Public Health
Prevent. Promote. Protect.

Community Health Improvement Plan

2015-2019

Southwest Health & Human Services

Lincoln, Lyon, Murray, Pipestone, Redwood, and Rock Counties

SOUTHWEST HEALTH & HUMAN SERVICES

Southwest Health & Human Service
607 W Main St. Marshall, MN 56258
507-537-6713

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Table of Contents

Message to the Community

I am pleased to present the Southwest Health and Human Services (SWHHS) Community Health Improvement Plan (CHIP). The CHIP is a long-term systemic effort to address Public Health problems in a community and is based on the results of the Community Health Assessment (CHA) activities.

The CHIP includes goals, measureable objectives, and action steps for our priority planning area: Preventing and Managing Chronic Disease- emphasis on Heart Disease. The plan is intended to be a call to action and a guide for community stakeholders to improving health across Lincoln, Lyon, Murray, Pipestone, Redwood and Rock Counties.

We welcome your feedback on this plan and encourage you to use this information in your work within the communities you live and serve.

Carol Biren, MS
Public Health Director, SWHHS

Acknowledgements

The Community Health Improvement Plan Committee Members:

- Carol Biren, Public Health Division Director
- Marie Meyers, Nursing Supervisor
- Kristin Deacon, Nursing Supervisor
- Krista Kopperud, Planner
- Michelle Salfer, Public Health Program Specialist
- Jason Kloss, Environmental Health Manager
- Chris Sorensen, Southwest Health and Human Services Director

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Community Health Improvement Plan

Introduction

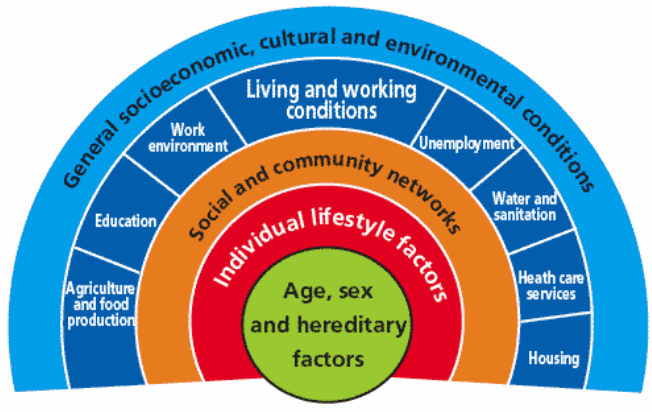
A community health improvement plan describes long-term, collaborative efforts to address public health issues identified through a community health assessment. This plan describes how Southwest Health and Human Services and the community it serves will work together to improve the health of everyone in the department's jurisdiction.

A community health improvement plan, or CHIP, is a customary practice of public health and also is a national standard for all public health departments. In Minnesota, community health improvement plans are developed for the geographic regions covered by community health boards (CHBs). By law, every Minnesota Community Health Board (CHB) must submit a CHIP to the Minnesota Department of Health every five years. Southwest Health and Human Services covers six counties in Southwest Minnesota: Lincoln, Lyon, Murray, Pipestone, Redwood, and Rock.

Southwest Health and Human Services led the CHIP process and based on the data from the Community Health Assessment, the CHIP committee identified Preventing and Management of Chronic Disease as the top priority area for the plan.

Health Disparities and Health Equity

Multiple factors affect health including the dynamic between people and their environments. When assessing a community's health, it is important to consider the interconnected factors of where and how an individual lives, where they work, socialize, and learn. Lifestyle behaviors and genetic disposition affect a person's health but so does more upstream factors including employment status and quality of housing. The social determinants of health framework address the distribution of wellness and illness among a population- its patterns, origins, and implications.



Source: Dalgren and Whitehead (1991) (101)

When groups face serious social, economic, and environmental disadvantages, such as structural racism and a widespread lack of economic and educational opportunities, health inequities are the result. A health disparity is a population-based difference in house outcomes (ex: women have more breast cancer than men). A health inequity is a health disparity based in inequitable, socially-determined circumstances (ex: American Indians have higher rates of diabetes due to the disruption of their way of life and replacement of traditional foods with unhealthy commodity). Because health inequities have social causes, change is possible.

Addressing health inequities through policy, systems, and environmental (PSE) changes are different from the traditional way of administering programs. Traditionally, Public Health programs are implemented to change behavior in individuals and community. However, there is a growing emphasis on addressing societal factors that affect behavior. Those would be through addressing PSE. Policy strategies may be a law, ordinance or rule (both formal and informal). System strategies involve changes to the economic, social, or physical environment.

The work of Southwest Health and Human Services aims to be a catalyst in the movement upstream to address causes and improve environments in our communities, neighborhoods, schools, and work places with the ultimate goal of health equity for all individuals of Southwest Minnesota.

Health Disparities in Southwest Minnesota

A 2008 report published through the South Carolina Rural Health Research Center highlighted the many health disparities that rural residents across the United States face: higher premature mortality rate, infant mortality rate, and age-adjusted death rate. (1) Rural adults are more likely to have a poorer health status, higher chronic disease prevalence, lower use of preventative services, and more likely to be uninsured. In addition, rural residents are older, poorer, and have fewer physicians to care for them which further contribute to the challenges of having positive health outcomes. (1)

In Southwest Minnesota, all six SWHHS counties have a higher percentage of people who are physically inactive and higher prevalence of diabetes than the state average. (2) In addition, nearly two-thirds of the rural counties in the U.S. are designated health professional shortage areas (HPSAs). Rock and Pipestone counties have U.S. Dept. of Health & Human Services Health Resources and Services Administration (HRSA)-designated Medically Underserved Populations (MUPs) and five of our counties (Redwood, Pipestone, Murray, Lyon, and Lincoln) have designated Medically Underserved Areas (MUAs). Lincoln and Lyon counties have a combined five MUAs. (3)

From 2007-2011, all SWHHS counties saw a higher percentage of people living at or below 200 percent of poverty. Pipestone County experienced the highest rate at 35.0 percent. (4) The 2011 CDC Health Disparities & Inequities Report showed persons whose household incomes were below or near the federal poverty level had substantially higher prevalence of smoking, compared with persons whose household incomes were above the federal poverty level. (5)

Heart disease, diabetes, obesity, elevated blood lead level, and low birth weight are more prevalent among individuals with low income and low educational attainment. (6) According to the 2012 US Census, all six counties in the SWHHS service area had below average number of persons age 25+ with a high school diploma and a bachelor's degree or higher. (4)

Pockets of minority populations live throughout the service area of SWHHS. Lyon County has a higher Hispanic population than the state average; the communities of Marshall and Tracy (both located in Lyon County) have the largest concentration of Hispanic, Somali, and Hmong populations combined within the six-county area. (4) Redwood County is home to the Lower Sioux Indian Tribe; in which 6.6 percent of Redwood Falls' population is Native American. (4) Population-specific data from our service area and state highlights healthy inequities facing our rural minority populations.

- The 2009 Minnesota Department of Health (MDH) data report on health disparities showed American Indians in Minnesota having higher diabetes, heart disease, cancer, and stroke mortality rates than other populations. This same report showed Asian populations in Minnesota experience disparities in the following chronic disease indicators: higher stroke, cancer, and heart disease mortality rates. (7)
- The 2011 Wilder Research Community Assessments of Native American, Somali, Hispanic, and Hmong populations in Southwest Minnesota showed high unemployment and high smoking rates in our local minority populations. Hmong and Hispanic populations had higher rates of diabetes and pre-diabetes than the general population. (8)

Planning Process

Community Health Themes and Rankings

Multiple methods were used to identify the top public health issues in the SWHHS counties. First, Southwest Health and Human Services staff worked together to identify public health concerns by topic area through data collection and review. This information was pulled from county, regional, and state-level data. This committee then utilized the PEARL Method (Propriety, Economic Feasibility, Acceptability, Resources, and Legality) to identify the top ten public health priorities. The priorities are listed below. Once the top ten public health priorities were identified, a survey was created and disseminated to gain further input from key informants across the six-county area. This survey, called "Top Public Health Problems Data," was distributed at the SWHHS's "Pitch the Commissioner" event on August 28, 2014 and through e-mailing and personal contact with key community informants across the six counties. The last page of the report asked that community members rank in importance from 1 (most important health issue) to 10 (least important health issue) the concerns by topic area. Over 50 community members were contacted, with 29 members returning surveys. County participation was also tracked to make sure the voices from each county were heard. In addition, the respondent's profession was tracked to be sure that a cross section of professions in the community were engaged in the process. The outcomes of this survey were utilized to formulate the agency's CHIP.

Top Ten Public Health Issues/Concerns by Topic Area

The topics below represent the results of the community ranking and the data that was presented to the community members.

Preventing/Management of Chronic Disease

- **Diabetes:** Diabetes is notably higher than the state average in the SWHHS counties.
- **Asthma:** Asthma hospitalization rates are higher in the SWHHS counties than the state rates. In more populated areas (Redwood and Lyon) – number of asthma related ER visits increased from 2006-2008 to 2009-2011.

- **Cancer:** 2nd leading cause of death in SWHHS counties is cancer. Prostate is leading new cancer diagnosis. Breast cancer is 2nd leading new cancer diagnosis. Lung cancer is the leading cause of death by cancer type.
- **COPD:** Higher rate of COPD hospitalizations in SWHHS counties compared to Minnesota.
- **Heart Attack:** Leading cause of death in SWHHS counties is heart disease. SWHHS counties have a slightly higher rate in heart attacks and heart disease than other (19 counties) in the region. Heart attack hospitalizations are higher in all SWHHS counties compared to the state.
- **Stroke:** Stroke mortality rates have declined over the past 10 years in SWHHS counties, but are still higher than the state average (with the exception of Murray). Pipestone ranked second highest in the state, Lincoln ranked sixth and Rock ranked seventh.
- **High Blood Pressure:** Over 30 percent of adults in SWHHS counties have a diagnosis of high blood pressure.
- **High Cholesterol:** Over 30 percent of adults in SWHHS counties have a diagnosis of high blood cholesterol.

Access to Care

- **Mental Health Professional Shortage:** All 6 SWHHS counties are underserved in mental health services.
- **Dental Professional Shortage:** Larger shortage of Dental Providers; most of SWHHS counties is in a dental shortage area.
- **Medical Professional Shortage:** Larger shortage of Physicians; most of SWHHS counties is in a medical shortage area.

Physical Activity/ Eating Habits/Obesity

- **Adult and Youth Obesity Rates:** A higher percent of SWHHS population is obese or overweight. 30 percent of SWHHS population is not overweight or obese (lower than the 19 county region – which is worse). Redwood County is 24 percent (which is poorer). About 30 percent of 9th graders in SWHHS counties are overweight or obese.
- **Youth Intake of Fruit/Vegetables:** SWHHS 9th grade students who eat vegetable 2 or more times daily are lower than Minnesota rate (2013 Minnesota 21 percent and SWHHS counties 20 percent).
- **Youth Intake of Fruit/Vegetables:** SWHHS 9th grade students who ate fruit or/& vegetable 5+ times yesterday are lower than Minnesota rate (2010 Minnesota 18 percent and SWHHS counties 14 percent).
- **Youth Physical Activity:** Physical activity notably decreases from 9th to 11th grade in SWHHS counties.
- **Adult Physical Activity:** Physical activity is increasing in adults, but it's still low (54 percent getting 3-5x/week).

Mental Health in Youth

- **Anxiety, Nervous, Tense Youth:** One third or higher of 9th graders in SWHHS counties in the last 12 months feel significant problems with anxious, nervous, tense, scared or panicked or like something bad was going to happen.
- **Youth Contemplating Suicide:** 15 percent of 9th grade students seriously consider attempting suicide in Redwood and Pipestone Counties.

Alcohol, Tobacco & Other Drugs

- **Youth Smoking Rates:** Adults and 9th graders smoking rates are decreasing in SWHHS counties (higher in Lincoln and Pipestone, lower in Rock – 9th graders).
- **Youth Exposure to Second Hand Smoke:** Second hand smoke is decreasing in SWHHS counties (but still over 50 percent). Although data is not currently available SWHHS staff expects to see an increase in exposure via e-cigarettes.
- **Prenatal Smoking:** Percent of birth mothers who smoke is higher in SWHHS six county area versus state averages.
- **Binge Drinking:** Binge drinking in 9th graders who engaged in last 2 weeks is higher than Minnesota in 4 of 6 SWHHS counties.

High Risk Behaviors

- **Rising Chlamydia Rates:** Chlamydia rates are under state and greater Minnesota rates but are climbing in SWHHS.
- **Youth Sexual Intercourse Rate:** SWHHS counties are higher than the state average for sexual intercourse in both 9th and 12th graders (Rock is lower for sex, tobacco, alcohol).
- **Teen Birth Rates:** Teen Birth rate 3 of 6 counties in SWHHS is higher than Minnesota in 2007-2011.

Advanced Aging Population

- **Home & Community-based Service for Long-term Care**
    - Higher percent of people utilize nursing homes for care versus home & community care options in SWHHS counties.
    - In SWHHS long term care expenditures are high than state average; home & community based service expenditures 65+ is lower than Minnesota average.

Injury Prevention

- **Motor Vehicle Crashes and Deaths:** Percent of deaths that were unbelted is higher in SWHHS counties than Minnesota and percent of crashes that result in death are higher in SWHHS counties than in Minnesota.

Healthy Start for Children and Adolescents

- **Breastfeeding Rates:** Breastfeeding initiation is lower than Minnesota average in 4 of 6 SWHHS counties; Breastfeeding duration at 3, 6, & 12 mo. is lower than Minnesota average in SWHHS counties.

Environmental Health

- **Radon**: Homes in SWHHS are at high risk for radon exposure.

Community Strengths

Also, during the ranking process the community was asked to list resources by topic area from local, county, and state. This was done to determine if there were resources out in the community that may be available to contribute to or support community health initiatives. Below is the list that resulted:

Preventing/Management of Chronic Disease

Minnesota Diabetes Association
America Cancer Society
Chronic Disease Self-management Program (CDSMP)
Disease Specific Organizations
Support Groups
Health Care Homes
Health Plans-Payment Source
"I Can Prevent Diabetes" Classes starting up in Marshall and Pipestone
ClearWay Community Health Improvement Program (CHIP)
Statewide Health Improvement Programs (SHIP)
Media
Lifestyle Management Programs
Disease Management Programs
Health Screenings
YMCA-Diabetes Prevention Program
Chronic Condition Value Based Benefits Design (enhanced health coverage)
Avera Clinics & Hospitals
Affiliated Community Medical Center (ACMC)
Sanford Clinics & Hospitals
U of MN Extension
Potential to have LIVESTRONG Program at the YMCA
Cardiac Pulmonary Rehab
Tele-stroke Services
Home Care
Libraries
Family literacy programs
SWHHS
Schools
Community Groups
Health Coaches at clinics with Medical Homes

Access to Care

Murray County Medical Center, Slayton, MN (MCMC)
Dr. Brown, Balaton, MN
ACMC
Avera
Sanford Health
Rural Minnesota Health Association
Medical Schools
Southwest Mental Health Services
Department of Human Services (DHS)
Lower Sioux building clinic with dental-looking at partner with U of MN like Rice Dental does
ComPsych Employee Assistance Program
U of MN Dental School
Mobile Crisis Team
Advance Tele-health of Mental Health
Western Mental Health
Open Door Clinic- Medical and Dental
Local providers
Community leaders

Government agencies
Minnesota State Colleges and University System (MNSCU)
Willmar Treatment
Rural resource center through Minnesota Department of Health to help with Health Professional Shortage Areas (HSPA) designation to recruit & have grant dollars
Traveling dental care stops

Physical Activity/ Eating Habits/Obesity

YMCA
Silver Sneakers
Wellness Center
Bone Builders
Schools
Day Cares
Farmers Markets
Units of Government
Supplemental Nutrition Assistance Program (SNAP)
Women Infants and Children (WIC)
Mothers and Children Program (MAC)
Nutrition Assistance Program for Seniors (NAPS)
SNAP Ed classes at low-income schools around the state
Eating Establishments
Families
Parents
SHIP Program
My Marshall
Avera
ACMC
Sanford Health
Public Health
School lunch program
School Gardens (Tyler)
Libraries
Community Bases initiatives
Sports facility managers
Local Grocers
Emergency food providers
Safe Routes to School
Tribal Programs
Fit Kids program though Sanford
Pediatricians
Community based "Healthy Marshall" CO-OP

Mental Health in Youth

Greater Minnesota Family Services
Southwest Mental Health Services
ComPsych Employee Assistance Program
Western Mental Health Services
Avera Behavioral Health
Mobile Crisis Team
Schools
Peer Groups

Faith Organizations
SW Crisis Center
School Counselors
New Horizons

Alcohol, Tobacco & Other Drugs

American Lung Association
Schools
Parents
Community
Project Turnabout
Tobacco Cessation Program
Nicotine Replacement Therapy
WIC
Medical Providers/Primary Care Clinics
Cultural Groups
State Organizations devoted to anti-smoking education
Tribal Programs
Local AA meetings
Public Health

High Risk Behaviors

Crisis Center
Public Health
Media
Schools
Parents
Peer Groups
Area Clinics
Tribal Programs
Primary Care
Pediatrician Education

Advanced Aging Population

Hospice Murray County
Senior Linkage Line
Caregiver Services
Social Services
Public Health
ComPsych Employee Assistance Program
Home Care
Assisted Livings
Adult Day Care
Nursing Homes
Care Providers
Families
Senior Services
Community leaders
Libraries
Faith Communities
Volunteers

Local hospitals
YMCA
Local Community Centers
Tribal Program

Injury Prevention

Car Fit
Matter of Balance
Media
Parents
Law Makers
Law Enforcement (Police, State Patrol, Sherriff)
Safety-Industrial Athlete
MERIT
Lincoln County TZD Committee
Schools
Groups that can offer incentives for safe driving
MNDOT
DPS
EMTs
Drivers Education
Public Health
Community Groups Focused on Safe Intersections

Healthy Start for Children and Adolescents

Day Cares
Hospitals
WIC
Medical Providers
Parents
Employers
Healthy Start Maternity Management Programs
Public Health
Early Childhood
Lactation Support Groups
Peer Educators
Tribal Programs

Environmental Health

Minnesota Pollution Control Agency (MPCA)
MDH
Public Health
Southwest Minnesota Housing Partnership (SWMHP)
County Environmental Offices
Tribal Environmental Offices
State Environmental Office
County Extension Office

Community Health Priority Area

The Southwest Health and Human Services CHIP was developed over a period from October-December 2014 using findings from the Community Health Assessment (CHA) and the key informant interviews/rankings. The CHIP workgroup and program staff (listed on page 4) selected the final strategies and developed specific objectives and action items for the priority area.

Action Plan Format

The rest of the CHIP document is organized by the priority area of Preventing & Management of Chronic Disease specifically Heart Disease. First, the action plan starts with a discussion of data from the 2014 Community Health Assessment that supports the importance of this priority. The section includes several goals with objectives and strategies. Below are the definitions of key terms used in these sections:

Goal is a fundamental issue the community needs to address. It is desired end, which is not necessarily attainable or quantifiable.

Objective is a measurable outcome that the community wants to achieve by focusing on the particular goal.

Strategy is a broadly stated means of utilizing resources to achieve the goals. The strategies are understood to contribute to meeting the objective.

Action plan is a document which includes tactics that describe who, what, when, where, and how activities will take place to implement a strategy.

2015-2019 Priority: Heart Disease

Why Focusing On Heart Disease Is Important

Heart disease and stroke, the first and third leading causes of death for men and women, are among the most widespread and costly health problems in the United States, yet they are also among the most preventable. Cardiovascular disease, including heart disease and stroke, account for more than one-third (33.6 percent) of all U.S. deaths. (9)

The burden of heart disease and stroke can also be felt on the economic impact on the nation's health care system. The CDC estimated in 2010 the total cost of cardiovascular disease in the United States was estimated to be $444 billion. Treatment of these diseases accounts for about $1 of every $6 spent on health care in the United States. (9) The American Heart Association estimates the direct and indirect cost of cardiovascular disease and stroke total more than $320.1 billion. (10) Those costs included procedures, hospitalizations, rehabilitations, and lost productivity due to mortality from heart disease and stroke. In 2011, Minnesotans incurred more than $1.8 billion in charges for inpatient hospitalizations due to heart disease. (11)

Overall, death rates for heart disease and stroke have decreased in the United States in recent decades. However, rates for incidence and death continue to be high, especially among some populations,

including members of certain racial and ethnic groups, people with low socioeconomic status, and those living in the southeastern United States.

In 2011, approximately 18 percent of all deaths (7,234) in Minnesota were attributed to heart disease making it the second leading cause of death for Minnesotans. (11) That same year, 178 deaths in the SWHHS counties were attributed to heart disease making it the leading cause of death in the Southwest Health and Human Services region. (12) Risk factors for heart disease are hypertension, high cholesterol, smoking/tobacco use, lack of physical exercise, poor nutrition, high sodium consumption, and obesity.

Hypertension

Hypertension or high blood pressure is a condition where the force of the blood flow in the arteries is often high. Often symptom-less, high blood pressure causes the tissue that makes up the walls of arteries to get stretched beyond its healthy limit and damage occurs. Consequences of hypertension include vascular weakness, vascular scarring, increased risk of blood clots, increased plaque build-up, tissue and organ damage from narrowed and blocked arteries, and increased workload on the circulatory system. (13)

The 2010 Wilder Research Survey showed 33 percent of adults in the SWHHS service area had a high blood pressure diagnosis from a health care provider. (14) 2011 BRFSS data showed 26 percent of Minnesotans had high blood pressure. (11)

High Cholesterol

Cholesterol is a waxy substance that comes from two sources: your body and food. Your body, and especially your liver, makes all the cholesterol you need and circulates it through the blood. But cholesterol is also found in foods from animal sources, such as meat, poultry, and full-fat dairy products. Your liver produces more cholesterol when you eat a diet high in saturated and *trans* fats. There are two types of cholesterol: "good" and "bad." Too much of one type — or not enough of another — can put you at risk for coronary heart disease, heart attack or stroke. (15)

Excess cholesterol can form plaque between layers of artery walls, making it harder for your heart to circulate blood. Plaque can break open and cause blood clots. If a clot blocks an artery that feeds the brain, it causes a stroke. If it blocks an artery that feeds the heart, it causes a heart attack. (15)

In 2011, approximately 35 percent of Minnesotans had a diagnosis of high cholesterol. (11) In 2010 across the SWHHS counties, 33 percent of adults had high cholesterol. (14)

Smoking

Tobacco use increases the risk of heart disease and heart attack. Cigarette smoking promotes atherosclerosis and increases the levels of blood clotting factors, such as fibrinogen. Also, nicotine raises blood pressure, and carbon monoxide reduces the amount of oxygen that blood can carry. Exposure to other people's smoke can increase the risk of heart disease even for nonsmokers. (16)

In 2012, almost 19 percent of Minnesotans were current smokers. Adult participants in 2010 Wilder Research Survey reported a 13.7 percent current smoking rate across the SWHHS counties. (14)

Minority populations in Southwest Minnesota show a higher rate of smoking versus the general population rate of 13.7 percent. (8) (14) The 2011 minority community assessments conducted by Wilder

Research showed half of Hmong and Hispanic respondents were current smokers; seven out of 10 respondents in the Native American communities were current smokers; and three out of 10 Somali respondents were smokers. (8)

Tobacco use in adulthood is predicated by youth tobacco usage. According to several studies cited by the CDC in Youth and Tobacco Use Fact Sheets, 9 out of 10 smokers had tried their first cigarette by age 18. (17)

There are several factors that can lead youth to try tobacco. Tobacco advertising and use of tobacco in movies can portray smoking as glamourous and socially normal. If the youth is surrounded by family and other youth that use tobacco, they are more likely to perceive tobacco use as a normal part of life. Tobacco use can be perceived as a method to cope with stress, weight issues, depression, and anxiety. Youth dependency on nicotine may happen at a faster pace according to some recent evidence. Also, there are genetic factors in some people that make it harder to quit using tobacco. (17)

From 1998 to 2010, SWHHS 9th graders saw a downward trend in smoking, from 31 to 10 percent, which was consistent with state-level data. In the 2010 survey results, 9th grade student smoking occurred at higher levels in Pipestone, Lincoln, and Redwood Counties than in the other counties. (18)

In the 2013 Minnesota Student Survey, the smoking question was changed slightly from "smoked cigarettes during the last 30 days" to "smoked in the last 30 days." When measured against the previous figure, the trend continued to decrease slightly, from ten percent in 2010 to nine percent in 2013. (18)

Starting in 2013, the Minnesota Student Survey asked about student exposure to second hand smoke. The survey reported 35 percent of SWHHS 9th grade students had been exposed to cigarette smoke in the last seven days versus 31 percent for the State of Minnesota. (18)

The 2010 Wilder Research Survey asked adults "In Minnesota, in the past 7 days, has anyone smoked near you at any place besides your home, workplace, or car?" 32.7 percent of adults in SWHHS counties reported "yes", while 35.9 percent of adults in the 19 County Region reported "yes". (14)

Freedom to Breath legislation in Minnesota has reduced secondhand smoke exposure in the workplace, bars and restaurants, but there are still areas where exposure still occurs like areas outside of workplaces, restaurants and bars, multi-unit housing, homes, casinos, vehicles and public parks. (19) (20) Exposure can affect adults and children that don't smoke and frequent these areas. Children that are exposed to secondhand smoke see an increased rate of asthma, respiratory infections like bronchitis and pneumonia, and respiratory symptoms, sudden infant death syndrome, and ear infections and see decreased lung growth. (21) (20) Adults that have been exposed to secondhand smoke increase their risk of heart disease by 25-30 percent and lung cancer by 20-30 percent. (20)

Lack of Physical Exercise

Being physically active is important at any age for overall health and wellbeing. Physical activity protects you by regulating your weight and improving your body's use of insulin. Being active is beneficial for your blood pressure, blood lipid levels, blood glucose levels, blood clotting factors, the health of your blood vessels and inflammation, which is a powerful promoter of cardiovascular disease. (22) National physical activity guidelines recommend that youth participate in 60 minutes of moderate and vigorous physical activity throughout the day. Adults are recommended to participate in 150 minutes of moderate physical activity per week. (22)

Fewer than half of all Minnesotan adults get the recommended amount of exercise or physical activity. In 2010, 19 percent of adults in Minnesota were not physically active at all. (11) The 2010 Wilder Research Survey across Southwest Minnesota showed only 38.4 percent of adults met the national physical activity guidelines; 23 percent were not physically activity at all. This was a higher percentage of inactive adults in comparison to the 19-county region who participated in the survey (20 percent) and overall Minnesota data. (11) (14)

Minnesota Student Survey results from 1998 through 2010 showed that SWHHS 9th grade physical activity fluctuated from a low of 46 percent in 2001 to a high of 62 percent in 2004 and then trended down to 56 percent in 2010. In 2013, the survey question changed to sixty minutes per day from thirty minutes. The response on average for SWHHS 9th graders in 2013 was 58 percent. (18)

2013 Minnesota Student Survey data for SWHHS 9th and 11th grade physical activity showed a decrease among the older students. In Minnesota schools, physical education is offered through 9th grade. This leaves students that are not participating in team sports without required activity starting in 10th grade. (18)

Poor Nutrition

Several aspects of peoples' dietary patterns have been linked to heart disease and related conditions. These include diets high in saturated fats and cholesterol, which raise blood cholesterol levels and promote atherosclerosis. High salt or sodium in the diet causes raised blood pressure levels. Eating excess calories can increase a person's risk of being overweight.

Consumer choices about food spending and diet are likely to be influenced by the accessibility and affordability of food retailers—travel time to shopping, availability of healthy foods, and food prices. In many cases, convenience is also a huge contributor to eating unhealthy foods. Some people and places, especially in rural areas and those with low-income, may face greater barriers in accessing healthy and affordable food retailers, which may negatively affect diet and food security. (23) Limited access to nutritious food and relatively easier access to less nutritious food may be linked to poor diets and ultimately, to obesity and diet-related diseases. A food desert is a geographic area where affordable and nutritious food is difficult to obtain, particularly for those without access to an automobile. (24) Southwest Minnesota is home to multiple food deserts.

The University of Minnesota Extension Service released information from the USDA in 2013 looking at accessibility to food and food insecurity in Southwest Minnesota. Low access to a store is defined as living more than 10 miles from a super market or large grocery story if living in a rural area, or more than one mile from a supermarket or large grocery store in an urban area. Supermarkets/large grocery stores are food retailers reporting at least $2 million in annual sales and containing all the major food departments. (25) Food insecurity is a lack of access, at times, to enough food for an active, healthy life for all household members. Food insecurity includes limited or uncertain availability of nutritionally-adequate foods. Lincoln County has greater than 60 percent of its residents with low access to a supermarket/large grocery store. (25) In addition, over 24 percent of its residents are in low income households with low access to a grocery store. Redwood County falls into the 12.0 to 15.9 percent range of households with low income and low food access. (25) On average, children in the SWHHS counties experience 14.5-15.4 percent food insecurity.

Food access and affordability affect the amount of fruit and vegetables consumed by both adults and children. In the 2010 Wilder Research Study, responses from SWHHS adults on servings of fruits and vegetables consumed in the past day showed 65.4 percent eating three or more servings yesterday. This was similar to the overall 19-County survey response of 65.2 percent. Individuals that ate zero servings and one to two servings locally and regionally were similar in data trends, too. (14)

From 1998 to 2010, SWHHS 9th grade students were at or below the state average for eating five or more servings of fruit and vegetables the day prior. (18)

In the 2013 Minnesota Student Survey, the fruit and vegetable question was separated into two specific questions: "During the last 7 days, how many times did you eat green salad, potatoes, carrots, or other vegetables?" and "During the last 7 days, how many times did you eat fruit?" Student data below shows those 9th graders who ate vegetables two or more times per day and those who ate fruit two or more times per day. Results showed only 20 percent of SWHHS 9th graders ate vegetables two or more times per day; the state average was 21 percent. 24 percent of 9th grade students ate fruit two or more times per day in comparison with the state average of 27 percent. (18)

Obesity

People with a body mass index (BMI) of 30 or higher are considered obese. The term "obesity" is used to describe the health condition of anyone significantly above his or her ideal healthy weight or 20 percent or more above the person's ideal weight. Nearly 70 percent of American adults are either overweight or obese. (26) Excess body fat is linked to higher LDL (bad) cholesterol, a low level of HDL (good) cholesterol, high blood pressure, and diabetes.

In 2011, 62 percent of Minnesotans were considered overweight and 24 percent were obese. (27) In the 2010 Wilder Research Survey, 30.5 percent of SWHHS participants were at a healthy body mass index. This was lower than the 19-county region at 33.7 percent. (14)

From the 2007-2013 Minnesota Student Survey results, the percentage of SWHHS 9th graders who were considered overweight or obese according to their body mass index (BMI) increased from 25 to 29 percent. During this same time-frame, state-level data increased from 22 to 23 percent. Locally, there was a wide range of outcomes between each county in 2013. Murray County 9th graders were lowest at 16 percent obese; Rock County had the largest percent of obese students at 37 percent. One notable comparison is between actual weight measurements and if students feel that they are overweight. In 2013, 29 percent of 9th grade students across the SWHHS counties were overweight or obese by BMI measurement, but only 22 percent all 9th graders felt that they were overweight. (18)

Prevention of Heart Disease

Leading a healthy lifestyle –not using tobacco, being physically active, maintaining a healthy weight, and making healthy food choices- greatly reduces a person's risk of developing heart disease or stroke. Preventing and controlling high blood pressure and high cholesterol also play a significant role in cardiovascular health. Public Health strategies and policies that promote healthy living, encourage healthy environments, and promote control of blood pressure and cholesterol levels are vital to improving the public's health and saving lives. For child-bearing age women, this includes the promotion of breastfeeding. A study on duration of breastfeeding and maternal cardiovascular disease risk factors showed women that had a lifetime history of breastfeeding for more than 12 months were less likely to

have hypertension, hyperlipidemia, cardiovascular disease and diabetes than women that had no history of breastfeeding. (28) The mother is not the only one that benefits from breastfeeding, the infant sees benefits of lower BMI and elevated HDL cholesterol levels into adulthood according to another study. (29)

The work of Southwest Health and Human Services and its community partners outlined in the CHIP action plan aim to prevent heart disease in the SWHHS counties. The focus of the strategies include: 1) reduction of tobacco use and second-hand smoke exposure in all populations through work of the Statewide Health Improvement Plan (SHIP) programming, ClearWay (CW) Grant work, and local partnerships; 2) increasing consumption of fruits and vegetables in both adult and youth populations through SHIP, Women, Infant, and Children (WIC), and community partners; 3) increasing breastfeeding rates through SHIP, WIC, and community partners; and 4) increasing the number of youth and adults who meet the nation physical activity recommendations across the region through SHIP work and community partnerships.

Plan to Address Heart Disease: 2015-2019

Healthy People 2020 Goal: Improve cardiovascular health and quality of life through prevention, detection, and treatment of risk factors for heart attack and stroke; early identification and treatment of heart attacks and strokes; and prevention of repeat cardiovascular events.

Overall SWHHS Goal: Improve cardiovascular health and quality of life through prevention of heart disease and stroke in the SWHHS counties.

Tobacco

Healthy People 2020 Goal: Reduce illness, disability, and death related to tobacco use and secondhand smoke exposure.

SWHHS Objectives and Strategies

OBJECTIVE	BASELINE	DATA SOURCE
1. By December 2019, reduce tobacco use in all populations by 1%.	*Adult: 13.7% **9.4% ***Youth: 35%	2010 Southwest/South Central Adult Health Survey 2013 Minnesota Student Survey

*Percent of SWWHS adults who are current smokers.
**Percent of SWHHS adults who used other tobacco products such as snuff, chewing tobacco, cigars, pipes, or any other type of tobacco product in the past 12 months.
***Percent of SWHHS 9th graders who have used any tobacco product during the past 30 days.

STRATEGY	TIMEFRAME	PARTNERS
1.1 Support and promote smoke-free multi-unit housing complex policies.	2015-2019	SWHHS (Statewide Health Improvement Plan (SHIP), ClearWay (CW), Property Management Companies
1.2 Support local implementation of smoke-free foster care law.	2015-2019	SWHHS (CW, Human Services), foster care parents
1.3 Support and promote 24 hour smoke-free child care policies.	2015-2019	SWHHS (CW, Human Services), child care providers
1.4 Support local implementation of tobacco-free grounds, parks, county, and campus policies.	2015-2019	SWHHS (SHIP, CW), Government entities
1.5 Support local implementation of e-cigarette free bars, restaurants, worksites/campus policies.	2015-2019	SWHHS (SHIP, CW), Businesses, Colleges
1.6 Local enforcement of Freedom to Breathe law.	2015-2019	SWHHS, local law enforcement

OBJECTIVE	BASELINE	DATA SOURCE
2. By December 2019, reduce second-hand smoke exposure to all populations by 1%.	*Adult: 8.1% **Adult: 18.3% ***Adult: 32.7% ****Youth: 35%	2010 Southwest/South Central Adult Health Survey 2013 Minnesota Student Survey

*Percent of SWHHS adults who smoke or are around someone who smokes inside their home. (past 7 days)
**Percent of SWHHS adults who have been in a car or other vehicle with someone who was smoking. (past 7 days)
***Percent of SWHHS adults who have had anyone smoke near them at any place besides their home, workplace, or car. (past 7 days)
****Percent of 9th grade SWHHS students exposed to cigarette smoke in a room.

STRATEGY	TIMEFRAME	PARTNERS
2.1 Support and promote smoke-free multi-unit housing complex policies.	2015-2019	SWHHS (SHIP, CW) and Property Management Companies
2.2 Support local implementation of smoke-free foster care law.	2015-2019	SWHHS (CW, Human Services), Foster Care Parents
2.3 Support and promote 24 hour smoke-free child care policies.	2015-2019	SWHHS (CW, Human Services), Child Care Providers
2.4 Support local implementation of tobacco-free grounds parks, county, and campus policies.	2015-2019	SWHHS (SHIP, CW), Government entities, Colleges
2.5 Support local implementation of e-cigarette free bars, restaurants, free worksites/campus policies.	2015-2019	SWHHS (SHIP), Businesses, Colleges

Nutrition and Weight Status

Healthy People 2020 Goal: Promote health and reduce chronic disease risk through the consumption of healthful diets and achievement and maintenance of healthy body weights.

SWHHS Objectives and Strategies

OBJECTIVE	BASELINE	DATA SOURCE
3. By December 2019, all populations will increase consumption of fruit and vegetables by 2%.	*Adult: 65.4% **Youth: 24% fruit & 20% vegetables	2010 Southwest/South Central Adult Health Survey 2013 Minnesota Student Survey

*Percent of SWHHS adults who ate 3 or more servings of fruit and vegetables the day prior.
**Percent of SWHHS 9th Grade students who ate 2 more fruit and vegetable servings per day in the last 7 days.

STRATEGY	TIMEFRAME	PARTNERS
3.1 Increase the number of WIC clients who utilize their vouchers for purchase of fruits and vegetables.	2015-2019	SWHHS (WIC), WIC Clients
3.2 Sustain current SWHHS WIC program sites with WIC gardens.	2015-2019	SWHHS (WIC)
3.3 Increase the number of farmers' markets that accept EBT/SNAP/WIC.	2015-2019	SWHHS (SHIP), University of Minnesota Extension, Western Community Action, Southwest Minnesota Opportunity Council, Healthy 56258, Pipestone Active Living
3.4 Increase the number of communities who sustain and support local Community Gardens, Expanding Food Cooperatives, and Community Supported Agriculture (CSA) farms.	2015-2019	SWHHS (SHIP), Community Partners
3.5 Increase the number of schools who participate in the Farm to School Program.	2015-2019	SWHHS (SHIP), School Districts
3.6 Increase the number of worksites who participate in the Farm to Cafeteria Program.	2015-2019	SWHHS (SHIP), School Districts
3.7 Worksites will implement policy, systems, and/or environmental changes to increase access to healthy foods and decrease access to unhealthy foods in vending machines, catering, and on-site food services in addition to company celebrations and fundraising.	2015-2019	SWHHS (SHIP), Businesses, Government entities
3.8 Worksites and schools will implement policy, systems, and/or environmental changes to increase access to healthy foods and decrease access to unhealthy foods in vending machines, a-la cart options, and fundraising.	2015-2019	SWHHS (SHIP), School Districts, Businesses, Government entities

OBJECTIVE	BASELINE	DATA SOURCE
4. By December 2019, increase the breastfeeding rates ≥12 months by 2%.	3.4%-12.6%	Minnesota WIC Information System, 2012.

STRATEGY	TIMEFRAME	PARTNERS
4.1 Increase in the number of WIC clients who participate in the Peer Breastfeeding Program.	2015-2019	SWHHS (Women, Infant, & Children (WIC))
4.2 Offer training opportunities on breastfeeding to all WIC and	2015-2019	SWHHS (WIC,

STRATEGY	TIMEFRAME	PARTNERS
Family Home Visiting staff.		Family Home Visiting (FHV))
4.3 Raise awareness, support environment change, and implement policies to support breastfeeding women in worksite settings.	2015-2019	SWHHS (SHIP), Businesses, Government entities

OBJECTIVE	BASELINE	DATA SOURCE
5. By December 2019, increase the number of youth meeting the national physical activity recommendation by 2%.*	**Youth: 48%	2013 Minnesota Student Survey

**Percent of SWHHS 5th Grade students who were physically active for at least 60 minutes per day the last 7 days (5-7 days).
*National physical activity guidelines recommend that youth participate in 60 minutes of moderate and vigorous physical activity throughout the day.

STRATEGY	TIMEFRAME	PARTNERS
5.1 Increase the number of school districts who have passed PE policies.	2015-2019	SWHHS (SHIP), School Districts
5.2 Increase the number of schools who implement Active Recess into their school day/curriculum.	2015-2019	SWHHS (SHIP), School Districts
5.3 Increase the number of schools who integrate Active Classrooms into their school day.	2015-2019	SWHHS (SHIP), School Districts
5.4 Increase the number of school districts who implement Before and After School Physical Activity Opportunities.	2015-2019	SWHHS (SHIP), School Districts
5.5 Increase the number of school districts who implement Safe Routes to School.	2015-2019	SWHHS (SHIP), Southwest Regional Development Council (SWRDC), School Districts, Government entities

OBJECTIVE	BASELINE	DATA SOURCE
6. By December 2019, increase the number of adults meeting the national physical activity recommendation by 2%.	*38.4%	2010 Southwest/South Central Adult Health Survey

*Percent of adults in the SWHHS counties who meet the CDC recommendations of a minimum of 30 or more minutes of moderate physical activity per day 5 or more days per week.

STRATEGY	TIMEFRAME	PARTNERS
6.1 Worksites will implement policy, systems, and/or environmental changes to increase activity within the work week (active meetings, standing meetings, etc.)	2015-2019	SWHHS (SHIP), Businesses, Government entities

STRATEGY	TIMEFRAME	PARTNERS
6.2 Increase the number of communities who offer Active Transportation to their residents.	2015-2019	SWHHS (SHIP), Government entities
6.3 Increase the number of communities who pass a Complete Streets Policy.	2015-2019	SWHHS (SHIP), SWRDC, Government entities
6.4 Worksites will implement Safe Routes to Work to encourage increased physical activity in their employees.	2015-2019	SWHHS (SHIP), Businesses, Government entities
6.5 Increase the number of communities who write Active Living Plans.	2015-2019	SWHHS (SHIP), SWRDC, Government entities

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