Prostate Cancer

Prostate cancer was the most commonly diagnosed cancer among males.

- Most new prostate cancer cases and deaths were among white males.
- Black males were most likely to be diagnosed with prostate cancer.
- African American males were more likely to die from prostate cancer than county men overall.

Prostate Cancer Deaths

Between 2005–2007, prostate cancer was responsible for 2.7% of all deaths and 10.8% of all cancer deaths among Contra Costa males. In Contra Costa, 270 males died of prostate cancer. This means that an average of 90 males in the county died from prostate cancer each year.

Contra Costa's age-adjusted death rate from prostate cancer was lower than California's age-adjusted rate (25.3 per 100,000) and met the Healthy People 2010 objective (28.2 per 100,000).

Table 1 ■ Prostate cancer deaths by race/ethnicity

Contra Costa County, 2005–2007

	Deaths	Percent	Rate
White	201	74.4%	23.7
African American	38	14.1%	53.1*
Hispanic	18	6.7%	NA
Asian/Pacific Islander	11	4.1%	NA
Total	**270**	**100.0%**	**22.7**

These are age-adjusted rates per 100,000 male residents.
Total includes racial/ethnic groups not listed above.
* Significantly higher rate than county males overall.

In this report a prostate cancer case is defined as a primary malignant tumor that originated in the prostate rather than having spread from another location.

The greatest number of deaths from prostate cancer in the county occurred among whites (201), followed by African Americans (38), Hispanics (18) and Asians/Pacific Islanders (11). Although African American males died from prostate cancer in fewer numbers, they had a higher death rate (53.1 per 100,000) from prostate cancer than county males overall (22.7 per 100,000).

Table 2 ■ Prostate cancer deaths by selected cities

Contra Costa County, 2005–2007

	Deaths	Percent	Rate
Walnut Creek	50	18.5%	27.9
Richmond	36	13.3%	35.0
Concord	27	10.0%	23.0
Antioch	17	6.3%	NA
San Pablo	12	4.4%	NA
Pittsburg	12	4.4%	NA
Pleasant Hill	12	4.4%	NA
Martinez	10	3.7%	NA
El Cerrito	10	3.7%	NA
Oakley	9	3.3%	NA
Brentwood	7	2.6%	NA
Contra Costa	**270**	**100.0%**	**22.7**

These are age-adjusted rates per 100,000 male residents.
Contra Costa total includes males from cities not listed above.

Invasive prostate cancer is cancer that has spread beyond the tissue where it developed to surrounding, healthy tissue.

The greatest numbers of deaths from prostate cancer occurred among males living in Walnut Creek (50), Richmond (36) and Concord (27). The prostate cancer death rates of these three cities were similar to the county overall rate (22.7 per 100,000). Data at the city level was limited due to small numbers of deaths.

New Cases

To understand the impact of prostate cancer on the community's health it is important to assess both prostate cancer diagnoses and deaths. Information about prostate cancer deaths indicates the ultimate toll this disease takes on males lives, but many more males develop prostate cancer than die from it. Information about new prostate cancer cases provides a sense of how much and among whom the disease is diagnosed and can highlight the need for prevention, screening and treatment programs.

Between 2003–2007, 3,908 new cases of invasive prostate cancer were diagnosed in Contra Costa—an average of 782 new cases per year. Prostate cancer was the most commonly diagnosed invasive cancer among males in Contra Costa, accounting for approximately one-third (33.5%) of all new invasive cancer cases among males. The age-adjusted rate of new invasive prostate cancer cases was higher in Contra Costa (170.0 per 100,000) than California (146.6 per 100,000).

The greatest number of new invasive prostate cancer cases in Contra Costa occurred among white males (2,727) followed by black (405), Hispanic (311) and Asian/Pacific Islander (253) males. Although white males accounted for most new invasive prostate cancer cases, black males had the highest rate of new cases (241.5 per 100,000); higher than males in the county overall (170.0 per 100,000) and the other racial/ethnic groups listed in the table. Asian/Pacific Islander males (91.0 per 100,000) experienced the lowest rate of new invasive prostate cancer cases in the county. Hispanic males (143.0 per 100,000) also had a lower rate than males in the county overall.

Table 3 ■ New invasive prostate cancer cases by race/ethnicity

Contra Costa 2003–2007

	Cases	Percent	Rate
White	2,727	69.8%	168.3
Black	405	10.4%	241.5*
Hispanic	311	8.0%	143.0**
Asian/Pacific Islander	253	6.5%	91.0**
Total	**3,908**	**100.0%**	**170.0**

These are age-adjusted rates per 100,000 male residents.
Total includes males in racial/ethnic groups not listed above.
* Significantly higher rate than county males overall.
** Significantly lower rate than county males overall.

What is prostate cancer?

The National Cancer Institute defines prostate cancer as "cancer that forms in the tissues of the prostate (a gland in the male reproductive system found below the bladder and in front of the rectum)."[1]

Why is it important?

Prostate cancer is the most commonly diagnosed cancer and the second leading cause of cancer death among males in Contra Costa[2,3] and the United States.[4]

Who is most impacted?

In Contra Costa, black/African American males are most likely to be diagnosed with prostate cancer and are more likely to die from the disease than males in the county overall.[2,3] Similar patterns exist at the national level.[5] Although the exact causes of prostate cancer are not known, several factors can increase the chance of developing prostate cancer: older age;[4,6] family history of prostate cancer (i.e., brother or father);[4,6] and some genetic factors.[4] High levels of testosterone and diets high in fat (especially animal fat) may also increase the risk of prostate cancer.[6]

What can we do about it?

The survival rate for prostate cancer is quite high. The chance of surviving five years after a prostate cancer diagnosis is 98% for all stages.[7] However, five-year survival is 33% if the cancer has spread to

other parts of the body.[7] Most prostate cancers are identified early through screening, using the prostate-specific antigen (PSA) test.[4]

Because many prostate cancers are slow-growing, they may never become life threatening. Screening and treatment do provide benefits for some males who develop prostate cancer, but there is uncertainty about the balance of risk and benefits for the population at large, particularly given the potential side effects of treatment.[4] The American Cancer Society suggests that males with at least a 10-year life expectancy who do not have symptoms of prostate cancer work with their health care provider to make an informed decision about whether to be screened.[4] The age at which males should begin receiving information about screening varies depending on their level of risk for prostate cancer—age 40 for men at very high risk; age 50 for men of average risk.[4]

Males living below the poverty level are less likely to get screened for prostate cancer than their wealthier counterparts.[7] Males without insurance or with Medicaid experience later-stage prostate cancer diagnoses compared to patients with private insurance.[4] Access to affordable and equitable health insurance and health care services is important for early detection and appropriate treatment of this disease.

Data Sources: Prostate Cancer

TABLES

Tables 1-3: Data presented for Hispanics include Hispanic residents of any race. Data presented for whites, Asians/Pacific Islanders and African Americans/blacks include non-Hispanic residents. Not all races/ethnicities are shown but all are included in totals for the county, by gender and by city. Counts fewer than five are not shown in order to protect anonymity. Rates were not calculated for any group with fewer than 20 cases due to unstable estimates.

Tables 1-2: These tables include total deaths and age-adjusted average annual death rates per 100,000 residents for 2005 through 2007. Mortality data from the California Department of Public Health (CDPH), www.cdph.ca.gov/, Center for Health Statistics' Death Statistical Master File, 2005-2007. Any analyses or interpretations of the data were reached by the Community Health Assessment, Planning and Evaluation (CHAPE) Unit of Contra Costa Health Services and not the CDPH.

ICD10 coding for malignant neoplasm of the prostate (ICD C61) from the Centers for Disease Control and Prevention National Center for Health Statistics, available online at: http://www.cdc.gov/nchs/data/nvsr/nvsr50/nvsr50_16.pdf.

Population estimates for Contra Costa and its subpopulations (by age, gender, race/ethnicity, city/census place) for 2005-2007 were provided by the Urban Strategies Council, Oakland, CA. January, 2010. Data sources used to create these estimates included: U.S. Census 2000, Neilsen Claritas 2009, Association of Bay Area Governments (ABAG) 2009 Projections, and California Department of Finance Population Estimates for Cities, Counties and the State 2001-2009, with 2000 Benchmark.

California population estimate for state level rate from the State of California, Department of Finance, E-4 Population Estimates for Cities, Counties and the State, 2001–2009, with 2000 Benchmark. Sacramento, California, May 2009.

Healthy People 2010 objectives from the US Department of Health and Human Services' Office of Disease Prevention and Health Promotion, available online at http://www.healthypeople.gov/

Table 3: This table includes five-year case counts and age-adjusted average annual new case rates per 100,000 residents for 2003 through 2007. New case data from the California Cancer Registry. (2009). Cancer Incidence Rates in California. Based on October 2009 Quarterly Extract (Released October 08, 2009). Retrieved (12/14/09) from http://www.cancer-rates.info/ca.

Note: Veterans Health Administration (VHA) hospitals did not report cancer cases to the California Cancer Registry (CCR) in 2005, 2006 and 2007. Therefore, new case counts and rates for adult males for 2005–2007 are underestimates and should be interpreted with caution. Although there is no way to know how many unreported cancer cases were diagnosed in these facilities, historically VHA-reported cases have accounted for approximately 4% of all new male cancers reported to the CCR. (For information in the undercount see www.ccrcal.org/publications/Vatechnotes).

International Classification of Diseases for Oncology, Third Edition (ICD-O-3) coding for new prostate cancer cases: C619, excluding histology types excluding 9590-9989, and sometimes 9050-9055, 9140+; recode 28010. (For information on ICD-O-3 codes see: http://seer.cancer.gov/siterecode/icdo3_d01272003/). Note: This section includes data for invasive cancer only. All but two new prostate cancer cases reported to the California Cancer Registry for this period were invasive cancer.

Text

1. National Cancer Institute. (n.d.) Cancer Topics: Prostate Cancer. Retrieved on June 12, 2010 from: http://www.cancer.gov/cancertopics/types/prostate
2. California Cancer Registry. (2009) Incidence data for 2003–07, based on October 2009 Quarterly Extract, released October 08, 2009.
3. California Department of Public Health, Center for Health Statistics' Death Statistical Master File, 2005–2007.
4. American Cancer Society. (2010) Cancer Facts & Figures 2010. Atlanta: American Cancer Society.
5. U.S. Cancer Statistics Working Group. (2010) United States Cancer Statistics: 1999–2006 Incidence and Mortality Web-based Report. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute. Data for 2006 retrieved August 31, 2010 at: www.cdc.gov/uscs.
6. Morris CR, Epstein J, Nassere K, Hofer BM, Rico J, Bates JH, Snipes KP. (2010) Trends in Cancer Incidence, Mortality, Risk Factors and Health Behaviors in California. Sacramento, CA: California Department of Public Health, Cancer Surveillance Section, January 2010.
7. American Cancer Society, California Department Public Health, California Cancer Registry (2009). California Cancer Facts and Figures 2010. Oakland, CA: American Cancer Society, California Division, September 2009.