# **Testicular Cancer**

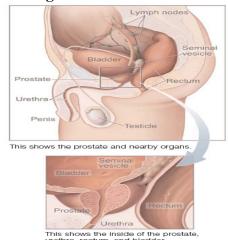
**Definition:** Testicular cancer usually develops in one or both testicles in young men. This cancer is highly treatable and usually curable.<sup>1</sup>

**Background:** From 2002 to 2006, there was a yearly average of approximately **303** newly diagnosed cases of testicular cancer in Ohio.<sup>2</sup> During this same time period, Ohio experienced approximately **14** deaths each year due to testicular cancer.<sup>2</sup>

Testicular cancer is not very common and treatment is very successful, making the risk of dying from this cancer very low.

The American Cancer Society recommends seeing a physician immediately if a lump is discovered in the testicles. It may be beneficial to perform monthly self-examinations, as well has having a physician examination during routine cancer-related checkups. I

Figure 23



### **Cuyahoga County Data:**

- The average annual number of newly diagnosed testicular cancer cases from 2002-2006 was **32**, with an age-adjusted incidence rate of **4.9** per 100,000 people.
- This is <u>lower</u> than the **5.5** incidence rate for Ohio and <u>lower</u> than the **5.4** incidence rate for the Nation.
- The average annual number of testicular cancer deaths from 2002-2006 was 1, with an ageadjusted mortality rate of **0.2** per 100,000 people.
- This is <u>lower</u> than the **0.3** mortality rate for Ohio and <u>lower</u> than the **0.3** mortality rate for the Nation.

Table 23a Testicular Cancer

Average Annual Number of Cancer Cases and Age-Adjusted Incidence Rates\* for 2002-2006

Incidence	Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate
<b>Cuyahoga County</b>	32	4.9			32	4.9
Ohio	303	5.5			303	5.5
National SEER		5.4				5.4

<sup>\*</sup> Rate is calculated per 100,000 people.

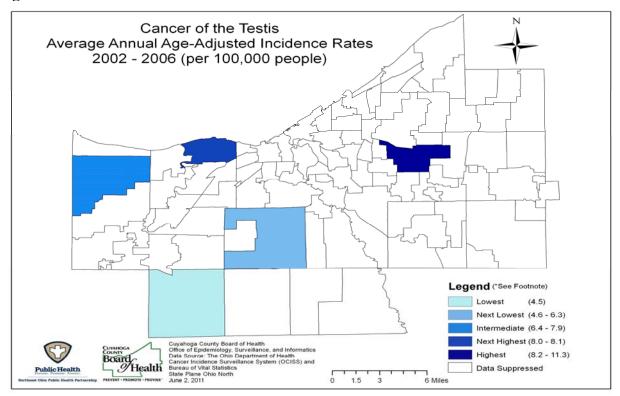
Table 23b Testicular Cancer

Average Annual Number of Cancer Deaths and Age-adjusted Mortality Rates\* for 2002-2006

Mortality	Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate
Cuyahoga County	1	0.2			1	0.2
Ohio	14	0.3			14	0.3
National SEER		0.3				0.3

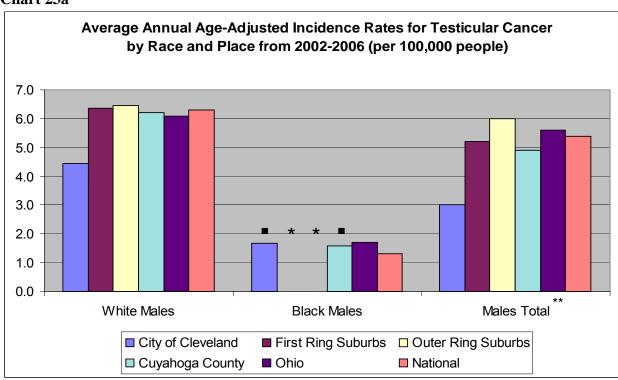
<sup>\*</sup> Rate is calculated per 100,000 people.

Figure 23a



<sup>\*</sup>Data were suppressed to help maintain confidentiality and /or due to concerns over unstable numbers. See methods/limitations section for additional details. Age-adjusted mortality rates for Testicular Cancer are not presented due to data suppression from case count totals being less than 5 for the time period 2002-2006.

Chart 23a



<sup>\*</sup>Data were suppressed to help maintain confidentiality and /or due to concerns over unstable numbers. See methods/limitations section for additional details.

<sup>\*\*</sup>All races are included in the age-adjusted rate calculations and confidence interval analyses for total males.

#### **Testicular Cancer Mortality Rates**

Age-adjusted mortality rates for testicular cancer by race and place are not presented due to data suppression from case count totals being less than 5 for the time period 2002-2006. National age-adjusted mortality rates for testicular cancer rates are available (See Table 23c).

Table 23c

National age-adjusted mortality	Rate per		
rates for testicular cancer for	100,000 males		
2002-2006			
White Males	0.3		
Black Males	0.2		
Males Total	0.3		

### **Risk Factors**

Males: In the United States, 1 in 270 males will <u>develop</u> testicular cancer and 1 in 5,000 males will die from testicular cancer.<sup>3</sup>

Several risk factors may contribute to the development of testicular cancer. They include:<sup>1</sup>

- Undescended testicle
- Family history of testicular cancer
- HIV infection
- Carcinoma in situ in the testicles
- Cancer of the other testicle
- Age- Nine out of ten cases of testicular cancers occur in men aged 20 to 54.
- Race and ethnicity- White men have a risk that is five times higher than African American men and three times higher than Asian-American and American Indian men.
- **Body size-** There *may* be an increased risk of testicular cancer in tall men.

# Symptoms<sup>1</sup>

- Lump in testicle (may or may not be painful)
- Swollen testicle
- Feeling of heaviness or aching in lower abdomen or scrotum
- Sore breasts (in rare cases)
- Loss of sexual desire
- Lower back pain
- Trouble breathing, chest pain, cough
- Abdominal pain
- Headaches

# Screening, Prevention and Early Detection

## Screening:1

Many testicular cancers can be detected at an early stage. A lump in the testicle is usually the first sign; however some early testicular cancers cause symptoms that need medical attention. Still, other testicular cancers may not cause any symptoms until they have reached an advanced stage.

The American Cancer Society recommends a testicular examination by a physician as part of a general physical exam and routine cancer-related checkup. Some physicians recommend monthly self-examinations. The American Cancer Society also advises that men see a physician immediately if a lump is found.

See <a href="http://www.cancer.org/Cancer/TesticularCancer/DetailedGuide/testicular-cancer-detection">http://www.cancer.org/Cancer/TesticularCancer/DetailedGuide/testicular-cancer-detection</a> for instructions on monthly self-examinations.

# **Prevention:**<sup>1</sup>

Testicular cancer may not be preventable at this time because the exact cause of this cancer is unknown. The risk factors of age, race, undescended testicle, and family history cannot be controlled.

# **Staging**

Stage at Diagnosis describes the severity of a person's cancer and the extent to which it has or has not spread throughout the body. Cancer staging is important in helping physicians plan appropriate treatment, as well as to estimate a patient's prognosis. Cancer diagnosed in the *in situ* and localized stages are generally referred to as early-stage tumors, whereas regional and distant tumors are referred to as late-stage tumors. Detecting cancers at an early stage may increase long-term survival and can lead to a reduction in mortality.

The National Cancer Institute groups staging into five main categories:<sup>4</sup>

- *In situ*: Abnormal cells are present only in the layer of cells in which they developed. In this report, *in situ* cases are only included for bladder cancer.
- 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.
- Unstaged/Unknown: There is not enough information to determine the stage.

#### Chart 23b

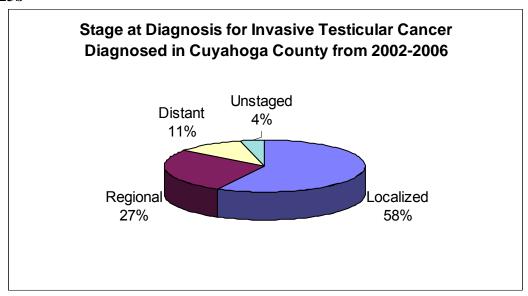


Table 23d

5-year Relative Survival* by Stage at Diagnosis for Testicular Cancer in the United States for 1999-2006, All Races, Both Sexes <sup>5</sup>			
Stage at Diagnosis	5-year Relative Survival (%)		
Localized			
(confined to primary site)	99.2		
Regional			
(spread to regional lymph nodes)	96.0		
Distant			
(cancer has metastasized)	71.5		
Unknown/Unstaged	87.2		

<sup>\*</sup>Relative survival compares observed survival for those with cancer to the expected survival for those without cancer.

Figure 23b

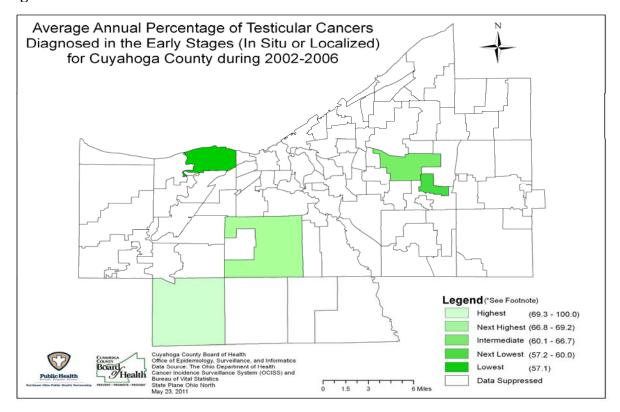
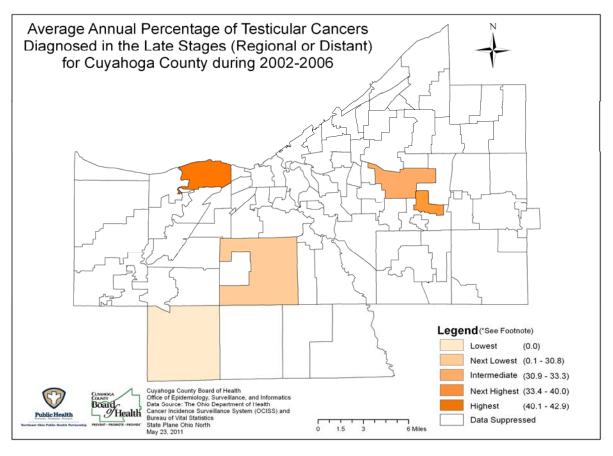
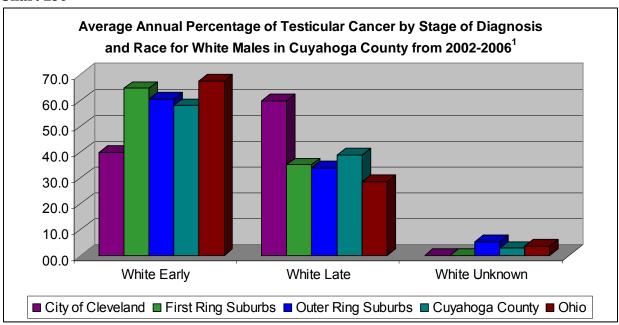


Figure 23c



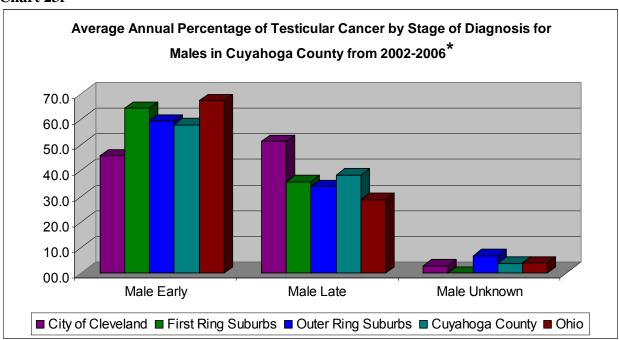
<sup>\*</sup>Data were suppressed to help maintain confidentiality and /or due to concerns over unstable numbers. See methods/limitations section for additional details.

Chart 23e



<sup>&</sup>lt;sup>1</sup> Ohio Department of Health Disclosures Limitation Standard was applied. Percentages could only be analyzed for white males. See methods/limitations section for additional details.

Chart 23f



<sup>\*</sup>All races are included in staging calculations.

### **More Information**

National Cancer Institute <a href="http://www.cancer.gov/">http://www.cancer.gov/</a> American Cancer Society <a href="http://www.cancer.org">http://www.cancer.org</a> Ohio Department of Health <a href="http://www.odh.ohio.gov/">http://www.odh.ohio.gov/</a>

#### Resources

- 1. The American Cancer Society. Testicular Cancer Detailed Guide. <a href="http://www.cancer.org/Cancer/TesticularCancer/DetailedGuide/index">http://www.cancer.org/Cancer/TesticularCancer/DetailedGuide/index</a>. (Accessed December 28, 2010).
- Cancer Incidence and Mortality among Ohio Residents, 2002-2006. Ohio Cancer Incidence Surveillance System, Ohio Department of Health and The Ohio State University, Columbus, Ohio, December 2009. <a href="http://www.odh.ohio.gov/ASSETS/79F9E92E210F477D885F8EAC864E2F27/0206Monograph">http://www.odh.ohio.gov/ASSETS/79F9E92E210F477D885F8EAC864E2F27/0206Monograph</a> Final.pdf.
- 3. The American Cancer Society. Lifetime Risk of Developing or Dying From Cancer. <a href="http://www.cancer.org/Cancer/CancerBasics/lifetime-probability-of-developing-or-dying-from-cancer">http://www.cancer.org/Cancer/CancerBasics/lifetime-probability-of-developing-or-dying-from-cancer</a>. (Accessed January 10, 2011).
- 4. National Cancer Institute. Cancer Staging. <a href="http://www.cancer.gov/cancertopics/factsheet/Detection/staging">http://www.cancer.gov/cancertopics/factsheet/Detection/staging</a>. (Accessed December 23, 2010).
- 5. Surveillance Epidemiology and End Results. SEER Stat Fact Sheets: Testis. <a href="http://seer.cancer.gov/statfacts/html/testis.html">http://seer.cancer.gov/statfacts/html/testis.html</a>. (Accessed December 28, 2010).
- 6. National Cancer Institute. What you need to know about cancer of the prostate. Testis images from <a href="http://www.cancer.gov/cancertopics/wyntk/prostate/page2">http://www.cancer.gov/cancertopics/wyntk/prostate/page2</a>. (Accessed December 28, 2010).