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: weight (lb)/height (in) ² x 703.
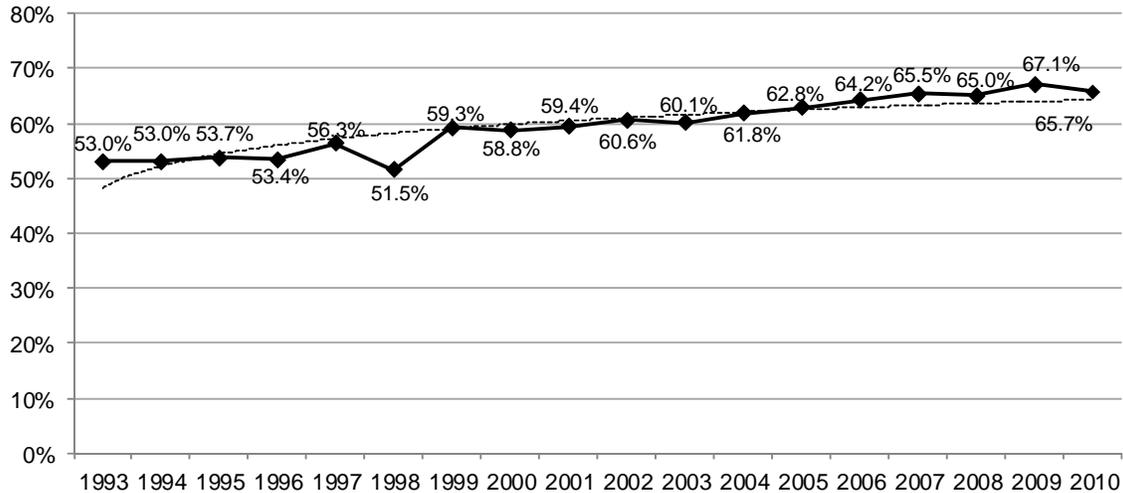
Prevalence of Overweight or Obese

o   South Dakota 66%
o   Nationwide median 64%

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, 2011-2012
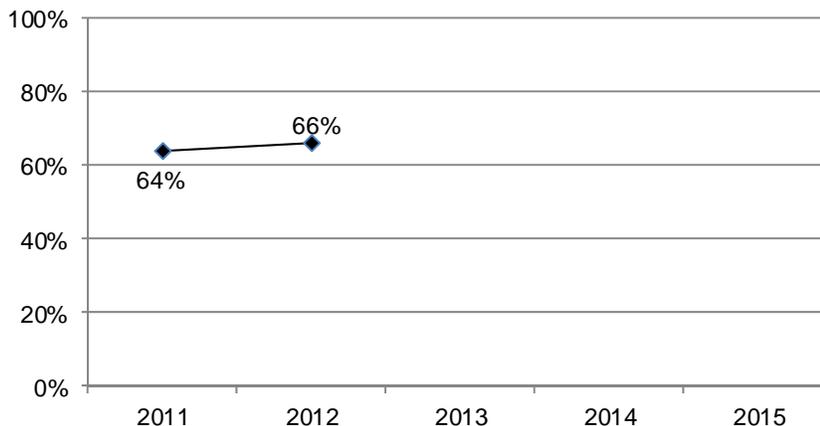
Note: Beginning in 2011, the CDC began using a different methodology to weight the data, therefore current data estimates cannot be compared to previous years.
Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2012

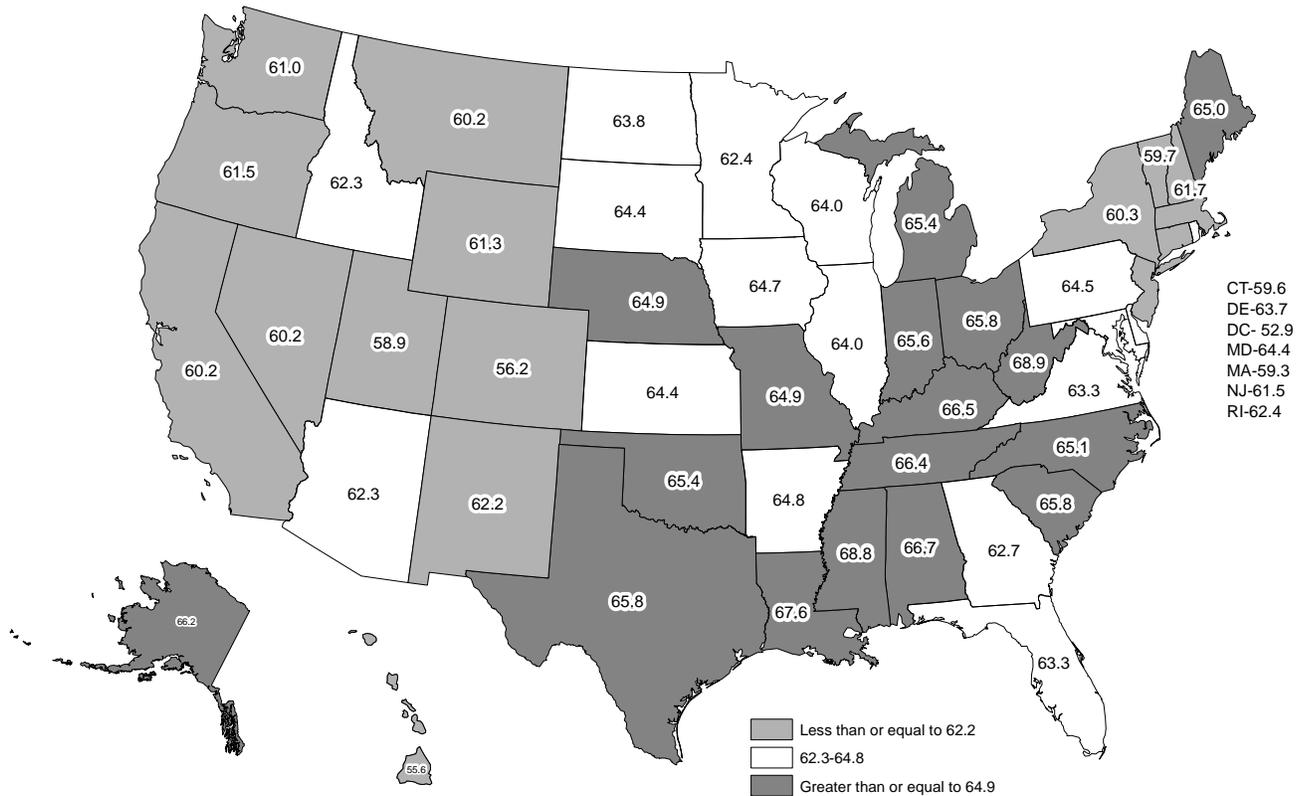|		**2011-2012**	**2011**	**2012**
Table 4 **Respondents Who Are Overweight or Obese, 2011-2012**			
\multicolumn{2}{l|}{**Total**}	**65%**	**64%**	**66%**
Gender	Male	73%	73%	73%
	Female	57%	55%	59%
Age	18-44	59%	58%	61%
	45-64	71%	72%	70%
	65+	69%	68%	70%
Race	White	65%	64%	66%
	American Indian	75%	*	*
Ethnicity	Hispanic	69%	70%	69%
	Non-Hispanic	65%	*	*
Household Income	Less than $25,000	64%	65%	64%
	$25,000-$49,999	66%	65%	68%
	$50,000+	68%	69%	67%
Education	High School, G.E.D., or Less	67%	66%	69%
	Some Post-High School	64%	62%	66%
	College Graduate	63%	65%	61%
Employment Status	Employed for Wages	65%	64%	65%
	Self-employed	72%	*	*
	Unemployed	68%	*	*
	Homemaker	56%	*	*
	Student	43%	*	*
	Retired	70%	69%	71%
	Unable to Work	67%	*	*
Marital Status	Married/Unmarried Couple	69%	69%	70%
	Divorced/Separated	66%	*	*
	Widowed	60%	*	*
	Never Married	55%	*	*
Home Ownership Status	Own Home	69%	68%	69%
	Rent Home	61%	61%	61%
Children Status	Children in Household (Ages 18-44)	63%	*	*
	No Children in Household (Ages 18-44)	54%	*	*
Phone Status	Landline	67%	66%	68%
	Cell Phone	61%	*	*
Pregnancy Status	Pregnant (Ages 18-44)	-	-	-
	Not Pregnant (Ages 18-44)	49%	*	*

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

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2012

National Statistics

The national median for respondents who are overweight or obese was 64 percent, as shown in Figure 3 on the next page. South Dakota had 66 percent of respondents who are overweight or obese. The District of Columbia had the lowest percent of respondents who are overweight or obese with 52 percent, while Louisiana had the highest percent with 70 percent.

Figure 3
Nationally, Respondents Who Are Overweight or Obese, 2012

CT-59.6
DE-63.7
DC- 52.9
MD-64.4
MA-59.3
NJ-61.5
RI-62.4

Less than or equal to 62.2
62.3-64.8
Greater than or equal to 64.9

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2012

Further Analysis

The following data show the percent of those who are overweight or obese for various health behaviors and conditions. For example, 86 percent of respondents who have diabetes are overweight or obese, while 63 percent of respondents who do not have diabetes are overweight or obese.

Table 5 Overweight or Obese for Selected Health Behaviors and Conditions, 2011-2012	
Health Behavior or Condition	**% Overweight or Obese**
Leisure Time Exercise	63%
No Leisure Time Exercise	72%
Current Smoker	59%
Former Smoker	74%
Never Smoked	63%
Smokeless Tobacco	73%
No Smokeless Tobacco	65%
Diabetes	86%
No Diabetes	63%

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Table 5 (continued) Overweight or Obese for Selected Health Behaviors and Conditions, 2011-2012	
Health Behavior or Condition	**% Overweight or Obese**
High Blood Pressure	80%
No High Blood Pressure	59%
Health Insurance (18-64)	66%
No Health Insurance (18-64)	65%
Employer Based Coverage (18-64)	65%
Private Health Plan (18-64)	66%
Medicare (18-64)	70%
Medicaid or Medical Assistance (18-64)	56%
The Military, CHAMPUS, TriCare, or the VA (18-64)	67%
The Indian Health Service (18-64)	75%
Breast Exam Within Past Two Years	59%
No Breast Exam Within Past Two Years	59%
Mammogram Within Past Two Years (40+)	66%
No Mammogram Within Past Two Years (40+)	56%
Pap Smear Within Past Three Years	56%
No Pap Smear Within Past Three Years	55%
Blood Stool Test Within Past Two Years (50+)	74%
No Blood Stool Test Within Past Two Years (50+)	70%
Ever Had a Sigmoidoscopy or Colonoscopy (50+)	71%
Never Had a Sigmoidoscopy or Colonoscopy (50+)	69%
PSA Test Within the Past Two Years (40+)	80%
No PSA Test Within the Past Two Years (40+)	77%
Flu Shot (65+)	71%
No Flu Shot (65+)	65%
Pneumonia Shot (65+)	71%
No Pneumonia Shot (65+)	66%
Previously Had Heart Attack	77%
Never Had Heart Attack	65%
Have Angina or Coronary Heart Disease	77%
Do Not Have Angina or Coronary Heart Disease	65%
Previously Had a Stroke	68%
Never Had a Stroke	65%
Cancer	66%
No Cancer	65%
Skin Cancer	67%
No Skin Cancer	65%
Current Asthma	73%
Former Asthma	64%
Never Had Asthma	65%
Arthritis	73%
No Arthritis	63%
COPD	70%
No COPD	65%
Depression	65%
No Depression	65%
Kidney Disease	81%
No Kidney Disease	65%
Vision Impairment	65%
No Vision Impairment	65%
Been to the Dentist in the Past Year	65%
Haven't Been to the Dentist in the Past Year	69%

Table 5 (continued) Overweight or Obese for Selected Health Behaviors and Conditions, 2011-2012	
Health Behavior or Condition	**% Overweight or Obese**
Always/Almost Always Wear Seat Belt	64%
Sometimes/Seldom/Never Wear Seat Belt	70%
Drank Alcohol in Past 30 Days	65%
Did Not Drink Alcohol in Past 30 Days	66%
Binge Drinker	66%
Not a Binge Drinker	66%
Heavy Drinker	61%
Not a Heavy Drinker	66%
< 3 Sweetened Beverages Per Day	66%
3+ Sweetened Beverages Per Day	63%
Good/Very Good/Excellent Health Status	64%
Fair/Poor Health Status	72%
Physical Health Not Good for 0-29 Days of the Past 30	65%
Physical Health Not Good for 30 Days of the Past 30	71%
Mental Health Not Good for 0-19 Days of the Past 30	65%
Mental Health Not Good for 20-30 Days of the Past 30	66%
Usual Activities Unattainable for 0-9 Days of the Past 30	65%
Usual Activities Unattainable for 10-30 Days of the Past 30	67%
Physical, Mental, or Emotional Problems	71%
No Physical, Mental, or Emotional Problems	64%
Disability with Special Equipment Needed	71%
No Disability with Special Equipment Needed	65%
Heard of "Healthy South Dakota" Program	65%
Not Heard of "Healthy South Dakota" Program	68%
Injured in a Fall in Past 12 Months (45+)	73%
Not Injured in a Fall in Past 12 Months (45+)	70%
Been Tested for HIV (18-64)	64%
Never Been Tested for HIV (18-64)	66%

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2012

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: weight (lb)/height (in) ² x 703.
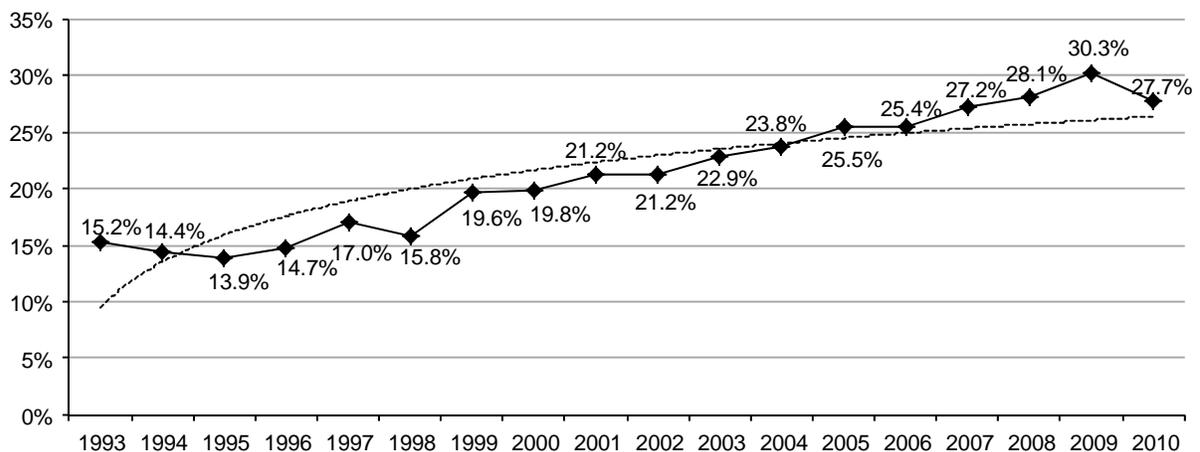
Prevalence of Obesity, Class I-III

- South Dakota 28%
- Nationwide median 28%

### 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, 2011-2012
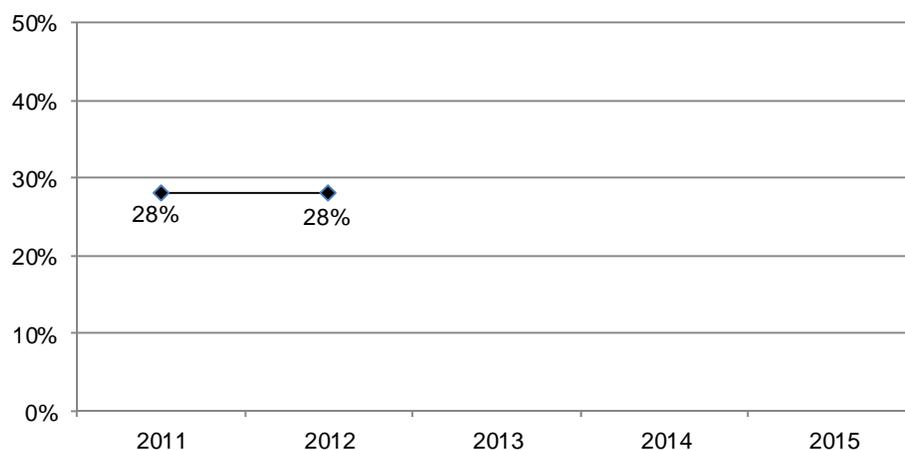
Note: Beginning in 2011, the CDC began using a different methodology to weight the data, therefore current data estimates cannot be compared to previous years.
Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2012

| Table 6 Respondents Who Are Class I-III Obese, 2011-2012		2011-2012	2011	2012
Total		**28%**	**28%**	**28%**
Gender	Male	29%	30%	29%
	Female	27%	26%	28%
Age	18-44	25%	25%	24%
	45-64	34%	34%	33%
	65+	26%	24%	28%
Race	White	27%	27%	28%
	American Indian	40%	*	*
Ethnicity	Hispanic	32%	*	*
	Non-Hispanic	28%	28%	28%
Household Income	Less than $25,000	32%	33%	32%
	$25,000-$49,999	29%	28%	30%
	$50,000+	27%	27%	27%
Education	High School, G.E.D., or Less	30%	30%	31%
	Some Post-High School	28%	27%	28%
	College Graduate	25%	26%	23%
Employment Status	Employed for Wages	29%	29%	29%
	Self-employed	28%	*	*
	Unemployed	38%	*	*
	Homemaker	24%	*	*
	Student	15%	*	*
	Retired	26%	24%	29%
	Unable to Work	39%	*	*
Marital Status	Married/Unmarried Couple	29%	29%	30%
	Divorced/Separated	31%	*	*
	Widowed	26%	*	*
	Never Married	25%	*	*
Home Ownership Status	Own Home	28%	28%	29%
	Rent Home	30%	31%	28%
Children Status	Children in Household (Ages 18-44)	27%	*	*
	No Children in Household (Ages 18-44)	22%	*	*
Phone Status	Landline	29%	29%	29%
	Cell Phone	26%	*	*
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, 2011-2012

National Statistics

The national median for respondents who are obese was 28 percent, as shown in Figure 6 on the next page. South Dakota had 28 percent of respondents who are obese. Colorado had the lowest percent of respondents who are obese with 21 percent, while Louisiana had the highest percent with 35 percent.

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Figure 6
Nationally, Respondents Who Are Class I-III Obese, 2012
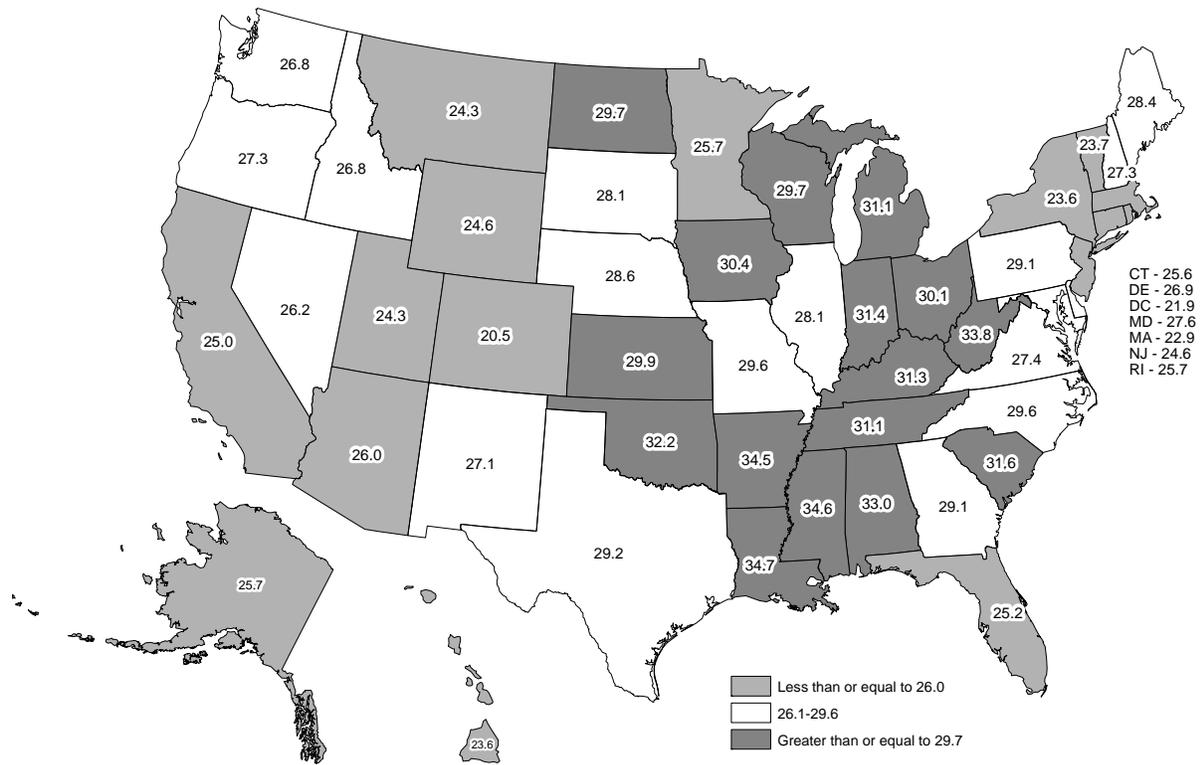
Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2012

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 22 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, 2011-2012	
Health Behavior or Condition	**% Obese I-III**
Leisure Time Exercise	26%
No Leisure Time Exercise	35%
Current Smoker	26%
Former Smoker	34%
Never Smoked	26%
Smokeless Tobacco	31%
No Smokeless Tobacco	28%
Diabetes	56%
No Diabetes	26%
High Blood Pressure	42%
No High Blood Pressure	22%
Health Insurance (18-64)	29%
No Health Insurance (18-64)	32%

Table 7 (continued) Class I-III Obese Status for Selected Health Behaviors and Conditions, 2011-2012	
Health Behavior or Condition	**% Obese I-III**
Employer Based Coverage (18-64)	28%
Private Health Plan (18-64)	26%
Medicare (18-64)	40%
Medicaid or Medical Assistance (18-64)	29%
The Military, CHAMPUS, TriCare, or the VA (18-64)	29%
The Indian Health Service (18-64)	40%
Breast Exam Within Past Two Years	28%
No Breast Exam Within Past Two Years	27%
Mammogram Within Past Two Years (40+)	31%
No Mammogram Within Past Two Years (40+)	28%
Pap Smear Within Past Three Years	27%
No Pap Smear Within Past Three Years	23%
Blood Stool Test Within Past Two Years (50+)	29%
No Blood Stool Test Within Past Two Years (50+)	32%
Ever Had a Sigmoidoscopy or Colonoscopy (50+)	31%
Never Had a Sigmoidoscopy or Colonoscopy (50+)	32%
PSA Test Within the Past Two Years (40+)	35%
No PSA Test Within the Past Two Years (40+)	33%
Flu Shot (65+)	27%
No Flu Shot (65+)	24%
Pneumonia Shot (65+)	27%
No Pneumonia Shot (65+)	22%
Previously Had Heart Attack	38%
Never Had Heart Attack	28%
Have Angina or Coronary Heart Disease	38%
Do Not Have Angina or Coronary Heart Disease	28%
Previously Had a Stroke	33%
Never Had a Stroke	28%
Cancer	27%
No Cancer	28%
Skin Cancer	26%
No Skin Cancer	28%
Current Asthma	42%
Former Asthma	33%
Never Had Asthma	27%
Arthritis	37%
No Arthritis	26%
COPD	38%
No COPD	28%
Depression	35%
No Depression	27%
Kidney Disease	44%
No Kidney Disease	28%
Vision Impairment	31%
No Vision Impairment	28%
Been to the Dentist in the Past Year	26%
Haven't Been to the Dentist in the Past Year	32%
Always/Almost Always Wear Seat Belt	27%
Sometimes/Seldom/Never Wear Seat Belt	34%
Drank Alcohol in Past 30 Days	27%
Did Not Drink Alcohol in Past 30 Days	30%
Binge Drinker	26%
Not a Binge Drinker	29%
Heavy Drinker	22%
Not a Heavy Drinker	28%

Table 7 (continued) Class I-III Obese Status for Selected Health Behaviors and Conditions, 2011-2012	
Health Behavior or Condition	**% Obese I-III**
< 3 Sweetened Beverages Per Day	29%
3+ Sweetened Beverages Per Day	25%
Good/Very Good/Excellent Health Status	26%
Fair/Poor Health Status	42%
Physical Health Not Good for 0-29 Days of the Past 30	27%
Physical Health Not Good for 30 Days of the Past 30	39%
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	37%
Usual Activities Unattainable for 0-9 Days of the Past 30	28%
Usual Activities Unattainable for 10-30 Days of the Past 30	36%
Physical, Mental, or Emotional Problems	38%
No Physical, Mental, or Emotional Problems	25%
Disability with Special Equipment Needed	40%
No Disability with Special Equipment Needed	27%
Heard of "Healthy South Dakota" Program	28%
Not Heard of "Healthy South Dakota" Program	29%
Injured in a Fall in Past 12 Months (45+)	39%
Not Injured in a Fall in Past 12 Months (45+)	30%
Been Tested for HIV (18-64)	29%
Never Been Tested for HIV (18-64)	28%

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2012

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: weight (lb)/height (in) ² x 703.
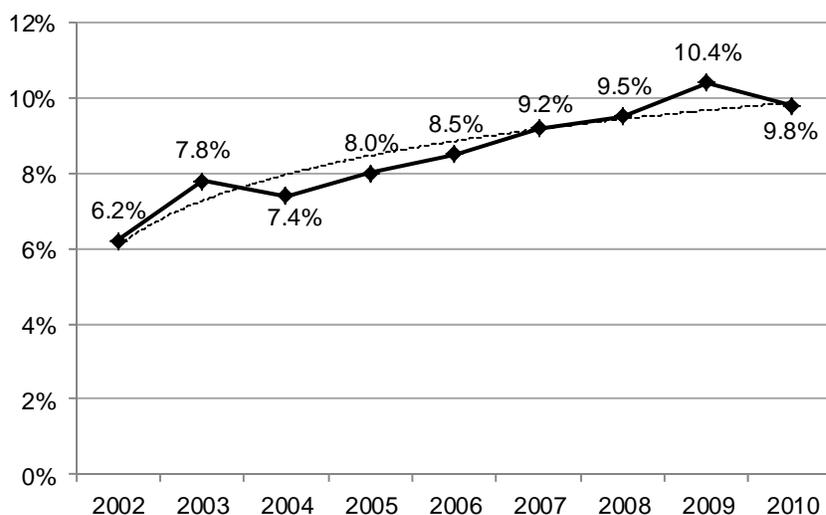
Prevalence of Obesity, Classes II-III

o South Dakota 10%
o *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, 2011-2012
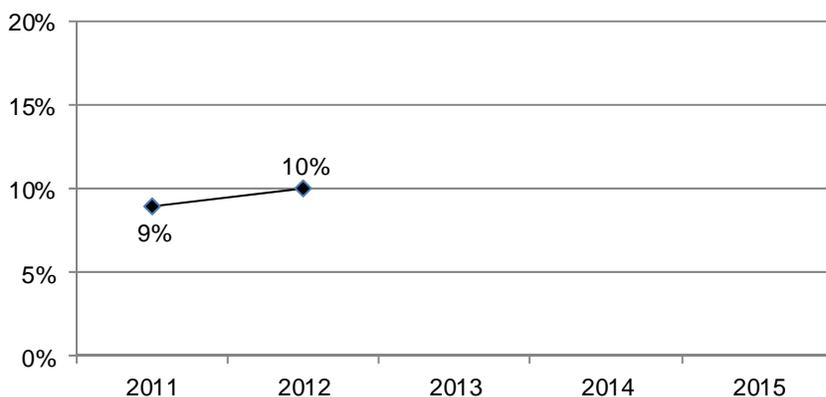
Note: Beginning in 2011, the CDC began using a different methodology to weight the data, therefore current data estimates cannot be compared to previous years.
Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2012

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Table 8 Respondents Who Are Class II-III Obese, 2011-2012		2011-2012	2011	2012
Total		**10%**	**9%**	**10%**
Gender	Male	9%	9%	10%
	Female	11%	10%	11%
Age	18-44	9%	9%	9%
	45-64	11%	11%	12%
	65+	8%	7%	10%
Race	White	9%	9%	10%
	American Indian	15%	*	*
Ethnicity	Hispanic	10%	*	*
	Non-Hispanic	10%	9%	10%
Household Income	Less than $25,000	12%	11%	14%
	$25,000-$49,999	11%	11%	11%
	$50,000+	8%	7%	9%
Education	High School, G.E.D., or Less	11%	11%	11%
	Some Post-High School	10%	9%	10%
	College Graduate	8%	7%	8%
Employment Status	Employed for Wages	10%	9%	10%
	Self-employed	7%	*	*
	Unemployed	17%	*	*
	Homemaker	9%	*	*
	Student	5%	*	*
	Retired	9%	8%	11%
	Unable to Work	19%	*	*
Marital Status	Married/Unmarried Couple	10%	9%	10%
	Divorced/Separated	12%	*	*
	Widowed	8%	*	*
	Never Married	10%	*	*
Home Ownership Status	Own Home	9%	9%	10%
	Rent Home	12%	11%	12%
Children Status	Children in Household (Ages 18-44)	9%	*	*
	No Children in Household (Ages 18-44)	9%	*	*
Phone Status	Landline	10%	9%	10%
	Cell Phone	10%	*	*
Pregnancy Status	Pregnant (Ages 18-44)	-	-	-
	Not 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, 2011-2012

Further Analysis

Following are data illustrating the percent of those who are obese for various health behaviors and conditions. For example, 23 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.

Table 9 Class II-III Obese Status for Selected Health Behaviors and Conditions, 2011-2012	
Health Behavior or Condition	**% Obese II-III**
Leisure Time Exercise	9%
No Leisure Time Exercise	13%
Current Smoker	10%
Former Smoker	12%
Never Smoked	9%
Smokeless Tobacco	9%
No Smokeless Tobacco	10%

Table 9 (continued) Class II-III Obese Status for Selected Health Behaviors and Conditions, 2011-2012	
Health Behavior or Condition	**% Obese II-III**
Diabetes	23%
No Diabetes	9%
High Blood Pressure	16%
No High Blood Pressure	7%
Health Insurance (18-64)	10%
No Health Insurance (18-64)	15%
Employer Based Coverage (18-64)	10%
Private Health Plan (18-64)	7%
Medicare (18-64)	21%
Medicaid or Medical Assistance (18-64)	16%
The Military, CHAMPUS, TriCare, or the VA (18-64)	7%
The Indian Health Service (18-64)	15%
Breast Exam Within Past Two Years	11%
No Breast Exam Within Past Two Years	12%
Mammogram Within Past Two Years (40+)	12%
No Mammogram Within Past Two Years (40+)	13%
Pap Smear Within Past Three Years	10%
No Pap Smear Within Past Three Years	11%
Blood Stool Test Within Past Two Years (50+)	13%
No Blood Stool Test Within Past Two Years (50+)	11%
Ever Had a Sigmoidoscopy or Colonoscopy (50+)	11%
Never Had a Sigmoidoscopy or Colonoscopy (50+)	12%
PSA Test Within the Past Two Years (40+)	13%
No PSA Test Within the Past Two Years (40+)	11%
Flu Shot (65+)	9%
No Flu Shot (65+)	8%
Pneumonia Shot (65+)	9%
No Pneumonia Shot (65+)	7%
Previously Had Heart Attack	13%
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	10%
Never Had a Stroke	10%
Cancer	10%
No Cancer	10%
Skin Cancer	9%
No Skin Cancer	10%
Current Asthma	19%
Former Asthma	16%
Never Had Asthma	9%
Arthritis	14%
No Arthritis	8%
COPD	15%
No COPD	10%
Depression	15%
No Depression	9%
Kidney Disease	23%
No Kidney Disease	10%
Vision Impairment	11%
No Vision Impairment	10%

Table 9 (continued) Class II-III Obese Status for Selected Health Behaviors and Conditions, 2011-2012	
Health Behavior or Condition	**% Obese II-III**
Been to the Dentist in the Past Year	9%
Haven't Been to the Dentist in the Past Year	13%
Always/Almost Always Wear Seat Belt	9%
Sometimes/Seldom/Never Wear Seat Belt	15%
Drank Alcohol in Past 30 Days	9%
Did Not Drink Alcohol in Past 30 Days	11%
Binge Drinker	9%
Not a Binge Drinker	10%
Heavy Drinker	7%
Not a Heavy Drinker	10%
< 3 Sweetened Beverages per Day	10%
3+ Sweetened Beverages per Day	10%
Good/Very Good/Excellent Health Status	8%
Fair/Poor Health Status	19%
Physical Health Not Good for 0-29 Days of the Past 30	9%
Physical Health Not Good for 30 Days of the Past 30	17%
Mental Health Not Good for 0-19 Days of the Past 30	9%
Mental Health Not Good for 20-30 Days of the Past 30	18%
Usual Activities Unattainable for 0-9 Days of the Past 30	9%
Usual Activities Unattainable for 10-30 Days of the Past 30	17%
Physical, Mental, or Emotional Problems	16%
No Physical, Mental, or Emotional Problems	8%
Disability with Special Equipment Needed	19%
No Disability with Special Equipment Needed	9%
Heard of "Healthy South Dakota" Program	10%
Not Heard of "Healthy South Dakota" Program	11%
Injured in a Fall in Past 12 Months (45+)	16%
Not Injured in a Fall in Past 12 Months (45+)	11%
Been Tested for HIV (18-64)	11%
Never Been Tested for HIV (18-64)	10%

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2012