

## Cancer Takes Too Many Lives in North Carolina and in Guilford County

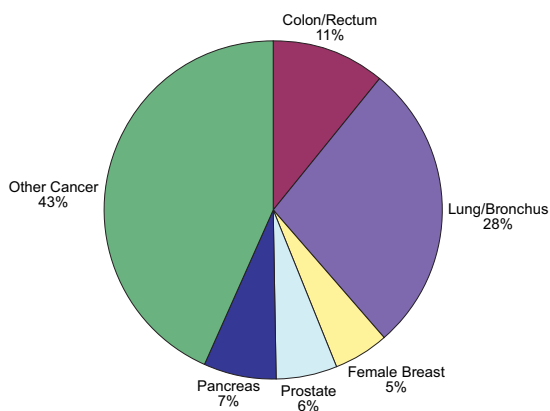
Cancer is the second leading cause of death in North Carolina and in the United States. In 2007, 17,425 persons in North Carolina died from cancer, 814 in Guilford County. It is estimated that nearly four in 10 North Carolinians will develop cancer during their lives.

**Table 1. 2007 Percent of Cancer Deaths in Guilford County Compared to 2007 Percent of Cancer Deaths in North Carolina**

Guilford County	North Carolina
22.4%	23.0%

Cancer is a group of more than 100 different diseases, but all are characterized by uncontrolled growth and spread of abnormal cells. Cancer risk increases with age, and varies by gender and race. As the average age of the population increases, the incidence of cancer will increase as well. Currently in North Carolina, cancer is the leading cause of death for people under the age of 85. Cancer is expected to surpass heart disease and become the leading cause of death in North Carolina and the nation by the year 2015. The majority of cancer deaths occur at five sites: lung, colon, female breast, prostate, and pancreas (Figure 1).

**Figure 1. Guilford County 2007 Cancer Deaths by Site**



It is generally accepted that over 60 percent of all cancers are related to personal lifestyle or environmental factors, such as smoking and diet, and are therefore preventable. Other factors such as age, gender, and family history of a specific cancer are also associated with the development of cancer and aid in the identification of people at high risk.

For several cancers, effective treatment is available. For these cancers, early detection saves lives. For example, almost 98 percent of women who are diagnosed with breast cancer in

the earliest stage survive the disease, whereas only 26 percent survive if the disease is diagnosed in the most advanced stage. The opportunity for disease control and for reducing the number of cancer deaths rests with prevention and early detection so that treatment of the disease can be effective.

In 2006, 2,549 cancer cases were reported for Guilford County residents. These numbers are expected to increase as the population ages.

**Table 2. 2009 Projected Cancer Cases for Guilford County and North Carolina**

	Guilford County	North Carolina
Lung/Bronchus	353	7,307
Colon/Rectum	228	4,672
Female Breast	387	7,781
Prostate	321	6,800
Pancreas	53	1,077
All Cancers	2,265	46,417

Early detection is often stressed; however for some cancers, prevention is more beneficial than early detection. For example, lung cancer is a disease that takes many years to develop and often metastasizes, or spreads, to other parts of the body before it is detected. Early detection and treatment options are extremely limited, and most patients with lung cancer die within a few months of diagnosis. In fact, lung cancer is currently the leading cause of cancer death among both men and women. This need not be the case, as lung cancer is also one of the most preventable cancers. Although many believe air pollution is the major cause of lung cancer, smoking is by far the leading risk factor for developing lung cancer. It is estimated that 80 percent of lung cancers result from smoking. Cigar and pipe smoking are almost as likely to cause lung cancer as cigarette smoking. Non-smokers who breathe in second-hand smoke are also at increased risk. The risk of lung cancer does seem to increase with age, and women who smoke seem at greater risk for developing cancer than men who smoke.

Stopping smoking at any age lowers the subsequent risk of developing lung cancer. The Behavioral Risk Factor Surveillance System, an annual survey of adult North Carolinians, examines risk factors such as these. For the 14,734 persons who indicated their age and smoking behaviors in the 2007 survey, the highest percentages of smokers were between 18 and 54 years of age (Table 3). According to this survey, adults 55 and older have the highest cessation rate, indicating that as North Carolinians age, the number of smokers does appear to decrease. A reduction in smoking will decrease the number of lung cancers that are diagnosed over time.

## Risk Factors and Interventions

**Smoking:** Smoking and the use of smokeless tobacco are responsible for the majority of all cancers of the lung, trachea, bronchus, larynx, pharynx, oral cavity, and esophagus. Smoking is the leading cause of preventable death in the United States.

**Nutrition and Physical Activity:** Sustaining a healthy diet and being active can influence the risk of developing cancer. Eating a variety of healthful foods, with an emphasis on plant sources, adopting a physically active lifestyle, maintaining a healthy weight, and limiting alcoholic consumption are recommended by the American Cancer Society for cancer prevention.

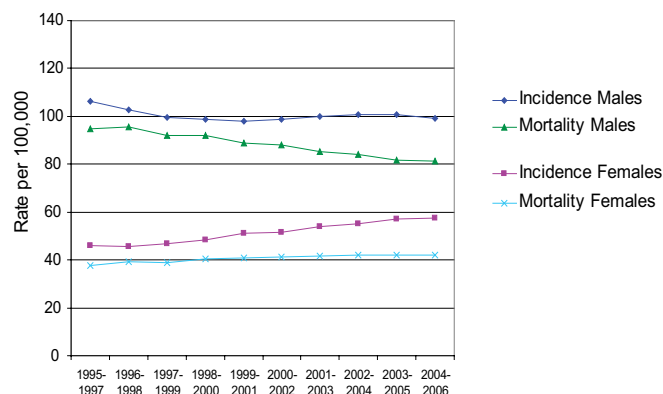
**Sunlight and Ultraviolet Rays:** Exposure to intense sunlight and UV rays are risk factors in developing nonmelanoma skin cancer. Sun safety tips for lowering this risk include limiting direct sun exposure during midday, covering up when outdoors, using sunscreen with a Sun Protection Factor of at least 15, and avoiding tanning beds and sunlamps.

**Screening:** Early detection is extremely important for those cancers that can be cured and which can be discovered early. Breast cancer is a good example of this. Stage-at-diagnosis is the most important factor in determining chance of survival from breast cancer. In 2009, a projected 7,781 women in North Carolina will be diagnosed with breast cancer, 387 in Guilford County. Many of these women will survive because they were diagnosed early, but some will face premature death because they were diagnosed too late for effective treatment.

Women 40 years and older should have a mammogram every year. A clinical breast exam (CBE) by a health care professional is also recommended annually after the age of 40. Women 20–39 years of age should have a CBE by a health care professional every three years. Monthly self-examinations are an option for women beginning in their twenties.

Lung cancer is the second most common cancer in both men (after prostate cancer) and women (after breast cancer). It is the leading cause of cancer-related deaths in North Carolina and in the United States. In Central North Carolina, lung cancer incidence rates in males have been steady, while the mortality rates have been decreasing. In females, the incidence rates have been increasing, while the mortality rates have been steady in the past few years (Figure 2). Lung cancer mainly occurs in older people. About 67 percent of people diagnosed with lung cancer are older than 65. Cigarette smoking is, by far, the most important risk factor for lung cancer. Tobacco use accounts for at least 30 percent of all cancer deaths and 87 percent of lung cancer deaths. Other risk factors include occupational and environmental exposure to secondhand

**Figure 2.**  
Lung Cancer Incidence and Mortality Trends in  
Central North Carolina Males and Females from 1995–2006  
(Rate per 100,000 Population, Age-adjusted to the U.S. 2000 Census)



smoke, radon, asbestos (particularly among smokers), certain metals (chromium, cadmium, arsenic), some organic chemicals, air pollution, radiation, and a history of tuberculosis. Each year, about 3,000 non-smoking adults die of lung cancer as a result of breathing secondhand smoke. Lung cancer screening tests like chest X-rays and sputum cytology have not proven to be very effective and tests like CT (Computed Tomography) scans sometimes may require further tests with serious side effects. For this reason, it is suggested that people who are at risk for developing lung cancer should talk to their doctors about the potential benefits and risks of lung cancer screening. Lung cancer is the most preventable form of cancer. The best way to prevent lung cancer is not to smoke or by trying to quit, if already smoking.

Source: American Cancer Society. Available at: [www.cancer.org/docroot/CRI](http://www.cancer.org/docroot/CRI) and [www.cancer.org/Tobacco-Related\\_Cancers\\_Fact\\_Sheet](http://www.cancer.org/Tobacco-Related_Cancers_Fact_Sheet).

### For More Information

**American Cancer Society** • 1-800-ACS-2345  
Web site: [www.cancer.org](http://www.cancer.org)

**Cancer Information Service** • 1-800-4CANCER  
Sponsored by the National Cancer Institute

North Carolina Division of Public Health,  
State Center for Health Statistics

**North Carolina Central Cancer Registry (CCR)** • 919-715-4555  
1908 Mail Service Center • Raleigh, NC 27699-1908  
Web site: [www.schs.state.nc.us/SCHS](http://www.schs.state.nc.us/SCHS)

**North Carolina Advisory Committee for  
Cancer Coordination and Control**  
919-707-5304

1922 Mail Service Center • Raleigh, NC 27699-1922



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**Table 3. Percentage of Respondents in North Carolina in Each Age Group Who Currently Smoke or Have Smoked in the Past**

Age Group	Total Respondents	Current Smoker	Former Smoker
18–24	494	31.4%	7.8%
25–34	1,499	25.6%	18.9%
35–44	2,337	24.4%	18.2%
45–54	2,920	26.9%	24.9%
55–64	3,058	19.8%	35.6%
65+	4,338	9.9%	43.6%
All Ages	14,734	22.9%	24.8%

Data Source: Behavioral Risk Factor Surveillance System, North Carolina 2007