Cancers Affected

Smoking is, by far, the leading cause of lung cancer deaths in men and women. Cigarette smoking increases the risk of cancers of the oral cavity and pharynx, larynx, lung, esophagus, pancreas, uterine cervix, kidney, bladder, stomach, colon and rectum, and liver, as well as acute myeloid leukemia. In addition, the International Agency for Research on Cancer recently concluded that there is some evidence that tobacco smoking causes female breast cancer, and the Surgeon General concluded that smoking increases the risk of advanced-stage prostate cancer.

Oral or smokeless tobacco products also cause cancer. These products cause oral, esophageal, and pancreatic cancers; precancerous lesions of the mouth; gum recession; bone loss around the teeth; and tooth staining. They can also lead to nicotine addiction. The use of any smokeless tobacco product is not considered a safe substitute for quitting.

Cigar smoking causes many of the same diseases as cigarette smoking and smokeless tobacco. Regular cigar smoking is associated with an increased risk of cancers of the lung, oral cavity, larynx, esophagus, and probably pancreas. Cigar smokers have 4 to 10 times the risk of dying from lung, laryngeal, oral, or esophageal cancer compared to never smokers.

Each year, secondhand smoke causes about 7,000 lung cancer deaths in non-smoking adults. Exposure to secondhand smoke increases the risk of lung diseases, including lung cancer, coronary artery disease, and heart attacks.

E-cigarettes, or electronic nicotine delivery systems, are battery-operated devices that allow the user to inhale a vapor produced from cartridges or tanks filled with a liquid typically containing nicotine, propylene glycol and/or vegetable glycerin, other chemicals, and sometimes flavoring. They are promoted as a
less harmful alternative to traditional cigarettes and a way to bypass smoke-free laws. However, the long-term health risks of using these products or being exposed to them secondhand are unknown. There is growing concern that e-cigarette use will normalize cigarette smoking and lead to the use of other forms of tobacco products with known health risks. Indeed, a recent study indicates that adolescent e-cigarette users are much more likely to initiate cigarette, cigar, or hookah smoking than non-users. Also, these products may discourage the use of evidence-based cessation therapies among those who want to quit. E-cigarettes have been gaining in popularity, particularly among high school students.

Opportunities for risk reduction

Quitting tobacco greatly decreases the risk of certain cancers, heart disease, stroke, and chronic lung disease. People who quit at any age live longer than people who keep smoking.

Quitting

The best way to quit using tobacco and stay quit is to use more than one quit approach. Approaches that can help someone quit include:

- Behavioral therapy/counseling
- Nicotine replacement therapy (gum, skin patches, inhaler, spray, or lozenges)
- Non-nicotine prescription medicine (such as ibupropion or varenicline)
- Peer support
- Advice from a health care provider
- A combination of the therapies listed above

Equally important is the prevention of tobacco use among children and youth. According to the 2014 Surgeon General’s Report, nearly 9 out of 10 adult smokers started before age 18, and 98% started by age 26. And 3 out of 4 high school smokers will become adult smokers – even if they intend to quit in a few years. People who start smoking at younger ages are more likely to develop long-term nicotine addiction than people who start later in life. If more children and youth can be prevented from starting, a large number of tobacco-related health problems can be avoided.

Bottom line

Quitting tobacco, or not ever starting, is the single most important action that can be taken to reduce cancer in the US. If all adults stopped smoking and children didn’t start, about one-third of all cancer deaths could be prevented, billions of dollars would be saved, and millions of family members and friends would avoid the sickness and premature death of a loved one.