A look at Selected Health and Demographic Indicators

AB 617 Workshop
San Pablo

May 16, 2018

Daniel Peddycord, RN, MPA/HA
Public Health Director, Contra Costa County
Daniel.peddycord@hsd.cccounty.us
Demographics of Contra Costa

Percent of Total Population – Apx 1.1 million

- Hispanic or Latino
  - California: 37.6%
  - Contra Costa: 40.1%

- White alone
  - California: 24.4%
  - Contra Costa: 47.8%

- Black or African American alone
  - California: 5.8%
  - Contra Costa: 8.9%

- API
  - California: 13.1%
  - Contra Costa: 14.6%
Population Growth

Population Size and Recent Growth for Select Contra Costa Cities

<table>
<thead>
<tr>
<th>City</th>
<th>2010 Population</th>
<th>Percent Change 1990-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bay Point</td>
<td>21,349</td>
<td>22%</td>
</tr>
<tr>
<td>Antioch</td>
<td>102,372</td>
<td>65%</td>
</tr>
<tr>
<td>Pittsburg</td>
<td>63,264</td>
<td>33%</td>
</tr>
<tr>
<td>Concord</td>
<td>122,067</td>
<td>10%</td>
</tr>
<tr>
<td>Richmond</td>
<td>103,701</td>
<td>21%</td>
</tr>
<tr>
<td>San Pablo</td>
<td>29,139</td>
<td>16%</td>
</tr>
<tr>
<td>Contra Costa</td>
<td>1,049,025</td>
<td>31%</td>
</tr>
</tbody>
</table>

U.S. Census Bureau, 1990 and 2010 Decennial Census.
Population 65+ years of age, Contra Costa 1990-2020

Source: Census.missouri.edu

*Polynomial projection
### Leading causes of deaths for persons 65 years of age and older

<table>
<thead>
<tr>
<th>White</th>
<th>Black</th>
<th>American Indian</th>
<th>Asian or Pacific Islander</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Heart Disease</td>
<td>Heart Disease</td>
<td>Heart Disease</td>
<td>Heart Disease</td>
<td>Heart Disease</td>
</tr>
<tr>
<td>2. Cancer</td>
<td>Cancer</td>
<td>Cancer</td>
<td>Cancer</td>
<td>Cancer</td>
</tr>
<tr>
<td>3. Stroke</td>
<td>Stroke</td>
<td>Diabetes</td>
<td>Stroke</td>
<td>Stroke</td>
</tr>
<tr>
<td>4. COPD</td>
<td>Diabetes</td>
<td>Stroke</td>
<td>Pneu/Influenza</td>
<td>COPD</td>
</tr>
<tr>
<td>5. Pneu/Influenza</td>
<td>Pneu/Influenza</td>
<td>COPD</td>
<td>Pneu/Influenza</td>
<td>Pneu/Influenza</td>
</tr>
</tbody>
</table>

Leading Causes of Death in Contra Costa – All Ages

- Heart Disease: 80
- Cancer (Not Lung): 71
- Stroke: 24
- Lung Cancer: 22
- Chronic Lower Respiratory: 21
- Alzheimers: 18
- Unintentional Injury: 15
- Diabetes: 10
- Influenza & Pneumonia: 7
- Suicide: 7
- Hypertension: 6
- Chronic Liver & Cirrosis: 6
- Homicide: 5

Average Annual Age Adjusted Rates per 100,000, 2009-2011
Age-adjusted Asthma Emergency Department Visit Rates Among Adults by Zip Code, 2014

Source: California Environmental Health Tracking Program [http://www.cehtp.org/page/asthma/query]; Office of Statewide Health Planning and Development
Age-adjusted Asthma Emergency Department Visit Rates Among **Children** by Zip Code, 2014

Source: California Environmental Health Tracking Program [http://www.cehtp.org/page/asthma/query](http://www.cehtp.org/page/asthma/query); Office of Statewide Health Planning and Development
Contra Costa County Asthma ED Visits per 10,000 Residents by Age Compared to California and HP2020 Targets, 2014

Source: California Healthy Breathing; Office of Statewide Health Planning and Development
Let's look at some **Social**, **Economic** and **Environmental** determinants of Health
Income, Race & Age effect Health

- Individuals with a lower income tend to have poorer health.
- Health needs jump dramatically as we age.
- Place Matters – Your Zip Code
- Race/Ethnicity matters.
Change in Poverty in Contra Costa

Federal Poverty Line is ~ $11k for single person and $23k for family of four

Source: US Census Bureau
Poverty

Percent of population living at or below 100% Federal Poverty Rate 2012-2016

San Pablo: 21.0%
Richmond: 16.6%
Pittsburg: 15.4%
Concord: 12.2%
Bay Point: 22.2%
Antioch: 14.5%

2012-2016 American Community Survey
Life Expectancy by Race Ethnicity for Contra Costa County, 2009-2011 :: “Race/Ethnicity Matters”

- **Asian**: 86 years
- **Hispanic**: 84 years
- **All**: 81 years
- **White**: 81 years
- **African American**: 74 years
California Life Expectancy vs. Poverty :: “Income Matters”

Life Expectancy at Birth

Neighborhood Poverty Rate

- <5.0%
- 5.0-9.9%
- 10.0-19.9%
- 20.0-29.9%
- 30.0-39.9%
- 40.0+

Asian
Hispanic
All Races
White
AfrAmer

87.4
84.6
83.5
82.8
82.8
82.3
78.6
77.5
71.8
71.5

80
85
90
65
70
75
80
85
90

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th></th>
<th>Females</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>County Rate</td>
<td>State Rate</td>
<td>County Rate</td>
<td>State Rate</td>
</tr>
<tr>
<td>Prostate</td>
<td>160.3'</td>
<td>143.3</td>
<td>Breast</td>
<td>136.1'</td>
</tr>
<tr>
<td>Lung &amp; Bronchus</td>
<td>58.5</td>
<td>62.0</td>
<td>Lung &amp; Bronchus</td>
<td>50.4'</td>
</tr>
<tr>
<td>Colon &amp; Rectum</td>
<td>52.9</td>
<td>50.3</td>
<td>Colon &amp; Rectum</td>
<td>41.2'</td>
</tr>
<tr>
<td>Bladder</td>
<td>37.4'</td>
<td>33.6</td>
<td>Uterus</td>
<td>23.0</td>
</tr>
<tr>
<td>Melanoma</td>
<td>27.6</td>
<td>26.2</td>
<td>Melanoma</td>
<td>16.5</td>
</tr>
<tr>
<td>All Sites</td>
<td>513.2'</td>
<td>494.5</td>
<td>All Sites</td>
<td>407.6'</td>
</tr>
</tbody>
</table>

Rates are shown as the number of new cases or deaths per 100,000 persons. All rates are age-adjusted to the 2000 United States Standard Population.

*County rate is statistically significantly different from the Statewide rate (p<0.05).
Cancer Incidence Rates for Contra Costa County, By Race and Gender

Age Adjusted Rates of All Cancers by gender and race/ethnicity, Contra Costa County

![Bar chart showing age-adjusted rates of all cancers by gender and race/ethnicity for Contra Costa County. The chart compares rates per 100,000 for Males and Females across different races: All Races, White, Black, Hispanic, and Asian.](chart_image)
Chronic Diseases Mortality Rates

*Significantly higher rate than the county overall. Rates per 100,000 people. Rates of death attributed to chronic diseases in selected Contra Costa communities 2005-2007 (Contra Costa Community Indicators Report 2010).
Incidence of heart attack or fatal coronary heart disease by age, sex, and race

Per 1,000 Persons

Age (Years)

35-44
45-54
55-64
65-74
75-84

White Men
Black Men
White Women
Black Women


Mozaffarian D et al. Circulation. 2015;131:e29-e32
Obesity is a Public Health Crisis – “It’s an Epidemic”

Nation-wide obesity rates have increased over the years.

Source: CDC Behavioral Risk Factor Surveillance System.
Adult Obesity Rate by State, 2014

Percent of obese adults (Body Mass Index of 30+)

- 0 - 9.9%
- 10 - 14.9%
- 15 - 19.9%
- 20 - 24.9%
- 25 - 29.9%
- 30 - 34.9%
- 35%+

Robert Wood Johnson Foundation and Trust for America’s Health
A look at Obesity among 65+

• Percent of noninstitutionalized persons with obesity (2011-2014)
  – Men age 65-74: 36.2%
  – Men age 75 and over: 26.8%
  – Women age 65-74: 40.7%
  – Women age 75 and over: 30.5%

CDC 2015
Diabetes prevalence in Bay Area by poverty

Diagnosed with diabetes

- 0-299% FPL: 10%
- 300% FPL and above: 5%
- All: 7%

Source: 2011-2012 California Health Interview Survey
Current smoking prevalence

Current Smoker

14.7% Contra Costa Adult
2.6% CA Teen

Source: 2014 California Health Interview Survey
Smoking Trends

Current Smoker, Bay Area

Source: California Health Interview Survey
Growth in Total Health Expenditures per Capita, US and Selected Countries, 2008
Does our investment strategy match the drivers of health?

Factors Influencing Health:
- Health Behavior 50%
- Environment 20%
- Genetics 20%
- Access to Care 10%

Medical Services 96%

Prevention 4%

National Health Expenditure $2.2 Trillion

JAMA. 1993 Nov 10;270(18):2207-12.
What Surrounds Us - Shapes Us

• It is the “accumulated” influence of these conditions that shape our health behaviors.

• It is not enough to simply say, “It’s about personal effort and choice”.

• That logic is insufficient to explain the epidemic.
Public & Organizational Policy are tools

Policy yields big impact!

- Smoking & Tobacco Laws
- Helmet laws
- Immunizations
- Water fluoridation
- Reducing trans-fats in food
- Speed limits
- Air quality regulations

And yet French fries are still considered a “vegetable” on our children's school lunch menu's.