

## HEALTHY COMMUNITIES DATA AND INDICATORS PROJECT

**Short Title:** Unemployment Rate

**Full Title:** Unemployment rate: percent of the population in the labor force who are unemployed

1. **Healthy Community Framework:** Economic and social development
2. **What is our aspirational goal:** Living wage, safe and healthy job opportunities for all
3. **Why is this important to health?**

### Description of significance and health connection

Unemployment is associated with higher rates of self-reported poor health, long-term illnesses, higher incidence of risky health behaviors (alcoholism, smoking), and increased mortality. These negative health outcomes affect not only the unemployed persons but can extend to their families. Longer unemployment can be associated with higher odds of negative health effects. Various explanations have been proposed for the link between poor health and unemployment; for example, economic deprivation that results in reduced access to essential goods and services. Another explanation is that unemployment causes the loss of latent functions (social contact, social status, time structure and personal identity) which can result in stigma, isolation and loss of self-worth. In present times, the safety net available to the unemployed is weaker than in the past due to the deterioration of employment rights, decrease in social support and welfare systems.

The population in the labor force is the civilian non-institutionalized population 16 years and over who have jobs or are actively looking for jobs. Persons in the labor force are classified as unemployed if they do not have a job, are currently available for work and have actively looked for work in the previous month (for instance, attending interviews, sending out resumes, or filling out applications). People that do not have a job and are not looking for one are considered not to be in the labor force. Women, youth (16-24 years of age), the least educated, and ethnic minorities are more likely to be unemployed.

### Summary of evidence

Aggregate level studies (countries) found a positive association between higher unemployment and overall mortality and death due to cardiovascular disease and suicide; however a negative relationship was detected with deaths due to motor-vehicle accidents. Individual level longitudinal studies showed that the unemployed had higher rates of poor physical health, suicides, mental health problems (depression, stress, anxiety), and greater use of health care services. Other studies found reduced access to health care services and higher likelihood to delay looking for care among the unemployed.

### Key References

- Bambra C, Eikemo TA. Welfare state regimes, unemployment and health: a comparative study of the relationship between unemployment and self-reported health in 23 European countries. *J Epidemiol Community Health* 2009; 63: 92–98.
- Janlert U, Hammarström A. Which theory is best? Explanatory models of the relationship between unemployment and health. *BMC Public Health* 2009; 9:235.
- Bambra C. Yesterday once more? Unemployment and health in the 21st century. *J Epidemiol Community Health* 2010; 64:213e215.
- Bureau of Labor Statistics, Labor Force Statistics from the Current Population Survey, [http://www.bls.gov/cps/cps\\_htgm.htm#concepts](http://www.bls.gov/cps/cps_htgm.htm#concepts), Accessed June 2<sup>nd</sup>, 2014

- Employment Conditions Knowledge Network (EMCONET). [Employment Conditions and Health Inequalities](#). 2007. Accessed June 2<sup>nd</sup>, 2014.
- Jin R, Chandrakant PS, Tomislav JS. The impact of unemployment on health: a review of the evidence. *Can Med Assoc J* 1995; 153(5): 529-540.
- Mossakowski K. The influence of past unemployment duration on symptoms of depression among young women and men in the United States. *A J Public Health* 2009; 99(10): 1826-1832.
- Pharr JR, Moonie S, Bungum T. The impact of unemployment on mental and physical health, access to health care and health risk behaviors. *ISRN Public Health* 2012; doi:10.5402/2012/483432.

#### 4. What is the indicator?

##### Detailed Definition:

$$\text{Unemployment rate} = \frac{\text{Unemployed population}}{\text{Population in the labor force}} * 100$$

Stratification: Race/ethnicity (8 categories)

##### Data Description

- Data sources: Local Area Unemployment Statistics (LAUS), Bureau of Labor Statistics (BLS), (<http://www.bls.gov/lau/home.htm>). U.S. Census Bureau, American Community Survey (ACS), 2006-2010 (<http://factfinder2.census.gov>).
- Years available: 2004 to 2013, 2006-2010 (5 year estimate)
- Updated: annually
- Geographies available: census tracts, cities/towns, counties, county divisions, regions and state.

Annual estimates of the population in the labor force (denominator), unemployed population (numerator), and unemployment rate were downloaded for cities and towns (population 25,000 or above), counties, and the state from the LAUS database. Five year estimates of unemployment data (2006-2010) with race ethnicity stratification were obtained from the ACS. Standard errors were obtained for the ACS data, and relative standard errors and 95% upper and lower confidence intervals were calculated. Decile rankings of places and relative risk in relation to state average were calculated. Regions were based on counties of metropolitan transportation organizations (MPO) regions as reported in the [2010 California Regional Progress Report](#).

#### 5. Limitations

The definition of unemployment excludes people that do not have a job but are not actively looking for one and people living in group quarters. The annual unemployment estimates provided by BLS-LAUS for sub-national areas are modeled from country level data from the Current Population Survey and no standard error estimates are available. More details can be found here: <http://www.bls.gov/lau/laumthd.htm> and <http://www.bls.gov/opub/hom/homch4.htm>. The modeled unemployment data is not seasonally adjusted. Information about differences in the methods to estimate unemployment between BLS-LAUS and the ACS can be found here: <http://www.bls.gov/lau/acsqa.htm>.

#### 6. Projects using similar indicators

1. Community Indicators Victoria. Community Indicators Victoria: Data Framework. Community Indicators Victoria; 2011. [http://www.communityindicators.net.au/data\\_framework](http://www.communityindicators.net.au/data_framework)
2. Jacksonville Community Council Inc. Quality of Life Progress Report: 25th Annual Edition. Jacksonville Community Council Inc.; 2009. <http://www.icci.org/icciwebsite/documents/09%20QOL%20Summary%20Document.pdf>

7. Examples of Maps, Figures, and Tables

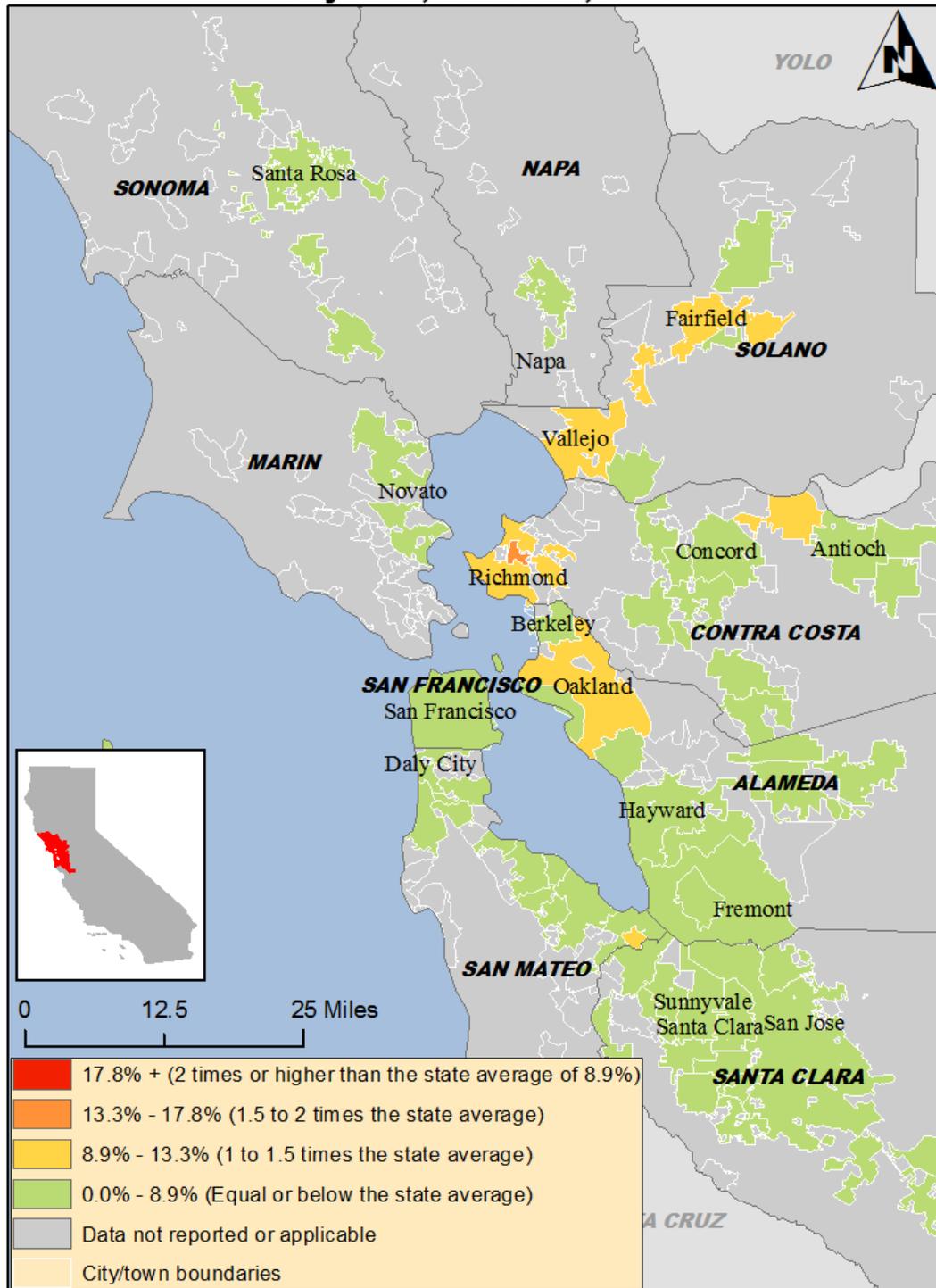
**Map 1: Unemployment Rate, Counties, California, 2013**



Source: Local Area Unemployment Statistics, Bureau of Labor Statistics.

Analysis by CDPH and UCSF

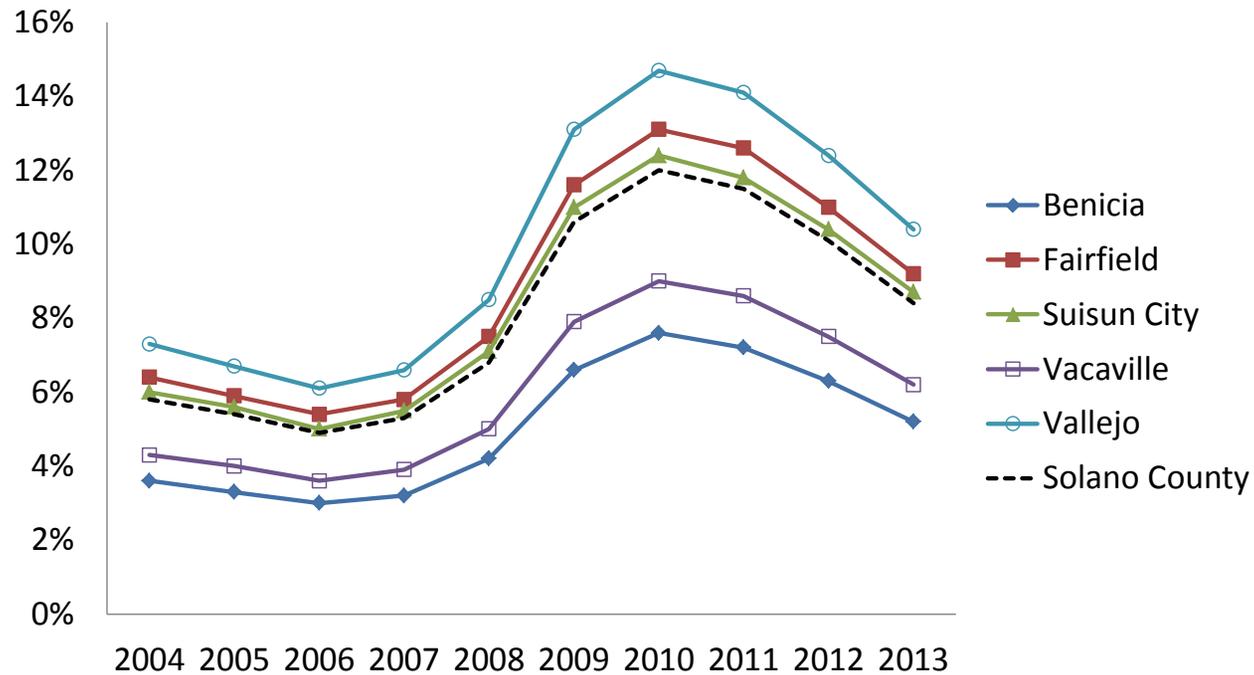
**Map 2: Unemployment Rate, Cities and Towns, Bay Area, California, 2013**



Source: Local Area Unemployment Statistics, Bureau of Labor Statistics

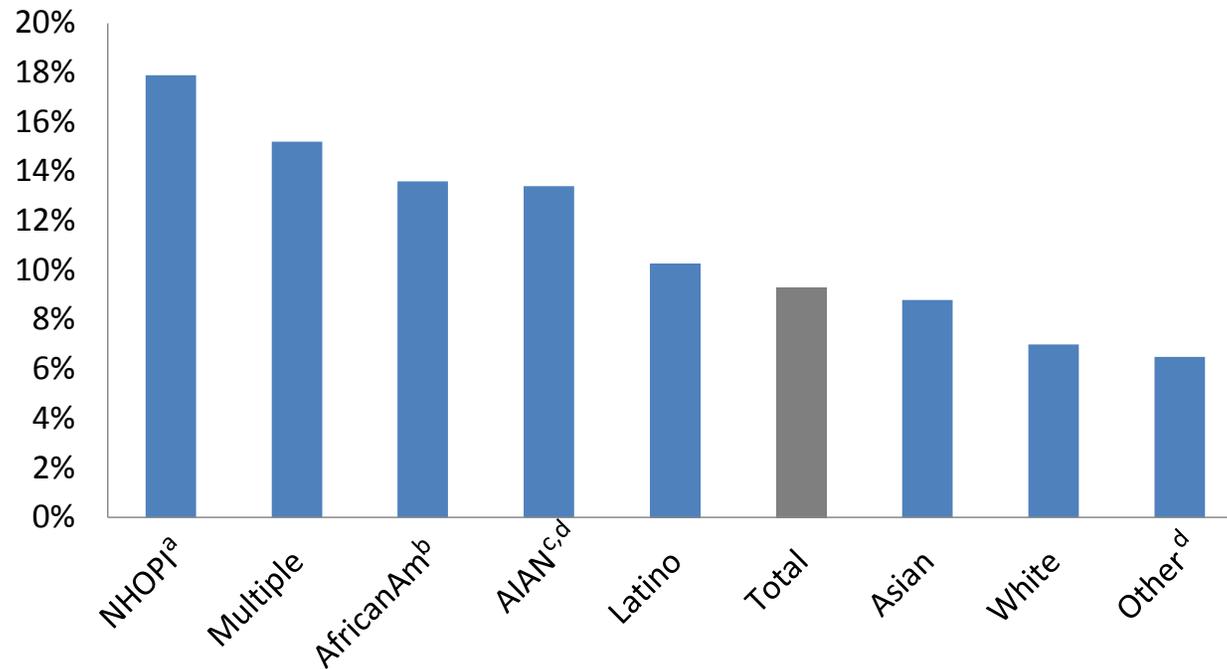
Analysis by CDPH and UCSF

## Unemployment Rate Cities, Solano County, California 2004 to 2013



Source: Local Area Unemployment Statistics , Bureau of Labor Statistics.

## Unemployment Rate by Race/Ethnicity Solano County, California, 2006-2010



Source: American Community Survey, 5 year estimates, 2006-2010. <sup>a</sup>NHOPId = Native Hawaiian other Pacific Islander; <sup>b</sup>AfricanAm= African American, <sup>c</sup>AIAN = American Indian Alaska Native. <sup>d</sup>Statistically unreliable estimate (RSE ≥ 30%)

**Table 1. Unemployment Rate: Percent of the Population in the Labor Force who are Unemployed, Cities and Towns in Contra Costa County, California, 2013.**

City/town	Labor force	Unemployment	Unemployment rate
Antioch	50,348	4,224	8.4
Brentwood	11,213	733	6.5
Concord	71,801	5,747	8
Danville	24,060	926	3.8
Lafayette	13,167	347	2.6
Martinez	22,580	1,331	5.9
Oakley	14,194	752	5.3
Pittsburg	30,957	3,664	11.8
Pleasant Hill	20,961	1,254	6
Richmond	53,875	6,519	12.1
San Pablo	14,111	2,122	15
San Ramon	29,444	887	3
Walnut Creek	35,425	1,755	5
<b>Contra Costa County</b>	<b>538,888</b>	<b>39,825</b>	<b>7.4</b>
<b>California</b>	<b>18,596,818</b>	<b>1,663,497</b>	<b>8.9</b>

Sources: Local Area Unemployment Statistics, Bureau of Labor Statistics.