

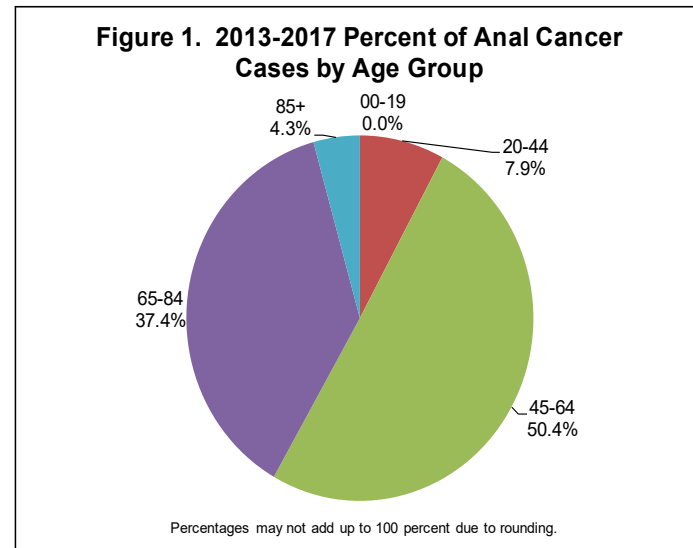
Anal Cancer

A Fact Sheet from the North Carolina Central Cancer Registry, State Center for Health Statistics

October 2020

An *HPV-associated cancer* is a specific cellular type of cancer that is diagnosed in a part of the body where HPV (*Human Papilloma Virus*) is often found. These parts of the body include the cervix, vagina, vulva, penis, anus, rectum, and oropharynx (back of the throat, including the base of the tongue and tonsils). According to the CDC, each year there are about 34,800 new cancer cases caused by HPV in the United States.

More than 90% of Anal cancers are caused by HPV. It is estimated that 263 people (87 males and 176 females) in North Carolina will be diagnosed with Anal cancer and 42 people (16 males and 26 females) will die of Anal cancer in 2020.

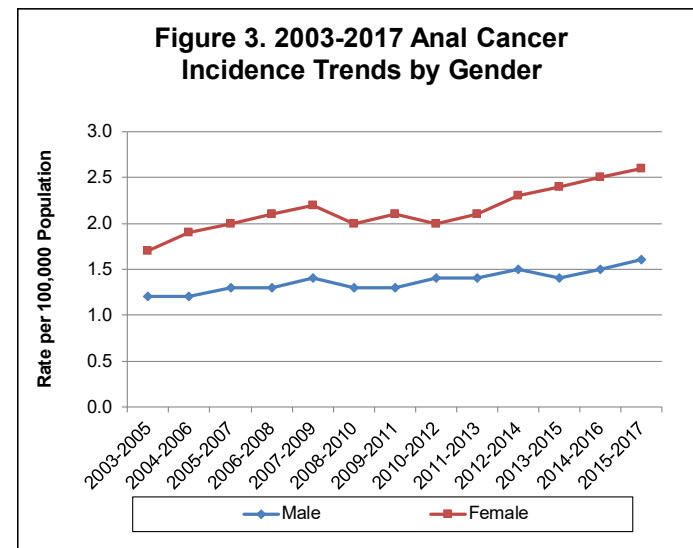
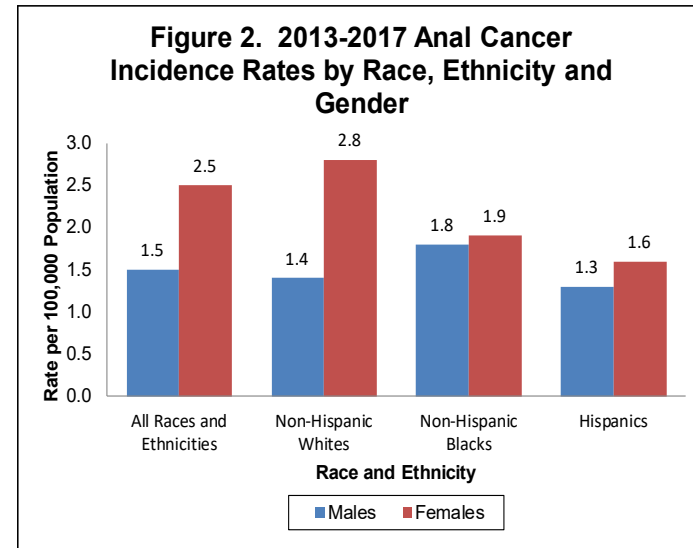


Incidence

The percentage of cases of Anal cancer from 2013 to 2017 is displayed by age group in Figure 1. About 7.9 percent of Anal cancer cases were diagnosed in people younger than 45.

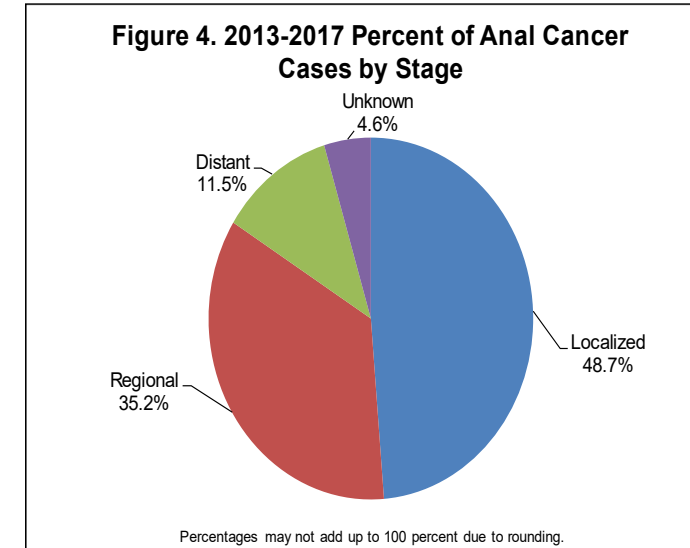
From 2013 to 2017, the age-adjusted incidence rate for Anal cancer in North Carolina was 2.0 per 100,000 people per year. Non-Hispanic white females have the highest incidence rate for Anal cancer (Figure 2).

From 2003 to 2017, Anal cancer incidence rates have increased for both men and women (Figure 3).



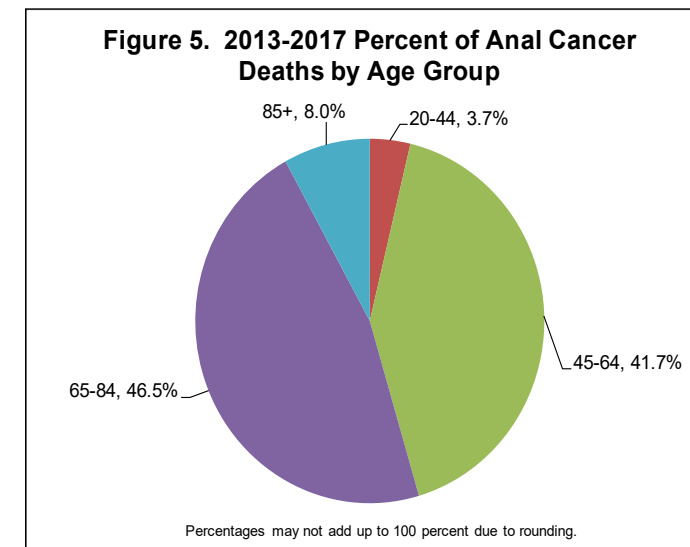
Stage at Diagnosis*

Figure 4 shows the stage distribution of Anal cancer cases diagnosed from 2013 to 2017. Approximately 83.9 percent of Anal cancer cases were diagnosed at the localized or regional stage.



Mortality

From 2013 to 2017, the percentage of Anal cancer deaths is displayed by age group in Figure 5. About 46.5 percent of deaths occurred in people ages 65 to 84.

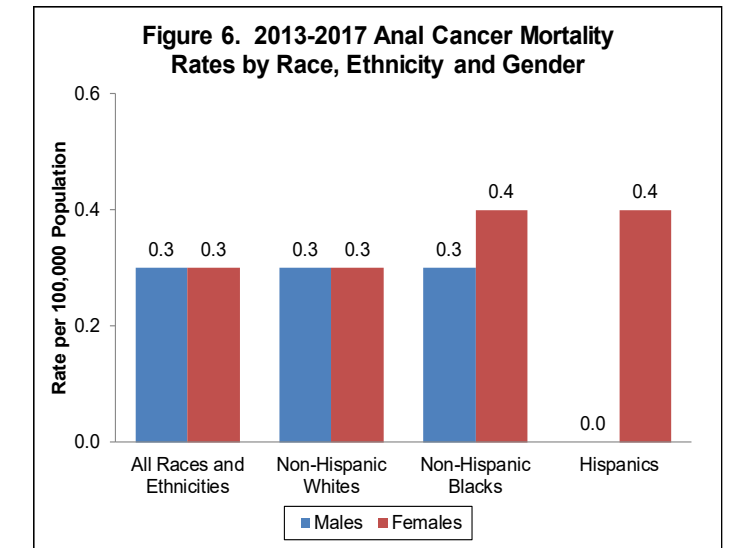


Data Sources and Methods

Data on North Carolina cases were obtained from the North Carolina Central Cancer Registry (CCR). Hospitals are the primary source of data. The CCR supplements hospital data with reports from physicians who diagnose cases in a non-hospital setting. The CCR also collects data from pathology laboratories and freestanding treatment centers. Data on cancer deaths were obtained from Statistical Services in the State Center for Health Statistics. Population data from the National Center for Health Statistics were used in the denominators of the rates, which are expressed per 100,000 people. Rates were age-adjusted using the 2000 United States Census data. To examine trends, three-year overlapping rates were used to improve stability over time. Stage at diagnosis was defined according to Surveillance, Epidemiology, and End Results Summary Stage guidelines as in situ, localized, regional, distant, and unknown/NA. For further information about the North Carolina CCR, visit www.schs.state.nc.us/units/ccr/.

* According to the National Cancer Institute (NCI), "many cancer registries, such as NCI's Surveillance, Epidemiology, and End Results Program (SEER), use summary staging. This system is used for all types of cancer. It groups cancer cases into five main categories: **In situ**—Abnormal cells are present only in the layer of cells in which they developed. **Localized**—Cancer is limited to the organ in which it began, without evidence of spread. **Regional**—Cancer has spread beyond the primary site to nearby lymph nodes or organs and tissues. **Distant**—Cancer has spread from the primary site to distant organs or distant lymph nodes. **Unknown**—There is not enough information to determine the stage." Additional information on staging can be found at <https://www.cancer.gov/about-cancer/diagnosis-staging/staging>.

The age-adjusted mortality rate of Anal cancer from 2013 to 2017 was 0.3 per 100,000 people per year. When comparing Anal cancer rates by race and ethnicity, non-Hispanic Black females and Hispanic females have the highest mortality rate (Figure 6).



From 2003 to 2017, Anal cancer mortality rates have been stable for both men and women (Figure 7).

