

# **Your Health Matters: Nutritious Eating**



## **1: Introduction**

# Acknowledgement

*This curriculum was created by The University of Texas School of Public Health, Brownsville Regional Campus with partial funding from the University of Texas Community Outreach supported by the Texas Department of State Health Services (DSHS).*



# Knowledge Questionnaire





# Nutritious Eating Program Goals

**Expand** understanding about why proper nutrition is important for a healthy life.

**Demonstrate** how eating right helps reduce risk for chronic diseases.

**Empower** participants to make healthy food choices and counsel clients with meal planning strategies.

**Provide** a curriculum which gives Community Health Workers the knowledge and skills about nutritious eating to impart to their communities.

This curriculum provides the nutrition component to compliment the *Your Health Matters: Fitness for Life* curriculum.



# Nutritious Eating Learning Objectives

- 🍏 Describe the obesity epidemic and its implications to health.
- 🍏 Describe how the energy balance influences healthy weight maintenance or weight loss.
- 🍏 Give examples of how food portions have changed in the past 20 years and the implications of these changes.
- 🍏 Recognize the Go-Slow-Whoa concept and give an example of each type of food.

*More...*



# Nutritious Eating Learning Objectives

- 🍏 Identify the six basic nutrients.
- 🍏 Explain the Nutrition Facts food labels and state the low and high percentages for the daily values.
- 🍏 Plan a healthy meal.



# Nutritious Eating Program Materials CD

*PowerPoint Presentations, Handouts,  
Information Sheets, Activities, and Videos*

**INTRODUCTION**

**MEAL PLANNING**

**ENERGY BALANCE**

**CONCLUSION**

**PORTION DISTORTION**

**BONUS MATERIAL**

Diabetes Information and  
Activities

**HEALTHY EATING**

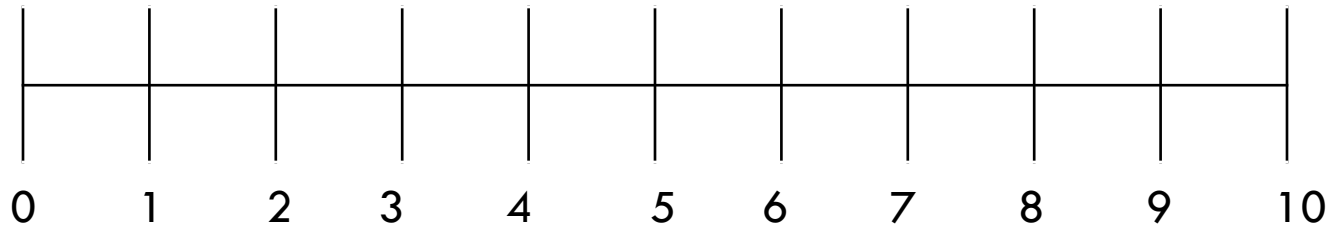
**THE BASIC NUTRIENTS**

**APPENDICES**

Glossary  
Additional Resources  
Handouts

**THE NUTRITION FACTS  
LABEL**

How prepared do you feel to  
educate people about healthy  
food choices?







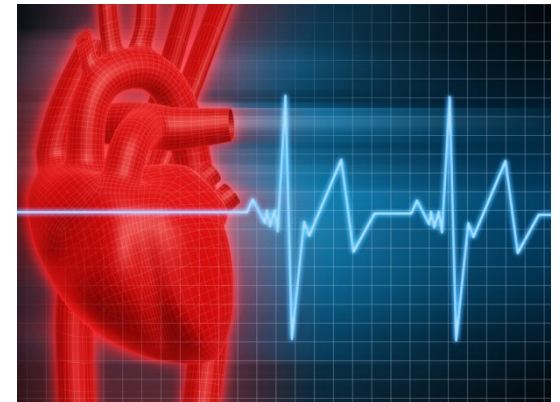
**So why are we here? ...**

# Obesity is an Epidemic

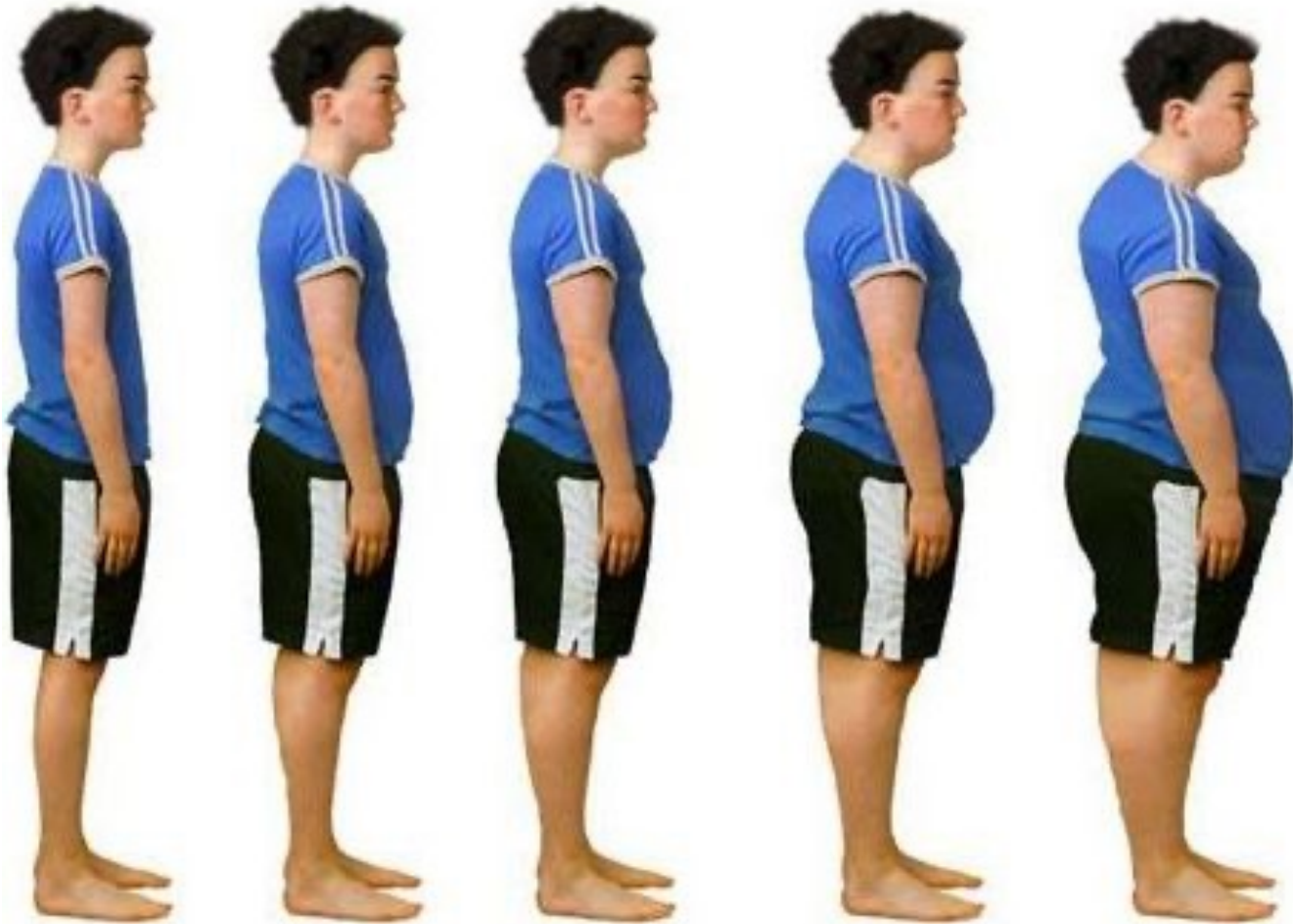
**#1 health problem facing American children**

**A defining public health challenge for the next half-century**

**The most challenging public health problem ever faced**



# What is Obesity?



# Adult Overweight & Obesity

## Body Mass Index (BMI)

*DEGREE OF BODY FAT BASED ON HEIGHT AND WEIGHT*

Body Mass Index Table																																				
Normal							Overweight					Obese								Extreme Obesity																
BMI	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
Height (inches)	Body Weight (pounds)																																			
58	91	96	100	105	110	115	119	124	129	134	138	143	148	153	158	162	167	172	177	181	186	191	196	201	205	210	215	220	224	229	234	239	244	248	253	258
59	94	99	104	109	114	119	124	128	133	138	143	148	153	158	163	168	173	178	183	188	193	198	203	208	212	217	222	227	232	237	242	247	252	257	262	267
60	97	102	107	112	118	123	128	133	138	143	148	153	158	163	168	174	179	184	189	194	199	204	209	215	220	225	230	235	240	245	250	255	261	266	271	276
61	100	106	111	116	122	127	132	137	143	148	153	158	164	169	174	180	185	190	195	201	206	211	217	222	227	232	238	243	248	254	259	264	269	275	280	285
62	104	109	115	120	126	131	136	142	147	153	158	164	169	175	180	186	191	196	202	207	213	218	224	229	235	240	246	251	256	262	267	273	278	284	289	295
63	107	113	118	124	130	135	141	146	152	158	163	169	175	180	186	191	197	203	208	214	220	225	231	237	242	248	254	259	265	270	278	282	287	293	299	304
64	110	116	122	128	134	140	145	151	157	163	169	174	180	186	192	197	204	209	215	221	227	232	238	244	250	256	262	267	273	279	285	291	296	302	308	314
65	114	120	126	132	138	144	150	156	162	168	174	180	186	192	198	204	210	216	222	228	234	240	246	252	258	264	270	276	282	288	294	300	306	312	318	324
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76	156	164	172	180	189	197	205	213	221	230	238	246	254	263	271	279	287	295	304	312	320	328	336	344	353	361	369	377	385	394	402	410	418	426	435	443

*For adults 20 years  
and older*

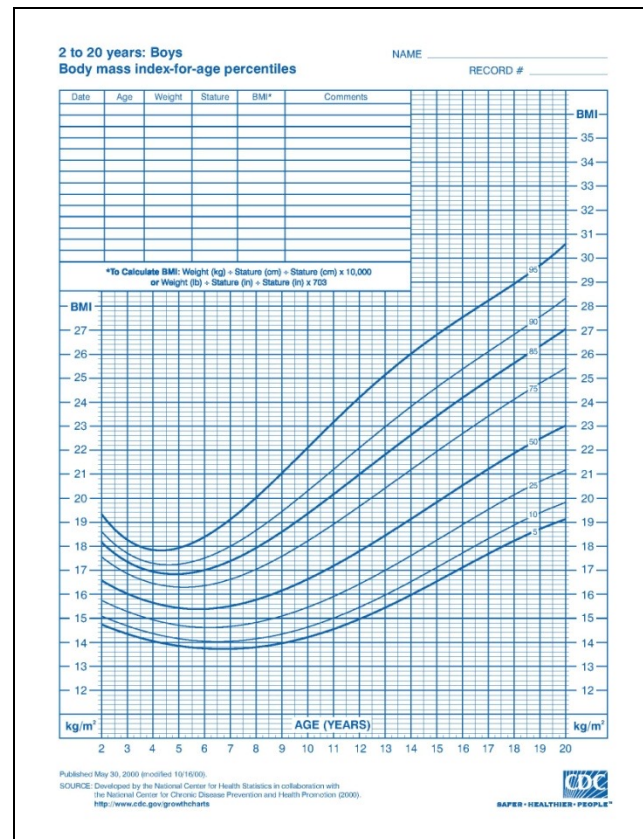
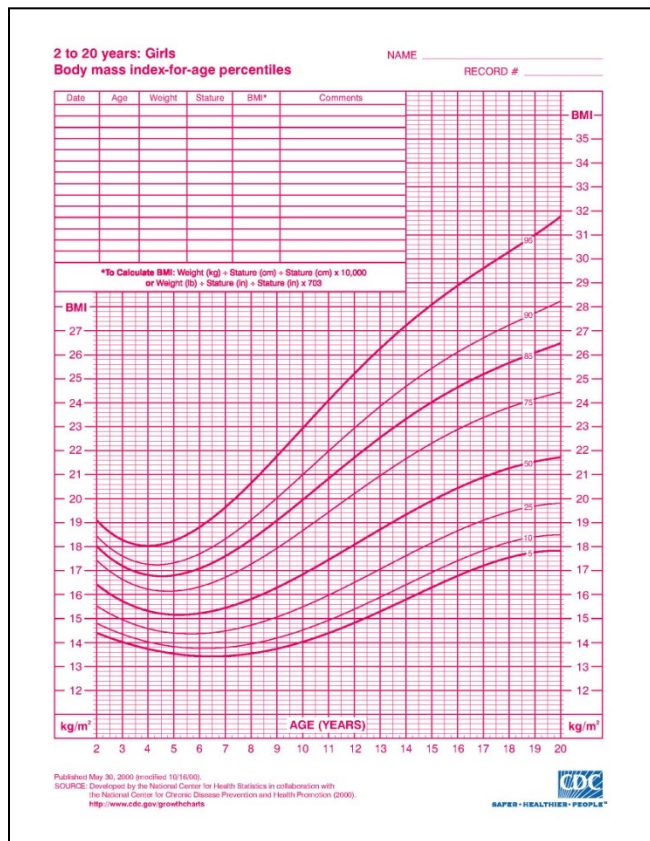
**Overweight**  
BMI of 25 to 29.9

**Obese**  
BMI of 30+

**Extremely Obese**  
BMI of 40+



# BMI-for-age Growth Charts



*For children  
2 to 19 years*

Overweight  
BMI between  
85<sup>th</sup> and 95<sup>th</sup>  
percentile

Obese  
BMI at or above  
95<sup>th</sup> percentile

# Why Do We Care?

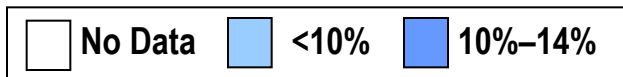
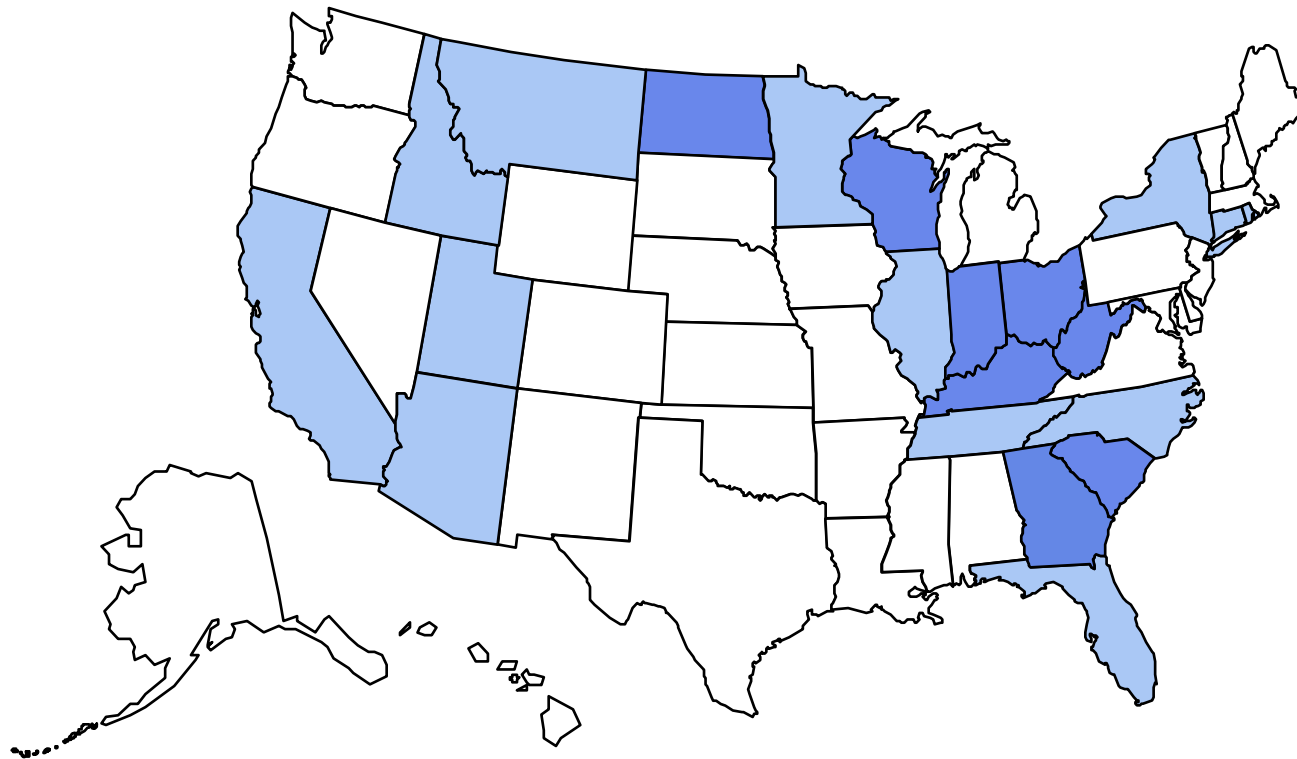
Obesity is a major risk factor for:

- Cardiovascular disease
- High total cholesterol
- High blood pressure
- Type 2 diabetes
- Stroke
- Liver disease
- Gall bladder disease
- Certain cancers
- Osteoporosis



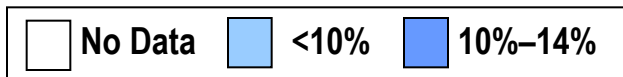
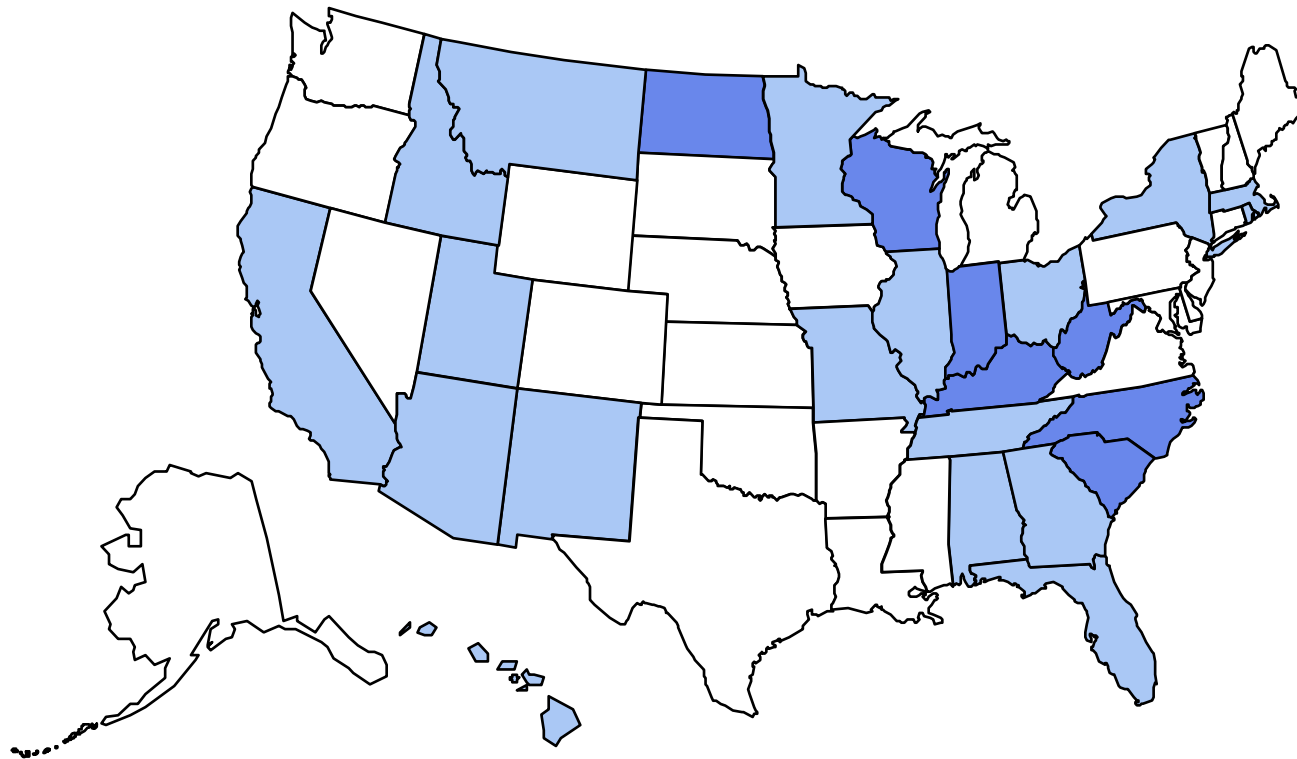
# Obesity Trends Among U.S. Adults

## BRFSS, 1985



# Obesity Trends Among U.S. Adults

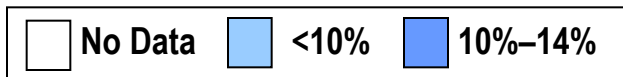
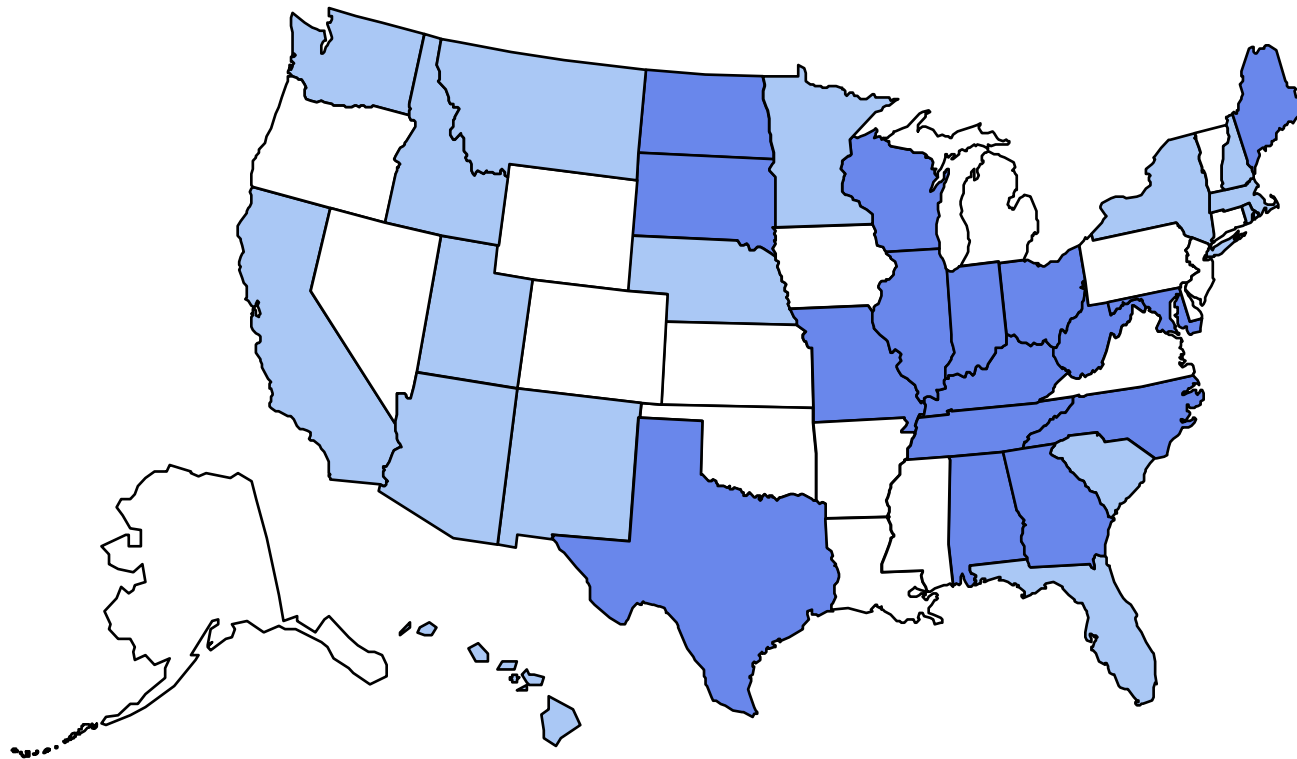
## BRFSS, 1986





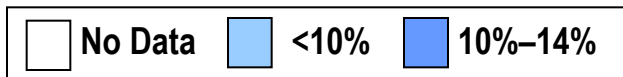
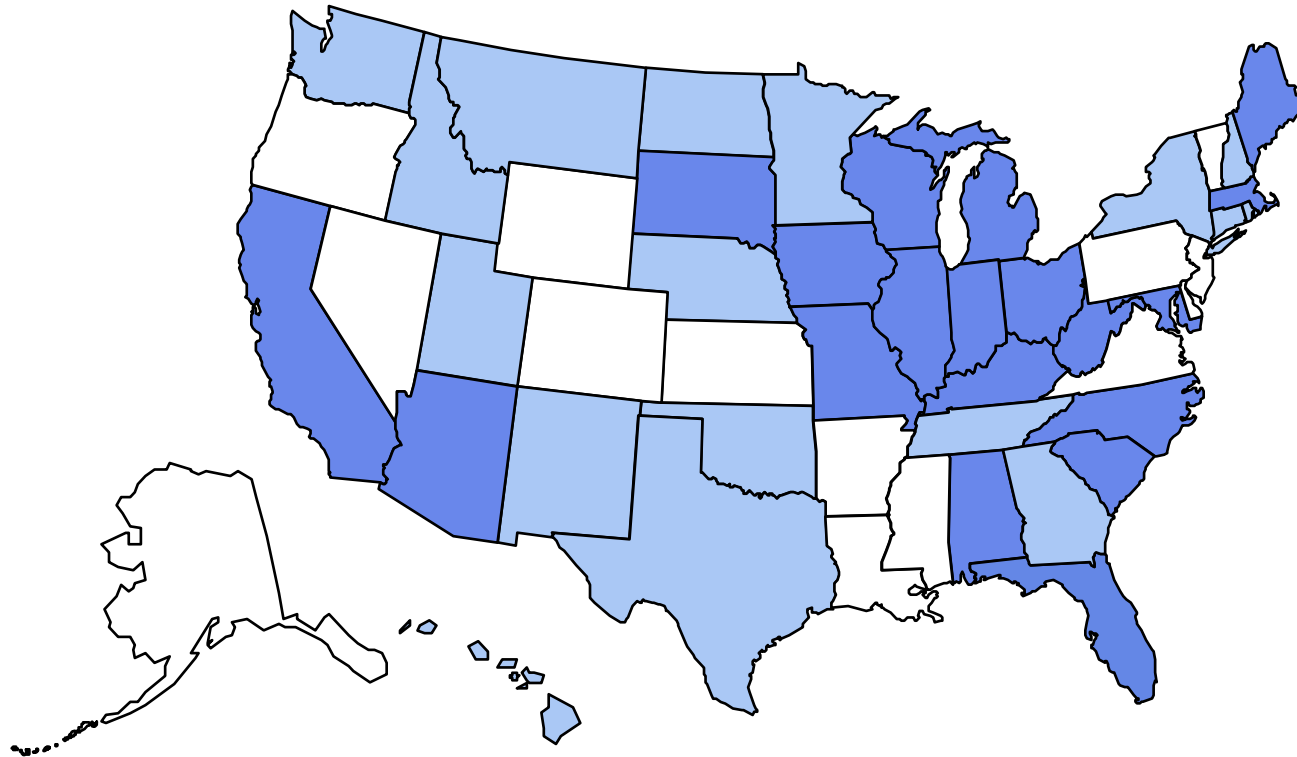
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## BRFSS, 1987



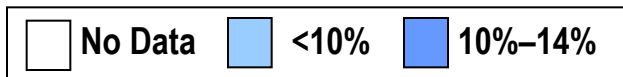
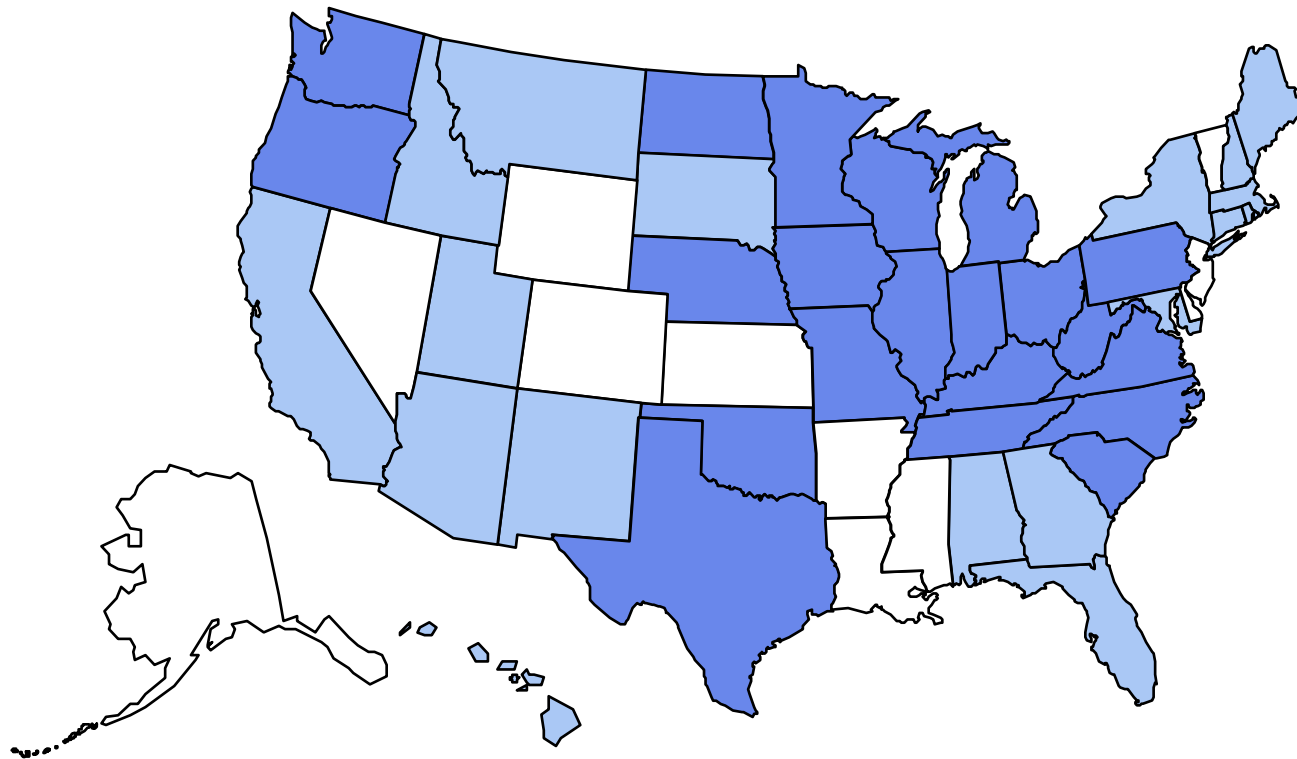
# Obesity Trends Among U.S. Adults

## BRFSS, 1988



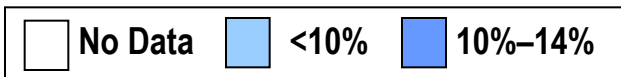
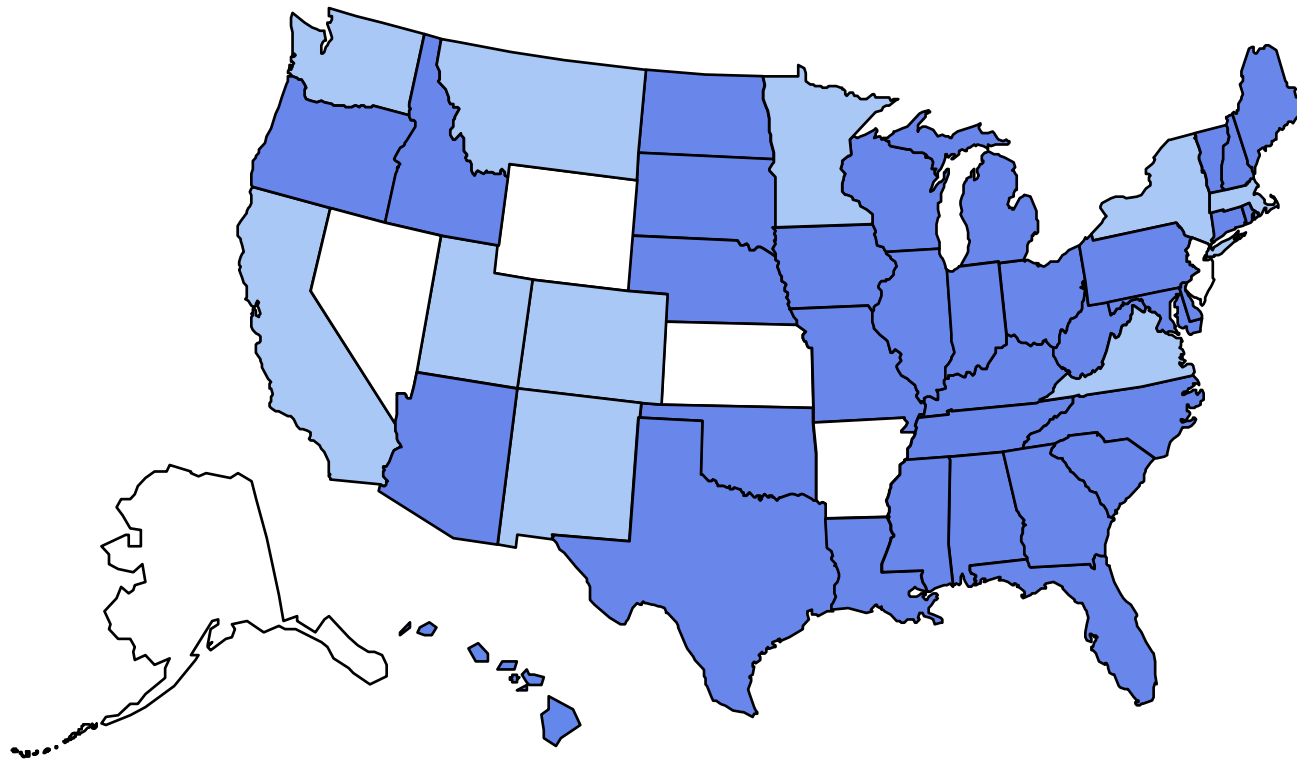
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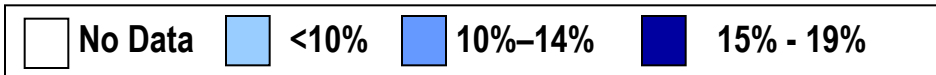
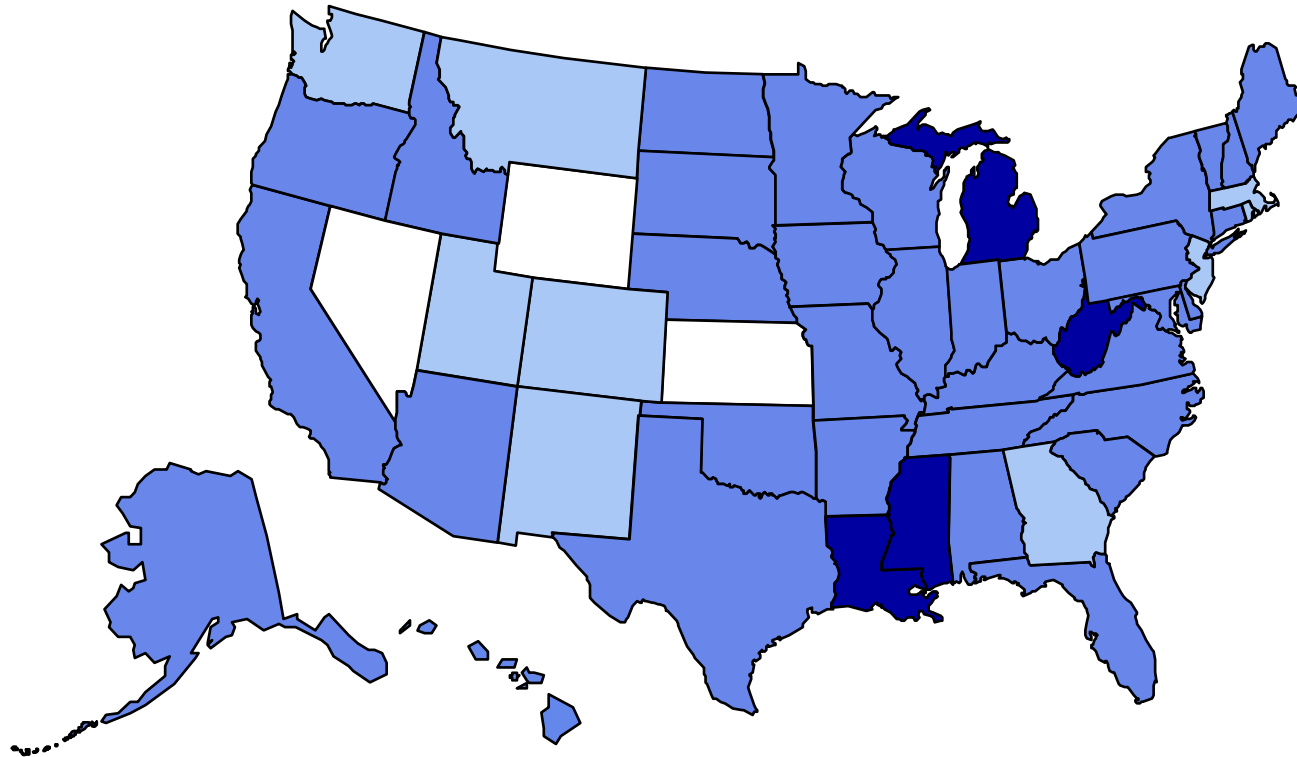
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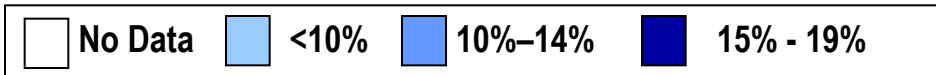
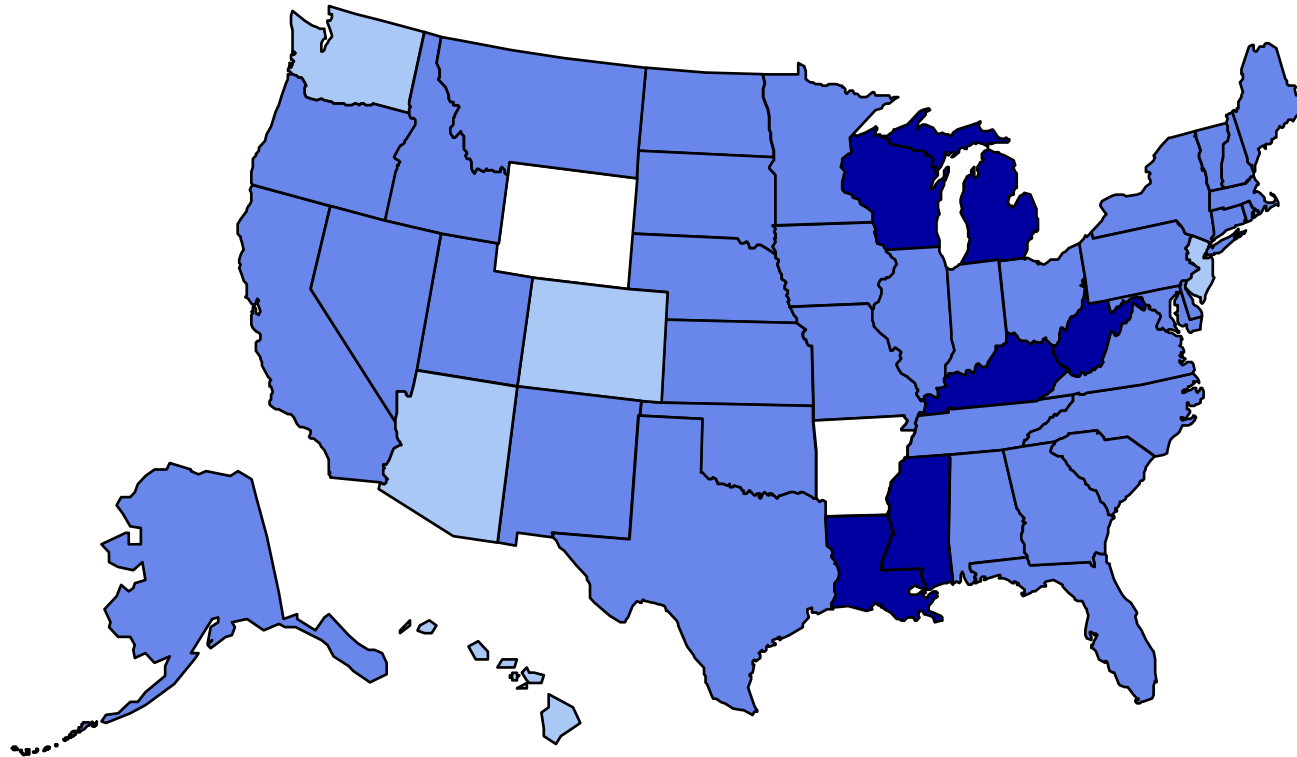
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## BRFSS, 1991



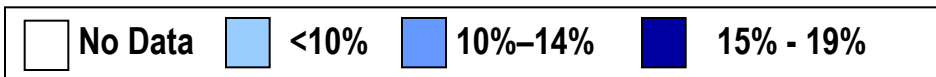
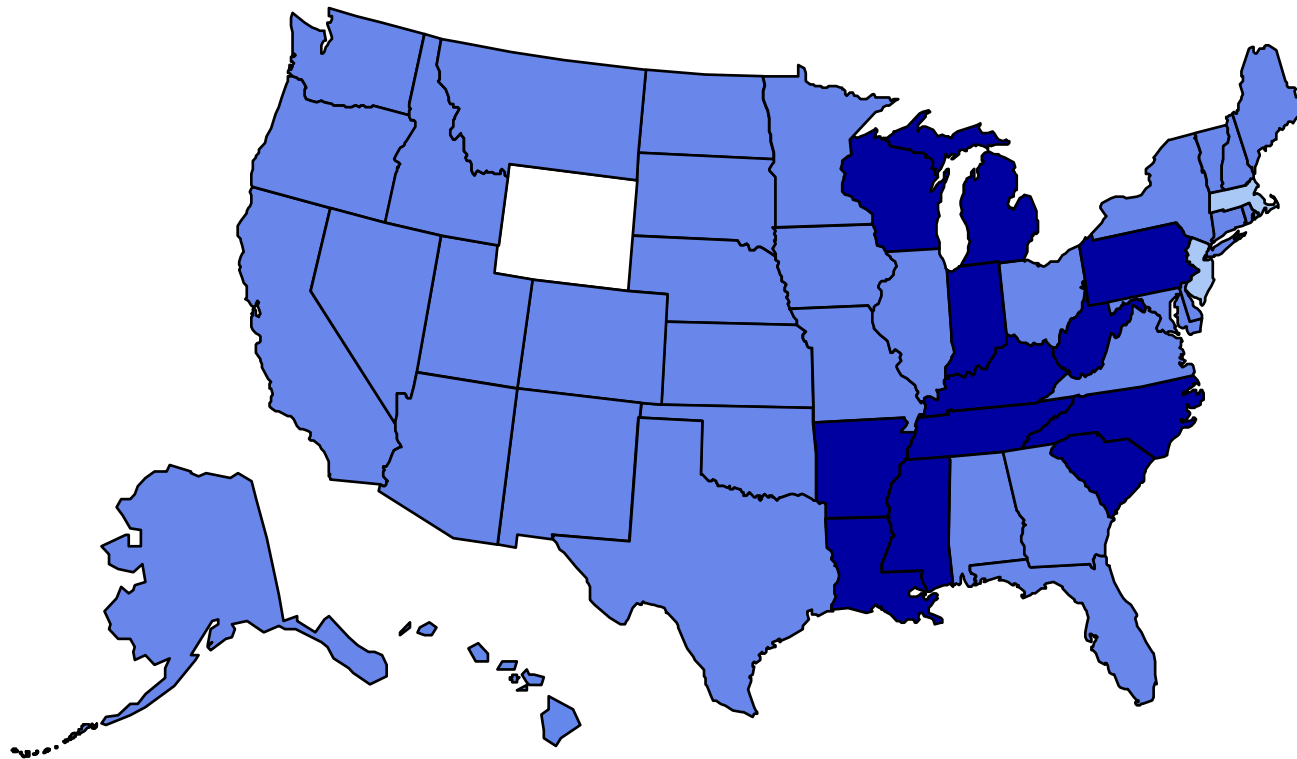
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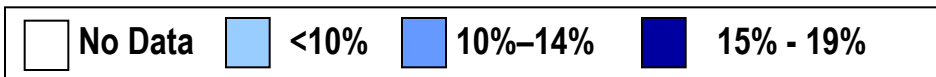
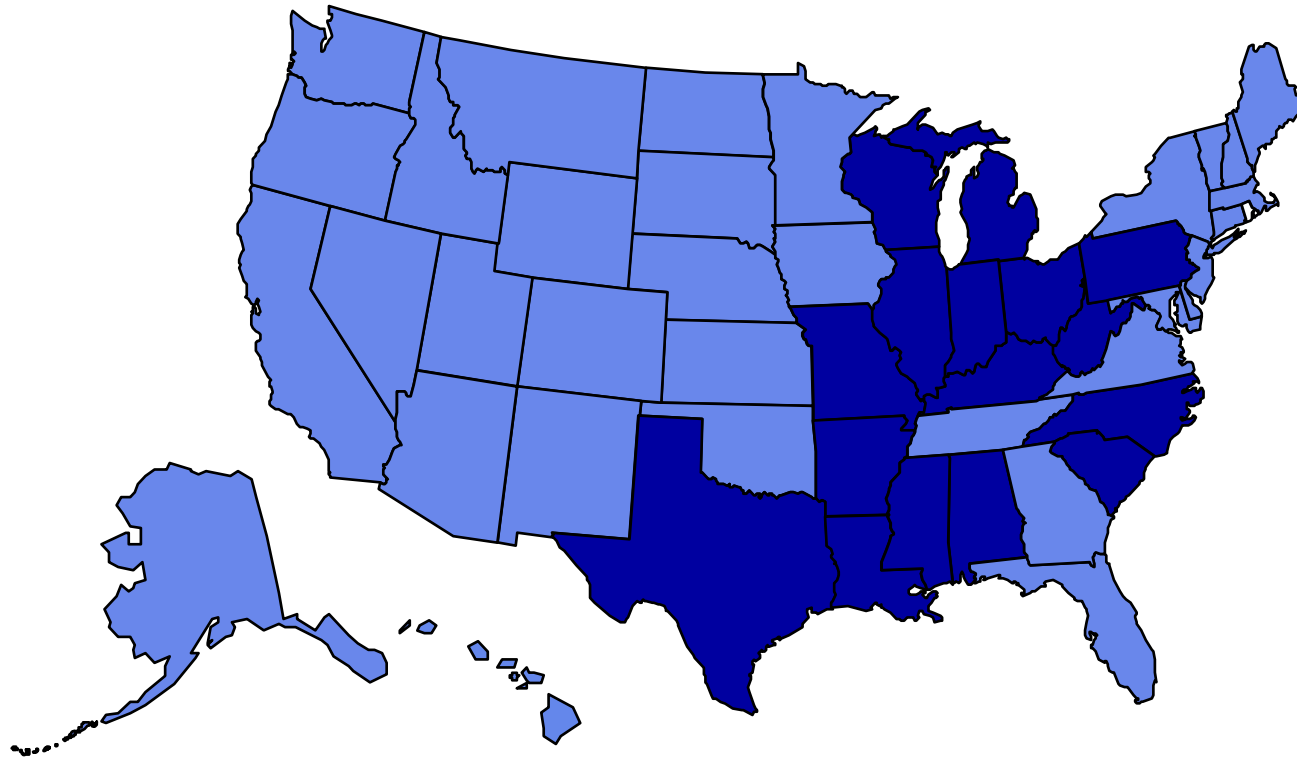
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## BRFSS, 1993



# Obesity Trends Among U.S. Adults

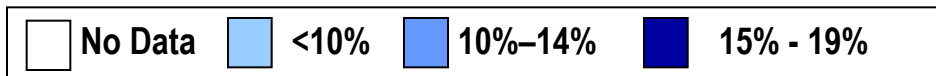
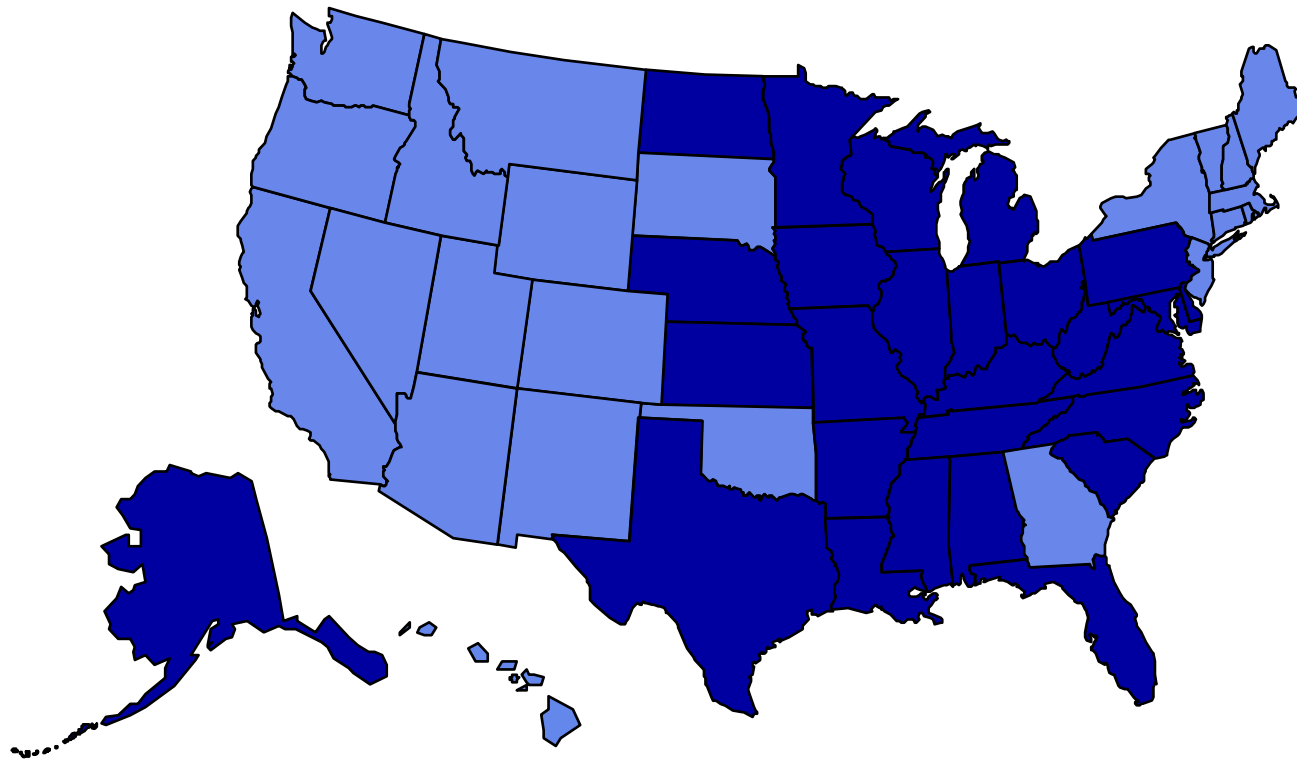
## BRFSS, 1994





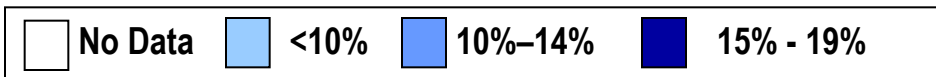
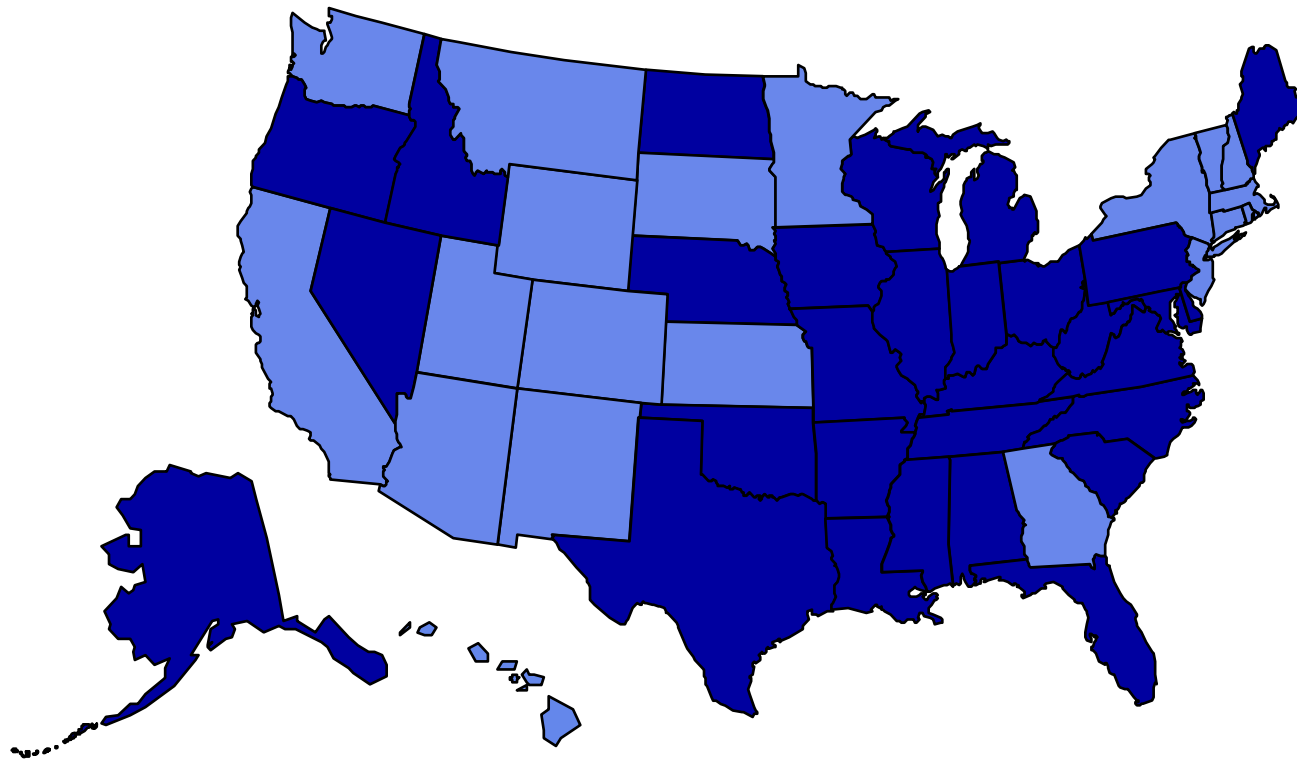
# Obesity Trends Among U.S. Adults

## BRFSS, 1995



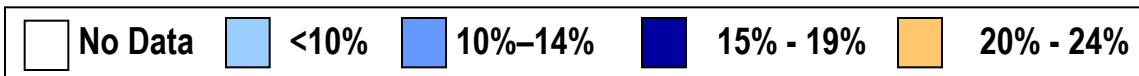
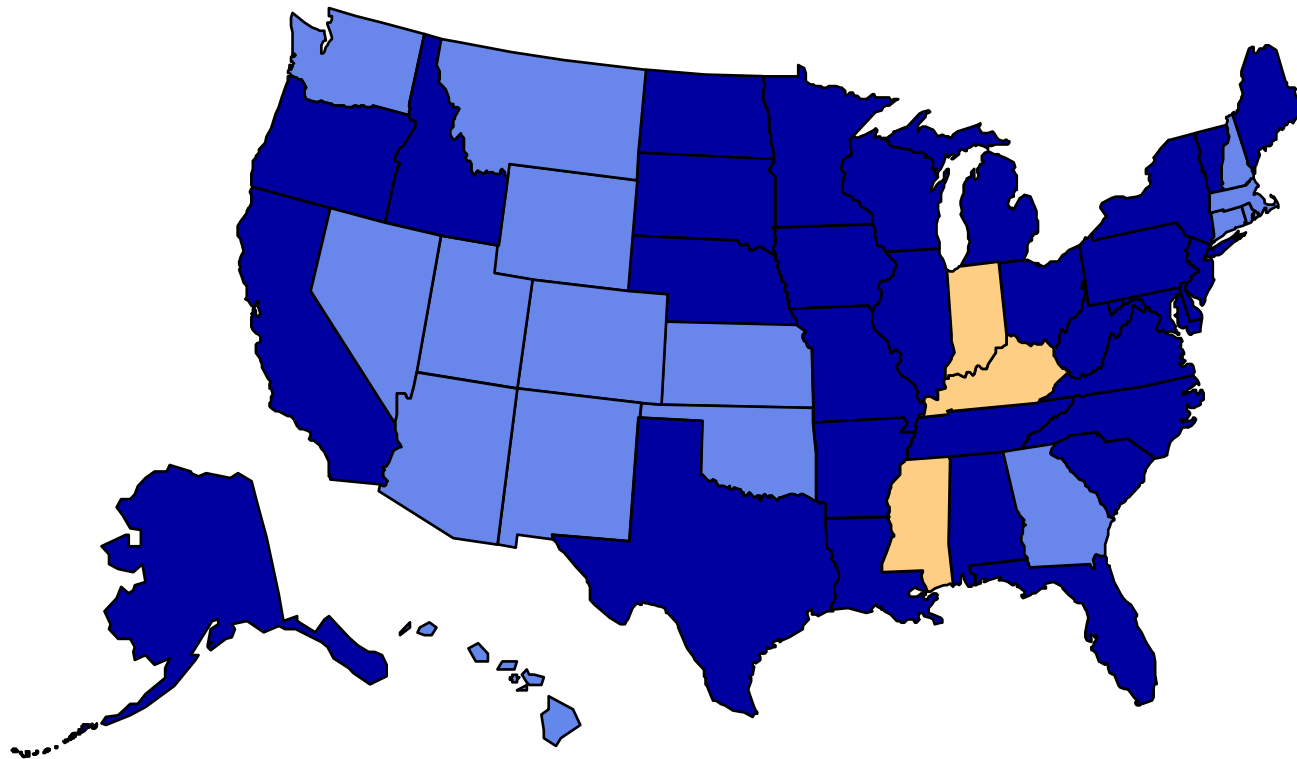
# Obesity Trends Among U.S. Adults

## BRFSS, 1996



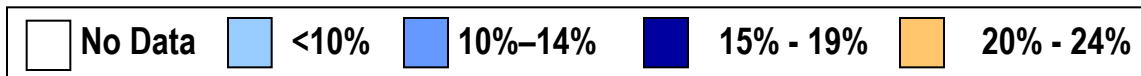
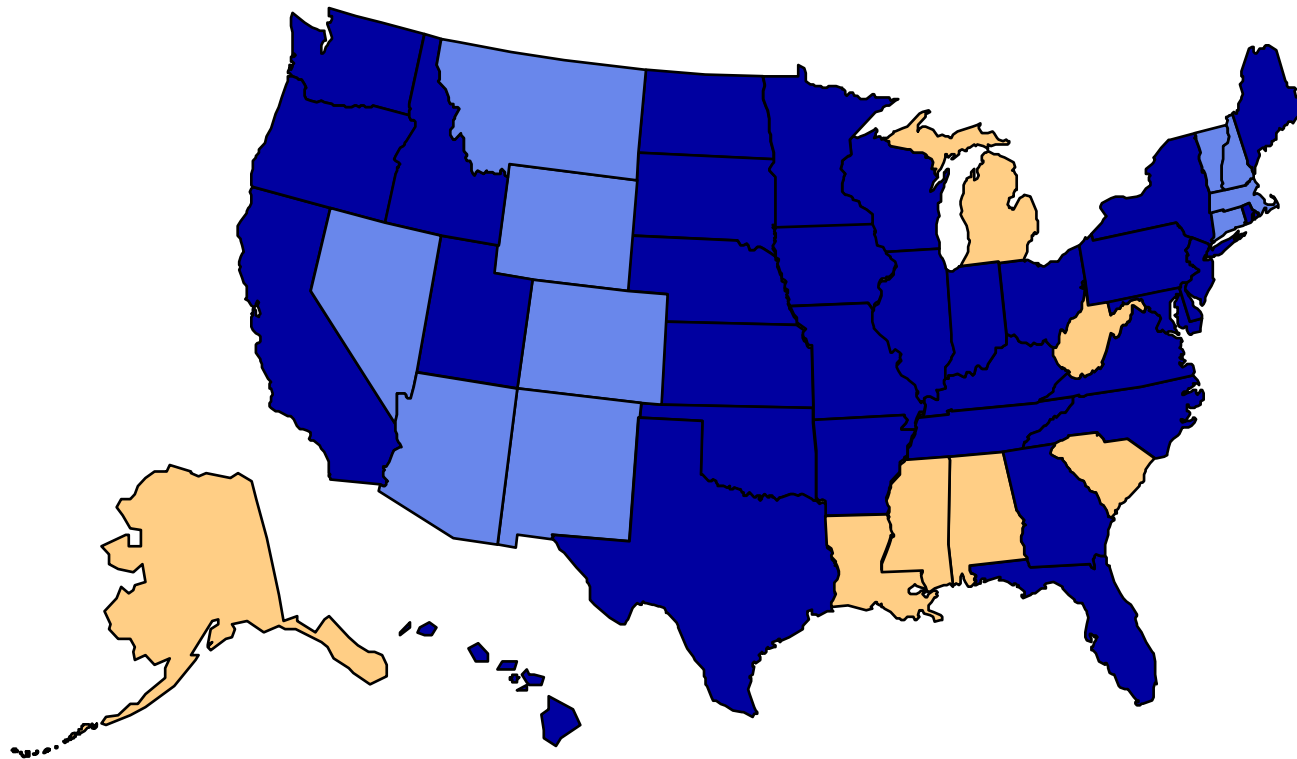
# Obesity Trends Among U.S. Adults

## BRFSS, 1997



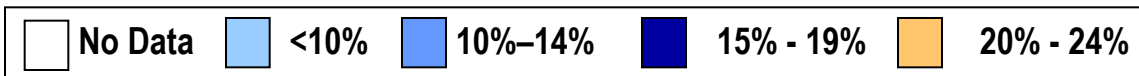
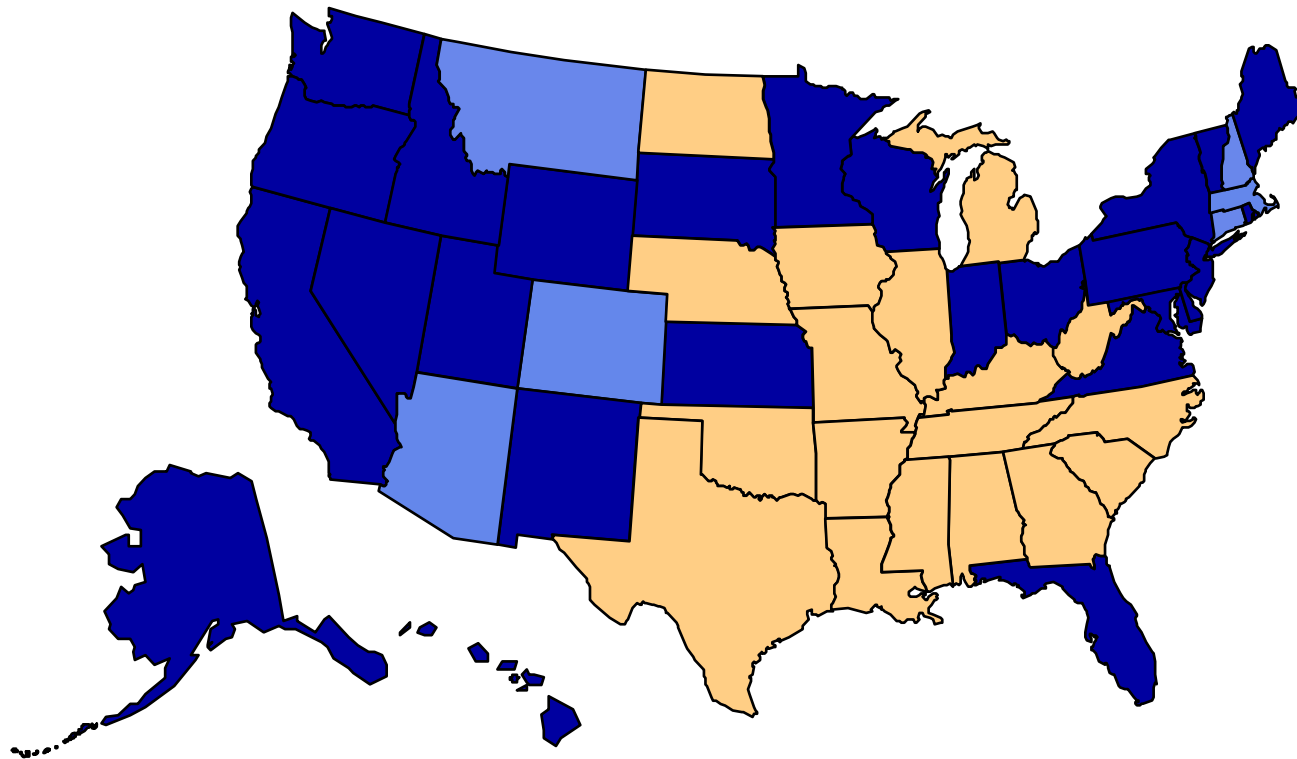
# Obesity Trends Among U.S. Adults

## BRFSS, 1998



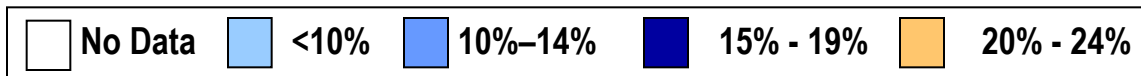
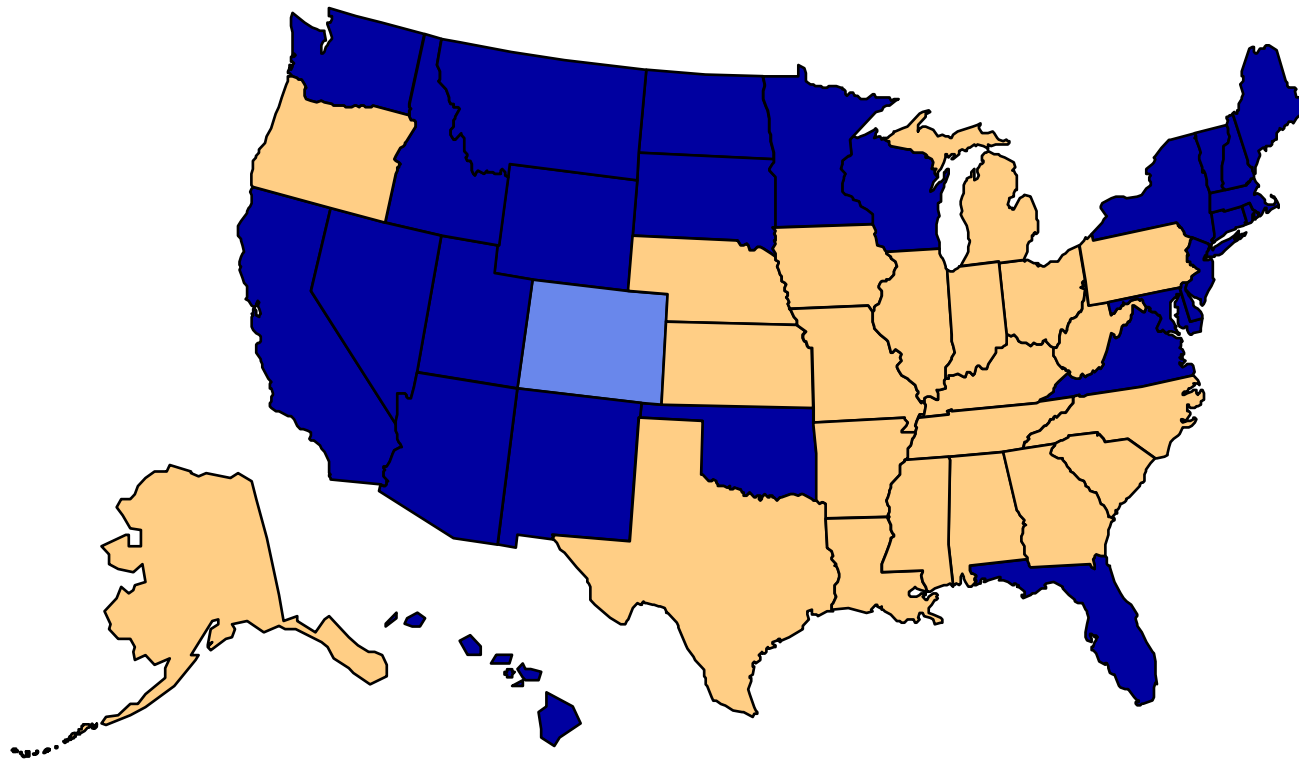
# Obesity Trends Among U.S. Adults

## BRFSS, 1999



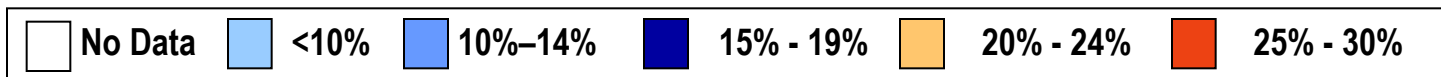
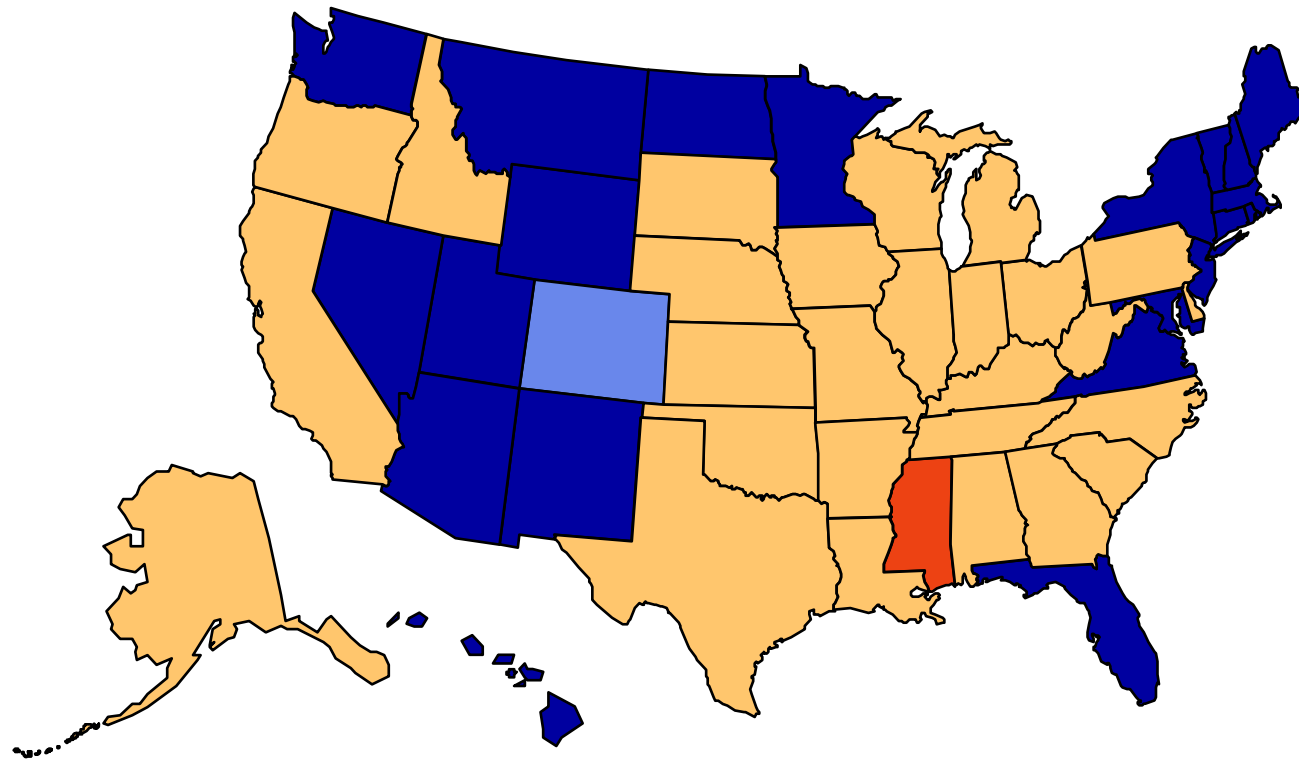
# Obesity Trends Among U.S. Adults

## BRFSS, 2000



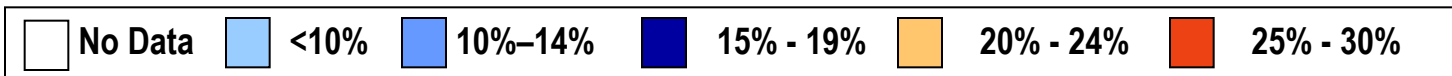
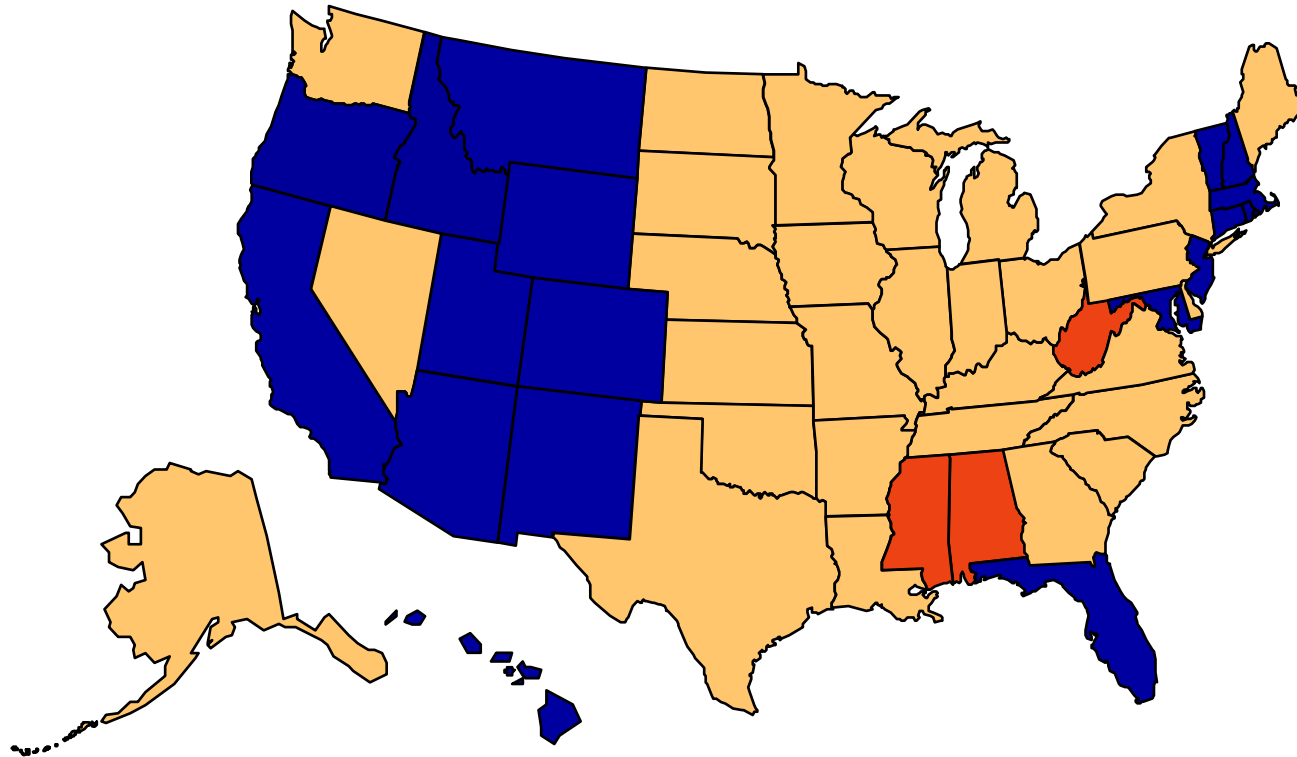
# Obesity Trends Among U.S. Adults

## BRFSS, 2001



# Obesity Trends Among U.S. Adults

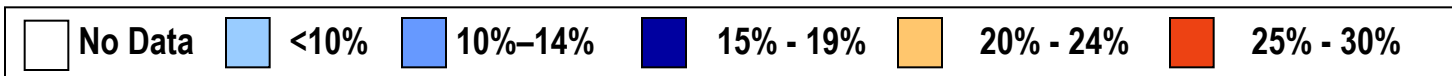
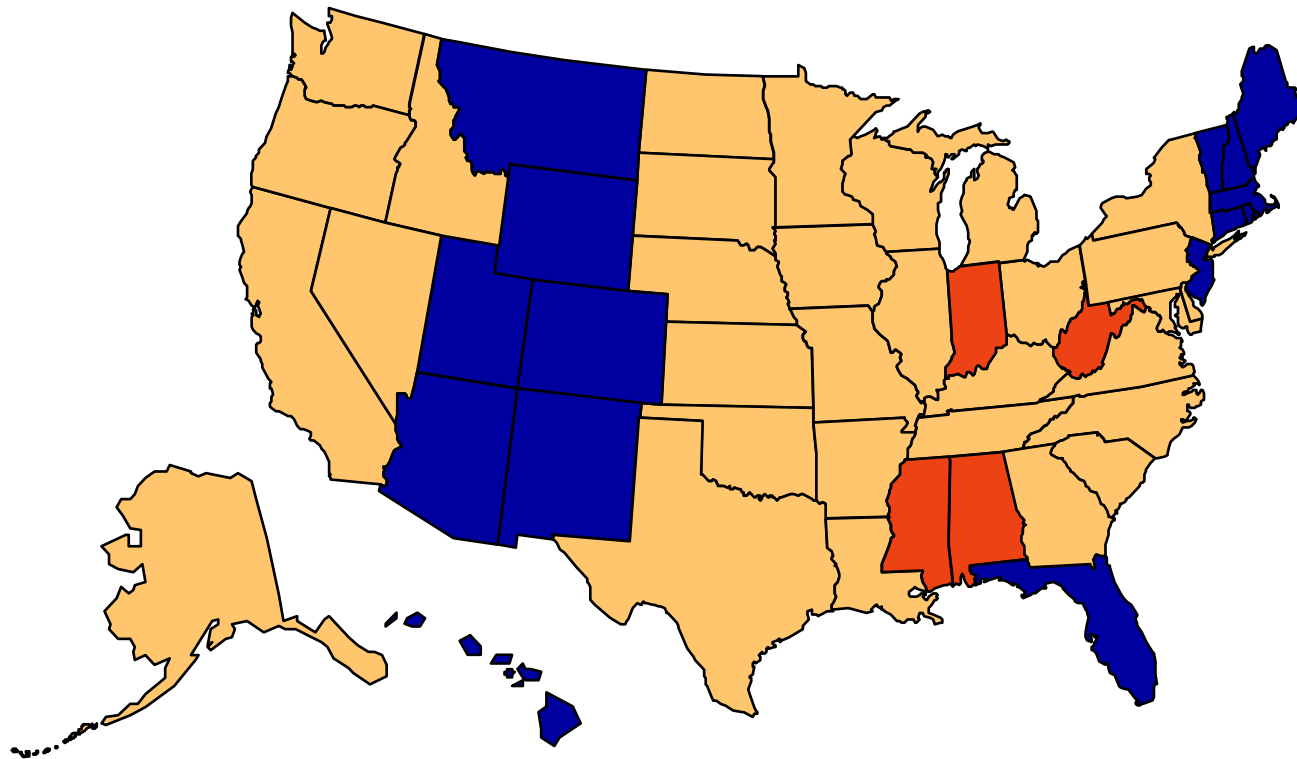
## BRFSS, 2002





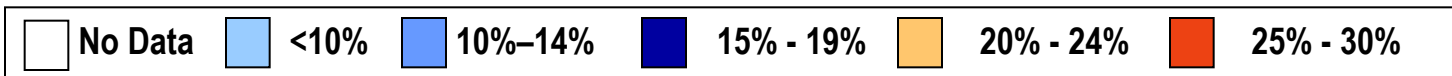
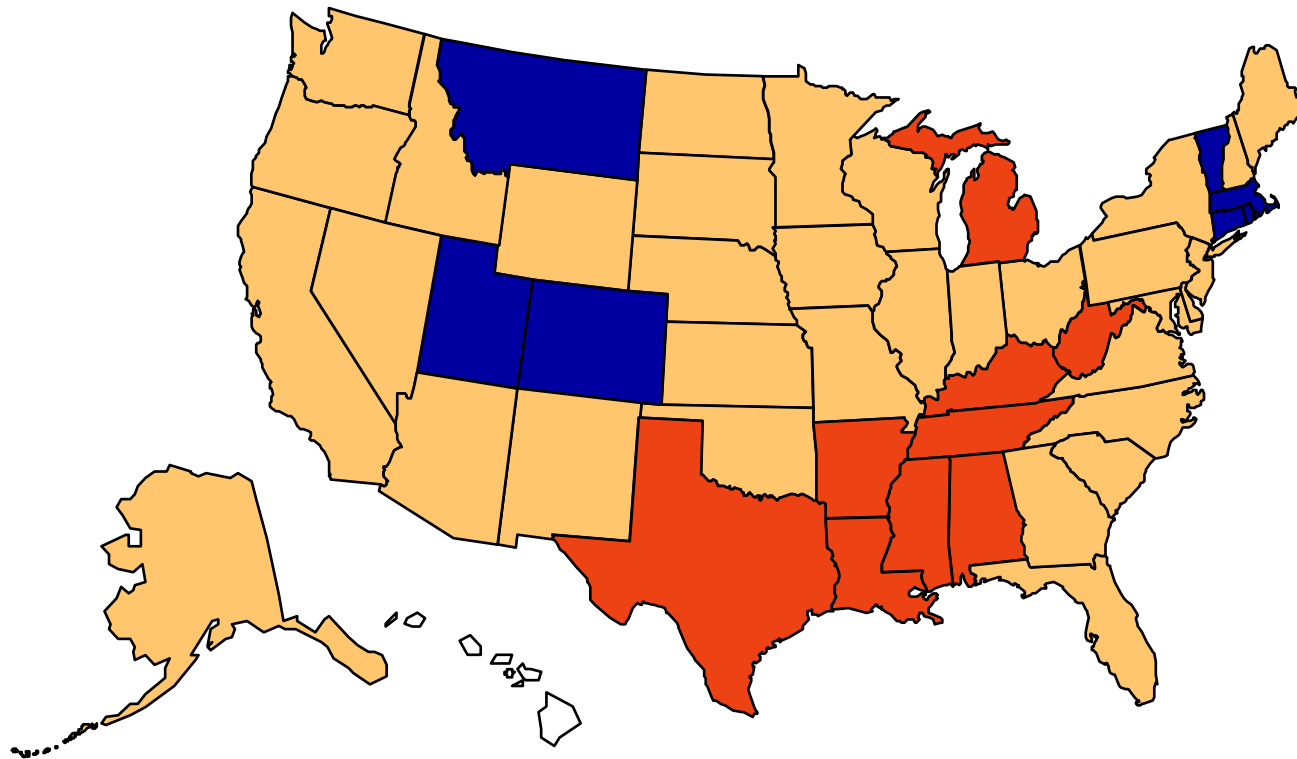
# Obesity Trends Among U.S. Adults

## BRFSS, 2003



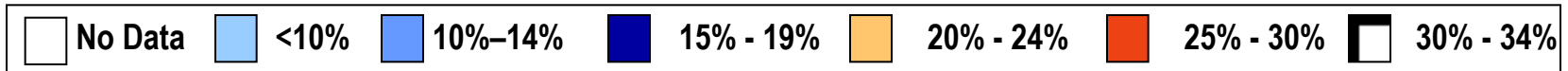
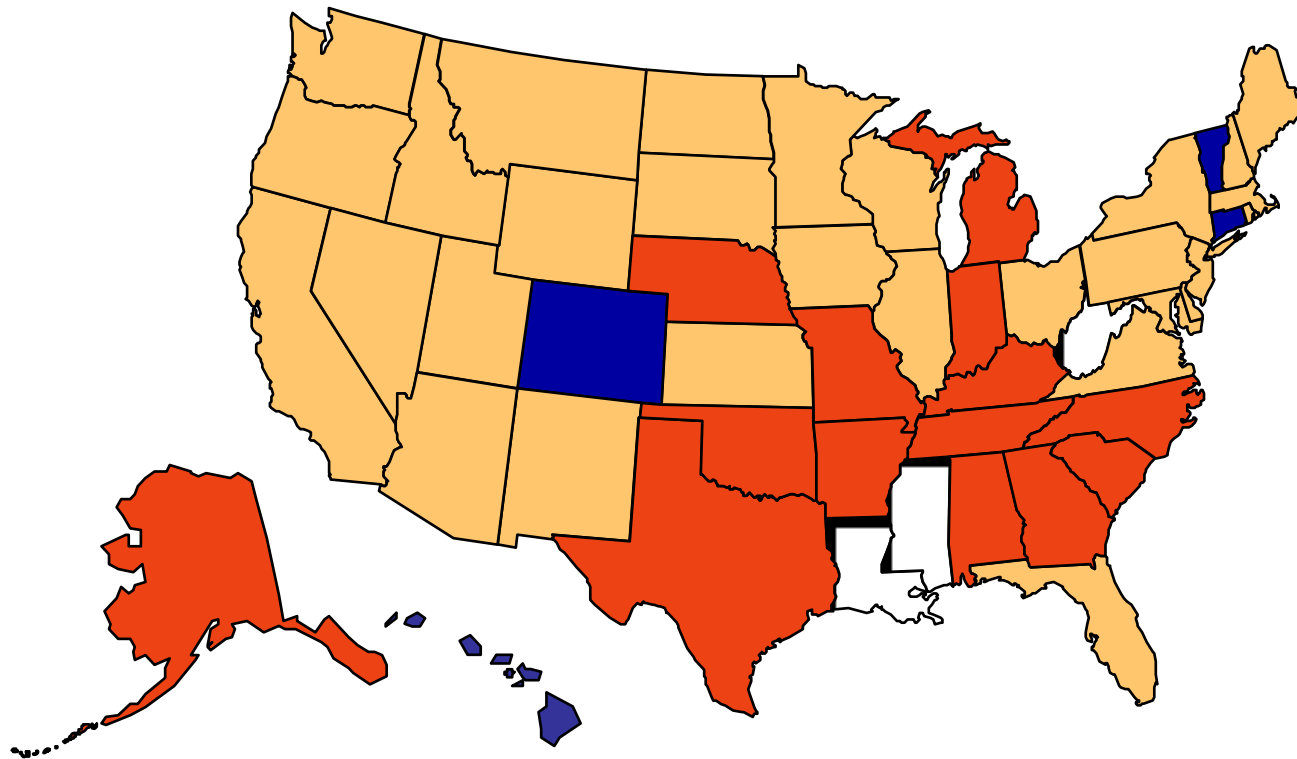
# Obesity Trends Among U.S. Adults

## BRFSS, 2004



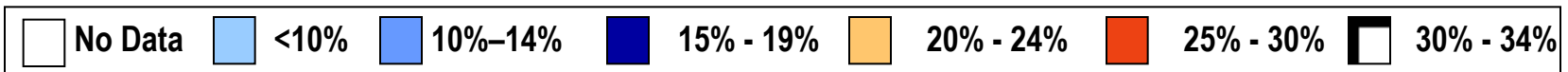
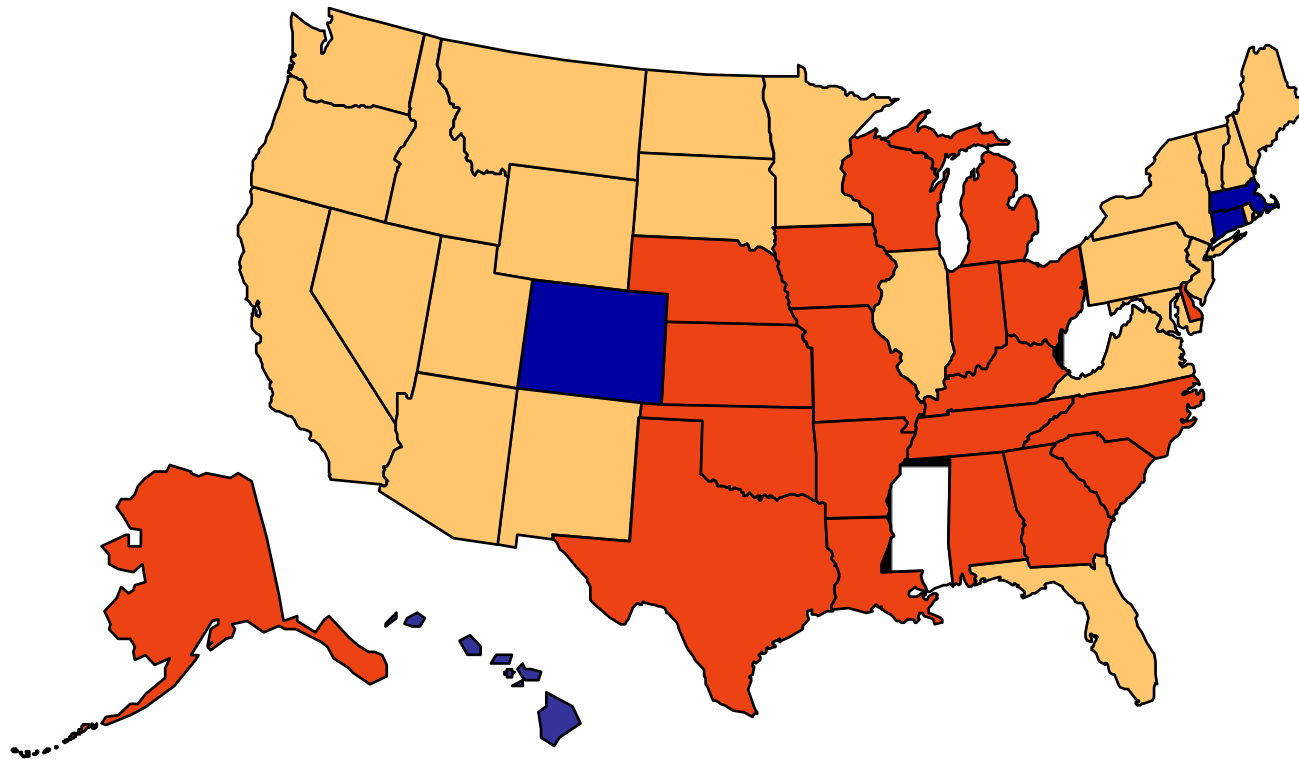
# Obesity Trends Among U.S. Adults

## BRFSS, 2005



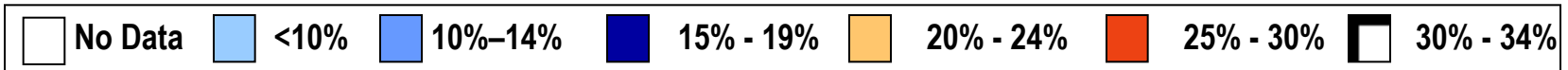
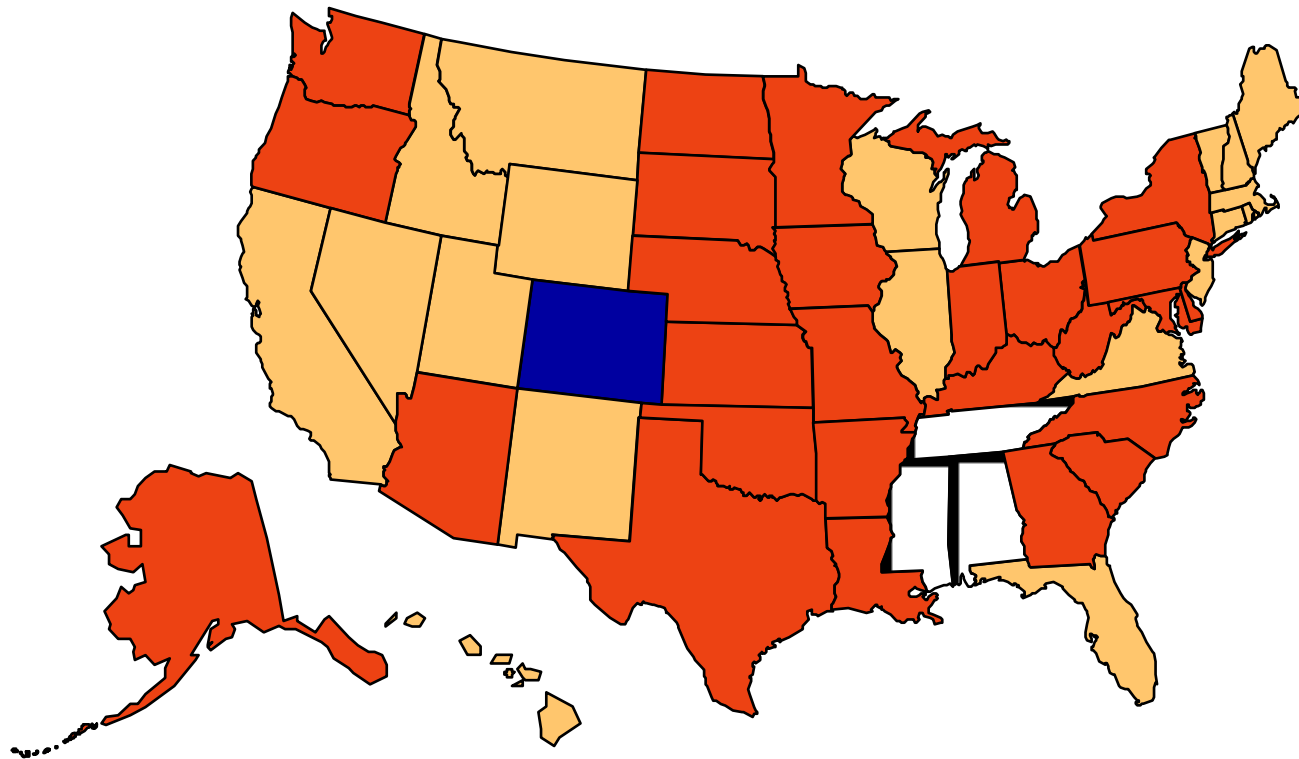
# Obesity Trends Among U.S. Adults

## BRFSS, 2006



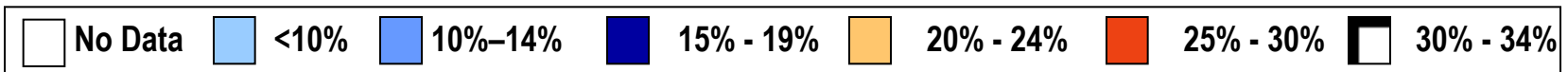
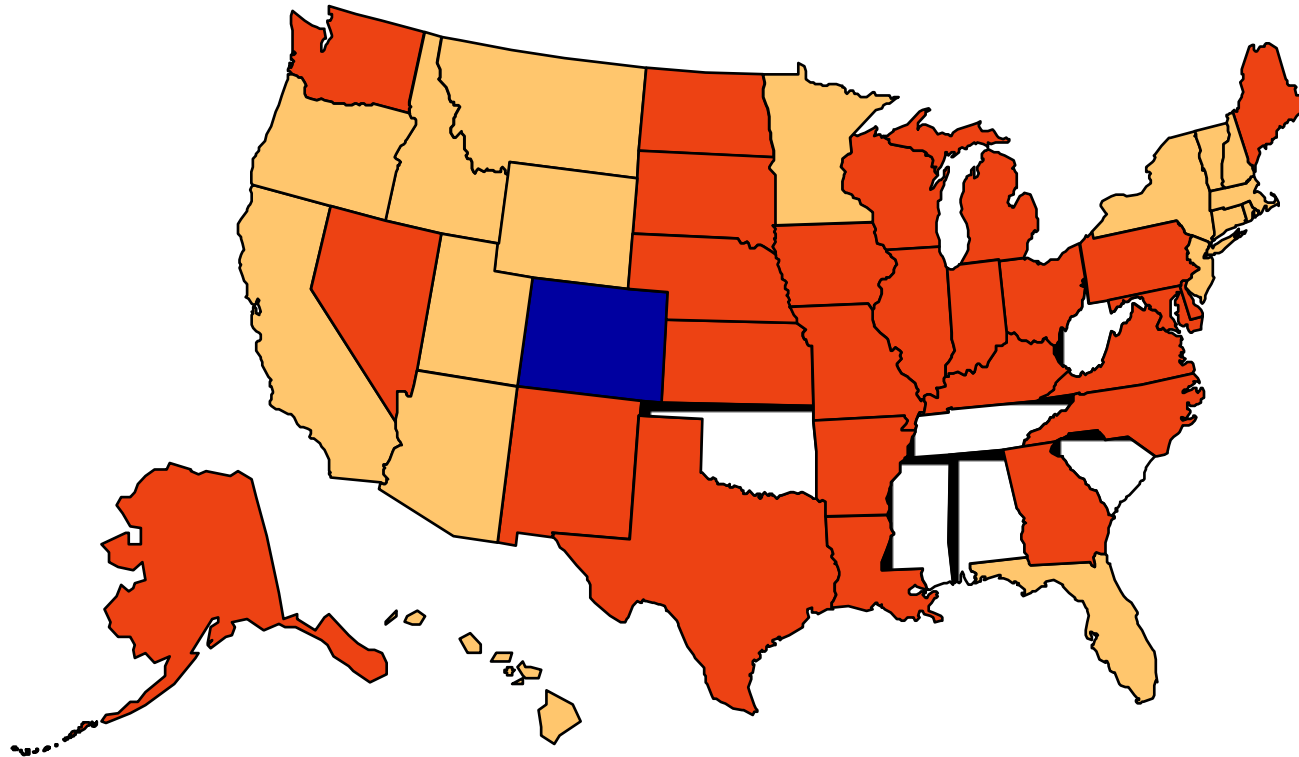
# Obesity Trends Among U.S. Adults

## BRFSS, 2007



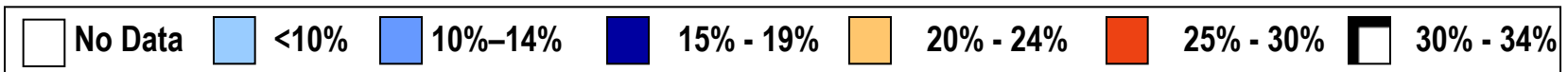
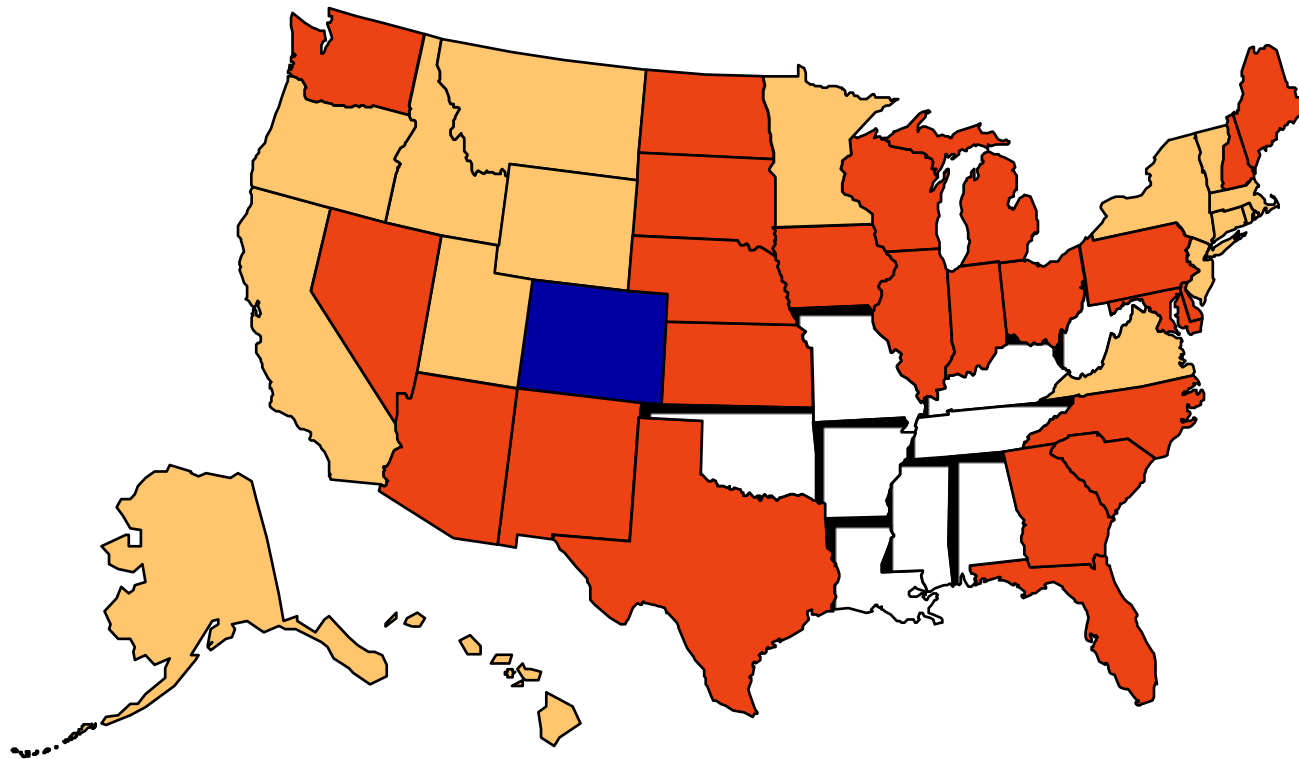
# Obesity Trends Among U.S. Adults

## BRFSS, 2008



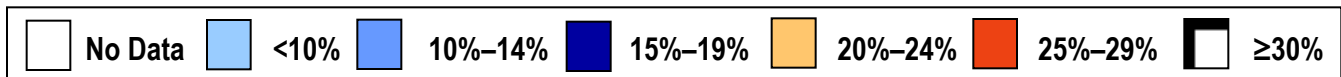
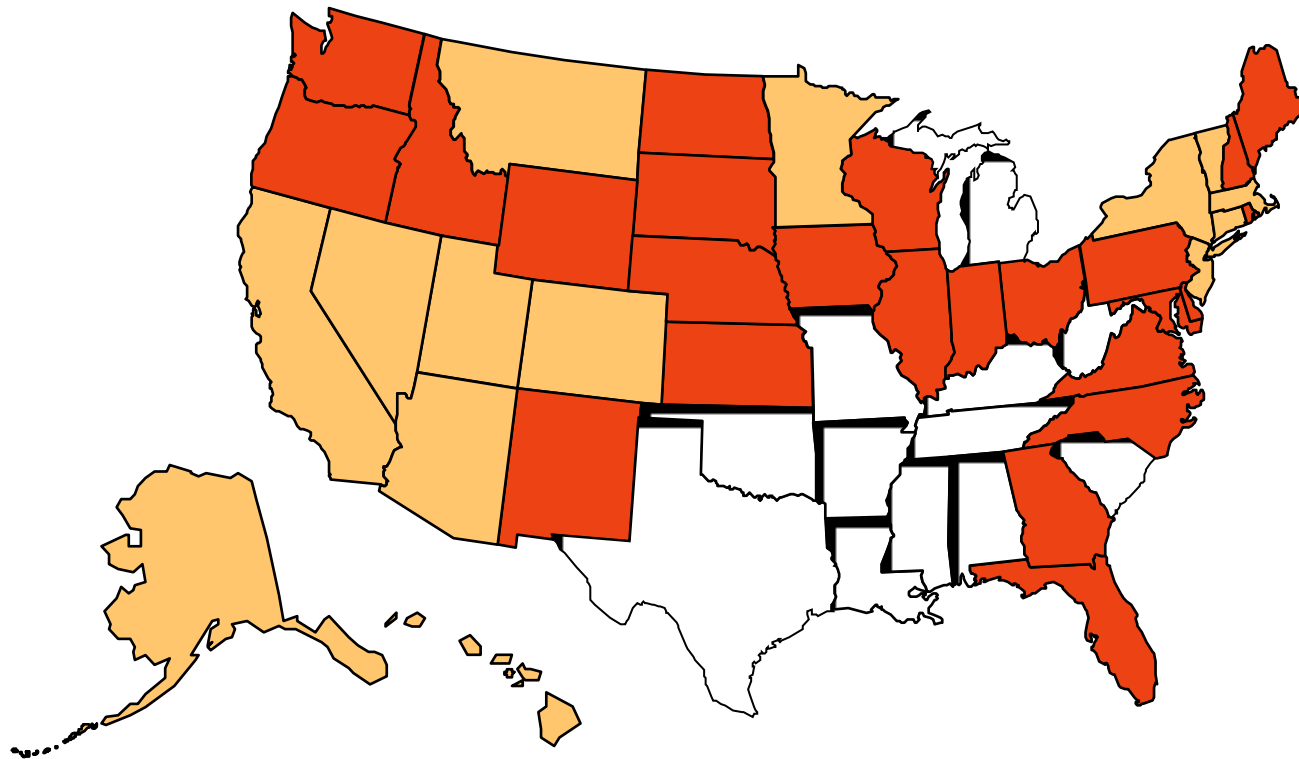
# Obesity Trends Among U.S. Adults

## BRFSS, 2009



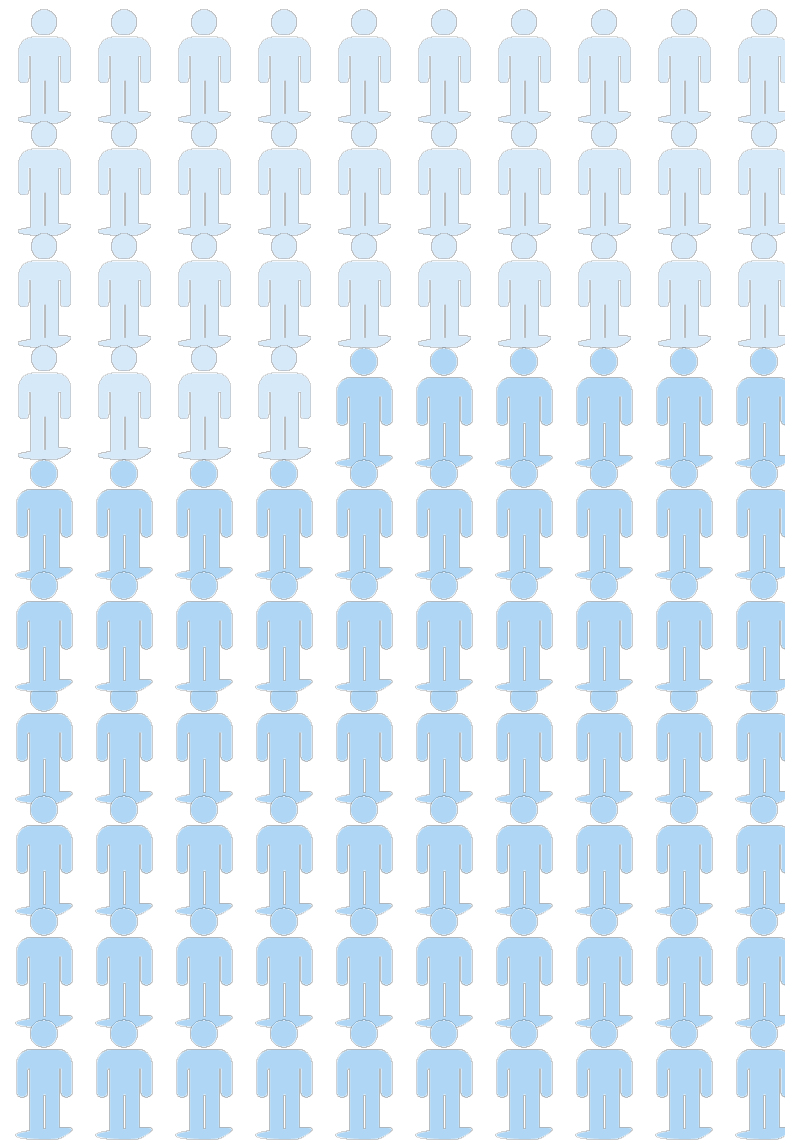
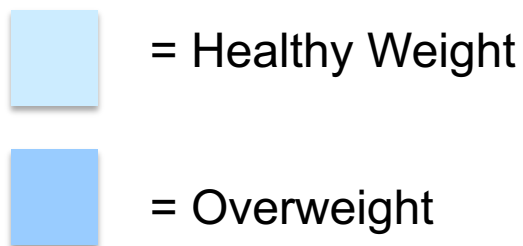
# Obesity Trends Among U.S. Adults

## BRFSS, 2010

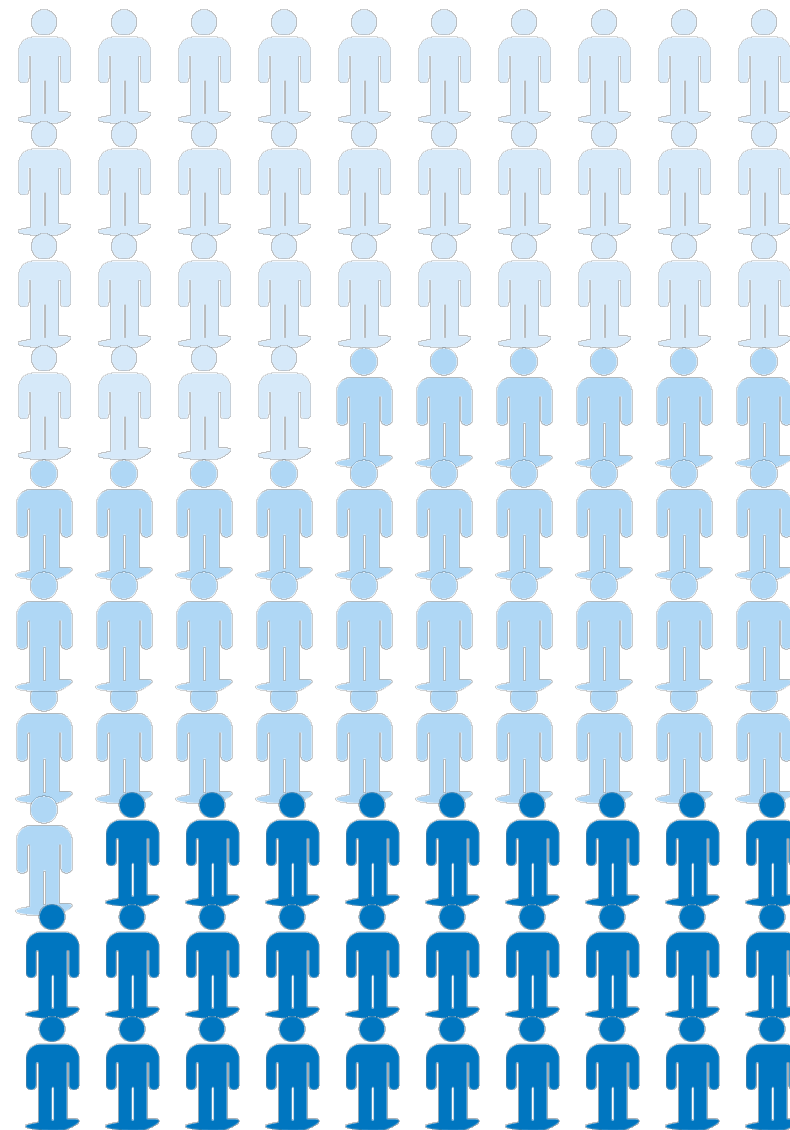
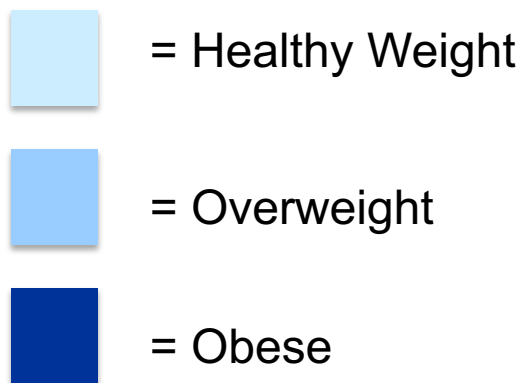




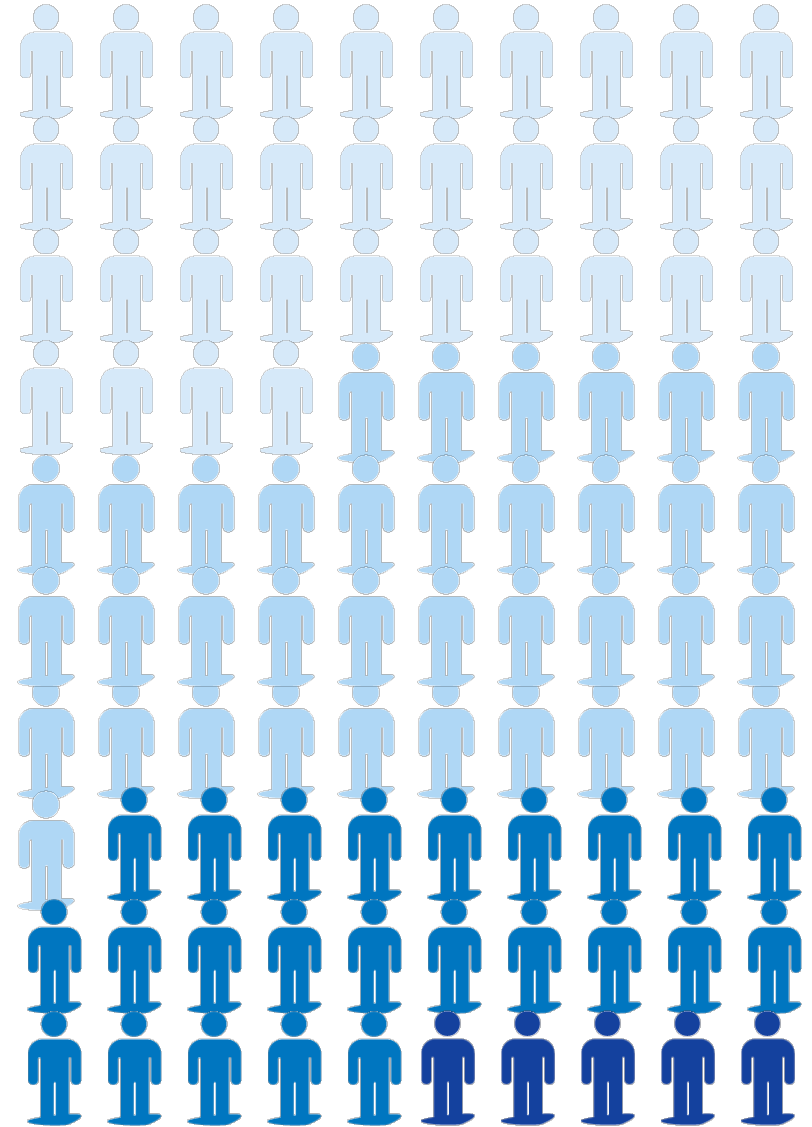
66% of all Americans  
are **overweight**  
with a BMI above 25



29% of all  
Americans  
are **obese**  
with a BMI  
above 30

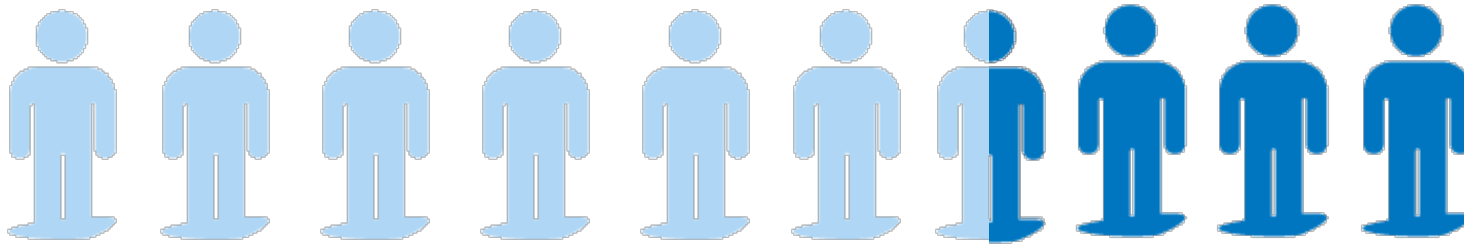


5% of all Americans are  
**extremely obese**  
with a BMI above 40

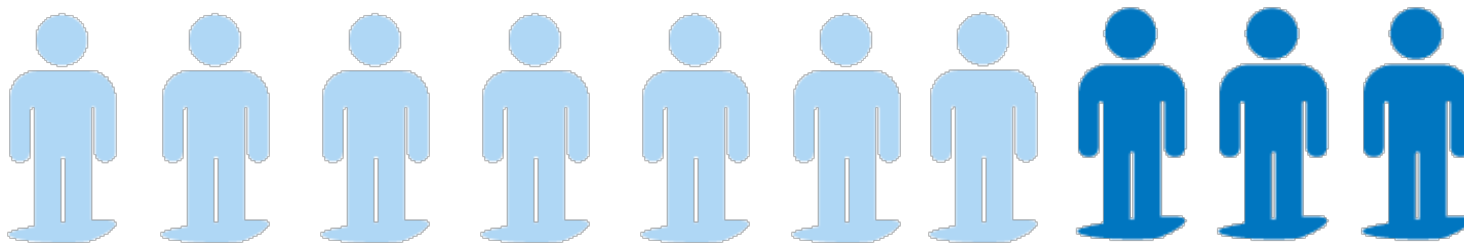


# Adult Obesity By Race

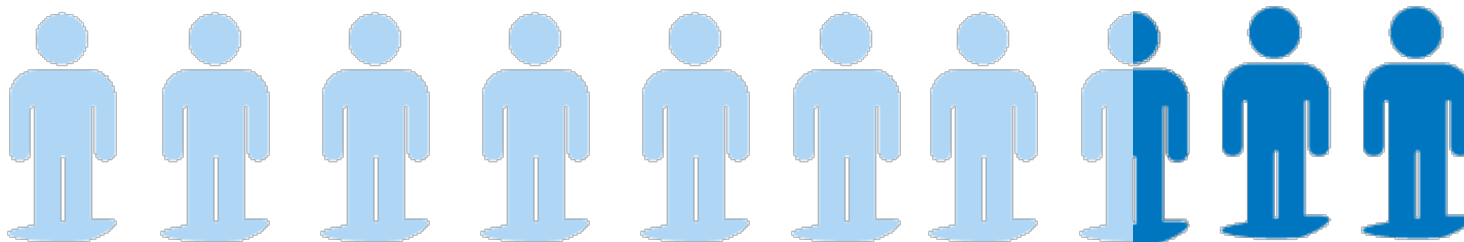
**For Non-Hispanic Black Americans - 36% are obese**





**For Hispanic Americans - 29% are obese**

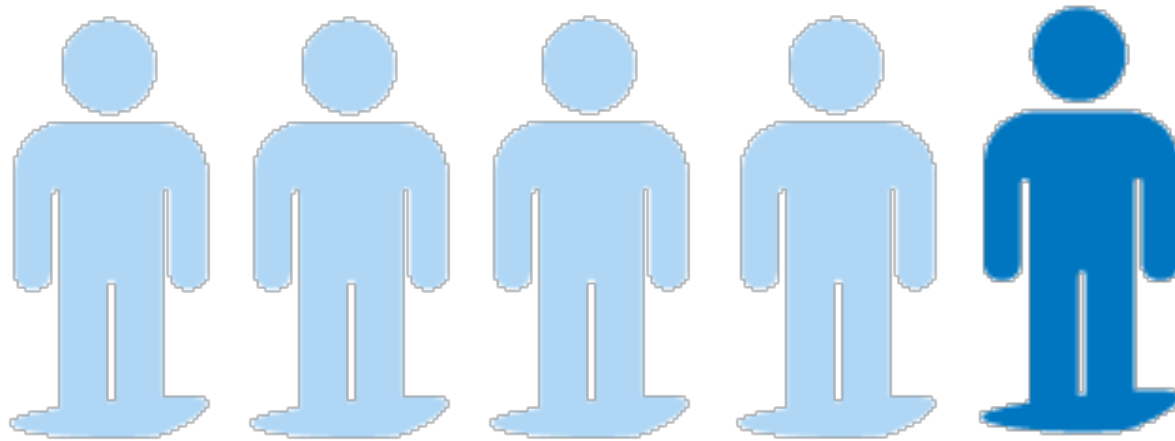


**For Non-Hispanic White Americans - 24% are obese**

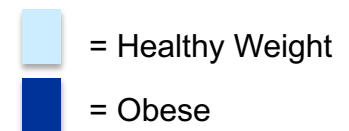


 = Healthy Weight  
 = Obese

# Children today have a lower life expectancy than their parents

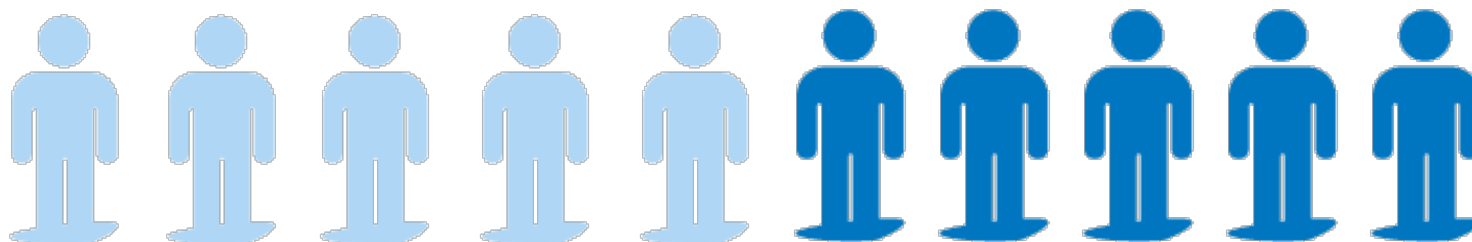


**17% of American children (approximately 1 in 5)  
age 2 to 19 years old are obese**

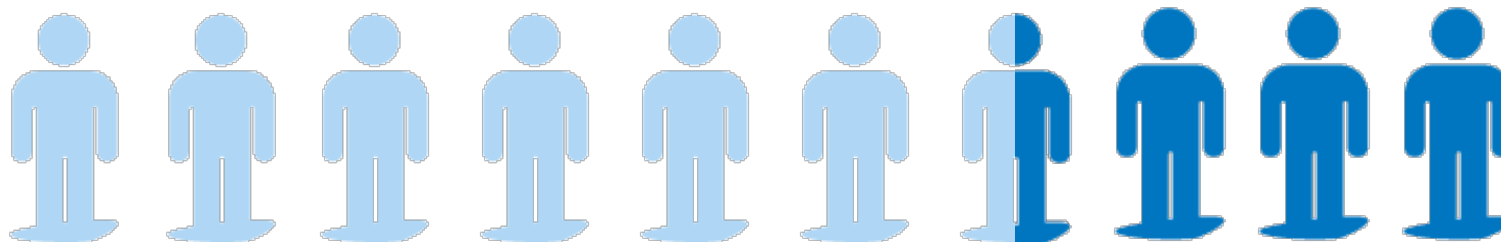


# Childhood Obesity

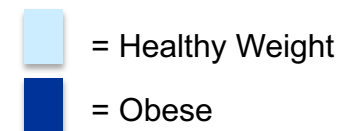
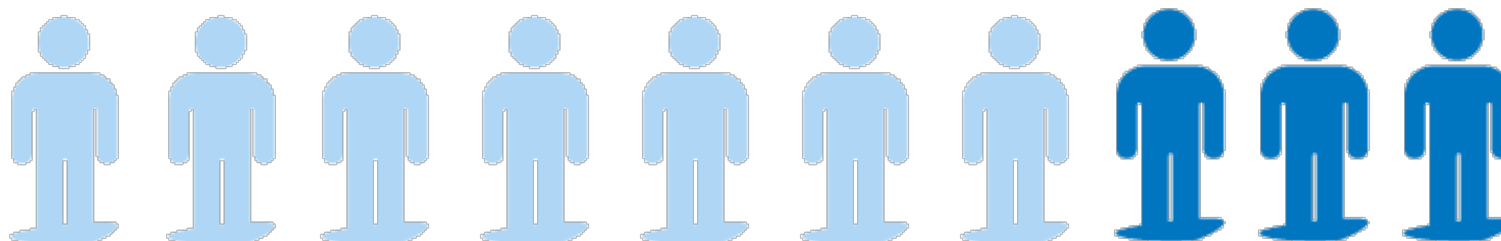
**For Non-Hispanic Black children age 12 to 19 years old - 49% are obese**



**For Mexican American children age 12 to 19 years old - 34% are obese**

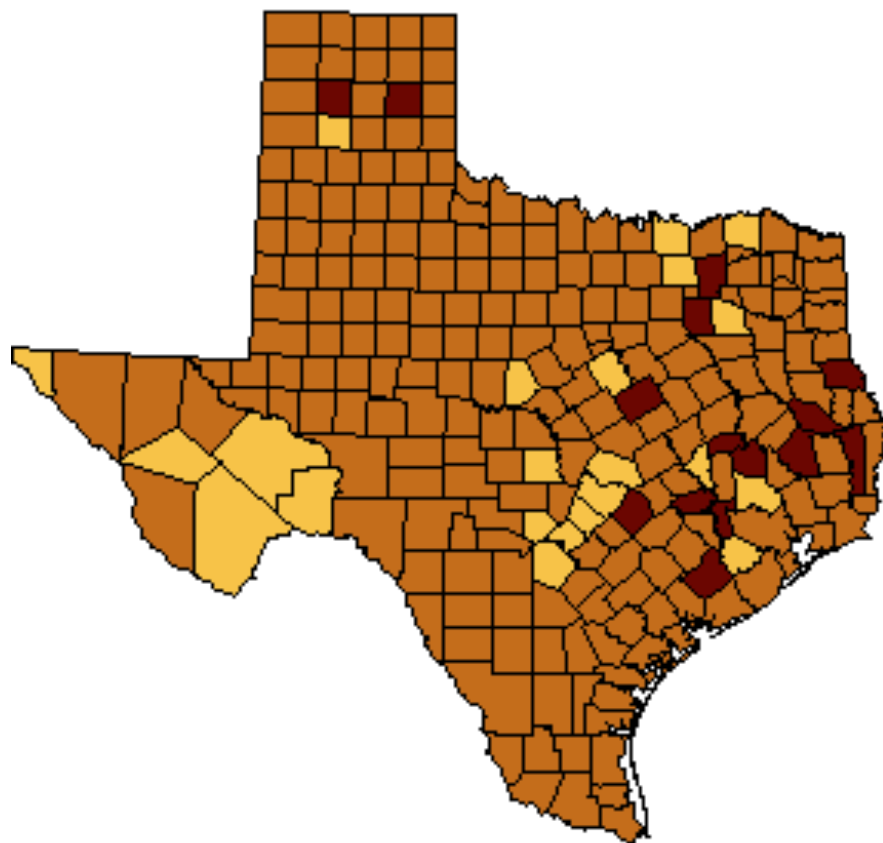


**For Non-Hispanic White children age 12 to 19 years old - 31% are obese**



# Adult Obesity in Texas

2008 Estimates of the Percentage of Adults Age  $\geq 20$  Who Are Obese in Texas

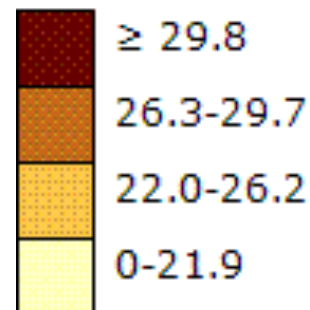


**Cameron County (Brownsville) – 26.7%**

**Galveston County (Galveston) – 27.2%**

**Nueces County (Corpus Christi) – 27.7%**

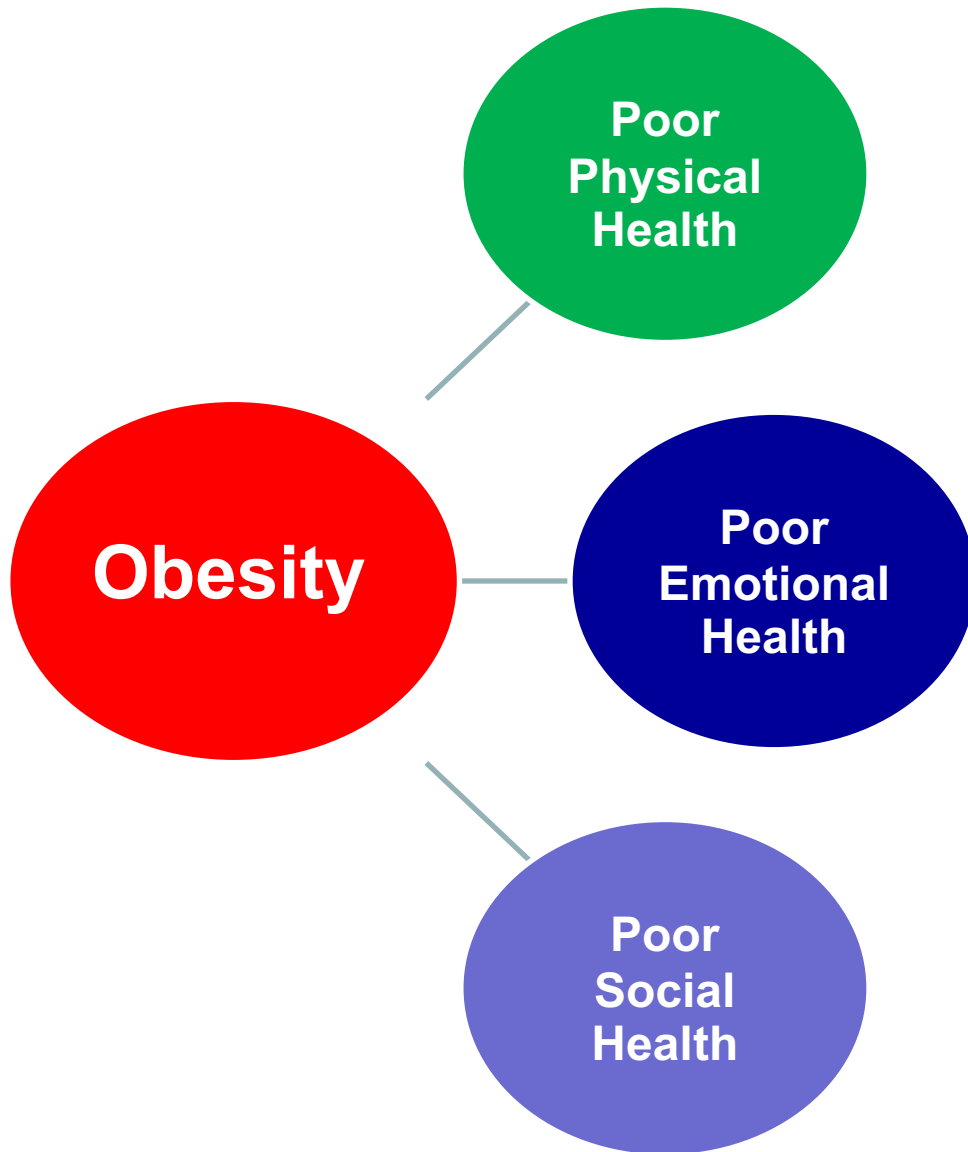
**Webb County (Laredo) – 28.2%**



**What are the  
health problems created  
by obesity?**



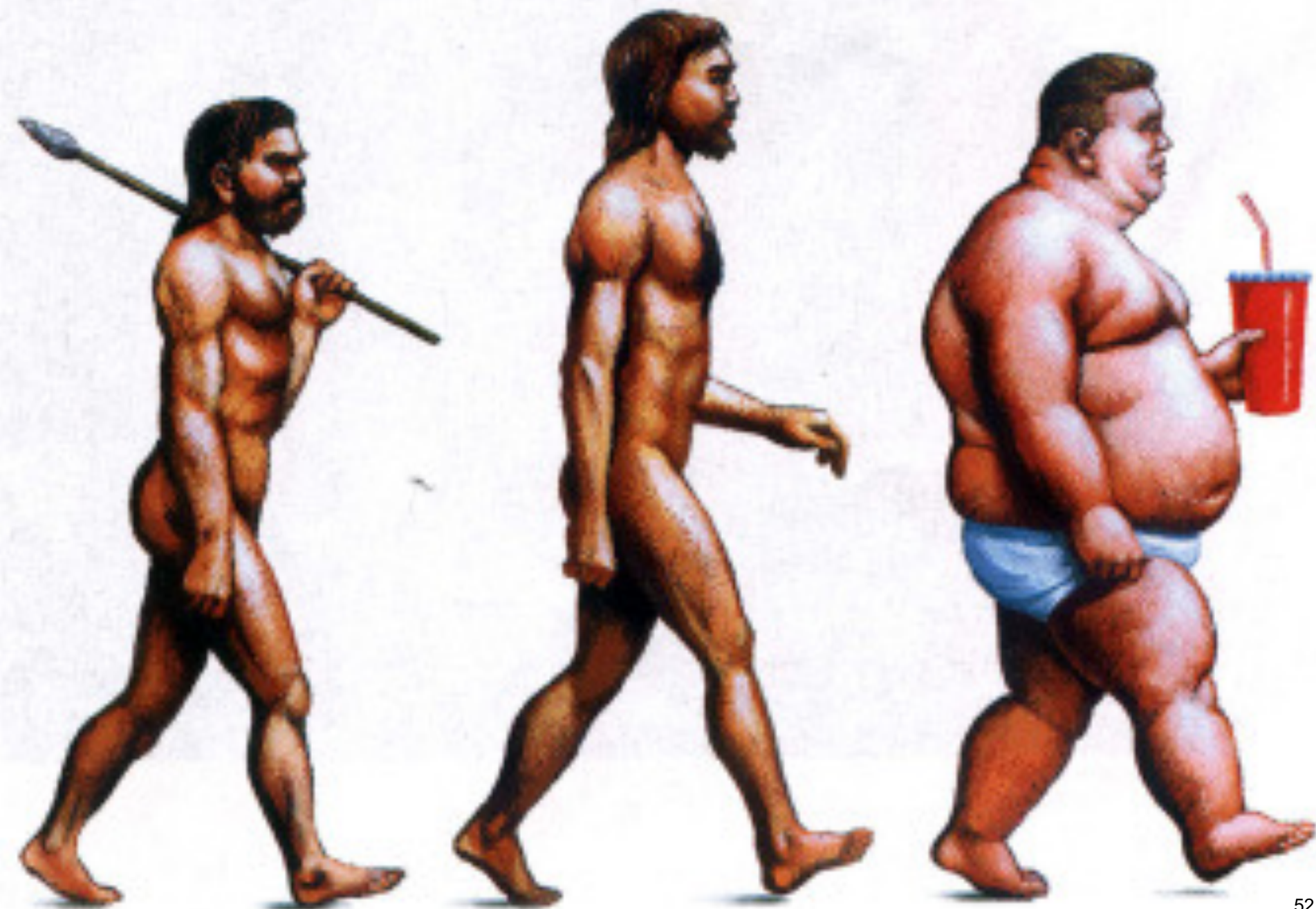
# Consequences for Obese Individuals



**Why do we  
“eat ourselves to death”  
?!?**



**Because we can.**



# How did we get here?

- Not a simple question.
- Many factors make this complex.
- Most simple answer:
  - Eating more
  - Moving less
  - Treatment mostly ineffective



# Toxic Environment:

Inexpensive unhealthy food available everywhere



# Toxic Environment



## Cradle to Grave Marketing

# Toxic Environment: Junk Food as Early Education





# Toxic Environment: Conflicting Messages



# Toxic Environment: Food Advertising



Food, beverages, candy  
\$7,313,200,000

Restaurants and fast food  
\$5,061,000,000

# Eating Behaviors



What is the most influential factor that determines how much children and adults eat?

- A. Hunger
- B. Mood
- C. PORTION SIZE**
- D. Time of Day

# Adults & Children eat more if given a larger portion size

- Children 3-5 years old ate 25% more of an entrée when given portions that were double an age-appropriate standard size.
  - Fisher, et al. *Am J Clin Nutr* 2003, v.77
- Adults ate more food when given larger portions and rated hunger and satiety the same
  - Rolls, et al. *J Am Diet Assoc.* 2004, v.104



# Toxic Environment: Portion Sizes

- **Original** McDonald's burger, fries and 12 ounce soft drink: **590 Calories**
- **Super Size Extra Value Meal** – Quarter Pounder with cheese, super size fries and a super size soft drink: **1,550 Calories**
- **Go Active! Happy Meal** – one of McDonald's four Premium Salads, a fountain drink of choice or bottled water, a Stepometer™ to track one's daily steps, and an informative booklet. (California Cobb Salad + medium soft drink): **580 kcal**





# Toxic Environment: Portion Sizes



## ...AND THE REAL

1954

**Burger King**



2.8 oz  
202 calories

2004



4.3 oz  
310 calories

1955

**McDonald's**



2.4 oz  
210 calories



7 oz  
610 calories

1900  
**Hershey's**



2 oz  
297 calories



7 oz  
1,000 calories

1916  
**Coca-Cola**



6.5 fluid oz  
79 calories



16 fluid oz  
194 calories

1950s  
**Movie popcorn**



3 cups  
174 calories



21 cups (buttered)  
1,700 calories



# Toxic Environment: Moving Less

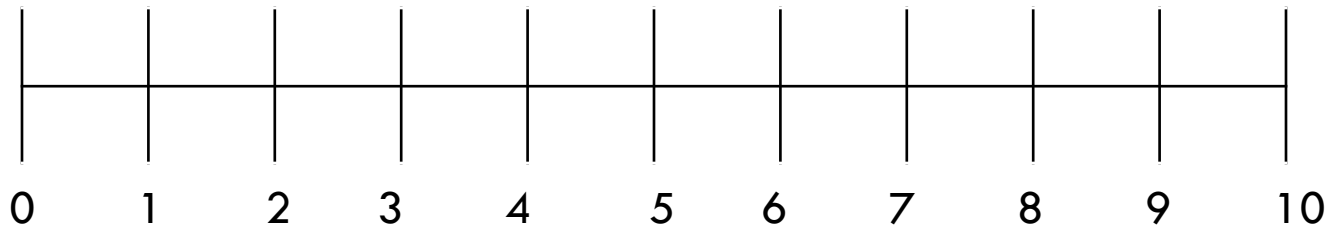


- TV, computers, video games
- Safety concerns
- Decrease in PE class time



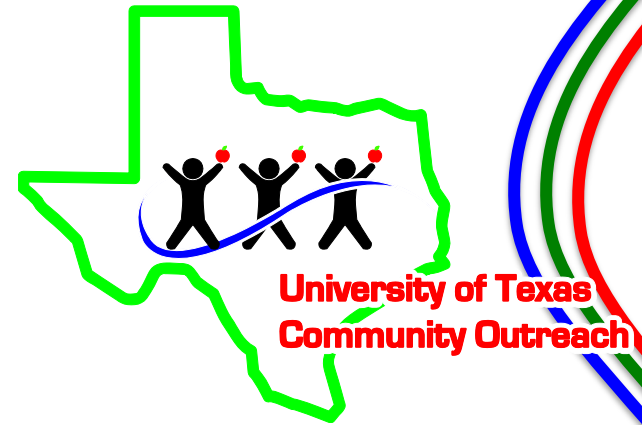
“On a scale of 0-10, how important is it to plan and eat fresh fruits and vegetables and whole grains?”

## HOW IMPORTANT IS IT?



Not important at all

Very important



**Community Health Workers can  
help bring about change with  
health promotion.**

***Let's begin!***

# **Switch to *Energy Balance* PowerPoint**