

The 2002 County Behavioral Risk Factor Surveillance System (BRFSS) in Florida

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FL State BRFSS...

- A population-based random sampling telephone survey, following CDC survey protocol
- Monitors behavioral risk factors and chronic diseases.
- Surveys residents 18 years and older.
- Conducted annually since 1986.
- Almost 6,000 completed interviews in 2002.

Types of Questions in BRFSS

- Core: provided by CDC and included every year
- Rotating core: provided by CDC and included every other year
- Optional module: provided by CDC and selected by DOH
- State-added questions: developed by DOH

BRFSS Questions

Demographics

- Age
- Sex
- Race/Ethnicity
- Marital status
- Educational level
- Employment status
- Income
- County of residence
- Pregnancy status
- Children <18 years in household

BRFSS Questions

Risk Behaviors

- Smoking status
- Tobacco indicators
- Other tobacco products
- Alcohol use
- Physical activities
- Injury related risk behavior
- Heart attack and stroke
- HIV/AIDS prevention
- Sexual behavior
- Fruit & vegetable consumption
- Weight control
- Folic acid use

BRFSS Questions

General Health

- Health status
- Health insurance
- Personal health provider
- Quality of life and care giving
- Height and weight

Health Conditions

- Diabetes
- High blood pressure
- High cholesterol
- Oral health
- Asthma history
- Cardiovascular disease
- Arthritis

BRFSS Questions

Health Services

- Health services
- Health care coverage & utilization
- Breast cancer screening
- Cervical cancer screening
- Prostate cancer screening
- Colorectal cancer screening
- Flu & pneumococcal vaccination

We have the statewide Florida
BRFSS

Why do we need a county-level
BRFSS?

To meet the needs of our counties!

The state BRFSS:

- Provides only *statewide* valid estimates of prevalence of behavioral risk factors
- Meets CDC requirements and state needs, not necessarily needs of county
- Cannot represent differences and similarities between counties

Survey Project Description

- Proposed: 500 interviews in 67 counties (total=33,500)
- Period of Interviews (Sept-Jan 2003)
- Survey: 76 questions
- CDC BRFSS protocol

76 County BRFSS Questions

- Demographics (15)
- Health Status (1)
- Health Care Access (5)
- Exercise (8)
- Fruits and Vegetables (6)
- Hypertension (2)
- Cholesterol (3)
- Asthma (2)
- Diabetes (1)
- Oral Health (3)
- Immunization (3)
- Tobacco Use (3)
- Alcohol Consumption (3)
- Women's Health (5)
- Weight Control (1)
- Cardiovascular Disease (6)
- Colorectal Cancer Screening (4)
- HIV/AIDS (5)

Magnitude of Survey Project

- Coordinated effort: Tallahassee, Tampa, Princeton, Burlington call centers
- Average interviewing time per day: 150-200 hrs
- 267,803 phone numbers were called
- Volume= 6.5 years of state Florida BRFSS surveys
- Intensity=16 state Florida BRFSS implemented at same time

Survey Results

- Completed in 5 months
- Saved \$160,000
- Obtained a large sample size
 - Total # of completes: 34,111
 - Average # per county: 509
- Achieved high quality: 99.7% met the CDC protocol

Data Dissemination

- Primary customers
 - County Health Departments
 - Disease prevention programs
 - Community organizations
- Type of data
 - Summary data
 - Special studies
 - Raw data
- Means of dissemination
 - CD-ROMs
 - Printed copies
 - Internet

Summary Data

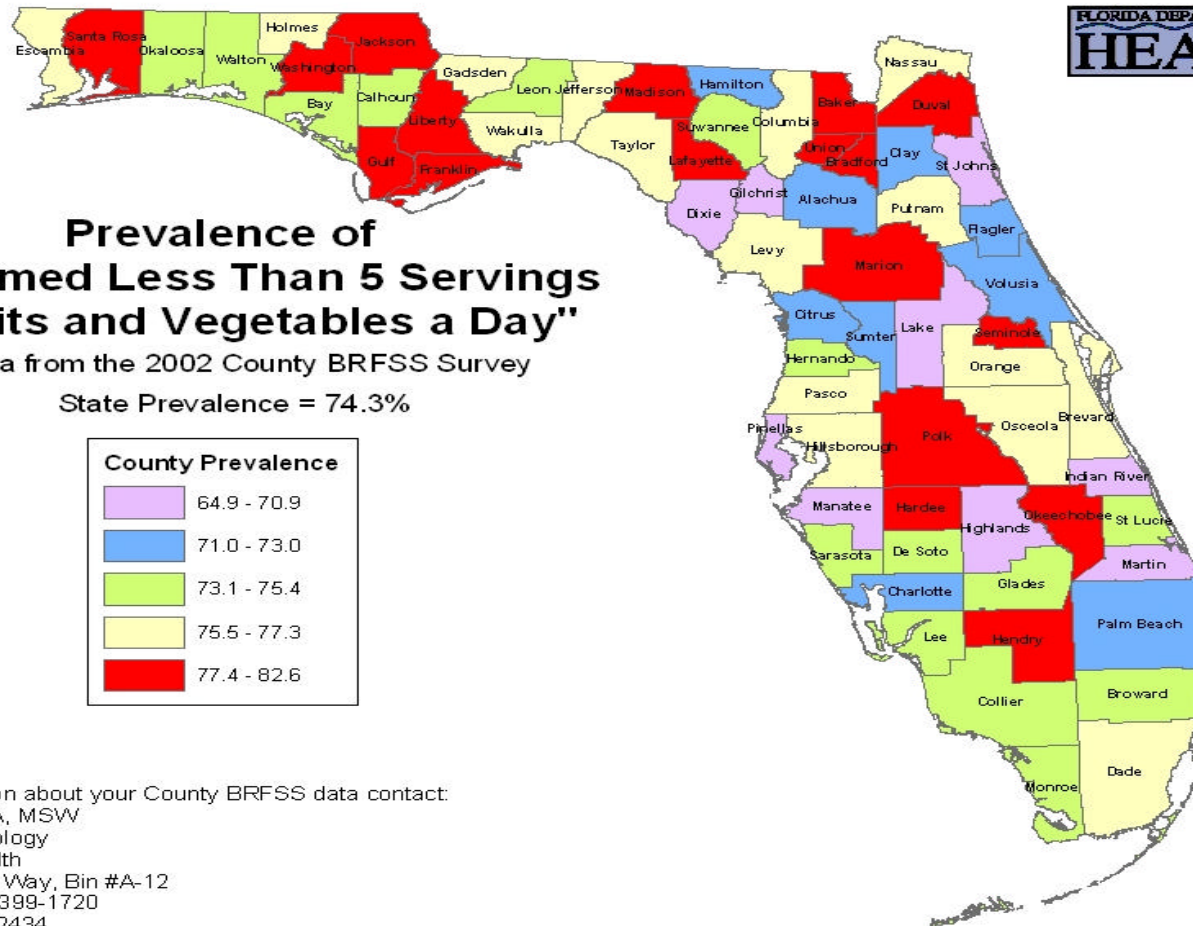
- Printed copies:
 - Individual county report
 - Color-coded Florida maps for key variables
 - Florida report
- Internet
 - All the information above
- CD-ROMs
 - All the information above PLUS
 - County-level raw in SAS format; data layout; coding

County Reports—the Escambia Example

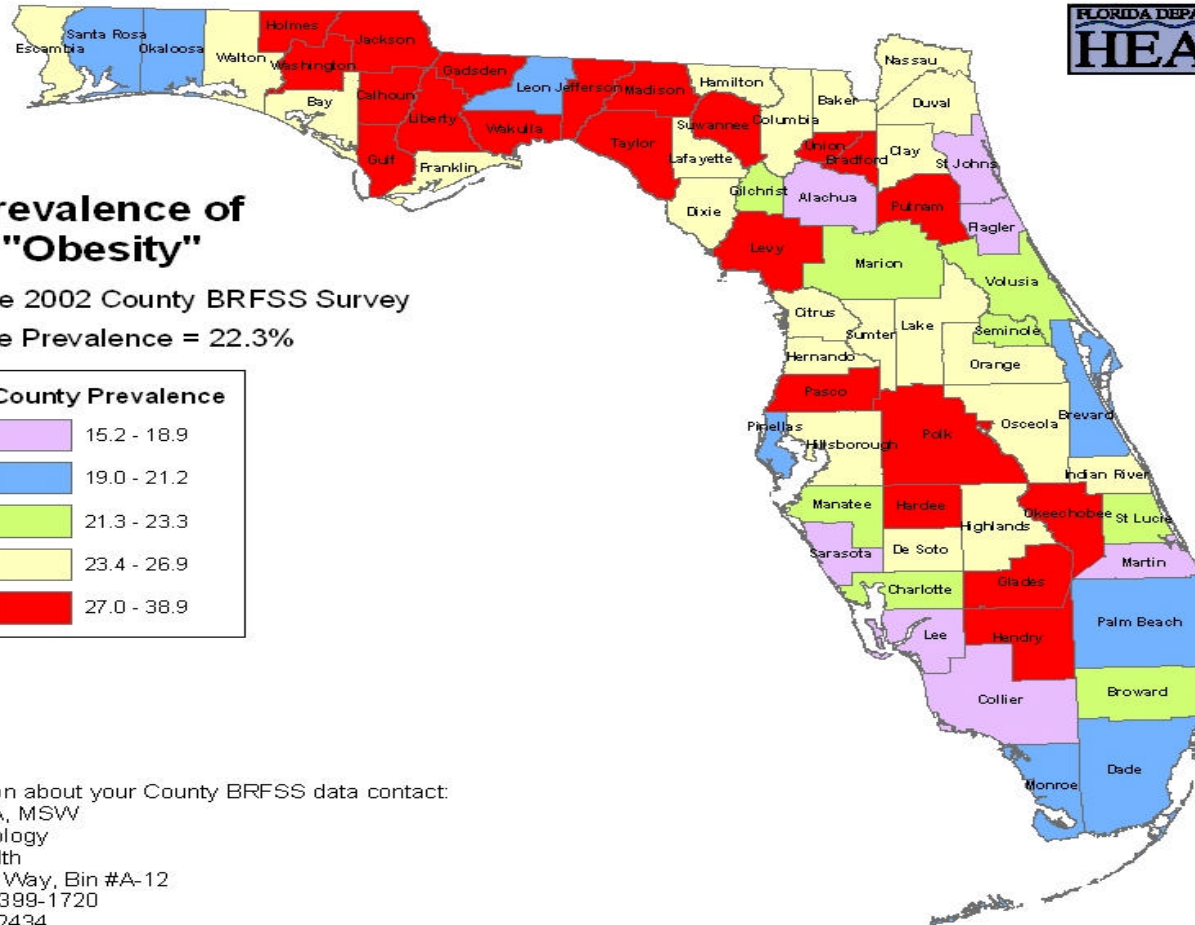
Population Size and Health Status									
		Population Size*		Health Status is Fair or Poor			Mostly sitting/standing at job		
		County	State	%	CI		%	CI	
All		294,410	15,982,378	20.4	16.4	24.4	60.6	53.7	67.6
Sex	Men	49.7%	48.8%	19.5	13.3	25.7	58.8	48.3	69.2
	Women	50.3%	51.2%	21.2	16.1	26.4	62.8	53.8	71.9
Race/ethnicity	NH White	70.9%	65.4%	18.5	13.9	23.2	62.1	54.0	70.2
	NH Black	21.2%	14.2%	33.2	21.4	44.9	58.4	38.8	78.1
	Hispanic	2.7%	16.8%	.	.	.	.	.	.
Race/ethnicity-Sex	NH White men	35.5%	31.9%	18.4	11.3	25.6	61.4	49.3	73.5
	NH White women	35.4%	33.6%	18.6	12.7	24.5	63.1	52.6	73.6
	NH Black men	10.2%	6.8%	.	.	.	.	.	.
	NH Black women	11.1%	7.4%	37.3	22.4	52.2	.	.	.
	Hispanic men	1.5%	8.4%	.	.	.	.	.	.
	Hispanic women	1.2%	8.4%	.	.	.	.	.	.
Age	18-44	41.1%	36.9%	15.4	10.0	20.8	63.7	54.9	72.6
	45-64	22.0%	22.7%	26.7	18.9	34.5	56.6	44.6	68.6
	65 and older	13.3%	17.6%	25.9	17.1	34.6	.	.	.
Marital Status	Never married	25.6%	22.5%	17.1	8.1	26.1	67.6	54.4	80.9
	Married/ living together as a couple	49.3%	53.7%	17.2	12.0	22.4	61.7	52.1	71.2
	Divorced/ widowed/separated	25.1%	23.8%	30.7	22.3	39.1	47.5	32.5	62.5
Education	0-11 years	17.9%	20.1%	42.8	25.9	59.6	.	.	.
	HS Grad/GED	28.3%	28.7%	27.5	19.0	36.0	44.7	29.9	59.4
	1 or more years of college	53.7%	51.1%	13.9	9.5	18.2	67.0	59.2	74.9
Employment	Employed for wages	51.7%	54.9%	12.5	8.0	17.1	60.6	53.7	67.6
Household Income	\$24,999 or less	34.5%	30.8%	34.8	26.2	43.4	54.0	39.6	68.4
	\$25,000 – 49,999	33.2%	31.6%	19.6	12.0	27.2	59.5	47.0	72.1
	\$50,000 or more	32.3%	37.6%	5.6	1.1	10.2	70.7	59.5	81.9

*Per Census Bureau calculations, the following demographic categories are limited to specific age groups: Marital Status, >=15 years old; Education, >=25 years old; Employment, >=16 years old.

Variable Maps—Nutrition



Variable Maps--Obesity



Special Studies

- Disparities of behavioral risk factors and diseases
 - By geographic areas
 - By race/ethnicity
 - By gender
 - Among special populations

Raw Data

- Survey data in SAS format
- Data layout
- Assistance with SAS programs and analysis

Use of the BRFSS Data

- Strengths of the data
 - Population-based survey
 - Conducted every year
 - Flexible and relatively inexpensive
 - Data are comparable to other states

Use of the BRFSS Data

- Limitations of the data
 - Selection bias:
 - telephone coverage
 - participation
 - Sample size
 - Sampling errors
 - Self-report

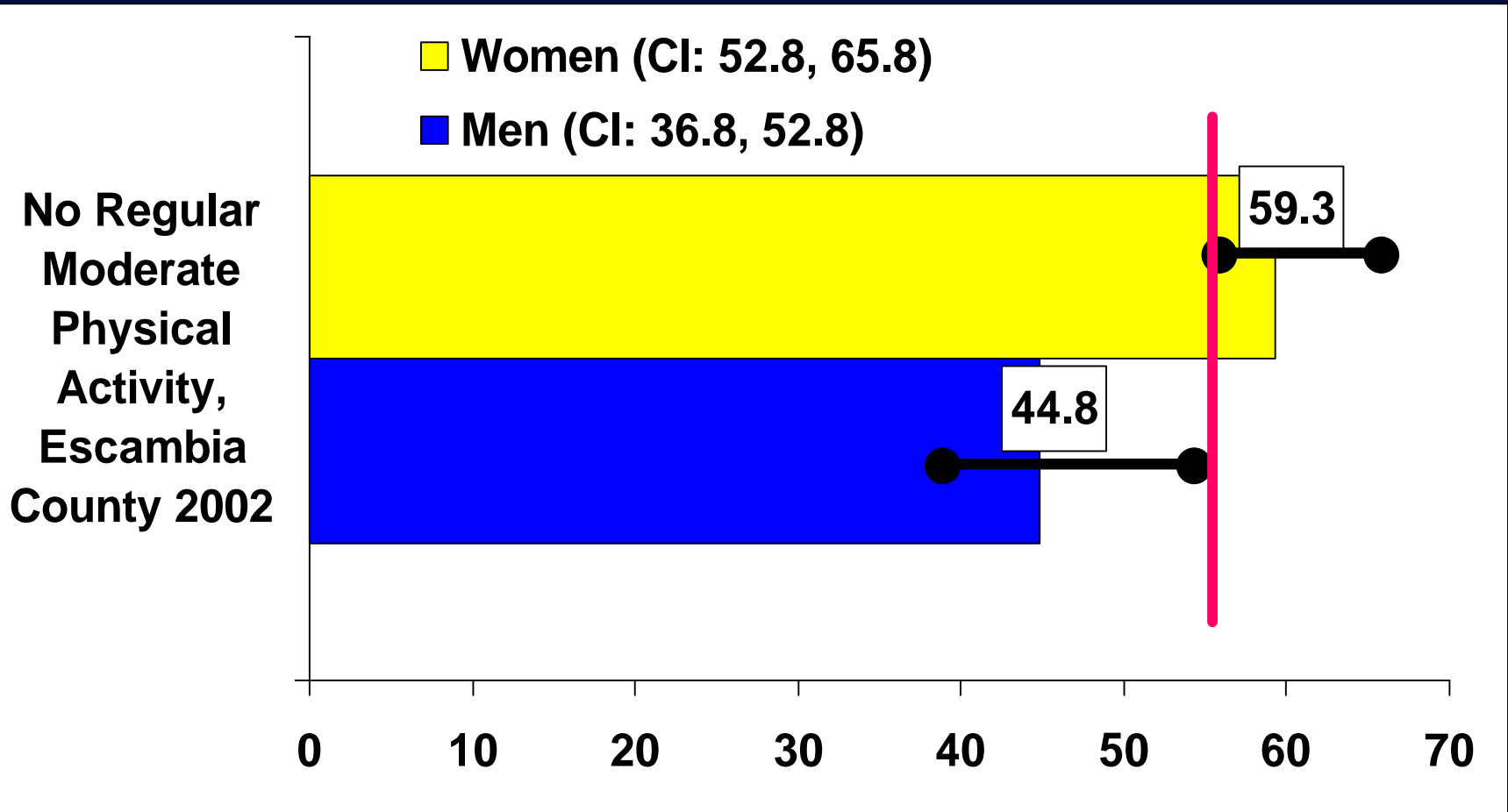
Use of the BRFSS Data

- Estimate of prevalence
 - Sampling errors and confidence intervals
 - Weighted for population estimate
- Comparisons between counties
- Analytic software: SAS v.8 and/or SUDAAN

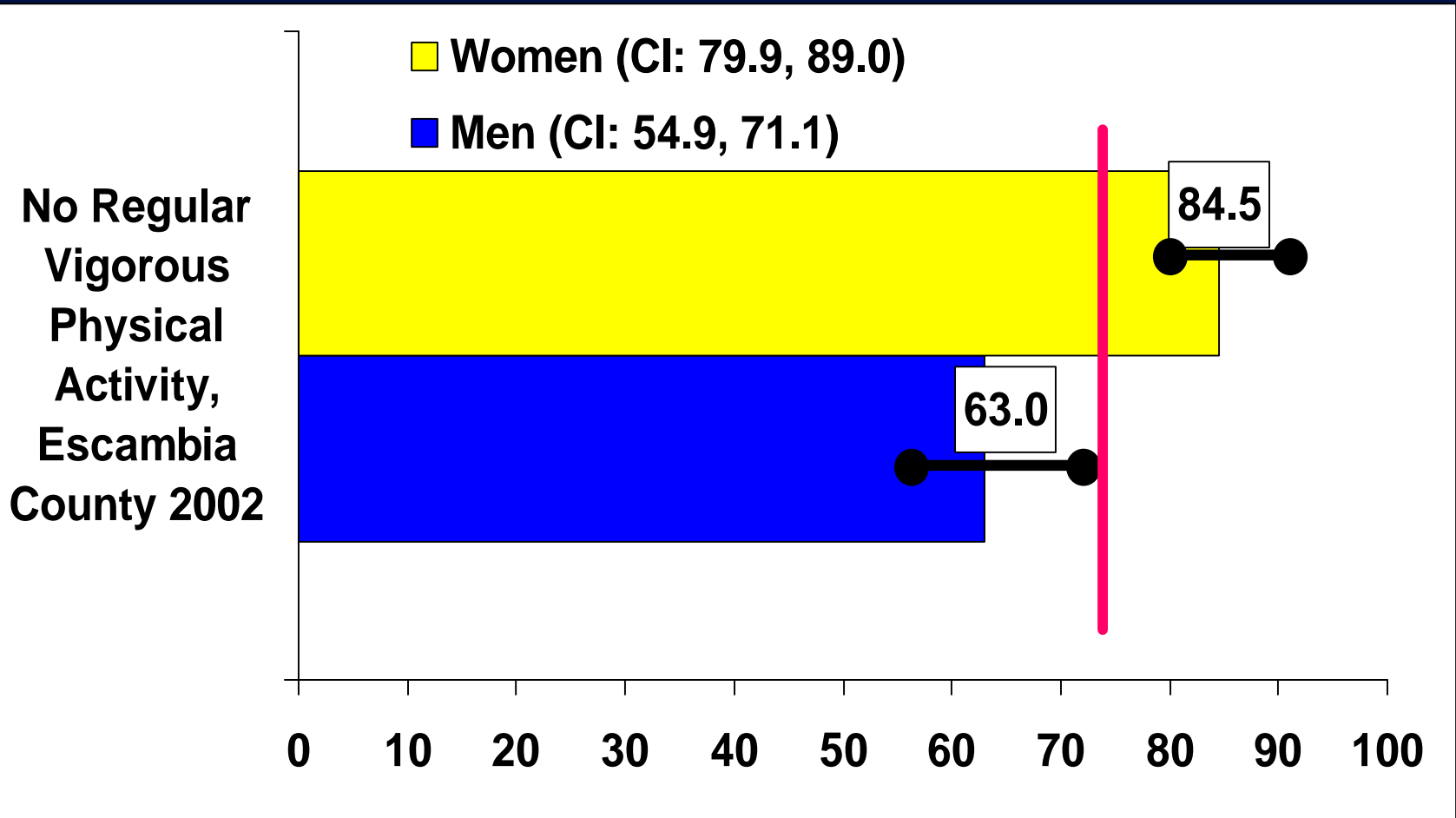
The Escambia Example

Risk Factors: Physical Activity										
Related Healthy People 2010 Objective(s) 22-1, 22-2, 22-3	No leisure time physical activity			No regular moderate physical activity ⁽¹⁾			No regular vigorous physical activity ⁽²⁾			
	%	CI		%	CI		%	CI		
All	24.8	20.5	29.0	52.2	47.0	57.4	74.0	69.2	78.8	
Sex										
	Men	18.1	12.2	24.1	44.8	36.8	52.8	63.0	54.9	71.1
	Women	31.0	25.0	37.0	59.3	52.8	65.8	84.5	79.9	89.0
Race/ethnicity										
	NH White	23.0	18.1	27.8	52.4	46.3	58.5	73.8	68.1	79.4
	NH Black	34.5	22.1	46.9	61.3	47.9	74.7	82.0	71.1	92.9
	Hispanic	.	.	.	.	.	.	.	.	.
Race/ethnicity-Sex										
	NH White men	17.0	10.1	23.8	43.9	34.5	53.3	62.5	53.0	71.9
	NH White women	28.9	22.2	35.7	61.0	53.6	68.4	85.3	80.0	90.5

Moderate Physical Activity



Vigorous Physical Activity



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