

HEART DISEASE IN WOMEN

Riverside County, California

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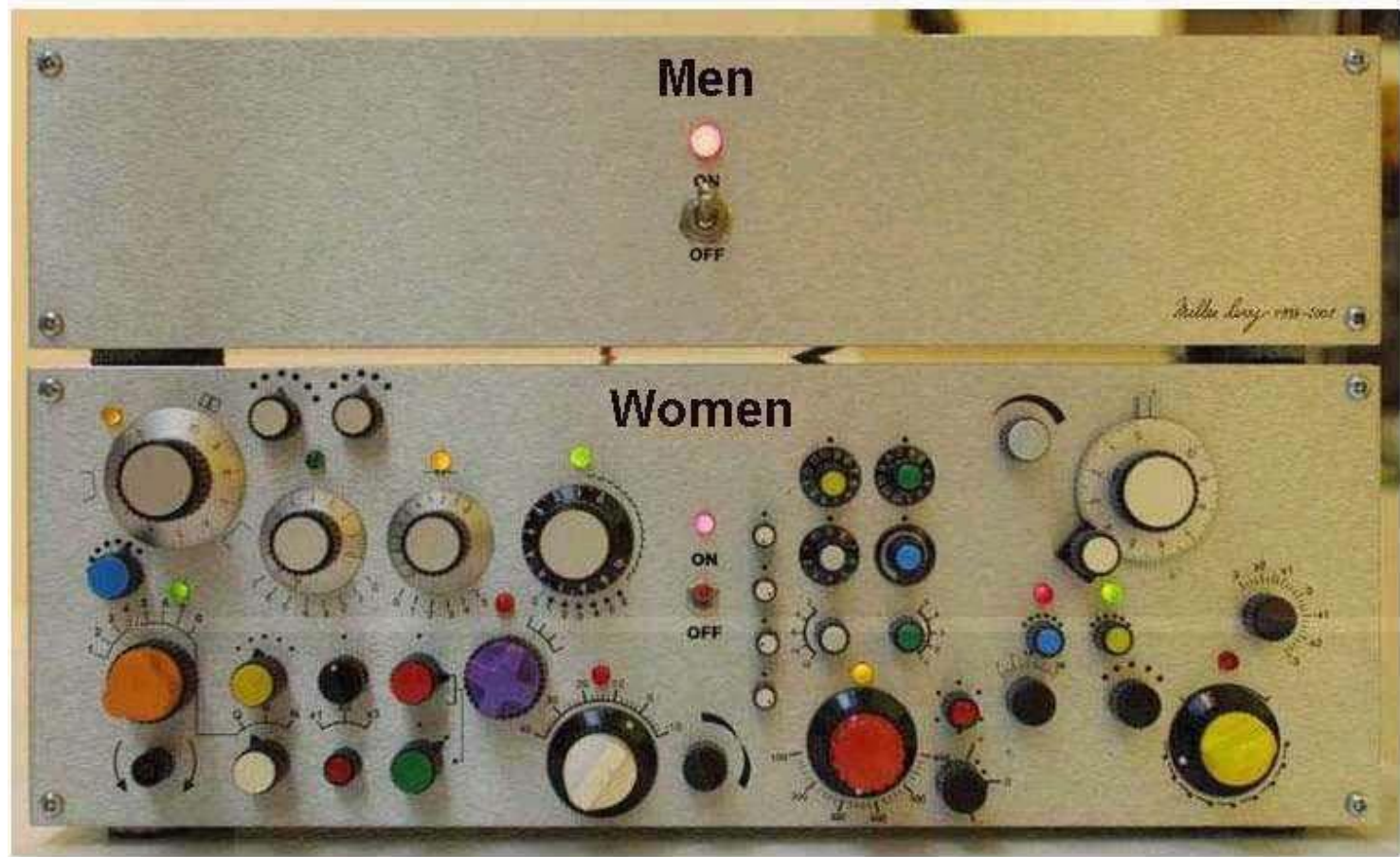
Riverside University Health System – Public Health



OVERVIEW

- ▶ Heart Disease is the leading cause of death for women in the United States, killing approximately 1 in 4 women.
 - ▶ However, only half (54%) of women recognize that heart disease is their number one killer
- ▶ Almost two-thirds (64%) of women who die suddenly of coronary heart disease had no previous symptoms.
- ▶ Even if women have no symptoms, they may still be at risk for heart disease.
- ▶ Heart Disease is the leading cause of death for Black and White women in the United States. Among Hispanic women, heart disease and cancer cause roughly the same number of deaths each year. For American Indian and Asian/Pacific Islander women, heart disease is second to only cancer.

WHAT'S DIFFERENT ABOUT WOMEN?



DEFINITIONS








The term “heart disease” refers to several types of heart conditions. The most common type of heart disease in the United States is coronary heart disease, which affects the blood flow to the heart. Decreased blood flow can cause a heart attack.

In this presentation:

Major cardiovascular disease includes: (as defined by CDC)

- ▶ Diseases of heart
 - ▶ Essential hypertension and hypertensive renal disease
 - ▶ Cerebrovascular diseases
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- ▶ Mortality Data: California Department of Public Health, VRBIS (Virtual Business Intelligence System)
 - ▶ Hospitalization Data: Office of Statewide Health Planning and Development (OSHPD), Patient Discharge Data

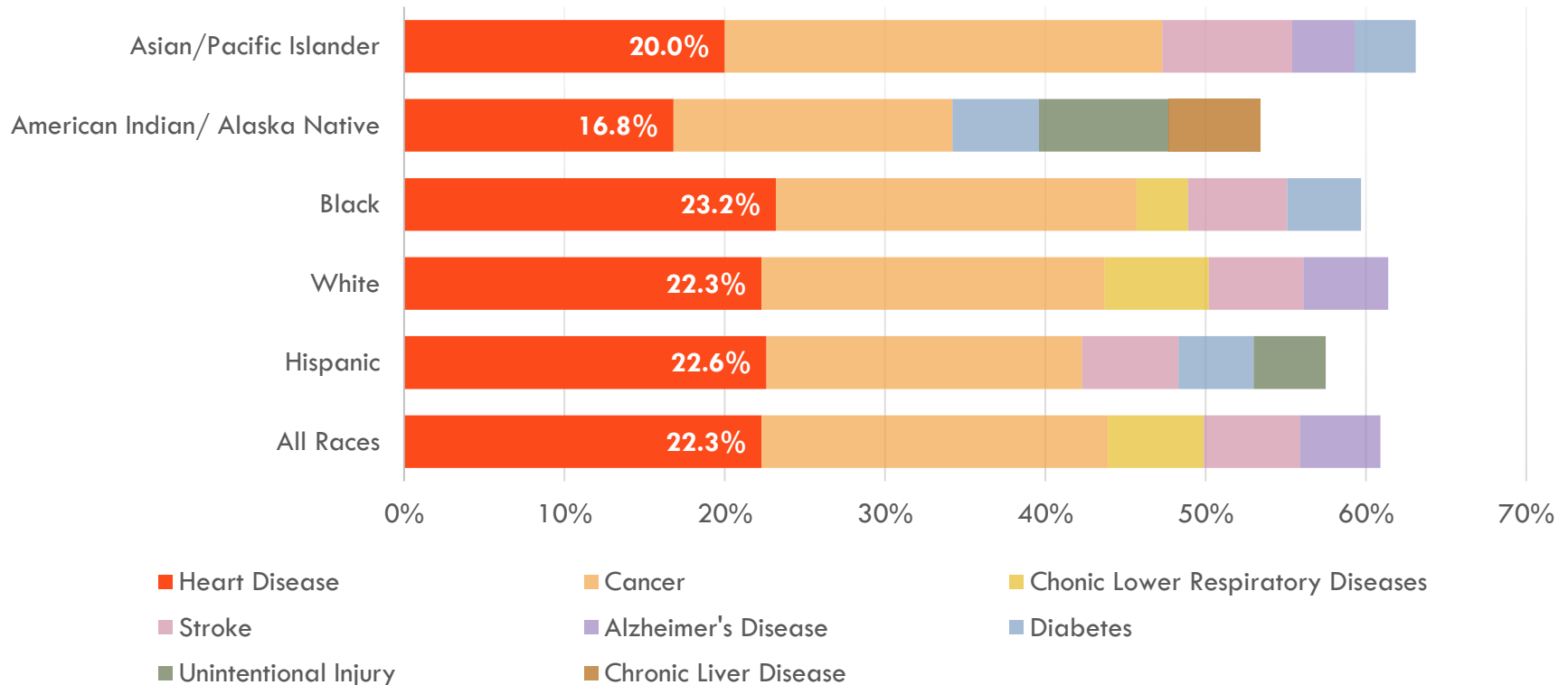
RIVERSIDE COUNTY — RISK FACTORS

	Riverside County	California	National	Indicator
High Blood Pressure	33.8%	28.8%	30.9%	
Diabetes	9.0%	9.4%	9.9%	
Smoking	11.9%	12.4%	17.5%	
Overweight/Obese	67.5%	62.6%	65.3%	
Physically Inactive (Adults who are Sedentary)	20.0%	17.4%	N/A	
Unhealthy Diet (Adult Fast Food Consumption in last week)	74.7%	64.2%	N/A	
Death Rate due to Coronary Heart Disease	113.9 (deaths per 100,000 population)	96.6 (deaths per 100,000 population)	102.2 (deaths per 100,000 population)	

HEART DISEASE RELATED DEATH DATA

LEADING CAUSES OF DEATH IN WOMEN

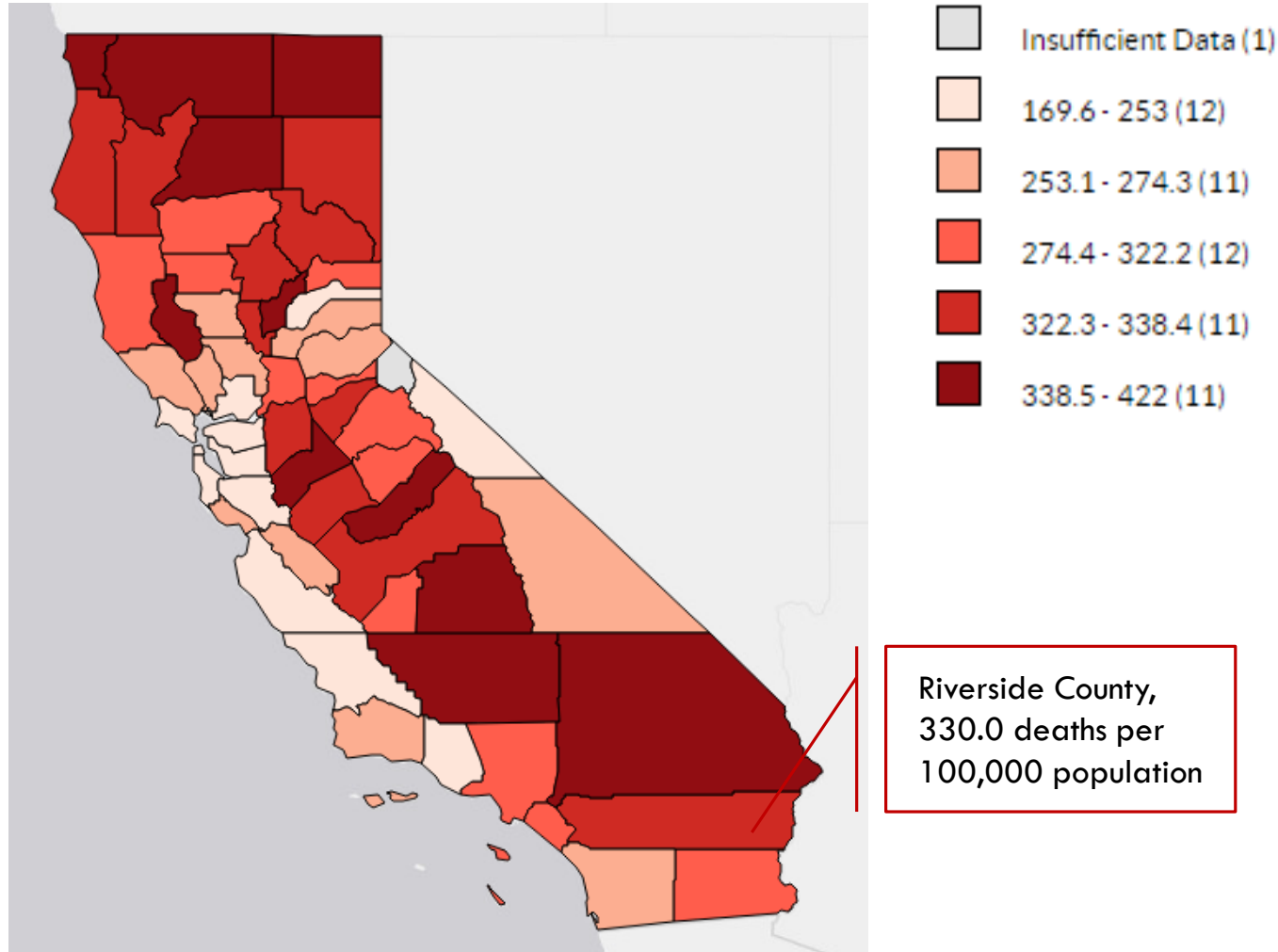
Leading Causes of Death Among Women in the U.S. by Race, 2014



- ▶ Heart Disease is among the top five leading causes of death among women of all race/ethnicities. For White and Black women, it is the number one leading cause of death.

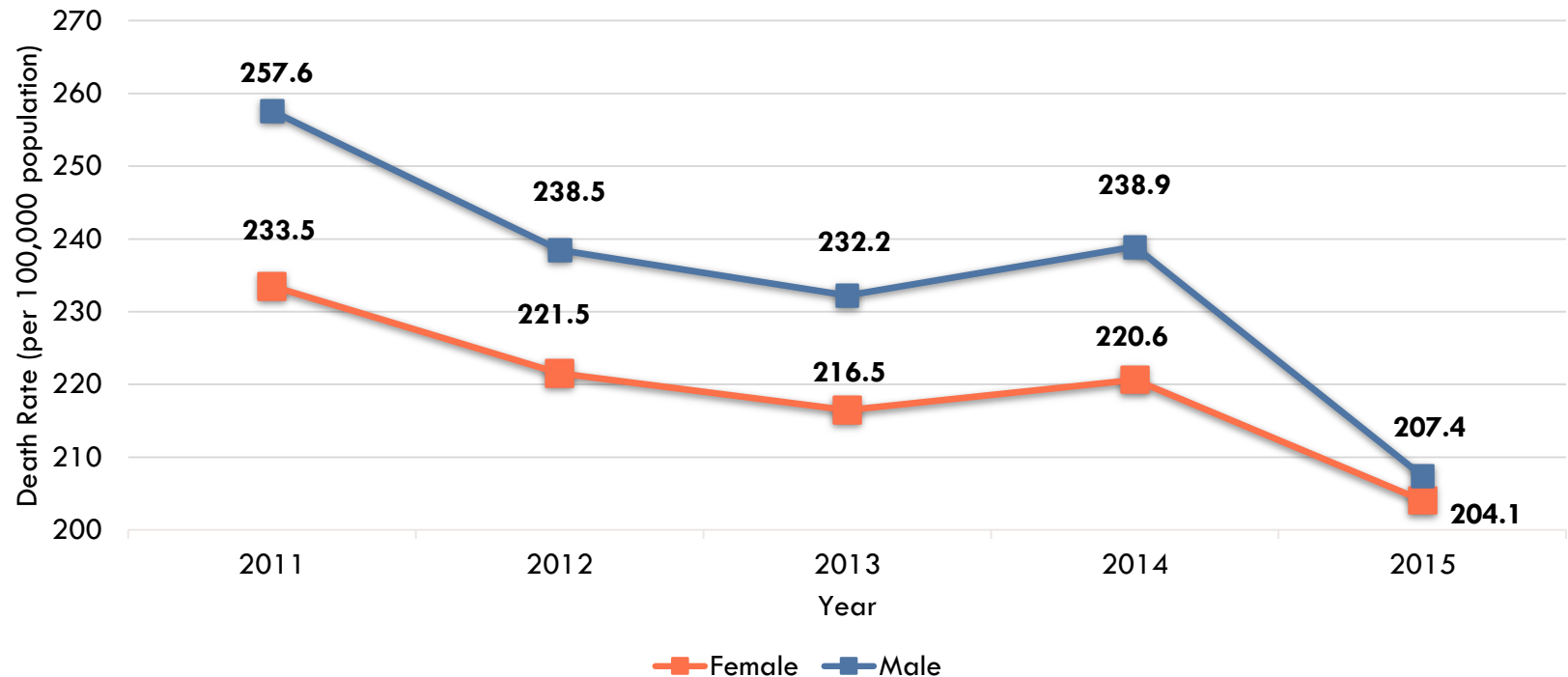
HEART DISEASE DEATH RATE BY COUNTY

Heart Disease Death Rate by County, California, 2014



HEART DISEASE DEATH RATE BY SEX

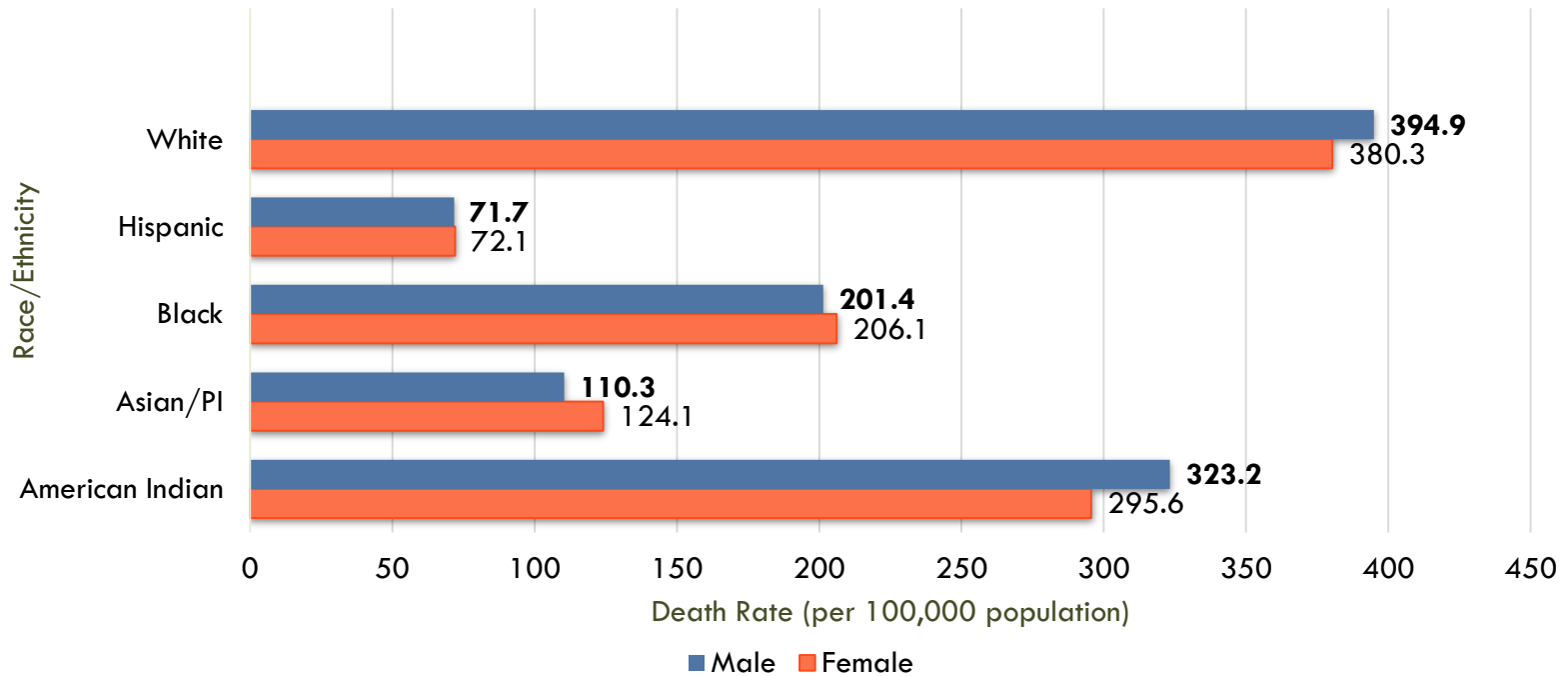
Heart Disease Death Rate by Sex, Riverside County, 2011-2015



- ▶ Heart Disease related death rate for men has dropped from 257.6 (per 100,000 population) to 207.4 (per 100,000 population), in just five years.
- ▶ For women, the death rate has dropped less, from 233.5 (per 100,000 population) to 204.1 (per 100,000 population).

RACE/ETHNICITY

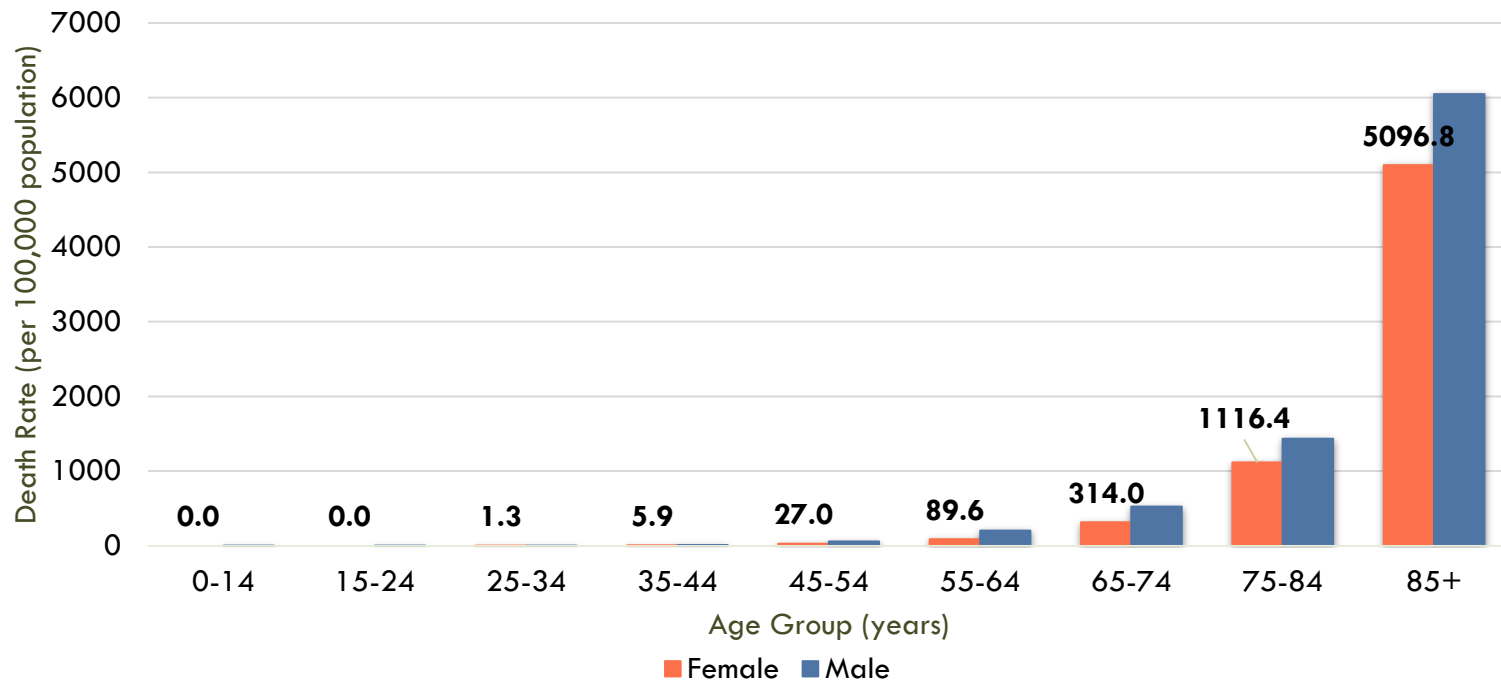
Heart Disease Death Rate by Sex and Race/Ethnicity, Riverside County, 2015



- ▶ Similar racial disparities are seen between Men and Women. Black and Asian/PI women have slightly higher death rates when compared to men.
- ▶ In general, the highest rates of heart disease related death can be seen in Whites and American Indians.
- ▶ In Riverside County, Black women have nearly 3 times the death rate when compared to Hispanic women while White women have nearly five times the rate.

AGE GROUP

Heart Disease Death Rate by Sex and Age Group, Riverside County, 2015

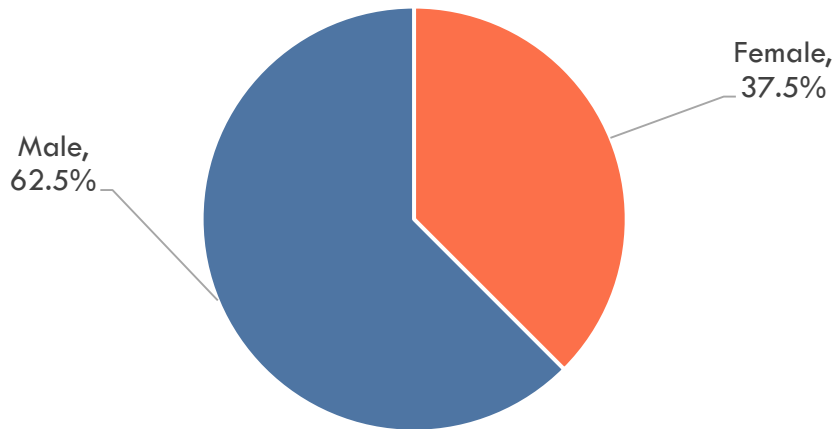


- ▶ Men have higher heart disease death rates when compared to women, across all age groups.
- ▶ In general, significantly higher death rates are seen for those over 75 years of age, for both men and women.
- ▶ Although men have higher death rates for heart disease, women in younger age groups have higher hospitalization rates.

HEART DISEASE HOSPITALIZATION DATA

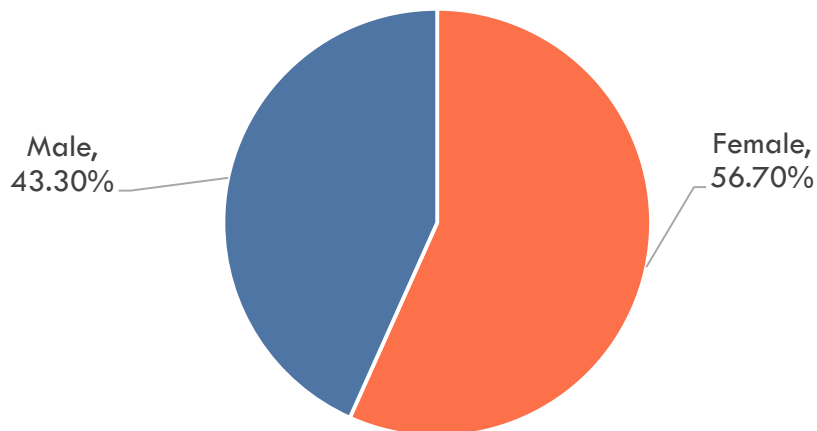
HEART DISEASE HOSPITALIZATION

Percent of Heart Attack-Related Hospitalizations by Sex,
Riverside County, 2014



- ▶ Nearly 2 in 3 (62.5%) of Heart Attack related hospitalizations were among men.

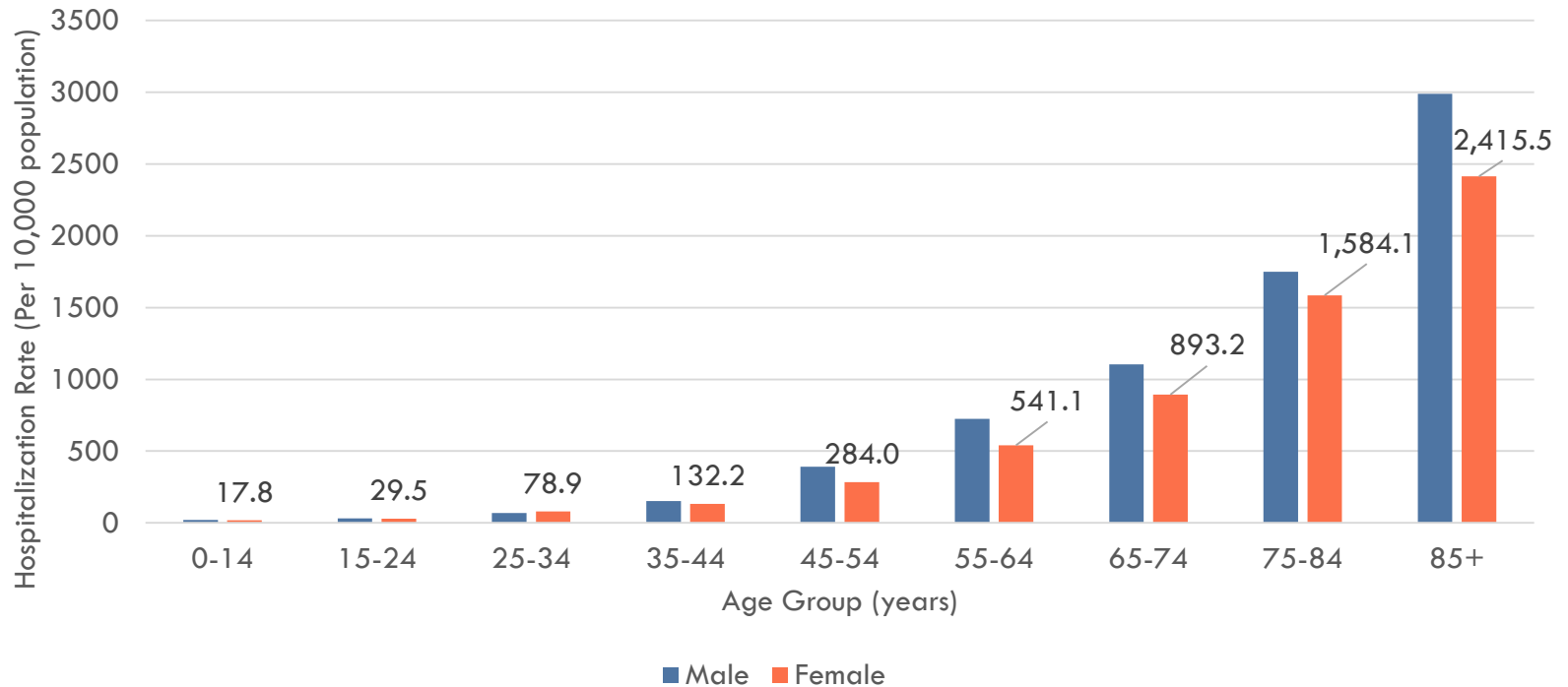
Percent of Hospitalizations by Sex, Riverside
County, 2014



- ▶ However, females were hospitalized more often than men overall.
- ▶ With a narrowing gap in heart disease related death, this could show that women are less likely to visit or recognize symptoms of heart disease.

AGE AND SEX

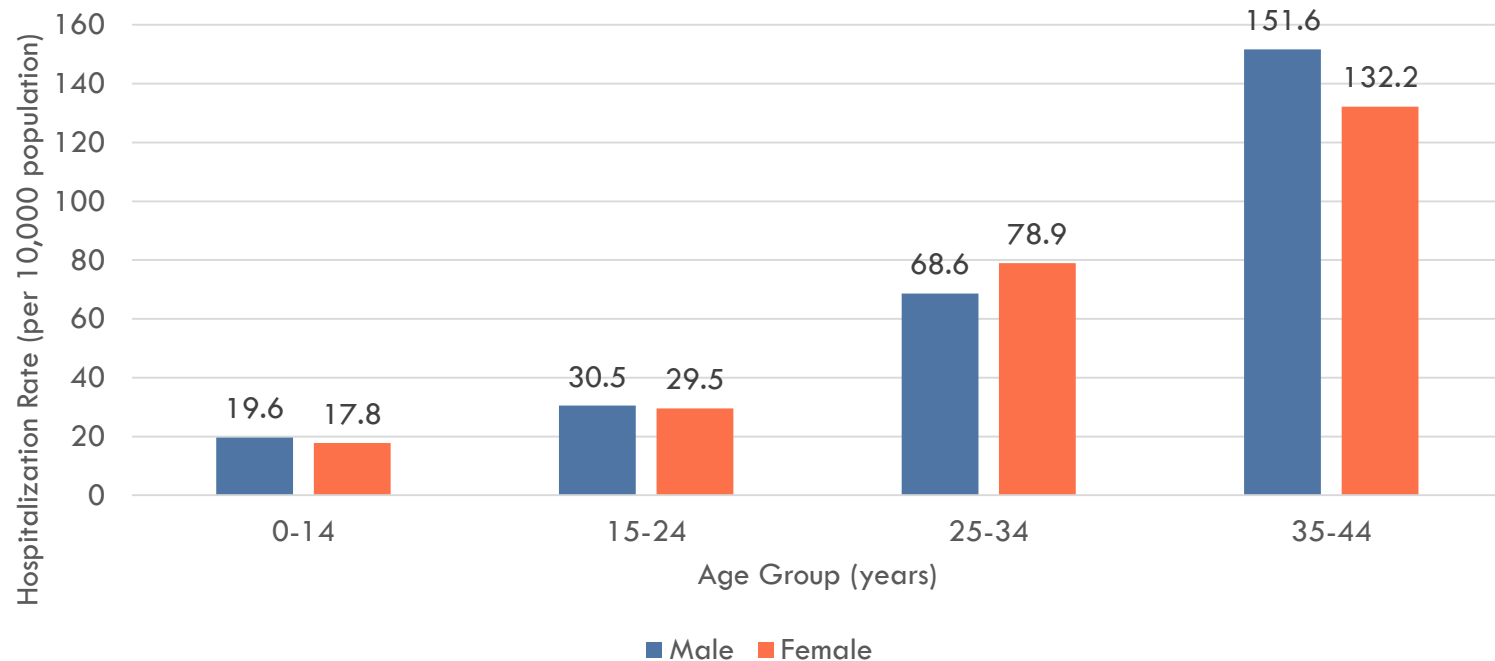
Heart Disease Hospitalization Rate by Age Group and Sex, Riverside County, 2014



- ▶ Men are more likely to be hospitalized than Women for Heart Disease related illness across most age groups.

AGE AND SEX — YOUNGER ADULTS

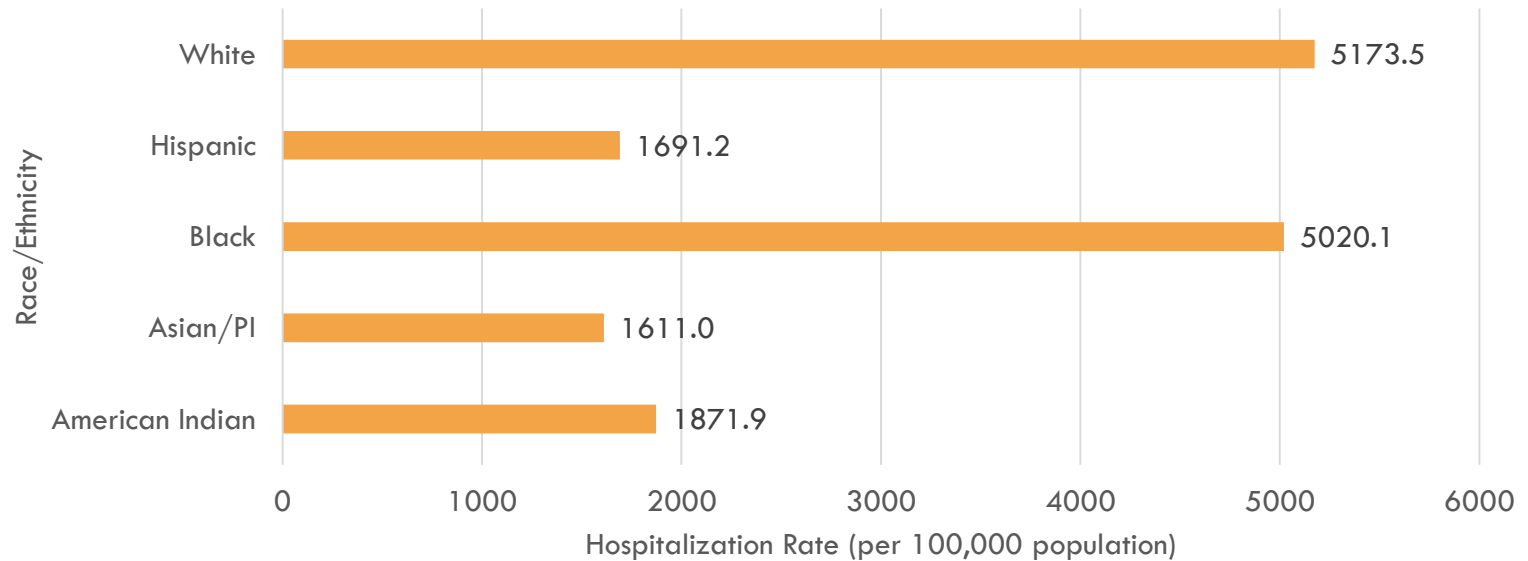
Heart Disease Hospitalization Rate for Younger Population by Sex and Age Group, Riverside County, 2014



- ▶ Men appear to have higher heart attack rates and hospitalization rates than women overall. However, when looking at younger age groups, women have a higher rate of heart disease related hospitalizations.
- ▶ About 4,000 women under the age of 35 were hospitalized in 2014 for heart disease illness.

RACE/ETHNICITY

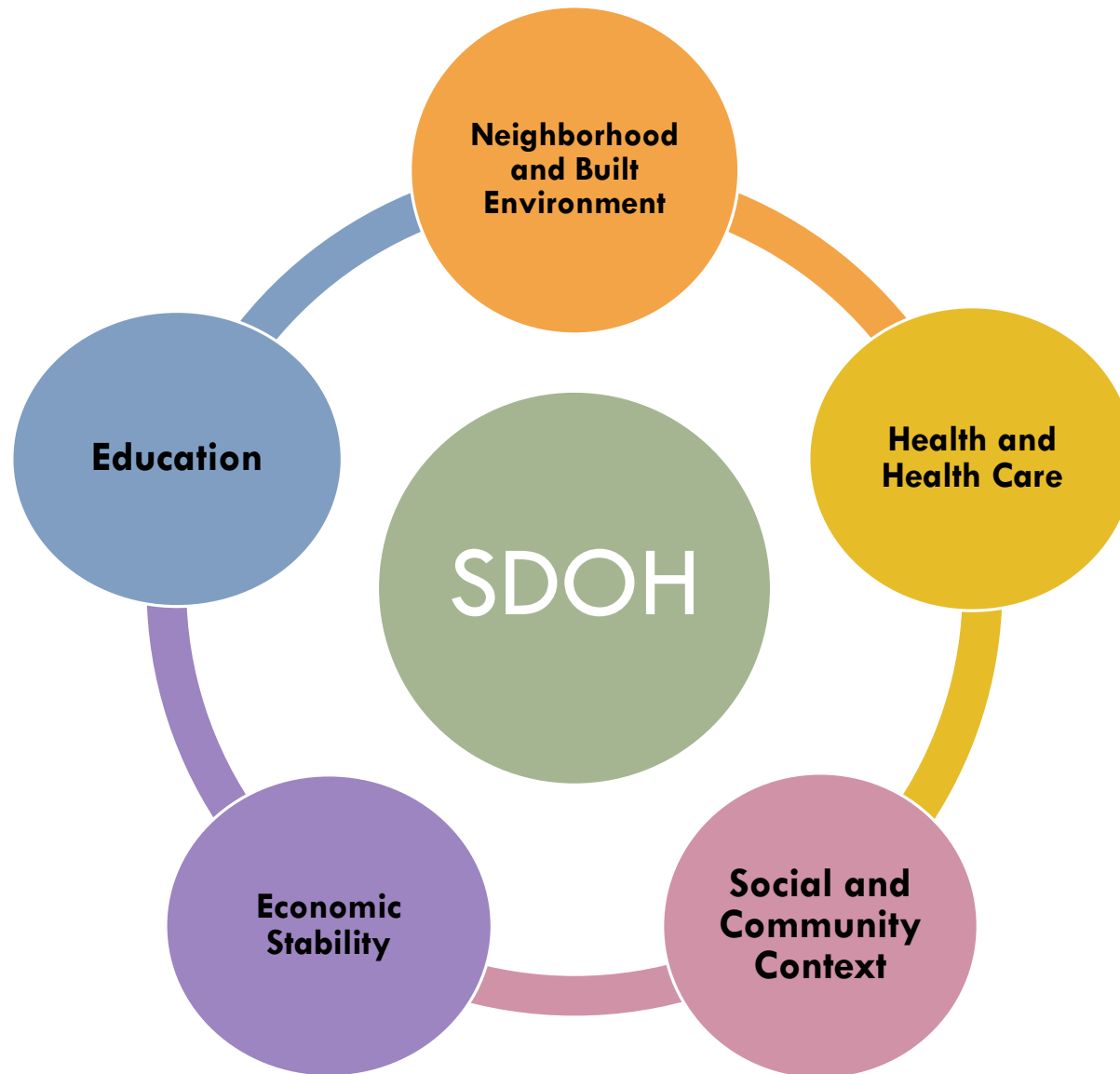
Heart Disease Hospitalizations by Race/Ethnicity Among Women, Riverside County, 2015



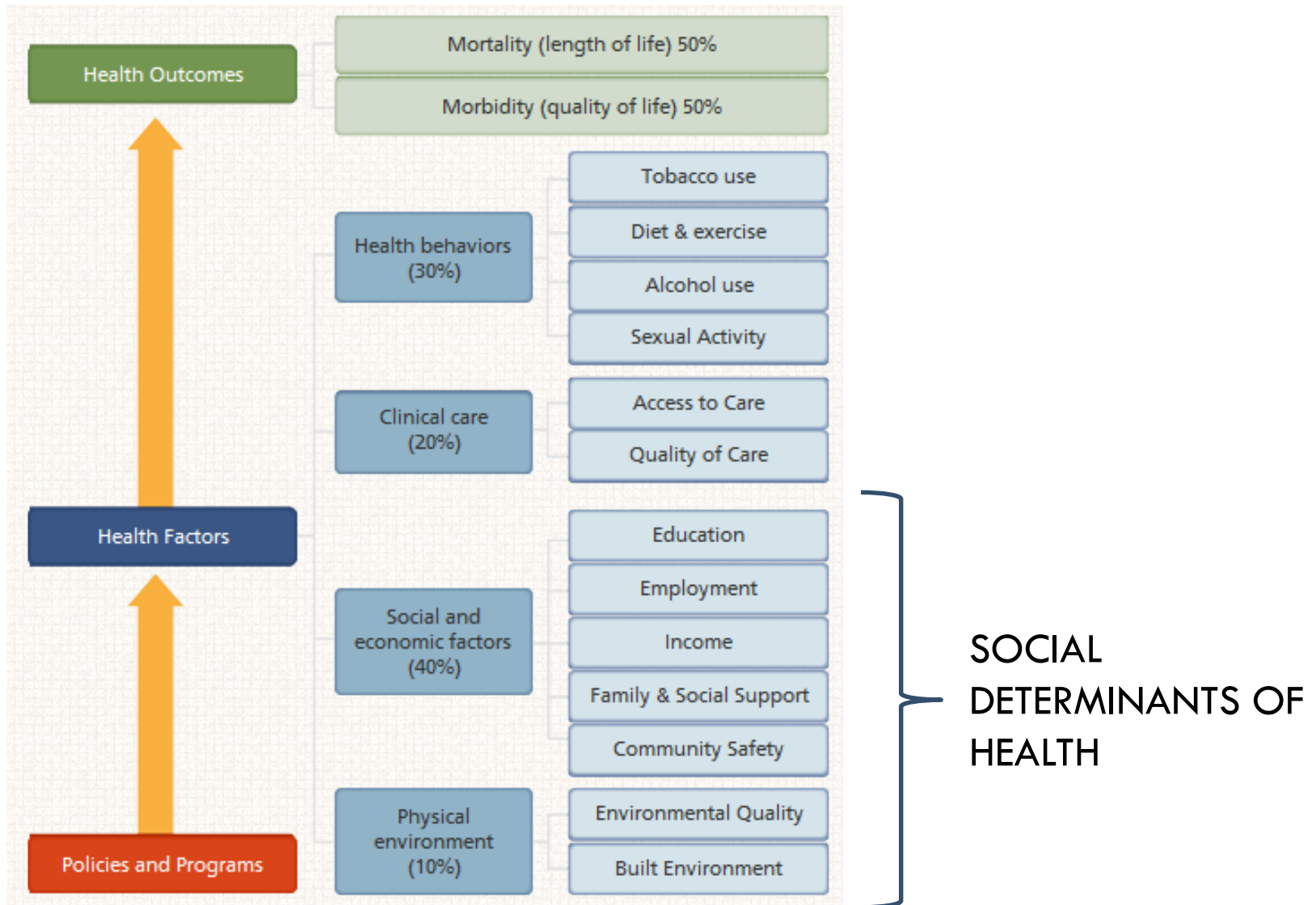
- ▶ White women and Black women are hospitalized at higher rates than other race/ethnicities.

SOCIAL DETERMINANTS OF HEALTH

SOCIAL DETERMINANTS OF HEALTH (SDOH)



SOCIAL DETERMINANTS OF HEALTH (SDOH)



TYPICAL RISK FACTORS – MEN & WOMEN

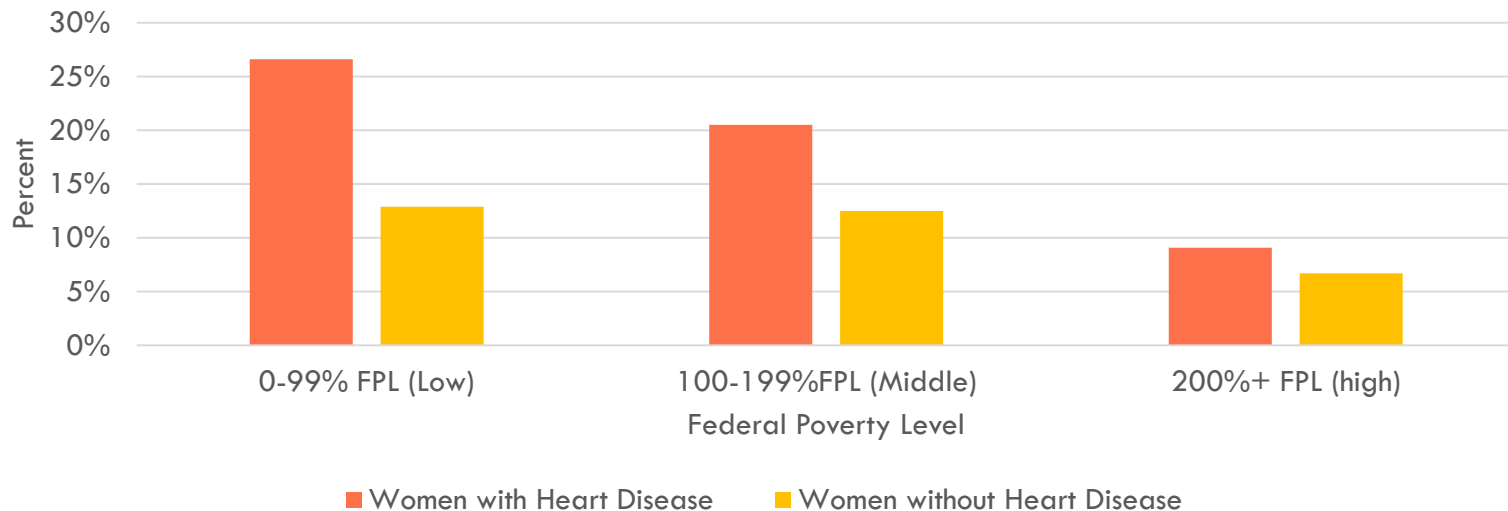
- ▶ Although several traditional risk factors for heart disease affect both men and women, other factors play a bigger role in the development of heart disease in women:

Risk Factors Affecting Men and Women	Risk Factors Affecting Women More
High Blood Pressure	Diabetes
High Cholesterol	Tobacco Use
Unhealthy Diet	Mental Stress and Depression
Physical Inactivity	Smoking
Obesity	Inactivity
Too Much Alcohol	Menopause
	Broken Heart Syndrome
	Pregnancy Complications

These Risk Factors affect both women and men. However, research has shown that they may play a bigger role in the development of heart disease in women than men.

PSYCHOLOGICAL DISTRESS

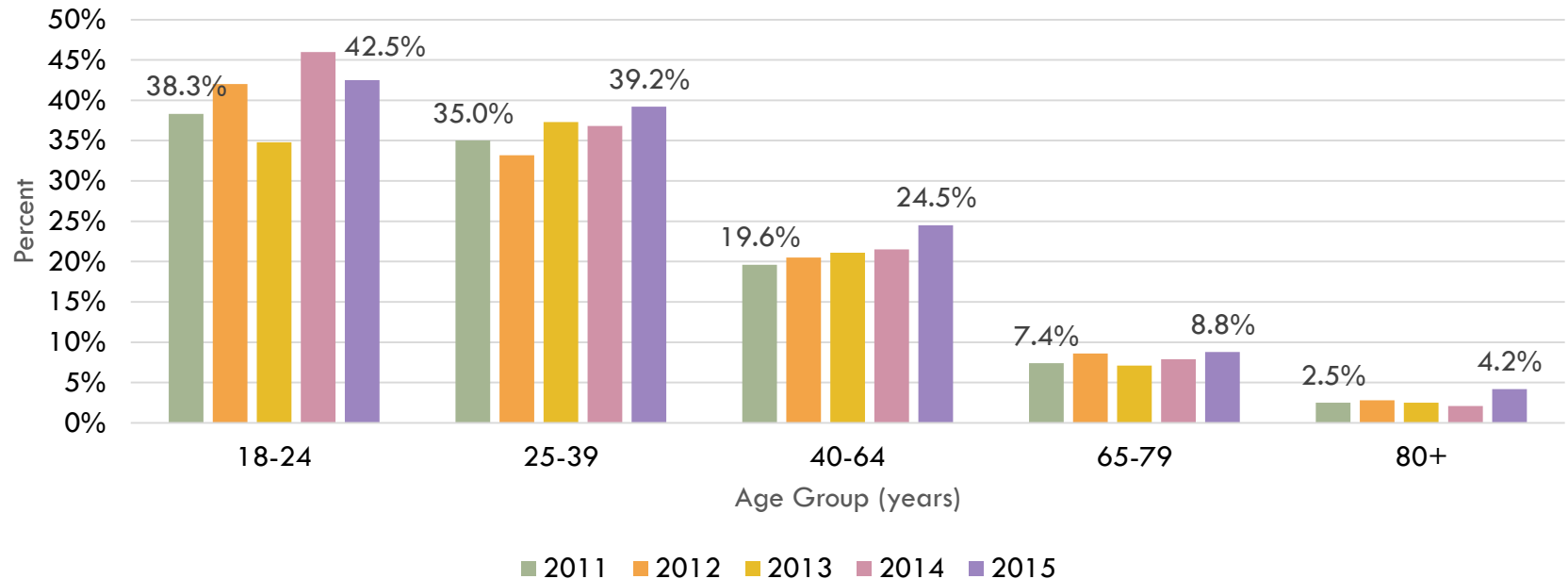
Women with Psychological Distress in Last Year by Poverty Level, California, 2014-2015



- ▶ Income indirectly effects the development of heart disease by affecting a persons ability to live a healthy lifestyle. Low income has been shown to correspond with higher levels of psychological distress.
- ▶ Stress, in turn is linked with a number of other risk factors that we know are linked to heart disease – smoking, drinking, and illicit drug use.
- ▶ As income level decreases, likelihood of having psychological distress goes up. Among those making less than FPL, percentage of people who exhibit signs of stress are 3 times higher than those making twice the FPL or higher.

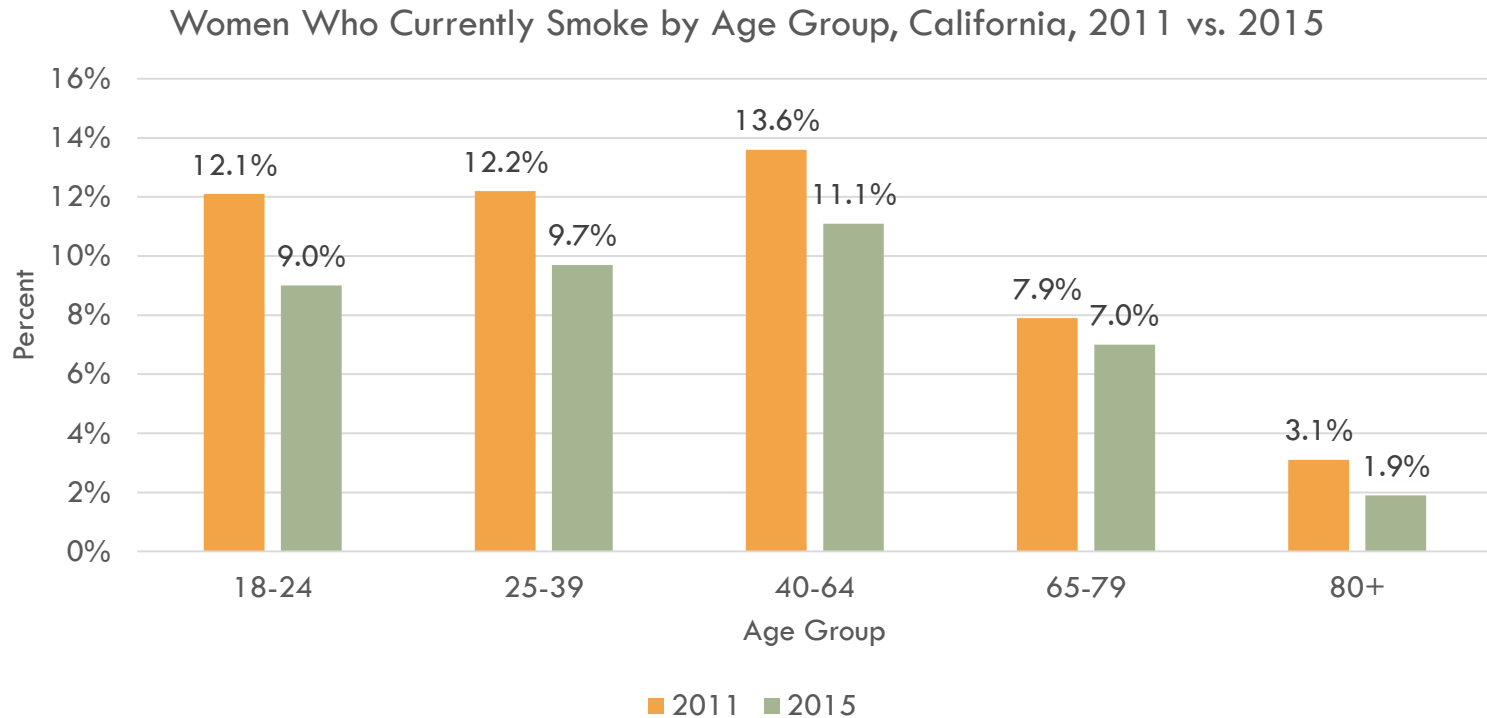
BINGE DRINKING

Adult Women who Binge Drink (in past year), California, 2011-2015



- ▶ In the past five years, binge drinking for women has increased in nearly all age groups.
- ▶ Alcohol has been shown to increase blood pressure and blood triglycerides which can lead to atherosclerosis and other heart disease related illness.
- ▶ Among teen females, 15-17 years, about 82% have had an alcoholic drink, which is considered to be binge drinking for that age group.

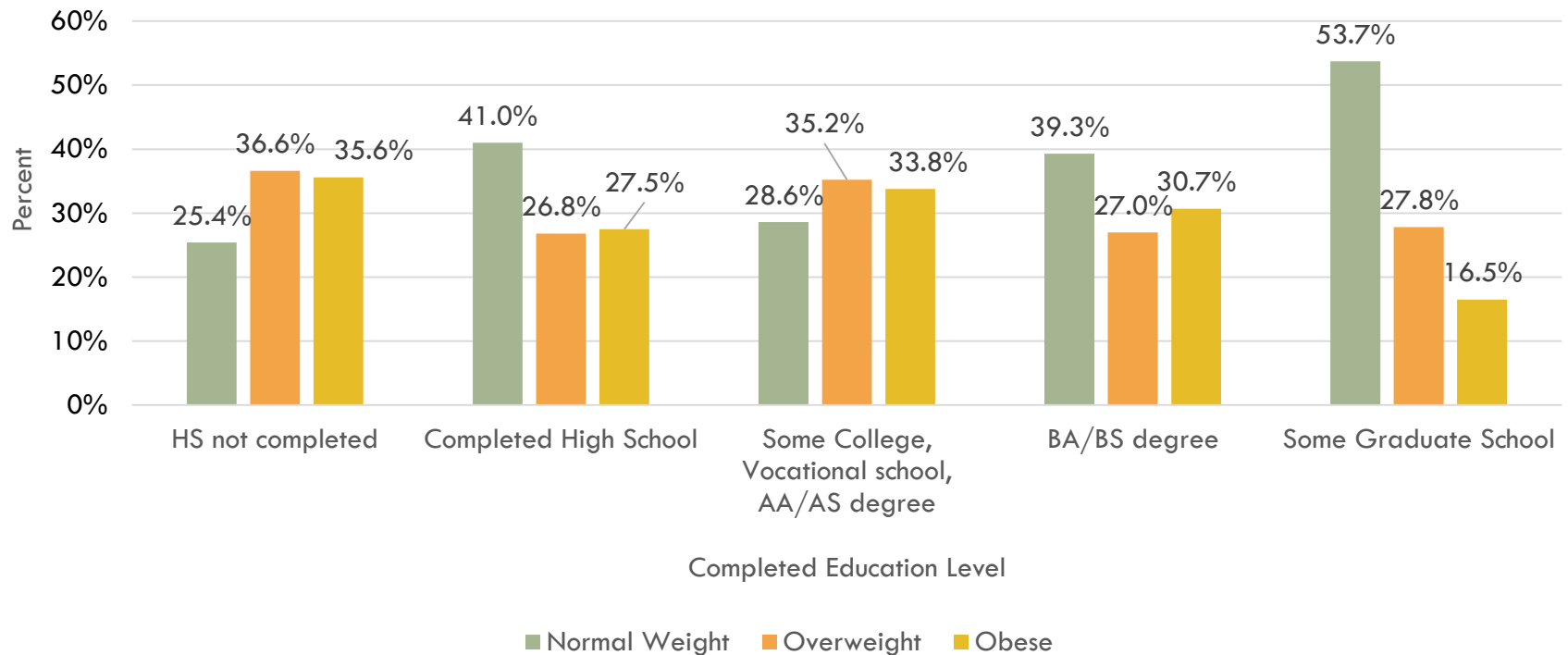
SMOKING



- ▶ Among all age groups, incidence of women who smoke has decreased. However, the highest rates of women smokers is still the 40-64 age group.
- ▶ Smoking is a increased risk factor for heart disease among women.

OBESITY/OVERWEIGHT

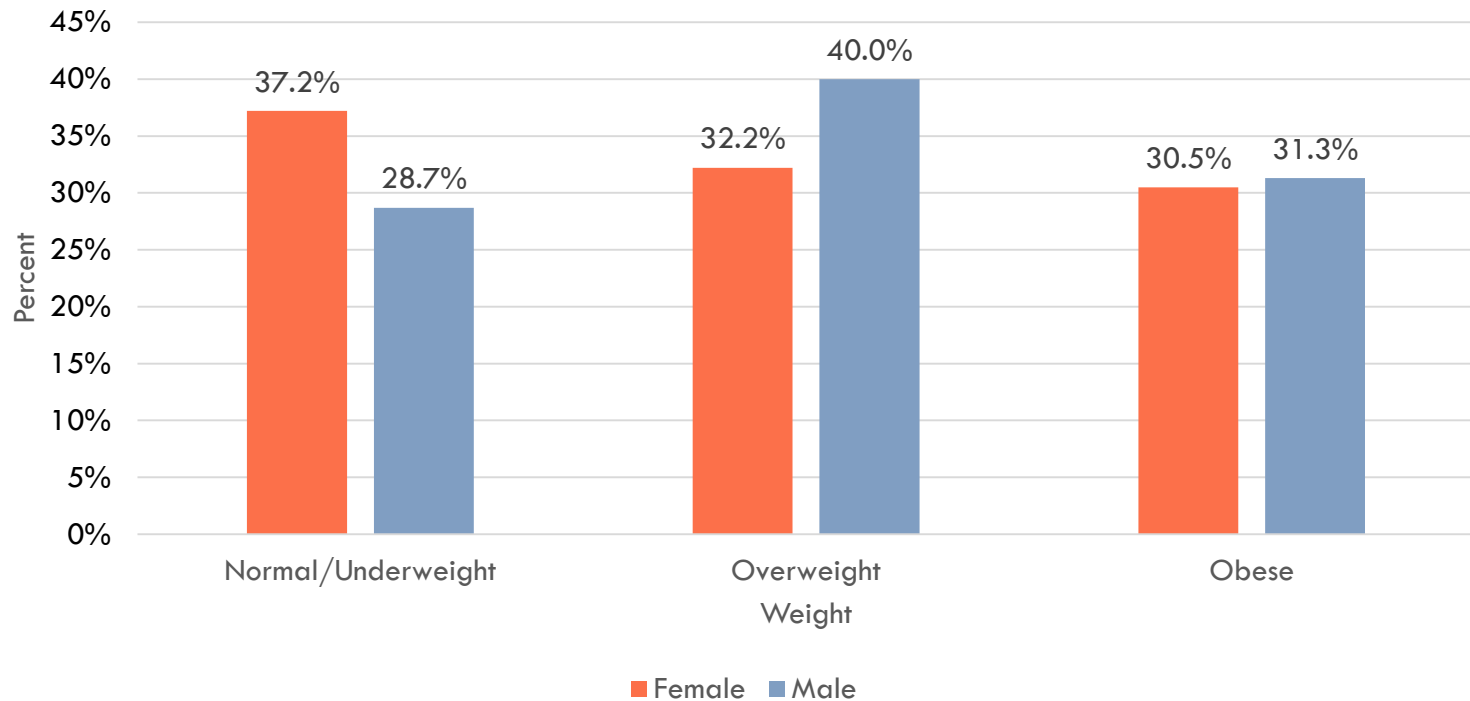
Women with Heart Disease by Weight and Level of Completed Education, California, 2014-2015



- ▶ Among those who haven't completed High School, 72.2% of women were overweight or obese.
- ▶ Compared to those who finished some level of graduate school, 44.3% of women were overweight or obese.

OBESITY/OVERWEIGHT

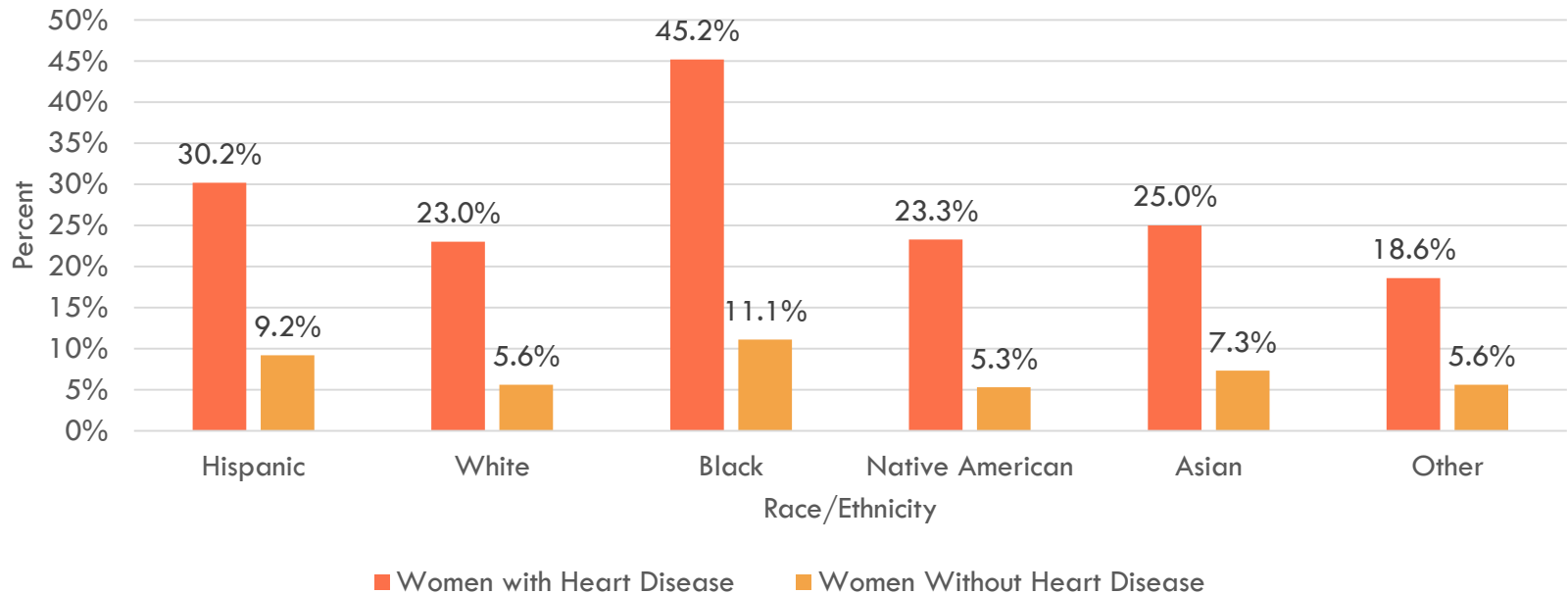
Heart Disease by Weight and Sex, California, 2014-2015



- ▶ Women are more likely to be normal/underweight than men and still have heart disease.
- ▶ Being obese or overweight are risk factors for both men and women. However, obesity is not as strongly linked to heart disease in men as it is in women.

DIABETES

Women with Heart Disease and Diabetes by Race, California, 2013-2015



- ▶ Nearly half of Black women with heart disease had diabetes as well. Similar trends can be seen for Hispanic women, Native American women, and Asian women.
- ▶ Compared to women who do not have heart disease, diabetes rates were much higher among the population of women with heart disease.

HEART DISEASE SYMPTOMS - WOMEN

- ▶ Women are more likely than men to have heart attack symptoms unrelated to chest pain such as:
 - ▶ Neck, jaw, shoulder, upper back or abdominal discomfort
 - ▶ Shortness of breath
 - ▶ Pain in one or both arms
 - ▶ Nausea or vomiting
 - ▶ Sweating
 - ▶ Lightheadedness or dizziness
 - ▶ Unusual fatigue
- ▶ Women may describe chest pain as pressure or a tightness. This may be because women tend to have blockages not only in their main arteries but also in smaller arteries that supply blood to the heart – a condition called small vessel heart disease or coronary microvascular disease.
- ▶ Symptoms may occur more often when women are resting, or even when they are asleep
- ▶ Mental stress also may trigger heart attack symptoms in women
- ▶ Women tend to downplay their symptoms and tend to show up in the ER after heart damage has already occurred because their symptoms are not those usually associated with a heart attack.

DEFINITIONS/ICD-10 CODING

Mortality from major cardiovascular diseases (International Classification of Disease, Tenth Revision ICD-10, I00-I78)

- ▶ Deaths from diseases of the heart: I00-I09, I11, I13, I20-I51
- ▶ Essential hypertension and hypertensive renal disease: I10, I12, I15
- ▶ Cerebrovascular diseases: I60-I69
- ▶ Diseases of arteries, arterioles and capillaries: I70-I78

THANK YOU!

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