## Hypertension and Cholesterol

## HYPERTENSION

Definition: South Dakotans who report they have been told by a health professional their blood pressure is high.

## Prevalence of Hypertension

- South Dakota 33\%
- Nationwide median $32 \%$


## Trend Analysis

Overall, the percent of South Dakotans who have been told they have high blood pressure has remained steady since 2011, however this went from 31 percent in 2019 to 33 percent in 2021. South Dakota is higher than the nationwide median of 32 percent.

Figure 19
Percentage of South Dakotans Who Were Told They Have Hypertension, 2011-2021


[^0]| Table 20 <br> South Dakotans Who Were Told They Have Hypertension, 2017-2021 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 2017-2021 | 95\% Confidence Interval |  |
|  |  |  | Low | High |
| Gender | Male | 36\% | 34.0\% | 37.9\% |
|  | Female | 28\% | 26.0\% | 29.2\% |
| Age | 18-29 | 9\% | 7.2\% | 11.5\% |
|  | 30-39 | 15\% | 12.8\% | 18.3\% |
|  | 40-49 | 24\% | 20.8\% | 28.0\% |
|  | 50-59 | 37\% | 33.9\% | 40.2\% |
|  | 60-69 | 51\% | 48.1\% | 53.9\% |
|  | 70-79 | 61\% | 57.3\% | 63.9\% |
|  | 80+ | 60\% | 55.3\% | 65.4\% |
| Race/Ethnicity | White, Non-Hispanic | 33\% | 31.3\% | 34.1\% |
|  | American Indian, Non-Hispanic | 33\% | 28.7\% | 37.9\% |
|  | American Indian/White, Non-Hispanic | 25\% | 15.6\% | 37.9\% |
|  | Hispanic | 22\% | 14.8\% | 30.7\% |
| Household Income | Less than \$35,000 | 36\% | 32.8\% | 38.3\% |
|  | \$35,000-\$74,999 | 34\% | 31.3\% | 36.2\% |
|  | \$75,000+ | 27\% | 24.8\% | 29.4\% |
| Education | Less than High School, G.E.D. | 38\% | 32.4\% | 44.5\% |
|  | High School, G.E.D. | 35\% | 32.4\% | 37.3\% |
|  | Some Post-High School | 31\% | 28.6\% | 32.9\% |
|  | College Graduate | 28\% | 25.7\% | 29.7\% |
| Employment Status | Employed for Wages | 24\% | 22.7\% | 26.2\% |
|  | Self-employed | 29\% | 25.7\% | 33.4\% |
|  | Unemployed | 31\% | 23.9\% | 38.0\% |
|  | Homemaker | 21\% | 15.8\% | 28.2\% |
|  | Student | 5\% | 2.5\% | 10.6\% |
|  | Retired | 58\% | 55.7\% | 60.8\% |
|  | Unable to Work | 48\% | 41.7\% | 54.1\% |
| Marital Status | Married/Unmarried Couple | 33\% | 31.6\% | 35.0\% |
|  | Divorced/Separated | 38\% | 34.3\% | 42.0\% |
|  | Widowed | 57\% | 52.2\% | 60.9\% |
|  | Never Married | 18\% | 15.5\% | 20.1\% |
| Home Ownership Status | Own Home | 36\% | 34.4\% | 37.6\% |
|  | Rent Home | 23\% | 20.5\% | 25.3\% |
| Children Status | Children in Household (Ages 18-44) | 14\% | 12.2\% | 17.0\% |
|  | No Children in Household (Ages 18-44) | 13\% | 10.8\% | 16.1\% |
| Phone Status | Landline | 45\% | 43.2\% | 47.8\% |
|  | Cell Phone | 27\% | 26.0\% | 29.0\% |
| Pregnancy Status | Pregnant (Ages 18-44) | 6\% | 2.2\% | 14.2\% |
|  | Not Pregnant (Ages 18-44) | 7\% | 5.8\% | 9.1\% |
| County | Minnehaha | 29\% | 26.0\% | 31.8\% |
|  | Pennington | 34\% | 30.7\% | 36.7\% |
|  | Lincoln | 29\% | 23.6\% | 34.5\% |
|  | Brown | 32\% | 28.3\% | 35.4\% |
|  | Brookings | 23\% | 19.7\% | 26.4\% |
|  | Codington | 31\% | 27.3\% | 34.2\% |
|  | Meade | 32\% | 27.1\% | 37.1\% |

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2017-2021

## Demographics

| Gender | Males exhibit a significantly higher prevalence of high blood pressure than females. |
| :---: | :---: |
| Age | The prevalence of high blood pressure generally increases as age increases. This includes significant increases as the $30 \mathrm{~s}, 40 \mathrm{~s}, 50 \mathrm{~s}, 60 \mathrm{~s}$, and 70 s are reached. |
| Race/ Ethnicity | Whites demonstrate a very high prevalence of high blood pressure, while Hispanics show a very low prevalence. |
| Household Income | The prevalence of high blood pressure decreases as household income increases. This includes a significant decrease as the $\$ 75,000+$ income group is reached. |
| Education | The prevalence of high blood pressure decreases as education levels increase. |
| Employment | Those who are retired demonstrate a very high prevalence of high blood pressure, while those who are a student show a very low prevalence. |
| Marital Status | Those who are widowed exhibit a very high prevalence of high blood pressure, while those who have never been married show a very low prevalence. |
| Home Ownership | Those who own their home demonstrate a significantly higher prevalence of high blood pressure than those who rent their home. |
| Children Status | The prevalence of high blood pressure does not seem to differ based on the presence of children in the household. |
| Phone Status | Those who primarily use a landline phone demonstrate a significantly higher prevalence of high blood pressure than those who primarily use a cell phone. |
| Pregnancy Status | The prevalence of high blood pressure does not seem to differ based on pregnancy status. |
| County | Pennington, Brown, Codington, and Meade counties all exhibit a very high prevalence of high blood pressure, while Brookings county shows a very low prevalence. |

The following table shows the percent of South Dakotans who were taking medicine for high blood pressure. In 2021, 78\% percent were taking medicine for high blood pressure.

Table 21
Percentage of South Dakotans Who Were Taking Medicine for High Blood Pressure, 2011-2021

| Year | \% |
| :---: | :---: |
| 2021 | $78 \%$ |
| 2019 | $77 \%$ |
| 2017 | $79 \%$ |
| 2015 | $79 \%$ |
| 2013 | $81 \%$ |
| 2011 | $78 \%$ |

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2021

In 2021, 53 percent of South Dakotans with high blood pressure were told by a doctor, nurse, or another health professional to check their own blood pressure outside of the doctor's office.

Figure 20
Percentage of Those With High Blood Pressure Who Have Been Told by Health Professional to Check Their Blood Pressure Outside of the Doctor's Office, 2019-2021


[^1]Of those with high blood pressure, 61 percent regularly check their blood pressure outside of the doctor's office because of the doctor's recommendation.

Figure 21
Percentage of Those With High Blood Pressure Who Regularly Check Their Blood Pressure Outside of the Doctor's Office by Doctor's Recommendation, 2019-2021


Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2019-2021

Of those who regularly check their high blood pressure outside of the doctor's office, 89 percent check their blood pressure at home compared to 11 percent of respondents who use another place such as a machine at the pharmacy or a grocery store.

Figure 22
Percentage of Those With High Blood Pressure Who Regularly Check Their Blood Pressure Outside of the Doctor's Office by Location, 2019-2021


[^2]
## HIGH CHOLESTEROL

Definition: South Dakotans who report they have had their cholesterol checked and were told it was high by a health professional.

## Prevalence of High Cholesterol

- South Dakota 37\%
- Nationwide median $36 \%$


## Trend Analysis

Overall, the percent of South Dakotans who have been told they have high cholesterol had been decreasing since 2011, however, 2021 saw an increase to 37 percent from 28 percent in 2019. South Dakota is slightly higher than the nationwide median.

Figure 23
Percentage of South Dakotans Who Were Told They Have High Cholesterol, 2011-2021


Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2021

| Table 22South Dakotans Who Were Told They Have High Cholesterol, 2017-2021 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 2017-2021 | 95\% Confidence Interval |  |
|  |  |  | Low | High |
| Gender | Male | 33\% | 31.3\% | 35.6\% |
|  | Female | 29\% | 27.5\% | 31.1\% |
| Age | 18-29 | 5\% | 3.1\% | 7.0\% |
|  | 30-39 | 13\% | 10.6\% | 16.6\% |
|  | 40-49 | 26\% | 22.1\% | 30.0\% |
|  | 50-59 | 38\% | 35.0\% | 41.6\% |
|  | 60-69 | 46\% | 43.5\% | 49.4\% |
|  | 70-79 | 51\% | 47.8\% | 54.8\% |
|  | 80+ | 44\% | 38.4\% | 49.2\% |
| Race/Ethnicity | White, Non-Hispanic | 33\% | 31.1\% | 34.1\% |
|  | American Indian, Non-Hispanic | 27\% | 22.4\% | 32.5\% |
|  | American Indian/White, Non-Hispanic | 24\% | 14.5\% | 37.8\% |
|  | Hispanic | 23\% | 15.0\% | 32.5\% |
| Household Income | Less than \$35,000 | 32\% | 29.3\% | 35.3\% |
|  | \$35,000-\$74,999 | 35\% | 31.9\% | 37.3\% |
|  | \$75,000+ | 28\% | 25.8\% | 30.6\% |
| Education | Less than High School, G.E.D. | 31\% | 25.0\% | 37.9\% |
|  | High School, G.E.D. | 34\% | 30.9\% | 36.3\% |
|  | Some Post-High School | 31\% | 28.4\% | 33.1\% |
|  | College Graduate | 30\% | 27.6\% | 31.9\% |
| Employment Status | Employed for Wages | 25\% | 22.8\% | 26.6\% |
|  | Self-employed | 30\% | 26.3\% | 34.8\% |
|  | Unemployed | 25\% | 18.2\% | 32.6\% |
|  | Homemaker | 25\% | 17.9\% | 32.8\% |
|  | Student | 6\% | 2.6\% | 12.5\% |
|  | Retired | 50\% | 47.0\% | 52.3\% |
|  | Unable to Work | 41\% | 34.4\% | 47.1\% |
| Marital Status | Married/Unmarried Couple | 34\% | 31.9\% | 35.6\% |
|  | Divorced/Separated | 35\% | 30.9\% | 38.9\% |
|  | Widowed | 44\% | 39.5\% | 48.6\% |
|  | Never Married | 15\% | 12.2\% | 17.2\% |
| Home Ownership Status | Own Home | 34\% | 32.9\% | 36.1\% |
|  | Rent Home | 22\% | 19.3\% | 24.8\% |
| Children Status | Children in Household (Ages 18-44) | 12\% | 10.1\% | 15.2\% |
|  | No Children in Household (Ages 18-44) | 11\% | 8.5\% | 14.9\% |
| Phone Status | Landline | 39\% | 37.2\% | 41.8\% |
|  | Cell Phone | 28\% | 26.7\% | 30.1\% |
| Pregnancy Status | Pregnant (Ages 18-44) | * | * | * |
|  | Not Pregnant (Ages 18-44) | 10\% | 8.2\% | 12.6\% |
| County | Minnehaha | 29\% | 26.2\% | 32.3\% |
|  | Pennington | 34\% | 30.7\% | 37.3\% |
|  | Lincoln | 30\% | 24.4\% | 35.7\% |
|  | Brown | 34\% | 30.5\% | 38.6\% |
|  | Brookings | 25\% | 21.3\% | 29.4\% |
|  | Codington | 29\% | 25.8\% | 32.8\% |
|  | Meade | 25\% | 20.9\% | 30.2\% |

Note: $\quad$ *Results based on small sample sizes have been suppressed.
Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2017-2021

## Demographics

| Gender | Males exhibit a significantly higher prevalence of high cholesterol than <br> females. |
| :--- | :--- |
| Age | The prevalence of high cholesterol generally increases as age increases. <br> This includes significant increases as the 30's, 40's, 50's, and 60's are <br> reached. |
| Race/Ethnicity | The prevalence of high cholesterol does not seem to differ based on <br> race/ethnicity. |
| Household | The prevalence of high cholesterol does not seem to change as household <br> income increases. |
| Income | The prevalence of high cholesterol does not seem to change as education <br> levels increase. |
| Education | Those who are retired or unable to work demonstrate a very high prevalence <br> of high cholesterol, while those who are a student show a very low <br> prevalence. |
| Employment |  |
| Marital | Those who are widowed exhibit a very high prevalence of high cholesterol, <br> while those who have never been married show a very low prevalence. |
| Status | Those who own their home demonstrate a significantly higher prevalence of <br> high cholesterol than those who rent their home. |
| Ownership | The prevalence of high cholesterol does not seem to differ based on the |
| Children |  |
| Status | presence of children in the household. |
| Phone Status | Those who primarily use a landline phone demonstrate a significantly higher <br> prevalence of high cholesterol than those who primarily use a cell phone. |
| Those in Pennington and Brown counties exhibit a very high prevalence of |  |

Figure 24, below, shows the percentage of South Dakotans with high cholesterol who take medication for it. In 2021, 65 percent of those with high cholesterol took medication for it.

Figure 24
Percentage of South Dakotans Who Take Medicine for Their High Cholesterol, 2017-2021


[^3]
[^0]:    Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2021

[^1]:    Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2019-2021

[^2]:    Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2019-2021

[^3]:    Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2017-2021

