TOBACCO-RELATED HEALTH DISPARITIES IN CONTRA COSTA

Tobacco Prevention Coalition
March 28, 2011

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Tobacco Prevention Project, Contra Costa Health Services
Purpose

- Present tobacco-related community health indicators from Community Health Indicators for Contra Costa County report.
- Describe tobacco-related health disparities.
- Discuss effective ways to communicate about tobacco-related health disparities with policy makers and community groups.
Introduction

- Tobacco is the **leading cause of death** in the US and globally.
- Tobacco is the **most preventable cause of death** and disease in the US and globally.
- Tobacco is a **powerful and pervasive cause of health disparities**.
- Some groups are significantly **more vulnerable** to the risks of tobacco use and exposure than others.
Surgeon General’s Report

- There is no safe level of exposure to tobacco smoke.
- Damage from tobacco smoke is immediate.
- Smoking longer means more damage.
- Cigarettes are designed for addiction.
- There is no safe cigarette.
- The only proven strategy for reducing the risk of tobacco-related disease and death for is to never smoke, and if you do smoke to quit.
Community Health Indicators for Contra Costa County

- Understand health status and health issues in Contra Costa County; and
- Illustrate health disparities in the county.
Health Disparities

“When one group of people has a higher incidence or mortality rate than another, or when survival rates are less for one group than another.”

—NCI Center to Reduce Cancer Health Disparities, 2003

- Usually measure differences by race/ethnicity (data most readily available).

- Often caused by socioeconomic and health inequality.
Contra Costa Demographic Overview

- 1,006,486 residents in 2005

- Most residents are White (52.9%), followed by Latino (21.1%), Asian (13.1%) and African American (9.1%).

- Latinos have increased to close to 25% in 2010 census.

- 19.6% of residents live in poverty (200% FPL)

- 13,268 births annually

- Relatively high median household income (In 2000, California $47,493, Contra Costa $63,675)
Contra Costa County Poverty by Census Tract (2000)
Contra Costa County Hispanic Population by Census Tract (2000)
Contra Costa Asian/Pacific Islander Population by Census Tract (2000)
Leading Causes of Death in Contra Costa

1. Cancer
2. Heart Disease
3. Stroke
4. Chronic Lower Respiratory Disease
   (COPD, chronic bronchitis, emphysema)
Smoking is known to cause approximately:

- 30% of all cancer deaths
- 87% of lung cancer cases
- Cancer of the larynx, oral cavity, esophagus, bladder, kidney, pancreas, stomach and cervix

Rates of cancers related to cigarette smoking are highest among African-American men.

CDC Report from 200-2004: [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5745a3.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5745a3.htm)


[http://www.cdc.gov/tobacco/basic_information/health_effects/cancer/index.htm](http://www.cdc.gov/tobacco/basic_information/health_effects/cancer/index.htm)
## Cancer Deaths by Race/Ethnicity

Cancer deaths data is provided for various racial and ethnic groups for the period 2005-2007. The table includes the number of deaths, the percentage of the total, and the death rate per 100,000 people. The rate is calculated as the number of deaths per 100,000 people in the population.

### Race/Ethnicity Summary

<table>
<thead>
<tr>
<th>Race</th>
<th>Deaths</th>
<th>Percent</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>3,799</td>
<td>75%</td>
<td>175.6</td>
</tr>
<tr>
<td>African American</td>
<td>512</td>
<td>10%</td>
<td>228.0</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>404</td>
<td>7.9%</td>
<td>16.2</td>
</tr>
<tr>
<td>Hispanic</td>
<td>360</td>
<td>7%</td>
<td>100.6</td>
</tr>
<tr>
<td>County Total</td>
<td>5,131</td>
<td>100%</td>
<td>162.00</td>
</tr>
</tbody>
</table>

Rate is the number of deaths per 100,000 people in the population.

Community Health Indicators for Contra Costa County, Contra Costa Health Services, December 2010
Cities with Cancer Death Rates Higher Than County Average

2005-2007

<table>
<thead>
<tr>
<th>City</th>
<th>Deaths</th>
<th>Percent</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Pablo</td>
<td>190</td>
<td>3.7%</td>
<td>269.6</td>
</tr>
<tr>
<td>Oakley</td>
<td>122</td>
<td>2.4%</td>
<td>219.2</td>
</tr>
<tr>
<td>Martinez</td>
<td>234</td>
<td>4.6%</td>
<td>207</td>
</tr>
<tr>
<td>Antioch</td>
<td>430</td>
<td>8.4%</td>
<td>200.8</td>
</tr>
<tr>
<td>County Total</td>
<td>5,131</td>
<td>100%</td>
<td>162.0</td>
</tr>
</tbody>
</table>

Rate is the number of deaths per 100,000 people in the population

Community Health Indicators for Contra Costa County, Contra Costa Health Services, December 2010
Heart Disease

- Smoking is known to cause approximately 30% of all coronary heart disease deaths.
- In California, secondhand smoke causes 3,600 cardiac deaths a year.
- Nonsmokers who are exposed to secondhand smoke at home or work increase their heart disease risk by 25–30%.
# Heart Disease Deaths by Race/Ethnicity

## 2005-2007

<table>
<thead>
<tr>
<th>Race</th>
<th>Deaths</th>
<th>Percent</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>3,465</td>
<td>74.3%</td>
<td>151.9</td>
</tr>
<tr>
<td>African American</td>
<td>538</td>
<td>11.5%</td>
<td>258.8</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>321</td>
<td>6.9%</td>
<td>107.4</td>
</tr>
<tr>
<td>Hispanic</td>
<td>299</td>
<td>6.4%</td>
<td>99.5</td>
</tr>
<tr>
<td>County Total</td>
<td>4,664</td>
<td>100%</td>
<td>147.5</td>
</tr>
</tbody>
</table>

*Rate is the number of deaths per 100,000 people in the population*

*Community Health Indicators for Contra Costa County, Contra Costa Health Services, December 2010*
## Cities with Heart Disease Death Rates Higher Than County Average

### 2005-2007

<table>
<thead>
<tr>
<th>City</th>
<th>Deaths</th>
<th>Percent</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Pablo</td>
<td>249</td>
<td>5.3%</td>
<td>337.6</td>
</tr>
<tr>
<td>Oakley</td>
<td>100</td>
<td>2.1%</td>
<td>226.5</td>
</tr>
<tr>
<td>Antioch</td>
<td>405</td>
<td>8.7%</td>
<td>221.1</td>
</tr>
<tr>
<td>Richmond</td>
<td>267</td>
<td>12.2%</td>
<td>210.2</td>
</tr>
<tr>
<td>Martinez</td>
<td>197</td>
<td>4.2%</td>
<td>188.5</td>
</tr>
<tr>
<td>Pittsburg</td>
<td>254</td>
<td>5.4%</td>
<td>181.5</td>
</tr>
<tr>
<td>Pleasant Hill</td>
<td>197</td>
<td>4.2%</td>
<td>156.7</td>
</tr>
<tr>
<td>County Total</td>
<td>4,664</td>
<td>100%</td>
<td>147.5</td>
</tr>
</tbody>
</table>

Rate is the number of deaths per 100,000 people in the population

Community Health Indicators for Contra Costa County, Contra Costa Health Services, December 2010
Stroke

- Smoking is known to cause approximately 18% of all strokes in the U.S.

- Smoking roughly doubles a person's risk for stroke.
# Stroke Deaths by Race/Ethnicity

## 2005-2007

<table>
<thead>
<tr>
<th>Race</th>
<th>Deaths</th>
<th>Percent</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>1,043</td>
<td>71.3%</td>
<td>45.6</td>
</tr>
<tr>
<td>African American</td>
<td>161</td>
<td>11.0%</td>
<td>80.5</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>141</td>
<td>9.6%</td>
<td>47.1</td>
</tr>
<tr>
<td>Hispanic</td>
<td>107</td>
<td>7.3%</td>
<td>36.1</td>
</tr>
<tr>
<td>County Total</td>
<td>1,462</td>
<td>100%</td>
<td>46.7</td>
</tr>
</tbody>
</table>

Rate is the number of deaths per 100,000 people in the population

Community Health Indicators for Contra Costa County, Contra Costa Health Services, December 2010
## Cities with Most Stroke Deaths

### 2005-2007

<table>
<thead>
<tr>
<th>City</th>
<th>Deaths</th>
<th>Percent</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Pablo</td>
<td>71</td>
<td>4.9%</td>
<td>99.9</td>
</tr>
<tr>
<td>Pittsburg</td>
<td>97</td>
<td>6.6%</td>
<td>71.9</td>
</tr>
<tr>
<td>Richmond</td>
<td>162</td>
<td>11.1%</td>
<td>61.5</td>
</tr>
<tr>
<td>Antioch</td>
<td>109</td>
<td>7.5%</td>
<td>56.1</td>
</tr>
<tr>
<td>Concord</td>
<td>180</td>
<td>12.3%</td>
<td>51.9</td>
</tr>
<tr>
<td>County Total</td>
<td>1,462</td>
<td>100%</td>
<td>46.9</td>
</tr>
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</table>

Rate is the number of deaths per 100,000 people in the population

Community Health Indicators for Contra Costa County, Contra Costa Health Services, December 2010
Lung Disease

Smoking causes:

- 90% of deaths from chronic obstructive pulmonary disease (COPD)
- 87% of lung cancer cases
- In California, secondhand smoke causes 400 lung cancer deaths a year
- Nonsmokers who are exposed to secondhand smoke at home or work increase their lung cancer risk by 20–30%

CDC Report from 200-2004: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5745a3.htm
http://www.cdc.gov/tobacco/basic_information/health_effects/respiratory/index.htm
# Lung Cancer Deaths by Race/Ethnicity

## 2005-2007

<table>
<thead>
<tr>
<th>Race</th>
<th>Deaths</th>
<th>Percent</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>944</td>
<td>77.5%</td>
<td>43.9</td>
</tr>
<tr>
<td>African American</td>
<td>120</td>
<td>9.9%</td>
<td>52.2</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>93</td>
<td>7.6%</td>
<td>27.3</td>
</tr>
<tr>
<td>Hispanic</td>
<td>45</td>
<td>3.7%</td>
<td>13.2</td>
</tr>
<tr>
<td>County Total</td>
<td>1,218</td>
<td>100%</td>
<td>38.8</td>
</tr>
</tbody>
</table>

Rate is the number of deaths per 100,000 people in the population

Community Health Indicators for Contra Costa County, Contra Costa Health Services, December 2010
## Cities with Lung Cancer Death Rates Higher Than County Average

### 2005-2007

<table>
<thead>
<tr>
<th>City</th>
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<td>122</td>
<td>2.4%</td>
<td>219.2</td>
</tr>
<tr>
<td>Martinez</td>
<td>234</td>
<td>4.6%</td>
<td>207</td>
</tr>
<tr>
<td>Antioch</td>
<td>430</td>
<td>8.4%</td>
<td>200.8</td>
</tr>
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<td>100%</td>
<td>162.0</td>
</tr>
</tbody>
</table>

Rate is the number of deaths per 100,000 people in the population

*Community Health Indicators for Contra Costa County, Contra Costa Health Services, December 2010*
# Chronic Lower Respiratory Disease*

## Deaths by Race/Ethnicity

<table>
<thead>
<tr>
<th>Race</th>
<th>Deaths</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>939</td>
<td>42.7</td>
</tr>
<tr>
<td>African American</td>
<td>71</td>
<td>33.9</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>52</td>
<td>18.1</td>
</tr>
<tr>
<td>Hispanic</td>
<td>44</td>
<td>15.7</td>
</tr>
</tbody>
</table>

*Chronic lower respiratory disease includes things like chronic bronchitis and emphysema*

Rate is the number of deaths per 100,000 people in the population

Community Health Indicators for Contra Costa County, Contra Costa Health Services, December 2010
## Childhood Asthma Hospitalizations

### 2005-2007

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Boys</th>
<th>Girls</th>
<th>Total</th>
<th>Percent</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>170</td>
<td>123</td>
<td>293</td>
<td>28.70%</td>
<td>*43.7</td>
</tr>
<tr>
<td>White</td>
<td>193</td>
<td>96</td>
<td>289</td>
<td>28.30%</td>
<td>**11.1</td>
</tr>
<tr>
<td>Hispanic</td>
<td>167</td>
<td>83</td>
<td>250</td>
<td>24.50%</td>
<td>**12.9</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>39</td>
<td>28</td>
<td>67</td>
<td>6.60%</td>
<td>**9.8</td>
</tr>
<tr>
<td><strong>Contra Costa Total</strong></td>
<td>657</td>
<td>364</td>
<td>1,021</td>
<td>100.00%</td>
<td>16.1</td>
</tr>
</tbody>
</table>

These are age-adjusted rates per 10,000 residents 0-14 years.
Contra Costa Total includes race/ethnicity groups not listed above.
* Significantly higher rate than county children overall.
** Significantly lower rate than county children overall.
Childhood Asthma Hospitalizations

2005-2007

Asthma Hospitalization Rates Age 0 - 14 by Zip Code

Community Health Indicators for Contra Costa County, Contra Costa Health Services, December 2010
Tobacco-Related Health Disparities
Targeted Marketing to Asian/Pacific Islanders

- Tobacco industry documents reveal 15+ years of targeted marketing to Asian/Pacific Islander (API) communities.

- A Lorillard memo described API’s as a “potential gold mine.”

Smoking Rates for API’s

- Smoking prevalence rates are higher in males in specific Asian/Pacific Islanders ethnic groups (for example, 27.9% for Korean males) than the general male smoking prevalence rate in California, which is 17.1%.

## Top Causes of Death for Asian/Pacific Islanders in Contra Costa

### 2005-2007

<table>
<thead>
<tr>
<th>Disease</th>
<th>Deaths</th>
<th>Percent of A/PI Deaths</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer</td>
<td>404</td>
<td>28.7%</td>
<td>116.2</td>
</tr>
<tr>
<td>Heart Disease</td>
<td>299</td>
<td>21.3</td>
<td>99.5</td>
</tr>
<tr>
<td>Stroke</td>
<td>141</td>
<td>10.0%</td>
<td>47.1</td>
</tr>
</tbody>
</table>

Rate is the number of deaths per 100,000 people in the population
Targeted Marketing to African Americans

- The tobacco industry sponsors cultural, educational and entertainment events, as well as intense marketing in the African American community and ethnic media.

- Disproportionately targeted with Menthol products.
African American Smoking Rates

- Smoking prevalence is higher in the African American adult population (19.3%) than in the general population (13.7%).

- The percentage of African American smokers who have successfully quit smoking is lower than among whites (50.5% vs. 35.4%).

# Top Causes of Death for African Americans in Contra Costa

## 2005-2007

<table>
<thead>
<tr>
<th>Disease</th>
<th>Deaths</th>
<th>Percent of AA Deaths</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart disease</td>
<td>538</td>
<td>24.2%</td>
<td>258.8*</td>
</tr>
<tr>
<td>Cancer</td>
<td>512</td>
<td>23.0%</td>
<td>228.0*</td>
</tr>
<tr>
<td>Stroke</td>
<td>161</td>
<td>7.2%</td>
<td>80.5</td>
</tr>
</tbody>
</table>

*Higher rate than County average

Rate is the number of deaths per 100,000 people in the population

Community Health Indicators for Contra Costa County, Contra Costa Health Services, December 2010
Tobacco-Related Deaths

- African Americans have the highest lung cancer incidence and mortality rates in California.

- The rate is 18% higher than non-Hispanic Whites and almost 2 x the rate among Asian/Pacific Islanders and Hispanic/Latino men.

The tobacco industry has financially supported primary and secondary schools, funded universities and colleges, and supported scholarship programs targeting Hispanics and Latinos.

Tobacco companies place advertising in community publications and sponsored Hispanic cultural events.
Smoking Rates for Hispanic/Latinos

- In 2008, Hispanic high school students in California had the second highest smoking prevalence among all high school students.

- In California, Hispanic adult males have a much higher smoking prevalence rate (16.0%) than Hispanic adult females (7.2%).

Top Causes of Death for Hispanic/Latinos in Contra Costa

2005-2007

<table>
<thead>
<tr>
<th>Disease</th>
<th>Deaths</th>
<th>Percent of H/L Deaths</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer</td>
<td>360</td>
<td>22.0%</td>
<td>100.6</td>
</tr>
<tr>
<td>Heart Disease</td>
<td>321</td>
<td>19.6%</td>
<td>107.4</td>
</tr>
<tr>
<td>Unintentional Injury</td>
<td>130</td>
<td>7.9%</td>
<td>21.9</td>
</tr>
</tbody>
</table>

Rate is the number of deaths per 100,000 people in the population

Community Health Indicators for Contra Costa County, Contra Costa Health Services, December 2010
Tobacco-Related Deaths

- Lung cancer is the leading cause of cancer deaths among Hispanics.
- Deaths from lung cancer are 2.1 times higher for Hispanic men as they are for Hispanic women in California.

Targeted marketing to Low Socioeconomic Status

- Targeted by tobacco industry with ethnic-specific media messages that appear at small convenience stores and corner grocers that are prevalent in low income neighborhoods.
California Adult Smoking Rate by Socioeconomic Status (2008)

Behavioral Risk Factor Surveillance System and California Adult Tobacco Survey,
Tobacco-Related Deaths

- Lower educated individuals in California are almost 2x as likely to die and lower income individuals are 1.5 x as likely to die from lung cancer and COPD, even after adjusting for age, race/ethnicity, sex, and smoking status.

Contra Costa Life Expectancy by Poverty Level

2005-2007

Life Expectancy by Poverty

81.4
79.8
77.7
74.9

Less than 10% of census tract < 2xFPL
10 - 19.9% of census tract < 2xFPL
20 - 29.9% of census tract < 2xFPL
30% or more of census tract < 2xFPL

Community Health Indicators for Contra Costa County, Contra Costa Health Services, December 2010
Contra Costa Life Expectancy by Education

2005-2007

Life Expectancy by Education

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Life Expectancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5% of census tract &lt; HS</td>
<td>82.0</td>
</tr>
<tr>
<td>5 - 14.9% of census tract &lt; HS</td>
<td>80.0</td>
</tr>
<tr>
<td>15 - 24.9% of census tract &lt; HS</td>
<td>77.3</td>
</tr>
<tr>
<td>25% or more of census tract &lt; HS</td>
<td>74.6</td>
</tr>
</tbody>
</table>
Tobacco industry advertising has openly targeted gays and lesbians since 1992, when Philip Morris began running ads in Genre magazine.

The industry sponsors many events in the LGBT community.
Smoking Rate in 18-24 year olds in California by Sexual Orientation (2005)

http://www.center4tobaccopolicy.org/_files/_files/Diverse%20Populations%20FINAL.pdf
Tobacco-Related Deaths

- Little accurate data on disparities in health outcomes because data gathered rarely includes sexual orientation.

- The American Cancer Society estimates that tobacco kills at least 33,000 gays and lesbians each year in the United States.
We still have work left to do.
Smoking Rates in Contra Costa

- Overall for County adults: 10.7% (CHIS, 2007)
  9.6% (CTS, 2008)

- Overall for 11th graders: 14%
  (range 9-17%)

- Overall for Non-traditional students: 38%
  (range 13-69%)

- Higher rates for targeted communities

California Tobacco Survey, 2008
California Health Interview Survey, 2007
Rates of Smoking by Sub-Populations in California

- General population: 14%
- American Indian: 36%
- African American: 19%
- Hispanic Latino males: 16%
- Korean Males: 28%
- LGBT: 30%
- Low SES: 19%
- High SES: 6%

Population Group in California

Program Funding

California, Tobacco Revenues vs. Program Funding, FY2011

Tobacco Revenue: $1,652.0
CDC Recommended Level: $441.9
Actual Funding: $75.0

Source: Tobacco Free Kids, 2010

(CA Tobacco revenues include taxes and Master Settlement Agreement money)
Money Spent on Tobacco Prevention versus Tobacco Industry Marketing in California

- State Tobacco Prevention Funding (2008)
- Tobacco Industry Spending on Marketing in CA (2005)

Prevention Funding vs. Industry Spending on Marketing

- $77.4 million
- $843.8 million