



# 2022 COMMUNITY HEALTH ASSESSMENT



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A MESSAGE FROM THE  
**PARTNERS**



Dear Sioux Falls Residents,

The Sioux Falls Health Department, Avera McKennan Hospital and University Health Center, Avera Heart Hospital of South Dakota, Sanford USD Medical Center and the Sioux Falls VA Health Care System are pleased to present this 2022 Community Health Status Report for the Sioux Falls Metropolitan Statistical Area (MSA).

As community partners, we all play a role in impacting health and well-being in our schools, worksites, neighborhoods, churches and public spaces. In examining health concerns and health outcomes through this collaborative Community Health Assessment (CHA) process, we recognized that population health is heavily influenced by the community environment, including access to healthy food, opportunities to be physically active, access to health care services, and options for housing and transportation.

We have a unique community with diverse viewpoints, and that is why we are particularly grateful to the many residents and organizations that provided feedback as part of this comprehensive health assessment. We believe that all residents of our community, regardless of their background, education, income, or neighborhood, should have equitable opportunities and the supporting environment to make choices that lead to a longer, healthier life. It is essential that we continue to work together in identifying, evaluating, prioritizing, and addressing health issues in our community.

As we move forward, we will continue monitoring the health of our community, through the lenses of prevention and equity, and actively pursue interventions that ensure our residents are able to achieve optimal health.

Sincerely,

**Dr. Charles Chima**  
Director  
Sioux Falls Health Department

**Paul Hanson**  
President and CEO  
Sanford USD Medical Center

**David Flicek**  
President and CEO  
Avera McKennan Hospital & University  
Health Center

**Dr. Timothy Pendergrass**  
Chief of Staff  
Sioux Falls VA Hospital





# CITY OF SIOUX FALLS HEALTH DEPARTMENT



*The mission of the Sioux Falls Health Department is to improve the quality of life for the Sioux Falls community by preventing or controlling disease, mitigating adverse health threats, and by providing an open door for primary health services.*

## FALLS COMMUNITY HEALTH

Falls Community Health is a Federally Qualified Health Center (FQHC) that provides comprehensive primary health care and dental care for all ages.

The clinic is a nationally-recognized Patient-Centered Medical Home, having received the highest level of certification from the National Committee for Quality Assurance. This designation recognizes the clinic's commitment to six core health care standards, including:

- Patient-centered access to appointments and clinical advice.
- Team-based health care.
- Population health management.
- Care management and support through evidenced-based practices.
- Coordinated health care.
- Performance measurement and quality improvement.

Falls Community Health offers care at its main location in downtown Sioux Falls, as well as at three school-based clinics at Hawthorne Elementary, Hayward Elementary and Terry Redlin Elementary. In addition to primary medical and dental care, the clinic also provides HIV/AIDS early intervention services and case management, behavioral health and substance use counseling services, case management, medical nutrition therapy, and social services.

## QUALITY ASSURANCE FOR EMERGENCY MEDICAL SERVICES

The Sioux Falls Health Department works with the Sioux Falls Regional Emergency Medical Services Authority (REMSA) to provide guidance and recommendations to the Mayor and the City Council on matters related to emergency medical services. This includes conducting quality assurance activities linking all the agencies that provide emergency medical services in Sioux Falls, including call taking, emergency medical dispatcher, law enforcement





CITY OF  
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and fire first response, ambulance service, online medical control, and hospitals. PatientCare EMS® (formerly Paramedics Plus) is the ground ambulance provider for Sioux Falls, serving the community since 2015. The Health Department, along with REMSA, provides compliance monitoring for ground ambulance services.

### ENVIRONMENTAL HEALTH PROTECTION

The Environmental Health division is committed to serving the people of Sioux Falls by providing high-quality environmental public health services. Areas addressed include:

- Family home day care registration and inspection.
- Permits and inspection of food service establishments.
- Tattoo artist permits and tattoo establishment permits and inspection.
- Hotel/Lodging permits and inspection.
- General sanitary code enforcement.
- Sound permits.
- Surveillance and control of disease vectors in the community.

### PUBLIC HEALTH EMERGENCY PREPAREDNESS AND RESPONSE

A key role of a public health department is to ensure the community is ready to respond in the event of a health emergency. The Sioux Falls Health Department continues to lead and participate in healthcare preparedness coalitions both in Sioux Falls and across the state. In addition, the department works with health care partners and community-based organizations to conduct preparedness planning, training and exercises, and support the broader public health needs during responses for all disasters.

### PUBLIC HEALTH LABORATORY

The Public Health Laboratory provides environmental and clinical laboratory testing services. Environmental testing serves the City of Sioux Falls, surrounding communities, agencies, commercial businesses, individuals, and the State of South Dakota. The laboratory also provides clinical laboratory and X-ray services for Falls Community Health patients at the main location downtown, as well as some clinical laboratory services at the three school-based locations. The Public Health Laboratory is certified by the Commission on

Office Laboratory Accreditation (COLA) for its clinical work and by the South Dakota Department of Environment and Natural Resources for its environmental testing.

### HEALTH PROMOTION AND DISEASE PREVENTION (LIVE WELL SIOUX FALLS)

Live Well Sioux Falls is a community-based initiative designed to help improve the health and well-being of Sioux Falls residents by collaborating on projects to address health needs. The Live Well Sioux Falls Coalition, a group of diverse businesses, organizations, and individuals, is instrumental in guiding efforts to improve community health and wellness. The vision of Live Well Sioux Falls is to transform the health of our community to create a more vibrant, active, and livable city. Community partners work together to develop strategies that help residents Breathe Well, Eat Well, Feel Well, Move Well, and Work Well.



# AVERA MCKENNAN HOSPITAL & UNIVERSITY HEALTH CENTER



*Avera McKennan Hospital & University Health Center in Sioux Falls is the 545-bed flagship of Avera Health, a system comprised of 315 locations in 100 communities across portions of five states in the Upper Midwest. Avera is home to innovative programs that include the world's most robust telemedicine program of its kind, Avera eCARE®, as well as genomic medicine and cell therapies to offer the latest in cancer treatment.*

*Sponsored by the Benedictine and Presentation Sisters, Avera is distinguished by its mission. Avera Health is a health ministry rooted in the Gospel. Our mission is to make a positive impact in the lives and health of persons and communities by providing quality services guided by Christian values. Avera employees are guided by Avera's gospel values of compassion, hospitality, and stewardship. Avera McKennan, founded in 1911, has a century-long history of health ministry. Headquartered in Sioux Falls, SD, the Avera system employs more than 19,700 individuals, including more than 7,585 in the Sioux Falls Metropolitan Statistical Area (MSA) and 1,160 physicians and advanced practice providers.*

*Avera McKennan provides a complete continuum of care in more than 60 medical specialties, including oncology, cardiology, critical care, emergency medicine and trauma, air transport, behavioral health, gastroenterology, endocrinology and diabetes care, hospice, imaging, medical education and research, brain and spine care, women's health care, pediatrics, neonatology, orthopedics, rehabilitation, and a full range of wellness services. Avera McKennan is home to the region's only bone marrow transplant program, longest-standing kidney transplant program, and the region's only liver and pancreas transplant programs. Accredited by The Joint Commission, Avera McKennan has also earned Magnet® hospital designation from the American Nurses Credentialing Center since 2001.*

## AVERA HEART HOSPITAL

Founded in 2001, Avera Heart Hospital is the region's first hospital dedicated to cardiac and vascular care and the state's first accredited Chest Pain Center. Services include 24-hour emergency care, Planet Heart screenings, cardiac catheterization, electrophysiology, surgery, and a full range of diagnostic and rehabilitation services.

## AVERA BEHAVIORAL HEALTH CENTER

Avera is home to the region's largest team of behavioral health specialists and the region's largest private psychiatric inpatient care facility, with specialized units for children, adolescents, adults and seniors; outpatient care and counseling; and innovative technology that includes a state-of-the-art electroconvulsive therapy (ECT) suite. Behavioral health services include a 24-hour assessment phone line and center available to patients and referring providers to provide recommendations for the most appropriate level of care. The Avera Behavioral Health Center is building a new wing that will offer services new to Sioux Falls including 24/7 psychiatric urgent care, youth addiction care, and partial hospitalization for youth and adults.

## AVERA CANCER INSTITUTE

Avera Cancer Institute offers comprehensive services through six regional centers. In Sioux Falls, Avera Cancer Institute is located in the Prairie Center on Cliff Avenue. Cutting-edge technology includes the Elekta Versa HD™ linear accelerator, electron-based intraoperative radiation therapy (IORT), Gamma Knife™ and brachytherapy suite. Avera's cancer program includes multidisciplinary case conferences, a dedicated breast surgery team, genomic medicine, patient navigation center, clinical trials and genetic testing. Patients benefit from amenities such as private chemotherapy suites and a patient-centered environment. Survivorship care, spiritual care, and integrative medicine are ways in which Avera cares for the whole person throughout the cancer care journey.

## AVERA ECARE

The most robust telemedicine program serving rural health care, Avera eCARE® extends specialty care across



*Avera McKennan Hospital & University Health Center  
and the Avera Heart Hospital of South Dakota*



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the miles, keeping patients closer to home. Through a full suite of applications that include eCARE Behavioral Health, Correctional Health, Emergency, Hospitalist, ICU, Pharmacy, School Health, and Senior Care and Specialty Clinic, Avera eCARE is connected to over 550 sites across 32 states. This includes collaboration with Indian Health Service (IHS) to provide emergency support, behavioral health, and specialty appointments to reservation communities.

**AVERA MEDICAL GROUP**

Avera's 1,160 physicians and allied health professionals collaborate to deliver comprehensive and seamless care at over 200 locations. Avera Medical Group offers 45 clinics in Sioux Falls, with innovative options including 24/7 AveraNow virtual visits with a provider via smartphones, tablets, or laptops. Through coordinated care, we help patients with complex or multiple conditions overcome barriers to better health management.

**AVERA HEALTH INSURANCE**

Avera Health Plans, founded in 1999, serve people and communities by providing cost-effective and innovative health plans. Avera Health Plans has participated in healthcare.gov since it began in 2013, after passage of the Affordable Care Act (ACA) in 2010. **DAKOTACARE** offers a wide variety of employer plan options and benefits to both large and small employers. It also offers self-funded and third-

party administration services. Together, Avera Health Plans and DAKOTACARE cover 130,000 lives.

**AVERA ON LOUISE HEALTH CAMPUS**

To address the growth of Sioux Falls and improve access to care in all sectors in the city, Avera opened its new campus at 69th Street and Louise Avenue in the fall of 2019. This facility includes:

- A 24-bed surgical hospital and medical office building complex, specializing in orthopedics, gastroenterology, rheumatology and internal medicine. This complex comprises 260,000 square feet.
- The Avera Addiction Care Center, a residential treatment facility with 32 private rooms.
- The Avera Human Performance Center, a 60,000-square-foot complex housing seven volleyball courts and designated areas for physical therapy and Athletic Republic acceleration. It is designed to serve athletes of all ages and ability levels and will promote overall health, wellness, and balance throughout a lifetime.

**MAIN CAMPUS UPDATES**

On its main campus, Avera McKennan invested in a \$41 million

update to address growing patient needs, including:

- A 24-bed inpatient post-acute rehabilitation unit, created in the shell space on the fifth floor of the Prairie Center on the main campus, to accommodate best practices and the latest technology in rehab care. This unit cares for patients ranging in age from adolescents to seniors with a range of conditions and diagnoses including stroke, head and spinal cord injury, multiple sclerosis, amputation, Guillain-Barre syndrome and more.
- A 28-bed intensive care unit (ICU) created in space formerly occupied by inpatient rehab. It features 28 beds in large private rooms that accommodate family amenities and advanced technology. An additional 30 ICU beds were added to handle demand brought about by COVID-19 by temporarily making the single rooms into double rooms.
- Expansion of surgical space in the former ICU space, providing 18 total surgical suites that are each 645 square feet in size and accommodate the latest surgical technology. Formerly, 14 ORs were available in the main hospital.

# SANFORD USD MEDICAL CENTER



*Sanford USD Medical Center is a 545-bed tertiary medical center in Sioux Falls, SD, providing comprehensive, innovative multispecialty care for patients from across the Midwest. It is the largest hospital in South Dakota and a Level II adult and pediatric trauma center, serviced by Sanford AirMed air ambulance, which covers a vast geographic region and offers four specialized transport teams, including adult, pediatric, neonatal and obstetric. As a provider of highly specialized services, Sanford USD offers Centers of Excellence in heart and vascular, children's services, cancer, neuroscience, orthopedics and sports medicine, and women's health. It also serves as the primary teaching hospital for the Sanford USD School of Medicine, located at the University of South Dakota in Vermillion.*

*Sanford employs more than 12,000 people in the Sioux Falls area, including 526 board-certified physicians and 552 advanced practice providers (APPs) in more than 80 medical specialties. Sanford USD Medical Center is accredited by The Joint Commission and is a designated Magnet hospital by the American Nurses' Credentialing Center. Through its mission, dedicated to sharing God's love through the work of health, healing and comfort, and its vision of improving the human condition at every stage of life through exceptional care, spiritual enrichment, innovation and discovery, Sanford is making medical care accessible to the entire region.*

## CHILDREN'S CASTLE

Sanford Children's Castle of Care serves pediatric patients in a five-state area and through Sanford World Clinics, which comprise of 133 health facilities in 10 countries. State-of-the-art neonatal intensive care and pediatric intensive care units offer 24/7 care by local specialists. This includes 135 pediatric specialists in over 30 unique medical areas of expertise. The model of CARE focuses on excellence in clinical services, advocacy, research, and education.

## HEART HOSPITAL

Sanford Heart Hospital is a state-of-the-art hospital offering highly advanced, integrated and personalized heart care from more than 750 experienced heart specialists and staff. All services for heart patients—emergency care, outpatient testing, surgery, rehab, catheterization, consultation with specialists—are consolidated into one building attached to the medical center, allowing for easy access. Within Sanford Heart Hospital, patients receive personalized, innovative health care where comfort,

well-being, compassion, communication, and empowered choices allow them to experience their healing journey in a positive, life-changing way.

## ORTHOPEDICS AND SPORTS

Sanford Orthopedic and Sports Medicine has a depth of services and specialties to treat sprains, strains, tears, breaks, joint pain, and concussions. We offer more than 45 expert providers with extensive experience in diagnosis, surgery, and nonsurgical treatments. Sanford is a regional leader in sports medicine and works with over 125 club, high school, collegiate, and semiprofessional teams.

## CANCER CENTER

Sanford's Cancer Center and Edith Sanford Breast Center combine to form a unique beacon of expert cancer and breast care throughout the region. Through the generosity of Denny Sanford, we have designed a space that supports advanced cancer care and breast care delivery models of the future, encompassing the whole person built on a foundation of distinguished research and supporting





team-based care. Sanford runs the WISDOM Study to create the most effective screening protocols for all women at every stage of life and participates in nationwide studies through the National Cancer Institute (NCI). One of the main objectives of the NCI Community Cancer Centers Program is to reduce cancer care disparities among underserved populations through education, prevention, screening, treatment, and patient-family support programs.

### WOMEN'S

Sanford Women's offers state-of-the-art obstetric and gynecological care for women of all ages in several locations throughout a four-state area. Care is provided by specialists in OB/GYN, maternal-fetal medicine, urogynecology, fertility and reproductive medicine, low intervention birth, and more. Sanford Women's Plaza is a unique destination that provides women with a variety of health options, all in one location.

### IMAGENETICS

Sanford Health is embedding the latest in genomic medicine into primary care through Imagenetics. This program provides physicians with unprecedented patient-specific information to better identify effective medications and risk for inherited disease in order to design a care plan for the future.

Through a national partnership with the U.S. Department of Veterans Affairs, Sanford Health is bringing free pharmacogenetic testing to 250,000 veterans across the country. Sanford Imagenetics was established in 2014 thanks to a generous gift of \$125 million from philanthropist Denny Sanford.

### SANFORD HEALTH INNOVATIONS

Combining an inventive spirit, multidisciplinary expertise and a comprehensive research infrastructure, Sanford Health Innovations develops and commercializes game-changing technologies to provide new solutions for improved patient care.

### SANFORD HEALTH PLAN

Sanford Health Plan is a Sanford Health Plan is a community-based, non-profit health insurance company that offers product lines for individuals, families, and businesses in North Dakota, South Dakota, Minnesota, and Iowa. Sanford Health Plan's regional network of 25,000 providers includes Sanford Health practitioners and providers as well as those affiliated with other health systems or in independent practice. The health plan also maintains a nationwide network for members living or traveling outside of the service area. There

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are currently 210,000 enrolled Sanford Health Plan members.

# SHIUX FALLS VA HEALTH CARE SYSTEM



*The Sioux Falls VA Health Care System (HCS) opened with the Royal C. Johnson Veterans Memorial Hospital on July 19, 1949. It consists of the Joint Commission accredited, complexity Level 2 medical center plus four Community Based Outpatient Clinics (CBOCs) and one outreach clinic that serve more than 30,000 veterans in eastern South Dakota, northwestern Iowa, and southwestern Minnesota.*

*The medical center in Sioux Falls, SD has 40 acute beds and 58 transitional care beds. CBOCs are in Aberdeen, Watertown, and Dakota Dunes, SD, as well as Spirit Lake, IA. An outreach clinic is located on the Yankton Sioux tribal land in Wagner, SD. The Dakotas VA Regional Office is co-located with the medical center. The Sioux Falls VA Health Care System is part of VA's VISN 23, which includes facilities in Fargo, ND; Fort Meade and Hot Springs (Black Hills HCS) in SD; Minneapolis and St. Cloud, MN; Des Moines (Central Iowa HCS) and Iowa City, IA; and Grand Island, Lincoln, and Omaha, (Nebraska-Western Iowa HCS), NE.*

*Our clinical services provide comprehensive health care and a wide range of patient care services including: audiology and speech pathology, chronic disease management, extended care and rehabilitation, Home Based Primary Care, mental health, Military Sexual Trauma counseling, nutrition, oncology, pharmacy, primary care, prosthetics, social work, specialty care, Women's Health Program, low vision clinic, Whole Health and Integrative Health services, Medical Foster Homes, Caregiver Support, Clinical Video Telehealth, neurology, orthopedics, pulmonary medicine, endoscopy, urology, general surgery, podiatry, dermatology, PTSD, substance use, emergency care, optometry and ophthalmology, nephrology, Compensated Work Therapy, orthopedic surgery, pain management, GI, and cardiology. The Sioux Falls VA is the only facility in V23 to accept applications for the Million Veteran Program.*

## FACILITY ACCOMPLISHMENTS

- The Sioux Falls VA Health Care System has been recognized as a "Leader in LGBTQ Healthcare Equality" by the Human Rights Campaign Foundation since 2014.
- The American Board for Certification in Orthotics, Prosthetics and Pedorthics certified Sioux Falls VA prosthetics and orthotics clinic in September 2015.
- The new fifth floor minor surgery suites and *Halls and Walls* project was completed in 2021. Projects in progress include renovation to building 1 for a new auditorium, renovation of the tower for administration space, new MRI, new laboratory space, and a new outpatient mental health building.
- The Aberdeen CBOC moved to a new and larger facility with the ribbon cutting and open house taking place on August 2020. The Watertown CBOC also relocated to a larger, new building in December 2019.
- The Sioux Falls VA HCS was a top performer of Level 2 facilities for the first annual VA "Best Experience Award" in January 2019. Sioux Falls VA HCS is also a four-star facility in SAIL.
- The Sioux Falls VA Health Care System is hosting the National Veterans Golden Age Games for 2022. Planning for this major even is underway.
- The Sioux Falls VA Healthcare System has two Community Living Center (CLC) neighborhoods. Both underwent renovations in early 2021 as part of the *Halls and Walls* project that updated the spaces and made them more functional and home-like for Veterans. The CLC has received four- or five-star ratings the last six consecutive quarters. The CLC received a top-block five-star rating in Q1 of FY 2021.





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- The Sioux Falls VA Health Care System was designated as an American Nurses Credentialing Center Pathway to Excellence Organization in December 2019.

### MAJOR SHARING AGREEMENTS

A contract is in place with the SD Air National Guard to provide audiology, radiology, and laboratory services.

### TRANSITION AND CARE MANAGEMENT (FORMERLY OEF/OIF/OND)

The Sioux Falls VA Medical Center Post 9/11 Military 2VA Case Management Program is designed to serve returning Post 9/11 Veterans and their families. All newly enrolled Post 9/11 Veterans are scheduled to meet with the Post 9/11 Military 2VA Case Management Program Manager for an initial bio-psycho-social screening. Based on the screening Veterans are scheduled for initial examinations such as medical, mental health, and vocational counseling etc. The Program Manager also supports local outreach events with the purpose of providing education about the effects of combat on individuals, their families, and the community. Program manager and Transition Patient Advocate attend Department of Defense Yellow Ribbon Reintegration events to assist our newest Veterans in accessing needed services.

### HOMELESS VETERAN PROGRAM

The Sioux Falls VA provides Housing and Urban Development-Veteran Affairs Supportive Housing (HUD-VASH), Health Care for Homeless Veterans (HCHV) Outreach and Case Management, HCHV-Contract Emergency Residential Services (Berakhah House) and Grant and Per Diem-Transition in Place (GPD-TIP).

### SUICIDE PREVENTION

Veterans identified as high risk for suicide are provided additional support. Suicide prevention staff are involved in at least five outreach activities per month. The team also manages the Suicide Prevention mail program and the caring contact outreach letter. The team manages crisis line calls to ensure follow up is made within 24 business hours of the call. The team also supports and creates community coalitions.

### PERFORMANCE IMPROVEMENT INITIATIVES

Our facility adopted LEAN as the primary process improvement methodology as recommended by the National Systems Redesign and Improvement program. We also adopted the National Systems Redesign and Improvement program's standardized LEAN curriculum.

### WOMEN'S HEALTH PROGRAM

The medical center and four

CBOCs have designated Women's Health Primary Care providers. Women Veterans served by the outreach clinic receive care at the Sioux Falls VA Medical Center or through CITC. A Women's Health Clinic at the medical center offers a private waiting room for women Veterans. The clinic was designed to give women Veterans a space where their privacy, safety, dignity, and sensitivity to gender-specific needs are respected.

### COMMUNITY PARTNERSHIPS

The Sioux Falls VA Health Care System has active education affiliations with the Sanford School of Medicine of the University of South Dakota with several staff members holding faculty appointments. In addition, psychiatry, pathology, and surgical residency programs continue to be strong. Approximately 285 residents, interns, and students are trained here each year. We have nursing student affiliations with Augustana University, Minnesota West, National American University, Southeast Technical Institute, Lake Area Technical Institute, the University of South Dakota, South Dakota State University, and the University of Sioux Falls. In addition, there are affiliations involving pharmacy, psychology, social work, chaplains, occupational therapy, physical therapy, physician assistants, medical technologists, recreation, and respiratory therapy.

# ACKNOWLEDGEMENTS

The Community Health Assessment (CHA) was a multi-partner collaboration spearheaded by the Sioux Falls Health Department, Avera McKennan Hospital & University Health Center, Sanford USD Medical Center, and the Sioux Falls VA Health Care System. The exercise was supported by the highest levels of leadership at these institutions and was operationalized by the CHA Steering Committee.

## CHA STEERING COMMITTEE

Jessica Stienstra, Avera Heart Hospital  
Teresa Miller, Avera Health  
Julie Ward, Avera McKennan Hospital & University Health Center  
Mary Michaels, City of Sioux Falls Health Department  
Christina Ward, Sanford Health  
Andrew Wiese, Sanford Health  
Jonathan Feiock, Sioux Falls VA Health Care System

The steering committee sought and received participation from several partners representing broad sectors of the community, including local government, for-profit businesses, non-profit organizations, and those serving the needs of populations at risk of poorer health outcomes or that have higher health risks such as the aged, homeless, low income, and uninsured populations. We are grateful to the following partners representing diverse community sectors for their participation.

## CHA PARTICIPATING AGENCIES

AARP South Dakota	Health Connect of South Dakota
Active Generations	Helpline Center
Alzheimer's Association	Keystone Treatment Center
American Cancer Society	Lewis Drug
American Heart Association	Lifescape
Argus Leader	Lutheran Social Services
Augustana University	Metro 911 Communications
Bishop Dudley Hospitality House	Minnehaha County Human Services
City of Sioux Falls Attorney's Office	Minnehaha County Administration
City of Sioux Falls Finance Department	POET
City of Sioux Falls Planning and Development Department	Sioux Empire United Way
City of Sioux Falls Libraries Department	Sioux Falls Business Resource Network
City of Sioux Falls Parks & Recreation Department	Sioux Falls Hope Coalition
City of Sioux Falls Police Department	Sioux Falls School District
City of Sioux Falls Public Works Department	Sioux Falls Thrive
Delta Dental	Sioux Falls VA Health Care System
EmBe	South Dakota Parent Connection
Face it TOGETHER, Inc.	South Dakota Urban Indian Health
Falls Community Health	South Dakota Voices for Peace
Feeding South Dakota	Southeastern Behavioral Health Care
Greater Sioux Falls Chamber of Commerce	St. Francis House
	Teddy Bear Den

*We would like to thank the following individuals for their various contributions to the process:*

Erik Gaikowski, AARP South Dakota	Jill Ireland, American Cancer Society
Lindsey Holmquest, AARP South Dakota	Chrissy Meyer, American Heart Association
Gerald Beninga, Active Generations	Cory Myers, Argus Leader
Donna Nugteren, Active Generations	Amy Meyers, Augustana University
Nancy Wehrkamp, Active Generations	Thomas Otten, Avera Behavioral Health Center
Leslie Morrow, Alzheimer's Association	Rick Kooima, Avera Health
David Benson, American Cancer Society	Alisa Reindl, Avera Health



John Srstka, Avera Health  
 Dr. Michael Elliott, Avera McKennan Hospital and University Health Center  
 David Flicek, Avera McKennan Hospital and University Health Center  
 Moses Idris, Avera McKennan Hospital & University Health Center  
 Patty Larson, Avera McKennan Hospital & University Health Center  
 Taylor Otten, Avera McKennan Hospital & University Health Center  
 Lori Popkes, Avera McKennan Hospital & University Health Center  
 Stacy Reitmeier, Avera McKennan Hospital & University Health Center  
 Sister Mary Thomas, Avera McKennan Hospital & University Health Center  
 Madeline Shields, Bishop Dudley Hospitality House  
 Sharla Svennes, City of Sioux Falls Attorney's Office/ Human Relations  
 Janelle Zerr, City of Sioux Falls Finance  
 Julie Charbonneau, City of Sioux Falls Health Department  
 Dr. Charles Chima, City of Sioux Falls Health Department  
 Alicia Collura, City of Sioux Falls Health Department  
 Shelby Kommes, City of Sioux Falls Health Department  
 Alan Roettger, City of Sioux Falls Housing  
 Lindsey Conrad, City of Sioux Falls Innovation and Technology  
 Grace Holsen, City of Sioux Falls Innovation and Technology  
 John Kiesow, City of Sioux Falls Innovation and Technology  
 Aileen Profir, City of Sioux Falls Innovation and Technology  
 Monique Christensen, City of Sioux Falls Libraries  
 Jodi Fick, City of Sioux Falls Libraries  
 Kelby Mieras, City of Sioux Falls Parks and Recreation  
 Chad Quissell, City of Sioux Falls Parks and Recreation  
 Andrew Siebenborn, City of Sioux Falls Police  
 Jon Thum, City of Sioux Falls Police  
 Heath Hoftiezer, City of Sioux Falls Public Works  
 Holly Meier, City of Sioux Falls Public Works  
 Jean Gross, Delta Dental  
 Katy Morris, EmBe  
 Kerri Tietgen, EmBe  
 Wendy White, Face it TOGETHER, Inc.  
 Michaela Gasca, Falls Community Health  
 Matt Gassen, Feeding South Dakota  
 Jeff Griffin, Greater Sioux Falls Chamber of Commerce  
 Fran Rice, Health Connect of South Dakota  
 Janet Kittams, Helpline Center  
 Joe Bartmann, Intersections Consulting  
 John Beranek, Intersections Consulting  
 Josh Merkley, Keystone Treatment Center  
 Bill Ladwig, Lewis Drug  
 Kristin Tuttle, Lifescape  
 Betty Oldenkamp, Lutheran Social Services  
 Kylee Sivertson, Lutheran Social Services  
 Ona Reker, Metro 911 Communications  
 Kari Benz, Minnehaha County Human Services  
 Brett Johnson, Minnehaha County Human Services  
 Lori Montis, Minnehaha County Human Services  
 Carol Muller, Minnehaha County Administration  
 Nancy Hodur, North Dakota State University Center for Social Research  
 Karen Olson, North Dakota State University Center for Social Research  
 Cole Fricke, POET  
 Todd Bechtold, Sanford Health  
 Sarah Bruns, Sanford Health  
 Josh Crabtree, Sanford Health  
 Ann Hamilton, Sanford Health  
 Paul Hanson, Sanford Health  
 Kelly Hefti, Sanford Health  
 Gwen Jensen, Sanford Health  
 Jennifer McDonald, Sanford Health  
 Andy Munce, Sanford Health  
 Mike Wilde, Sanford Health  
 Jay Powell, Sioux Empire United Way  
 Christina Riss, Sioux Empire United Way  
 Vicki Stewart, Sioux Falls Business Resource Network  
 Amy Benda, Sioux Falls Hope Coalition  
 Molly Satter, Sioux Falls School District  
 Dr. Jane Stavem, Sioux Falls School District  
 Candy Hanson, Sioux Falls Thrive  
 Rachel Gangle, Sioux Falls VA Health Care System  
 Timothy Pendergrass, Sioux Falls VA Health Care System  
 Lisa Simoneau, Sioux Falls VA Health Care System  
 Lisa Sanderson, SD Parent Connection  
 Michaela Seiber, SD Urban Indian Health  
 Taneeza Islam, SD Voices for Peace  
 Kim Hansen, Southeastern Behavioral Health Care  
 Julie Becker, St. Francis House  
 Sandy Lown, Teddy Bear Den



Across the nation, gaps in health are large, persistent and increasing—many of them caused by barriers set up at all levels of our society. After all, it's hard to be healthy without access to good jobs and schools and, safe, affordable homes. Health equity means increasing opportunities for everyone to live the healthiest life possible, no matter who we are, where we live, or how much money we make.

– ROBERT WOOD JOHNSON FOUNDATION

Health as defined by the World Health Organization is “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.”<sup>1</sup>

Thus in quantifying the aggregate health of a population, it is necessary to look at measures of longevity and quality of life, as well as disease burden. The health of a population is shaped by multiple factors including health behaviors, health care access and quality, and factors in the social and physical environment. To get a comprehensive view of population health in our community, we must look at the totality of these health determining factors that impact residents in their daily lives.

We conducted this community health assessment with the goal of developing a global view of population health in the Sioux Falls Metropolitan Statistical Area (MSA), which is comprised of four counties (Lincoln, McCook, Minnehaha, and Turner). The Sioux Falls MSA is the largest MSA in the state of South Dakota and constitutes more than one-third of the population of the state. The City of Sioux Falls is the major city in the MSA.

This report discusses the findings from the CHA, which was conducted January 2021 to December 2021 using a collaborative approach. The dimensions assessed and reported in this CHA are: health outcomes in

## EXECUTIVE SUMMARY

the population expressed in terms of disease burden and quantity and quality of life measures; risk factors and determinants of poor health; and community resources available to improve health status.

The CHA identifies areas for improvement as well as the community's strengths, assets and resources. Findings from the assessment will serve as a catalyst to promote collaboration and innovation, align expertise and partner resources towards the development of a Community Health Improvement Plan (CHIP), implementation of which will ultimately improve health in the community.

### METHODS

The CHA defined health in the broadest sense and recognized health shaping factors at multiple levels. Existing demographic, behavioral, social, and economic, and health care data were drawn from national, state, and local sources, such as the U.S. Census Bureau, the U.S. Centers for Disease Control and Prevention's Behavioral Risk Factor Surveillance System, the County Health Rankings, and South Dakota Department of Health Office of Health Statistics. Primary data was also obtained through a resident survey, focus group discussions, key informant interviews, and assessment of community resources in various sectors.

## FINDINGS

### About Our Community

Key findings about the demographic makeup of the community include:

- The population of Sioux Falls MSA according to the 2020 census is 276,730, representing a 21 percent growth from the population as at 2010 census. This far exceeds the state population growth of nearly nine percent and the national growth of just over seven percent over the same period.<sup>2</sup>
- The MSA population is younger than the state and U.S. population. The median age in Sioux Falls is 34.4 years, in South Dakota is 37 years, and in the U.S. is 38.1 years.<sup>3</sup>
- As Sioux Falls and the surrounding area continue to grow, the population is becoming increasingly more diverse. The non-Hispanic White population remains by far the major ethnic group but the proportion of the population that are Hispanic/Latino or Black/African American is growing.<sup>3</sup>
- Furthermore, 6.2 percent of the population in the MSA were born outside of the U.S and 7.9 percent speak a language other than English at home. These proportions are higher in the City of Sioux Falls. It is thus increasingly important to see that services in the area are culturally sensitive, that health information is made available in multiple languages, and that interpretation services are readily available for those who might need them.<sup>3</sup>
- Individuals with a disability comprise approximately 10 percent of the MSA, and veterans comprise 7.5 percent of the MSA population.<sup>3</sup>

### Health Outcomes

Although slightly better than state and national rates, the percentage of people reporting fair or poor health in the MSA has worsened over time, from 9.1 percent in 2016 to 14.3 percent in 2019. Overall, average life expectancy in the Sioux Falls area is higher than state and national averages, although Turner county and McCook county lag behind.<sup>4</sup>

The major health challenges in the area can be summarized under the following themes:

- high burden of chronic diseases, mental health disorders and injuries;
- poor oral health, especially in school-age children;
- growing threat of communicable diseases and other health issues; and
- disparities in health outcomes by geographic, socioeconomic, and racial/ethnic groups

The following observations give a snapshot of the status health indicators in the area.

#### Chronic Non-communicable Diseases

- Cancer and heart disease are by far the leading causes of death in the MSA. Cardiovascular diseases, which include heart disease and cerebrovascular disease, constitute the leading cause of death both locally, statewide, and nationally.<sup>5</sup>
- The top 10 causes of death are chronic, non-communicable diseases and injuries, except for influenza and pneumonia.<sup>5</sup>
- Compared to state and national averages, the MSA has higher age-adjusted incidence rates for the most common cancers in the U.S.<sup>6</sup>
- McCook County saw a significant increase in cancer incidence in the period 2016 to 2018.<sup>6</sup>

- 31 percent of adults in the area have been diagnosed with hypertension and there was a steady increase in the proportion of adults diagnosed with hypertension in the MSA from 2015 and 2019.<sup>4</sup>
- One in four adults in the MSA have been diagnosed with high blood cholesterol. Although lower than state and national rates, this points to a significant burden of a major metabolic risk factor for CVD.<sup>4</sup>
- The percentage of adults with diagnosed diabetes went up significantly between 2016 and 2019 for both the state of South Dakota and the Sioux Falls MSA.<sup>4</sup>
- In the MSA, 35.5 percent of the adult population were estimated to be obese as of 2019. This was a significant jump from the preceding three years.<sup>4</sup>
- Asthma rates are higher in the MSA compared to the state average, while COPD rates are lower in the MSA.<sup>4</sup>
- In the MSA, 27 percent of adults report not keeping at least an annual dental visit.<sup>4</sup> One out of every three adults have lost at least one permanent tooth, and 12 percent of adults aged 65 and older have lost all of their natural teeth.<sup>4</sup> While these figures are slightly better than state and national rates, they point to a poor state of oral health and gaps in uptake of preventive oral care services.
- There is evidence of poor oral health among children in South Dakota and the Sioux Falls area:
  - 56.5 percent of third grade children in South Dakota have a history of dental decay.<sup>7</sup>
  - The 2019 Youth Risk Behavior Survey showed that 20 percent of South Dakota high school students had missed school in the past 12 months because of problems with their teeth or mouth.<sup>8</sup>
  - 20 percent of the general population of elementary school students screened at three school-based dental clinics in the Sioux Falls School District<sup>9</sup> in 2021 had signs of obvious or probable tooth decay on visual examination. 56.2 percent of those referred and successfully enrolled in dental services at these schools already have dental decay.

#### Injury and Accidental Death

- Intentional and unintentional injuries are the leading causes of death in Americans aged 1 to 44 years.<sup>10</sup> In the Sioux Falls MSA, death rate from injuries (intentional and unintentional, combined) is lower than the state and national rates. However, rates vary among the four counties, with the highest rate seen in Minnehaha County, which exceeds the national average.<sup>10</sup>
- Unintentional fall deaths are particularly high in Minnehaha County; the unintentional fall death rate in Minnehaha County is more than double the national rate.<sup>10</sup>
- Rates of death by suicide are higher locally (Minnehaha County) and in the state of South Dakota than the national average.<sup>10</sup>

#### Mental Health and Substance Use

- Mental health and related topics were frequently mentioned during the 2021 CHA Focus Group discussions as top health issues facing the community.<sup>11</sup>
- In 2019, 20 percent of adults reported that they have been diagnosed with depression.<sup>4</sup> This is comparable to the U.S. average but higher than the average for South Dakota. The percentage of adults diagnosed with depression is also trending upwards.<sup>4</sup>



- Drug overdose incidents and substance use treatment admissions are higher in the MSA compared to the state average.<sup>12</sup> At the individual county level, Minnehaha County is primarily driving the rates in the MSA.

### Communicable Disease

- As of December 2021, confirmed deaths per capita as a result of COVID-19 varied significantly among the counties in the area.<sup>13</sup> Whereas the rates in McCook and Turner far exceeded state and national death rates, Lincoln and Minnehaha counties had much smaller death rates than the state and country. Also, the vaccination rate (first dose of any COVID-19 vaccine) in Minnehaha county exceeded national and state rates, Lincoln county had a comparable rate, while McCook and Turner counties lagged significantly behind both state and national rates.<sup>14</sup>
- Rates of sexually transmitted infections are going up in the area. Particularly, gonorrhea cases per 100,000 population jumped significantly between 2015 and 2019, with Minnehaha County in the lead.<sup>15</sup>

### Health Disparities

- There are significant disparities in health outcomes in the state and area:
  - Within the Sioux Falls city limits, life expectancy varies by more than 15 years between census tracts.<sup>16</sup>
  - The American Indian population, populations with lower income, and those with fewer years of education have a higher burden of depression, diabetes, and obesity.<sup>17</sup> American Indians also have a much higher rate of death from injuries.<sup>10</sup>
  - Other racial/ethnic minorities generally fare worse than non-Hispanic Whites.
  - Blacks experience a much higher incidence and prevalence of HIV than other racial/ethnic groups.<sup>15</sup>
  - There are marked disparities in behavioral and environmental health determinants. For example, racial/ethnic minorities, people with low income, and fewer years of education have much higher smoking rates.<sup>17</sup>

### Health Determinants

The major drivers of poor health in the MSA include:

- Behavioral factors such as high rates of use of alcohol, tobacco, and other substances<sup>4</sup>; low levels of physical activity<sup>4</sup>; and unhealthy dietary behaviors such as high level of consumption of sugar sweetened beverages<sup>4</sup> and low levels of consumption of fruits and vegetables<sup>4</sup>.
- Environmental factors, particularly in the built environment, that create barriers to healthy eating and active living lifestyles, such as presence of food deserts in the area<sup>18</sup>; and limited public transit options and active transportation (biking) infrastructure<sup>19,20</sup>.
- Socioeconomic factors such as food insecurity<sup>21</sup>, limited availability of affordable housing options<sup>22</sup>, and gaps in digital access<sup>23</sup>.
- Inadequate access to and quality of health care services as a result of factors including limited supply of dental and mental health providers<sup>24</sup>, lack of health insurance coverage<sup>3</sup>, rising cost of care<sup>19</sup>, and inadequate use of clinical preventive services.

### Health Behaviors

- When asked about health behaviors and health issues that were of the greatest concern, respondents to the 2021 CHA Survey of MSA residents ranked alcohol and drug use among the top concerns<sup>19</sup>. In addition, survey respondents also indicated that services to address addiction was second only to mental health in terms of health care services they would like to see offered or improved in the community.<sup>19</sup>
- In recent years, the Sioux Falls MSA has seen an increase in both heavy drinking and binge drinking, with rates that are higher than the national average. Excessive alcohol use can be categorized as “heavy drinking,” meaning more than 14 drinks per week for men and 7 drinks per week for women, and “binge drinking,” which is defined as consuming 4 or more drinks per occasion for women or 5 or more drinks per occasion for men. With respect to heavy drinking, the MSA rate rose from 4.1 percent in 2015 to 7.9 percent in 2019, and the binge drinking rate for the MSA increased from 17.1 percent in 2015 to 21.4 percent in 2019.<sup>4</sup>
- 28 percent of driving deaths in the MSA have alcohol involvement.<sup>25</sup>
- While local, statewide, and national adult smoking rates have been generally trending downward slowly, the Sioux Falls MSA saw a slight increase from 2018 to 2019.<sup>4</sup>
- Notwithstanding the strong policy and regulatory environment, adolescents continue to initiate and use tobacco products at high rates, necessitating further interventions to limit access to tobacco products in this population and improve their agency to resist or quit use of tobacco products. 12 percent of high school students in South Dakota have recent history of smoking cigarettes while the rate for vaping is nearly 24 percent.<sup>8</sup>
- Adults in the MSA fall significantly short of meeting recommendations for fruit and vegetable consumption. Nearly 40 percent of adults report consuming fruits less than once per day and 18 percent report the same for vegetable consumption.<sup>4</sup>
- A national study estimated that 72.5 percent of South Dakota adults consume sugar sweetened beverages (SSBs) once daily or more, compared to a national rate of 63 percent.<sup>4</sup> With such a high rate, South Dakota ranked 48th in the nation. Furthermore, in 2019, 14.4 percent of South Dakota high school students reported drinking regular soda/pop at least one time per day while 8.4 percent reported drinking two or more of such drinks per day.<sup>8</sup>
- Stakeholders ranked all sectors (community settings, health care, and worksites) except schools, as having gaps in policy, regulation, and environment (PRE) and in education and awareness (EA) strategies to improve nutrition.<sup>26</sup>
- Nearly 26 percent of adults in the MSA do not participate in any physical activity outside of their regular job.<sup>4</sup> In addition, 79 percent of adults in the area do not meet the recommended guidelines for both aerobic and muscle strengthening activity, which shows a slight improvement from recent years but is still worse than national average.<sup>4</sup>
- Stakeholders identified community settings as needing improvements in policy, regulation, and environment (PRE) strategies to promote physical activity.<sup>26</sup>



### Healthcare Access and Quality

- Sioux Falls MSA generally has a low supply of dentists and mental health providers. Access to primary care providers in the MSA looks good compared to state and national benchmarks, with the exception of McCook County.<sup>24</sup>
- For those who had not recently had a routine medical check-up, COVID-19 was the number one reason why they had not been to a provider, with perception that they had “no need to see the doctor” and “cost” as other top reasons. This points to financial barriers as well as personal factors such as limited health literacy.<sup>19</sup>
- 12 percent of respondents to the CHA resident survey indicated they had a medically necessary care need but did not receive care.<sup>19</sup> Financial barriers (51 percent cited inability to pay or cost concerns and 31 percent cited lack of health insurance) were by far the most common reasons for skipping necessary care, besides COVID-19. A significant proportion also reported the reasons were due to organizational-level barriers, including long wait times (17 percent), not feeling welcome or valued at the clinic (16 percent), and inconvenient clinic hours (9 percent). This points to opportunities to improve patient-centered care.
- Availability of affordable, quality mental health care has consistently been rated lower than other services.<sup>20</sup>
- The rate of hospital stays for Ambulatory-care Sensitive Conditions in counties in the MSA are comparable to the state rate, but are much higher than the national rate.<sup>27</sup>

### Social and Economic Factors

- While poverty rates in the MSA for both adults and children are well below state and national averages, poverty remains an important community issue because of its widespread impacts on affected individuals and families.<sup>3</sup>
- Food insecurity (i.e. limited or uncertain access to adequate food), is less prevalent in the MSA when compared to state and U.S. averages. Yet, more than eight percent of the population in the area were food insecure in 2019.<sup>21</sup>
- In the 2021 CHA Resident Survey, 66 percent rated the ability of residents to access healthy and nutritional foods in the community as excellent or very good, while 13 percent rated access as fair or poor.<sup>19</sup>
- Food deserts in the area have worsened since the last Community Health Assessment.<sup>18</sup>
- Housing access was regarded as one of the biggest barriers to creating a healthy community. Among MSA residents responding to the CHA Resident Survey, 41 percent consider availability of affordable housing in the area as fair or poor.<sup>19</sup>
- 9 percent of MSA households experience severe housing cost burden, meaning they spend 50 percent or more of their household income on housing.<sup>3</sup>

### Physical Environment

- 84.3 percent of the MSA population drive alone to work, compared to 81 percent for South Dakota.<sup>3</sup>
- 30 percent of MSA population rate the ability of residents to access daily transportation as fair or poor.<sup>19</sup>

- Biking/walking trails are rated highly, while ease of walking, traveling by bicycle or traveling by public transportation are ranked lower.<sup>19, 20</sup>
- Cost, accessibility and coverage area were cited as concerns related to public transportation.<sup>11, 19</sup>
- The walk score, bike score, and transit score for the City of Sioux Falls show gaps in the built environment:<sup>28</sup>
  - o Walk Score is 37 (out of 100), indicating the city is “car-dependent” (e.g. most errands require a car);
  - o Bike Score is 46 (out of 100), indicating “somewhat bikeable” due to limitations in bike infrastructure for commuting;
  - o Transit Score is 17 (out of 100), indicating minimal transit options.
- All four counties in Sioux Falls MSA are in a high-risk region for environmental radon exposure.<sup>29</sup> Radon is the second leading cause of lung cancer in the US, behind smoking.

### Identifying Health Priorities

With the release of this CHA report, the community partners will initiate a process to develop a collaborative Community Health Improvement Plan (CHIP), which will include strategies to improve key areas affecting health and well-being. Partners will identify priorities using criteria such as scope of the issue, urgency, economic feasibility, potential for impact, availability of community assets, and value to the community.

This process will engage leaders of the community in all sectors—non-profit and for-profit, public and private entities—beginning in early 2022. We encourage all residents to read this CHA report and to join us as we move into the CHIP process and implement action steps over the next three years to build a healthier community.



# Key Indicators in the Sioux Falls MSA



**41%**  
rate affordable housing as fair/poor



**18%** of adults consume vegetables less than once per day

**2.2%**  
unemployment



**Only 42%** of surveyed adults positively rated public transportation



**51%** of adults delaying medical care cite inability to pay



**21%** population growth 2010-2020

**8%**  
of adults are food insecure

**Gonorrhea cases** in the MSA exceed state and national rates

**15 year** difference in life expectancy among Sioux Falls census tracts



**35.5%** of adults with obesity

**37** out of **100** WalkScore

**Cancer and heart disease** are the leading causes of death



**21.4%** of adults binge drink



**27%** of adults do not get an annual dental visit

**31%**

of adults diagnosed with hypertension

**20%** of a sample of Sioux Falls elementary school students have signs of tooth decay

**9.9%** of adults and **4.5%** of children are uninsured

**\$235,000** median home sales price



**79%** of adults do not meet physical activity guidelines



**40%** of adults consume fruits less than once per day



**16.3 %** adult smoking rate

**13.7%** of households lack internet connection at home

**\$65,621** median household income





# INTRODUCTION

For the purpose of this report, “community” was defined as the Sioux Falls Metropolitan Statistical Area (MSA), anchored by the city of Sioux Falls and including the counties of Lincoln, McCook, Minnehaha, and Turner in the state of South Dakota. This area represents where approximately 50 percent of the Sioux Falls hospital inpatient discharges originate. While South Dakota counties are predominantly rural, the majority of Minnehaha County is classified as urban.

The role of public health is to promote and protect the health of people and the communities where they live, learn, work and play.<sup>30</sup>

The 10 Essential Public Health Services<sup>31</sup> (Figure 1) describe public health activities that all communities should undertake to promote and protect health.

These essential public health services, include:

- Assess and monitor population health status, factors that influence health, and community needs and assets
- Investigate, diagnose, and address health problems and hazards affecting the population
- Communicate effectively to inform and educate people about health, factors that influence it, and how to improve it
- Strengthen, support, and mobilize communities and partnerships to improve health

**Figure 1: 10 Essential Public Health Services**



Data Source: 10 Essential Public Health Services Futures Initiative Task Force. 10 Essential Public Health Services. September 9, 2020. <https://phnci.org/uploads/resource-files/EPHS-English.pdf>

- Create, champion, and implement policies, plans, and laws that impact health
- Utilize legal and regulatory actions designed to improve and protect the public's health
- Ensure an effective system that enables equitable access to the individual services and care needed to be healthy
- Build and support a diverse and skilled public health workforce
- Improve and innovate public health functions through ongoing evaluation, research, and continuous quality improvement

- Build and maintain a strong organizational infrastructure for public health

Actively promoting policies, systems, and overall community conditions enable optimal health for all people. Communities should also work to remove systemic and structural barriers that result in health inequities. By actively working within these key service areas, we can ensure that everyone has a fair and just opportunity to achieve optimal health and well-being. Conducting a comprehensive community health assessment (CHA) is a critical element of community health promotion and protection.

### CHA PURPOSE AND SCOPE

The purpose of the CHA was to develop a global view of population health, including the prevalence of diseases and health issues, in the Sioux Falls Metropolitan Statistical Area (MSA), which is comprised of four counties (Lincoln, McCook, Minnehaha, and Turner), with the City of Sioux Falls as the major city within the MSA. The dimensions assessed and reported in this CHA are: health outcomes in the population expressed in terms of disease burden and quantity and quality of life measures; risk factors and determinants of poor health; and community resources available to improve health status.

The CHA identifies the community's strengths and areas for improvement. Findings from the assessment will serve as a catalyst to promote collaboration and innovation, align expertise and partner resources towards the development of a Community Health Improvement Plan (CHIP), implementation of which will ultimately improve community health.

The CHA process utilized the South Dakota Good & Healthy Communities Assessment framework (Figure 2), a state-based model for community health assessment and improvement. The CHA partners developed a multi-faceted assessment that included quantitative and qualitative methods of data collection and that actively sought feedback from key stakeholders and community residents.

The partners made a good faith effort to engage community representatives in each component of the assessment process, and opportunity was given for public comments and feedback prior to finalization of the assessment. For the previous CHA (2019), none of the partners received community comments or questions.

**Figure 2: Community Health Assessment Framework**





## Regulatory Requirements

Federal regulations stipulate that non-profit medical centers conduct a community health needs assessment at least once every three years and prioritize the needs for the purpose of implementation strategy development and submission in accordance with the Internal Revenue Code 501(r). The Internal Revenue Code 501(r) requires that each hospital must have: (1) conducted a community health needs assessment in the applicable taxable year; (2) adopted an implementation strategy for meeting the community health needs identified in the assessment; and (3) created transparency by making the information widely available.

The regulations also stipulate that each medical center take into account input from persons who represent the broad interests of the community. Hospitals are required to seek at least one state, local, tribal or regional government public health department or state Office of Rural Health with knowledge, information or expertise relevant to the health needs of the community. Non-profit hospitals are required to seek input from members of medically underserved, low income, and minority populations in the community, or organizations serving or representing the interest of such populations, and underserved populations experiencing disparities or at risk of not receiving adequate care as a result of being uninsured or due to geographic, language or financial or other barriers.

The community health assessment includes a process to identify community resources that are available to address the assessed needs and to prioritize the needs. Hospitals are to address each assessed need or explain why they are not addressing the needs. Once the needs have been identified and prioritized, hospitals must develop an implementation strategy to address top needs. The strategies are reported on the IRS 990 and a status report must be provided each year on IRS form 990 Schedule H. Finally, hospitals are to be transparent with the findings and make the written CHA report available to anyone who asks for the report. In addition to having printed copies available upon request, this CHA report is available on all of the partner websites.

## METHADODOLOGY

A mixed methods approach was employed in this CHA, including primary and secondary data sources and the use of qualitative and quantitative research methods and data. Primary data sources included a Community Health Assessment Resident Survey, Focus Group Discussions, Key Informant Interviews, and a Community Sector Assessment of Resources that was held specifically for the CHA. Secondary data sources included CDC's Behavioral Risk Factor Surveillance System, the U.S. Census Bureau Census Data and American Community Survey, the National Community Survey, The County Health Rankings, South Dakota Department of Health Office of Health Statistics, select program data from healthcare providers, and data from local government departments in the City of Sioux Falls including Police Department, Planning and Development Services, and Innovation and Technology, among others. Further details on some of these data sources are provided below.

### 2021 Community Health Assessment Resident Survey (2021 CHA Survey)

Community members were asked a series of questions through an online survey designed in partnership with health experts and public health officials across the Sanford Health footprint. The tool was designed to understand the needs of the community and was based upon the University of Wisconsin County Health Rankings Population Health model. Each respondent was asked to rate community health drivers from poor to excellent. Any response other than excellent was offered a follow up opportunity to comment on the reason. Respondents were also asked a series of questions specific to their health care access, health care quality, barriers to care, travel to care, and insurance. The survey was sent to a sample of the Sioux Falls MSA population secured through Qualtrics, a qualified vendor. The full set of questions is available in the appendix.

To further promote community involvement, the survey was also sent electronically to community stakeholders and elected officials with knowledge and connections amongst medically underserved, low income, or minority populations. Stakeholders were asked to complete the instrument as a resident of the community and forward the survey to their respective populations for greater involvement. The survey was also promoted to community stakeholders by the CHA partners through news articles, social media posts and paid social media advertising. A total of 739 respondents from the Sioux Falls MSA completed the survey. The data from the CHA Survey are not necessarily generalizable to the entire community.

### Focus Group Discussions and Key Informant Interviews

Avera McKennan Hospital & University Health Center contracted with Intersections Consulting, a private consulting firm, to develop, facilitate, compile, and analyze focus group and key informant interview content for this needs assessment. References to Sioux Falls include the surrounding metro area (i.e. the Sioux Falls MSA). Intersections Consulting facilitated two community listening sessions and six key informant interviews. Key informants were asked to validate focus group conclusions on the subjects of community assets, barriers, and top recommendations. All community listening sessions followed a similar pattern framed in four parts:

- A warm-up conversation to get participants in a community health mindset, using an *Elements of a Healthy Community* visual;
- A scan of what is happening, trending and emerging, using a *Wave* visual;
- A dive into underlying structures and deeper thinking that is driving community health, using an *Iceberg* visual; and

- A catch-all approach to gathering advice for community health systems of all kinds, using a *Dear Health Systems* visual.

Considering the ongoing COVID-19 pandemic at the time of this assessment, all Community Listening Sessions were facilitated virtually using Zoom video calls. Some participants did not use video. Intersections Consulting also utilized a virtual facilitation app called Miro during group sessions to encourage hands-on engagement in the process.

Facilitators approached the listening sessions through a whole-community systems lens. All participants were informed that when the term *health system* was used, the team was referring not to any particular healthcare system (e.g. Avera Health, Sanford Health, etc.), but to any community organization or player in the system that support better community health of all kinds in the Sioux Falls region.

### Community Sector Assessment

Community members in all sectors have a role to play in improving health. Similar to the 2016 and 2019 CHA processes, the partners utilized the South Dakota Good & Healthy Community Checklist (The Checklist), which is a valid and tested tool to help communities assess local policy, regulations, and environment, as well as education and awareness regarding physical activity, nutrition, tobacco use, chronic disease management, and school health.

The Checklist was developed and adapted from the Ohio Healthy Communities Checklist and with approval from the Primary Prevention Section and Creating Healthy Communities Program, Ohio Department of Health. The sectors included in this portion of the assessment include schools, worksites, health care sector, and the community sector, which includes departments of the City of Sioux Falls government and community organizations. The four health indicators—nutrition, physical activity, tobacco, and chronic disease management—were assessed for each sector. Within each module, indicators are scored to provide insight regarding the health of each sector in the community.

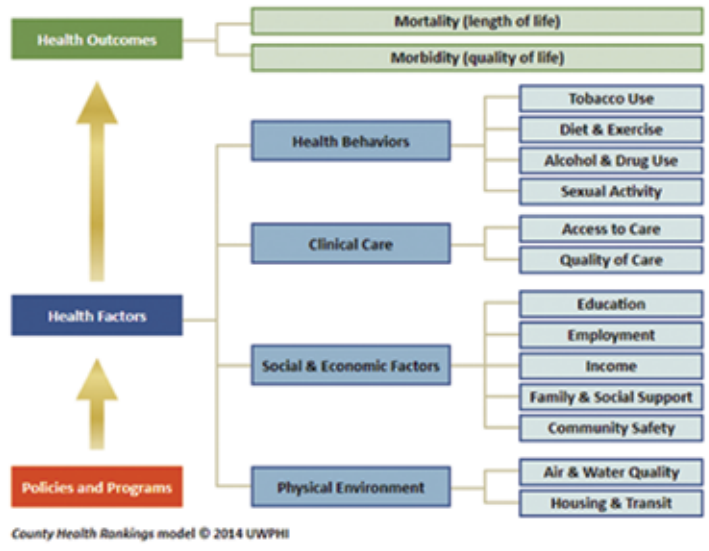
Each Module (Policy/Regulations and Environment, and Education and Awareness) located within each of the health areas (physical activity, nutrition, tobacco, and chronic disease management) is scored based on a scale ranging from 0–3, understanding that all strategies included in the Module may not be applicable to each community. The strategies are scored with their corresponding drop-down box, and then a total score of all strategies within each Module is calculated. This assessment tool identifies opportunities that cross all sectors and also those specific to a sector or health topic. Opportunities for improvement exist where the score is less than 60 percent.

### Secondary Data

In addition to the primary data collection methods described in this section, this report also relied on several quantitative demographic and population health data to build a comprehensive health profile for the Sioux Falls MSA.

The County Health Rankings and Roadmaps is an initiative of the University of Wisconsin Population Health Institute that seeks to measure the health of nearly every county in all 50 states in the U.S. and serve as the main secondary data source utilized for the community health needs assessment.<sup>32</sup> The County Health Rankings provided a great starting point for viewing county-level population health indicators, which were further explored in other secondary data sources. The County health Rankings

**Figure 3: County Health Rankings Model**



model (Figure 3) also served as a good framework for organizing the secondary data gathered for this community health assessment.

The Sioux Falls Metropolitan Statistical Area Calculator is a tool that was developed on behalf of the CHA Steering Committee to generate MSA rates for the study area using county-level data for the four counties that make up the MSA. The calculator takes, as input, data from all four counties as well as the start year and end year for the statistic. It then uses Census Bureau population estimates for each of the years to average the population over the provided range and then multiply each county's rate by its average population. That number is then divided by the average MSA population over the same time period. This method provides a single MSA number for the metro area that reflects, proportionally, the make-up of the four counties. Throughout this report, footnotes are used for tables and figures using the calculator to provide the MSA data. This approach was relied on to generate estimates for several health indicators where county-level data was available but weren't available for the geographic unit of interest.

This report also includes references to other data sources, such as the Behavioral Risk Factor Surveillance System, the U.S. Census Bureau Census Data and American Community Survey, state-level data from the South Dakota Department of Health Office of Health Statistics, select program data from healthcare providers, and data from local government departments in the City of Sioux Falls including Police Department, Planning and Development Services, and Innovation and Technology, among others. This CHA also references data from The National Community Survey (2021), developed by the experts at Polco's National Research Center to capture residents' opinions about livability in the community. The National Community Survey provides the opinions of a representative sample of 598 residents of the City of Sioux Falls collected from January 4, 2021 to February 22, 2021. The margin of error around any reported percentage is 4% for all respondents and the response rate for the 2020 survey was 21%. Survey results were weighted so that the demographic profile of respondents was representative of the demographic profile of adults in Sioux Falls.



## LIMITATIONS

The findings in this CHA provide an overall snapshot of demographic indicators, health factors impacting the health of residents living in the community, and the status of health outcomes at the time of the assessment. Despite the best efforts made, there were a few limitations related to the availability, timing, and quality of data. While there are several secondary data sources that provide high quality information on population health indicators at the national and state levels, many do not sample at a level that allows for quantification of health for metro areas the size of Sioux Falls MSA. Thus for some of the measures, the best that could be done for this round of CHA was to rely on state-level estimates. However, since the Sioux Falls MSA accounts for more than one-third of the state's population, extrapolating state-level data in certain areas such as for health disparities would be considered a reasonable alternative.

Although data collection was done in the year 2021 for this 2022 CHA report, for secondary data sources we can only report the most recent available data. Thus for some measures, the most recent available data may be for the year 2019 for example. We clearly indicate the timing for all measures obtained from secondary data sources.

Whereas the limitations on availability and timing of data noted above apply to secondary data sources, they do not apply to the primary data from the resident survey, focus group discussions, and key informant interviews, which were done in 2021. For these, a good faith effort was made to secure input from a broad base of the community. However, the final samples included in the surveys and qualitative

studies may not be proportionally representative of every demographic group in the community. They also do not capture demographic or geographic variations in views or responses.

To mitigate the above limitations, the CHA triangulated data on community health from several data sources and perspectives. Oftentimes, we found that information from several data sources and study types pointed to the same conclusions, thus increasing our confidence in the reported findings. The process of checking the preliminary results with institutional knowledge by the CHA partners and other stakeholders, community members, and community leaders that have knowledge and expertise regarding special populations allowed us to further probe and refine the findings.

## FINDINGS

The CHA findings are presented in the subsequent sections of this report in three broad categories:

1. About Our Community—a demographic profile of the community.
2. Health Outcomes—an overview of health status in the community using aggregate measures of mortality (length of life) and morbidity (quality of life and disease burden).
3. Health Determinants—a review of underlying factors that are driving or contributing to the observed health outcomes.

Wherever possible, given the available data, racial/ethnic, socioeconomic, and geographic disparities in health outcomes and health determinants are highlighted.





# ABOUT OUR COMMUNITY

For the purpose of this report, “community” was defined as the Sioux Falls Metropolitan Statistical Area (MSA), which is anchored by the City of Sioux Falls and includes the counties of Lincoln, McCook, Minnehaha, and Turner in the state of South Dakota. This area represents where approximately 50 percent of the Sioux Falls hospital inpatient discharges originate. While South Dakota counties are predominantly rural, the majority of Minnehaha County is classified as urban.

Sioux Falls is the largest city in South Dakota, with the metro area accounting for more than 30 percent of the state’s population. With an area of about 80.12 square miles, it is the county seat of Minnehaha County and also extends into Lincoln County to the south.<sup>33</sup>

Amid several strong years of construction, job growth, and quality of life investments, Sioux Falls experienced substantial population growth in the last decade, with growth rates that tripled the U.S. growth rate (Tables 1 and 2).

**TABLE 1: POPULATION**

	Sioux Falls	Sioux Falls MSA	South Dakota	U.S.
2018	174,151	255,438	864,289	864,289
2019	177,117	259,348	870,638	870,638

DATA SOURCE: United States Census Bureau. (2019). American Community Survey Data. <https://www.census.gov/programs-surveys/acs/data.html>

**TABLE 2: POPULATION GROWTH BETWEEN 2010 CENSUS AND 2020 CENSUS**

	2010	2020	10-year Percentage Growth
SIoux FALLS	153,888	192,517	25.10%
SIoux FALLS MSA	228,261	276,730	21.23%
SOUTH DAKOTA	814,180	886,667	8.9%
UNITED STATES	308,745,538	331,449,281	7.35%

DATA SOURCE: United States Census Bureau. (2020). QuickFacts. <https://www.census.gov/quickfacts/fact/table/US/PST045219>





According to the City of Sioux Falls Planning and Development Services, Sioux Falls' population grew by 5,100 in 2020 (2.7 percent growth rate), compared to a 3,550-person increase in 2019 (1.9 percent growth rate).<sup>34</sup> The city averaged a 4,100 person annual increase for more than ten years. Since January 1, 2000, Sioux Falls has increased in population by 71,000 people, and the city population is projected to be 251,000 by 2040.

Nearly 17 percent of Americans are aged 65 years and older (Table 3), and that percentage is growing. In 2030,

more than one in five people in the U.S. will be 65 years old or older. Furthermore, between 2020 and 2050, the number of people 65 and older is expected to increase from 56 to 86 million.<sup>35</sup> The Sioux Falls area population is younger than the state and U.S. population (Table 3). The median age in Sioux Falls is 34.4 years, in South Dakota is 37 years, and in the U.S. is 38.1 years.<sup>3</sup> The Sioux Falls MSA population is almost evenly divided between males and females (Table 4).

**TABLE 3: POPULATION BY AGE, PERCENT OF POPULATION**

	Sioux Falls	Sioux Falls MSA	South Dakota	U.S.
UNDER 18 YEARS	25.0%	25.9%	24.5%	22.3%
18–64	62.3%	61.1%	59.2%	61.7%
65 AND OVER	12.7%	13.0%	17.2%	16.5%

DATA SOURCE: United States Census Bureau. (2019). American Community Survey Data. <https://www.census.gov/programs-surveys/acs/data.html>

**TABLE 4: POPULATION BY GENDER, PERCENT OF POPULATION**

	Sioux Falls	Sioux Falls MSA	South Dakota	U.S.
MALE	49.9%	50.2%	50.5%	49.2%
FEMALE	50.1%	49.8%	49.5%	50.8%

DATA SOURCE: United States Census Bureau. (2019). American Community Survey Data. <https://www.census.gov/programs-surveys/acs/data.html>

As Sioux Falls and the surrounding area continue to grow, the population is becoming increasingly more

diverse. The top three racial/ethnic groups in the MSA are White, Hispanic/Latino, and Black (Table 5).

**TABLE 5: POPULATION BY RACE AND ETHNICITY, PERCENT OF POPULATION**

	Sioux Falls	Sioux Falls MSA	South Dakota	U.S.
WHITE ALONE, NOT HISPANIC/LATINO	80.9%	85.4%	81.9%	60.7%
BLACK/AFRICAN	6.2%	4.5%	2.3%	13.4%
AMERICAN INDIAN/ALASKAN	2.1%	1.6%	9%	1.3%
ASIAN	2.5%	1.8%	1.5%	5.9%
NATIVE HAWAIIAN/PACIFIC ISLANDER	0.00%	0	0.1%	0.2%
HISPANIC/LATINO	5.5%	4.3%	4.2%	18.5%
TWO+ RACES	3.2%	2.4%	2.5%	2.8%

DATA SOURCE: United States Census Bureau. (2019). American Community Survey Data. <https://www.census.gov/programs-surveys/acs/data.html>

Data now available from the 2020 Census suggests that the population in the city of Sioux Falls is even more diverse, with 77.6 percent Non-Hispanic White, 6.4 percent Hispanic/Latino, and 6.3 percent Black.<sup>2</sup> Furthermore, 6.2 percent of the population in the MSA were born outside of the United States (Table 6) and 7.9 percent speak a language other than English at

home (Table 7). These proportions are higher in the city of Sioux Falls. It is increasingly important to see that services in the area are culturally sensitive, that health information is made available in multiple languages, and that interpretation services are readily available for those who might need them.

**TABLE 6: FOREIGN BORN PERSONS, PERCENT OF POPULATION**

	Sioux Falls	Sioux Falls MSA	Lincoln	McCook	Minnehaha	Turner	South Dakota	U.S.
PERCENT OF FOREIGN BORN BY REGION (CITIZEN AND NON-CITIZEN) MOE* VERY HIGH	8.5%	6.2%	2.6%	2.4%	7.6%	1.1%	4.1%	13.7%
EUROPE	0.3%	0.3%	N/A	N/A	0.2%	N/A	0.3%	1.4%
ASIA	2.2%	1.7%	N/A	N/A	1.9%	N/A	1.1%	4.3%
AFRICA	4.4%	3.2%	N/A	N/A	4.2%	N/A	1.2%	0.8%
OCEANIA	0%	0%	N/A	N/A	0%	N/A	0.2%	0.1%
LATIN AMERICA	1.8%	1.4%	N/A	N/A	1.7%	N/A	1.0%	6.7%
NORTHERN AMERICA	0.1%	0.1%	N/A	N/A	0.1%	N/A	0.1%	0.2%

\*Margin of Error

DATA SOURCE: United States Census Bureau. (2019). American Community Survey Data. <https://www.census.gov/programs-surveys/acs/data.html>





**TABLE 7: LANGUAGE SPOKEN AT HOME, PERCENT OF POPULATION**

	Sioux Falls	Sioux Falls MSA	Lincoln	McCook	Minnehaha	Turner	South Dakota	U.S.
ENGLISH ONLY/SPEAKS ENGLISH VERY WELL	95.5%	96.7%	98.9%	98.3%	95.9%	98.9%	97.8%	91.6%
SPEAKS ENGLISH LESS THAN "VERY WELL"	4.5%	3.3%	1.1%	1.7%	4.1%	1.1%	2.2%	8.4%
LANGUAGE OTHER THAN ENGLISH AT HOME	10.4%	7.9%	4.7%	3.5%	9.2%	2.7%	6.4%	21.6%

(Population 5 years+)

DATA SOURCE: United States Census Bureau. (2019). American Community Survey Data.

<https://www.census.gov/programs-surveys/acs/data.html>

As we continue to work with partners to improve health and well-being in our community, it is essential to consider the unique needs of various populations, including individuals with disabilities and veterans in

the community. Currently, individuals with a disability comprise approximately 10 percent of the Sioux Falls MSA, and veterans comprise 7.5 percent of the MSA population (Tables 8 and 9).

**TABLE 8: DISABILITY CHARACTERISTICS, PERCENT OF POPULATION**

	Sioux Falls	Sioux Falls MSA	South Dakota	U.S.
INDIVIDUALS WITH DISABILITY	10.2%	9.9%	12%	12.6%
TYPES OF DISABILITY				
HEARING DIFFICULTY	2.8%	3.0%	4.1%	3.6%
VISION DIFFICULTY	1.6%	1.6%	2.0%	2.3%
COGNITIVE DIFFICULTY	4.4%	4.0%	4.4%	5.1%
AMBULATORY DIFFICULTY	4.9%	4.7%	5.8%	6.9%
SELF-CARE DIFFICULTY	1.8%	1.6%	1.9%	2.6%
INDEPENDENT LIVING DIFFICULTY	4.5%	4.0%	4.6%	5.8%

DATA SOURCE: United States Census Bureau. (2019). American Community Survey Data.

<https://www.census.gov/programs-surveys/acs/data.html>

**TABLE 9: VETERAN STATUS, PERCENT OF POPULATION**

	Sioux Falls	Sioux Falls MSA	Lincoln	McCook	Minnehaha	Turner	South Dakota	U.S.
VETERANS % CIVILIAN POP>18 YEARS	6.9%	7.5%	7.3%	7.9%	7.5%	8.7%	8.8%	7.3%
# OF VETERANS	9,178	14,351	2,988	317	10,494	552	2.2%	18,230,322
VETERANS BY GENDER								
MALE	89.8%	90.4%	88.0%	90.9%	9.1%	92.8%	91.6%	91.1%
FEMALE	10.2%	9.6%	12.0%	9.1%	9.0%	7.2%	8.4%	8.9%

DATA SOURCE: United States Census Bureau. (2019). American Community Survey Data.

<https://www.census.gov/programs-surveys/acs/data.html>



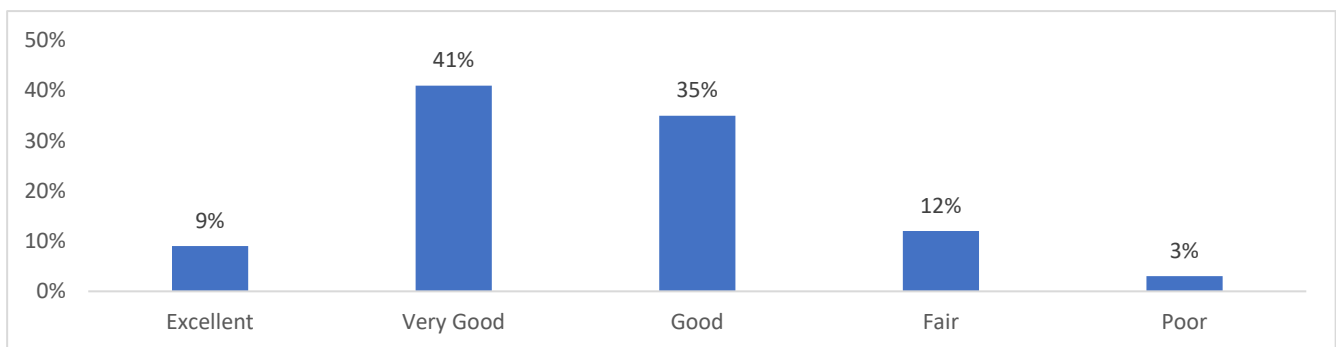
## HEALTH OUTCOMES

Health can be measured in a number of ways, from looking at causes of death to examining the impact of physical and mental health factors on quality of life. In this report, we quantify the population health of Sioux Falls area residents using aggregate measures of mortality (length of life) and morbidity (quality of life and disease burden).

### HEALTH-RELATED QUALITY OF LIFE

Overall, a majority of residents in the Sioux Falls MSA consider themselves to be in good health, as reflected in Figure 4 below. About 15 percent consider their health to be fair or poor, similar to the most recent estimate (14.3 percent) from the Behavioral Risk Factor Surveillance Survey (Figure 5).

**Figure 4: Resident Perceptions of Their State of Health and Wellness**

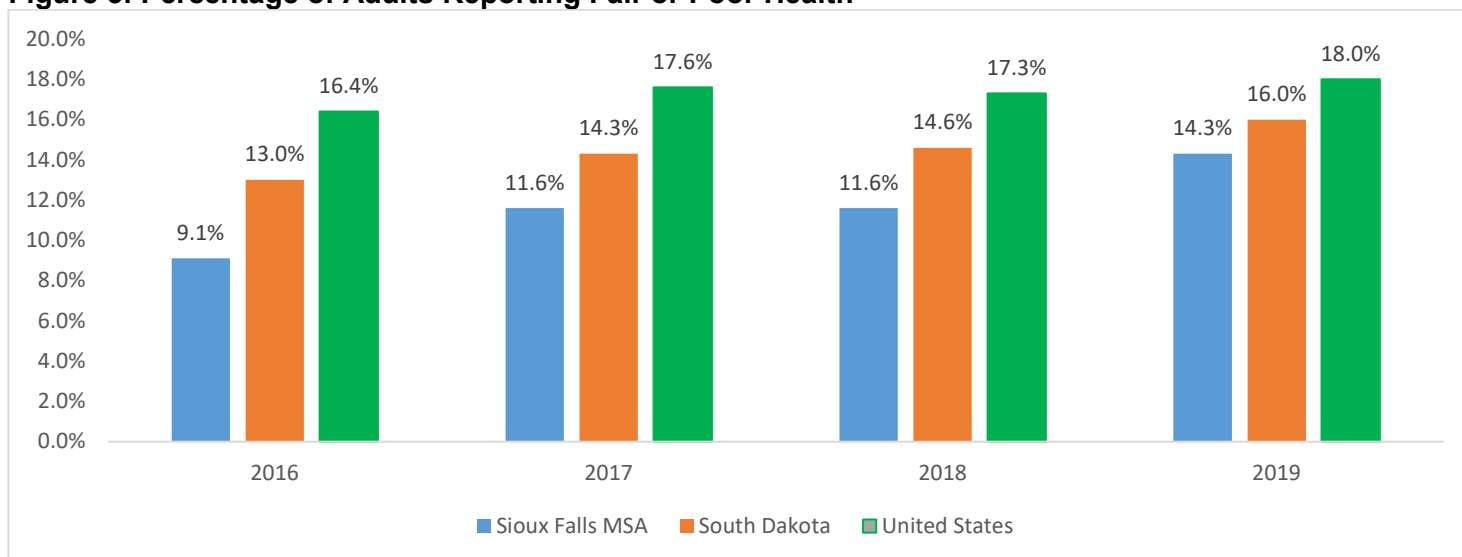


DATA SOURCE: 2021 Community Health Assessment Resident Survey



The percentage of people reporting fair or poor health in the Sioux Falls MSA has worsened over time, from 9.1 percent in 2016 to 14.3 percent in 2019 (Figure 5).

**Figure 5: Percentage of Adults Reporting Fair or Poor Health**

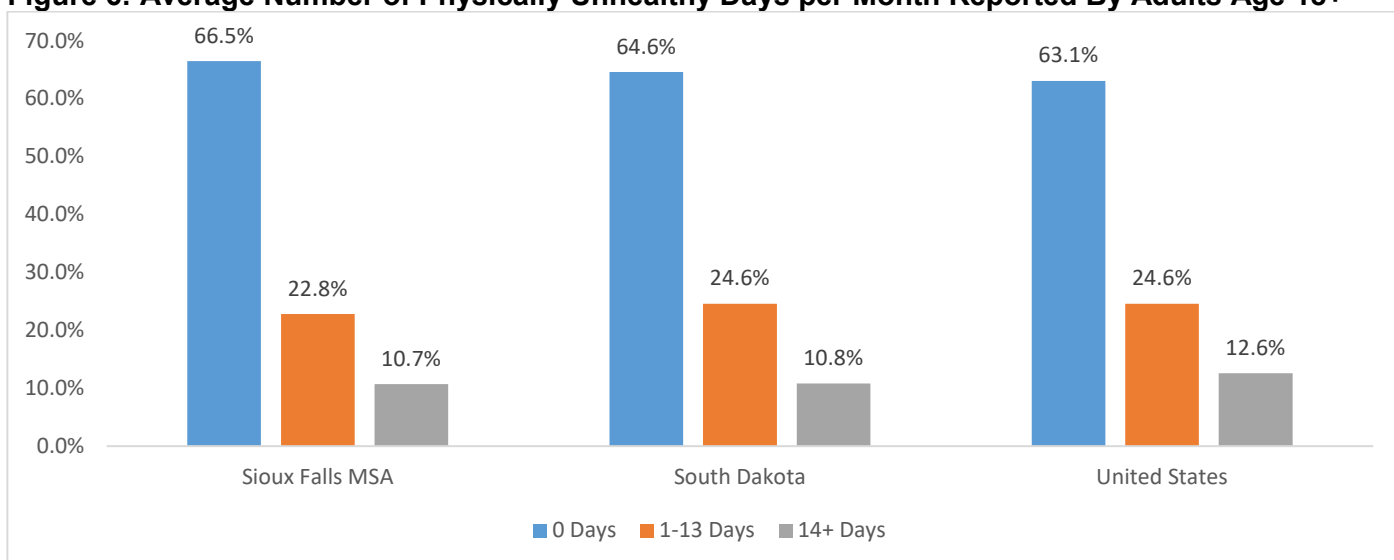


**DATA SOURCE:** Centers for Disease Control and Prevention. (2019). BRFSS Prevalence & Trends Data. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. <https://www.cdc.gov/brfss/brfssprevalence/>

Self-reported numbers of healthy and unhealthy days in a month is an established measure of health-related quality of life that was developed by the U.S. Centers for Disease Control and Prevention (CDC). Unhealthy days are an estimate of the overall number of days during the previous 30 days when a respondent felt that either their physical or mental health was not good.<sup>36</sup> Unhealthy days have been

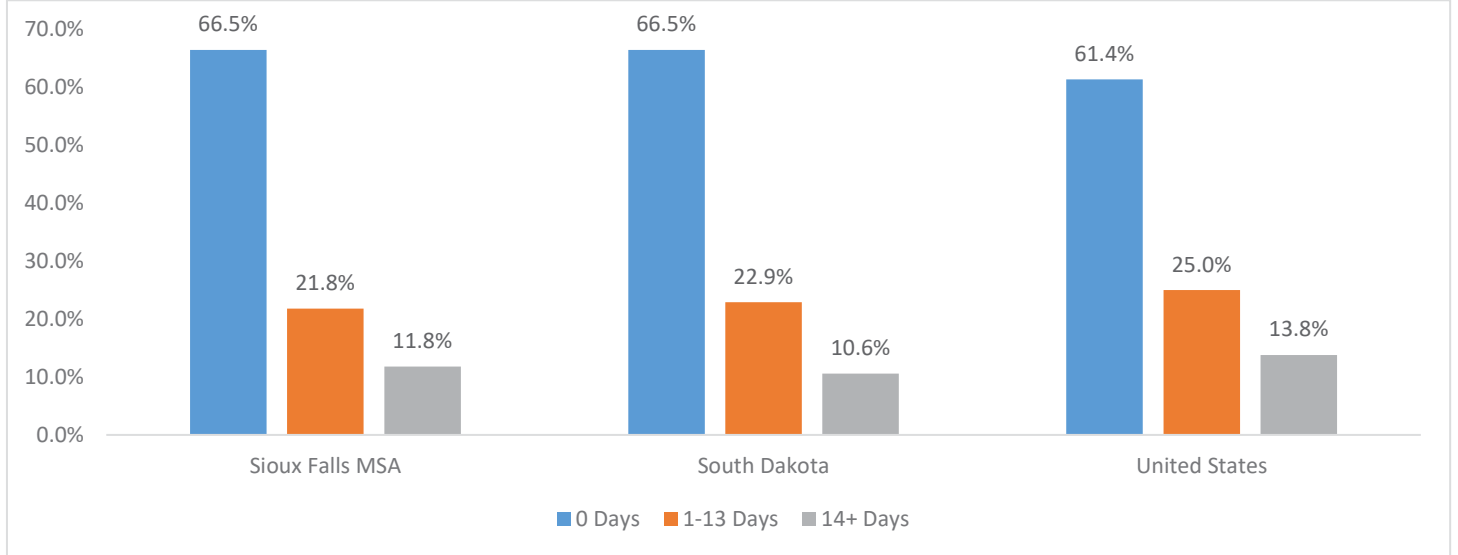
shown to be a valid and responsive index of perceived physical and mental health over time. In 2019, fewer adults in Sioux Falls MSA reported physically and mentally unhealthy days compared to state and national averages (Figures 6 and 7). Nonetheless, nearly 11 percent of the adult population reported 14 or more physically unhealthy days while 12 percent reported 14 or more mentally unhealthy days.

**Figure 6: Average Number of Physically Unhealthy Days per Month Reported By Adults Age 18+**



**DATA SOURCE:** Centers for Disease Control and Prevention. (2019). BRFSS Prevalence & Trends Data. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. <https://www.cdc.gov/brfss/brfssprevalence/>

**Figure 7: Average Number of Mentally Unhealthy Days per Month Reported By Adults Age 18+**



DATA SOURCE: Centers for Disease Control and Prevention. (2019). BRFSS Prevalence & Trends Data. National Center for Chronic

**MORTALITY**  
**Life Expectancy**

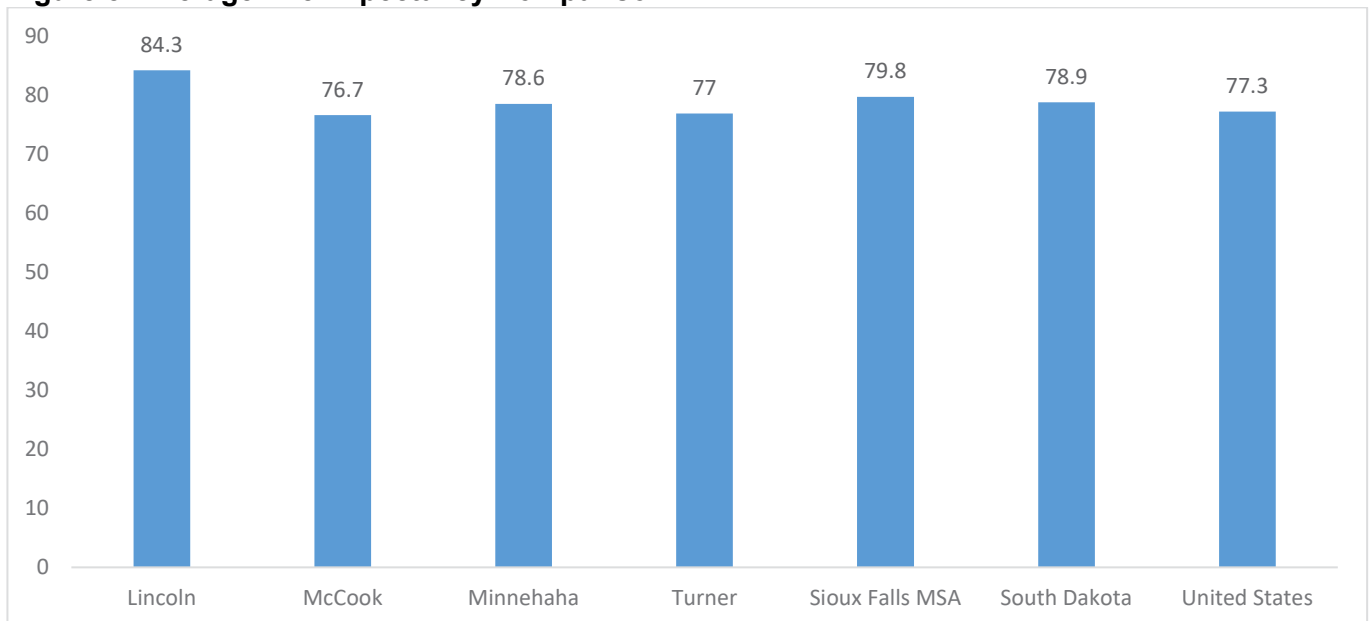
Life expectancy for many groups in the U.S. is at its lowest since the mid-2000's, according to the National Center for Health Statistics. Disparities are seen in life expectancy among various racial and ethnic groups, and overall, life expectancy dropped from 78.8 years in 2019 to 77.3 years in 2020, which is the lowest level since 2003.<sup>10</sup> Other observations<sup>37</sup> regarding life expectancy in the U.S. include:

- Male life expectancy is 74.5 years, the lowest since 2003.
- Female life expectancy is 80.2, the lowest level since 2005.
- The Hispanic population saw the largest decline, changing from 81.8 years in 2019 to 78.8 years in 2020. This represents the lowest since 2006 when life expectancy was first measured by Hispanic origin.

Although life expectancy has been on a gradual decline in the past few years in the U.S., mortality due to COVID-19 played a significant role in the steep further decline in 2020, accounting for nearly 75 percent of it. Other causes of death that impacted the rates were unintentional injuries, homicide, and diabetes.<sup>37</sup>

Life expectancy in the Sioux Falls area is higher than state and national averages (Figure 8). South Dakota has higher life expectancy than the U.S. average. Whereas life expectancy in Minnehaha County is comparable to the state average, Lincoln County far exceeds the state average.

**Figure 8: Average Life Expectancy Comparison**



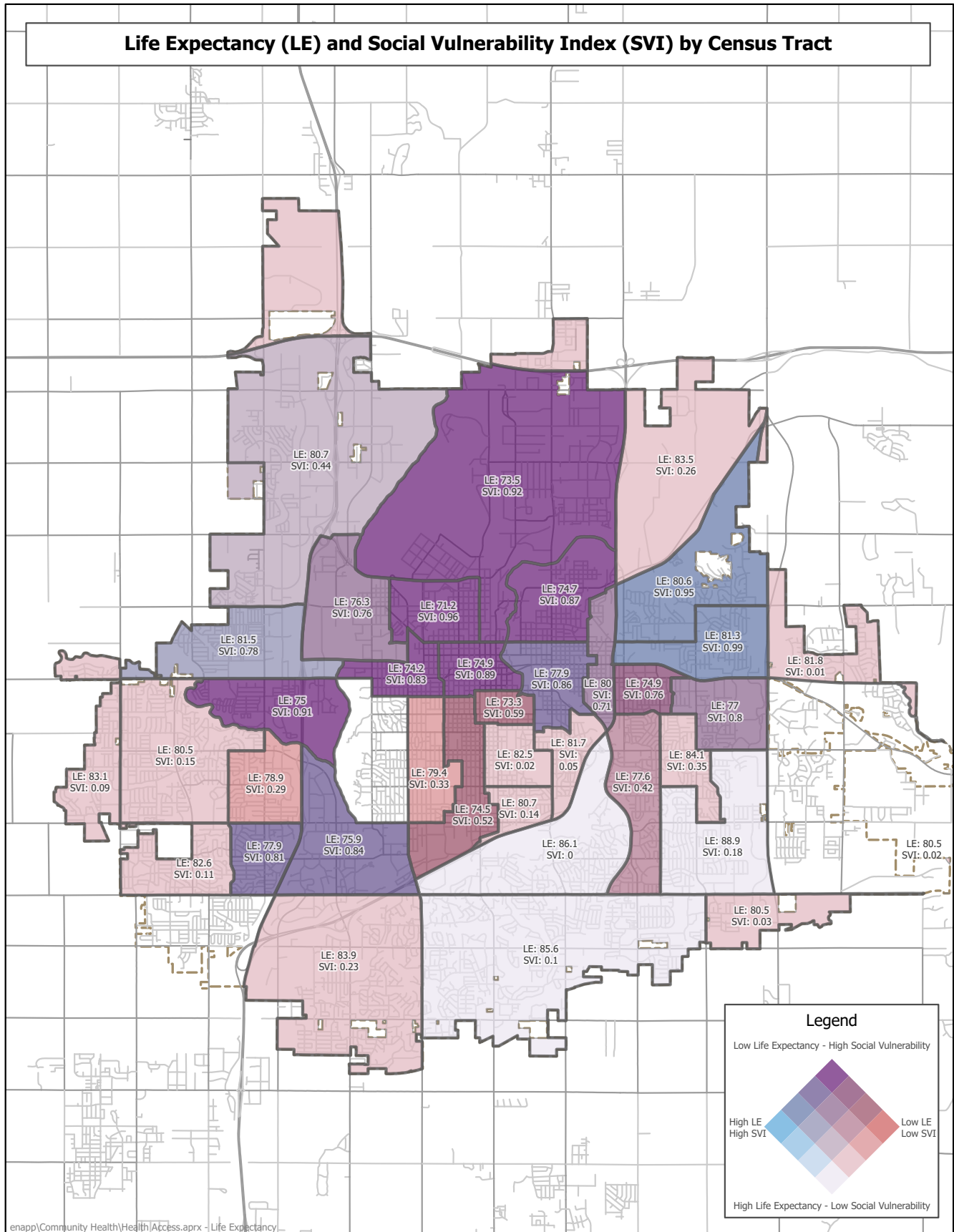
DATA SOURCE: National Center for Health Statistics - Mortality Files, 2017-2019. Accessed at [www.countyhealthrankings.org](http://www.countyhealthrankings.org). Sioux Falls MSA data based on Sioux Falls Metropolitan Statistical Area Calculator.





Social Vulnerability refers to the resilience of communities to survive and thrive when confronted with external stresses such as disasters or disease. The Social Vulnerability Index represents the percentile rank of a census tract. For example, a ranking of 0.85 signifies that 85 percent of tracts are less vulnerable than the tract of interest and that 15 percent of tracts are more vulnerable. There is a high correlation between life expectancy and social vulnerability index. Neighborhoods with higher social vulnerability are more likely to also experience lower life expectancy (Figure 10).

**Figure 10: Life Expectancy with Social Vulnerability Index, City of Sioux Falls**



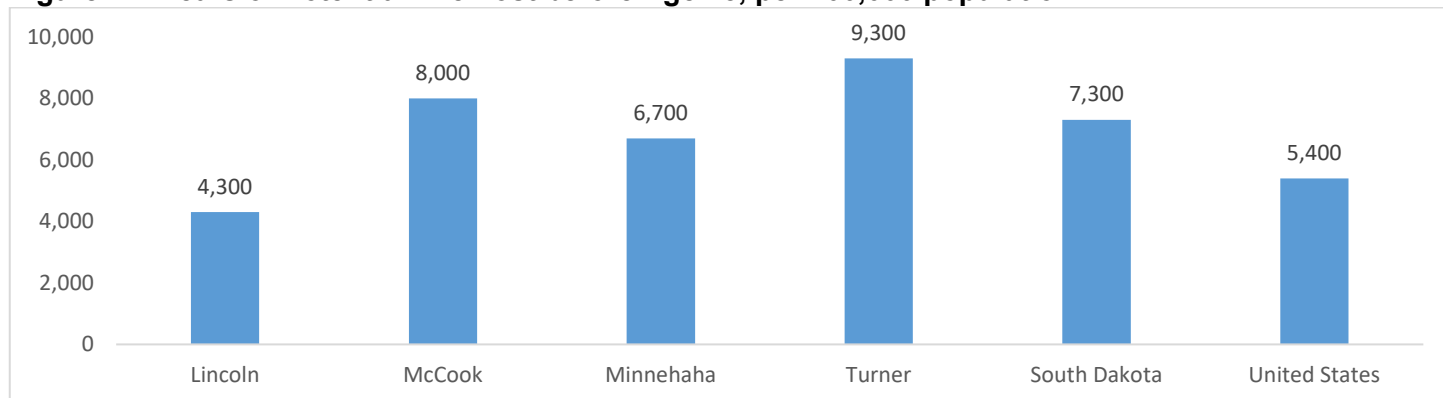
DATA SOURCE: City of Sioux Falls Civic Analytics Using Data from CDC/ATSDR Social Vulnerability Index <https://www.atsdr.cdc.gov/placeandhealth/svi/index.html>



### Years of Potential Life Lost (YPLL)

In addition to life expectancy, it is possible to examine the impact of disease or accidental deaths on a population by looking at Years of Potential Life Lost (YPLL). This measure estimates the impact of premature deaths on the longevity of a population. Lincoln County has lower (better) YPLL than U.S. and state averages, Minnehaha County is doing better than the state average but worse than the national average, while both McCook and Turner Counties have worse YPLL than state and U.S. averages (Figure 11).

**Figure 11: Years of Potential Life Lost before Age 75, per 100,000 population**

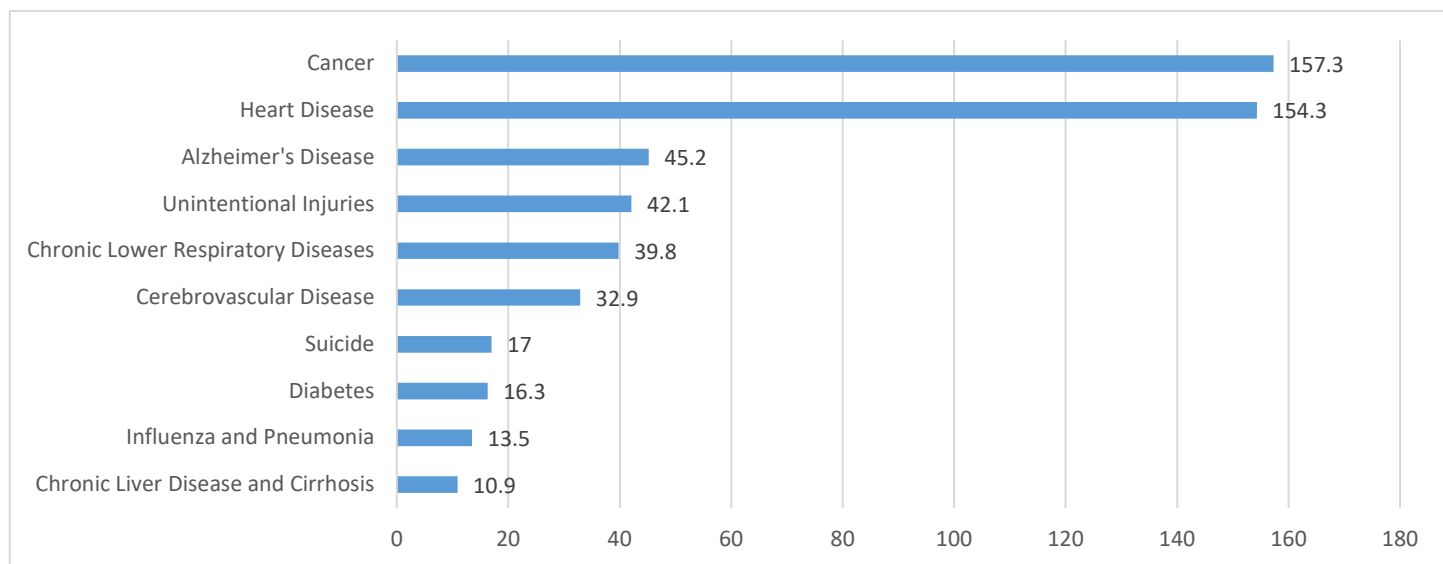


*DATA SOURCE: County, state and national data from the National Center for Health Statistics - Mortality Files 2017-2019. Accessed at countyhealthrankings.org. Sioux Falls MSA data based on Sioux Falls Metropolitan Statistical Area Calculator.*

### Leading Causes of Death

Cancer and heart disease are by far the leading causes of death in the Sioux Falls MSA. The top 10 causes of death are chronic, non-communicable diseases and injuries, except for influenza and pneumonia, which when combined, together rank nine out of 10 (Figure 12). Cardiovascular diseases, which include heart disease and cerebrovascular disease, constitute the leading cause of death both locally, statewide, and nationally.

**Figure 12: Age-adjusted Mortality Rate for the Leading Causes of Death for the Sioux Falls MSA, per 100,000 population (2015-2019)**

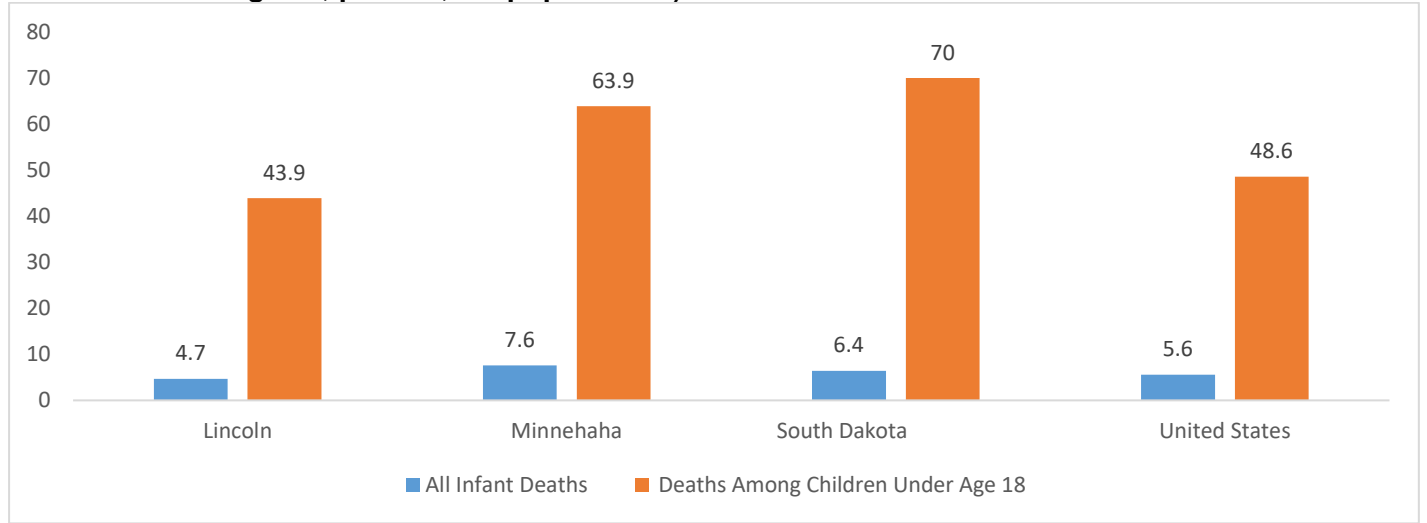


*DATA SOURCE: Sioux Falls MSA rates based on Sioux Falls Metropolitan Statistical Area Calculator using data from the South Dakota Department of Health Office of Health Statistics. Vital Statistics 2015-2019. 2019 SOUTH DAKOTA VITAL STATISTICS (sd.gov)*

### Infant and Child Mortality

Infant mortality is the death of a child before his or her first birthday, measured as the number of infant deaths for every 1,000 live births. In addition to giving us key information about maternal and infant health, the infant mortality rate is an important marker of the overall health of a society.<sup>38</sup> In 2019, the infant mortality rate in the United States was 5.6 deaths per 1,000 live births (Figure 13). Lincoln County has a lower infant mortality rate, while Minnehaha County's rate is worse than both U.S. and state rates. Along with Minnehaha County, the state of South Dakota has a much higher child mortality rate than the U.S. average.

**Figure 13: Infant Mortality (Infant Deaths per 1,000 Live Births) and Child Mortality (Deaths among Children under Age 18, per 100,000 populations)**



DATA Source: Centers for Disease Control and Prevention. (2016-2020). CDC Wonder: Mortality Data. National Center for Health Statistics. <https://wonder.cdc.gov/>

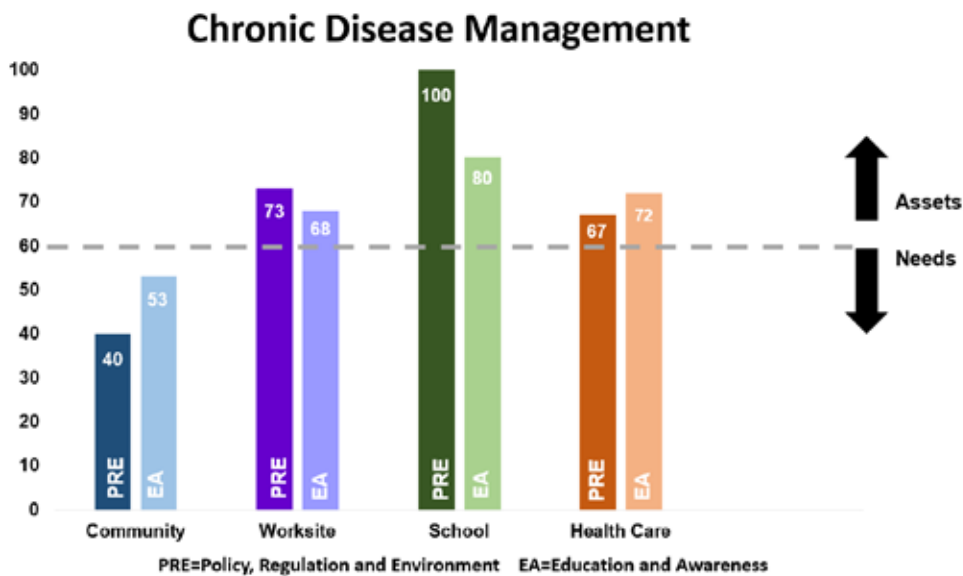
### CHRONIC NONCOMMUNICABLE DISEASES

The term Noncommunicable Disease (NCD) refers to a group of conditions, typically not infectious in origin, that result in long-term health consequences and that often create a need for long-term treatment. Common NCDs include cancers, cardiovascular disease, diabetes, and chronic lung illnesses. Many of these diseases can be prevented by reducing common risk factors such as tobacco use, harmful alcohol use, physical inactivity, and unhealthy eating patterns. Many other important health conditions are also considered NCDs, including injuries and mental health disorders.<sup>39</sup> NCDs are the leading cause of death and disability globally, as well as in the U.S., South Dakota, and the Sioux Falls area.

In this section, we discuss the burden of NCDs in the Sioux Falls area.

Using the South Dakota Good and Healthy Community Checklist, representatives from several sectors of the community rated Policy, Regulation, and Environment (PRE) and Education and Awareness (EA) efforts related to Chronic Disease Management. In the following chart (Figure 14), scores over 60 represent an indication of chronic disease management assets, while scores below 60 indicate needs in the area of chronic disease management.

**Figure 14: Community Chronic Disease Management Assessment**



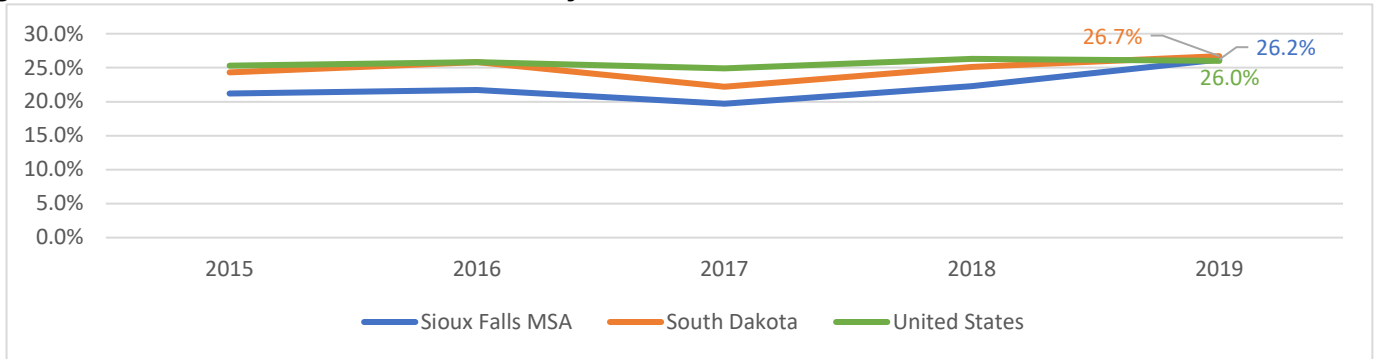
DATA SOURCE: 2021 Community Health Assessment, South Dakota Good & Healthy Assessment Tool.



## Arthritis

Arthritis is a leading cause of disability, with annual costs for medical care and lost earnings of \$303.5 billion.<sup>40</sup> About one in four adults have been diagnosed with arthritis in the U.S., and similar rates are observed in the Sioux Falls MSA (Figure 15).

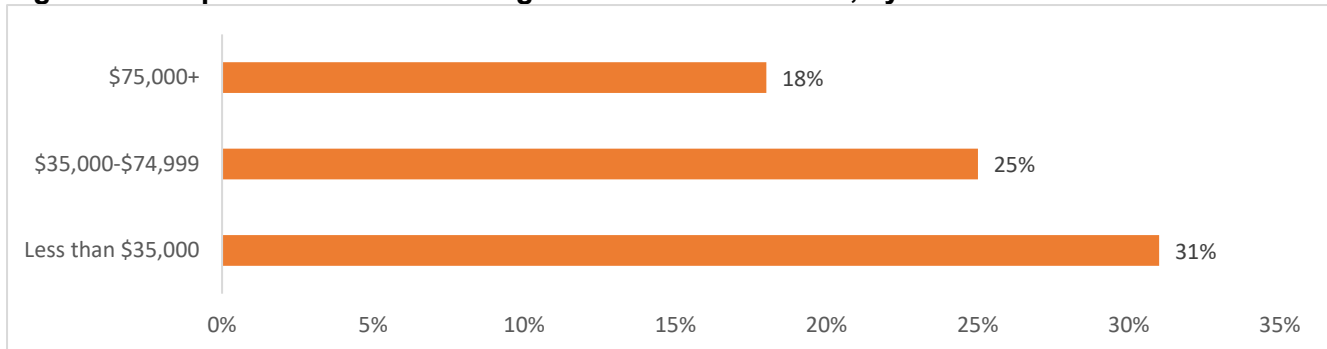
**Figure 15: Adults Who Have Been Told They Have Arthritis**



**DATA SOURCE:** Centers for Disease Control and Prevention. (2019). BRFSS Prevalence & Trends Data. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. <https://www.cdc.gov/brfss/brfssprevalence/>

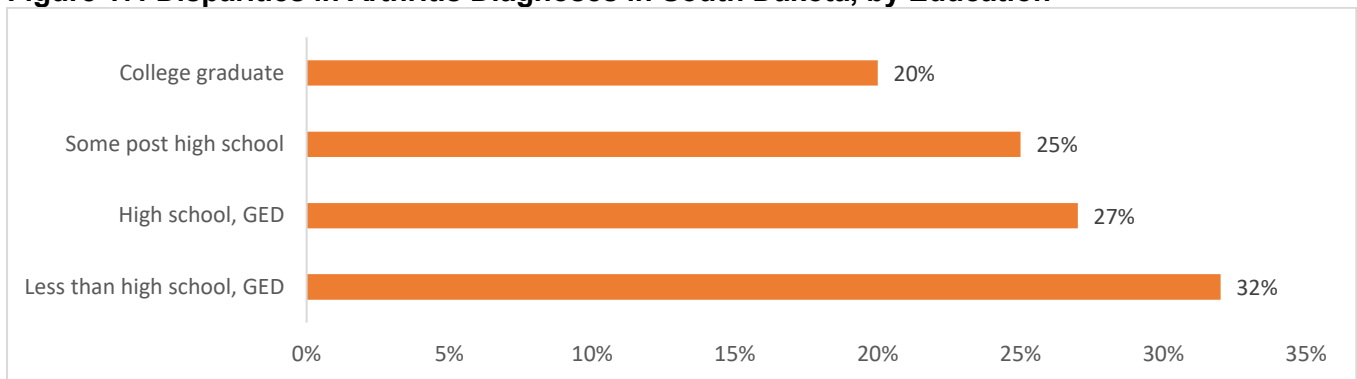
When looking at state-level data for arthritis, there are some evident disparities. People with lower income and fewer years of education have a much higher burden of arthritis in South Dakota (Figure 16 and 17).

**Figure 16: Disparities in Arthritis Diagnoses in South Dakota, by Income**



**DATA SOURCE:** South Dakota Department of Health. (2019). Behavioral Risk Factor Surveillance System. Office of Health Statistics. <https://doh.sd.gov/statistics/>

**Figure 17: Disparities in Arthritis Diagnoses in South Dakota, by Education**

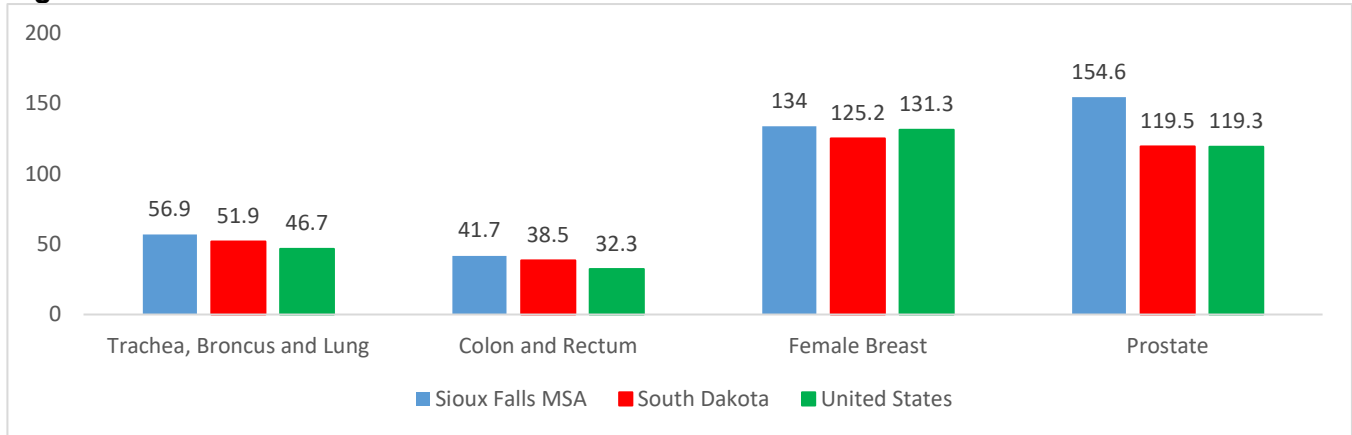


**DATA SOURCE:** South Dakota Department of Health. (2019). Behavioral Risk Factor Surveillance System. Office of Health Statistics. <https://doh.sd.gov/statistics/>

## Cancer

According to the South Dakota Department of Health, each year in South Dakota there are an estimated 4,000 new cancer cases and 1,600 deaths. This translates to, on average, 10-11 new cases and four deaths per day in the state.<sup>6</sup> Cancer remains one of the leading causes of death in the state, and it was only second to cardiovascular disease as the leading cause of death in the Sioux Falls MSA for the period 2015 to 2019.<sup>5</sup> The Sioux Falls MSA has higher age-adjusted incidence rates for the most common cancers in the U.S. (Figure 18).

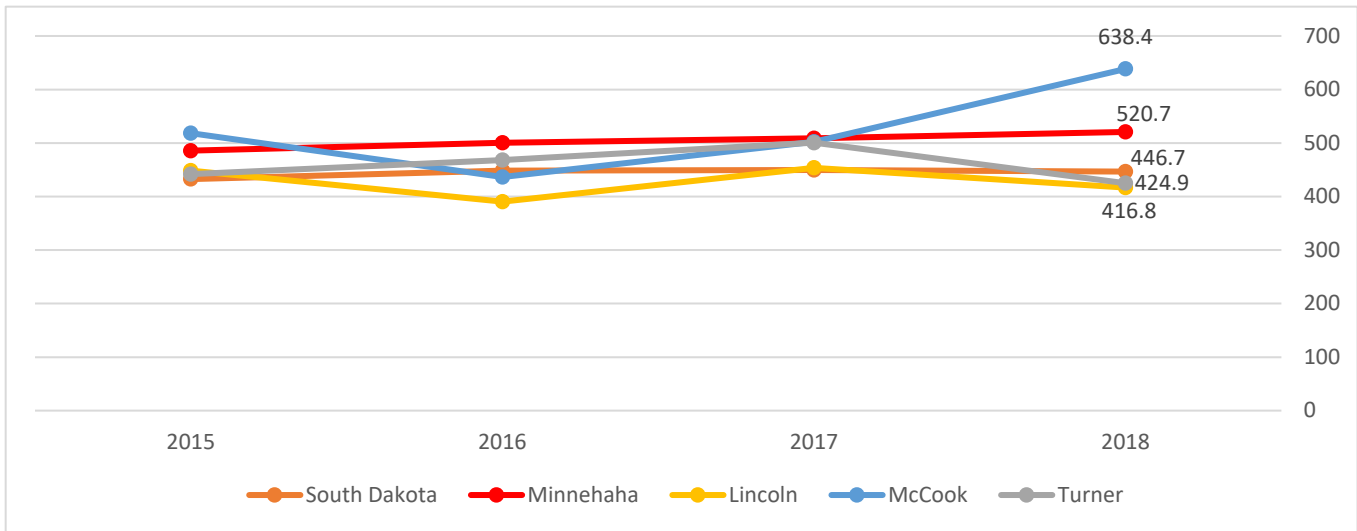
**Figure 18: Incidence Rates for Most Common Cancers**



**DATA SOURCE:** South Dakota Department of Health. (2018). South Dakota Cancer Registry. Get Screened SD. <https://getscreened.sd.gov/registry/data/>. Sioux Falls MSA data based on Sioux Falls Metropolitan Statistical Area Calculator.

Figure 19 below shows trends in overall cancer incidence in each of the four counties that make up the Sioux Falls MSA. McCook County saw a significant increase in cancer incidence in the period 2016 to 2018.

**Figure 19: Rate of all cancer incidence per 100,000 people**

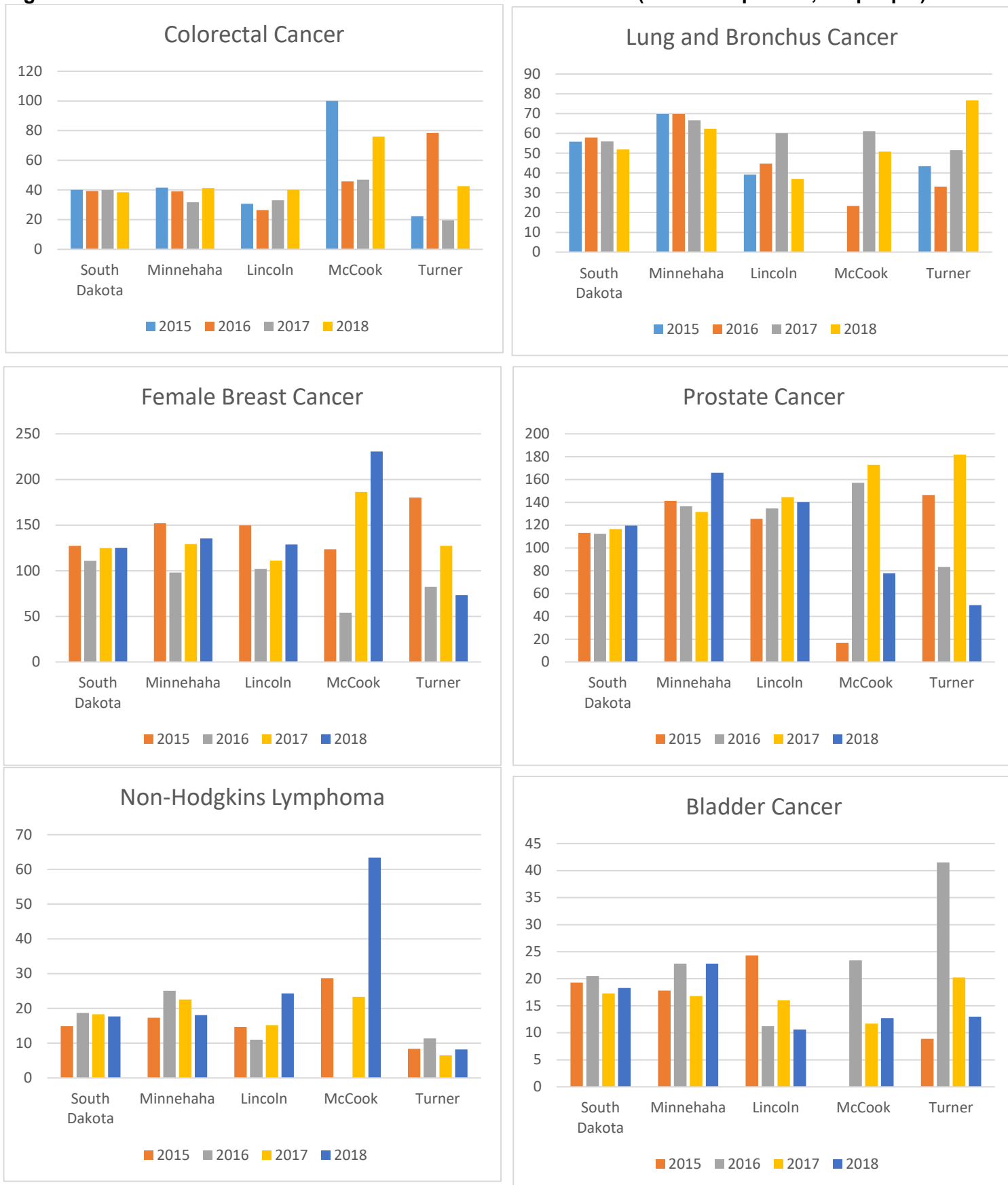


**DATA SOURCE:** South Dakota Department of Health. (2018). South Dakota Cancer Registry. Get Screened SD. <https://getscreened.sd.gov/registry/data/>



The following graphs (Figure 20) taken from the South Dakota Department of Health Cancer Registry Report show cancer incidence among the four counties of the Sioux Falls MSA. There is variation in incidence rates across the four counties and over time, but no consistent trends or patterns across the board.

**Figure 20: Rates of Most Common Cancers in the Sioux Falls MSA (incidence per 100,000 people)**

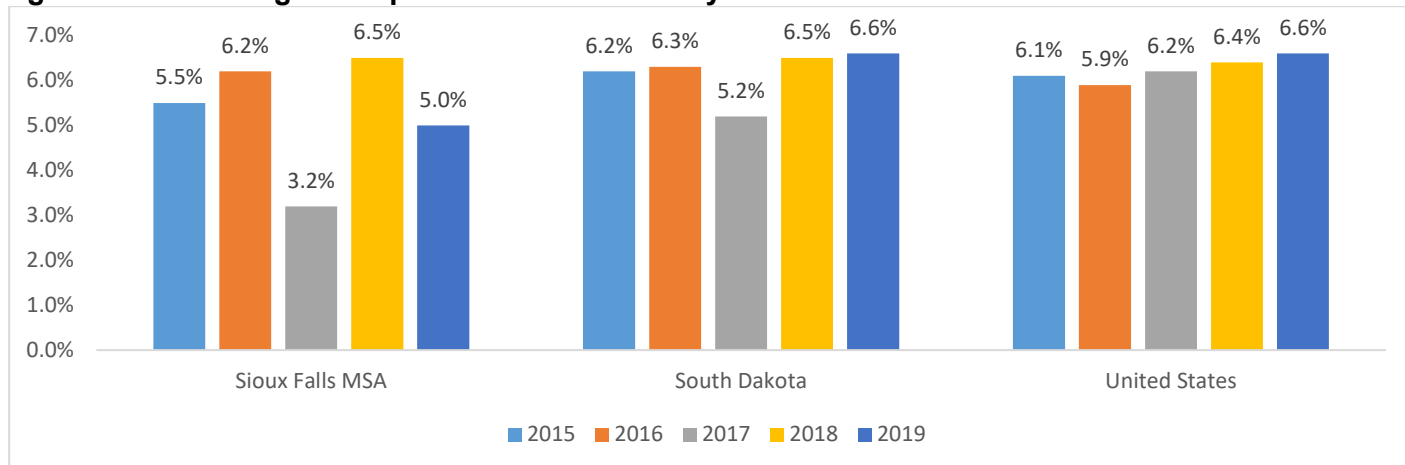


DATA SOURCE: South Dakota Department of Health. (2018). South Dakota Cancer Registry. Get Screened SD. <https://getscreened.sd.gov/registry/data/>



There are fewer diagnosed cases of skin cancer in the Sioux Falls MSA compared to state and national averages (Figure 21).

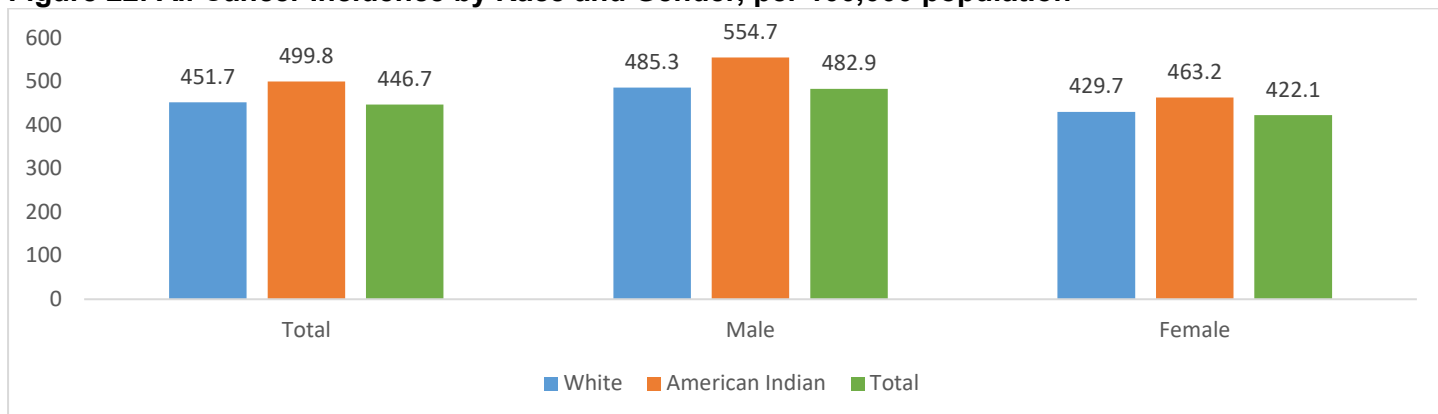
**Figure 21: Percentage of Population Ever Told They Have Skin Cancer**



DATA SOURCE: Centers for Disease Control and Prevention. (2019). BRFSS Prevalence & Trends Data. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. <https://www.cdc.gov/brfss/brfssprevalence/>

At the state level in South Dakota, data shows that American Indian individuals have a higher incidence rate for cancers than those who are White (Figure 22).

**Figure 22: All Cancer Incidence by Race and Gender, per 100,000 population**



### Cardiovascular Disease and Metabolic Risk Factors

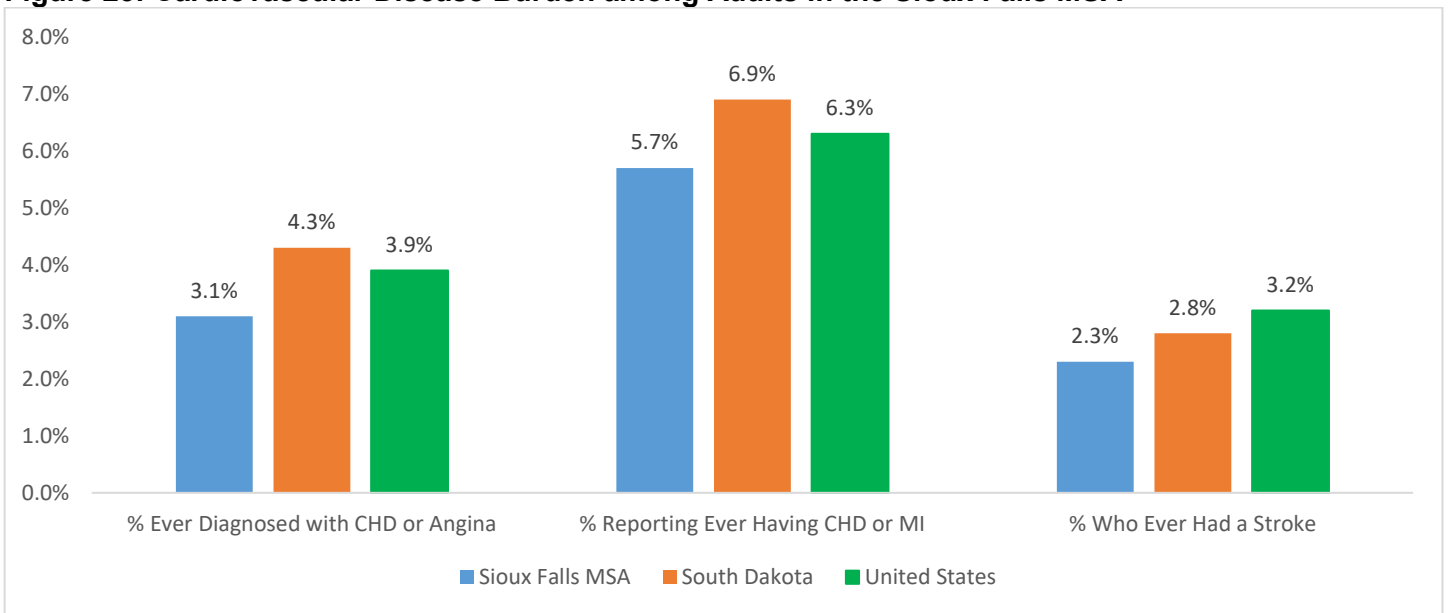
Cardiovascular disease (CVD) is the term for all types of diseases that affect the heart or blood vessels,<sup>41</sup> including:

- Coronary heart disease—a disease of the blood vessels supplying the heart muscle.
- Cerebrovascular disease—a disease of the blood vessels supplying the brain, including stroke, carotid stenosis, vertebral stenosis and intracranial stenosis, aneurysms, and vascular malformations.
- Peripheral arterial disease—a disease of blood vessels supplying the arms and legs.
- Rheumatic heart disease—damage to the heart muscle and heart valves from rheumatic fever.

- Congenital heart disease—malformations of the heart structure from birth.
- Deep vein thrombosis and pulmonary embolism—blood clots in the leg veins, which can dislodge and move to the heart and lungs.

CVDs are the leading cause of death for men, women, and people of most racial and ethnic groups in the United States, with one person dying every 36 seconds from CVD.<sup>42</sup> Figure 23 below shows the burden of a select number of CVDs in Sioux Falls MSA. The prevalence of diagnosed coronary heart disease (CHD) or angina, myocardial infarction (MI), and stroke, are lower in the MSA compared to state and national averages.

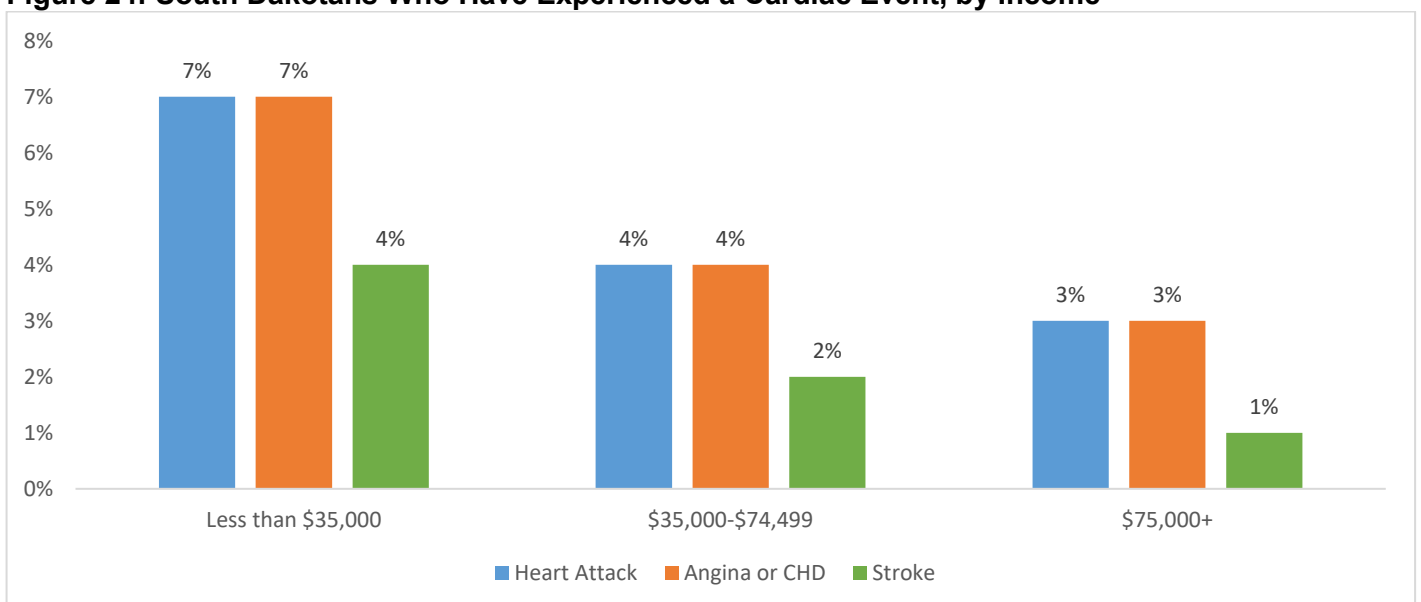
**Figure 23: Cardiovascular Disease Burden among Adults in the Sioux Falls MSA**



**DATA SOURCE:** Centers for Disease Control and Prevention. (2020). BRFSS Prevalence & Trends Data. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. <https://www.cdc.gov/brfss/brfssprevalence/>

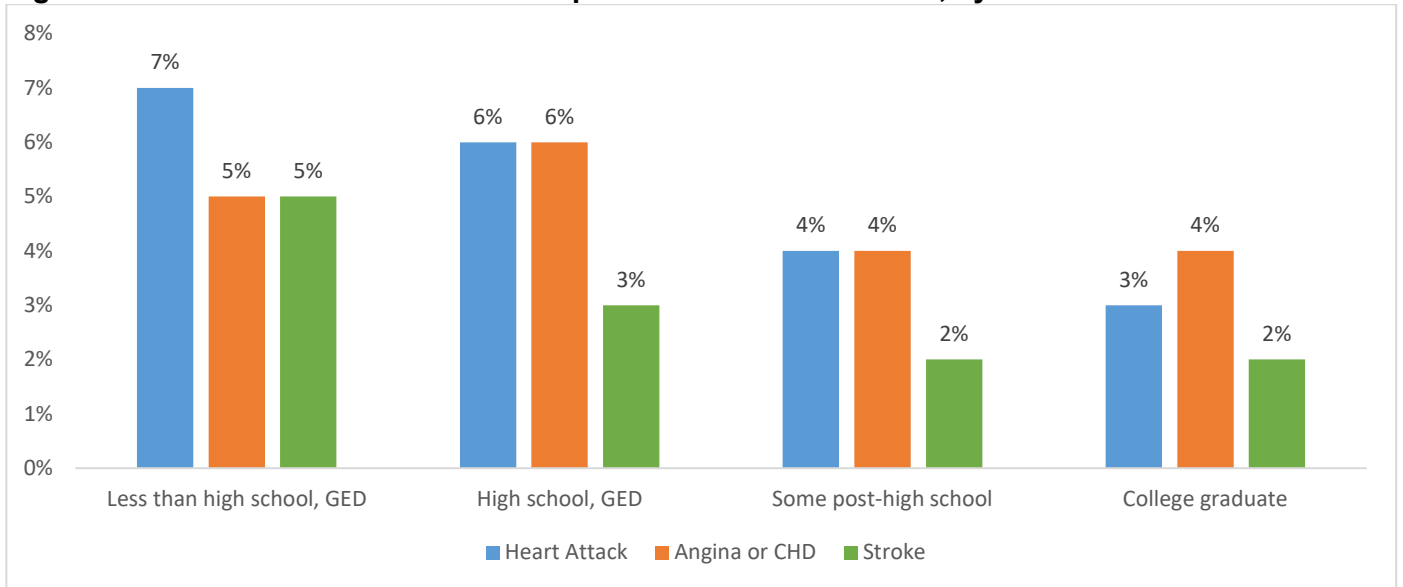
There are socioeconomic disparities in the burden of CVD in South Dakota. People with lower income or fewer years of education are more likely to experience a heart attack, angina, CHD, and stroke (Figure 24 and 25).

**Figure 24: South Dakotans Who Have Experienced a Cardiac Event, by Income**



**DATA SOURCE:** South Dakota Department of Health. (2019). Behavioral Risk Factor Surveillance System. Office of Health Statistics. <https://doh.sd.gov/statistics/>

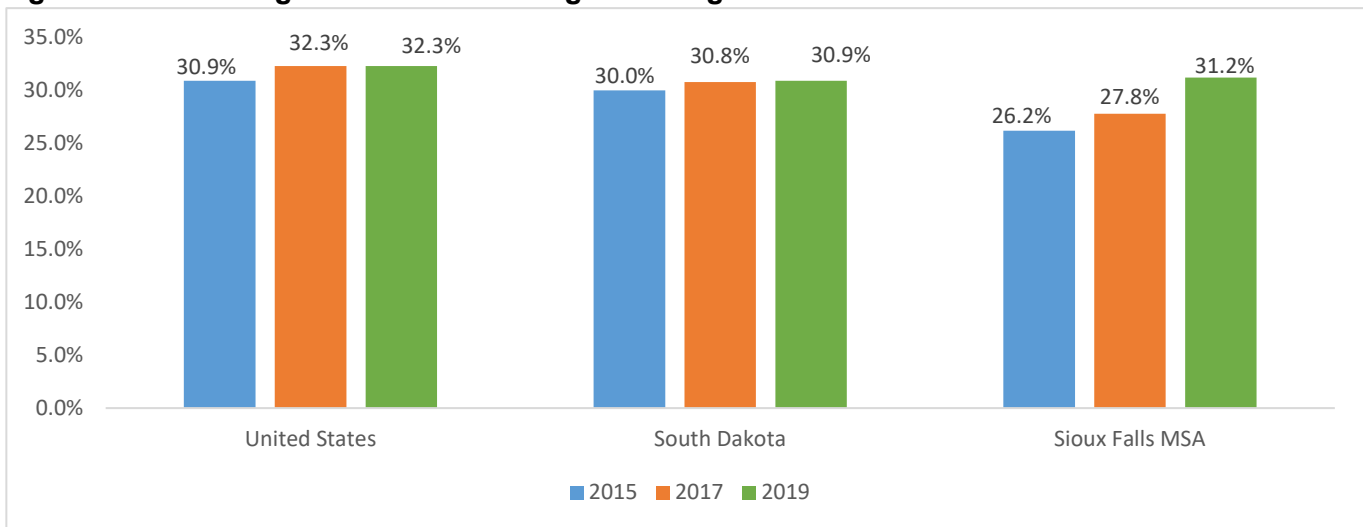
**Figure 25: South Dakotans Who Have Experienced a Cardiac Event, by Education**



**DATA SOURCE:** South Dakota Department of Health. (2019). Behavioral Risk Factor Surveillance System. Office of Health Statistics. <https://doh.sd.gov/statistics/>

Certain health conditions, known as metabolic risk factors, significantly increase the risk of cardiovascular disease. These include hypertension, or high blood pressure, high and altered cholesterol levels, diabetes mellitus, and obesity. There was a steady increase in the proportion of adults diagnosed with hypertension in the Sioux Falls MSA from 2015 and 2019 (Figure 26).

**Figure 26: Percentage of Adults with Diagnosed High Blood Pressure**

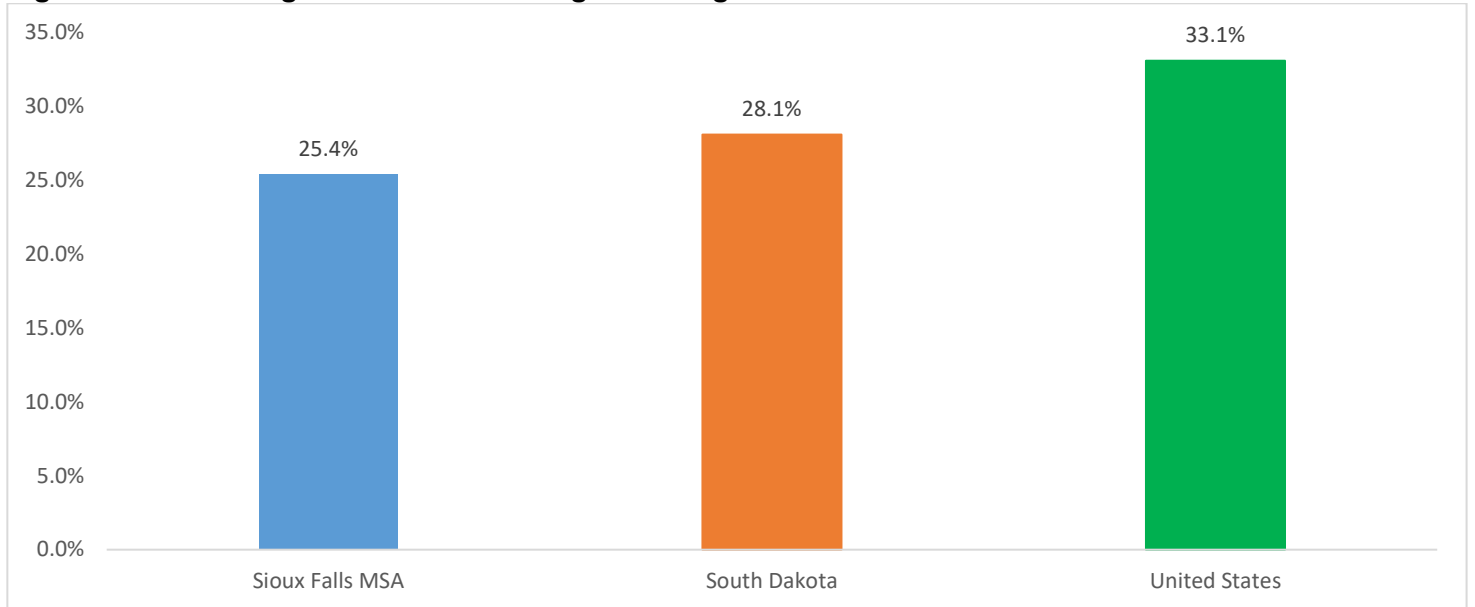


**DATA SOURCE:** Centers for Disease Control and Prevention. (2020). BRFSS Prevalence & Trends Data. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. <https://www.cdc.gov/brfss/brfssprevalence/>

One in four adults in the Sioux Falls MSA who have had their blood cholesterol checked have been told it was high (Figure 27). Although lower than state and national rates, this points to a significant burden of a major metabolic risk factor for CVD.



**Figure 27: Percentage of Adults with Diagnosed High Blood Cholesterol**



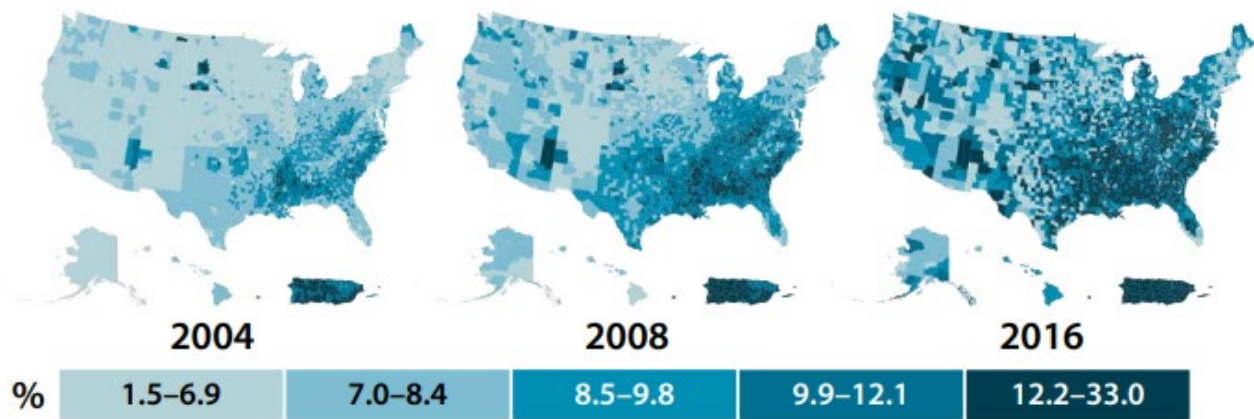
**DATA SOURCE:** Centers for Disease Control and Prevention. (2020). BRFSS Prevalence & Trends Data. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. <https://www.cdc.gov/brfss/brfssprevalence/>

Diabetes and obesity are discussed separately below. Other major risk factors for CVD include health behaviors such as tobacco use, not getting enough physical activity, and eating unhealthy diets. These are discussed within the health determinants section of this report.

**Diabetes**

Diabetes is a growing public health problem in the United States (Figure 28). According to the 2020 National Diabetes Statistics Report, 34.2 million people of all ages—or 10.5 percent of the U.S. population—had diabetes in 2018.<sup>43</sup>

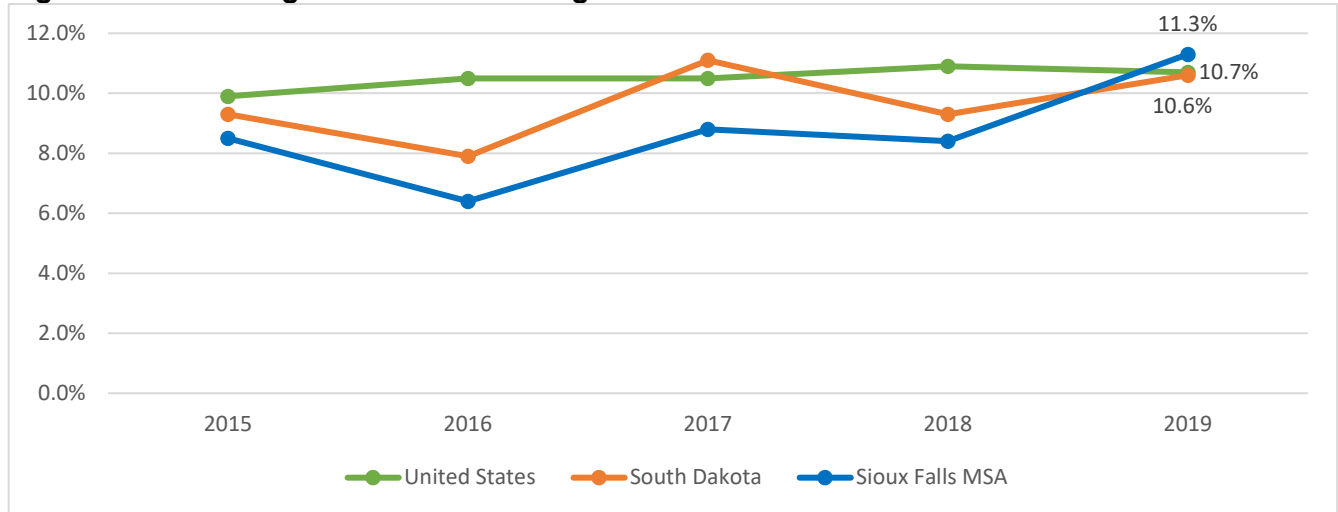
**Figure 28: Changes in Age-adjusted Prevalence of Diagnosed Diabetes among Adults Age 20+**



**DATA SOURCE:** Centers for Disease Control and Prevention. (2020). 2020 Estimates of Diabetes and Its Burden in the United States. <https://www.cdc.gov/diabetes/pdfs/data/statistics/national-diabetes-statistics-report.pdf>

The percentage of adults with diagnosed diabetes went up significantly between 2016 and 2019 for both the state of South Dakota and the Sioux Falls MSA (Figure 29).

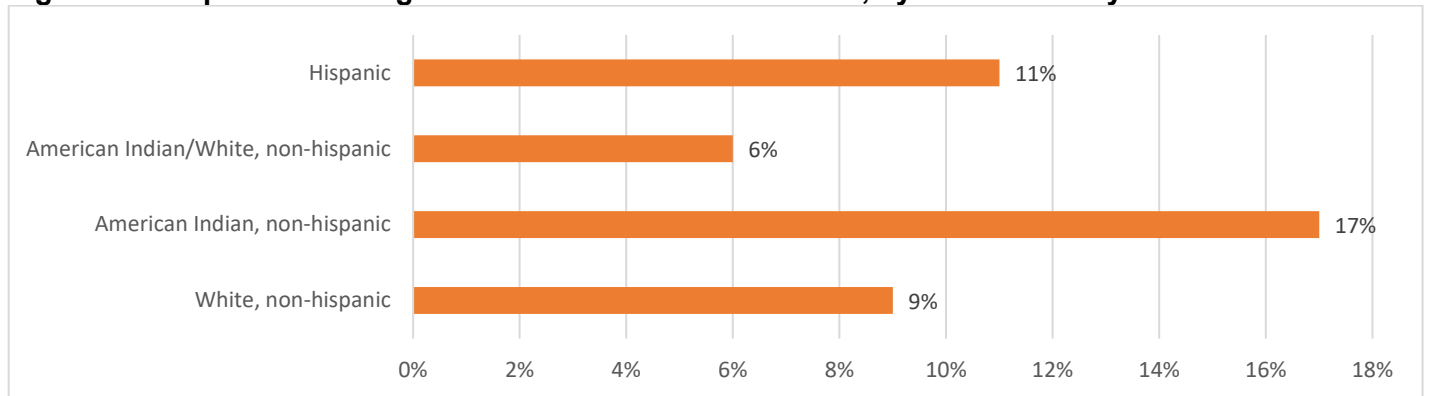
**Figure 29: Percentage of Adults with Diagnosed Diabetes**



**DATA SOURCE:** Centers for Disease Control and Prevention. (2019). BRFSS Prevalence & Trends Data. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. <https://www.cdc.gov/brfss/brfssprevalence/>

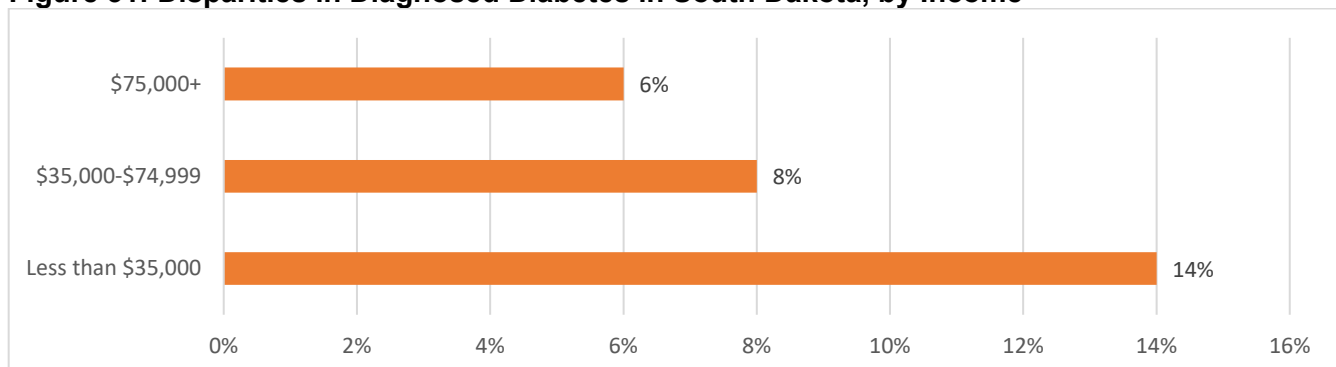
In South Dakota, diabetes rates are nearly double in the American Indian population compared to their White counterparts. Diabetes rates are also higher among the Hispanic population, those with lower income, and those with lower educational attainment (Figures 30, 31 and 32).

**Figure 30: Disparities in Diagnosed Diabetes in South Dakota, by Race/Ethnicity**



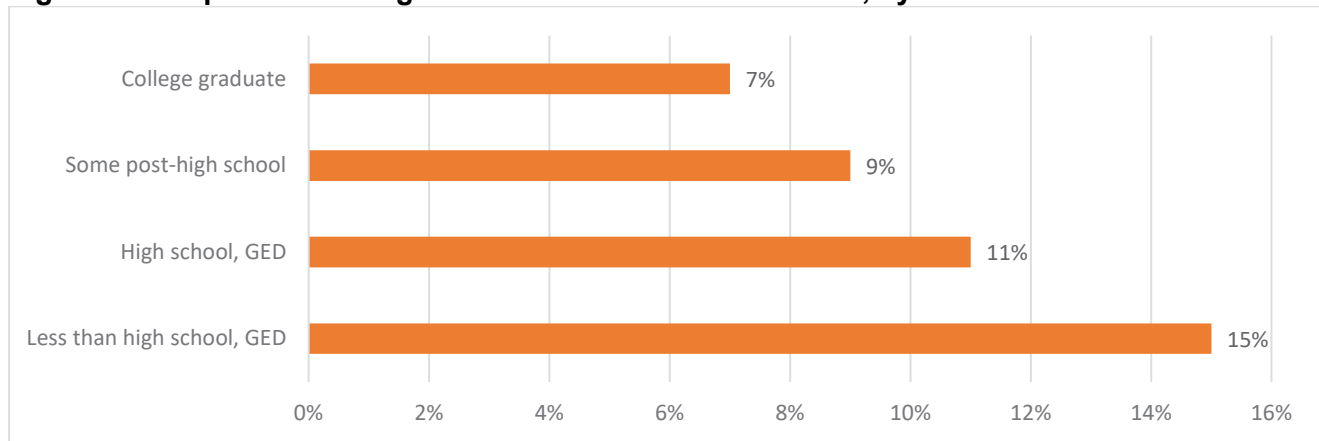
**DATA SOURCE:** South Dakota Department of Health. (2019). Behavioral Risk Factor Surveillance System. Office of Health Statistics. <https://doh.sd.gov/statistics/>

**Figure 31: Disparities in Diagnosed Diabetes in South Dakota, by Income**



**DATA SOURCE:** South Dakota Department of Health. (2019). Behavioral Risk Factor Surveillance System. Office of Health Statistics. <https://doh.sd.gov/statistics/>

**Figure 32: Disparities in Diagnosed Diabetes in South Dakota, by Education**



**DATA SOURCE:** South Dakota Department of Health. (2019). Behavioral Risk Factor Surveillance System. Office of Health Statistics. <https://doh.sd.gov/statistics/>

### Obesity

According to the State of Obesity: Better Policies for a Healthier America, an annual report of the Trust for America's Health, obesity is estimated to increase health care spending by \$149 billion annually.<sup>44</sup> Research continues to link obesity to other chronic conditions such as cancer, cardiovascular disease and diabetes. And, as evidenced over the past year, obesity is one of the underlying conditions associated with the most serious consequences of COVID-19.

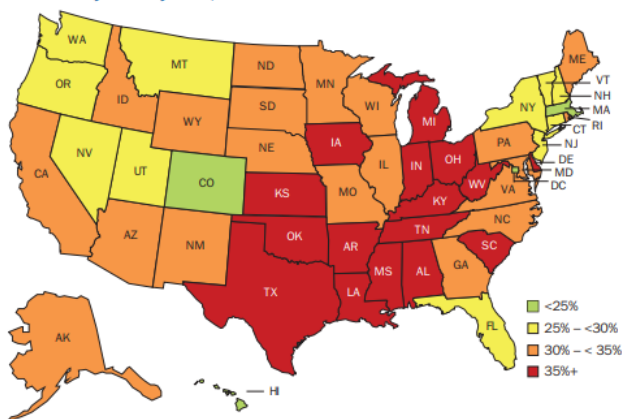
In 2020, 16 states had adult obesity rates at or above 35 percent, up from 12 states the previous year. Rates of childhood obesity are also increasing: 19.3 percent of U.S. young people, ages 2 to 19, have obesity (Figure 33). Youth obesity rates have more than tripled since the mid-1970s, and Black and Latino youth have substantially higher rates of obesity than do their White peers.<sup>44</sup>

*The epidemic of obesity is an urgent problem in the U.S. and has worsened during the COVID-19 pandemic. What is needed are transformational policies and bold investment in programs that reduce health inequities and address the social and economic conditions that are barriers to access to affordable, healthy food and physical activity.*

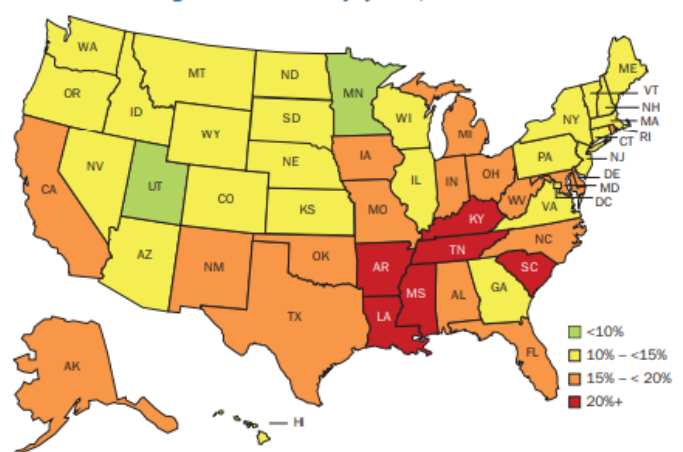
**- J. NADINE GRACIA, MD, MSCE,  
PRESIDENT AND CEO OF TRUST FOR  
AMERICA'S HEALTH.<sup>44</sup>**

**Figure 33: State-level Obesity Rates in the United States**

**Adult Obesity Rates by State, 2020**



**Percent of Children Ages 10-17 with Obesity by State, 2018-2019**



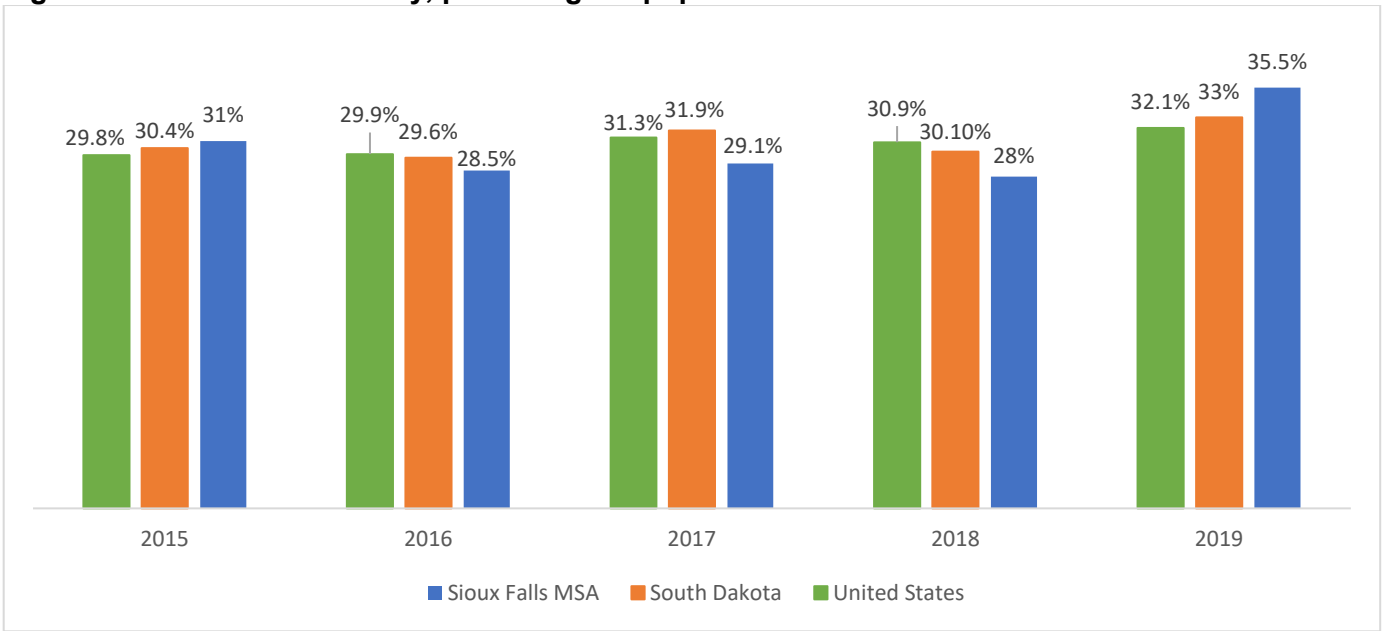
**DATA SOURCE:** Trust for America's Health. (2021). State of Obesity 2021: Better Policies for a Healthier America. <https://www.tfah.org/report-details/state-of-obesity-2021/>

Since the start of the pandemic, 42 percent of adults in the U.S. experienced weight gain. The average self-reported gain among U.S. adults was 29 pounds.<sup>45</sup>



In the Sioux Falls MSA, 35.5 percent of the adult population were estimated to be obese as of 2019. This was a significant jump from the prior three years, during which the obesity rates were in the range of 28 percent to 29 percent (Figure 34).

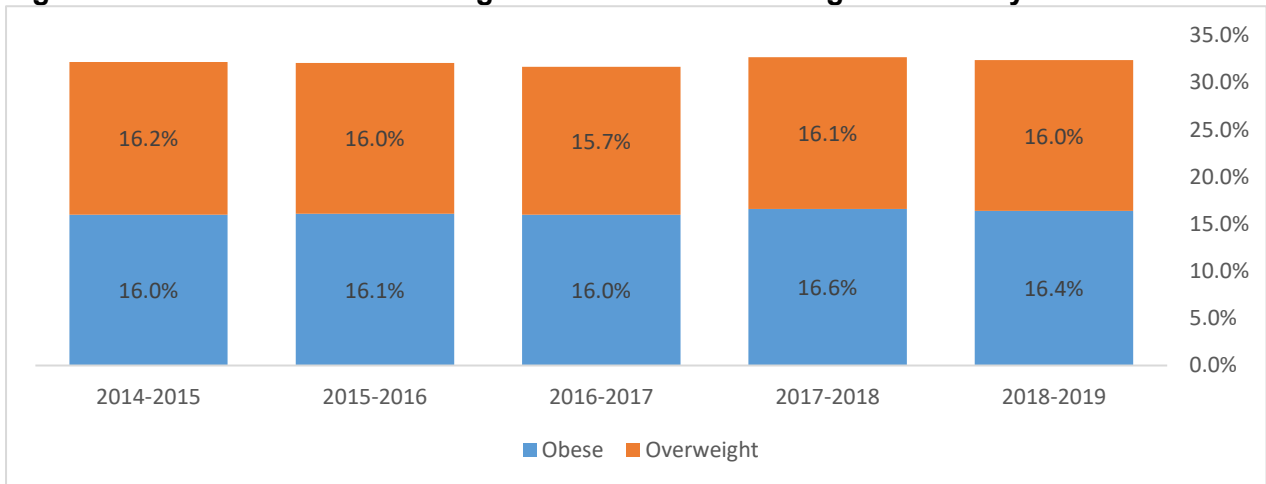
**Figure 34: Adults with Obesity, percentage of population**



*DATA SOURCE: Centers for Disease Control and Prevention. (2019). BRFSS Prevalence & Trends Data. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. <https://www.cdc.gov/brfss/brfssprevalence/>*

One out of every three school-age children in South Dakota is overweight or obese (Figure 35). Children who are obese are more likely to be obese as adults. To reduce obesity rates among adults in the future, effective interventions need to be implemented among today's children.

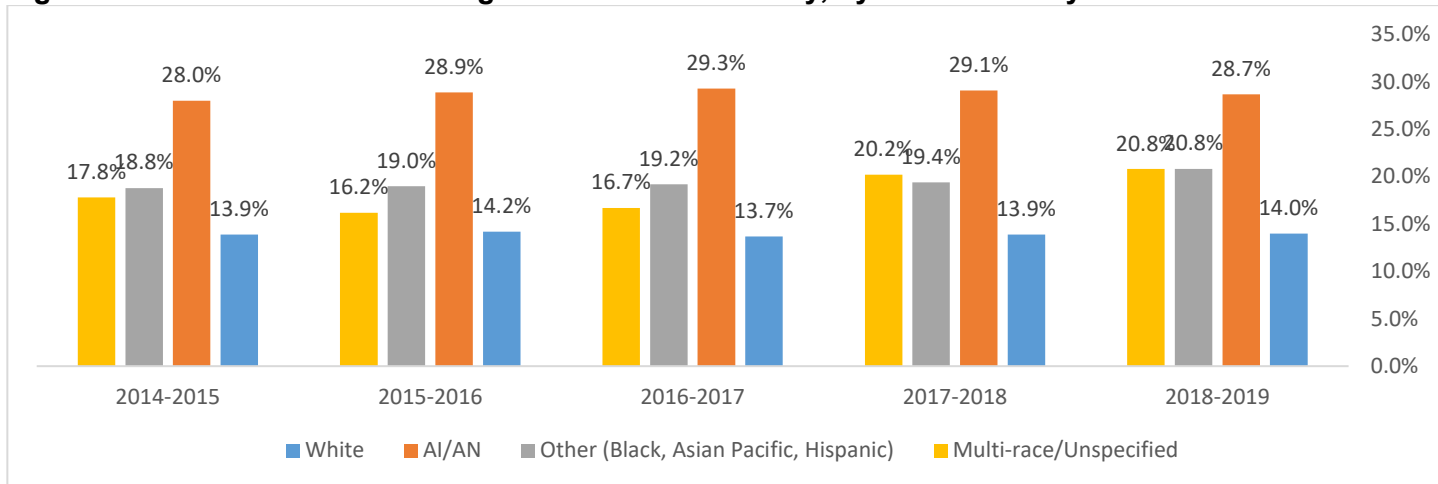
**Figure 35: South Dakota School-age Children with Overweight or Obesity**



*DATA SOURCE: South Dakota Department of Health. (2018-2019). South Dakota School Height Weight Survey Project. <https://doh.sd.gov/statistics/school-height-weight.aspx>*

There are disparities in childhood obesity in South Dakota. Rates are much higher for American Indian/Alaskan Native populations, followed by other racial/ethnic minority groups relative to the White population. (Figure 36)

**Figure 36: South Dakota School-age Children with Obesity, by Race/Ethnicity**



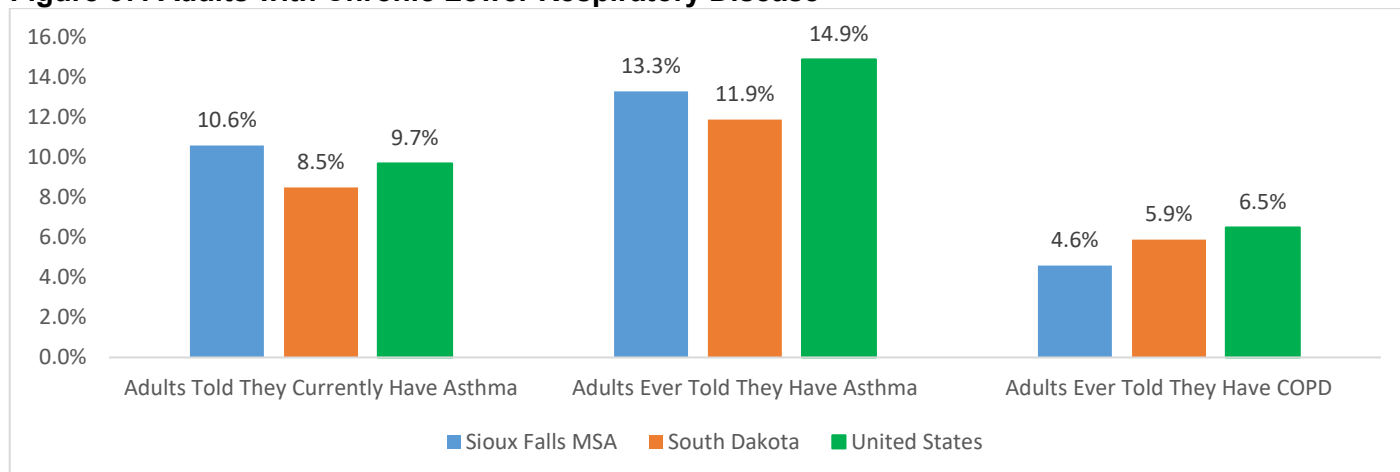
DATA SOURCE: South Dakota Department of Health. (2018-2019). South Dakota School Height Weight Survey Project. <https://doh.sd.gov/statistics/school-height-weight.aspx>

**Chronic Lower Respiratory Diseases**

Chronic lower respiratory diseases (CLRDs) are a group of conditions that affect the lungs and are characterized by shortness of breath caused by airway obstruction. CLRDs comprise mainly of asthma and chronic obstructive pulmonary disease (COPD), which includes emphysema and chronic bronchitis. In addition to their major risk factor—tobacco smoke—other risk factors include air pollution, occupational chemicals, and dusts.<sup>46</sup>

Asthma rates are higher in Sioux Falls compared to the state average, while COPD rates are lower in the MSA (Figure 37).

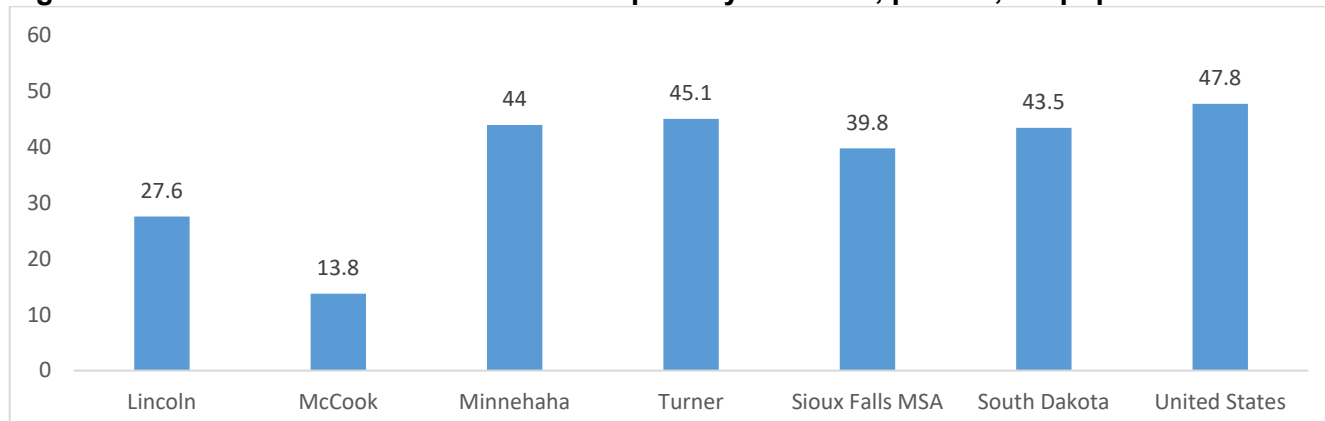
**Figure 37: Adults with Chronic Lower Respiratory Disease**



DATA SOURCE: Centers for Disease Control and Prevention. (2019). BRFSS Prevalence & Trends Data. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. <https://www.cdc.gov/brfss/brfssprevalence/>

The death rate due to CRDs was slightly lower in the MSA when compared to both the state and national rates (Figure 38).

**Figure 38: Deaths Due to Chronic Lower Respiratory Diseases, per 100,000 population**



DATA SOURCE for SD and Counties: South Dakota Department of Health Office of Health Statistics. (2019). Sioux Falls MSA data based on Sioux Falls Metropolitan Statistical Area Calculator. U.S. Data Source: Centers for Disease Control and Prevention. (2016-2020). CDC Wonder: Mortality Data. National Center for Health Statistics. <https://wonder.cdc.gov/>

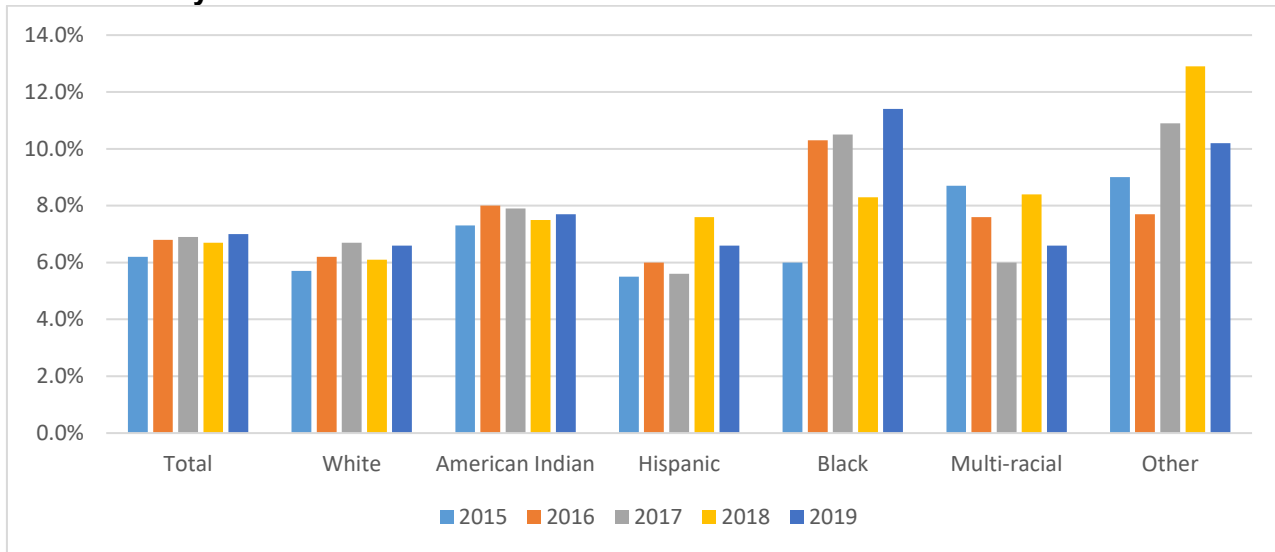
## Maternal and Child Health

When considering the health of individuals and communities, it is important to pay attention to the health status of mothers, infants, and children because their well-being determines the health of the next generation and can help predict future public health challenges.<sup>47</sup> Factors that impact maternal and child health include access to prenatal and well-child care, newborn screenings, mental health, child immunizations and child nutrition.

While there is limited local data on maternal and child health indicators, state-level data point to disparities among racial/ethnic groups in South Dakota. According to South Dakota Vital Statistics 2019:

- Low birth weight is higher for racial/ethnic minorities in general, and nearly doubles for infants born to Black, non-Hispanic mothers compared to White, non-Hispanic mothers (Figure 39).
- Teen birth rates are higher for racial/ethnic minorities and particularly worse among American Indian and Hispanic populations (Figure 40).
- American Indian mothers are more likely to start prenatal care later or forego prenatal care during their entire pregnancy than mothers of other races. (Figure 41).

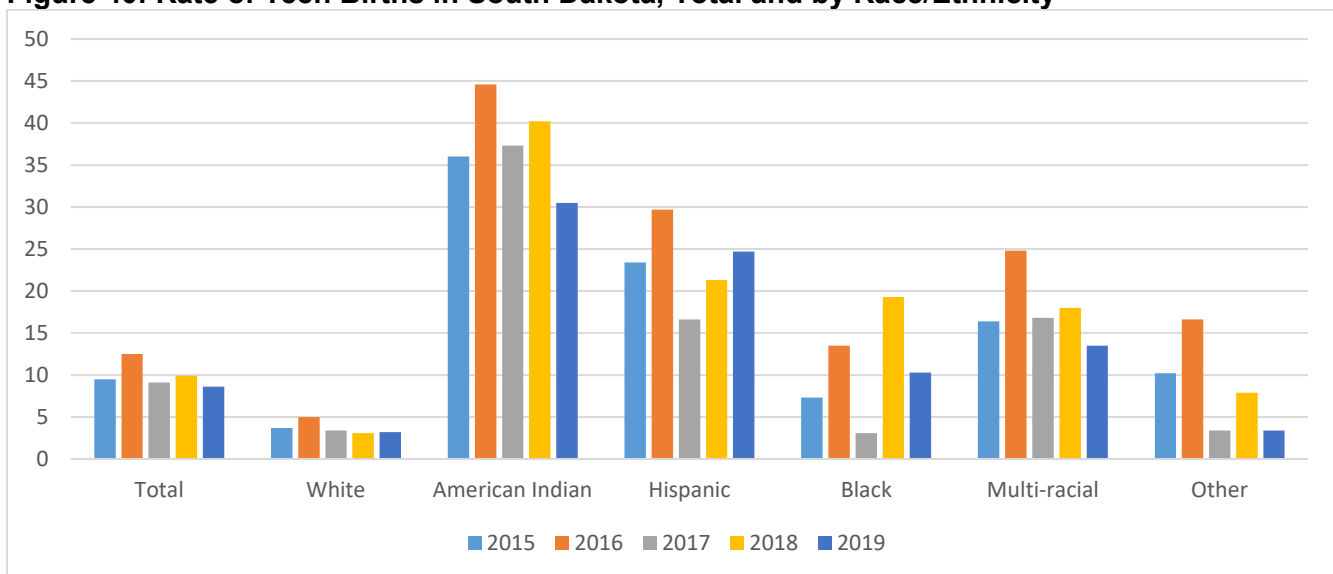
**Figure 39: Percent of Total Live Births in South Dakota Considered Low Birth Weight\*, Total and By Race/Ethnicity**



\*Low Birth Weight defined as less than 2500g.

DATA SOURCE: South Dakota Department of Health. 2019 South Dakota Vital Statistics  
[https://doh.sd.gov/statistics/2019Vital/6\\_Natality.pdf](https://doh.sd.gov/statistics/2019Vital/6_Natality.pdf)

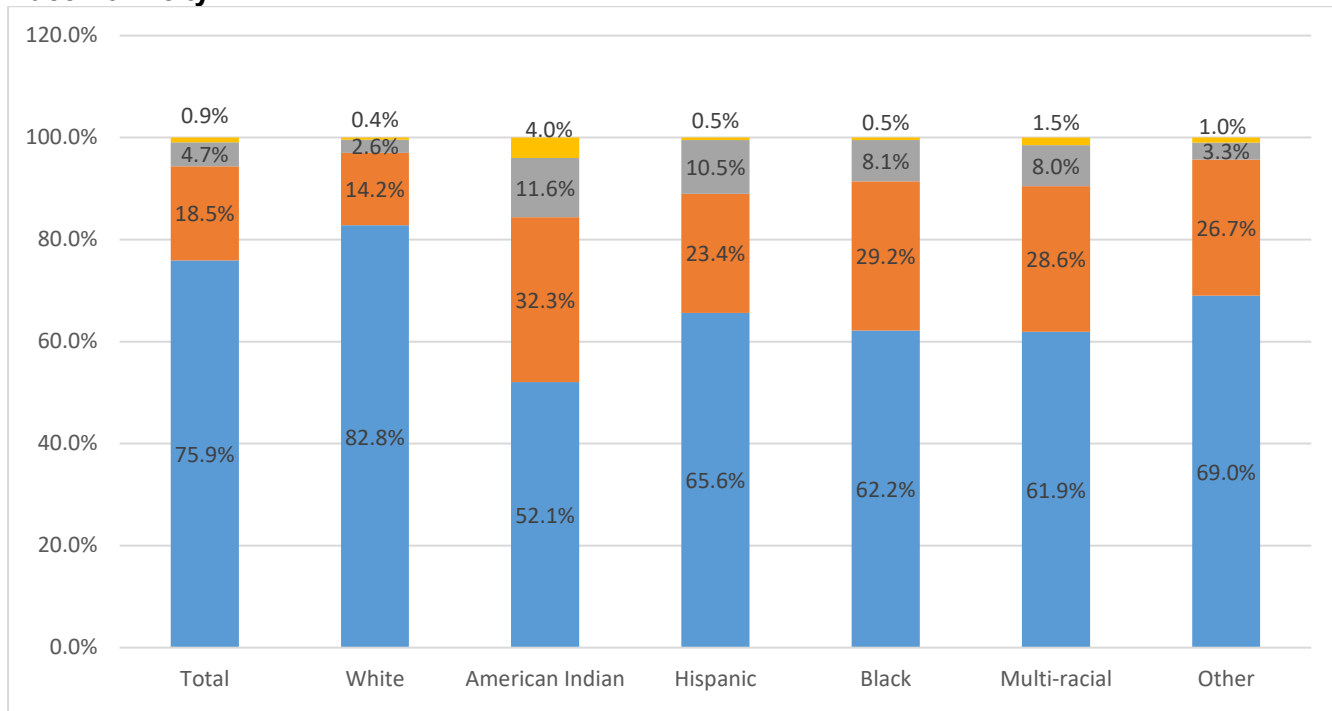
**Figure 40: Rate of Teen Births in South Dakota, Total and by Race/Ethnicity**



DATA SOURCE: South Dakota Department of Health. (2019). South Dakota Vital Statistics.  
[https://doh.sd.gov/statistics/2019Vital/6\\_Natality.pdf](https://doh.sd.gov/statistics/2019Vital/6_Natality.pdf)



**Figure 41: Percent of Live Births in South Dakota by Trimester Prenatal Care Began and Mother's Race/Ethnicity**



**Oral Health**

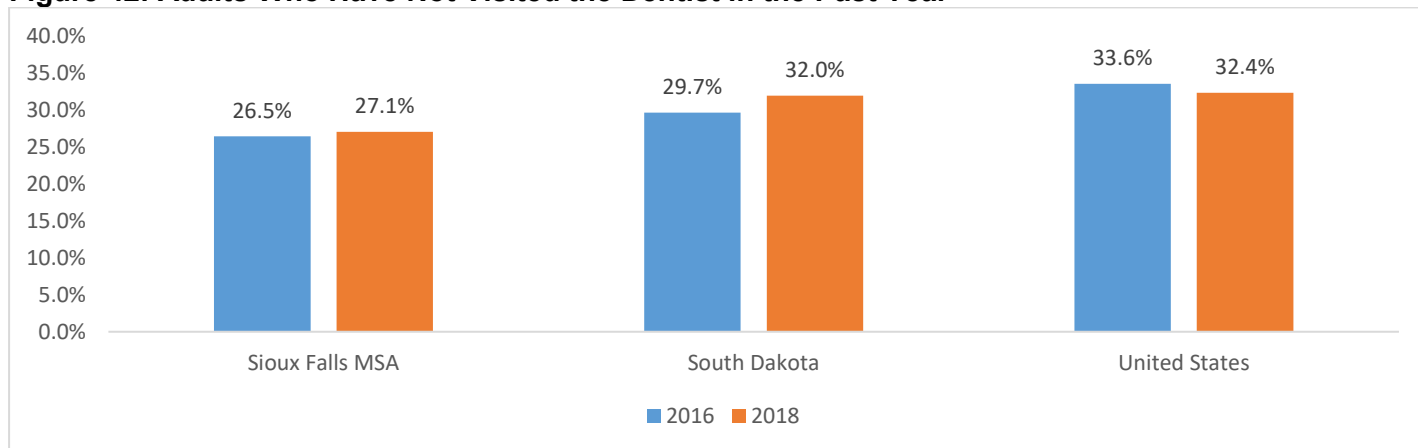
According to the World Health Organization, oral diseases are exceedingly prevalent, burdensome, and costly to treat.<sup>48</sup> However, much of this burden of disease is preventable or treatable if caught early. Common oral diseases are dental caries (decay), periodontal disease (gum disease), and oral cancer. Alcohol consumption, tobacco use, and a diet high in sugar are primary risk factors for oral disease.

Practicing good oral care at home and keeping routine dental visits are critical to maintaining good oral health. If left untreated, oral conditions can have major negative consequences such as infection, pain, difficulty chewing and speaking, sleep impairment, and loss of work and school hours among adults and

children.<sup>49</sup> Poor oral health conditions also impact many systemic conditions such as diabetes, cardiovascular disease, pulmonary disease, and pregnancy.<sup>50</sup>

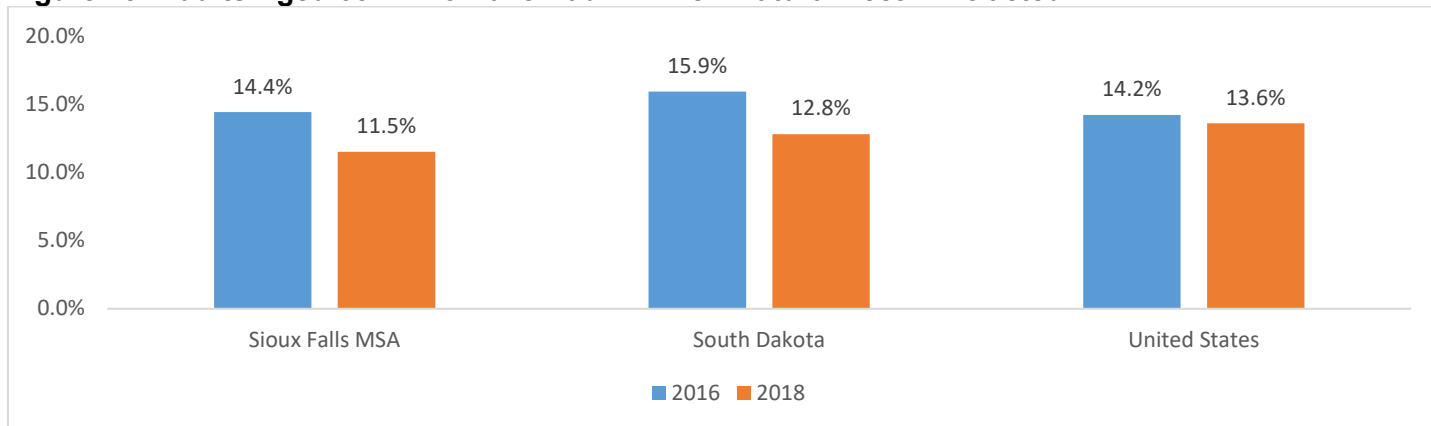
In the Sioux Falls MSA, 27 percent of adults report not keeping at least an annual dental visit (Figure 42). One out of every three adults have lost at least one permanent tooth, and 12 percent of adults age 65 and older have lost all of their natural teeth (Figures 43 and 44). While these figures are slightly better than state and national rates, they point to a poor state of oral health and gaps in uptake of preventive oral care services among adults. Cost, fear, and no perceived need to visit the dentist are three common reasons for avoiding dental care cited among South Dakota adults.<sup>51</sup>

**Figure 42: Adults Who Have Not Visited the Dentist in the Past Year**



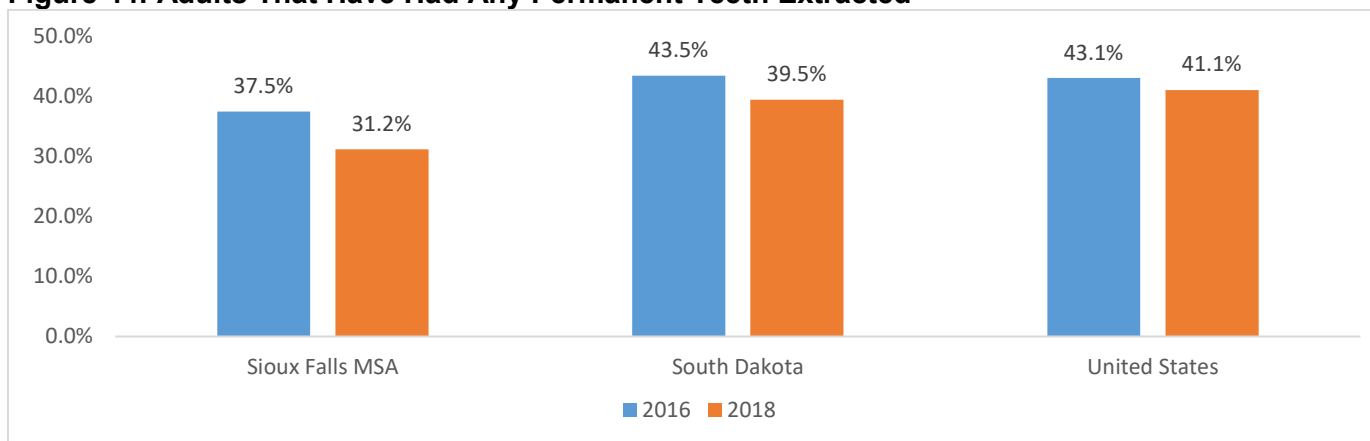
DATA SOURCE: Centers for Disease Control and Prevention. (2018). BRFSS Prevalence & Trends Data. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. <https://www.cdc.gov/brfss/brfssprevalence/>

**Figure 43: Adults Aged 65+ Who Have Had All Their Natural Teeth Extracted**



DATA SOURCE: Centers for Disease Control and Prevention. (2018). BRFSS Prevalence & Trends Data. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. <https://www.cdc.gov/brfss/brfssprevalence/>

**Figure 44: Adults That Have Had Any Permanent Teeth Extracted**



DATA SOURCE: Centers for Disease Control and Prevention. (2018). BRFSS Prevalence & Trends Data. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. <https://www.cdc.gov/brfss/brfssprevalence/>

There is evidence of poor oral health among children in South Dakota and the Sioux Falls area. For example, 56.5 percent of third grade children in South Dakota have a history of dental decay.<sup>7</sup> The 2019 Youth Risk Behavior Survey showed that 20 percent of South Dakota high school students had missed school in the past 12 months because of problems with their teeth or mouth.<sup>8</sup>

Data collected through three school-based dental clinics in the Sioux Falls School District<sup>9</sup> show that:

- 20 percent of the general population of elementary school students screened in 2021 had signs of obvious or probable tooth decay on visual examination.

- 56.2 percent of elementary school students enrolled in dental services at the three school-based clinics in 2021 already have dental decay.

Furthermore, 83.9 percent of all patients (adults and children) that received a dental examination at Falls Community Health (FCH) in 2021 were classified as having a moderate to high risk of dental caries. FCH is the major safety net clinic in Sioux Falls that seeks to provide access to comprehensive primary medical and dental care for all individuals regardless of their background or ability to pay.

While many improvements have occurred in the nation's oral health care system, lack of access to dental care among all ages remains a challenge.

## INJURY AND ACCIDENTAL DEATH

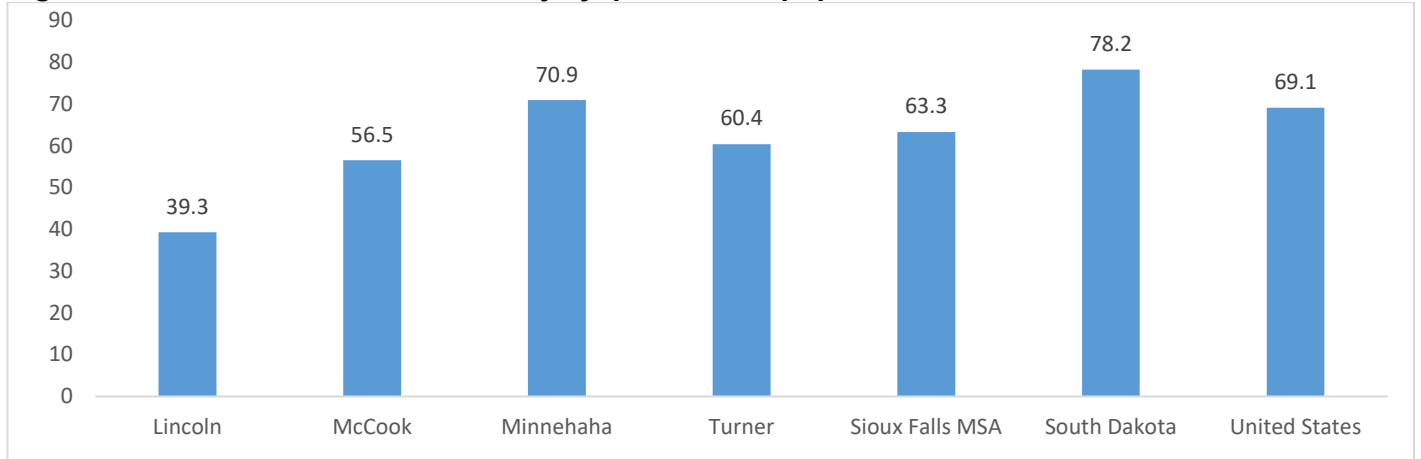
According to the CDC, more Americans die in the first half of life from injuries and violence, such as motor vehicle crashes, suicide, or homicides, than from any other cause.<sup>10</sup> Among those 1-44 years in the U.S.:

- Unintentional injuries, such as unintentional poisoning (including opioid overdoses), motor vehicle crashes, and unintentional falls, are the leading cause of death.
- Suicide is the second leading cause of death, and suicide rates continue to rise.

- Homicide remains in the top five leading causes of death.

In the Sioux Falls MSA, death rate from injuries (intentional and unintentional, combined) is lower than the state and national rates (Figure 45). However, rates vary among the four counties, with the highest rate seen in Minnehaha County, which exceeds the national average.

**Figure 45: Number of Deaths Due to Injury, per 100,000 population**

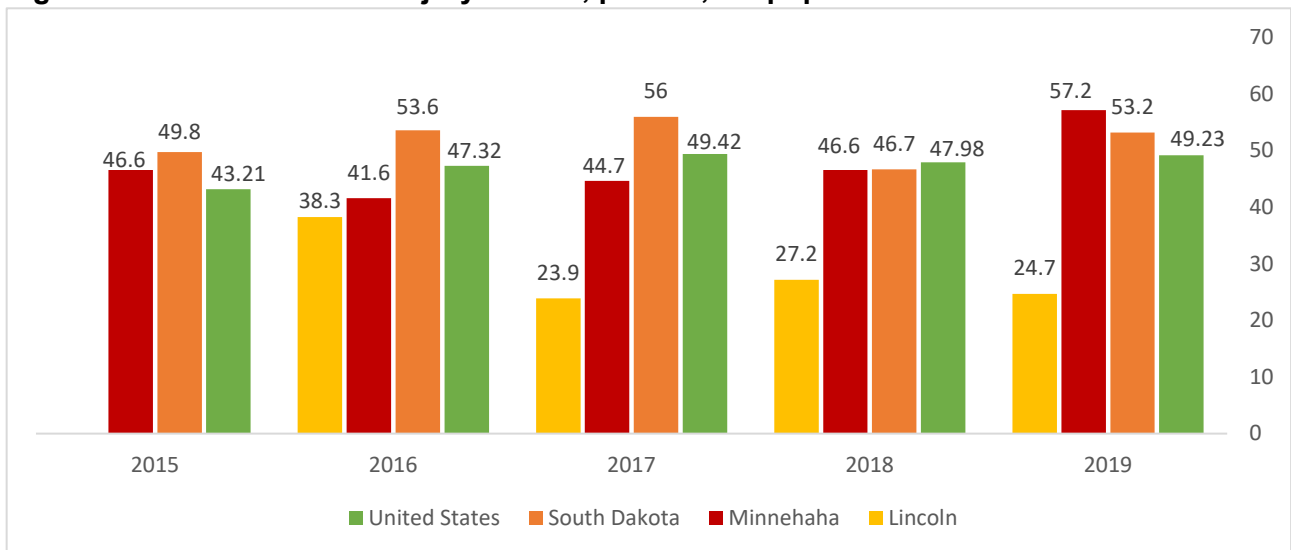


**DATA SOURCE:** Centers for Disease Control and Prevention. (2019). Web-based Injury Statistics Query and Reporting System (WISQARS). Injury Prevention & Control. <https://www.cdc.gov/injury/wisqars/index.html>. Sioux Falls MSA data based on Sioux Falls Metropolitan Statistical Area Calculator.

### Unintentional Injury

Looking specifically at unintentional injury deaths, Lincoln County's rate is half of the national average, while Minnehaha County's rate now exceeds both state and national rates (Figure 46).

**Figure 46: All Unintentional Injury Deaths, per 100,000 population**

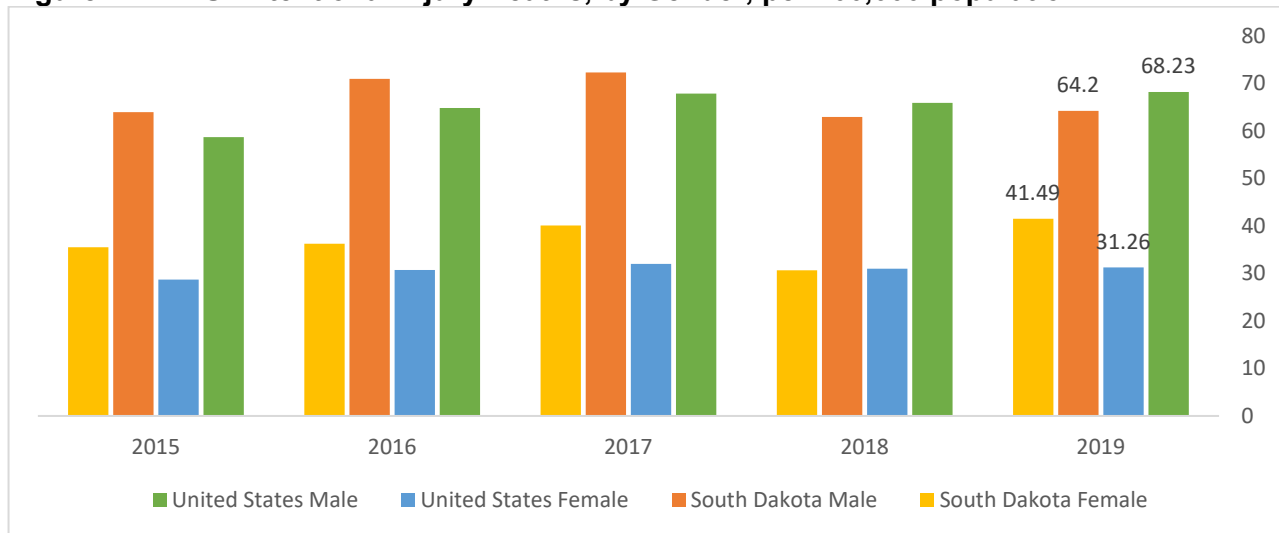


**DATA SOURCE:** Centers for Disease Control and Prevention. (2019). Web-based Injury Statistics Query and Reporting System (WISQARS). Injury Prevention & Control. <https://www.cdc.gov/injury/wisqars/index.html>



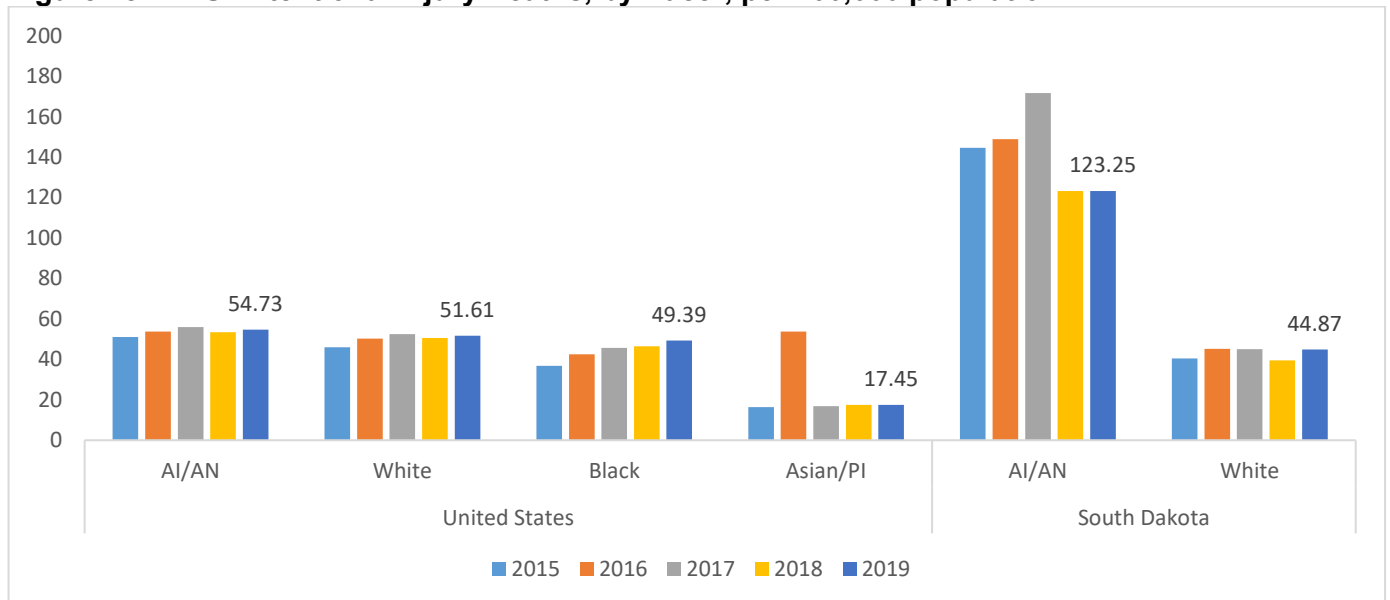
Disparities are seen in unintentional injury deaths at the state level in South Dakota, with higher rates for males compared to females and for the American Indian population compared to the White population (Figure 47 and 48).

**Figure 47: All Unintentional Injury Deaths, by Gender, per 100,000 population**



DATA SOURCE: Centers for Disease Control and Prevention. (2019). Web-based Injury Statistics Query and Reporting System (WISQARS). Injury Prevention & Control. <https://www.cdc.gov/injury/wisqars/index.html>

**Figure 48: All Unintentional Injury Deaths, by Race\*, per 100,000 population**



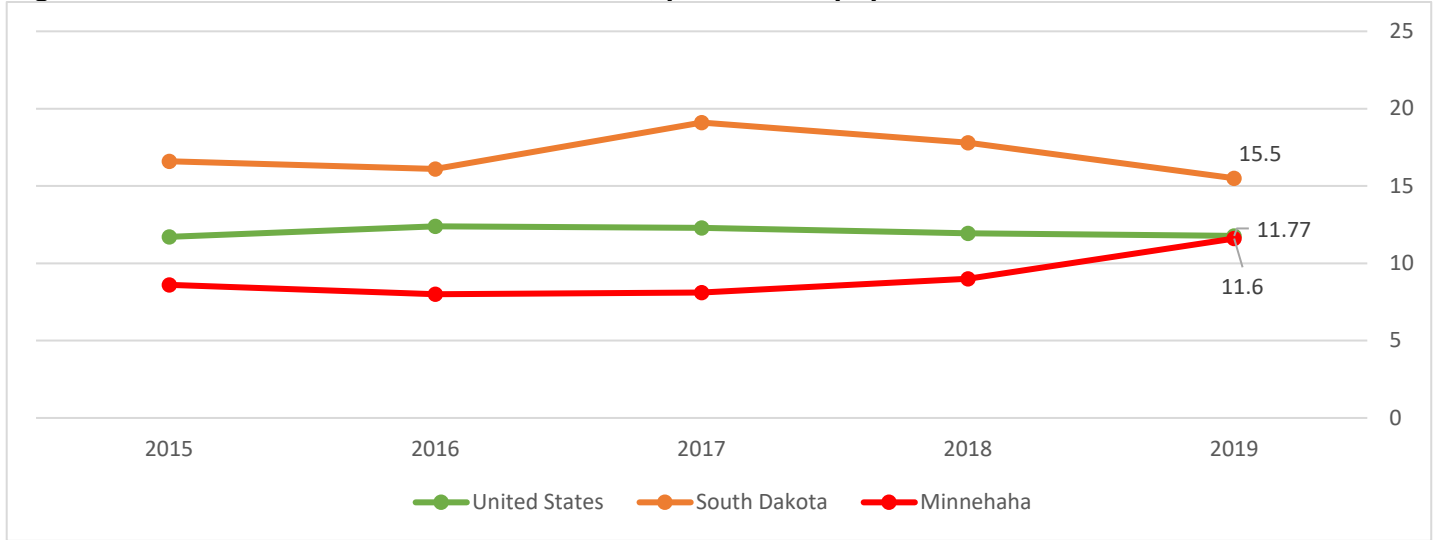
\*South Dakota statistics for Black and Asian/Pacific Islander are not available

DATA SOURCE: Centers for Disease Control and Prevention. (2019). Web-based Injury Statistics Query and Reporting System (WISQARS). Injury Prevention & Control. <https://www.cdc.gov/injury/wisqars/index.html>

Motor vehicle crashes are a leading cause of unintentional deaths, particularly among young people. As population increases, that also increases the number of cars on the road. A 2019 data report showed that in the U.S. there were 276.5 million vehicles, 231 million licensed drivers, and more than three trillion miles driven annually.<sup>52</sup> According to the National Safety Council, the top three causes of fatalities on the road are alcohol, speeding, and lack of seat belt use.

Minnehaha County's rate of unintentional motor vehicle deaths has risen slowly over the last few years to catch up with the U.S. average rate, while the South Dakota rate remains higher than both (Figure 49). Comparable data was not available for other counties in the MSA.

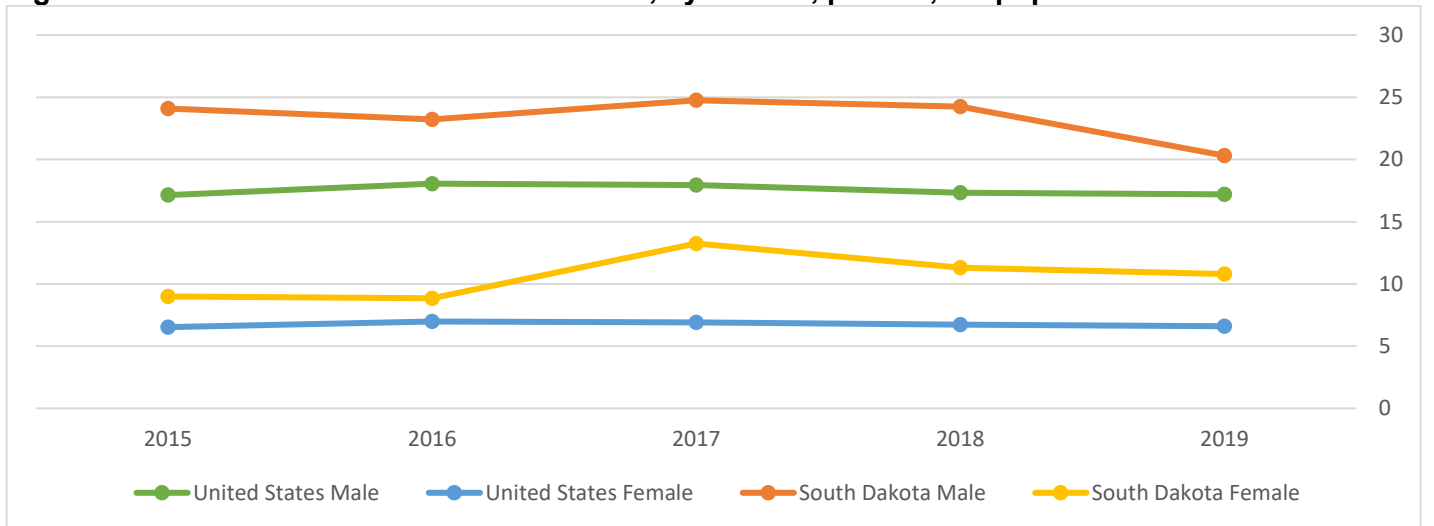
**Figure 49: Unintentional Motor Vehicle Deaths, per 100,000 population**



DATA SOURCE: Centers for Disease Control and Prevention. (2019). Web-based Injury Statistics Query and Reporting System (WISQARS). Injury Prevention & Control. <https://www.cdc.gov/injury/wisqars/index.html>

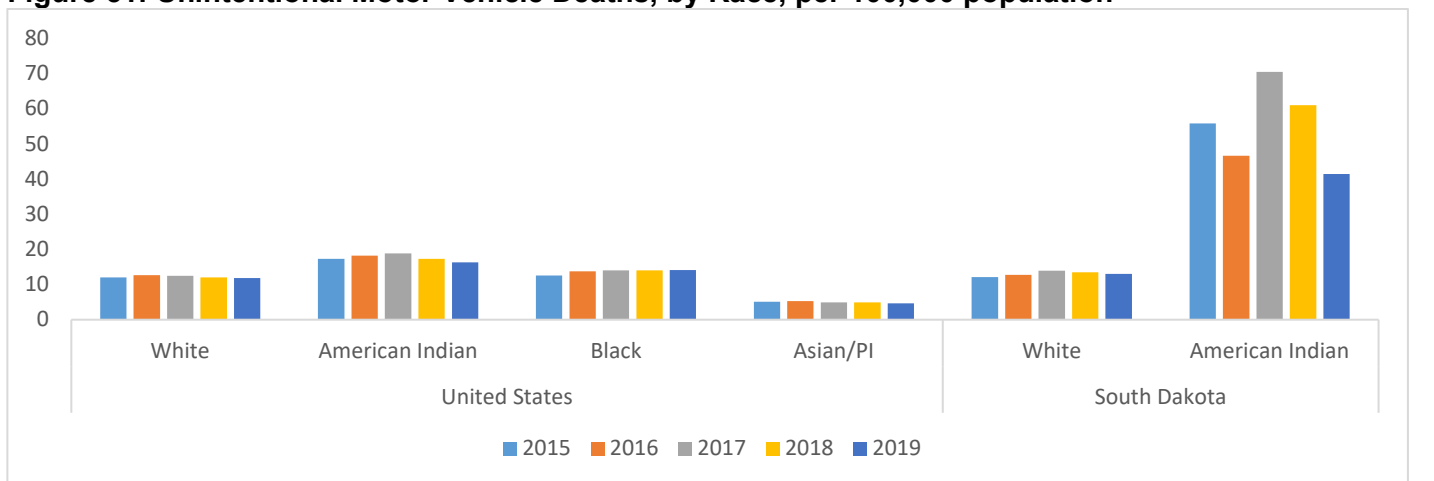
Similar to the trend for unintentional injuries overall, males are more likely to die from motor vehicle accidents and American Indians have a higher risk than their White counterparts (Figure 50 and 51).

**Figure 50: Unintentional Motor Vehicle Deaths, by Gender, per 100,000 population**



DATA SOURCE: Centers for Disease Control and Prevention. (2019). Web-based Injury Statistics Query and Reporting System (WISQARS). Injury Prevention & Control. <https://www.cdc.gov/injury/wisqars/index.html>

**Figure 51: Unintentional Motor Vehicle Deaths, by Race, per 100,000 population**

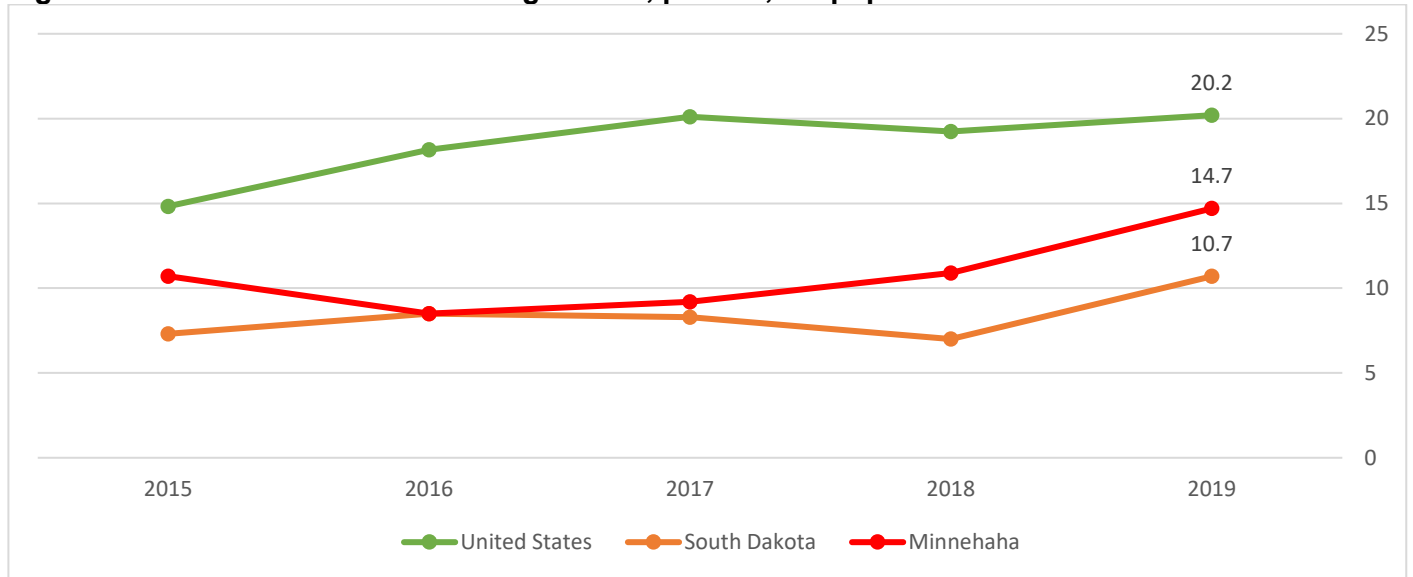


DATA SOURCE: Centers for Disease Control and Prevention. (2019). Web-based Injury Statistics Query and Reporting System (WISQARS). Injury Prevention & Control. <https://www.cdc.gov/injury/wisqars/index.html>

The CDC defines a poison as a “substance, including medications, that is harmful to your body if too much is eaten, inhaled, injected, or absorbed through the skin,” and uses unintentional poisoning to refer to a situation in which “a person taking or giving too much of a substance did not mean to cause harm.”<sup>53</sup>

Death from unintentional poisoning is trending upwards at the county (Minnehaha), state, and national levels (Figure 52). However, local and state rates are significantly lower than the national average.

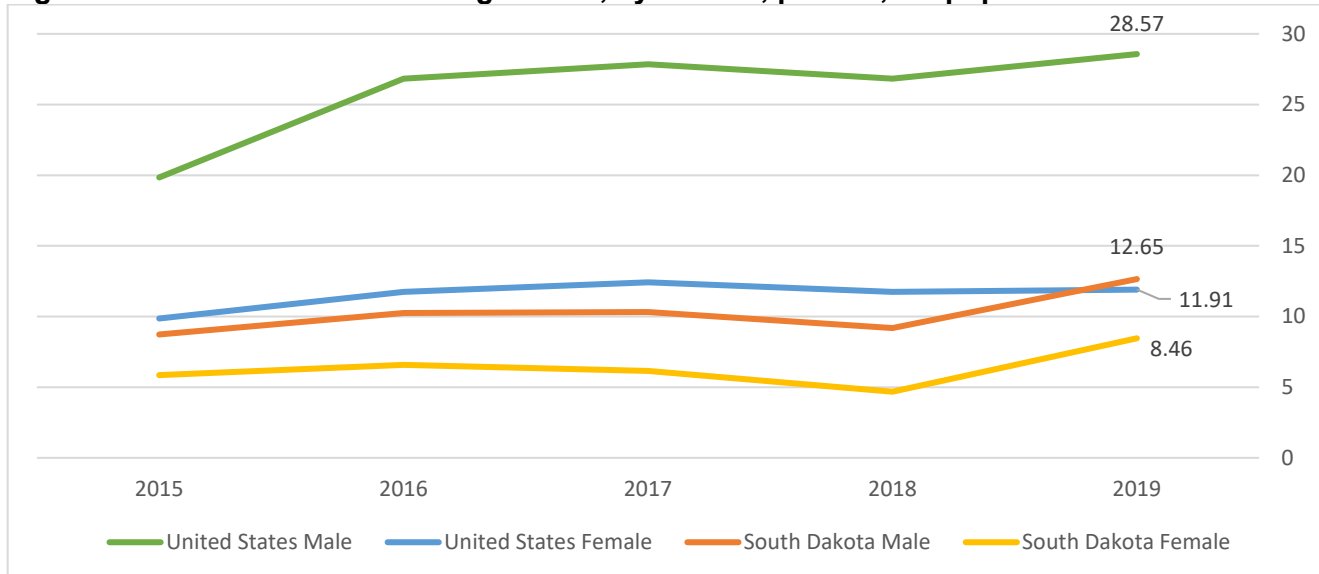
**Figure 52: All Unintentional Poisoning Deaths, per 100,000 population**



DATA SOURCE: Centers for Disease Control and Prevention. (2019). Web-based Injury Statistics Query and Reporting System (WISQARS). Injury Prevention & Control. <https://www.cdc.gov/injury/wisqars/index.html>

As can be seen in Figures 53 and 54, unintentional poisoning deaths are more likely to occur among males and American Indians.

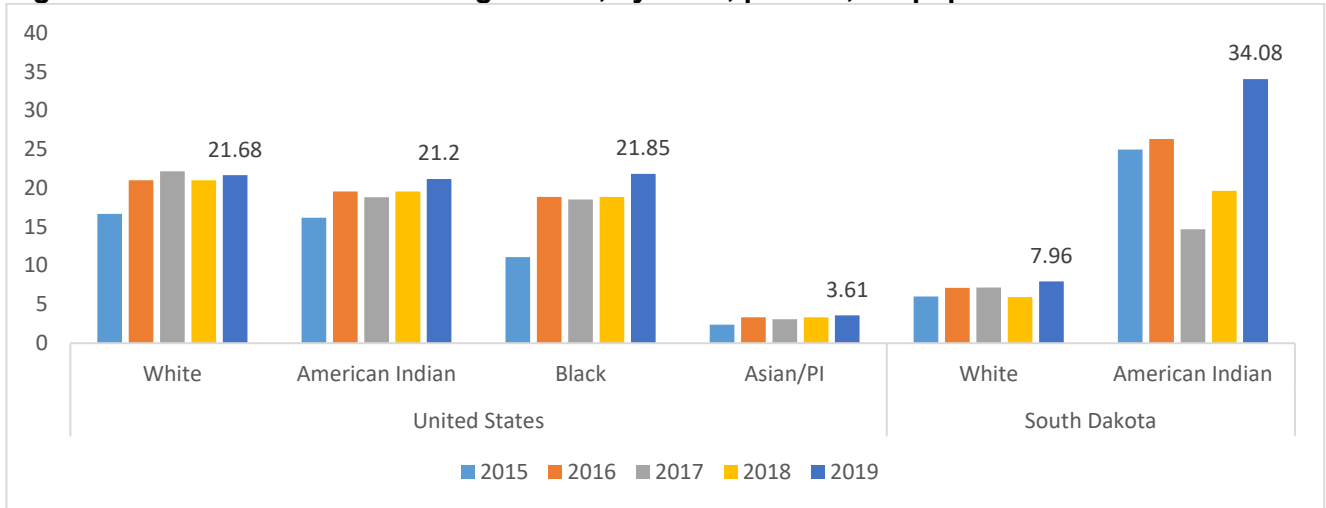
**Figure 53: Unintentional Poisoning Deaths, by Gender, per 100,000 population**



DATA SOURCE: Centers for Disease Control and Prevention. (2019). Web-based Injury Statistics Query and Reporting System (WISQARS). Injury Prevention & Control. <https://www.cdc.gov/injury/wisqars/index.html>



**Figure 54: Unintentional Poisoning Deaths, by Race, per 100,000 population**



\*South Dakota statistics for Black and Asian/Pacific Islander are not available

DATA SOURCE: Centers for Disease Control and Prevention. (2019). Web-based Injury Statistics Query and Reporting System (WISQARS). Injury Prevention & Control. <https://www.cdc.gov/injury/wisqars/index.html>

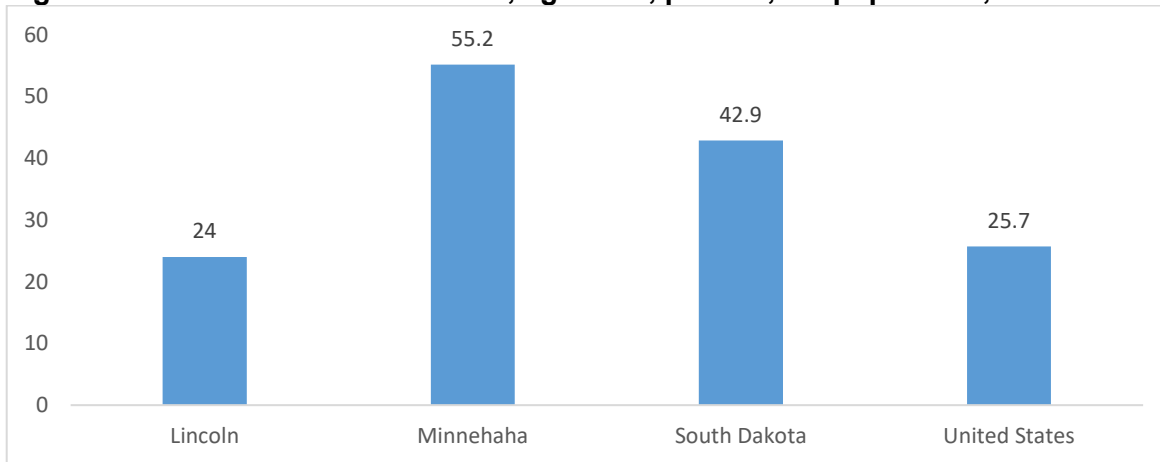
Millions of Americans aged 65 and older fall every year, and falls occur in as many as one out of every four older people. Falls can cause serious injury, including traumatic brain injury, resulting in costly emergency department visits, hospitalizations, and even death.<sup>54</sup>

A 2018 report on older South Dakotans indicated that the number of deaths from falls among adults age 65 and older increased significantly in South Dakota between 2007 and 2016.<sup>55</sup> It is important to note that

falls are not just a consequence of aging, as individuals under age 65 have reported injuries from falls that required them to limit regular activities for at least a day, or to visit a doctor.

Whereas the unintentional fall death rate in Lincoln County is similar to the national average, the rate in Minnehaha County is more than double the national rate (Figure 55).

**Figure 55: Unintentional Fall Deaths, ages 45+, per 100,000 population, 2015-2019**



DATA SOURCE: Centers for Disease Control and Prevention. (2019). Web-based Injury Statistics Query and Reporting System (WISQARS). Injury Prevention & Control. <https://www.cdc.gov/injury/wisqars/index.html>

### Suicide

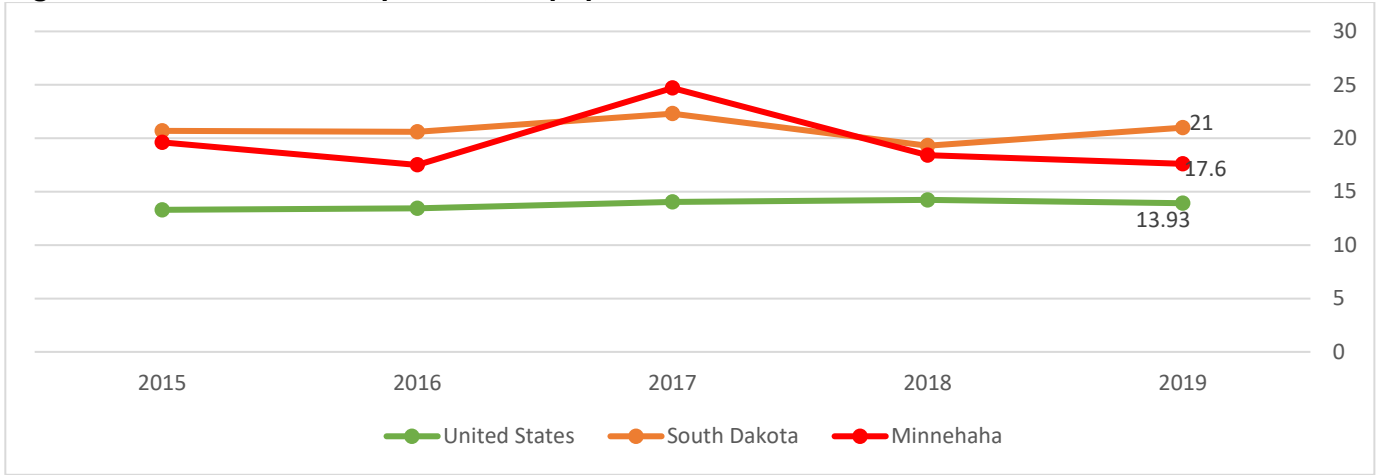
Suicide is defined as death caused by self-directed injurious behavior with intent to die as a result of the behavior.<sup>56</sup> According to the CDC's injury statistics reporting system, in 2019:

- Suicide was the tenth leading cause of death overall in the United States, claiming the lives of over 47,500 people.

- Suicide was the second leading cause of death among individuals between the ages of 10 and 34, and the fourth leading cause of death among individuals between the ages of 35 and 44.

Rates of death by suicide are higher locally (Minnehaha County) and in the state of South Dakota than the national average (Figure 56).

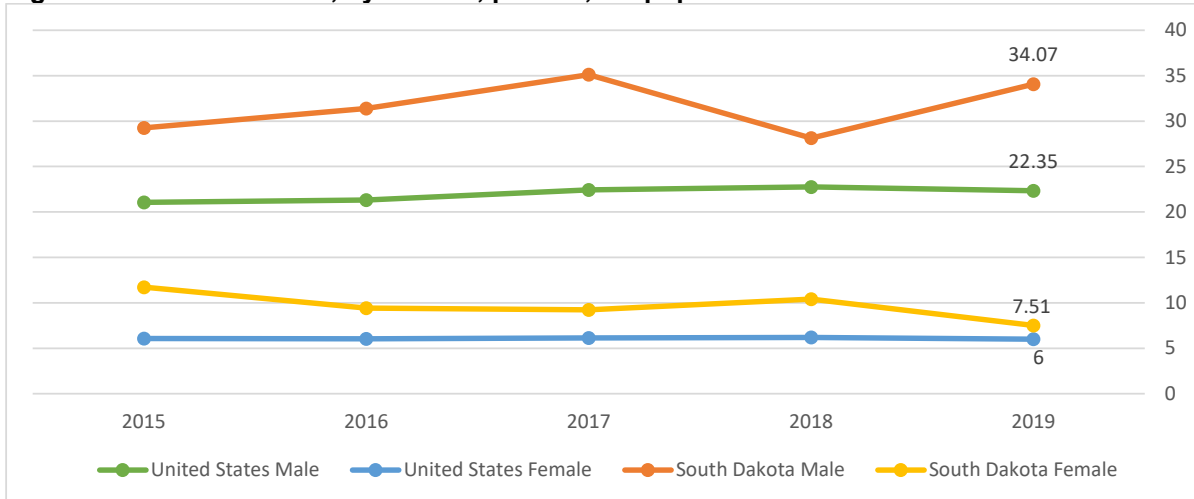
**Figure 56: Suicide Deaths, per 100,000 population**



DATA SOURCE: Centers for Disease Control and Prevention. (2019). Web-based Injury Statistics Query and Reporting System (WISQARS). Injury Prevention & Control. <https://www.cdc.gov/injury/wisqars/index.html>

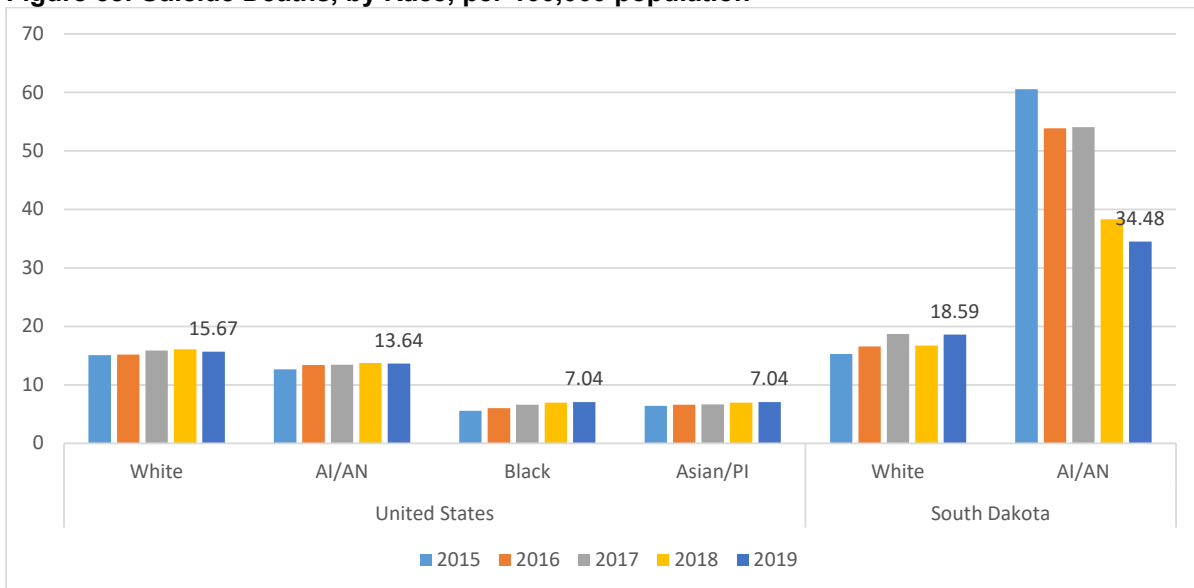
Similar to trends for unintentional injuries, males are more likely to die by suicide in South Dakota and the U.S., and American Indians in South Dakota have a higher risk than their White counterparts (Figure 57 and 58). However, the rate of suicide deaths among the American Indian population in South Dakota is trending downward.

**Figure 57: Suicide Deaths, by Gender, per 100,000 population**



DATA SOURCE: Centers for Disease Control and Prevention. (2019). Web-based Injury Statistics Query and Reporting System (WISQARS). Injury Prevention & Control. <https://www.cdc.gov/injury/wisqars/index.html>

**Figure 58: Suicide Deaths, by Race, per 100,000 population**

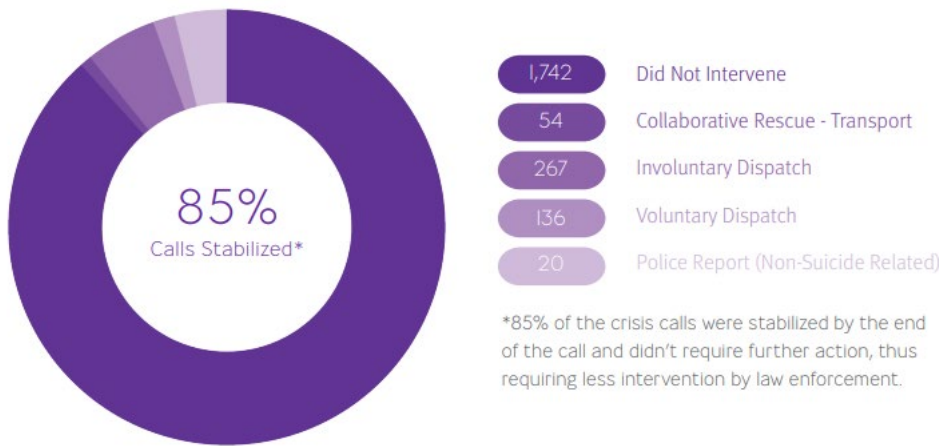


\*South Dakota statistics for Black and Asian/Pacific Islander are not available

DATA SOURCE: Centers for Disease Control and Prevention. (2019). Web-based Injury Statistics Query and Reporting System (WISQARS). Injury Prevention & Control. <https://www.cdc.gov/injury/wisqars/index.html>

Locally, the Helpline Center reported 2,045 suicide-related contacts in 2020, which include calls, texts, and emails received from 211 and 1-800-273-8255 (Figure 59).

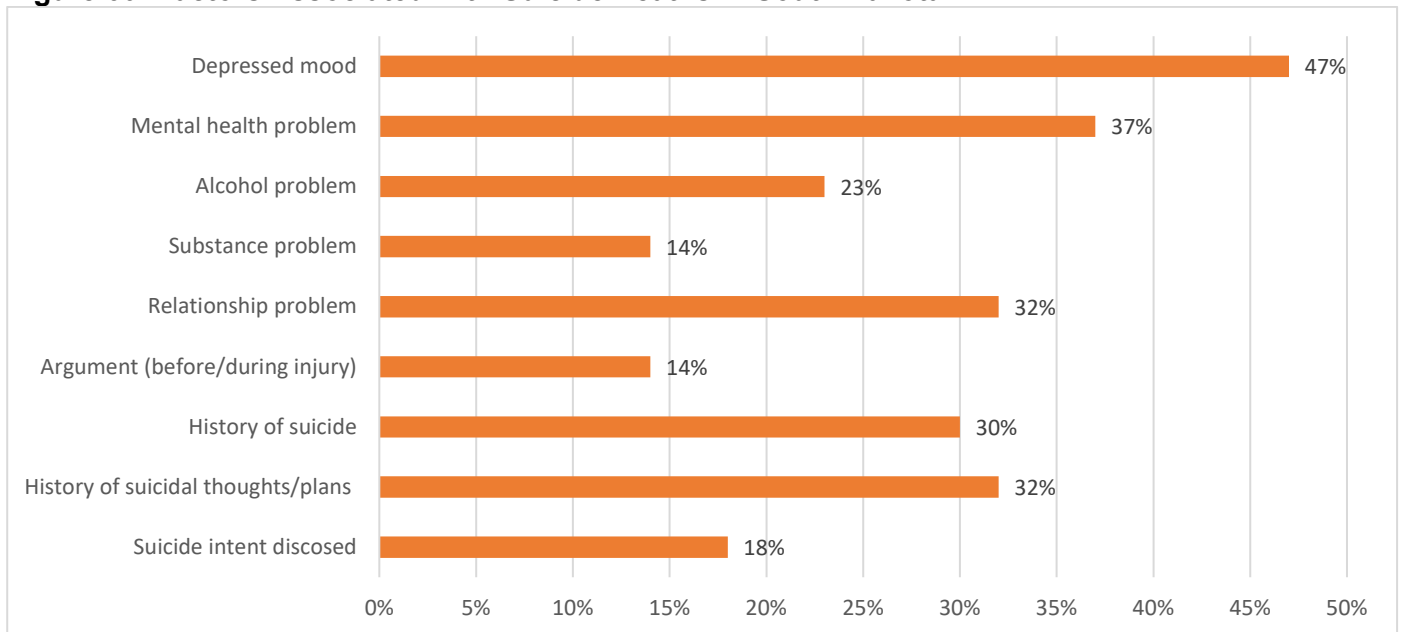
**Figure 59: Suicide-related Contacts through the Helpline Center**



*DATA SOURCE: Helpline Center. (2020). 211 Data Snapshot 2020. <https://www.helplinecenter.org/wp-content/uploads/HLCRD-SD-Data-Snapshot.pdf?nc994>*

The figures below (Figures 60 and 61) show contributing circumstances surrounding suicide and life stressors for those who died by suicide. It is important to note that persons who died by suicide may have had multiple contributing circumstances. For example, an individual may have been experiencing depression and relationship problems, which is why the numbers in the charts may total above or below 100 percent. Additionally, it is possible that other circumstances could have been present and not diagnosed, known, or reported.

**Figure 60: Factors Associated with Suicide Deaths in South Dakota\***

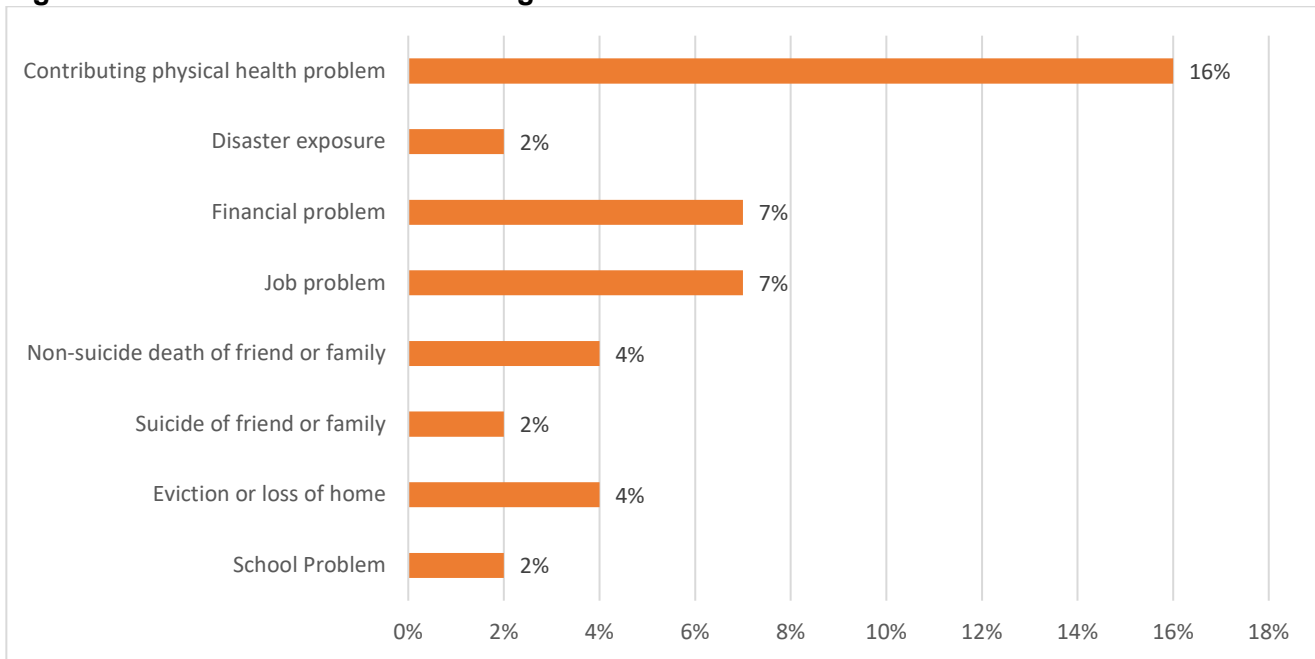


\* Contributing circumstances surrounding suicide deaths were documented in the records by coroners and/or law enforcement and multiple factors (or no factors) could have been documented.

*DATA SOURCE: South Dakota Department of Health. (2019). South Dakota Violent Death Reporting System. <https://doh.sd.gov/documents/statistics/2019SD-VDRSDDataReport.pdf>*



**Figure 61: Life Stressors Contributing to Suicide Deaths in South Dakota\***



\* Life stressors contributing to suicide deaths were documented in the records by coroners and/or law enforcement and multiple stressors (or no stressors) could have been documented.

DATA SOURCE: South Dakota Department of Health. (2019). South Dakota Violent Death Reporting System. <https://doh.sd.gov/documents/statistics/2019SD-VDRSDDataReport.pdf>

### MENTAL HEALTH AND SUBSTANCE ABUSE

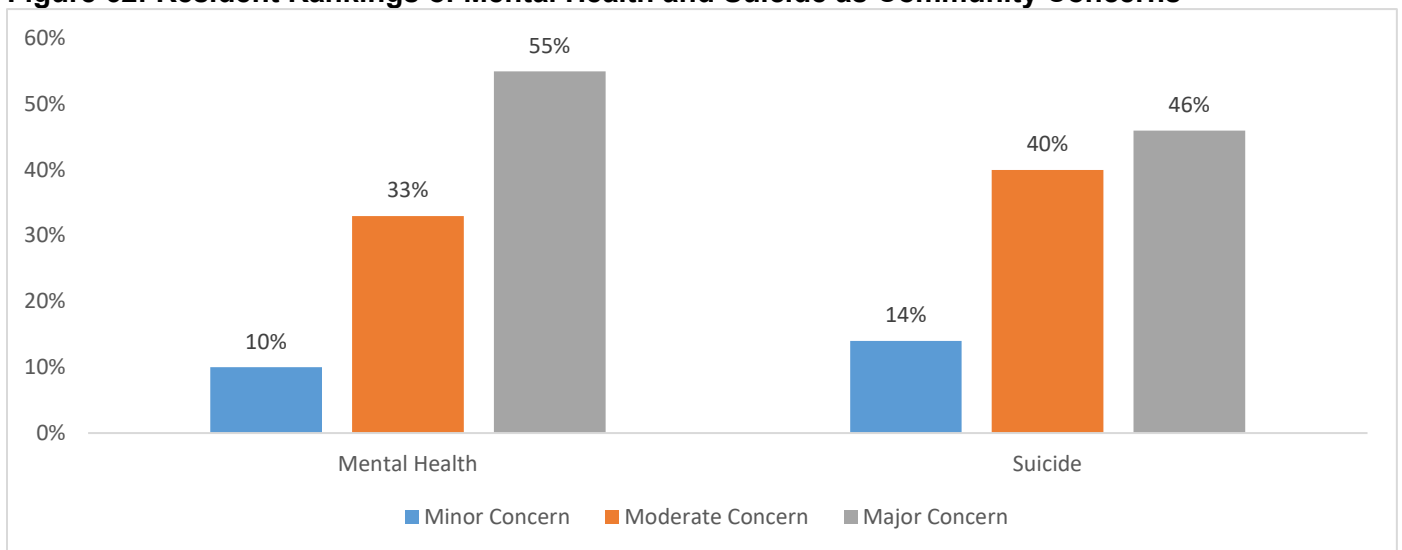
Research shows that mental illnesses are common in the United States, affecting tens of millions of people each year. Estimates suggest that only half of people with mental illnesses receive treatment.<sup>57</sup> Mental health is an essential part of overall well-being because it is necessary for individuals to maintain fulfilling relationships with others, to adapt to change, to cope with challenges, and to participate in health-promoting behaviors.

Substance use and abuse can negatively impact mental and physical health and well-being. Many individuals also resort to using substances as a coping mechanism for dealing with health and other life

challenges. Thus, mental health and substance use disorders often present as challenges handled by behavioral health services. According to the National Institute on Drug Abuse (NIDA), the abuse of tobacco, alcohol, and illicit drugs in the U.S. results in more than \$740 billion annually in costs related to crime, lost work productivity, and health care.<sup>58</sup>

Mental health and related topics were frequently mentioned during the 2021 Community Health Assessment Focus Group discussions as top health issues facing the community. In addition, more than half of residents responding to the National Community Survey named mental health as a “major concern” for the community (Figure 62).

**Figure 62: Resident Rankings of Mental Health and Suicide as Community Concerns**

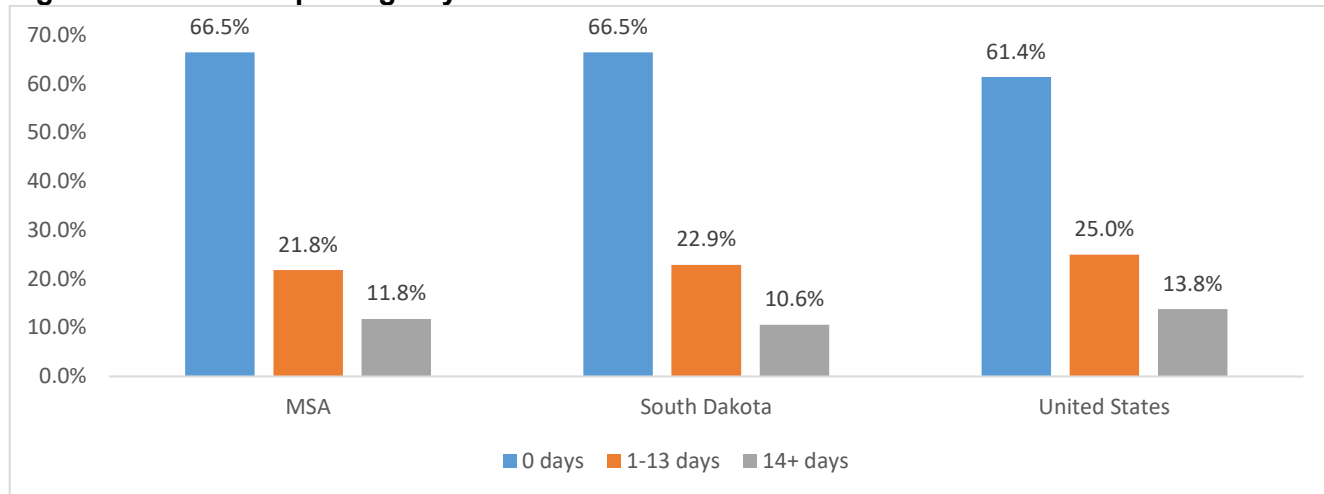


DATA SOURCE: Sioux Falls, SD The National Community Survey Report of Results 2021. The National Research Center. Accessed at <https://www.siouxfalls.org/council/community-survey/survey-results/21-report-of-results>

The CDC's Behavioral Risk Factor Surveillance System asks adults to indicate the number of days within a month when they felt their mental health status was "not good." One in three adults in the Sioux Falls MSA report at least one or more days with poor mental health status in a month; two-thirds of people in this

group report being mentally unhealthy less than half of the month (one to 13 days), while one-third of them report being mentally unhealthy for at least half of the days in the month (14 or more days). These rates are comparable to the state average in South Dakota but slightly better than the U.S. average (Figure 63).

**Figure 63: Adults Reporting Days in a Month When Their Mental Health Status Was "Not Good"**



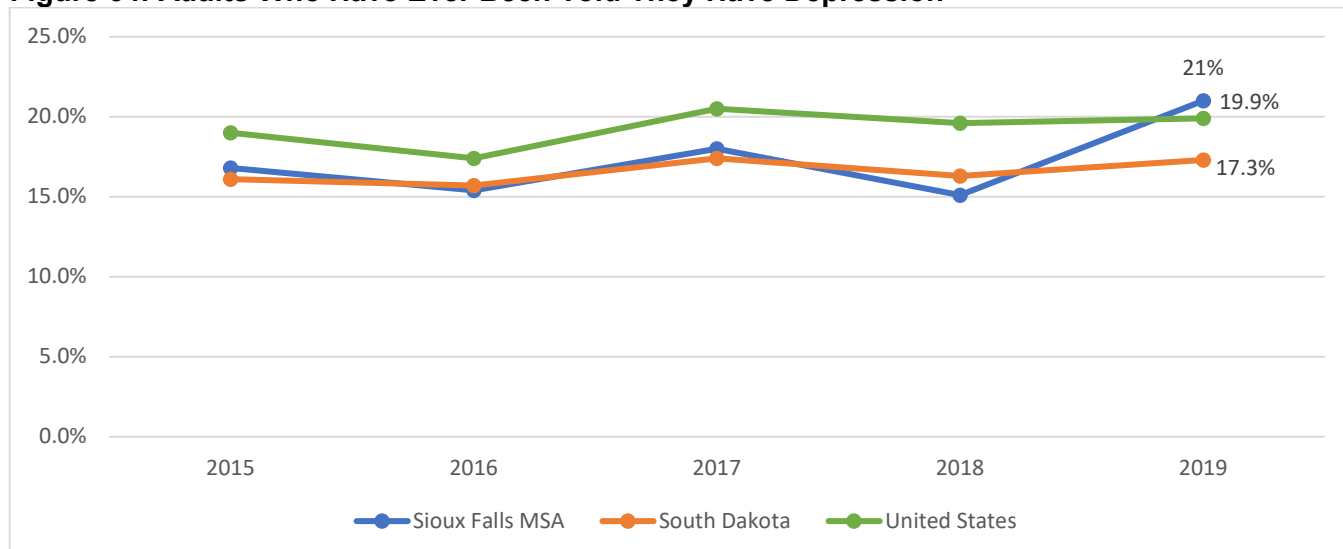
DATA SOURCE: Centers for Disease Control and Prevention. (2019). BRFSS Prevalence & Trends Data. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. <https://www.cdc.gov/brfss/brfssprevalence/>

### Depression

In the Sioux Falls MSA, 20 percent of adults report that they have been diagnosed with depression.<sup>4</sup> This is comparable to the U.S. average but higher than the

average for South Dakota. The percentage of adults diagnosed with depression has also been trending upwards in the Sioux Falls MSA and South Dakota. (Figure 64).

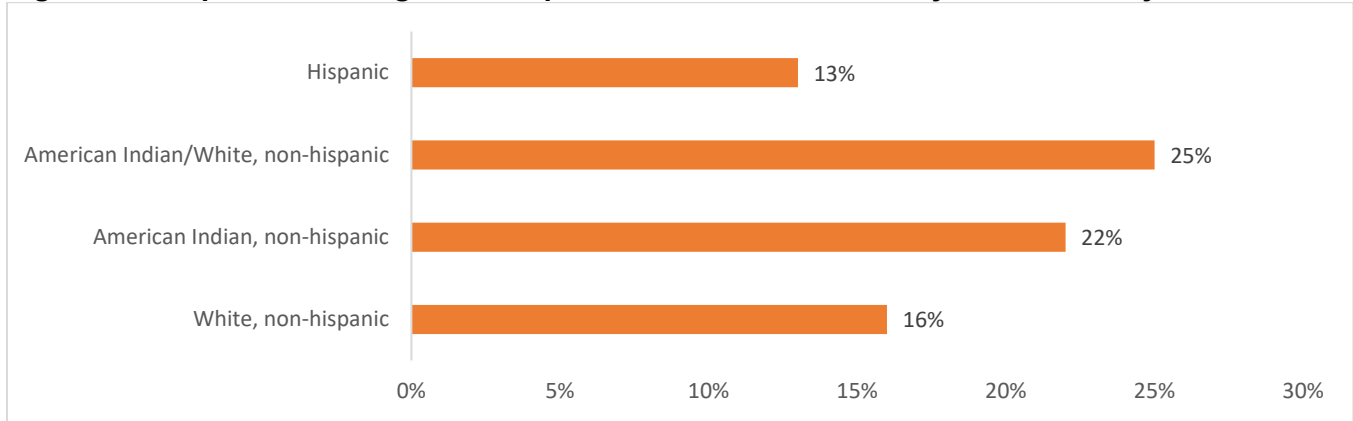
**Figure 64: Adults Who Have Ever Been Told They Have Depression**



DATA SOURCE: Centers for Disease Control and Prevention. (2019). BRFSS Prevalence & Trends Data. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. <https://www.cdc.gov/brfss/brfssprevalence/>

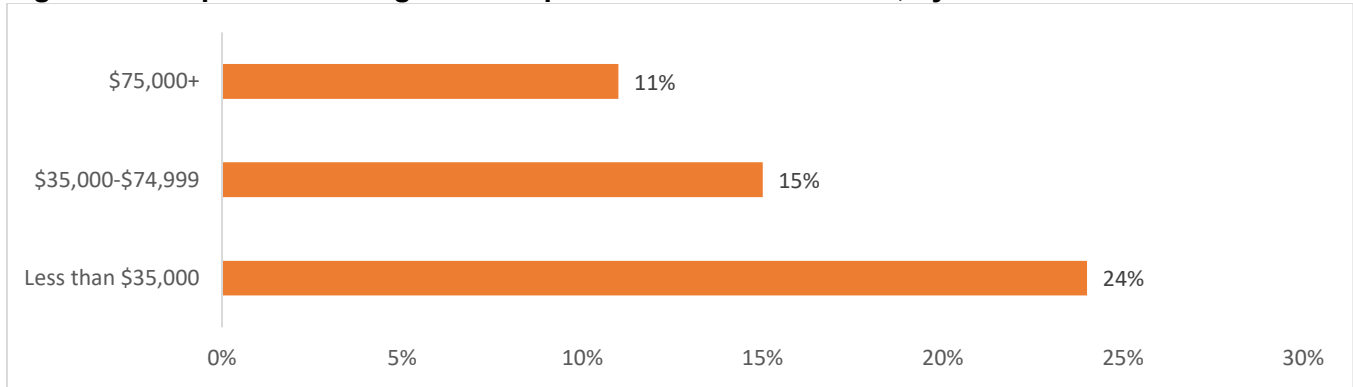
In South Dakota, depression rates vary by race/ethnicity, income level, employment status, and marital status (Figures 65-68). American Indians, lower income earners, individuals unable to work or who are unemployed, and adults who are divorced or separated report higher depression rates.

**Figure 65: Disparities in Diagnosed Depression in South Dakota, by Race/Ethnicity**



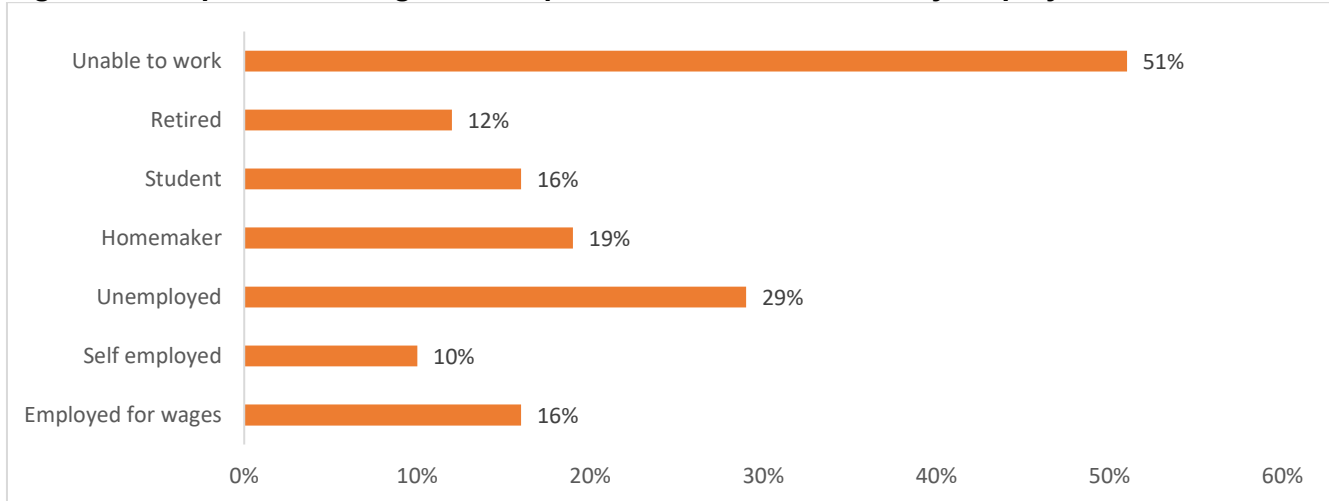
DATA SOURCE: South Dakota Department of Health. (2019). Behavioral Risk Factor Surveillance System. Office of Health Statistics. <https://doh.sd.gov/statistics/>

**Figure 66: Disparities in Diagnosed Depression in South Dakota, by Income**



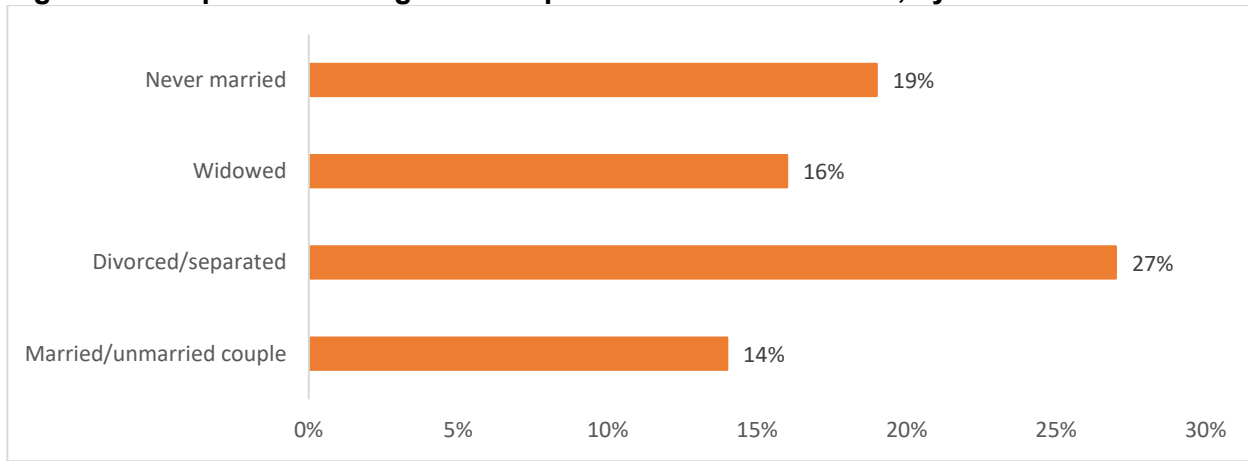
DATA SOURCE: South Dakota Department of Health. (2019). Behavioral Risk Factor Surveillance System. Office of Health Statistics. <https://doh.sd.gov/statistics/>

**Figure 67: Disparities in Diagnosed Depression in South Dakota, by Employment Status**



DATA SOURCE: South Dakota Department of Health. (2019). Behavioral Risk Factor Surveillance System. Office of Health Statistics. <https://doh.sd.gov/statistics/>

**Figure 68: Disparities in Diagnosed Depression in South Dakota, by Marital Status**



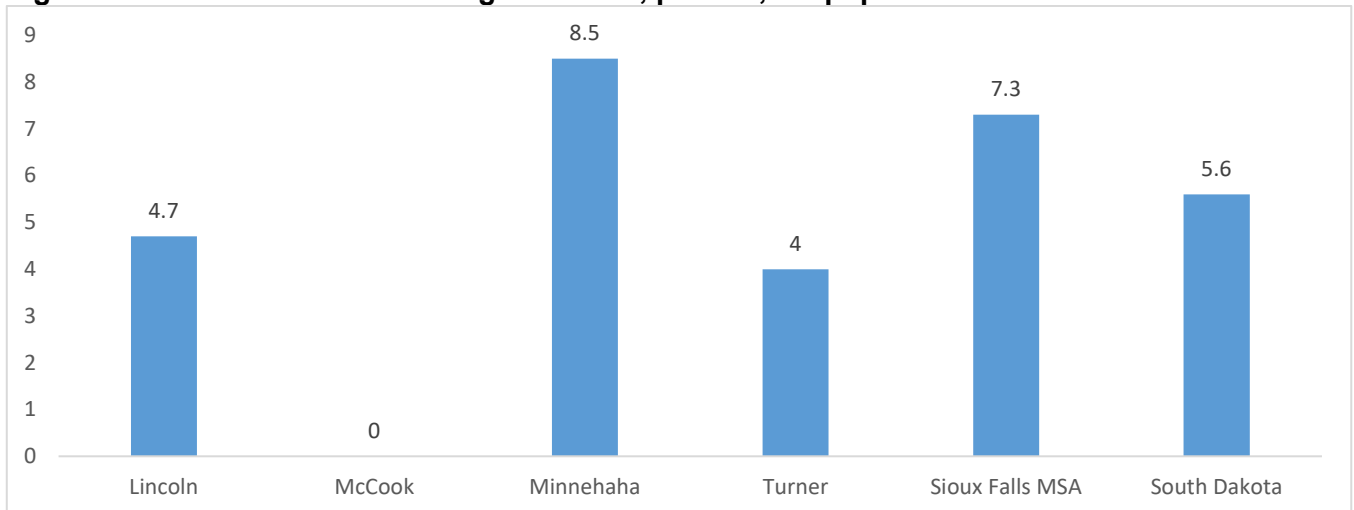
**DATA SOURCE:** South Dakota Department of Health. (2019). Behavioral Risk Factor Surveillance System. Office of Health Statistics. <https://doh.sd.gov/statistics/>

**Substance Use**

In 2020, drug overdose deaths in the United States increased by nearly 30 percent over the previous year, reaching an all-time high of more than 93,000.<sup>59</sup> Opioids were involved in nearly three-quarters of all drug overdose deaths, and the majority of opioid deaths were linked to use of synthetic opioids such

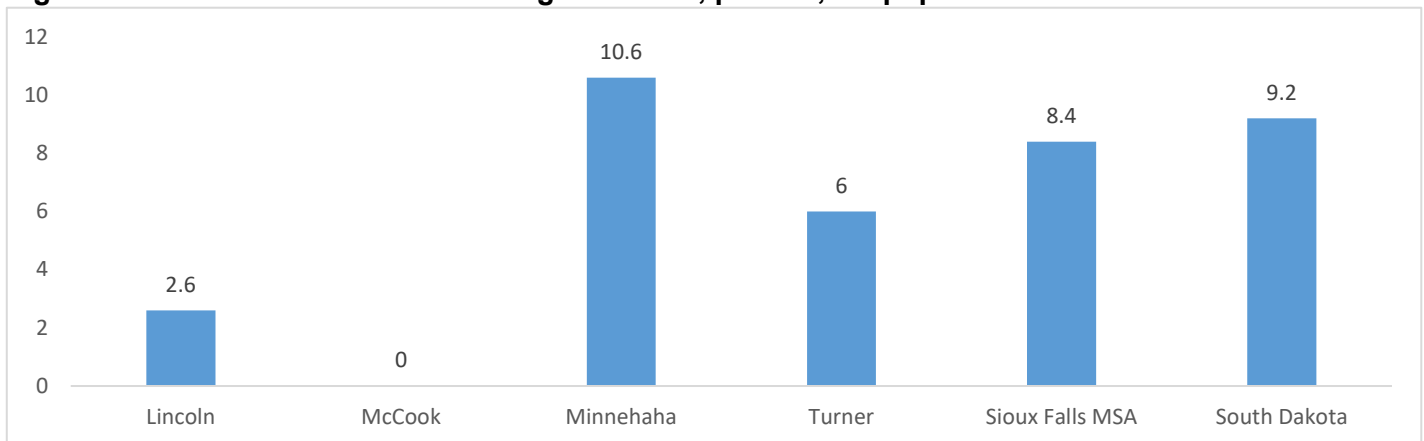
as fentanyl, followed by psychostimulants such as methamphetamine. Drug overdose incidents and substance use treatment admissions are higher in the Sioux Falls MSA compared to the state average (Figures 69-71). At the individual county level, Minnehaha County is primarily driving the high rates in the MSA.

**Figure 69: Unintentional Fatal Drug Overdose, per 100,000 population**



**DATA SOURCE:** South Dakota Department of Health. (2019). Vulnerability Assessment. Health Data and Statistics. Vulnerability Assessment. <https://doh.sd.gov/statistics/vulnerabilityassessment.aspx>. Sioux Falls MSA data based on Sioux Falls Metropolitan Statistical Area Calculator.

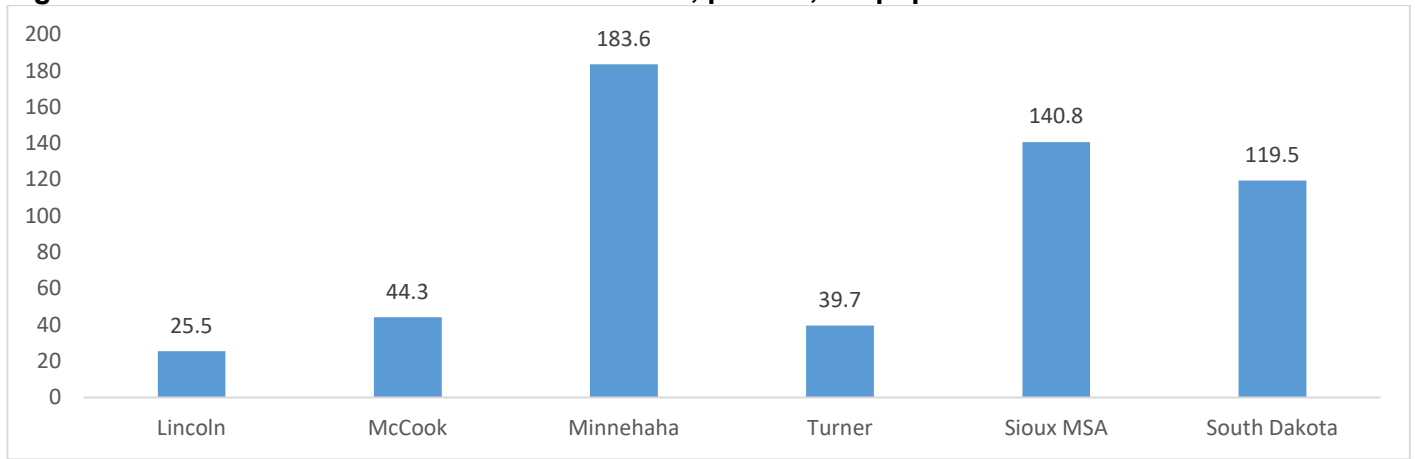
**Figure 70: Unintentional Non-fatal Drug Overdose, per 100,000 population**



**DATA SOURCE:** South Dakota Department of Health. (2019). Vulnerability Assessment. Health Data and Statistics. Vulnerability Assessment. <https://doh.sd.gov/statistics/vulnerabilityassessment.aspx>. Sioux Falls MSA data based on Sioux Falls Metropolitan Statistical Area Calculator.



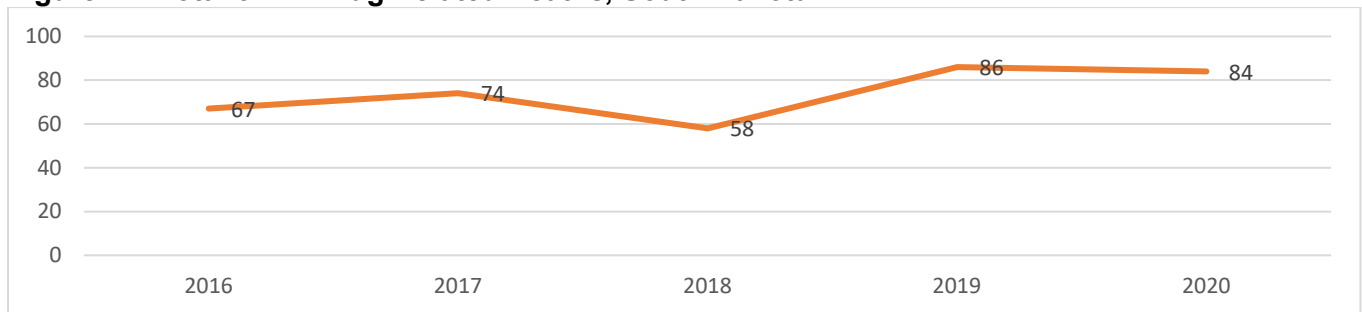
**Figure 71: Substance Use Treatment Admissions, per 100,000 population**



**DATA SOURCE:** South Dakota Department of Health. (2019). *Vulnerability Assessment. Health Data and Statistics. Vulnerability Assessment.* <https://doh.sd.gov/statistics/vulnerabilityassessment.aspx>. Sioux Falls MSA data based on Sioux Falls Metropolitan Statistical Area Calculator.

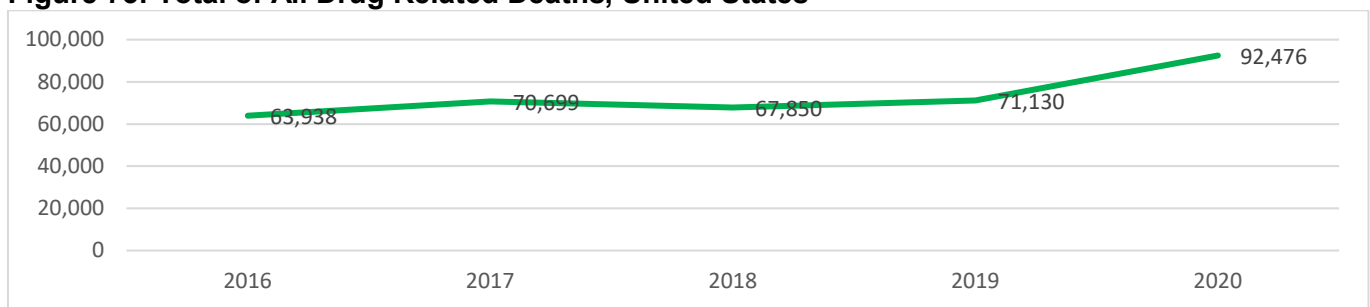
At the state level, both opioid and overall drug-related deaths went up between 2016 and 2020. Although drug-related deaths remain a public health challenge in South Dakota, the state is not as impacted as some other places in the United States, as reflected in the national statistics (Figures 72-75).

**Figure 72: Total of All Drug Related Deaths, South Dakota**



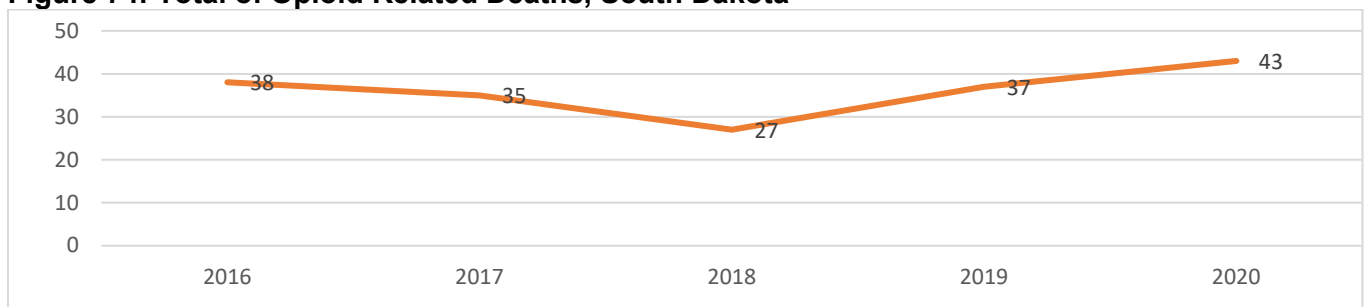
**DATA SOURCE:** South Dakota Departments of Health & Human Services. (2020). *Key Data. Avoid Opioid Prescription Addiction.* <https://www.avoidopioidsd.com/key-data/>

**Figure 73: Total of All Drug Related Deaths, United States**



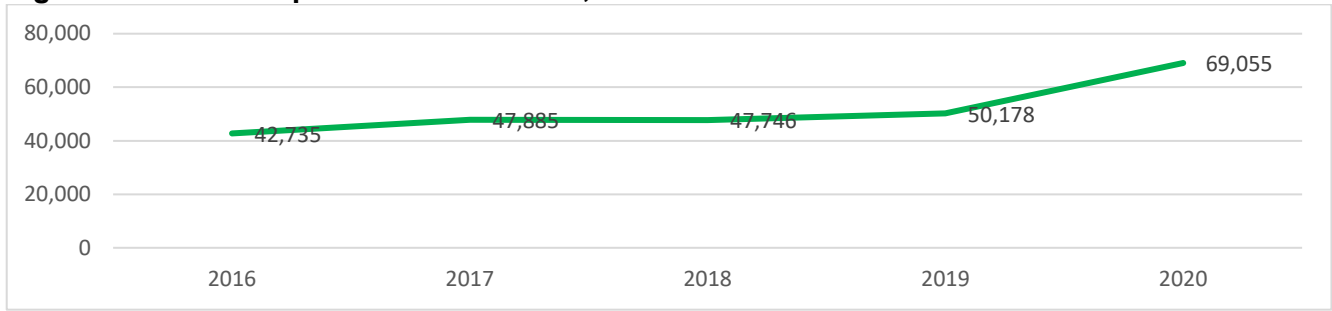
**DATA SOURCE:** South Dakota Departments of Health & Human Services. (2020). *Key Data. Avoid Opioid Prescription Addiction.* <https://www.avoidopioidsd.com/key-data/>

**Figure 74: Total of Opioid Related Deaths, South Dakota**



**DATA SOURCE:** South Dakota Departments of Health & Human Services. (2020). *Key Data. Avoid Opioid Prescription Addiction.* <https://www.avoidopioidsd.com/key-data/>

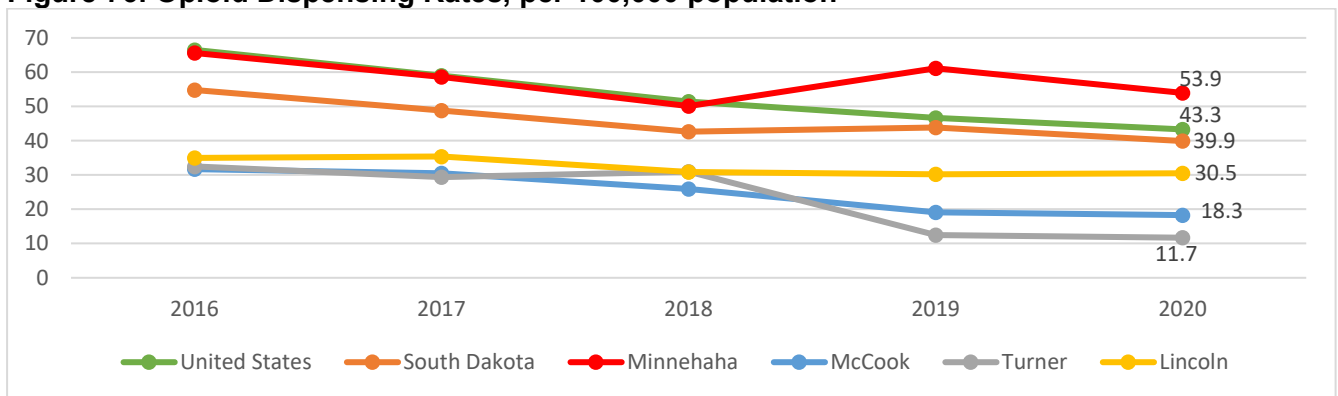
**Figure 75: Total of Opioid Related Deaths, United States**



DATA SOURCE: South Dakota Departments of Health & Human Services. (2020). Key Data. Avoid Opioid Prescription Addiction. <https://www.avoidopioidsd.com/key-data/>

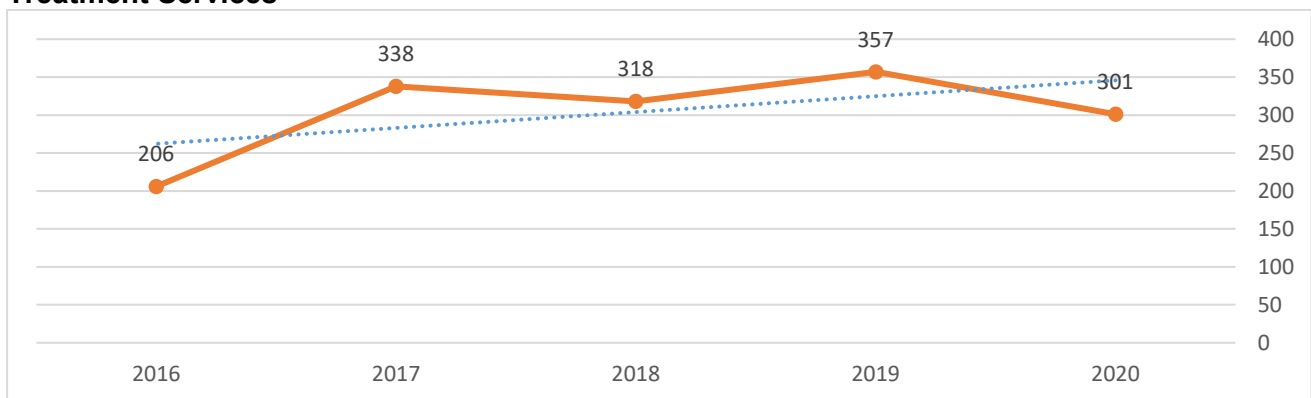
Progress is being made in combatting the opioid crisis in South Dakota. First, opioid dispensing rates have been trending downward in the state, including counties in the Sioux Falls MSA (Figure 76). Second, there has been a gradual increase in the number of individuals (Figure 76) receiving treatment for Opioid Use Disorder (OUD).

**Figure 76: Opioid Dispensing Rates, per 100,000 population**



DATA SOURCE: South Dakota Departments of Health & Human Services. (2020). Key Data. Avoid Opioid Prescription Addiction. <https://www.avoidopioidsd.com/key-data/>. Sioux Falls MSA data based on Sioux Falls Metropolitan Statistical Area Calculator.

**Figure 77: Clients in South Dakota with Opioid Use Disorder (OUD) Receiving Publicly Funded Treatment Services**



DATA SOURCE: South Dakota Departments of Health & Human Services. (2020). Key Data. Avoid Opioid Prescription Addiction. <https://www.avoidopioidsd.com/key-data/>

## COMMUNICABLE DISEASES

Communicable diseases are illnesses caused by infectious organisms, like viruses or bacteria that people spread to one another through contact with contaminated surfaces, bodily fluids, blood products, insect bites, or through the air. Some examples of communicable diseases include HIV, hepatitis A, B and C, influenza, measles, and COVID-19.<sup>60</sup>

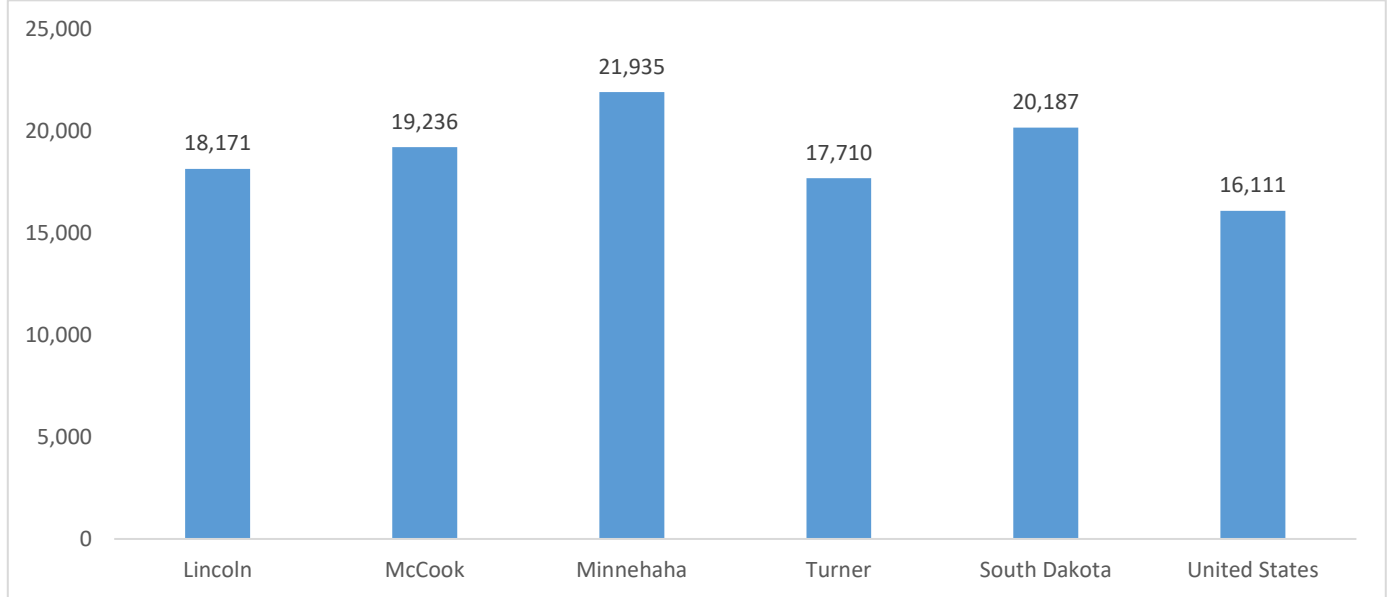
Although non-communicable diseases remain the leading causes of death and disability in the Sioux Falls area, there is a growing burden of communicable diseases. Obviously, COVID-19 was the single biggest

health concern at the time of this assessment due to the ongoing pandemic.

### COVID-19

The global pandemic of COVID-19 was officially declared by the World Health Organization in March 2020, following initial outbreak of the new illness caused by the SARS-CoV-2 virus in China. By the end of 2020, COVID-19 was the third leading cause of death in the U.S., with 345,000 deaths attributed to the virus, exceeded only by cardiovascular disease and cancer.<sup>61</sup>

**Figure 78: Confirmed COVID-19 Cases Per Capita (as of December 30, 2021)**

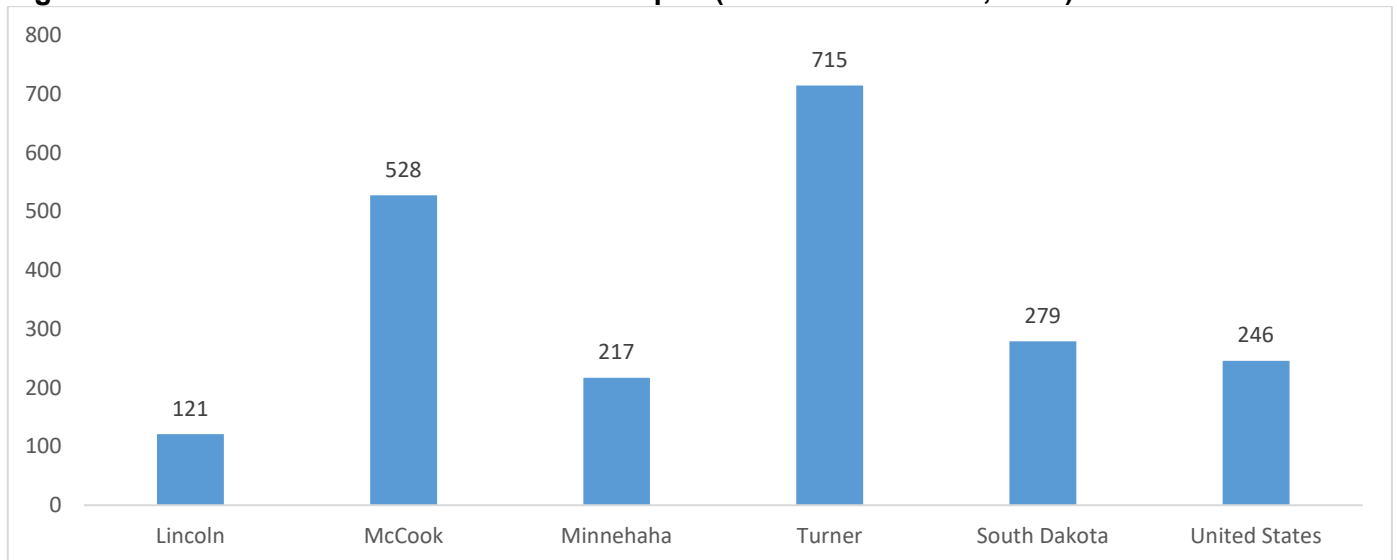


DATA SOURCE: County level data from: South Dakota Department of Health. (2021). South Dakota COVID-19 Dashboard. <https://doh.sd.gov/COVID/Dashboard.aspx>

^County level cases per capita were calculated using SD Department of Health data and 2020 census population estimates. Case counts include both confirmed, persons with a positive PCR test, and probable, persons with a positive antigen test.

\*US and SD Data from: Centers for Disease Control and Prevention. (2021). COVID Data Tracker. [https://covid.cdc.gov/covid-data-tracker/#vaccinations\\_vacc-total-admin-rate-total](https://covid.cdc.gov/covid-data-tracker/#vaccinations_vacc-total-admin-rate-total).

**Figure 79: Confirmed COVID-19 Deaths Per Capita (as of December 30, 2021)**



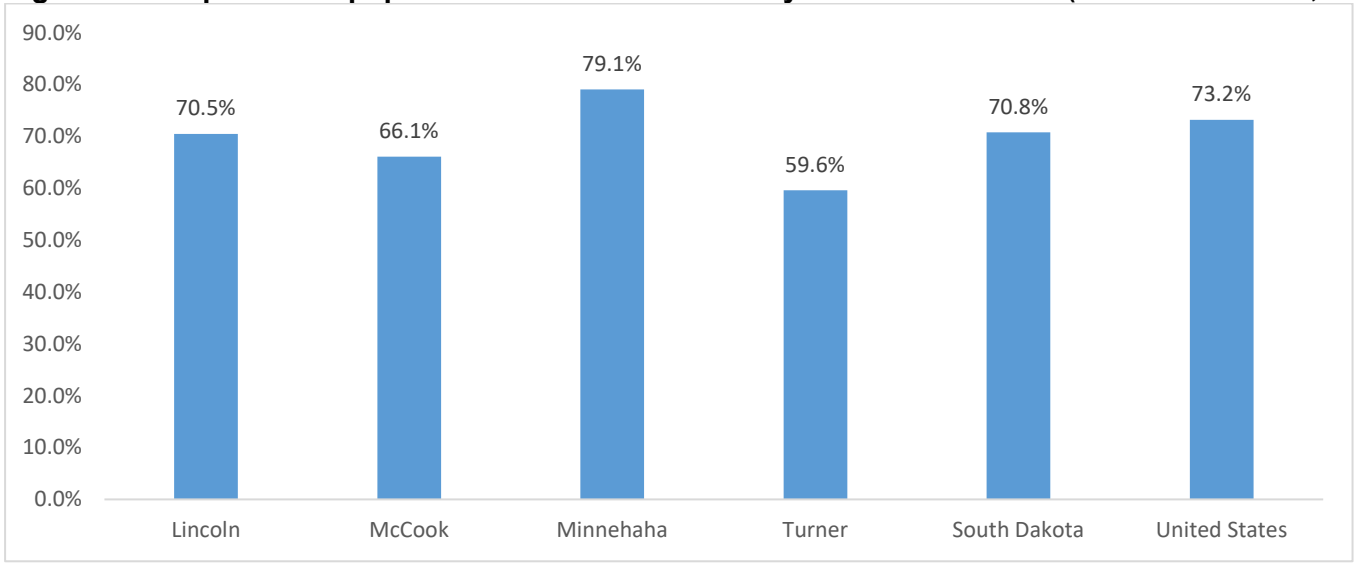
DATA SOURCE: County level data from: South Dakota Department of Health. (2021). South Dakota COVID-19 Dashboard. <https://doh.sd.gov/COVID/Dashboard.aspx>

^County level deaths per capita were calculated using SD Department of Health data and 2020 census population estimates.

\*US and SD Data from: Centers for Disease Control and Prevention. (2021). COVID Data Tracker. [https://covid.cdc.gov/covid-data-tracker/#vaccinations\\_vacc-total-admin-rate-total](https://covid.cdc.gov/covid-data-tracker/#vaccinations_vacc-total-admin-rate-total).

As nations across the globe addressed challenges during the COVID-19 pandemic, the advent of several highly effective vaccines became critical tools to help reduce the spread of the virus and mitigate severe outcomes such as hospitalization and death. As of December 2021, the vaccination rate (first dose of any COVID-19 vaccine) in Minnehaha County exceeded national and state rates. Lincoln County had a comparable rate, while McCook and Turner counties lagged significantly behind both state and national rates (Figure 80).

**Figure 80: Proportion of population with first dose of any COVID-19 vaccine (as of December 30, 2021)**



DATA SOURCE: Centers for Disease Control and Prevention. (2021). COVID Data Tracker. [https://covid.cdc.gov/covid-data-tracker/#vaccinations\\_vacc-total-admin-rate-total](https://covid.cdc.gov/covid-data-tracker/#vaccinations_vacc-total-admin-rate-total)

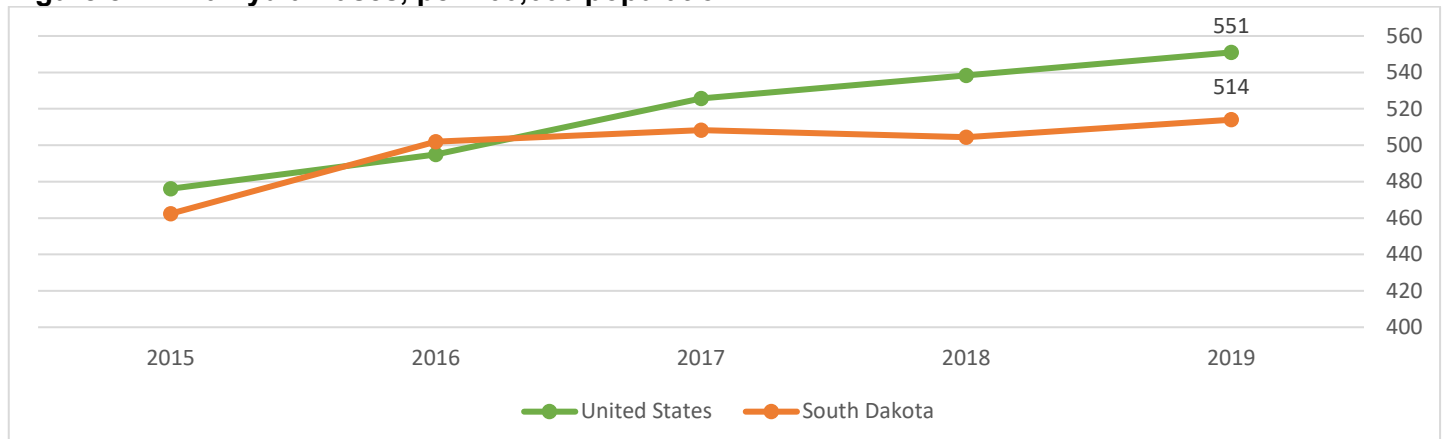
**HIV and Sexually Transmitted Diseases**

Reported annual cases of sexually transmitted diseases (STDs) in the United States continue to climb and reached an all-time high in 2019.15 Surveillance data from that year noted the following:

- Chlamydia, gonorrhea, and syphilis are the three most reported STDs, with 2.5 million reported cases.
- There was a nearly 30 percent increase nationwide in reportable STDs between 2015 and 2019.
- The sharpest increase was in cases of syphilis among newborns (i.e., congenital syphilis), which nearly quadrupled between 2015 and 2019.

Figures 81 through 84 below show that, consistent with national trends, cases of chlamydia, gonorrhea, and syphilis are also trending upwards in South Dakota. There is variation in prevalence of the three leading STDs compared to the national rates. Whereas syphilis prevalence in South Dakota is only about half of the national rate and the chlamydia rate is slightly less than the national rate, gonorrhea prevalence significantly exceeds the national average. Looking specifically at gonorrhea (Figure 82), Minnehaha County is exceeding the rates not only for the other counties in our MSA, but also for both state and national rates.

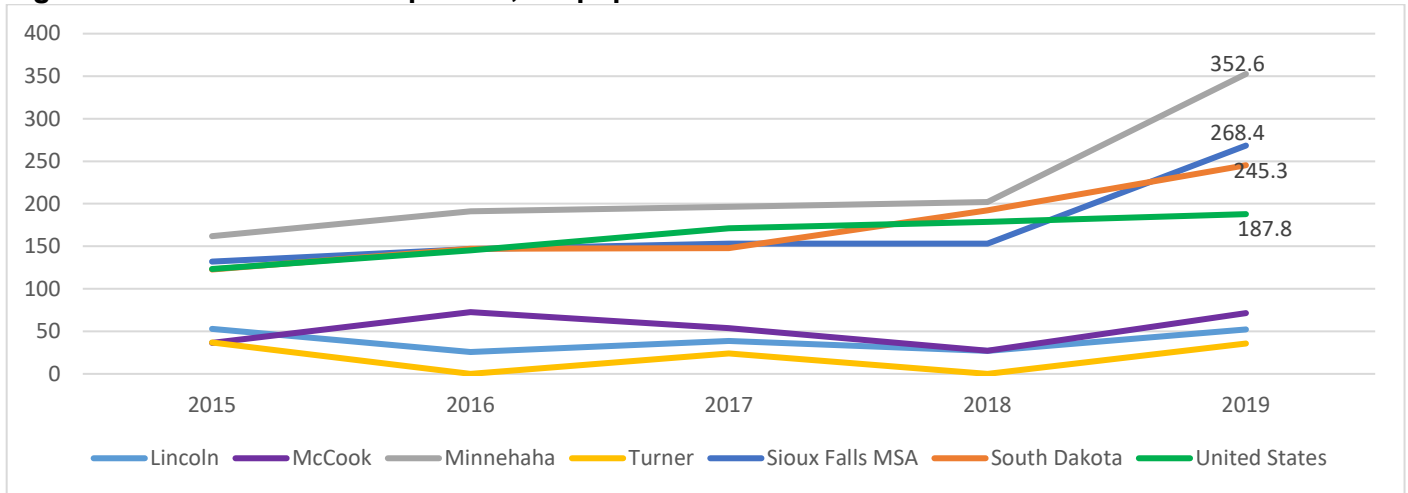
**Figure 81: Chlamydia Cases, per 100,000 population**



DATA SOURCE: Centers for Disease Control and Prevention. (2021). National Center for HIV, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) Atlas Plus. <https://www.cdc.gov/nchhstp/atlas/index.htm>

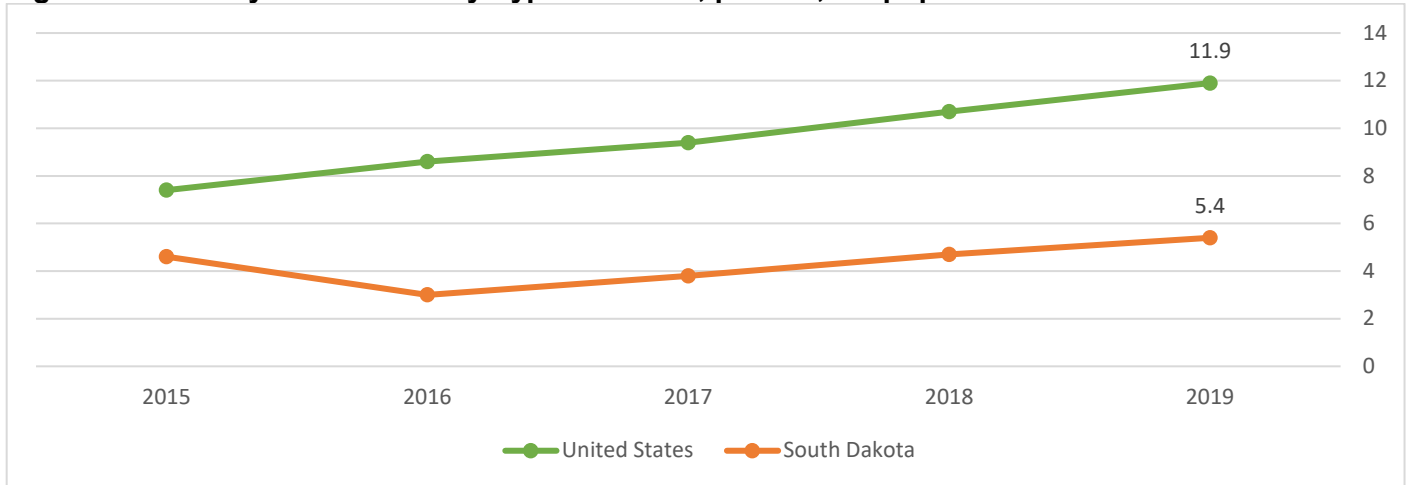


**Figure 82: Gonorrhea Cases per 100,000 population**



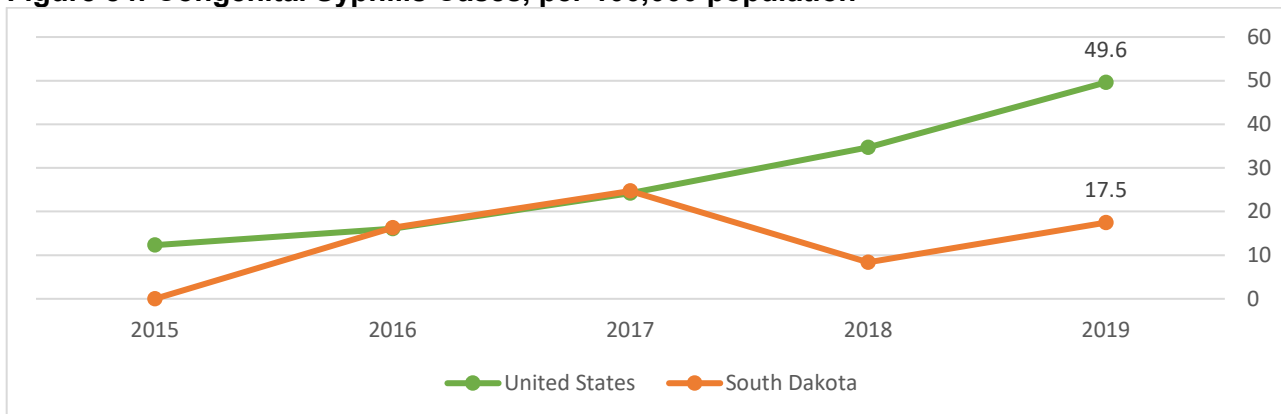
DATA SOURCE: Centers for Disease Control and Prevention. (2021). National Center for HIV, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) Atlas Plus. <https://www.cdc.gov/nchhstp/atlas/index.htm>. Sioux Falls MSA data based on Sioux Falls Metropolitan Statistical Area Calculator.

**Figure 83: Primary and Secondary Syphilis Cases, per 100,000 population**



DATA SOURCE: Centers for Disease Control and Prevention. (2021). National Center for HIV, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) Atlas Plus. <https://www.cdc.gov/nchhstp/atlas/index.htm>

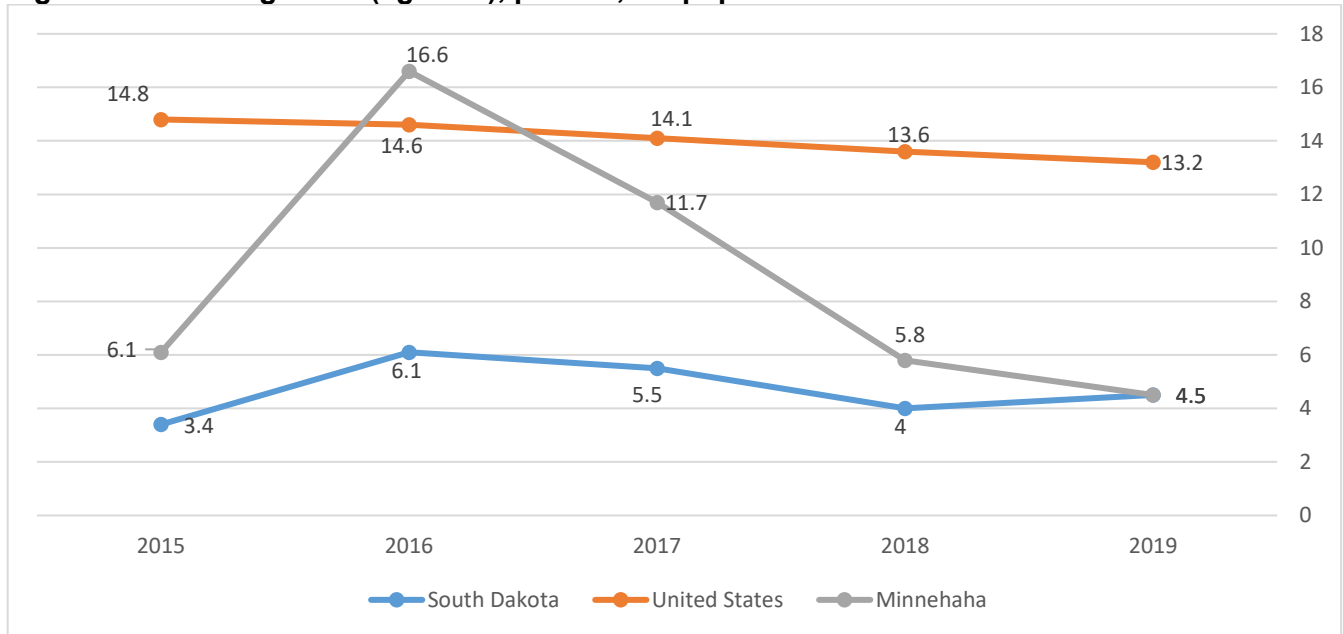
**Figure 84: Congenital Syphilis Cases, per 100,000 population**



DATA SOURCE: Centers for Disease Control and Prevention. (2021). National Center for HIV, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) Atlas Plus. <https://www.cdc.gov/nchhstp/atlas/index.htm>

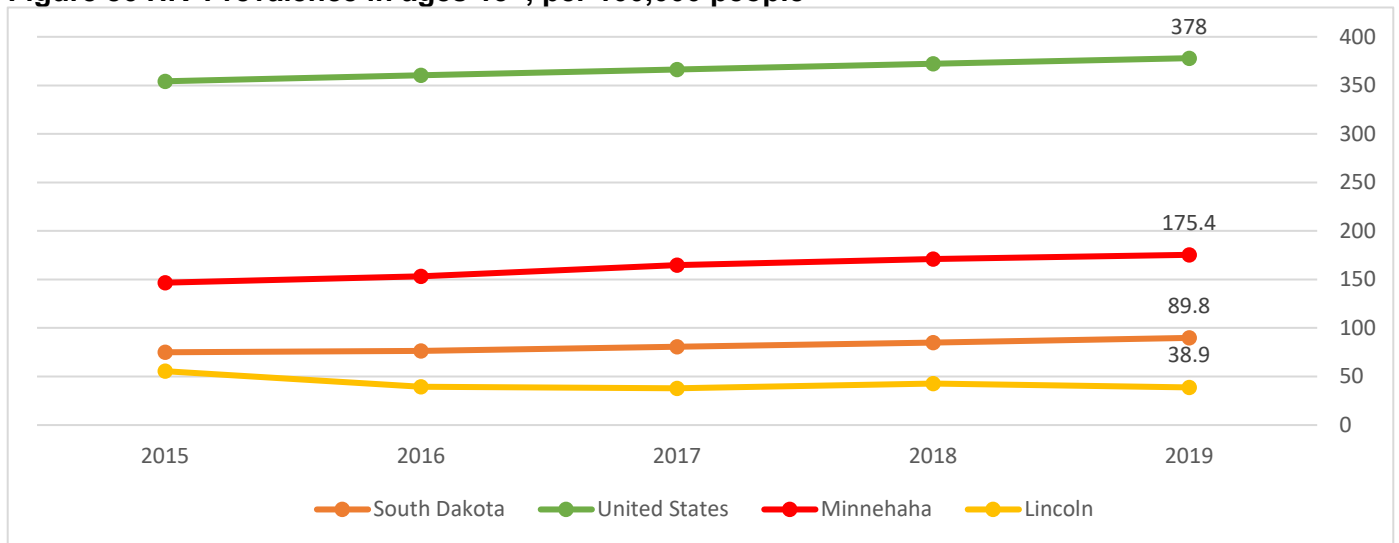
While there has been a decline in HIV diagnoses among those aged 13 and older at the national level and in Minnehaha County (Figure 85), HIV prevalence is trending upwards at the local, state, and national levels (Figure 86). This could be as a result of improvement in treatment services, which results in longer lives for people living with HIV.

**Figure 85: HIV Diagnoses (age 13+), per 100,000 population**



DATA SOURCE: Centers for Disease Control and Prevention. (2021). National Center for HIV, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) Atlas Plus. <https://www.cdc.gov/nchhstp/atlas/index.htm>

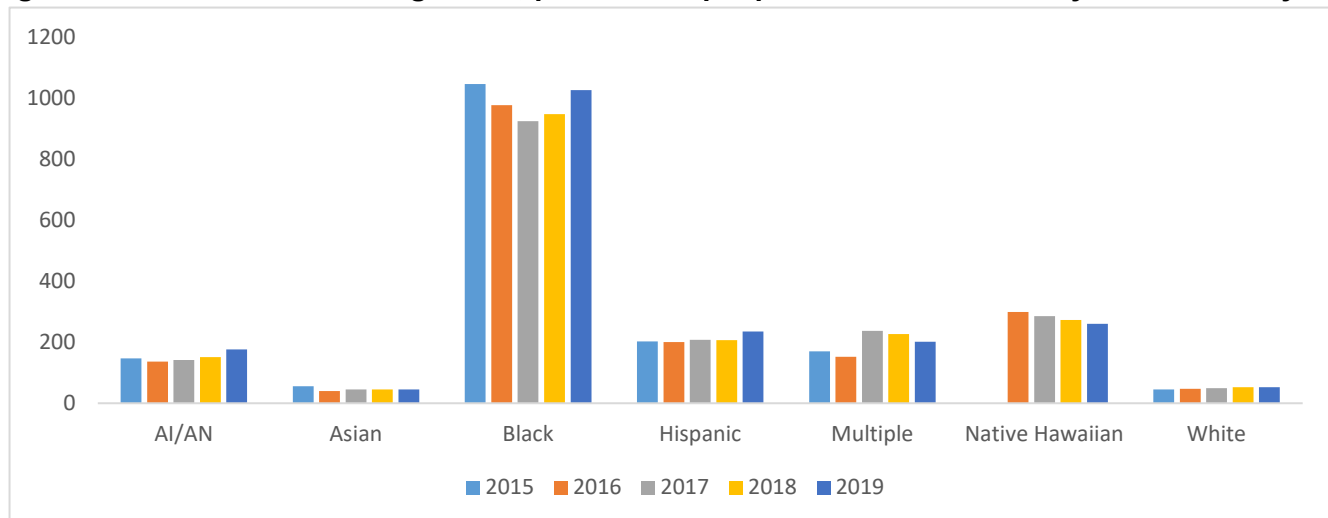
**Figure 86 HIV Prevalence in ages 13+, per 100,000 people**



DATA SOURCE: Centers for Disease Control and Prevention. (2021). National Center for HIV, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) Atlas Plus. <https://www.cdc.gov/nchhstp/atlas/index.htm>

Racial/ethnic disparities in HIV prevalence is observed in South Dakota, with Blacks having a much higher prevalence rate compared to other racial/ethnic groups in the state (Figure 87).

**Figure 87: HIV Prevalence in ages 13+, per 100,000 people, in South Dakota, by Race/Ethnicity**



DATA SOURCE: Centers for Disease Control and Prevention. (2021). National Center for HIV, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) Atlas Plus. <https://www.cdc.gov/nchhstp/atlas/index.htm>



# HEALTH DETERMINANTS

The health of a population is shaped by multiple factors known as health determinants, risk factors, or drivers of health. Health determinants include health behaviors, healthcare access and quality, and other social determinants of health.

In this section, we explore the determinants that are driving the health outcomes in the Sioux Falls MSA as summarized in the previous section.

## HEALTH BEHAVIORS

The lifestyle choices we make in our daily lives have a significant impact on our health. For example, eating nutritious foods and being physically active benefit health, while behaviors such as smoking or excessive alcohol use can lead to negative health consequences. However, it is also important to factor in how environmental factors influence the opportunities people have to make healthy decisions. Addressing policy, systems and environmental changes helps to ensure that healthy choices are easily accessible for all community residents.

### Alcohol and Substance Use

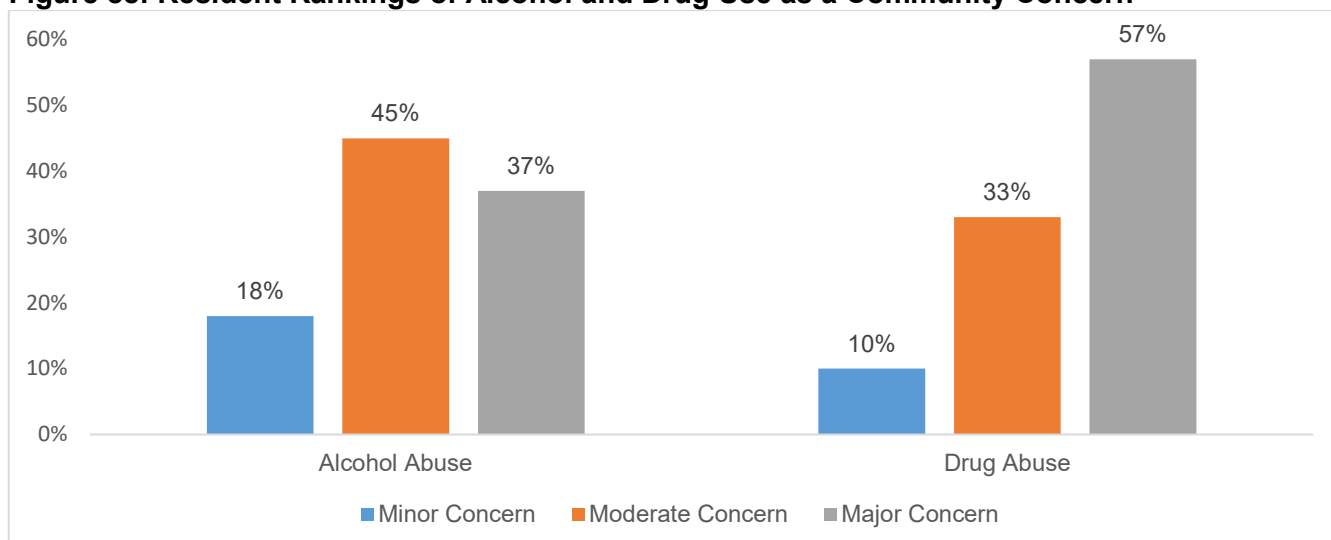
Excessive alcohol use is associated with an increased risk of unintentional injuries and several health conditions.

According to the U.S. Centers for Disease Control and Prevention, the estimated cost of excessive alcohol consumption in the United States is \$249 billion, or about \$807 per person. The CDC’s estimate for the impact to South Dakota is approximately \$735 per person.<sup>62</sup> The costs come primarily from losses in workplace productivity and health care expenses, but also other costs related to criminal justice expenses, motor vehicle crashes, and property damage.

When asked about health behaviors and health issues that were of the greatest concern, respondents to the 2021 CHA Survey of Sioux Falls MSA residents ranked alcohol and drug use among the top concerns (Figure 88). In addition, survey respondents also indicated that services to address addiction was second only to mental health in terms of health care services they would like to see offered or improved in the community.<sup>19</sup>



**Figure 88: Resident Rankings of Alcohol and Drug Use as a Community Concern**



DATA SOURCE: 2021 Community Health Assessment Resident Survey. Completed by Sioux Falls CHA Partners February 2021.



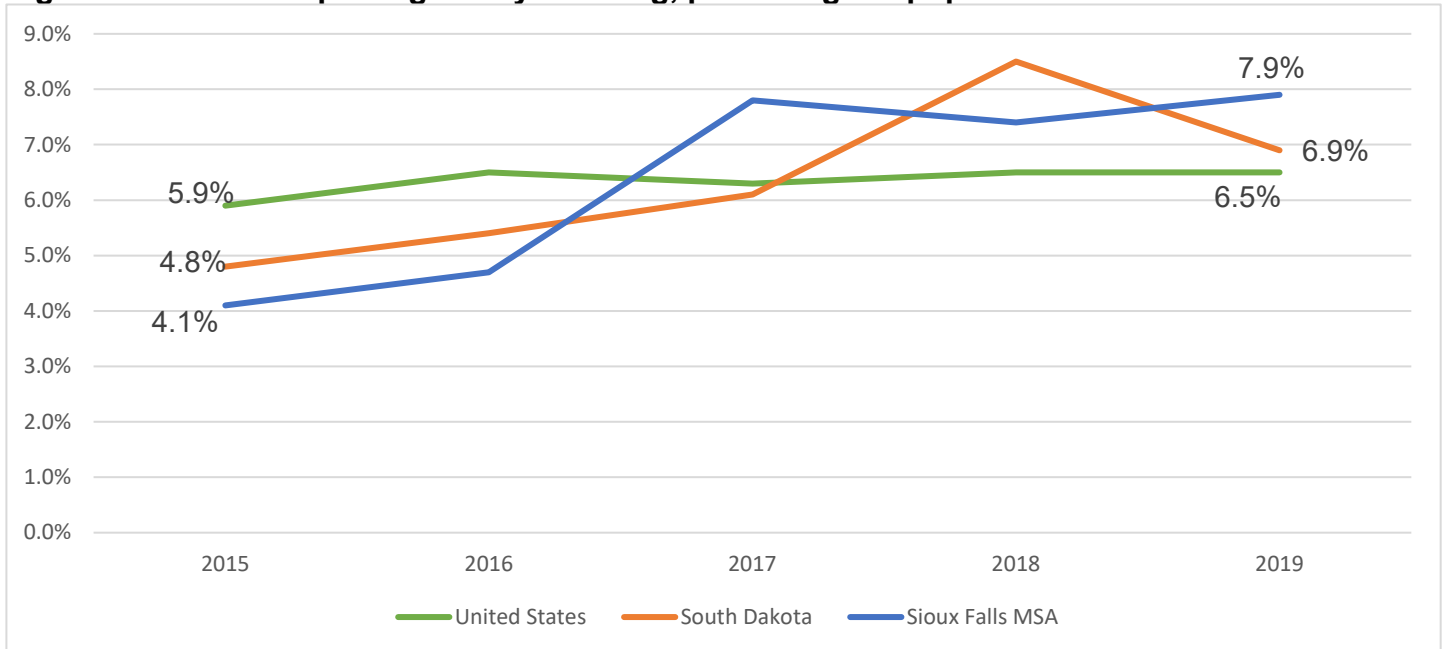
Alcohol and substance use were also top concerns cited by Sioux Falls respondents to the 2021 National Community Survey, where 82 percent of respondents rated alcohol as a major or moderate concern, and 90 percent rated drug use as a major or moderate concern.<sup>20</sup>

Excessive alcohol use can be categorized as “heavy drinking,” meaning more than 14 drinks per week for

men and 7 drinks per week for women, and “binge drinking,” which is defined as consuming 4 or more drinks per occasion for women or 5 or more drinks per occasion for men.

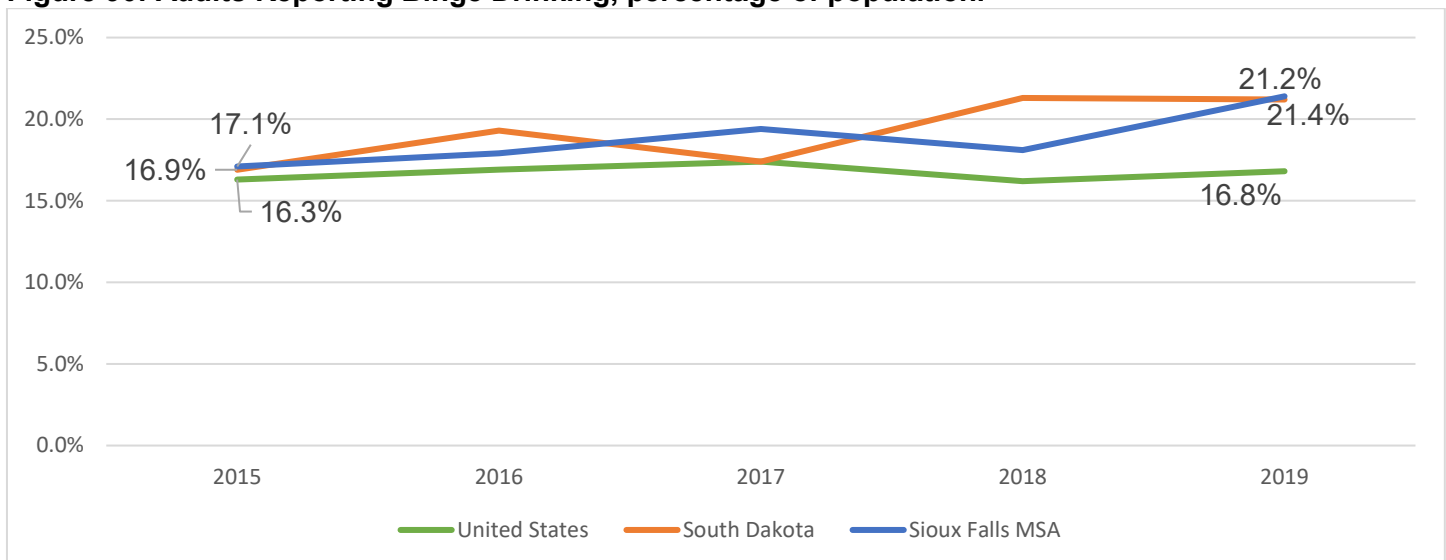
In recent years, the Sioux Falls MSA has seen an increase in both heavy drinking and binge drinking, with rates that are higher than the national average (Figures 89 and 90).

**Figure 89: Adults Reporting Heavy Drinking, percentage of population**



DATA SOURCE: Centers for Disease Control and Prevention. (2019). BRFSS Prevalence & Trends Data. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. <https://www.cdc.gov/brfss/brfssprevalence/>

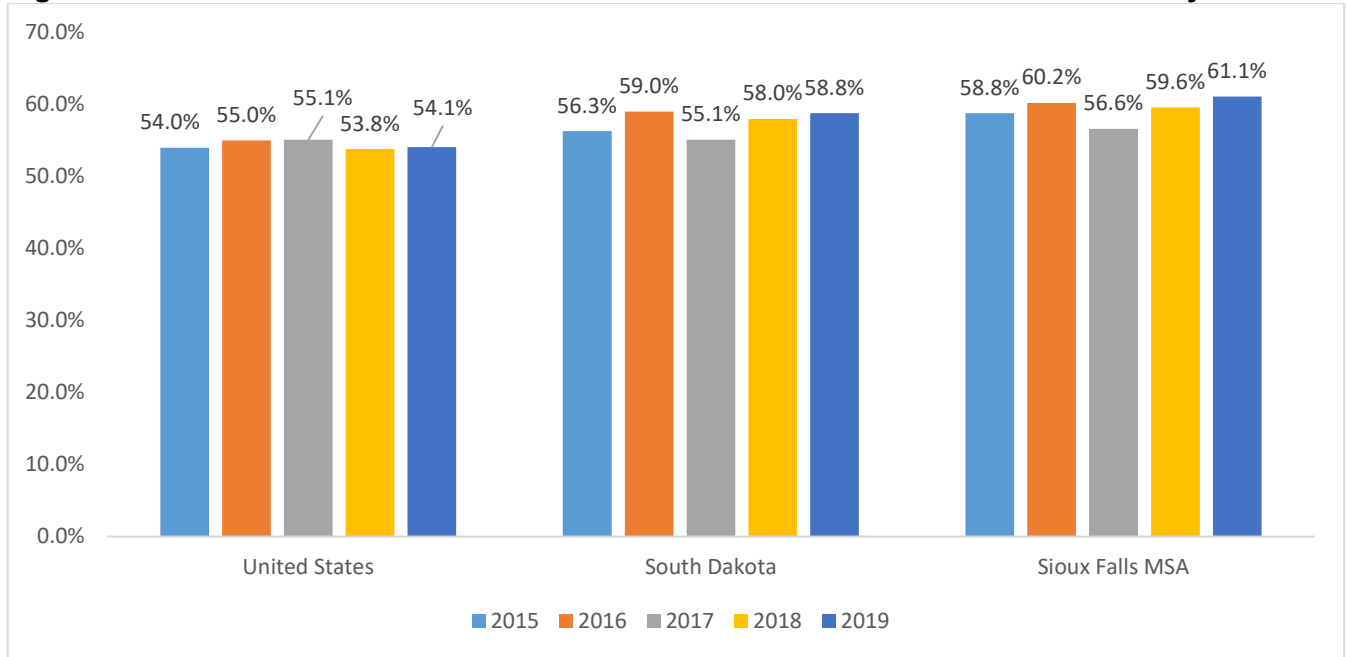
**Figure 90: Adults Reporting Binge Drinking, percentage of population.**



DATA SOURCE: Centers for Disease Control and Prevention. (2019). BRFSS Prevalence & Trends Data. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. <https://www.cdc.gov/brfss/brfssprevalence/>

Looking at general alcohol use among adults, the rate of adults consuming at least one alcoholic beverage per month increased slightly in recent years and is higher than both state and national rates (Figure 91).

**Figure 91: Adults Who Have Had at Least One Drink of Alcohol within the Past 30 days**



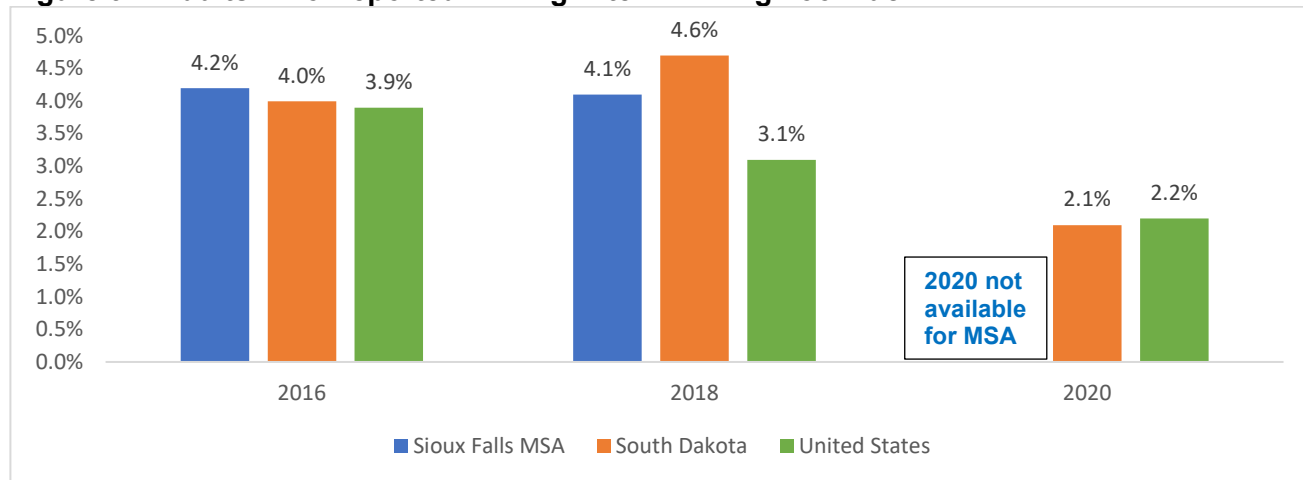
DATA SOURCE: Centers for Disease Control and Prevention. (2019). BRFSS Prevalence & Trends Data. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. <https://www.cdc.gov/brfss/brfssprevalence/>

Excessive alcohol use certainly has negative impacts for the person drinking. If, however, that person decides to drive while under the influence of alcohol, they create risk for others.

one person every 52 minutes.<sup>63</sup> The most recent available data suggests that 4 percent of adults in the Sioux Falls MSA report that they have driven after drinking too much (Figure 92).

Each day, approximately 28 people are killed in drunk-driving crashes in the United States, which is about

**Figure 92: Adults Who Reported Driving After Drinking Too Much**



DATA SOURCE: Centers for Disease Control and Prevention. (2019). BRFSS Prevalence & Trends Data. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. <https://www.cdc.gov/brfss/brfssprevalence/>

Underage drinking is also a serious health concern, as alcohol is the most widely used substance among young people.<sup>64</sup>

substance use among South Dakota youth (Tables 10 and 11). Currently, 15 percent of young people actively engage in binge drinking.

While local data is not available for the Sioux Falls MSA, there is a significant amount of underage drinking and

**TABLE 10: UNDERAGE DRINKING IN SOUTH DAKOTA AND THE U.S.**

	South Dakota	U.S.
Past month alcohol use among persons aged 12 to 20	31.5%	26.6%
Self-purchase of the last alcohol used among past month alcohol users aged 12 to 20	6.3%	8.8%
Had their first drink of alcohol before age 13 years (other than a few sips)	17.6%	15%
Currently were binge drinking (on at least 1 day during the 30 days before the survey)	14.9%	13.7%

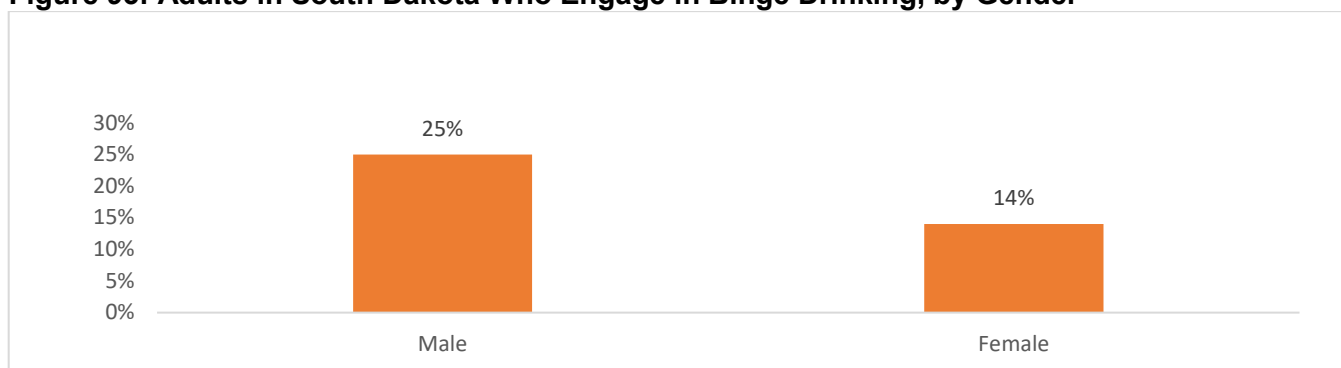
DATA SOURCE: Substance Abuse and Mental Health Services Administration (SAMHSA). 2019 National Survey on Drug Use and Health. Accessed October 4, 2021, at <https://www.samhsa.gov/data/sites/default/files/reports/rpt29394/NSDUHDetailedTabs2019/NSDUHDetTabsSect2pe2019.htm#tab2-6b>.

**TABLE 11: YOUTH SUBSTANCE USE IN SOUTH DAKOTA**

	South Dakota	U.S.
Ever Used Marijuana (one or more times during their life)	31.5%	36.8%
Currently used marijuana (one or more times during the 30 days before the survey)	16.5%	14.3%
Ever took prescription pain medicine without a doctor's prescription or differently than how a doctor told them to use it (counting drugs such as codeine, Vicodin, Oxycontin, Hydrocodone, and Percocet, one or more times during their life)	15.7%	36.8%
Ever used inhalants (sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high, one or more times during their life)	9.3%	6.4%
Ever used heroin (one or more times during their life)	2.0%	1.8%
Ever used methamphetamines (one or more times during their life)	2.8%	2.1%
Ever injected any illegal drug (used a needle to inject any illegal drug into their body, one or more times during their life)	1.6%	1.6%
Were offered, sold, or given an illegal drug on school property (during the 12 months before the survey)	15.1%	21.8%

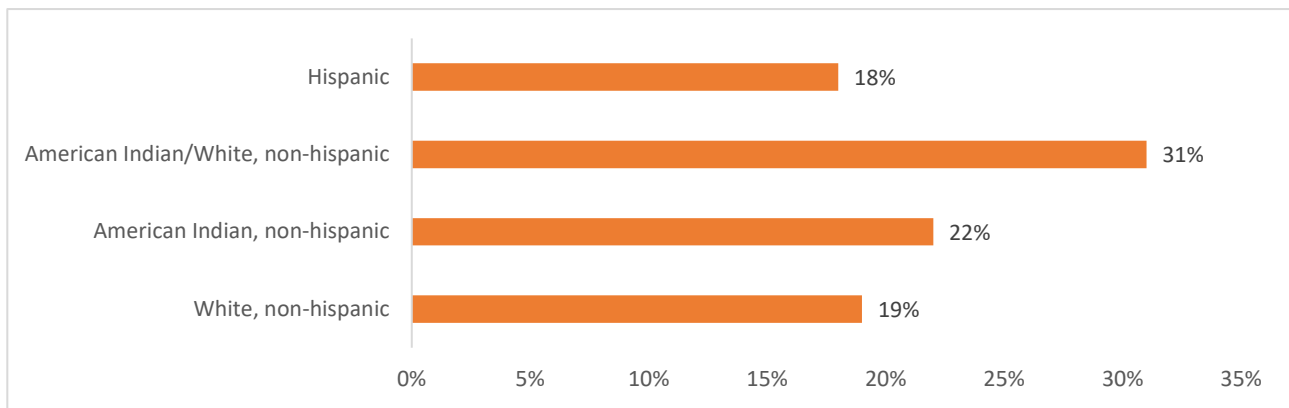
DATA SOURCE: 2019 High School Youth Risk Behavior Survey (YRBS)

State-level data indicate that males binge drink at nearly twice the rate for females, and binge drinking is higher among American Indians in South Dakota compared to Non-Hispanic Whites and the Hispanic Population (Figures 93 and 94).

**Figure 93: Adults in South Dakota Who Engage in Binge Drinking, by Gender**

DATA SOURCE: South Dakota Department of Health. (2019). Behavioral Risk Factor Surveillance System. Office of Health Statistics. <https://doh.sd.gov/statistics/>

**Figure 94: Adults in South Dakota Who Engage in Binge Drinking, by Race/Ethnicity**



DATA SOURCE: South Dakota Department of Health. (2019). Behavioral Risk Factor Surveillance System. Office of Health Statistics. <https://doh.sd.gov/statistics/>

**Nutrition**

More than half of American adults (6 in 10) have one or more preventable, diet-related chronic condition, such as cardiovascular disease, type 2 diabetes, and obesity.<sup>65</sup>

Many factors influence the nutrition behaviors of individuals, including access and affordability of healthy foods; knowledge, beliefs, and attitudes about good nutrition; and social and cultural factors.

The most recent Dietary Guidelines for Americans focus on four overarching guidelines:

Follow a healthy dietary pattern at every life stage.

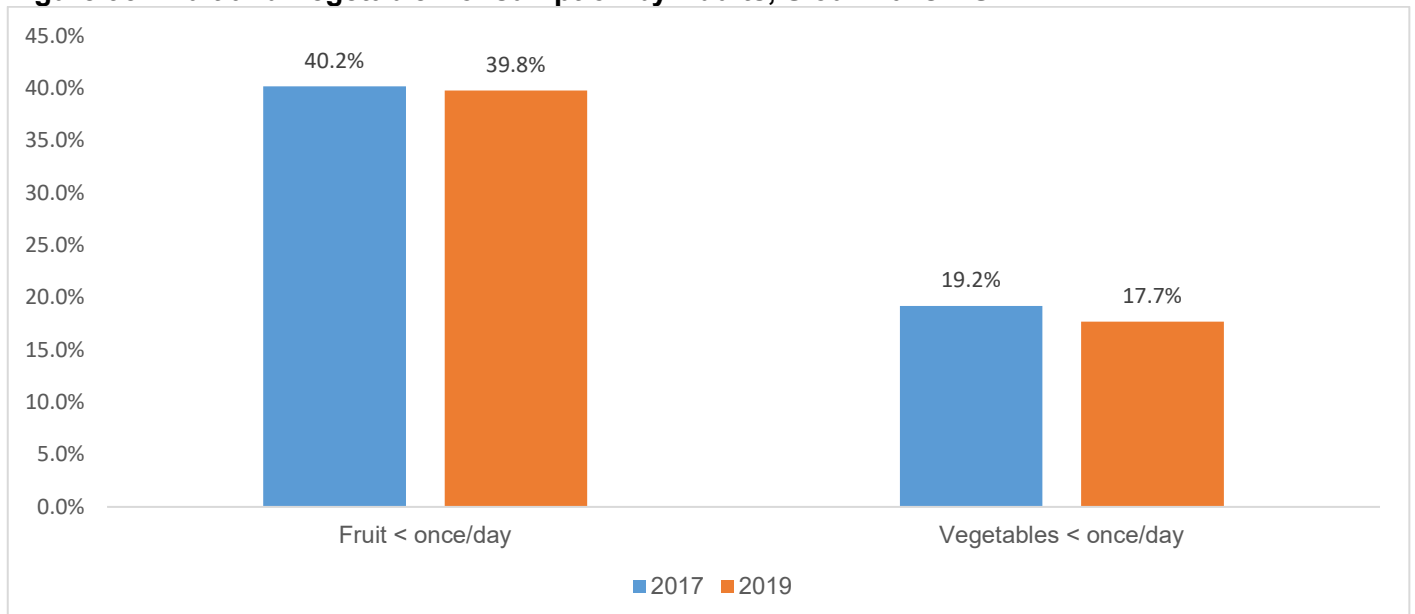
- Customize and enjoy nutrient-dense food and beverage choices to reflect personal preferences, cultural traditions, and budgetary considerations.
- Focus on meeting food group needs with nutrient-dense foods and beverages, and stay within calorie limits.

- Limit foods and beverages higher in added sugars, saturated fat, and sodium, and limit alcoholic beverages.

Fruit and vegetable consumption is an important dimension of dietary behavior.

Data continues to show that adults in the Sioux Falls MSA fall significantly short of meeting recommendations for fruit and vegetable consumption. Nearly 40 percent of adults report consuming fruits less than once per day and 18 percent report the same for vegetable consumption (Figure 95). Across the state of South Dakota, the proportion of individuals that report consuming the recommended minimum of five servings of fruits and vegetables held steady at a significantly poor rate (15 percent or less) throughout the last decade (Figure 96).

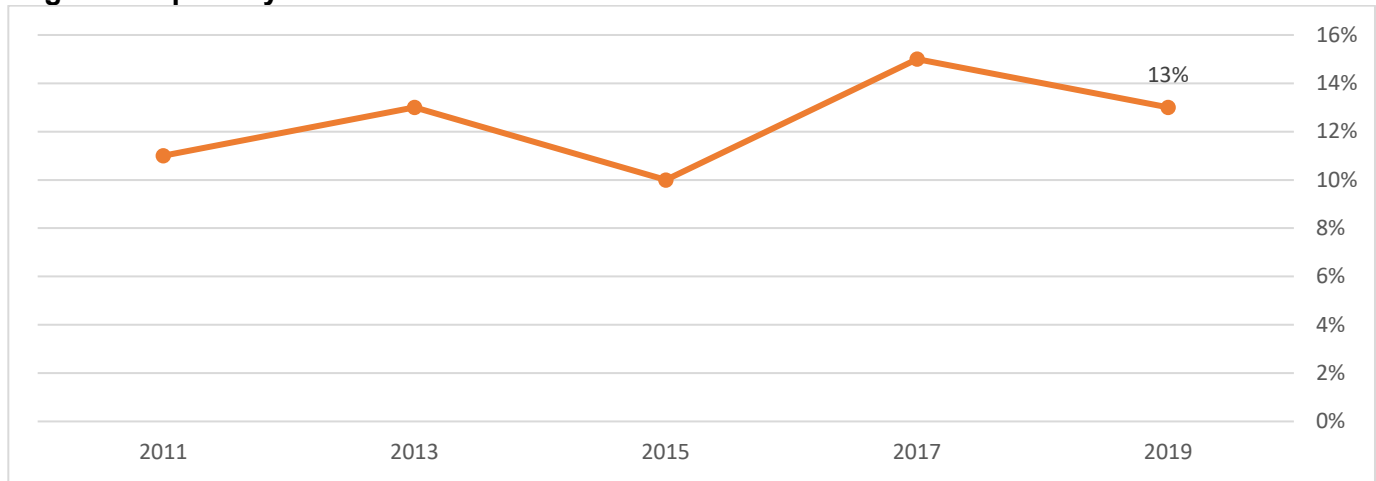
**Figure 95: Fruit and Vegetable Consumption by Adults, Sioux Falls MSA**



DATA SOURCE: Centers for Disease Control and Prevention. (2019). BRFSS Prevalence & Trends Data. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. <https://www.cdc.gov/brfss/brfssprevalence/>



**Figure 96: Percentage of South Dakotans Who Reported Consuming at Least 5 Servings of Fruits and Vegetables per Day**



DATA SOURCE: South Dakota Department of Health. (2019). Behavioral Risk Factor Surveillance System. Office of Health Statistics. <https://doh.sd.gov/statistics/>

According to the CDC, sugar-sweetened beverages (SSBs) are leading sources of added sugars in the American diet. These beverages include, but are not limited to, regular soda (not sugar-free), fruit drinks, sports drinks, energy drinks, sweetened waters, and coffee and tea beverages with added sugars. Frequent consumption of sugar-sweetened beverages has been linked to health concerns such as obesity, type 2 diabetes, heart disease, kidney diseases, and tooth decay.<sup>66</sup> Limiting SSB intake can help individuals maintain a healthy diet and a healthy weight. Although local data could not be obtained for SSB consumption in the Sioux Falls area, data points to high rates of SSB consumption in South Dakota.

A national study estimated that 72.5 percent of South Dakota adults consume SSBs once daily or more, compared to a national rate of 63 percent.<sup>4</sup> With such

a high rate, South Dakota ranked 48th in the nation. Furthermore, in 2019, 14.4 percent of South Dakota high school students reported drinking regular soda/pop at least one time per day while 8.4 percent reported drinking two or more of such drinks per day.<sup>8</sup>

When unhealthy snacks and drinks are available in the secondary school setting, such as in vending machines, school stores or concession stands, it predisposes young people to make less healthy food choices. A national survey of secondary schools indicates that the proportion of secondary schools in South Dakota that did not sell any of six unhealthy snacks or drinks improved from 46 percent in 2016 to 54 percent in 2018 (Table 12). While things appear to be moving in the right direction, nearly half of secondary schools still provide access to unhealthy food items to students.

**TABLE 12: SECONDARY SCHOOLS ALLOWING STUDENTS TO PURCHASE SNACK FOODS AND BEVERAGES**

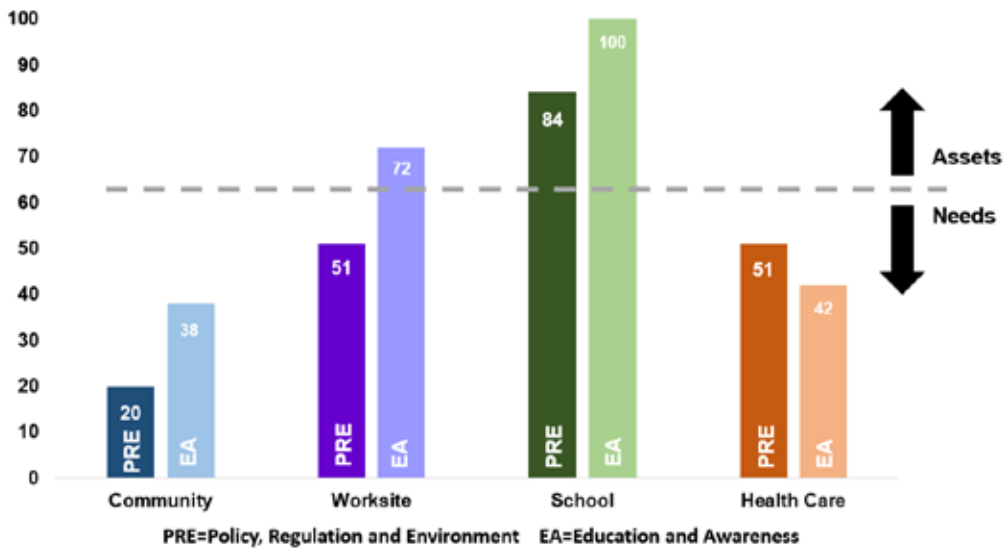
	Allowed students to purchase snack foods or beverages at all	Chocolate Candy	Other kinds of candy	Salty Snacks	Cookies, crackers, cakes, pastries or other baked goods	Soda pop or fruit drinks	Sports Drinks	Did not sell any of these 6 sugary or salty food items
2016	67.5%	7.2%	14.4%	9.5%	13.5%	18.8%	47.5%	46.0%
2018	60.2%	6.5%	8.8%	10.4%	12%	15.2%	38%	53.9%

DATA SOURCE: Centers for Disease Control and Prevention. (2019). School Health Profiles. Adolescent and School Health. <https://www.cdc.gov/healthyyouth/data/profiles/index.htm>

Using the South Dakota Good & Healthy Community Assessment, representatives from several sectors of the Sioux Falls community rated Policy, Regulations, and Environment (PRE) efforts, along with Education and Awareness (EA) efforts related to nutrition. In Figure 97, scores over 60 represent an indication of nutrition assets, while scores below 60 indicate areas of need. Of the four topics addressed through the

Good & Healthy SD Assessment tool, nutrition has the most areas of need. All sectors, with the exception of schools, saw scores below 60 in both policy, regulation, and environment (PRE) strategies to improve nutrition and in education and awareness (EA) about nutrition. Specific assets and needs identified through the assessment process are listed in the Appendix.

**Figure 97: Community Nutrition Assessment**



DATA SOURCE: 2021 Community Health Assessment using the South Dakota Good & Healthy Assessment Tool

**Physical Activity**

Strong scientific evidence demonstrates that engaging in physical activity reduces the risk of many chronic medical conditions and is critical to the recovery process for many diseases. Among adults and older adults, physical activity can lower the risk of:

- Early death
- Coronary Heart Disease
- Stroke
- High blood pressure
- Type 2 diabetes
- Some types of cancer
- Falls
- Depression
- Dementia (including Alzheimer’s disease)
- Excessive weight gain

Among children and adolescents, physical activity can:

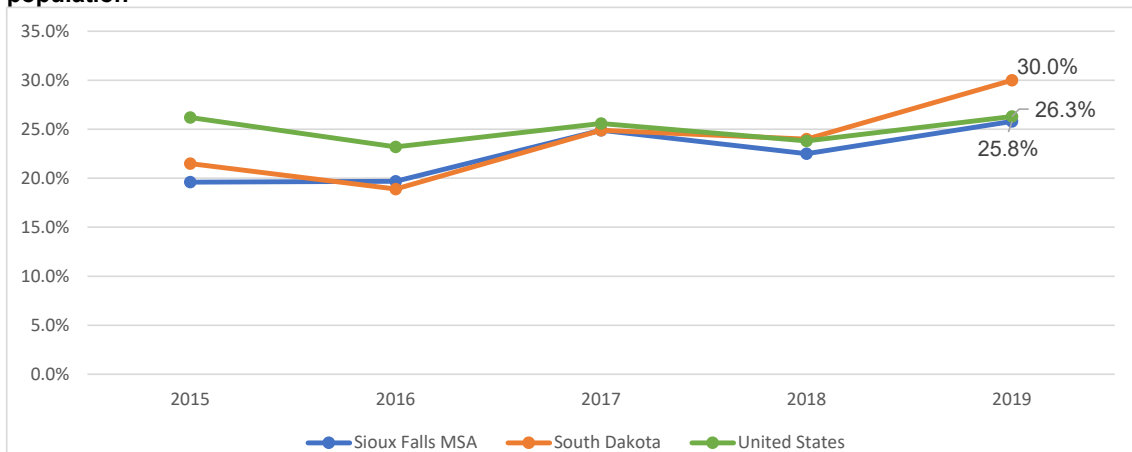
- Improve bone health.
- Improve cardiorespiratory and muscular fitness.

- Decrease levels of body fat.
- Reduce symptoms of depression.
- Enhance learning and academic performance.

In recent years, health professionals have used the term “sitting disease” to describe the negative health effects of long periods of physical inactivity, including links to obesity and heart disease. One study estimated that the average American spends 55 percent of waking time, or 7.7 hours per day, in sedentary behaviors such as sitting.<sup>50</sup> This research also indicates that seven of the ten most common chronic diseases are favorably influenced by regular physical activity.

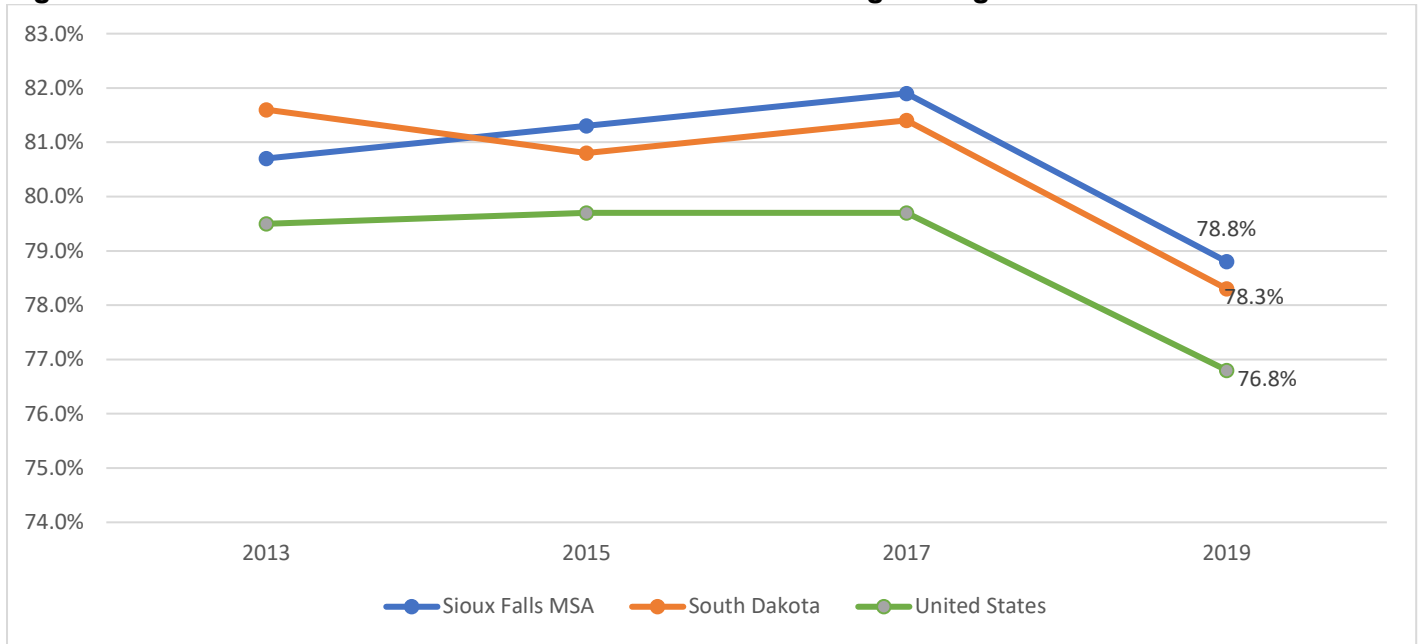
Lack of physical activity is linked to approximately \$117 billion in annual health care costs and about 10 percent of premature mortality.<sup>67</sup> When asked if they had participated in any physical activity outside of their regular job during the past month, one quarter of Sioux Falls MSA adults said no (Figure 98). In addition, 79 percent of adults in the area do not meet the recommended guidelines for both aerobic and muscle strengthening activity, which shows a slight improvement from recent years but still worse than the national average. (Figure 99).

**Figure 98: Percent of Adults Reporting No Leisure Time Physical Activity in the Past Month, percent of population**



DATA Source: Centers for Disease Control and Prevention. (2019). BRFSS Prevalence & Trends Data. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. <https://www.cdc.gov/brfss/brfssprevalence/>

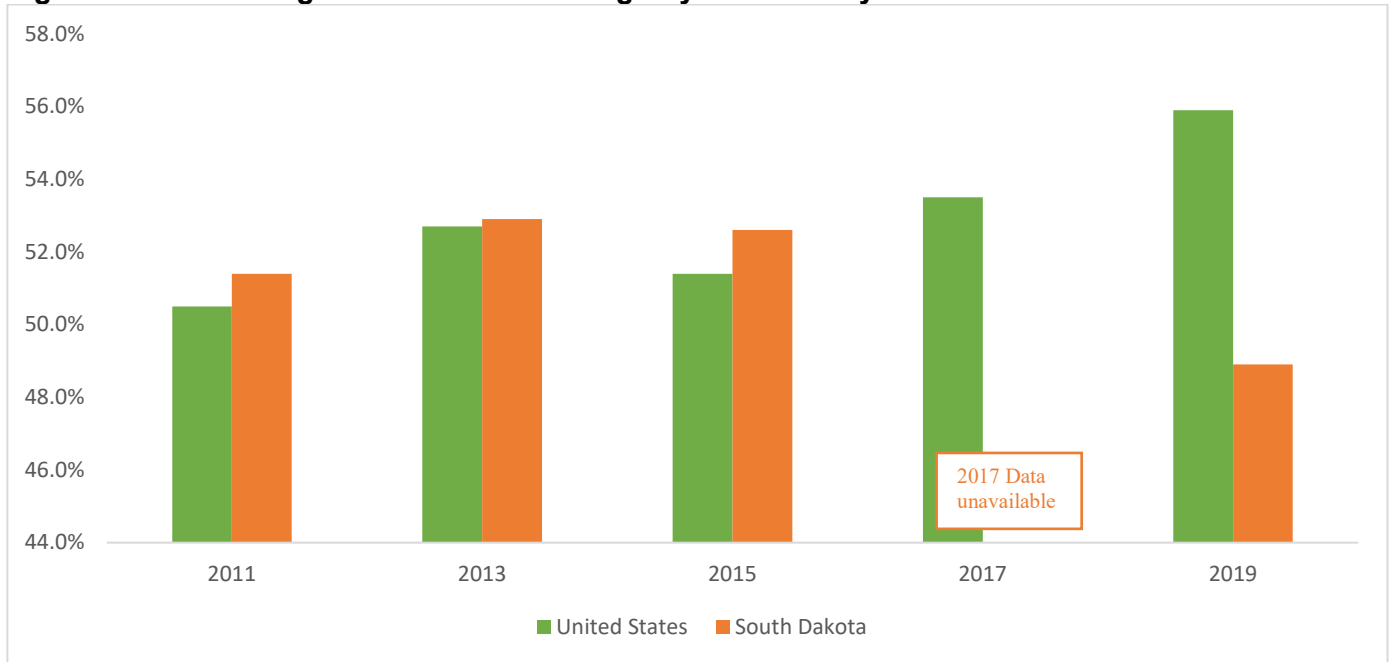
**Figure 99: Adults Who Do Not Meet Aerobic and Muscle Strengthening Exercise Guidelines\***



\*At least 150 minutes/week of moderate-intensity aerobic activity and muscle-strengthening activity at least 2 days/week  
 DATA SOURCE: Centers for Disease Control and Prevention. (2019). BRFSS Prevalence & Trends Data. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. <https://www.cdc.gov/brfss/brfssprevalence/>

Physical activity is also important for youth, with a national recommendation of at least 60 minutes of daily physical activity. Less than half of South Dakota youth are meeting that guideline (Figure 100).

**Figure 100: Percentage of Youth Not Meeting Physical Activity Guidelines\***

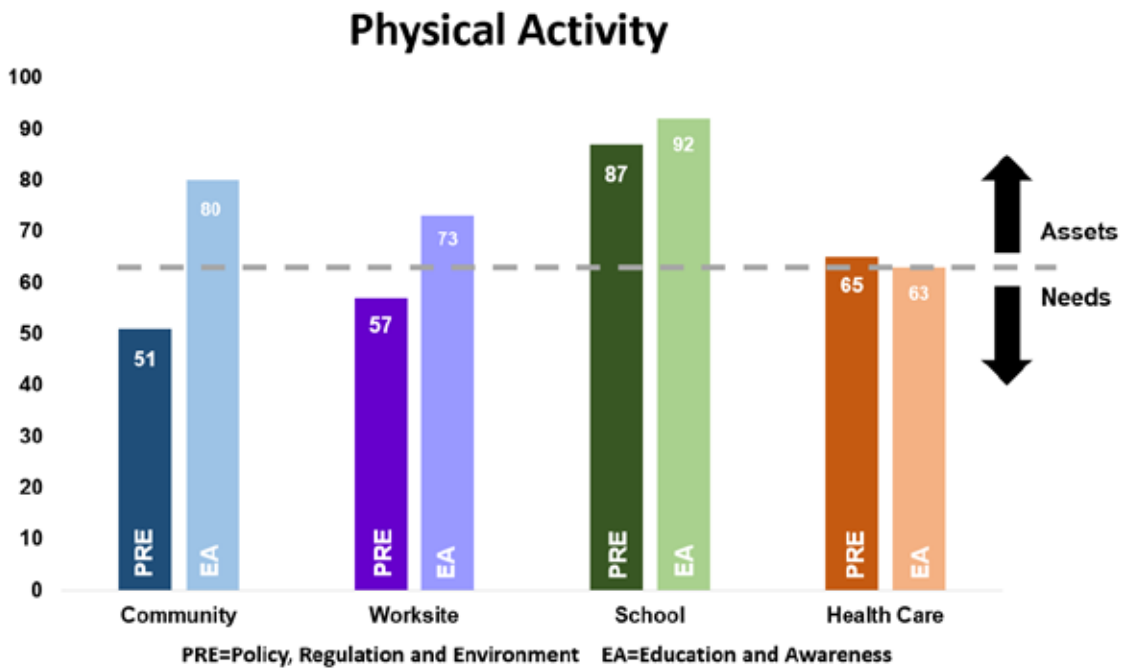


\*60 minutes per day on at least 5 days in a week  
 DATA SOURCE: Centers for Disease Control and Prevention (CDC). (2019). 1991-2019 High School Youth Risk Behavior Survey Data. YRBSS Explorer. <http://yrbs-explorer.services.cdc.gov/>

Understanding the factors that influence physical activity behaviors in the community is important to ensure the effectiveness of strategies to improve physical activity levels for all residents.

Using the South Dakota Good & Healthy Community Assessment, representatives from several sectors of the community rated Policy, Regulations, and Environment (PRE) efforts, along with Education and Awareness (EA) efforts related to physical activity. In Figure 101, scores over 60 represent the presence of physical activity assets, while scores below 60 indicate areas of need related to physical activity.

**Figure 101: Community Physical Activity Assessment**



DATA SOURCE: 2021 Community Health Assessment using the South Dakota Good & Healthy Assessment Tool

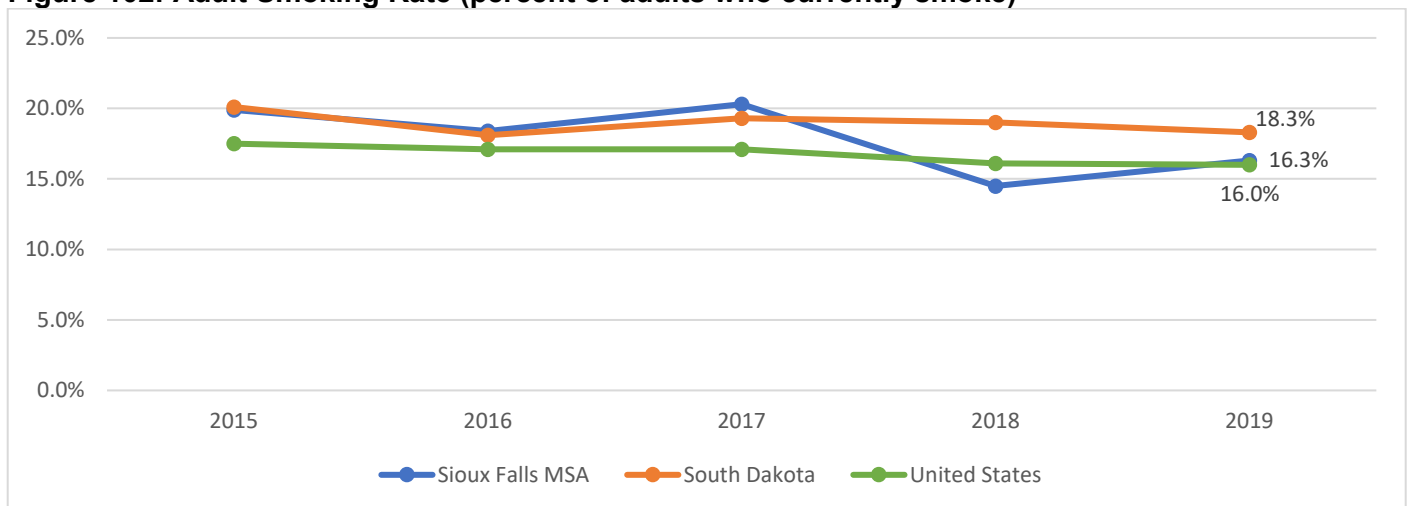
#### Tobacco Use

Tobacco remains the single most preventable cause of disease, disability, and death in the United States. Smoking harms nearly every organ in the body and causes cancer, heart disease, stroke, respiratory illness, and many other health problems. The estimated economic costs attributable to smoking and exposure to tobacco smoke continue to increase and now approach \$300 billion annually, with direct medical costs of at least \$130 billion and productivity losses of more than \$150 billion a year.<sup>68</sup>

In South Dakota, the annual health care costs directly caused by smoking are approximately \$373 million. Smoking-caused government expenditures creates a state and federal tax burden of about \$959 on each South Dakota household.<sup>69</sup>

While local, statewide, and national adult smoking rates have been generally trending downward slowly, the Sioux Falls MSA did see a slight increase from 2018 to 2019 (Figure 102).

**Figure 102: Adult Smoking Rate (percent of adults who currently smoke)**



DATA SOURCE: Centers for Disease Control and Prevention. (2019). BRFSS Prevalence & Trends Data. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. <https://www.cdc.gov/brfss/brfssprevalence/>

Tobacco use is often started and established primarily during adolescence. Nearly nine out of 10 cigarette smokers first tried smoking by age 18, and 99 percent first tried smoking by age 26. Each day in the United States, more than 3,800 youth aged 18 years or younger smoke their first cigarette, and an additional 2,100 youth and young adults become daily cigarette smokers. If current rates continue, 5.6 million

Americans younger than 18 years of age who are alive today are projected to die prematurely from smoking-related disease.<sup>68</sup>

Local data on adolescent tobacco use is not available. However, in South Dakota, 11.3 percent of middle school students have already tried smoking a cigarette, and that percentage jumps to 31.4 percent by high



school (Table 13). Furthermore, 12 percent of high school students in South Dakota have a history of recent cigarette use, and 3.5 percent have already become frequent smokers (Table 13). The use of e-cigarettes and smokeless tobacco products is also a

concern among high school students in South Dakota, as 50.6 percent have tried e-cigarettes and nearly one in four have history of recent e-cigarette use (Table 13), pointing to a need to continue focusing on tobacco prevention programs that target adolescents.

**TABLE 13: ADOLESCENT TOBACCO USE IN SOUTH DAKOTA**

Middle School Cigarette Smoking in South Dakota	
Students who have ever tried smoking a cigarette	11.3%
Students who smoked cigarettes on one or more of the past 30 days	3.5%
High School Cigarette Smoking in South Dakota	
Students who have ever tried smoking a cigarette	31.4%
Students who smoked cigarettes on one or more of the past 30 days	12%
High School E-Cigarette Use in South Dakota	
Students who have ever used an electronic vapor product	50.6%
Students who have used an electronic vaping product one or more times in the past 30 days	23.6%
High School Smokeless Tobacco Use in South Dakota	
Students who have ever used chewing tobacco, snuff, dip, snus, or dissolvable tobacco products	15.4%
Percentage of students who used chewing tobacco, snuff, dip, snus, or dissolvable tobacco products on one or more occasion in the past 30 days	7.1%

DATA SOURCE: High School Data is from Centers for Disease Control and Prevention (CDC). (2019). 1991-2019 High School Youth Risk Behavior Survey Data. YRBSS Explorer. <http://yrbs-explorer.services.cdc.gov/>. Middle School Data is from South Dakota Department of Health: Tobacco Control Program. (2019). South Dakota 2019 Youth Tobacco Survey (SD YTS). Be tobacco free, South Dakota. [https://doh.sd.gov/prevention/assets/2019YTSReport\\_WithRecommendations.pdf](https://doh.sd.gov/prevention/assets/2019YTSReport_WithRecommendations.pdf)

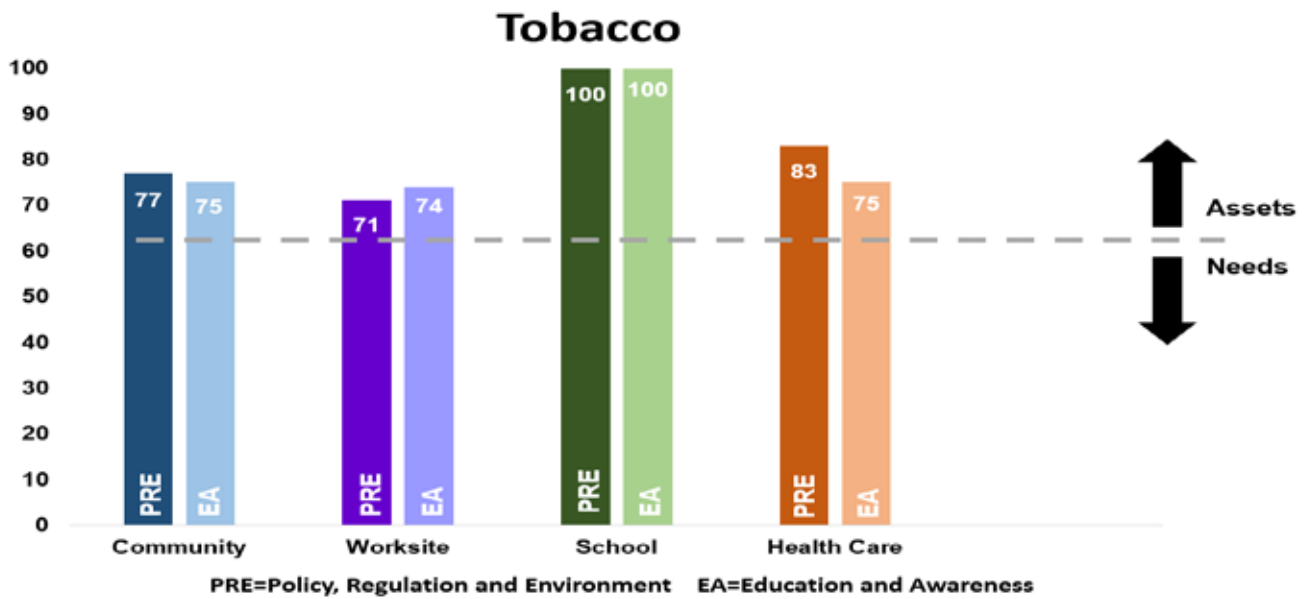


Using the South Dakota Good & Healthy Community Assessment, representatives from several sectors of the community rated Policy, Regulation, and Environment (PRE) efforts, along with Education and Awareness (EA) efforts related to tobacco prevention. In Figure 103, scores over 60 represents an indication of positive steps, or assets, in tobacco prevention, while scores below 60 indicate areas of need.

South Dakota has had a statewide law in place since 2010 regulating indoor smoking, and the City of Sioux Falls passed an ordinance in 2017 regulating tobacco use on City property. This appears to be reflected in the PRE scores well above 60 for all sectors. Other identified assets include enforcing laws prohibiting the sale of tobacco products to minors, cessation resources such as the South Dakota Quitline, and a 24/7 tobacco-free school policy prohibiting the use of tobacco and electronic smoking products on school grounds.

Despite the strong policy and regulatory environment, adolescents continue to initiate and use tobacco products at high rates, necessitating further interventions to limit access to tobacco products in this population and to improve their ability to resist or to quit use of tobacco products.

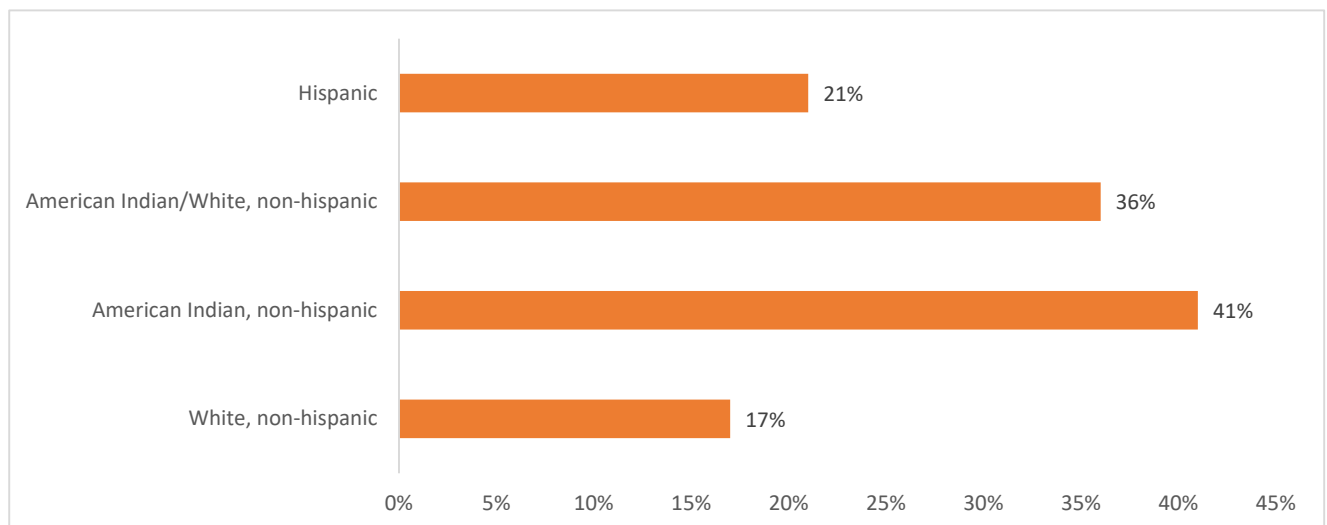
**Figure 103: Community Tobacco Assessment**



DATA SOURCE: 2021 Community Health Assessment using the South Dakota Good & Healthy Assessment Tool

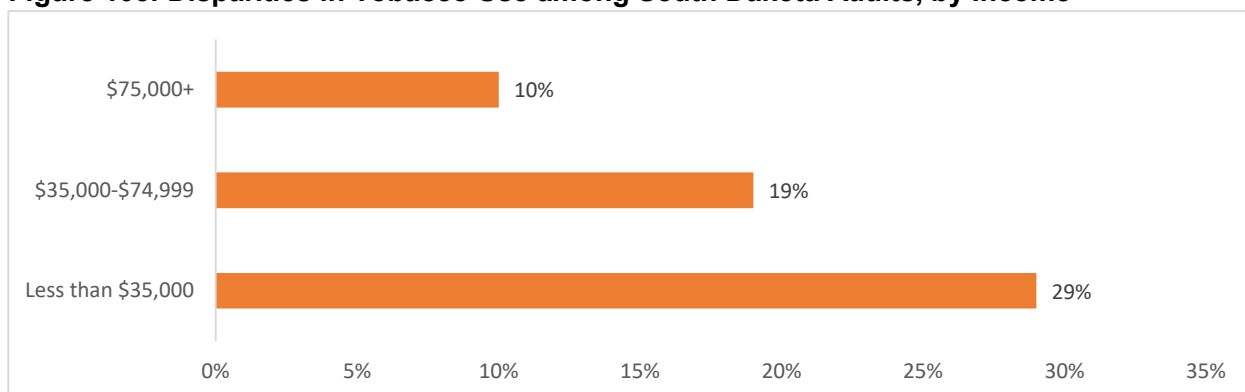
There are significant disparities in the use of commercial tobacco products in South Dakota. American Indians, lower income adults, unemployed adults and those unable to work, and adults with fewer years of education generally report higher use of tobacco products (Figures 104 through 107).

**Figure 104: Disparities in Tobacco Use among South Dakota Adults, by Race/Ethnicity**



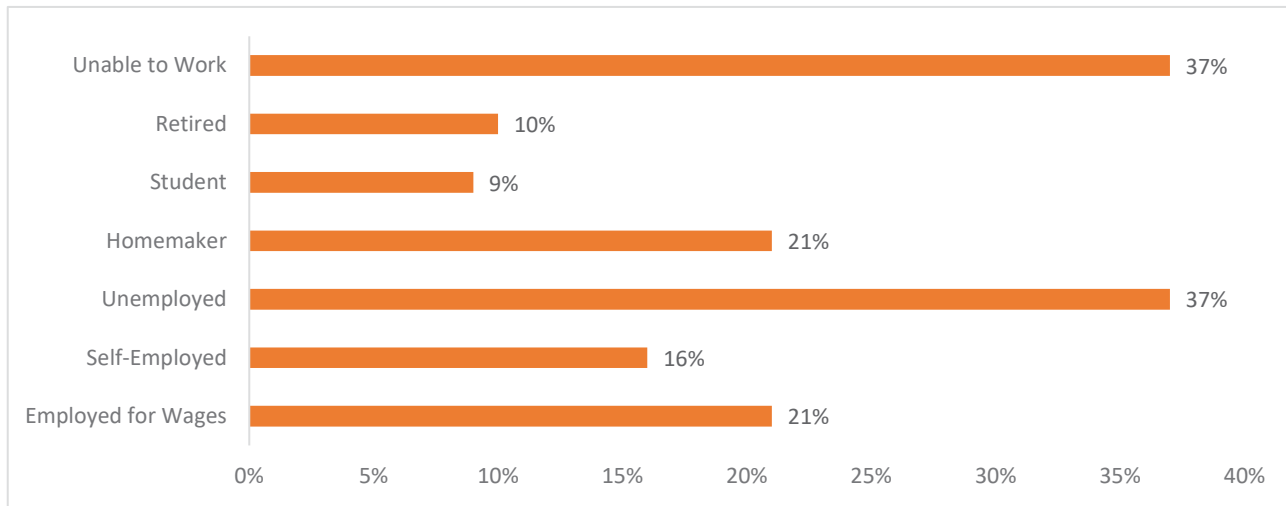
DATA SOURCE: South Dakota Department of Health. (2019). Behavioral Risk Factor Surveillance System. Office of Health Statistics. <https://doh.sd.gov/statistics/>

**Figure 105: Disparities in Tobacco Use among South Dakota Adults, by Income**



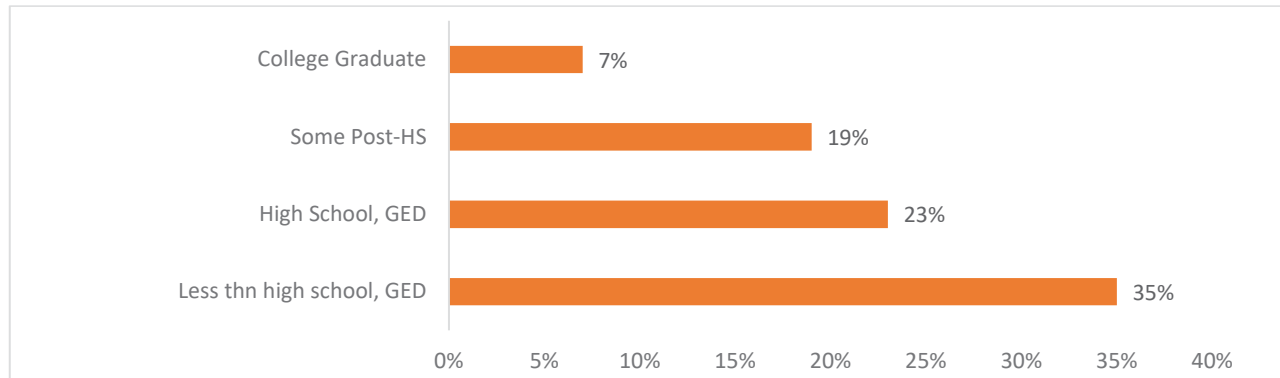
DATA SOURCE: South Dakota Department of Health. (2019). Behavioral Risk Factor Surveillance System. Office of Health Statistics. <https://doh.sd.gov/statistics/>

**Figure 106: Disparities in Tobacco Use among South Dakota Adults, by Employment Status**



DATA SOURCE: South Dakota Department of Health. (2019). Behavioral Risk Factor Surveillance System. Office of Health Statistics. <https://doh.sd.gov/statistics/>

**Figure 107: Disparities in Tobacco Use among South Dakota Adults, by Educational Attainment**



DATA SOURCE: South Dakota Department of Health. (2019). Behavioral Risk Factor Surveillance System. Office of Health Statistics. <https://doh.sd.gov/statistics/>

## HEALTH CARE ACCESS AND QUALITY

### Access to Care

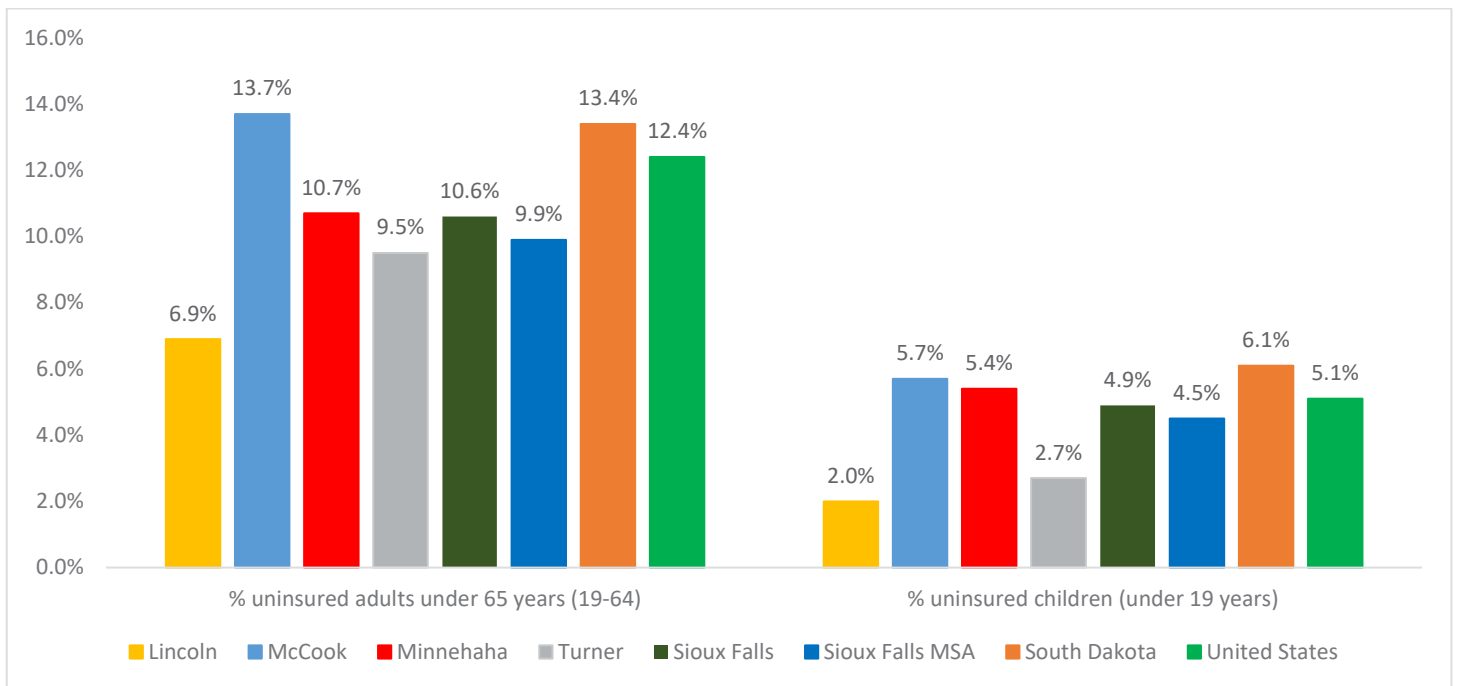
Ensuring residents are able to access comprehensive, quality health care services is essential for maintaining health, preventing and managing disease, and reducing disability and premature death. However, the concept of access is complex and multifaceted, including availability and utilization of health care services. Supply constraints (e.g. local availability of providers, proximity to service sites) limit availability, while financial, personal, and organizational barriers limit demand or utilization of services.

Compared to state and national averages, the Sioux Falls MSA has a lower proportion of uninsured adults and children (Figure 108). Focus group participants highlighted the availability of resources in the Sioux Falls area to help address needs of uninsured and underinsured residents, including free health care clinics and Falls Community Health, a Federally Qualified Health Center (FQHC).

*Access must be defined more broadly as ensuring that all people have the opportunity to get the medical, public health, and social services they need to live healthier lives. Building a Culture of Health means that people are able to access high-quality, affordable care to prevent or treat medical issues that may arise.*

– ROBERT WOOD JOHNSON FOUNDATION<sup>70</sup>

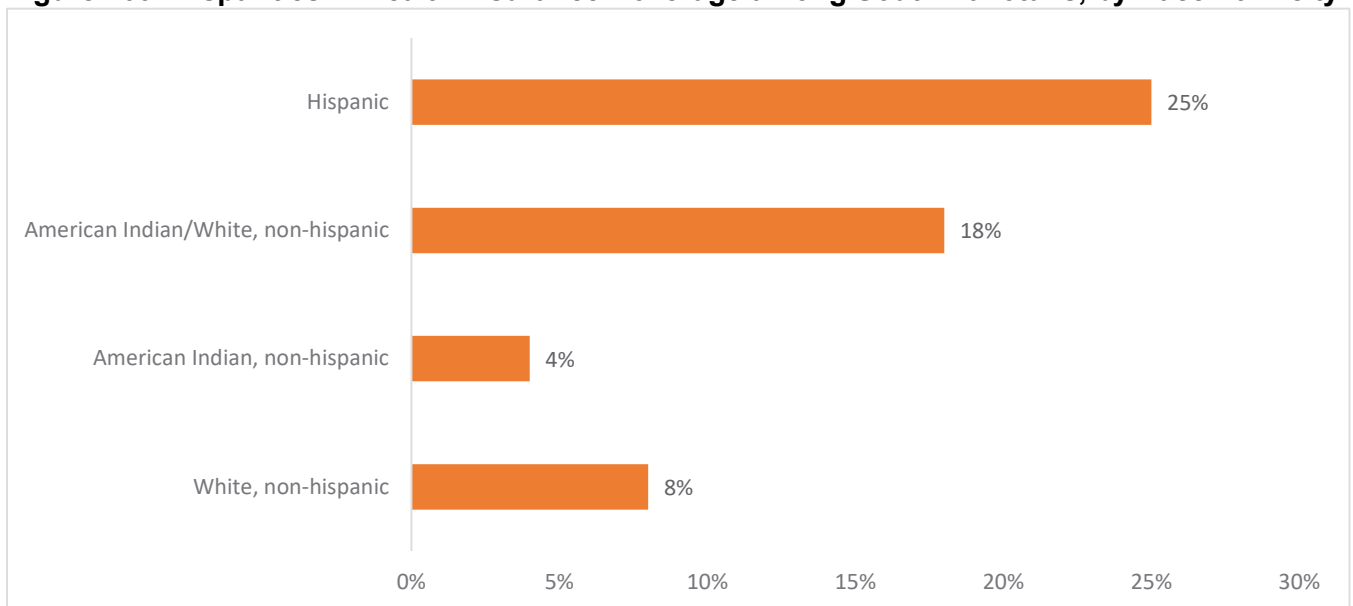
**Figure 108: Percent of Population that Lack Health Insurance Coverage**



DATA SOURCE: United States Census Bureau. (2019). American Community Survey Data. <https://www.census.gov/programs-surveys/acs/data.html>

In South Dakota, there are disparities in health insurance coverage, with non-White adults and those with lower incomes more likely to be uninsured (Figures 109 and 110).

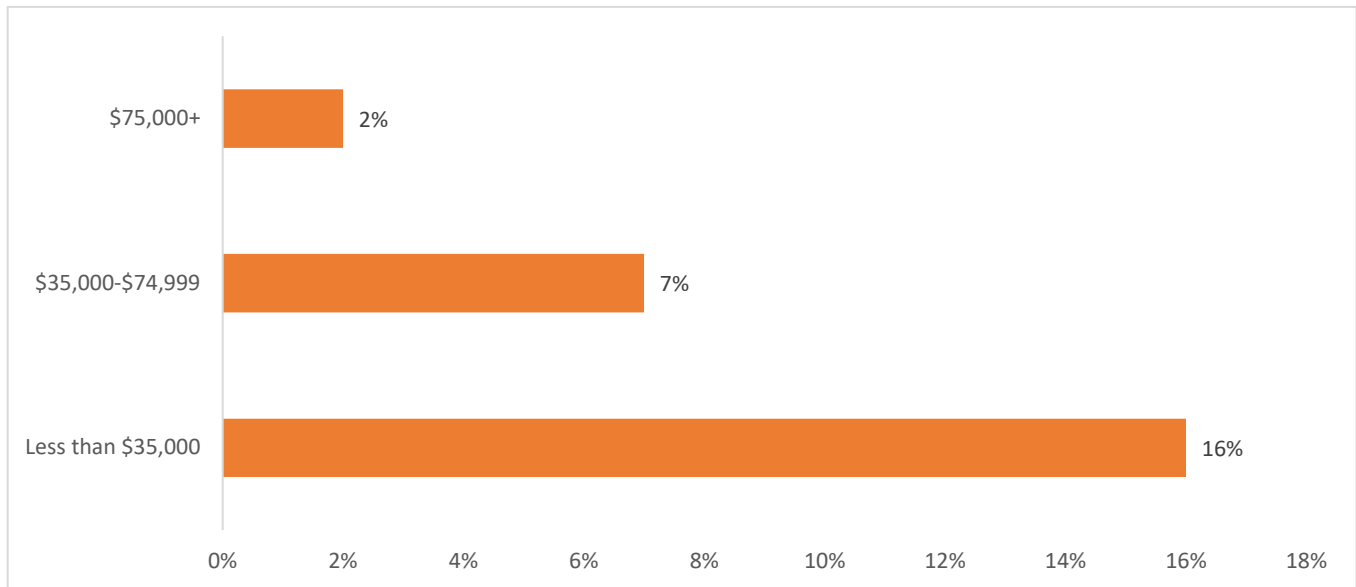
**Figure 109: Disparities in Health Insurance Coverage among South Dakotans, by Race/Ethnicity**



DATA SOURCE: South Dakota Department of Health. (2019). Behavioral Risk Factor Surveillance System. Office of Health Statistics. <https://doh.sd.gov/statistics/>



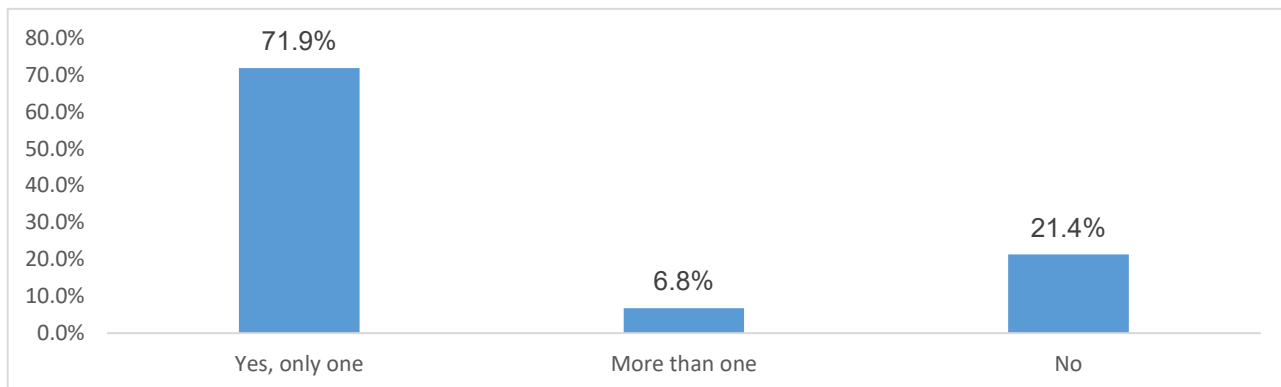
**Figure 110: Disparities in Health Insurance Coverage among South Dakotans, by Household Income**



**DATA SOURCE:** South Dakota Department of Health. (2019). Behavioral Risk Factor Surveillance System. Office of Health Statistics. <https://doh.sd.gov/statistics/>

Having a health care provider who can serve as a point of entry into the health care system and ensure continuity and coordination of care is another important measure of access to care. The majority of adults in the Sioux Falls MSA say they have at least one person they think of as a personal doctor or health care provider, but 21 percent do not (Figure 111).

**Figure 111: Adults in the Sioux Falls MSA Stating They Have at Least One Person They Think of as a Personal Doctor or Health Care Provider**



**DATA SOURCE:** Centers for Disease Control and Prevention. (2019). BRFSS Prevalence & Trends Data. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. <https://www.cdc.gov/brfss/brfssprevalence/>



Having a variety of health care providers available is necessary to ensure that there is adequate capacity to meet the care needs of the population. The ratio of population to providers is an important measure of access to care. The ratio represents the number of individuals served by one provider in a geographic unit if the population was equally distributed across providers. For example, if a county has a population

of 50,000 and has 20 primary care physicians, the ratio would be 2,500:1. As seen in Table 14 below, the Sioux Falls MSA generally has a low supply of dentists and mental health providers. While access to primary care providers in the MSA looks good compared to state and national benchmarks, with the exception of McCook County.

**TABLE 14: RATIO OF POPULATION TO HEALTH CARE PROVIDERS IN THE FOUR COUNTIES IN THE SIOUX FALLS MSA**

	Lincoln	McCook	Minnehaha	Turner	South Dakota	U.S.
Ratio of population to primary care physicians	620:1	5550:1	1060:1	N/A	1300:1	Top performers* 1030:1
Ratio of population to primary care providers other than physicians	660:1	2790:1	440:1	1050:1	630:1	N/A
Ratio of population to dentists	1180:1	5590:1	1800:1	4190:1	1620:1	Top performers 1210:1
Ratio of population to mental health providers	380:1	N/A	520:1	N/A	N/A	Top performers 270:1

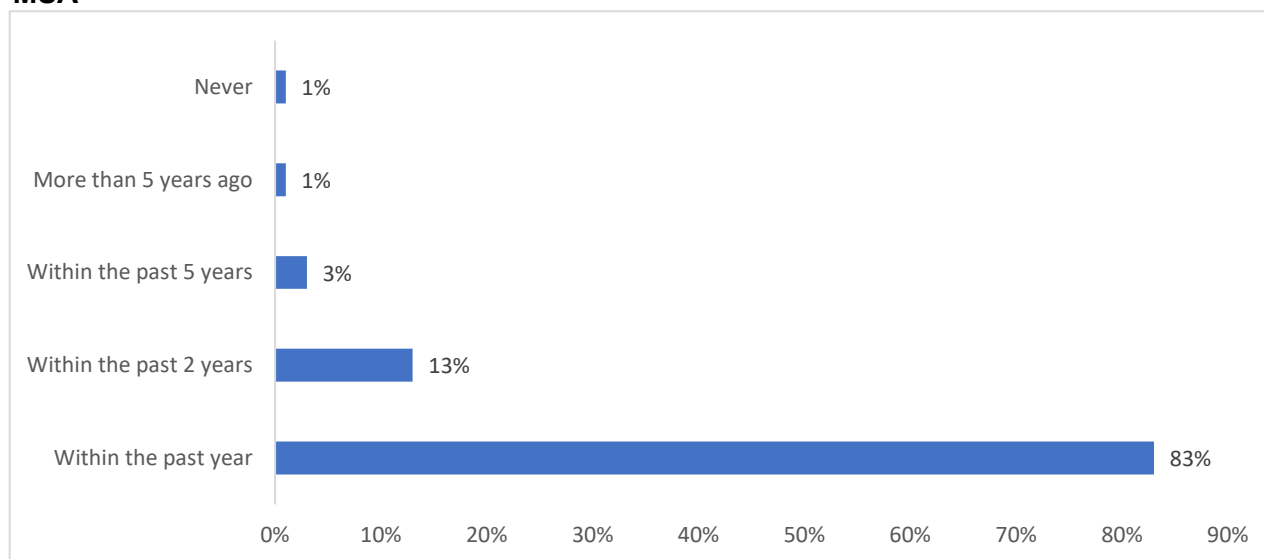
\*Top U.S. Performers = 90th percentile

DATA SOURCE: Area Health Resource Findings 2018 (primary care and dentists); CMS, National Provider Identification 2020 (primary care other than physicians and mental health). Accessed through [www.countyhealthrankings.org](http://www.countyhealthrankings.org).

According to the 2021 CHA resident survey, 83 percent of respondents indicated they had seen a primary care provider within the last year. For those who had not recently had a routine check-up, COVID-19 was the number one reason why they had not been to a

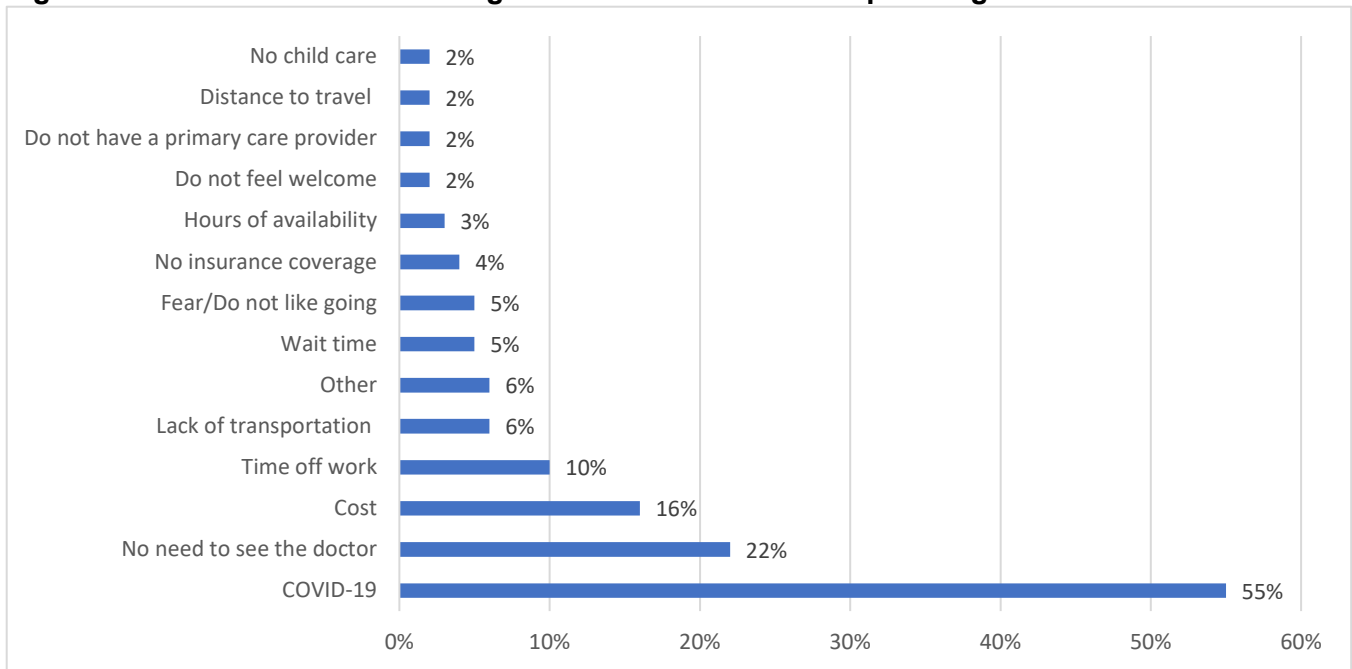
provider, with perception that they had “no need to see the doctor” and “cost” as other top reasons (Figure 112 and 113). This points to financial barriers as well as personal factors such as health literacy.

**Figure 112: Length of Time since Last Routine Checkup or Screening among Adults in the Sioux Falls MSA**



DATA SOURCE: 2021 Community Health Assessment Resident Survey. Completed by Sioux Falls CHA Partners February 2021

**Figure 113: Reasons for Not Having a Recent Routine Checkup among Adults in the Sioux Falls MSA**

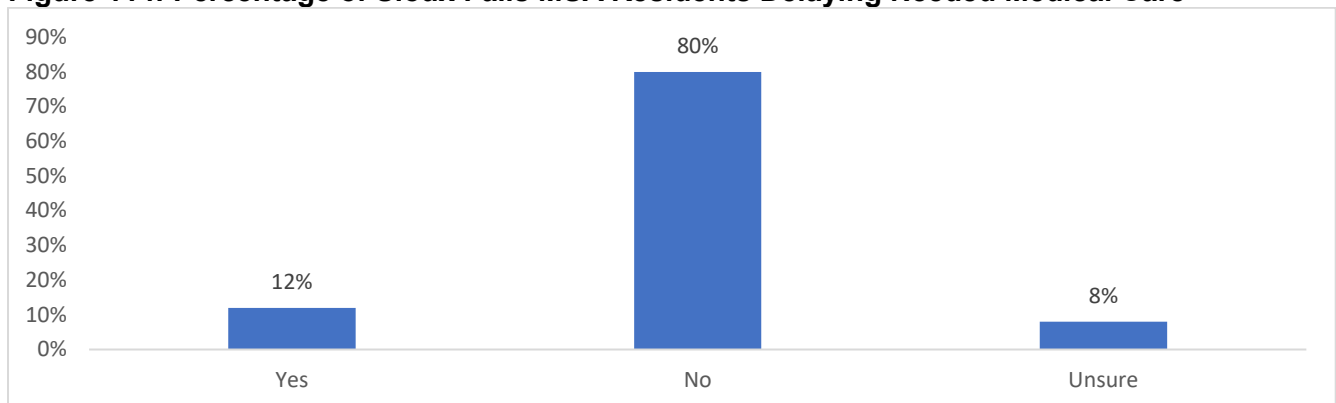


*DATA SOURCE: 2021 Community Health Assessment Resident Survey. Completed by Sioux Falls CHA Partners February 2021*

The CHA Resident Survey asked residents if, in the past year, they had a medically necessary care need but had to delay it for any reason, and 12 percent responded that they had delayed care (Figure 114). Of these, financial barriers (inability to pay or cost concerns and lack of health and lack of health insurance) were by far the most common reasons

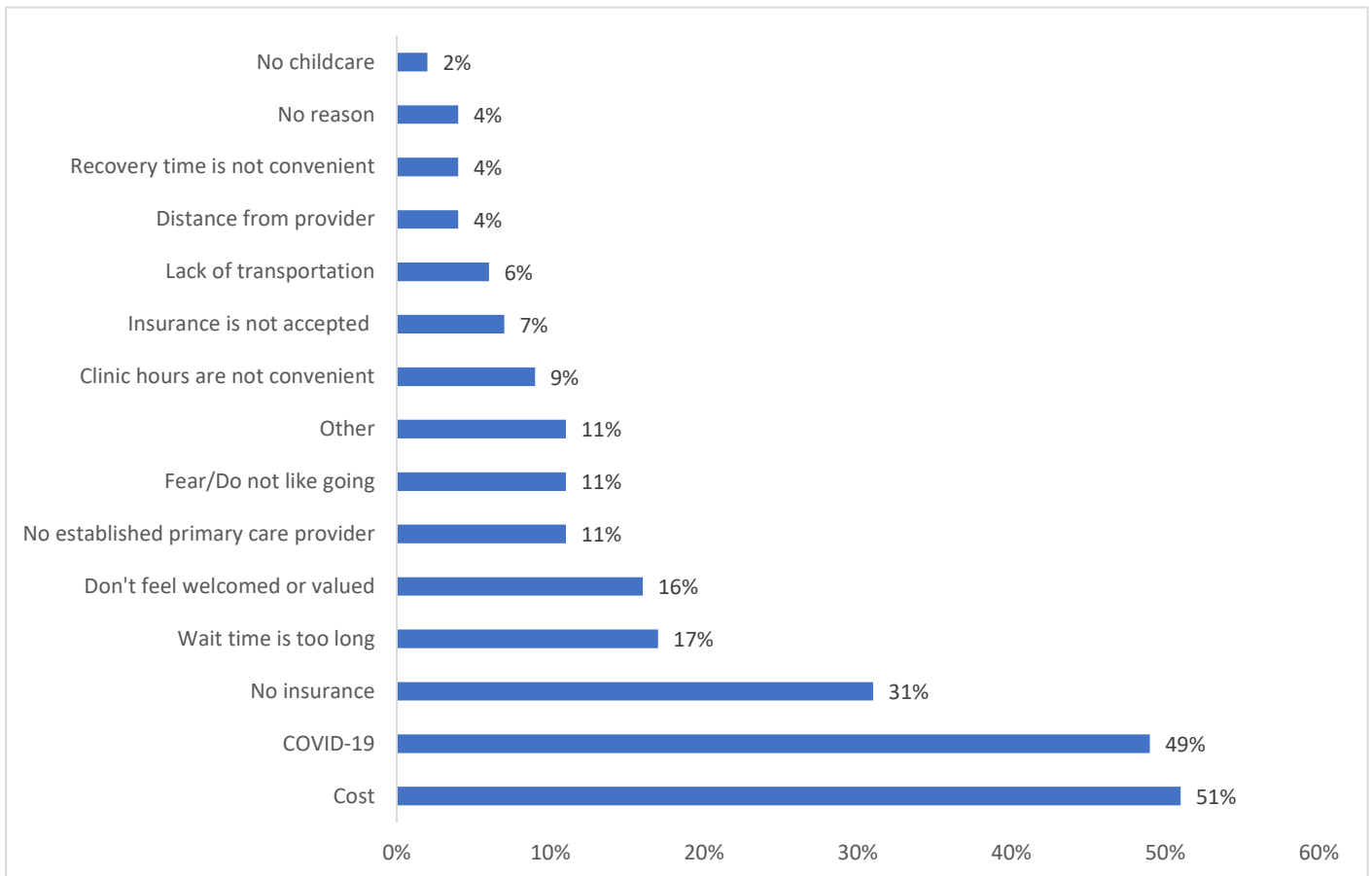
besides COVID-19 (Figure 115). A significant proportion also reported the reasons were due to organizational-level barriers, including long wait times (17 percent), not feeling welcome or valued at the clinic (16 percent), and inconvenient clinic hours (9 percent). The factors cited in Figure 115 point to opportunities in improving patient-centered care.

**Figure 114: Percentage of Sioux Falls MSA Residents Delaying Needed Medical Care**



*DATA SOURCE: 2021 Community Health Assessment Resident Survey. Completed by Sioux Falls CHA Partners February 2021*

**Figure 115: Reasons for Not Receiving Needed Health Care Services among Sioux Falls MSA Residents**



DATA SOURCE: 2021 Community Health Assessment Resident Survey. Completed by Sioux Falls CHA Partners February 2021

In both the CHA Resident Survey and during focus group discussions, respondents expressed the following concerns related to access to care:

- Cost and access are the two most important health care issues the community faces.
- Priority populations have the most difficulty accessing services. Examples of priority populations include individuals who are low-income or homeless, individuals with disabilities, those with severe mental health or addiction problems, or individuals who do not use English as a first language.

- The public needs more education on how to access care and prevention programming, as well as education on managing their health.

In the most recent National Community Survey, more than 70 percent of residents rated availability of affordable, good quality health care and preventive services as “excellent or good,” and those rankings have remained consistent over the previous three surveys (Table 15). Availability of affordable, quality mental health care has consistently been rated lower than other services.

**TABLE 15: RESIDENT RANKINGS OF HEALTH SERVICES IN SIOUX FALLS**

	2015	2017	2019	2021
Availability of affordable quality health care	74%	77%	72%	73%
Availability of preventative health services	76%	80%	80%	80%
Availability of affordable quality mental health care	64%	66%	63%	63%

DATA SOURCE: Sioux Falls, SD The National Community Survey Report of Results 2021. The National Research Center. Accessed at <https://www.sioxfordfalls.org/council/community-survey/survey-results/21-report-of-results>

Overall, Sioux Falls residents generally feel that the metro area has a strong healthcare system, with 75 percent of residents stating that access to healthcare is either “excellent” or “very good.”<sup>19</sup> Focus group participants highlighted the robust medical community as the city’s number one health-related asset. In addition to having two comprehensive health

systems, the focus groups mentioned the availability of specialty clinics, integrative health clinics, and free or sliding-scale fee clinics to serve area residents.

The CHA focus groups identified some potential health gaps in need of attention, including:

- Mental health, addiction, and disability care.



- Transportation options and availability.
- Need for additional navigation and case management between health systems and other services.
- Diversity in leadership and leadership involvement.
- Unequal access to health information and healthy lifestyle resources.

- Dental care costs.
- Whole person healthcare.

In a 2020 survey of Sioux Falls adults over the age of 45, residents rated several aspects of the health care system. Overall, residents gave “excellent” or “very good” ratings to factors such as convenience of emergency care centers and access to a variety of health care professionals (Table 16).

**TABLE 16: RATING OF HEALTH CARE SERVICES BY OLDER ADULTS**

	Poor	Fair	Good	Very good	Excellent	Not sure
Conveniently located emergency care centers	2%	5%	23%	38%	29%	4%
Well-maintained hospitals and health care facilities	2%	1%	8%	37%	51%	0%
Affordable home health care providers	8%	7%	18%	14%	9%	44%
A variety of health care professionals including specialists	1%	2%	8%	35%	47%	6%
Health care professionals who speak different languages	3%	6%	13%	19%	14%	44%
Conveniently located health and social services	4%	13%	30%	27%	17%	9%
A service that provides people to help seniors easily find and access health and supportive services	8%	9%	18%	24%	10%	30%

DATA SOURCE: 2020 Age-Friendly Sioux Falls Survey. Sioux Falls Health Department.

The following listing and map (Figure 116) show locations where residents can access primary care services in the community.

### Primary Care Locations in Sioux Falls

#### Avera Clinics | [www.avera.org](http://www.avera.org)

Family Health | 4011 West Benson Road  
 Family Health | 6215 South Cliff Avenue  
 Family Health | 1200 South 7th Avenue  
 Family Health/Urgent Care | 2100 South Marion Road  
 Family Health/Urgent Care | 1910 West 69th Street

Family Health/Urgent Care | 1035 South Highline Place  
 Health Care Clinic | 300 North Dakota Avenue, Suite 117  
 Internal Medicine | 1301 South Cliff Avenue  
 Internal Medicine | 6100 S. Louise Avenue  
 Internal Medicine/Women's | 6215 South Cliff Avenue

#### Sanford Clinics | [www.sanfordhealth.org](http://www.sanfordhealth.org)

Family Health | 600 N. Sycamore Avenue  
 Family Health | 2701 S. Kiwanis Avenue  
 Family Health | 3401 W. 49th Street  
 Family Health | 6110 S. Minnesota Avenue  
 Family Health/Pediatrics | 6101 S. Louise Avenue  
 Family Health/Pediatrics/Acute Care | 4405 E 26th Street

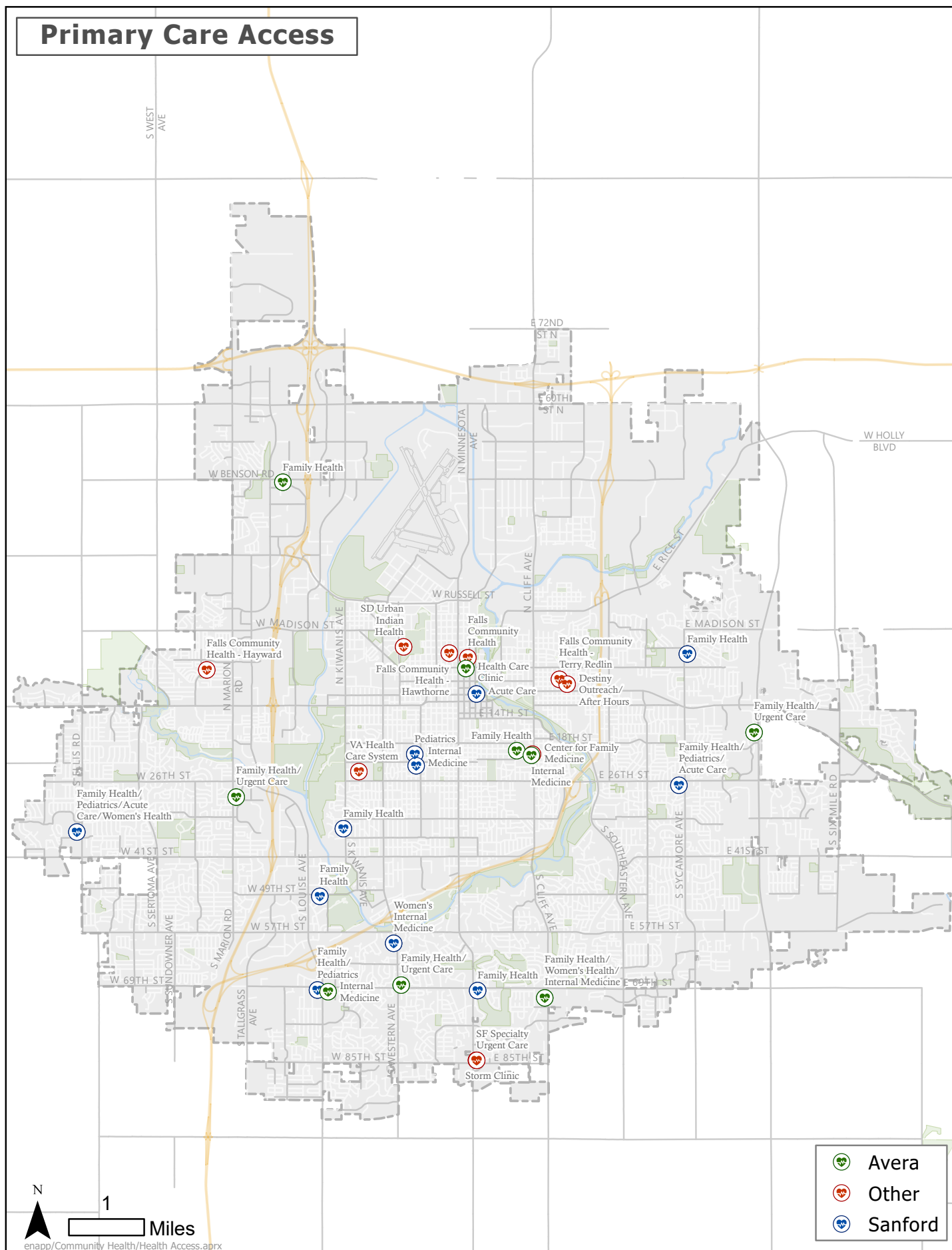
Family Health/Pediatrics/Acute Care/Women's Health  
 2601 S. Ellis Road  
 Pediatrics | 1205 S. Grange Avenue  
 Internal Medicine | 1321 W. 22nd Street  
 Women's Internal Medicine | 5019 S. Western Avenue  
 Acute Care | 136 S. Phillips Avenue

#### Other Clinics

Center for Family Medicine | 1115 East 20th Street  
[www.centerforfamilymed.org](http://www.centerforfamilymed.org)  
 Destiny Outreach/After Hours (at the Empower Campus)  
 1905 E. 8th Street | [www.destinyclinic.com](http://www.destinyclinic.com)  
 Falls Community Health | 521 N. Main Avenue  
[www.siouxfalls.org/fch](http://www.siouxfalls.org/fch)  
 Falls Community Health at Hawthorne Elementary  
 601 N. Spring Avenue  
 Falls Community Health at Hayward Elementary  
 410 North Valley View Road

Falls Community Health at Terry Redlin Elementary  
 1722 E 8th Street  
 SD Urban Indian Health Clinic | 711 N Lake Ave  
[www.sduih.org](http://www.sduih.org)  
 Sioux Falls Specialty Urgent Care  
 7600 S. Minnesota Avenue | [www.sfish.com/urgent-care](http://www.sfish.com/urgent-care)  
 Sioux Falls VA Health Care System  
 2501 W. 22nd Street | [www.siouxfalls.va.com](http://www.siouxfalls.va.com)  
 Storm Clinic | 7600 South Minnesota Avenue  
[www.stormclinic.com](http://www.stormclinic.com)

**Figure 116: Primary Care Access Sites in the City of Sioux Falls**



DATA SOURCE: City of Sioux Falls Civic Analytics

### Quality of Care

It is important for individuals to be able to access care and afford needed services, but the quality of those services are just as important in helping someone achieve their best possible health and well-being. Preventive care is important to help individuals reduce their risk for disease, as well as to reduce disability and premature death. Ensuring regular checkups and screenings can help reduce health care costs and improve both longevity and quality of life.

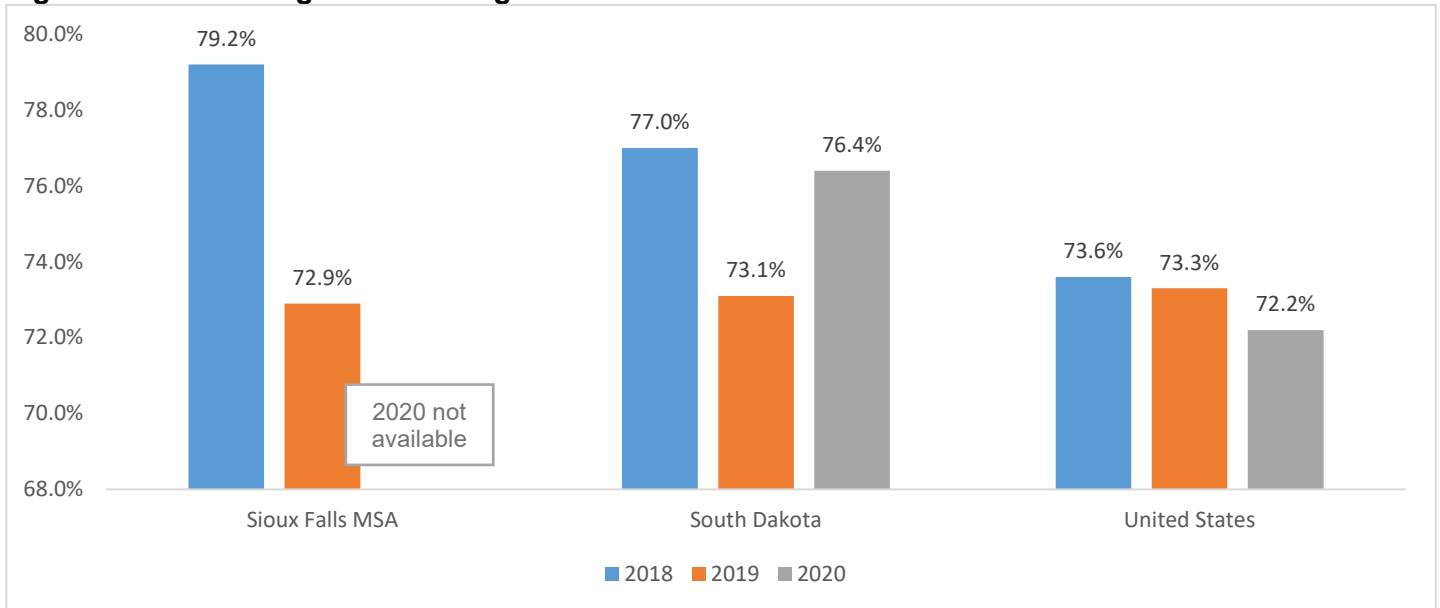
Overall, residents in the Sioux Falls MSA give high marks to the quality of care available in the area, with 73 percent of respondents to the 2021 CHA Resident Survey rating quality of health care available in the community as “excellent” or “very good.”<sup>43</sup> Ratings were slightly higher in the 2021 National Community Survey of Sioux Falls residents, with 85 percent of respondents rating the quality of health services in the community as “excellent” or “good.”<sup>20</sup>

### Preventive Care: Immunizations

Every year in the U.S., thousands of adults become seriously ill and may be hospitalized because of diseases that vaccines can help prevent. From childhood through adulthood, following recommended vaccine guidelines can greatly reduce disease risk. Vaccines are not only important for an individual’s health, but also to protect those in the community who may not be able to get vaccines due to age or health conditions.<sup>71</sup>

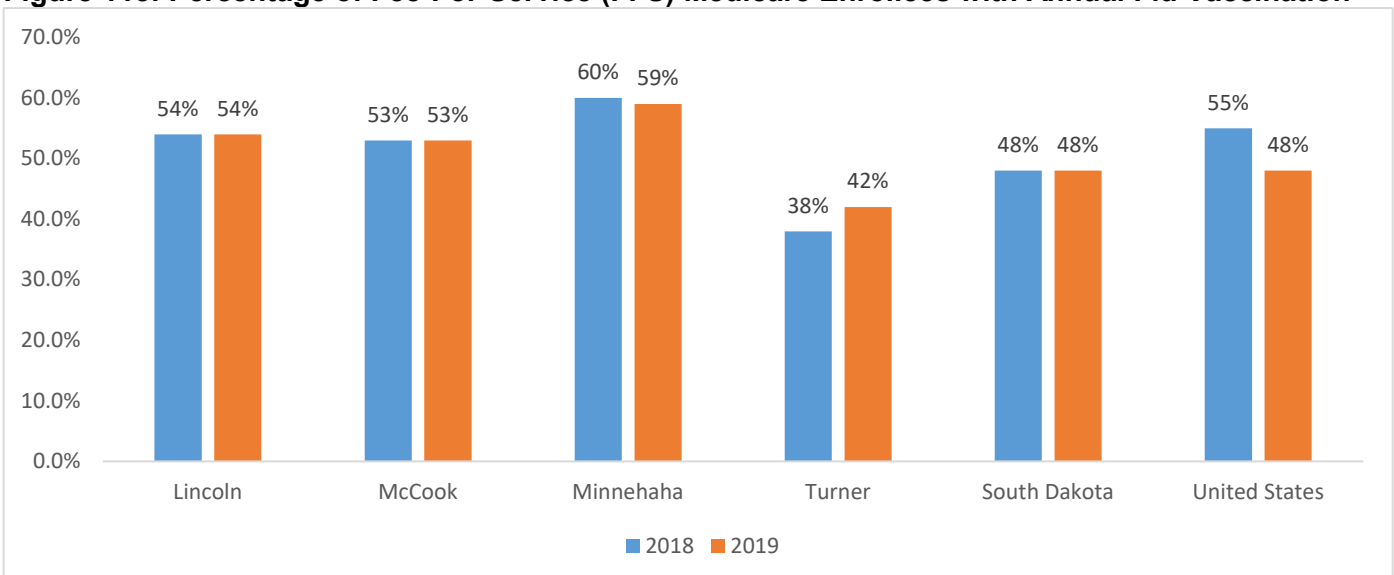
When looking at vaccination rates, there are areas where residents in the Sioux Falls MSA are doing well, such as adults over the age of 65 who have received a pneumococcal (pneumonia) vaccine (Figure 117), but there are other areas where there is room for improvement, including the number of residents who get an annual flu vaccination (Figure 118).

**Figure 117: Percentage of Adults Age 65+ Who Have Ever Had a Pneumococcal Vaccination**



DATA SOURCE: Centers for Disease Control and Prevention. (2019). BRFSS Prevalence & Trends Data. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. <https://www.cdc.gov/brfss/brfssprevalence/>

**Figure 118: Percentage of Fee-For-Service (FFS) Medicare Enrollees with Annual Flu Vaccination**



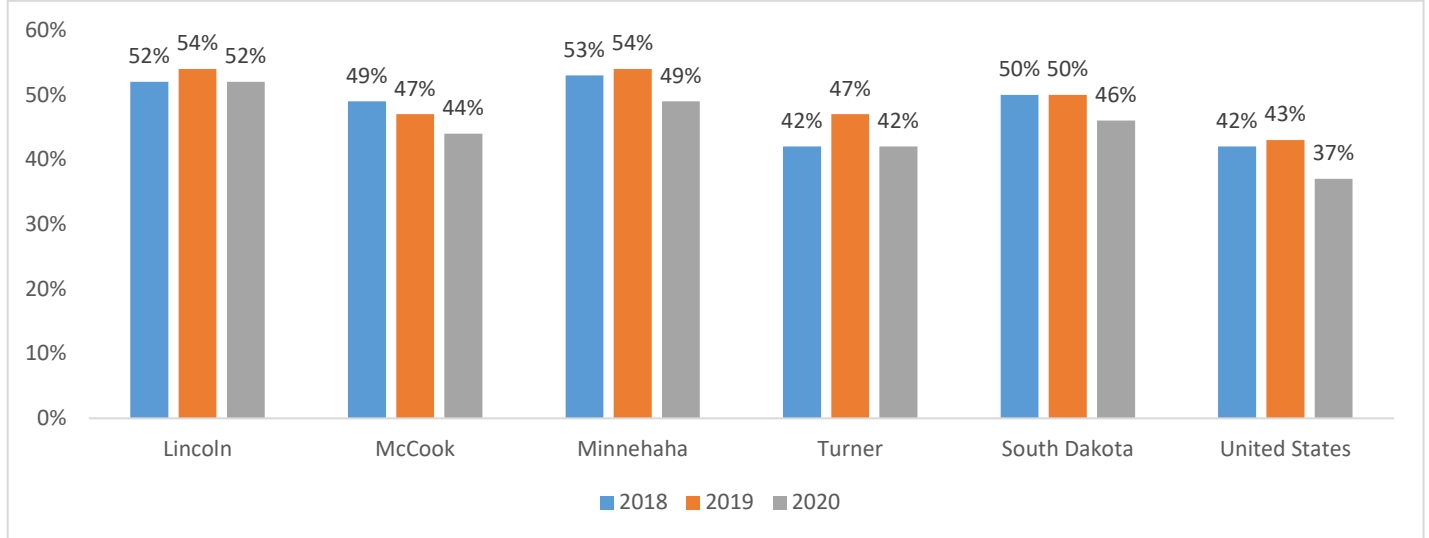
DATA SOURCE: Centers for Medicare and Medicaid Services. (2020). Mapping Medicare Disparities. Office of Minority Health. <https://www.cms.gov/About-CMS/Agency-Information/OMH/OMH-Mapping-Medicare-Disparities>.

**Preventive Care: Screenings and Examinations**

Preventive screenings can detect diseases in early stages when they are easier to treat. Cancer screenings like mammography and colonoscopy are important for adults, while other routine exams like dental checkups are important for individuals of all ages.

Breast cancer is the second most common cancer in women, and mammograms can help detect breast cancer as early as three years before it can be felt. Although mammography rates in the elderly population in the Sioux Falls MSA are slightly higher than state and national rates, only about half of women ages 65-74 received an annual mammogram (Figure 119).

**Figure 119: Percentage of Female Medicare Enrollees Ages 65-74 that Received an Annual Mammography Screening.**

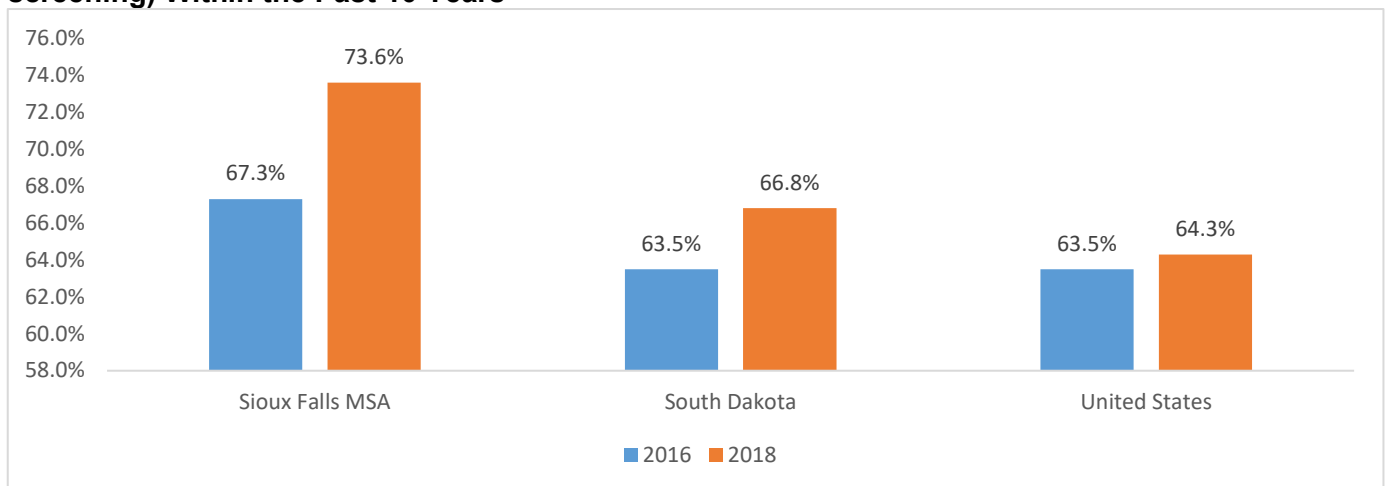


DATA SOURCE: Centers for Medicare and Medicaid Services. (2020). Mapping Medicare Disparities. Office of Minority Health. <https://www.cms.gov/About-CMS/Agency-Information/OMH/OMH-Mapping-Medicare-Disparities>.

Colorectal cancer (CRC) is the second leading cause of cancer-related deaths among men and women in the United States. However, many people who are at risk of CRC are not being screened according to national guidelines. An estimated 60 percent of CRC deaths could be prevented if all men and women aged 50 years or older in the United States were

regularly screened.<sup>72</sup> The Healthy People 2030 target is to reach 74.4 percent of adults getting screened according to the national guidelines.<sup>73</sup> With an increasing trend in recent years, the Sioux Falls MSA is doing better than the state and national average and is approaching the Healthy People 2030 target (Figure 120).

**Figure 120: Percentage of Adults Age 50-75 Who Have Had a Colonoscopy (colorectal cancer screening) Within the Past 10 Years**

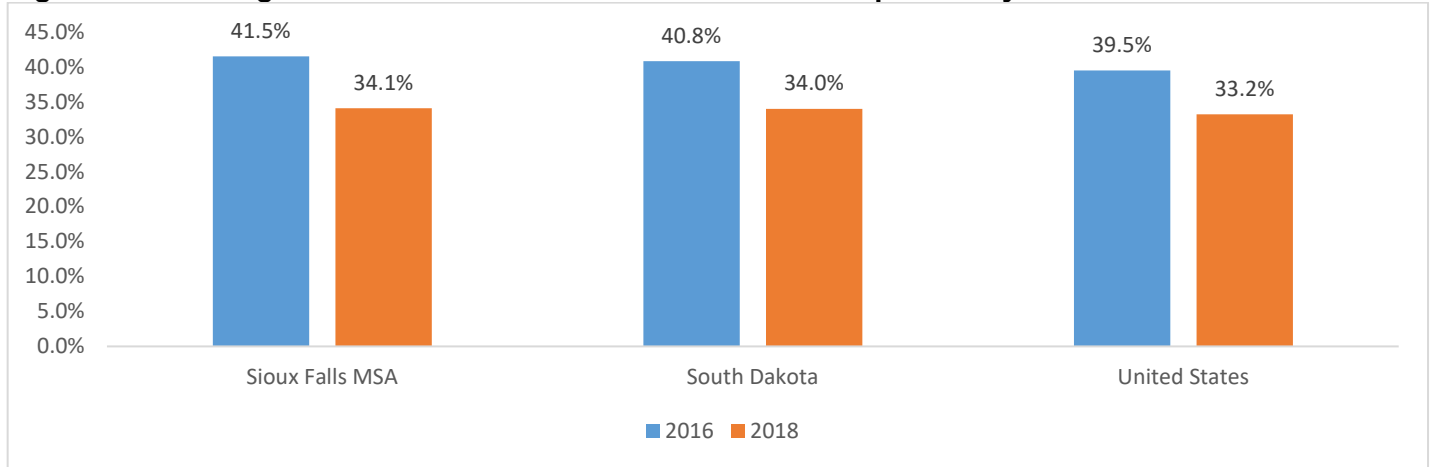


DATA SOURCE: Centers for Disease Control and Prevention. (2018). BRFSS Prevalence & Trends Data. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. <https://www.cdc.gov/brfss/brfssprevalence/>



The prostate-specific antigen (PSA) test can be used as a screening tool to detect prostate cancer. Compliance with PSA screening guidelines is poor across the board at the MSA, state, and national levels (Figure 121).

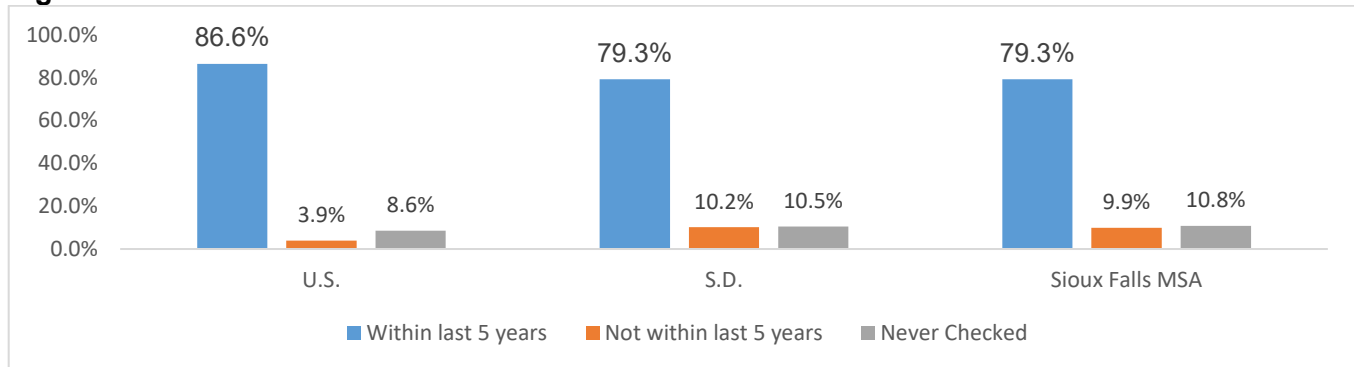
**Figure 121: Men aged 40+ who have had a PSA test within the past two years**



DATA SOURCE: Centers for Disease Control and Prevention. (2018). BRFSS Prevalence & Trends Data. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. <https://www.cdc.gov/brfss/brfssprevalence/>

High blood cholesterol is one of the leading risk factors for heart disease.<sup>74</sup> More than three-fourths of adults in the Sioux Falls MSA have had their blood cholesterol checked within the last five years. Just under 11 percent have never had a blood cholesterol screening (Figure 122).

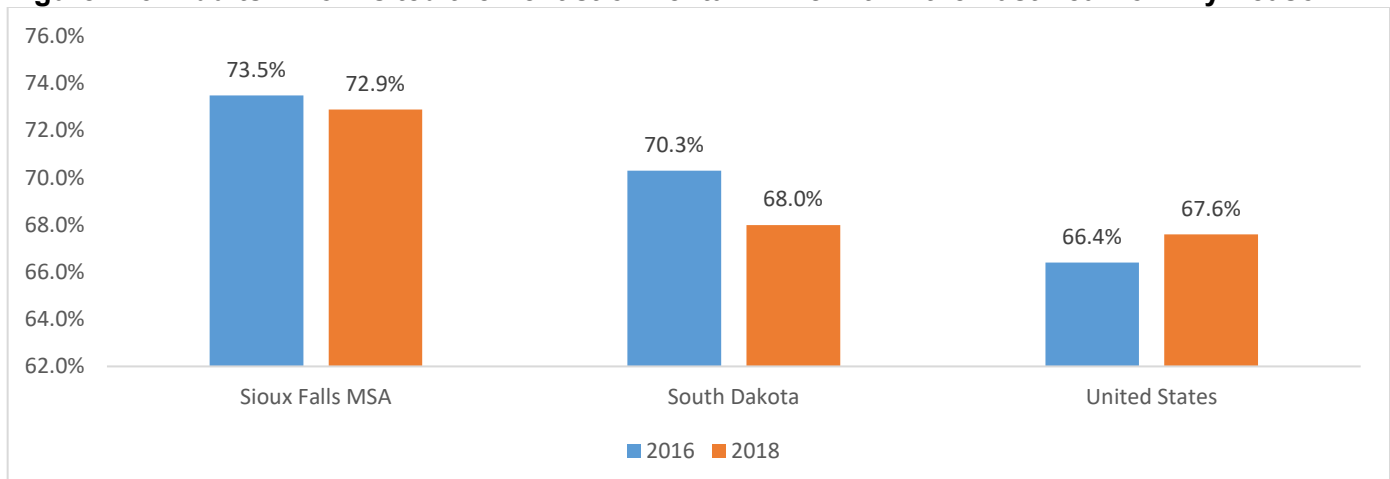
**Figure 122: Adults Who Have Had Their Blood Cholesterol Checked within the Last Five Years**



DATA SOURCE: Centers for Disease Control and Prevention. (2018). BRFSS Prevalence & Trends Data. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. <https://www.cdc.gov/brfss/brfssprevalence/>

According to the World Health Organization, oral diseases are exceedingly prevalent, burdensome, and costly to treat.<sup>48</sup> Common oral diseases are dental caries (decay), periodontal disease (gum disease), and oral cancer. However, much of this burden of disease is preventable or easier to treat if caught early. More than one in four adults in the Sioux Falls MSA did not have a dental visit in the past year, according to 2018 data (Figure 123).

**Figure 123: Adults Who Visited the Dentist or Dental Clinic within the Past Year for Any Reason**



DATA SOURCE: Centers for Disease Control and Prevention. (2018). BRFSS Prevalence & Trends Data. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. <https://www.cdc.gov/brfss/brfssprevalence/>

Hospital care represents the largest component of U.S. healthcare expenditures. As a result, reducing potentially preventable hospitalizations has become a priority among policymakers and public and private payers.<sup>75</sup> Potentially preventable hospitalizations are inpatient stays for treating ambulatory care sensitive conditions (ACSCs) that evidence suggests may be avoidable, in part, through timely and quality primary and preventive care. Examples include complications

of diabetes or asthma. This measure may also indicate a tendency to overuse emergency departments and urgent care as a main source of care.

Preventable hospital stays can be looked at as both a quality of care and an access to care measure. The rate of hospital stays for ACSCs in Sioux Falls MSA counties are comparable to the state average, but are much higher than the national average (Table 22).

**TABLE 17: RATE OF HOSPITAL STAYS FOR AMBULATORY-CARE SENSITIVE CONDITIONS PER 100,000 MEDICARE ENROLLEES**

Lincoln	McCook	Minnehaha	Turner	South Dakota	United States
4,927	4,743	4,361	3,970	4,189	2,565

DATA SOURCE: Centers for Medicare and Medicaid Services. (2020). Mapping Medicare Disparities. Office of Minority Health. <https://www.cms.gov/About-CMS/Agency-Information/OMH/OMH-Mapping-Medicare-Disparities>

**SOCIAL AND ECONOMIC FACTORS**

Social Determinants of Health, are factors related to the environments where people live, learn, work, worship, and play. These factors affect physical and mental health, as well as overall quality of life. In fact, it has been estimated that only about 20 percent of the factors that influence our health can be addressed by access to good quality medical care, while as much as 50 percent of variation in population health could be as a result of the impact of determinants<sup>32</sup> such as:

- Education, employment, and income.
- Access to healthy foods and opportunities to be physically active.
- The physical environment, including air and water quality, and elements of the built environment such as housing, transportation, and neighborhoods.
- Language and literacy skills.
- Racism, discrimination, and violence.

*The pandemic reinforces what we already know. We can't keep people healthy if they don't have a roof over their head and food on the table.*<sup>76</sup>

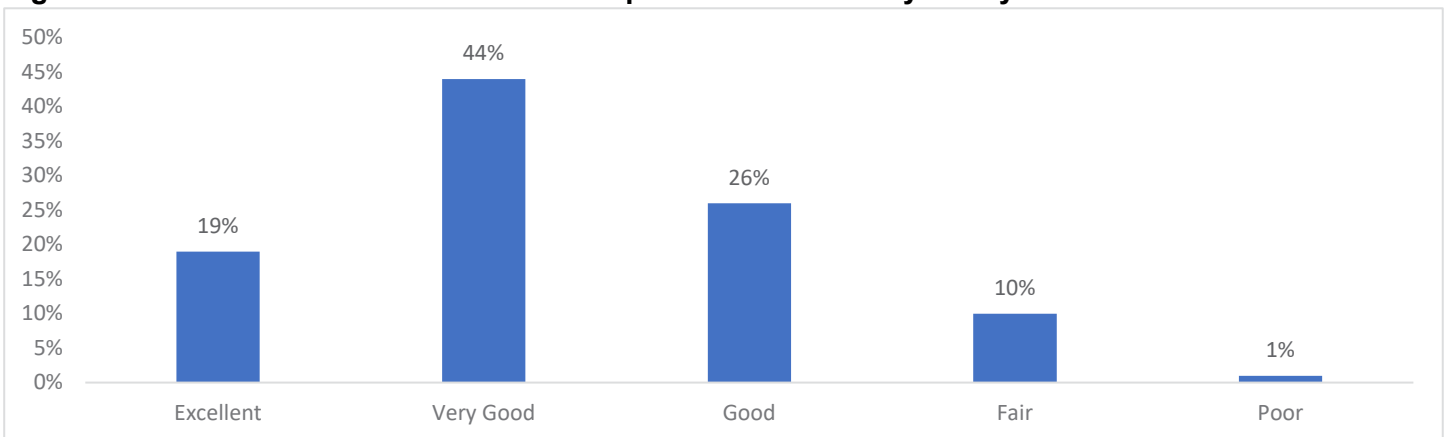
- BECHARA CHOUCAIR, M.D., SENIOR VICE PRESIDENT AND CHIEF HEALTH OFFICER, KAISER PERMANENTE

While COVID-19 has been the prevailing health topic of 2020 and 2021, along with pandemic-related impacts on jobs, housing, and access to food, many of these social and economic factors have been impacting residents' health for decades. Income, education, employment, safety, and other factors directly impact how well and how long we live. They affect our residents' ability to make healthy choices, pay for housing, manage stress, or access medical care. This section of the CHA report focuses on many of these social determinants of health.

**Crime and Safety**

Perceptions of safety and security impacts stress levels and the ability of residents to utilize community resources such as trails and parks. In general, the majority of residents responding to the 2021 CHA Survey rated the community as a safe place to live (Figure 124).

**Figure 124: Sioux Falls Area Resident Perceptions of Community Safety**



DATA SOURCE: 2021 Community Health Assessment Resident Survey. Completed by Sioux Falls CHA Partners February 2021.

The 2021 National Community Survey asked residents more specific questions about overall feelings of safety, how safe they feel from specific types of crime, as well as how they rank various safety agencies like police, fire and emergency medical services. While

overall feelings of safety declined in the 2021 survey, residents rate safety in their neighborhoods and in the downtown area high and also give high marks to police, fire, and ambulance services in the city (Table 18).

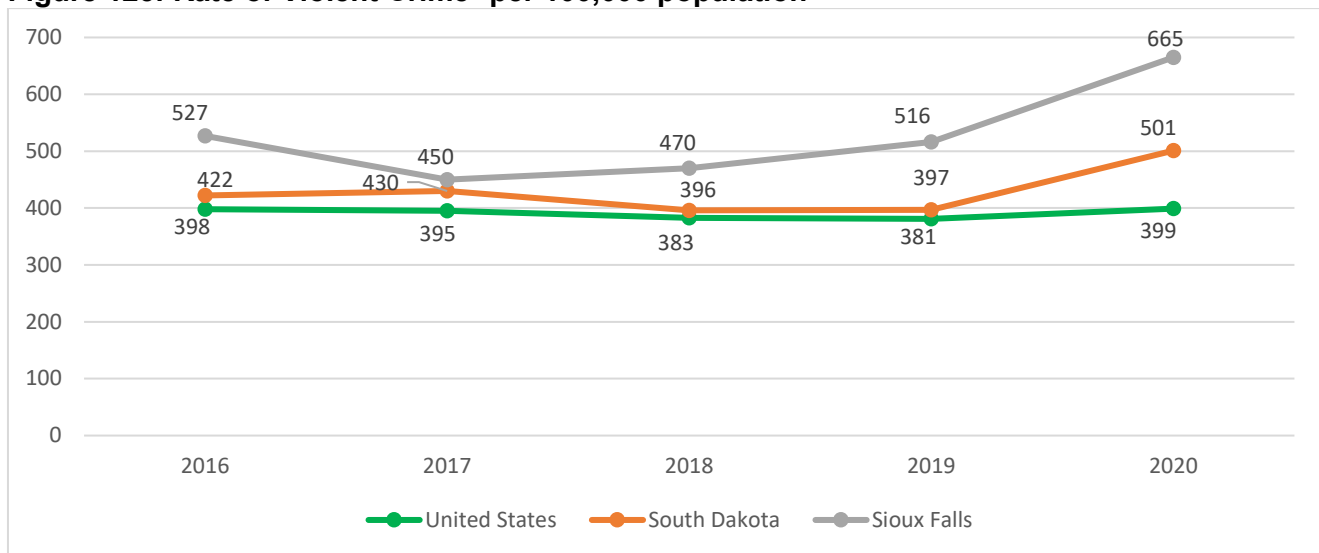
**TABLE 18: RESIDENT RATINGS TO VARIOUS ASPECTS OF SAFETY IN THE CITY OF SIOUX FALLS**

	2015	2017	2019	2021
Overall feeling of safety	79%	77%	80%	67%
Safe in neighborhood	93%	95%	97%	93%
Safe downtown/commercial area	85%	86%	88%	90%
Police	83%	89%	84%	83%
Fire	96%	97%	94%	94%
Ambulance or EMS services	92%	84%	83%	85%
Crime prevention	71%	71%	71%	65%
From property crime	N/A	N/A	N/A	72%
From violent crime	N/A	N/A	N/A	75%
Emergency preparedness	72%	71%	73%	69%
Traffic enforcement	64%	65%	68%	69%
Street lighting	64%	68%	68%	72%

DATA SOURCE: Sioux Falls, SD The National Community Survey Report of Results 2021. The National Research Center. Accessed at <https://www.siouxfalls.org/council/community-survey/survey-results/21-report-of-results>

After a period of holding steady at both state and national levels, there was a significant increase in the rate of violent crime in South Dakota between 2019 and 2020. There has also been a gradual increase in violent crime in Sioux Falls, according to data from the Sioux Falls Police Department. (Figure 125).

**Figure 125: Rate of Violent Crime\* per 100,000 population**



\*Violent crime includes murder (including manslaughter), rape, robbery, and aggravated assault.

DATA SOURCE: City level data from: Sioux Falls Police Department 2020 Annual Report. State and National Data from: Federal Bureau of Investigation Uniform Crime Reporting Program (2020). Trend of Violent Crime from 2010 to 2020. Crime Data Explorer. <https://crime-data-explorer.app.cloud.gov/pages/home>

Trafficking and use of illegal substances remain a concern in the Sioux Falls area. Cocaine, fentanyl, heroin, and methamphetamine are all drugs of concern in the community (Table 19). Emergency services respond to overdose calls in Sioux Falls, with the majority of overdose calls being opioid-related. Fentanyl has quickly become a major concern as it is linked with a high rate of overdose deaths.

The Sioux Falls Area Drug Task Force (SFADTF) seized over 308 grams of fentanyl and 281 grams of heroin in 2020. According to the South Dakota Vulnerability Assessment completed in 2019, Lincoln and Minnehaha Counties within the Sioux Falls MSA have been identified as “high intensity drug trafficking” areas.<sup>12</sup>

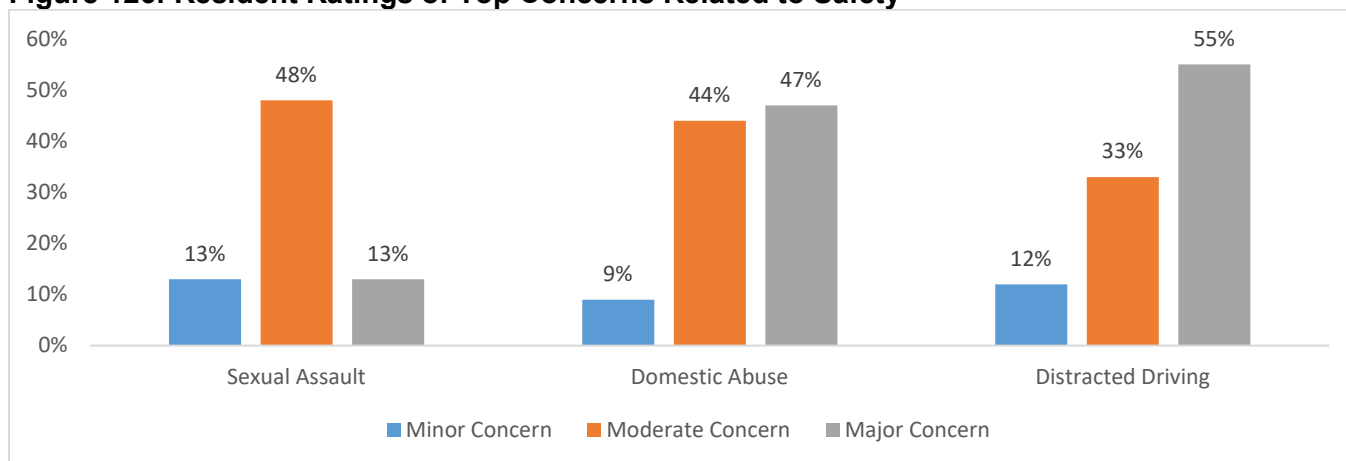
**TABLE 19: DRUG SEIZURES IN SIOUX FALLS**

	2016	2017	2018	2019	2020
Cocaine/Crack (grams)	1406.17	839.57	541.42	2,019.66	158.74
Methamphetamine (pounds)	37.98	11.16	56.32	133.35	64.26
Heroin (grams)	91.81	139.85	3,828.85	35.63	281.44
Fentanyl (grams)	0	0	0	47.72	308.13
Synthetic Marijuana (grams)	804.04	373.44	392.39	613.01	19.73
Ecstasy (tablets)	0	2	8	44	8.5
Meth Labs	4	0	0	2	0

DATA SOURCE: Sioux Falls Police Department 2020 Annual Report

When the National Community Survey asked Sioux Falls residents to list their top concerns in the area of safety, 91 percent named domestic abuse as a major or moderate concern, 88 percent said distracted driving, and 87 percent listed sexual assault as a major or moderate concern (Figure 126).

**Figure 126: Resident Ratings of Top Concerns Related to Safety**



DATA SOURCE: Sioux Falls, SD The National Community Survey Report of Results 2021. The National Research Center. Accessed at <https://www.siouxfalls.org/council/community-survey/survey-results/21-report-of-results>

**Digital Access**

Digital access influences several aspects of life including access to social, economic, and health care resources. Digital equity describes a state when all individuals and communities have the needed information technology resources and abilities to fully participate in society, democracy, and economy.<sup>77</sup> To achieve digital equity, three main barriers need to be remedied, including:

- Access to affordable, reliable, robust broadband Internet service;
- Access to information technology devices (e.g. tablets, desktop computers, laptops) that best meet the needs of the user; and

- Digital literacy skills to comfortably navigate the internet and use technology as part of daily life activities.

In the Sioux Falls MSA, 13.7 percent of households lack internet connection at home, while 7.8 percent lack a computer (Table 20). According to the 2021 National Community Survey, 76 percent of Sioux Falls residents stated they access the internet from home several times a day, but only 64 percent rate the quality of their internet service at home as excellent or good.<sup>20</sup>



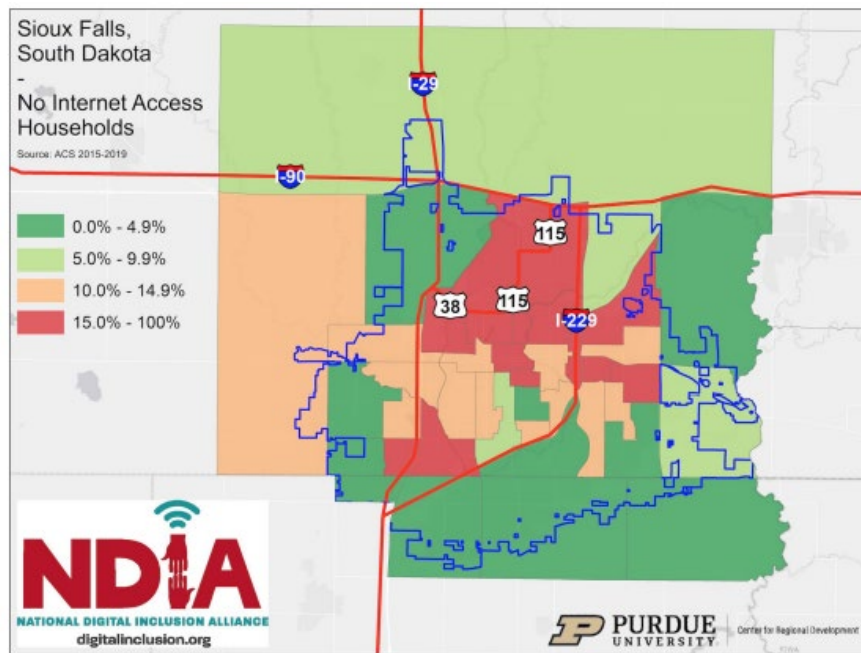
**TABLE 20: DIGITAL ACCESS IN HOUSEHOLDS**

	Sioux Falls	Sioux Falls MSA	Lincoln	McCook	Minnehaha	Turner	South Dakota	U.S.
Households with no computer	7.7%	7.8%	4.6%	10.5%	8.1%	17.0%	11.5%	9.7%
Without Internet	13.4%	13.7%	8.7%	19.0%	14.3%	25.4%	18.9%	17.0%

DATA SOURCE: United States Census Bureau. (2019). American Community Survey Data. <https://www.census.gov/programs-surveys/acs/data.html>

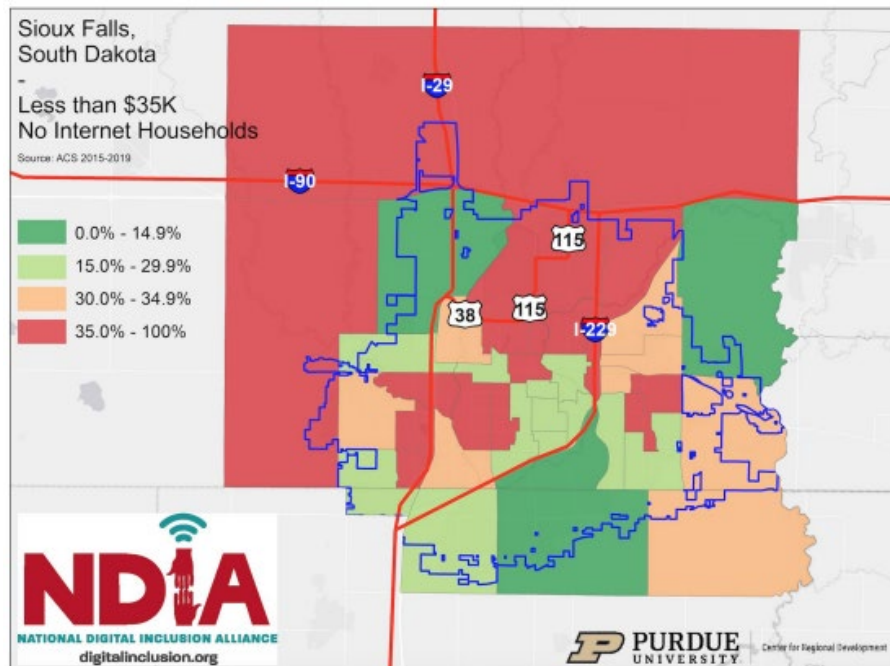
A digital equity survey conducted by the City of Sioux Falls in 2020 found similar rates of Internet and computer penetration. However, rates varied markedly by census tract (Figure 127 and 128). The survey showed that the share of minorities, less educated, and lower earning individuals without home Internet access was roughly seven times higher compared to White, non-Hispanic residents with higher education and higher incomes.<sup>23</sup>

**Figure 127: Households in Sioux Falls with No Internet Access by Census Tract**



DATA SOURCE: Individual Digital Capital Survey: Key Findings. 2020. <https://siouxfalls.org/digitalequity>

**Figure 128: Households with No Internet Access Making Less Than \$35,000 per Year**



DATA SOURCE: Individual Digital Capital Survey: Key Findings. 2020. <https://siouxfalls.org/digitalequity>

## Education

Studies show that Americans with more education are likely to live longer, healthier lives. Someone with higher educational attainment, for example, may be more likely to be employed at a job that provides health promoting benefits such as health insurance, paid leave, and retirement. Individuals with higher levels of education may also be more likely to learn about healthy behaviors and how to advocate for their health or the health of their families.<sup>78</sup>

The Sioux Falls MSA has slightly better educational attainment rates than South Dakota and the U.S. In the MSA, 23 percent of the population ages 25 years and over have completed a four-year college degree or higher, compared with an average of 20 percent at the state and national levels. The percentage of individuals with less than high school education is also lower in the MSA compared to state and national rates (Table 21).

**TABLE 21: EDUCATIONAL ATTAINMENT (PERCENT OF POPULATION 25 YEARS AND OVER)**

	Sioux Falls	Sioux Falls MSA	Lincoln	McCook	Minnehaha	Turner	South Dakota	U.S.
Less than High School	7.7%	7.2%	5.2%	11.3%	7.6%	8.0%	8.3%	12%
High School or Equivalent	24.8%	26.1%	23%	35%	26.4%	33.7%	30.2%	27%
Some College, no degree	20.8%	20.6%	20.2%	16.3%	20.9%	19.9%	21.1%	20.4%
Associate's Degree	11.5%	12.7%	14.1%	13.3%	12.2%	14.6%	11.5%	8.5%
Bachelor's Degree	23.8%	23.2%	24.8%	16.6%	23.2%	17.1%	19.9%	19.8%
Graduate or Professional Degree	11.4%	10.3%	12.7%	7.6%	9.9%	6.6%	8.9%	12.4%

DATA SOURCE: United States Census Bureau. (2019). American Community Survey Data. <https://www.census.gov/programs-surveys/acs/data.html>

When asked about education opportunities in Sioux Falls, residents responding to the National Community Survey have consistently highlighted K-12 education and public library services as top resources. However, child care availability and affordability received lower marks (Table 22).

**TABLE 22: RESIDENT RANKINGS OF EDUCATIONAL OPPORTUNITIES IN SIOUX FALLS (% RATED "EXCELLENT" OR "GOOD")**

	2015	2017	2019	2021
Availability of affordable quality childcare/preschool	57%	57%	54%	60%
K-12 Education	82%	80%	83%	80%
Adult educational opportunities	73%	74%	75%	71%
Public library services	91%	87%	91%	90%

DATA SOURCE: Sioux Falls, SD The National Community Survey Report of Results 2021. The National Research Center. Accessed at <https://www.siouxfalls.org/council/community-survey/survey-results/21-report-of-results>

## Employment and Income

Socioeconomic status has long been recognized as a factor that impacts health and mortality. In the U.S., adults with low socioeconomic status are five times as likely to report being in poor or fair health, and they have higher rates of chronic conditions such as diabetes, heart disease, and stroke compared to higher income Americans.<sup>79</sup>

On average, American adults spend more than half of their waking hours at work. Having a job provides more than just a paycheck. It can also offer benefits and the stability needed to maintain proper health.

Like most municipalities across the nation, communities in the Sioux Falls MSA experienced challenges over the past two years related to the

COVID-19 pandemic. While not immune to the impacts of the pandemic on employment and income, South Dakota and the Sioux Falls MSA fared better than many other areas of the nation. A strong local economy and a long-standing commitment to fiscal discipline allowed Sioux Falls to remain resilient. These factors, combined with a lower unemployment rate compared to the national average, resulted in Sioux Falls ranking tenth on SmartAsset's top 10 Most Recession-Resistant Cities of 2020.<sup>80</sup>

Local confidence in the economy remains high, with 63 percent of Sioux Falls MSA residents responding to the 2021 CHA Survey rating employment and economic opportunities as excellent or very good. Only 14 percent gave rankings of fair or poor.<sup>19</sup>

More people participate in the labor force, and unemployment rates in the City of Sioux Falls and the Sioux Falls MSA are lower than state and national rates (Table 23). An October 2021, snapshot from the South Dakota Department of Labor showed an unemployment rate in the Sioux Falls MSA of

2.2 percent, a full percentage point lower than the same time period in 2020. That same snapshot for October 2021 showed South Dakota's unemployment rate at 2.8 percent and a national unemployment rate of 4.6 percent.<sup>81</sup>

**TABLE 23: EMPLOYMENT STATUS, PERCENT OF POPULATION**

	Sioux Falls	Sioux Falls MSA	Lincoln	McCook	Minnehaha	Turner	South Dakota	U.S.
Civilian Labor Force ( <i>population over 16 years</i> )	73.8%	74.2%	74.9%	70.4%	74.6%	66.4%	67.7%	63.0%
Unemployment Rate	3.0%	2.7%	2.0%	3.1%	2.9%	2.1%	3.4%	5.3%

DATA SOURCE: United States Census Bureau. (2019). American Community Survey Data. <https://www.census.gov/programs-surveys/acs/data.html>

**TABLE 24: INCOME IN THE PAST 12 MONTHS, 2019 INFLATION-ADJUSTED DOLLARS**

	Sioux Falls	Sioux Falls MSA	Lincoln	McCook	Minnehaha	Turner	South Dakota	U.S.
Median Household Income	\$59,912	\$65,621	\$82,473	\$61,507	\$61,772	\$59,242	\$58,275	\$62,843
Median Family Income	\$79,533	\$82,404	\$95,160	\$76,328	\$80,213	\$75,043	\$75,168	\$77,263

DATA SOURCE: United States Census Bureau. (2019). American Community Survey Data. <https://www.census.gov/programs-surveys/acs/data.html>

While poverty rates in the Sioux Falls MSA for both adults and children are well below state and national averages, poverty remains an important community issue because of its widespread impacts on affected individuals and families (Table 25).

**TABLE 25: PERCENTAGE OF POPULATION IN POVERTY IN THE PAST 12 MONTHS**

	Sioux Falls	Sioux Falls MSA	Lincoln	McCook	Minnehaha	Turner	South Dakota	U.S.
Poverty, all (%)	10.4	8.7	4.1	9.7	10.0	10.9	13.1	13.4
Children in Poverty (% under 18 years)	12.9	10.4	3.8	9.6	12.6	12.2	17.3	18.5

DATA SOURCE: United States Census Bureau. (2019). American Community Survey Data. <https://www.census.gov/programs-surveys/acs/data.html>

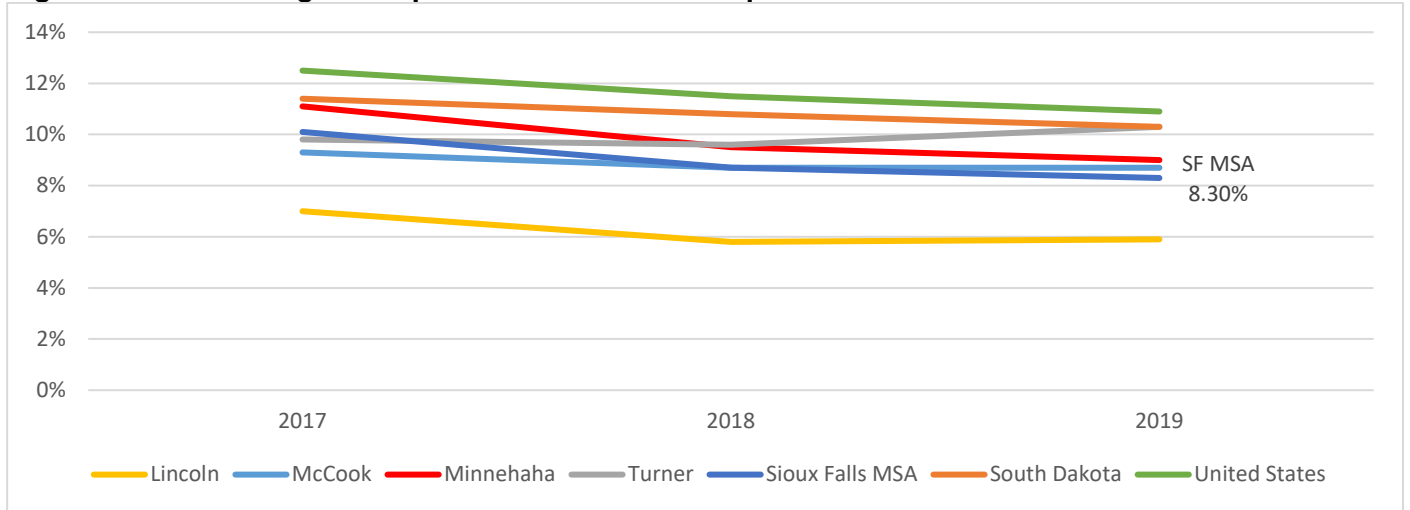
### Food Access

When individuals are struggling to access healthy foods, they are at increased risk for experiencing diet-related health conditions such as diabetes or high blood pressure. For children who do not have enough healthy food, academic achievement and even future economic prosperity are at risk.

In South Dakota, one out of every nine individuals is food insecure, and one out of every six children is at

risk of going hungry. In addition, families often need to make tradeoffs, deciding whether to purchase food or spend their income on other necessities including utilities, housing, or medical care.<sup>82</sup> Food insecurity (i.e. limited or uncertain access to adequate food), is less prevalent in the Sioux Falls MSA when compared to state and U.S. averages. Yet, more than eight percent of the population in the area are food insecure (Figure 129).

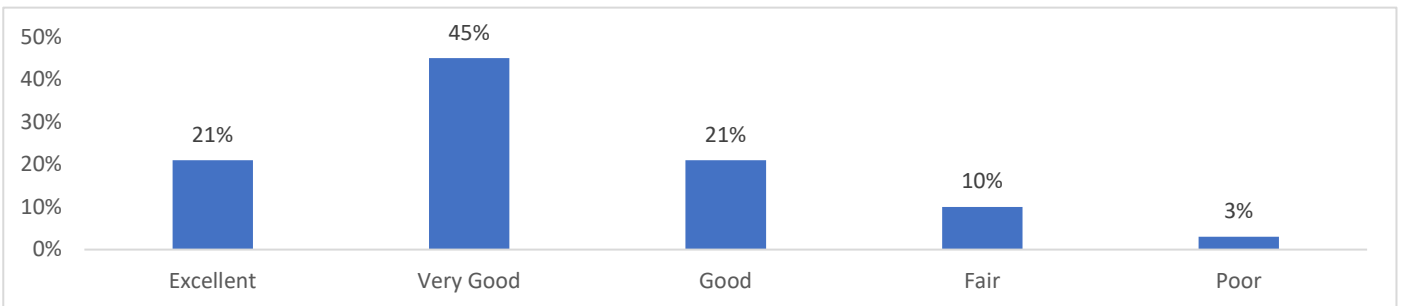
**Figure 129: Percentage of Population Who Lack Adequate Access to Food.**



*DATA SOURCE: Map the Meal Gap, Feeding America 2018-2019. <https://map.feedingamerica.org/>. Sioux Falls MSA data based on Sioux Falls Metropolitan Statistical Area Calculator.*

In the 2021 CHA Survey, 66 percent rated the ability of residents to access healthy and nutritional foods in the community as excellent or very good, while 13 percent rated access as fair or poor (Figure 130). Reasons for lower rankings include cost of food (16 percent) and limited access to grocery stores (10 percent) (Figure 131).

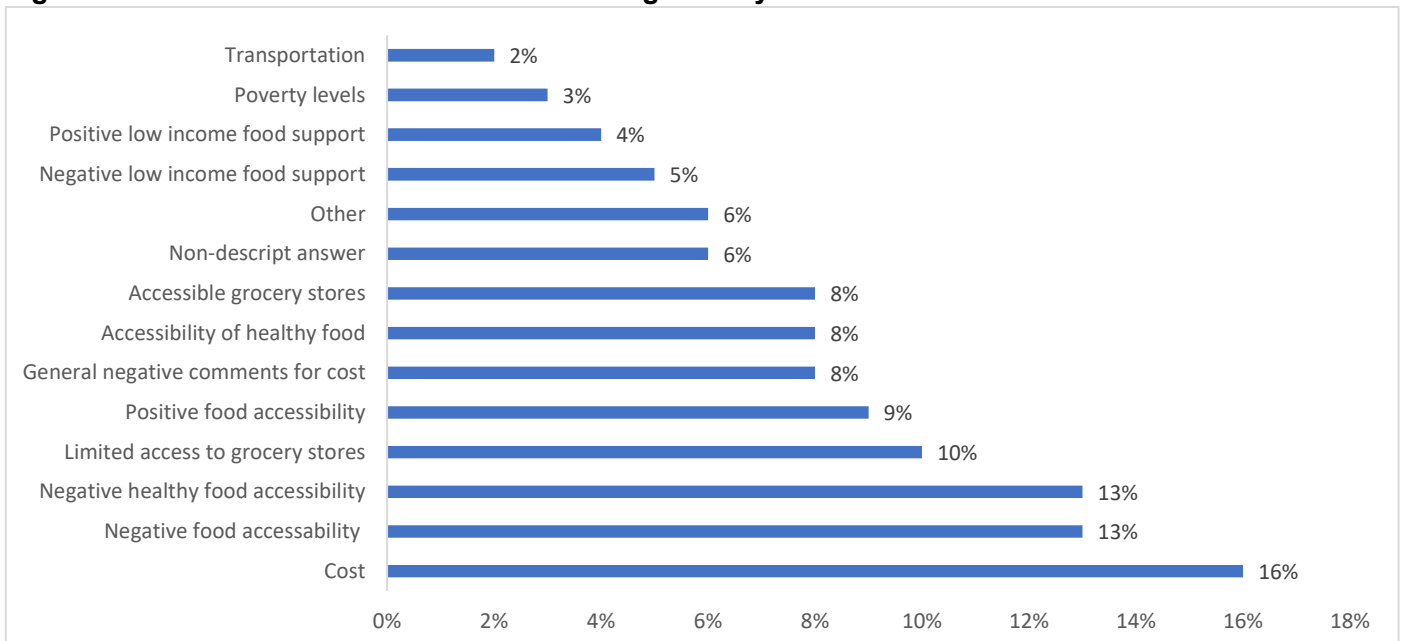
**Figure 130: Resident Rankings of the Ability to Access Healthy Foods in the Community**



*DATA SOURCE: 2021 Community Health Assessment Resident Survey. Completed by Sioux Falls CHA Partners February 2021.*

In compiling results from the 2021 CHA Survey, the researcher grouped individual responses together into the categories below (Figure 131). While some category names seem similar, such as “negative healthy food accessibility” and “negative food accessibility,” there are slight variations that reflect individuals’ responses about the presence of too many unhealthy options in the community, such as fast food and convenience stores, and not enough healthy options like gardens, farmers markets, and stores that offer affordable healthy foods.

**Figure 131: Resident Concerns about Accessing Healthy and Nutritious Foods in the Sioux Falls MSA**



*DATA SOURCE: 2021 Community Health Assessment Resident Survey. Completed by Sioux Falls CHA Partners February 2021.*



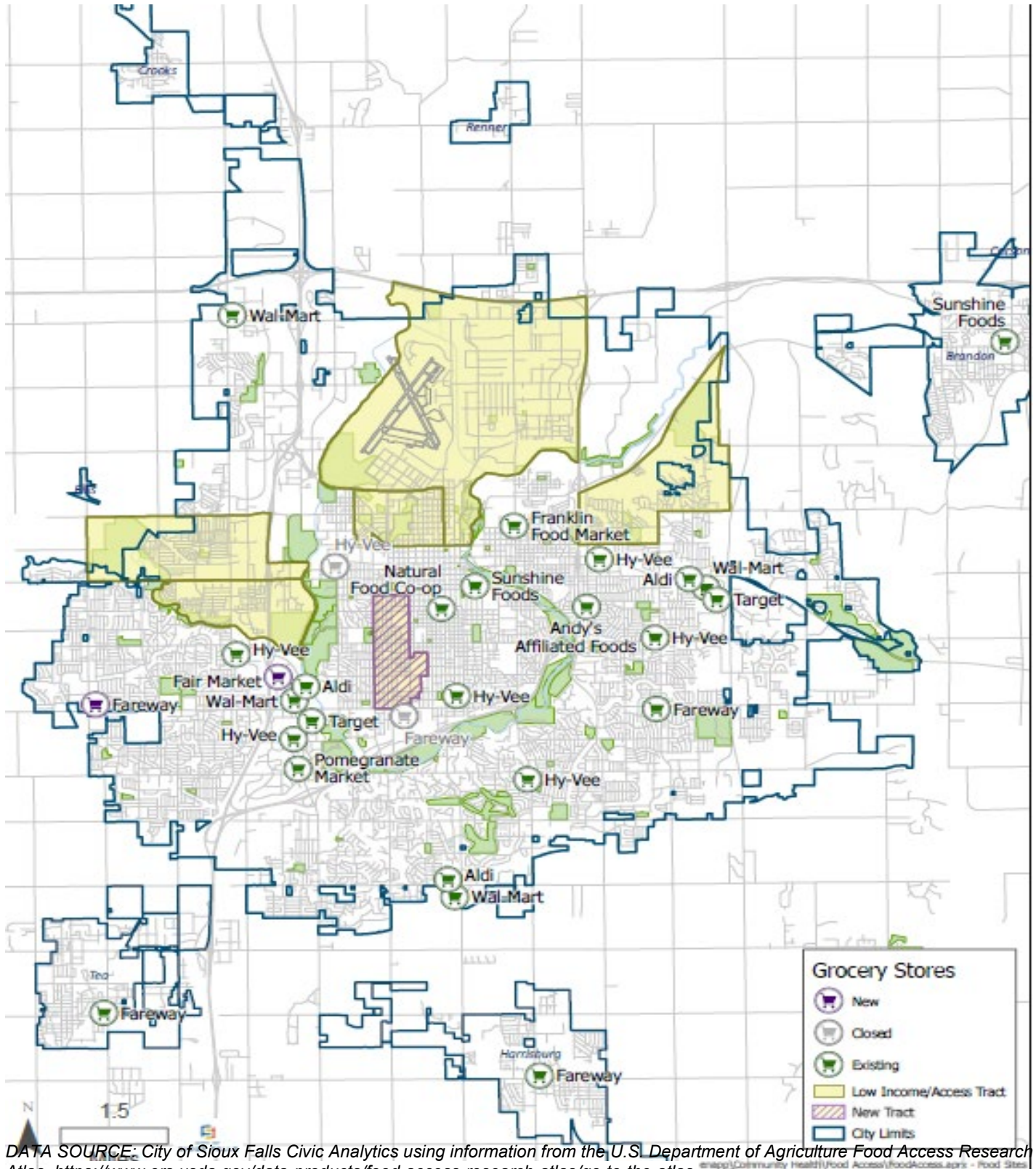
In addition to cost and affordability of healthy food, the other dimension of food access has to do with the physical environment, that is, the ability of individuals in the population to access physical locations where they can purchase healthy food options like fresh fruits and vegetables.

There are geographic areas within the Sioux Falls community where residents have no easily accessible options for purchasing affordable and healthy foods.

Food deserts are geographic areas with a certain threshold of individuals who have low income levels and low access to healthy food.<sup>18</sup>

In the following map (Figure 132), the yellow shaded areas represent low income, low access census tracts (food deserts) in the Sioux Falls area. Since the last community health assessment was completed, a new food desert appeared in the central part of the city (represented by yellow outlined in purple below).

**Figure 132: Low Income Low Access Census Tracts in the Sioux Falls Area**



DATA SOURCE: City of Sioux Falls Civic Analytics using information from the U.S. Department of Agriculture Food Access Research Atlas - <https://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas>

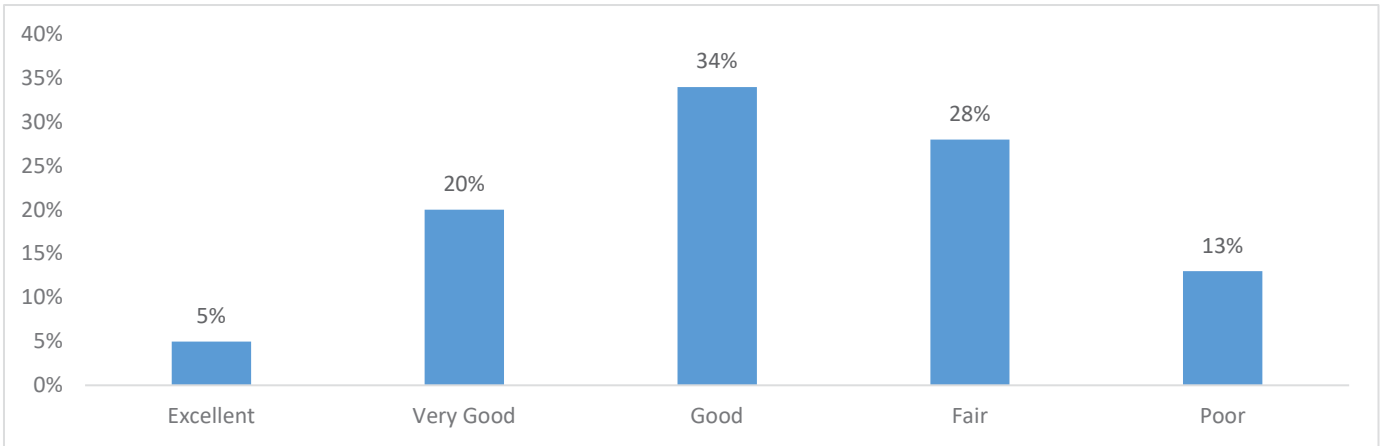
## Housing and Homelessness

Feedback received from the 2021 CHA Resident Survey and Focus Groups consistently pointed out housing access as one of the biggest barriers to creating a healthy community. Among MSA residents, 41 percent consider availability of affordable housing in the area as fair or poor (Figure 133). Specific concerns raised by the survey respondents include general access and availability of housing, cost, availability of senior and low income housing, and cost of renting (Figure 134).

*In only 5 percent of all U.S. counties can a full-time minimum-wage worker afford a one-bedroom rental home at fair market rent.<sup>69</sup>*

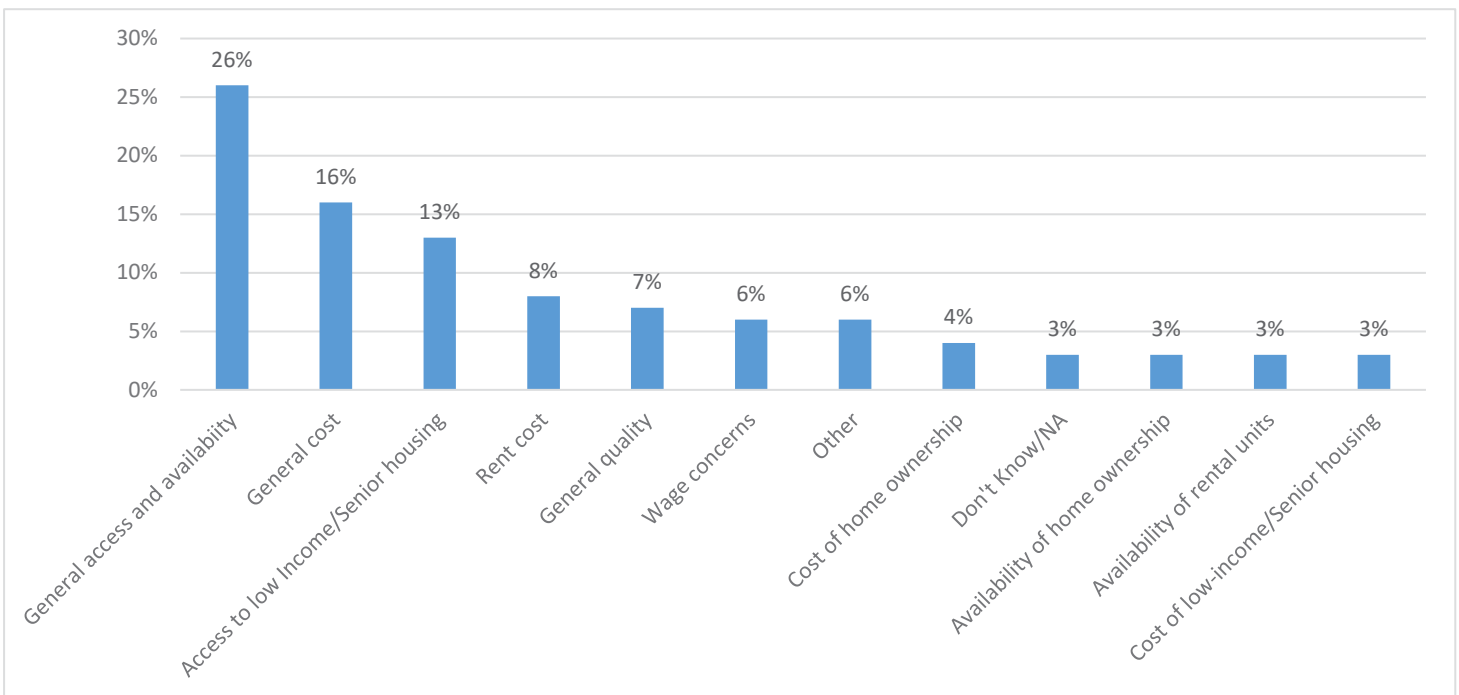
**- NATIONAL LOW INCOME HOUSING COALITION, OUT OF REACH 2020**

**Figure 133: Resident Rating of the Availability of Affordable Housing**



DATA SOURCE: 2021 Community Health Assessment Resident Survey. Completed by Sioux Falls CHA Partners February 2021.

**Figure 134: Resident Concerns about Housing in the Sioux Falls MSA**



DATA SOURCE: 2021 Community Health Assessment Resident Survey. Completed by Sioux Falls CHA Partners February 2021.

In the Sioux Falls MSA, the median sales price for homes is approximately \$235,000.<sup>84</sup> Median gross rent in Sioux Falls is higher than the state of South Dakota, but lower than the U.S. (Table 26).

**TABLE 26: MEDIAN VALUE OF OWNER-OCCUPIED HOUSING UNITS AND MEDIAN GROSS RENT**

	Sioux Falls	Sioux Falls MSA	Lincoln	McCook	Minnehaha	Turner	South Dakota	U.S.
Median Value	\$189,800	\$193,300	\$228,800	\$137,800	\$186,800	\$122,400	\$167,100	\$217,500
Median Gross Rent	\$827	\$829	\$963	\$575	\$813	\$661	\$747	\$1,062

DATA SOURCE: United States Census Bureau. (2019). American Community Survey Data. <https://www.census.gov/programs-surveys/acs/data.html>

Affordable housing typically means a person is paying no more than 30 percent of their income toward monthly rent or mortgage.<sup>85</sup> According to a 2021 housing needs assessment completed by the Augustana Research Institute, there are an estimated 28 units affordable and available for every 100 households below 30 percent of the area median family income.<sup>22</sup> Table 27 below shows changes in

Fair Market Rent for the past four years, and Table 28 shows the annual income needed to afford various housing sizes. The data in these tables show that individuals at the minimum and other lower wage levels cannot afford any bedroom size in the area. The lowest income renters have the highest housing cost burden of any group in the city.

**TABLE 27: SIOUX FALLS MSA FAIR MARKET RENTS FOR ALL BEDROOM SIZES**

Year	Efficiency	One-Bedroom	Two-Bedroom	Three-Bedroom	Four-Bedroom
FY2018	\$535	\$639	\$781	\$1,045	\$1,217
FY2019	\$612	\$715	\$873	\$1,045	\$1,326
FY2020	\$599	\$685	\$839	\$1,096	\$1,302
FY2021	\$642	\$714	\$874	\$1,150	\$1,435
% Increase 2018-2021	20%	11.73%	11.9%	10%	17.9%

DATA SOURCE: U.S. Department of Housing and Urban Development (HUD). (2019). FY19 Fair Market Rents Documentation System. [https://www.huduser.gov/portal/datasets/fmr/fmrs/FY2019\\_code/2019summary.odn](https://www.huduser.gov/portal/datasets/fmr/fmrs/FY2019_code/2019summary.odn)

**TABLE 28: RELATIONSHIP BETWEEN INCOME AND HOUSING AFFORDABILITY**

Annual Income Needed to Afford	South Dakota	Sioux Falls MSA
Zero-bedroom	\$22,662	\$25,680
One-Bedroom	\$25,167	\$28,560
Two-Bedroom	\$32,159	\$34,960
Three-Bedroom	\$43,378	\$46,000
Four-Bedroom	\$51,684	\$57,400
Minimum Wage	South Dakota	Sioux Falls MSA
Minimum Wage	\$9.45/hour	\$9.45/hour
Rent Affordable at Minimum Wage	\$491/month	\$491/month

DATA SOURCE: National Low Income Housing Coalition. (2021). Out of Reach 2021: South Dakota. <https://reports.nlihc.org/oor/south-dakota>

Sioux Falls is a member of the AARP Network of Age-Friendly communities, and some people find they need or want to move out of their home as they get older. In a survey specific to needs and concerns of older adults, the Sioux Falls Health Department surveyed adults over the age of 45 as part of its

age-friendly planning. Residents were asked what issues might be a factor in deciding whether to move out of their current home. As seen in Table 29, older adults are concerned about maintaining their current homes and wanting a home that will help them live independently as they age.

**TABLE 29: FACTORS OLDER ADULTS WOULD CONSIDER IN MOVING OUT OF THEIR CURRENT RESIDENCE.**

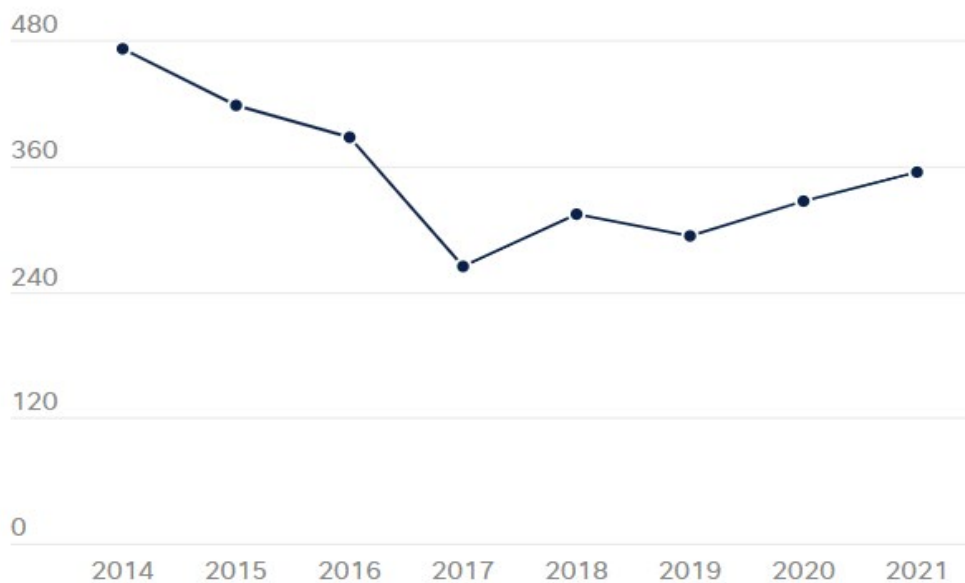
	A major factor	A minor factor	Not a factor at all	Not sure
Wanting a smaller size home	30%	29%	38%	3%
Wanting a larger size home	2%	6%	88%	4%
The cost of maintaining your current residence	33%	39%	25%	3%
Wanting a home that will help you live independently as you age, for example a home without stairs	60%	21%	18%	2%

DATA SOURCE: 2020 Age-Friendly Sioux Falls Survey. Sioux Falls Health Department.

**Homelessness**

After years of steady decline, homelessness in Sioux Falls is on the rise again. In 2021, Sioux Falls' sheltered homeless population rose by 21 percent compared to prepandemic levels in 2019. (Figure 135).

**Figure 135: Sheltered Homeless Population in Sioux Falls, 2014-2021**



\*Sheltered counts only for 2021 due to COVID-19 pandemic

DATA SOURCE: South Dakota Housing Development Authority. (2021). Homeless Counts. Housing for the Homeless. <https://www.sdhda.org/housing-for-the-homeless/public-awareness/homeless-counts>

The City of Sioux Falls fair housing call-line saw an increase in the number of people identified as “at risk” for homelessness in 2021, with 326 residents who were “at risk” for homelessness during the time period of February to September 2021.<sup>86</sup> An individual identified as being housing insecure typically lacks a source of steady income, is behind on rent, is dealing with a recent job loss, has a job but is still unable to meet financial obligations, and/or is in an eviction process.

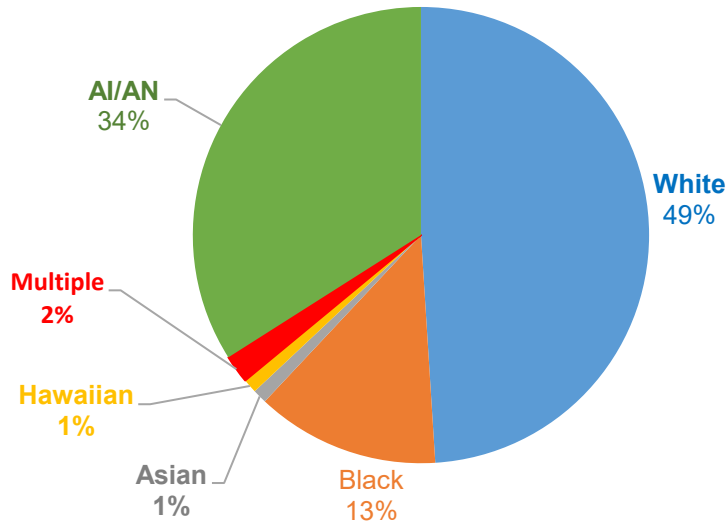
During this timeframe, more than 2,100 residents were on the waitlist for housing choice vouchers, which provide subsidized, free or income-based housing to people struggling with homelessness, domestic violence, mental health or those with a disability.

Homelessness disproportionately affects people of color in Sioux Falls.<sup>22</sup> In 2020, American Indians were 45.6 more times likely as White residents to experience homelessness, and Black residents were



5.5 times as likely. Although American Indians make up only two percent of the population of the city of Sioux Falls, they comprised more than one-third of the population of homeless individuals in 2021 (Figure 136).

**Figure 136: Sheltered Homeless Individuals in Sioux Falls (2021), by Race/Ethnicity**



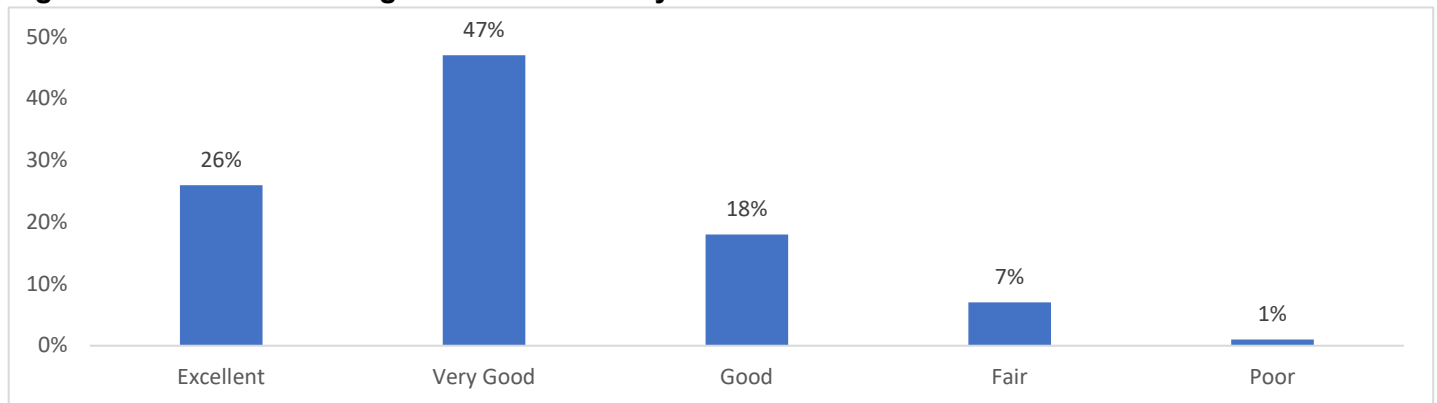
DATA SOURCE: South Dakota Housing Development Authority. (2021). *Homeless Counts. Housing for the Homeless.* <https://www.sdhda.org/housing-for-the-homeless/public-awareness/homeless-counts>

**PHYSICAL ENVIRONMENT**  
**Air and Water Quality**

Among residents responding to the 2021 CHA Survey, 73 percent rate the community’s environmental health as excellent or very good (Figure 137). Residents then had the opportunity to comment on factors they would either rate positively or negatively, and the survey researcher grouped responses into the

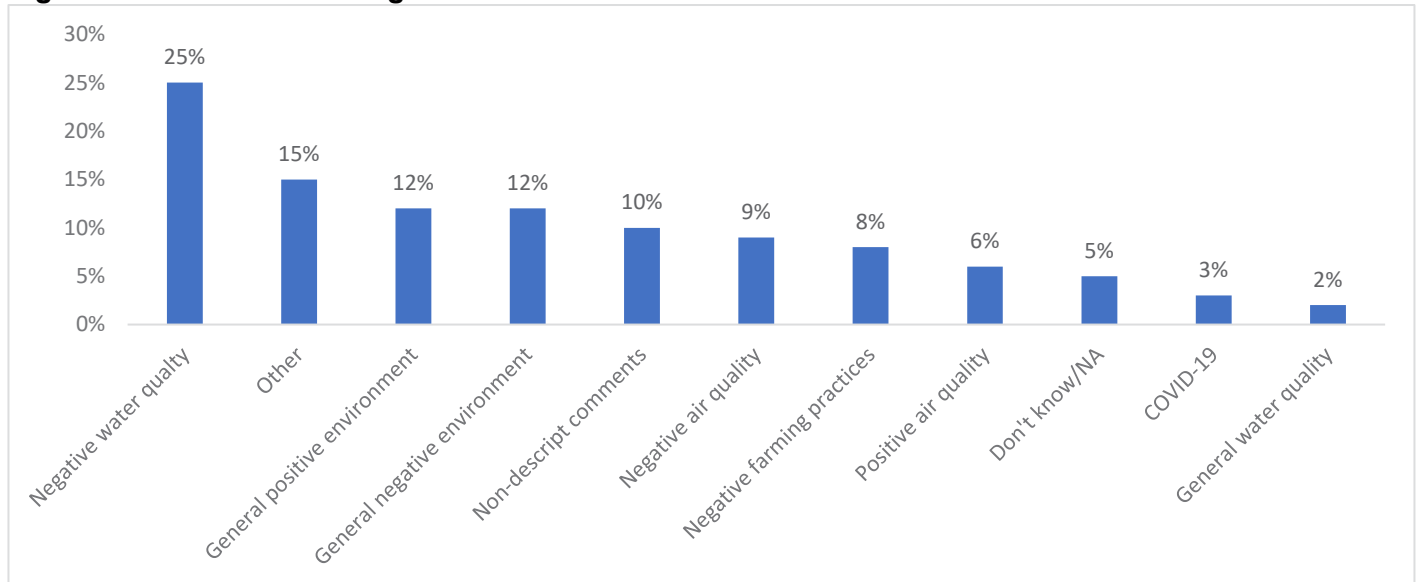
categories shown in Figure 138. Residents were able to provide multiple responses and gave positive ratings to factors such as drinking water quality and low impacts to air quality related to smog. However, residents expressed concern about pollution in the Big Sioux River and other bodies of water, as well as air quality as it relates to odors in the air.

**Figure 137: Resident Ratings of the Community’s Environmental Health**



Data Source: 2021 Community Health Assessment Resident Survey. Completed by Sioux Falls CHA Partners February 2021.

**Figure 138: Resident Ratings on Environmental Issues in Sioux Falls**



Data Source: 2021 Community Health Assessment Resident Survey. Completed by Sioux Falls CHA Partners February 2021.

The City of Sioux Falls provides an average of 22.0 million gallons of water a day for use in homes, schools, hospitals, and businesses and ensures all required water quality standards are met. In numbers that far exceed minimum testing requirements, more than 170,000 analyses on more than 250 substances were conducted during 2020 to ensure reliable results and safe drinking water.<sup>87</sup>

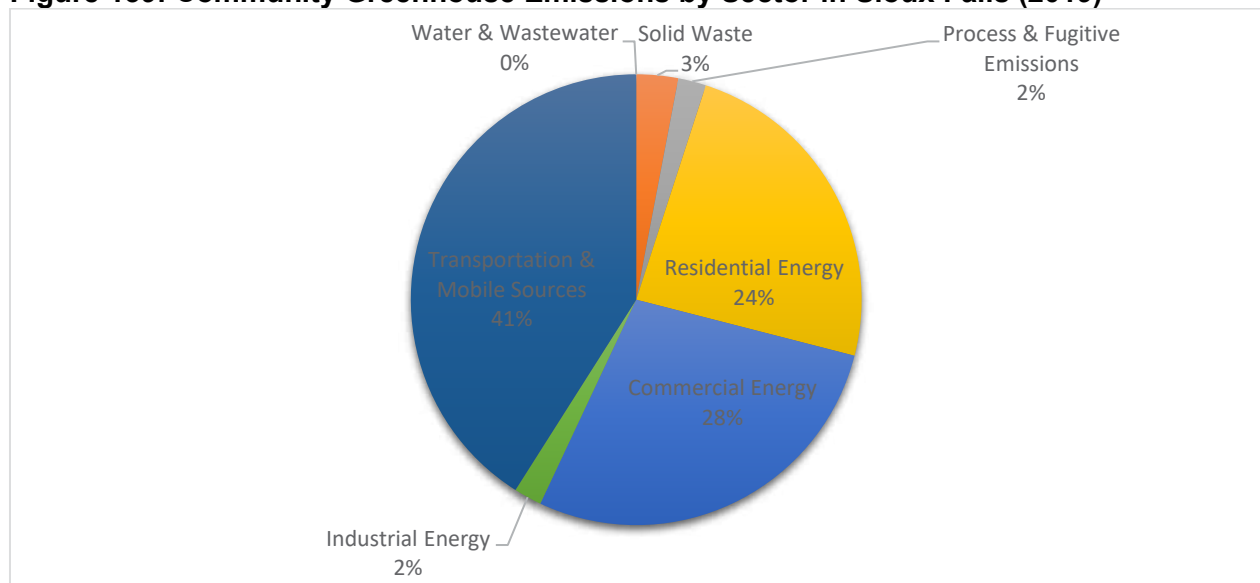
**Greenhouse Gas Emissions**

The City of Sioux Falls Public Works Department distributed a community-wide survey in 2021 on the topic of climate and sustainability. More than 1,300 community residents responded, with 88 percent stating they were “concerned” or “very concerned” about sustainability and environmental issues, and

93 percent responding they felt it was “important” or “very important” for Sioux Falls to address sustainability and environmental issues.<sup>88</sup> The Public Works department is currently in the process of finalizing a new Sustainability and Climate Action Plan, with plans to release the plan in Spring 2022.

One of the key areas being addressed in that plan is reducing greenhouse gas emissions. Starting in late 2020, the City of Sioux Falls began collecting data to identify greenhouse gas emissions. The findings showed that the transportation sector is the largest contributor of greenhouse emissions in the city, followed by commercial and residential energy for buildings (Figure 139).

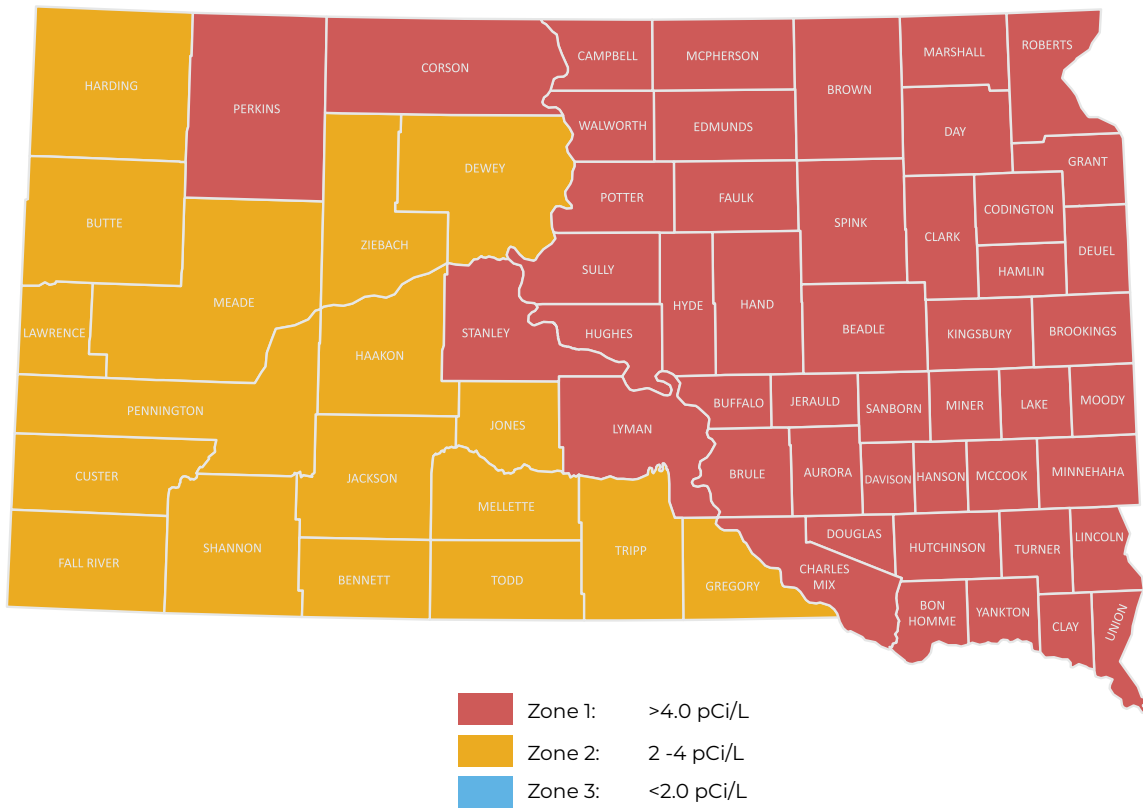
**Figure 139: Community Greenhouse Emissions by Sector in Sioux Falls (2019)**



DATA SOURCE: City of Sioux Falls Public Works Sustainability Program 2021. <https://siouxfalls.org/sustainability>

**Radon**  
 Another area of concern is radon exposure, which is the second leading cause of lung cancer in the U.S. behind smoking. As seen in the map below, all four counties in the Sioux Falls MSA are in a high-risk region with the potential for elevated indoor radon levels (Figure 140).

**Figure 140: Radon Potential in South Dakota by County**



DATA SOURCE: South Dakota Department of Agriculture & Natural Resources. EPA recommends avoiding long-term radon exposures above 4 pico couries/liter (pCi/L) <https://danr.sd.gov/Environment/AirQuality/Radon/default.aspx>.

**Physical Activity Environment**

**Walkability**

People living in neighborhoods with high walkability are more likely to be active and are more likely to have lower rates of diabetes and obesity than those living in less walkable areas.

Researchers<sup>89</sup> have found that, when compared to people living in a car-dependent area, people living in a walkable area are:

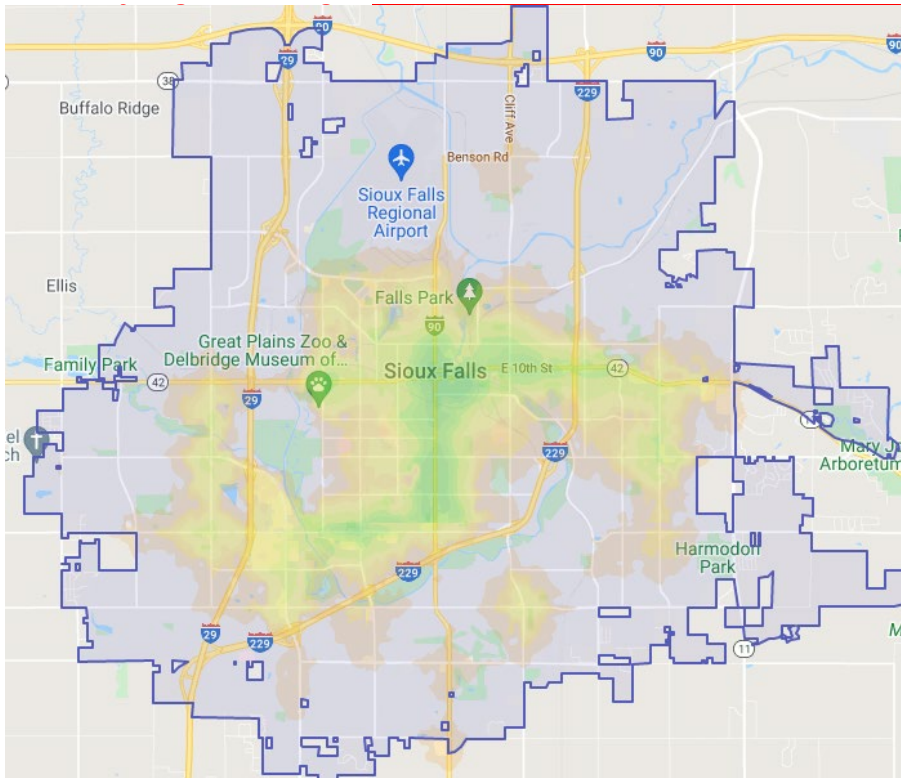
- 17 percent more likely to meet weekly recommended level of physical activity.
- 42 percent less likely to be obese.
- 39 percent less likely to have diabetes.
- 14 percent less likely to have heart disease.
- 23 percent less likely to have stressful days.
- 47 percent more likely to have a strong sense of community.

One way that walkability is represented in a community is by its Walk Score.<sup>28</sup>

This rating at the city and census tract level ranges from 0 (least walkable) to 100 (most walkable). Walk Score is calculated based on intersection density, residential density, and accessibility of amenities such as grocery stores, parks, and restaurants, which affect the ease of walking within a neighborhood. City-level and tract level values represent population-weighted aggregations of blocks. This means that areas in which people are unlikely to live, such as industrial areas or around bodies of water, do not contribute to the census tract Walk Score value.

The Walk Score for Sioux Falls is 37.4 out of 100, which indicates the city is “car-dependent” (e.g. most errands require a car). In the following image (Figure 141), green indicates better walkability, such as the downtown area of Sioux Falls that has a Walk Score of 81.

**Figure 141: Walk Score for Sioux Falls**



**Park and Recreation Access**

The Sioux Falls Parks and Recreation system includes more than 3,300-acres of parkland, made up of 80 parks, 13 undeveloped sites, five community centers, three enlarged gymnasiums, three golf courses, six ice rinks, five outdoor pools, and one indoor aquatic center. In addition, the City maintains a nearly 20-mile Greenway Recreation Trail and over 15 spur miles connecting to the main trail.

The Parks and Recreation department engages in park planning with a guideline of having parks within a half mile of residents' homes. The current park system plan, which extends through 2024, has a goal to "update existing neighborhood parks where needed and develop new neighborhood parks in underserved areas of the city to achieve an equitable level of service for neighborhood parks across the city."<sup>90</sup>

When asked to rate the parks and recreation programs and services in Sioux Falls, respondents to the 2021 National Community Survey expressed strong satisfaction with the overall quality of parks and trails (Table 30).

DATA SOURCE: Walk Score. (2021). *Living in Sioux Falls*. <https://www.walkscore.com/>

In addition, 73 percent of respondents to the 2021 CHA Survey rated the ability of residents to access physical activity and exercise opportunities as excellent or very good (Figure 142). However, areas of concern were identified through in the survey, including financial barriers (19 percent) and availability of gym/classes (13 percent).

**TABLE 30: RESIDENT RATINGS OF PHYSICAL ACTIVITY ENVIRONMENT IN SIOUX FALLS (PERCENT "EXCELLENT" OR GOOD")**

	2015	2017	2019	2021
Overall quality of parks and rec opportunities	N/A	N/A	N/A	85%
Availability of paths and walking trails	77%	79%	76%	83%
Fitness opportunities (Exercise classes, trails, etc.)	80%	84%	85%	86%
Recreational opportunities	73%	75%	78%	79%
City Parks	88%	89%	88%	88%
Recreation programs of classes	78%	80%	86%	80%
Recreation centers or facilities	76%	81%	84%	81%
Overall health and wellness opportunities	85%	88%	84%	84%

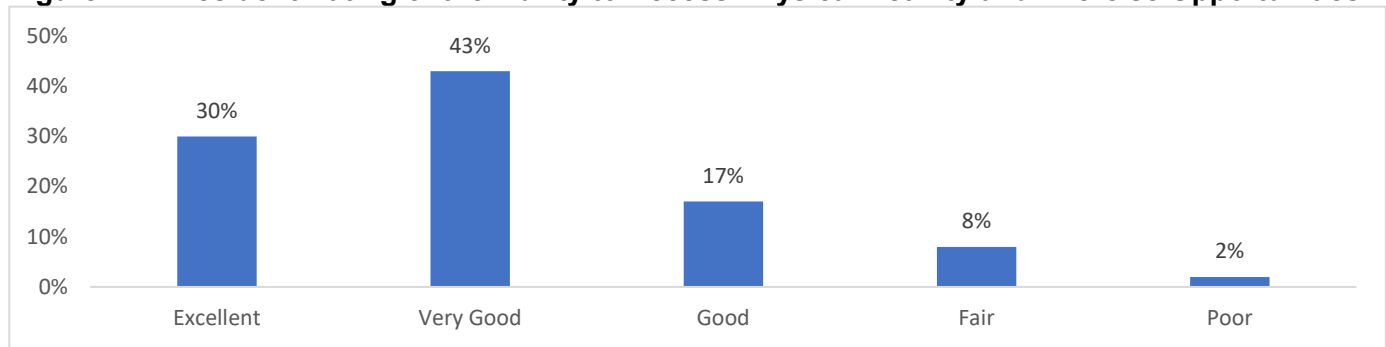
DATA SOURCE: Sioux Falls, SD The National Community Survey Report of Results 2021. The National Research Center. Accessed at <https://www.siouxfalls.org/council/community-survey/survey-results/21-report-of-results>





In addition, 73 percent of respondents to the 2021 CHA Survey rated the ability of residents to access physical activity and exercise opportunities as excellent or very good (Figure 142). However, areas of concern were identified through in the survey, including financial barriers (19 percent) and availability of gym/classes (13 percent).

**Figure 142: Resident Rating of the Ability to Access Physical Activity and Exercise Opportunities**



DATA SOURCE: 2021 Community Health Assessment Resident Survey. Completed by Sioux Falls CHA Partners February 2021.

According to data collected by the U.S. Census through its TIGER Geodatabases, the percentage of the population with adequate access to locations for physical activity varies among the four counties that comprise the Sioux Falls MSA (Table 31). The term *adequate access* is defined as living “reasonably close” to a park or recreational facility. Specifically, the measure looks at:

- Individuals who reside in a census block within a half mile of a park.
- Individuals who reside in an urban census block within one mile of a recreational facility.
- Individuals who reside in a rural census block that is within three miles of a recreational facility.

**TABLE 31: PERCENTAGE OF POPULATION WITH ADEQUATE ACCESS TO LOCATIONS FOR PHYSICAL ACTIVITY**

Lincoln	Minnehaha	McCook	Turner	Sioux Falls MSA	SD	Top U.S. Performers*
80%	92%	28%	58%	86.9%	N/A	91%

\*Top U.S. Performers = 90th percentile.

DATA SOURCE: U.S. Census TIGER Geodatabases 2019, accessed at [www.countyhealthrankings.org](http://www.countyhealthrankings.org). Sioux Falls MSA data based on Sioux Falls Metropolitan Statistical Area Calculator.

### Transportation

The 2021 National Community Survey and 2021 CHA Survey asked residents to rate the transportation system. Public transportation availability was most often identified as a need. Only 42 percent of respondents positively rated the ease of travel by public transportation (Table 32).

**TABLE 32: RESIDENT TRANSPORTATION RATINGS (% RATING POSITIVELY) IN SIOUX FALLS**

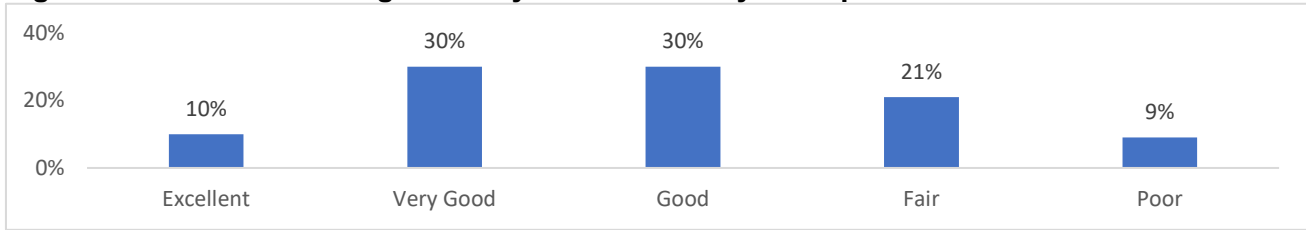
	2008	2009	2013	2015	2017	2019	2021
Overall quality/Ease of travel	N/A	N/A	N/A	73%	77%	77%	66%
Paths and walking trails	N/A	77%	76%	77%	79%	76%	83%
Ease of walking	71%	74%	72%	66%	68%	71%	73%
Ease of travel by bicycle	68%	65%	63%	59%	59%	60%	60%
Ease of travel by public transportation	N/A	N/A	N/A	45%	42%	37%	42%
Public parking	N/A	N/A	N/A	51%	51%	49%	59%
Traffic flow	42%	41%	45%	46%	49%	52%	56%
Quality of bus or transit services	N/A	N/A	N/A	59%	56%	52%	56%

DATA SOURCE: Sioux Falls, SD The National Community Survey Report of Results 2021. The National Research Center. Accessed at <https://www.sioxfalls.org/council/community-survey/survey-results/21-report-of-results>



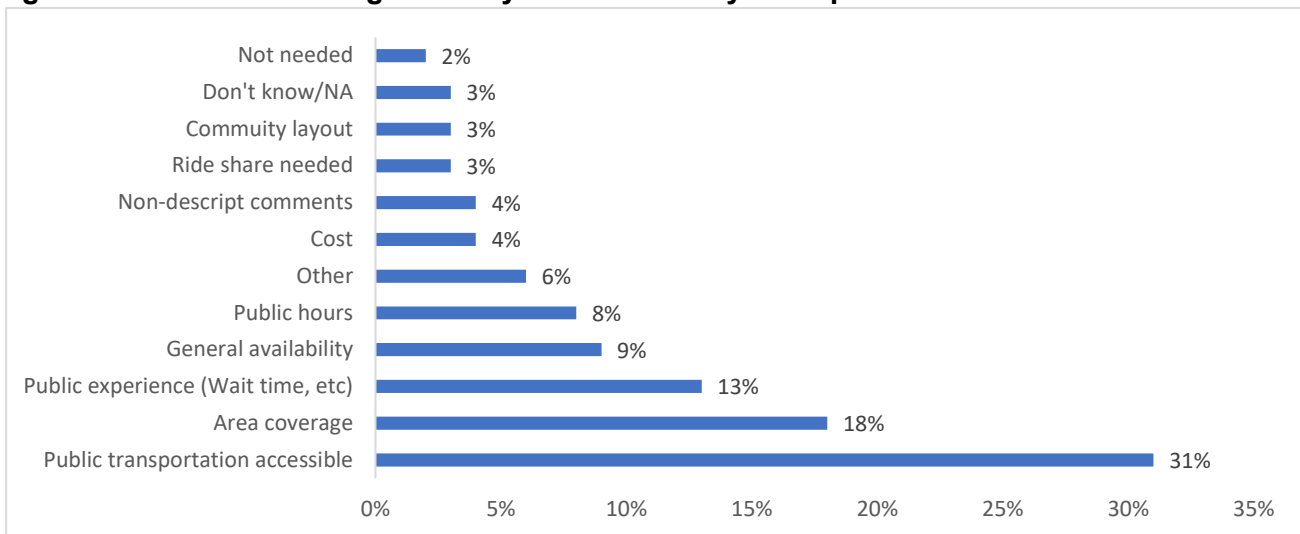
In addition, 30 percent of respondents to the resident survey believe that the ability to access daily transportation is fair or poor (Figure 143). Reasons for resident ratings about daily transportation are shown in Figure 144, where the survey researcher grouped responses into categories. Residents were able to provide multiple responses.

**Figure 143: Resident Rating of Ability to Access Daily Transportation in the Sioux Falls MSA**



DATA SOURCE: 2021 Community Health Assessment Resident Survey. Completed by Sioux Falls CHA Partners February 2021.

**Figure 144: Resident Rating of Ability to Access Daily Transportation in the Sioux Falls MSA**



DATA SOURCE: 2021 Community Health Assessment Resident Survey. Completed by Sioux Falls CHA Partners February 2021.

The Sioux Falls area is primarily car-dependent, with the majority of residents driving alone to work (Table 33).

**TABLE 33: RESIDENT MODE OF TRANSPORTATION**

	Sioux Falls	Sioux Falls MSA	Lincoln	McCook	Minnehaha	Turner	South Dakota	U.S.
<b>Mean Travel Time to Work (minutes)</b>	16.9	18.6	19.5	26.2	17.9	25.5	17.2	26.9
<b>Mode of Transportation (percent)</b>								
Drove Alone	84.3	84.3	86.6	75.7	84.2	76.6	80.6	76.3
Carpool	8.5	8.1	7.5	10.1	8.1	10.6	8.4	9.0
Public Transportation	0.8	0.5	0.1	0.0	0.7	0.0	0.5	5.0
Walked	2.0	2.1	1.2	5.0	2.2	3.6	3.3	2.7
Other Means	1.1	1	0.3	0.7	1.1	1.9	1.2	1.8
Worked from Home	3.4	4.1	4.3	8.5	3.7	7.3	5.9	5.2

DATA SOURCE: United States Census Bureau. (2019). American Community Survey Data. <https://www.census.gov/programs-surveys/acs/data.html>

The health assessment focus groups pointed out a large disconnect in transportation for the community. One of the continual issues the community faces is providing transportation for those who need it, when it is needed the most. Transportation plays an important role in ensuring that community members access health services and resources.

Additionally when miscommunication occurs between service providers, it can cause additional struggles for individuals trying to make it to multiple appointments at different locations and times. Some residents who experience the most difficult hardships with transportation include those with visible and invisible disabilities.

When asked what the City government can do to improve Sioux Falls, the top response was mobility, which includes roads, parking, public transportation,

traffic, snow removal, and walkability.<sup>20</sup> Other transportation concerns include the availability of public transportation (31 percent) and the coverage area of public transportation (18 percent).

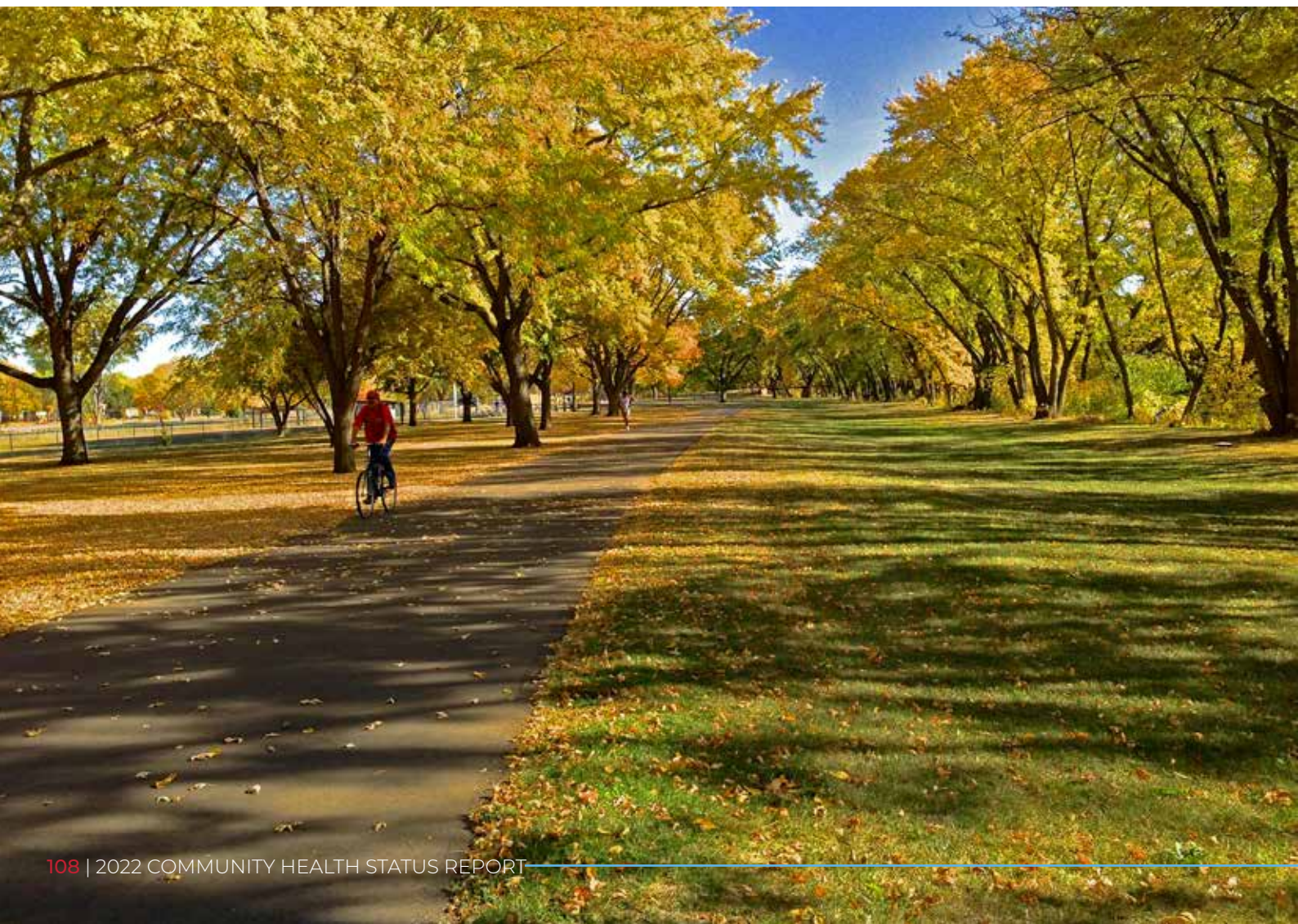
Cities are able to view walkability rankings with Walk Score<sup>28</sup>, as well as rankings of other transportation modes such as bicycling and public transit.

The table below compares Walk Score, Bike Score, and Transit Score for Sioux Falls and other South Dakota cities (Table 34). Although Sioux Falls has a significant recreational bike trail system, there are opportunities to improve infrastructure to support bicycling as a mode of transportation. The city's Bike Score of 46 (out of 100) indicates that the community is only "somewhat bikeable" and could benefit from additional infrastructure. The Transit Score of 17 (out of 100) indicates minimal transit options in the city.

**TABLE 34: WALKSCORE RATINGS OF WALKABILITY, BIKEABILITY AND TRANSIT IN SOUTH DAKOTA CITIES**

City	Walk Score	Transit Score	Bike Score
Sioux Falls	37	17	46
Aberdeen	35	-	66
Brookings	39	-	58
Rapid City	29	-	36
Watertown	35	-	50

DATA SOURCE: Walk Score. (2021). Living in Sioux Falls. <https://www.walkscore.com/>







## CONCLUSION

The public health challenges currently facing the Sioux Falls MSA are complex. The population is growing and becoming more diverse. Addressing health in an equitable way needs to be accorded a high priority.

From years of research on the social determinants of health, we know that clinical care is just a small part of what actually makes individuals healthy.<sup>3</sup>

As shown in this report, there are a number of factors driving poor health that relate more to our zip code than our genetic code. Solutions will require actions that go beyond health care, bringing together partners across several policy areas and sectors.

Strategies to improve health and well-being must address behavioral, environmental, and

socioeconomic factors, as well as continue to promote better utilization of high quality health care services. Opportunities for improvement in the built environment and for addressing behavioral health determinants have been highlighted in this report.

As community partners, we will continue to promote health equity and sustainability, support cross-sector collaboration, identify how a collaborative approach benefits all partners, engage stakeholders and residents, and create policy, systems, and environmental change.

Working together, we can help all residents live their healthiest life possible.

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# APPENDIX





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### Screeners

#### WHERE YOU LIVE

Please select the county in which you live.

*(Listed in alphabetical order)*

- Becker, MN
- Beltrami, MN
- Brown, SD
- Brule, SD
- Buffalo, SD
- Burleigh, ND
- Cass, ND
- Charles Mix, SD
- Clay, MN
- Clay, SD
- Clearwater, MN
- Cottonwood, MN
- Day, SD
- Deuel, SD
- Edmunds, SD
- Gregory, SD
- Jackson, MN
- Lincoln, SD
- Lyman, SD
- Lyon, IA
- Lyon, MN
- Mahnomon, MN
- McCook, SD
- Minnehaha, SD
- Morton, ND
- Murray, MN
- Nobles, MN
- O'Brien, IA
- Otter Tail, MN
- Pennington, MN
- Pipestone, MN
- Richland, ND
- Redwood, MN
- Rock, MN
- Sioux, IA
- Steele, ND
- Traill, ND
- Traverse, MN
- Tripp, SD
- Turner, SD
- Union, SD
- Wilkin, MN
- Yellow Medicine, MN
- None of the above

Please enter your 5-digit zip code.

What is your current age?

*(Use the slider below to select your current age.)*



## Community

### YOUR COMMUNITY

Overall, how would you rate the quality of HEALTH CARE available in your community?

- Poor
- Fair
- Good
- Very Good
- Excellent
- Don't Know

In your opinion, what is the most important HEALTH CARE issue your community faces?

How would you rate the quality of LONG TERM CARE, NURSING HOMES & SENIOR HOUSING services available in your community?

- Poor
- Fair
- Good
- Very Good
- Excellent
- Don't Know

Why did you rate LONG TERM CARE, NURSING HOMES & SENIOR HOUSING in your community as  $\{q://QID181/ChoiceGroup/SelectedChoices\}$ ?

How would you rate the quality of CHILDCARE, DAYCARE & PRE-SCHOOL services available in your community?

- Poor
- Fair
- Good
- Very Good
- Excellent
- Don't Know



**Why did you rate CHILDCARE, DAYCARE & PRE-SCHOOL in your community as**  
**`\${q://QID211/ChoiceGroup/SelectedChoices}`?**

**How would you rate the availability of AFFORDABLE HOUSING in your community?**

- |                       |                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Poor                  | Fair                  | Good                  | Very Good             | Excellent             | Don't Know            |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

**Why did you rate AFFORDABLE HOUSING in your community as**  
**`\${q://QID199/ChoiceGroup/SelectedChoices}`?**

**How would you rate the ability of residents to ACCESS DAILY TRANSPORTATION in your community?**

- |                       |                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Poor                  | Fair                  | Good                  | Very Good             | Excellent             | Don't Know            |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

**Why did you rate the ability of residents to ACCESS DAILY TRANSPORTATION as**  
**`\${q://QID200/ChoiceGroup/SelectedChoices}`?**

**How would you rate your community's EMPLOYMENT & ECONOMIC OPPORTUNITIES?**

- |                       |                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Poor                  | Fair                  | Good                  | Very Good             | Excellent             | Don't Know            |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

**Why did you rate your community's EMPLOYMENT & ECONOMIC OPPORTUNITIES as**  
**`\${q://QID201/ChoiceGroup/SelectedChoices}`?**

**How would you rate your community as being a SAFE place to live?**

- Poor
- Fair
- Good
- Very Good
- Excellent
- Don't Know

**Why did you rate SAFETY in your community as  $\{q://QID202/ChoiceGroup/SelectedChoices\}$ ?**

**How would you rate the ENVIRONMENTAL health of your community? (clean air, clean water, etc.)**

- Poor
- Fair
- Good
- Very Good
- Excellent
- Don't Know

**Why did you rate the ENVIRONMENTAL health of your community as  $\{q://QID203/ChoiceGroup/SelectedChoices\}$ ?**

**How would you rate the ability of residents to access HEALTHY & NUTRITIONAL FOODS in your community?**

- Poor
- Fair
- Good
- Very Good
- Excellent
- Don't Know

**Why did you rate the community's access to HEALTHY & NUTRITIONAL FOODS as  $\{q://QID209/ChoiceGroup/SelectedChoices\}$ ?**

**How would you rate the ability of residents to access PHYSICAL ACTIVITY & EXERCISE OPPORTUNITIES in your community?**

- Poor
- Fair
- Good
- Very Good
- Excellent
- Don't Know



Why did you rate the community's access to PHYSICAL ACTIVITY & EXERCISE OPPORTUNITIES as  $\$(q://QID213/ChoiceGroup/SelectedChoices)?$

MAIN BLOCK

YOUR HEALTH AND WELLNESS

Overall, how would you rate YOUR current state of health & wellness?

Poor



Fair



Good



Very Good



Excellent



What is the biggest HEALTH CARE concern you or your family face on a regular basis?

Are there any health care services that you would like to see OFFERED or IMPROVED in your community?

Yes

No

Please select the healthcare services you would like to see OFFERED or IMPROVED in your community.

*(select all that apply)*

Addiction Treatment

General Surgery

Behavioral Health / Mental Health

Heart Care

Cancer Care

Labor and Delivery

- Chiropractic Care
- Dental Care
- Dermatology
- Emergency / Trauma
- Eye Services (Ophthalmology, Optometry)
- Family Medicine / Primary Care

- Long Term Care / Nursing Homes
  - Orthopedics and Sports Medicine
  - OBGYN / Womens' Care
  - Pediatrics / Childrens' Care
  - Walk-in / Urgent Care
  - Other (please specify)
- 

### YOUR HEALTH CARE USAGE

**Do you currently have a primary care physician or provider who you go to for general health issues?**

- Yes
- No

**How long has it been since you last visited a physician / provider for a routine check up or screening?**

- Within the past year
- Within the past 2 years
- Within the past 5 years
- More than 5 years ago
- Never

**What has kept you from having a routine check-up?**

*(select all that apply)*

- Cost / inability to pay
- COVID -19
- Don't feel welcomed or valued
- Don't have a primary care physician
- Don't have insurance



- My insurance is not accepted
- Lack of transportation
- Distance / lack of local providers
- Getting time off from work
- No child care
- Wait time for appointments are too long
- Clinic hours are not convenient
- Fear / I do not like going to the doctor
- Nothing / I do not need to see a doctor
- Other (Specify)

**How would you rate your current ability to ACCESS to healthcare services?**

- Poor                      Fair                      Good                      Very Good                      Excellent
- 

**Why did you rate your current ability to ACCESS to healthcare services as  $\{q://QID156/ChoiceGroup/SelectedChoices\}$ ?**

**In the past year, did you or someone in your family need medical care, but did not receive the care needed?**

- Yes
- No
- Unsure

**What are the reasons you or a family member did not receive the care needed?**

*(select all that apply)*

- Cost / inability to pay
- COVID-19

- Don't feel welcomed or valued
- Don't have a primary care physician
- Don't have insurance
- My insurance is not accepted
- Lack of transportation
- Distance / lack of local providers
- Getting time off from work
- No child care
- Wait time for appointments are too long
- Clinic hours are not convenient
- Fear / I do not like going to the doctor
- Recovery time / not convenient
- Nothing / no reason
- Other (Specify)

## TRAVELING FOR CARE

**Have you or a member of your family TRAVELED to receive health care services outside of your community within the past 3 years?**

- Yes
- No

### Where did you travel to?

*(If you traveled more than once, enter the most recent place you traveled to?)*

City:

State:

### What was the main reason you traveled for care?

*(select all that apply)*

- Needed a specialist / service was not available locally
- Referred by a physician

- Better / higher quality of care
- Don't feel welcomed or valued by local providers
- Second opinion
- Medical emergency
- Immediate / faster appointment
- On vacation / traveling / snowbirds
- Cost or insurance coverage
- Military / VA
- Other (please specify)

## YOUR HEALTH INSURANCE

**Do you currently have health insurance?**

- Yes
- No

**Please indicate the source of your health insurance coverage?**

*(Select all that apply)*

- Employer (Your employer, spouse, parent, or someone else's employer)
- Individual (Coverage bought by you or your family)
- Federal Marketplace (Minnesota Care / Obamacare / Affordable Care Act)
- Medicare
- Medicaid
- Military (Tricare, Champus, VA)
- Indian Health Service (IHS)
- Other (please specify)

## DEMOGRAPHICS

## ABOUT YOU

**What is your biological sex?**

- Male
- Female

**Do you, personally, identify as lesbian, gay, bisexual, transgender or queer?**

- Yes
- No

**How many people live in your house, including yourself?**

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

People in household:

**How many children under age 18 currently live with you in your household?**

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Children in household:

**Are you Spanish, Hispanic, or Latino in origin or decent?**

- Yes
- No

**Choose one or more races that you consider yourself to be.**

- American Indian or Alaska Native
- Asian
- Caucasian or White
- Native Hawaiian or Pacific Islander

Black or African American

Other

**What language is spoken most frequently in your home?**

- English
- Arabic
- Chinese
- German
- Korean
- Native American (Dakota, Ojibwa, etc.)
- Nepali
- Spanish
- Tamil
- Vietnamese
- Other

**What is your current marital status?**

- Married
- Single, never married
- Unmarried couple living together
- Divorced
- Widowed
- Separated

**Which of the following best describes your current living situation?**

- House (owned)
- Apartment or House (rental)
- Homeless
- Some other arrangement



**What is your primary mode of daily transportation?**

- Automobile/Truck (owned or leased)
- Public Transportation (bus / subway / rail)
- Online Ride Service (Uber / Lyft)
- Taxi Service
- Family, Friends or Neighbors
- Bicycle
- Walk
- I do not have a primary mode of daily transportation
- Other (specify)

**What is the highest level of school you have completed or the highest degree you have received?**

- Less than high school degree
- High school graduate (high school diploma or equivalent including GED)
- Some college but no degree
- Associate degree in college (2-year)
- Bachelor's degree in college (4-year)
- Master's degree
- Doctoral degree
- Professional degree (JD, MD)

**Your current employment status is best described as:**

- Employed (full-time)
- Employed (part-time)
- Self-employed
- Furloughed
- Not employed, looking for work
- Not employed, not looking for work
- Retired

Disabled or unable to work

**What is your total household income from all sources?**

- Less than \$20,000
- \$20,000 - \$24,999
- \$25,000 - \$29,999
- \$30,000 - \$34,999
- \$35,000 - \$49,999
- \$50,000 - \$74,999
- \$75,000 - \$99,999
- \$100,000 - \$199,999
- \$200,000 or more
- Prefer not to answer

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# COMMUNITY ASSESSMENT ASSETS & NEEDS



These are the results from the Community Sector Assessment. Areas scoring 60 or better are noted as assets, and those scoring below 60 are needs. They are presented on the following pages by sector.




































Asset



Need

# COMMUNITY

## CHRONIC DISEASE MANAGEMENT

POLICY, REGULATION, AND ENVIRONMENT	2016	2019	2021
Faith communities offering a network of health professionals trained to provide chronic disease management support for members of their congregations.			
Community-based health screenings, referral and follow-up is offered to residents which meet current clinical guidelines for measurement and addresses chronic diseases and related risk factors.			
A coalition is established that is focused on promoting health/preventing chronic disease.			
EDUCATION AND AWARENESS			
Accessible and affordable chronic disease self-management programs (diabetes, obesity, arthritis, etc.) for all community residents.			
Reports from media outlets focus on the importance of the detection of risk factors for positive lifestyle modification.			
Strategies for providing community residents with information about high blood pressure and appropriate preparation for measurements of blood pressure and how the results should be provided and interpreted.			
Strategies for providing community residents with information about high cholesterol and appropriate preparation for measurements of blood cholesterol and how the results should be provided and interpreted.			
Strategies for providing community residents information about pre-diabetes and appropriate preparation for measurements of blood glucose and how the results should be provided and interpreted.			
Referral services are in place and are promoted for persons with chronic disease risk factors.			
Support groups are available for residents with chronic diseases.			
Community has an advisory group or action team working to increase and improve active living, healthy eating, tobacco-free living, chronic disease self-management, etc.			

## NUTRITION













POLICY, REGULATION, AND ENVIRONMENT	2016	2019	2021
Institute strategies to increase the availability of healthier food and beverage choices in locations controlled by local, city or county government (i.e., city buildings, county parks, recreation centers).			
Institute pricing strategies that support reduced cost of healthier foods and beverages relative to the cost of less healthy foods sold in public service venues (i.e. vending machines, cafeterias, and concession stands in local city facilities).			
A policy to support an increase in the number of full-service grocery stores and supermarkets in underserved areas.			
Regulation for improved availability for purchasing food from farms (i.e. farmers markets, farm stands, community-supported agriculture (CSA), pick your own, and farm-to-school initiatives).			
Local government incentives for new and/or existing food retailers for offering healthier foods and beverages in underserved areas.			
Provide access to farmers' markets in underserved areas.			
Provide smaller portion sizes at local restaurants and food venues.			
Policy for limiting the advertising and promotion of unhealthy foods and beverages in locations controlled by local, city, or county government buildings, parks, recreation centers.			
Policy for licensed day care facilities to serve two or more vegetables per day.			
Policy for licensed day care facilities to ban sugar-sweetened beverages and limit portion size of 100 percent juice.			
Farmers' Markets and farm stands that accept Women Infant and Children (WIC) Farmer Market Nutrition Vouchers and/or Food Stamp Benefits and/or Senior Citizen Farm Market Coupons are established and promoted.			
Transportation options to supermarkets and other food outlets established for senior citizens and low-income populations.			
Institute strategies to connect locally grown foods to local restaurants and food venues.			
EDUCATION AND AWARENESS			
Promotion of point-of-purchase nutrition information (menu labeling) in local restaurants and/or retail establishments, and promotion of the South Dakota Department of Health Munch Code at recreation centers, community parks, faith-based organizations, etc.			
Promotion of locally grown foods, community gardens, and agriculture initiatives.			
Healthy nutrition practices promoted in day care facilities, government, and faith-based organizations.			

































## PHYSICAL ACTIVITY

POLICY, REGULATION, AND ENVIRONMENT	2016	2019	2021
Create access to recreation facilities for people of all ages and abilities, such as joint-use agreements with schools.			
Access to public recreation facilities (i.e., parks, play areas, community and wellness centers) for people of all abilities.			
Community-wide and neighborhood specific urban/community planning and policy development interventions that increase opportunities for physical activity.			
Master plan for walking and biking in the community that enhances infrastructure to support walking and biking and encourage active transportation.			
A maintained network of parks with improved access to outdoor recreational facilities (establish a program to repair and upgrade existing parks and playgrounds).			
Trails, parks, shared paths and/or open spaces that are within walking distance of residential areas, especially public housing areas.			
Policy for 5-foot sidewalks to be built with street infrastructure enhancements such as lighting, traffic signals, and crosswalk counters.			
Policy for traffic-calming measures such as road narrowing, center islands, roundabouts, speed bumps, and/or crosswalk counters with timer countdowns at major intersections to make neighborhoods safer to walk and bike.			
Strategies to enhance infrastructure to support walking and biking (sidewalks, benches, shade, bike lanes, shared road signs, bike racks, etc.).			
Strategies for creating and maintaining crime prevention/safety measures for outdoor activity and recreation, such as adequate lighting, neighborhood watch associations, increased police presence, etc.			
Access to public transportation for community residents to access public facilities, parks, etc., so they can engage in physical activity.			
Child care facilities have a written policy for children in their care to engage in organized physical activity.			
Child care centers in the community have implemented fitCare® to address nutrition and physical activity policy and environment.			
Adopt and support “complete streets” ordinances, which ensure that streets are designed and operated to enable safe access for all users.			

## EDUCATION AND AWARENESS

Events used to motivate community residents to engage in physical activity (i.e., challenges, community races/walks, group hikes, etc.).			
Reports from media outlets focus on the promotion of physical activity guidelines, resources, and events in the community.			
Community-wide campaigns to encourage community residents to engage in physical activity (i.e., social support through buddy system, “contracts”; risk factor screenings; health education; address other cardiovascular risk factors, including nutrition/tobacco use).			
Promotion of places to be physically active (i.e., trails signage, maps, play areas, recreational facilities).			

## TOBACCO

POLICY, REGULATION, AND ENVIRONMENT	2016	2019	2021
Policies/programs for creating tobacco-free environments in the community, such as parks, faith-based organizations, recreation and cultural arts centers, multifamily homes, etc.			
Community enforcement of the law which prohibits the sale of tobacco products to minors.			
Policies that prohibit tobacco advertisement near schools and/or places where youth gather.			
Restrict the placement of tobacco vending machines (including self-service displays).			
Enforce the ban of selling single cigarettes.			
Provide promotion and access to a referral system for tobacco cessation resources and services, such as the SD QuitLine (1-866-SD-QUITS).			
EDUCATION AND AWARENESS			
Promote a referral system to help community members to access tobacco cessation resources or services, such as the SD QuitLine (1-866-SD-QUITS).			
Community-wide intervention program(s) for restricting minors' access to tobacco products.			
Community promotes tobacco-free programs through local media outlets.			
South Dakota Department of Health Regional Tobacco Prevention Coordinators are utilized to support community tobacco prevention/cessation activities through the provision of technical assistance (i.e., improving local tobacco-free policy) and resources (i.e., educational materials).			

## HEALTH CARE
























### CHRONIC DISEASE MANAGEMENT

POLICY, REGULATION, AND ENVIRONMENT	2016	2019	2021
Medical services provided outside of regular working hours (i.e., late evenings, weekends) to increase access to care for all community residents.			
Health care providers partner with community agencies to offer free/low-cost chronic disease health screenings (i.e., assessing body mass index, blood pressure) and education events for the public with follow-up counseling for those at-risk.			
Participation in community coalitions and partnerships to address chronic diseases and associated risk factors.			
Regular counseling on the importance of lifestyle behavior changes in preventing and controlling symptoms from chronic diseases is provided at all routine office visits.			
Referral system to help patient's access community-based resources and services for chronic disease management.			
Chronic disease risk factor counseling in accordance with current clinical guidelines is provided.			
Provide screening for chronic diseases in adults with modifiable risk factors.			
Policy that adopts current emergency heart disease and stroke treatment guidelines (i.e., Joint National Committee 7, American Heart Association).			
Policy to provide access to resources and training for using a stroke rating scale.			
Policy to measure weight and height and calculate BMI for adults at each office visit and review results with patient.			
Policy to assure that adult patients receive screenings for chronic diseases at intervals recommended by the U.S. Clinical Preventive Services Task Force, (i.e., colonoscopy, mammography, LDL measurements).			
<b>EDUCATION AND AWARENESS</b>			
Multiple communication channels (i.e., public service announcement, print posters/brochures, social media) promote healthy lifestyle messages throughout the health care facility/system.			
Patients are educated on the signs and symptoms of heart attack and stroke through multiple communicate channels (i.e., email, print brochures, social media, interpersonal communication).			
Health care providers offer educational information to patients through multiple communication channels (i.e., email, print brochures, social media, interpersonal communication) regarding the importance of chronic disease prevention as determined necessary by the health care provider.			
Annual cultural competency training for all health care employees for optimal care of all patients regardless of their race/ethnicity and/or culture/background.			
Continuing educational opportunities for all health care providers on current chronic disease prevention and management guidelines.			

## NUTRITION
































POLICY, REGULATION, AND ENVIRONMENT	2016	2019	2021
Health care providers assess patients' nutrition habits as part of a written checklist/ screening at office visits.			
Health care providers counsel about the importance of good nutrition during office visits and provide ongoing reinforcements in follow-up visits on interventions involving behavior change.			
Health care providers use a referral system to help patients access community-based resources and services for nutrition/nutrition education.			
Patient access to dietitian to help assess nutrition needs, prescribe personalized meal plan, and support long-term healthy nutrition behaviors.			
Policy for healthy eating and beverage options in on-site cafeteria and food venues.			
Policy for healthy food and beverage options in vending machines.			
Policy for pricing strategies that encourage the purchase of health food and beverage options.			
Healthy food purchasing (i.e. to reduce the caloric, sodium, and fat content of foods offered) is instituted in on-site cafeteria and food venues.			
Policy for healthy food preparation and practices (i.e., steaming, low fat, low salt, limiting frying, reduced calorie) in on-site cafeteria and food venues throughout health care facility.			
Health care providers adopt Breastfeeding Friendly Initiative and refer mothers to the program.			
EDUCATION AND AWARENESS			
Health care professionals (i.e. physicians, specialists) receive regular updates on nutrition guidelines for chronic disease management (i.e. CDC Morbidity and Mortality Weekly Report, Public Health Bulletin, American Dietary Guidelines).			
Health care providers assess and receive current guidelines for nutrition assessment and counseling.			
Health care providers increase social support for healthy eating behaviors by including families and parents.			
Health care professionals (i.e. nurses, lactation consultants) educate mothers about Baby-Friendly Initiative regarding breastfeeding and its benefits in improving breastfeeding related outcomes.			
Health care providers trained in use of <i>Obesity in South Dakota, A Clinical Toolkit for Health care Providers</i> as a resource for chronic disease management.			

## PHYSICAL ACTIVITY

POLICY, REGULATION, AND ENVIRONMENT	2016	2019	2021
Health care providers routinely assess patients' physical activity as part of a written checklist/screening at office visits.			
Referral system available to help at-risk patients access community-based resources/ services for physical activity.			
Health care facility/building is physical activity friendly with sidewalks, bike racks, well-lit stairwells.			
Health care providers ensure high risk groups for chronic disease and inactivity have equal or better access to physical activity services (individual health coaching, referral to outreach programs), than the general population.			
EDUCATION AND AWARENESS			
Health care providers routinely counsel patients about the importance of regular physical activity and track the prevalence of physical inactivity during office visits.			
Health care providers offer educational information to patients through multiple communication channels (e.g. email, print brochures, social media, interpersonal) about interventions to encourage physical activity.			
Health care providers support community physical activity advocacy (e.g. financial support, help with planning, implementing and/or promoting events, participating in events, serving on local physical activity committees).			
Continuing education is provided for Health care providers regarding risk factor management (i.e. physical inactivity), intervention, and treatment.			



## TOBACCO

POLICY, REGULATION, AND ENVIRONMENT	2016	2019	2021
Health care providers utilize EHR to identify and intervene with patients who use tobacco.			
Health care providers assess patient's willingness to quit and uses the 2 A+R method (A-Ask, A-Advise and R-Refer).			
Health care providers advocate for free or low-cost pharmacological quitting aids with insurance companies and/or the SD QuitLine.			
Health care providers utilize secondhand smoke (i.e., environmental tobacco smoke) education for tobacco using patients who are pregnant or have families.			
A provider-reminder system is in place to assess, advise, track, and monitor tobacco use.			
Tobacco-free policy 24/7 for indoor and outdoor public places.			
Smoke-free policy 24/7 for indoor and outdoor public places.			
EDUCATION AND AWARENESS			
Professional development for health care providers regarding counseling and intervention techniques to promote tobacco cessation in patients using tobacco.			
Culturally appropriate tobacco cessation materials are provided to tobacco using patients.			
Promote a referral system to help employees to access tobacco cessation resources or services, such as the SD QuitLine (1-866-SD-QUITS).			
South Dakota Department of Health Regional Tobacco Prevention Coordinators are utilized to support health care tobacco prevention/cessation activities through the provision of technical assistance (i.e., improving tobacco-free policy) and resources (i.e., educational materials).			

## SCHOOLS

### CHRONIC DISEASE MANAGEMENT

#### POLICY, REGULATION, AND ENVIRONMENT

2016 2019 2021

Access to a school/community nurse.



Students with health problems associated with sedentary lifestyle and unhealthy diet are identified and referred to appropriate medical care/community resources.



Policy to meet the nutritional needs of students with special health care or dietary requirements (allergies, diabetes, physical disabilities) as required by the school.



Policy to provide immediate and reliable access to student medications for chronic disease management throughout the school day.



School management protocols (i.e., school diabetes management plans) are developed in consultation with their families, medical providers, and school staff to manage students with chronic diseases or conditions (i.e., asthma, diabetes, epilepsy).



#### EDUCATION AND AWARENESS

Professional development is offered to faculty and staff on chronic disease prevention and management.



School-based educational materials provide information about the signs and symptoms of heart attack and stroke; risk factors for hypertension, high blood cholesterol, cancer, respiratory conditions, arthritis, obesity, and diabetes; and calling 911.



Rewards and/or incentives (i.e., extra free class time, field trips, gift certificate) are offered and promoted to motivate students, faculty, and staff members to practice healthy behaviors.



Health screenings are accessible and free (or affordable), and referrals are offered to faculty and staff members at least once a year.



Annual training is provided to all staff on CPR (Cardio-Pulmonary Resuscitation) and use of an AED.






























## NUTRITION

POLICY, REGULATION, AND ENVIRONMENT	2016	2019	2021
Policy that requires nutrition standards for all food sold on school grounds (a la carte, school stores, concession stands, vending machines, and sporting events).			
Point-of-purchase labeling is displayed for healthy foods.			
Pricing policies for reduced prices for healthier food items.			
Fundraising policy that supports healthy eating through the sale of healthy foods as well as nonfood products and services.			
Policy that supports healthy snacks for classroom celebrations.			
Policy that limits the sale and distribution of less nutritional foods on school grounds.			
Regulations in place for a nutritious breakfast program that meets USDA standards and is fully accessible to all students.			
Regulations in place for a nutritious lunch program that meets USDA standards and is fully accessible to all students.			
School food services uses healthy food preparation practices such as steaming, low-fat and low-salt preparation with on-site food venues.			
Policy that establishes recess is provided before lunch for elementary students.			
Adequate time is provided for students to eat school meals (10 minutes for breakfast/20 minutes for lunch from the time students are seated).			
Policy that encourages nonfood rewards for academic work.			
Policy that prohibits withholding food as punishment.			
Policy that limits advertising and promotion of less healthy foods and beverages on school campus.			
Local farmer partnerships and/or community gardens are used for fresh produce/fruits for student meals and snacks when available.			
Access to healthy foods is provided through increasing availability of and variety of healthy food.			
Policy that adopts the South Dakota Harvest of the Month curriculum.			
EDUCATION AND AWARENESS			
Age appropriate nutrition education is part of the district curricula.			
School food services promote healthy food and beverage purchases (i.e., highlighting healthy food in menus, displaying nutrition information about foods, taste testing opportunities, etc.).			
The cafeteria is utilized as a learning lab for good nutrition.			
Educational materials on healthy eating topics (portion control, fruits/vegetables, snacking, reading food labels, Harvest of the Month materials, etc.) are reinforced through school-based communication channels.			
Food service managers/staff attend annual professional development/ continuing education trainings regarding nutrition, healthy food preparation and health promotion.			
School provides information on strategies that focus on families/parents as an important component of interventions for healthy eating behaviors.			

## PHYSICAL ACTIVITY

POLICY, REGULATION, AND ENVIRONMENT	2016	2019	2021
Policy that requires all physical education classes to be taught by qualified, certified physical educators.			
Policies offering non-competitive physical activity programs before and after the school day.			
Facilities and space that support physical activity for students and staff on school grounds (bike racks, walking paths, fitness room).			
Policy (i.e. Joint Use Agreements) for use of school grounds and facilities for physical activity outside the school day for students, school faculty & staff, parents, and community members.			
Daily recess breaks for elementary students.			
Policy that prohibits the use of physical education class or recess as punishment.			
Policy that prohibits the use of excessive or physical activity as punishment.			
Policy that provides equal and appropriate opportunity for all students to participate in physical activity regardless of mental or physical disabilities.			
Policy that requires at least 30 minutes of moderate to vigorous physical activity in physical education curricula at least three days per week during the school year.			
Transportation policies in place that encourage physical activity (Safe-Routes-to-School and Walking School Buses), and events to support those policies.			
EDUCATION AND AWARENESS			
Age appropriate quality, daily, evidence-based physical education is part of the district curricula.			
Physical education classes teach lifetime physical activity skills such as jogging, tennis, and basketball.			
Instruction on health related fitness (i.e. cardiovascular endurance, flexibility, muscular strength, muscular endurance and body composition) is provided during physical education and health education class.			
Promotion of student participation in extracurricular physical activities (i.e. athletics, community walks/races, activity clubs).			
School environment supports and encourages physical activity throughout the day (posters, newsletters, announcements, library displays).			
Behavioral interventions (i.e. TV Turnoff challenge) are implemented to reduce out-of-school screen time (TV, video game, computer, etc.) aimed at improving children's' and parents' knowledge, attitudes, or skills.			
Professional development is provided to school staff on incorporating physical activity into the classroom, recess, out-of-school time, and Safe Routes to School programs.			
Professional development opportunities offered for physical education and health education teachers on the National Health Education Standards, the National Physical Education Standards, and/or the Physical Activity Guidelines for Americans.			

## TOBACCO

POLICY, REGULATION, AND ENVIRONMENT	2016	2019	2021
24/7 tobacco-free school policy which prohibits all tobacco use on school grounds and school-sponsored activities by everyone—staff, students, faculty, visitors and guests.			
Policy for cessation/education classes such as the American Lung Association's Not on Tobacco (NOT) program offered in school setting.			
Referral for students who use tobacco to cessation resources (i.e. NOT program, SD QuitLine).			
EDUCATION & AWARENESS			
Evidence-based tobacco prevention programs, such as LifeSkills, are part of the district's curriculum.			
Professional development opportunities on tobacco prevention and cessation are offered/ promoted to staff teaching tobacco prevention and cessation.			
Educational opportunities for smoking cessation are provided rather than punitive measures for students caught using tobacco products.			
Educational materials on the harmful consequences of tobacco use and exposure are included in school-based communication channels (e.g. email, poster, newsletters, public address system announcements, and social media).			
South Dakota Department of Health Regional Tobacco Prevention Coordinators are utilized to support school tobacco prevention/cessation activities through the provision of technical assistance (i.e. improving school tobacco-free policy) and resources (i.e. educational materials).			
Promote tobacco prevention and cessation through education programs, such as the American Lung Association's Not on Tobacco (NOT) program and Teens Against Tobacco Use (TATU).			



## WORKSITES





































### CHRONIC DISEASE MANAGEMENT

POLICY, REGULATION, AND ENVIRONMENT	2016	2019	2021
Local employers participate in Department of Health worksite wellness program, WORKWell.			
Policy to provide affordable, accessible, annual quality health screenings, including chronic disease screening, health coaching, and referral.			
Provide follow-up counseling and education for employees at high risk for developing chronic diseases and related risk factors.			
Adopt an emergency response plan (e.g., an Automatic External Defibrillator, instruction and training for CPR, choking).			
Worksite offers health care coverage for preventive services and quality medical care for employees.			
Policy that health insurance discounts are offered to employees who adopt healthier lifestyles, decrease their chronic disease risk factors, or improve their health screening score.			
Policy to provide employee access to qualified occupational health staff.			
EDUCATION AND AWARENESS			
Worksite communication channels (email, posters, newsletters, public address system announcements, social media, group education sessions) that promote the importance of healthy lifestyle behaviors in preventing and /or managing chronic diseases.			
Promote affordable and accessible chronic disease self-management programs and/or community resources for employees and their families.			
Promote community resources available to employees with risk factors for chronic diseases.			
Events, classes, and incentives are offered for the prevention of and/or management of chronic diseases.			
Training for management and employees on proper response to chronic disease related emergencies (heart attack, stroke, hypoglycemia, etc.) and use of equipment to support timely response (e.g. AED).			
Support groups for employees with chronic diseases such as obesity, arthritis, and diabetes.			

## NUTRITION

POLICY, REGULATION, AND ENVIRONMENT	2016	2019	2021
Policy for healthy guidelines for all foods and beverages provided at worksite, such as vending machine products, snacks, and cafeteria food.			
Worksite-sponsored wellness committee which plans and promotes policies and environmental changes for healthy nutrition behaviors of employees.			
Policy for healthy foods and beverages to be served at employee meetings, trainings, and celebrations.			
Partnerships with community organizations for employee access to affordable fresh fruits and vegetables, (i.e. farmers' markets, community gardens, co-ops).			
Provide employee access to refrigerator, microwave, and sink.			
Opportunities are available to employees at the workplace or through outside community-based individually adapted behavior change programs (i.e. weight loss programs that offer counseling and education).			
Policy which promotes individual behavior change through worksite-sponsored challenges (i.e. Eat 5 servings per day of fruits and/or vegetables).			
Policy for providing breastfeeding accommodations for employees that include both time and private space for breastfeeding during working hours.			
Policies for reduced prices for healthy food items in cafeterias and vending machines.			
Point-of- decision labeling (i.e. "low fat," "light," "heart health," "no trans fat") for healthy food items in cafeteria, break rooms, and vending areas.			
EDUCATION AND AWARENESS			
Worksite-sponsored events and incentives promote nutrition education and healthy nutrition behaviors.			
Professional development for foodservice staff on healthy food preparation techniques, portion sizes, and healthy menu choices.			
Worksite communication channels (e.g. email, posters, newsletters, public address system announcements, social media, group educations sessions) promote the importance of healthy nutrition behaviors in preventing and/or managing chronic diseases.			

## PHYSICAL ACTIVITY

POLICY, REGULATION, AND ENVIRONMENT	2016	2019	2021
Free or reduced cost memberships to community physical activity/fitness centers for employees.			
Policy supporting physical activity on breaks/lunch.			
Policy providing flexible work schedule and/or break times for employees to be active during the day.			
A worksite-sponsored wellness committee plans physical activity opportunities for employees.			
Financial/benefit incentives promote/reward employee participation in regular physical activity.			
Policy which promotes individual behavior change through worksite-sponsored challenges (i.e. 10,000 Steps a day, workplace physical activity program).			
Policy for structuring the Built Environment to support physical activity opportunities for employees at or near worksite (i.e. bike racks, walking paths, sidewalks, fitness equipment, etc.).			
Point-of-decision prompts (i.e. motivational signs) located by stairwells, when possible.			
Policy supporting strategies to reach and motivate highly sedentary workforce.			
EDUCATION AND AWARENESS			
Worksite communication channels (i.e., email, posters, newsletters, public address system announcements, social media, group education sessions) promote the benefits of regular physical activity, the physical activity guidelines, and the opportunities for activity and recreation at or near the worksite.			
Worksite sponsored events and incentives for increasing and maintaining physical activity for employees.			
Promotion of stairwell use (i.e. Motivational Signs, Music, Art, etc.).			

# TOBACCO

POLICY, REGULATION, AND ENVIRONMENT	2016	2019	2021
Worksite Insurance coverage of nicotine replacement therapy.			
Reduced cost insurance premiums for employees who do not use tobacco.			
Tobacco-free policy 24/7 for indoor and outdoor buildings and grounds.			
Smoke-free policy 24/7 for indoor and outdoor buildings and grounds.			
EDUCATION AND AWARENESS			
Promote a referral system to help employees access tobacco cessation resources or services, such as the SD QuitLine (1-866-SD-QUITS).			
Worksite communication channels (email, posters, newsletters, public address system announcements, Social media, group education sessions) support a tobacco-free environment and tobacco cessation for employees.			
South Dakota Department of Health Regional Tobacco Prevention Coordinators are utilized to support tobacco prevention and/or cessation through technical assistance (i.e. improving worksite tobacco-free policy) and resources (i.e. educational materials).			

# COMMUNITY ASSET MAP







## Basic Needs

### Clothing and Household Items

- Employment closets
- Maternity and Kids closets
- Thrift stores
- Laundry assistance
- Furniture assistance

### Employment

- Employment resource center
- Work transportation
- Disability employment assistance
- Vocational training programs

### Food

- Food pantries and charitable food sites
- Nutrition programs
- Grocery stores
- Local Farms and Co-Ops

### Community Gardens

- Supplemental assistance programs
- Dietitian services

### Housing

- Local shelters for housing or crisis needs
- Renters Assistance
- Home buying programs
- Low income housing
- Local and state housing divisions
- Legal services
- After incarceration reintegration

### Transportation

- Sioux Area Metro
- Bike Lanes
- Walking paths
- Local transportation non-profits
- Gas, bus pass, and bike assistance
- Paratransit services

### Cultural Groups

- Faith-based Gathering Places
- Multicultural Center
- Neighborhood Associations

### Education

- Local private and public school systems
- Colleges, universities and technical schools
- Tutoring assistance
- GED testing services

### Health

#### Healthcare Access

- Federally qualified health center
- Regional hospitals
- Telehealth services
- Prescription assistance programs
- Community health workers
- Veteran healthcare
- Dental, hearing, and vision care and assistance
- Indian Health Services

#### Mental Health and Substance Use

- Mental Health Providers



### **Mental Health and Substance Use (Cont.)**

- Residential group care
- Substance use prevention services
- Medication-assisted treatment
- Residential Treatment facilities
- Outpatient services
- Community triage center
- Drug and Alcohol Counselors
- Support groups

### **Organizations**

- City, County and State Government Agencies
- Private Sector Businesses
- Chamber of Commerce/Economic Development
- Nonprofit Service Agencies

### **Priority Populations**

#### **Older Adults**

- Agencies on aging
- Falls prevention services
- Nutrition programs
- Faith groups
- Assisted living, long-term care, hospice care
- Activity and Education Centers

#### **Family/Childcare/Youth**

- Family planning clinics
- Pregnancy services
- Childcare assistance
- Early childhood programs
- Parental learning opportunities
- Family and marriage counseling

- Developmental resources
- Visitation centers

### **Immigration/Refugee Resources**

- Cultural centers
- Interpretation and translation services
- Case management
- Education and legal support

### **Quality of Life Activity**

- Local parks and trails
- Youth sports
- Recreation centers
- Gym/Studio Membership Programs

### **Arts & Culture**

- Arts Council
- Art Galleries
- Events
- Performing Arts Venues
- Sculpture Walk

### **Safety**

- City, county, and state Law enforcement
- Child protection services
- Citizen led organizations
- Animal control

\*A comprehensive listing of specific resources related to basic needs, mental health, and substance use resources and community organizations is available at [www.helplinecenter.org](http://www.helplinecenter.org).



