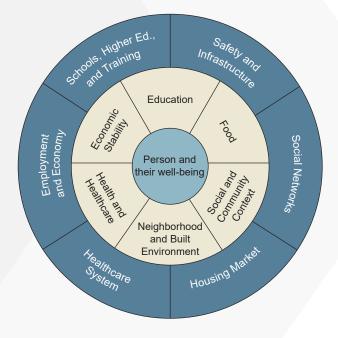
FACT SHEET

Social Determinants of Health in North Dakota

Various external factors, referred to as social determinants of health (SDOH), can affect health status and explain why some Americans are generally healthier than others are. SDOH include conditions where people live, work, learn, and socialize. Six factors are recognized as core social determinants of health. They are individuals' economic circumstances, their education, food access, the physical infrastructure of their environment, the social and community context in which they live, and their overall health and access to healthcare. An example pertinent to North Dakota would be the rurality of the state and how this affects residents who live in rural areas.

Figure 1. Social Determinants of Health Wheel



Economic Stability

Economic stability can encompass numerous factors including the overall health of the economy for an area in which an individual lives, employment, poverty, and opportunities in various industries. The unemployment rate is one commonly used economic measure that can change very quickly. For instance, In March of 2020, North Dakota reported an unemployment rate of 2.0% but this rate jumped to 9.1% in April of 2020.³ Also, poverty can have a significant impact on an individual's health as it can limit access to services and resources including healthy foods, good housing, and healthcare. It is estimated that 10.6% of the total population of North Dakota is



living in poverty while 11.0% of children under the age of 18 are living in poverty.⁴

Education

Education is an important facet of social determinants of health as obtaining an education can lead to increased job and economic opportunities. In North Dakota, the cohort graduation rate was 87.2% in 2019, which exceeds the national number of 84.6%.⁵ About 7.5% of North Dakotans age 25 or older have no high school diploma, which is far lower than the national number of 12.3%.⁶ North Dakota has seen a 19.1% increase in enrollment in public schools from the 2010-2011 school year to the 2019-2020 school year.⁷ Generally, obtaining a college degree provides more opportunities for employment. In North Dakota, 29.5% of individuals aged 25 or older have obtained a bachelor's degree or higher.⁶

Food Access

Lack of access to fresh, healthy foods is associated with poor diets and higher levels of obesity, diabetes, and other negative health outcomes.⁸ Programs that provide healthy, affordable food result in fewer negative health outcomes and chronic illnesses among the population, especially when targeted towards children in need.⁹ In North Dakota, there are about 2.4 grocery stores per 10,000 North Dakota residents but some counties have no grocery stores at all.¹⁰ A lack of grocery stores can contribute to food deserts, which are geographical areas with limited access to a variety of healthy and affordable food. There are 17 census tracts in North Dakota that are considered food deserts, with 56,724 North Dakota residents living in these census tracts.¹¹

Physical Infrastructure

The physical environment in which individuals live can also affect their overall health. Factors such as roads, air quality, and access to both outdoor and indoor recreation can greatly vary between communities. One study found that fewer recreational facilities per capita was a predictor of obesity in non-metro settings. ¹² Based on the 2010 population, there are about 14.4 recreation/ fitness facilities per 10,000 residents in North Dakota. ¹⁰ Other ways communities can offer recreational activities include the newspaper, a town newsletter, town websites or social media pages, or on bulletin boards in community spaces announcing community events.

Social and Community Context

Access to community and social supports also influences an individual's overall health. Studies have shown that loneliness and social isolation are associated with an increase in all-cause mortality. Social isolation has also been linked to cardiovascular disease. Some communities as a whole work on building social networks for individuals living in their community by organizing community events. A model that may also prove beneficial is that of community health workers (CHWs). CHWs work in conjunction with the local healthcare system and public health officials, providing support for individuals seeking healthcare. Further, they can help patients navigate the local healthcare system, connect people to healthcare and healthcare resources, provide culturally competent health education and information, serve as patient advocates, and provide numerous other services.

Health and Healthcare

Access to healthcare and healthcare resources can be affected by where individuals live, their economic status, their ability to navigate the health system, and other social determinants. One way to examine access to and availability of healthcare services and providers is through Health Professional Shortage Area designations or HPSAs. As of June 2020, about 94% of counties in North Dakota are fully or partially designated for primary care, 49% of counties are fully or partially designated for dental health, and 91% of counties are fully or partially designated for mental health.¹⁵ Individuals located in a HPSA may have increased travel time and distance to healthcare services and/or they may have to wait longer periods of time to access healthcare services. Insurance coverage also plays a role in access to healthcare. The majority of the population of North Dakota has some form of health insurance coverage but in 2018, about 8.1% of the population was uninsured, a decrease from 11.5 % in 2009.16

Conclusion

All these factors are linked and influence one another. It is important to recognize how disparity in one area of the social determinants of health could affect other areas of an individual's life. Some of the goals when addressing social determinants of health are increasing health equity and reducing disease prevalence.¹⁷ Reducing disease prevalence includes making efforts towards reducing obesity, cardiovascular disease, diabetes, cancer, and other conditions, all of which can be influenced by social determinants of health.

References

- Centers for Disease Control and Prevention. (January 2018). Social determinants of health: Know what affects health. cdc.gov/socialdeterminants/index.htm
- Office of Disease Prevention and Health Promotion. (August 2020). Social determinants of health. Healthy People 2020. healthypeople. gov/2020/topics-objectives/topic/social-determinants-of-health
- 3. U.S. Bureau of Labor Statistics. (2020). Economy at a glance: North Dakota. bls.gov/eag/eag.nd.htm#eag_nd.f.1
- U.S. Census Bureau. (December 2019). SAIPE state and county estimates for 2018. census.gov/data/datasets/2018/demo/saipe/2018state-and-county.html
- U.S. Department of Education. (2019). National center for education statistics. Retrieved from americashealthrankings.org/explore/annual/ measure/Graduation/state/ND
- U.S. Census Bureau. (2018). 2014-2018 American Community Survey. Retrieved from census.gov/programs-surveys/acs/data.html
- North Dakota Department of Public Instruction. (2020). Public and non-public enrollment data 2009-2020. Retrieved from nd.gov/dpi/ data
- Gregory, C. & Coleman-Jensen, A. (July 2017). Food insecurity, chronic disease, and health among working-age adults. ers.usda.gov/ webdocs/publications/84467/err-235.pdf?v=42942
- Cook, J. T., Frank, D. A., Berkowitz, C., Black, M. M., Casey, P. H., Cutts, D. B., Meyers, A. F., Zaldivar, N., Skalicky, A., Levenson, S., Heeren, T., & Nord, M. (2004). Food insecurity is associated with adverse health outcomes among human infants and toddlers. The Journal of Nutrition, 134(6), 1432-1438. Retrieved from academic.oup. com/jn/article/134/6/1432/4870889
- U.S. Department of Agriculture. (2016). Economic research service: Food environment atlas. ers.usda.gov/data-products/food-environment-atlas/data-access-and-documentation-downloads/
- U.S. Department of Agriculture. (2015). Economic research service: Food access research atlas. ers.usda.gov/data-products/food-access-research-atlas/
- Ahern, M., Brown, C., & Dukas, S. (2011). A national study of the association between food environments and county-level health outcomes. The Journal of Rural Health, 27(4), 367-379. onlinelibrary.wiley. com/doi/abs/10.1111/j.1748-0361.2011.00378.x
- Leigh-Hunt, N., Bagguley, D., Bash, K., Turner, V., Turnball, S., Valtora, N., & Caan, W. (2017). An overview of systematic reviews on the public health consequences of social isolation and loneliness. Public Health, 152 157-171. pubmed.ncbi.nlm.nih.gov/28915435/
- National Heart, Lung, and Blood Institute. (June 2014). Role of community health workers. nhlbi.nih.gov/health/educational/healthdisp/role-of-community-health-workers.htm
- North Dakota Primary Care Office. (2020). Shortage designation management system: Health professional shortage areas [Data set].
- U.S. Census Bureau. (2018). Small area health insurance estimates (SAHIE) program. census.gov/programs-surveys/sahie.html
- Center for Disease Control and Prevention. (December 2019). NCH-HSTP social determinants of health. cdc.gov/nchhstp/socialdeterminants/faq.html

