

# Smoking 101

Cigarette smoking has been identified as the most important source of preventable morbidity and premature mortality worldwide. Smoking-related diseases claim an estimated 438,000 American lives each year, including those affected indirectly, such as babies born prematurely due to prenatal maternal smoking and victims of “secondhand” exposure to tobacco’s carcinogens. Smoking costs the United States over \$167 billion each year in health-care costs including \$92 billion in mortality-related productivity losses and \$75 billion in direct medical expenditures or an average of \$3,702 per adult smoker.

Cigarette smoke contains over 4,800 chemicals, 69 of which are known to cause cancer. Smoking is directly responsible for approximately 90 percent of lung cancer deaths and approximately 80-90 percent of COPD (emphysema and chronic bronchitis) deaths.

About 8.6 million people in the U.S. have at least one serious illness caused by smoking. That means that for every person who dies of a smoking-related disease, there are 20 more people who suffer from at least one serious illness associated with smoking.

Among current smokers, chronic lung disease accounts for 73 percent of smoking-related conditions. Even among smokers who have quit chronic lung disease accounts for 50 percent of smoking-related conditions.

Smoking is also a major factor in coronary heart disease and stroke; may be causally related to malignancies in other parts of the body; and has been linked to a variety of other conditions and disorders, including slowed healing of wounds, infertility, and peptic ulcer disease. For the first time, the Surgeon General includes pneumonia in the list of diseases caused by smoking.

Smoking in pregnancy accounts for an estimated 20 to 30 percent of low-birth weight babies, up to 14 percent of preterm deliveries, and some 10 percent of all infant deaths. Even apparently healthy, full-term babies of smokers have been found to be born with narrowed airways and curtailed lung function.

Only about 30 percent of women who smoke stop smoking when they find out they are pregnant; the proportion of quitters is highest among married women and women with higher levels of education.

Smoking during pregnancy declined in 2004 to 10.2 percent of women giving birth, down 42 percent from 1990.

Neonatal health-care costs attributable to maternal smoking in the U.S. have been estimated at \$366 million per year, or \$704 per maternal smoker.

Smoking by parents is also associated with a wide range of adverse effects in their children, including exacerbation of asthma, increased frequency of colds and ear infections, and sudden infant death syndrome. Secondhand smoke causes an estimated 150,000 to 300,000 cases of lower respiratory tract infections in children less than 18 months of age, resulting in 7,500 to 15,000 annual hospitalizations.

In 2005, an estimated 45.1 million, or 21.0 percent of, adults were current smokers. The annual prevalence of smoking has declined 40 percent between 1965 and 1990, but has been unchanged virtually thereafter.

Males tend to have significantly higher rates of smoking prevalence than females. In 2005, 23.9 percent of males currently smoked compared to 18.1 percent of females.

Prevalence of current smoking in 2005 was highest among Native American Indians/Alaska Natives (32.0%), intermediate among non-Hispanic whites (21.9%), and non-Hispanic blacks (21.5%), and lowest among Hispanics (16.2%) and Asians and Pacific Islanders (13.3%).

As smoking declines among the White non-Hispanic population, tobacco companies have targeted both African Americans and Hispanics with intensive merchandising, which includes billboards, advertising in media targeted to those communities, and sponsorship of civic groups and athletic, cultural, and entertainment events. In 2003, total advertising and promotion by the five major tobacco companies was the highest ever reported at \$15.15 billion.

Tobacco advertising also plays an important role in encouraging young people to begin a lifelong addiction to smoking before they are old enough to fully understand its long-term health risk. Approximately 90 percent of smokers begin smoking before the age of 21.

In 2005, 23 percent of high school students were current smokers.

Over 8 percent of middle school students were current smokers in 2004.

Secondhand smoke involuntarily inhaled by nonsmokers from other people's cigarettes is classified by the U.S. Environmental Protection Agency as a known human (Group A) carcinogen, responsible for approximately 3,400 lung cancer deaths and 46,000 (ranging 22,700-69,600) heart disease deaths in adult nonsmokers annually in United States.

Workplaces nationwide are going smoke-free to provide clean indoor air and protect employees from the life-threatening effects of secondhand smoke. Nearly 70 percent of the U.S. workforce worked under a smoke free policy in 1999, but the percentage of workers protected varies by state, ranging from a high of 83.9 percent in Utah and 81.2 percent in Maryland to 48.7% in Nevada.

Employers have a legal right to restrict smoking in the workplace, or implement a totally smoke-free workplace policy. Exceptions may arise in the case of collective bargaining agreements with unions. Nicotine is an addictive drug, which when inhaled in cigarette smoke reaches the brain faster than drugs that enter the body intravenously. Smokers not only become physically addicted to nicotine; they also link smoking with many social activities, making smoking a difficult habit to break.

In 2005, an estimated 46.1 million adults were former smokers. Of the current 45.1 million smokers, 42.5 percent of current smokers had stopped smoking at least 1 day in the preceding year because they were trying to quit smoking completely.

Nicotine replacement products can help relieve withdrawal symptoms people experience when they quit smoking. Nicotine patches, nicotine gum and nicotine lozenges are available over-the-counter, and a nicotine nasal spray and inhaler are currently available by prescription.

In addition, a doctor can prescribe non nicotine pills such as Zyban and Chantix to help smokers quit. Nicotine replacement therapies are helpful in quitting when combined with a behavior change program such as the American Lung Association's Freedom From Smoking (FFS), which addresses psychological and behavioral addictions to smoking and strategies for coping with urges to smoke.