Colorectal Cancer

Colorectal cancer was the second leading cause of cancer deaths.

- Colorectal cancer was the fourth most commonly diagnosed cancer in the county.
- Most new colorectal cancer cases in Contra Costa occurred among white residents.
- Black/African American residents were most likely to be diagnosed with and die of colorectal cancer.
- People living in Antioch were more likely to die from colorectal cancer than the county overall.
- Contra Costa's colorectal cancer death rate did not meet the Healthy People 2010 objective.

Colorectal Cancer Deaths

Between 2005–2007, colorectal cancer was responsible for 10.1% of all cancer deaths and 2.5% of all deaths among Contra Costa residents. There were 517 Contra Costa residents who died of colorectal cancer. This means that on average 172 residents died from colorectal cancer each year. Contra Costa's age-adjusted death rate (16.5 per 100,000) from colorectal cancer was similar to California's age-adjusted rate (16.1 per 100,000) and did not meet the Healthy People 2010 objective (13.7 per 100,000).

Table 1 ■ Colorectal cancer deaths by race/ethnicity

Contra Costa County, 2005–2007

	Deaths	Percent	Rate
White	370	71.6%	17.0
African American	65	12.6%	31.1 *
Asian/Pacific Islander	45	8.7%	13.8
Hispanic	29	5.6%	8.5 **
Total	**517**	**100.0%**	**16.5**

In this report a colorectal cancer case is defined as a primary malignant tumor that orignated in the colon or rectum rather than spread from another location.

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

The greatest number of deaths from colorectal cancer in the county occurred among whites (370), followed by African Americans (65), Asians/Pacific Islanders (45) and Hispanics (29).

Even though African Americans died in fewer numbers than whites, African Americans had the highest colorectal cancer death rate (31.1 per 100,000); significantly higher than the county overall (16.5 per 100,000) and all other racial/ethnic groups listed. Hispanics (8.5 per 100,000) had a significantly lower colorectal cancer death rate compared to the county overall.

Table 2 ■ Colorectal cancer deaths by gender

Contra Costa County, 2005–2007

	Deaths	Percent	Rate
Females	276	53.4%	15.1
Males	241	46.6%	18.4
Total	**517**	**100.0%**	**16.5**

These are age-adjusted rates per 100,000 residents.

Females (276) experienced slightly more colorectal cancer deaths than males (241), yet the rates of colorectal cancer death between females (15.1 per 100,000) and males were similar (18.4 per 100,000).

Table 3 ■ Colorectal cancer deaths in selected cities

Contra Costa County, 2005–2007

	Deaths	Percent	Rate
Walnut Creek	69	13.3%	15.8
Concord	62	12.0%	18.0
Antioch	53	10.3%	25.5*
Richmond	41	7.9%	15.9
Pittsburg	30	5.8%	21.1
Martinez	27	5.2%	22.6
San Pablo	20	3.9%	28.3
Brentwood	20	3.9%	18.8
El Cerrito	17	3.3%	NA
Pleasant Hill	15	2.9%	NA
Hercules	12	2.3%	NA
Pinole	12	2.3%	NA
Bay Point	11	2.1%	NA
Oakley	8	1.5%	NA
Contra Costa	**517**	**100.0%**	**16.5**

These are age-adjusted rates per 100,000 residents.
Contra Costa total includes cities not listed above.
*Significantly higher rate than the county overall.

The greatest number of deaths from colorectal cancer occurred among residents living in Walnut Creek (69), Concord (62), Antioch (53) and Richmond (41). Antioch had a significantly higher colorectal cancer death rate (25.5 per 100,000) than the county overall (16.5 per 100,000).

New Cases

To understand the impact of colorectal cancer on the community's health it is important to assess both colorectal cancer diagnoses and deaths. Information about colorectal cancer deaths indicates the ultimate toll this disease takes on people's lives. But many more people develop colorectal cancer than die from it. Information about new colorectal 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, 2,325 new cases of invasive colorectal cancer were diagnosed in Contra Costa; an average of 465 new cases per year. Colorectal cancer was the fourth most commonly diagnosed cancer in the county, representing 10.1% of all new invasive cancer cases. The age-adjusted rate of new invasive colorectal cancer cases for this period was similar in Contra Costa (46.1 per 100,000) and California (44.4 per 100,000).

New invasive colorectal cancer cases were evenly distributed between males (1,165) and females (1,160) in the county, yet males experienced a significantly higher age-adjusted rate of new cases compared to females (52.9 and 41.0 per 100,000 respectively).

Table 4 ■ New invasive colorectal cancer cases by gender

Contra Costa County, 2003–2007

	Cases	Percent	Rate
Males	1,165	50.1%	52.9 *
Females	1,160	49.9%	41.0
Total	**2,325**	**100.0%**	**46.1**

These are age-adjusted rates per 100,000 residents.

* Significantly higher rate than county females.

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

The greatest number of new invasive colorectal cancer cases in Contra Costa occurred among whites (1,655), followed by Asians/Pacific Islanders (222), blacks (216) and Hispanics (182). Although whites accounted for most new invasive colorectal cancer cases in the county, blacks had the highest rate of new cases (58.9 per 100,000); significantly higher than the county overall (46.1 per 100,000) and the other racial/ethnic groups listed in the table. Asians/Pacific Islanders (35.4 per 100,000) and Hispanics (34.3 per 100,000) had significantly lower rates than the county overall.

Table 5 ■ New invasive colorectal cancer cases by race/ethnicity

Contra Costa County, 2003–2007

	Cases	Percent	Rate
White	1,655	71.2%	46.8
Asian/Pacific Islander	222	9.5%	35.4 **
Black	216	9.3%	58.9 *
Hispanic	182	7.8%	34.3 **
Total	**2,325**	**100.0%**	**46.1**

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

The greatest number of new invasive male colorectal cancer cases in Contra Costa occurred among whites (826) followed by Asians/Pacific Islanders (113), Hispanics (98) and blacks (97). Rates of new male cases for all racial/ethnic groups listed in the table were similar to that of males in the county overall.

Table 6 ■ New invasive male colorectal cancer cases by race/ethnicity

Contra Costa County, 2003–2007

	Cases	Percent	Rate
White	826	70.9%	53.3
Asian/Pacific Islander	113	9.7%	41.5
Hispanic	98	8.4%	42.3
Black	97	8.3%	64.3
Total	**1,165**	**100.0%**	**52.9**

These are age-adjusted rates per 100,000 male residents.
Total includes males in racial/ethnic groups not listed above.

The greatest number of new invasive female colorectal cancer cases in Contra Costa occurred among whites (829) followed by blacks (119), Asians/Pacific Islanders (109) and Hispanics (84). Although white females accounted for most new invasive female colorectal cancer cases, rates were highest among black females (54.8 per 100,000); significantly higher than females in the county overall (41.0 per 100,000) and all racial/ethnic groups listed in the table. Asian/Pacific Islander (30.9 per 100,000) and Hispanic (28.2 per 100,000) females had significantly lower rates than females in the county overall.

Table 7 ■ New invasive female colorectal cancer cases

By Race/Ethnicity

Contra Costa County, 2003–2007

	Cases	Percent	Rate
White	829	71.5%	41.9
Black	119	10.3%	54.8*
Asian/Pacific Islander	109	9.4%	30.9**
Hispanic	84	7.2%	28.2**
Total	**1,160**	**100.0%**	**41.0**

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

What is colorectal cancer?

The National Cancer Institute defines colorectal cancer as "cancer that forms in the tissues of the colon (the longest part of the large intestine) or ... the rectum (the last several inches of the large intestine closest to the anus)."[1]

Why is it important?

Colorectal cancer is the fourth most commonly diagnosed invasive cancer in Contra Costa and California.[2] It was also the second leading cause of cancer death in the county[3] and the state.[4]

Although rates of new colorectal cancer cases have decreased throughout the past 20 years in California, Korean males and females and Vietnamese and Filipina females in the state are experiencing increasing rates of new colorectal cancer cases.[4]

Who is most impacted?

In Contra Costa, males are more likely to be diagnosed with colorectal cancer than females. Locally, blacks/African Americans are most likely to be diagnosed with and die from colorectal cancer.[2,3] Black females are also most likely to be diagnosed among females in the county.[2] Although local data did not detect differences among males, nationally black males are most likely to be diagnosed among males.[5]

Colorectal cancer is more likely to be diagnosed at older ages. More than 90% of people with colorectal cancer are diagnosed after age 50.[6,7,8] Other factors that can increase the risk of developing colorectal cancer include: colorectal polyps, if not removed;[6,7,8] family[6,7,8] or personal history[6,8] of colorectal cancer; conditions that cause inflammation of the colon or bowels;[6,7,8] several inhterited conditions;[6,7,8] smoking;[6,7] heavy alcohol consumption;[6] and being physically inactive or obese.[6] Diets low in fruits and vegetables[6,8] and those high in animal fat[7,8] and red or processed meat[6] may also contribute to risk of developing colorectal cancer.

What can we do about it?

Colorectal cancer is less common than breast and prostate cancer but has a poorer prognosis partly because it is often diagnosed at a late stage.[9] In California in 2007, only 46% of new colorectal cancer diagnoses were early stage compared to 82% for prostate cancer and 70% for breast cancer.[9] Colorectal cancer survival is much better if the cancer is diagnosed early. The five-year survival rate is 64% for all stages combined; 91% if diagnosed early before it has spread; 10% if diagnosed late after it has spread to other parts of the body.[9]

Regular screening is critical to preventing and detecting colorectal cancer early.[8] Screening can identify polyps that can be removed before they develop into cancer.[6] It can also detect early stage colorectal cancer, when the prognosis is best.[6] The American Cancer Society recommends that men and women of average risk begin getting screened for colorectal cancer at age 50.[9]

Although colorectal screening has increased since the mid-1990s,[7] in 2008 only 38% of California adults 50 years of age and older reported being screened for colorectal cancer (i.e., sigmoidoscopy or colonoscopy) within the prior five years.[9]

Being physically active, eating a healthy diet and maintaining a healthy weight may also help reduce the risk of colorectal cancer.[9] Policies and programs that improve access to affordable healthy foods, increase opportunities for safe, low or no-cost physical activity and discourage smoking can support healthy behaviors to help prevent colorectal cancer. Access to health insurance and affordable, culturally competent health care services is also important to enable people to pursue appropriate screening and early treatment for colorectal cancer.

Data Sources: Colorectal Cancer

TABLES

Tables 1–7: 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 race/ethnicities are shown but all are included in totals for the county, by gender and by city. Rates were not calculated for any group with fewer than 20 cases due to unstable estimates.

Tables 1–3: These tables include total deaths due to colorectal cancer 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), http://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 colon, rectosigmoid junction, rectum and anus (ICD C18-C21) 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 U.S. Department of Health and Human Services' Office of Disease Prevention and Health Promotion, available online at http://www.healthypeople.gov/.

Table 4–7: These tables include 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 December 14, 2009 from http://www.cancer-rates.info/ca. [Counts for black males and Asian/Pacific Islander females were not publicly available due to small sample sizes but were provided by Mark Allen at the California Cancer Registry on January 5, 2010.]

Note: Veterans Health Administration 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 percent of all new male cancers reported to the CCR. (For information in the undercount see http://ccrcal.org/publications/Vatechnotes).

International Classification of Diseases for Oncology, Third Edition (ICD–O-3) coding for new colorectal cancer cases: colon excluding rectum (C180–187, C260) and rectum and rectosigmoid junction (C199 and C209) excluding histology types 9590–9989, and sometimes 9050-9055, 9140+. (For information on ICD–O-3 codes see: http://seer.cancer.gov/siterecode/icdo3_d01272003/). This section includes data for invasive cancer only. All but 82 colorectal cancer cases (i.e., 97%) reported to the California Cancer Registry for this period were invasive.

TEXT

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