## Cardiovascular Disease

## 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, 2011-2019


Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2019

| Table 30 <br> South Dakotans Who Previously Had a Heart Attack, 2015-2019 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 2015-2019 | 95\% Confidence Interval |  |
|  |  |  | Low | High |
| Gender | Male | 6\% | 5.7\% | 7.0\% |
|  | Female | 3\% | 2.9\% | 3.7\% |
| Age | 18-29 | 1\% | 0.5\% | 1.7\% |
|  | 30-39 | 1\% | 0.6\% | 1.5\% |
|  | 40-49 | 3\% | 2.0\% | 4.5\% |
|  | 50-59 | 4\% | 3.7\% | 5.4\% |
|  | 60-69 | 8\% | 6.8\% | 8.8\% |
|  | 70-79 | 13\% | 11.5\% | 15.1\% |
|  | 80+ | 15\% | 12.4\% | 16.9\% |
| Race/ Ethnicity | White, Non-Hispanic | 5\% | 4.4\% | 5.2\% |
|  | American Indian, Non-Hispanic | 7\% | 5.5\% | 9.7\% |
|  | American Indian/White, Non-Hispanic | 3\% | 1.5\% | 6.7\% |
|  | Hispanic | 5\% | 2.2\% | 10.2\% |
| Household Income | Less than \$35,000 | 7\% | 6.2\% | 7.9\% |
|  | \$35,000-\$74,999 | 4\% | 3.8\% | 5.0\% |
|  | \$75,000+ | 3\% | 2.3\% | 3.7\% |
| Education | Less than High School, G.E.D. | 7\% | 5.6\% | 9.1\% |
|  | High School, G.E.D. | 6\% | 5.4\% | 7.0\% |
|  | Some Post-High School | 4\% | 3.7\% | 4.8\% |
|  | College Graduate | 3\% | 2.7\% | 3.6\% |
| Employment Status | Employed for Wages | 2\% | 2.0\% | 2.9\% |
|  | Self-employed | 4\% | 2.7\% | 5.2\% |
|  | Unemployed | 3\% | 2.1\% | 5.5\% |
|  | Homemaker | 5\% | 2.8\% | 7.4\% |
|  | Student | 0.5\% | 0.2\% | 1.5\% |
|  | Retired | 12\% | 10.7\% | 13.1\% |
|  | Unable to Work | 12\% | 9.9\% | 14.5\% |
| Marital Status | Married/Unmarried Couple | 5\% | 4.4\% | 5.5\% |
|  | Divorced/Separated | 7\% | 5.5\% | 7.9\% |
|  | Widowed | 11\% | 9.2\% | 12.7\% |
|  | Never Married | 2\% | 1.3\% | 2.2\% |
| Home Ownership Status | Own Home | 5\% | 4.7\% | 5.6\% |
|  | Rent Home | 4\% | 3.6\% | 5.0\% |
| Children Status | Children in Household (Ages 18-44) | 1\% | 0.7\% | 1.7\% |
|  | No Children in Household (Ages 18-44) | 1\% | 0.6\% | 1.5\% |
| Phone Status | Landline | 7\% | 6.2\% | 7.6\% |
|  | Cell Phone | 4\% | 3.5\% | 4.4\% |
| Pregnancy Status | Pregnant (Ages 18-44) | 0\% | 0.0\% | 1.5\% |
|  | Not Pregnant (Ages 18-44) | 1\% | 0.5\% | 1.5\% |
| County | Minnehaha | 4\% | 3.0\% | 4.6\% |
|  | Pennington | 5\% | 3.9\% | 5.8\% |
|  | Lincoln | 4\% | 2.0\% | 7.2\% |
|  | Brown | 5\% | 3.9\% | 6.1\% |
|  | Brookings | 4\% | 2.7\% | 5.3\% |
|  | Codington | 6\% | 4.5\% | 7.1\% |
|  | Meade | 4\% | 3.0\% | 6.3\% |
|  | Lawrence | 4\% | 3.2\% | 6.0\% |

Note: $\quad$ *Results based on small sample sizes have been suppressed.
Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2015-2019

## Demographics

| Gender | Males exhibit a significantly higher prevalence of a previous heart attack than <br> females. |
| :--- | :--- |
| Age | The prevalence of a previous heart attack increases as age increases with <br> significant increases as the 40s, 60s, and 70s are reached. |
| Race/ | American Indians demonstrate a very high prevalence of a previous heart <br> attack, while whites show a very low prevalence. |
| Ethnicity | The prevalence of a previous heart attack decreases as household income <br> increases. This includes significant decreases as the $\$ 35,000-\$ 74,999$ and <br> \$75,000+ household income levels are reached. |
| Income | The prevalence of a previous heart attack decreases as education increases. |
| Education | This includes significant decreases as the some post-high school and college <br> graduate levels are reached. |
| Employment | Those who are retired or unable to work demonstrate a very high prevalence <br> of a previous heart attack, while those who are students show a very low <br> prevalence. |
| Marital | Those who are widowed exhibit a very high prevalence of a previous heart <br> attack while those who have never been married show a very low prevalence. |
| Status | The prevalence of a previous heart attack does not seem to change based on |
| Home |  |
| home ownership status. |  |

## 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 4\%
- Nationwide median 4\%

Figure 33
Percentage of South Dakotans Who Have Angina or Coronary Heart Disease, 2011-2019


Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2019

| Table 31 <br> South Dakotans Who Have Angina or Coronary Heart Disease, 2015-2019 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 2015-2019 | 95\% Confidence Interval |  |
|  |  |  | Low | High |
| Gender | Male | 6\% | 5.2\% | 6.4\% |
|  | Female | 3\% | 3.1\% | 3.9\% |
| Age | 18-29 | 1\% | 0.6\% | 1.7\% |
|  | 30-39 | 0.4\% | 0.2\% | 0.8\% |
|  | 40-49 | 2\% | 1.0\% | 3.1\% |
|  | 50-59 | 5\% | 3.7\% | 5.6\% |
|  | 60-69 | 8\% | 6.8\% | 8.9\% |
|  | 70-79 | 13\% | 11.3\% | 14.8\% |
|  | 80+ | 16\% | 13.3\% | 18.6\% |
| Race/ Ethnicity | White, Non-Hispanic | 5\% | 4.3\% | 5.0\% |
|  | American Indian, Non-Hispanic | 6\% | 4.0\% | 8.4\% |
|  | American Indian/White, Non-Hispanic | 4\% | 2.1\% | 8.7\% |
|  | Hispanic | 4\% | 2.3\% | 7.9\% |
| Household Income | Less than \$35,000 | 7\% | 5.8\% | 7.4\% |
|  | \$35,000-\$74,999 | 4\% | 3.6\% | 4.8\% |
|  | \$75,000+ | 3\% | 2.3\% | 3.7\% |
| Education | Less than High School, G.E.D. | 5\% | 4.1\% | 7.0\% |
|  | High School, G.E.D. | 6\% | 5.1\% | 6.8\% |
|  | Some Post-High School | 4\% | 3.5\% | 4.6\% |
|  | College Graduate | 4\% | 3.1\% | 4.2\% |
| Employment Status | Employed for Wages | 2\% | 1.8\% | 2.5\% |
|  | Self-employed | 3\% | 2.1\% | 4.5\% |
|  | Unemployed | 3\% | 1.3\% | 5.2\% |
|  | Homemaker | 3\% | 1.9\% | 4.9\% |
|  | Student | 0.2\% | 0.0\% | 0.9\% |
|  | Retired | 13\% | 11.9\% | 14.5\% |
|  | Unable to Work | 10\% | 8.0\% | 12.9\% |
| Marital Status | Married/Unmarried Couple | 5\% | 4.0\% | 5.0\% |
|  | Divorced/Separated | 6\% | 5.1\% | 7.6\% |
|  | Widowed | 12\% | 10.2\% | 14.3\% |
|  | Never Married | 2\% | 1.4\% | 2.4\% |
| Home Ownership Status | Own Home | 5\% | 4.7\% | 5.7\% |
|  | Rent Home | 4\% | 2.9\% | 4.3\% |
| Children Status | Children in Household (Ages 18-44) | 1\% | 0.4\% | 1.1\% |
|  | No Children in Household (Ages 18-44) | 1\% | 0.4\% | 1.3\% |
| Phone Status | Landline | 7\% | 6.2\% | 7.6\% |
|  | Cell Phone | 4\% | 3.3\% | 4.1\% |
| Pregnancy Status | Pregnant (Ages 18-44) | 0\% | 0.0\% | 1.5\% |
|  | Not Pregnant (Ages 18-44) | 1\% | 0.4\% | 1.2\% |
| County | Minnehaha | 4\% | 3.1\% | 4.6\% |
|  | Pennington | 5\% | 4.2\% | 6.0\% |
|  | Lincoln | 3\% | 1.9\% | 4.6\% |
|  | Brown | 5\% | 3.6\% | 5.7\% |
|  | Brookings | 2\% | 1.6\% | 2.8\% |
|  | Codington | 4\% | 3.3\% | 5.4\% |
|  | Meade | 4\% | 2.6\% | 5.5\% |
|  | Lawrence | 4\% | 3.3\% | 5.9\% |

Note: $\quad$ *Results based on small sample sizes have been suppressed.
Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2015-2019

Gender
Age The prevalence of heart disease generally increases as age increases with significant increases as the $40 \mathrm{~s}, 50 \mathrm{~s}, 60 \mathrm{~s}$, and 70 s are reached.

Race/ There are no significant racial/ethnicity differences regarding heart disease.

Household Income

Education The prevalence of heart disease does not seem to differ as education levels change.

Employment Those who are retired or unable to work demonstrate a very high prevalence of heart disease, while those who are students show a very low prevalence.
$\begin{array}{ll}\text { Marital } & \begin{array}{l}\text { Those who are widowed exhibit a very high prevalence of heart disease, while } \\ \text { those who have never been married show a very low prevalence. }\end{array} \\ \text { Status } & \text { Those who own their home demonstrate a significantly higher prevalence of }\end{array}$ Ownership

Children The prevalence of heart disease among adults does not seem to change Status

Phone Status Those who primarily use a landline phone show a significantly higher prevalence of heart disease than those who primarily use a cell phone.

Pregnancy The prevalence of heart disease does not seem to change based on Status

County Minnehaha, Pennington, Brown, Codington, and Lawrence counties demonstrate a very high prevalence of heart disease, while Brookings county shows 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, 2011-2019


Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2019

| Table 32 <br> South Dakotans Who Previously Had a Stroke, 2015-2019 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 2015-2019 | 95\% Confidence Interval |  |
|  |  |  | Low | High |
| Gender | Male | 3\% | 2.3\% | 3.1\% |
|  | Female | 3\% | 2.2\% | 2.9\% |
| Age | 18-29 | 0.5\% | 0.2\% | 1.0\% |
|  | 30-39 | 1\% | 0.4\% | 1.0\% |
|  | 40-49 | 1\% | 0.7\% | 2.3\% |
|  | 50-59 | 2\% | 1.9\% | 3.0\% |
|  | 60-69 | 4\% | 3.3\% | 4.7\% |
|  | 70-79 | 6\% | 5.1\% | 7.7\% |
|  | 80+ | 11\% | 8.7\% | 12.9\% |
| Race/ Ethnicity | White, Non-Hispanic | 3\% | 2.3\% | 2.8\% |
|  | American Indian, Non-Hispanic | 4\% | 3.0\% | 5.0\% |
|  | American Indian/White, Non-Hispanic | 1\% | 0.5\% | 1.6\% |
|  | Hispanic | 4\% | 1.6\% | 9.4\% |
| Household Income | Less than \$35,000 | 4\% | 3.7\% | 5.0\% |
|  | \$35,000-\$74,999 | 2\% | 1.2\% | 1.9\% |
|  | \$75,000+ | 1\% | 0.9\% | 1.6\% |
| Education | Less than High School, G.E.D. | 5\% | 3.7\% | 7.1\% |
|  | High School, G.E.D. | 3\% | 2.3\% | 3.2\% |
|  | Some Post-High School | 2\% | 2.0\% | 2.8\% |
|  | College Graduate | 2\% | 1.5\% | 2.1\% |
| Employment Status | Employed for Wages | 1\% | 0.7\% | 1.3\% |
|  | Self-employed | 1\% | 0.7\% | 1.4\% |
|  | Unemployed | 2\% | 1.0\% | 2.5\% |
|  | Homemaker | 3\% | 2.1\% | 5.6\% |
|  | Student | 0.4\% | 0.1\% | 1.3\% |
|  | Retired | 7\% | 5.8\% | 7.6\% |
|  | Unable to Work | 11\% | 8.7\% | 13.2\% |
| Marital Status | Married/Unmarried Couple | 2\% | 2.0\% | 2.7\% |
|  | Divorced/Separated | 4\% | 3.0\% | 4.7\% |
|  | Widowed | 8\% | 6.8\% | 9.8\% |
|  | Never Married | 1\% | 0.8\% | 1.3\% |
| Home Ownership Status | Own Home | 2\% | 2.2\% | 2.8\% |
|  | Rent Home | 3\% | 2.5\% | 3.6\% |
| Children Status | Children in Household (Ages 18-44) | 1\% | 0.4\% | 1.1\% |
|  | No Children in Household (Ages 18-44) | 0.5\% | 0.3\% | 0.8\% |
| Phone Status | Landline | 4\% | 3.6\% | 4.7\% |
|  | Cell Phone | 2\% | 1.7\% | 2.3\% |
| Pregnancy Status | Pregnant (Ages 18-44) | 0.1\% | 0.0\% | 0.4\% |
|  | Not Pregnant (Ages 18-44) | 1\% | 0.3\% | 0.9\% |
| County | Minnehaha | 2\% | 1.2\% | 2.2\% |
|  | Pennington | 3\% | 2.1\% | 3.3\% |
|  | Lincoln | 3\% | 1.5\% | 6.5\% |
|  | Brown | 4\% | 2.7\% | 4.8\% |
|  | Brookings | 2\% | 1.6\% | 3.3\% |
|  | Codington | 3\% | 2.3\% | 4.2\% |
|  | Meade | 2\% | 1.8\% | 3.4\% |
|  | Lawrence | 2\% | 1.6\% | 3.5\% |

Note: $\quad$ *Results based on small sample sizes have been suppressed.
Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2015-2019

## Demographics

| Gender | The prevalence of a previous stroke does not seem to differ by gender. |
| :--- | :--- |
| Age | The prevalence of a previous stroke increases as age increases with <br> significant increases as the 60s, 70 s, and 80 s are reached. |
| Race/ | American Indians demonstrate a very high prevalence of a previous stroke, <br> while American Indian/whites show a very low prevalence. |
| Ethnicity | The prevalence of a previous stroke decreases as household income <br> Household <br> Income |
| increases. This includes a significant decrease as the \$35,000-\$74,999 |  |
| household income level is reached. |  |

