

# Behavioral Risk Factors for the DISABLED POPULATION IN NEBRASKA

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## Behavioral Risk Factors for the Disabled Population in Nebraska

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## Introduction

A disability is any impairment, activity limitation, or participation restriction. Impairment can include an issue in bodily function or structure, while an activity limitation could be a difficulty encountered during task-execution or action. An individual could struggle with participation restriction if they struggle with involvement in typical life situations. Those with disabilities require interventions to remove environmental and social barriers.<sup>1</sup> Disability as a result of physical, emotional, or mental limitations has a direct impact on an individual's quality of life and subsequently becomes a public health concern.

Approximately 15% of the world's population is living with a disability, and one-fifth of the estimated global total experience significant difficulties.<sup>2</sup> A disability is not just a health problem, but also a complex phenomenon that illustrates an interaction between someone's body and features of society.<sup>3</sup>

Those who are disabled require the same health screenings and have the same needs as those who are not disabled. People who are living with disabilities face other external struggles like poverty and social exclusion; they are also susceptible to secondary conditions.<sup>4</sup> In the United States, health disparities can be seen between those who are disabled and not disabled. Moreover, 27% of those who are disabled see cost as a barrier to obtaining care, compared to 12.1% of people who are not disabled.<sup>5</sup> In Nebraska, we continually see those who are living with a disability struggling with obesity, high blood pressure, and several other chronic diseases more than those who are not disabled.

For the purposes of this report, only those indicators that demonstrated the disparities faced by individuals with a disability are presented. "Disability" is defined as either limited activity due to physical, mental, or emotional problems, or the requirement of special equipment such as canes, wheelchairs, or special beds or telephones.

This is the first report published by the Office of Health Disparities and Health Equity to address the Nebraska population with a disability. This report will provide a baseline for future comparisons.

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<sup>1</sup>World Health Organization. (2017). Disabilities. Retrieved from <https://www.who.int/topics/disabilities/en/>

<sup>2</sup>World Health Organization. (2019). Disability Inclusion Overview. Retrieved from <https://www.worldbank.org/en/topic/disability>

<sup>3</sup>Ibid.

<sup>4</sup>Ibid.

<sup>5</sup>Centers for Disease Control and Prevention. (2019). Disability & Health - Disability Status Graph. Retrieved from <https://www.cdc.gov/ncbddd/disabilityandhealth/features/unrecognizedpopulation-longdesc.html>

## Methodology

The Nebraska Behavioral Risk Factor Surveillance System (BRFSS) has been conducting surveys annually since 1986 to collect data on the prevalence of major health risk factors among adults residing in the state. Information gathered in these studies can be used to target health education and risk reduction activities throughout the state in order to lower rates of premature death and disability. This surveillance system is based on a research design developed by the Centers for Disease Control and Prevention (CDC) and used in all 50 states, the District of Columbia, and three U.S. territories. The data for this report came from the Nebraska BRFSS 2011-2015.

## Questionnaire Design

The questionnaire consists of three sections; core questions required for all states participating in BRFSS, a set of optional standardized modules developed by the Centers for Disease Control and Prevention (CDC), and state-added questions designed and administered by individual states to address locally identified health problems.

The BRFSS questionnaire is updated each calendar year by the CDC and each participating state. Core and optional module questions were previously tested. Changes were discussed, and it was determined which would be included at the annual national BRFSS conference. A group of individuals from the Nebraska Department of Health and Human Services Division of Public Health met to discuss which optional modules and state-added questions to include in the coming year.

The two BRFSS questions included on the survey related to disability were; “Are you limited in any activities because of physical, mental, or emotional problems?” and “Do you now have any health problem that requires you to use special equipment, such as a cane, a wheelchair, a special bed, or a special telephone?” A response of “yes” to these questions put the respondent in the disability category and a “no” response in the no-disability category. Disability status has been analyzed by gender, race, and income for various health indicators as measured by BRFSS and compared to the non-disability group. This breakdown gives us a deeper understanding of where the key inequalities exist.

The data source for this report card is Nebraska BRFSS 2011-2015.



# Chronic Disease

Disabled vs Non-disabled



## Diabetes

Disabled Nebraskans were three times more likely to have diabetes compared to the non-disabled Nebraskans

## Arthritis

Over half of the disabled population in Nebraska reported ever been diagnosed with Arthritis

## Myocardial Infarction

Non-disabled Nebraskans were 4.6 times less likely than disabled Nebraskans to have Myocardial Infarction.

## Asthma

Just over one-eighth of the disabled Nebraskans reported having ever been diagnosed with Asthma.

## Stroke

Disabled Nebraskans are over six times more likely to have a stroke compared to the non-disabled population.

## High Blood Pressure

Just over half of the disabled population in Nebraska reported having ever been diagnosed with Diabetes

## Coronary Heart Disease

The disabled population was almost 5 times more likely than the non-disabled to have coronary heart disease.

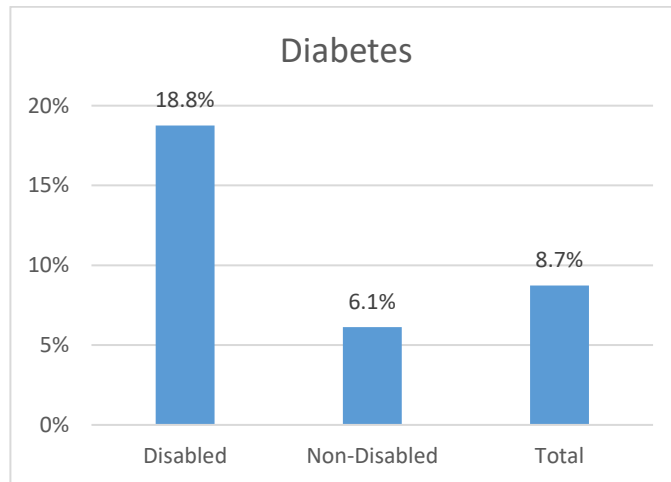




## Chronic Disease

### Diabetes

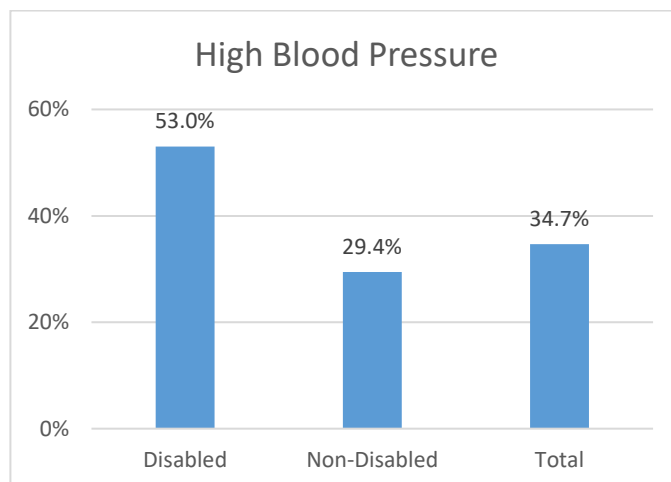
*Survey Question: Have you ever been told by a doctor that you have Diabetes? (Females diagnosed only while pregnant were excluded.)*



- The disabled Nebraskans (18.8%) were approximately three times more likely to report having ever been diagnosed with Diabetes compared to non-disabled Nebraskans (6.1%).
- The diabetes prevalence among disabled Nebraskans is 10% more than the percentage reported by all Nebraskans (8.7%).

### High Blood Pressure

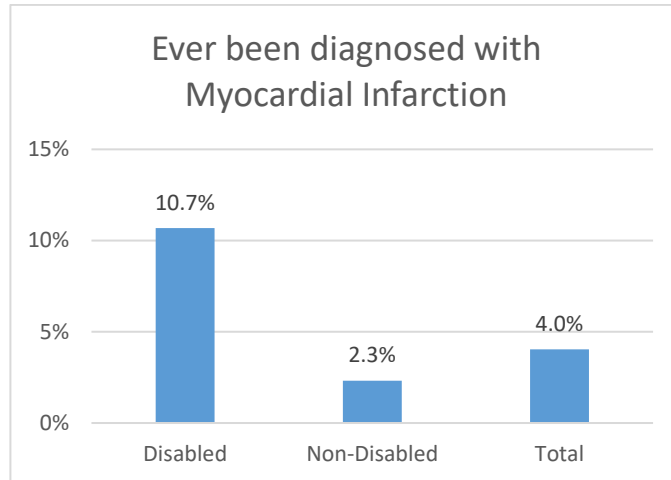
*Survey Question: Have you ever been told by a doctor, nurse, or other health professionals that you have high blood pressure? (Females reporting hypertension only during pregnancy are excluded.)*



- Over half of the disabled population in Nebraska (53%) reported having ever been diagnosed with Diabetes, compared to just under one-third of the non-disabled people (29.4%).
- The percentage reported by disabled Nebraskans was 1.5 times higher than the percentage reported by the total population in Nebraska (34.7%).

## Myocardial Infarction

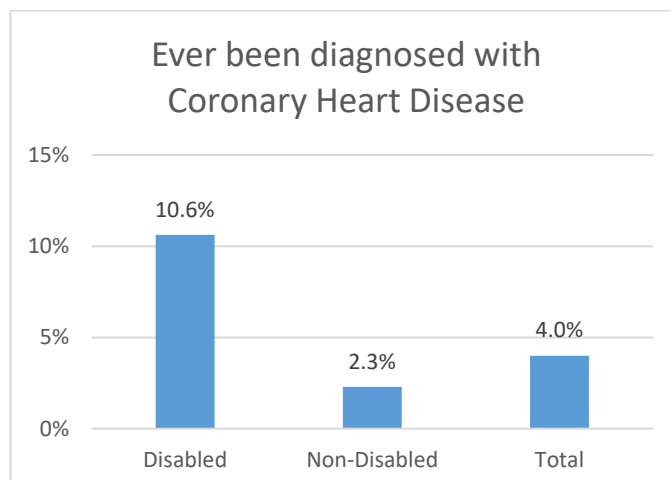
*Survey Question: Has a doctor, nurse, or other health professionals ever told you that you had any of the following: A heart attack, also called a myocardial infarction? Angina or coronary heart disease? A stroke?*



- The non-disabled population (2.3%) in Nebraska was 4.6 times less likely to report having ever been diagnosed with Myocardial Infarction compared to the disabled population (10.68%) in Nebraska.
- Only 4% of Nebraska reported ever been diagnosed with Myocardial Infarction, less than half the percentage reported by disabled Nebraskans.

## Coronary Heart Disease

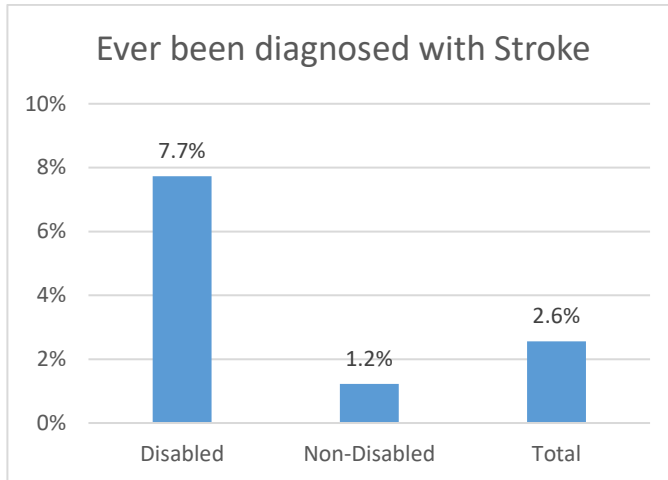
*Survey Question: Has a doctor, nurse, or other health professionals ever told you that you had any of the following: A heart attack, also called a myocardial infarction? Angina or coronary heart disease? A stroke?*



- Over one-tenth of the disabled population (10.6%) in Nebraska reported having ever been diagnosed with coronary heart disease, compared to only 2.3% reported by the non-disabled community in Nebraska.
- The total population in Nebraska reported only 4% of those ever been diagnosed with coronary heart disease, almost three times less likely compared to the disabled population.

## Stroke

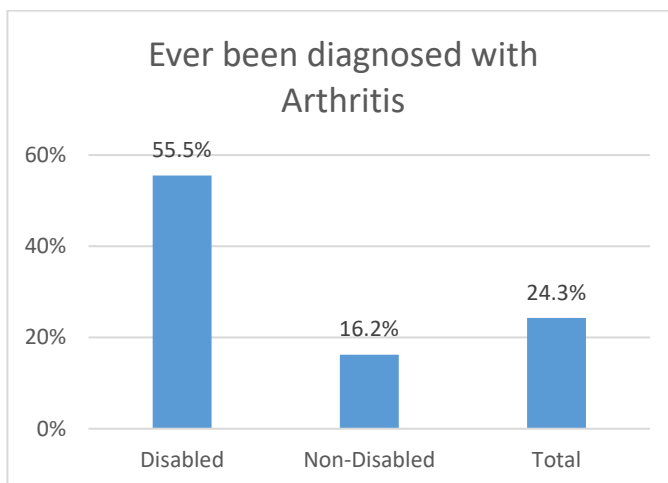
*Survey Question: Has a doctor, nurse, or other health professionals ever told you that you had any of the following: A heart attack, also called a myocardial infarction? Angina or coronary heart disease? A stroke?*



- The percentage of the disabled population in Nebraska to report having ever been diagnosed with a stroke was 7.7%, over six times higher than the percentage reported by the non-disabled population.
- Overall, only 2.6% of Nebraskans reported having ever been diagnosed with a stroke.

## Arthritis

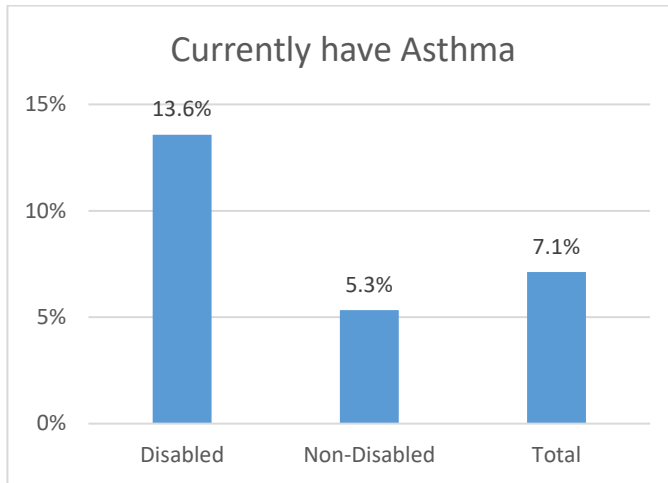
*Survey Question: Have you ever been told by a doctor or other health professional that you have some form of Arthritis, rheumatoid Arthritis, gout, lupus, or fibromyalgia?*



- Over half of the disabled population (55.5%) in Nebraska reported having ever been diagnosed with Arthritis, whereas only 16.2% of the non-disabled Nebraskans reported the same.
- A quarter of the Nebraska population (24.3%) reported having ever been diagnosed with Arthritis.

## Asthma

Survey Question: *Do you currently have Asthma?*



- Just over one-eighth of disabled Nebraskans reported having ever been diagnosed with Asthma, whereas non-disabled Nebraskans reported only 5.3%.
- Only 7.1% of the overall population in Nebraska reported having ever been diagnosed with Asthma, almost half the proportion reported by disabled Nebraskans.



# Risk Factors for Illness

Disabled vs Non-disabled



## Physically Unwell

Disabled Nebraskans were 7.7 times more likely than non-disabled Nebraskans to be physically unwell for 10 or more days in a month.

## Mentally Unwell

Disabled Nebraskans were 2.5 times more likely than non-disabled Nebraskans to be mentally unwell for 10 or more days in a month.

## Perceived Health Status

Two-fifths of disabled Nebraskans perceived their health status as fair or poor, compared to under one-fifth of the non-disabled population

## Physical Inactivity

Approximately 40% of Nebraskans that are disabled do not exercise outside of work, compared to 20% of non-disabled Nebraskans

## Depressive Disorder

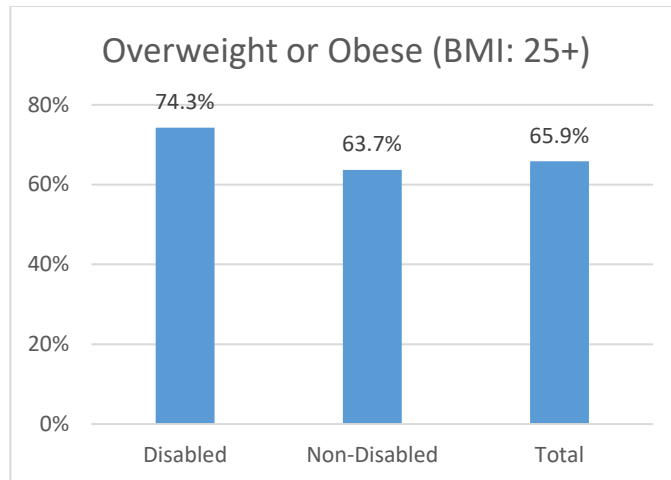
Approximately one-third of disabled Nebraskans reported having depressive disorder, compared to only 13% of non-disabled Nebraskans



## Risk Factors for Illness

### Overweight or Obese

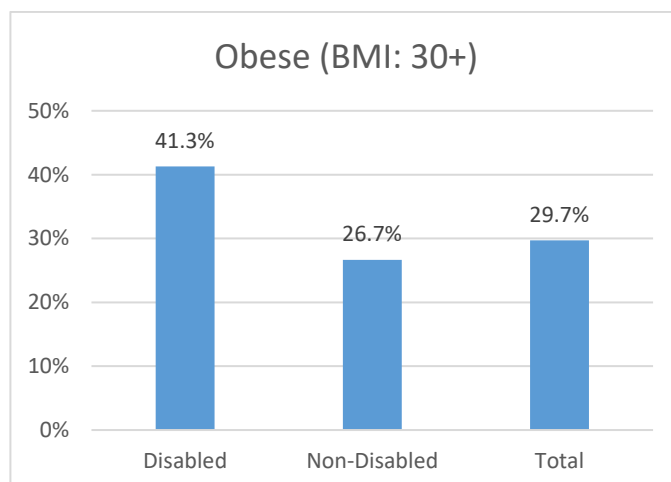
*Survey Question: No survey question solicits the respondent to provide his body mass index (BMI); instead, it is calculated from the self-reported height and weight. Individuals with a BMI of 25-29.9 are considered overweight, while individuals with a BMI of 30 or higher are considered obese.*



- Approximately three-quarters of disabled Nebraskans (74.3%) and two-thirds of non-disabled Nebraskans (63.7%) were either overweight or obese.
- The percentage of Nebraskans who were overweight or obese (65.9%) is slightly higher than the percentage seen in non-disabled Nebraskans.

### Obesity

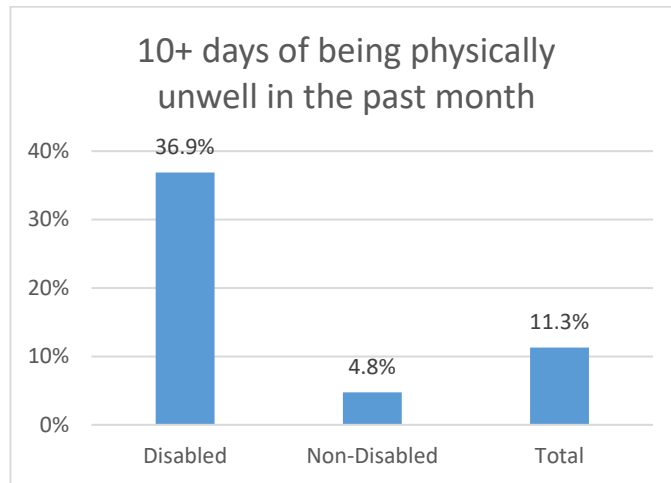
*Survey Question: No survey question solicits the respondent to provide his body mass index (BMI); instead, it is calculated from the self-reported height and weight. Individuals with a BMI of 25-29.9 are considered overweight, while individuals with a BMI of 30 or higher are considered obese.*



- Just over two-fifths of the disabled population and a quarter of the non-disabled population in Nebraska were obese.
- Approximately 30% of all Nebraskans were obese, 10% lower than the percentage seen in disabled Nebraskans.

## Physically Unwell

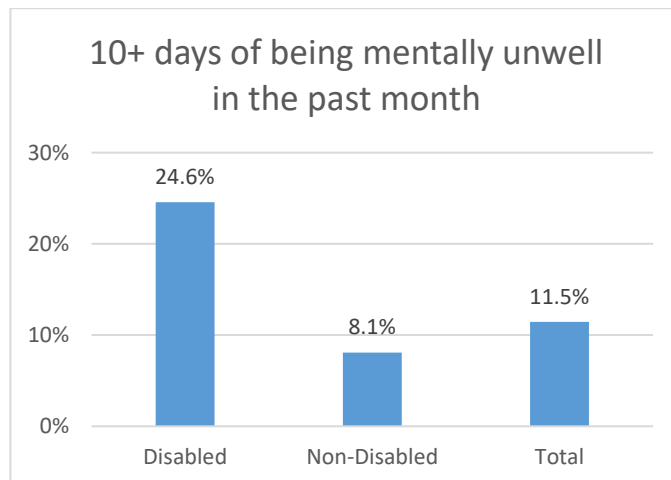
*Survey Question: Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?*



- Over one-third of the disabled population (36.9%) in Nebraska reported ten or more days of being physically unwell in the past 30 days, whereas only 4.8% of non-disabled Nebraskans reported the same.
- Overall, 11.3% of Nebraskans reported ten or more days of being physically unwell in the past month, over 20% less than the percentage seen in disabled Nebraskans.

## Mentally Unwell

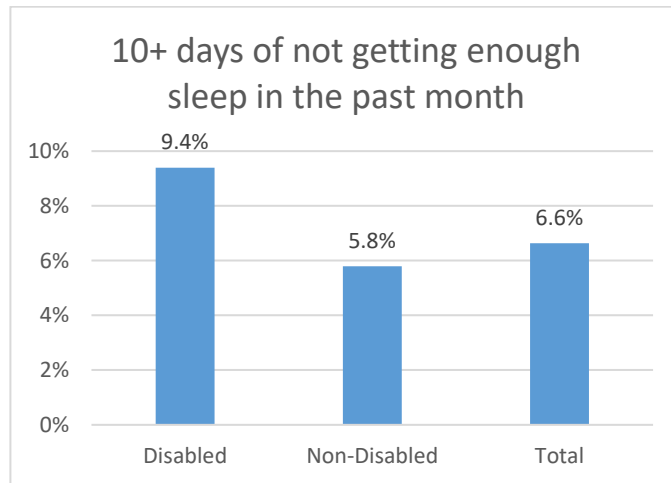
*Survey Question: Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?*



- Approximately a quarter of disabled Nebraskans reported being mentally unwell for ten days or more in the past 30 days. In contrast, less than 10% of non-disabled Nebraskans reported the same.
- The percentage of Nebraskans over who reported being mentally unwell for ten or more days in the past 30 days was 11.5%.

## Sleep Insufficiency

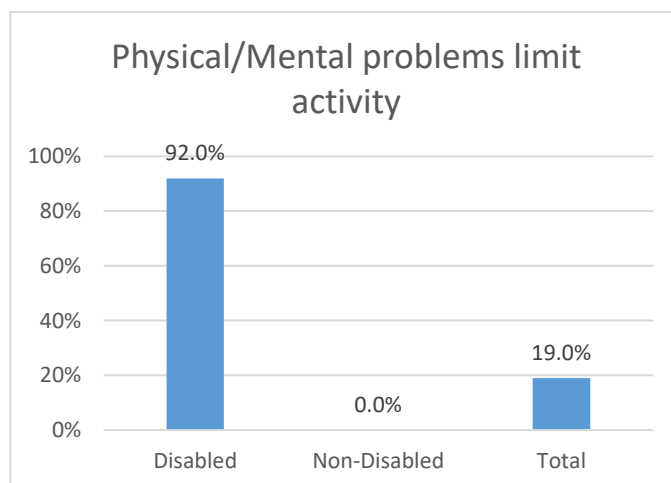
*Survey Question: During the past 30 days, for about how many days have you felt you did not get enough rest or sleep?*



- Just under 10% of the disabled population (9.4%) in Nebraska reported not getting enough sleep for ten days or more in the past month, whereas approximately 6% of non-disabled Nebraskans (5.8%) reported the same.
- The percentage of all Nebraskans (6.6%) not getting enough sleep on ten days or more in the past month was slightly higher than the percentage reported by non-disabled Nebraskans.

## Activity Limitations

*Survey Question: During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?*

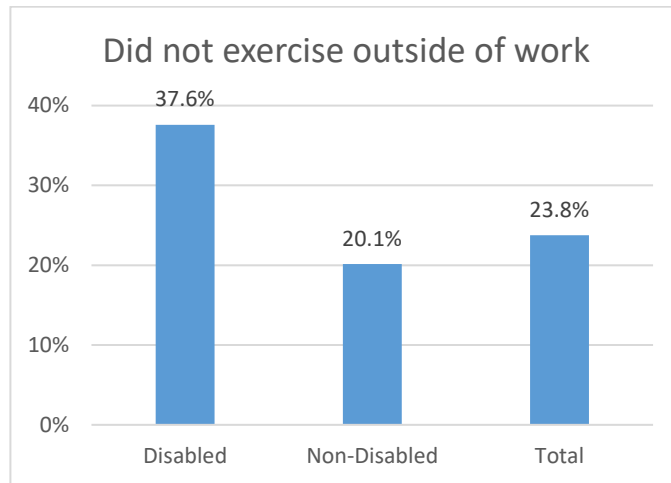


- 9 out of 10 disabled Nebraskans reported that their physical or mental problems limited their daily activity, whereas none of the non-disabled Nebraskans reported the same.
- One-fifth of the Nebraskans reported physical or mental problems limited their daily activities.



## Physical Inactivity

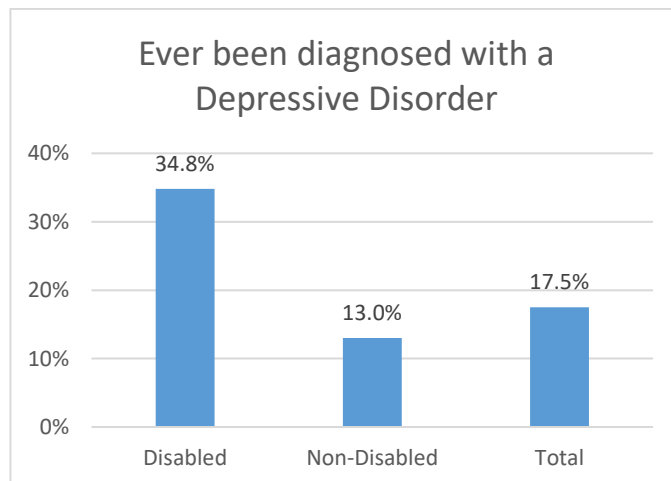
*Survey Question: During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?*



- Approximately 40% of Nebraskans that are disabled (37.6%) did not exercise outside of work, compared to 20% of non-disabled Nebraskans (20.1%).
- Almost a quarter of Nebraskans (23.8%) reported not exercising outside of work.

## Depressive Disorder

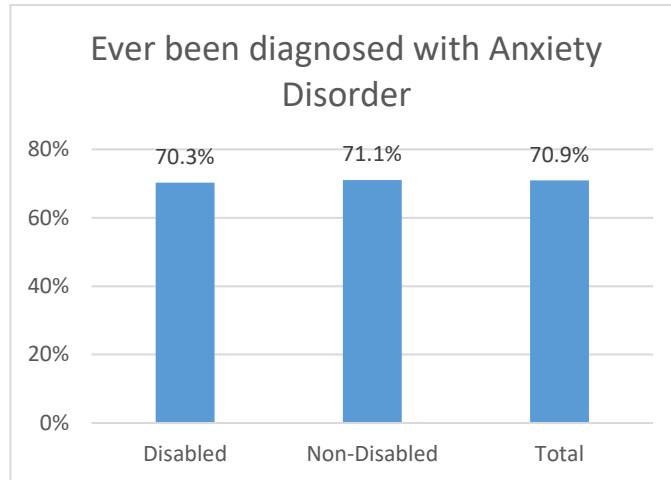
*Survey Question: Has a doctor or other health care provider ever told you that you have a depressive disorder (including depression, major depression, dysthymia, or minor depression)?*



- Approximately one-third of disabled Nebraskans (34.8%) reported having ever been diagnosed with a depressive disorder, whereas only 13% was reported by non-disabled Nebraskans.
- Only 17.5% of Nebraskans reported having ever been diagnosed with a depressive disorder.

## Anxiety Disorder

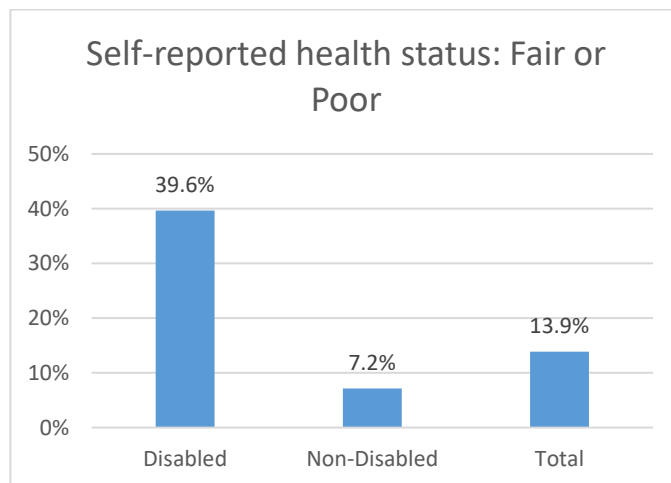
*Survey Question: Has a doctor or other health care provider ever told you that you had an anxiety disorder (including acute stress disorder, panic disorder, phobia, post-traumatic stress disorder, or social anxiety disorder)?*



- Approximately similar percentages were reported by the disabled (70.3%) and non-disabled (71.0%) population in Nebraska for those that had ever been diagnosed with an anxiety disorder.
- On average, 7 out of 10 Nebraskans (70.9%) reported having ever been diagnosed with an anxiety disorder.

## Perceived Health Status

*Survey Question: Would you say that in general your health is – excellent, very good, good, fair, or poor.*



- Two-fifths of disabled Nebraskans (39.6%) perceived their health status as fair or poor, whereas only 7.2% of the non-disabled population in Nebraska reported the same.
- Just over 10% of the total Nebraska population (13.9%) perceived their health status as fair or poor.

# Health Behaviors

Disabled vs Non-disabled



## Dental Visit

Disabled Nebraskans were slightly less likely than non-disabled Nebraskans to visit a dentist.

## Routine Checkup

Disabled Nebraskans reported 5.7% higher percentage of those that had a routine checkup in the past 2 years than non-disabled Nebraskans.

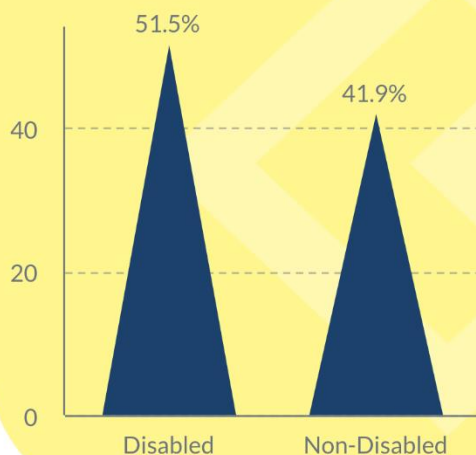
## Cholesterol Check

Disabled Nebraskans reported 12% higher percentage of those that ever had their cholesterol checked than non-disabled Nebraskans.

## Sigmoidoscopy

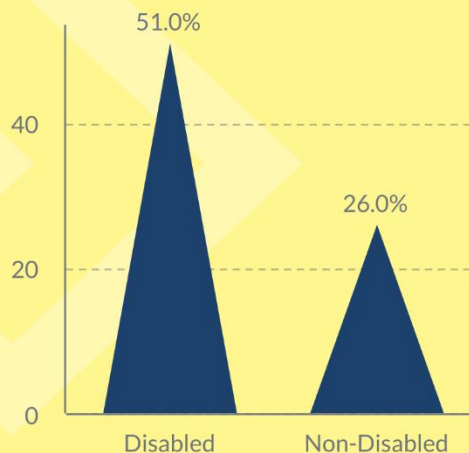
Disabled Nebraskans were slightly more likely than non-disabled Nebraskans to have a sigmoidoscopy.

## Flu Shot



Over half of the disabled population in Nebraska had received a flu shot and/or pneumonia shot in the past 12 months.

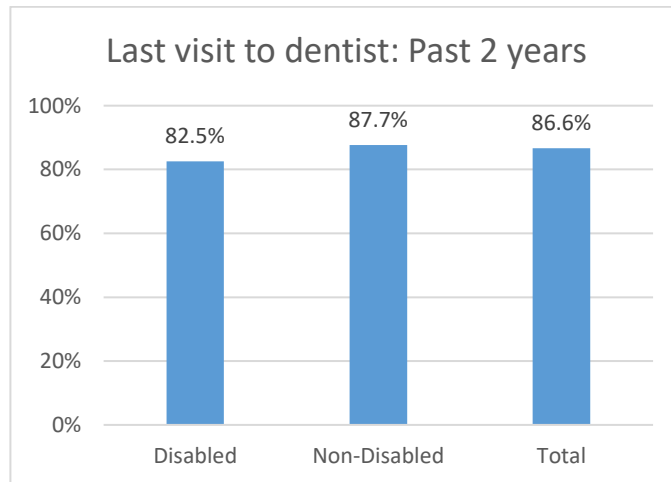
## Pneumonia Shot



## Health Behaviors

### Dental Visit

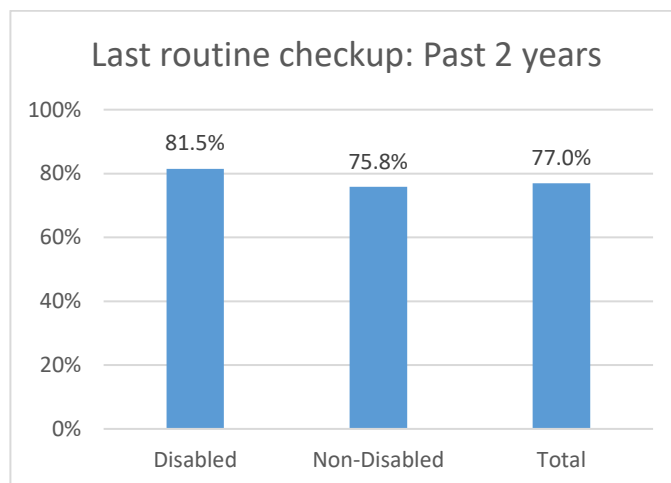
*Survey Question: How long has it been since you last visited a dentist or a dental clinic for any reason includes visits to dental specialists, such as orthodontists?*



- The percentage of non-disabled Nebraskans (87.7%) that had a dental visit in the past two years was slightly higher than the percentage reported by disabled Nebraskans (82.5%).
- Almost 90% of the total Nebraska population reported having had a dental visit in the past two years.

### Routine Checkup

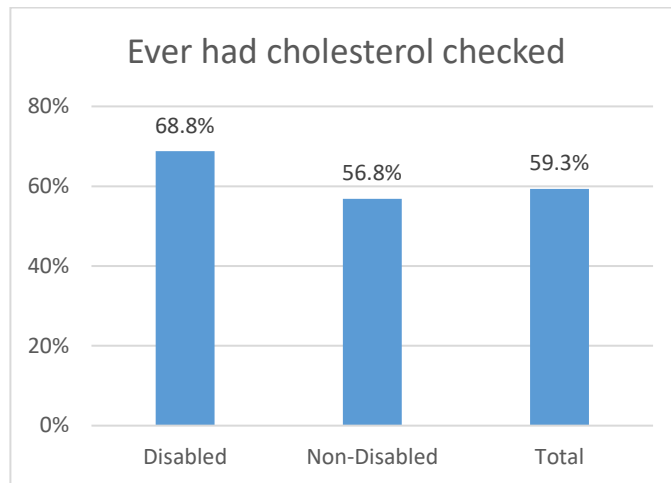
*Survey Question: About how long has it been since you last visited a doctor for a routine check-up?*



- The percentage of disabled Nebraskans (81.5%) that had a routine checkup in the past two years was just 5.7% higher than the percentage reported by the non-disabled Nebraskans (75.8%).
- Three-quarters of the total Nebraska population (77.0%) reported having had a routine checkup in the two years.

## Cholesterol Check

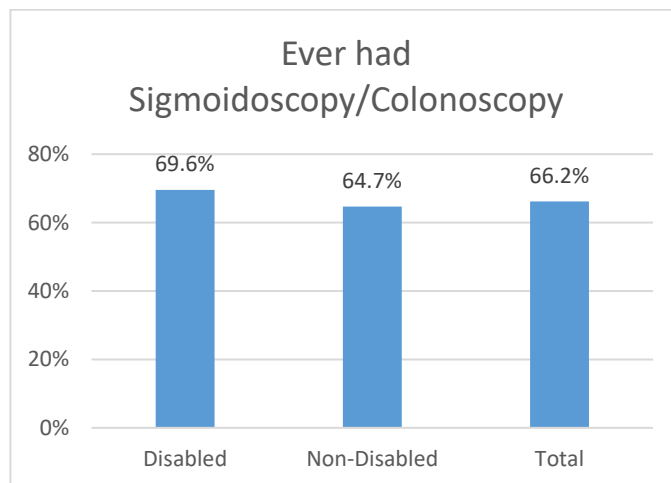
*Survey Question: Have you ever had your blood cholesterol checked?*



- Disabled Nebraskans (68.8%) reported a slightly higher percentage of those who ever had their cholesterol checked compared to the non-disabled population (56.8%) in Nebraska.
- Approximately three out of five Nebraskans (59.3%) ever had their cholesterol checked.

## Sigmoidoscopy

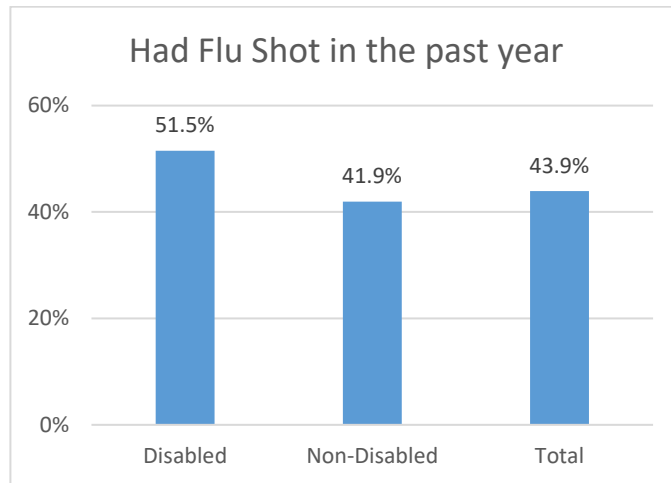
*Survey Question: Sigmoidoscopy and colonoscopy are exams in which a tube is inserted in the rectum to view the colon for signs of cancer or other health problems. Have you ever had either of these exams?*



- Similar percentages of those who ever had a sigmoidoscopy or colonoscopy were reported by disabled (69.6%) and non-disabled Nebraskans (64.7%).
- Approximately two-thirds of the total Nebraska population (66.2%) reported having ever had a sigmoidoscopy or colonoscopy.

## Flu Shot

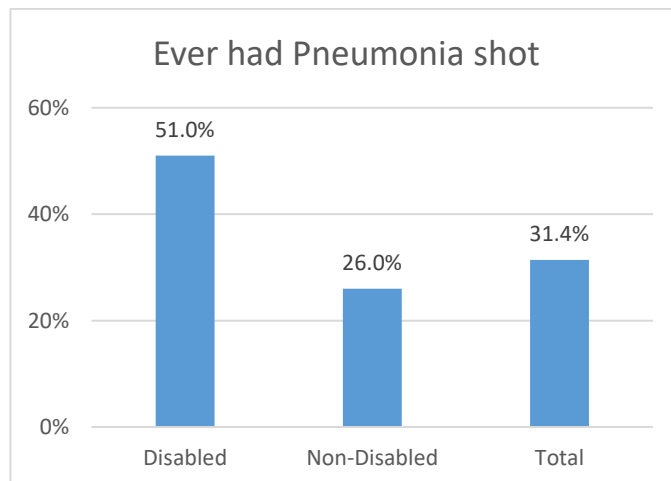
*Survey Question: A flu shot is an influenza vaccine injected in your arm. During the past 12 months, have you had a flu shot?*



- Over half of the disabled population (51.5%) in Nebraska received a flu shot in the past year, compared to only 41.9% of non-disabled Nebraskans.
- The percentage of the total Nebraska population that received a flu shot in the past year was 43.9%, slightly lower than the percentage reported by disabled Nebraskans.

## Pneumonia Shot

*Survey Question: A pneumonia shot or pneumococcal vaccine is usually given only once or twice in a person's lifetime and is different from the flu shot. Have you ever had a pneumonia shot?*



- Over half of the disabled population (51.0%) in Nebraska reported having ever had a pneumonia shot. This was almost two times the percentage reported by non-disabled Nebraskans (26.0%).
- Overall, 31.4% of Nebraskans reported having ever had a pneumonia shot, approximately 20% less than the percentage reported by disabled Nebraskans.

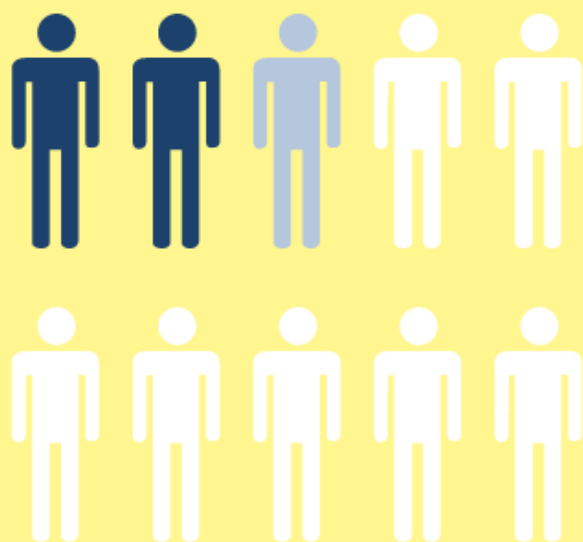
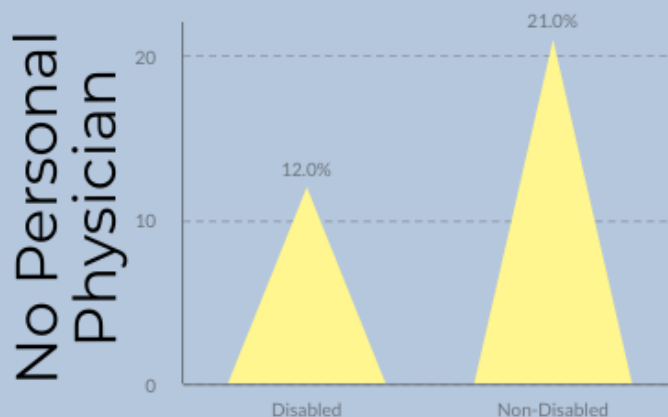
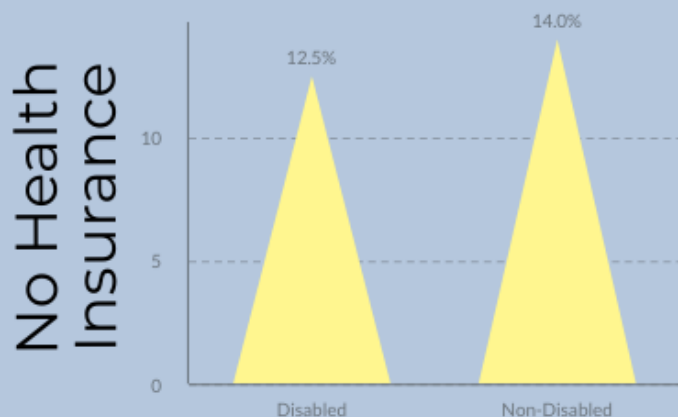


# Access to Healthcare

Disabled vs Non-disabled



The disabled population in Nebraska were slightly less likely than the non-disabled population to have no health insurance and/or personal physician.



## Unable to see a physician due to cost

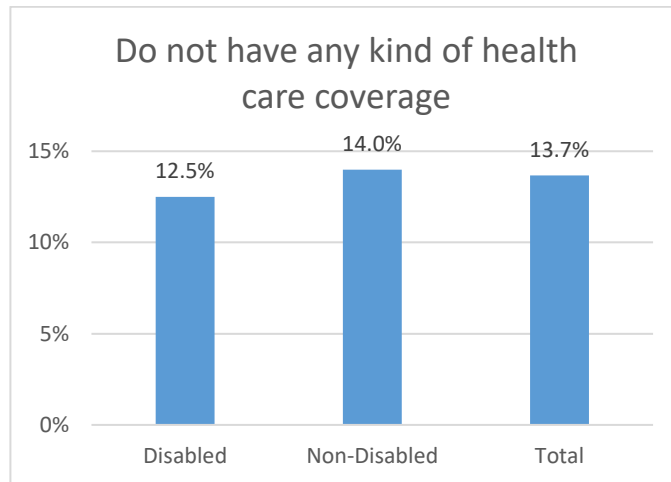
Two out of ten disabled Nebraskans reported unable to see a physician due to cost, compared to only one out of ten non-disabled Nebraskans.



## Access to Health Care

### No Health Insurance

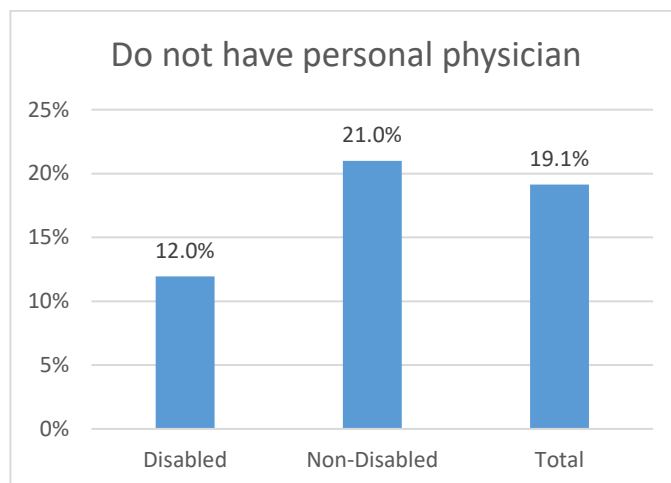
*Survey Question: Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare?*



- The percentage of those without any kind of health care coverage was slightly higher for non-disabled Nebraskans (14.0%) than disabled Nebraskans (12.5%).
- Almost 14% of the total Nebraska population (13.7%) reported not having any kind of health care coverage.

### No Personal Physician

*Survey Question: Do you have one person you think of as your personal doctor or health care provider?*

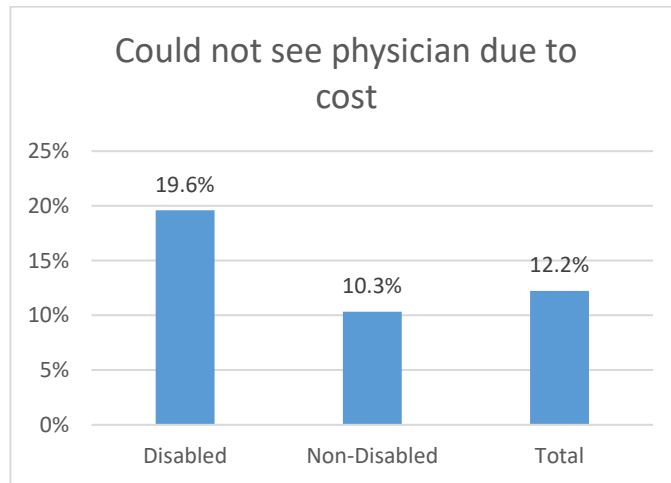


- Over one-tenth of the disabled population in Nebraska (12.0%) reported not having a personal physician, whereas one-fifth of the non-disabled population in Nebraska (21.0%) reported the same.
- Approximately one in five people in Nebraska (19.1%) reported not having a personal physician, almost a similar proportion reported by the non-disabled Nebraskans.



## Unable to See a Physician Due to Cost

*Survey Question: Was there a time in the past 12 months when you needed to see a doctor but could not because of cost?*



- Approximately one-tenth of non-disabled Nebraskans (10.3%) reported they were unable to see a physician due to cost, half of the percentage reported by disabled Nebraskans (19.6%).
- The percentage of those unable to see a physician due to cost was slightly higher for the total Nebraska population than non-disabled Nebraskans.

## Conclusion

The purpose of this report is to provide a more in-depth look at the disparities experienced by Nebraskans with disabilities. In many of the presented factors, those with a disability experienced a higher percentage of negative health outcomes and risk factors when compared to individuals without a disability.

The percentage of Nebraskans with a disability (39.6%) who perceived their health status as either fair or poor was much higher than Nebraskans with no disability (6.1%). A higher proportion of individuals with a disability (37.6%) reported not getting exercise outside of work compared to their counterparts (20.1%). Diabetes among those with a disability was three times higher than those who reported no disability. All measures related to cardiovascular disease (high blood pressure, heart attack, coronary heart disease, and stroke) were higher for respondents who were disabled than those who were not. The diagnosis of arthritis among disabled respondents was 3.4 times higher than non-disabled respondents. Measures related to mental health, such as depression were lower among individuals who reported they had no disability. The percentage of disabled Nebraskans who were unable to see a physician due to cost was twice that of non-disabled Nebraskans.

Incorporating this data into policies and procedures, as well as implementing and evaluating interventions to address these issues, will help reduce the disparities experienced by Nebraskans who have disabilities.