

## **Obesity Trends Among U.S. Adults**

### **Citations**

- **BRFSS, Behavioral Risk Factor Surveillance System**  
[www.cdc.gov/brfss](http://www.cdc.gov/brfss)
- **Mokdad A H, et al. The Spread of the obesity epidemic in the United States, 1991-1998 *JAMA* 1999;282:16.**
- **Mokdad A H, et al. The continuing epidemics of obesity and diabetes in the United States. *JAMA* 2001;286:10.**
- **Mokdad A H, et al. Prevalence of obesity, diabetes, and obesity-related conditions. *JAMA* 2003;289:1.**
- **Source: *MMWR* 2006;55:36.**

## **Obesity Trends Among U.S. Adults between 1985 and 2006**

### ***Definitions:***

- Obesity: Having a very high amount of body fat in relation to lean body mass, or Body Mass Index (BMI) of 30 or higher.
- Body Mass Index (BMI): A measure of an adult's weight in relation to his or her height, specifically the adult's weight in kilograms divided by the square of his or her height in meters.

Slide 3 of 27

***Source of the data:***

- The data shown in these maps were collected through CDC's Behavioral Risk Factor Surveillance System (BRFSS). Each year, state health departments use standard procedures to collect data through a series of monthly telephone interviews with U.S. adults.
- Prevalence estimates generated for the maps may vary slightly from those generated for the states by BRFSS (<http://aps.nccd.cdc.gov/brfss>) as slightly different analytic methods are used.

Slide 4 of 27

In 1990, among states participating in the Behavioral Risk Factor Surveillance System, 10 states had a prevalence of obesity less than 10% and no states had prevalence equal to or greater than 15%.

By 1998, no state had prevalence less than 10%, seven states had a prevalence of obesity between 20-24%, and no state had prevalence equal to or greater than 25%.

In 2006, only four states had a prevalence of obesity less than 20%. Twenty-two states had a prevalence equal or greater than 25%; two of these states (Mississippi and West Virginia) had a prevalence of obesity equal to or greater than 30%.

**Obesity Trends\* Among U.S. Adults; BRFSS, 1985** (\*BMI greater than or equal to 30, or about 30 lbs. overweight for 5'4" person)

No Data	Less than 10%	10%-14%	15%-19%	Greater than or equal to 20%
Alabama	Arizona	Georgia		
Alaska	California	Indiana		
Arkansas	Connecticut	Kentucky		
Colorado	Florida	North Dakota		
Delaware	Idaho	Ohio		
Hawaii	Illinois	South Carolina		
Iowa	Minnesota	West Virginia		
Kansas	Montana	Wisconsin		
Louisiana	New York			
Maine	North Carolina			
Maryland	Rhode Island			
Massachusetts	Tennessee			
Michigan	Utah			
Mississippi				
Missouri				
Nebraska				
Nevada				
New Hampshire				
New Jersey				
New Mexico				
Oklahoma				
Oregon				
Pennsylvania				
South Dakota				
Texas				
Vermont				
Virginia				
Washington				
Wyoming				

Source: BRFSS, CDC.

**Obesity Trends\* Among U.S. Adults; BRFSS, 1986** (\*BMI greater than or equal to 30, or about 30 lbs. overweight for 5'4" person)

No Data	Less than 10%	10%-14%	15%-19%	Greater than or equal to 20%
Alaska	Alabama	Indiana		
Arkansas	Arizona	Kentucky		
Connecticut	California	North Carolina		
Colorado	Florida	North Dakota		
Delaware	Georgia	South Carolina		
Hawaii	Hawaii	West Virginia		
Iowa	Idaho	Wisconsin		
Kansas	Illinois			
Louisiana	Massachusetts			
Maine	Minnesota			
Maryland	Missouri			
Michigan	Montana			
Mississippi	New Mexico			
Missouri	New York			
Nebraska	Ohio			
Nevada	Rhode Island			
New Hampshire	Tennessee			
New Jersey	Utah			
New Mexico				
Oklahoma				
Oregon				
Pennsylvania				
South Dakota				
Texas				

Source: BRFSS, CDC.

**Obesity Trends\* Among U.S. Adults; BRFSS, 1987** (\*BMI greater than or equal to 30, or about 30 lbs. overweight for 5'4" person)

No Data	Less than 10%	10%-14%	15%-19%	Greater than or equal to 20%
Alaska	Arizona	Alabama		
Arkansas	California	Georgia		
Colorado	Florida	Illinois		
Connecticut	Hawaii	Indiana		
Delaware	Idaho	Kentucky		
Iowa	Massachusetts	Maine		
Kansas	Minnesota	Maryland		
Louisiana	Montana	Missouri		
Michigan	Nebraska	North Carolina		
Mississippi	New Hampshire	North Dakota		
Nevada	New Mexico	Ohio		
New Jersey	New York	South Dakota		
Oklahoma	Rhode Island	Tennessee		
Oregon	South Carolina	Texas		
Pennsylvania	Utah	West Virginia		
Vermont	Washington	Wisconsin		
Virginia				
Wyoming				

Source: BRFSS, CDC.

**Obesity Trends\* Among U.S. Adults; BRFSS, 1988** (\*BMI greater than or equal to 30, or about 30 lbs. overweight for 5'4" person)

No Data	Less than 10%	10%-14%	15%-19%	Greater than or equal to 20%
Alaska	Connecticut	Alabama		
Arkansas	Georgia	Arizona		
Colorado	Hawaii	California		
Delaware	Idaho	Florida		
Kansas	Minnesota	Illinois		
Louisiana	Montana	Indiana		
Mississippi	Nebraska	Iowa		
Nevada	New Hampshire	Kentucky		
New Jersey	New Mexico	Maine		
Oregon	New York	Maryland		
Pennsylvania	North Dakota	Massachusetts		
Vermont	Oklahoma	Michigan		
Virginia	Rhode Island	Missouri		
Wyoming	Tennessee	North Carolina		
	Texas	Ohio		
	Utah	South Carolina		
	Washington	South Dakota		
		West Virginia		
		Wisconsin		

Source: BRFSS, CDC.

Slide 10 of 27

**Obesity Trends\* Among U.S. Adults; BRFSS, 1989** (\*BMI greater than or equal to 30, or about 30 lbs. overweight for 5'4" person)

No Data	Less than 10%	10%-14%	15%-19%	Greater than or equal to 20%
Alaska	Alabama	Illinois		
Arkansas	Arizona	Indiana		
Colorado	California	Iowa		
Delaware	Connecticut	Kentucky		
Kansas	Florida	Michigan		
Louisiana	Georgia	Minnesota		
Mississippi	Hawaii	Missouri		
Nevada	Idaho	Nebraska		
New Jersey	Maine	North Carolina		
Vermont	Maryland	North Dakota		
Wyoming	Massachusetts	Ohio		
	Montana	Oklahoma		
	New Hampshire	Oregon		
	New Mexico	Pennsylvania		
	New York	South Carolina		
	Rhode Island	Tennessee		
	South Dakota	Texas		
	Utah	Virginia		
		Washington		
		West Virginia		
		Wisconsin		

Source: BRFSS, CDC.

**Obesity Trends\* Among U.S. Adults; BRFSS, 1990** (\*BMI greater than or equal to 30, or about 30 lbs. overweight for 5'4" person)

No Data	Less than 10%	10%-14%	15%-19%	Greater than or equal to 20%
Alaska	California	Alabama		
Arkansas	Colorado	Arizona		
Kansas	Massachusetts	Connecticut		
New Jersey	Minnesota	Delaware		
Nevada	Montana	Florida		
Wyoming	New Mexico	Georgia		
	New York	Hawaii		
	Utah	Idaho		
	Virginia	Illinois		
	Washington	Indiana		
		Iowa		
		Kentucky		
		Louisiana		
		Maine		
		Maryland		
		Michigan		
		Mississippi		
		Missouri		
		Nebraska		
		New Hampshire		
		North Carolina		
		North Dakota		
		Ohio		
		Oklahoma		
		Oregon		
		Pennsylvania		

Rhode Island

South Carolina

South Dakota

Tennessee

Texas

Vermont

Wisconsin

West Virginia

Source: BRFSS, CDC.

**Obesity Trends\* Among U.S. Adults; BRFSS, 1991** (\*BMI greater than or equal to 30, or about 30 lbs. overweight for 5'4" person)

No Data	Less than 10%	10%-14%	15%-19%	Greater than or equal to 20%
Kansas	Colorado	Alabama	Louisiana	
Nevada	Georgia	Alaska	Michigan	
Wyoming	Massachusetts	Arizona	Mississippi	
	Montana	Arkansas	West Virginia	
	New Jersey	California		
	New Mexico	Connecticut		
	Rhode Island	Delaware		
	Utah	Florida		
	Washington	Hawaii		
		Illinois		
		Indiana		
		Iowa		
		Idaho		
		Kentucky		
		Maryland		
		Maine		
		Missouri		
		Minnesota		
		Nebraska		
		New Hampshire		
		New York		
		North Carolina		
		North Dakota		
		Oklahoma		
		Ohio		
		Oregon		

Pennsylvania  
South Carolina  
South Dakota  
Tennessee  
Texas  
Vermont  
Virginia  
Wisconsin

Source: Mokdad AH, et al. *JAMA* 1999;282:16.

**Obesity Trends\* Among U.S. Adults; BRFSS, 1992** (\*BMI greater than or equal to 30, or about 30 lbs. overweight for 5'4" person)

No Data	Less than 10%	10%-14%	15%-19%	Greater than or equal to 20%
Arkansas	Arizona	Alabama	Kentucky	
Wyoming	Colorado	Alaska	Louisiana	
	Hawaii	California	Michigan	
	New Jersey	Connecticut	Mississippi	
	Washington	Delaware	West Virginia	
		Florida	Wisconsin	
		Georgia		
		Idaho		
		Illinois		
		Indiana		
		Iowa		
		Kansas		
		Montana		
		Maine		
		Maryland		
		Massachusetts		
		Minnesota		
		Missouri		
		Nebraska		
		Nevada		
		New Hampshire		
		New Mexico		
		New York		
		North Carolina		
		North Dakota		

Ohio  
Oklahoma  
Oregon  
Pennsylvania  
Rhode Island  
South Carolina  
South Dakota  
Tennessee  
Texas  
Utah  
Vermont  
Virginia

Source: BRFSS, CDC.

**Obesity Trends\* Among U.S. Adults; BRFSS, 1993** (\*BMI greater than or equal to 30, or about 30 lbs. overweight for 5'4" person)

No Data	Less than 10%	10%-14%	15%-19%	Greater than or equal to 20%
Wyoming	Massachusetts	Alabama	Arkansas	
	New Jersey	Alaska	Indiana	
		Arizona	Kentucky	
		California	Louisiana	
		Colorado	Michigan	
		Connecticut	Mississippi	
		Delaware	North Carolina	
		Florida	Pennsylvania	
		Georgia	South Carolina	
		Hawaii	Tennessee	
		Idaho	West Virginia	
		Illinois	Wisconsin	
		Iowa		
		Kansas		
		Maryland		
		Maine		
		Minnesota		
		Missouri		
		Montana		
		Nebraska		
		Nevada		
		New Hampshire		
		New Mexico		
		New York		
		North Dakota		
		Oklahoma		

Ohio  
Oregon  
Rhode Island  
South Dakota  
Texas  
Utah  
Vermont  
Virginia  
Washington

Source: Mokdad AH, et al. *JAMA* 1999;282:16.

**Obesity Trends\* Among U.S. Adults; BRFSS, 1994** (\*BMI greater than or equal to 30, or about 30 lbs. overweight for 5'4" person)

No Data	Less than 10%	10%-14%	15%-19%	Greater than or equal to 20%
Rhode Island		Alaska	Alabama	
		Arizona	Arkansas	
		California	Illinois	
		Colorado	Indiana	
		Connecticut	Kentucky	
		Delaware	Louisiana	
		Florida	Michigan	
		Georgia	Mississippi	
		Hawaii	Missouri	
		Idaho	North Carolina	
		Iowa	Ohio	
		Kansas	Pennsylvania	
		Maine	South Carolina	
		Massachusetts	Texas	
		Maryland	West Virginia	
		Minnesota	Wisconsin	
		Montana		
		Nebraska		
		Nevada		
		New Jersey		
		New Hampshire		
		New York		
		New Mexico		
		North Dakota		
		Oklahoma		
		Oregon		

South Dakota

Tennessee

Utah

Vermont

Virginia

Washington

Wyoming

Source: BRFSS, CDC.

**Obesity Trends\* Among U.S. Adults; BRFSS, 1995** (\*BMI greater than or equal to 30, or about 30 lbs. overweight for 5'4" person)

No Data	Less than 10%	10%-14%	15%-19%	Greater than or equal to 20%
		Arizona	Alabama	
		California	Alaska	
		Colorado	Arkansas	
		Connecticut	Delaware	
		Georgia	Florida	
		Hawaii	Illinois	
		Idaho	Indiana	
		Maine	Iowa	
		Massachusetts	Kansas	
		Montana	Kentucky	
		Nevada	Louisiana	
		New Hampshire	Maryland	
		New Jersey	Michigan	
		New Mexico	Minnesota	
		New York	Mississippi	
		Oklahoma	Missouri	
		Oregon	North Carolina	
		Rhode Island	North Dakota	
		South Dakota	Nebraska	
		Utah	Ohio	
		Vermont	Pennsylvania	
		Washington	South Carolina	
		Wyoming	Tennessee	
			Texas	
			West Virginia	

Virginia

Wisconsin

Source: Mokdad AH, et al. *JAMA* 1999;282:16.

**Obesity Trends\* Among U.S. Adults; BRFSS, 1996** (\*BMI greater than or equal to 30, or about 30 lbs. overweight for 5'4" person)

No Data	Less than 10%	10%-14%	15%-19%	Greater than or equal to 20%
		Arizona	Alabama	
		California	Alaska	
		Colorado	Arkansas	
		Connecticut	Delaware	
		Georgia	Florida	
		Hawaii	Idaho	
		Kansas	Illinois	
		Massachusetts	Indiana	
		Montana	Iowa	
		Minnesota	Kentucky	
		New Mexico	Louisiana	
		New Jersey	Maine	
		New Hampshire	Maryland	
		New York	Michigan	
		Rhode Island	Mississippi	
		South Dakota	Missouri	
		Utah	Nebraska	
		Vermont	Nevada	
		Washington	North Carolina	
		Wyoming	North Dakota	
			Oklahoma	
			Ohio	
			Oregon	
			Pennsylvania	
			South Carolina	
			Texas	

Tennessee

Virginia

West Virginia

Wisconsin

Source: BRFSS, CDC.

**Obesity Trends\* Among U.S. Adults; BRFSS, 1997** (\*BMI greater than or equal to 30, or about 30 lbs. overweight for 5'4" person)

No Data	Less than 10%	10%-14%	15%-19%	Greater than or equal to 20%
		Arizona	Alabama	Indiana
		Colorado	Alaska	Kentucky
		Connecticut	Arkansas	Mississippi
		Georgia	California	
		Kansas	Delaware	
		Massachusetts	Florida	
		Montana	Hawaii	
		Nevada	Idaho	
		New Hampshire	Illinois	
		New Mexico	Iowa	
		Oklahoma	Louisiana	
		Rhode Island	Maine	
		Utah	Maryland	
		Washington	Michigan	
		Wyoming	Minnesota	
			Missouri	
			Nebraska	
			New Jersey	
			New York	
			North Carolina	
			North Dakota	
			Ohio	
			Oregon	
			Pennsylvania	
			South Carolina	
			South Dakota	

Tennessee

Texas

Vermont

Virginia

West Virginia

Wisconsin

Source: BRFSS, CDC.

**Obesity Trends\* Among U.S. Adults; BRFSS, 1998** (\*BMI greater than or equal to 30, or about 30 lbs. overweight for 5'4" person)

No Data	Less than 10%	10%-14%	15%-19%	Greater than or equal to 20%
		Arizona	Arkansas	Alabama
		Colorado	California	Alaska
		Connecticut	Delaware	Louisiana
		Massachusetts	Florida	Michigan
		Montana	Georgia	Mississippi
		Nevada	Hawaii	South Carolina
		New Hampshire	Idaho	West Virginia
		New Mexico	Illinois	
		Vermont	Indiana	
		Wyoming	Iowa	
			Kansas	
			Kentucky	
			Maine	
			Maryland	
			Minnesota	
			Missouri	
			Nebraska	
			New Jersey	
			New York	
			North Carolina	
			North Dakota	
			Oklahoma	
			Ohio	
			Oregon	
			Pennsylvania	
			Rhode Island	

South Dakota

Tennessee

Texas

Utah

Virginia

Washington

Wisconsin

Source: Mokdad AH, et al. *JAMA* 1999;282:16.

**Obesity Trends\* Among U.S. Adults; BRFSS, 1999** (\*BMI greater than or equal to 30, or about 30 lbs. overweight for 5'4" person)

No Data	Less than 10%	10%-14%	15%-19%	Greater than or equal to 20%
	Arizona		Alaska	Alabama
	Colorado		California	Arkansas
	Connecticut		Delaware	Georgia
	Massachusetts		Florida	Illinois
	Montana		Hawaii	Iowa
	New Hampshire	Idaho		Kentucky
			Indiana	Louisiana
			Kansas	Michigan
			Maine	Mississippi
			Maryland	Missouri
			Minnesota	Nebraska
			New Jersey	North Carolina
			New Mexico	North Dakota
			New York	Oklahoma
			Nevada	South Carolina
			Ohio	Tennessee
			Oregon	Texas
			Pennsylvania	West Virginia
			Rhode Island	
			South Dakota	
			Utah	
			Vermont	
			Virginia	
			Washington	
			Wisconsin	
			Wyoming	

**Obesity Trends\* Among U.S. Adults; BRFSS, 2000** (\*BMI greater than or equal to 30, or about 30 lbs. overweight for 5'4" person)

No Data	Less than 10%	10%-14%	15%-19%	Greater than or equal to 20%
		Colorado	Arizona	Alabama
			California	Alaska
			Connecticut	Arkansas
			Delaware	Georgia
			Florida	Illinois
			Hawaii	Indiana
			Idaho	Iowa
			Maine	Kansas
			Maryland	Kentucky
			Massachusetts	Louisiana
			Minnesota	Michigan
			Montana	Mississippi
			Nevada	Missouri
			New Hampshire	Nebraska
			New Jersey	North Carolina
			New Mexico	Ohio
			New York	Oregon
			North Dakota	Pennsylvania
			Oklahoma	South Carolina
			Rhode Island	Tennessee
			South Dakota	Texas
			Utah	West Virginia
			Vermont	
			Virginia	
			Washington	
			Wisconsin	

Wyoming

Source: Mokdad A H, et al. *JAMA* 2001;286:10

**Obesity Trends\* Among U.S. Adults; BRFSS, 2001** (\*BMI greater than or equal to 30, or about 30 lbs. overweight for 5'4" person)

No Data	Less than 10%	10%-14%	15%-19%	20%-24%	Greater than 25%
		Colorado	Arizona	Alabama	Mississippi
			Connecticut	Alaska	
			Florida	Arkansas	
			Hawaii	California	
			Maine	Delaware	
			Maryland	District of Columbia	
			Massachusetts	Georgia	
			Minnesota	Idaho	
			Montana	Illinois	
			Nevada	Indiana	
			New Hampshire	Iowa	
			New Jersey	Kansas	
			New Mexico	Kentucky	
			New York	Louisiana	
			North Dakota	Michigan	
			Rhode Island	Missouri	
			Utah	Nebraska	
			Vermont	North Carolina	
			Washington	Ohio	
			Wyoming	Oklahoma	
				Oregon	
				Pennsylvania	
				South Carolina	
				South Dakota	
				Tennessee	
				Texas	

Virginia  
West Virginia  
Wisconsin

Source: Mokdad A H, et al. *JAMA* 2001;286:10

**Obesity Trends\* Among U.S. Adults; BRFSS, 2002** (\*BMI greater than or equal to 30, or about 30 lbs. overweight for 5'4" person)

No Data	Less than 10%	10%-14%	15%-19%	20%-24%	Greater than or equal to 25%
			Arizona	Alaska	Alabama
			California	Arkansas	Mississippi
			Colorado	Delaware	West Virginia
			Connecticut	Georgia	
			Florida	Illinois	
			Hawaii	Indiana	
			Idaho	Iowa	
			Maryland	Kansas	
			Massachusetts	Kentucky	
			Montana	Louisiana	
			New Hampshire	Maine	
			New Jersey	Maine	
			New Mexico	Michigan	
			Oregon	Minnesota	
			Rhode Island	Missouri	
			Utah	Nevada	
			Vermont	New York	
			Wyoming	North Carolina	
				North Dakota	
				Ohio	
				Oklahoma	
				Pennsylvania	
				South Carolina	
				South Dakota	
				Tennessee	
				Texas	
				Virginia	
				Washington	
				Wisconsin	

Source: BRFSS, CDC.

Slide 24 of 27

**Obesity Trends\* Among U.S. Adults; BRFSS, 2003** (\*BMI greater than or equal to 30, or about 30 lbs. overweight for 5'4" person)

No Data	Less than 10%	10%-14%	15%-19%	20%-24%	Greater than or equal to 25%
			Arizona	Alaska	Alabama
			Colorado	Arkansas	Indiana
			Connecticut	California	Mississippi
			Florida	Delaware	West Virginia
			Hawaii	Georgia	
			Maine	Idaho	
			Massachusetts	Illinois	
			Montana	Iowa	
			New Hampshire	Kansas	
			New Jersey	Kentucky	
			New Mexico	Louisiana	
			Rhode Island	Maryland	
			Utah	Michigan	
			Vermont	Minnesota	
			Wyoming	Missouri	
				Nebraska	
				Nevada	
				New York	
				North Carolina	
				North Dakota	
				Ohio	
				Oklahoma	
				Pennsylvania	
				Oregon	
				South Carolina	
				South Dakota	
				Tennessee	
				Texas	
				Virginia	
				Washington	
				Wisconsin	

Source: BRFSS, CDC.

Slide 25 of 27

**Obesity Trends\* Among U.S. Adults; BRFSS, 2004** (\*BMI greater than or equal to 30, or about 30 lbs. overweight for 5'4" person)

No Data	Less than 10%	10%-14%	15%-19%	20%-24%	Greater than or equal to 25%
Hawaii		Colorado	Alaska	Alabama	
		Connecticut	Arizona	Arkansas	
		Massachusetts	California	Kentucky	
		Montana	Delaware	Louisiana	
		Rhode Island	Florida	Michigan	
		Utah	Georgia	Mississippi	
		Vermont	Idaho	Tennessee	
			Illinois	Texas	
			Indiana	West Virginia	
			Iowa		
			Kansas		
			Maine		
			Maryland		
			Minnesota		
			Missouri		
			Nebraska		
			Nevada		
			New Hampshire		
			New Jersey		
			New Mexico		
			New York		
			North Carolina		
			North Dakota		
			Ohio		
			Oklahoma		
			Oregon		
			Pennsylvania		
			South Carolina		
			South Dakota		
			Virginia		
			Washington		
			Wisconsin		
			Wyoming		



Source: BRFSS, CDC.

**Obesity Trends\* Among U.S. Adults; BRFSS, 2005** (\*BMI greater than or equal to 30, or about 30 lbs. overweight for 5'4" person)

No Data	Less than 10%	10%-14%	15%-19%	20%-24%	25%-29%	Greater than or equal to 30%
			Colorado	Arizona	Alabama	Louisiana
			Connecticut	California	Alaska	Mississippi
			Hawaii	Delaware	Arkansas	West Virginia
			Vermont	Florida	Georgia	
				Idaho	Indiana	
				Illinois	Kentucky	
				Iowa	Michigan	
				Kansas	Missouri	
				Maine	Nebraska	
				Maryland	North Carolina	
				Massachusetts	Oklahoma	
				Minnesota	South Carolina	
				Montana	Tennessee	
				Nevada	Texas	
				New Hampshire		
				New Jersey		
				New Mexico		
				New York		
				North Dakota		
				Ohio		
				Oregon		
				Pennsylvania		
				Rhode Island		
				South Dakota		
				Utah		
				Virginia		
				Washington		
				Wisconsin		
				Wyoming		

Source: MMWR 2006:55:36.

