



# Health Consequence of Tobacco Use Among Women

## MORTALITY

- Cigarette smoking plays a major role in the mortality of U.S. women. Since 1980, when the Surgeon General's Report on Women and Smoking was released, about three million women have died prematurely of smoking-related diseases.
- In 1997, about 165,000 U.S. women died of smoking-related diseases, including lung and other cancers, heart disease, stroke, and chronic lung diseases such as emphysema.
- Each year throughout the 1990s, about 2.1 million years of the potential life of U.S. women were lost prematurely because of smoking-attributable diseases. Women smokers who die of a smoking-related disease lose on average 14 years of potential life.
- Women who stop smoking greatly reduce their risk of dying prematurely. The relative benefits of smoking cessation are greater when women stop smoking at younger ages, but smoking cessation is beneficial at all ages.

## LUNG CANCER

- Cigarette smoking is the major cause of lung cancer among women. About 90% of all lung cancer deaths among U.S. women smokers are attributable to smoking.
- In 1950, lung cancer accounted for only 3% of all cancer deaths among women; however, by 2000, it accounted for an estimated 25% of cancer deaths.
- Since 1950, lung cancer mortality rates for U.S. women have increased an estimated 600%. In 1987, lung cancer surpassed breast cancer to become the leading cause of cancer death among U.S. women. In 2000, about 27,000 more women died of lung cancer (about 68,000) than breast cancer (about 41,000).

## OTHER CANCERS

- Smoking is a major cause of cancer of the oropharynx and bladder among women. Evidence is also strong that women who smoke have increased risk for cancer of the pancreas and kidney. For cancer of the larynx and esophagus, evidence that smoking increases the risk among women is more limited but consistent with large increases in risk.
- Women who smoke may have a higher risk for liver cancer and colorectal cancer than women who do not smoke.

- Smoking is consistently associated with an increased risk for cervical cancer. The extent to which this association is independent of human papillomavirus (tumor caused by virus) infection is uncertain.
- Several studies suggest that exposure to environmental tobacco smoke is associated with an increased risk for breast cancer; however, this association remains uncertain. More research is needed.

## CARDIOVASCULAR DISEASE

- Smoking is a major cause of coronary heart disease among women. Risk increases with the number of cigarettes smoked and the duration of smoking.
- Women who smoke have an increase risk for ischemic stroke (blood clot in one of the arteries supplying the brain) and subarachnoid hemorrhage (bleeding in the area surrounding the brain).
- Women who smoke have an increased risk for peripheral vascular atherosclerosis.
- Smoking cessation reduces the excess risk of coronary heart disease, no matter at what age women stop smoking. The risk is substantially reduced within 1 or 2 years after they stop smoking.
- The increased risk for stroke associated with smoking begins to reverse after women stop smoking. About 10 to 15 years after stopping, the risk for stroke approaches that of a women who never smoked.

## CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) AND LUNG FUNCTION

- Cigarette smoking is the primary cause of COPD in women, and the risk increases with the amount and duration of cigarette use.
- Mortality rates for COPD have increased among women for the past 20 to 30 years. About 90% of mortality from COPD among U.S. women is attributed to smoking.
- Exposure to maternal smoking is associated with reduced lung function among infants, and exposure to environmental tobacco smoke during childhood and adolescence may be associated with impaired lung function among girls.

- Smoking by girls can reduce their rate of lung growth and the level of maximum lung function. Women who smoke may experience a premature decline of lung function.

### **MENSTRUAL FUNCTION**

- Some studies suggest that cigarette smoking may alter menstrual function by increasing the risks for painful menstruation, secondary amenorrhea (abnormal absence of menstrual), and menstrual irregularity.
- Women smokers have natural menopause at a younger age than do nonsmokers, and they may experience more severe menopausal symptoms.

### **REPRODUCTIVE OUTCOMES**

- Women who smoke have increased risk for conception delay and for both primary and secondary infertility.
- Women who smoke during pregnancy risk pregnancy complications, premature birth, low-birth-weight infants, stillbirth, and infant mortality.
- Women who smoke may have a modest increase in risks for ectopic pregnancy (fallopian tube or peritoneal cavity pregnancy) and spontaneous abortion.
- Studies show a link between smoking and the risk of sudden infant death syndrome (SIDS) among the offspring of women who smoke during pregnancy.

### **BONE DENSITY AND FRACTURE RISK**

- Postmenopausal women who smoke have lower bone density than women who never smoked.
- Women who smoke have an increased risk for hip fracture than women who never smoked.

### **OTHER CONDITIONS**

- Women who smoke may have a modestly elevated risk for rheumatoid arthritis.
- Women smokers have an increased risk for cataract, and may have an increased risk for age-related macular degeneration.
- The prevalence of smoking generally is higher for women with anxiety disorders, bulimia, depression, attention deficit disorder, and alcoholism; it is particularly high among patients with diagnosed schizophrenia. The connection between smoking and these disorders requires additional research.

### **HEALTH CONSEQUENCES OF ENVIRONMENTAL TOBACCO SMOKE (ETS)**

- Exposure to ETS is a cause of lung cancer among women nonsmokers.
- Studies support a causal relationship between exposure to ETS and coronary heart disease mortality among women nonsmokers.
- Infants born to women who are exposed to ETS during pregnancy may have a small decrement in birth weight and a slightly increased risk for intrauterine growth retardation.