



Surveillance Epidemiology and End Results

providing information on cancer statistics to help reduce the burden of this disease on the U.S. population

SEER Stat Fact Sheets

Cancer:

It is estimated that 8,090 men will be diagnosed with and 380 men will die of cancer of the testis in 2008 ¹.

The following information is based on NCI's SEER Cancer Statistics Review ².

Incidence & Mortality

SEER Incidence

From 2001-2005, the median age at diagnosis for cancer of the testis was 34 years of age ³. Approximately 5.8% were diagnosed under age 20; 46.3% between 20 and 34; 29.2% between 35 and 44; 13.3% between 45 and 54; 3.3% between 55 and 64; 1.2% between 65 and 74; 0.6% between 75 and 84; and 0.2% 85+ years of age.

The age-adjusted incidence rate was 5.4 per 100,000 men per year. These rates are based on cases diagnosed in 2001-2005 from 17 SEER geographic areas.

Incidence Rates by Race

Race/Ethnicity	Male
All Races	5.4 per 100,000 men
White	6.3 per 100,000 men
Black	1.4 per 100,000 men
Asian/Pacific Islander	1.7 per 100,000 men
American Indian/Alaska Native ^a	4.2 per 100,000 men
Hispanic ^b	3.9 per 100,000 men

US Mortality

From 2001-2005, the median age at death for cancer of the testis was 41 years of age ⁴. Approximately 2.9% died under age 20; 31.4% between 20 and 34; 26.0% between 35 and 44; 19.1% between 45 and 54; 7.9% between 55 and 64; 5.5% between 65 and 74; 4.7% between 75 and 84; and 2.5% 85+ years of age.

The age-adjusted death rate was 0.3 per 100,000 men per year. These rates are based on patients who died in 2001-2005 in the US.

Death Rates by Race

Race/Ethnicity	Male
All Races	0.3 per 100,000 men

White	0.3 per 100,000 men
Black	0.2 per 100,000 men
Asian/Pacific Islander	0.1 per 100,000 men
American Indian/Alaska Native ^a	^
Hispanic ^b	0.2 per 100,000 men

Trends in Rates

Trends in rates can be described in many ways. Information for trends over a fixed period of time, for example 1995-2005, can be evaluated by the **annual percentage change (APC)**. If there is a negative sign before the number, the trend is a decrease; otherwise it is an increase. If there is an asterisk after the APC then the trend was significant, that is, one believes that it is beyond chance, i.e. 95% sure, that the increase or decrease is real over the period 1995-2005. If the trend is not significant, the trend is usually reported as stable or level. **Joinpoint analyses** can be used over a long period of time to evaluate when changes in the trend have occurred along with the APC which shows how much the trend has changed between each of the joinpoints.

The joinpoint trend in SEER cancer incidence with associated APC(%) for cancer of the testis between 1975-2005

All Races	
Male	
Trend	Period
2.3*	1975-1989
0.8*	1989-2005

The joinpoint trend in US cancer mortality with associated APC(%) for cancer of the testis between 1975-2005

All Races	
Male	
Trend	Period
-10.5*	1975-1981
-3.1*	1981-1995
-0.1	1995-2005

Survival & Stage

Survival rates can be calculated by different methods for different purposes. The survival rates presented here are based on the **relative survival rate**, which measures the survival of the cancer patients in comparison to the general population to estimate the effect of cancer. The overall 5-year relative survival rate for 1996-2004 from 17 SEER geographic areas was 95.5%. Five-year relative survival rates by race were: 95.8% for white men; 88.1% for black men.

The **stage distribution** based on historic stage shows that 70% of testis cancer cases are diagnosed while the cancer is still confined to the primary site (localized stage); 18% are diagnosed after the cancer has spread to regional lymphnodes or directly beyond the primary site; 11% are diagnosed after the cancer has already metastasized (distant stage) and for the remaining 1% the staging information was unknown. The corresponding 5-year relative survival rates were: 99.3% for localized; 95.7% for regional; 71.1% for distant; and 87.6% for unstaged.

Lifetime Risk

Based on rates from 2003-2005, 0.37% of men born today will be diagnosed with cancer of the testis at some time during their lifetime. This number can also be expressed as 1 in 273 men will be diagnosed with cancer of the testis during their lifetime. These statistics are called the **lifetime risk** of developing cancer. Sometimes it is more useful to look at the **probability of developing** cancer of the testis between two age groups. For example, 0.05% of men will develop cancer of the testis between their 50th and 70th birthdays.

Prevalence

On January 1, 2005, in the United States there were approximately 184,074 men alive who had a history of cancer of the testis. This includes any person alive on January 1, 2005 who had been diagnosed with cancer of the testis at any point prior to January 1, 2005 and includes persons with active disease and those who are cured of their disease.

Prevalence can also be expressed as a percentage and it can also be calculated for a specific amount of time prior to January 1, 2005 such as diagnosed within 5 years of January 1, 2005.

References

All statistics in this report are based on SEER incidence and NCHS mortality statistics. Most can be found within:

Ries LAG, Melbert D, Krapcho M, Stinchcomb DG, Howlader N, Horner MJ, Mariotto A, Miller BA, Feuer EJ, Altekruse SF, Lewis DR, Clegg L, Eisner MP, Reichman M, Edwards BK (eds). *SEER Cancer Statistics Review, 1975-2005*, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2005/, based on November 2007 SEER data submission, posted to the SEER web site, 2008.

Footnotes

- 1 Table I-1 (http://seer.cancer.gov/csr/1975_2005/results_single/sect_01_table.01.pdf)
- 2 Testis Section (http://seer.cancer.gov/csr/1975_2005/results_merged/sect_25_testis.pdf)
- 3 Table I-11 (http://seer.cancer.gov/csr/1975_2005/results_single/sect_01_table.11_2pgs.pdf)
- 4 Table I-13 (http://seer.cancer.gov/csr/1975_2005/results_single/sect_01_table.13_2pgs.pdf)

^ Statistic not shown. Rate based on less than 16 cases for the time interval.

* The APC is significantly different from zero ($p < .05$).

a Incidence data for Hispanics is based on NHIA and excludes cases from Alaska Native Registry and Kentucky. Hispanic death rates exclude deaths from Minnesota, New Hampshire and North Dakota.

b Incidence and mortality data for American Indians/Alaska Natives is based on the CHSDA (Contract Health Service Delivery Area) counties.

Definitions

Annual percent change (APC)

The average annual percent change over several years. The APC is used to measure trends or the change in rates over time. For information on how this is calculated, go to [Trend Algorithms](#) in the SEER*Stat Help system. The calculation involves fitting a straight line to the natural logarithm of the data when it is displayed by calendar year.

Joinpoint analyses

A statistical model for characterizing cancer trends which uses statistical criteria to determine how many times and when the trends in incidence or mortality rates have changed. The results of joinpoint are given as calendar year ranges, and the annual percent change (APC) in the rates over each period.

Survival rates

Survival examines how long after diagnosis people live. Cancer survival is measured in a number of different ways depending on the intended purpose.

Relative survival rate

A measure of net survival that is calculated by comparing observed (overall) survival with expected survival from a comparable set of people that do not have cancer to measure the excess mortality that is associated

with a cancer diagnosis.

Stage distribution

Stage provides a measure of disease progression, detailing the degree to which the cancer has advanced. Two methods commonly used to determine stage are AJCC and SEER historic. The AJCC method (see Collaborative Staging Method) is more commonly used in the clinical settings, while SEER has standardized and simplified staging to ensure consistent definitions over time.

Lifetime risk

The probability of developing cancer in the course of one's lifespan. Lifetime risk may also be discussed in terms of the probability of developing or of dying from cancer. Based on cancer rates from 2003 to 2005, it was estimated that men had about a 44 percent chance of developing cancer in their lifetimes, while women had about a 37 percent chance.

Probability of developing cancer

The chance that a person will develop cancer in his/her lifetime.

Prevalence

The number of people who have received a diagnosis of cancer during a defined time period, and who are alive on the last day of that period. Most prevalence data in SEER is for limited duration because information on cases diagnosed before 1973 is not generally available.