Diabetes
There are unfair racial differences in diabetes deaths.

Deaths
Diabetes is the 7th leading cause of death in Contra Costa, accounting for 2.8% of all deaths in the county. On average, 194 Contra Costa residents die of diabetes each year. The age-adjusted death rate from diabetes is lower in Contra Costa than California (19.7 vs. 21.2 per 100,000).

In Contra Costa, the largest number of diabetes deaths is found among Whites (357), followed by African Americans (101), Latinos (61) and Asians (53).

Even though African Americans die in far fewer numbers than Whites, African Americans are more than twice as likely to die from diabetes compared to the county overall. African Americans have the highest death rate from diabetes (52.3 per 100,000) – higher than the county overall (19.7 per 100,000), Whites (16.3 per 100,000), Latinos (26.0 per 100,000) and Asians (19.1 per 100,000). These differences are not due to the age of the population and are likely due to limited access to health services, unhealthy behaviors and/or environmental risks. Whites are less likely to die from diabetes than the county overall.

- African Americans are more likely to die of diabetes.
- Residents of San Pablo and Richmond are more likely to die of diabetes.
- On average, 194 residents die from diabetes each year.
- Contra Costa’s diabetes prevalence (5.3%) does not meet the Healthy People 2010 objective.

Editor’s note: The statistics presented include Type 1 and 2 diabetes data. They do not include pregnancy-related diabetes cases.
In Contra Costa, men are more likely to die from diabetes (23.0 per 100,000) than women (17.3 per 100,000). Although men overall are more likely to die from diabetes, slightly more than half of the diabetes deaths occur among women (295, 50.6%).

Residents of San Pablo and Richmond are more likely to die from diabetes compared to Contra Costa as a whole. The largest number of diabetes deaths occur among residents of Richmond (94), followed by Concord (81), Walnut Creek (63), and Antioch (53).

### Diabetes Deaths by Race/Ethnicity

**Table 1. Contra Costa County 2002–2004**

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Deaths</th>
<th>Percent</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>357</td>
<td>61.2%</td>
<td><strong>16.3</strong></td>
</tr>
<tr>
<td>African American</td>
<td>101</td>
<td>17.3%</td>
<td><em>52.3</em></td>
</tr>
<tr>
<td>Latino</td>
<td>61</td>
<td>10.5%</td>
<td>26.0</td>
</tr>
<tr>
<td>Asian</td>
<td>53</td>
<td>9.1%</td>
<td>19.1</td>
</tr>
<tr>
<td>Contra Costa</td>
<td>583</td>
<td>100.0%</td>
<td>19.7</td>
</tr>
</tbody>
</table>

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

* Significantly higher rate compared to the county.
** Significantly lower rate

### Diabetes Deaths by Gender

**Table 2. Contra Costa County 2002–2004**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Deaths</th>
<th>Percent</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td>295</td>
<td>50.6%</td>
<td>17.3</td>
</tr>
<tr>
<td>Men</td>
<td>288</td>
<td>49.4%</td>
<td>23.0</td>
</tr>
<tr>
<td>Contra Costa</td>
<td>583</td>
<td>100.0%</td>
<td>19.7</td>
</tr>
</tbody>
</table>

These are age-adjusted rates per 100,000 residents.
Death rates are likely higher than these numbers suggest. This is because diabetes is underreported as a cause of death. Sixty-five percent of people with diabetes die of heart disease or stroke; however, death certificates may not list diabetes as the primary or contributing cause of death. Therefore, the number of diabetes deaths is likely higher and may continue to rise as risk factors, such as obesity, increase in prevalence.

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**Estimated Cases**

In Contra Costa, approximately 40,000 adults 18 years and older are diagnosed with diabetes, resulting in a diabetes prevalence of 5.3% for the county. The prevalence of diabetes among men and women in Contra Costa is nearly the same (6.1% vs. 4.5% respectively).

Contra Costa’s diabetes prevalence (5.3%) exceeds the national Healthy People 2010 objective (2.5%).

Analyses of diabetes cases by city and race/ethnicity at the county level were not possible due to small numbers, but
we can look to the Greater Bay Area to learn how diabetes affects our community. Contra Costa’s diabetes prevalence (5.6%) is similar to the prevalence for the Greater Bay Area region (6.5%) and California (7.0%).

In the Greater Bay Area, more than one-third of diabetes cases are among Whites (130,000), a quarter of the cases are Latino (91,000), followed by Asians (72,000), and African Americans (42,000).

**Diabetes affects some racial groups more than others.** Even though African Americans have far fewer cases of diabetes diagnosed, African Americans are almost twice as likely to be diagnosed with diabetes compared to the region as a whole and Whites. African Americans have a higher prevalence (12.3%) compared to the region overall (6.5%) and Whites (4.7%). Whites are less likely to be diagnosed with diabetes compared to the county overall.

### Diabetes Cases by Race/Ethnicity

Table 4. Greater Bay Area adults 18 years and older 2005

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Cases</th>
<th>Percent</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>130,000</td>
<td>37.8%</td>
<td><strong>4.7%</strong></td>
</tr>
<tr>
<td>Latino</td>
<td>91,000</td>
<td>26.5%</td>
<td>9.2%</td>
</tr>
<tr>
<td>Asian</td>
<td>72,000</td>
<td>20.9%</td>
<td>6.5%</td>
</tr>
<tr>
<td>African American</td>
<td>42,000</td>
<td>12.2%</td>
<td>*12.3%</td>
</tr>
<tr>
<td>Greater Bay Area</td>
<td>344,000</td>
<td>100.0%</td>
<td>6.5%</td>
</tr>
</tbody>
</table>

* Significantly higher prevalence compared to the region overall.
** Significantly lower prevalence.
Throughout California, American Indians/Alaska Natives and Latinos also have a higher risk for being diagnosed with diabetes. State estimates show that 12.5% of American Indians/Alaska Natives have been diagnosed with diabetes. Statewide, Latinos have the highest prevalence within each age group, in part because many Latinos are diagnosed with diabetes at younger ages than other groups.\textsuperscript{5}

In the Greater Bay Area, men and women are equally likely to be diagnosed with diabetes. The prevalence of diabetes among men and women is similar (7.4% men, 5.5% women) compared to the region as a whole (6.5%).

**People become more likely to develop, and die from, diabetes as they get older.** In Contra Costa, adults 65 years and older are nearly six times as likely to be diagnosed with diabetes than younger adults (17.5% vs. 3.1%). In California, diabetes prevalence among adults age 65 and over increased from 15.1% in 2003 to 17.5% in 2005.\textsuperscript{5}

**Diabetes cases will continue to rise.** In the past 15 years, the number of people with diabetes in the U.S. has increased by more than 50%.\textsuperscript{5} This is largely attributed to the rise in Type 2 diabetes, which is being increasingly diagnosed at younger ages.\textsuperscript{7}

The alarming increase in obesity, a major risk factor for diabetes, may indicate a rise in future diabetes cases. Among California’s adults not diagnosed with diabetes, more than one-third are overweight and an additional one-fifth are obese. These 12.8 million adults are at risk for developing diabetes and some may already have the condition.\textsuperscript{5}

For more information, see the obesity sections of this report.

**Diabetes is a major cause of disability.** People with diabetes are more likely to experience blindness, kidney failure, leg and foot amputations, heart disease and stroke. Many of these outcomes can be managed and even prevented. Access to health care, medical screening and education regarding diet and exercise are critical in treating current cases and abating the potential wave of new diagnoses.

**There are 3 types of diabetes.** Diabetes mellitus is a chronic disease in which the body makes too little insulin or does not use it effectively.\textsuperscript{5} There are two main
types of diabetes – type 1 and type 2 – and gestational diabetes. Type 1 diabetes, also known as insulin-dependent diabetes, is an autoimmune disease and most typically occurs in children and young adults. Type 2 diabetes, formerly known as “adult onset”, accounts for 90-95% of diabetes cases and most often occurs after the age of 40. Type 2 diabetes is linked to obesity and physical activity. Gestational diabetes, which develops during pregnancy, usually disappears after delivery but can increase the mother’s risk of Type 2 diabetes later in life.

Data Sources: Diabetes

Text


4. The Greater Bay Area includes the counties of Santa Clara, Alameda, Contra Costa, San Francisco, San Mateo, Sonoma, Solano, Marin and Napa.


Tables
Tables 1-3: Mortality data from the California Department of Health Services (CDHS), http://www.dhs.ca.gov/, Center for Health Statistics’ Death Statistical Master File, 2002-2004. Any analyses, interpretations of conclusions of the data have been reached by CHAPE and are not from the CDHS. In Table 1, data for the following race/ethnicity groups was excluded due to small numbers: American Indian/Alaska Native, Native Hawaiian/Pacific Islanders, Two or More Races, and Other. Due to unstable estimates, rates could not be calculated for these groups. Tables 2 and 3 include all race/ethnic groups including those mentioned above. These tables include total deaths and age-adjusted average annual death rates for 2002 through 2004.

ICD10 coding for diabetes mellitus (ICD10-E14) 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 data from:

Note: City level denominators were extrapolated from the E-4 file to approximate the mid-year city-level population estimates that are needed to calculate city-level rates. For more information, see our section on statistical methods.

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 4: Local data about diabetes from the California Health Interview Survey’s AskCHIS data query system, copyright© 2005 the Regents of the University of California, all rights reserved, available online at: http://www.chis.ucla.edu/. Data analysis performed January 10, 2007. Data for the following race/ethnicity groups was excluded due to small numbers: American Indian/Alaska Natives, Native Hawaiian/ Pacific Islanders, and Two or More Races. Due to unstable estimates, percentages could not be calculated for these groups. Ask CHIS data are generated from a telephone survey that asks questions to a randomly selected group of residents in Contra Costa and other counties in California. Responses are then weighted to represent the county, region, and state as whole.