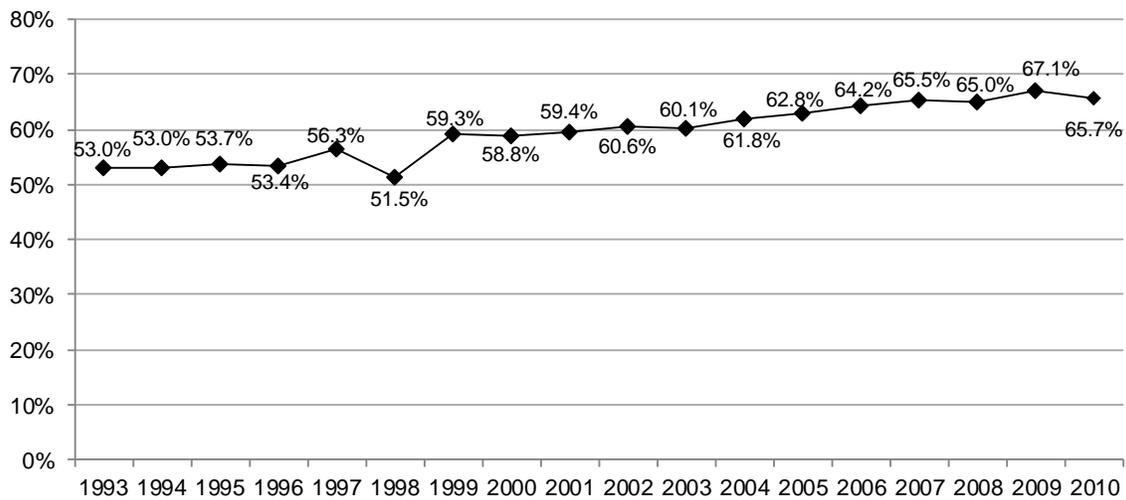# *Overweight and Obese*

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.

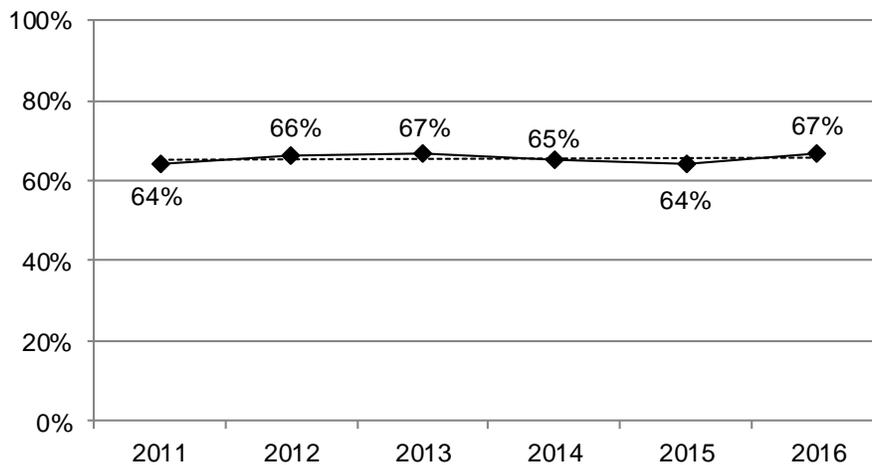## Prevalence of Overweight or Obese

o South Dakota 67%
o Nationwide median 65%

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, 2011-2016

Note: Beginning in 2011, the CDC began using a different methodology to weight the data; therefore data prior to 2011 cannot be compared to data since 2011.
Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2016

			95% Confidence Interval	
Table 4 Respondents Who Are Overweight or Obese, 2012-2016				
		2012-2016	**Low**	**High**
Gender	Male	73%	71.5%	74.0%
	Female	58%	57.2%	59.8%
Age	18-29	47%	44.8%	49.7%
	30-39	68%	65.5%	70.1%
	40-49	71%	69.1%	73.5%
	50-59	73%	71.1%	74.7%
	60-69	75%	73.6%	77.0%
	70-79	71%	68.4%	73.0%
	80+	60%	57.3%	63.5%
Race	White	66%	64.9%	66.8%
	American Indian	72%	68.2%	75.1%
Ethnicity	Hispanic	66%	57.5%	73.8%
	Non-Hispanic	66%	64.9%	66.8%
Household Income	Less than $35,000	66%	64.1%	67.4%
	$35,000-$74,999	69%	67.6%	70.7%
	$75,000+	67%	65.7%	69.1%
Education	Less than High School, G.E.D.	66%	62.1%	69.0%
	High School, G.E.D.	68%	66.0%	69.4%
	Some Post-High School	66%	64.6%	67.8%
	College Graduate	63%	61.7%	64.7%
Employment Status	Employed for Wages	67%	65.3%	67.9%
	Self-employed	70%	67.9%	72.9%
	Unemployed	64%	58.6%	68.8%
	Homemaker	56%	51.6%	60.3%
	Student	37%	32.5%	42.4%
	Retired	70%	68.5%	71.7%
	Unable to Work	74%	70.5%	77.9%
Marital Status	Married/Unmarried Couple	70%	68.9%	71.1%
	Divorced/Separated	68%	65.1%	70.1%
	Widowed	62%	59.4%	64.8%
	Never Married	55%	52.2%	56.9%
Home Ownership Status	Own Home	69%	67.6%	69.7%
	Rent Home	61%	59.1%	63.3%
Children Status	Children in Household (Ages 18-44)	62%	59.8%	63.7%
	No Children in Household (Ages 18-44)	54%	51.9%	57.0%
Phone Status	Landline	68%	66.7%	69.2%
	Cell Phone	64%	63.0%	65.6%
Pregnancy Status	Pregnant (Ages 18-44)	-	-	-
	Not Pregnant (Ages 18-44)	52%	49.2%	53.8%
County	Minnehaha	63%	61.0%	65.8%
	Pennington	62%	59.2%	64.5%
	Lincoln	64%	60.3%	67.4%
	Brown	71%	67.7%	75.0%
	Brookings	63%	57.6%	67.7%
	Codington	65%	60.3%	68.9%
	Meade	64%	59.3%	68.9%
	Lawrence	61%	56.9%	64.0%

Note: *Results based on small sample sizes have been suppressed.
Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2012-2016

Demographics

Gender   Males exhibit a significantly higher prevalence of being overweight than females.

Age   The prevalence of being overweight increases as age increases with a peak in the 60s including a significant increase as the 30s are reached. After that, the prevalence of being overweight decreases as age increases with significant decreases as the 70s and 80s are reached.

Race   American Indians demonstrate a significantly higher prevalence of being overweight than whites.

Ethnicity   There seems to be no Hispanic difference with regard to the prevalence of being overweight.

Household Income   There seems to be no household income difference with regard to the prevalence of being overweight.

Education   There seems to be no education level difference with regard to the prevalence of being overweight.

Employment   Those who are self-employed, retired, or unable to work demonstrate a very high prevalence of being overweight, while students show a very low prevalence.

Marital Status   Those who are married or divorced exhibit a very high prevalence of being overweight, while those who have never been married show a very low prevalence.

Home Ownership   Those who own their home show a significantly higher prevalence of being overweight than those who rent their home.

Children Status   Those adults with children in the household demonstrate a significantly higher prevalence of being overweight than those with no children.

Phone Status   Those with a landline phone exhibit a significantly higher prevalence of being overweight than those with a cell phone.

County   Brown county demonstrates a very high prevalence of being overweight, while Minnehaha, Pennington, Lincoln, and Lawrence counties show a very low prevalence.

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.
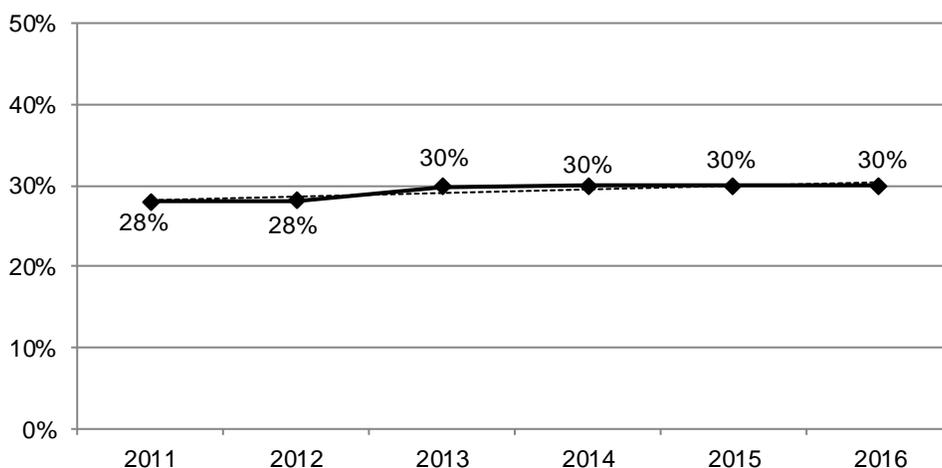
Prevalence of Obesity, Class I-III

o South Dakota 30%
o Nationwide median 30%

Figure 3
Percent of Respondents Who Are Class I-III Obese Based on Body Mass Index, 1993-2010
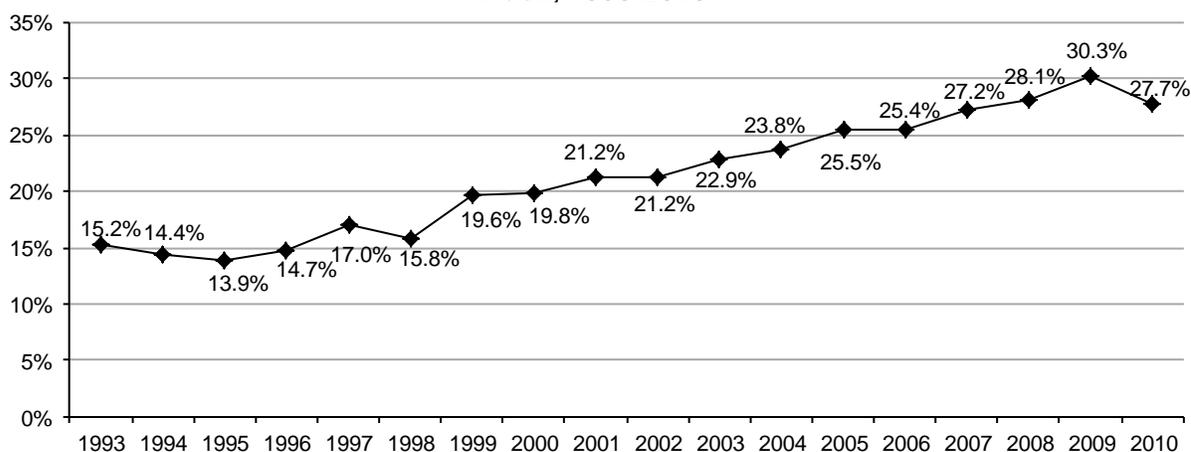
Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 1993-2010

Figure 4
Percent of Respondents Who Are Class I-III Obese Based on Body Mass Index, 2011-2016

Note: Beginning in 2011, the CDC began using a different methodology to weight the data; therefore data prior to 2011 cannot be compared to data since 2011.
Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2016

			95% Confidence Interval	
Table 5 **Respondents Who Are Class I-III Obese, 2012-2016**				
		2012-2016	**Low**	**High**
Gender	Male	31%	30.1%	32.6%
	Female	28%	26.6%	28.8%
Age	18-29	19%	16.9%	20.6%
	30-39	31%	29.2%	33.8%
	40-49	36%	33.2%	37.9%
	50-59	35%	33.5%	37.4%
	60-69	35%	33.1%	37.0%
	70-79	29%	26.7%	31.2%
	80+	17%	15.2%	19.8%
Race	White	29%	28.4%	30.1%
	American Indian	38%	34.4%	41.1%
Ethnicity	Hispanic	29%	21.9%	37.2%
	Non-Hispanic	30%	28.7%	30.4%
Household Income	Less than $35,000	31%	29.9%	33.0%
	$35,000-$74,999	31%	29.8%	32.8%
	$75,000+	29%	27.4%	30.8%
Education	Less than High School, G.E.D.	30%	27.1%	33.5%
	High School, G.E.D.	30%	28.4%	31.4%
	Some Post-High School	31%	29.4%	32.4%
	College Graduate	27%	25.7%	28.4%
Employment Status	Employed for Wages	31%	29.8%	32.2%
	Self-employed	30%	27.6%	32.5%
	Unemployed	29%	24.7%	33.5%
	Homemaker	22%	19.3%	26.0%
	Student	14%	10.8%	17.3%
	Retired	28%	26.1%	29.3%
	Unable to Work	46%	41.9%	49.9%
Marital Status	Married/Unmarried Couple	31%	30.3%	32.5%
	Divorced/Separated	31%	29.0%	33.7%
	Widowed	27%	24.2%	29.0%
	Never Married	24%	22.7%	26.4%
Home Ownership Status	Own Home	30%	29.4%	31.4%
	Rent Home	29%	26.8%	30.5%
Children Status	Children in Household (Ages 18-44)	28%	26.0%	29.6%
	No Children in Household (Ages 18-44)	24%	21.8%	26.0%
Phone Status	Landline	30%	29.1%	31.5%
	Cell Phone	29%	27.8%	30.2%
Pregnancy Status	Pregnant (Ages 18-44)	-	-	-
	Not Pregnant (Ages 18-44)	26%	23.8%	27.7%
County	Minnehaha	28%	26.3%	30.6%
	Pennington	27%	24.4%	29.2%
	Lincoln	26%	23.4%	29.5%
	Brown	32%	28.7%	36.1%
	Brookings	25%	21.3%	29.3%
	Codington	30%	26.3%	33.8%
	Meade	28%	23.9%	31.6%
	Lawrence	25%	22.2%	27.8%

Note: *Results based on small sample sizes have been suppressed.
Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2012-2016

Demographics

Gender   Males exhibit a significantly higher prevalence of being obese than females.

Age   The prevalence of being obese increases as age increases with a peak in the 40s including a significant increase as the 30s are reached. After that, the prevalence of being obese decreases as age increases with significant decreases as the 70s and 80s are reached.

Race   American Indians demonstrate a significantly higher prevalence of being obese than whites.

Ethnicity   There seems to be no Hispanic difference with regard to the prevalence of being obese.

Household Income   There seems to be no household income difference with regard to the prevalence of being obese.

Education   There seems to be no education level difference with regard to the prevalence of being obese.

Employment   Those who are unable to work demonstrate a very high prevalence of being obese, while students show a very low prevalence.

Marital Status   Those who are married or divorced exhibit a very high prevalence of being obese, while those who are widowed or have never been married show a very low prevalence.

Home Ownership   Home ownership does not seem to affect the prevalence of being obese.

Children Status   Children in the household do not seem to affect the prevalence of the adults being obese.

Phone Status Phone status does not seem to affect the prevalence of being obese.

County   Brown county demonstrates a very high prevalence of being obese, while Lawrence county shows a very low prevalence.

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 11%
o   *There is no nationwide median for obese classes II-III*

Figure 5
Percent of Respondents Who Are Class II-III Obese Based on Body Mass Index, 2002-2010
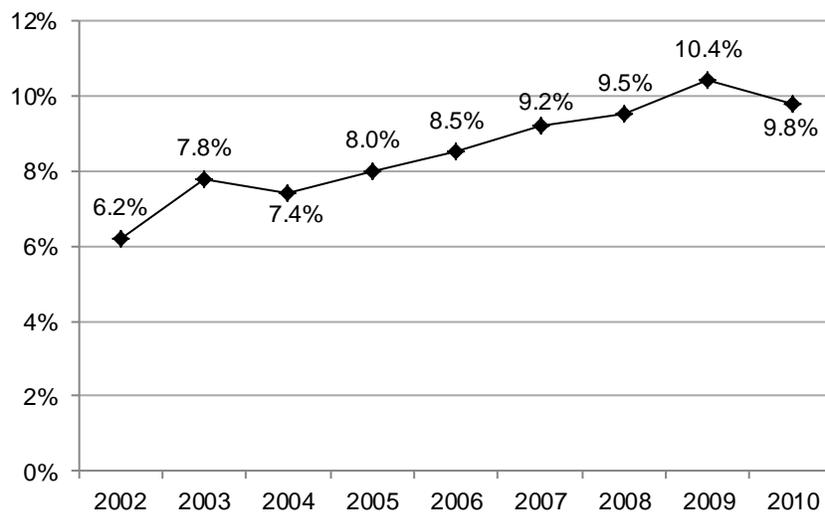
Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2002-2010

Figure 6
Percent of Respondents Who Are Class II-III Obese Based on Body Mass Index, 2011-2016
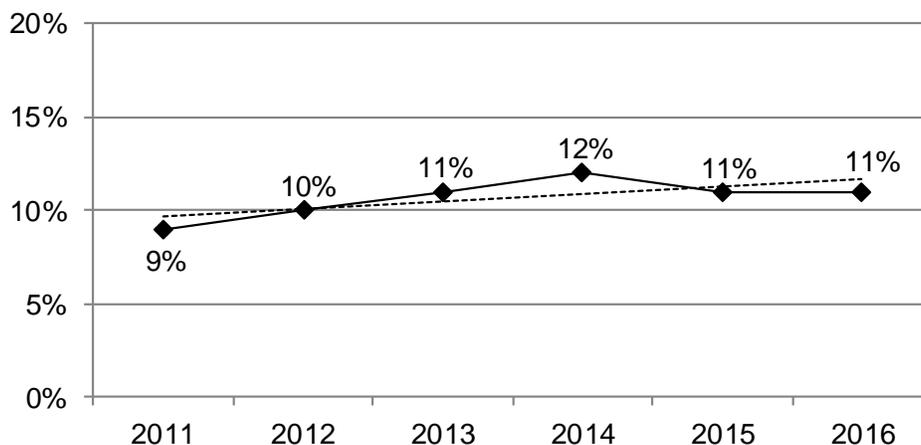
Note: Beginning in 2011, the CDC began using a different methodology to weight the data; therefore data prior to 2011 cannot be compared to data since 2011.
Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2016

Table 6
Respondents Who Are Class II-III Obese, 2012-2016

			95% Confidence Interval	
		2012-2016	**Low**	**High**
Gender	Male	11%	9.8%	11.5%
	Female	12%	10.9%	12.5%
Age	18-29	8%	6.3%	8.9%
	30-39	12%	10.6%	13.7%
	40-49	14%	12.5%	16.0%
	50-59	14%	12.1%	15.0%
	60-69	13%	12.0%	14.8%
	70-79	9%	7.3%	10.0%
	80+	5%	3.7%	6.7%
Race	White	11%	10.3%	11.5%
	American Indian	15%	12.9%	17.8%
Ethnicity	Hispanic	13%	8.1%	19.0%
	Non-Hispanic	11%	10.5%	11.7%
Household Income	Less than $35,000	14%	12.5%	14.8%
	$35,000-$74,999	11%	10.4%	12.5%
	$75,000+	10%	8.9%	11.3%
Education	Less than High School, G.E.D.	12%	9.5%	13.9%
	High School, G.E.D.	11%	10.2%	12.2%
	Some Post-High School	12%	10.7%	12.8%
	College Graduate	10%	9.3%	11.2%
Employment Status	Employed for Wages	12%	11.3%	13.0%
	Self-employed	9%	7.5%	10.7%
	Unemployed	14%	11.0%	17.1%
	Homemaker	8%	6.3%	10.8%
	Student	4%	2.4%	6.3%
	Retired	9%	8.1%	10.2%
	Unable to Work	23%	20.0%	26.7%
Marital Status	Married/Unmarried Couple	11%	10.1%	11.6%
	Divorced/Separated	13%	11.8%	15.3%
	Widowed	11%	9.2%	12.7%
	Never Married	11%	9.7%	12.3%
Home Ownership Status	Own Home	11%	9.9%	11.2%
	Rent Home	13%	11.9%	14.6%
Children Status	Children in Household (Ages 18-44)	11%	9.8%	12.4%
	No Children in Household (Ages 18-44)	10%	8.3%	11.0%
Phone Status	Landline	12%	11.1%	12.8%
	Cell Phone	11%	9.8%	11.3%
Pregnancy Status	Pregnant (Ages 18-44)	-	-	-
	Not Pregnant (Ages 18-44)	12%	10.4%	13.2%
County	Minnehaha	11%	9.4%	12.3%
	Pennington	9%	8.0%	11.2%
	Lincoln	10%	8.0%	12.4%
	Brown	14%	11.6%	17.1%
	Brookings	9%	6.6%	12.1%
	Codington	12%	9.3%	14.6%
	Meade	11%	8.3%	14.0%
	Lawrence	7%	5.8%	8.6%

Note: *Results based on small sample sizes have been suppressed.
Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2012-2016

Demographics

Gender   There seems to be no gender difference with regard to being very obese.

Age   The prevalence of being very obese increases as age increases with a peak in the 40s and 50s including a significant increase as the 30s are reached. After that, the prevalence of being very obese decreases as age increases with significant decreases as the 70s and 80s are reached.

Race   American Indians demonstrate a significantly higher prevalence of being very obese than whites.

Ethnicity   There seems to be no Hispanic difference with regard to the prevalence of being very obese.

Household Income   The prevalence of being very obese decreases as household income increases.

Education   There seems to be no education level difference with regard to the prevalence of being very obese.

Employment   Those who are unable to work demonstrate a very high prevalence of being very obese, while those who are a homemaker or a student show a very low prevalence.

Marital Status   Those who are divorced exhibit a very high prevalence of being very obese, while those who are married show a very low prevalence.

Home Ownership   Those who rent their home show a significantly higher prevalence of being very obese than those who own their home.

Children Status   Children in the household do not seem to affect the prevalence of the adults being very obese.

Phone Status   Phone status does not seem to affect the prevalence of being very obese.

County   Minnehaha, Brown, and Codington counties demonstrate a very high prevalence of being very obese, while Pennington and Lawrence counties show a very low prevalence.