of oral cavity and pharynx, larynx, esophagus, bladder, pancreas, kidney, cervix, stomach, and acute myeloid leukemia cancers.<sup>2</sup>

## **Tobacco-Related Cancer Incidence Rates**

Compared to national rates, West Virginia has higher incidence rates for cancers of the lung and bronchus, bladder, kidney and renal pelvis, oral cavity and pharynx, cervix, esophagus, larynx and acute myeloid leukemia (Figure 1).



Figure 1. Tobacco-Related Cancer Incidence Rates, WV and US, 2006-2010

**Note:** Rates are age-adjusted to the 2000 US population standard. Not all cancers presented can be attributed to tobacco use; however, tobacco use is a strong risk factor for these cancers. **Data Sources:** West Virginia Cancer Registry and CDC Wonder



This publication is a collaborative effort between the West Virginia Cancer Registry, the Division of Tobacco Prevention and the West Virginia Comprehensive Cancer Program.

# Number of Tobacco-Related Cancers

In West Virginia, tobacco-related cancers account for more than 40% of all the cancers diagnosed among men and over 30% of all cancers diagnosed among women.

Each year, on average, 4,025 cases of tobacco-related cancer are diagnosed among West Virginia residents (Table 1).

In West Virginia, the most common tobacco-related cancer is lung and bronchus cancer.

Lung and bronchus cancer accounts for approximately 50% of all tobacco-related cancers and 19% of all cancer types diagnosed in West Virginia.

## **Tobacco-Related Cancer Deaths**

On average, 2,332 West Virginians die each year from a tobacco-related cancer (Table 1).

It is estimated that tobacco use accounts for at least 30% of all cancer deaths and 80-90% of lung cancer deaths.

Lung cancer is the leading cause of cancerrelated death in West Virginia, accounting for more deaths than five of the most common cancers combined: colon and rectum, female breast, prostate, non-hodgkin's lymphoma, and urinary bladder (Figure 2).

People who stop smoking or using other tobacco products reduce their risk of dying from lung and other types of cancer.

Table 1. Average Annual Number of Tobacco-Related CancerCases and Cancer Deaths in West Virginia, 2006-2010

| Cuses and Cancer Deaths in West Virginia, 2000 2010 |                       |                      |
|---|-----------------------|----------------------|
| Cancer Type   | Cancer Cases          | <b>Cancer Deaths</b> |
| Lung and Bronchus                                   | 2023                  | 1538                 |
| Urinary Bladder                                     | 530                   | 107                  |
| Kidney and Renal Pelvis                             | 388                   | 105                  |
| Pancreas  | 247                   | 217                  |
| Oral Cavity and Pharynx                             | 265                   | 60                   |
| Cervix  | 98                    | 30                   |
| Stomach   | 131                   | 65                   |
| Esophagus   | 127                   | 114                  |
| Larynx  | 125                   | 35                   |
| Acute Myeloid Leukemia                              | 91                    | 61                   |
| All Tobacco-Related Sites                           | 4025                  | 2332                 |
| Notas: Not all cancers presente                     | d can be attributed t | o tobacco use        |

**Notes:** Not all cancers presented can be attributed to tobacco use; however, tobacco use is a strong risk factor for these cancers. **Data Sources:** WV Cancer Registry and WV Health Statistics Center

#### Figure 2. Average Annual Number of Cancer Deaths by Cancer Type, West Virginia, 2006-2010



#### References

1. Vital Signs: Current Cigarette Smoking Among Adults Aged ≥ 18 Years—United States, 2005–2010. MMWR 2011;60(33):1207–12

2. The Health Consequences of Smoking: A Report of the Surgeon General. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2004

3. The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2006