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# Cardiovascular Disease

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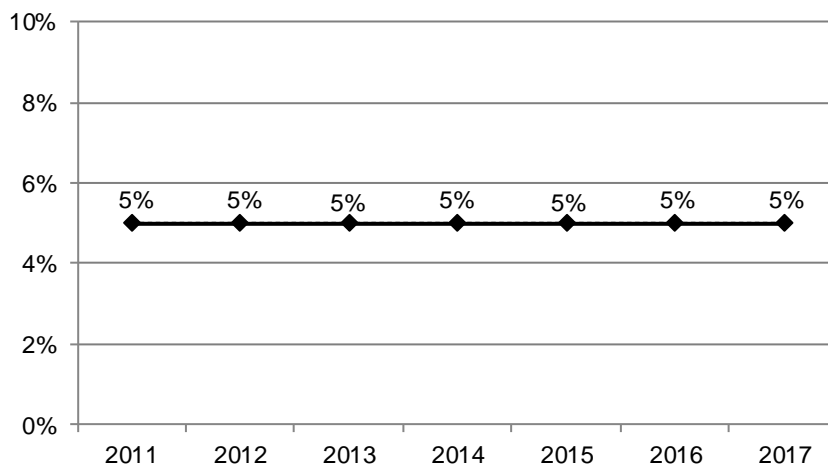
## PREVIOUSLY HAD A HEART ATTACK

**Definition:** South Dakotans who answered “yes” to the question: “Has a doctor, nurse, or other health professional ever told you that you had a heart attack, also called a myocardial infarction?”

### Prevalence of Previous Heart Attack

- South Dakota 5%
- Nationwide median 4%

**Figure 32**  
**Percentage of South Dakotans Who Previously Had a Heart Attack, 2011-2017**



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2017

**Table 29**  
**South Dakotans Who Previously Had a Heart Attack, 2013-2017**

			95% Confidence Interval	
		2013-2017	Low	High
<b>Gender</b>	Male	7%	6.0%	7.2%
	Female	3%	2.8%	3.6%
<b>Age</b>	18-29	1%	0.4%	1.5%
	30-39	1%	0.5%	1.6%
	40-49	2%	1.5%	2.9%
	50-59	5%	3.7%	5.4%
	60-69	9%	7.5%	9.7%
	70-79	13%	11.7%	15.3%
	80+	17%	14.3%	19.0%
<b>Race</b>	White	5%	4.5%	5.3%
	American Indian	6%	4.8%	7.4%
<b>Ethnicity</b>	Hispanic	5%	2.5%	10.2%
	Non-Hispanic	5%	4.5%	5.2%
<b>Household Income</b>	Less than \$35,000	7%	6.3%	7.9%
	\$35,000-\$74,999	5%	4.0%	5.2%
	\$75,000+	2%	2.0%	3.0%
<b>Education</b>	Less than High School, G.E.D.	8%	6.6%	9.9%
	High School, G.E.D.	6%	5.5%	7.1%
	Some Post-High School	4%	3.4%	4.4%
	College Graduate	3%	2.6%	3.6%
<b>Employment Status</b>	Employed for Wages	2%	2.0%	2.7%
	Self-employed	3%	2.8%	4.3%
	Unemployed	4%	2.8%	6.9%
	Homemaker	3%	2.0%	5.8%
	Student	0.3%	0.1%	1.2%
	Retired	13%	11.6%	14.1%
	Unable to Work	14%	11.3%	16.4%
<b>Marital Status</b>	Married/Unmarried Couple	5%	4.4%	5.4%
	Divorced/Separated	6%	5.3%	7.5%
	Widowed	12%	10.5%	14.1%
	Never Married	2%	1.5%	2.4%
<b>Home Ownership Status</b>	Own Home	5%	4.7%	5.6%
	Rent Home	4%	3.8%	5.2%
<b>Children Status</b>	Children in Household (Ages 18-44)	1%	0.7%	1.8%
	No Children in Household (Ages 18-44)	1%	0.5%	1.2%
<b>Phone Status</b>	Landline	7%	6.1%	7.4%
	Cell Phone	4%	3.4%	4.2%
<b>Pregnancy Status</b>	Pregnant (Ages 18-44)	0%	0.0%	1.3%
	Not Pregnant (Ages 18-44)	1%	0.4%	1.3%
<b>County</b>	Minnehaha	4%	3.2%	4.9%
	Pennington	5%	3.9%	6.0%
	Lincoln	3%	2.2%	4.5%
	Brown	5%	3.5%	6.0%
	Brookings	4%	2.7%	5.9%
	Codington	7%	5.8%	9.2%
	Meade	4%	3.0%	5.5%
	Lawrence	5%	3.7%	6.0%

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

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2013-2017

## **Demographics**

<b>Gender</b>	Males exhibit a significantly higher prevalence of a previous heart attack than females.
<b>Age</b>	The prevalence of a previous heart attack increases as age increases with significant increases as the 50s, 60s, and 70s are reached.
<b>Race</b>	There are no significant racial differences regarding a previous heart attack.
<b>Ethnicity</b>	There is no significant Hispanic difference in the prevalence of a previous heart attack.
<b>Household Income</b>	The prevalence of a previous heart attack decreases as household income increases. This includes significant decreases as the \$35,000-\$74,999 and \$75,000+ household income levels are reached.
<b>Education</b>	The prevalence of a previous heart attack decreases as education increases. This includes a significant decrease as some post-high school level is reached.
<b>Employment</b>	Those who are retired or unable to work demonstrate a very high prevalence of a previous heart attack, while those who are students show a very low prevalence.
<b>Marital Status</b>	Those who are widowed exhibit a very high prevalence of a previous heart attack while those who have never been married show a very low prevalence.
<b>Home Ownership</b>	The prevalence of a previous heart attack does not seem to change based on home ownership status.
<b>Children Status</b>	The prevalence of a previous heart attack among adults does not seem to change based on the presence of children in the household.
<b>Phone Status</b>	Those with a landline phone show a significantly higher prevalence of a previous heart attack than those with a cell phone.
<b>Pregnancy Status</b>	The prevalence of a previous heart attack does not seem to change based on pregnancy status.
<b>County</b>	Codington county demonstrates a very high prevalence of a previous heart attack, while Minnehaha, Lincoln, and Meade counties show a very low prevalence.

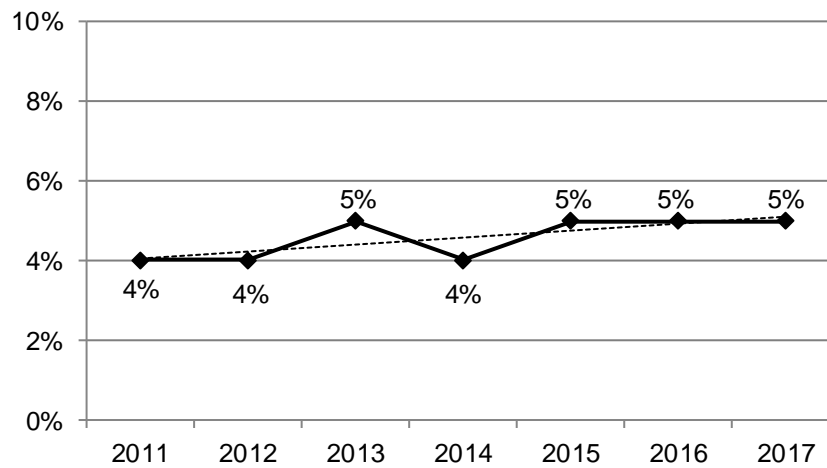
## **ANGINA OR CORONARY HEART DISEASE**

**Definition:** South Dakotans who answered “yes” to the question: “Has a doctor, nurse, or other health professional ever told you that you have angina or coronary heart disease?”

### **Prevalence of Angina or Coronary Heart Disease**

- South Dakota 5%
- Nationwide median 4%

**Figure 33**  
**Percentage of South Dakotans Who Have Angina or Coronary Heart Disease, 2011-2017**



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2017

**Table 30**  
**South Dakotans Who Have Angina or Coronary Heart Disease, 2013-2017**

			95% Confidence Interval	
		2013-2017	Low	High
<b>Gender</b>	Male	6%	5.2%	6.3%
	Female	4%	3.1%	4.0%
<b>Age</b>	18-29	1%	0.5%	1.6%
	30-39	0.4%	0.2%	0.8%
	40-49	1%	0.7%	1.7%
	50-59	4%	3.6%	5.2%
	60-69	8%	7.2%	9.3%
	70-79	14%	11.9%	15.6%
	80+	17%	14.9%	20.3%
<b>Race</b>	White	5%	4.4%	5.1%
	American Indian	4%	3.3%	6.1%
<b>Ethnicity</b>	Hispanic	5%	2.5%	9.7%
	Non-Hispanic	5%	4.3%	5.0%
<b>Household Income</b>	Less than \$35,000	6%	5.7%	7.3%
	\$35,000-\$74,999	4%	3.8%	4.9%
	\$75,000+	3%	2.2%	3.4%
<b>Education</b>	Less than High School, G.E.D.	6%	5.1%	8.2%
	High School, G.E.D.	6%	4.9%	6.4%
	Some Post-High School	4%	3.7%	4.9%
	College Graduate	3%	2.7%	3.5%
<b>Employment Status</b>	Employed for Wages	2%	1.7%	2.4%
	Self-employed	3%	2.0%	3.6%
	Unemployed	4%	2.0%	6.5%
	Homemaker	2%	1.4%	3.1%
	Student	0.2%	0.1%	0.9%
	Retired	14%	13.1%	15.8%
	Unable to Work	10%	8.2%	12.8%
<b>Marital Status</b>	Married/Unmarried Couple	5%	4.2%	5.1%
	Divorced/Separated	6%	4.7%	6.8%
	Widowed	12%	10.6%	14.5%
	Never Married	2%	1.2%	2.2%
<b>Home Ownership Status</b>	Own Home	5%	4.6%	5.5%
	Rent Home	4%	3.4%	4.8%
<b>Children Status</b>	Children in Household (Ages 18-44)	1%	0.3%	1.1%
	No Children in Household (Ages 18-44)	1%	0.4%	1.4%
<b>Phone Status</b>	Landline	7%	6.0%	7.3%
	Cell Phone	3%	3.1%	3.9%
<b>Pregnancy Status</b>	Pregnant (Ages 18-44)	0%	0.0%	1.3%
	Not Pregnant (Ages 18-44)	1%	0.4%	1.3%
<b>County</b>	Minnehaha	4%	2.9%	4.3%
	Pennington	5%	4.1%	6.1%
	Lincoln	3%	2.1%	4.2%
	Brown	6%	4.3%	7.1%
	Brookings	3%	2.2%	4.2%
	Codington	6%	4.4%	7.1%
	Meade	4%	2.9%	5.1%
	Lawrence	4%	3.4%	5.5%

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

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2013-2017

## **Demographics**

<b>Gender</b>	Males exhibit a significantly higher prevalence of heart disease than females.
<b>Age</b>	The prevalence of heart disease generally increases as age increases with significant increases as the 50s, 60s, and 70s are reached.
<b>Race</b>	There are no significant racial differences regarding heart disease.
<b>Ethnicity</b>	There is no significant Hispanic difference in the prevalence of heart disease.
<b>Household Income</b>	The prevalence of heart disease decreases as household income increases. This includes significant decreases as the \$35,000-\$74,999 and \$75,000+ household income levels are reached.
<b>Education</b>	The prevalence of heart disease decreases as education increases. This includes a significant decrease as the college graduate level is reached.
<b>Employment</b>	Those who are retired demonstrate a very high prevalence of heart disease, while those who are students show a very low prevalence.
<b>Marital Status</b>	Those who are widowed exhibit a very high prevalence of heart disease, while those who have never been married show a very low prevalence.
<b>Home Ownership</b>	The prevalence of heart disease does not seem to change based on home ownership status.
<b>Children Status</b>	The prevalence of heart disease among adults does not seem to change based on the presence of children in the household.
<b>Phone Status</b>	Those with a landline phone show a significantly higher prevalence of heart disease than those with a cell phone.
<b>Pregnancy Status</b>	The prevalence of heart disease does not seem to change based on pregnancy status.
<b>County</b>	Brown and Codington counties demonstrate a very high prevalence of heart disease, while Minnehaha, Lincoln, and Brookings counties show a very low prevalence.

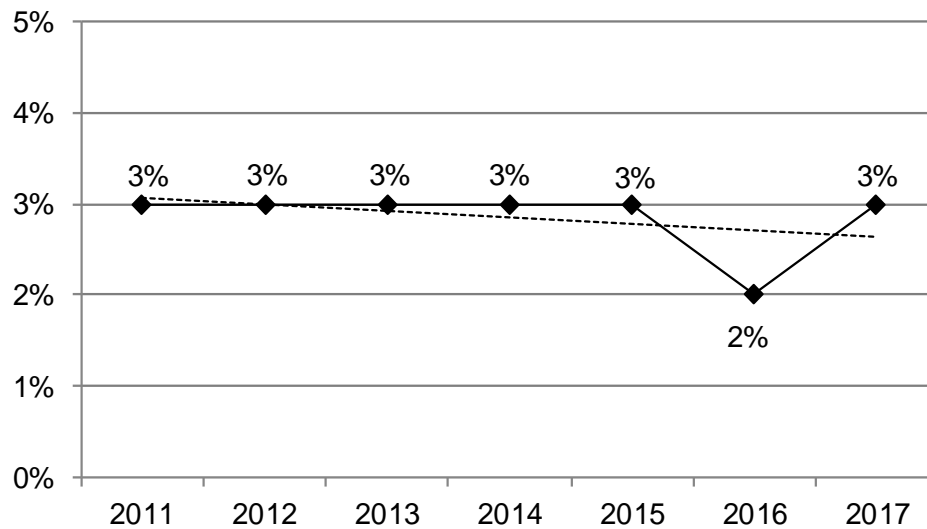
## PREVIOUSLY HAD A STROKE

**Definition:** South Dakotans who answered “yes” to the question: “Has a doctor, nurse, or other health professional ever told you that you had a stroke?”

### Prevalence of Previous Stroke

- South Dakota 3%
- Nationwide median 3%

**Figure 34**  
**Percentage of South Dakotans Who Have Previously Had a Stroke, 2011-2017**



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2017

**Table 31**  
**South Dakotans Who Previously Had a Stroke, 2013-2017**

			95% Confidence Interval	
		2013-2017	Low	High
<b>Gender</b>	Male	3%	2.4%	3.1%
	Female	3%	2.2%	2.9%
<b>Age</b>	18-29	1%	0.3%	1.1%
	30-39	1%	0.4%	1.4%
	40-49	1%	1.0%	2.1%
	50-59	2%	1.6%	2.5%
	60-69	4%	3.2%	4.6%
	70-79	7%	6.1%	8.8%
<b>Race</b>	80+	11%	8.9%	12.8%
	White	3%	2.4%	2.9%
	American Indian	4%	2.8%	4.5%
<b>Ethnicity</b>	Hispanic	3%	1.3%	8.9%
	Non-Hispanic	3%	2.4%	2.9%
<b>Household Income</b>	Less than \$35,000	4%	3.7%	4.9%
	\$35,000-\$74,999	2%	1.5%	2.2%
	\$75,000+	1%	0.9%	1.4%
<b>Education</b>	Less than High School, G.E.D.	6%	4.4%	7.3%
	High School, G.E.D.	3%	2.4%	3.4%
	Some Post-High School	2%	1.8%	2.6%
	College Graduate	2%	1.4%	2.1%
<b>Employment Status</b>	Employed for Wages	1%	0.8%	1.3%
	Self-employed	1%	0.9%	1.7%
	Unemployed	2%	1.0%	2.5%
	Homemaker	3%	1.9%	4.9%
	Student	0.3%	0.1%	1.5%
	Retired	7%	6.3%	8.1%
	Unable to Work	11%	8.6%	12.9%
<b>Marital Status</b>	Married/Unmarried Couple	2%	2.0%	2.7%
	Divorced/Separated	4%	3.0%	4.5%
	Widowed	8%	6.8%	9.7%
	Never Married	1%	0.8%	1.5%
<b>Home Ownership Status</b>	Own Home	3%	2.3%	3.0%
	Rent Home	3%	2.5%	3.4%
<b>Children Status</b>	Children in Household (Ages 18-44)	1%	0.5%	1.4%
	No Children in Household (Ages 18-44)	1%	0.4%	1.1%
<b>Phone Status</b>	Landline	4%	3.5%	4.4%
	Cell Phone	2%	1.6%	2.2%
<b>Pregnancy Status</b>	Pregnant (Ages 18-44)	0%	0.0%	1.3%
	Not Pregnant (Ages 18-44)	1%	0.4%	1.2%
<b>County</b>	Minnehaha	2%	1.5%	2.7%
	Pennington	3%	2.1%	3.4%
	Lincoln	2%	1.4%	3.1%
	Brown	4%	2.6%	5.2%
	Brookings	2%	1.4%	3.1%
	Codington	3%	1.7%	3.7%
	Meade	3%	1.9%	4.1%
	Lawrence	2%	1.8%	3.3%

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

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2013-2017



## **Demographics**

<b>Gender</b>	There is no significant gender difference regarding the prevalence of a previous stroke.
<b>Age</b>	The prevalence of a previous stroke increases as age increases with significant increases as the 60s, 70s, and 80s are reached.
<b>Race</b>	There are no significant racial differences regarding the prevalence of a previous stroke.
<b>Ethnicity</b>	There is no significant Hispanic difference in the prevalence of a previous stroke.
<b>Household Income</b>	The prevalence of a previous stroke decreases as household income increases. This includes significant decreases as the \$35,000-\$74,999 and \$75,000+ household income levels are reached.
<b>Education</b>	The prevalence of a previous stroke decreases as education increases. This includes a significant decrease as the high school graduate level is reached.
<b>Employment</b>	Those who are unable to work demonstrate a very high prevalence of a previous stroke, while those who are employed for wages, self-employed, unemployed, or a student show a very low prevalence.
<b>Marital Status</b>	Those who are widowed exhibit a very high prevalence of a previous stroke while those who have never been married show a very low prevalence.
<b>Home Ownership</b>	The prevalence of a previous stroke does not seem to change based on home ownership status.
<b>Children Status</b>	The prevalence of a previous stroke among adults does not seem to change based on the presence of children in the household.
<b>Phone Status</b>	Those with a landline phone show a significantly higher prevalence of a previous stroke than those with a cell phone.
<b>Pregnancy Status</b>	The prevalence of a previous stroke does not seem to change based on pregnancy status.
<b>County</b>	There are no significant differences among the eight counties regarding the prevalence of a previous stroke.