#### AMERICAN THORACIC SOCIETY SERIES ON TOBACCO



# Smoking and Cancer

Our DNA controls how the cells in our body grow and function. When our DNA gets damaged, it can cause cells to grow uncontrollably and create cancerous tumors. Damage to the DNA can be caused by many things such as poisons and radiation.

#### How does tobacco cause cancer?

Many of the poisons found in tobacco can damage your DNA and lead to cancer. Poisons in tobacco not only damage the DNA, but they weaken the cells that fight the tumor. The bottom line is that tobacco causes cancer and then prevents your body from fighting it.

# What type of cancer can be caused by tobacco use?

Most lung cancers are caused by smoking. Tobacco use can also cause cancer in many other areas of your body. Cancers of the throat, mouth, nose, larynx (voice box), esophagus, stomach, pancreas, kidney, uterus, bladder, cervix, blood, and bone marrow are all linked to tobacco use.

### What are signs and symptoms of cancer?

Cancer often grows for a long time without causing any signs or symptoms. Some signs and symptoms are commonly seen with cancer but are also seen with many other health problems. This is why it is important for you to have regular health checkups and report any things that seem abnormal to you. You should consider getting evaluated if you have the following:

- Cough that does not go away or if you cough up blood
- New or worsening shortness of breath
- Unexplained weight loss
- Fever
- Fatigue (tiredness)
- Pain

### How can I protect myself from getting cancer?

The best way to lower your risk of developing cancer is to avoid the things that can cause cancer. The following are some of the things you can do to prevent cancer:

- Stay away from tobacco and tobacco smoke
- Eat healthy foods
- Exercise

- Get regular health checkups
- Talk to your health care provider about whether you should get screened for lung cancer

# Will quitting smoking make my cancer go away?

Unfortunately, once you have cancer, quitting smoking will not make the cancer go away, but it can make your life better. Studies show that people with lung cancer who stop smoking, have a better quality of life than those who do not quit smoking. Treatment for lung cancer (such as surgery or chemotherapy), seem to work better for people who do not smoke. Those who quit often spend more time at home than in the hospital and are able to do the things they want to do. So even if you have cancer, quitting can make a big difference in your life.

#### **ACTION STEPS:**

- Stop smoking or using tobacco products (your health care provider can help you with this step)
- Avoid second and third hand smoke
- Do not let your children get exposed to smoke

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#### **Resources:**

American Cancer Society (2011). <u>Tobacco Combine.</u> docx

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US Department of Health and Human Services, Surgeon General's Reports

http://www.surgeongeneral.gov/library/tobaccosmoke/index.html

A Report of the Surgeon general: How Tobacco Smoke Causes Disease: What it Means to You. Office on Smoking and Health, 2010. http://www.cdc. gov/tobacco/data\_statistics/sgr/2010/consumer\_ booklet/index.htm

Exposure To Tobacco Smoke Causes Immediate Damage. December 9, 2010

http://www.hhs.gov/news/press/2010pres/12/20101209a.html