Data Details-Cancer

Interpreting the Data

What these data tell us:

- These data can be used to determine number of specific types of cancer diagnosed in South Carolina residents in each county.
- These data can tell us how cancer incidence has changed over time in South Carolina.

What these data do not tell us:

- These data cannot tell us when the cancer developed in any and all cases in South Carolina.
- These data cannot tell us what neighborhoods, within the county, possess the highest risk level for cancer or if there is a "cancer cluster" in that area.
- These data cannot be used to determine the cause of cancer.

Putting the data in perspective

- Acute (immediate risk) - If harm happens quickly after coming in contact with a hazard, the risk is called acute. However, most cancers have a latency period, meaning the cancer does not develop immediately following an exposure to a risk factor. Cancer latency is the length of time between the length of time between the beginning of the disease and the manifestation of the symptoms.
- Chronic (long term risk) - If harm happens after repeated exposure over a long period of time the risk is considered chronic. For example, you may work in a place where you are exposed to hazardous materials on a daily

basis but do not get sick from exposure every day. Eventually you may get a disease as a result of many years of exposure to the hazardous materials.

Limitations of the data

The location is based on the residence at the time of the cancer diagnosis. Information on the length of time each person spent in that particular county before or after the cancer diagnosis is unavailable.

No environmental factors will be available. This means that any personal information such as smoking habits, drug history, lifestyle, diet, or character will not be made public.

No information about the latency (the length of time between the beginning of the disease and the manifestation of the symptoms) will be available for the cancer cases.

About these measurements

Measures included

South Carolina cancer data are presented in two ways by two time periods:

1. The number (frequency) of cancer diagnosed in a given year or five year period.
2. The age-adjusted incidence rate of cancer in a given year or five year period.

Frequency of measurement

Data collection for cancers diagnosed in South Carolina is continuous. Therefore, South Carolina Cancer incidence data cannot be finalized until more than two

years have passed from the end of the data year. For example, 2008 cancer data were still being collected until at least the end of 2010. Also, South Carolina Cancer frequency and incidence data are always being updated and processed for every year, not just the most current year.

Interpretation of rates

A cancer rate should be interpreted as the number of new cases of cancer diagnosed [per 100,000 and age-adjusted to the 200 US Std. Population (18 age groups - Census P25-1130) standard)] during that year in South Carolina. For example, in York County during the year 2005 there was a rate of 9.1 for thyroid cancer which can be interpreted as "Out of every 100,000 people in York County in 2005, 9.1 people were diagnosed with thyroid cancer."

Calculation Methods

Incidence of cancer diagnosis

Incidence refers to the frequency of development of a new illness in a population in a certain period of time, normally one year. When we say that the incidence of this cancer has increased in past years, we mean that more people have developed this condition year after year, i.e., the incidence of thyroid cancer has been rising, with 13,000 new cases diagnosed this year.