

1999/2000 Five-County Study of Cardiovascular Disease Risk Factors

Baker

Bradford

Columbia

Suwannee

Union

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PURPOSE AND METHODS

Purpose

The purpose of this study is to ascertain the prevalence of various risk factors for cardiovascular disease (CVD) in five counties in Florida, in which the rates of cardiovascular disease exceed those for the state as a whole. These five counties are Baker, Bradford Columbia, Suwannee and Union.

Data

In the fall of 1999 and spring of 2000, a telephone survey of adults 18 years of age and older was conducted among residents of the five Florida counties under study. The survey was based on core questions from the 1998 Behavioral Risk Factor Surveillance System (BRFSS), as well as additional items of interest to the counties or to the state. After excluding survey respondents with missing data on gender or age, the sample size in each county is as follows: Baker, N=506; Bradford, N=490; Columbia, N=700; Suwannee, N=495 and Union, N=490. All data were weighted by gender and age to reflect the actual distribution of the adult population in each of the counties from which the data are drawn. Data were analyzed for men and women separately.

Variables Included in the Analyses

The factors associated with CVD that are analyzed in this report are whether the respondent: has health insurance, visited a health care provider for a health checkup within the past year, has ever been diagnosed for high blood pressure by a health provider, has ever had their blood cholesterol checked and when, has ever received a diagnosis of high blood cholesterol, has ever been diagnosed with diabetes, smokes cigarettes, and is overweight or obese. Two variables, chronic drinking and binge drinking, are also analyzed.¹ Having a chronic drinking problem is defined for men as drinking more than two servings of alcohol per day, on average, and is defined for women as drinking an average of more than 1 drink of alcohol daily. Binge drinking is defined for both men and women as having five or more drinks on an occasion.

The prevalence of the selected risk factors for CVD is described for each county by the following sociodemographic factors: age, race/ethnicity, education and income. Also, all findings are presented separately for women and men because the ratio of men to women is unusually high in the populations of Baker, Bradford and Union Counties.

Distribution of Population by Demographic Characteristics

Table 1 presents detailed data on the distribution of population by demographic status. Race/ethnicity does not vary considerably by county with the exception of Union County, which has a higher proportion of Hispanic residents (4.9%) relative to the other

¹ Preliminary analyses indicated notable differences between the five-county area and the state in alcohol consumption. In order to identify the degree to which particular counties contribute to the five-county area by state differences, chronic and binge drinking are analyzed for each of the five counties and for comparing the five-county area with the state but not by sociodemographic status.

counties. In the five-county area overall, 85.7% of the population is white, 10.1% is black, 2.9% is Hispanic and 1.3% belong to other race/ethnic groups.

The proportion of the population aged 18-44 years ranges from 41.0% in Suwanee County to 59.6% in Baker County. Just over 26% of the population of Union County is between 45 and 64 years, compared to 32.5% in Columbia County. The percentage of the population 65 years of age or older ranges from 11.5% in Union to 25.0% in Suwanee County. The mean age ranges from 43.1 years (Union County) to 50.2 (Suwanee County) and is 46.8 for the five counties overall.

Level of education varies by county. The percentage of adults who completed less than 12 years of education is higher in Baker County (20%) than in the five counties combined (16.7%). In contrast, there is a relatively high proportion of residents in Columbia County (46.2%) who completed one year of college or more compared to the five counties combined (40.2%).

Employment status and annual income vary by county. In Union County 74% of adults are employed for wages or are self-employed, and a small proportion of the population (18.2%) is retired or unable to work. The remaining 7.8% of adults are out of work, homemakers or students. In Suwanee County, only 52.7% of the adult population is employed for wages or is self-employed, and fully 34.8% of adults are retired or unable to work. An additional 12.5% of the population in Suwanee County consists of adults who are out of work, homemakers or students. The relatively low annual income in Suwanee County is consistent with the high proportion of unemployed adults: 46.8% of adults in Suwanee County earn less than \$25,000 annually versus 40.4% for all counties combined.

RESULTS: COMPARISON OF CVD RISK FACTORS ACROSS THE FIVE COUNTIES

The Overall Prevalence of Risk Factors for Cardiovascular Disease

Table 1 shows the crude number and weighted prevalence estimates of selected risk factors for heart disease by county, for all five counties, separately and combined.

General Health Status. For all five counties combined, 47.2% of residents report their general health to be excellent or very good, 30.8% report good health and 22% report their health to be fair or poor. In Union County, a relatively high proportion of the population reports their general health status as excellent or very good (51.2%), and a small percentage reports their general health status to be fair or poor (14.6%). In Suwanee County, which has a fairly large population of elderly and low-income residents, 44.8% of residents report excellent to very good general health and 24.4% report their health to be fair to poor.

Health Insurance. The percentage of people who have health insurance is 82.9% in all five counties combined and ranges from 78.4% in Suwanee County to 85.5% in Baker County.

Routine Health Checkups. Consistent with the relatively low percentage of adults in Suwannee County with health insurance, only 69.4% of adults in that county saw a health professional for a routine checkup within the past year compared to 73.7% in the five counties combined.

Blood Pressure. The proportion of people who have ever been told they have high blood pressure is 31.9% in the five-county area and ranges from 29.0% in Baker County to 34.1% in Suwannee County.

Blood Cholesterol. The percentage of adults who have ever had their blood cholesterol checked is lowest in Baker County (72.5%) and is highest in Columbia County (78.4%). Among them, over a third of residents in the five-county area have ever been told that their blood cholesterol is high (34.0%); the proportion ranges from 38.1% in Suwannee County to 29.9% in Bradford County.

Diabetes. The proportion of people who have diabetes in the five counties is 6.9% overall and ranges from 6.5% (Bradford and Union Counties) to 7.8% in Baker County.

Cigarette Smoking. One out of four adults smokes cigarettes currently in the five-county area and the proportion of current smokers ranges from 23.3% in Suwannee County to 27.4% in Bradford County. The proportion of former cigarette smokers is 26.0% in the five-county area and is highest in Suwannee County at 32.5%.

Overweight and Obesity. The percentage of adults who are overweight ranges from 63.1% (Bradford) to 71.9% (Union). The proportion of adults who are obese ranges from 25.3% in Columbia County to 31.9% in Union County. In the five-county area as a whole, the percentage of overweight adults is 65.8% and 26.6% of adults are obese.

Alcohol Consumption. Chronic drinking is reported by 7.3% of adults in Suwannee County, followed by Bradford (6.0%), Columbia (5.8%), Baker (5.1%) and Union (3.6%) counties. Overall, 5.9% of adults in the five-county area drink alcohol chronically. Although the lowest reported prevalence of chronic drinking is in Union County, the highest percentage of adults reporting binge drinking is also in Union County (15.2%). The prevalence of binge drinking in adults is 14.7% in Baker County, is 12.8% in both Bradford and Columbia counties and is 11.6% in Suwannee County.

The Distribution of Risk Factors Associated with Heart Disease across Sociodemographic Groups within the Five-County Area

Tables 2 and 3 summarize the crude number and weighted prevalence of each risk factor by the demographic variables included in these analyses. Again, each analysis is reported separately for men (Table 2) and women (Table 3).

General Health Status. General health status declines with age and trends are similar for men and women. The percentage of adults reporting excellent or very good general health is 60.8% for men and 55.9% for women in the 18-44 year old age group. In contrast, the percentage of adults aged 65 years and over who report excellent to very good general health is 32.9% for men and is 30.4% for women.

Education has a positive effect on general health -- the percentage of adults with excellent to very good health status is about two times higher for those with at least some college education compared to adults who did not graduate from high school. However, the relationship between education and health is more marked for women than for men. The proportion of men without a high school degree who report excellent or very good health is 31.0%, whereas fully 58.9% of men with at least some college report excellent or very good health. General health is excellent or very good for 21.7% of women who did not graduate from high school but 57.5% of women who attended at least some college report excellent-very good health.

Income is positively associated with good general health status. Of men and women with incomes of \$50,000 or more, the percentage of those who report excellent or very good health is 60.6% and 70.5%, respectively. In contrast, those with the lowest incomes have the worst reported health: 31% of men and of women with incomes less than \$25,000 report excellent or very good health.

Race/ethnicity influences general health status but the particular trends by race differ for men and women. Hispanic men are less likely to report excellent or very good general health status (40.0%) than are white (49.2%) and black (52.8%) men and are more likely to report fair or poor health status (29.1%) than are white (19.9%) and black men (17.0%). Black women are less likely to report excellent or very good general health status and are more likely to report fair or poor health than are white and Hispanic women. Specifically, 35.4% of black women report excellent to very good general health compared to 46.1% of white and 51.6% of Hispanic women.

Health Insurance. The proportion of adults who have health insurance increases with age, partly because those aged 65 years and over have access to Medicare. Among 18-44 year-olds, men are more likely to have health insurance than women (81.8% and 72.7%, respectively) but the proportion who have health insurance is similar for men and women at ages 65 and older (nearly 98% for both). Not surprisingly, having insurance is positively related to education and income for both men and women.

There is no notable difference by sex in the percentage of adults with health insurance at each income level or at the lowest educational level. However, more men than women have health insurance (82.0% and 77.7%, respectively) among those who completed high school and among those with some college (91.9% and 85.6%, respectively). There is virtually no difference in the presence of health insurance by race/ethnicity for men or for women.

Routine Health Checkups. The percentage of adults who visited a doctor for a routine checkup within the past year is highest among those over 65 years of age; nearly 90% of men and women over 65 years received a routine check-up in the last year, consistent with a high and equal proportion of elderly men and women having health insurance. Among 18-44 year-olds, a much higher percentage of women (74%) received a checkup within the past year than men (59.4%). Men with less than a high school degree (76.6%) are slightly more likely than men with more education (about 67%) to have visited a doctor for a checkup in the past year. There are no differences by education for women or by income for men and women in the propensity to have received a checkup in the past year.

Black men are more likely to have visited a doctor for a routine checkup (83.7%) than are white (67.0%) or Hispanic (75.1%) men. Among women, Hispanic women (92.9%) are more likely to have received a checkup within the past year than are white (77.9%) or black (88.3%) women.

Blood Pressure. The prevalence of high blood pressure among 18-44 year-old men is 18.6%, is 42.1% among men 45-64 years and is 47.1% for men 65 years of age or older. Among women the percentage of 18-44 year-old with high blood pressure is 18.5%, is 36.9% between ages 45-64 and is 60.8% for women 65 years and older. Among men, there is no clear association between education and having been diagnosed with high blood pressure. Among women, the prevalence of high blood pressure is notably lower among those who completed high school or had more education (31%) than among those with less than a high school diploma (46.7%).

The prevalence of high blood pressure is lowest among those with annual incomes over \$50,000 (27.9% for men, 20.0% for women) and is highest for those whose annual incomes are below \$25,000 (36.7% for men and 40.5% for women). The association between race/ethnicity and having been diagnosed with high blood pressure differs for men and women. The percentage of white men and women who have ever been told they have high blood pressure is similar (30% and 32.9%, respectively). However, the percentage of black men (23.8%) who have been diagnosed with high blood pressure is much smaller than the percentage of black women (44.3%). The gender difference in high blood pressure is reversed for Hispanics: 36.4% of Hispanic men and 22.7% of Hispanic women have been told that they have high blood pressure.

Blood Cholesterol. Not surprisingly, the percentage of adults who have had their blood cholesterol checked increases with age and the prevalence is similar for men and women (about 62% of 18-44 year olds compared to 90.9% of those aged 65 and over). The percentage of adults who have had their blood cholesterol checked is positively associated with education and income for both men and women. There are striking differences by race/ethnicity in the percentage of men who have had their blood cholesterol checked: 74.4% of white men and 77.3% of Hispanic men have had cholesterol checked compared to 59.6% of black men. The percentage of women who have had their cholesterol levels checked is slightly higher for whites (78.0%) than for blacks (69.0%) and Hispanics (71.9%). Of those who have had their cholesterol checked, the majority had it checked within the last year.

Of those who have had their blood cholesterol checked, the prevalence of high cholesterol in men is much lower for 18-44 year-olds (21.5%) than for 45-64 year olds (43.9%) and for those age 65 and older (37.9%). This trend is similar for women although the gap between the youngest and oldest age groups is larger (17.4% for 18-44 year-olds and 52.0% for women over 64 years). There are no differences for men by education or income in the prevalence of high blood cholesterol. The percentage of women with high cholesterol in the lowest income group (42.1%) is markedly higher than for women in the highest income group (21.5%). The prevalence of high blood cholesterol is much lower among black men (15.9%) than among white and Hispanic men (32.8% and 33.9%, respectively). Again, these results are only for those who have had their cholesterol checked.

Diabetes. The prevalence of diabetes increases with age; 1.4% of 18-44 year-old men and 13.4% of men aged 65 years and older have been diagnosed with diabetes. Similarly, diabetes prevalence is 3.0% among women aged 18-44 years and is 14.8% among women who are 65 years of age and older. Diabetes prevalence declines as education and income increase for both men and women. The number of adults who have been diagnosed with diabetes is too small to examine prevalence separately for men and women by race/ethnicity.

Cigarette Smoking. The percentage of current smokers is lower among those 65 years of age and older (14.9% of men and 11.5% of women) than among younger adults. The prevalence of current smoking is 26.7% for men aged 18-44 years and is 30.5% for men 45-64 years of age. Thirty-two percent of women aged 18-44 years smoke cigarettes currently compared to 24.8% of women aged 45-64 years. For both men and women, smoking prevalence declines steadily as education and income increase (e.g., 36.9% of men with less than a high school degree smoke currently versus 17.9% of those with at least some college). There is virtually no difference in smoking prevalence across race/ethnicity for men in the five-county area. However, race/ethnic differences in smoking prevalence are clear among women: 26.4% of white women are current smokers compared to 11.8% of black women. The number of Hispanic women who are current smokers is too small for reliable estimates in this sample.

Overweight and Obesity. More men than women are overweight in the five-county area (72.4% and 58.0%, respectively). About the same percentage of men and women are obese (27.2% and 26.0%, respectively). Among women the prevalence of overweight increases with age (49.8% of those aged 18-44 and 62.1% of those over 45 years). Among men, those aged 45-64 have the highest prevalence of overweight (79.0%), men over 65, the lowest (66.2%); 70.6% of men aged 18-44 are overweight. For both men and women, the majority of those who are obese are 45-64 years of age.

Among men, the prevalence of overweight is highest for those with the most education (74.9%) and is lowest among men with 0-11 years of education (65.6%). There are no notable differences across educational status in the percentage of men who are obese but obesity is highest among men with the highest incomes (25.9% for those with incomes less than \$25,000 and 36.2% for those with incomes exceeding \$50,000). Among women, the prevalence of overweight and obesity decrease as education and income increase (e.g., 67.4% of women without a high school degree are overweight compared to 56.0% of those with some college or more).

RESULTS: COMPARISON OF CVD RISK FACTORS IN THE FIVE-COUNTY AREA AND FLORIDA

The comparison between the five counties and the entire state of Florida from the 1999 BRFSS are summarized below and the data are presented in Tables 4 and 5. Table 6 presents prevalence data and corresponding confidence intervals on five cardiovascular risk factors separately for women, men and all residents.

Distribution of Population by Demographic Characteristics

The age distribution of the five-county area is similar to that of Florida. Among men, the mean age is 45 years in the five counties and is 48 years in the state. The median age of men is 46 years for the five counties and is 47 years in the state. Among women, the mean age is 49 in the five counties and in the state. The median age for women in the five counties is 47 years and is 48 years in the state.

There is a substantial difference between the state and the five counties in the portion of the population that is Hispanic. The percentage of men who are Hispanic in the five-county area is 3.6% and is 18.2% in the state as a whole. The percentage of women who are Hispanic in the five-county region is 2.1% and is 16.8%. The distribution of annual income is different between the five counties and Florida. Among both men and women, adults have lower annual incomes in the five-county area than in the state.

Risk Factors for Cardiovascular Disease

General Health Status. In the five-county area, 49.2% of men report excellent or very good health compared to 56.5% of men in entire state. Among women residing in the five-county area, 44.9% report their health as excellent-very good compared to 52.1% of women in the state.

Health Insurance. The percentage of men with health insurance is 85.1% in the five counties and is 83.2% in entire state, and the percentage of women with insurance is 80.3% in the five counties and is 84.4% statewide.

Routine Health Checkups. The percentage of adults who visited a doctor for a routine checkup within the past year is about the same for those living in the five counties and in the entire state for both men and women. About 70% of men and about 80% of women in both the five counties and in the state visited a doctor for a routine checkup in the past year.

Blood Pressure. The prevalence of high blood pressure is similar for men in the five-county area (29.9%) and men in Florida, overall (27.4%). A greater proportion of women in the five-county area (34.1%) has high blood pressure compared to women in the state as a whole (28.1%).

Blood Cholesterol. Of men who have had their cholesterol checked the percentage diagnosed with high blood cholesterol is 32.4% in the five-county area and is 30.2% in the state. The proportion of women who have been told they have high blood cholesterol is the same in the five-county area (35.9%) and in the state (35.4%).

Cigarette Smoking. The proportion of men living in the five-county area who are current smokers is 26.0% and the proportion statewide is 22.2%. Nearly one out of three men is a former cigarette smoker in the five-county area (31.5%) and in Florida, overall (31.4%). One-quarter of women in the five-county area are current cigarette smokers compared to 19.1% of women in the state as a whole. The proportion of women who are former smokers is 19.8% in the five-county area and is 22.6% statewide.

Overweight and Obesity. Among both men and women, the prevalence of overweight and obesity is notably higher in the five counties than in the state. Among men, 72.4% of adults is overweight in the five-county area compared to 65.3% statewide. Obesity is about 50% higher among men in the five-county area (27.2%) than in the state (18.2%). Among women, 58.0% are overweight in the five-county area and 48.8% are overweight statewide. As with men, obesity among women is about 50% higher in the five-county area (26.0%) than in the state (18.7%).

Diabetes. The prevalence of diabetes is similar for men in the five counties and in the state (6.2% and 6.9%, respectively). The prevalence of diabetes for women is 7.6% in the five counties and is 6.8% in the state as a whole.

Alcohol Consumption. A high prevalence of chronic drinking (8.7%) is observed among men in the five-county area compared to the men statewide (5.1%). In contrast, among women the prevalence of chronic drinking is lower in five-county area (2.7%) than statewide (5.0%). There are clear gender differences in binge drinking in the five-county area and in the state. The prevalence of binge drinking is about four times higher among men than among women in both areas; about 20% of men and 5% of women report binge drinking in both the five-county area and in the state as a whole.

SUMMARY & CONCLUSIONS

In this study, the prevalence of risk factors for cardiovascular disease varied by county. Generally, the prevalence of risk factors for CVD is higher in Suwannee County than in the other four counties. Relative to the other four counties, a much smaller percentage of adults in Suwannee County: report their general health status as excellent or very good, have any health care access, or visit a doctor for a routine checkup. Also, a larger proportion of adults in Suwannee County has high blood pressure than in the other four counties. The health disadvantages noted in Suwannee County correspond to the demographics of the county: a relatively large proportion of elderly, a low percentage of employed adults and relatively low annual incomes.

In all five counties, the prevalence of risk factors for cardiovascular disease varies by sociodemographic status. For example, general health status varies considerably by age and income, and smoking status varies by education level and income. The prevalence of high blood pressure, high blood cholesterol, diabetes, and obesity also vary by age, race/ethnicity and education or income. A few associations between sociodemographic status and CVD risk factors are found only for men or for women, which are important to note in developing public health prevention and intervention programs.

Importantly, -- key risk factors for CVD -- overweight, obesity and cigarette use are more prevalent in the five counties examined in this report than in Florida as a whole (Table 6). Also, a high prevalence of chronic drinking is found among men in the five county-area. These findings warrant attempts to reduce CVD risk in these counties, especially through reducing the percentage of adults who are overweight or obese, who are current cigarette smokers, and who have chronic drinking problems.

Table 1. BRFSS Five-County Study: Prevalence of Cardiovascular Disease Risk Factors

	Baker N=506		Bradford N=490		Columbia N=700		Suwannee N=495		Union N=490		5 counties N=2681	
	N	%*	n	%*	n	%*	n	%*	n	%*	n	%*
Gender												
Male	200	54.7	198	57.7	266	50.6	181	47.6	178	66.8	1023	53.3
Female	306	45.3	292	42.3	434	49.3	314	52.4	312	33.2	1658	46.7
Race/Ethnicity												
White	442	88.4	415	84.4	582	83.5	439	88.7	405	84.6	2283	85.7
Black	51	9.4	51	10.6	85	11.7	39	7.7	55	10.2	281	10.1
Hispanic	7	1.6	15	3.1	19	3.0	12	2.6	20	4.9	73	2.9
Other	3	0.6	7	1.9	10	1.8	4	1.0	4	0.4	28	1.3
Age												
18-44	272	59.6	202	52.7	293	48.1	203	41.0	246	62.2	1216	50.2
45-64	160	27.7	179	29.5	261	32.5	162	34.0	152	26.3	914	31.0
65+	74	12.8	109	17.8	146	19.4	130	25.0	92	11.5	551	18.7
Education												
Never Attended school or some high school	108	20.0	89	16.9	110	15.3	93	17.8	86	14.3	486	16.7
High School Graduate	224	46.6	233	48.3	269	38.5	209	42.9	205	45.9	1140	43.1
Some college, technical school or college graduate	174	33.4	166	34.7	321	46.2	192	39.3	199	39.8	1052	40.2
Employment												
Employed for wages or self-employed	299	64.5	259	60.9	384	58.3	248	52.7	311	74.0	1501	59.9
Out of work , homemaker or student	82	13.5	69	11.6	86	10.6	71	12.5	55	7.8	363	11.3
Retired or unable to work	125	22.0	160	27.5	230	31.2	176	34.8	122	18.2	813	28.8

* Weighted by gender and age

Table 1. Continued

	Baker N=506		Bradford N=490		Columbia N=700		Suwannee N=495		Union N=490		5 counties N=2681	
	N	%*	n	%*	n	%*	n	%*	n	%*	n	%*
Income												
\$0.00 to less than \$25,000	166	34.1	211	43.5	250	38.4	213	46.8	168	35.2	1008	40.4
\$25,000 to less than \$50,000	181	41.1	164	38.9	235	40.3	161	37.6	172	42.6	913	39.8
\$50,000 and more	103	24.8	73	17.6	129	21.4	67	15.6	87	22.2	459	19.9
General health status												
Excellent-very good	238	49.5	210	45.4	321	47.7	217	44.8	239	51.2	1225	47.2
Good	150	29.8	152	31.3	213	30.0	155	30.8	164	34.2	834	30.8
Fair-poor	115	20.7	122	23.3	165	22.3	122	24.4	86	14.6	610	22.0
Have any health insurance	431	85.5	408	83.1	580	83.9	386	78.4	420	85.4	2225	82.9
Visited doctor for routine checkup, past year	400	74.6	384	76.4	539	75.2	351	69.4	387	72.5	2061	73.7
Ever told have high blood pressure	152	29.0	177	32.6	228	30.8	171	34.1	162	33.3	890	31.9
Ever had blood cholesterol checked	385	72.5	378	74.5	554	78.4	365	73.4	387	73.8	2069	75.3
Last had blood cholesterol checked												
Within 1 year	303	56.6	288	55.3	420	59.5	283	56.6	296	54.4	1590	57.2
2-5 years	64	12.5	70	14.8	106	14.9	58	11.7	75	15.6	373	13.9
More than 5 years or never	139	30.9	132	29.9	174	25.6	154	31.7	119	30.1	718	28.9
Ever told that your blood cholesterol is high ¹	132	33.6	122	29.9	196	34.2	142	38.1	136	32.2	728	34.0

* Weighted by gender and age

¹ Of the respondents who ever had their blood cholesterol checked

Table 1. Continued

	Baker N=506		Bradford N=490		Columbia N=700		Suwannee N=495		Union N=490		5 counties N=2681	
	N	%*	n	%*	n	%*	n	%*	n	%*	n	%*
Diabetes	45	7.8	39	6.5	49	6.6	35	7.1	44	6.5	212	6.9
Smoking status												
Current	123	25.8	134	27.4	182	26.5	117	23.3	116	23.4	672	25.5
Former	126	25.1	112	22.4	163	23.6	151	32.5	121	27.6	673	26.0
Never	257	49.1	244	50.2	355	49.9	227	44.2	250	49.0	1333	48.5
Overweight	325	69.0	297	63.1	424	64.3	309	65.6	311	71.9	1666	65.8
Obesity	131	26.7	127	27.6	178	25.3	122	25.6	141	31.9	699	26.6
Chronic drinking problem	19	5.1	22	6.0	36	5.8	31	7.3	14	3.6	122	5.9
Binge drinking	54	14.7	45	12.8	74	12.8	48	11.6	38	15.2	259	13.0

* Weighted by gender and age

Table 2. Florida BRFSS Five-County Study: Prevalence of Cardiovascular Disease Risk Factors by Age, Education, Income and Race/ethnicity: Male

Risk Factor	Age						Education						Income						Race/Ethnicity								Overall		
	18-44		45-64		65 ≤		Never-some HS		HS graduate		Some college-graduate		\$0-less than \$25k		\$25k to less than \$50k		\$50k or more		White		Black		Hispanic		Others		n=1023		
	n	%*	n	%	N	%*	n	%*	n	%*	n	%*	n	%*	n	%*	n	%*	n	%*	n	%*	n	%*	n	%*	n	%*	N
General health status																													
Excellent-very good	285	60.8	127	35.7	60	32.9	45	31.0	196	46.2	231	58.9	94	30.7	212	58.5	123	60.6	405	49.2	39	52.8	15	40.0	9	52.3	472	49.2	
Good	137	28.7	125	33.8	58	31.2	46	29.4	159	34.8	115	26.4	89	28.1	127	30.7	72	32.5	278	30.9	25	30.2	12	31.0	3	17.0	320	30.6	
Fair-poor	48	10.5	109	30.5	66	35.9	68	39.7	91	19.0	64	14.7	139	41.2	48	10.9	17	7.0	189	19.9	16	17.0	10	29.1	6	30.7	223	20.2	
Have any health insurance	380	81.8	315	84.7	182	97.7	120	75.0	373	82.0	384	91.9	246	75.0	347	87.9	201	94.6	756	84.9	65	84.6	32	86.9	18	100	877	85.1	
Visited a doctor for a routine checkup within the past year	276	59.4	284	76.0	168	88.7	127	76.6	313	68.2	288	66.6	246	73.4	262	64.6	155	71.7	613	67.0	67	83.7	29	75.1	15	79.6	728	68.8	
Ever told that you have high blood pressure	90	18.6	156	42.1	89	47.1	61	33.6	139	28.6	135	29.9	131	36.7	117	26.9	60	27.9	286	30.0	24	23.8	15	36.4	6	29.9	335	29.9	
Ever had your blood cholesterol checked	286	61.8	324	88.0	170	90.9	116	68.0	306	65.8	358	84.8	234	69.7	302	75.7	182	83.8	677	74.7	49	59.6	30	77.3	16	86.3	780	74.0	
How long since your last blood cholesterol checked																													
Within 1 yr	198	42.8	257	69.3	148	79.6	95	55.3	236	50.0	272	63.1	184	54.4	227	55.4	143	65.1	520	56.1	40	48.6	24	62.4	15	82.9	603	56.2	
2-5 yr	68	14.7	53	14.3	12	6.1	11	6.1	55	12.6	67	16.5	38	11.5	51	14.2	34	15.8	116	13.6	7	9.5	6	14.9	1	3.4	133	13.3	
5yr<or never	204	42.5	56	16.4	27	14.3	54	38.6	158	37.3	75	20.4	103	34.0	111	30.5	35	19.2	244	30.3	33	41.9	7	22.8	2	13.7	287	30.5	
Ever been told that blood cholesterol is high1	61	21.5	141	43.9	65	37.9	42	35.2	107	32.5	118	31.5	90	36.8	93	28.9	69	36.2	233	32.8	9	15.9	11	33.9	9	51.3	267	32.4	
Ever told that you have diabetes	6	1.4	46	11.6	25	13.4	23	11.6	23	4.1	31	6.6	33	8.9	20	4.1	13	4.4	65	6.1	8	7.7	2	5.9	2	8.1	77	6.2	
Smoking status																													
Current	126	26.7	113	30.5	27	14.9	56	36.9	132	30.1	78	17.9	114	36.1	88	22.1	40	18.8	229	26.0	21	24.9	9	25.1	6	36.9	266	26.0	
Former	83	17.1	156	42.5	115	62.0	61	35.0	148	29.3	145	32.6	123	34.6	130	30.6	67	28.6	312	32.5	16	17.9	14	29.5	8	41.2	354	31.5	
Never	260	56.2	97	27.0	45	23.1	43	28.2	168	40.6	191	49.6	88	29.3	170	47.3	105	52.6	338	41.6	43	57.2	14	45.4	4	21.8	402	42.5	

*Weighted by gender and age

¹ Of the respondents who ever had their blood cholesterol checked

Table 2. Continued, Male

	Age						Education						Income						Race/Ethnicity						Overall				
	18-44		45-64		65≤		Never – some HS		HS graduate		Some college - graduate		\$0.00-less than \$25k		\$25k to less than \$50k		\$50k or more		white		black		Hispanic		others		n	%	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%			n
Current employed status																													
Employed, or self-employed	425	90.4	241	64.8	12	5.6	68	48.4	308	72.0	302	75.2	147	50.0	298	80.1	188	90.4	583	70.0	53	69.0	26	73.4	10	58.1	678	69.9	
Out of work, homemaker or student	23	4.7	9	2.9	0	0.0	4	3.2	21	5.0	7	2.0	13	4.3	9	2.5	2	1.1	25	3.1	7	10.0	0	0	0	0.0	32	3.5	
Retired or unable to work	21	4.8	116	32.3	175	94.4	88	48.4	120	23.1	104	22.8	165	45.7	82	17.4	21	8.5	271	26.9	20	21.1	11	26.6	8	41.9	312	26.6	
Overweight	331	70.6	289	79.0	122	66.2	109	65.6	321	72.1	312	74.9	219	66.6	287	73.9	172	81.0	644	73.1	54	67.6	27	73.5	11	59.5	742	72.4	
Obesity	124	26.2	124	34.0	35	17.9	44	25.1	111	26.1	128	29.1	89	25.9	101	25.6	76	36.2	241	27.2	23	28.6	10	25.8	5	22.6	283	27.2	

*Weighted by gender and age

Table 3. Florida BRFSS Five-County Study: Prevalence of Cardiovascular Disease Risk Factors by Age, Education, Income and Race/ethnicity: Female

Risk Factor	Age						Education						Income						Race/Ethnicity								Overall		
	18-44		45-64		65 ≤		Never-some HS		HS graduate		Some college-graduate		\$0-less than \$25k		\$25k to less than \$50k		\$50k or more		White		Black		Hispanic		Others		n=1658		
	n	%*	n	%	N	%*	n	%*	n	%*	n	%*	n	%*	n	%*	n	%*	n	%*	n	%*	n	%*	n	%*	n	%*	n
General health status																													
Excellent-very good	423	55.9	221	40.1	109	30.4	68	21.7	315	44.1	369	57.5	213	30.5	286	54.4	176	70.5	653	46.1	75	35.4	17	51.6	3	40.2	753	44.9	
Good	229	30.1	171	31.3	114	32.5	103	31.6	241	35.5	169	26.0	219	32.1	182	34.6	52	20.9	435	31.0	64	33.2	11	24.7	2	16.0	514	31.0	
Fair-poor	94	14.0	155	28.6	138	37.1	153	46.7	134	20.4	99	16.5	250	37.4	56	11.0	19	8.6	311	22.9	62	31.4	8	23.8	5	43.9	387	24.0	
Have any health insurance																													
	555	72.7	437	78.6	356	97.5	249	75.1	547	77.7	549	85.6	514	73.9	440	82.9	232	92.9	1141	80.0	164	81.8	29	85.4	7	69.2	1348	80.3	
Visited a doctor for a routine checkup within the past year																													
	562	74.0	444	79.9	327	89.4	257	78.3	553	79.6	521	79.9	535	77.0	423	80.0	203	80.2	1109	77.9	176	88.3	33	92.9	8	64.1	1333	79.4	
Ever told that you have high blood pressure																													
	129	18.5	205	36.9	221	60.8	158	46.7	214	31.8	180	30.1	275	40.5	143	28.4	47	20.0	449	32.9	92	44.3	8	22.7	4	50.7	555	34.1	
Ever had your blood cholesterol checked																													
	482	62.8	475	86.0	332	90.9	233	69.9	522	73.9	532	83.5	502	72.4	411	77.3	215	86.0	1106	78.0	141	69.0	27	71.9	8	68.5	1289	76.8	
How long since your last blood cholesterol checked																													
Within 1 yr	335	42.7	371	66.3	281	77.1	185	54.7	400	56.9	401	61.8	389	55.9	305	56.6	157	60.9	837	58.2	118	58.4	22	62.4	4	35.1	987	58.3	
2-5 yr	123	16.6	83	15.7	34	9.2	37	12.1	100	13.9	103	16.7	84	12.5	90	17.1	49	20.8	211	15.4	20	9.7	5	9.4	3	24.6	240	14.6	
5yr<or never	288	40.7	94	18.1	49	13.7	104	33.2	191	29.2	134	21.6	210	31.6	129	26.4	41	18.3	355	26.5	63	32.0	9	28.1	3	40.3	431	27.1	
Ever been told that blood cholesterol is high1																													
	86	17.4	202	42.2	173	52.0	102	43.5	187	36.2	172	32.5	214	42.1	128	32.1	49	21.5	397	36.0	54	38.0	6	20.8	3	45.1	461	35.9	
Ever told that you have diabetes																													
	22	3.0	53	8.9	60	14.8	47	12.6	46	6.6	41	6.0	78	10.8	26	4.5	7	2.4	105	6.8	25	12.6	1	3.8	2	20.5	135	7.6	
Smoking status																													
Current	232	32.0	135	24.8	39	11.5	96	30.2	174	25.9	136	21.4	193	29.1	139	26.5	44	18.0	363	26.4	23	11.8	13	30.8	5	62.5	406	25.0	
Former	106	14.5	118	21.8	95	27.3	73	22.4	123	18.1	123	20.5	130	19.0	88	17.7	49	21.2	281	20.7	28	13.8	6	18.1	2	20.4	319	19.8	

Never	406	53.5	295	53.4	230	61.2	157	47.4	392	56.0	379	58.1	359	51.9	296	55.8	154	60.9	758	52.9	149	74.4	17	51.0	3	17.2	931	55.2
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*Weighted by gender and age

¹ Of the respondents who ever had their blood cholesterol checked

Table 3. Continued, Female

	Age						Education						Income						Race/Ethnicity								Overall	
	18-44		45-64		65≤		Never – some HS		HS graduate		Some college - graduate		\$0.00-less than \$25.00		\$25k to less than \$50k		\$50k or more		white		black		Hispanic		others		n	%
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%		
Current employed status																												
Employed, or self-employed	506	65.7	293	53.7	24	6.7	79	25.3	353	49.6	391	58.8	240	33.5	324	62.0	203	80.6	684	47.3	111	53.3	21	66.1	2	29.1	823	48.4
Out of work, homemaker or student	196	27.8	95	17.1	40	10.3	78	23.5	134	19.5	118	19.5	144	21.2	118	22.2	30	13.4	286	20.9	35	18.0	8	13.9	2	13.5	331	20.3
Retired or unable to work	42	6.47	160	29.2	299	83.1	168	51.2	202	30.9	129	21.7	298	45.4	82	15.8	14	6.0	431	31.8	55	28.7	7	20.0	5	57.3	501	31.4
Overweight	359	49.8	346	66.2	219	62.1	213	67.4	376	55.4	334	56.0	415	62.8	279	54.7	120	52.0	744	55.2	152	79.9	22	58.9	2	22.3	924	58.0
Obesity	163	23.4	168	31.0	85	23.7	116	36.4	162	24.0	137	22.8	213	31.7	118	23.5	39	16.4	319	23.6	88	44.9	7	20.2	1	17.7	416	26.0

*Weighted by gender and age

Table 4. Characteristics of the 5-county and Florida populations: Male

		State n=2054		5 Counties n=1023	
Age	Mean	48.1*		45.1**	
	Median	46*		47**	
		n	%*	n	%**
Race/Ethnicity					
	White	1534	70.6	880	85.9
	Black	165	8.0	80	8.4
	Hispanic	282	18.2	37	3.6
Current employed status					
	Employed, or self-employed	1315	65.3	678	69.9
	Out of work, homemaker or student	122	7.3	32	3.5
	Retired or unable to work	612	27.3	312	26.6
Annual income					
	\$0.00 to less than \$25,000	513	28.7	325	34.2
	\$25,000 to less than \$50,000	710	37.7	389	43.4
	\$50,000 and more	637	33.6	212	22.4
General health status					
	Excellent-very good	1165	56.5	472	49.2
	Good	600	29.5	320	30.6
	Fair-poor	284	13.9	223	20.2
	Have health insurance	1732	83.2	877	85.1
	Visited a doctor for a routine checkup within the past year	1426	68.9	728	68.8
	Have high blood pressure	561	27.4	335	29.9
	Have high cholesterol¹	485	30.2	270	32.4
	Ever told that you have diabetes	146	6.9	77	6.2
Smoking status					
	Current	475	22.2	266	26.0
	Former	659	31.4	354	31.5
	Never	914	46.5	402	42.5

Overweight	1326	65.3	742	72.4
Obesity	384	18.2	283	27.2
Chronic drinking problem	115	5.1	83	8.7
Binge Drinking	415	20.6	184	20.1

*Weighted by gender and age, and adjusted for non-response, 1999 data

**Weighted by gender and age, 2000 data

¹ Of the respondents who ever had their blood cholesterol checked

Table 5. Characteristics of the 5-county and Florida populations: Female

		State n=3123		5 Counties n=1658	
Age	Mean	49.6*		48.8**	
	Median	48*		47**	
		N	%*	n	%**
Race/Ethnicity					
	White	2286	70.4	1403	85.4
	Black	331	10.3	201	12.0
	Hispanic	425	16.8	36	2.1
Current employed status					
	Employed, or self-employed	1601	50.0	823	48.4
	Out of work, homemaker or student	558	19.8	331	20.3
	Retired or unable to work	959	30.3	501	31.4
Annual Income					
	\$0.00 to less than \$25,000	1047	37.4	683	47.6
	\$25,000 to less than \$50,000	1006	37.3	524	35.5
	\$50,000 and more	661	25.4	247	16.9
General Health status					
	Excellent-very good	1644	52.1	753	44.9
	Good	948	31.6	514	31.0
	Fair-poor	525	16.4	387	24.0
	Have Health Insurance	2667	84.4	1348	80.3
	Visited a doctor for a routine checkup within the past year	2550	80.5	1333	79.4
	High blood pressure	865	28.1	555	34.1
	Have high cholesterol¹	864	35.4	460	35.9
	Ever told that you have diabetes	218	6.8	135	7.6
Smoking status					
	Current	633	19.1	406	25.0
	Former	715	22.6	319	19.8
	Never	1768	58.3	931	55.2

	Overweight	1455	48.8	924	58.0
Obesity		564	18.7	416	26.0
Chronic drinking problem		164	5.0	38	2.7
Binge drinking		173	5.9	74	5.1

*Weighted by gender and age, and adjusted for non-response, 1999 data

**Weighted by gender and age, 2000 data

¹ Of the respondents who ever had their blood cholesterol checked

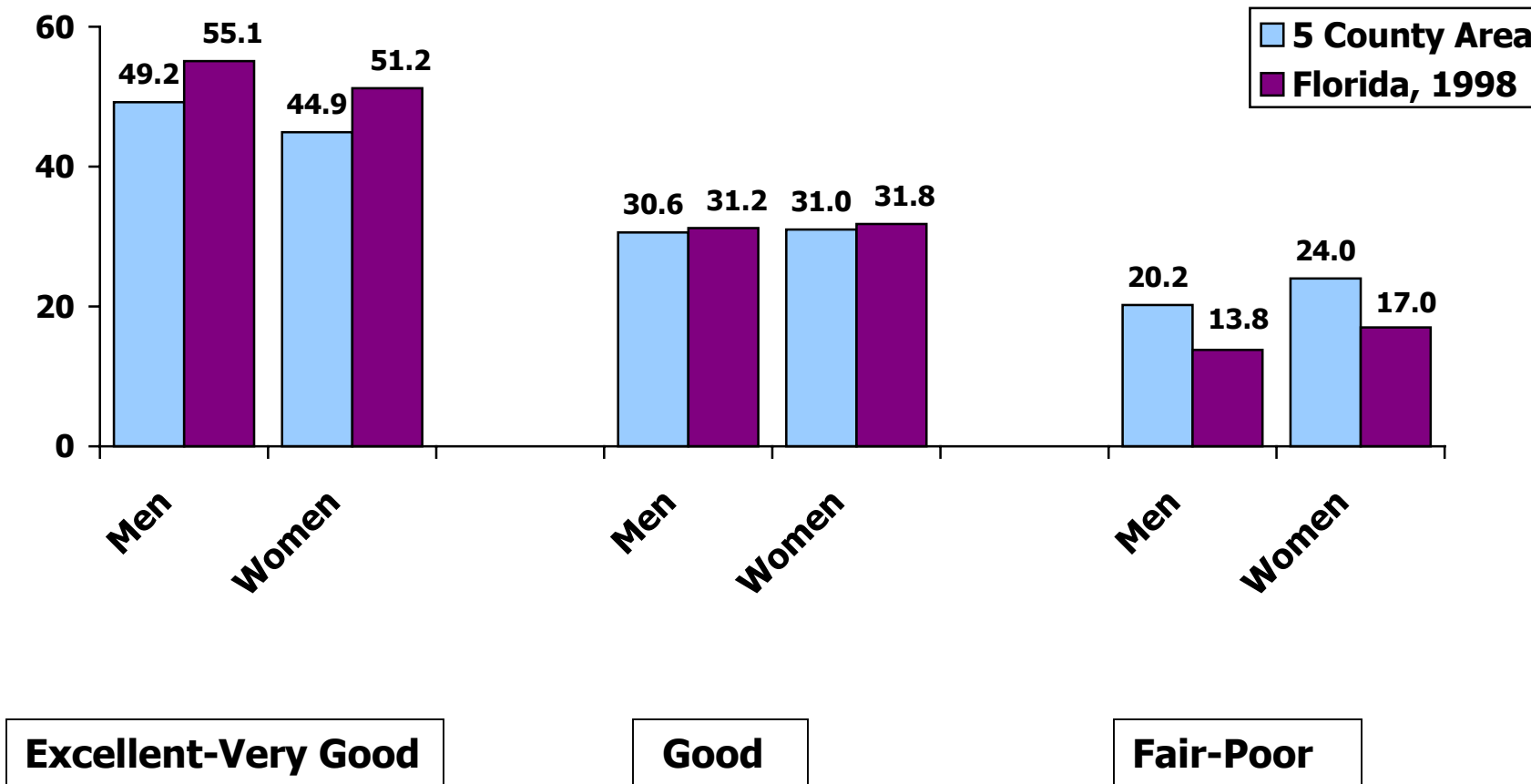
Table 6. Prevalence of 5 Major Risk Factors of CVD in 5 Florida Counties¹ (1999/2000) and in Florida, Overall (1999)

	Overweight		Obesity		Current Smoking	
	%		%		%	
	(95%CI)		(95%CI)		(95%CI)	
	5 counties	Florida	5 counties	Florida	5 counties	Florida
Males	72.4 (70.0-74.7)	65.3 (63.4-67.2)	27.2 (24.9-29.5)	18.2 (16.6-19.7)	26.0 (23.7-28.3)	22.2 (20.5-23.8)
Females	58.0 (55.2-60.8)	48.8 (46.9-50.7)	26.0 (23.5-28.5)	18.7 (17.2-20.2)	25.0 (22.6-27.3)	19.1 (17.6-20.6)
All	65.8 (63.9-67.6)	56.8 (55.4-58.1)	26.6 (24.9-28.3)	18.5 (17.4-19.5)	25.5 (23.9-27.2)	20.6 (19.5-21.7)

	Chronic Drinking Problem		Binge Drinking	
	%		%	
	(95%CI)		(95%CI)	
	5 counties	Florida	5 counties	Florida
Males	8.7 (7.2-10.2)	5.1 (4.3-6.0)	20.1 (18.0-22.2)	20.6 (19.0-22.2)
Females	2.7 (1.8-3.6)	5.0 (4.1-5.8)	5.1 (3.9-6.3)	5.9 (5.0-6.7)
All	5.9 (5.0-6.8)	5.1 (4.4-5.7)	13.0 (11.7-14.3)	12.9 (12.0-13.8)

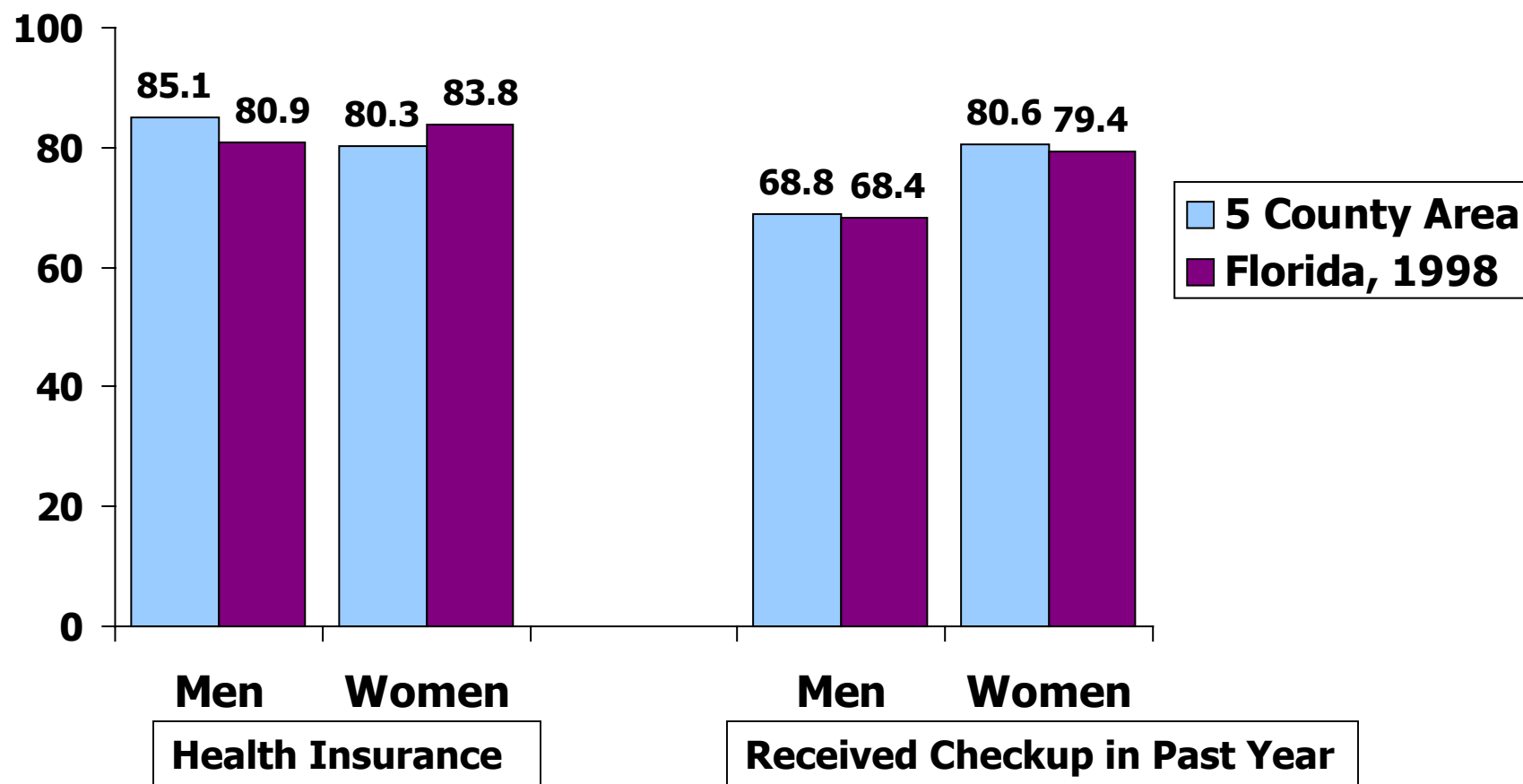
¹Baker, Bradford, Columbia, Suwannee, Union counties

Figure 1. Percentage of Adults Reporting Particular Level of General Health by Sex:
Five Florida Counties, 2000¹ & Florida, 1998



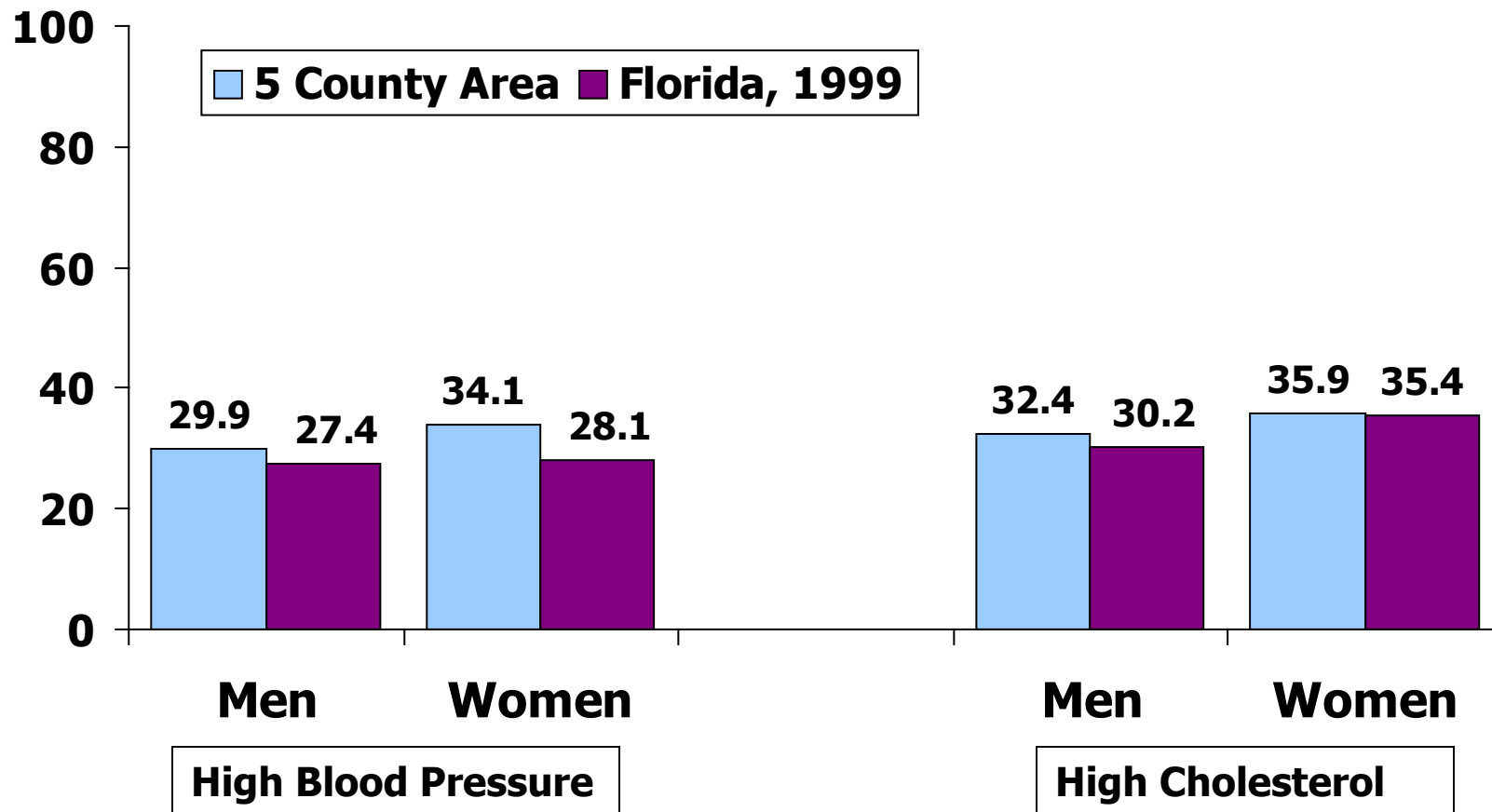
¹Aggregate data for Baker, Bradford, Columbia, Suwannee & Union counties

Figure 2. Percentage of Adults with Health Insurance & Who Received Checkup by Sex:
Five Florida Counties, 2000¹ & Florida, 1998



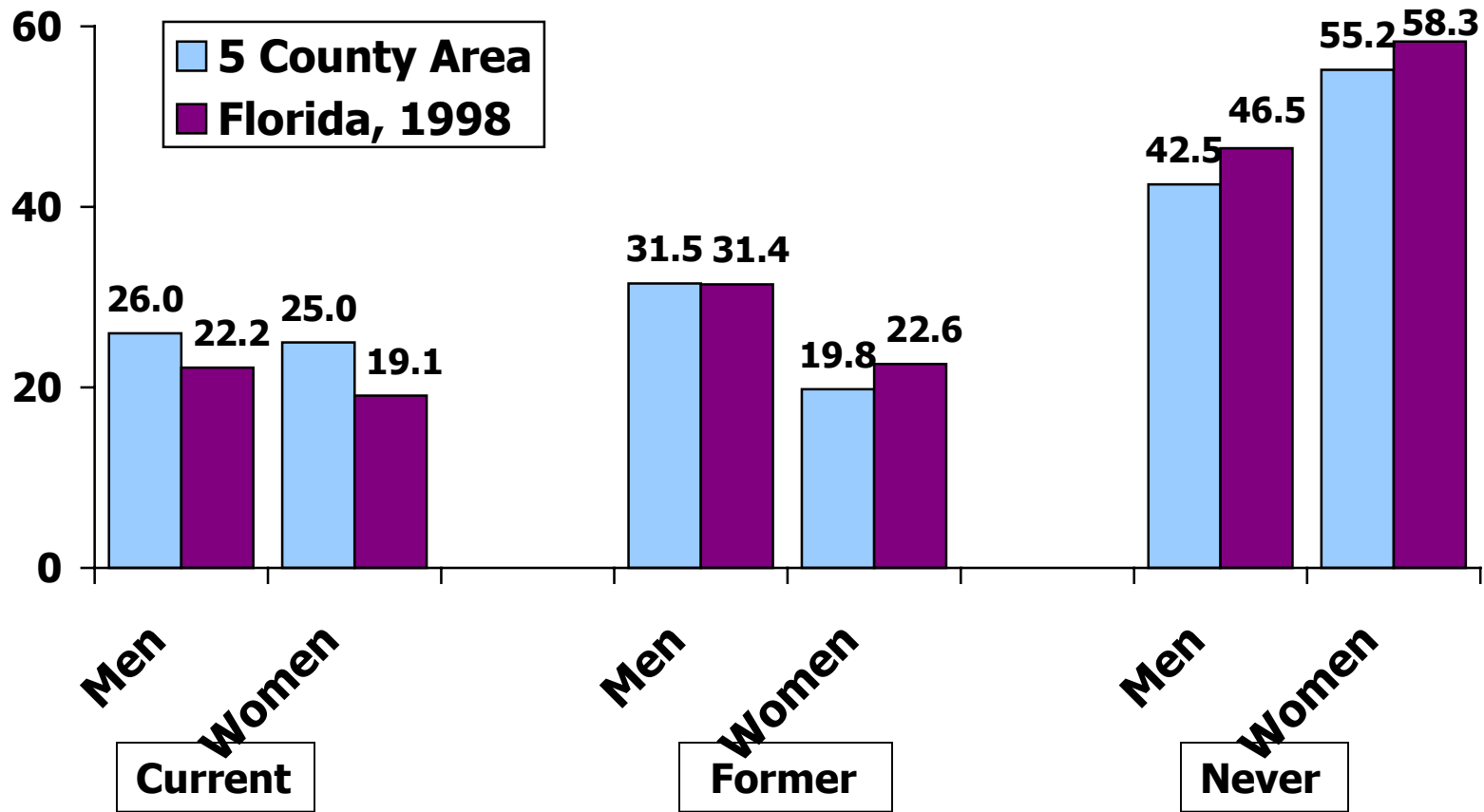
¹Aggregate data for Baker, Bradford, Columbia, Suwannee & Union counties

Figure 3. Percentage of Adults Ever Diagnosed with High Blood Pressure or High Cholesterol by Sex:
 Five Florida Counties, 2000¹ & Florida, 1999



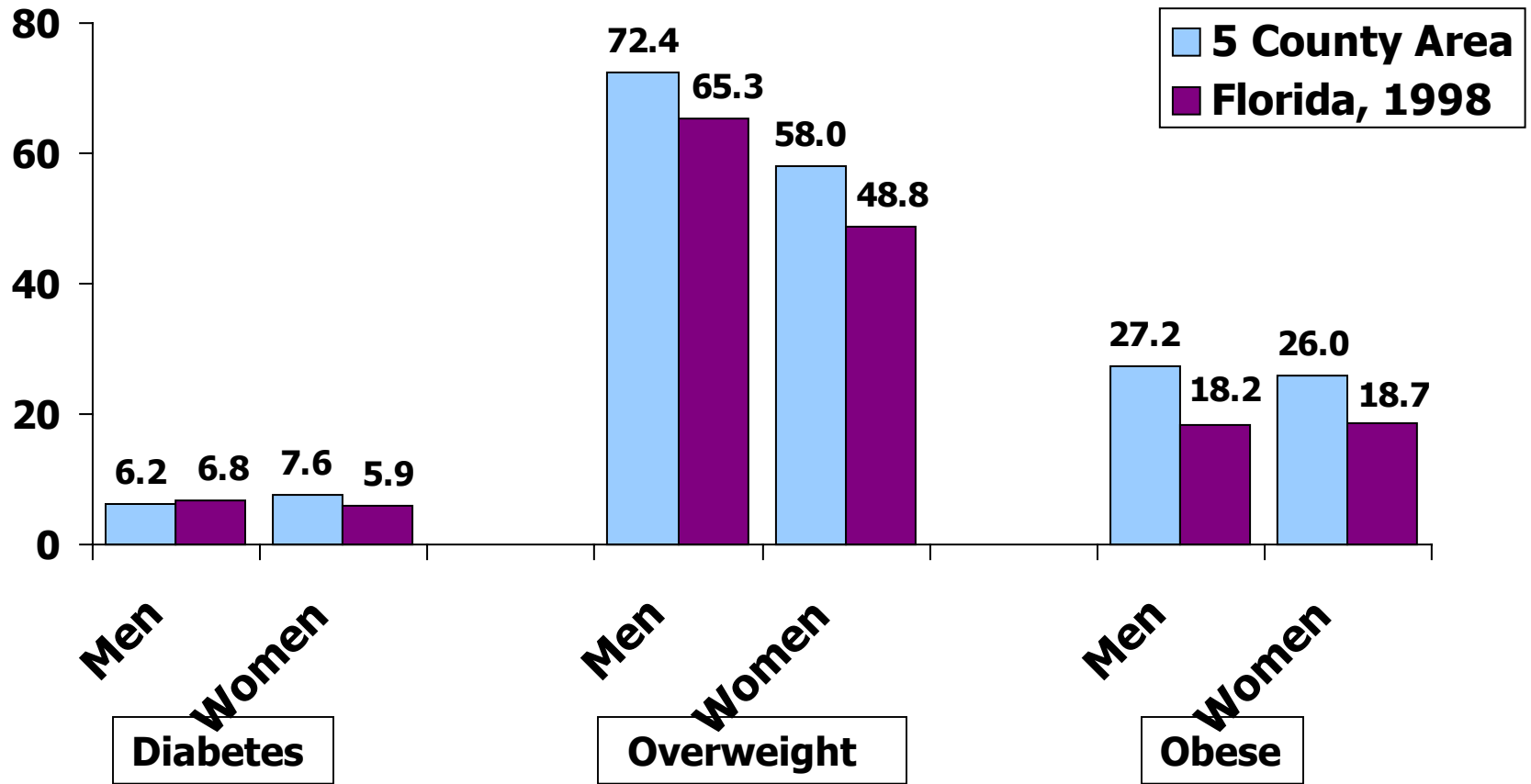
¹Aggregate data for Baker, Bradford, Columbia, Suwannee & Union counties

Figure 4. Prevalence of Adults who are Current, Former or Never Cigarette Smokers by Sex:
 Five Florida Counties, 2000¹ & Florida, 1998



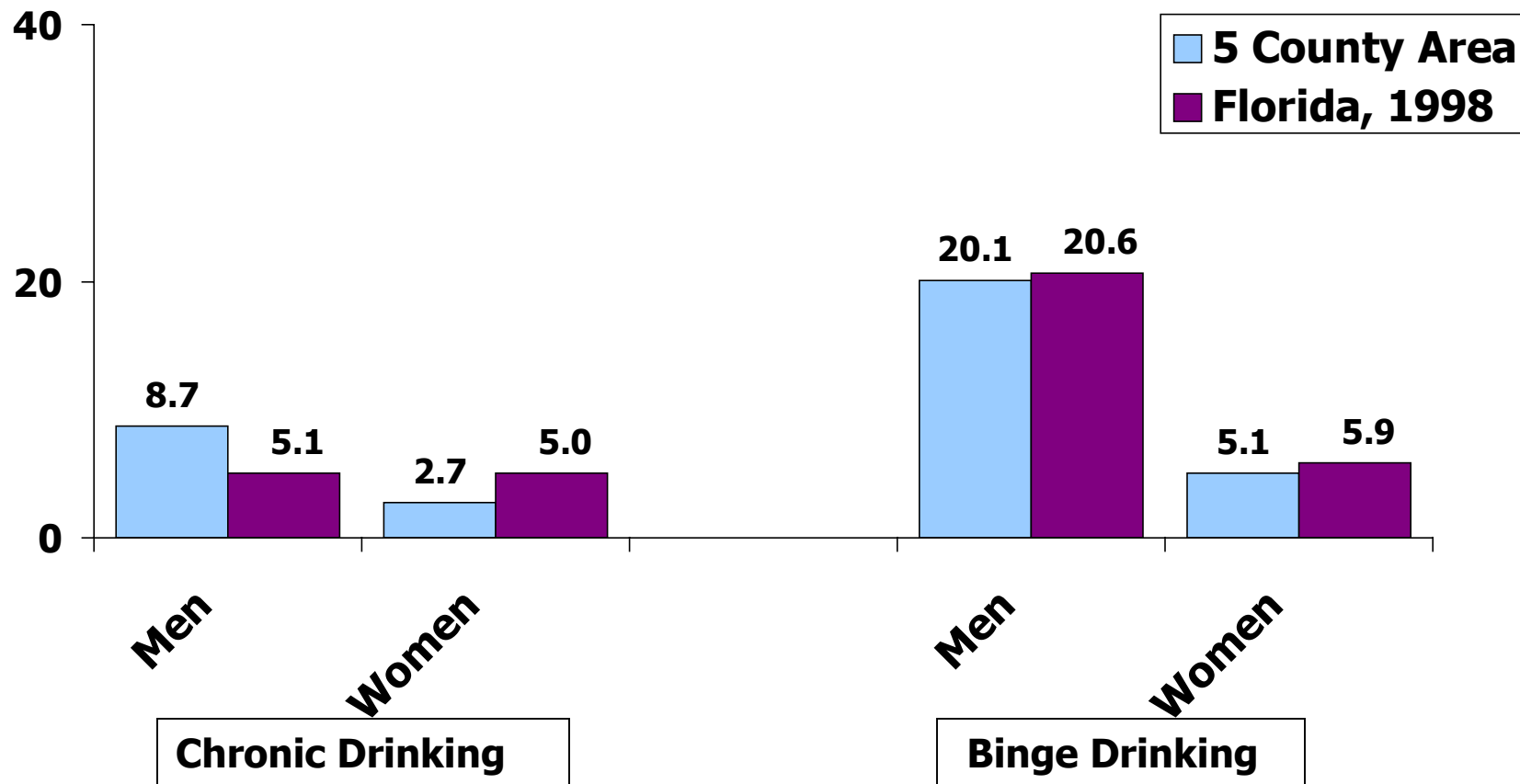
¹Aggregate data for Baker, Bradford, Columbia, Suwannee & Union counties

Figure 5. Prevalence of Adults with Diabetes & Percentage who are Overweight or Obese by Sex:
 Five Florida Counties, 2000¹ & Florida, 1998



¹Aggregate data for Baker, Bradford, Columbia, Suwannee & Union counties

Figure 6. Prevalence of Adults with Chronic Alcohol Problem and who are classified as Binge Drinkers, by Sex: Five Florida Counties, 2000¹ & Florida, 1998



¹Aggregate data for Baker, Bradford, Columbia, Suwannee & Union counties