

# North Dakota State Health Improvement Plan 2019-2021

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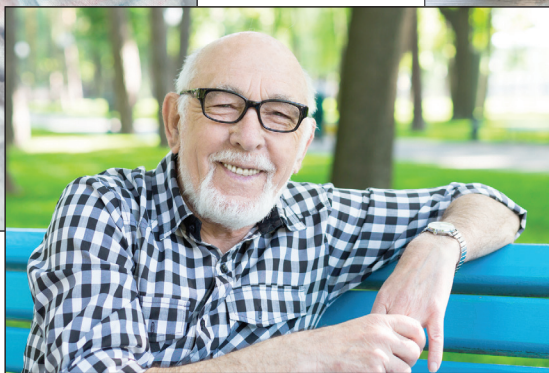


# Background

In North Dakota, many local and statewide groups work to improve our population's health. The State Health Improvement Plan (SHIP) strives to align those plans and efforts. The SHIP calls the state health department, local public health units, other state and local organizations and communities to action to improve population health.

The Main Street Initiative Health and Wellness Steering Committee provides leadership and direction in the state health improvement process. The Health and Wellness Steering Committee is committed to improving the health and well-being of all North Dakotans. The steering committee members are included in the contributions section of this report.

This plan describes the goals to be addressed in the short-term. Statewide partners are focusing their attention and resources on the priorities identified for short-term impact. Therefore, multiple goals, measurable objectives, and strategies, along with the organizations responsible for the strategy implementation are included in the two-year timeline. The SHIP framework included in the appendix, showcases the process for identifying the priorities, goals, and measures. The steering committee continually monitors progress towards meeting the goals and objectives. Also included in the appendix is the SHIP strategic map that outlines the vision for improving the health and wellbeing for all North Dakota.



## P R I O R I T Y   A R E A

### Priority 1 ► Prevent Injury and Premature Death

In North Dakota, the leading causes of death for most age groups five years of age and older, includes heart disease, accidents, and cancer. In 2017, the leading cause of death was heart disease with 1,315 deaths, accounting for 21 percent of all deaths. In that same year, there were 330 accidental deaths, accounting for 5 percent of all deaths. Among the accidental deaths, motor vehicle crashes are the leading cause of death at 32 percent.

For North Dakotans age 0-4 years, perinatal conditions, congenital anomalies and sudden infant death syndrome (SIDS) rank among the top three causes of death, accounting for 74 percent of deaths for this age group. Among this age group, American Indian infants have a higher mortality rate (10.7 per 1000 live births) than all other races combined (6.1 per 1,000).

Many deaths among North Dakotans are preventable. Stakeholders have implemented solutions statewide, using policies, programs, and services to more effectively address the factors that lead to injury and premature death; many are described in the North Dakota State Injury Plan (<https://www.ndhealth.gov/injury>).



# Reduce the American Indian infant mortality rate

from 10.7 per 1,000 live births in 2017 to 8 per 1,000 in 2021

**Objective 1** ▶ Decrease the percent of American Indian women using tobacco during pregnancy from 27.4 percent in 2017 to 20 percent in 2021.

**Objective 2** ▶ Increase the percent of American Indian women initiating prenatal care in the first trimester from 35 percent in 2017 to 45 percent in 2021.

*Data source: Vital Records, Birth Certificate Database*

## STRATEGIES

- ▶ Provide staff training at a variety of entities (e.g., Women, Infant and Children (WIC) program, local public health units, hospitals, clinics) on the 5 A's: Ask, Advise, Assess, Assist, and Arrange and engage providers and encourage them to refer to cessation programs. *Lead organization: North Dakota Department of Health*
- ▶ Promote and educate on optimal birth spacing, inter-conception care, pregnancy intention and prenatal care through tribal summits and workshops. *Lead organizations: North Dakota Department of Health, North Dakota March of Dimes, American Indian Public Health Resource Center, North Dakota Tribes*



# GOAL 2

## Decrease cardiac-related deaths by 1 percent

from age adjusted death rate of 155.5 per 100,000 in 2017 to 153.9 per 100,000 in 2021

*Data source: Vital Records, Death Certificate Database*

**Objective 1** ▶ Increase the number of adults identified with hypertension for disease management from 29.6 percent in 2017 to 32 percent in 2021. *Data source: Behavioral Risk Factor Surveillance System*

**Objective 2** ▶ Increase the number of communities better prepared to respond, assist, and improve survival when an individual suffers a cardiac event from 10 Cardiac Ready Community designations in 2018 to 50 in 2021. *Data source: North Dakota Department of Health- Division of Emergency Medical Services*

### STRATEGIES

- ▶ Promote the adoption and use of electronic health records and health information technology to improve identification and management of adults with hypertension. *Lead organizations: North Dakota Department of Health, Altru Health System, Sanford Health, North Dakota Chiropractic Association*
- ▶ Promote and support health care systems and providers in adopting evidence-based quality measurement at the provider level and the adoption of medication therapy management. *Lead organizations: North Dakota Pharmacists Association, North Dakota State University – Department of Pharmacy, Trinity Health, Thrifty White Pharmacy*
- ▶ Educate the public on risks of high blood pressure and the importance of self-measured blood pressure monitoring. *Lead organizations: American Medical Association, North Dakota Pharmacists Association, University of North Dakota – School of Nursing, BlueCross BlueShield of North Dakota, Local Public Health Units, Altru Health System, Sanford Health*
- ▶ Disseminate automated external defibrillators (AEDs) to communities enrolled in the Cardiac Ready Community program. *Lead organizations: North Dakota Department of Health, American Heart Association, North Dakota Emergency Medical Services Association*
- ▶ Provide training and technical assistance to Emergency Medical Services in implementing resuscitation protocols and transport plans. *Lead organization: North Dakota Department of Health*
- ▶ Provide CPR and AED training to the public. *Lead organization: American Red Cross, American Heart Association*
- ▶ Develop Cardiac Ready Community criteria and provide technical assistance to communities in meeting the criteria. *Lead organization: North Dakota Department of Health*



# GOAL 3

## Reduce the 5-year motor vehicle crash fatality annual average

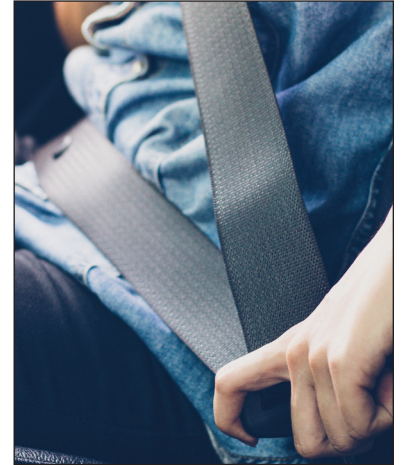
from 128.6 (2013-2017) to 123.5 (2017-2021)

**Objective 1** ▶ Reduce the 5-year alcohol-involved motor vehicle crash fatality annual average from 59 (2013-2017) to 56.7 (2017 to 2021).

**Objective 2** ▶ Reduce the 5-year unbelted motor vehicle crash fatality annual average from 63.6 (2013-2017) to 61.1 (2017 to 2021).

**Objective 3** ▶ Reduce the 5-year speed-related motor vehicle crash fatality annual average from 39.8 (2013-2017) to 38.2 (2017 to 2021).

Data source: North Dakota Department of Transportation - Safety Division



### STRATEGIES

▶ Promote, develop and facilitate implementation of Vision Zero strategies. Vision Zero is a statewide coalition led by the North Dakota Department of Transportation, North Dakota Highway Patrol and North Dakota Department of Health and includes representation from transportation, law enforcement, emergency medical services, engineering, health and others.

Key strategies:

- Work with the legislature to ensure state laws represent best practices in traffic safety.
- Implement workplace policies that support driver and passenger safety.
- Implement infrastructure improvements.
- Apply technology advancements that make vehicles, roads and drivers safer.
- Conduct high visibility enforcement of existing traffic laws.

Note: Goal and objective targets for priority area 1 were recommended by North Dakota Department of Health and North Dakota Department of Transportation. Target recommendations in the objectives are determined based on trend data

### PRIORITY AREA

#### Priority 2 ▶ Improve our population's overall physical health

Physical health is critical to overall well-being and is often influenced by lifestyle factors such as physical activity, nutrition and diet, smoking, alcohol and other substance use, and sleep. Poor lifestyle behavior choices contribute to many chronic diseases and conditions which are often preventable. Decreasing obesity and smoking use are just two factors that can have a tremendous impact on reducing the burden of chronic diseases and ensuring optimal health.

The current trend for youth and adult obesity is increasing. Research indicates that breastfed babies are less likely to become obese later in childhood. Tobacco use is the state's leading cause of preventable disease and death. Preventing tobacco initiation among youth and young adults, and stopping use in youth and adults, will greatly reduce the negative health and economic impact.

Stakeholders have implemented solutions statewide, using policies, programs, and services to more effectively address tobacco use in youth and adults; many are described in the North Dakota Comprehensive Tobacco Prevention and Control State Plan ([https://www.ndhealth.gov/tobacco/NDDoH\\_Eval\\_Plan.pdf](https://www.ndhealth.gov/tobacco/NDDoH_Eval_Plan.pdf)).

# GOAL 1

## Decrease the current cigarette smoking rate

in adults from 18.3 percent in 2017 to 17 percent in 2021 and youth from 12.6 percent in 2017 to 9 percent in 2021

**Objective 1** ▶ Increase cessation attempts from 54.6 percent in 2017 to 60 percent in 2021.

# GOAL 2

## Decrease electronic vaping product use

by youth from 20.6 percent in 2017 to 19 percent in 2021

**Objective 1** ▶ Decrease the percent of youth who have ever tried electronic vaping product from 41.0 percent in 2017 to 38 percent in 2021.

*Data source: Adult data – North Dakota Behavioral Risk Factor Surveillance System, Youth data – North Dakota Youth Risk Behavior Survey*

## STRATEGIES

- ▶ Promote and provide accredited tobacco training on tobacco treatment to providers. *Lead organization: North Dakota Department of Health*
- ▶ Work with health care system partners to implement cessation protocols and increase referrals to cessation programs. *Lead organizations: North Dakota Department of Health, Local Public Health Units*
- ▶ Administer NDQuits cessation program. *Lead organization: North Dakota Department of Health*
- ▶ Identify, create and disseminate new electronic nicotine delivery system messaging. *Lead organizations: Tobacco Free North Dakota, North Dakota Public Education Task Force (Local Public Health Units)*
- ▶ Plan and promote tobacco youth summit. *Lead organizations: North Dakota Department of Health, Local Public Health Units*



# GOAL 3

## Decrease obesity rates

in adults from 33.1 percent in 2017 to 32 percent in 2021 and youth grades 9-12 rates from 14.9 percent in 2017 to 13.5 percent in 2021

*Data source: Adult data - North Dakota Behavioral Risk Factor Surveillance System, Youth data – North Dakota Youth Risk Behavior Survey*

**Objective 1** ▶ Increase the percentage of infants who were breastfed at 6 months from 58.2 percent in 2018 to 60.6 percent in 2021.

*Data Source: Centers for Disease Control and Prevention (CDC) Breastfeeding Report Card*

**Objective 2** ▶ Increase the percent of youth grades 9-12 who were physically active at least 60 minutes per day on all 7 days from 26.1 percent in 2017 to 28 percent in 2021 and youth grades 7-8 from 45.1 percent in 2017 to 47 percent in 2021.

*Data source: Adult data – North Dakota Behavioral Risk Factor Surveillance System, Youth data – North Dakota Youth Risk Behavior Survey*

### STRATEGIES

- ▶ Promote and administer the ND Breastfeeding-Friendly designation for birth hospitals. Hospitals provide staff training and support interdisciplinary teams. *Lead organizations: North Dakota Department of Health, Health Care Systems*
- ▶ Promote and administer the Infant Friendly Workplace designation to businesses. Businesses establish workplace policies based on approved breastfeeding-friendly best practice. *Lead organizations: North Dakota Department of Health, North Dakota Worksite Wellness/Blue Cross Blue Shield, Businesses*
- ▶ Support funding for Maternal and Child Health grantees to implement evidence-based, evidence-informed and/or promising practices efforts in the community. *Lead organization: North Dakota Department of Health*
- ▶ Promote and support early childhood care centers in developing and adopting policies to implement food service guidelines and nutrition and physical activity best practices. *Lead organization: American Heart Association*
- ▶ Work with schools to implement innovative strategies like mobile breakfast carts and breakfast in classrooms. *Lead organization: North Dakota Department of Public Instruction.*

*Note: Goal and objective targets for priority area 2 were recommended by North Dakota Department of Health. Target recommendations in the objectives are determined based on trend data.*



# P R I O R I T Y   A R E A

## Priority 3 ► Improve our population's overall behavioral health

By 2020, mental and substance use disorders will surpass all physical diseases and major causes of disability worldwide. In total, North Dakota ranks much higher than the national average in excessive drinking. Substance use and mental disorders can make daily activities difficult and impair a person's ability to work, interact with family, and fulfill other major life functions. Underage drinking and adult binge drinking are a serious public health issue and challenge for North Dakota communities.

The North Dakota Behavioral Health Vision 20/20 outlines the strategic goals prioritized from the recommendations

of the 2018 Behavioral Health System Study. Additional strategies to address excessive drinking are referenced in the document (<https://www.behavioralhealth.nd.gov>).



## Reduce high school use (past 30-days) of alcohol

from 29.1 percent in 2017 to 23.8 percent in 2021

*Data Source: Youth Risk Behavior Survey*

**Objective 1** ► Increase community implementation of effective strategies targeting underage drinking from 24 in 2018 to 32 in 2021.

**Objective 2** ► Increase number of professionals certified as minor in possession providers from 0 in 2018 to 20 in 2021.

*Data source: North Dakota Department of Human Services - Behavioral Health Division*





# Reduce adult binge drinking (past 30-days)

among adults age 26 and older from 30.7 percent in 2015-2016 to 26.7 percent in 2020-2021

*Data source: National Survey on Drug Use and Health*

**Objective 1** ▶ Increase community implementation of effective strategies targeting adult binge drinking from 14 in 2018 to 22 in 2020. *Data source: North Dakota Department of Human Services, Behavioral Health Division*

## STRATEGIES

- ▶ Promote Parents Lead, an evidence-based prevention program that provides parents and caregivers with a wide variety of tools and resources to support them in creating a safe environment for their children. *Lead organizations: North Dakota Department of Human Services, Local Public Health Units, North Dakota Tribes*
- ▶ Fund and support evidence-based underage drinking prevention strategies. *Lead organization: North Dakota Department of Human Services*
- ▶ Promote “Speak Volumes” campaign which educates the public on binge drinking. *Lead organization: North Dakota Department of Human Services*
- ▶ Fund and support evidence-based binge drinking prevention strategies. *Lead organization: North Dakota Department of Human Services*

*Note: Goal and objective targets for priority area 3 by North Dakota Department of Human Services. Target recommendations in the objectives are determined based on trend data.*

## PRIORITY AREA

### Priority 4 ▶ Increase access to health care services

Access to comprehensive, quality health care services is important for promoting and maintaining health, preventing and managing disease, reducing unnecessary disability and premature death, and achieving health equity for all North Dakotans. Stakeholders have been working to improve access to health care services by ensuring the availability of providers for an ongoing source of care and prevention. In addition, stakeholders have identified and implemented innovative approaches in reaching and providing preventive services in ways that are convenient, such as providing oral health services to students in schools.

Staffing is the number one concern facing long-term care and health care facilities in North Dakota. A shortage of physicians and nurses has intensified over the years due the retirement of baby boomers, a growing and aging population, and the increase of health care needs. Many facilities have had to use contracted staffing to fill the need. A better solution would be to fill shortages with facility full-time employees rather than contracting staff which is costly, making it more difficult to provide salary increases and other incentives to retain workforce.

# GOAL 1

## Decrease the prevalence of third grade children who have tooth decay from 68 percent in 2018 to 64 percent in 2021

**Objective 1** ▶ Increase the percentage of third grade children that have dental sealants in permanent molar teeth from 47 percent in 2018 to 51 percent in 2021.

*Data Source: North Dakota Third Grade Basic Screening Survey*

### STRATEGIES

- ▶ Administer Seal!ND, a preventive dental care program that utilizes public health hygienists and private dental practices. *Lead organizations: North Dakota Department of Health, Oral Health Program, North Dakota Dental Association, Private Practice Dentists*
- ▶ Work to expand access to preventive dental care through medical professionals. *Lead organizations: North Dakota Department of Health - Primary Care Office and Oral Health Programs, North Dakota Medical Association, North Dakota Dental Association, Local Public Health Units*
- ▶ Provide oral health screenings and fluoride varnish through Health Tracks Program. *Lead organizations: North Dakota Medicaid, North Dakota Dental Association, Local Public Health Units, Health Care Systems*



# GOAL 2

## Reduce the statewide nurse FTE vacancy rates for registered nurses working in hospitals and long-term care facilities

from 13.1 percent in 2016-2018 to 10 percent in 2021 and for certified nurse assistants from 8.9 percent in 2016-2018 to 7 percent in 2021.

**Objective 1** ▶ Increase the percentage of students graduating from a North Dakota nursing program who become registered nurses licensed in North Dakota from 58 percent in 2017 to 60 percent in 2021.

**Objective 2** ▶ Decrease the percentage of nursing facilities using contracted agency staff from 82 percent in 2018 to 70 percent in 2021.

*Data source: 2016 North Dakota Nursing Facility Workforce Survey, 2017 North Dakota Hospital Workforce Survey, North Dakota Board of Nursing licensure data*

# GOAL 3

## Increase the percent of adults living in rural areas who have had a routine check-up in the past 12 months

from 60 percent in 2017 to 65 percent in 2021

*Data source: North Dakota Department of Health - Behavioral Risk Factor Surveillance System*

**Objective 1** ▶ Increase the rate of physicians practicing in rural, underserved areas from 3.4 per 10,000 population in 2018 to 4.5 per 10,000 population in 2021.

*Data source: North Dakota Department of Health - Primary Care Office*

### STRATEGIES

- ▶ Promote and provide educational training to long-term care nursing staff to increase competencies and to administration on payment model implementation. *Lead organization: North Dakota Long Term Care Association*
- ▶ Provide scholarships to assist qualified persons who wish to further their education and practice in the long-term care profession. *Lead organization: North Dakota Long Term Care Association*
- ▶ Provide technical assistance to organizations and communities in their efforts to expand access to primary care for underserved populations. *Lead organizations: North Dakota Department of Health - Primary Care Office, University of North Dakota Center for Rural Health*
- ▶ Administer and implement the North Dakota Health Professional Student Loan Repayment Program and the Federal/State Loan Repayment Program. *Lead organization: North Dakota Department of Health - Primary Care Office*
- ▶ Provide technical assistance for the National Health Service Corp. and administer the J1Visa program. *Lead organization: University of North Dakota Center for Rural Health*



*Note: Goal and objective targets for priority area 4 by Center for Rural Health and the Healthcare Workforce Group, University of North Dakota, School of Medicine and Health Sciences. Target recommendations in the objectives are determined based on trend data.*

# North Dakota State Health Improvement Plan (SHIP): Improving the Health and Wellbeing of All North Dakotans



**2019-2021**

**Health & Wellness Steering Committee Representation**

- ND Department of Health
- ND Department of Commerce
- ND Department of Human Services
- State Legislators
- Office of the Governor
- ND Information Technology Department
- ND Hospital Association
- ND Medical Association
- UND School of Medicine & Health Sciences
- ND Long Term Care Association
- ND Dental Association
- ND Department of Transportation
- ND Department of Public Instruction
- ND American Heart Association
- ND Indian Affairs Commission
- Lutheran Social Services of ND
- ND Nurses Association



**MSI Health Dashboard Priority Indicators:**

Length of Life: premature death  
 Quality of Life: poor physical health & mental health days  
 Risk Factors: tobacco use, obesity  
 Access to Care: health care provider availability



**SHIP Mission: Improving the Health and Wellbeing of All North Dakotans**

**Priority Areas and Goals:**

- 1) Prevent injury and premature deaths
  - a. Reduce the American Indian infant mortality rate
  - b. Decrease cardiac-related deaths
  - c. Reduce motor vehicle crash fatalities
- 2) Improve our population's overall physical health
  - a. Decrease cigarette smoking
  - b. Decrease electronic vaping product use
  - c. Decrease obesity
- 3) Improve population's overall behavioral health
  - a. Reduce high school alcohol use
  - b. Decrease adult binge drinking
- 4) Increase access to health care services
  - a. Decrease the prevalence of third grade children who have tooth decay
  - b. Reduce FTE vacancy rates for registered nurses working in hospitals and long term care facilities
  - c. Increase the percent of adults who have had a routine check-up

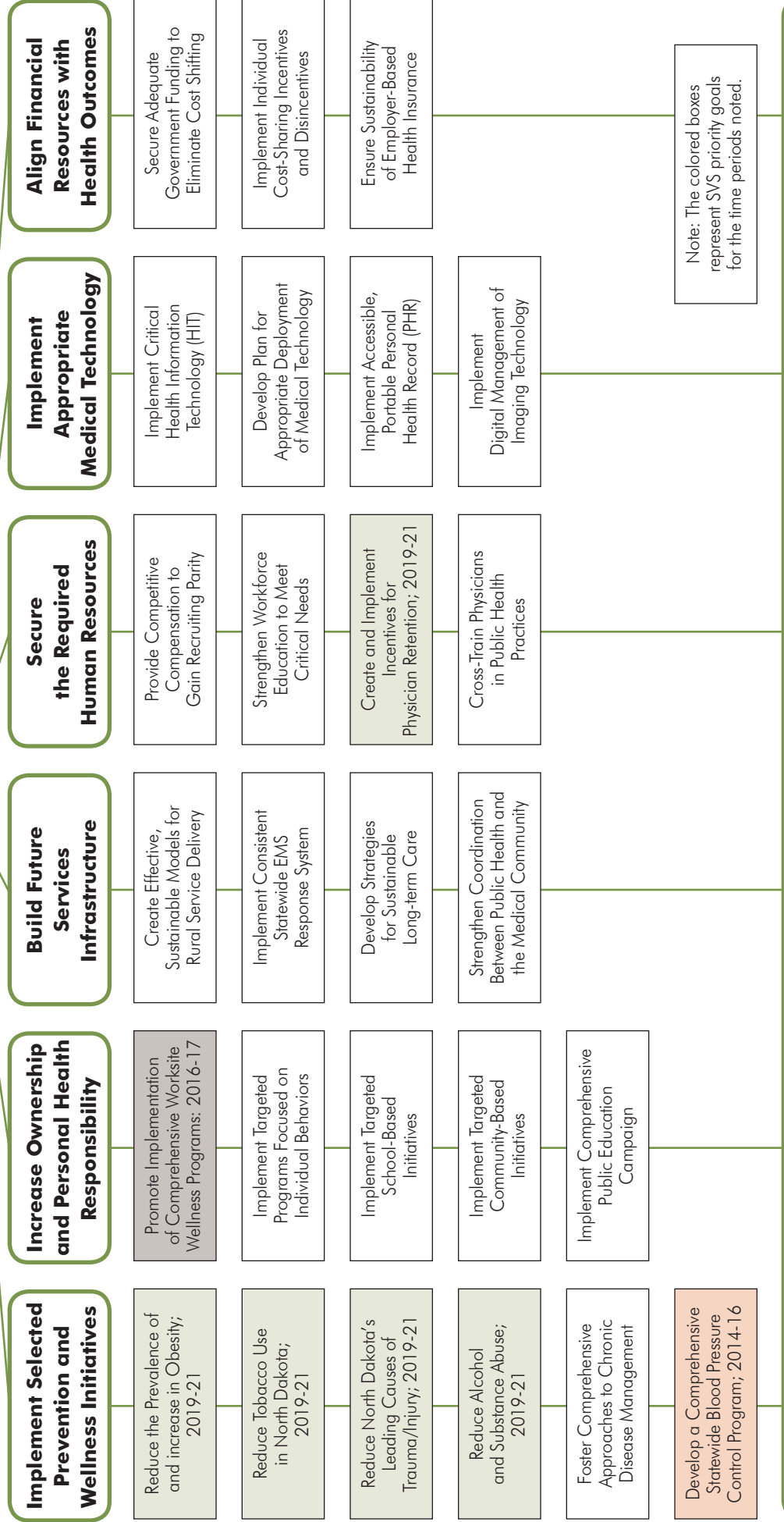
**Long-term Goal: Healthy and Vibrant Communities**



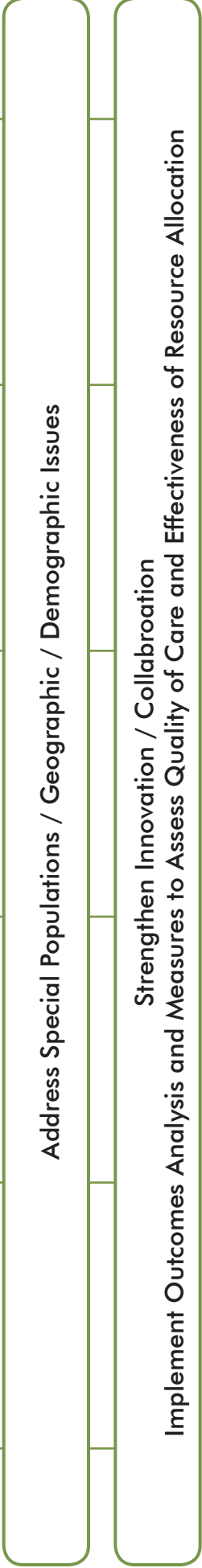
**SHIP Implementation Partners**

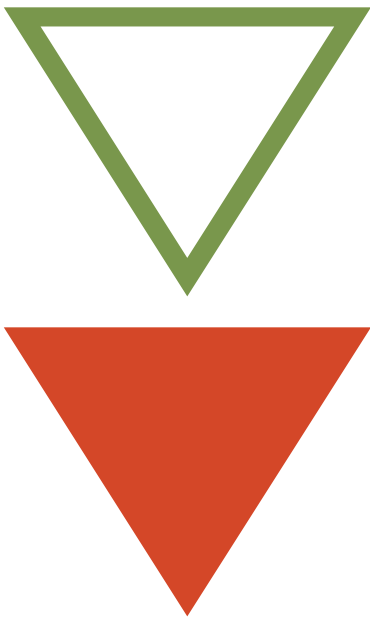
- UND Center for Rural Health
- ND Department of Public Instruction
- ND Department of Human Services
- ND American Heart Association
- ND Department of Health
- ND Department of Transportation
- ND Dental Association
- ND Medical Association
- ND Long Term Care Association

**Implement Key Strategies to Improve the Health and Well-being of All North Dakotans**



Note: The colored boxes represent SVS priority goals for the time periods noted.





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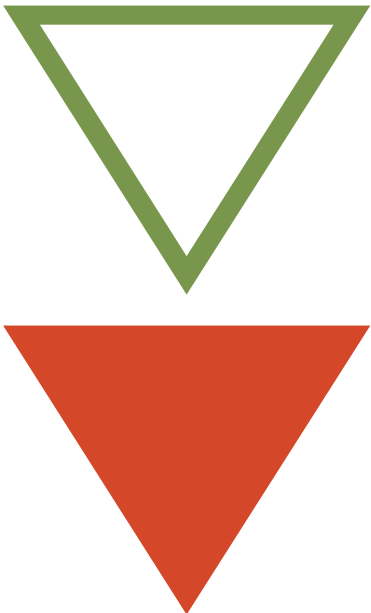
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