

Overweight and Obese

OVERWEIGHT OR OBESE

Definition: Overweight or obese is defined as having a Body Mass Index (BMI) of 25.0 or above. Body Mass Index (BMI) is calculated by taking a person's body weight in pounds, divided by their height in inches, divided by height in inches (again) times 703. The mathematical equation for BMI is: $\text{weight (lb)}/\text{height (in)}^2 \times 703$.

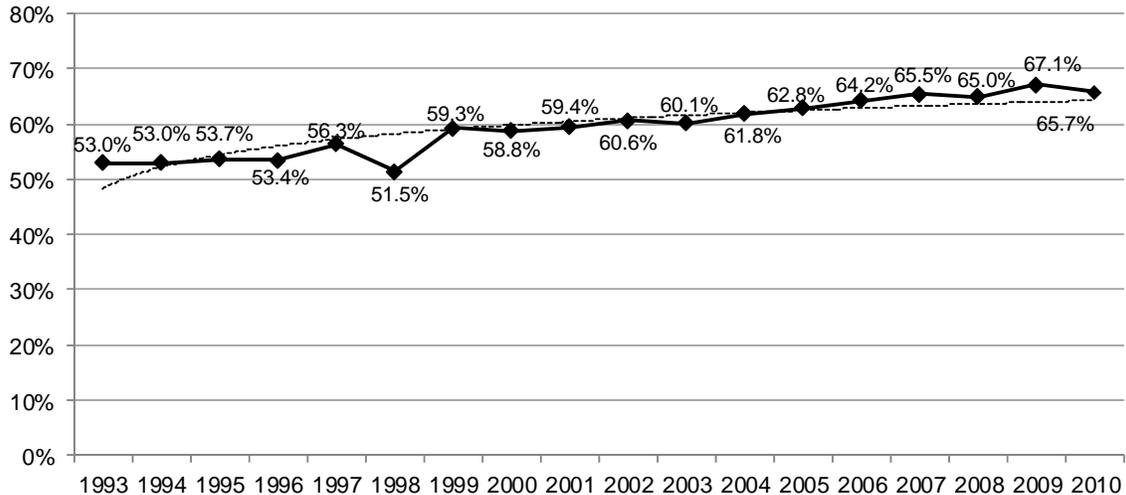
Prevalence of Overweight or Obese

- South Dakota 67%
- Nationwide median 65%

Healthy People 2020 Objective

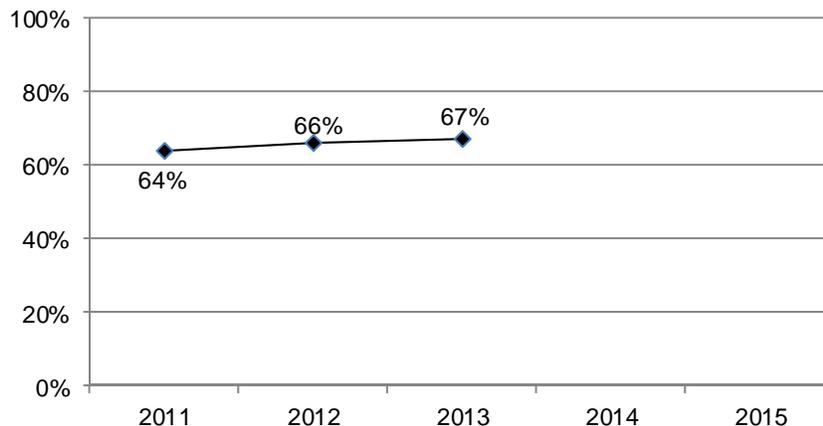
There is no comparable Healthy People 2020 objective for overweight or obese.

Figure 1
Percent of Respondents Who Are Overweight or Obese Based on Body Mass Index, 1993-2010



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 1993-2010

Figure 2
Percent of Respondents Who Are Overweight or Obese Based on Body Mass Index, 2011-2013



Note: Beginning in 2011, the CDC began using a different methodology to weight the data, therefore current data estimates cannot be compared to previous years.

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2013

**Table 4
Respondents Who Are Overweight or Obese, 2011-2013**

		2011-2013	2011	2012	2013
Total		66%	64%	66%	67%
Gender	Male	73%	73%	73%	74%
	Female	58%	55%	59%	60%
Age	18-34	53%	*	*	*
	35-44	71%	*	*	*
	45-54	70%	*	*	*
	55-64	74%	72%	73%	*
	65-74	75%	*	*	*
	75+	64%	*	*	*
Race	White	66%	64%	66%	67%
	American Indian	73%	*	*	*
Ethnicity	Hispanic	67%	*	*	*
	Non-Hispanic	66%	64%	66%	67%
Household Income	Less than \$15,000	62%	*	*	*
	\$15,000-\$24,999	66%	*	*	*
	\$25,000-\$34,999	66%	*	*	*
	\$35,000-\$49,999	67%	*	*	*
	\$50,000-\$74,999	70%	*	*	*
	\$75,000+	67%	67%	65%	*
Education	Less than High School, G.E.D.	66%	*	*	*
	High School, G.E.D.	68%	66%	70%	68%
	Some Post-High School	65%	62%	66%	67%
	College Graduate	64%	65%	61%	65%
Employment Status	Employed for Wages	66%	64%	65%	*
	Self-employed	71%	*	*	*
	Unemployed	67%	*	*	*
	Homemaker	55%	*	*	*
	Student	43%	*	*	*
	Retired	70%	69%	71%	71%
	Unable to Work	71%	*	*	*
Marital Status	Married/Unmarried Couple	70%	69%	70%	71%
	Divorced/Separated	67%	*	*	*
	Widowed	61%	*	*	*
	Never Married	55%	*	*	*
Home Ownership Status	Own Home	69%	68%	69%	69%
	Rent Home	62%	61%	61%	*
Children Status	Children in Household (Ages 18-44)	62%	*	*	*
	No Children in Household (Ages 18-44)	55%	*	*	*
Phone Status	Landline	68%	66%	68%	70%
	Cell Phone	62%	*	63%	64%
Pregnancy Status	Pregnant (Ages 18-44)	-	-	-	-
	Not Pregnant (Ages 18-44)	50%	*	*	*

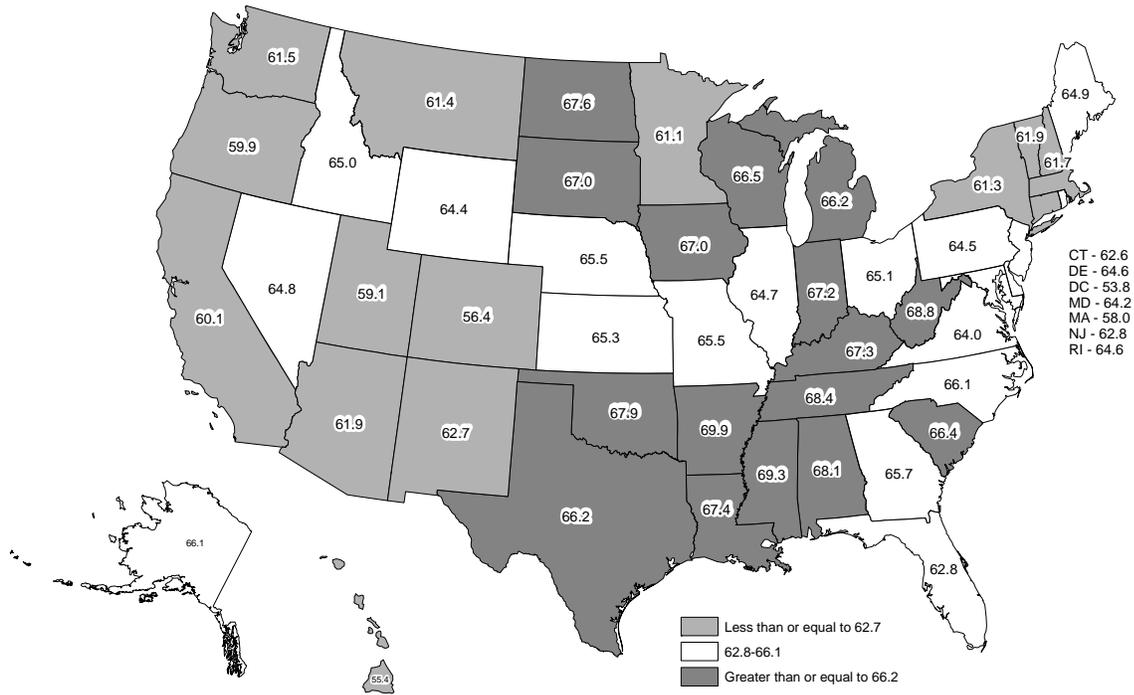
Note: *Results based on small sample sizes have been suppressed.

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2013

National Statistics

The national median for respondents who are overweight or obese was 64.8 percent, as shown in Figure 3 on the next page. South Dakota had 67.0 percent of respondents who are overweight or obese. The District of Columbia had the lowest percent of respondents who are overweight or obese with 53.8 percent, while Arkansas had the highest percent with 69.9 percent.

Figure 3
Nationally, Respondents Who Are Overweight or Obese, 2013



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2013

Further Analysis

The following data show the percent of those who are overweight or obese for various health behaviors and conditions. For example, 87 percent of respondents who have diabetes are overweight or obese, while 64 percent of respondents who do not have diabetes are overweight or obese.

Table 5	
Overweight or Obese for Selected Health Behaviors and Conditions, 2011-2013	
Health Behavior or Condition	% Overweight or Obese
Leisure Time Exercise	64%
No Leisure Time Exercise	72%
Met Physical Activity Recommendations	64%
Did Not Meet Physical Activity Recommendations	68%
2+ Servings of Fruit per Day	60%
< 2 Servings of Fruit per Day	68%
3+ Servings of Vegetables per Day	61%
< 3 Servings of Vegetables per Day	66%
5+ Servings of Fruits and Vegetables per Day	57%
< 5 Servings of Fruits and Vegetables per Day	67%

**Table 5 (continued)
Overweight or Obese for Selected Health Behaviors and
Conditions, 2011-2013**

Health Behavior or Condition	% Overweight or Obese
Current Smoker	60%
Former Smoker	75%
Never Smoked	64%
Smokeless Tobacco	76%
No Smokeless Tobacco	65%
Heard of "South Dakota QuitLine"	67%
Not Heard of "South Dakota QuitLine"	71%
Diabetes	87%
No Diabetes	64%
High Blood Pressure	81%
No High Blood Pressure	59%
High Blood Cholesterol	79%
No High Blood Cholesterol	65%
Health Insurance (18-64)	67%
No Health Insurance (18-64)	62%
Employer Based Coverage (18-64)	66%
Private Health Plan (18-64)	65%
Medicare (18-64)	72%
Medicaid or Medical Assistance (18-64)	61%
The Military, CHAMPUS, TriCare, or the VA (18-64)	70%
The Indian Health Service (18-64)	76%
Flu Shot (65+)	72%
No Flu Shot (65+)	66%
Pneumonia Shot (65+)	71%
No Pneumonia Shot (65+)	69%
Previously Had Heart Attack	79%
Never Had Heart Attack	65%
Have Angina or Coronary Heart Disease	79%
Do Not Have Angina or Coronary Heart Disease	65%
Previously Had a Stroke	69%
Never Had a Stroke	66%
Cancer	66%
No Cancer	66%
Skin Cancer	68%
No Skin Cancer	66%
Current Asthma	72%
Former Asthma	62%
Never Had Asthma	65%
Arthritis	75%
No Arthritis	63%
COPD	69%
No COPD	66%
Depression	68%
No Depression	66%
Kidney Disease	80%
No Kidney Disease	65%
Severe Vision Impairment	64%
No Severe Vision Impairment	67%
Recent Increased Confusion/Memory Loss	71%
No Recent Increased Confusion/Memory Loss	68%

**Table 5 (continued)
Overweight or Obese for Selected Health Behaviors and
Conditions, 2011-2013**

Health Behavior or Condition	% Overweight or Obese
< 6 Hours of Sleep	68%
6+ Hours of Sleep	67%
Always/Almost Always Wear Seat Belt	65%
Sometimes/Seldom/Never Wear Seat Belt	70%
Drank Alcohol in Past 30 Days	65%
Did Not Drink Alcohol in Past 30 Days	67%
Binge Drinker	64%
Not a Binge Drinker	66%
Heavy Drinker	60%
Not a Heavy Drinker	66%
Good/Very Good/Excellent Health Status	65%
Fair/Poor Health Status	73%
Physical Health Not Good for 0-29 Days of the Past 30	66%
Physical Health Not Good for 30 Days of the Past 30	71%
Mental Health Not Good for 0-19 Days of the Past 30	66%
Mental Health Not Good for 20-30 Days of the Past 30	66%
Usual Activities Unattainable for 0-9 Days of the Past 30	66%
Usual Activities Unattainable for 10-30 Days of the Past 30	69%
Physical, Mental, or Emotional Problems	72%
No Physical, Mental, or Emotional Problems	64%
Disability with Special Equipment Needed	74%
No Disability with Special Equipment Needed	65%
< 2 Hours of TV per Day	58%
2+ Hours of TV per Day	70%
Been Tested for HIV (18-64)	65%
Never Been Tested for HIV (18-64)	66%

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2013

OBESITY, CLASS I-III

Definition: Obesity, Class I-III is defined as having a Body Mass Index (BMI) of 30.0 or greater. Body Mass Index (BMI) is calculated by taking a person's body weight in pounds divided by height in inches, divided by height in inches (again) times 703. The mathematical equation for BMI is: $\text{weight (lb)}/\text{height (in)}^2 \times 703$.

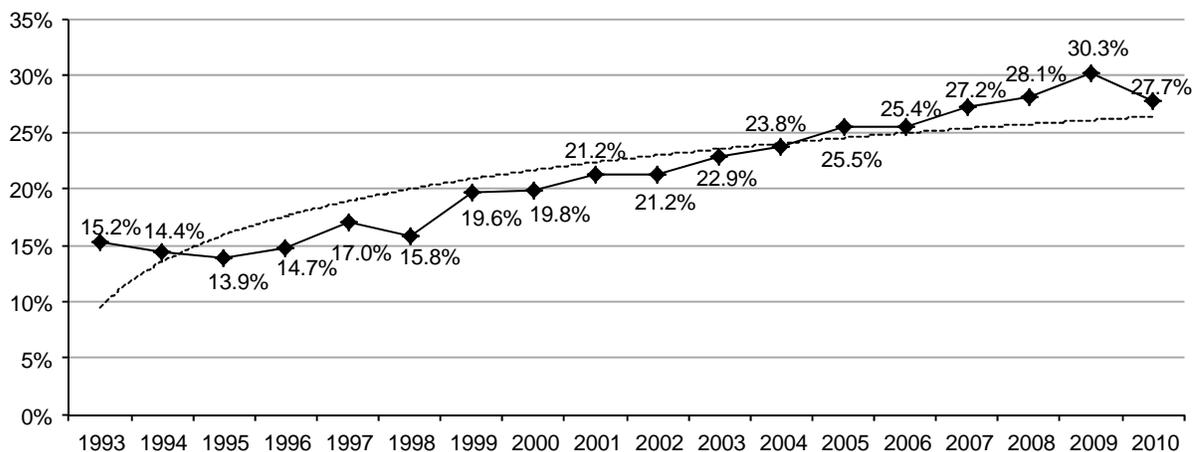
Prevalence of Obesity, Class I-III

- South Dakota 30%
- Nationwide median 29%

South Dakota Department of Health 2020 Initiative

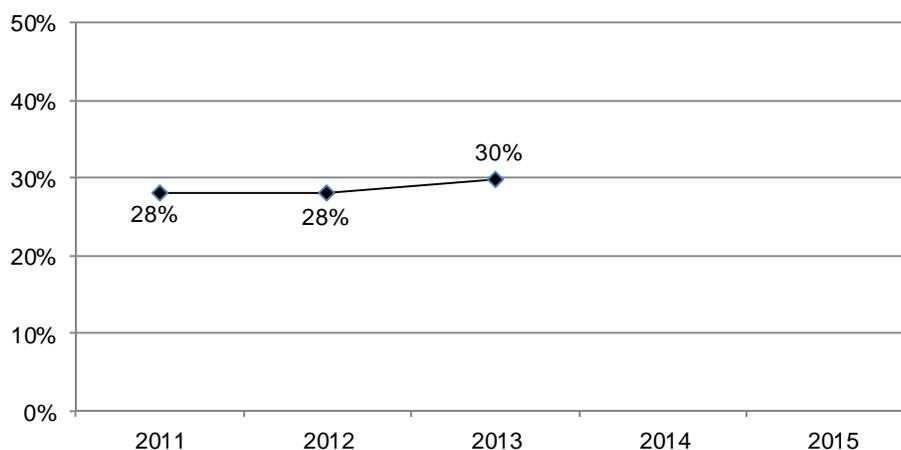
Reduce the proportion of adults aged 18 years and older who are obese to 23 percent.

Figure 4
Percent of Respondents Who Are Class I-III Obese Based on Body Mass Index, 1993-2010



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 1993-2010

Figure 5
Percent of Respondents Who Are Class I-III Obese Based on Body Mass Index, 2011-2013



Note: Beginning in 2011, the CDC began using a different methodology to weight the data, therefore current data estimates cannot be compared to previous years.

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2013

**Table 6
Respondents Who Are Class I-III Obese, 2011-2013**

		2011-2013	2011	2012	2013
Total		29%	28%	28%	30%
Gender	Male	30%	30%	29%	32%
	Female	27%	26%	28%	28%
Age	18-34	22%	*	*	*
	35-44	33%	*	*	*
	45-54	34%	*	*	*
	55-64	35%	35%	34%	*
	65-74	32%	*	*	*
	75+	21%	*	*	*
Race	White	28%	27%	28%	30%
	American Indian	38%	*	*	*
Ethnicity	Hispanic	31%	*	*	*
	Non-Hispanic	29%	28%	28%	30%
Household Income	Less than \$15,000	33%	*	*	*
	\$15,000-\$24,999	31%	*	*	*
	\$25,000-\$34,999	29%	*	*	*
	\$35,000-\$49,999	28%	*	*	*
	\$50,000-\$74,999	30%	*	*	*
	\$75,000+	27%	26%	25%	*
Education	Less than High School, G.E.D.	31%	*	*	*
	High School, G.E.D.	29%	30%	31%	28%
	Some Post-High School	29%	27%	28%	33%
	College Graduate	26%	26%	23%	28%
Employment Status	Employed for Wages	29%	29%	29%	30%
	Self-employed	30%	*	*	*
	Unemployed	35%	*	*	*
	Homemaker	24%	*	*	*
	Student	17%	*	*	*
	Retired	26%	24%	29%	27%
	Unable to Work	43%	*	*	*
Marital Status	Married/Unmarried Couple	30%	29%	30%	31%
	Divorced/Separated	32%	*	*	*
	Widowed	25%	*	*	*
	Never Married	26%	*	*	*
Home Ownership Status	Own Home	29%	28%	29%	30%
	Rent Home	30%	31%	28%	*
Children Status	Children in Household (Ages 18-44)	26%	*	*	*
	No Children in Household (Ages 18-44)	24%	*	*	*
Phone Status	Landline	30%	29%	29%	32%
	Cell Phone	27%	*	27%	28%
Pregnancy Status	Pregnant (Ages 18-44)	-	-	-	-
	Not Pregnant (Ages 18-44)	25%	*	*	*

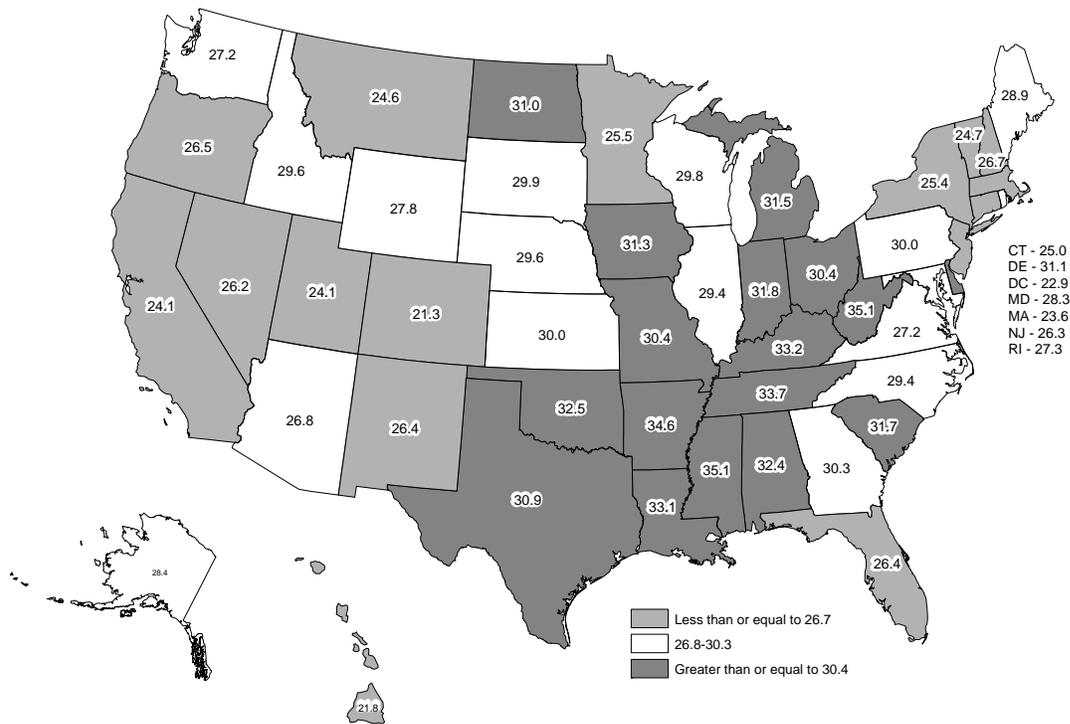
Note: *Results based on small sample sizes have been suppressed.

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2013

National Statistics

The national median for respondents who are obese was 29.4 percent, as shown in Figure 6 on the next page. South Dakota had 29.9 percent of respondents who are obese. Colorado had the lowest percent of respondents who were obese with 21.3 percent, while West Virginia and Mississippi had the highest with 35.1 percent.

Figure 6
Nationally, Respondents Who Are Class I-III Obese, 2013



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2013

Further Analysis

Following are data illustrating the percent of those who are Class I-III obese for various health behaviors and conditions. For example, 42 percent of respondents who have high blood pressure are Class I-III obese, while 23 percent of respondents who do not have high blood pressure are Class I-III obese.

Table 7	
Class I-III Obese Status for Selected Health Behaviors and Conditions, 2011-2013	
Health Behavior or Condition	% Obese I-III
Leisure Time Exercise	27%
No Leisure Time Exercise	35%
Met Physical Activity Recommendations	26%
Did Not Meet Physical Activity Recommendations	32%
2+ Servings of Fruit per Day	27%
< 2 Servings of Fruit per Day	30%
3+ Servings of Vegetables per Day	25%
< 3 Servings of Vegetables per Day	29%
5+ Servings of Fruits and Vegetables per Day	26%
< 5 Servings of Fruits and Vegetables per Day	29%
Current Smoker	26%
Former Smoker	34%
Never Smoked	27%

Table 7 (continued)
Class I-III Obese Status for Selected Health Behaviors and
Conditions, 2011-2013

Health Behavior or Condition	% Obese I-III
Smokeless Tobacco	34%
No Smokeless Tobacco	28%
Heard of "South Dakota QuitLine "	30%
Not Heard of "South Dakota QuitLine "	30%
Diabetes	56%
No Diabetes	26%
High Blood Pressure	42%
No High Blood Pressure	23%
High Blood Cholesterol	38%
No High Blood Cholesterol	28%
Health Insurance (18-64)	30%
No Health Insurance (18-64)	28%
Employer Based Coverage (18-64)	29%
Private Health Plan (18-64)	26%
Medicare (18-64)	42%
Medicaid or Medical Assistance (18-64)	34%
The Military, CHAMPUS, TriCare, or the VA (18-64)	31%
The Indian Health Service (18-64)	41%
Flu Shot (65+)	28%
No Flu Shot (65+)	25%
Pneumonia Shot (65+)	28%
No Pneumonia Shot (65+)	23%
Previously Had Heart Attack	36%
Never Had Heart Attack	28%
Have Angina or Coronary Heart Disease	40%
Do Not Have Angina or Coronary Heart Disease	28%
Previously Had a Stroke	32%
Never Had a Stroke	29%
Cancer	28%
No Cancer	29%
Skin Cancer	27%
No Skin Cancer	29%
Current Asthma	41%
Former Asthma	32%
Never Had Asthma	27%
Arthritis	38%
No Arthritis	26%
COPD	38%
No COPD	28%
Depression	36%
No Depression	27%
Kidney Disease	44%
No Kidney Disease	28%
Severe Vision Impairment	29%
No Severe Vision Impairment	30%
Recent Increased Confusion/Memory Loss	43%
No Recent Increased Confusion/Memory Loss	30%
< 6 Hours of Sleep	31%
6+ Hours of Sleep	30%
Always/Almost Always Wear Seat Belt	28%
Sometimes/Seldom/Never Wear Seat Belt	34%

**Table 7 (continued)
Class I-III Obese Status for Selected Health Behaviors and
Conditions, 2011-2013**

Health Behavior or Condition	% Obese I-III
Drank Alcohol in Past 30 Days	28%
Did Not Drink Alcohol in Past 30 Days	30%
Binge Drinker	26%
Not a Binge Drinker	29%
Heavy Drinker	24%
Not a Heavy Drinker	29%
Good/Very Good/Excellent Health Status	27%
Fair/Poor Health Status	42%
Physical Health Not Good for 0-29 Days of the Past 30	28%
Physical Health Not Good for 30 Days of the Past 30	40%
Mental Health Not Good for 0-19 Days of the Past 30	28%
Mental Health Not Good for 20-30 Days of the Past 30	38%
Usual Activities Unattainable for 0-9 Days of the Past 30	28%
Usual Activities Unattainable for 10-30 Days of the Past 30	39%
Physical, Mental, or Emotional Problems	40%
No Physical, Mental, or Emotional Problems	26%
Disability with Special Equipment Needed	40%
No Disability with Special Equipment Needed	28%
< 2 Hours of TV per Day	24%
2+ Hours of TV per Day	31%
Been Tested for HIV (18-64)	31%
Never Been Tested for HIV (18-64)	28%

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2013

OBESITY, CLASSES II-III

Definition: Obesity, Classes II-III is defined as having a Body Mass Index (BMI) of 35.0 or greater. Body Mass Index (BMI) is calculated by taking a person's body weight in pounds divided by height in inches, divided by height in inches (again) times 703. The mathematical equation for BMI is: $\text{weight (lb)}/\text{height (in)}^2 \times 703$.

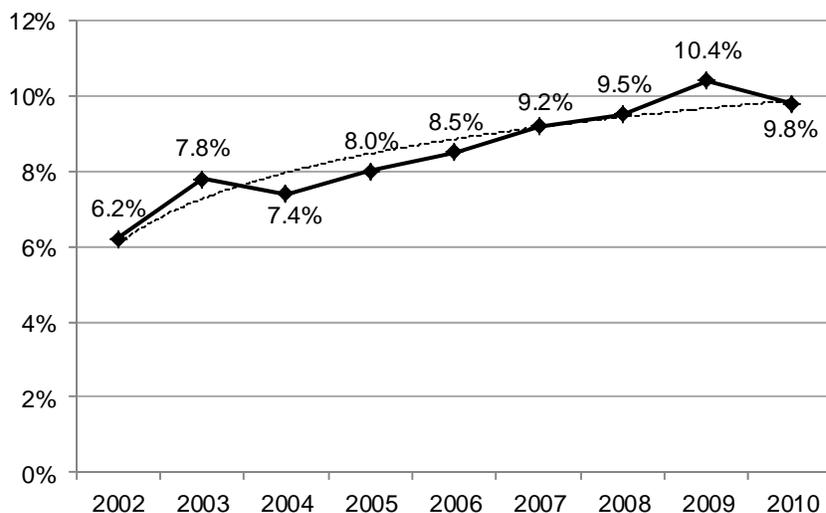
Prevalence of Obesity, Classes II-III

- South Dakota 11%
- There is no nationwide median for obesity classes II-III.

Healthy People 2020 Objective

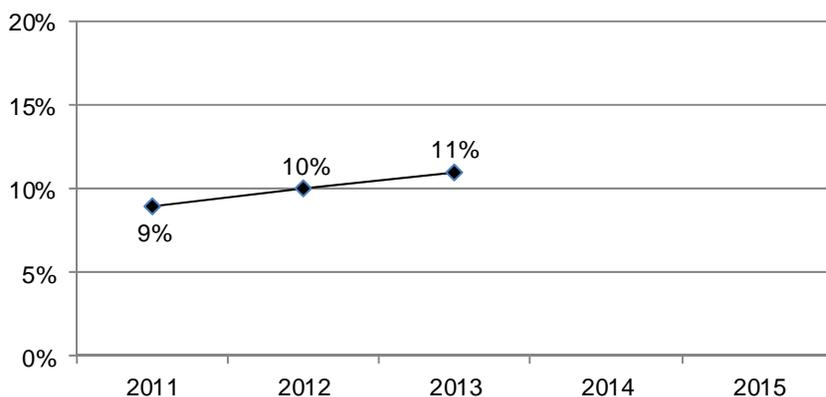
There is no comparable Healthy People 2020 objective for obesity, classes II-III.

Figure 7
Percent of Respondents Who Are Class II-III Obese Based on Body Mass Index, 2002-2010



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2002-2010

Figure 8
Percent of Respondents Who Are Class II-III Obese Based on Body Mass Index, 2011-2013



Note: Beginning in 2011, the CDC began using a different methodology to weight the data, therefore current data estimates cannot be compared to previous years.

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2013

Table 8
Respondents Who Are Class II-III Obese, 2011-2013

		2011-2013	2011	2012	2013
Total		10%	9%	10%	11%
Gender	Male	10%	9%	10%	11%
	Female	11%	10%	11%	11%
Age	18-34	8%	*	*	*
	35-44	12%	*	*	*
	45-54	12%	*	*	*
	55-64	13%	10%	14%	*
	65-74	12%	*	*	*
Race	75+	5%	*	*	*
	White	10%	9%	10%	11%
Ethnicity	American Indian	14%	*	*	*
	Hispanic	13%	*	*	*
Household Income	Non-Hispanic	10%	9%	10%	11%
	Less than \$15,000	14%	*	*	*
	\$15,000-\$24,999	13%	*	*	*
	\$25,000-\$34,999	11%	*	*	*
	\$35,000-\$49,999	9%	*	*	*
	\$50,000-\$74,999	11%	*	*	*
Education	\$75,000+	9%	5%	10%	*
	Less than High School, G.E.D.	11%	*	*	*
	High School, G.E.D.	11%	10%	11%	10%
	Some Post-High School	11%	9%	10%	13%
Employment Status	College Graduate	8%	7%	8%	10%
	Employed for Wages	10%	9%	10%	11%
	Self-employed	9%	*	*	*
	Unemployed	16%	*	*	*
	Homemaker	8%	*	*	*
	Student	5%	*	*	*
	Retired	9%	8%	11%	9%
Marital Status	Unable to Work	21%	*	*	*
	Married/Unmarried Couple	10%	9%	10%	11%
	Divorced/Separated	12%	*	*	*
	Widowed	8%	*	*	*
Home Ownership Status	Never Married	11%	*	*	*
	Own Home	10%	9%	10%	10%
Children Status	Rent Home	12%	11%	12%	*
	Children in Household (Ages 18-44)	10%	*	*	*
Phone Status	No Children in Household (Ages 18-44)	9%	*	*	*
	Landline	10%	9%	10%	12%
Pregnancy Status	Cell Phone	10%	*	10%	10%
	Pregnant (Ages 18-44)	-	-	-	-
		11%	*	*	*

Note: *Results based on small sample sizes have been suppressed.

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2013

Further Analysis

Following are data illustrating the percent of those who are obese for various health behaviors and conditions. For example, 24 percent of respondents who have diabetes are Class II-III obese, while 9 percent of respondents who do not have diabetes are Class II-III obese.

Health Behavior or Condition	% Obese II-III
Leisure Time Exercise	9%
No Leisure Time Exercise	14%
Met Physical Activity Recommendations	8%
Did Not Meet Physical Activity Recommendations	12%
2+ Servings of Fruit per Day	10%
< 2 Servings of Fruit per Day	10%
3+ Servings of Vegetables per Day	9%
< 3 Servings of Vegetables per Day	11%
5+ Servings of Fruits and Vegetables per Day	9%
< 5 Servings of Fruits and Vegetables per Day	10%
Current Smoker	11%
Former Smoker	12%
Never Smoked	9%
Smokeless Tobacco	10%
No Smokeless Tobacco	10%
Heard of "South Dakota QuitLine"	12%
Not Heard of "South Dakota QuitLine"	9%
Diabetes	24%
No Diabetes	9%
High Blood Pressure	17%
No High Blood Pressure	7%
High Blood Cholesterol	14%
No High Blood Cholesterol	10%
Health Insurance (18-64)	11%
No Health Insurance (18-64)	12%
Employer Based Coverage (18-64)	10%
Private Health Plan (18-64)	8%
Medicare (18-64)	23%
Medicaid or Medical Assistance (18-64)	17%
The Military, CHAMPUS, TriCare, or the VA (18-64)	10%
The Indian Health Service (18-64)	15%
Flu Shot (65+)	9%
No Flu Shot (65+)	8%
Pneumonia Shot (65+)	9%
No Pneumonia Shot (65+)	8%
Previously Had Heart Attack	12%
Never Had Heart Attack	10%
Have Angina or Coronary Heart Disease	14%
Do Not Have Angina or Coronary Heart Disease	10%
Previously Had a Stroke	12%
Never Had a Stroke	10%
Cancer	10%
No Cancer	10%
Skin Cancer	8%
No Skin Cancer	10%

**Table 9 (continued)
Class II-III Obese Status for Selected Health Behaviors and
Conditions, 2011-2013**

Health Behavior or Condition	% Obese II-III
Current Asthma	20%
Former Asthma	15%
Never Had Asthma	9%
Arthritis	15%
No Arthritis	9%
COPD	17%
No COPD	10%
Depression	17%
No Depression	9%
Kidney Disease	20%
No Kidney Disease	10%
Severe Vision Impairment	13%
No Severe Vision Impairment	11%
Recent Increased Confusion/Memory Loss	15%
No Recent Increased Confusion/Memory Loss	11%
< 6 Hours of Sleep	13%
6+ Hours of Sleep	11%
Always/Almost Always Wear Seat Belt	10%
Sometimes/Seldom/Never Wear Seat Belt	14%
Drank Alcohol in Past 30 Days	10%
Did Not Drink Alcohol in Past 30 Days	11%
Binge Drinker	9%
Not a Binge Drinker	11%
Heavy Drinker	8%
Not a Heavy Drinker	10%
Good/Very Good/Excellent Health Status	9%
Fair/Poor Health Status	20%
Physical Health Not Good for 0-29 Days of the Past 30	10%
Physical Health Not Good for 30 Days of the Past 30	17%
Mental Health Not Good for 0-19 Days of the Past 30	10%
Mental Health Not Good for 20-30 Days of the Past 30	18%
Usual Activities Unattainable for 0-9 Days of the Past 30	10%
Usual Activities Unattainable for 10-30 Days of the Past 30	20%
Physical, Mental, or Emotional Problems	17%
No Physical, Mental, or Emotional Problems	8%
Disability with Special Equipment Needed	20%
No Disability with Special Equipment Needed	9%
< 2 Hours of TV per Day	9%
2+ Hours of TV per Day	11%
Been Tested for HIV (18-64)	12%
Never Been Tested for HIV (18-64)	10%

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2013