

# The Health Behaviors of South Dakotans 2019

*A Report of the South Dakota  
Behavioral Risk Factor Surveillance System*



600 East Capitol Avenue  
Pierre, South Dakota 57501

In cooperation with  
the Centers for Disease Control and Prevention  
Atlanta, Georgia

April 2021

Copies of this report and its distribution were paid for by a grant from  
the Centers for Disease Control and Prevention.



---

## **Preface**

---

*The Health Behaviors of South Dakotans 2019* serves as a way to measure health risks of South Dakotans.

The information used to develop the report came from the Behavioral Risk Factor Surveillance System (BRFSS). The South Dakota Department of Health (DOH) initiated the BRFSS with help from the Centers for Disease Control and Prevention (CDC).

The survey consists of questions aimed at tracking and trending prevalence of health behaviors and conditions over time.

The BRFSS is the world's largest telephone survey. The survey is administered to households with adults age 18 years or older.

The Office of Health Statistics edited and compiled data for this publication. This report contains as much information as practical from the survey.

For questions regarding *The Health Behaviors of South Dakotans 2019*, please contact:

Office of Health Statistics  
615 East 4th Street  
Pierre, South Dakota 57501-2536  
Phone: (605) 773-3361  
<http://doh.sd.gov/Statistics/>  
National web site: <http://www.cdc.gov/brfss/>

The following people were the main contributors to the development of this report:

|                   |  |
|-------------------|--|
| Carrie Cushing    | Policy Data Analyst  |
| Mark Gildemaster  | Coordinator of South Dakota Behavioral Risk Factor Surveillance System |
| Daniel Bucheli    | Communications Director  |
| Virginia Peterson | Management Analyst   |



---

## ***Table of Contents***

---

|   |      |
|---|------|
| Preface .....                               | v    |
| List of Tables.....                         | viii |
| List of Figures .....                       | xii  |
| Overview.....                               | 3    |
| Methodology .....                           | 11   |
| Health Behavior Topics.....                 | 15   |
| Overweight and Obese .....                  | 17   |
| Physical Activity and Nutrition.....        | 29   |
| Tobacco Use.....                            | 41   |
| Diabetes.....                               | 59   |
| Chronic Obstructive Pulmonary Disease ..... | 63   |
| Health Insurance.....                       | 66   |
| Hypertension and Cholesterol.....           | 77   |
| Cardiovascular Disease .....                | 85   |
| Cancer .....                                | 94   |
| Immunization .....                          | 100  |
| Arthritis.....                              | 109  |
| Asthma.....                                 | 113  |
| Depression.....                             | 116  |
| Kidney Disease.....                         | 119  |
| Vision Impairment .....                     | 122  |
| Alcohol Use.....                            | 125  |
| General Health Status.....                  | 134  |
| Advance Directive .....                     | 152  |
| Confusion/Memory Loss .....                 | 155  |
| Hearing Difficulty.....                     | 158  |
| HIV/AIDS.....                               | 161  |
| Prescription Pain Medication .....          | 164  |
| Substance Abuse Treatment .....             | 167  |
| Family Planning .....                       | 170  |
| Appendix A: Demographics.....               | 177  |
| Appendix B: BRFSS Questionnaire .....       | 183  |

---

## **List of Tables**

---

|     |   |     |
|-----|---|-----|
| 1.  | Estimated Percentage and Number of Persons at Risk Due to Selected Factors (Ages 18 and Older Unless Otherwise Specified): South Dakota BRFSS, 2019 ..... | 5   |
| 2.  | Topics Covered on the South Dakota BRFSS, 2010-2019 .....   | 6-7 |
| 3.  | Disposition of All Telephone Numbers in the Sample, 2019 .....  | 13  |
| 4.  | South Dakotans Who Are Overweight or Obese, 2015-2019 .....   | 18  |
| 5.  | South Dakotans Who Are Obese, 2015-2019 .....   | 21  |
| 6.  | South Dakotans Who Are Severely Obese, 2015-2019 .....  | 24  |
| 7.  | South Dakotans Who Are Morbidly Obese, 2015-2019 .....  | 27  |
| 8.  | South Dakotans Who Met Physical Activity Recommendations, 2015-2019 .....   | 30  |
| 9.  | South Dakotans Who Reported Consuming at Least Five Servings of Fruits and Vegetables Per Day, 2015-2019 .....  | 33  |
| 10. | South Dakotans Who Reported Consuming at Least Two Servings of Fruits Per Day, 2015-2019 .....  | 36  |
| 11. | South Dakotans Who Reported Consuming at Least Three Servings of Vegetables Per Day, 2015-2019 .....  | 39  |
| 12. | South Dakotans Who Currently Smoke Cigarettes, 2015-2019 .....  | 42  |
| 13. | South Dakotans Who Tried to Stop Smoking, Within the Past 12 Months, for One Day or Longer, Because They Were Trying to Quit Smoking, 2011-2019 .....     | 44  |
| 14. | South Dakotans Who Use Smokeless Tobacco, 2015-2019 .....   | 47  |
| 15. | South Dakotans Who Currently Smoke E-Cigarettes, 2016-2019 .....  | 51  |
| 16. | South Dakotans Who Currently Smoke Cigarettes, Use Smokeless Tobacco, or Use E-Cigarettes, 2016-2019 .....  | 54  |
| 17. | South Dakotans Who Have Heard of the QuitLine Program, 2015-2019 .....  | 57  |
| 18. | South Dakotans Who Were Told They Have Diabetes, 2015-2019 .....  | 60  |
| 19. | South Dakotans Who Have Been Told They Have COPD, 2015-2019 .....   | 64  |
| 20. | South Dakotans, Ages 18-64, Who Do Not Have Health Insurance, 2015-2019 .....   | 67  |
| 21. | Type of Health Insurance, Ages 18-64, 2011-2019 .....   | 69  |

|     |   |       |
|-----|---|-------|
| 22. | How Long Since South Dakotans Last Visited a Doctor for a Routine Checkup, 2013-2019 .....                      | 69    |
| 23. | South Dakota Males, Ages 18-64, Who Had Not Had a Routine Health Check-up In the Past Two Years, 2018-2019..... | 70    |
| 24. | South Dakota Children, Ages 0-17, Who Do Not Have Health Insurance, 2015-2019.....                              | 72    |
| 25. | Different Types of Health Coverage for South Dakota Children, Ages 17 and Under, 2011-2019 .....                | 73    |
| 26. | South Dakotans Who Have Had a Routine Checkup Within the Past Two Years, 2015-2019 .....                        | 75    |
| 27. | South Dakotans Who Were Told They Have Hypertension, 2015-2019.....   | 78    |
| 28. | Percentage of South Dakotans With High Blood Pressure Who Were Taking Medicine for It, 2011-2019 .....          | 79    |
| 29. | South Dakotans Who Were Told They Have High Blood Cholesterol, 2015-2019 .....                                  | 83    |
| 30. | South Dakotans Who Previously Had a Heart Attack, 2015-2019.....  | 86    |
| 31. | South Dakotans Who Have Angina or Coronary Heart Disease, 2015-2019.....  | 89    |
| 32. | South Dakotans Who Previously Had a Stroke, 2015-2019 .....   | 92    |
| 33. | South Dakotans Who Have Ever Been Diagnosed With Cancer (Excluding Skin Cancer), 2015-2019 .....                | 94-95 |
| 34. | South Dakotans Who Have Ever Been Diagnosed With Skin Cancer, 2015-2019 .....                                   | 97-98 |
| 35. | South Dakotans, Ages 65 and Older, Who Have Had a Flu Shot Within the Past 12 Months, 2015-2019 .....           | 101   |
| 36. | South Dakotans, Ages 65 and Older, Who Have Had a Pneumonia Shot, 2015-2019.....                                | 104   |
| 37. | South Dakotans Who Have Had a Tetanus Shot In the Past Ten Years, 2016-2019.....                                | 107   |
| 38. | South Dakotans Who Were Told They Have Arthritis, 2015-2019.....  | 110   |
| 39. | South Dakotans Who Were Told They Have Asthma, 2015-2019.....   | 114   |
| 40. | South Dakotans Who Have Been Told They Have Depression, 2015-2019.....  | 117   |

|     |  |         |
|-----|--|---------|
| 41. | South Dakotans Who Have Been Told They Have Kidney Disease, 2015-2019 ....   | 120     |
| 42. | South Dakotans Who Have a Vision Impairment, 2015-2019.....  | 123     |
| 43. | South Dakotans Who Drank Alcohol In Past 30 Days, 2015-2019 .....  | 126     |
| 44. | South Dakotans Who Engage In Binge Drinking, 2015-2019 .....   | 129     |
| 45. | South Dakotans Who Engage In Heavy Drinking, 2015-2019 .....   | 132     |
| 46. | South Dakotans Reporting Fair or Poor Health Status, 2015-2019 .....   | 135     |
| 47. | South Dakotans Who Reported Physical Health Not Good for 30 Days of the Past<br>30, 2015-2019 .....  | 138     |
| 48. | South Dakotans Who Stated Mental Health Not Good for 20-30 Days of the<br>Past 30, 2015-2019 .....   | 142     |
| 49. | South Dakotans Who Are Taking Medicine or Receiving Treatment for Mental<br>Health or Emotional Problems, 2016-2019 .....                      | 146     |
| 50. | South Dakotans Who Stated Usual Activities Unattainable Due to Poor Physical or<br>Mental Health for 10-30 Days of the Past 30, 2015-2019..... | 149     |
| 51. | South Dakotans Who Have an Advance Directive, 2015-2019 .....  | 153     |
| 52. | South Dakotans, Ages 45 and Older, Who Have Experienced Increased Confusion<br>or Memory Loss, 2015-2019 .....                                 | 156     |
| 53. | South Dakotans Who Are Deaf or Have Serious Difficulty Hearing, 2016-2019 .....  | 159     |
| 54. | South Dakotans Who Have Ever Been Tested for HIV, 2015-2019.....   | 162     |
| 55. | South Dakotans That Have Taken Prescription Pain Medication In the Last 12<br>Months, 2017-2019 .....  | 165     |
| 56. | South Dakotans Who Have Been or Are Currently Being Treated for Substance<br>Abuse, 2016-2019 .....  | 168     |
| 57. | Female South Dakotans, Ages 18-49, Who Are Currently Using Birth<br>Control, 2017-2019.....  | 171     |
| 58. | Type of Birth Control Used, 2017-2019 .....  | 172     |
| 59. | Reasons for Not Using Birth Control, 2017-2019.....  | 173     |
| 60. | Demographics of Survey South Dakotans, 2019 .....  | 177     |
| 61. | Surveys Completed by Resident County, 2019 .....   | 178-179 |



---

## **List of Figures**

---

|     |  |    |
|-----|--|----|
| 1.  | Percentage of South Dakotans Who Are Overweight or Obese Based on Body Mass Index, 2011-2019 .....   | 17 |
| 2.  | Percentage of South Dakotans Who Are Obese Based on Body Mass Index, 2011-2019 .....   | 20 |
| 3.  | Percentage of South Dakotans Who Are Severely Obese Based on Body Mass Index, 2011-2019.....   | 23 |
| 4.  | Percentage of South Dakotans Who Are Morbidly Obese, 2011-2019.....  | 28 |
| 5.  | Percentage of South Dakotans Who Met Physical Activity Recommendations, 2011-2019 .....  | 29 |
| 6.  | Percentage of South Dakotans Who Reported Consuming at Least Five Servings of Fruits and Vegetables Per Day, 2011-2019.....                        | 32 |
| 7.  | Percentage of South Dakotans Who Reported Consuming at Least Two Servings of Fruit Per Day, 2011-2019 .....  | 35 |
| 8.  | Percentage of South Dakotans Who Reported Consuming at Least Three Servings of Vegetables Per Day, 2011-2019 .....                                 | 38 |
| 9.  | Percentage of South Dakotans Who Currently Smoke Cigarettes, 2011-2019 .....   | 41 |
| 10. | Percentage of Smokers Who Have Been Advised by a Doctor, Nurse, or Other Health Professional to Quit Smoking In the Past 12 Months, 2011-2019..... | 44 |
| 11. | South Dakotans' Place of Work Smoking Policy, 2015-2019 .....  | 45 |
| 12. | South Dakotans' Rules About Smoking Inside the Home, 2015-2019.....  | 45 |
| 13. | Percentage of South Dakotans Who Use Smokeless Tobacco, 2011-2019.....   | 46 |
| 14. | Percentage of South Dakotans Advised to Quit Using Smokeless Tobacco by a Doctor, Nurse, or Other Health Professional, 2011-2019 .....             | 49 |
| 15. | Percentage of South Dakotans Who Currently Smoke E-Cigarettes, 2016-2019.....  | 50 |
| 16. | Percentage of South Dakotans Who Currently Smoke Cigarettes, Use Smokeless Tobacco, or Use E-Cigarettes, 2016-2019 .....                           | 53 |
| 17. | Percentage of South Dakotans Who Have Heard of the South Dakota QuitLine Program, 2013-2019.....   | 56 |
| 18. | Percentage of South Dakotans Who Were Told They Have Diabetes, 2011-2019...  | 59 |
| 19. | South Dakotans Who Have Had a Test for High Blood Sugar or Diabetes Within the Past Three Years, 2011-2019 .....                                   | 62 |

|     |  |     |
|-----|--|-----|
| 20. | South Dakotans' Diabetic Status, 2015-2019 .....   | 62  |
| 21. | Percentage of South Dakotans Who Were Told They Have COPD, 2011-2019 .....   | 63  |
| 22. | Percentage of South Dakotans, Ages 18-64, Who Do Not Have Health Insurance, 2011-2019 .....  | 66  |
| 23. | Percentage of South Dakotans, Ages 18-64, Who Needed to See a Doctor But Could Not Because of the Cost, 2013-2019 .....  | 70  |
| 24. | Percentage of South Dakota Children, Ages 0-17, Who Do Not Have Health Insurance, 2011-2019 .....  | 71  |
| 25. | Percentage of South Dakotans Who Have Had a Routine Checkup Within the Past Two Years, 2011-2019.....  | 74  |
| 26. | Percentage of South Dakotans Who Were Told They Have Hypertension, 2011-2019 .....   | 77  |
| 27. | Percentage of Those With High Blood Pressure Who Have Been Told by a Doctor, Nurse, or Other Health Professional to Check Their Blood Pressure Outside of the Doctor's Office, 2019..... | 80  |
| 28. | Percentage of Those With High Blood Pressure Who Regularly Check Their Blood Pressure Outside of the Doctor's Office by Doctor's Recommendation, 2019.....                               | 80  |
| 29. | Percentage of Those With High Blood Pressure Who Regularly Check Their Blood Pressure Outside of the Doctor's Office by Location, 2019 .....   | 81  |
| 30. | Percentage of South Dakotans Who Were Told They Have High Blood Cholesterol, 2011-2019.....  | 82  |
| 31. | Percentage of South Dakotans With High Cholesterol Who Take Medicine for It, 2017-2019 .....   | 84  |
| 32. | Percentage of South Dakotans Who Previously Had a Heart Attack, 2011-2019.....   | 85  |
| 33. | Percentage of South Dakotans Who Have Angina or Coronary Heart Disease, 2011-2019 .....  | 88  |
| 34. | Percentage of South Dakotans Who Have Previously Had a Stroke, 2011-2019.....  | 91  |
| 35. | Percentage of South Dakotans Who Have Ever Been Diagnosed With Cancer (Excluding Skin Cancer), 2011-2019 .....   | 94  |
| 36. | Percentage of South Dakotans Who Have Ever Been Diagnosed With Skin Cancer, 2011-2019 .....  | 97  |
| 37. | Percentage of South Dakotans, Ages 65 and Older, Who Have Had a Flu Shot Within the Past 12 Months, 2011-2019.....   | 100 |
| 38. | Percentage of South Dakotans, Ages 65 and Older, Who Have Had a Pneumonia Shot, 2011-2019 .....  | 103 |

|     |  |     |
|-----|--|-----|
| 39. | Percentage of South Dakotans Who Have Had a Tetanus Shot In the Past Ten Years, 2013-2019 .....  | 106 |
| 40. | Percentage of South Dakotans Who Were Told They Have Arthritis, 2011-2019...   | 109 |
| 41. | Percentage of Those With Arthritis Who Are Limited In Their Usual Activities, 2011-2019 .....  | 112 |
| 42. | Percentage of South Dakotans Who Were Told They Have Asthma, 2011-2019...  | 113 |
| 43. | Percentage of South Dakotans Who Were Told They Have Depression, 2011-2019 .....   | 116 |
| 44. | Percentage of South Dakotans Who Have Been Told They Have Kidney Disease, 2011-2019 .....  | 119 |
| 45. | Percentage of South Dakotans Who Have a Vision Impairment, 2013-2019 .....   | 122 |
| 46. | Percentage of South Dakotans Who Drank Alcohol In the Past 30 Days, 2011-2019 .....  | 125 |
| 47. | Percentage of South Dakotans Who Engage In Binge Drinking, 2011-2019.....  | 128 |
| 48. | Percentage of South Dakotans Who Engage In Heavy Drinking, 2011-2019.....  | 131 |
| 49. | Percentage of South Dakotans Reporting Fair or Poor Health Status, 2011-2019 .....   | 134 |
| 50. | Percentage of South Dakotans Reporting Physical Health Not Good for 30 Days of the Past 30, 2011-2019 .....                                      | 137 |
| 51. | Average Number of Days South Dakotans' Physical Health Was Not Good In the Past 30 Days, 2011-2019 .....   | 140 |
| 52. | Percentage of South Dakotans Stating Mental Health Not Good for 20-30 Days of the Past 30, 2011-2019.....  | 141 |
| 53. | Average Number of Days Respondents' Mental Health Was Not Good In the Past 30 Days, 2011-2019 .....  | 144 |
| 54. | Percentage of South Dakotans Who Are Taking Medicine or Receiving Treatment for Mental Health or Emotional Problems, 2016-2019.....              | 145 |
| 55. | Percentage of South Dakotans Reporting Usual Activities Unattainable for 10-30 Days of the Past 30, 2011-2019 .....                              | 148 |
| 56. | Average Number of Days Poor Physical or Mental Health Kept South Dakotans From Doing Their Usual Activities In the Past 30 Days, 2011-2019 ..... | 151 |
| 57. | Percentage of South Dakotans Who Have an Advance Directive, 2015-2019 .....  | 152 |

|     |   |     |
|-----|---|-----|
| 58. | Percentage of South Dakotans, Ages 45 and Older, Who Have Experienced Increased Confusion or Memory Loss, 2013-2019 ..... | 155 |
| 59. | Percentage of South Dakotans Who Are Deaf or Have Serious Difficulty Hearing, 2016-2019 .....                             | 158 |
| 60. | Percentage of South Dakotans Who Have Ever Been Tested for HIV, 2011-2019 .....   | 161 |
| 61. | Percentage of South Dakotans That Have Taken Prescription Pain Medication In the Last 12 Months, 2017-2019 .....          | 164 |
| 62. | Percentage of South Dakotans Who Have Been or Are Currently Being Treated for Substance Abuse, 2016-2019 .....            | 167 |
| 63. | Percentage of Female South Dakotans, Ages 18-49, Who Are Currently Using Birth Control, 2017-2019 .....                   | 170 |