



Kandiyohi-Renville
Community Health Board
Public Health
Prevent. Promote. Protect.

Kandiyohi-Renville
Community Health
Assessment
March 2019

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Introduction

What is health?

The World Health Organization calls health, “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.” Everything in our lives — our families, homes, neighborhoods, jobs, schools, the land, water, and air — impacts our health.

Health is a resource for our everyday lives. If we are healthy, we can engage with our family and friends, attend school, go to work, play, and be active participants in society by volunteering, voting, and more. Each of us is part of multiple communities, and our health results largely from our interactions with the people and the places that surround us, including both the man-made and the natural world. Because health comes from our interactions, health is something we shape together, and each person’s health is affected by every other person’s health.

What creates health?

For many years, public health has focused on individual behavior change as the means of improving health. We are familiar with the advice to eat right and exercise to impact our weight, our blood pressure, and our sleeping habits. Without discounting the role of the individual, studies show that the circumstances of our lives — in particular where we live — play the largest role in our health. Where we live determines our options and influences our choices no matter how well-intentioned or motivated we may be to “make healthy choices.”

Decades of study on the **social determinants of health** show that the policies and processes that shape the daily circumstances of our lives creates health. Our individual behaviors are overshadowed by a much larger set of economic and social forces put into action by policy decisions at every level of government.

The perspective that health is dependent on the individual prevents us from making the kinds of changes that *would* generate good health: policies that assure all children thrive, equitable educational and job opportunities, shared power and decision-making, access to health care, affordable housing, multiple transportation options, and unpolluted environments.

What is health equity?

Health equity is a state of affairs where everyone has what they need to be healthy and no one is prevented from being as healthy as they can be by unjust or unfair barriers. We can only achieve health equity when all children get a loving and healthy start; when we can all get a good education and good jobs; when we can all take part in the decisions that shape our communities; and when we all have good living conditions. When some of our populations are not as healthy as they could be, it is typically because of inequities in these conditions. To achieve health equity, we need to tell a story about health that goes beyond the individual and is based in our growing understanding of what *really* creates health.

Looking beyond averages

A thorough community health assessment is a customary practice and core function of public health. Every Minnesota Community Health Board must complete an assessment every five years. The community health assessment was prepared under a KaRe to Achieve leadership team and the Kandiyohi-Renville CHB, using data from the Minnesota Department of Health (MDH), the Centers for Disease Control and Prevention (CDC), student and PACT for Families surveys, SW Regional Adult Health Survey, U.S. Census, and local hospital and clinics.

The *2019 Kandiyohi-Renville Community Health Assessment* tells the story of our health today and how it has been shaped over time by opportunities, belonging, and interactions with nature. This assessment intends to help make clear the association between the conditions of our lives and our health. The assessment sets the stage for our work with community partners and guides our collective efforts to assure that we achieve the Kandiyohi-Renville Community Health Board mission to lead efforts to:

- **prevent** illness, disease and injury,
- **promote** healthy and safe neighborhoods,
- **protect** and enhance the well-being of those who live, work, learn and play in our communities.

The *2019 Kandiyohi-Renville Community Health Assessment* addresses four areas that shape our health:

People	Who we are, where we've come from, and our real and perceived differences.
Opportunity	Our opportunities for education, employment, income, housing and transportation.
Nature	Our interactions with the natural environment and the places we live, learn, work, and play.
Belonging	Our connections with each other from early childhood through our later years.

Childhood as a “critical moment” for lifetime health

Early childhood is a critical time to maximize the opportunity for a healthy future. Early nutrition, the material environment, and interactions with nature and with the people around us are all potent influences on our life-long health. Parents who receive support to provide safe, stable, and nurturing environments can help their children grow into strong, successful adults. Homes full of affection and free of the stress caused by poverty and other negative conditions help us develop good mental, social, and physical health.

Traumatic childhood experiences increase our risk for a host of negative health behaviors and health outcomes throughout the lifespan. The impact of opportunity, nature, and belonging on children is highlighted in each section of this assessment.

The challenges of a multi-county health assessment

This assessment can only say a little about a lot of things

This community health assessment provides snapshots of many data points, to draw an overall picture of health and the conditions that it creates in Kandiyohi and Renville Counties. Many other topics have been studied but not written about in great detail. Only limited data are available for some populations, such as the rural poor, specific ethnic and cultural group populations, the LGBTQ community, and people with disabilities. This makes it challenging to make population-level comparisons and provide a complete picture of the health and health inequities experienced by these populations.

Data categorizes us

Each individual is unique, each population is unique, each county is unique, and each has value. However, research methods require creating categories for analysis, and grouping people, populations, and communities in such a way that hide some of our real and important differences while allowing comparisons.

An assessment can only start the conversation about health in the community. The work of advancing health requires engaging with people and communities to more fully understand all our unique circumstances and to shape action for change.

Trauma and resilience play a role in our health

The story of health is one of both trauma and resilience. When looking at disparities by ethnicity, income level, or size of a rural community, it is very easy to feel that everything about these populations must be cause for concern. Yet, painting a picture of despair is inaccurate and unhelpful, because it perpetuates deficit-based models and narratives. It does not take into account a community's strengths. It is important to remember that with trauma comes both vulnerabilities and resiliency. Vulnerabilities (or risks) include health, socioeconomic, and educational factors. Community assets, such as strong and close-knit communities and adaptability and determination in the face of adversity, are resiliency factors that contribute to improved health outcomes.

Thinking about individuals can overshadow the role of system

Most of what we know today about health comes from aggregate data collected from individuals: individual rates of disease or injury, and individual behaviors like smoking and exercise. When we emphasize personal choice as *the* key strategy for improving health, we attribute health problems to the individual alone, rather than seeing each person in a set of surroundings. However, our growing understanding about what creates health pushes us to locate the source of health problems in the systems and structures that shape individual behavior and health across our communities, for good and for ill.

The tension persists because so much of what we know about health comes from our analyses of individuals, and because the individual and his/her ability to make choices is still important. The challenge that confronts us is to move from a focus on individuals to an analysis of communities and to get much better at addressing the policies and systems (economic, educational, social, and more) that create or hinder health.

Across time

This assessment embraces the multiple perspectives of past, present, and future.

We must learn about and understand the past to confront the issues of today. If we will not or cannot see the impact of historical policies on health, we cannot understand health inequities or make good decisions for the future. The past also gives us examples of hope and progress.

We must act in the present. Reflection and understanding should lead to concrete steps for change today. We can always do something *now*.

We must engage in the work of advancing health with hope for the future. It is easy to become overwhelmed by the severity of health inequities. With growing partnerships and the wisdom of many, we can build our collective efforts toward meaningful change.

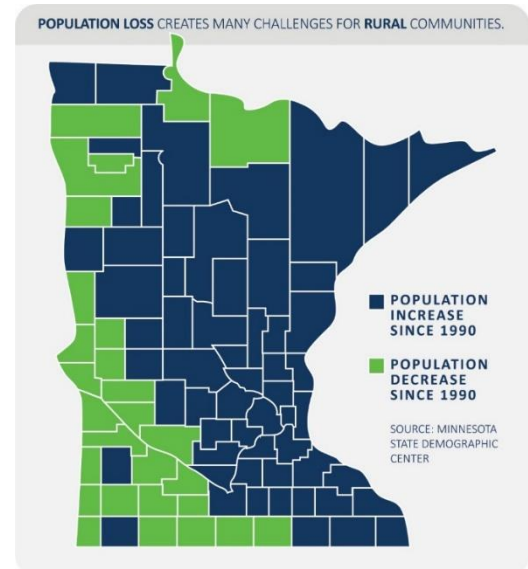
This community health assessment provides a grounding for people and organizations in Kandiyohi and Renville Counties to develop plans for improving our health.

People

There are 87 counties in Minnesota. Kandiyohi County is the 23rd most populated county in Minnesota, while Renville County is the 56th. In 2016, Kandiyohi and Renville Counties had a combined population of 57,155, with 42,495 people residing in Kandiyohi County and 14,660 in Renville County.

Minnesota's geography is a mixture of rural and urban areas:

- 73% (4 million) live in urban areas → more than 50,000 residents
- 11% (over 600,000) live in or near large towns → 10,000 to 49,999 residents
- 7% (nearly 390,000) live in or near small towns → 2,500 to 9,999 residents
- 8% (more than 434,000) live in more remote rural areas



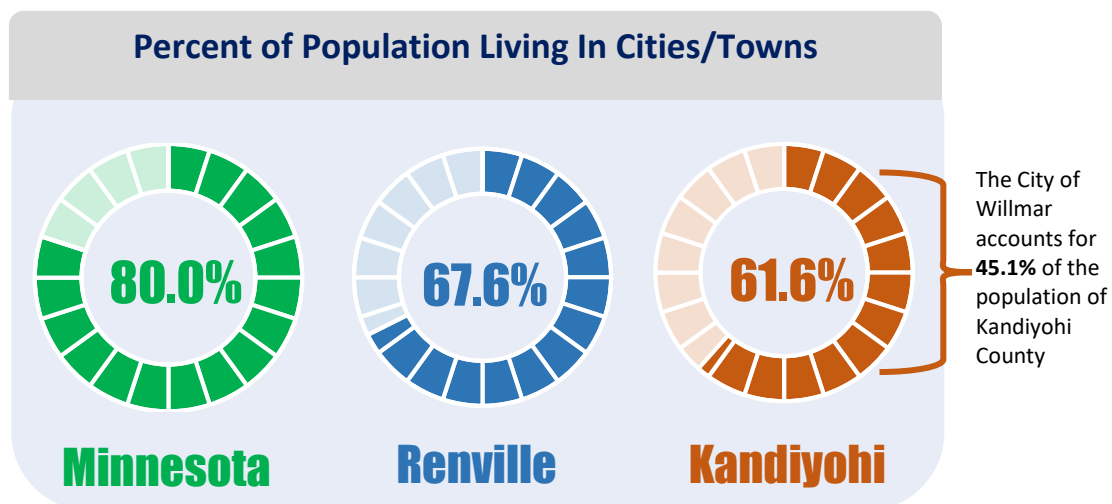
Kandiyohi County geography:

- Town/rural mix: small towns with one large town, Willmar, which accounted for about 45.1% (19,610) of the county's total population in 2016

Renville County geography:

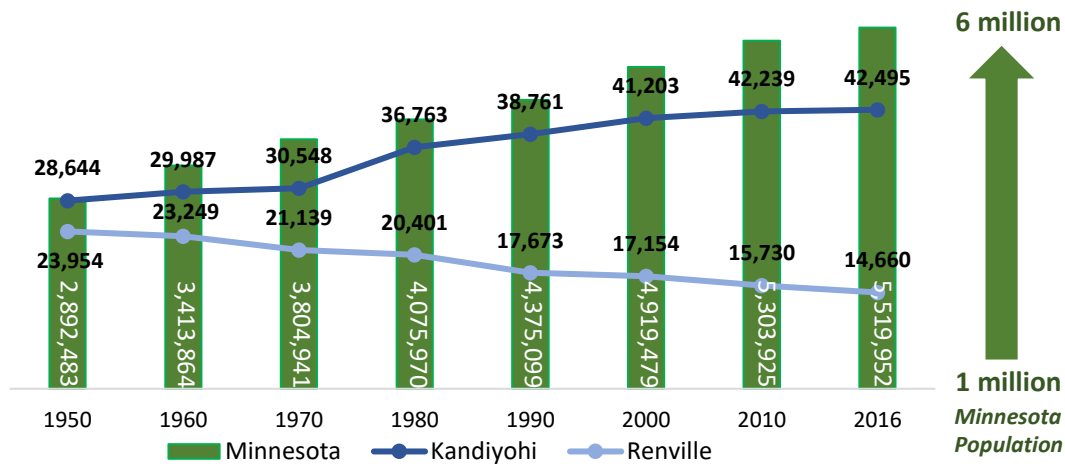
- Small town/rural mix: 67.6% (9,906) lived in small towns in 2016

Being rural poses unique challenges, such as the ability to maintain infrastructure (roads, bridges, water quality, sewers, schools and more) and to protect the health and well-being of all residents. Due to the distance between healthcare facilities and trauma centers, rapid access to specialized care can be more challenging for people injured in rural areas. www.cdc.gov/media/releases/2017/p0112-rural-death-risk.html



According to the Minnesota State Demographic Center, Minnesota's total population is estimated to exceed 6 million by 2032, and grow to nearly 6.8 million by 2070. By 2035, Kandiyohi County's population is expected to grow from an estimated 42,495 to 43,046, or about 28 people per year. Renville County's population is expected to decrease from an estimated 14,660 to 11,942. Entirely rural counties across the state have experienced population losses overall since 2010. One explanation for this change may be that rural populations are considerably older, on average. Consequently, entirely rural counties have seen the number of deaths to residents outpace the number of births to residents since 2000.

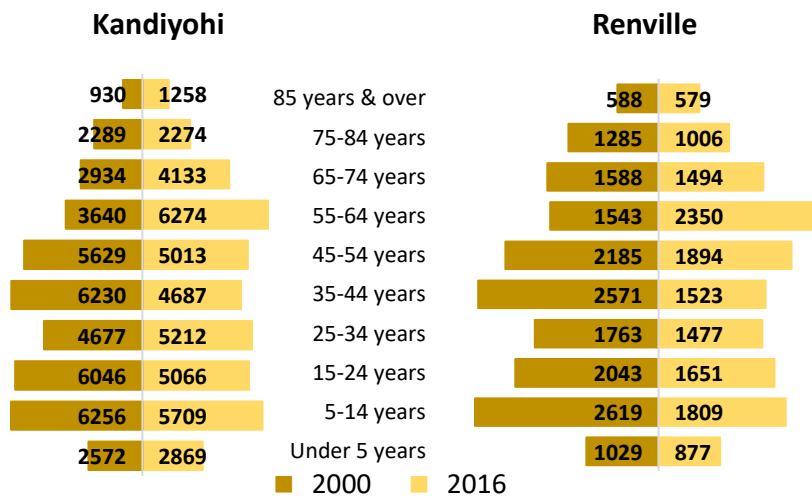
Population Change 1950-2016



Mid Minnesota County Profile Kandiyohi and Renville Counties 1-25-2018

The aging population

Aging presents new opportunities — to volunteer in the community, to try a different career, or to take on a new role in the family. Rates of volunteerism for older adults in Minnesota far outpace national rates. A growing body of research indicates that volunteers have lower mortality rates, greater functional ability and lower rates of depression later in life. Older adults who “give back” provide tremendous in-kind benefits to communities and secure a better future for themselves in the process. Aging also presents new challenges to health, including increasing levels of disability. For example, older adults are at increased risk of injuries from falls, over half of which occur at home. As of 2016, 32.9% of Kandiyohi County's population was aged 55 or older with 37% of Renville County's population aged 55 or older.



Mid Minnesota County Profile Kandiyohi and Renville Counties 1-25-2018

In the coming two decades (2015-2035), Minnesota’s population under the age of 18 will grow modestly (by just 32,000). Meanwhile, the population age 65 and older will grow much more rapidly, adding more than half a million people (510,000+) over the same period. By 2035 – for the first time in the state's history – there will be more adults over age 65 than children.

Our local population has a similar projection for adults over age 65; however, there is a projected decrease in the population under 18 years of age in Kandiyohi County, with a very slight increase predicted for Renville County. By the year 2030, both counties are projected to have 1 in 4 residents who are of retirement age.

“Back in the day there was more vibrancy and community connections with people”

Renville County HEDA Report

“The police drive around and check on people” 88 year old Willmar resident

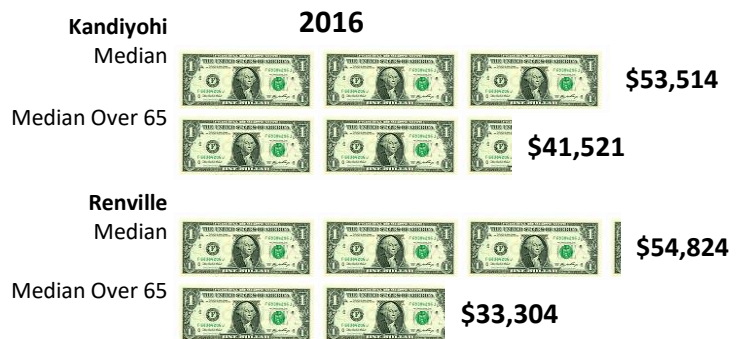
“Senior citizens have the opportunity to come to the senior center for exercise such as the bone builders”

85 year old Willmar resident

Securing adequate income can be challenging as adults move out of the workforce and depend on other sources of income, such as Social Security. Older adults in Kandiyohi and Renville Counties experience disparities in income.

Poverty may increase the risk of developing diabetes, and chronic disease can lead to more health expenses resulting in lower spendable income. Working-age adults living in households earning less than \$35,000 a year are 2½ times as likely to report having diabetes as those with higher incomes. *Minnesota Department of Health. (2016). Income, employment and diabetes*

Income Disparity in Adults Over Age 65



Our children

In 2016, Minnesota was home to 1,277,145 children under the age of 18, representing 23 percent of the state’s population. Over half of the state’s children (about 55%) live in the seven-county Twin Cities metropolitan area, and the remaining 45% live in the remaining 80 counties.

2016 data shows 24% of Kandiyohi County residents and 22% of Renville County residents were under the age of 18. *US Census.*

173,981, or 13.8%, or 1 in 7 of Minnesota’s children under the age of 18 lived in poverty in 2016. *Minnesota State Demographic Center. (n.d.). Children and Families. Retrieved July 19, 2017 from <https://mn.gov/admin/demography/data-by-topic/children-families/>*

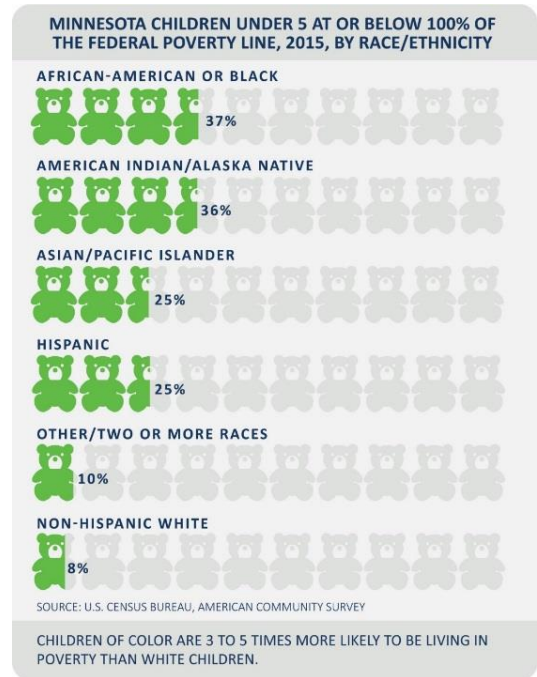
**16.2% of Renville County and 17% of Kandiyohi County children
lived in poverty in 2016**

Children whose families live in poverty are more likely to experience hunger, homelessness, and poor physical and behavioral health. Compared to peers in higher-income homes, they are far more likely to struggle in school, and less likely to graduate high school, putting them at risk for continued economic insecurity as adults. Children in poverty are also more likely to live in neighborhoods with fewer amenities and higher levels of crime and violence.

Minimizing the experience, duration, and impacts of poverty in the lives of our children will pay dividends for our communities in terms of a stronger, better prepared future workforce.

- Kandiyohi (\$53,514) and Renville (\$54,824) Counties have median household incomes that are typically less than the state of Minnesota (\$63,217). *Mid-Minnesota County Profile Kandiyohi and Renville Counties*
- 21% of households in Kandiyohi and Renville County had an income of less than \$25,000 in 2016 compared to the state of Minnesota at 18%.

It is critical to address these challenges facing our children so every child has the opportunity to grow up healthy.

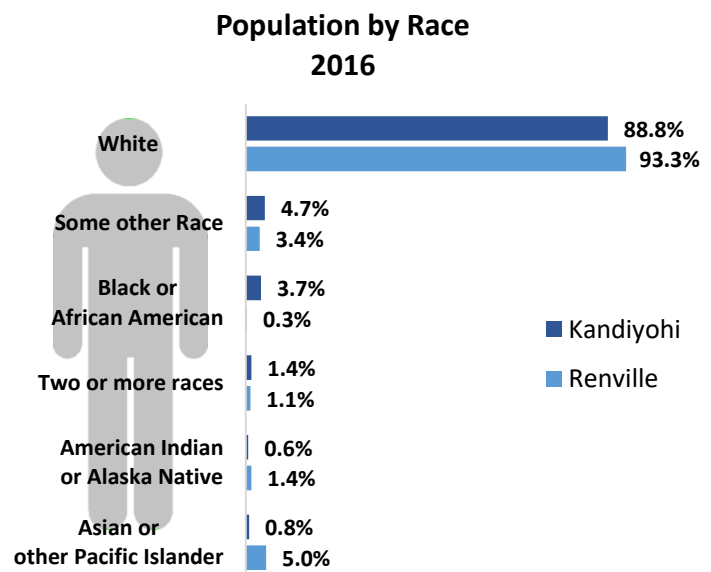


Race and ethnicity

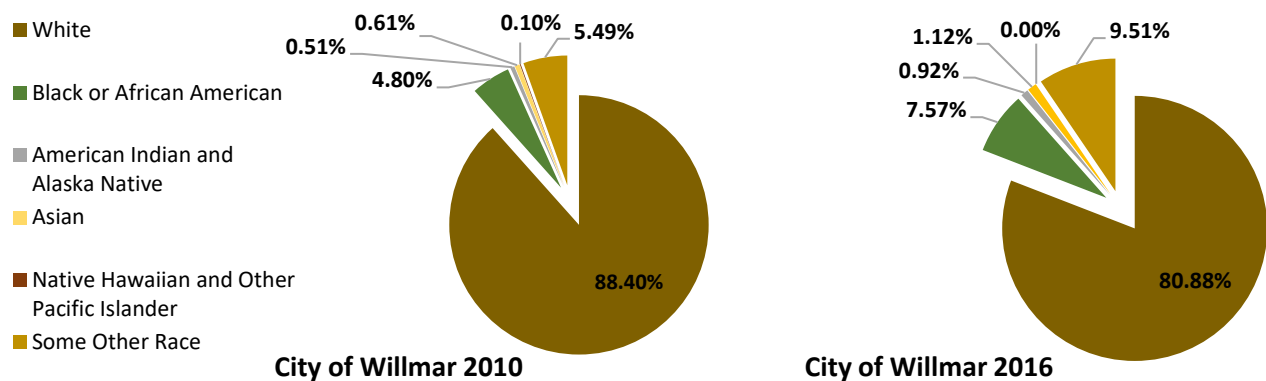
Minnesota is rapidly becoming more racially and ethnically diverse, where people of color (those who identify as a race other than White alone, and/or those who are Hispanic) make up 19% of the total population. All race groups have grown recently in Minnesota, but between 2010 and 2015, the state added four times as many people of color as non-Hispanic White residents.

In Kandiyohi County, the population who identified themselves as Black or African American increased from 1.9% (816) in 2010 to 3.7% (1,566) in 2016 while the white non-Hispanic population decreased by 3%. Those who identified as Hispanic or Latino increased 1.5% during the same time period.

In Renville County, the population who identified as Black or African American decreased from .6% (96) in 2010 to .3% (45) in 2016 while the white non-Hispanic population decreased by 2%. Those who identified as Hispanic or Latino increased 1.4% during the same time period. *US Census Table B03002*



In most small towns and rural areas, more than 90 percent of residents are white non-Hispanic. The city of Willmar is an exception. Those residing in the city of Willmar identifying as white went down from 88.4% in 2010 to 80.88% in 2016.



Mid Minnesota County Profile Kandiyohi County

IMMIGRATION

Over 80 percent of people in Minnesota have roots in northern Europe. French fur traders arrived in Minnesota in the 17th century and were among the first Europeans to call Minnesota “home”; other settlers followed. Today, Minnesota’s immigrant population includes people from all over the globe, including Africa, Asia, and Central and South America. The largest populations of immigrants to Minnesota today come from Mexico, China, Korea, and India. *Minnesota State Demographic Center, Department of Administration. <https://mn.gov/admin/demography/>*

Public Health in Kandiyohi County saw over 80 immigrants in 2016 from a variety of countries with the largest numbers coming from Mexico. Renville County, in contrast, did not see any new immigrants. 7.1% (3,012) of Kandiyohi County residents were foreign born in 2016, while 2.8% (406) of Renville County residents were foreign born. *Mid Minnesota County Profile Kandiyohi County*

REFUGEES

Refugees are people who have been forced to leave their home country, often because of war, disaster, or oppression. Refugee challenges are unique, including the trauma and upheaval of the refugee experience and challenging conditions in refugee camps. Minnesota has a long history of refugee resettlement.

From 1979 to the mid 1990s, the majority of refugee arrivals to Minnesota were from Southeast Asia following the instabilities in that region (Hmong/Laotians, Cambodians and Vietnamese). In the early 90s, Minnesota started seeing an increase in arrivals from the former Soviet Union and former Yugoslavia. Arrivals from sub-Saharan countries (Liberia, Sierra Leone, Ethiopia and Somalia) surged in the late 90s.

2004 was a record year in arrivals - nearly 15,000 Hmong refugees were evacuated from the Wat Tham Krabok, a Buddhist temple in Thailand; one-third, or nearly 3,500, were resettled in Minnesota.

Today, the largest populations of refugees to Minnesota come from Somalia, Liberia, Laos, Thailand, Vietnam, and Ethiopia. Minnesota is home to the second-largest population of Hmong in the U.S. (more than 66,000, including first, second, and third generations).

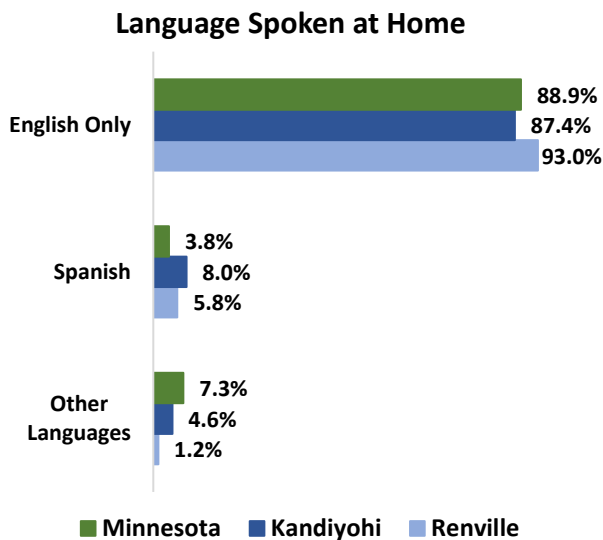
In 2016, eighty-eight percent of all secondary refugee arrivals to Minnesota were Somali. The majority resided in Hennepin (39%), Stearns (18%), and Kandiyohi (17%) counties. Somalis started arriving in Minnesota in 1992, while Kandiyohi County started to see arrivals in 2004.

Somali refugees choose Minnesota and Kandiyohi County for a number of reasons, including jobs (work in poultry processing and manufacturing plants); family reunification; and area resources.

Many languages are spoken in homes throughout Kandiyohi and Renville Counties. During the 2016-2017 school year in Kandiyohi County homes, after English, the most common languages spoken were Spanish, Somali and Karen. Twenty-seven languages were spoken at homes where English was the non-primary language.

During the 2016-2017 school year in Renville County homes, after English, the most common languages spoken were Spanish and German. Four languages were spoken at homes where English was the non-primary language.

Minnesota Department of Education: 2016-2017 Primary Home Languages Total



American Fact Finder. American Community Survey (ACS) US Census

The LGBTQ population

Population-based data on persons who identify as lesbian, gay, bisexual, transgender, and questioning (LGBTQ) is becoming more available. The Minnesota Student Survey added questions of sexual orientation, gender identity, and gender expression to surveys for high school students in 2016.

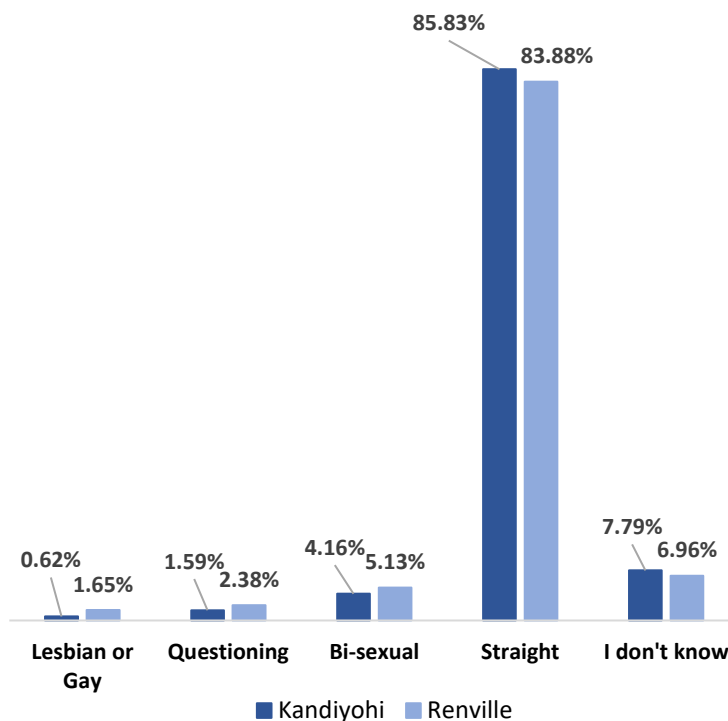
Kandiyohi and Renville County student combined grade level responses to the survey are shown in the graph to the right. In each grade, a range of 0 to 5 percent of students identify as transgender, genderqueer, gender fluid, or questioning gender identity.

Comparatively statewide, 1% of 9th and 11th grade students identify as gay or lesbian and 2-8% identify as bisexual. Those students across the state that identify as “questioning” ranged between 3% and 6% with those identifying as transgender, genderqueer, gender fluid, or unsure of their gender identity ranged between 2% and 4%.

2016 Student Survey: Sexual Orientation: Gender Identity; Gender Expression.

Which of the Following Categories Best Describes You?

2016 Minnesota Student Survey



People with disabilities

One in five Minnesota families with children has at least one child with a special health need (estimates of children with special health needs in Minnesota range from 160,000 to 200,000). *Minnesota Department of Health. Children and youth with special health needs (CYSHN)* Children and youth with special health needs are those who have (or who are at increased risk for) a chronic physical, developmental, behavioral, or emotional condition. Children with a disability face a lifetime of physical and social challenges. The challenges of parenting a special needs child can stress a family, increasing financial burdens and difficulties accessing adequate physical and mental health care and social support.

The definition of “disability” is purposely broad, inclusive, and not condition specific. It recognizes that all children and youth with special health needs, regardless of their condition, require a well-functioning, community-based system of resources to reach their full potential.

Disability in adults is defined in data collection around 6 types of functional difficulties experienced: hearing, vision, cognitive, ambulatory, self-care, and independent living.

Disabilities occur at a statistically similar percentage when comparing males and females. 8.5% percent of Minnesotans age 18 to 64 have a disability.

Kandiyohi County’s rate within this age group of 18-64 year olds (9.6%) is higher than the state, while Renville County’s rate is similar to the state.

The likelihood of developing a disability increases with age, and as our population ages, the number and percentage of people living with a disability is expected to rise.

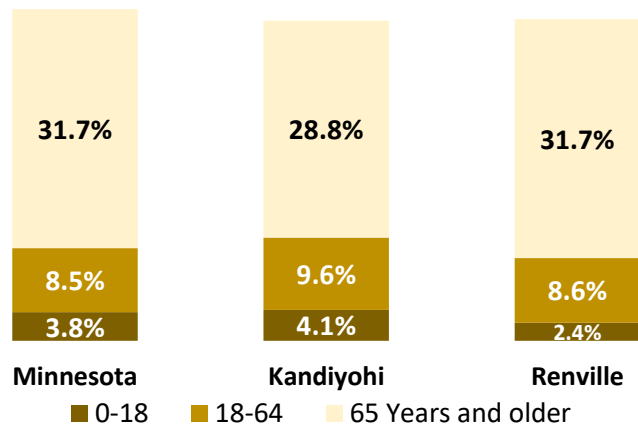
Some of the greatest challenges for people with disabilities arise because physical environments and social settings are not structured to support full participation. *Minnesota State Demographic Center.* People with disabilities live daily with challenges that include a lack of adequate accessible transportation, limited housing, unequal access to programs and facilities, barriers to education and employment, and reduced income. Minnesotans with disabilities are more than two times as likely to live in poverty as those without a disability. The stress of being poor, such as worry about money, increases the chance of developing chronic diseases later. About 19% of those with disabilities in the state live below the federal poverty line.

Kandiyohi County is a regional hub and therefore has many corporate and private foster care homes and group homes where a large number of the disabled live.

“Lack of group home staff to take me out in the community so I can do things”
32 year old disabled Willmar resident

Mental illness (depending on diagnosis and severity) can also be considered a disability, especially if a person’s environment is not set up to support successful management of their illness or if it limits their opportunities to participate in the community.

**Percent of People with Disability by Age
2016**



US Census Age by Disability Status B18101

Opportunity

The American Dream, as it is traditionally understood, describes a place where all of us have the opportunity to make a life for ourselves, and to improve our lives and our children's lives. Opportunity means having the chance to experience success at every stage of life, from early childhood through old age. The conditions that constrain or expand our available choices shape our opportunities. These conditions include what schools we can go to, what jobs are open to us, and even what kind of food is available to us.

Our opportunities are interconnected. For example, employment drives income. Housing depends on income and employment. Employment depends on our opportunities for training and education and our social connections. Our ability to manage demands of family and care for our health is influenced by whether our jobs offer benefits like health insurance and paid leave.

Social Determinants of Health are conditions in which people are born, grow, live, work, and age that shape health. Most people think of clinical care as the most important factor impacting health. Our behaviors, along with social and economic factors, have the greatest impact on the health of individuals and the community collectively. The conditions in which we live explain, in part, why some are generally healthier and others are not as healthy as they could be.

Examples of *social determinants* include:

- Availability of resources to meet daily needs (e.g., safe housing and local food markets)
- Access to educational, economic, and job opportunities
- Access to health care services
- Quality of education and job training
- Availability of community-based resources in support of community living and opportunities for recreational and leisure-time activities
- Transportation options
- Public safety
- Social support
- Social norms and attitudes (e.g., discrimination, racism, and distrust of government)
- Exposure to crime, violence, and social disorder (e.g., presence of trash and lack of cooperation in a community)
- Socioeconomic conditions (e.g., concentrated poverty and the stressful conditions that accompany it)
- Residential segregation
- Language/Literacy
- Access to mass media and emerging technologies (e.g., cell phones, the Internet, and social media)
- Culture

Addressing social determinants of health is important for improving health and well-being of entire communities.

We all do better when we all do better

Opportunity and our health

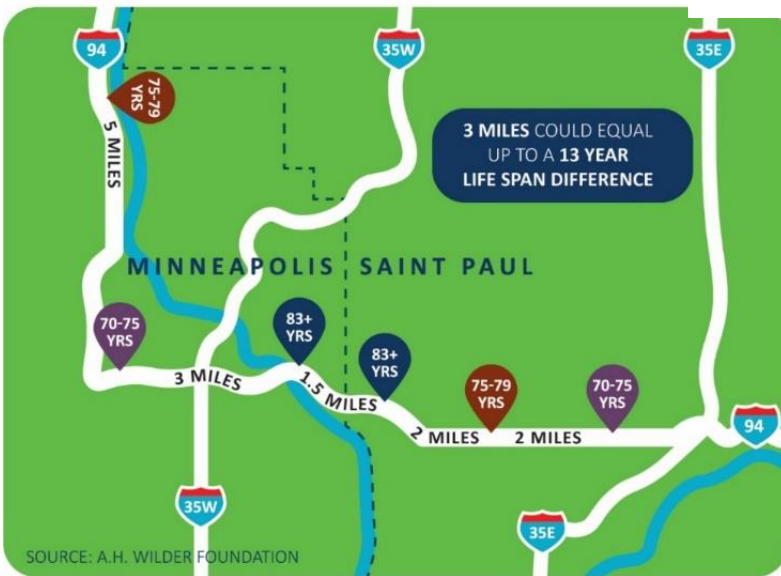
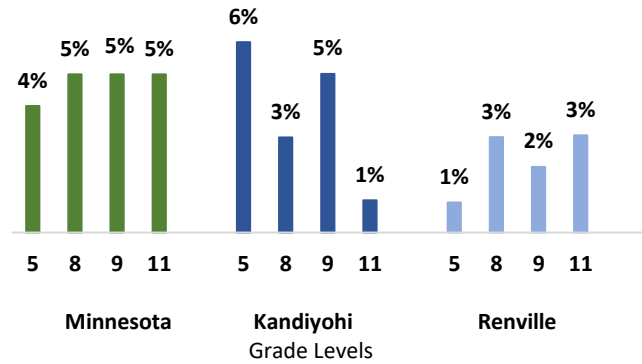
The opportunities envisioned in the American Dream — to earn a living, to own property, to determine the course of one's own life — are also important for health.

Research is very clear that whether we get a good education, have a permanent home, find work with good pay and health insurance, or have safe places to play improves or reduces our chances to be healthy.

The conditions that shape opportunity — income, in particular — have important and lasting impacts on our children’s health. Children need good nutrition, stable housing, and positive life experiences to grow healthy and strong. Living in families and communities that face constant economic stress can cause changes to young brains and bodies that show up as health problems later in life. While the percentages in the graph seem small, the numbers reflect real children who are hungry. For this survey, 63 children skipped meals because there wasn’t enough money for food.

Percentage of Students who Skipped Meals Because Families Didn't Have Enough Money to Buy Food

2016 Minnesota Student Survey

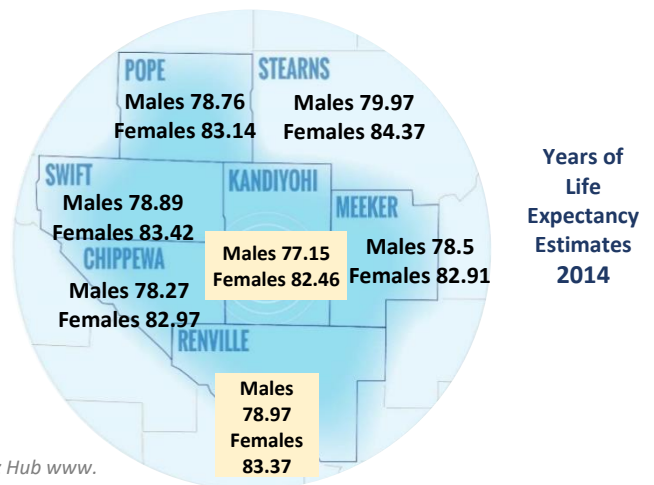


NOTE: this study has not been repeated since 2010.

A community’s income also affects health for people in that community. Communities that have more income, wealth and higher tax base have better schools, more full service grocery and other stores, better parks, recreation, roads, sidewalks, and access to medical care. Stress, lack of access to care, and unequal exposure to environmental hazards in communities that have lower income and do not have all the amenities contribute to more chronic disease and earlier deaths.

The lifespan of people living in higher income areas of the Twin Cities metropolitan area can be more than 13 years longer than people living in low income areas. Amherst H. Wilder Foundation. (2010). *The unequal distribution of health in the Twin Cities.*

Local data shows a less dramatic life span difference than that of the Twin Cities metropolitan area. In 2014, Renville County’s overall life expectancy was 79.67 years, while Kandiyohi was 81.17 years and the state was 80.9 years. However, the data does follow that the more rural the area, the lower life expectancy is also. Minnesota Department of Health, Behavioral Risk Factor Surveillance Survey



US Health Map Viz Hub www.vizhub.healthdata.org/subnational/usa

Education

Education is one of the clearest and strongest predictors of lifelong health. When we have more education, we are more likely to live longer, healthier lives.

Success in school leads to higher earnings and this improves our living conditions. Education allows us to find better-paying jobs with healthier working conditions and benefits, including health insurance and paid leave. Our children are more likely to be healthy too. *Robert Wood Johnson Foundation. (2013, March). Why does education matter so much to health?*

The high school graduation rate in Kandiyohi County was 88.6% in 2016 while the high school graduation rate in Renville County was 89.2%. *US Census American Community Survey*

	Kandiyohi County	Renville County
Percent with an associate's degree	14.2%	11.7%
College graduation rate	20.7%	14.6%
Percent with a graduate or professional degree	6.1%	2.4%
High school graduation rate	88.6%	89.2%
Percent who did not finish 9 th grade	5.2%	4.8%

Of the 571 births in Kandiyohi County in 2016, 26.1% were born to mothers who had less than a high school education. In Renville County, of the 201 births, 18% were born to mothers with less than a high school education.

Employment and benefits

Paid work provides a source of income and connects us to people, while offering a sense of purpose, meaning, and belonging in the community. Employment provides us with opportunities for success, and is the main way most people access health insurance. Most people in Minnesota have gainful employment with varying benefits such as retirement and health insurance. The following charts show the percentage of local employment by occupation.

DATA USA <https://datausa.io/>

Kandiyohi County 2015 – 2016

Management 8.8%		Education, Training, & Library 5.9%		Administrative 12.5%	Sales 9%	Production 8.3%		Construction & Extraction 6.5%	
Business & Financial Operations 3.7%		Community - Social 2.5%	Legal .8%			Personal Care & Service 5.1%	Health care support 3.8%	Transportation 4.9%	Material Moving 3.7%
Health Practitioners 4.5%	Health Technicians 1.7%	Architecture Engineering 1.3%	Life, Physical Social Science .8%	Food & Serving 4.7%	Firefighting Supervisors .6%				
		Computer Mathematical .9%				Cleaning Maintenance 2.6%	Law Enforcement Supervisors .5%		

Renville County 2015 – 2016

Management 13.9%		Education, Training, & Library 5.3%		Production 10.2%	Transportation 6.3%	Personal Care & Service 4.4%	Food & Serving 4.4%	Construction & Extraction 5.1%
Business & Financial Operations 2.8%		Community & Social 1.7%	Legal .5%		Material moving 3.8%	Cleaning 3.2%	Firefighting Supervisors .5%	
Health Practitioners 2.8%	Health Technicians 2.7%	Arts/ Recreation .3%	Life, Physical Social Science 1.3%	Administrative 11.3%	Sales 6.8%			Healthcare Support 2.4%
		Computer Mathematical .3%				Architecture and Engineering .6%		

The unemployment rate for Minnesota in 2016 was 3.7%. Kandiyohi and Renville Counties reflected the same low unemployment rates of 3.3% and 4.5% respectively.

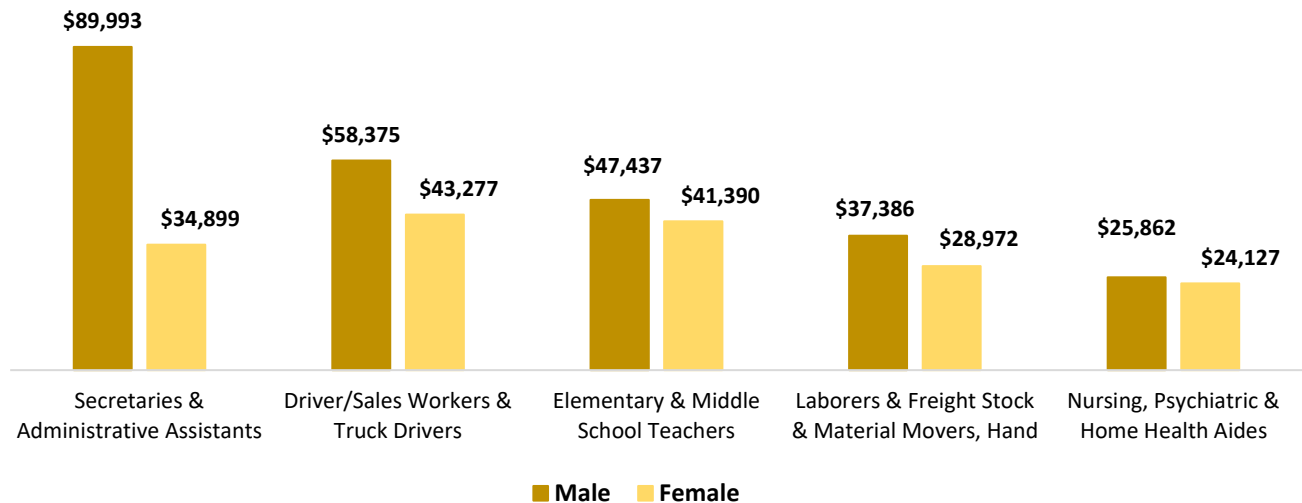
- During 2016 in Kandiyohi County, the unemployment rate for Black or African Americans was 17.7%. Latinos rate was 10.7 % and those with a disability was 7.3 %.
- During 2016 in Renville County, the unemployment rate for Black or African Americans was 0% and for Latinos the rate was 9.4 % and those with a disability rate was 3.7%.

Gender inequity is also evident in the region. Full-time male employees in Kandiyohi, McLeod, Meeker, Renville and Sibley Counties earned 1.43 times more than female employees. Below is data from 2016.

- Average Male Salary: \$53,562: ± \$3,263
- Average Female Salary: \$37,393: ± \$2,165

The chart below reflects the gender-based wage disparity in the 5 most common occupations in Kandiyohi, McLeod, Meeker, Renville and Sibley Counties by number of full-time employees. DATA USA <https://datausa.io/> Dataset: ACS Public Use Microdata Area (PUMA) 5-year Estimate/Source: Census Bureau

Wage by Gender in Common Jobs in Kandiyohi, McLeod, Meeker, Renville and Sibley Counties



While many people with disabilities hold employment, others who seek to work face hiring challenges. Some people with severe disabilities may be unable to work or have limited employment options, depending on the nature of their disability. Appropriate health/mental health care, or workplace accommodations, may help more people with disabilities gain employment.

Highly qualified job seekers with disabilities are frequently overlooked and underestimated. Workers with disabilities also face significant gaps in pay and compensation compared to workers with no disability. *U.S. Department of Labor, Bureau of Labor Statistics. (2017.) Persons with a Disability*

CHILD CARE ACCESS

There are about 120 licensed child care providers in Kandiyohi County and about 80 in Renville County.

Despite these numbers, access to quality child care is difficult to find. There are limited spots for infants. Currently, Kandiyohi County is lacking over 700 childcare spots. Renville County Human Services also reports a shortage of infant openings.

Impacts on inadequate childcare

- child safety
- child growth and development
- workforce

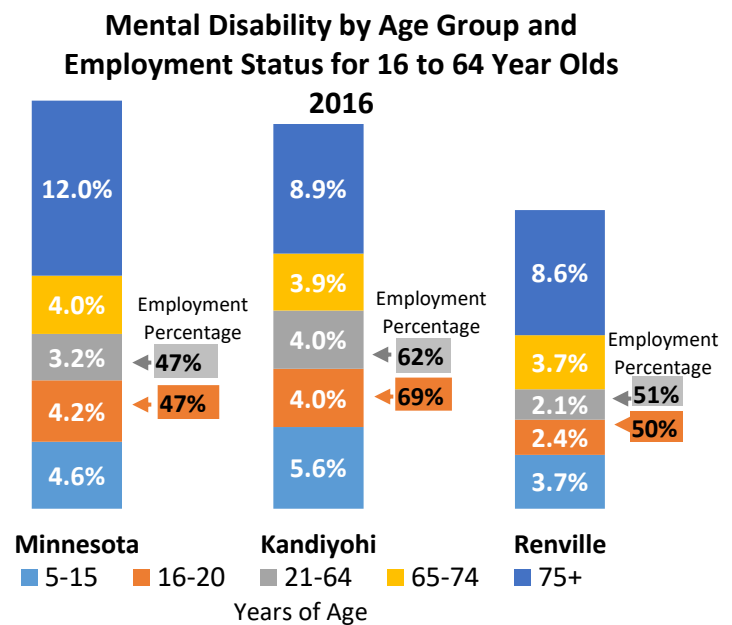
“We don’t have daycare. I would work but no daycare available for infants in town. Got a job in Bird Island and only daycare available was in Winthrop.” (42 miles between those two towns)
Fairfax Resident

PAID LEAVE

Access to paid leave creates the opportunity for family members to provide care and support for one another and makes it possible for people to earn a living and care for their loved ones.

People with paid leave use less sick time and fewer health care services, and their children do better in school than the children of parents who lack paid leave. Paid leave contributes to better maternal mental and physical health, better prenatal and postnatal care, more breastfeeding, and greater parent-infant bonding. Elders cared for by family members with paid leave enjoy a higher quality of life. *Minnesota Department of Health, Center for Health Equity.* People who have less education, lower incomes, work part time, or are single parents are less likely to have access to paid sick and family leave.

Access to paid leave varies by industry. People working in service and industrial occupations have the least access to paid sick leave, while professionals and people working in technical fields are more likely to have paid leave as an employment benefit. *Minnesota Department of Health, Center for Health Equity*



Paid maternity leave gives mothers the opportunity to form a strong bond and establish breastfeeding before returning to work.

- Only 5 percent of women in the lowest-paying jobs have access to paid maternity leave, compared to 20 percent of women in the highest-paying jobs.
- One in four working mothers returns to work less than two weeks after giving birth. *Van Giezen, R.W. (2013). Paid leave in private industry over the past 20 years. Beyond the Numbers: Pay & Benefits 2(18). U.S. Bureau of Labor Statistics.*

The health care system

With so many health challenges confronting people in our counties, particularly the disproportionate burden of disease experienced by people living in poverty, it is important that our health care system supports belonging for all. Health care systems support belonging when people can get the right care at the right time, in a convenient location, with a caring provider, and a positive outcome. The health care system is shaped by: the number and types of providers located in every community; the range of services available; whether providers reflect the populations served; and whether services are provided in culturally appropriate ways. We can improve health care encounters when providers have ready access to current health information, and when health care is coordinated among different providers.

Minnesota's current population of providers does not reflect the racial and ethnic diversity of the state. Most of Minnesota's physicians are white, and most speak only English. In 2015, Minnesota physicians by race were: White (83.9%), Asian (10.7%), black (2.9%), Hispanic (2.8%), American Indian (0.6%), Native Hawaiian or Pacific Islander (0.3%), other (3.2%). *The 2015 Physician Workforce Survey*

Ratio of Health Care Providers to County Residents

	<u>Kandiyohi</u>	<u>Renville</u>	<u>Minnesota</u>
Physicians	1 to 390	1 to 1,227	1 to 240
Mid-Level Practitioners	1 to 1,062	1 to 1,840	1 to 649
Dentists	1 to 2,124	1 to 3,680	1 to 1,784
Mental Health Therapists	1 to 512	1 to 1,227	1 to 536

2015 MDH Workforce Questionnaire

The physician-to-patient ratio is very uneven across the state. Kandiyohi County has one physician for every 390 people and Renville County has 1 for every 1,227 people. *2015 Physician Workforce Survey*

Mid-level practitioners (nurse practitioners and physician assistants) have helped fill the gap for primary care in many areas of Minnesota and also locally.

An emerging field of practice is licensed dental therapists, which may help fill gaps for primary dental care in our areas. There are roughly 70 licensed dental therapists in Minnesota.

Mental health professionals and dentists are especially hard to find in rural Minnesota. *Minnesota Department of Health, Office of Rural Health and Primary Care.*

Health insurance and access to care

Health care coverage is an important piece to getting the health care that is needed. Minnesota has a higher rate of health insurance coverage compared to the rest of the U.S., in part due to a higher overall employment rate. Individual insurance is available, but for most people, insurance is tied to full-time employment. People with part-time, contract, or low-paying jobs may not have access to health insurance or may lack adequate coverage, making

it difficult for them or their families to get needed care. People who are uninsured or underinsured tend to get sicker before seeing a doctor and have a harder time recovering.

The largest age group to have health care coverage is 6 to 17 years of age, which coincides with the national average. The next group most likely to have health care coverage is 55 to 64 years of age.

- American Indian, Hispanic/Latino, and black populations under age 65 in Minnesota are far less likely than other groups to have health insurance. *Minnesota Compass 2013.*
- Completing high school or college increases the likelihood that a person will have health insurance through employment. *Minnesota Department of Health, 2015 Minnesota Health Access Survey.*

When people have health and dental insurance, they are much more likely to access preventive care, including immunizations, cancer screenings, prenatal care, and dental care. Even with insurance, many people do not get the care they need due to high deductibles and co-pay requirements; they feel it is too expensive. People with a disability are twice as likely to skip seeing the doctor because of cost. *Minnesota Department of Health, Minnesota Center for Health Statistics. Behavioral Risk Factor Surveillance System. (2015.)*

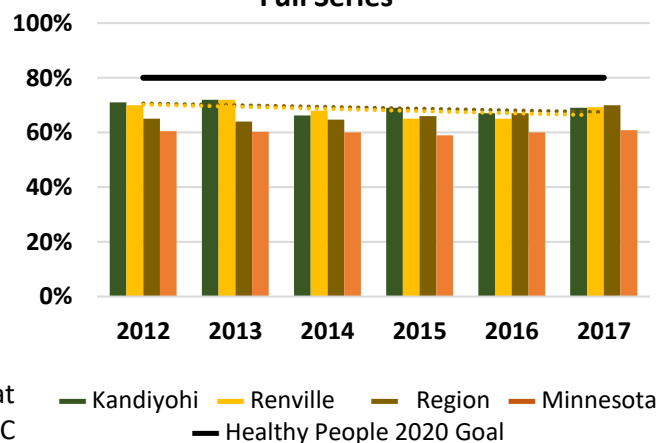
Health care costs continue to rise. Over the last 10 years, premiums rose between 35 and 40 percent in Minnesota. To deal with some of those increases, companies have slightly decreased the proportion of premiums they cover by a few percentage points. Companies are also changing the plans they offer. To keep premiums less expensive, companies are offering more high-deductible insurance plans. Average employee premium contributions for single and family health plans consumed nearly 7 percent of U.S. median income in 2016, up from 5 percent in 2008.

Childhood immunizations

Vaccines prevent many infectious diseases, including chickenpox, measles, diphtheria, hepatitis, influenza, polio, pneumonia, and tetanus. Most vaccines are provided through private insurance, but the federally funded Minnesota Vaccines for Children Program makes certain that any child in the state can receive the recommended vaccines. *Minnesota Department of Health*

In 2016, only about 60 percent of Minnesota children age 24 to 35 months had completed the childhood immunization series, which includes seven vaccines that should be given by age 2 years, if following CDC recommendations. *Minnesota Department of Health: Immunizations.*

Childhood Immunizations Rates
Full Series



Vaccination rates for area kindergartners in the 2015-16 school year were 90% or higher for each reported vaccine.

	3-year Kindergarten Enrollment	Vaccinated	Percent Vaccinated	Partially Vaccinated or No Doses	Percent Partially Vaccinated or No Doses	Non-Medical Exemptions	Non-Medical Exemptions Percent	Medical Exemptions	Medical Exemptions Percent
Minnesota	205,486	193,226	94.0%	8,056	3.9%	3,987	1.9%	180	0.1%
Kandiyohi	1,654	1,580	95.5%	43	2.6%	28	1.7%	3	0.2%
Renville	531	481	90.6%	44	8.3%	6	1.1%	0	0.0%

Minnesota Immunization Information Connection (MIIC) Program Data and Kandiyohi and Renville County Program Data

Because vaccines are available at low or no cost to those who need them, historically, we have not seen disparities in vaccination by population. In 2008, however, state and local public health officials became concerned about the declining rate of vaccination among young Somali children. An outbreak of measles in 2011 led MDH and local public health departments to increase their outreach and community engagement efforts to the Somali community.

In response to the 2017 outbreak (April through August 2017) there was a further intensification of community outreach and public education activities, resulting in an increase in the Somali MMR (Measles, Mumps and Rubella) vaccination rates.

In the first quarter of 2017 (January-March), an average of 37 MMRs were given to Somali children each week. That number jumped early in April, and from mid-April through early June the average number of MMR vaccines provided to Somali children was 321 per week. *Minnesota Department of Health, Minnesota Immunization Information Connection.*

Access to cancer screening

In both Renville and Kandiyohi Counties, cancer was the leading cause of premature (under age 75) death in 2016. *Minnesota County Health Tables Mortality* The actual numbers of new cancers in Kandiyohi and Renville Counties are small, so the incident rate per 100,000 may only be a few individuals.

- Although not above the state rate, lung cancer is the most common type of cancer in both counties for men.
- Breast cancer is the most common for women over the age of 50 in both counties.
- The rate of colorectal cancer and leukemia is above the state rate for males in both counties.
- Melanoma rate is above the state rate for Kandiyohi County women.

Also interesting is the difference in rates for men and women.

- In both counties, some cancers are over 2 times more common in men than in women (oral pharyngeal, liver, esophageal and bladder cancer). *Minnesota County Health Tables*
- Women have a 3 times higher rate of thyroid cancer in our counties. *Minnesota County Health Tables*

Screening and early detection for some of the most common types of cancer (such as breast or cervix) can improve survival and save lives. Screening for colorectal cancer can also prevent cancer by detecting and removing pre-cancerous polyps. In the past 20 years, the rates of illness and death from colorectal cancer has dropped in Minnesota and nationwide, due in part to increased screening and improvement in treatment. Remaining colorectal cancer death disparities by race reflect common risk factors: how early the cancer was detected (e.g., by screening), access to health care and treatment, and overall health status at the time of diagnosis. While nearly three-fourths of people in Minnesota aged 50 and older get regular colorectal cancer screening, this rate varies by race and education. *Minnesota County Health Tables*

- All racial ethnic groups are significantly less likely (by 73 percent) to undergo colorectal cancer screening than white Minnesotans. *Minnesota Community Measurement. (2017). 2016 Health Equity of Care Report.*
- Only 61 percent of those without a high school education get screened, compared to 71 percent of those who completed high school, 75 percent of those with some post-high school education, and 80 percent of those with a college degree. *Minnesota Department of Health, Minnesota Cancer Alliance, & American Cancer Society. (2016) Minnesota Cancer Facts & Figures 2015, p. 18*
- American Indians are diagnosed with colorectal cancer at a rate of 50 to 80 percent higher than white non-Hispanics, and are twice as likely to die from it *Minnesota Department of Health, Minnesota Cancer Alliance, & American Cancer Society. (2016) Minnesota Cancer Facts & Figures 2015.*

Access to prenatal care

Prenatal visits help keep both pregnant women and their babies healthy. Prenatal care reduces the risk of pregnancy-related complications for babies, such as anemia, preterm birth, and low birth weight. For mothers, these visits reduce the risk of complications like preeclampsia, diabetes, and hypertension. Access to prenatal care differs by race, income, and education/job status. Mothers who do not receive adequate prenatal care are also less likely to receive information about breastfeeding.

- In Kandiyohi and Renville Counties, about 15% of mothers delivering in 2016 had less than the minimum recommended prenatal visits.
- In Kandiyohi and Renville counties, the percentage of preterm births is slightly higher than the state level and for Renville County, the percent of low birthweight is also above the state level.

2016 Prenatal Care in Minnesota 2016 Minnesota County Health Table

	Percent of Prenatal Care Received in 1st Trimester	Percent Adequacy of Prenatal Care, GINDEX		
		Adequate or Better	Intermediate	Inadequate or None
State of Minnesota	81.4%	78.5%	10.5%	10.9%
Kandiyohi	77.5%	65.1%	19.5%	15.4%
Renville	78.1%	71.7%	12.6%	15.7%
CHB - Kandiyohi, Renville	77.7%	66.8%	17.7%	15.5%

GINDEX: A prenatal care index determined by combining measures of the month or trimester prenatal care began, the number of prenatal visits, and the gestational age of the infant/fetus at the time of birth. The GINDEX includes gestational age over 36 weeks and number of prenatal visits greater than nine to impute adequacy of prenatal care.

Adequate or Better: Prenatal care started in the 1st trimester and the woman had an adequate number of visits.

Intermediate: Prenatal care started in the 1st or 2nd trimester and the woman had an intermediate range of visits.

Inadequate or None: No prenatal care or the prenatal care started in the 3rd trimester or the woman had an inadequate range of visits, regardless of when prenatal care began.

Access to oral health care

Oral health is essential to overall health. Oral health means being free of chronic oral-facial pain, mouth and throat cancers, sores and lesions, birth defects (like cleft lip and palate), and other problems affecting the mouth, teeth and face, including tooth decay, gum disease, or oral-dental trauma.

Chronic diseases like heart and lung disease, stroke, and diabetes are

linked to periodontitis. Periodontitis is a chronic inflammation and infection of the gums and periodontal ligament and bone that support the teeth. Mothers with periodontal disease have a higher incidence of preterm and low birth weight babies. *Li X, Kolltveit KM, Tronstad L, and Olsen I. (2000). Systemic Diseases Caused by Oral Infection. Clinical Microbiology Reviews.*

THIRD-GRADERS WITH CURRENT OR PAST TOOTH DECAY



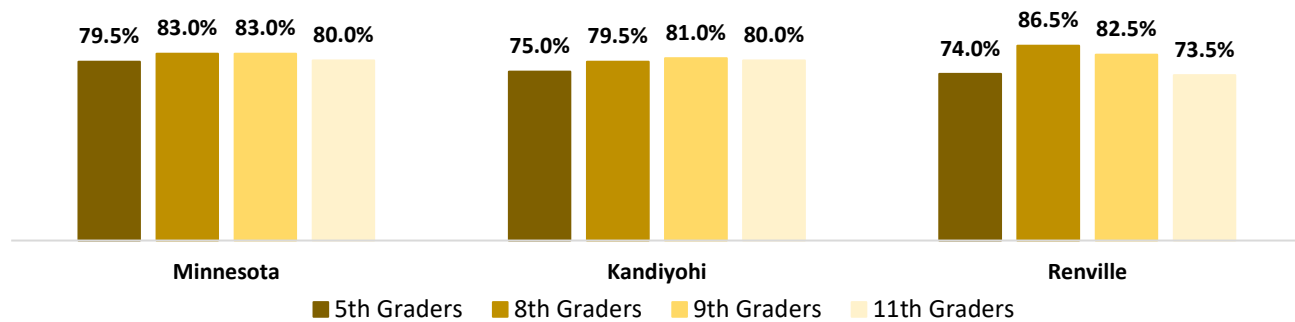
SOURCE: MINNESOTA DEPARTMENT OF HEALTH, ORAL HEALTH PROGRAM

For children, untreated tooth decay can cause pain and infections that may lead to problems with eating, speaking, playing, and learning. *Centers for Disease Control and Prevention*

In Kandiyohi County there are about 25 dentists and in Renville County there are less than 5. Among the dental opportunities in the southwest region of the state is the Rice Regional Dental Clinic. Rice Regional Dental Clinic is a collaborative effort between CarrisHealth and the University of Minnesota School of Dentistry. The clinic has 10 chairs and provides a full range of dentistry service. The clinic serves clients who have Medical Assistance and offers a sliding fee schedule for access to those who may not otherwise have access to dental care. While this benefit is available, transportation remains an issue for many.

For both Kandiyohi and Renville Counties, greater than 20 % of children in most age categories have either never seen or not seen a dentist or dental hygienist for a regular check-up, exam or teeth cleaning, or other dental work for more than 1 year. *2016 Minnesota Student Survey, Health Care Access*

Students Receiving Dental Care During the Last Year



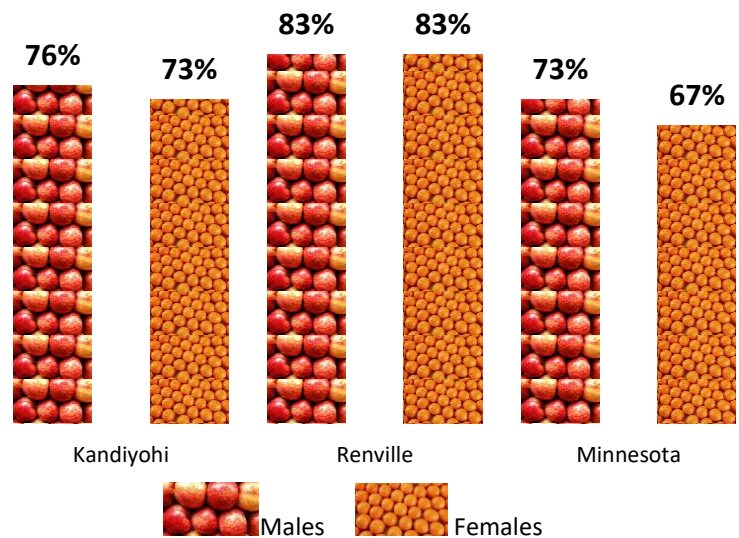
Food

Food connects people in communities. A wide variety of foods, from all cultures, can be enjoyed as part of an eating pattern that supports overall well-being.

A healthy eating pattern including nutrient-rich foods like fruits and vegetables that is low in added sugars, saturated fat, and sodium reduces the risk for heart disease, diabetes, stroke, and some cancers. Healthy eating also helps manage body weight.

However, many people do not or cannot eat this way. An individual's income and life circumstances make healthy food choices difficult, especially when these foods are not readily available or affordable. Processed foods and beverages high in calories, added sugars, sodium, and added

Percentage of 9th Graders Consuming 1 or Fewer Fruit Daily



2016 Minnesota Student Survey

fats are cheap and readily available, while nutrient-rich fresh foods such as fruits and vegetables can be less available and less affordable.

“What you are supposed to eat is so expensive” 70 year old Olivia resident

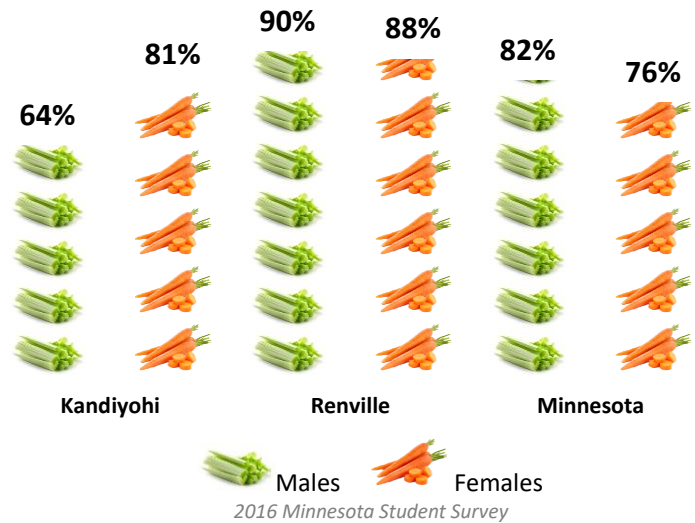
“We don’t decide what to eat until supper time” Olivia Mom

“Most families have kitchen tables, but don’t use them” Renville parent

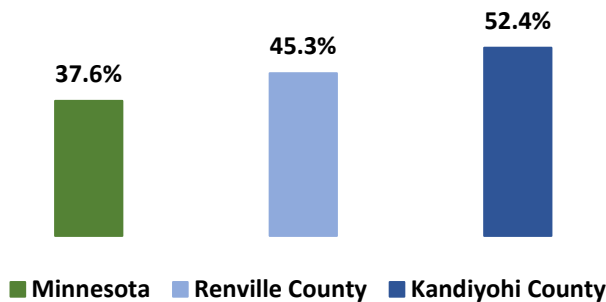
Locally, more than three-fourths of all 9th graders eat one or fewer fruits and/or vegetables daily.

2016 MN Student Survey

Percentage of 9th Graders Consuming 1 or Fewer Vegetables Daily



Percentage of Students Eligible for Free and Reduced Lunch 2016



During the 2016-2017 school year, 52.4% of Kandiyohi County students were eligible for free or reduced lunch. In Renville 45.3% were eligible compared to statewide eligible students, which was 37.6%. *Vital Statistics Trend Report, Minnesota Department of Health: October 2017*

Our counties are fortunate to have thriving farmers’ markets, but there are also “food deserts”. Food deserts are areas that lack access to affordable fruits, vegetables, whole grains, low-fat milk, and other foods that make up the full range of a healthy diet. *(CDC definition)*

The majority of Renville County is considered a “food desert”, with six of the ten communities having no grocery stores and four with small grocery stores with quick, ready-to-eat items. All but one small town in Renville County has a convenience store (aka as corner stores in the metro) with little to no fresh meats or produce. 45% of county residents report traveling 21 miles or more to buy groceries.

Kandiyohi County, with the regional city of Willmar, has 3 large grocery stores (Walmart, Cash Wise, and Cub). There are also several smaller grocery stores (Aldi, Target, etc.) and “corner” markets selling primarily ethnic foods. Most small towns in Kandiyohi County have a grocery/convenience store. Spicer is the exception with a mid-sized grocery store.

“Senior citizens have limited income to buying groceries”
82 year old resident of Willmar

“It takes a half a day to get groceries”
Hector resident

“Sometimes going to Willmar is not always cheaper, like to go to Aldi –especially with paying for transportation or gas money”
70 year old Olivia resident

“It’s easier to get cigarettes in our town than it is to get food.” Fairfax resident

**Kandiyohi and Renville Counties
Adult BMI Status (weighted)
2015**

Kandiyohi

	<u>Male</u>	<u>Female</u>
Not Overweight	24.7%	36.7%
Overweight	49.2%	36.9%
Obese	26.1%	26.4%

Renville

	<u>Male</u>	<u>Female</u>
Not Overweight	21.2%	34.3%
Overweight	42.2%	30.4%
Obese	36.6%	35.3%

2015 Southwest Adult Survey and Minnesota Center for Health

One in four adults in Minnesota is obese. Rates of obesity in the Kandiyohi and Renville Counties are higher than the state average. *Centers for Disease Control and the Minnesota Public Health Data Access* For adults in both counties, the percentage who were overweight rose between 2010 and 2015 (Kandiyohi: from 34.1% to 41.9% - Renville: from 35.2% to 36.2%). In addition, the percentage of adults who were obese in Renville rose between 2010 and 2015, from 33.7% to 35.9%.

Local data for children ages 2-5 in both counties enrolled in the Women, Infants, and Children (WIC) program shows that about 30% of those children in both counties are either overweight, obese, or very obese.

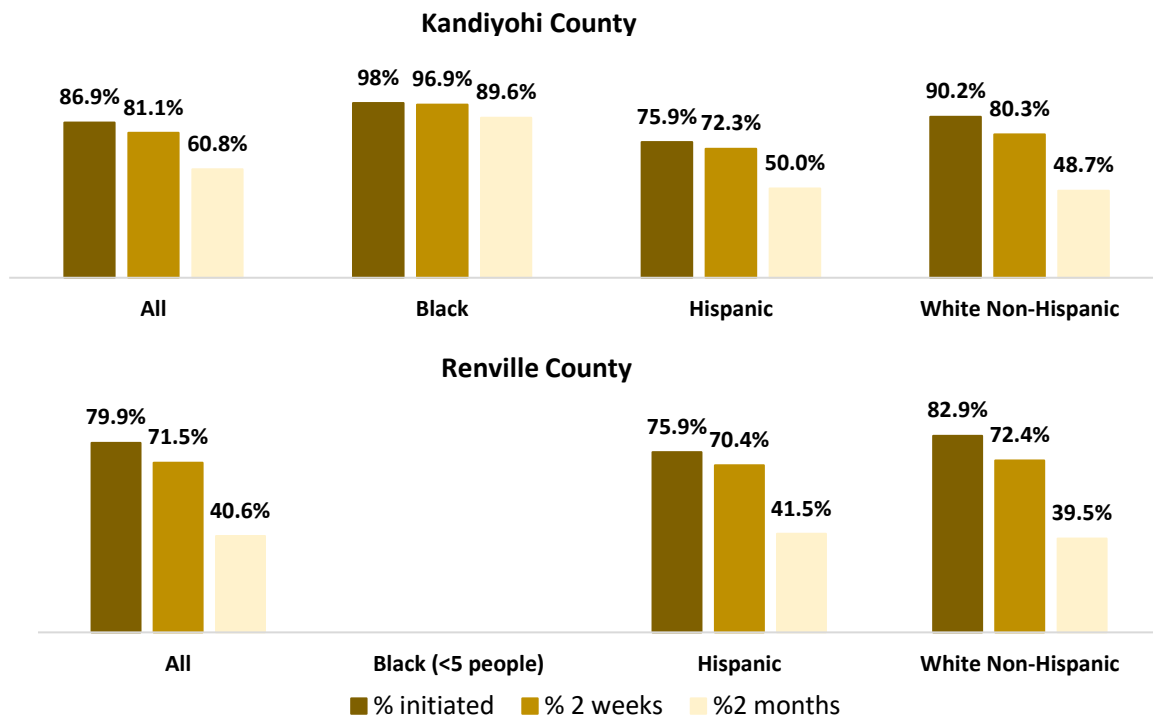
BREASTFEEDING

Breastfeeding provides the ideal first nutrition for infants. The benefits of breastfeeding include:

- Healthy babies
- Decrease in obesity rates
- Decrease in medical costs
- Decrease in chronic diseases in women
- Decrease in allergies in children

Ninety percent of Minnesota mothers say they breastfed their babies (for any amount of time), but rates of breastfeeding are highest among better-educated, older, urban mothers, and lowest among mothers with low income and mothers under age 20. 2016 local WIC data shows that the breastfeeding initiation rate is above the state rate in Kandiyohi County but below in Renville County. Both county rates drop significantly by 3 months. The lowest rates in both initiation and 3 month continuation are in the Latino moms.

2016 Breastfeeding by Race and Ethnicity



Mothers with higher education are most likely to have access to paid leave, which increases the likelihood that they will be able to continue to breastfeed their babies. Employer support for mothers who are breastfeeding, such as private spaces for breastfeeding/pumping (lactation rooms), varies widely.

WIC Breastfeeding Initiation and Continuation Rates					
<i>**MN WIC Program Objective: Minnesota WIC Program 2016</i>					
	Initiation	2 weeks	2 months	3 months	6 months
2020 Healthy People Benchmark	81.9%	-	-	70% **	60.6%
Minnesota	81.1%	73 %	55%	48.6 %	36.2%
Kandiyohi	86.9%	81.1%	60.8%	52.6%	36.8%
Renville	79.9%	71.5 %	40.6 %	36.4%	22.7%

Housing

Owning a home is an important way that Minnesotans build wealth. Homeownership provides stability and minimizes disruptions that are detrimental to health and emotional well-being, such as changing schools, changing jobs, or frequent moves. This stability increases trust among neighbors, creates lasting friendships, and builds community cohesion. Homeowners move less frequently than renters, and have more control over their home environment.

We all need a safe place to live that is not so expensive that we cannot afford other necessities. Stable housing provides a critical foundation for daily living and health. When such housing is out of reach, we may end up living in places that are overcrowded or do not meet basic health and safety standards.

HOME OWNERSHIP

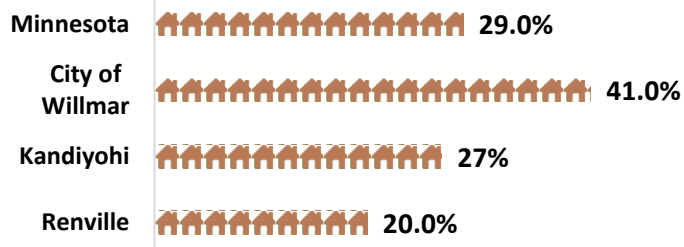
73% of households in Kandiyohi County and 79% in Renville County own their homes. For white, non-Hispanic households in Kandiyohi County the ownership rate is 78%, with Renville County being 80%.



Households of color have a home ownership rate of 31% in Kandiyohi County and 61% in Renville County.

US Census This large homeownership disparity is a direct result of years of discrimination in housing policies, real estate, and lending practices. Communities of color continue to experience discrimination and segregation in housing and find it difficult to obtain traditional mortgages; similarly, they are targeted with predatory lending practices. *Rugh, J.S. & Massey, D.S. (2010). Racial segregation and the American foreclosure crisis. American Sociological Review 75(5).*

Residents Who Do Not Own a Home 2016



US Census

57% of the homes in Renville County and 33% of those in Kandiyohi County were built before 1960 and some are poorly maintained and in disrepair.

COST BURDEN OF HOUSING

Housing creates stability, but only if it is affordable.

- For 24% of owners and 53% of renters in Kandiyohi County, housing consumes 30% or more of their household income. *American Community Survey 2008-12.* In Renville County, 19% of owners and 44% of renters spend 30% of their income on housing. This can mean inadequate spending on other basic needs such as food and medicine.
- The high cost of renting makes it more difficult to save for a down payment on a home.
- Homeownership is an increasingly distant dream for many.
- People worried about housing costs are more likely to report having chronic diseases such as cancer, arthritis, depression, diabetes, or asthma. *Minnesota Center for Health Statistics. (2015) Behavioral Risk Factor Surveillance*

"I live in Highland apartments and pay for it according to my income, which I don't have enough."

75 year old Willmar resident

Kandiyohi County Housing



RENTER HOUSEHOLDS

4,353 | 26% of all households

Median rent, 2000: \$599

Median rent, 2015: \$666

↑ rent up **11%**

Median renter income, 2000: \$28,798

Median renter income, 2015: \$25,103

↓ income down **-13%**

Fair market rent for 2-bedroom apartment **\$686**

Median-income renter can afford **\$628**



OWNER HOUSEHOLDS

12,532 | 74% of all households

Median home value, 2000: \$126,216

Median home value, 2015: \$160,800

↑ home value **27%**

Median owner income, 2000: \$64,282

Median owner income, 2015: \$63,953

↓ income down **-1%**

Change in homeownership rate for households younger than 35 years old, 2000-2015

-5%

Renville County Housing



RENTER HOUSEHOLDS

1,352 | 21% of all households

Median rent, 2000: \$526

Median rent, 2015: \$578

↑ rent up **10%**

Median renter income, 2000: \$35,479

Median renter income, 2015: \$30,873

↓ income down **-13%**

Fair market rent for 2-bedroom apartment **\$658**

Median-income renter can afford **\$772**



OWNER HOUSEHOLDS

5,026 | 79% of all households

Median home value, 2000: \$85,062

Median home value, 2015: \$95,700

↑ home value **13%**

Median owner income, 2000: \$56,701

Median owner income, 2015: \$58,024

↑ income up **2%**

Change in homeownership rate for households younger than 35 years old, 2000-2015

-12%

Internet access

Broad Band Internet access is a necessity for rural areas to draw and retain residents and to participate and compete in the rest of the world economy. It must be accessible and affordable. Currently, all areas of both counties do not have dependable internet services. *Farmer's Union Report on What People Think 2017.*

Transportation

Transportation is key to daily activities, including access to food, health care, and connections to family, friends, and faith communities. Reliable and affordable transportation is important for equity in health. Transportation systems in rural areas are unique - people need to drive everywhere and it is not feasible and/or sustainable to provide access to transportation in all areas.

What is true in both counties is that the largest percentage of people (40%) have 2 vehicles and 82% drive alone to work an average of 17 miles. With the limited availability of bus service and the distance people drive to work, it is easy to see the challenges that are faced if there is not enough income to support reliable vehicles and gas.

Kandiyohi and Renville are served by a county owned bus cooperative called Central Community Transit (CCT). CCT Bus provides transportation for all Kandiyohi County and Renville County residents with a fleet of 21 buses and over 50 volunteer drivers throughout the 2 counties. Bus transportation is provided for all ages. Children ride the bus to and from school, daycare and other activities, while adults ride the bus to and from work and appointments. Elderly ride the bus to go for medical appointments, groceries or to visit someone and get out of the house. The service is reasonably priced. The challenge is that the amount of service by location and timelines is not adequate to meet the needs in all areas of the counties.

While this is a great service for our communities, it does not reach every community or those that are in the rural areas outside of towns.

***“Some people don’t have cars and so they can’t go places,
they have to rely on the bus or other people for transportation”***

80 year old resident of Willmar

“It is easier to take the bus than driving around. I have been taking the bus for years and feel safe”

74 year old resident of Willmar

“When people get older we don’t always have transportation to go to the grocery store. Also you live on a fixed income so you don’t have as much money to buy groceries.”

82 year old resident of Willmar

Nature

How we understand and feel about nature, how we treat our surroundings, and our access to natural spaces are shaped by our families, jobs, culture, and society. People with wide-ranging interests and values have very different ideas about what it means to own land, how nature should be used (or not), who is responsible for assuring access to clean air and water, and how to reconcile the many complex issues and competing interests involving nature.

Kandiyohi and Renville citizens take pride in natural resources. Kandiyohi’s motto is *“Where the Lakes Begin”* and is dotted with numerous lakes, resorts, and campgrounds. Renville County has rich soil and is a leader in agriculture production in the state and region. Both counties boast of beautiful county parks, clean air, and beautiful horizons.

The way we design our cities, our homes, and our workplaces shapes our interactions with nature and determine who can access a healthy natural environment and who cannot. We make decisions every day in agriculture, development, construction, land management, and food processing, which ultimately shape our health. Being mindful of our actions and interactions with nature is essential to assure our health.

Climate

Human health is impacted through extreme weather events, wildfires, decreased air quality, threats to mental health, and illnesses transmitted by food, water, and vectors (disease-carriers) like mosquitoes and ticks. *Luber, G., Knowlton, K., Balbus, J., Frumkin, H., Hayden, M., Hess, J., et al. (2014). Ch. 9: Human Health. Climate Change Impacts in the United States: The Third National Climate Assessment.*

Climate events influence our health, but do not affect us all in the same way. Some of us are more vulnerable to the effects of climate events, including the poor or homeless, the elderly, young children, and people who have chronic health conditions like allergies and asthma. These climate events also create stress for people whose livelihoods are dependent on the weather, like farmers, and for people who work outdoors.

In Minnesota, the average temperature is rising.

- Rising temperatures increase air pollution, which intensifies the symptoms of asthma and other respiratory and cardiovascular diseases
- Rising temperatures cause more deaths from heat stroke
- More insects survive when winters are warmer, contributing to the spread of diseases like Lyme disease
- Warming temperatures are leading to a longer allergy season

Warmer nights mean that homes without air conditioning do not cool down. People who don't have air conditioning, who are isolated, or unable to get out of their homes are at greater risk of heat-related illness. People who must work outdoors, such as farm laborers and construction workers, are also at risk.

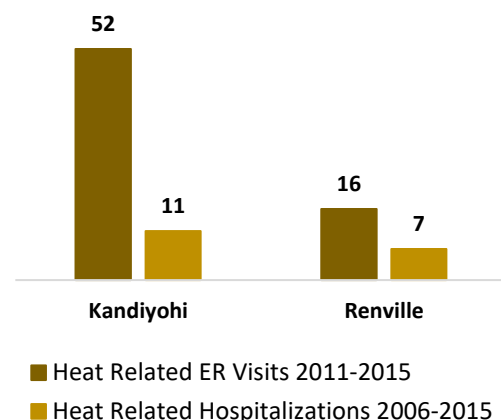
- In 2015, 652 Minnesotans visited the emergency department for heat-related illnesses and three people died due to heat. *Minnesota Department of Health Heat-related illness. MN Public Health Data Access.*

People who live in low-lying areas and are poor are at greater risk from flooding and its after effects, especially those that cannot afford to fix their homes, or have to depend on a landlord to make repairs.

- In 2016, Minnesota experienced two mega-rains in one year for the first time since tracking major rainfall events in Minnesota. A mega-rain event means that 6 inches of rain fell, covering more than 1000 square miles, and that the core of the storm topped 8 inches. Flooding can cause injury and death from exposure to floodwaters, harm mental health by destroying homes and property (including the livelihoods of those who depend on the land), cause respiratory illnesses from mold in wet basements, and increase the potential for contaminated drinking water and waterborne infections.
- During the second mega rain event during August 10-11, 2016, the city of Willmar (Kandiyohi County) received 8.09 inches of rain and the city of Olivia (Renville County) received 8.78 inches of rain. *National Weather Service*

Heat Related Illness ER Visits and Hospitalizations

Minnesota Public Health Data Access



Air quality

Air quality affects our health in multiple ways. Outdoor air pollution includes ozone and fine particles in the air, which can trigger asthma attacks and contribute to pneumonia, bronchitis, and heart attacks. Outdoor air pollution comes from motor vehicles and equipment, home heating, burning (garbage and wood), gas stations, char-broilers, dry cleaners, and auto body shops. *Minnesota Department of Health and Minnesota Pollution Control Agency*

Currently, Kandiyohi County and Renville County do not have reporting air quality monitoring stations. *Minnesota Public Health Data Access*

Indoor air pollutants and allergens include asbestos, carbon monoxide, dust mites, formaldehyde, lead dust, mold, fine particles, radon, tobacco smoke, and volatile organic compounds. *American Lung Association*

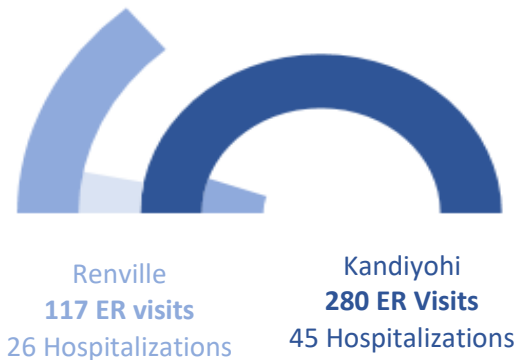
Some pollutants or allergens in indoor air occur naturally (like radon and dust mites) and others are the product of human decisions, such as materials used in home construction and furnishings. We benefit from homes, schools and workplaces built with radon resistance, adequate ventilation, and plenty of natural lighting.

Air pollution is especially harmful for people living with asthma or respiratory and cardiovascular diseases, the elderly, and those who participate in heavy or extended physical activity.

- In Minnesota, one in 16 children (6.4%) and one in 13 adults (7.4%) currently have asthma. *Minnesota Department of Health Asthma Program.*
- Statewide, there were 18,200 emergency department visits and 1,900 hospitalizations for asthma.

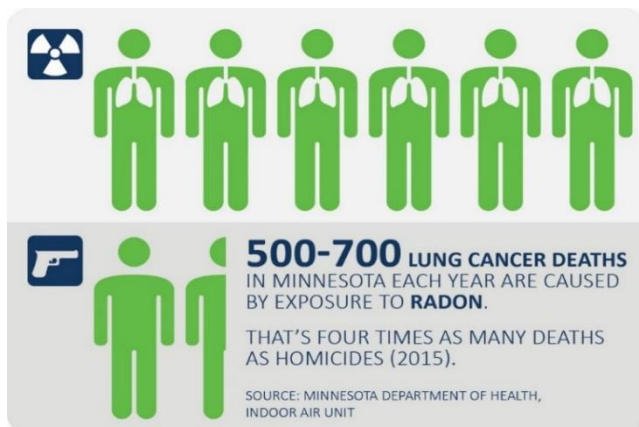
Asthma attacks are more common in communities located near busy roads. People who are less able to choose where they live, to determine the conditions of their homes, or to control their surroundings (like renters), may suffer more frequent asthma episodes. *Lindgren, P., Johnson, J., Williams, A., Yawn, B. & Pratt, G.C. (2016, November 3). Asthma exacerbations and traffic: examining relationships using link-based traffic metrics and a comprehensive patient database. Environment Health*

Asthma Related Visits to Emergency Rooms and Hospitalizations 2013-2015



Minnesota Public Health Data Access

RADON



Radon is a colorless, odorless radioactive gas that naturally comes from the soil. About 40 percent of Minnesota homes have elevated levels of radon. In winter, heating systems tend to draw in radon gas from the soil, increasing radon levels inside our homes, schools, and other buildings.

The average radon level in Minnesota soil is more than three times higher than the average U.S. radon level.

Minnesota Department of Health Radon. Minnesota Public Health Data Access.

- In Kandiyohi County, 820 properties were tested for radon from 2010 - 2016. 71.1% of those tested were ≥ 4 pCi/L, the approved standard level. *Minnesota Public Health Data Access*
- In Renville County, 265 properties were tested from 2010 - 2016. 75.8% of those tested were ≥ 4 pCi/L, the approved standard level. *Minnesota Public Health Data Access*
- In Minnesota during the same time period, 44.1% of properties tested were ≥ 4 pCi/L, the approved standard level. *Minnesota Public Health Data Access*
- Kandiyohi and Renville lung cancer rates are slightly below Minnesota lung cancer rates (2009-2013) which does not coincide with higher radon rates in the counties.

Lead

Lead-based paint was phased out of residential use in the U.S. in 1950 and eventually banned in 1978. When children under age six ingest lead (usually through the dust from lead paint), they can develop problems with brain function and behavior that last a lifetime.

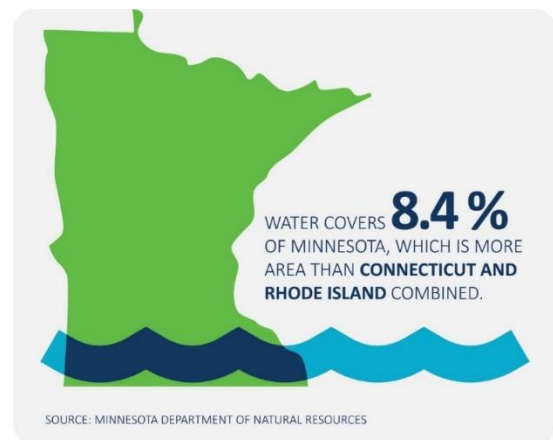
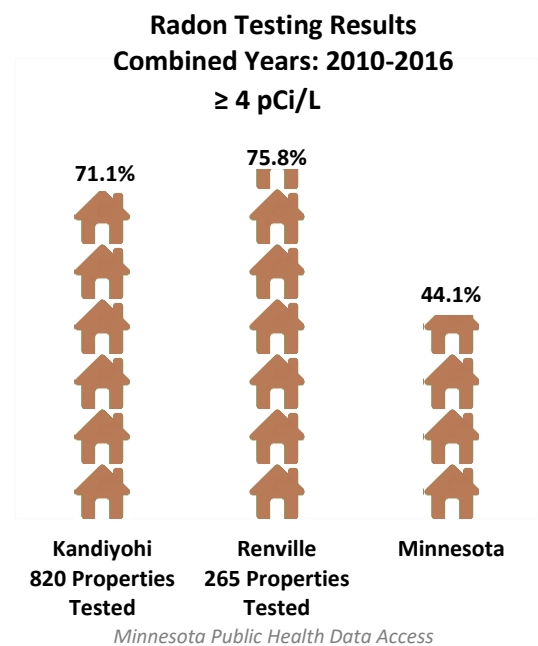
Elevated blood lead cases in Minnesota are declining, but lead is still one of the most common environmental health threats to children. Older housing, especially housing built before 1950, is a risk factor for childhood lead exposure due to the presence of lead-based paint. Lead exposure primarily affects low-income children living in older, poorly maintained housing.

- 33% of homes in Kandiyohi County were built prior to 1960; in Renville County 57% of homes were built prior to 1960.
- In 2016, 873 children in Minnesota had confirmed elevated blood lead test results. Of those, 14 children resided in Kandiyohi County and 6 children in Renville County. The majority of children with elevated blood lead tests in Kandiyohi and Renville Counties were in the under 3 year old age group. (12 in Kandiyohi and 4 in Renville) *Minnesota Public Health Data Access*

Water

Water covers over eight percent of Minnesota. *Minnesota Department of Natural Resources*. Kandiyohi County has a total area of 92.4% land and 7.6% water (66 square miles). In contrast, Renville County has .4% of its area covered with water, only 4.2 square miles. *Minnesota Department of Health: Minnesota Public Health Data Access*

Clean water supports human health and the health of all living things. Not only is clean drinking water essential, but many of us enjoy using lakes, rivers and streams for swimming, boating, and fishing. The health of Minnesota's water supplies is threatened. Land use is a major factor in our current water quality problems, including urban and rural runoff, agricultural drainage, and erosion caused by removing vegetation from shorelines. *Minnesota Pollution Control Agency*



Community water supplies, which are monitored for contaminants, play a critical role in protecting our health. Smaller communities may lack the technical expertise or the financial resources to maintain water quality. Sometimes water supply clean-up costs are passed on to homeowners, which can over-burden people with the least ability to pay.

- Minnesota has 6,787 public water systems. *Minnesota Department of Health. Minnesota drinking water 2016 annual report.*
- Kandiyohi County has 15 and Renville County has 10 public water systems.
- 64% or 27,222 people in Kandiyohi County are served by public water systems.
- 65% or 9,816 people in Renville County are served by public water systems. *MDH: MN Public Health Data Access*

NITRATE

Nitrate in groundwater and surface water is closely tied to land use practices. Over half of Minnesota's land is used for agriculture. While the amount of nitrogen fertilizer used by each farm is down, the number of total acres of "row crops" (like corn and soybeans) has increased, so nitrogen fertilizer run off remains a problem. Runoff or leakage from soil, wastewater, landfills, animal feedlots, septic systems, and urban drainage can cause high levels of nitrate in water, which is especially concerning for the health of infants. Babies under six months old who are fed formula mixed with well water are at the highest risk for methemoglobinemia, or "blue baby syndrome." Blue baby syndrome is a blood disorder that affects how the red blood cells distribute oxygen in the body. Infants with this disorder have skin that looks blue, and may fail to thrive, have seizures, and experience developmental delays and intellectual disabilities.

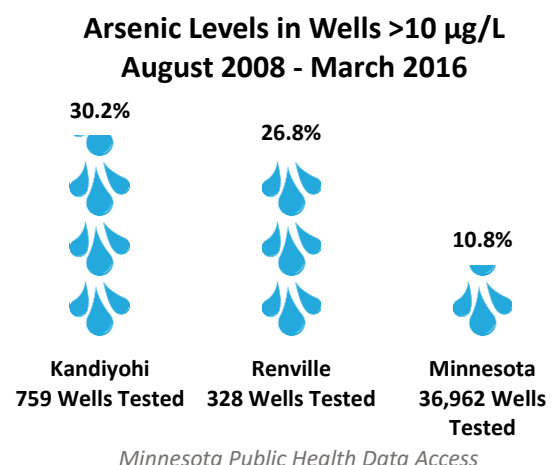
- In 2005, 15,000 Minnesotans were served by community water supplies that treat for nitrite; in 2015, this number grew to 50,000.
- None of the community water supplies in Kandiyohi or Renville Counties needed treatment for nitrite.
- There is no local data on private wells and nitrate levels for Kandiyohi and Renville Counties.
- Many home loans and home sales requires private well testing for bacteria, e-coli form, nitrates and lead. Statewide, one in five existing private wells exceeded the drinking water standard for nitrate.

ARSENIC

Arsenic occurs naturally in Minnesota water, mostly as a result of glacial deposits; levels differ due to geography. Some counties have more arsenic because of how the sediment was deposited and where conditions are right to release arsenic into the water. Arsenic is very expensive to remove from water.

Since 2008, all new private wells in Minnesota are required to be tested for arsenic. 27 to 30 percent of new wells in Kandiyohi and Renville Counties have arsenic levels that exceed the EPA standard (10 µg/L). *Minnesota Department of Health. Arsenic in Minnesota's well water.*

Long-term exposure to arsenic, even at low levels, is associated with cancer of the bladder, lungs, skin, kidney, nasal passages, liver, and prostate. Other possible health effects include cardiovascular disease, diabetes, developmental and reproductive effects. Combined cancer rates for 2009-2013 show that Kandiyohi and Renville Counties had slightly higher rates than the state average for bladder and kidney cancers. Public water supplies are monitored and treated for arsenic. Private well owners may be at higher risk for exposure to arsenic, because they are personally responsible for testing and treating their own drinking water.



Outdoor recreation

Outdoor recreation is good for the mind, body and spirit. Minnesota is rich in parks and trails, creating many opportunities to get outside, alone or with friends and family. Access to parks and safe places for outdoor recreation contribute to our physical and mental well-being.

- Both Kandiyohi and Renville County have a variety of parks. All of the towns in the counties have city parks. Some are well kept and others are in need of maintenance. Willmar has a parks department with a dedicated budget and Olivia has a parks board.
- The county parks in both counties are beautiful. Most in Kandiyohi County surround lakes and are well utilized. Most of Renville County parks border the Minnesota River and are an underutilized resource.

From a recent Renville County Health Equity Data Analysis (HEDA) study, it was noted that park infrastructure varied from town to town. Some felt parks were just for kids and there is little there for adults to do. Families use city parks as it is the only free common outdoor space. People who feel safe enjoy walking for social connection.

“You have to live in a town for kids to participate in summer activities with working parents” Sacred Heart mom

“Parks great for kids, not a lot for adults” Hector parent

“I see a lot of people out walking or biking” 89 year old Fairfax resident

National guidelines recommend that children and adolescents participate in 60 minutes or more of moderate-to-physical activity on most — preferably all — days of the week.



Only 26% of **Minnesota male** ninth-graders get the recommended amount of physical activity.

Only 25% of **Kandiyohi and Renville male** ninth graders get the recommended amount of physical activity.

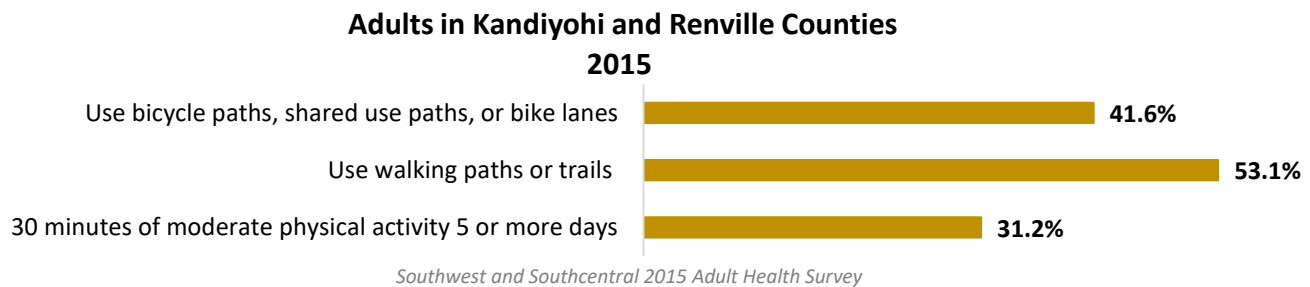
Only 13% of **Minnesota female** ninth graders get the recommended amount of physical activity.

Only 17% of **Kandiyohi** and 18% of **Renville female** ninth-graders get the recommended amount of physical activity. *2016 Minnesota Student Survey*

Willmar has been designated a bike-friendly city and efforts continue to increase physical activity in communities for all ages. Walking is free and quite safe in rural areas and towns in Kandiyohi and Renville Counties. We are challenged with changing the community narrative where residents' perception is that a “center” is needed to be physically active. Regular physical activity helps improve overall health and reduces risk for heart disease, stroke, type 2 diabetes, depression and cancer. Other benefits of regular physical activity:

- Weight control
- Mood improvement
- Energy boost
- Better sleep
- Bone and muscle strengthening

Adult recommendations are for at least 150 minutes of moderate-intensity aerobic activity every week plus muscle-strengthening activity at least two days per week.



Agriculture and health

Agriculture is an important industry in both Kandiyohi and Renville Counties. Unfortunately, we do not have local data and must extrapolate this data from national studies. It is an area of study pertinent to our counties. Farmers and agricultural workers are believed to be healthier and have lower morbidity and mortality rates than non-farming rural and urban populations. This fact has been reported as possibly attributable to a healthier lifestyle, more intensive physical activity and a healthier diet followed by farmers compared to non-farming populations. On the other hand, farming itself and farming-related tasks entail significant hazards to the health and well-being of farmers. Although not well appreciated, farming is among the most hazardous of occupations.

Agricultural workers are exposed to a wide range of occupational hazards, such as ergonomic stress, sunlight, viruses, inorganic dust, pesticides and other chemicals. All these exposures have been investigated as possible risk factors for the reported adverse health effects in farmers including musculoskeletal disorders, respiratory diseases, injuries, cardiovascular diseases, hearing loss, pesticides poisoning, and neurological dysfunction.

Stress in farm workers has been recently recognized as an important public health concern. Stressors inherent in farm work and lifestyle, such as uncertain and fluctuating economic prospects and weather conditions are associated with poor physical and mental health outcomes and result in harmful effects on cognitive function, depression and higher rates of suicide. Research from a California University found that suicide rates in agriculture are five times higher than the national average, and even double the rate for military veterans. Among the reasons: net farm income worries, social isolation, pesticide-induced issues, and ever-present stigma related to mental health issues. Locally, Woodland Centers, a regional provider of mental health services, and others have increased awareness and effort to address agriculture mental health.

A number of factors related to the nature of the agricultural work have been identified as possible risk factors for higher frequencies of musculoskeletal and orthopedic problems such as extensive workloads, heavy lifting, and working in stressful postures. Farmers state that they experience more frequently ear, nose and throat disorders. Cough, pharyngitis, sinusitis, pharyngeal irritation and nasal irritation (dryness, sneezing and secretions) have been reported and were attributed to exposure to pesticides. Moreover, self-reported hearing loss was found to be related to farm noise exposure. www.ncbi.nlm.nih.gov/pmc/articles/PMC3709284/

In both Renville and Kandiyohi County, agriculture is important to the economy and jobs. While Renville County is ranked 56 out of 87 counties for population, it ranks **third** in total agricultural production for the state. Kandiyohi County ranks 10th in total agricultural production for the state. The Minnesota Department of Agriculture states that out of the total 8,001 jobs in Renville County, 1,265 are employed on farms while of the 30,086 jobs in Kandiyohi County, 1,622 are employed on farms. Many of the off-farm employment jobs are agriculturally related or dependent.

2016 County Agricultural Profiles

Minnesota Department of Agriculture

Renville

Population: 15,500 (Ranks 56th in Minnesota)

Total employment: 8,001 jobs

On-farm employment: 1,265 jobs

Non-farm employment: 6,736 jobs

Agricultural Rankings Among all Minnesota Counties

#3 in total agricultural production

#2 in total crop production

#3 in corn

#1 in sweet corn for processing

#10 in soybeans

#6 in sugar beets

#10 in total livestock

#3 in sheep and lambs

#8 in poultry

#10 in hogs

Kandiyohi

Population: 42,173 (Ranks 23rd in Minnesota)

Total employment: 30,086 jobs

On-farm employment: 1,622 jobs

Non-farm employment: 28,464 jobs

Agricultural Rankings Among all Minnesota Counties

#10 in total agricultural production

#25 in crop production

#9 in sugar beets

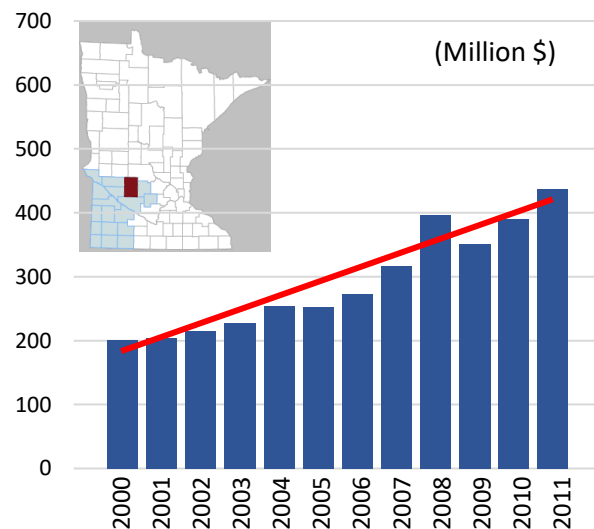
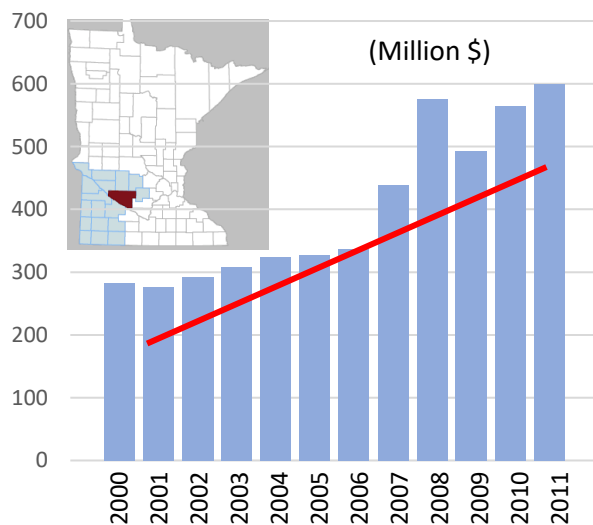
#7 in livestock production

#1 in poultry

#4 in sheep and goats

#21 in milk cows

2016 County Agricultural Marketing



Belonging

When a population or community **belongs** (that is, they are not marginalized or excluded), their voices are heard in such a way that they help shape the conditions in the community that affect their lives and their health. *powell, j.a. (2012, April). Poverty and race through a belongingness lens. Policy Matters 1(5)* Belonging and inclusion determine how we interact with each other individually, in our families, in the community, and in society. Belonging improves the nature of our relationships, expands our access to resources, improves our resilience, and increases our opportunities for educational and economic success.

We are social creatures, and belonging creates meaning, purpose, and hope for the future. Forming relationships and learning to be part of families and communities are critical in early childhood. Children find their own place in society through their experiences and relationships in their families and communities. Pregnant mothers, babies, and children experience stress and trauma when they or their families are marginalized. Children in these circumstances may struggle to connect with others and are at greater risk of experiencing alienation and depression in adolescence and adulthood. *Minnesota Department of Health (2011). Adverse childhood experiences in Minnesota*

Belonging and our health

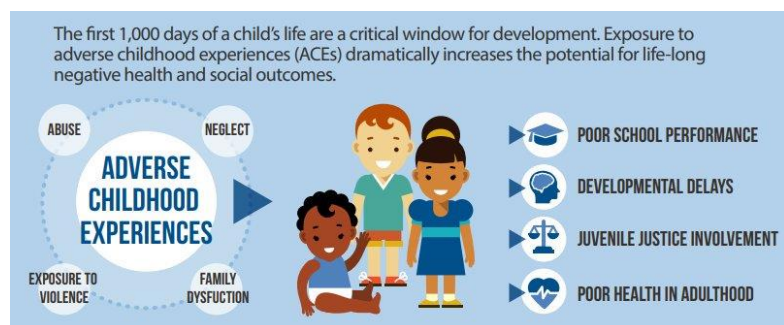
Healthy, positive relationships and lifelong inclusion in society interact to prevent disease, disability, injury, and premature death; they also create a high quality of life. In many ways, *not* belonging is the true source of health inequity. When prejudice, poverty, or simply living in isolated rural areas are a regular part of our lives, we hear a persistent message that “you don’t matter.” If our voices are not heard, if we are not allowed to fully participate in society, we suffer more than stigma. We suffer from higher rates of injury, addiction, abuse, joblessness, incarceration, trauma, depression, disease, disability, and death.

Students that feel included and heard among their peers interact with others, family members, the community, and through society. Students who do not have an adult or peer to talk to have higher rates of injury, addiction, abuse, incarceration, trauma to oneself, depression, and death. In the 2017 SHARE survey conducted within area schools, 82.4% of Renville County students and 78.3% of Kandiyohi students were comfortable talking to an adult in their school (up from 66.5% in 2014). These students reported better connections with teachers they see every day as compared to a counselor or social worker they see occasionally.

Early life experiences

Many things, including relationships, experiences, and the environment, influence brain development. During the first 1,000 days of life, a baby’s brain rapidly develops. An early bond with another person helps set the stage for lifelong emotional, social, and physical health. While we learn about our world, a strong attachment to another person promotes positive emotional and physical development.

Zero to Three from <https://www.zerotothree.org/>



ATTACHMENT

Bonding – or forming attachments – is a building block for developing trust and learning to navigate the world. Holding, cuddling, and talking to infants is essential for their development and lifelong health. If they are consistently well cared for, over time, babies learn to trust their physical and emotional needs will be met.

Attachment is ideally formed in infancy with a child's family of origin. When this is not possible the development of healthy attachments is still possible with consistent, loving, and trauma informed care.

Breastfeeding is one powerful way to develop attachment between mothers and babies by providing them with time together and close physical contact. Breastfeeding releases beneficial hormones in the mother's body during breastfeeding, which helps her bond with her baby. The baby benefits because breast milk is especially good for them.

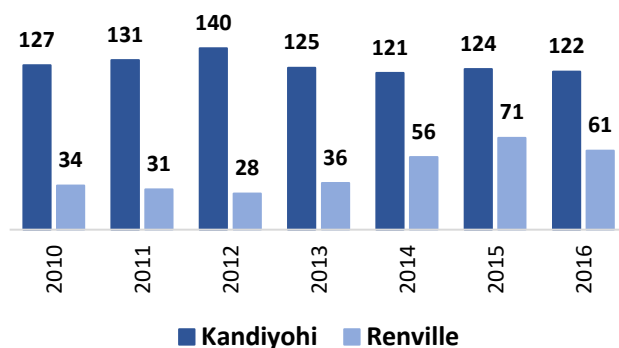
Babies who are breastfed tend to have fewer health problems and lower adult weight than babies who are not breastfed. Mothers who breastfeed are less likely to develop diabetes or breast or ovarian cancer later in life. Not every mother is able to breastfeed, but one can still form a close emotional bond with her infant and provide her or him with a loving, healthy start.

Close care and attention is important, but consistency of caregivers is also needed for a young child's ability to attach. Out-of-Home Placements, even when these are necessary for the safety of the child, disrupt the attachment to a caregiver.



Breastfeeding develops attachment between mothers and babies which helps babies learn their emotional and physical needs will be met.

**Children in Out of Home Placement
2010-2016**



The more caregiver changes that young children experience, the more likely they are to suffer from attachment disorders. Attachment disorders are associated with risk taking behaviors in adolescence.

According to the 2017 SHARE survey of 7th, 9th and 11th graders:

- 88.5% believed that their mother loved them
- 83.1% believed that their fathers loved them

ADVERSE CHILDHOOD EXPERIENCES

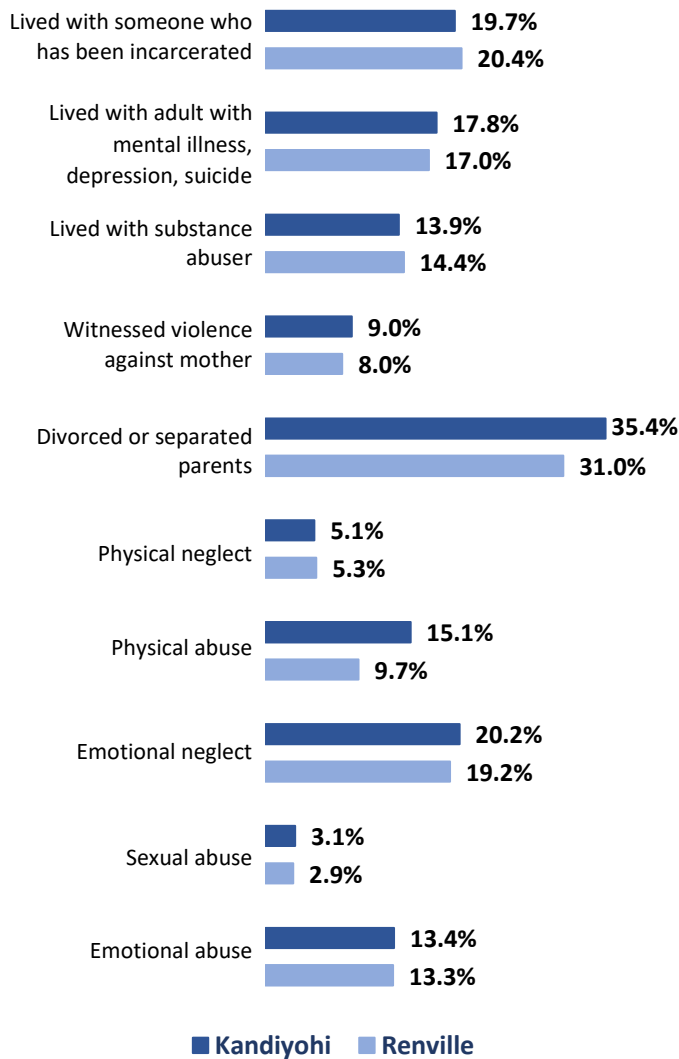
Negative experiences, especially adverse childhood experiences (ACEs) shape lifelong health. ACEs are traumatic events in life occurring before a child turns 18.

Dr. Robert Block, the former President of the American Academy of Pediatrics, said “adverse childhood experiences are the single greatest unaddressed public health threat facing our nation today”.



Percentage of Students Who Have Experienced an Indicated Adverse Childhood Experience (ACE)

2017 SHARE data Grades 7, 9, & 11 combined



Nine different types of ACEs have been studied: physical abuse, sexual abuse, verbal abuse, mental illness of a household member, problematic drinking or alcoholism of a household member, illegal street or prescription drug use by a household member, divorce or separation of a parent, witnessing domestic violence towards a parent, and incarceration of a household member.

The more ACEs experienced, the more likely to experience health problems later in life.

Children and youth with special health care needs in Minnesota are almost three times more likely to experience three or more adverse events in childhood.

Adults who experienced ACEs are three times more likely to have asthma, four times more likely to have depression, six times more likely to have anxiety, and twice as likely to engage in chronic drinking.

Minnesota Department of Health Adverse childhood experiences in Minnesota

Substance use

Even though ACEs are experienced in childhood, they have a powerful effect on entire lives. This is especially true for substance use.

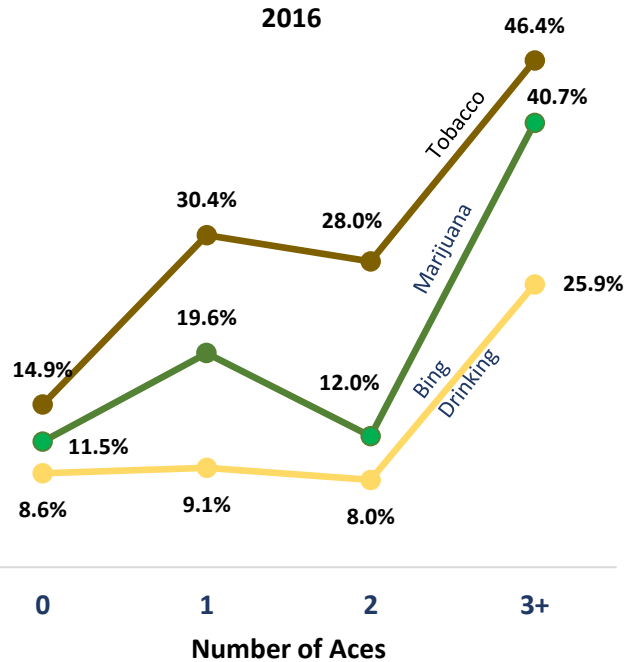
Adverse experiences in childhood increase the risk of adolescents turning to alcohol and drugs. *Moore, K., Sacks, V. Bandy, T. & Murphey, D. (2014). Fact Sheet: Adverse childhood experiences and the well-being of adolescents. Child Trends.*

As the number of ACEs experienced increases, the more likely people will smoke as adults. They are more likely to have anxiety, depression, and alcohol and substance abuse throughout their adulthood.

Living with a parent who abuses substances is also an Adverse Childhood Experience, with lasting impacts on a person’s physical and mental well-being for the rest of their lives.

Hardships in childhood can cause youth to turn to drugs and alcohol as teens.

**Kandiyohi and Renville Counties Combined
11th Graders using substances by number of
Adverse Childhood Experiences**



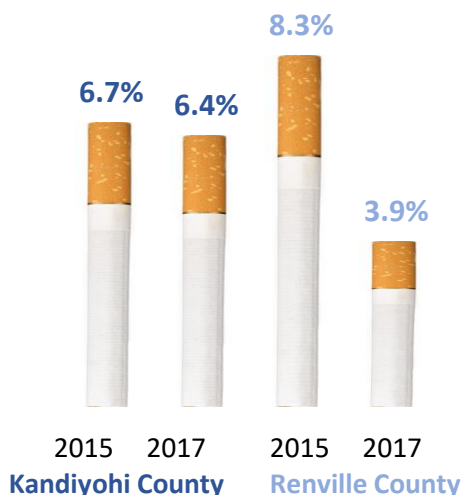
SMOKING

Tobacco use remains the primary cause of preventable diseases and death in Minnesota. The sooner an adolescent starts using tobacco, the longer they are likely to keep the habit up. Local data shows smoking cigarettes has decreased while using E-Cigarettes is on the rise.

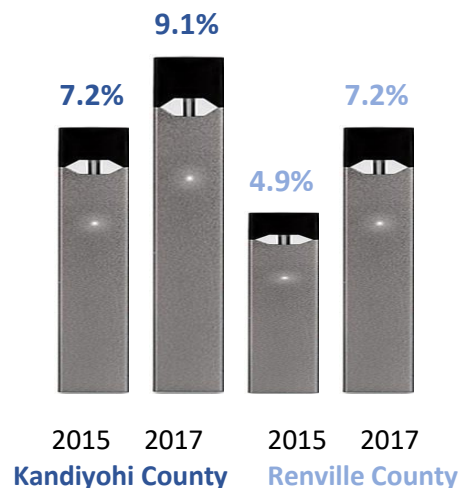
In the last 30 days, did you use the following substance?

PACT 4 SHARE survey

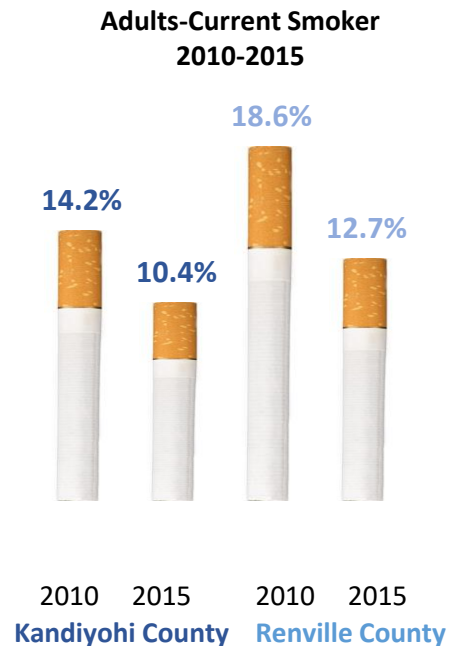
Student Tobacco Use 2015-2017



Student E-Cigarette Use 2015-2017



According to the most recent regional adult survey, adults who smoke in both counties has decreased since 2010.



2010-2015 Southwest Southcentral Adult Health Survey

Fetal exposure to nicotine can have long-term health consequences, including sudden infant death syndrome (SIDS), impaired fetal brain and lung development, hearing problems, effects on behaviors and obesity, and deficits in attention and cognition.

**Percent of Pregnant Women
Who Smoke
2012-2015**



Kandiyohi Renville Minnesota
MN Dept. of Health Tobacco Profile

ALCOHOL AND DRUG ABUSE

According to the CDC, in 2016 alcohol abuse was linked to 80,000 deaths; more deaths than guns, opioids, or even HIV/AIDS at its peak. Alcohol use has become so normalized in our society that we often don't think of it as a leading cause of death. Unintentional injuries, high blood pressure, stroke, heart disease, liver disease, sexual problems, and malnutrition are all related to long term use of alcohol. These chronic diseases become more prevalent after age 50. Deaths that are 100 percent attributable to alcohol include accidental and intentional alcohol poisoning, or chronic conditions of the liver, heart, pancreas, stomach, and nervous system.

- The number of alcohol-related deaths in Minnesota has increased steadily since 2000. Over half of these are due to liver disease; liver disease is the primary driver of the increase in 100 percent alcohol-related deaths. *Minnesota Department of Health. Minnesota death certificates, 2000-2016.*
- According to the 2015 Southwest Adult Health Survey, 31.3% of adults in Kandiyohi and Renville Counties consumed no alcohol. 11.7% drank an alcoholic beverage daily, with a gender difference of more men (18.7%) versus women (5.1%) drinking daily.

Drug-related deaths were at 63,500 (two thirds of these involved opioids). Opioid and other drug use is an emerging concern. Local hospitals, clinics, and dentists have taken measures to reduce initial prescribing of opioids and to support and monitor those patients on continuing prescriptions. For Minnesotans:

- Death caused by overdose on methadone and other opioids has increased 10-fold in the past 16 years, from 18 deaths in 2000 to 186 in 2016. *Minnesota Department of Health. Drug overdose deaths among Minnesota residents, 2000-2016*
- Heroin overdose death has jumped almost as much, but in a shorter time period: from 2 deaths in 2005 to 142 in 2016. *Minnesota Department of Health. Drug overdose deaths among Minnesota residents, 2000-2016.*
- American Indians die from drug overdose six times more often than whites, African-Americans die twice as often as whites. *Age-adjusted mortality from drug overdose, Minnesota, 2016*



Through community efforts and support of Drug Free Community initiatives in Kandiyohi and Renville Counties, teenage drinking rates have decreased.

In Kandiyohi County 9th graders reporting any use of alcohol in the past 30 days decreased from **21.9%** in 2007 to **11.4%** in 2016. During the same period Renville's 9th graders' use decreased from **34.5%** to **5.2%**.

ADULT DRINKING BEHAVIOR

People binge drink for many reasons, including to feel they belong, to feel more self-confident, to forget their problems, and to avoid negative emotions.

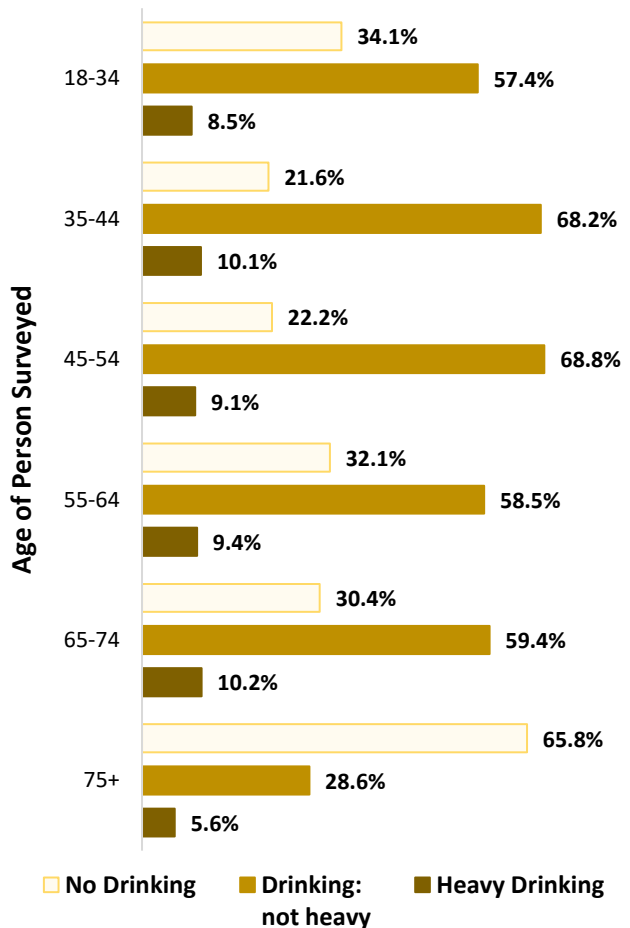
Using the CDC definition, for men, binge drinking is generally defined as having five or more drinks in a short amount of time; for women it is defined as having four or more drinks in the same short time period.

Binge drinking is associated with many health problems, including injuries, suicide, sexual assault, domestic violence, liver disease, poor control of diabetes, and cardiovascular disease.

Generally speaking, men binge drink about twice as often as women. In Kandiyohi and Renville Counties, 42.8% of adult males and 27.2% of adult females stated that they had engaged in binge drinking in the past 30 days. *2015 Southwest / South Central Regional Health Survey*

Children living with adults who abuse alcohol and other drugs are at higher risk for neglect and abuse. Problematic drinking or alcoholism of a household member is itself an adverse experience for children.

**Kandiyohi and Renville Counties
Combined Adult Drinking Behavior**
2015 Adult Health Survey



Incarceration

People with a criminal conviction frequently are excluded from jobs and have trouble finding somewhere to live. This affects their well-being and that of their families and communities.

Incarceration severely disrupts belonging and creates trauma for families and children. When a parent is in prison or jail, children are more likely to experience economic hardship, have unpredictable family relationships, have difficulty with school, struggle with mental and physical health, engage in risky behaviors such as drinking alcohol, and experience stigma. *MN strengthening families affected by incarceration collaborative. Wilder Research/incarceration.*

Youth with a parent in prison or jail are more likely to report trying alcohol (72 percent) than youth without (43 percent). *MN strengthening families affected by incarceration collaborative. Wilder Research/incarceration.*

Since 1993, Kandiyohi and Renville County imprisonment rates have doubled over the years to 2013. The counties' highest imprisonment rates started in 2000 due mainly to methamphetamine and the creation of felony DUI laws. The rates began to taper off in 2007.

Isolation

People physically or socially isolated are at greater risk of abuse, loneliness, depression, and injury. As people grow older and lose life partners or family members, they may become more isolated. The proportion of older persons who are expected to be living alone is anticipated to increase significantly among baby boomers, partly because they have fewer children than preceding generations.

- In 2010 in Minnesota, almost 10 percent of people aged 65 and older lived alone. In 2015 in Kandiyohi and Renville Counties, 11.5% of people ages 65-74 lived alone. This jumps to 37.2% for those age 75 and older.
- In Kandiyohi and Renville Counties, you are more likely to live alone if you are over 75 years, have less than a high school diploma, or have an annual household income less than \$20,000. *2015 Southwest Adult Health Survey*

As people grow older and start to lose life partners, they become more isolated. If they become physically or socially isolated, they will have a greater risk of abuse, loneliness, depression, and injury. For rural elders the risk of isolation is compounded by distance to family, communities, or needed services. Disability at any age increases a potential for physical and social isolation.

A 2018 Renville County HEDA study found that people in our rural area are quick to list what is missing and conclude that there is nothing to do: necessities and entertainment are somewhere else. Businesses are closing and new initiatives are not seen. "Back in the day", there was more vibrancy, community connections, and people. Residents express nostalgia of the past and today's life doesn't feel as positive. Older people stated that you had to intentionally stay connected. The study also noted that rural towns can be isolating. Winter is hard here and most people stay more isolated in their homes during the winter due to the conditions and fewer gatherings for people.

People leave their small towns weekly, if not daily in Renville County, to work, play, shop, meet friends, access services, and simply do "something better."

"Have to travel if going to live in Franklin" Franklin parent

"There is enough to do here if you want to. A lot of it surrounds the school, but there's other things like athletics, Night Out, Corn Chaff Days, Totally U does bus trips." 90 year old Renville County resident

Immigrants and refugees who lack English language skills and cultural knowledge face additional hurdles to belonging. The loss of a shared culture, lack of access to familiar foods, and missing the companionship of friends and loved ones contributes to isolation.

According to the 2017 SHARE Survey, **19.7% of Kandiyohi** and **20.4% of Renville** county's 7th, 9th and 11th grade **students** reported having **lived with someone who has gone to jail or prison.**

Incarceration of a family member is an Adverse Childhood Experience (ACE)

PACT for Families Collaboration

Mental well-being

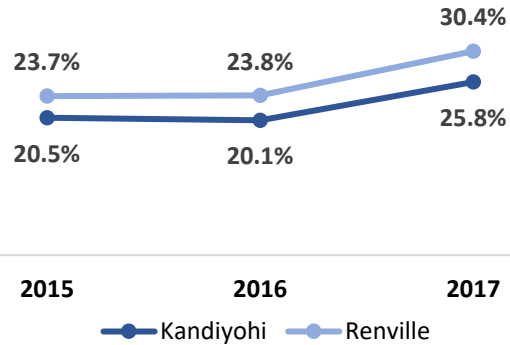
The World Health Organization (WHO) definition of mental health is a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community.

In 2017, of the 563 Renville County student respondents, 171 (30.4%) said that they felt sad or hopeless enough to have difficulties with normal activities while of the 1,184 Kandiyohi County student respondents, 305 (25.8%) said the same.

Students

In the past 12 months, I have felt so sad or hopeless for 2 or more weeks in a row that I have stopped doing some of my normal activities

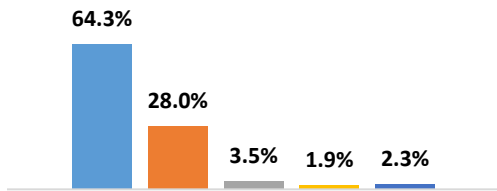
Grades 7, 9, 11 SHARE Survey



Adults

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?

2015 Southwest South Central Adult Health Survey



Kandiyohi and Renville Counties Combined

- 0 days
- 1-9 days
- 10-19 days
- 20-29 days
- all 30 days

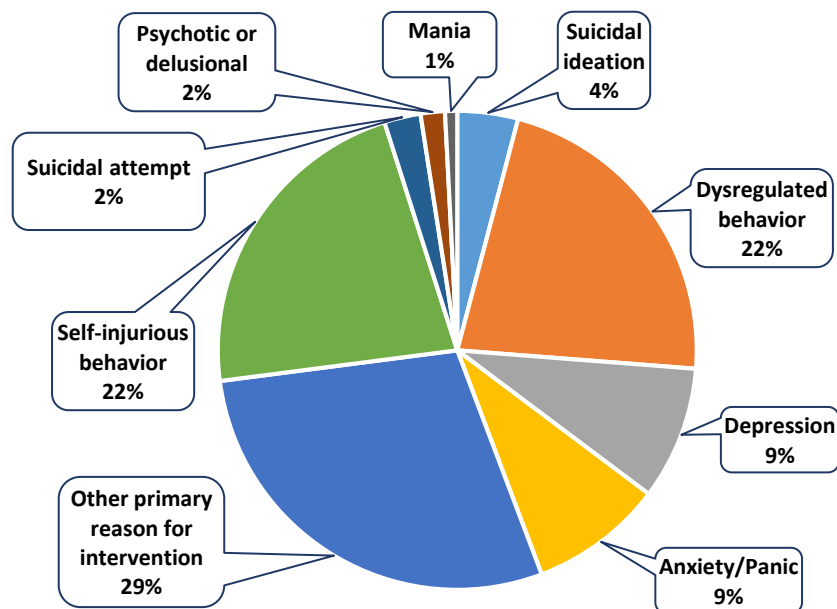
Adults are struggling with mental health/mental well-being. 28% of Kandiyohi and Renville County adults responding to the 2015 survey noted that their mental health was not good for 1-9 days within the past month.

The daily pressures of financial struggles, lack of employment, difficulty in finding affordable housing, and lack of social support all affect mental well-being. Adults who are out of work report a greater number of poor mental health days than others.

Woodland Centers, a regional provider of mental health services, supports people of all ages in both of our counties. One of the many services that they provide is mobile crisis service. 2016 mobile crisis response data shows 170 dispatches in Kandiyohi County and 52 dispatches in Renville County. Overall dispatch data shows the 50% of calls are youth related and 50% adults.

22% of people seen were clients new to Woodland Centers. The overall reason for any dispatch is seen to the right.

Mobile Crisis Unit Primary Reason For Dispatch



Sexuality

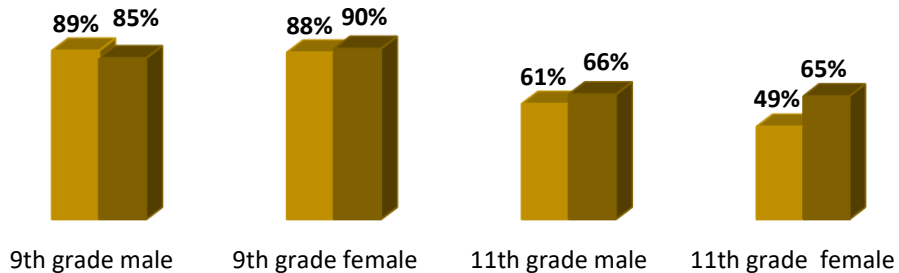
Sexual activity among Minnesota adolescents remains lower than national figures, with 11% of 9th graders and 35% of 11th graders reporting ever having sex, compared to 24% of 9th graders and 50% of 11th graders in the United States. *2017 Minnesota Adolescent Sexual Health report. University of MN Healthy Youth Development Prevention Research Center*

Young People NOT Ever Having Sex by Age and Gender

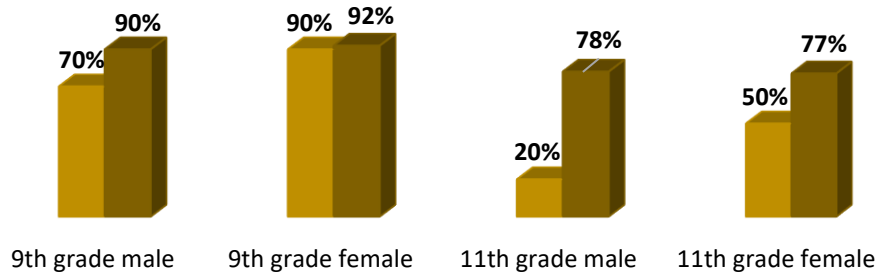
2010 and 2016

Minnesota Student Survey

Kandiyohi



Renville

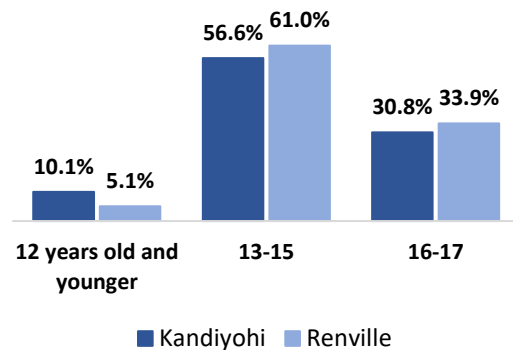


Students cite fear of sexually transmitted diseases as a reason to not have sex (45.4% of students in Kandiyohi County and 52.2% in Renville County), along with fear of pregnancy (47.6% in Kandiyohi County and 56.4% in Renville County). *2017 SHARE Survey - PACT for Families Collaboration*

Age of First Sexual Experience Sexually Active Students Only

2017 SHARE Survey

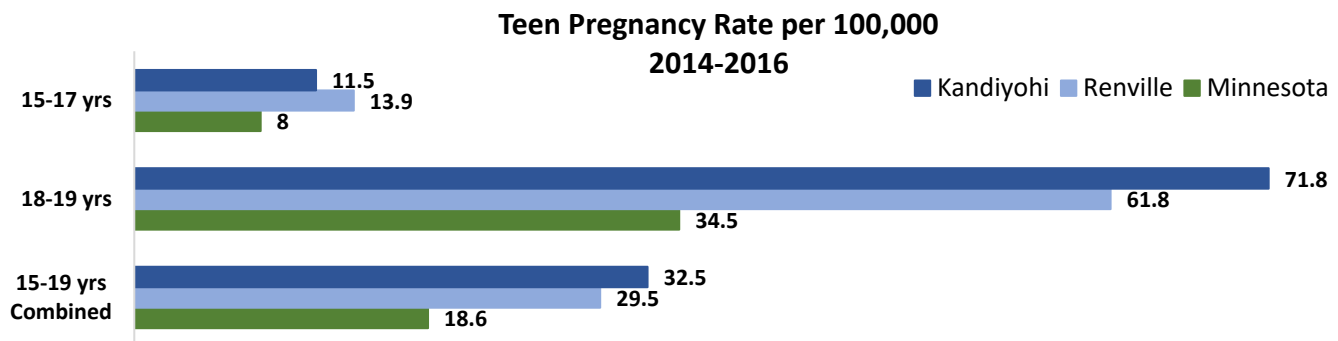
The younger a person is when they become sexually active, the more partners they may have in their lifetime and the risk of sexually transmitted diseases increases.



Adolescent sexual health comprises much more than the absence of pregnancy, early childbearing, or infection.

Overall, there is much to celebrate. Teen pregnancy and birth rates are at historic lows. Statewide teen pregnancy and birth rates are at historic lows, with the pregnancy rate among 15-19 year olds having declined 69% from 1990 to 2015 and the birth rate having declined 63% in the same period. *2017 Minnesota Adolescent Sexual Health report. University of MN Healthy Youth Development Prevention Research Center*

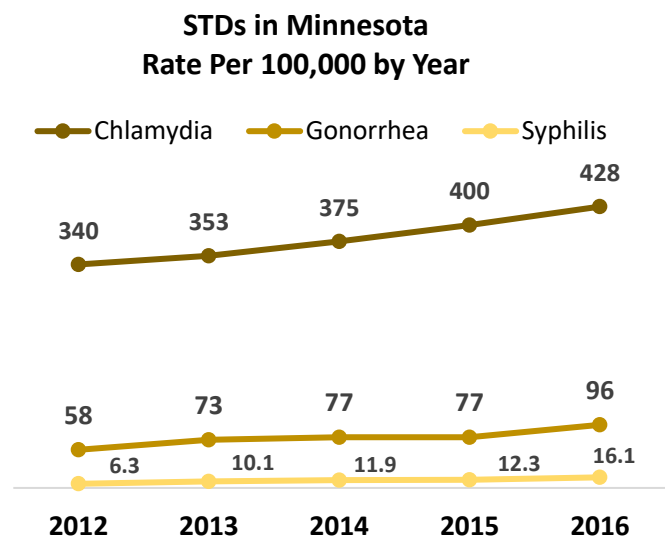
Local data for the combined years of 2014-2016 show that both Kandiyohi and Renville County have higher rates of teen pregnancy than what is seen at the state level. However, note that the majority are seen in the 18 to 19 year old population.



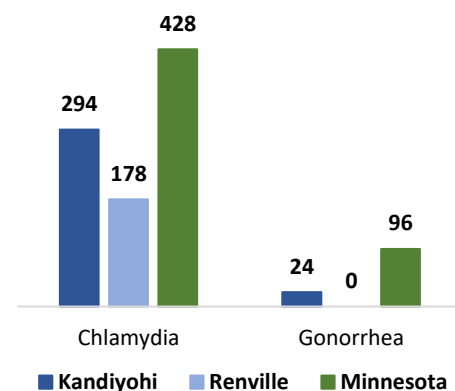
SEXUALLY TRANSMITTED DISEASES (STDs)

Sexually transmitted diseases (STDs) are also known as sexually transmitted infections (STIs). These are infections caused by viruses, bacteria, or parasites that are spread through sexual activity. Statewide data is listed below:

- From 2006-2016, the chlamydia rate increased by 71%.
- From 2015-2016, the rate of gonorrhea increased by 25% and the rates of reported syphilis increased by 30%.
- Minnesota has seen a resurgence of syphilis over the past decade, with men who have sex with men and those co-infected with HIV being especially impacted. However, the number of females is near the record high for the last decade.
- Persons of color continue to be disproportionately affected by STDs.



**2016 Chlamydia and Gonorrhea
Rate Per 100,000**



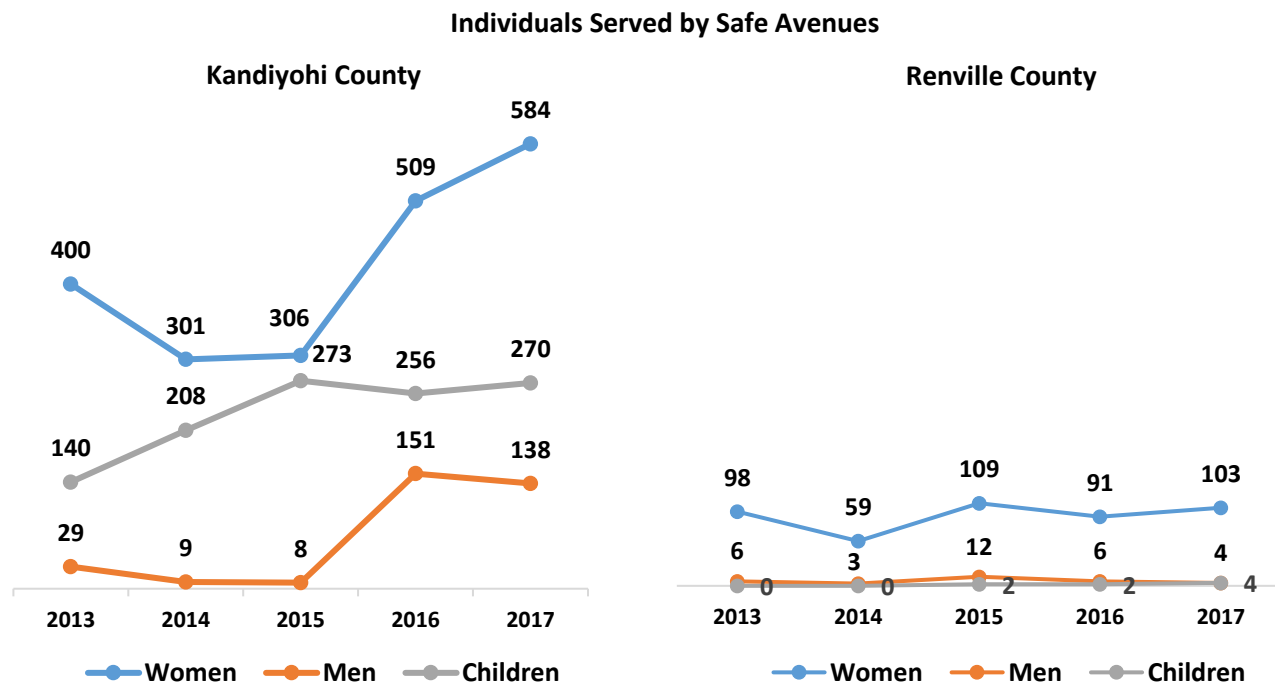
Over 8,500 people in Minnesota live with HIV/AIDS. *People in Minnesota living with HIV/AIDS, 2016*

- Total HIV diagnoses for 2016 were similar to 2015.
- Male to Male sex remains the leading risk factor for HIV.
- More than half of newly reported cases were among communities of color.
- Cases among 20-29 year olds remain high.
- Regionally, there was a 41% increase in new HIV cases in Greater Minnesota from the previous year.

Physical and sexual violence

Physical and sexual violence is a means of maintaining power or control over another person. The effects of this violence on a person's mind and body lasts for a lifetime. Safe Avenues is a regional agency that provides advocacy, supervised parenting time services, and emergency shelter for victims of domestic and sexual violence in Kandiyohi and Renville Counties as well as the surrounding area. They report the following:

- Women are far more likely than men to experience physical and sexual violence. An estimated 1 in 3 women experience domestic violence.
- Men are more likely to experience stalking.
- Teens aged 14-18 are four times more likely to experience sexual violence than any other age group.
- The risk of violence is higher for people with disabilities. They are often targeted specifically because of those disabilities. People with disabilities also report crime less frequently, often due to the nature of their disabilities (like cognitive or physical disabilities or mental illness).
- An estimated 60% of all victims do not report or seek help.
- ACEs research indicates that children who witness domestic violence or are victims of abuse themselves are at serious risk for long-term physical and mental health problems.



Beginning in 2016, Safe Avenues began to track when individuals suffered more than one type of victimization. In Kandiyohi County, there were 145 individuals and in Renville County there were 10. Examples of victimization include sexual abuse, sex trafficking, child pornography, bullying, physical abuse, family violence, kidnapping, and stalking.

Local statistics show an upward trend in sex trafficking and/or exploitation. Sexual exploitation and human trafficking is commonly overlooked, misidentified, and goes underreported. Minnesota recently enacted a law that requires sex trafficking prevention training for all hotels and motels in the state.

Belonging in school

Belonging as an adolescent sets the stage for belonging and participating in society as adults. A welcoming and supportive school environment, where every child knows they belong and are valued, can have positive effects throughout life. Whether in school or another setting, bullying also negatively affects belonging.

Bullying is intentional physical, verbal, or psychological tormenting, and can range from hitting, shoving, name-calling, threats, and mocking to extorting money and treasured possessions. Some kids bully by shunning others and spreading rumors. Others use email, social media, and text messages to taunt others or hurt their feelings online.

EFFECTS OF BULLYING

Bullying actions ripple outward, causing a multitude of issues, including criminal charges such as harassment, hazing, or assault. www.Stopbullying.gov

Bullying can affect everyone—those who are bullied, those who bully, and those who witness bullying.

Bullying is linked to many negative outcomes including impacts on mental health, substance use, and suicide.

It is important to talk to kids to determine whether bullying—or something else—is a concern.

Kids who are bullied can experience negative physical, school, and mental health issues and are more likely to experience:

- Depression and anxiety, increased feelings of sadness and loneliness, changes in sleep and eating patterns, and loss of interest in activities they used to enjoy. These issues may persist into adulthood.
- Health complaints
- Decreased academic achievement—GPA and standardized test scores—and school participation. They are more likely to miss, skip, or drop out of school.

Kids who bully others can also engage in violent and other risky behaviors into adulthood and are more likely to:

- Abuse alcohol and other drugs in adolescence and as adults
- Get into fights, vandalize property, and drop out of school
- Engage in early sexual activity
- Have criminal convictions and traffic citations as adults
- Be abusive toward their romantic partners, spouses, or children as adults

Bystanders or witnesses are more likely to:

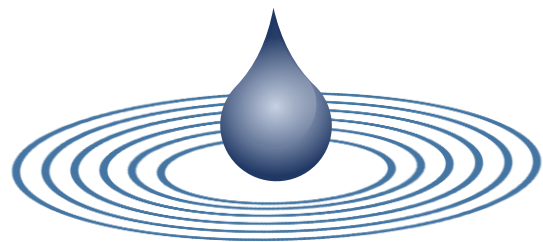
- Have increased use of tobacco, alcohol, or other drugs
- Have increased mental health problems, including depression and anxiety
- Miss or skip school

Percentage of Students Being Bullied

SHARE Survey Pact for Families Collaborative



In 2015, **7.8%** of Kandiyohi County and **10.6%** of Renville County students said they had experienced bullying.



By 2017, the students experiencing bullying had risen to **9.3%** in Kandiyohi County and **12.6%** in Renville County.

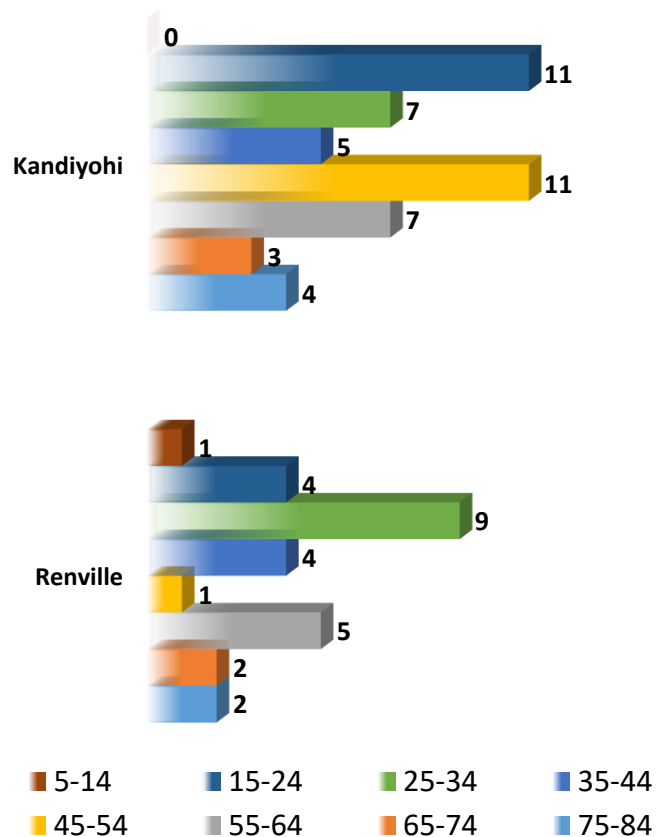
Suicide

Suicide can reflect a deep sense of hopelessness and lack of belonging. Often mental illness is undiagnosed or not treated. Historical trauma, experiences of racial and other prejudice, physical, sexual, or emotional abuse, the experience of being addicted to drugs or alcohol, chronic pain, mental illness, or an immediate crisis can all lead to suicidal thoughts or actions.

While girls and women of every race attempt suicide, boys and men more often die from suicide, because they tend to use more lethal means (e.g., firearms).

In 2017, 12.1% of Kandiyohi County and 14.5% of Renville County students had considered suicide. Of those who had considered suicide, 21.6% had attempted one or more times in Kandiyohi County with an additional 12.7% not wanting to talk about it. In Renville County 18.1% had attempted and 19.5% did not want to talk about it. *2017 SHARE Survey - PACT for Families Collaboration*

**Ten Year Suicide Count For
Kandiyohi And Renville Counties**



Age groups

Minnesota Department of Health, Injury and Prevention Unit

There were no suicides in the 0-4 age group and the 85 and older age group for either counties. In Minnesota, the 0-4 age group was zero and the 85 and older age group was 135. The crude death rate per 100,000 for Kandiyohi and Renville Counties was unable to be determined due to the low number of events.

Wrap up

Different geographies: one community health board

While our two counties are unique, we have many concerns in common.

- Our children under the age of 5 face a growing rate of poverty.
- Aging populations challenge our capacity to adapt to the growing needs of our elderly, while still attending to the needs of our young people.
- Increasing racial and ethnic diversity requires us to assert our values of equity and opportunity for all.
- Increasing numbers of families struggle to make ends meet, highlighting the importance of assuring opportunities for education and good jobs with benefits.
- Scarcity of affordable housing limits the ability of our young families and new immigrants to establish themselves and provide a healthy living environment for their children.
- Population changes challenge our ability to maintain our infrastructure (roads, bridges, water quality, sewers, schools and more) and protect the health and well-being of all residents.
- Transportation systems in rural areas are unique - we drive everywhere and cannot provide feasible and/or sustainable access to transportation in all areas.
- High rates of adults and children receiving mental health services.
- Emerging issues around substance use, particularly vaping, marijuana, opioids and methamphetamine.
- Increasing rates of overweight and obese adults and children.

Building on our strengths

As our local population changes, we need to harness the strengths of our commitment to and shared vision for a place where everyone can thrive. While there are challenges, Kandiyohi and Renville Counties, as well as Minnesota, have many strengths that we can continue to build upon:

- We have a history of a strong commitment to education and quality schools.
- Many people have health insurance, compared to the rest of the country.
- We have quality health services within our counties and around the region.
- Our unemployment rate, along with the state as a whole, is lower than the national average.
- Our crime rate, compared to urban counterparts, is lower.
- We have programs in place to support efforts to provide stable homes for families.
- Our community partners have stated their commitment to increasing the opportunity for all people in our counties to be healthy.
- We have a long history of civic participation. Minnesota has the highest rate of voter turnout in the country.

- We recognize that our growing demographic diversity — including racial and ethnic diversity, as well as an aging population — is an opportunity as we move into the future.
- Many of our faith communities are active in social justice work.
- We have a strong tradition of industrial and agricultural innovation and community philanthropy.
- Our local service organizations put their resources to work to help individuals and communities.
- Our communities actively work to promote belonging, including city and county celebrations.
- We have great city and county parks, as well as wide open spaces, to provide opportunity for people to get outside, be active, and enjoy time with one another throughout the year.
- We have beautiful lakes and rivers. The state’s commitment to water protection helps ensure everyone has access to clean drinking water.
- Many people garden during the short summer season. In addition to home gardens, many of our towns and neighborhoods support community gardens and farmer’s markets.
- We’ve made progress toward equitable transportation, helping to assure access to jobs and services.

We will need to call upon all these strengths and more, and take advantage of every opportunity for change that arises, to move forward on a plan of action for health.