DEPARTMENT OF HEALTH

Resource Guide for Priority Health Area Data, Determinants of Health, Strategy, and Evaluation

ELIMINATING HEALTH DISPARITIES INITIATIVE GRANT PROGRAM

11/9/2026

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Introduction

The Minnesota Legislature created the Eliminating Health Disparities (EHDI) grant program (https://www.health.state.mn.us/communities/equity/ehdi/index.html) in 2001 per Minn. Stat. §145.928 (https://www.revisor.mn.gov/statutes/?id=145.928). The purpose of the EHDI grant is to address and improve the health of populations experiencing health disparities in eight eligible Priority Health Areas (PHAs):

- Breast and cervical cancer
- Cardiovascular disease
- Diabetes
- Immunizations for adults and children
- Infant mortality and prenatal care access and utilization
- Unintentional injuries and violence
- Sexually Transmitted Infections (STIs), including HIV/AIDS
- Teen pregnancy prevention (in service of preventing infant mortality)

"PHA Specialists" serve as subject matter experts within MDH for each health area. EHDI grantees, applicants, and community members are welcome to reach out to PHA Specialists to learn more about a PHA. This document contains an overview for each PHA, and contact information for the PHA Specialists.

Please note: MDH staff may not advise any applicants or grantees on their grant application, review drafts of proposals, or communicate about the RFP itself. Applicants may communicate with MDH staff regarding requests for data, information on health promotion or prevention practices, and benchmarks and other content-related questions.

Breast and cervical cancer

Minnesota public health goals are to detect cancer early, reduce racial and geographic disparities, and to implement evidence-based clinical interventions that increase screening.

Part I. Background information

Breast cancer is a disease in which cells in the breast grow out of control. Because breasts are made of different types of cells, different kinds of breast cancer result from the type of cells that become cancerous. Due to limitations in data, this document references national and Minnesota data that pertain to women and females. The EHDI program's goal is to reach all individuals in need of screening.

Cervical cancer is a cancer that occurs when the cells of the cervix grow abnormally and invade other tissues and organs of the body.

Breast cancer in Minnesota

Breast cancer is the most common cancer diagnosed and the second leading cause of cancer death among Minnesota women across all racial and ethnic groups. It accounts for over 30% of all female cancer diagnoses. There are roughly 5,300 new cases diagnosed annually. In 2023, 679 Minnesota women died from breast cancer (Minnesota Department of Health, 2026). In 2024, only 76% of Minnesota women 40 and older had received a mammogram within the past two years.

Disparities in breast cancer

Disparities in breast cancer screening, incidence, and mortality remain significant and longstanding in Minnesota. While overall survival rates have improved statewide, systemic barriers create vastly different outcomes based on race, ethnicity, and gender identity.

- Though Black Minnesota women have lower incidence of breast cancer compared to white women, they face a 36.5% higher breast cancer mortality rate and have the lowest five-year survival rates (Minnesota Department of Health, 2026).
- American Indian women in Minnesota suffer from the highest rates of late-stage breast cancer diagnoses (Minnesota Department of Health, 2026).
- Breast cancer continues to be the most common cancer diagnosed among Minnesota's Hispanic
- women and remains the leading cause of cancer-related death in this population.
- About 1 in 4 Minnesota women 40 and older have not had a mammogram within the past 2 years. Non-Hispanic Asian women in this age group have significantly lower rates of mammography screening over the past 2 years compared to non-Hispanic white and Black women.
- Transgender individuals are significantly less likely to be screened for breast cancer compared with cisgender individuals.

Cervical cancer in Minnesota

According to the American Cancer Society (ACS), an estimated 160 Minnesota women will develop invasive cervical cancer in 2026, and 50 will die from the disease. Thousands more women will develop precancerous changes of the cervix that may progress to cervical cancer if left untreated. Each year, approximately 50,000 new cases of cancer are found in parts of the body where HPV is commonly detected. HPV causes about 39,000 (about 78%) of these cancers. Cervical cancer is the most common form of HPV-related cancer among women.

Disparities in cervical cancer

Screening for cervical cancer is a very cost-effective way to prevent the spread of cancerous cells in the cervix. When detected early, precancerous cellular changes generally require less treatment and cost, and treating precancerous changes can prevent them from developing into cervical cancer.

- In 2020, 55% of Asian/Pacific Islander, non-Hispanic females aged 21-65 were screened for cervical cancer with a Pap test, compared to 79% of white, non-Hispanic females.
- Incidence rates of cervical cancer are highest for women in the American Indian/Alaska Native population, followed (in decreasing order) by Asian American/Pacific Islander (non-Hispanic), Black (African American/African, non-Hispanic), Hispanic, and White (non-Hispanic) populations.
- In Minnesota, women of color are more likely to be diagnosed with late-stage cervical cancer, making it more difficult and costly to treat. More specifically, women who are Indigenous/Native are more than four times more likely to be diagnosed with late-stage cervical cancer compared to white, non-Hispanic women.
- Transgender individuals are significantly less likely to be screened for cervical cancer compared with cisgender individuals.

Risk factors

Breast cancer

One of the greatest risk factors for dying due to breast cancer is a lack of screening (mammography). According to guidelines supported by the Centers for Disease Control and Prevention (CDC), all women ages 40 and older

should have access to regular annual mammography screening. Through shared decision making with their healthcare providers, individuals should evaluate the benefits and risks of starting cancer screening at age 40.

Additionally, the CDC's National Breast and Cervical Cancer Early Detection Program (NBCCEDP) recommends regular mammograms for age-appropriate transgender men, gender non-conforming people with a female anatomical history, and transgender women who have undergone hormone therapy. Nationwide, approximately 99% of women who have localized breast cancer detected in its earliest stages survive five years or more, whereas the proportion of survivors drops to 33% for women whose breast cancers have spread to distant parts of the body.

- The Statewide Behavioral Risk Factor Surveillance System (BRFSS) survey data from 2024 indicate approximately 1 in 4 Minnesota women aged 40 and older has not had a mammogram within the past two years.
- Based on 2022 BRFSS data, non-Hispanic Black (80%) and non-Hispanic white (79%) women have the highest rates of mammography screenings, while non-Hispanic Asian (52%) women have the lowest.
- Whereas 93% of white women will live at least five years after a diagnosis of breast cancer, only 76% of Black women will survive five years after diagnosis.
- Black women have a 38% higher likelihood of dying from breast cancer compared to White women, despite a 5% lower likelihood of being diagnosed.
- A higher proportion of Black Minnesota women are diagnosed with late-stage breast cancer; among those diagnosed at this advanced stage, only 58% live at least 5 years after diagnosis, compared to 78% of white women.
- According to a 2023 state healthcare quality report, only 58% of women enrolled in a Minnesota Health Care Program (MHCP), which includes Medical Assistance and MinnesotaCare, received a mammogram, compared to 80% of women with commercial insurance or Medicare coverage.
- Many individuals from the LGBTQ+ community delay or skip routine screening mammograms because they are afraid of being treated unfairly for who they are, or because they have had bad experiences with doctors in the past.

Beyond structural and clinical barriers to screening, behavioral risk factors influence breast cancer risk, and include alcohol consumption, smoking, and high fat diets. A study analyzing the dietary history of premenopausal women over a 20-year period showed higher intake of red meat contributing to increased risk of breast cancer. Additional risk factors for breast cancer include advancing age, family history, and gene mutations that increase breast cancer risk.

Cervical cancer

One of the greatest risk factors of developing or dying from cervical cancer is lack of screening. Prior to the initiation of cervical cancer screening with the Pap smear in the 1950s, cervical cancer was a leading cause of death for women in the U.S. and worldwide. The use of the Pap smear in cervical cancer screening has transformed the diagnosis of an invasive cervical cancer so that a death related to cervical cancer is almost entirely preventable.

- The available evidence suggests that women of color in Minnesota are at greater risk for cervical cancer due to less frequent screening and follow-up care.
- While approximately 90% of Black women reported having a Pap smear within the past 3 years, screening adherence among other populations were lower.

An additional risk factor for cervical cancer is the lack of immunization against human papillomavirus (HPV). Behavioral risk factors associated with a greater likelihood of exposure to HPV include early sexual contact and multiple sexual partners.

Protective factors for breast and cervical cancer

While screening is perhaps the most protective of factors for preventing deaths due to breast and cervical cancer, other protective factors reduce the risk of breast and cervical cancer.

HPV vaccination before initiation of sexual activity, for both boys and girls, can be a powerful protective strategy as studies have shown that HPV is responsible for virtually all cases of cervical cancer. Vaccination, however, does not eliminate the need for cervical cancer screening.

Breastfeeding for at least one year after giving birth can lessen a woman's risk of both premenopausal and postmenopausal breast cancer by reducing their exposure to estrogen. An analysis of over 47 epidemiological studies across 30 countries found that the relative risk of breast cancer decreased 4.3% for every 12 months of breastfeeding.

Supportive, trauma-informed health care systems that are culturally competent, flexible, and responsive to patient circumstances ensure diverse populations receive clear, accessible breast and cervical cancer prevention information tailored to their specific needs, as well as timely access to early testing and effective treatment.

Having the **information and the capacity to act** on that information to create healthy environments for themselves, their families, and their communities.

Social determinants for breast and cervical cancer

- **Social connections and support:** Creating communities that are welcoming to all people, with strong social connections and support, can encourage healthy behaviors by connecting people with resources and upholding positive social norms. Supportive environments help protect against trauma and stress that increase cancer risk. A strong social network also lowers the risk of mortality related to breast cancer. A 2023 meta-analysis found that socially isolated individuals with breast cancer had a 51% higher risk of dying from any cause and were also 33% more likely to die specifically from breast cancer.
- **Racism and discrimination:** Early life circumstances, such as adverse childhood experiences, can contribute to developing breast and cervical cancer later in life. The experience of racism or other ongoing discrimination creates epigenetic changes (changes in how people's genes are expressed) that pass to the next generation and increase risk for cancer. Racism and discrimination can also worsen people's health and keep them from accessing screenings, preventive care, and treatment.
- **Immigration status:** Changing federal immigration policies and enforcement create widespread fear, deterring lawfully present, naturalized, and U.S.-born individuals from attending cancer screening events. This fear threatens to diminish future attendance at community health initiatives as trust in safe spaces erodes.
- **Housing:** Safe, stable, and affordable housing reduces stress and makes it easier to establish and routinely access primary healthcare, including screenings to detect cancer at an early stage. For those experiencing cancer, stable housing makes it easier to keep up with treatment regimens.
- **Neighborhood conditions:** Neighborhood conditions can support healthy behaviors protective against cancer, such as helping people maintain a healthy diet and engage in regular physical activity. These positive environments rely on safe and green spaces that are welcoming and accessible to all, and on the availability of affordable, fresh, and healthy food. A safe and healthy neighborhood supports behaviors that protect against cancer. For example, safe and accessible green spaces encourage physical activity, and access to grocery stores selling fresh produce makes it easier for people to eat healthful foods.
- **Employment and benefits**: Employment with health insurance benefits is the primary way people in the U.S. obtain access to healthcare, including breast and cervical cancer screening.

- **Income and wealth:** Like employment and benefits, income increases access to health care and cancer screening. Higher-income populations are more likely to receive a timely cancer diagnosis, increasing the opportunities for effective treatment and reducing the risk of mortality. Conversely, lower-income populations are more likely to die from breast and cervical cancer. Because income is racialized in the U.S. (i.e., race is a strong predictor of income), the effects of income also follow racial lines.
- **Access to quality health care:** People who have experienced, or are at risk of, breast and cervical cancer benefit from access to high quality, affordable, and culturally- and linguistically competent care. This includes early detection screenings, preventative care, treatment, and health education about how to maintain wellness.
- **Transportation:** People require affordable, convenient transportation options to access cancer screenings, preventive care, and treatment. A 2018 study found that transportation insecurity was associated with a 41% reduction in the odds of breast cancer screening.

Priority Health Area Specialist

For more data information on best practices or other cancer-related questions, contact:

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Part II. Examples of objectives, strategies and activities

The following are examples of the types of projects that applicants may undertake through EHDI. **Applicants are *not required* to use the objectives, strategies, activities, and evaluation measures listed in the RFP appendices.** Applicants are encouraged to propose their own research-based or promising strategies and/or adapt and build upon these practices. Projects that are research-based or promising strategies will be given equal weight in the review process.

Goal: To close the gap in the health status of populations of color and American Indians as compared to whites in breast and cervical cancer.

Level of change 1: Deliver health promotion and prevention projects grounded in cultural knowledge and wisdom that contribute to eliminating disparities.

- **Example Objective:** Increase screening rates for breast and cervical cancer by 25% among American Indians served by Organization X by June 30, 2031.
    - **Example Strategy:** Make low cost or free breast and cervical cancer screening services available.
        - **Example Activity 1:** Provide free or low-cost screening options for uninsured, underinsured or those with high deductibles based on a threshold of annual income to promote screening services utilization.

        - Example Activity 2: Leverage patient navigators and community workers to help eligible population access and utilize free cancer screening services.
        - Example Activity 3: Partner with Allina Health to bring their mobile imaging van (Mammo on the Move) to Healthy Days event each September.
    - **Example Strategy**: Implement an automated reminder system to prompt patients due or are overdue for their mammogram.
        - **Example Activity 1:** Set up automated reminder system by age group using email and phone text messaging.
        - **Example Activity 2:** Send reminder letters by mail to patients who received automated reminders but have not scheduled their mammogram 60 days after receiving the automated reminder.
- **Example Objective:** Increase awareness of breast and cervical cancer risk factors by 50% among American Indians served by Organization X by June 30, 2031.
    - **Example Strategy:** Conduct breast and cervical cancer risk assessments
        - **Example Activity 1**: Partner with community organizations to conduct culturally appropriate breast and cervical cancer screening education and outreach, with focus on risk and protective factors.
        - **Example Activity 2:** Schedule one-on-one risk assessment sessions with participants to discuss family history, current health, and lifestyle and to develop a risk reduction plan.
    - **Example Strategy**: Educate patients about community screening resources and covered health insurance benefits.
        - **Example Activity 1:** Partner with community organizations to develop and maintain a print and online directory of breast and cervical cancer screening and other supportive resources.
        - **Example Activity 2:** Connect participants with healthcare navigators who can provide them information regarding available resources and health insurance coverage options.
        - **Example Activity 3:** Develop a referral system to refer participants to partner organizations for advanced screening and treatment.

Example Evaluation Measures:

- 100 American Indian individuals receive free or low-cost mammograms. (Output)
- 100 American Indian women receive free or low-cost Pap smears. (Output)
- 80 percent of individuals who received free or low-cost screening from Project X return for at least one more screening (mammogram or Pap smear) after a year. (Outcome)
- 90 percent of Project X participants increase their understanding of the risk factors for breast cancer/cervical cancer. (Outcome)

Level of Change 2: Participating in or leading efforts that contribute to eliminating disparities by addressing people's social needs around housing, education, jobs, transportation, food access, health care, and more, focusing change efforts within neighborhoods or local geographies, organizations, and institutions.

- **Example Objective:** Increase community capacity to provide culturally congruent breast and cervical cancer prevention initiatives.
    - **Example Strategy:** Expand community access points around breast and cervical cancer prevention services.

        - **Example Activity 1:** Expand culturally congruent telehealth services by upgrading telehealth equipment and connectivity, adding language options, and hiring a telehealth manager.
        - **Example Activity 2:** Conduct ongoing health worker training on virtual care technology and culturally congruent best practices.
        - **Example Activity 3:** Apply for funding to continuously support virtual care infrastructure (such as the MDH Rural Health Transformation Grant).
    - **Example Strategy:** Expand the cancer workforce in the Nexus Health system.
        - **Example Activity 1:** Promote cancer care training for CHWs, CHRs and lay health navigators by developing a cancer curriculum and certification program.
        - **Example Activity 2:** Partner with Minneapolis College, Normandale College, and St. Catherine University to host CHW internships and externships.
    - **Example Strategy:** Improve community and lifestyle interventions.
        - **Example Activity 1:** Implement Food Rx program to lower breast cancer risk by partnering with Your Neighborhood Coop to fill produce prescriptions for free.
        - **Example Activity 2**: Implement rideshare voucher program by partnering with Uber and Lyft to get patients to screening and treatment appointments.

Example Evaluation Measures:

- A cancer care curriculum and certification program for CHWs, CHRs and lay health navigators is developed. (Output)
- Number of CHWs, CHRs and lay navigators who receive certification to provide cancer care. (Output)
- Two healthcare providers increase their hiring of CHWs, CHRs or lay health navigators for cancer care and prevention. (Outcome)
- Two post-secondary institutions in Minnesota improve their CHE program with the incorporation of cancer care into the curriculum. (Outcome)

Level of Change 3: Participating in or leading efforts to change governing structures and processes, economic and social policies, power structures, and cultural norms, values, or worldviews at the broader systems level.

- **Example Objective:** By 2031, increase by 50 percent the proportion of adolescents in Program X who get the recommended doses of the HPV vaccine.
    - **Example Strategy:** Join or lead efforts to develop and implement the multi-dose HPV vaccine schedule as the state standard.
        - **Example Activity 1:** Attend meetings organized by the Minnesota Department of Health to develop the state standard for the HPV vaccine schedule.
        - **Example Activity 2:** Co-develop with the Minnesota Department of Health HPV vaccine informational resources in multiple languages.
        - **Example Activity 3:** Partner with local public health or join coalition efforts to educate staff and partners on the Minnesota standard for the HPV vaccine schedule.
    - **Example Strategy:** Join or lead efforts to expand required insurance coverage to include multi-doses of the HPV vaccine.
        - **Example Activity 1:** Develop a communication campaign to increase public awareness of the importance of strengthening insurance regulations to fully cover the multi-doses of the HPV vaccine.

- **Example Activity 2:** Meet with private health plan representatives to offer community perspective regarding the preservation of no cost-sharing and no strict timeline limits to complete multi-doses of the HPV vaccine regardless of federal guidelines.

Example Evaluation Measures:

- Number of radio and television ads about full insurance coverage of multi-doses of the HPV vaccine (Output).
- Number of meetings around the HPV vaccine schedule standard with the Minnesota Department of Health. (Output).
- Private health plans that Program X met with that commit to following the Minnesota standard (not the federal standard) for the HPV vaccine schedule (Outcome).
- Increase in the percent of students in Evergreen Middle School who have received their initial dose of the HPV vaccine by age 12 (Outcome).

Part III. Resources

American Cancer Society: Cancer Statistics Center (https://cancerstatisticscenter.cancer.org/)

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Cardiovascular disease

Part I. Background information

Cardiovascular disease refers to diseases that affect the heart and blood vessels. Many of these diseases are related to a process called atherosclerosis, the hardening and narrowing of arteries. When arteries narrow because of plaque buildup in the vessel wall, it is harder for blood to flow through. If a blood clot forms, it can stop blood flow to the heart, causing a heart attack, or to the brain, causing a stroke.

Heart disease and stroke in Minnesota

Heart disease and stroke combined are the number one cause of death in Minnesota, accounting for nearly 1 in 4 deaths in 2024 (>11,000 total). In that same time period, around 50,000 hospitalizations occurred due to heart disease and 14,000 hospitalizations occurred due to stroke. Around 7% of Minnesota adults reported ever having a heart attack or heart disease in 2024, while 3% reported ever having a stroke.

Disparities

Certain racial and ethnic groups have higher age-adjusted death rates for heart disease and stroke than the overall population.

- From 2020 to 2024, the age-adjusted heart disease death rate was 39% higher for American Indian people compared to the overall Minnesota population.
- From 2020 to 2024, the age-adjusted stroke death rate was 27% higher for American Indian people, 45% higher for Black or African American people, and 51% higher for Asian people compared to the overall Minnesota population.

Certain racial and ethnic groups experience a higher concentration of heart disease and stroke at younger ages.

- From 2020 to 2024, the heart disease death rate for middle-aged adults (ages 45 to 64) was 1.9 times as high for Black or African American people and about 3 times as high for American Indian people compared to White people.
- From 2020 to 2024, the stroke death rate for middle-aged adults (ages 45 to 64) was 2.6 times as high for Black or African American people and 3.4 times as high for American Indian people compared to White people.

Risk factors

We can reduce risk of heart attacks and stroke by focusing on heart-healthy factors and behaviors. Many of these factors also contribute to brain and mental functioning, so promoting heart health can improve Minnesotans' overall health and wellbeing.

Health factors include:

- High blood pressure/hypertension – High blood pressure occurs when blood pushes too hard against blood vessel walls and damages them. High blood pressure is a major risk factor for heart disease, affecting about 69% of people who have a first heart attack. In 2024, approximately 31% of Minnesota adults reported having high blood pressure.

- High cholesterol – High LDL cholesterol levels contribute to fatty buildup in blood vessels. In 2024, approximately 34% of Minnesota adults reported having high cholesterol.
- Obesity – In 2024, approximately 35% of Minnesota adults were overweight, and more than 32% were obese.
- Diabetes – Adults with diabetes are nearly twice as likely to have heart disease or stroke as adults without diabetes. In 2024, approximately 10% of Minnesota adults reported having diabetes.

Health behaviors include:

- Smoking – People who smoke have 2 to 4 times higher risk of heart disease or stroke than nonsmokers, and nonsmokers exposed to secondhand smoke have a 20–30% higher risk than those not exposed. In 2024, 10% of Minnesota adults reported being current smokers.
- Physical activity – Lack of physical activity increases the risk of heart disease anywhere from 1.5 to 2.4 times – comparable to the risk posed by high blood cholesterol, high blood pressure or cigarette smoking. In 2023, only 31% of Minnesota adults met recommended amounts of aerobic and strength exercise, and 22% of adults in Minnesota did not participate in any physical activity.
- Diet – Healthy eating patterns, including higher intake of whole grains, vegetables, fruits, legumes, and nuts, are consistently associated with lower risk of heart disease and stroke.

Key Focus Populations:

- Mid-life – Risk factors like high blood pressure, high cholesterol, and diabetes often appear in mid-life (ages 45-65), and they are linked with late life heart disease and dementia. This makes middle age an important window to address risk factors and improve long-term outcomes. Heart disease and strokes that occur at younger ages are especially impactful because they can result in long-term complications and increase the risk of future attacks. In Minnesota, 29% of adults in the Minnesota Stroke Registry from 2018-2024 were working age (18-64), highlighting the need for risk factor management at younger ages.
- Women – Although heart disease affects all groups of people, women have specific challenges that can increase their risk. Hormonal changes and body composition can influence what symptoms look like and how the body reacts to medication at different times, which can lead to underdiagnosis and undertreatment. Women also experience transitional stages like pregnancy and menopause that can reveal early signs of heart disease risk. These time periods are an important opportunity for heart health screening and intervention.

Protective factors

According to the Global Cardiovascular Risk Consortium, about half of heart disease risk is linked to things we can change, like weight, blood pressure, cholesterol, smoking, and diabetes. We can improve Minnesotans' heart health by addressing these factors at the individual, community, and systems levels.

- Education and tools for managing risk factors – National estimates suggest that more than one third of people with high blood pressure and more than 1 in 4 of those with diabetes don't know they have the condition. We can support healthy choices by improving access to tools like nutrition or smoking-cessation education, risk factor screening, and self-measured blood pressure.
- Healthy environments – We can promote heart health by reducing barriers and increasing accessibility to healthy food and opportunities for physical activity.
- Cardiac rehab – Cardiac rehabilitation programs help people recover more quickly after a heart attack or stroke and reduce their risk of future events. Although cardiac rehab has proven benefits, only 24% of

adults with Medicare in the U.S. report participating in the program. We can improve outcomes by increasing awareness and access to these programs.

Social determinants

- Social connections and support: Creating communities that are welcoming to all people, with strong social connections and support, can encourage healthy behaviors by connecting people with resources and upholding positive social norms. A strong social network helps people stay active and engaged during treatment and recovery. Supportive environments help protect against trauma and stress that increase heart disease and stroke risk. Research shows that social support can also serve as a buffer to prevent or reduce harmful longer-term health effects associated with encountering traumatic events.
- Racism and discrimination: Early life circumstances, such as adverse childhood experiences, can contribute to developing heart disease and stroke later in life. The experience of racism or other ongoing discrimination creates epigenetic changes (changes in people's genes) that pass to the next generation and increase risk for heart disease and stroke. Racism and discrimination can also worsen people's health and keep them from accessing screenings, preventive care and treatment.
- Housing: Safe, stable and affordable housing reduces stress and makes it easier to establish and routinely access primary health care, including screenings to detect risk factors for heart disease and stroke. Stable housing also makes it easier to keep up with treatment and monitoring for heart disease and stroke.
- Neighborhood conditions: A safe and healthy neighborhood supports healthy behaviors that help protect against heart disease and stroke. For example, green spaces that are safe and accessible encourage people to engage in physical activity. Access to grocery stores selling fresh produce makes it easier for people to eat healthful foods.
- Educational opportunity: Minnesota has persistent disparities in four-year high school graduation rates by race/ethnicity and by disability status. Minnesotans with more education have fewer risk factors for heart disease and stroke. For example, they are much more likely to be employed, are less likely to be diagnosed with diabetes, are more likely to receive prenatal care, and are less likely to smoke. Individuals with no formal education after a high school diploma report much higher rates of high blood pressure than those with at least a college degree (33% as compared to 27%).
- Employment and benefits: Meaningful work and adequate wages reduce stress, a significant risk factor for heart disease and stroke. Employment is also a form of social connection and support, as well as a source of access to health care.
- Income and wealth: Low income is a major source of stress, a significant risk factor for heart disease and stroke. The higher one's income, the less likely one is to have heart disease or stroke, while the lower one's income, the higher one's risk for these diseases. A 2011 University of California study found that people with lower socioeconomic status had a 50% greater risk of developing heart disease than other study participants. Income also affects the food people eat. According to the U.S. Department of Agriculture's Current Population Survey, 13% of Minnesota households in 2018 were unable to provide adequate food for one or more household members due to lack of resources, a decline from 14.3% in 2016 and 14.6% in 2016.
- Access to quality health care: People who have experienced or are at risk of heart disease or stroke benefit from access to high quality, affordable and culturally- and linguistically competent care. Health care includes screenings, preventive care, treatment and education about how to maintain health.
- Transportation: People need affordable, convenient transportation options to access screenings for risk factors, preventive care and treatment for heart disease and stroke.

For more data, information on best practices, or other heart disease and stroke questions, contact:

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Part II. Examples of objectives, strategies and activities

The following are examples of the types of projects that applicants may undertake through EHDI. Applicants are not required to use the objectives, strategies, activities, and evaluation measures listed in the RFP appendices. Applicants are encouraged to propose their own research-based or promising strategies and/or adapt and build upon these practices. Projects that are research-based or promising strategies will be given equal weight in the review process.

Goal: To close the gap in the health status of populations of color and American Indians as compared to whites in cardiovascular disease.

Level of change 1:

- **Example Objective:** Each year between 2027 and 2031, program participants increase their knowledge of the risk factors for cardiovascular disease by 50% as measured by their pre and post test score at the beginning and at the end of each 8-week program.
    - **Example Strategy:** Empower individuals to prevent cardiovascular disease and manage their cardiovascular disease risk factors.
        - **Example Activity 1:** Implement culturally specific cardiovascular health curricula (e.g., Heart of Many Nations: Heart Attack Prevention & Response in Native Communities, Check, Change Control – contact the MDH Cardiovascular Health Unit for more information).
        - **Example Activity 2:** Utilize cultural gathering spaces (e.g. places of worship, barbershops, hair salons, cafes) to educate people about heart health by offering blood pressure screening and then referring those clients with high blood pressure for follow-up services.
    - **Example Strategy:** Disseminate consistent, effective, and culturally appropriate messaging around signs and symptoms of heart attack and stroke.
        - **Example Activity 1:** Conduct public service announcements (PSAs) with culturally appropriate messaging using Tribal community TV network and other ethnic media.
        - **Example Activity 2:** Create and disseminate culturally tailored printed educational materials or videos in various languages about signs and symptoms of heart attack and stroke.
- **Example Objective:** Between 2027 and 2031, increase by 10 percent annually the percentage of program participants that initiate one or more healthy behaviors that reduce the risk of heart disease and stroke.
    - **Example Strategy:** Implement community-driven strategies that cultivate individual wellness and wellbeing.
        - **Example Activity 1:** Engage community members at risk of heart disease and stroke in a culturally responsive and accessible physical activity program (ex: Walk with Ease, Latin Zumba dance, tai chi).

        - **Example Activity 2:** Implement worksite wellness initiatives that promote access to healthy foods, exercise breaks/walking meetings, mental health resources, and/or smoking cessation.
- **Example Objective:** Between 2027 and 2031, increase by 50 percent the percentage of program participants who indicate that they have improved their ability to manage their cardiovascular health conditions.
    - **Example Strategy:** Implement community-driven strategies that help people manage their chronic condition and prevent future cardiovascular health events.
        - **Example Activity 1:** Train community members to lead activities in an evidence-based program in a community setting such as the Chronic Disease Self-Management Program (CDSMP)/Living Well With Chronic Conditions.
        - **Example Activity 2:** Hire Community Health Workers to support community members living with hypertension or cardiovascular disease to manage their condition through weekly check-ins and referrals to appropriate community and clinical resources.

Example Evaluation Measures:

- Number of PSAs conducted (Outputs).
- Number of cardiovascular disease handouts translated to languages other than English (Outputs).
- Number of Project X participants taking part in at least one physical activity class (Outputs).
- Project X participants diagnosed with or are at risk for heart disease lower their blood pressure after one year (Outcome).
- Project X participants diagnosed with or are at risk for heart disease lower their blood cholesterol level after one year (Outcome).
- Project X participants increase their knowledge of ways to reduce their risk of contracting heart disease (e.g., keeping blood pressure and blood cholesterol at recommended healthy levels) (Outcome).
- Project X participants who are smokers reduce their tobacco consumption (Outcome).
- Project X participants increase the amount and frequency of physical activity (Outcome).

Level of Change 2: Participating in or leading efforts that contribute to eliminating disparities by addressing people's social needs around housing, education, jobs, transportation, food access, health care, and more, focusing change efforts within neighborhoods or local geographies, organizations, and institutions.

- **Example Objective:** Implement one clinical practice improvement in collaboration with health plans and community groups to effectively serve communities experiencing health disparities related to cardiovascular disease between 2027 and 2031.
    - **Example Strategy:** Link community resources and clinical services that support systematic referrals, self-management, and lifestyle change for patients with high blood pressure and high blood cholesterol
        - **Example Activity 1:** Implement electronic systems that can facilitate bi-directional referral between community programs/resources and healthcare systems to link patients to culturally appropriate community resources that could help them manage high blood pressure and high cholesterol. Examples:
            - Join Unite Minnesota, a coordinated care network of health and social care providers working together to improve health across communities and get access to an electronic directory of social care resources to meet specific client needs.

        - Connect older adults to the Juniper platform to access evidence-based healthy aging programs and classes.
    - **Example Activity 2:** Implement a SNAP Rx / Veggie Rx / Food Rx program in a clinical setting to increase access to healthy foods for those managing or at risk of cardiovascular disease.
- **Example Strategy**: Increase monitoring of clinical data for improved identification, management, and treatment of patients with high blood pressure and high blood cholesterol
    - **Example Activity 1:** Develop a quality improvement process for identifying undiagnosed hypertensive patients using electronic health records (EHR) to get them on the path to management of their hypertension.
    - **Example Activity 2:** Assemble an interdisciplinary Quality Improvement (QI) team with appropriate clinical support services to monitor clinical outcomes and quality of services, and recommend improvements.
    - **Example Activity 3:** Increase data collection for social determinants of health and disaggregated demographic data monitor healthcare disparities, then implement activities to reduce identified healthcare disparities such as engaging a Community Health Worker to coordinate referrals to appropriate community resources.
- **Example Strategy:** Improve the capacity of social service organizations to support patient well-being with culturally appropriate resources and programs
    - **Example Activity 1:** Form a Health Educator Network in Hennepin county to share experiences with culturally appropriate lifestyle programs to help patients better manage their high blood pressure and cholesterol.
    - **Example Activity 2:** Increase access, availability, and selection of healthier and culturally desirable foods provided through emergency food programs by implementing strategies that educate decision-makers, donors, suppliers, staff, and volunteers.
    - **Example Activity 3**: Establish partnership with Hennepin County Public Health to refer patients who report history of heart attacks or strokes or are living with high blood pressure or heart disease to its Women's Heart Health support group and Healthy Hearts Social Group to learn vital heart health information and skills and build social connections.

Example Evaluation Measures:

- Number of patients previously undiagnosed with hypertension who receive a formal diagnosis through the new QI process. (Output)
- Number of SNAP Rx / Veggie Rx / Food Rx prescriptions given. (Output)
- Percent of SNAP Rx / Veggie Rx / Food Rx prescriptions given that were used by patients. (Output)
- Organization X decreases the average time (hours or days) between the time a client is identified as high risk for diabetes (e.g., high blood pressure and high cholesterol) and the time the client is referred to culturally appropriate community resources for diabetes prevention. (Outcome)
- Community organizations that operate a food bank or food pantry increase their stock of healthier and culturally desirable foods at any given time. (Outcome)
- Community organizations that operate a food bank or food pantry increase their stock of fresh produce at any given time. (Outcome)
- Improve ability to address heart disease disparities as measured by the instances when Community Health Workers were integrated into a patient's clinical care. (Outcome)

Level of Change 3: Participating in or leading efforts to change governing structures and processes, economic and social policies, power structures, and cultural norms, values, or worldviews at the broader systems level.

Example Objective: Decrease the rate of hypertension by 10% among Black and African American residents in South Minneapolis between 2027 and 2031 by partnering with community organizations.

- **Example Strategy:** Reduce commercial tobacco use
    - **Example Activity 1:** Join statewide efforts to raise the minimum sale age (MSA) for tobacco to age 21 (Tobacco 21 Campaign) to delay or eliminate initiation of commercial tobacco use.
    - **Example Activity 2:** Join statewide efforts to propose a law that restricts the sale of tobacco products to youth (e.g., implement ordinances that create a buffer zone so that sales are not allowed within a certain distance of youth gathering places).
- **Example Strategy:** Develop and implement comprehensive city plans that address built environment needs and ensure safe conditions for walking and biking
    - **Example Activity 1:** Work with community groups or local public health departments to implement a statewide Safe Routes to School Program to make it safe, convenient, and fun for children to bike and walk to school.
    - **Example Activity 2:** Join planning efforts to ensure that comprehensive city plans reflect the active transportation needs of communities experiencing health inequities, i.e., families who do not own cars can walk or bike safely to their destinations.

Example Objective: Reduce hospital admission rates among patients with chronic heart disease by 25 percent by 2031.

- **Example Strategy:** Increase enrollment in cardiac rehabilitation programs by removing cost and transportation barriers.
    - **Example Activity 1:** Track heart disease patients who face barriers to enrollment in cardiac rehabilitation programs.
    - **Example Activity 2:** Assist heart disease patients in enrolling in cardiac rehabilitation programs.
- **Example Strategy:** Improve incentives to increase Community Health Worker (CHW) home visits to patients with heart disease
    - **Example Activity 1:** Join efforts in Minnesota to increase Minnesota Health Care Programs (MHCP) Medicaid reimbursement rates for CHW home visits to cover operational and travel costs.
    - **Example Activity 2:** Connect patients with heart disease to CHWs.

Example Evaluation Measures:

- Number of community groups partnering to increase CHW home visit reimbursement rate (Output).
- Number of meetings held with Minnesota health plans about restructuring benefits around cardiac rehabilitation programs (Output).
- Increase in proportion of heart disease patients enrolled in cardiac rehabilitation programs (Outcome).
- Increase in proportion of heart disease patients receiving home visits from CHWs (Outcome).

Part III. Resources

Franks, P., Winters, P.C., Tancredi, D.J., Fiscella, K.A. (2011). Do changes in traditional coronary heart disease risk factors over time explain the association between socio-economic status and coronary heart disease?. *BMC Cardiovascular Disorders 11(28).* (https://doi.org/10.1186/1471-2261-11-28)

For data tools and more information on heart health in Minnesota: Cardiovascular Health Data (www.health.state.mn.us/diseases/cardiovascular/data/index.html)

For collected cardiovascular health reports and resources: Cardiovascular Health Reports and Resources (https://www.health.state.mn.us/diseases/cardiovascular/data/reports.html#stories)

For more information on cardiac rehabilitation resources and support in Minnesota: Cardiac Rehabilitation - MN Dept. of Health (https://www.health.state.mn.us/diseases/cardiovascular/tools/cardiacrehab.html)

2008 Physical activity guidelines for Americans. U.S. Department of Health and Human Services, 2008. 2008 Physical Activity Guidelines for Americans | odphp.health.gov (https://odphp.health.gov/our-work/nutrition-physical-activity/physical-activity-guidelines/previous-guidelines/2008-physical-activity-guidelines)

Diabetes

Part I. Background information

Diabetes is a chronic (long-lasting) disease that affects how your body turns food into energy. Many of foods eaten are broken down into sugar (also called glucose) and released into the bloodstream. To be able to use the sugar for energy, the pancreas makes a hormone called insulin, which acts like a key to let the blood sugar into the body's cells.

With diabetes, the body either does not make enough insulin or the body's cells cannot use the insulin it makes as well as it should. Without enough insulin or when cells stop responding to insulin, too much blood sugar stays in the bloodstream, which over time can cause serious health problems, such as heart disease, vision loss, and kidney disease.

Common types of diabetes:

Type 1 diabetes is caused by an autoimmune reaction (the body attacks itself by mistake) that causes the pancreas to stop making insulin. About 5 percent of the people who have diabetes have type 1.

With type 2 diabetes, the body does not use insulin well and is unable to keep blood sugar at normal levels. Most people with diabetes – 9 in 10 people – have type 2. It develops over many years and is usually diagnosed in adults, though it is seen increasingly in children, teens, and young adults. Nationally, the number of youths diagnosed with type 2 diabetes has risen sharply since 2000. Estimates from Colorado showed a 10 times higher incidence of youth-onset type 2 diabetes in 2023 compared to 2002.

Gestational diabetes develops in pregnant women who have not been diagnosed with diabetes previously. With gestational diabetes, the baby could be at higher risk for health complications. Gestational diabetes usually goes away after the baby is born but increases the mother's risk for type 2 diabetes later in life. The baby is more likely to develop type 2 diabetes later in life as well.

It is estimated that 1 in 3 people 12 years of age and over in the U.S. have prediabetes, and many do not know they have it. Prediabetes is a serious health condition where blood sugar levels are higher than normal, but not high enough yet to be diagnosed as diabetes. Prediabetes increases the risk for type 2 diabetes, heart disease, and stroke.

Diabetes in Minnesota

According to the Minnesota Center for Health Statistics, diabetes is the eighth leading cause of death. It is also the leading cause of blindness, kidney failure and lower-limb amputations. In 2024, 8.8% of Minnesota adults (about 400,000) reported having diabetes (type 1 or 2). Around 24,000 new cases are diagnosed in Minnesota each year (CDC, 2018). Around 1 in 10 people with diabetes do not know that they have the disease.

Disparities

The National Diabetes Statistics Report shows clear racial and ethnic disparities in the percentage of adults living with diagnosed diabetes (prevalence), which stands at 12.0% of all U.S. adults in 2023. National data from 2021-2023 show the age-adjusted prevalence of diabetes (diagnosed and undiagnosed) was 7.1% for non-Hispanic white adults, with higher rates for Asian adults (9.7%), Hispanic adults (12.2%), Black, non-Hispanic adults (12.2%), and American Indians or Alaska Natives (15.7%). The CDC estimates that over 115 million U.S. adults, slightly more than one in every three, had prediabetes in 2023.

Minnesota data from 2024 also reveal these disparities. Because older age is linked to higher diabetes risk and some populations are older than others, the effect of age differences between populations is removed when analyzing the data, giving rise to age-adjusted data. The age-adjusted prevalence of diabetes among non-Hispanic white adults in Minnesota is 8.0% compared with 16.7% among Hispanic adults, 13.9% among non-Hispanic Black adults, and 21.2% among American Indian adults.

Minnesota-specific data from 2024 show that the death rate from diabetes (with age adjustment) in Black or African adults is more than twice the rate for whites, and the death rate for American Indians is more than four times higher than the rate for whites. In Minnesota, people of Hispanic or Latino ethnicity have a death rate about one and a half times higher than the rate for Minnesotans who are not of Hispanic or Latino ethnicity.

Risk factors

- Being overweight or obese
- Age 45 or older
- Family history of diabetes
- High blood pressure
- Not being physically active
- Smoker
- Low level of HDL ("good") cholesterol or a high level of triglycerides
- Stress (often linked to social determinants, described below)
- Certain medical conditions or history, including gestational diabetes or having given birth to a baby weighing 9 pounds or more, polycystic ovary syndrome (PCOS), or history of heart disease or stroke
- Depression, trauma, or adverse childhood experiences

Protective factors

- Having the tools, knowledge, and ability to prevent and manage one's own diabetes
- Improving health behaviors by changing the physical and social environment including access to healthy food and safe places to be physically active
- Assuring children have safe, stable, nurturing environments to prevent trauma and future chronic conditions

Social determinants

Social connections and support: Creating communities that are welcoming to all people, with strong social connections and support, can encourage healthy behaviors by connecting people with resources and upholding positive social norms. Supportive environments help protect against trauma and stress that increase diabetes risk. A strong social network also helps people stay active and engaged while managing their diabetes.

Racism and discrimination: Early life circumstances, such as adverse childhood experiences, can contribute to developing diabetes later in life. The experience of racism or other ongoing discrimination creates epigenetic changes (changes in people's genes) that pass to the next generation and increase risk for diabetes. Racism and discrimination can also be a barrier to accessing follow up health care, worsen people's health and keep them from accessing screenings, preventive care, and treatment.

Housing: Safe, stable, and affordable housing reduces stress and makes it easier to establish and routinely access health care, including screenings to detect risk factors for diabetes. For those with diabetes, stable housing also makes it easier to keep up with treatment and monitoring.

Neighborhood conditions: A safe and healthy neighborhood supports healthy behaviors that help prevent and manage diabetes. For example, green spaces that are safe and accessible encourage people to engage in physical activity. Access to grocery stores selling fresh produce makes it easier for people to eat healthful foods.

Educational opportunity: Educational opportunities, including extracurricular activities and post-high school education, improve health overall and reduce the incidence of diabetes. In 2023, about 7.9 percent of Minnesota adults who have a college degree reported having diabetes compared with 11.2 percent of Minnesota adults who have a high school diploma or GED.

Employment and benefits: Meaningful work and adequate wages provide social connection and financial security, both of which reduce the stress that can contribute to diabetes (stress stimulates the release of various hormones, which can result in elevated blood glucose levels). Employment also provides access to health care for people with prediabetes and diabetes.

Income and wealth: Health survey data show that self-reported diabetes rates are higher for people living in households that earn lower incomes. Among Minnesota adults who shared their income information in 2023, 16.4% of those with household incomes less than $25,000 per year reported a diagnosis of diabetes, compared to 13.2% or lower among those who reported higher household incomes. Low income contributes to stress, a risk factor for diabetes complications; low income also increases food insecurity making it more difficult to manage diabetes through nutrition. In 2019, 8.5% of Minnesota adults who accessed Supplemental Nutrition Assistance (SNAP) (formerly referred to as food stamps) in the last year reported a diabetes diagnosis vs 4.9% of people who had not used food SNAP in Minnesota.

Access to quality health care: People with diabetes or prediabetes benefit from access to high quality, affordable and culturally- appropriate care, including treatment and education about how to manage their condition. People at risk of diabetes also benefit from routine access to preventive care and screenings.

Transportation: People need affordable, convenient transportation options to access diabetes screenings, preventive care, and treatment.

Priority Health Area Specialist

For more data and information on best practices or other prediabetes/diabetes-related questions, contact:

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Part II. Examples of objectives, strategies and activities

The following are examples of the types of projects that applicants may undertake through EHDI. Applicants are not required to use the objectives, strategies, activities, and evaluation measures listed in the RFP appendices. Applicants are encouraged to propose their own research-based or promising strategies and/or adapt and build upon these practices. Projects that are research-based or promising strategies will be given equal weight in the review process.

Goal: To close the gap in the health status of populations of color and American Indians as compared to whites in diabetes.

Level of Change 1: Delivering health promotion and prevention projects grounded in cultural knowledge and wisdom that contribute to eliminating disparities through direct service.

Example Objective: By May 2031, increase by 30% the number of participants diagnosed with Type 2 diabetes who have improved their health as measured by their lowered A1C levels.

- **Example Strategy:** Deliver culturally responsive diabetes education and prevention programs and services.
    - **Example Activity 1:** Organize, host and lead evidence-based self-management classes (e.g., Living Well with Diabetes, National Diabetes Prevention Program, Stay Active and Independent for Life) in convenient community locations such as a church, senior center or public housing facility for people with diabetes in the community.
    - **Example Activity 2:** Recruit and train evidence-based wellness workshop leaders and lifestyle coaches that represent the cultures and languages of high-risk populations. For example, workshop leaders may include respected elders, helpers, faith leaders, and Community Health Workers/Community Health Representatives/Promotores de Salud.
    - **Example Activity 3:** Deliver diabetes support services in other non-classroom formats (e.g., cooking and meal planning classes, fitness or dance classes, grocery store tours)
    - **Example Activity 4:** Provide diabetes support services in various languages by developing culturally specific modules for healthy eating, increasing physical activity, and improved mental wellbeing.

Example Evaluation Measures:

- Number of Living Well with Diabetes workshops held in two types of community settings (Output).
- Number of workshop leaders and lifestyle coaches recruited and trained who represent the most at-risk populations (Output).
- Number of alternative language formats in which the curriculum was delivered (Output).
- Decrease in the number of participants diagnosed with diabetes (Outcome).
- Program participants increase their knowledge of how to plan healthy meals (Outcome).
- Program participants increase their knowledge of how to prepare healthy meals (Outcome).
- Program participants increase their amount and frequency of physical activity (Outcome).
- Program participants reduce their A1c level (Outcome).

Level of Change 2: Participating in or leading efforts that contribute to eliminating disparities by addressing people's social needs around housing, education, jobs, transportation, food access, health care, and more, focusing change efforts within neighborhoods or local geographies, organizations, and institutions.

Example Objective: Increase Organization X's capacity to assist Type 2 diabetes patients in the management of their condition, as measured by an additional 10 Type 2 diabetes patients served each year between 2027 and 2031.

- **Example Strategy:** Improve health care referral systems and protocols.
    - Example Activity 1: Create referral systems and protocols that can identify patients in need and immediately refer them to appropriate support services in the community such as the National Diabetes Prevention Program (DPP), Diabetes Self-Management Education and Support (DSMES), a dietitian, and medication therapy management.

    - **Example Activity 2:** Utilize team-based approaches to enhance coordination of care for patients to improve processes for identifying and referring patients to a diabetes prevention program, DSMES services, specialty care, dietitian, pharmacist, and other appropriate referrals.
    - **Example Activity 3:** Incorporate feedback loops into Electronic Medical Records (EMR) systems to enhance two-way communication between the clinic and other community providers offering diabetes prevention and diabetes self-management services.
- **Example Strategy:** Develop infrastructure that supports linking patients to both community and clinical resources for preventing and managing diabetes
    - **Example Activity 1:** Work with other providers and the Minnesota Department of Health (MDH) to deliver a culturally appropriate National DPP in the community. Obtain technical assistance from MDH to support National DPP providers
    - **Example Activity 2:** Implement electronic systems that can facilitate two-way referrals between community programs/resources and healthcare systems to link patients to culturally appropriate community resources (e.g., Integrate the Unite Us electronic community resource directory and care coordination platform into Organization X's electronic health record (EHR) system
        - (A related activity is to implement organizational policy to refer patients to the Juniper community care hub to access free health and wellness classes.)
    - **Example Activity 3:** Implement a SNAP Rx /Veggie Rx /Food Rx program at Organization X to increase access to healthy foods for those managing or at risk of developing diabetes.
        - (To learn more about SNAP Rx, see the Hunger Solutions website: SNAP Rx - Hunger Solutions)

Level of Change 3: Participating in, or leading, efforts to change governing structures and processes, economic and social policies, power structures, and cultural norms, values, or worldviews at the broader systems level.

Example Objective: By 2031, decrease by 5 percent the proportion of Organization X clients diagnosed with Type 2 diabetes.

- **Example Strategy:** Work with statewide health coalitions to strengthen the Minnesota Insulin Safety Net Program by removing barriers to participation.
    - **Example Activity 1:** Join advocacy and professional groups such as the American Diabetes Association, local Area Agency on Aging, Minnesota Medical Association, and others in efforts to increase the emergency urgent-need program limit from a one-time 30-day supply to a 60-day supply per 12-month period
    - **Example Activity 2:** Join advocacy and professional groups such as the American Diabetes Association, local Area Agency on Aging, Minnesota Medical Association, and others in efforts to reduce diabetes patients' paperwork burden at participating local pharmacies.
- **Example Strategy:** Participate in the public input process to implement Minnesota's 2035 Action Plan to Address Cardiovascular Disease, Stroke, and Diabetes.
    - **Example Activity 1:** Join an online community forum created to support community conversations around the MN 2035 Plan and its implementation.
    - **Example Activity 2:** Gather and submit stories of success and challenges from using strategies and actions outlined in the MN 2035 Plan to help assess progress around its implementation.

Example Evaluation Measures:

- Number of type 2 diabetes patients assisted by Organization X in applying for the Minnesota Insulin Safety Net Program's urgent need and continuing need programs (Output).
- Number of MN 2035 Plan community forums attended (Output).
- Percent of Organization X's type 2 diabetes patients who report a reduction in insulin rationing behavior resulting from uninterrupted access to insulin (Outcome).
- Increase in new partnerships formed by Organization X around advocacy efforts to strengthen the Minnesota Insulin Safety Net Program (Outcome).

Part III. Selected resources

Chronic disease self-management education programs including Living Well with Diabetes, Walk With Ease, Living Well with Chronic Pain, and more, offered throughout Minnesota: Take Classes - YourJuniper (https://yourjuniper.org/programs-classes/)

Diabetes information, programs, prevention, resources, publications and advancing health equity, CDC: Diabetes | CDC (https://www.cdc.gov/diabetes/index.html)

Do I Have Prediabetes short questionnaire/website, CDC: Do I Have Prediabetes? | Do I Have Prediabetes? (https://doihaveprediabetes.org/) (English) | PodriaTenerPrediabetes.org | ¿Podria Tener Prediabetes? (https://doihaveprediabetes.org/es) (Spanish)

National Council on Aging: Evidence-Based Chronic Disease Self-Management Education Programs (https://www.ncoa.org/article/evidence-based-chronic-disease-self-management-education-programs) (Note: Tomando Control de Su Salud curriculum available in Spanish)

Manage Your Diabetes for Life Toolkit, MDH: Manage Your Diabetes for Life Toolkit - MN Dept. of Health (https://www.health.state.mn.us/diseases/diabetes/manage/resources.html)

MN Performance Improvement Project (PIP): Improving Comprehensive Diabetes Care with a particular focus on reducing health disparities through resources and recorded trainings on Food is Medicine, strategies for optimal diabetes care, pharmacists roles, and more (https://stratishealth.org/health-plan-performance-improvement-projects-pips/pip-improving-comprehensive-diabetes-care/)

National Diabetes Prevention Program Curricula, CDC: Curriculum for the National DPP Lifestyle Change Program - National DPP Coverage Toolkit (https://coveragetoolkit.org/national-dpp-curriculum/) (Note: English, Spanish, Chinese, Vietnamese, Korean, Bengali and other curricula are available. Ask about others that may not be posted yet.)

National Diabetes Statistics Report, CDC. Estimates of diabetes and its burden in the United States (https://www.cdc.gov/diabetes/data/statistics-report/index.html)

Native Diabetes Wellness Program, CDC (https://www.cdc.gov/diabetes/ndwp/index.html)

Population Profiles. Office of Minority Health, US DHHS. Provides detailed demographic, language fluency, education, economic, insurance coverage and health status information, as well as full census reports: Population Profiles | Office of Minority Health (https://minorityhealth.hhs.gov/population-profiles)

Quick Facts - Diabetes in Minnesota, MDH: Diabetes in Minnesota Fact Sheet 2022 (https://www.health.state.mn.us/diseases/diabetes/docs/diabetesfacts.pdf)

Quick Facts - Prediabetes in Minnesota, MDH: Prediabetes Factsheet (https://www.health.state.mn.us/diseases/diabetes/docs/prediabetesfacts.pdf)

Report: Income, Employment and Diabetes in Minnesota Income, Employment and Diabetes Report (https://www.health.state.mn.us/diseases/diabetes/docs/diabetesincome.pdf)

Ways that community-based organizations can help support people with diabetes. Centers for Disease Control and Prevention: Community-Based Organizations | Diabetes | CDC (https://www.cdc.gov/diabetes/php/cbo-guidance/index.html)

What Works for Health tool uses evidence-based strategies, policies and programs to help your community, County Health Rankings: What Works for Health | County Health Rankings & Roadmaps (https://www.countyhealthrankings.org/strategies-and-solutions/what-works-for-health)

Wonder Database, CDC. Deaths: Underlying cause of deaths: CDC WONDER (https://wonder.cdc.gov/)

HIV/AIDS and sexually transmitted infections (STIs)

Part I. Background information

Sexually transmitted infections (STIs) refer to infectious organisms transmitted through sexual activity and the diseases or conditions they cause. In Minnesota (MN), gonorrhea, chlamydia, syphilis, human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) are reportable to the Minnesota Department of Health (MDH). HIV is the virus that causes AIDS and without treatment, HIV attacks and weakens the immune system, making people living with HIV susceptible to infections and some cancers. MDH monitors reportable STIs and HIV/AIDS using reviews of submitted case reports and laboratory reports.

STIs in Minnesota

Chlamydia and gonorrhea are the two most common reportable STIs in MN. In 2025, there were 18,179 cases of chlamydia and 5,960 cases of gonorrhea reported to MDH. Both are showing decreasing trends from when they peaked in 2021. Reported cases of syphilis have also shown decreasing trends, with 1,384 cases reported in 2025, down from 1,457 in 2021. Although rates of primary, secondary and early non-primary/non-secondary syphilis have decreased, the rate of late or unknown duration has shown increasing trends, from a rate of 8.1 per 100,000 to 11.9 per 100,000 from 2021 to 2025. These cases represent individuals who are diagnosed after a year of having syphilis and/or individuals within inadequate treatment. While the majority of syphilis cases are still diagnosed among men, the rate in females remains elevated compared to 2016. This elevated rate among females is contributing to increasing rates of congenital syphilis in MN. Congenital syphilis can occur when a syphilis infection is transmitted to an unborn baby during pregnancy through the placenta. Congenital syphilis can cause miscarriages and stillbirths and infants born with congenital syphilis can suffer a variety of serious health problems, including deformities, seizures, anemia and jaundice.

STI rates remain highest in the cities of Minneapolis and St. Paul. However, cases are detected in Twin Cities suburbs and Greater MN. Fifty-four percent of primary and secondary syphilis infections were among those who were residents of the Twin Cities suburbs or Greater MN. Forty-four percent of gonorrhea infections and 64% of chlamydia infections were diagnosed in residents of the Twin Cities suburbs or Greater MN.

Disparities

- In 2025, the chlamydia rate was 9.3 times higher in the non-Hispanic, Black/African American population, 7.3 times higher in the American Indian population, 5.6 times higher in the Hispanic population and almost twice as high in the Asian/Pacific Islander population compared to whites.
- In 2025, the gonorrhea rate was 12.5 times higher in the non-Hispanic, Black/African American population, 10.9 times higher in the American Indian population, 3.9 times higher in the Hispanic population and 1.4 times higher in the Asian/Pacific Islander population compared to whites.
- Disparities in syphilis rates persist. The rates of primary and secondary syphilis are 9.6 times higher in the American Indian population and 10 times higher in the Black/African American population compared to whites.
- Early syphilis cases in females show striking disparities when compared to the underlying population distribution. Black, non-Hispanic females represented 24% of diagnosed cases compared to 8.3% of the population and American Indian females represented 17% of diagnosed cases compared to 1.7% of the population.

For more information on STIs in MN, visit the MDH STI Statistics (https://www.health.state.mn.us/diseases/stds/stats/index.html) website.

HIV in Minnesota

In 2025 there were 253 newly diagnosed HIV infections reported to MDH. This is a 19% decrease from 2024 (312). While this is a decrease from 2023 and 2024, 253 is on track with incidence trends from prior to the COVID emergency. In 2016 there were 295 new HIV diagnoses, 279 in 2017, 277 in 2018, and 268 in 2019. At the end of 2025, there were 9588 people alive and living with diagnosed HIV.

Disparities in HIV

- 68% of new HIV cases affect communities of color.
- Hispanic/Latino males made up 19% of all new diagnoses in MN in 2025. This is similar to 2023 and 2024, but a significant increase from earlier years.
- Incidence rates continue to remain highest among Black African-born (34.3 per 100,000), Black African-American (17.0 per 100,000), and Hispanic (15.8 per 100,000) people. Only 1.8 per 100,000 white people in MN were diagnosed with HIV in 2025.
- In 2025, 72% of all new HIV diagnoses were among people residing in the 7-county Twin Cities metro, and 28% among people residing in Greater MN (counties outside of the 7-county metro).

Racial and ethnic disparities also exist in HIV treatment and care:

- The CDC reports that African Americans living with diagnosed HIV infection have percentages of linkage to care and viral suppression (low level of HIV in the blood) that are lower than whites and far below national goals.
- In Minnesota in 2024, BIPOC MSM had lower rates of viral suppression and retainment in care than white MSM. In 2024, 89% of white MSM were retained in care compared to 84% of Hispanic and Black, non-African born MSM. Eighty-six percent of white MSM were virally suppressed compared to 67% of American Indian MSM, 74% of Black African-born MSM, and only 76% of Black non-African born MSM.

For more information and data on HIV/AIDS in Minnesota, visit the HIV/AIDS Statistics (https://www.health.state.mn.us/diseases/hiv/stats/index.html) page.

Risk factors

Individual risk factors for STIs and HIV include:

- Having unprotect anal or vaginal sex
- Having sexual contact with multiple partners, especially anonymous partners
- Injection drug use and substance use, including alcohol
- Having an STI increases the risk for HIV and having a history of STIs increases risk for reinfection
- Being forced to have sexual intercourse or sexual activity

Testing is a key to HIV and STI prevention. For HIV, early detection and treatment can prolong life and reduce the likelihood of progression to AIDS. Chlamydia, gonorrhea and syphilis are all treatable with antibiotics. It is critical to identify infections and test and treat partners to lower transmission risk.

Individual barriers to treatment may include: fear of a positive result and/or lack of confidentiality, being unaware of risk factors and limited understanding of the benefits of treatment.

Protective factors

- Consistent condom use
- Getting vaccinated (HPV, hepatitis A and hepatitis B)

- Limiting excessive alcohol and drug use
- Getting tested regularly while sexually active
- Receiving comprehensive sexuality education and being supported in a sex-positive culture
- Having a positive understanding and perception of sexuality

Removing structural barriers such as the lack of universal HIV screening (not all health care professionals offer HIV testing or are aware of CDC guidelines) and complex insurance systems can reduce health disparities for different populations.

For the first time, the knowledge and tools exist to end the HIV epidemic effectively are now widely available. Treating HIV prevents new infections from occurring, also referred to as the "treatment as prevention" approach. One highly effective HIV prevention strategy is antiretroviral therapy (ART) which decreases the amount of virus in the bodies of people living with HIV to undetectable levels, allowing them to live long, healthy lives. Key studies have shown that once people with HIV have undetectable amounts of virus in their body, a concept known as Undetectable = Untransmittable (U=U), they no longer bear the risk of sexually transmitting HIV to their partners.

Another highly effective HIV prevention strategy is pre-exposure prophylaxis (PrEP) (http://www.health.state.mn.us/divs/idepc/diseases/hiv/prep.html), a daily pill taken by people who do not have HIV in order to prevent infection. An HIV negative person exposed to HIV can take post-exposure prophylaxis (PEP) to reduce their risk of infection.

Social determinants

- Social connections and support: Creating communities that are welcoming to young people, LGBTQ people, people of color and others, with strong social connections and support, can help people avoid sexual risk-taking and other risky behaviors such as injection drug use. Supportive communities encourage positive parenting and caregiving, which also protect against risk-taking.
- Racism and discrimination: Racism and discrimination, along with stigma related to HIV, AIDS and STIs, can worsen people's health and keep them from accessing screenings, preventive care and treatment. Creating welcoming environments for LGBTQ people also contributes to a sense of belonging and protects against sexual risk-taking.
- Housing: Safe, stable and affordable housing reduces stress and makes it easier to establish and routinely access health care, including HIV and STI screenings. Stable housing makes it easier to keep up with treatment and monitoring for STIs, HIV and AIDS.
- Neighborhood conditions: A neighborhood that offers opportunities for young people—such as after-school programs, sports, and job training—supports positive sexual health and decreased sexual risk-taking.
- Educational opportunity: Creating opportunities for youth – such as after-school programs, sports, and job training – supports positive sexual health, including decreased sexual risk taking. Increasing school connectedness – such as involvement in school activities, liking school and finding it important, bonding with teachers and peers, feeling safe and fairly treated – improves students' opportunities for success and protects against sexual risk-taking. Academic achievement and aspirations lead youth to make healthy decisions about sex.
- Employment and benefits: In addition to being a key source of access to health care, employment is also a source of social connection and financial and food security. Unemployment, on the other hand, can lead to late testing and delayed treatment.
- Income and wealth: HIV/AIDS affects populations of lower socioeconomic status and impoverished neighborhoods at a disproportionately high rate. According to the American Psychological Association (APA), "limited economic opportunities and periods of homelessness have been associated with risky

sexual practices, such as exchanging sex for money, drugs, housing, food and safety, placing individuals at risk for HIV. Living in poverty can also result in food insufficiency weakening the body's ability to fight off infection, as well as result in transactional sex and power differences in sexual relationships that place an individual at risk of infection. Individuals may continue to face hunger after contracting HIV. Refer to the APA HIV/AIDS and socioeconomic status fact sheet for more information.

- Access to quality health care: People who are living with or are at risk for HIV, AIDS or STIs benefit from access to high quality, affordable and culturally- and linguistically competent care. Health care includes screenings, preventive care, treatment and education about how to maintain health. Health care should be welcoming to all, including LGBTQ community members and young people.
- Transportation: People need affordable, convenient transportation options to access screenings, preventive care and treatment for HIV, AIDS and STIs.

More information on risk and protective factors can be found on the Act for Youth Risk and Protective Factors for Adolescent Sexual Health website.

Priority Health Area Specialists

If you need additional data not found on this page, please submit a specific data request through the STD/HIV/TB Data and Presentation Request Form and someone will get back to you within two weeks.

For more data, information on best practices or other questions about HIV/AIDS, contact:

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Part II. Examples of objectives, strategies, and activities

The following are examples of the types of projects that applicants may undertake through EHDI. Applicants are not required to use the objectives, strategies, activities, and evaluation measures listed in the RFP appendices. Applicants are encouraged to propose their own research-based or promising strategies and/or adapt and build upon these practices. Projects that are research-based or promising strategies will be given equal weight in the review process.

Goal: To close the gap in the health status of populations of color and American Indians as compared to whites in HIV/AIDS and STIs.

Level of Change 1: Delivering health promotion and prevention projects grounded in cultural knowledge and wisdom that contribute to eliminating disparities.

Example Objective: Each year between 2027 and 2031, increase by 5 percent the proportion of program participants who are aware of their HIV/AIDS/STI level of risk and/or status.

- **Example Strategy:** Provide HIV/AIDS/STI education and counseling.
    - **Example Activity 1:** Provide education and counseling (individual and group) regarding the importance and effectiveness of screening for HIV and STDs for high-risk individuals.
    - **Example Activity 2**: Provide education and counseling to groups and individuals regarding the availability of treatments and services for HIV and STDs to reduce stigma and anxiety over screening and testing.
- **Example Strategy:** Provide HIV and/or STI screening or testing to individuals identified as high risk for STIs and/or HIV.
    - **Example Activity 1:** Train staff in CDC STI and HIV treatment guidelines and HIV and/or STI screening; testing and risk assessment.
    - **Example Activity 2:** Facilitate referral to clinics or facilities experienced in serving people with HIV and/or STIs for medical care and additional supportive services.

Example Evaluation Measures:

- Number of individuals who receive individual and group education and counseling per program cycle (Output).
- Number of individuals tested for HIV/AIDS/STIs per year (Output).
- Number of individuals identified as high risk for HIV/AIDS/STIs who receive referrals to appropriate services (or are linked to HIV medical care) (Output).
- Number of individuals diagnosed with HIV/AIDS or STIs who receive treatment and aftercare services (Output).
- Increase in the proportion of program participants who report that they believe in the importance of screening for HIV/AIDS/STIs prevention (Outcome).
- Increase in the proportion of program participants who increase knowledge of their HIV status (Outcome).

Level of Change 2: Participating in or leading efforts that contribute to eliminating disparities by addressing people's social needs around housing, education, jobs, transportation, food access, health care, and more, focusing change efforts within neighborhoods or local geographies, organizations, and institutions.

Example Objective: By 2031, increase by 25 percent Organization X's capacity to serve individuals living with or at risk for HIV/AIDS and STIs. as measured by an additional 10 clients served each year.

- **Example Strategy**: Improve Organization X's ability to provide its participants with access to regular HIV/AIDS/STIs testing and support services.
    - **Example Activity 1:** Partner with Minneapolis and Bloomington Public Health Departments to get free or low-cost HIV/AIDS/STIs testing for its youth program participants and their families.
    - **Example Activity 2:** Create fast-track or walk-in testing protocols with minimal waiting times for clients unable to make formal appointments.

- **Example Strategy:** Partner with Anderson High School and Bayview High School to educate parents of its students around Minnesota's new K-12 health education standards.
    - **Example Activity 1:** Partner with Anderson and Bayview high schools' health educators to develop a training curriculum.
    - **Example Activity 2:** Use Organization X's bus to provide free transportation to its youth's parents or guardians to attend parent education classes at Anderson and Bayview high schools once a week from September 2026 to January 2027.
- **Example Strategy:** Build long-term self-sufficiency among Organization X's clients living with HIV.
    - **Example Activity 1:** Apply for funding to secure resources that will move clients from emergency vouchers to more permanent, independent living.
    - **Example Activity 2:** Partner with community organizations (e.g., Clare Housing or Aliveness Project) to secure housing for its homeless youth diagnosed with HIV.
    - **Example Activity 3:** Offer work-readiness classes to clients living with AIDS.

Example Evaluation Measures:

- Number of youth participants who received free HIV/AIDS/STIs testing (Output),
- Number of parents of youth participants who attended a session about Minnesota's new K-12 health education standards at Anderson or Bayview high schools (Output).
- Number of clients living with HIV who secured stable housing through the program (Output).
- Percent increase in Organization X parents who opt in their children to K-12 health education instruction after the parent education was offered at Anderson or Bayview high schools (Outcome).
- Percent increase in Organization X youth living with HIV who indicate they feel self-sufficient in their lives (Outcome).

Level of Change 3: Participating in, or leading, efforts to change governing structures and processes, economic and social policies, power structures, and cultural norms, values, or worldviews at the broader systems level.

Example Objective: By 2031, improve overall wellness of Organization X clients living with AIDS, as measured by an increase of 25 percent or more their score on the Physical Health Summary and Mental Health Summary of the MOS-HIV Survey tool.

- **Example Strategy:** Join efforts to increase housing stock for low-income renters in Minnesota
    - **Example Activity 1:** Attend meetings of the Homes for All Coalition, a major statewide coalition that brings together dozens of organizations to advance shared policy initiatives to prevent and end homelessness and achieve housing stability for all Minnesotans
    - **Example Activity 2:** Co-develop a 2027 policy agenda with other Homes for All coalition members.
- **Example Strategy:** Reduce stigma and discrimination around HIV/AIDS
    - **Example Activity 1:** Conduct an information campaign to educate the public, employers, landlords, etc. about HIV and Minnesota disability discrimination laws that provide legal protection to people living with HIV in areas such as employment, housing, education, and other public accommodations and services.
    - **Example Activity 2:** Work with health insurance plans to increase accessibility of HIV treatment by removing critical HIV medications from high-cost pricing tiers.
    - **Example Activity 3:** Participate in the development and implementation of END HIV MN (a comprehensive long-term plan to end new HIV infections and improve health outcomes for

people living with HIV in Minnesota) by participating in stakeholder engagement sessions and implementing strategies from the plan.

Example Evaluation Measures:

- Number of coalition (Homes for All, END HIV MN) meetings attended (Output).
- Number of END HIV MN strategies adopted / implemented by Organization X (Output).
- Percent of Organization X clients living with AIDS who improved their housing status / employment status / access to medication (Outcome).
- Percent of Organization X clients living with AIDS who increase their physical and mental health scores on the MOS-HIV Survey (Outcome).

Part III. Resources

Act for Youth: Sexual Health: Risk and Protective Factors - ACT for Youth (https://actforyouth.org/adolescence/sexual-health/health/)

American Psychological Association HIV/AIDS webpage: HIV/AIDS and Socioeconomic Status (https://www.apa.org/pi/ses/resources/publications/hiv-aids)

American Psychological Association HIV/AIDS & Socioeconomic Status (PDF) (factsheet-hiv-aids.pdf)

HIV/AIDS Resources, including Prevention & Care, links for Health Professionals, Syringe Access and Disposal and Sexual Health: HIV/AIDS - MN Dept. of Health (https://www.health.state.mn.us/diseases/hiv/index.html)

Overview of Sexually Transmitted Infections, including links for Health Professionals, STI/HIV Training & Resources, and STI/HIV Partners Services Program: Sexually Transmitted Infections (STIs) - MN Dept. of Health (https://www.health.state.mn.us/diseases/stds/index.html)

Pre-exposure Prophylaxis (PrEP): Pre-Exposure Prophylaxis (PrEP) - MN Dept. of Health (https://www.health.state.mn.us/diseases/hiv/prevention/prep/index.html)

Syphilis in Pregnancy and Congenital Syphilis: Syphilis - MN Dept. of Health (https://www.health.state.mn.us/diseases/syphilis/index.html)

Immunizations for adults and children

Part I. Background information

Immunizations in Minnesota

Immunizations strengthen the body's natural defenses by helping it safely develop immunity to disease. Because many serious diseases can be prevented with vaccines, it is important for people to stay up-to-date on vaccines throughout their lives. Despite a variety of barriers to vaccination, immunization remains one of the top public health achievements of all time. Vaccination prevents tens of thousands of deaths and saves tens of billions of dollars in healthcare costs in the United States every year.

In 2025, 64% of Minnesota children received their childhood immunization series by age two years. Among the vaccines that make up the childhood series:

- The consistently lowest rate is for children receiving 4 doses of DTaP by age two years.
- Over the last five years, MMR and polio immunization rates have declined.

Additionally, only 31% of Minnesota adolescents completed their adolescent immunizations by age 13 years in 2025.

The coverage rate for children enrolled in school and childcare in Minnesota has declined over the last 5 years. While Minnesota has historically had high coverage for the vaccines that are required for school and childcare, the declining trend in coverage increases the risk for outbreaks. In 2025, 85.8% of kindergarten students were fully vaccinated with two doses of MMR vaccine, while 6.8% of kindergarten students had a non-medical exemption for MMR. It is estimated that approximately 95% MMR vaccination coverage is needed to prevent measles outbreaks. Coverage rates are similar for the other required vaccines, including polio, DTaP, hepatitis B, and varicella. The decline in coverage is due to several factors, including missed well child visits during the pandemic, and a decrease in vaccine confidence among some communities in Minnesota.

Adult immunization coverage rates in Minnesota are low and leave many adults vulnerable to vaccine-preventable diseases. Only 36% of adults 50 years and older have completed a zoster vaccine series to protect against shingles. Among residents 75 years and older, only 31% have received an RSV vaccine. Immunization during pregnancy not only protects the pregnant person but also their newborn before they are old enough to receive their own vaccines. Tdap vaccination during pregnancy prevents pertussis (whooping cough), which can be very severe in infants. Coverage has not changed in the last 8 years with 68% of pregnant persons receiving a Tdap during pregnancy 2025. However, coverage is much lower for other routinely recommended vaccines during pregnancy.

As a result of declining vaccination coverage, we are continuing to see increases in vaccine-preventable disease (VPD) outbreaks in Minnesota, such as measles, pertussis, and varicella (chickenpox). VPD outbreaks put Minnesotans at risk for severe illness and health complications, place significant strain on healthcare and public health systems, and cause major disruptions for families and communities. Outbreaks require prolonged efforts from school and childcare staff as well as public health and healthcare sectors to implement control measures and contain spread. Public health agencies devote substantial resources to managing these outbreaks, including conducting case and contact investigations and implementing the interventions needed to stop transmission. Additionally, these outbreaks result in missed school and workdays as well as high healthcare and laboratory expenses.

Measles activity in the United States has intensified, driven largely by outbreaks in under-vaccinated communities where persistent immunity gaps create opportunities for rapid transmission. National cases increased from 2,289 in 2025 to 3,134 in 2026 (as of 9/3/26), marking the highest burden in more than three decades and reflecting expanding domestic spread. Several states have experienced large, sustained outbreaks. Minnesota has also been affected, with 17 cases reported so far in 2026; nearly all occurring in individuals who were unvaccinated or had an unknown vaccination status. Of note, all 17 cases were acquired domestically rather than through international travel, representing a significant departure from historical patterns of international imported cases.

Pertussis activity has also been increasing, consistent with national trends. Minnesota continues to see periodic surges in cases, particularly among under-vaccinated school aged children and infants too young to be fully vaccinated. These increases reflect ongoing immunity gaps and highlight the importance of maintaining high vaccine coverage for both children and adults. Infants remain at highest risk for severe disease, hospitalization, and death, underscoring the critical role of timely childhood vaccination and maternal Tdap vaccination during each pregnancy.

There have also been increases in varicella (chickenpox) cases and outbreaks per year in recent years. In 2025, Minnesota (MN) experienced 450 cases and 25 varicella outbreaks, which is the highest number of cases since MN began case-based surveillance for this disease in 2012. Although varicella does not cause complications for most people, individuals with weakened immune systems and those who acquire the disease in adolescence or adulthood are at higher risk for serious complications or hospitalization.

Disparities

While Minnesota's overall immunizations rates are strong, disparities in certain socioeconomic, racial and ethnic populations continue to be a cause for concern. For example:

- Childhood immunization coverage rates are lower among Medicaid eligible children.
- Childhood immunization coverage rates are lower in Black/African American, American Indian/Alaskan Native, Hispanic and recently immigrated communities.
- Adolescent immunization coverage rates are lower among those not eligible for Medicaid.
- Adolescent HPV coverage rates among those living in Greater Minnesota are lower than metro area residents.
- Immunization coverage rates are lower among pregnant persons when they have no health insurance at time of birth or have inadequate prenatal care.
- Adult immunization coverage rates are lowest among black non-Hispanic residents for Zoster (Shingles) and RSV.
- American Indian/Alaskan Native non-Hispanic adults living in the metro have lower immunization coverage rates than those living in Greater Minnesota.
- RSV immunization coverage rates are low among Asian/Pacific Islander non-Hispanic adults.

Risk factors

Individuals are less likely to receive recommended immunizations when they lack health insurance, have limited access to health care or a regular medical home, or when they have concerns or insufficient understanding about vaccine importance and safety, often influenced by misinformation. Additionally, these same factors result in delayed or skipped care and treatment for individuals who become sick from a VPD, which can lead to increased severity and complications from the disease.

Protective factors

Supportive, trauma-informed, and culturally competent health care systems that are flexible and responsive to the unique needs of different racial, ethnic, and cultural populations are important. Certain attributes of those systems include:

- Availability of interpreters and translators.
- Trust established between health care providers and the different populations in a community.
- Culturally competent and culturally congruent care resulting from providers' knowledge of patients' cultural values, beliefs, and traditions.
- Clinic reminders when shots are due.
- Community members and leaders who are trusted and connected in their communities can act as vaccine advocates and safe spaces to discuss vaccine concerns.

School and childcare immunization policies: For decades, certain immunizations have been required before a student can attend school or childcare in Minnesota. Additionally, there are exemptions to the requirements. The purpose of immunization requirements in these settings are to:

- Protect students from dangerous diseases, including those students who have medical or non-medical exemptions.
- Reduce the risk of outbreaks in school and childcare settings. Diseases, such as measles, varicella, and pertussis can spread quickly in schools and childcares due to the large number of people congregating together and the amount of time spent in school.
- Protect students who are too young to be vaccinated. Childcares care for the youngest Minnesotans, who may not be old enough to be fully protected by vaccination and are at increased risk of severe disease and complications from VPDs.
- Ensures that school health and childcare staff have immunization and exemption records readily available to quickly take action to reduce the impacts of VPD outbreaks.

Social determinants

- Social connections and support: Communities with strong social connections and support can encourage immunization by connecting people with resources and upholding positive social norms.
- Housing: Safe, stable, and affordable housing reduces stress and makes it easier to establish and routinely access primary health care, including receiving immunizations on schedule.
- Employment and benefits: Employment with benefits is the primary way people in the U.S. obtain access to healthcare, which includes immunizations.
- Access to quality health care: Access to high quality, affordable, and culturally- and linguistically competent care is essential to ensuring that people receive comprehensive and timely immunizations.
- Racism and discrimination: Racism and discrimination in health care can prevent people from accessing immunizations.
- Income and wealth: Rates of immunization are lower for populations with low socioeconomic status. Income plays a role in immunizations by making it more difficult for parents to learn about the benefits of vaccines (less access to information, especially if access to health care is lower) and presenting challenges in finding access to vaccines.
- Transportation: People need affordable, convenient transportation options to obtain immunizations on schedule.

Priority Health Area Specialists

For more data, information on best practices, or other immunization-related questions, contact:

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Part II. Examples of objectives, strategies and activities

The following are examples of the types of projects that applicants may undertake through EHDI. Applicants are not required to use the objectives, strategies, activities, and evaluation measures listed in the RFP appendices. Applicants are encouraged to propose their own research-based or promising strategies and/or adapt and build upon these practices. Projects that are research-based or promising strategies will be given equal weight in the review process.

Goal: To close the gap in the health status of populations of color and American Indians as compared to whites in immunization coverage.

Level of Change 1: Delivering health promotion and prevention services grounded in cultural knowledge and wisdom that contribute to eliminating disparities.

Example Objective: The percent of program participants who agree that immunizations protect individuals and communities from harmful diseases increase by 25 percent at the end of the program.

- **Example Strategy:** Develop community-informed education and outreach around immunization.
    - **Example Activity 1:** Work with clinics and community members to conduct immunization education and outreach for populations with low immunization rates.
    - **Example Activity 2:** Recruit parents and other community members as peer educators to facilitate discussions with their peers (e.g., parents, high-risk adults, adolescents) around immunizations.
- **Example Strategy:** Increase the availability of immunization services in various community settings.
    - **Example Activity 1:** Partner with community health workers (CHWs), pharmacists and pharmacy students to hold immunization clinics in childcare facilities.
    - **Example Activity 2:** Link immunizations with other clinical and public health services (e.g., family home visits, WIC) utilized by populations with low immunization rates (e.g., pregnant people).
    - **Example Activity 3:** Hold immunizations clinics in community gathering places such as community centers, churches, libraries, and parks.

Example Evaluation Measures:

- Number of immunization clinics held each year in community sites (Output).
- Number of individuals immunized each year at immunization clinics in community sites (Output).
- Vaccination coverage among adults in populations of color and American Indians in Hennepin County increases (Outcome).

- Increase in influenza and pneumococcal vaccination rates among the elderly in populations of color and American Indians in Ramsey County (Outcome).
- Increase in immunization rates among WIC enrollees in Minneapolis (Outcome).

Level of Change 2: Participating in or leading efforts that contribute to eliminating disparities by addressing people's social needs around housing, education, jobs, transportation, food access, health care, and more, focusing change efforts within neighborhoods or local geographies, organizations, and institutions.

Example Objective: Between 2027 and 2031, 100 percent of participants in the spring cohort with outstanding vaccinations complete their vaccinations by the end of the program in July.

- **Example Strategy:** Support implementation of immunization best practices at clinics serving populations experiencing disparities in immunization coverage.
    - **Example Activity 1:** Implement a county-wide reminder, recall, and outreach (RRO) system for childhood immunizations on known disparities in immunization rates.
    - **Example Activity 2:** Establish agreements between clinics and childcare facilities or schools to conduct immunization audits and follow-up clinical visits.
- **Example Strategy:** Provide enabling services (translation/interpretation, transportation, and social support) to populations facing barriers to immunization access in healthcare facilities.
    - **Example Activity 1:** Establish clinic policies to ensure the availability of culturally competent care in clinic settings.
        - (For example, health care professionals who can speak the patients' first language, available medical interpreters/translators and CHWs, additional time during visits, transportation, etc.)
    - **Example Activity 2:** Extend walk-in hours for vaccine services or extend clinic hours to evening or weekends to accommodate patients who cannot visit during standard weekday hours.

Example Evaluation Measures:

- Number of immunization patients served during extended clinic hours (Output).
- Number of agreements established with clinics and childcare facilities or schools that will conduct immunization audits and follow-up clinical visits (Output).
- Increase in the proportion of newborns, infants, and toddlers in Minneapolis who receive their recommended vaccinations on schedule (Outcome).
- Clinics in Minneapolis that utilize the RRO system report an increase in immunization coverage (Outcome).
- Clinics in Minneapolis increase their vaccination catch up rates among children and adolescents with delayed vaccinations (Outcome).

Level of Change 3: Participating in, or leading, efforts to change governing structures and processes, economic and social policies, power structures, and cultural norms, values, or worldviews at the broader systems level.

Example Objective: Percent of program participants who reported experiencing one or more barriers to immunization access during intake will be reduced by half after 12 months in the program

- **Example Strategy:** Build additional pathways for members of communities experiencing immunization disparities to participate in the health care workforce to improve trust-building.

    - **Example Activity 1:** Join or lead efforts to develop or improve state education standards that provide for educational pathways into healthcare careers for students from communities most impacted by inequities in immunizations.
    - **Example Activity 2:** Increase state budget allocations for residency and clinical preparation grants for international medical graduates (IMGs) to enhance service in medically underserved areas.
- **Example Strategy:** Expand immunization access points
    - **Example Activity 1:** Join or lead efforts to require acute care hospitals and long-term facilities to assess the flu and pneumococcal immunization status of adult patients and offer the vaccines before discharge.
    - **Examples Activity 2:** Join or lead efforts to increase permanent funding for the Minnesota Department of Health to offer on-demand spatial mapping services to providers to allow them to identify areas of low vaccine coverage and direct outreach and mobile health vans directly to trusted community gathering centers in those areas.
- **Example Strategy:** Improve the statewide immunization reporting system.
    - **Example Activity 1:** Join or lead efforts to expand immunization information systems (registries) by requiring providers to report all ages, since participation in registries are shown to increase coverage.
    - **Example Activity 2:** Join or lead efforts to expand statewide initiatives to allow all licensed childcare centers and schools to directly access the state's electronic vaccine registry (Minnesota Immunization Information Connection or MIIC) to meet annual reporting requirements.

Example Evaluation Measures:

- Number of high schools in Hennepin County that are implementing a health care pathway program (Output).
- Number of individuals vaccinated through the BeWell Mobile Clinic (Output).
- Healthcare providers in Becker and Ottertail counties (designated as Minnesota health professional shortage areas) report an increase in their number of providers.
- Increased compliance with annual reporting requirements among licensed childcare centers in Ramsey county, as measured by the number that submit their annual immunization status report on time.

Part III. Resources

A comprehensive resource from the Minnesota Department of Health providing detailed information on various vaccine-preventable diseases, which includes data on VPDs in Minnesota: Diseases Prevented by Vaccines - MN Dept. of Health (https://www.health.state.mn.us/people/immunize/vpds.html)

Immunization information for every age including vaccine recommendations, reliable resources, where to get vaccinated and how to find your vaccination record: Immunization: Me and My Family - MN Dept. of Health (https://www.health.state.mn.us/people/immunize/basics/index.html)

Childhood immunization coverage rates by 24 months. Adolescent immunization coverage rates by 13 years of age or 19 years of age: Minnesota Public Health Data Access Portal (https://mndata.web.health.state.mn.us/index.html)

COVID-19 and Influenza immunization coverage rates. Updated monthly from October-May with current respiratory virus season data: Vaccine Data: Influenza and COVID-19: Viral Respiratory Illness in Minnesota - MN Dept. of Health (https://www.health.state.mn.us/diseases/respiratory/stats/vaccine.html)

Interactive dashboards that displays measles and varicella coverage rates in Minnesota schools and childcares. The dashboards also include historical case data: Analytic Tools & Resources - Midwest Analytics and Disease Modeling Center (MADMC) - School of Public Health - University of Minnesota (https://www.sph.umn.edu/research/centers/midwest-analytics-and-disease-modeling/tools/)

Minnesota childhood and adolescent immunization rates that are updated quarterly as well as annual school and childcare required immunization and exemption data: Immunization Statistics - MN Dept. of Health (https://www.health.state.mn.us/people/immunize/stats/index.html)

Videos about how vaccines are a safe and effective way to protect against some diseases. Includes videos in Hmong, Somali, and Spanish. MDH: Vaccines Prevent to Protect - YouTube (https://www.youtube.com/playlist?list=PLnv1INVkmxmtwlZxyRCI33Jbxh-fu6Jzq)

Infant mortality

Part I. Background information

Infant mortality in Minnesota

Infant mortality refers to the death of a live-born infant from any cause before the infant's first birthday. The infant mortality rate is the number of infant deaths per 1,000 live births. It is an important indicator of the overall health and well-being of families, communities, and entire societies.

Minnesota's infant mortality rate in 2024 declined by 39.7 percent compared to the 1990 rate, from a high of 7.3 deaths per 1,000 live births to 4.4 deaths per 1,000 live births. Not only is the 2024 rate well below the national Healthy People target of 5.0 deaths per 1,000 live births by 2030, but it is also below the nation's overall rate of 55.5 per 1,000 live births in 2024. But this seemingly sound status for the state overall masks longstanding disparities in infant mortality.

Infant mortality disparities

There are racial and ethnic disparities in infant mortality in Minnesota.

- Infants born to Black/African American and American Indian mother/birthing people die at more than twice the rate of infants born to mother/birthing people in the state overall.
- While the five-year average mortality rate for infants born to mothers/birthing people in Minnesota during the 2020-2024 period was 4.5 per 1,000 live births, the rate for black/African American infants was more than twice as high at 9.1 deaths per 1,000 births.
- For American Indians, the rate from 2020-2024 was 10.6 per 1,000 infants, 2.4 times the state rate overall.

Disparities also exist in the timing of infant deaths. These differences in timing help determine the types of interventions that are effective in reducing disparities. At 6.2 deaths per 1,000 live births, American Indians' post-neonatal (between 28 days and 1 year) infant mortality rate from 2020-2024 was higher than that of any other group and was four times the state's overall post-neonatal mortality rate of 1.6 per 1,000 births. Sudden unexpected infant deaths (SUID), which includes sudden infant death syndrome (SIDS) and deaths from accidental suffocation and strangulation in bed, is the leading cause of post-neonatal deaths in the American Indian population.

Prenatal care in Minnesota

Prenatal care is essential in preventing infant mortality because early and consistent care helps identify concerns, manage medical and social risks, and ensures both the birthing parent and infant receive timely support that promotes a healthier pregnancy and safer birth outcomes.

Prenatal care disparities

In 2024 in Minnesota, 78.5% of pregnant people received prenatal care within their first trimester of pregnancy. Approximately 1 in 29 (2,113) infants were born to a parent who received late (started in the third trimester) or no prenatal care at all.

- From 2019-2023, 13.1 percent of American Indian or Alaska Native birthing parents, 6.9 percent of Black birthing parents, and 7.1 percent of Hispanic birthing parents began prenatal care in the third trimester or received no prenatal care at all.
- Among birthing parents living in Greater Minnesota, 44% experienced at least one barrier to prenatal care. Barriers can be related to finances, transportation, health insurance, and ability to take time off work. Pregnant people with lower incomes are often simultaneously exposed to multiple intersecting barriers to care.
- Quality care during pregnancy and delivery is essential for preventing maternal and infant deaths. However, between 2020 and 2024, less than half of births (42.7%) to American Indian birthing people received the recommended adequate/intensive prenatal care utilization.
- American Indian pregnant people systematically experience the lowest rates of prenatal care and the highest rates of giving birth prematurely to a baby with low birthweight in Minnesota.
- In Minnesota, while Non-Hispanic Black mothers/birthing people (12%) and American Indian birthing people (1.4%) are a small portion of the birthing population, they are disproportionately represented in pregnancy-related deaths. The pregnancy-related mortality ratio for American Indian birthing individuals was over 12 times higher than the statewide rate of 17.9 pregnancy-related deaths per 100,000 live births (n=10), and 2 times higher for non-Hispanic Black mothers (n=16).

Barriers to care differ systematically by race and ethnicity and include health insurance coverage, cost, convenience, discrimination and racism, fear, and lack of information on how to address postpartum health issues. All these barriers can perpetuate maternal morbidity.

Systemic racism creates barriers to accessing quality care throughout pregnancy and delivery. This also results in unfair and unjust treatment of women and pregnant people of color and their families in the healthcare system, leading to disparities in prenatal care utilization across race.

The Minnesota Department of Health has the Minnesota Perinatal Health Data Dashboard. This publicly available interactive tool provides data on maternal and infant health outcomes as well as care delivery across the state.

Risk factors

Infant mortality in Minnesota includes complications stemming from low birth weight, premature birth and unsafe sleep environments. Individual risk factors include:

- Lack of access to timely and high-quality prenatal care
- Disease status
- Stress
- Smoking
- Alcohol consumption during pregnancy
- Poor nutrition and weight status
- Prematurity
- Low birth weight

Protective factors

- Health insurance and access to timely, high-quality, and culturally sensitive health care
- Strong social connections to family and friends
- Knowledge/education about the importance and benefits of breastfeeding
- Folic acid supplements to reduce neural tube birth defects
- Appropriate pregnancy intervals

- Reduced stress
- Access to prenatal care
- Access to culturally appropriate midwife and doula services

Social determinants

- Social connections and support: Creating communities that are welcoming to all people, with strong social connections and support, can help reduce infant mortality. Supportive communities give people a sense of belonging, connect them to resources and help protect against trauma and stress.
- Racism and discrimination: Maternal experiences before, during, and after pregnancy can adversely affect their baby's health. Racism is a major contributor to racial inequities in birth outcomes because it is a source of toxic stress. Exposure to stress during pregnancy can harm the immune and endocrine systems, a likely explanation for the higher incidence of preterm and low-birth-weight births among Black/African American birthing people. Long-term exposure to stress from racism may also explain why factors such as high levels of education, income, or wealth are not as protective for infants born to American Indian and Black birthing people as they are for babies born to white birthing people.
- Housing: Safe, stable, and affordable housing reduces stress and makes it easier to establish and routinely access primary health care, including pregnancy testing, prenatal care, and pediatric care.
- Neighborhood conditions: A safe and healthy neighborhood supports behaviors that contribute to healthy pregnancies, which helps reduce the risk of infant mortality. For example, green spaces that are safe and accessible encourage physical activity. Access to grocery stores selling a wide selection of quality fresh produce makes it easier to eat healthful foods.
- Educational opportunity: While more education is associated with improved rates of infant mortality – likely because of the associated improvements in opportunities for employment and income – the benefits are not as pronounced for women of color. For example, African American women with advanced degrees still experience higher rates of infant mortality than white women who have not graduated from high school.
- Employment and benefits: Meaningful work and adequate wages provide social connection and security, both of which reduce maternal stress, a significant contributor to infant mortality. Employment benefits are also an important source of access to prenatal and infant health care.
- Income and wealth: Infants of low-income families have a much higher risk of dying in the first year of life than infants of higher-income families. Income is linked to education and employment, sources of social support, options for health care, and resources for daily life that are crucial for the health of families and children.
- Access to quality health care: Access to high quality, affordable, and culturally and linguistically competent care is essential to ensuring that people receive comprehensive and timely prenatal care. Prenatal care promotes healthy pregnancies and reduces the risk of infant mortality.
- Transportation: People need affordable and convenient transportation options to access prenatal and pediatric care, as well as educational and employment opportunities and other needs such as healthy food and safe housing.

Priority Health Area Specialist

For more data, information on best practices or other questions about general infant mortality, contact:

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For more data, information on best practices or other questions about prenatal care access and utilization, contact:

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Part II. Examples of objectives, strategies and activities

The following are examples of the types of projects that applicants may undertake through EHDI. Applicants not required to use the objectives, strategies, activities, and evaluation measures listed in the RFP appendices. Applicants are encouraged to propose their own research-based or promising strategies and/or adapt and build upon these practices. Projects that are research-based or promising strategies will be given equal weight in the review process.

Included are examples of objectives and evaluation measures from Healthy People 2030 and the Healthy Minnesota 2025 Statewide Health Improvement Framework. This is to give applicants a glimpse of both national and statewide public health priorities. A few MDH programs use Healthy People 2030 objectives to set performance targets. The Healthy Minnesota Partnership, a group charged with developing a statewide health improvement plan around strategic initiatives, has counted EHDI grantees among its members since 2010.

Goal: To close the gap in infant mortality for populations of color and American Indians as compared to whites.

Level of Change 1: Delivering health promotion and prevention projects grounded in cultural knowledge and wisdom that contribute to eliminating disparities.

Example Objective: Increase breastfeeding rate at 3 months in the American Indian population from 37% in 2025 to 40% by July 1, 2031.

- **Example Strategy:** Provide culturally appropriate peer breastfeeding support to pregnant and breastfeeding women as well as interested family and friends in their support network to increase breastfeeding initiation, exclusivity, and women's confidence in their ability to breastfeed their infants.
    - **Example Activity 1:** Gather information from program participants through a survey about factors contributing to breastfeeding discontinuation.
    - **Example Activity 2:** Assess Organization X's readiness to implement peer breastfeeding support by determining who will train and supervise peers, how to support peers, and whether there is an International Board Certified Lactation Consultant (IBCLC) or other highly trained person for peers to refer issues beyond their scope.
    - **Example Activity 3:** Develop plans, policies and procedures to supervise, recruit and train peer managers and peers, and implement them.
- **Example Strategy:** Encourage pregnant and breastfeeding clients to enroll in the WIC program.
    - Example Activity 1: Include a question in the intake form if they are participating in the WIC program.

- **Example Activity 2:** Provide WIC program information to pregnant and breastfeeding clients at intake.

Example Evaluation Measures:

- Number of participant surveys completed (Output).
- Number of pregnant and breastfeeding clients who received WIC program information at intake. (Output).
- Organization X's readiness assessment to implement peer breastfeeding support is completed by December 2027 (Process Outcome).
- Increase in program participants who are pregnant or breastfeeding who report that they received adequate and culturally appropriate breastfeeding support from the program (Outcome).
- Increase in breastfeeding initiation among program participants (Outcome).
- Increase in breastfeeding duration to three months or more among program participants (Outcome).
- Increase in eligible pregnant U.S.-born Black and American Indian birthing people who participate in WIC for 3 or more months during pregnancy (from 44% in 2026) (Outcome).
- Increase in eligible pregnant American Indian birthing people who participate in WIC for 3 or more months during pregnancy (from 44 % in 2022) (Outcome).
- Zero infant mortality among birthing people in the program (Outcome).
- Increase in the proportion of birthing people who initiate prenatal care in the first trimester (Outcome).

Level of Change 2: Participating in or leading efforts that contribute to eliminating disparities by addressing people's social needs around housing, education, jobs, transportation, food access, health care, and more, focusing change efforts within neighborhoods or local geographies, organizations, and institutions.

Example Objective: Between 2027 and 2031, reduce African American and American Indian infant mortality rates in Hennepin county by at least one percentage point.

- **Example Strategy:** Work with the Minnesota Department of Health or local public health departments to recruit birthing hospitals to become safe sleep certified through the National Safe Sleep Hospital Certification Program.
    - **Example Activity 1:** Identify hospitals that do not have safe sleep certification.
    - **Example Activity 2:** Meet with identified hospitals to provide information on and encourage safe sleep certification.
        - For example, share data on sleep-related sudden unexpected infant deaths (SUID) with identified hospitals, describe the certification program and process, determine the hospital's readiness for certification at the bronze level (i.e., existing provider and patient education about safe sleep and an updated hospital safe sleep policy), and encourage certification as appropriate.
- **Example Strategy:** Build the capacity of Organization X to meet the needs of pregnant or parenting Black and American Indian people.
    - **Example Activity 1:** Increase the number of black and American Indian doulas, perinatal educators and other paraprofessionals who can support positive birth outcomes by providing staff with training and certification opportunities.
    - **Example Activity 2:** Partner with hospitals to develop and implement a standard of continuum of care from prenatal though postpartum periods.
    - **Example Activity 3:** Revise intake form used in perinatal appointments to add a food security screening question, and embed WIC referral in the electronic health records (HER) system.

Example Evaluation Measures:

- Number of partner hospitals that develop a standard of continuum of care from pre-natal though post-partum periods (Output).
- Number of perinatal patients who are identified as food insecure and referred to a WIC clinic (Output).
- Organization X increases its number of black and American Indian doulas, perinatal educators and other paraprofessionals (Outcome).
- At least half of partner hospitals fully implement a standard of continuum of care from pre-natal though post-partum periods (Outcome).
- Decrease the number of perinatal patients who are food insecure (Outcome).
- Increase in the number of birthing hospitals in Minnesota that receive safe sleep certification (Outcome).

Level of Change 3: Participating in or leading efforts to change governing structures and processes, economic and social policies, power structures, and cultural norms, values, or worldviews at the broader systems level.

Example Objective: By 2031, improve birth outcomes statewide and by population group in Minnesota as measured by lower infant mortality rates compared to 2027 baseline rates.

- **Example Strategy:** Advance policy to ensure safe, stable, and affordable housing to low income, housing insecure, and medically at-risk pregnant birthing people and their families to reduce stress and improve birth outcomes.
    - **Example Activity 1:** Research laws, policies and procedures that impede access to housing for pregnant people and their families.
    - **Example Activity 2:** Join or partner with local housing agencies or coalitions to conduct a feasibility study on developing new specialized housing in greater Minnesota for pregnant or birthing people experiencing housing instability or are medically at risk.
    - **Example Activity 3**: Tour existing transitional maternity homes in Minnesota to gather information regarding unmet needs of such facilities and their residents.
- **Example Strategy:** Collaborate with the Minnesota Partnership to Prevent Infant Mortality to expand safe sleep practices in Minnesota healthcare facilities by incentivizing safe sleep certification (e.g., Cribs for Kids® National Safe Sleep Hospital Certification Program)
    - **Example Activity 1:** Work with the Minnesota Department of Health (MDH) to draft language around agency policy on infant health grants to hospitals and birth centers to tie funding to safe sleep certification.
    - **Example Activity 2:** Work with MDH to develop communication materials (e.g., press releases, marketing materials, public dashboards) that promote and publicize Gold, Silver, and Bronze level designees of safe sleep certification, to motivate non-certified hospitals and birth centers to get certified.
- **Example Strategy:** Build a culture of respect for people's decision-making power and bodily autonomy during care.
    - **Example Activity 1:** Work with the Council of Health Plans, the Minnesota Hospital Association or other clinical care groups to develop standards around listening and responding to the concerns of birthing people.
    - **Example Activity 2:** Conduct a survey of hospitals and birth centers to determine their standard protocols and required continuing education training for staff related to listening and responding to the concerns of birthing people

- **Example Activity 3:** Develop a "Know Your Rights" campaign to support shared decision-making expectations during the prenatal, birthing, and postpartum periods.

Example Evaluation Measures:

- Feasibility study on housing in greater Minnesota for medically at-risk pregnant birthing people drafted by July 2029, completed by July 2030 (Output).
- Communication materials (e.g., press releases, marketing materials, public dashboards) that promote and publicize Gold, Silver, and Bronze level designees of safe sleep certification drafted by July 2029, completed by July 2030 (Output).
- Increase the number of hospitals and birth centers in Minnesota that have safe sleep certification (any level) (Outcome).
- Increase the number of hospitals and birth centers in Minnesota that are implementing standard protocols around listening and responding to the concerns of birthing people (Outcome).

Part III. Resources

American Academy of Pediatrics Parenting Website: HealthyChildren.org - From the American Academy of Pediatrics (https://www.healthychildren.org/English/Pages/default.aspx)

Black Mamas Matter Toolkit (PDF): Toolkits - Black Mamas Matter Alliance (https://blackmamasmatter.org/our-work/toolkits/)

Centering Healthcare Institute: Centering Healthcare Institute | Why Centering? (https://centeringhealthcare.org/why-centering)

Doulas of North America (DONA) International: Doula Training and Doula Certification – DONA International (https://dona.org/)

Folic Acid for a Healthy Pregnancy and Baby, March of Dimes: Folic acid | March of Dimes (https://www.marchofdimes.org/find-support/topics/pregnancy/folic-acid)

Healthy Women, Healthy Pregnancies, Healthy Futures: Action Plan To Improve Maternal Health in America (PDF) (https://aspe.hhs.gov/sites/default/files/private/aspe-files/264076/healthy-women-healthy-pregnancies-healthy-future-action-plan_0.pdf)

Hill L, Rao H, Artiga S, and Ranji U. (2025). Racial disparities in maternal and infant health: Current status and key issues. *Kaiser Family Foundation*. (https://www.kff.org/racial-equity-and-health-policy/racial-disparities-in-maternal-and-infant-health-current-status-and-key-issues/)

Infant Mortality, Centers for Disease Control and Prevention (CDC): Infant Mortality | Maternal Infant Health | CDC (https://www.cdc.gov/maternal-infant-health/infant-mortality/)

Minnesota Breastfeeding Coalition: Minnesota Breastfeeding Coalition (https://www.mnbreastfeedingcoalition.org/)

Minnesota Department of Health Perinatal Health Data Dashboard. Perinatal Health Data Dashboard Homepage - MN Dept. of Health (https://www.health.state.mn.us/people/womeninfants/womenshealth/dataindex.html)

Minnesota Maternal Mortality Report, MDH 2017-2021 (PDF) Minnesota Maternal Mortality Report - 2017-2021 (https://www.health.state.mn.us/people/womeninfants/maternalmortality/matmortreport1721.pdf)

Minnesota Pregnancy Risk Assessment Monitoring System (PRAMS), MDH: Minnesota Pregnancy Risk Assessment Monitoring System (Minnesota PRAMS) - MN Dept. of Health (https://www.health.state.mn.us/people/womeninfants/prams/index.html)

Nowhere To Go: Maternity Care Deserts Across the U.S. 2026 Report for United States: Maternity Care Deserts, 2026 report | PeriStats | March of Dimes (https://www.marchofdimes.org/peristats/reports/united-states/maternity-care-deserts)

Office on Women's Health: Prenatal care (https://www.womenshealth.gov/a-z-topics/prenatal-care)

SchoolHouse Connection. (2025). Infant & Toddler Homelessness Across 50 States: 2022-2023. (PDF) (2025) Infant and Toddler Homelessness Across 50 States: 2022-2023 (https://e1.nmcdn.io/assets/schoolhouse/wp-content/uploads/2025/04/2025-Infant-and-Toddler-Homelessness-Across-50-States-2022-2023.pdf)

Sleep-Related infant Deaths: Updated 2022 Recommendations for Reducing Infant Deaths in the Sleep Environment: American Academy of Pediatrics Updates Safe Sleep Recommendations: Back is Best (https://www.aap.org/en/news-room/news-releases/aap/2022/american-academy-of-pediatrics-updates-safe-sleep-recommendations-back-is-best/)

Sudden Unexpected Infant Death and Sudden Infant Deaths Syndrome, Centers for Disease Control and Prevention (CDC): Sudden Unexpected Infant Death and Sudden Infant Death Syndrome | SUID and SIDS | CDC (https://www.cdc.gov/sudden-infant-death/)

The National Safe Sleep Hospital Certification Program: Hospital Certification - Cribs for Kids (https://cribsforkids.org/hospitalcertification/)

Thrive from the Start. An Unseen Reality: Infant and Toddler Homelessness: Thrive From the Start – Addressing Infant and Toddler Homelessness (https://thrivefromthestart.org/)

Torres, J.M.C., Kelley-Stiles, T., & Stockton, J.D. (2020). Racism and inequity in Birth Outcomes for Black and Native American Families: A Review of the Literature. *Michigan Public Health Institute*. (https://www.michigan.gov/-/media/Project/Websites/mdhhs/Folder1/Folder51/ABEST_Literature_Review.pdf?rev=4ad3d1096e4f45839bf5e4a310b4f019)

White House Blueprint for Addressing the Maternal Health Crisis, 2022 (PDF) : Maternal Health Blueprint (https://bidenwhitehouse.archives.gov/wp-content/uploads/2022/06/Maternal-Health-Blueprint.pdf)

Women's Preventive Services Initiative: WPSI | When women are healthy, communities thrive. (https://www.womenspreventivehealth.org/)

Zero to Three State of Babies Yearbook: 2023. State of Babies Yearbook | ZERO TO THREE (https://www.zerotothree.org/our-work/state-of-babies-yearbook/)

Teen pregnancy prevention

Part I. Background information

Teen pregnancy refers to young people who experience a pregnancy between the ages of 15 and 19. Teen pregnancy and childbearing can have significant immediate and long-term impacts on teen parents and their children.

Teen pregnancy in Minnesota

Overall, the pregnancy and birth rates among adolescents ages 15-19 have continued to decline in Minnesota over the past decade, with the pregnancy rate decreasing by 46% and the birth rate decreasing by 53% between 2014 and 2024. The Minnesota teen pregnancy rate was 11.0 per 1,000 in 2024. Minnesota ranks fifth out of the 50 states with 7.3 births per 1,000 teens in 2024. This is lower than the national rate of 12.6 per 1,000 teens. Despite the progress made in reducing the Minnesota adolescent pregnancy and birth rates, striking disparities remain by geography, race and ethnicity, and among vulnerable populations. In 2024, American Indian (38.0 per 1,000), Hispanic (26.3 per 1,000), and Non-Hispanic Black (11.2 per 1,000) youth experienced disproportionate birth rates, indicating a continued failure of systems to support all youth in having access to healthcare, health information, and support to make decisions about their health.

Disparities

While Minnesota has reduced racial and ethnic disparities in teen pregnancies and births, they persist despite prevention efforts and are largely attributed to lack of opportunity and health care access.

- Black, Asian/Pacific Islander, and white youth in Minnesota have lower adolescent (15-19) birth rates than the general U.S. population. However, compared to the 2024 figures for adolescents aged 15-19 years old in the U.S., Hispanic and American Indian youth in Minnesota have higher birth rates.
- In 2024, the birth rate for American Indian adolescents was9.5 times higher than that of white adolescents.
- The birth rates for Black and Hispanic adolescents are 2.8 times higher and 6.6 times higher, respectively, than white adolescents.
- From 2023 to 2024, the teen birth rate for the state decreased 8%. The birth rates for African American (-23%), Asian/Pacific Islander (-24%), and Hispanic (-12%) adolescents also decreased. On the other hand, birth rates increased for American Indian (+60%) and white (+3%) adolescents.

Risk factors

While all adolescents are at risk for unplanned pregnancy, some adolescents are at increased risk. Individual-level risk factors include:

- Early sexual activity
- Inconsistent or incorrect use of contraceptives
- Lack of financial resources
- Adverse childhood experiences
- Dysfunction and disadvantage in a young person’s life and environment
- Being un- or underinsured
- Lack of connection to and support from trusted adults and community resources

Protective factors

Research shows that young people who have the following protective factors are less likely to experience a pregnancy:

- Healthy relationships, including parent-child connectedness and communication. Parent/child discussions about sex and contraception that occur before the child becomes sexually active may delay the initiation of sex and increase condom or other contraceptive use.
- Experiencing a youth-oriented teen pregnancy prevention curriculum that provides education on delaying and reducing the frequency of sexual activity, reducing the number of partners and improving contraceptive use.
- Teen-friendly clinic services, including school-based services, where adolescents feel comfortable accessing care that is confidential, private, respectful, and culturally competent.
- Mentorship and community connection.
- Access to trusted adults.

Social determinants

Many factors can impact young people's sexual and reproductive health. Key social determinants related to teen pregnancy are:

- Social connections and support: Creating communities that are welcoming to young people, LGBTQ people, American Indians, people of color and others, with strong social connections and support, can help young people avoid sexual risk-taking. Supportive communities often encourage positive parenting and caregiving, which also protect against sexual risk-taking.
- Discrimination: Racism and discrimination, along with stigma related to teen pregnancy, can prevent people from accessing contraceptive care and pregnancy testing. Young people who are LGBTQ, experiencing homelessness or in foster care may be especially vulnerable to stigma and discrimination.
- Housing: Safe, stable and affordable housing reduces stress and promotes family connectedness. Stable housing also makes it easier for young people to establish and routinely access primary health care, including contraception.
- Neighborhood conditions: A neighborhood that offers opportunities for young people—such as after-school programs, sports, and job training—supports positive sexual health and decreased sexual risk-taking.
- Educational opportunity: Pregnancy and birth remain major contributors to high school dropout rates. Recent national estimates show that slightly over half of young people who give birth as teens complete high school by their early twenties, compared with close to 90 percent of their peers who do not experience a teen birth. Research indicates they are more likely to experience health challenges, involvement with systems, and unemployment in young adulthood—patterns shaped both by teen parenthood and broader structural factors.
- Employment: Employment can help young people avoid early sexual activity by helping them feel more connected to the community and giving them a sense of hope for the future.
- Income and wealth: Family income and wealth strongly shape teens' risk of pregnancy because lower-income youth often have reduced access to high-quality sexual health education, reliable contraception, and supportive opportunities such as stable schooling and extracurriculars. Economic hardship also increases stress and limits future outlooks, which can make early childbearing more likely.
- Access to quality health care: Access to high quality, affordable and culturally- and linguistically competent care can help prevent teen pregnancy. A trusted health care provider can provide education as well as contraception. Health care should be welcoming to all young people, including LGBTQ people and community members with disabilities.

- Transportation: Young people need affordable, convenient transportation options to access health care, including contraception and pregnancy testing.

Priority Health Area Specialist

For more data, information on best practices or other teen pregnancy-related questions, contact:

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Part II. Examples of objectives, strategies and activities

The following are examples of the types of projects that applicants may undertake through EHDI. Applicants are not required to use the objectives, strategies, activities, and evaluation measures listed in the RFP appendices. Applicants are encouraged to propose their own research-based or promising strategies and/or adapt and build upon these practices. Projects that are research-based or promising strategies will be given equal weight in the review process.

Goal: To close the gap in teen pregnancy rates for populations of color and American Indians as compared to whites.

Level of Change 1: Delivering health promotion and prevention projects grounded in cultural knowledge and wisdom that contribute to eliminating disparities.

Example Objective: Between 2027 and 2031, reduce by 5 percent each year the number of youth participants who have removed one or more teen pregnancy risk factors from their lives, and increase by 5 percent each year the number of youth who have added one or more teen pregnancy protective factors in their lives.

- **Example Strategy:** Improve sexual health education of young people.
  - Example Activity 1: Implement an evidence-based sexual health education program such as Love Notes, Positive Prevention PLUS, All4You, Be Proud! Be Responsible!, !Cuidate!, or Wise Guys.
  - Example Activity 2: Implement after-school programs such as Prime Time, Becoming a Responsible Teen (BART), Draw the Line/Respect the Line, Teen Outreach Program (TOP) or SiHLE: Sistas, Informing, Healing, Living, Empowering.
  - Example Activity 3: Conduct outreach to vulnerable teens such as homeless or runaway teens.
- **Example Strategy:** Increase school and family connectedness among teens.
  - Example Activity 1: Implement an evidence-based program that increases parent and child communication about sexuality, such as Project TALC, Pespeto/Proteger, AIM 4 Teen Moms, Families Talking Together, Generations or the promising approach It's that Easy.
  - **Example Activity 2:** Utilize mobile phone texting apps as enhancements to teen pregnancy programs to increase social and school connectedness among teens (e.g., TOP® Plus Text).
  - **Example Activity 3:** Promote positive peer norms and support for healthy sexual behaviors by training and supporting peer educators/leaders.

Example Evaluation Measures:

- Number of homeless or runaway teens recruited into the Prime Time program each year (Output).
- Number of youth who completed peer educator/leader training (Output).
- SiHLE participants increase their knowledge about how HIV is passed from person to person (Outcome).
- SiHLE participants feel more confident starting a discussion about contraception use with their partner (Outcome).
- Pregnancy rate among middle and high school students at X Academy is reduced each year between 2027 and 2031 compared to the baseline rate in 2027 (Outcome).

Level of Change 2: Participating in or leading efforts that contribute to eliminating disparities by addressing people's social needs around housing, education, jobs, transportation, food access, health care, and more, focusing change efforts within neighborhoods or local geographies, organizations, and institutions.

Example Objective: By 2031, increase by 25 percent the number of youth participants who report that they feel safe accessing sexual health services at any school clinic or youth-serving organization compared to the 2027 baseline.

- **Example Strategy:** Improve Clinic X practices to better reach young people.
    - Example Activity 1: Establish clinical policies and procedures that ensure all staff are trained on youth-friendly care to learn about the unique developmental and health needs of young people.
    - **Example Activity 2:** Establish clinical policies and procedures that ensure young people feel comfortable and safe accessing services.
        - (For example, conduct the intake step one-on-one and in private without parents or peers present, using white noise machines or privacy screens during one-on-one counseling sessions, or using less invasive alternatives to physical exams).
- **Example Strategy:** Normalize sexual health education in Minneapolis schools.
    - **Example Activity 1:** Create or join a coalition of Minneapolis youth/students, parent groups, school personnel, school board members, community partners, and the Minneapolis Public Health department to promote full adoption of Minnesota's new K-12 health education standards
    - **Example Activity 2:** Involve school student councils in Minneapolis efforts to raise awareness, design campaigns, and build peer comfort around accessing sexual health services
- **Example Strategy:** Increase employment opportunities for youth and their families.
    - **Example Activity 1**: Offer free work readiness training and financial literacy training to youth and their families.
    - **Example Activity 2:** Increase paid internship opportunities for youth.
    - **Example Activity 3:** Work with financial institutions to offer low interest business startup loans to youth
- **Example Strategy:** Increase social connectedness in Minneapolis schools and communities
    - **Example Activity 1:** Promote Organization X's mentoring and peer support programs in Minneapolis schools to recruit new mentors, peer leaders, and mentees and support group participants
    - **Example Activity 2:** Partner with philanthropic organizations to build safe gathering places and out-of-school programs for youth

Example Evaluation Measures:

- Number of new policies or practices implemented by Clinic X to make it more youth friendly (Output).
- Number of Clinic X staff who received training on youth-friendly care (Output).

- Increase in the number of youth using Clinic X services (Outcome).
- Increase in the number of youth patients at Clinic X who report that they intend to come back for their annual check-up (Outcome).
- Students in Minneapolis schools feel more connected to their community (Outcome).
- Increase in the number of Minneapolis Public Schools students who report they can easily access sexual health resources at their school (Outcome).
- Decrease in the number of Minneapolis Public Schools parents who opt their children out of any health education instruction (Outcome).

Level of Change 3: Participating in, or leading, efforts to change governing structures and processes, economic and social policies, power structures, and cultural norms, values, or worldviews at the broader systems level.

Example Objective: By December 2031, reduce the geographic disparity in teen pregnancy rates by reducing the teen pregnancy rate by 20 percent among females aged 15–19 in Minnesota's top 10 highest-burden rural counties.

- **Example Strategy:** Establish dedicated state funding for reproductive health equity.
    - **Example Activity 1:** Allocate state general funds to establish a grant pool that will ensure local health departments and community-based organizations across Minnesota can provide stable and reliable sexual and reproductive health programs and services.
    - **Example Activity 2:** Work with the Minnesota Department of Health to provide small, community-based clinics across the state with technological and technical assistance and infrastructure funding to add or scale up virtual visits as part of their services.

Example Evaluation Measures:

- Number of community-based clinics that added virtual visits in years 2027-2031 (Output).
- Number of new school-based clinics established in rural Minnesota counties in years 2027-2031 (Output).
- Reduction in the teen pregnancy rate among females aged 15–19 in Minnesota's top 10 highest-burden rural counties (Outcome).
- Increased state funding for mobile health clinics in rural Minnesota counties, based on MDH's Community Clinic Grant Program awards and Rural Health Transformation Program awards (Outcome).

Part III. Resources

Adolescent Development | Youth.gov (https://youth.gov/youth-topics/adolescent-health/adolescent-development)

Advancing Social and Emotional Learning - CASEL (https://casel.org/)

Advocates for Youth (https://www.advocatesforyouth.org/)

Be Proud! Be Responsible! - Program Success Center (https://www.etr.org/ebi/programs/be-proud-be-responsible/)

Consent and Confidentiality Laws in Minnesota (https://www.health.state.mn.us/people/adolescent/youth/confidential.html)

Characteristics of Youth Friendly Services (https://www.healthyteennetwork.org/wp-content/uploads/2024/10/TipSheet_CharacteristicsYouth-FriendlyClinicalServices.pdf)

Effective Facilitation & Youth Engagement: A Toolkit for Working with Youth | Reproductive Health National Training Center (https://rhntc.org/resources/effective-facilitation-youth-engagement-toolkit-working-youth.html)

FLASH Lesson Plans - King County (https://kingcounty.gov/depts/health/locations/family-planning/education/FLASH.aspx)

Get Real - ETR (https://www.etr.org/store/curricula/get-real/)

Health Care Providers and Adolescent Sexual and Reproductive Health | Reproductive Health | CDC (https://www.cdc.gov/reproductive-health/hcp/teen-pregnancy-prevention/index.html)

HealthSmart (https://www.healthsmartk12.org/)

IN•clued - SparkED (https://sparked.net/inclued/)

Infographic: Teens Visiting Health Clinic | CDC (https://www.cdc.gov/teenpregnancy/health-care-providers/teen-friendly-health-visit.htm)

Making Proud Choices – ETR (https://www.etr.org/store/curricula/making-proud-choices/)

Minnesota Evidenced-Based PREP Curricula Minnesota Department of Health (https://www.health.state.mn.us/people/adolescent/prep/curricula.html)

Myself My Health (https://www.myselfmyhealth.org/)

Native STAND - Healthy Native Youth (https://healthynativeyouth.npaihb.org/curricula/native-stand/)

Plan A - Entertainment-Education Video Intervention - Reduce STIs & unplanned pregnancies (https://www.myplana.org/)

Positive Prevention Plus (https://positivepreventionplus.com/)

Power to Decide (https://powertodecide.org/)

Project MARS: Motivating Adolescents to Reduce Sexual Risk – Sociometrics (https://www.socio.com/products/project-mars)

Reducing the Risk - Program Success Center (etr.org) (https://www.etr.org/ebi/programs/reducing-the-risk/)

RHNTC: Program Model Fit Worksheet (PDF) (https://rhntc.org/sites/default/files/resources/rhntc_program_fit_worksheet-2-5-2026.pdf)

Science and Success, Second Edition (PDF) (https://www.advocatesforyouth.org/wp-content/uploads/storage/advfy/documents/sciencesuccess.pdf)

Rights, Respect, Responsbility (https://3rs.org/)

Safer Sex Intervention | Boston Children's Hospital (https://www.childrenshospital.org/services/safer-sex-intervention-program)

School Connectedness Helps Students Thrive | Reducing Health Risks Among Youth | CDC (https://www.cdc.gov/youth-behavior/school-connectedness/index.html)

Sex Ed for Social Change: SIECUS (https://siecus.org/)

Sex Ed To-Go for Teachers (https://sexedtogoteachers.thinkific.com/)

Sexuality for All Abilities Main - Mad Hatter Wellness (https://madhatterwellness.com/sexuality-all-abilities/)

Search Institute – youth empowerment research organization: Search Institute (https://searchinstitute.org/)

Sociometrics: SiHLE: Health Workshops for Young Black Women (https://www.socio.com/products/pasha-sihle-health-workshops-for-young-black-women)

Teen Outreach Program (TOP) | Wyman Center (https://wymancenter.org/programs/teen-outreach-program-top/)

Youth-Friendly Care | Michigan Medicine (https://www.michiganmedicine.org/community/community-health-services/adolescent-health/resources-topic/youth-friendly-care)

Unintentional injuries and violence

Part I. Background information

Unintentional injuries and violence-related injuries can be caused by multiple events, including motor vehicle crashes, falls, fires, poisoning, drownings, suicide, self-inflicted harm, and sexual, interpersonal, or community violence. No matter the circumstances of the event, and even when death does not occur, injuries can have serious, painful and debilitating physical and emotional health consequences affecting individuals, family members, friends, coworkers, employers, and communities.

This appendix contains information on a few selected types of unintentional injuries and violence; interested organizations should not limit their applications to these areas.

Motor vehicle crashes in Minnesota

More people have died in motor vehicle crashes in the U.S. than have died in all the country's wars, accounting for nearly 1 in 6 injury deaths in the U.S. and 1 in 5 unintentional injury deaths.

In Minnesota, motor vehicles crashes remain the third leading cause of unintentional injury death, as well as the second leading cause of hospitalized traumatic brain injury (TBI) for all ages.

Increased seat belt use, declining rates of drinking and driving, safer road and vehicle designs, improvements in emergency medical services, and new acute care technologies have contributed to a steady decline in motor vehicle crash fatalities. Despite these positive changes, in 2025, 363 traffic fatalities occurred in Minnesota.

Disparities in motor vehicle crashes

- While most crashes occur inside cities of 5,000 or more people, the majority of fatal crashes occur on roads in rural areas (Greater Minnesota).
- Young people and males are more likely to be involved in traffic crashes, particularly drivers aged 15-34.
- Those at greatest risk of dying in a motor vehicle crash are young (15- to 24-year-old) drivers, elderly drivers, male drivers, unbelted occupants, and unrestrained children.
- American Indian and Alaskan Native populations had significantly higher rates of fatal motor vehicle crashes than all other races (19.9 per 100,000 people in 2024). The rate for the white population was 8.6 per 100,000 people in 2024.

Falls, fires, drownings, and poisonings in Minnesota

Falls: Fall death rates in Minnesota are approximately two times higher than the U.S. rates among the elderly 85 years and older. Statewide, falls are the leading cause of fatal and nonfatal unintentional injuries. Most fatal falls occur in the home, especially among the elderly. Nearly 1 in 3 Minnesotans 65 years old or older fall each year. Among those who report falling in the past 12 months, more than 1 in 3 report being injured as a result of their fall. Falls are the leading cause of traumatic brain injury among older adults.

Home fires: In Minnesota in 2024, there were 73 deaths due to fire which is an increase from previous years (50 in 2023; 33 in 2018). Smoking and alcohol use are often involved.

Drowning: There were 64 unintentional drowning deaths (excluding water transport) in Minnesota in 2024. In 2025, the Minnesota Department of Natural Resources reported 7 boating fatalities and 25 non-boating drownings. There were 1.04 deaths per 100,000 registered watercrafts, compared to the U.S. rate of 4.8.

Poisoning: Poisonings, both unintentional and self-inflicted, are the eighth leading cause of hospitalized injuries in Minnesota. In 2024, poisoning is the first leading cause of injury death for Minnesotans ages 25 to 64 and the second leading cause for ages 15 to 24. Poisonings can occur from many different chemicals and substances, including drugs, alcohol, carbon monoxide, and lead.

Poisoning can be grouped into three categories: drug overdoses, alcohol poisoning, and exposures from other substances such as carbon monoxide, lead, and household chemicals. Who is most affected, what puts people at risk, and what protects them differs across these types, so each is described separately in the sections below.

Drug overdose

- From 2021-2025, there were 6,093 drug overdose deaths and 52,898 hospitalizations for nonfatal drug overdose in Minnesota. This does not include overdoses reversed in the community with naloxone or treated by EMS and not transported to a hospital.
- Opioids remain the most common substance contributing to the overdose burden. In 2025, there were 1,025 drug overdose deaths in the state and most (65%) involved opioids (671 deaths). Fentanyl was involved in 55% (564) of overdose deaths.
- Stimulants are also commonly involved in drug overdose deaths. In 2025, psychostimulants (including amphetamines) were involved in 42% (430) of overdose deaths. Cocaine was involved in 21% (212) of overdose deaths.
- In 2025, there were 9,209 hospitalizations for nonfatal drug overdose. Of these, 39% (3,617 visits) involved opioids and 13% (1,162 visits) involved stimulants, such as amphetamines and cocaine.

For more information and detailed overdose data, visit the MDH Drug Overdose Data webpage.

Alcohol poisoning

Excessive alcohol use is a risk factor for chronic disease, injury and violence. Alcohol poisoning is just one harm due to excessive drinking, but most alcohol-related harms are due to chronic alcohol use that lead to diseases such as cancer or heart disease.

- From 2018 to 2024, 2,785 individuals lost their lives due to alcohol poisoning. Among youth (15 - 20 years), 60 died from alcohol poisoning.
- There were also 15,631 alcohol poisoning hospitalizations for youth under the legal drinking age, with a yearly average of 2,233 visits. Across all age groups who were hospitalized and survived alcohol poisoning, there were half a million (492,187) visits.

Environmental and household exposures

- Carbon monoxide results in more fatal unintentional poisonings in the U.S. than any other agent.
- Childhood lead poisoning is considered one of the most preventable environmental diseases of young children, yet about one million children have elevated blood levels of lead.

Disparities in falls, fires, drownings, and poisonings

Falls:

On average in Minnesota, females have higher rates of hospital-treated falls than males.

From 2018-2024, males (21.3 per 100,000) have a higher rate of fatal falls than females (17.3 per 100,000) in Minnesota. Both statewide rates for males and females are higher than the national rate for fatal falls, 13.1 and 9.0 per 100,000, respectively.

From 2018-2024, American Indian Minnesotans had the highest fall-related death rate (21.5 per 100,000), followed by white Minnesotans (19.5 per 100,000).

Rates start to rise in the 65 to 74 age group but climb significantly in ages 85 and older.

Fires:

Nationwide, fires disproportionately affect older adults, African Americans, American Indians, and the poorest Americans according to the Federal Emergency Management Agency (FEMA).

Drownings:

Drowning rates from 2018 to 2024 were higher for American Indians (3.8 per 100,000), African Americans (2.9), and Asian Americans (1.9) compared to whites (1.3).

Overall, males account for nearly 80 percent of drowning deaths in Minnesota.

Drowning rates among males (2.4 per 100,000) were four times higher than females (0.6 per 100,000) in 2024.

Drug overdose:

American Indian and Black/African American residents experience the greatest burden of drug overdose in Minnesota. In 2024, American Indians in Minnesota were seven times more likely to die from a drug overdose than white Minnesotans. Black Minnesotans were three times as likely to die from a drug overdose than white Minnesotans.

Justice-impacted populations also face disproportionate overdose risk. In 2023-2024, 26.1% of people who experienced a fatal overdose and 19.6% of people who experienced a nonfatal overdose had been released from a Minnesota prison or jail within the previous 12 months.

People experiencing homelessness face much higher rates of substance use mortality. One in ten deaths related to substance use in the state occurred among unhoused Minnesotans, and the substance use mortality rate is ten times higher among people experiencing homelessness compared to all Minnesotans.

Alcohol poisoning:

Males are disproportionately represented in alcohol poisonings, accounting for two-thirds of fully alcohol attributable deaths (68.4%) and consistently experience twice the alcohol-attributable mortality rate of females.

Those ages 55 – 64 have the highest rate of fatal alcohol poisonings (41.9 per 100,000).

Environmental and household exposures:

During 2020 to 2024 American Indians had the highest rate of non-drug related poisoning mortality among all racial groups in Minnesota.

In Minnesota, children living in neighborhoods with higher childhood poverty are more than two times as likely to have lead poisoning compared to children living in neighborhoods with average levels of poverty. Children of color and American Indian children are more likely to be living in poverty than white children.

Suicide and self-inflicted harm in Minnesota

Suicide, or death by intentional self-harm, is the eighth leading cause of death in Minnesota. Deaths by suicide in Minnesota have been trending up for the past 20 years with some slight fluctuations each year, mirroring patterns across the United States. The suicide rate in Minnesota remained the same in 2024, compared to 2023, with 813 suicides among residents. This marks two years of suicides below the state high set in 2022. The rate, based on death certificates filed in Minnesota for the state's residents was 13.9 per 100,000 people in 2024. This rate and number of deaths is approximately the same as 2023. Learn about Minnesota's Suicide Prevention Plan.

Death by suicide is complex and often due to many contributing and interrelated factors. While death occurs at the individual level, each person lives in the contexts of family, neighborhood, community, and society. The impact of death by suicide is felt broadly and often in ways that differ from deaths due to other causes. In many cultures, death by suicide may not be discussed, often because of hesitancy to speak about mental health or mental illness issues, due to unease about conversations dealing with feelings of hopelessness, isolation, despair, or because of unease about spiritual or moral implications.

Disparities in suicide and self-inflicted harm

- Males had consistently higher rates of suicide in 2024 and 2025 and were more likely to die using firearms.
- American Indians were about 3 times more likely to die by suicide in both 2024 and 2025 than other racial groups, with a suicide rate of 23.6 per 100,000.
- Females were most likely to die by poisoning or suffocation in 2024 and 2025.
- The age group with the highest suicide rate in 2025 was ages 60-64 (24.0 per 100,000).
- Counties made up entirely of rural census tracts had the highest suicide rates in 2025, continuing a pattern from previous years. In fact, there is a consistent, direct relationship between rurality and suicide rates: areas that are more rural have higher suicide rates, on average, while areas that are more urban have lower suicide rates, on average.

Sexual violence in Minnesota

Sexual violence involves a range of acts including attempted or completed rape, sexual coercion, unwanted sexual contact, and non-contact unwanted sexual experiences like verbal harassment. Sexual violence victimization may result in a variety of health problems including, but not limited to, physical injury, chronic health problems, and mental health problems.

According to the National Intimate Partner and Sexual Violence Survey (NISVS) data for 2023-2024:

- 56.2% of women and 16.1% of men in Minnesota reported being victims of any form of contact sexual violence including rape.
- 25.4% of Minnesota women reported having been victims of rape in their lifetime.
- 48.2% of women and 14.3% of men in Minnesota reported being victims of unwanted sexual experiences other than rape.

According to the Behavioral Risk Factor Surveillance Survey (BRFSS) in 2024, 11.3% of Minnesotans reported experiencing sexual assault (18.4% of women and 4.3% of men). One in six (18.2%) Minnesota youth in grades 9

and 11 have experienced sexual or intimate partner violence according to the 2025 Minnesota Student Survey (Sexual Violence Prevention Data).

Sexual violence continues to be a major public health issue, but it can be prevented. Interventions aimed at preventing sexual violence should focus on community- and societal-level changes to create safe, supportive environments where sexual violence is unthinkable.

More information about sexual violence can be found on the MDH Sexual Violence Prevention Program website.

Disparities in sexual violence

Sexual violence can happen to anyone, but some communities experience sexual violence at higher rates than others due to the societal root causes of sexual violence, including sexism, racism, homophobia, transphobia, ageism, ableism, and other forms of oppression. The following groups experience higher rates of sexual violence victimization in Minnesota according to the 2025 Minnesota Student Survey:

- American Indian and Alaska Native youth
- Native Hawaiian and Pacific Islander youth
- Latine youth
- Black, African, and African American youth
- Filipino, Hmong, Lao, Korean, and Vietnamese youth
- Multiracial youth
- Youth with disabilities
- Youth in the foster care system
- Youth who have experienced food insecurity or housing instability
- Youth whose parent or guardian was/is incarcerated
- LGBTQ+ youth

Please note that data on sexual violence victimization are often undercounts, therefore the list is most likely incomplete and additional disparities likely exist.

Risk factors

Motor vehicle crashes: Many factors can contribute to serious injury and death in a motor vehicle crash, but the leading modifiable risk factors include:

- Distraction while driving (including food, phones and texting).
- Lack of seatbelt use and improperly secured infant or toddler booster seats.
- Speeding, close following and other risky driving.
- Alcohol and the use of other substances that impair driving.
- Driving at night.
- Social norms that promote or encourage risky behavior or decision-making.

The leading nonmodifiable risk factors include gender (males are at much greater risk) and age (both the very young and senior Minnesotans have increased injury rates).

Falls:

- Advanced age
- Previous falls
- Fear of falling

- Muscle weakness, gait/balance problems, poor vision, postural hypotension, and chronic conditions including arthritis, stroke, incontinence, diabetes, Parkinson's and dementia
- Psychoactive medications and improper use of assistive devices
- Lack of stair handrails or bathroom grab bars
- Poor stair design
- Dim lighting or glare
- Obstacles/tripping hazards
- Slippery or uneven surfaces
- Alcohol consumption: An estimated 37% of fatal fall injuries in Minnesota from 2020-2021 can be attributed to excessive alcohol consumption

Fires:

- Smoke alarms that are not working (faulty or old batteries)
- Alcohol consumption: An estimated 34% of fatal fire injuries in Minnesota from 2020-2021 can be attributed to excessive alcohol consumption.
- Cigarettes

Drowning:

- Not being able to swim
- Lack of close supervision
- Not wearing life jackets
- Alcohol consumption: An estimated 3.1 out of 10 (i.e., 31%) of fatal fall injuries in Minnesota from 2020-2021 can be attributed to excessive alcohol consumption.
- Using drugs or prescription medications
- Pools with missing or ineffective fences

The highest risk locations for drowning vary by age. Most drowning occur in bathtubs for infants, in home swimming pools for young children, in both natural water and swimming pools among older children and adolescents. Nearly half of drowning among adults occur in natural water.

Drug overdose:

Drug overdose is influenced by a combination of individual, interpersonal, community, and societal conditions. These factors describe circumstances that can increase vulnerability to substance use and overdose. They are not characteristics that place blame on people who use substances. Understanding these conditions helps direct prevention, treatment, and harm reduction efforts where they are most needed.

Risk factors for drug overdose include:

- Structural inequities and social conditions, including racial inequities and systemic racism, homelessness or unstable housing, recent incarceration or other criminal-legal system impacts, poverty or limited economic stability, and stigma towards people who use drugs.
- Knowledge, attitudes, and social supports, such as limited understanding of overdose risk or harm reduction strategies, attitudes or beliefs that discourage harm reduction or medications for opioid use disorder (MOUD), social isolation or using alone, limited peer or family support, low perception of risk, and limited knowledge or resources to manage withdrawal safely.

- Substance use patterns, including injecting drugs, using opioids together with other substances, having access to opioids without safe-use education, and using substances in a way that increases the likelihood of experiencing an overdose (such as using alone or after periods of reduced tolerance).
- Drug market and supply dynamics, including exposure to an unpredictable and increasingly toxic drug supply driven by fentanyl, xylazine, medetomidine, and other adulterants, as well as substances with unknown potency or contamination.
- Health-related factors, including chronic physical or mental health conditions such as chronic pain, depression, liver or lung disease, and HIV, along with other conditions that may increase vulnerability to overdose.
- Trauma-related factors, including experiences of trauma or adverse childhood experiences (ACEs), intergenerational trauma, limited access to trauma-informed care, and impacts of trauma on coping and resiliency.
- Access to services and community conditions, such as limited access to culturally specific providers, behavioral health care, MOUD, harm reduction programs, naloxone, transportation, safe community environments, insurance coverage, drug disposal resources, and prescribing practices that increase overdose risk.

Alcohol poisoning:

Risk factors of excessive alcohol use unique to youth:

- Higher Adverse Childhood Experiences (ACE) scores are linked with more alcohol use; youth with three or more ACEs report noticeably higher binge drinking.
- High-stress or unstable home environments, including exposure to household substance use or violence, elevate risk.
- Early access to alcohol through family, peers, or unsupervised environments increases the likelihood of early initiation and frequent use. Taking alcohol from the home is the most common source of alcohol for youth.
- Peer influence and social norms that encourage drinking or binge drinking, especially in older grades where prevalence increases.
- Mental health challenges, which are more common among youth with multiple ACEs and can increase the likelihood of alcohol use as a coping mechanism.

Environmental and household exposures:

The most common poison exposures for children are ingestion of household products such as cosmetics and personal care products, cleaning substances, pain relievers, foreign bodies and plants; for adults they are prescription medications, pain relievers, sedatives, cleaning substances, antidepressants and bites/stings.

The most common sources of lead poisoning are house paint, soil and tap water. Living in an older home, especially housing built before 1950, is a risk factor for contamination by lead paint. Old pipes in a home are a risk factor for contamination through drinking water.

Risk factors for carbon monoxide poisoning include smoking, chronic heart disease, anemia (a reduced number of healthy red blood cells) and respiratory problems such as asthma, as well as age and sex.

Suicide and self-inflicted harm:

Suicide and self-inflicted harm are complex behaviors driven by a combination of individual, relational, community and societal factors rather than a single cause.

Individual risk factors for suicide may include:

- Mental health conditions: depression, anxiety disorders, bipolar disorder, schizophrenia, post-traumatic stress disorder (PTSD), border line personality disorder, all strongly elevate risk.
- Previous attempts or self-harm: A prior suicide attempt or a history of non-suicidal self-injury is among the most reliable predictors for future fatal behaviors.
- Substance use: misuse of alcohol or drugs, increases impulsivity, and worsens any underlying depression. For example, from 2015 to 2022, one-third of suicides involved alcohol. Preventing excessive alcohol use is a critical component of suicide prevention in addition to addressing population-level strategies.
- Trauma and sexual abuse: a history of adverse childhood experiences, physical, emotional, or sexual abuse, or severe trauma.
- Physical health: Chronic pain, serious or debilitating illnesses, and traumatic brain injury.

Relational Risk Factors:

- Social isolation: loneliness and a lack of social connection or support.
- Bullying and harassment: being a victim of face-to-face or cyberbullying significantly increases distress and vulnerability, particularly in youth.
- Interpersonal conflict: relationships, break-ups, family violence.

Community and societal risk factors:

- Access to means: easy access to lethal means, firearms, sharp objects, medications.
- Barriers to care: lack of mental health care access or services.
- Stigma: cultural or societal stigma with mental health and asking for help.
- Life stressors: financial difficulties, loss of a job, or legal issues.

Sexual violence:

When considering risk factors related to sexual violence, it is important not to place blame on victims/survivors. Below is a list of risk factors for perpetrating sexual violence, according to the Centers for Disease Control and Prevention (CDC):

- Individual factors: Alcohol and drug use, delinquency, lack of concern for others, aggressive behaviors and acceptance of violent behaviors, early sexual initiation, coercive sexual fantasies, preference for impersonal sex and sexual risk-taking, exposure to sexually explicit media, hostility towards women, adherence to traditional social norms about how men and women behave, hyper-masculinity, suicidal behavior, and prior sexual violence victimization or perpetration.
- Relationship factors: Family history of conflict and violence; childhood history of physical, sexual, or emotional abuse; emotionally unsupportive family environment; poor parent-child relationships, particularly with fathers; association with sexually aggressive, hyper-masculine, and delinquent peers; and involvement in a violent or abusive intimate relationship.
- Community factors: Poverty, lack of employment opportunities, lack of institutional support from police and judicial systems, general tolerance of sexual violence within the community, and weak community sanctions against sexual violence perpetrators.
- Societal factors: Societal norms that support sexual violence; societal norms that support male superiority and sexual entitlement; societal norms that maintain women's inferiority and sexual submissiveness; weak laws and policies related to sexual violence and gender equity; high levels of crime and other forms of violence.

Protective factors

Motor vehicle crashes:

- Avoiding distracted driving
- Wearing a seat belt or proper child restraint
- Using child safety seats
- Not driving under the influence of alcohol or drugs
- Not speeding

Falls:

- Staying healthy and active
- Monitoring medications to prevent untoward side effects or interactions
- Assuring that home, public and work environments are free of tripping and slipping hazards
- Improving vision
- Refraining from or limiting alcohol consumption

Fires:

- Working smoke alarms
- Refraining from or limiting alcohol consumption

Drowning:

- Learn basic swimming and water safety skills
- Build fences that fully enclose pools
- Supervise closely
- Wear a life jacket
- Learn CPR
- Know the risks of natural water
- Avoid alcohol
- Use the buddy system

Poisoning:

Drug overdose

Protective factors against drug overdose include the supports, services, and community conditions that make it easier for people to stay safe, access care, and recover:

- Access to evidence-based treatment and harm reduction services, such as medications for opioid use disorder (MOUD), substance use disorder treatment, mental health care, syringe services programs, safer-use supplies, and other risk-reduction services that help lower the likelihood of overdose.
- Availability and use of naloxone, including widespread community distribution, pharmacy dispensing protocols, and trainings that helps individuals, families, and communities recognize an overdose and respond quickly.
- Culturally specific and community-based supports, including access to culturally grounded behavioral health services, peer support networks, community health workers, and prevention programs shaped by leadership from the communities most impacted.
- Leadership and expertise of people with lived experience, including individuals who use drugs, who have experienced homelessness or incarceration, who regularly reverse overdoses in the community, or who

navigate the drug supply, whose knowledge strengthens prevention efforts, informs harm reduction services, improves overdose response, and increases the effectiveness of treatment and recovery supports.
- Strong knowledge, skills, and prevention education, such as understanding overdose risks, safer-use strategies, signs of overdose, harm reduction principles, and ongoing public health education that is trauma-informed and culturally relevant across the lifespan.
- Supportive social networks and connectedness, including strong peer and family support, trusting relationships with care providers, and community collaboration that strengthens safety, belonging, and recovery.
- Stable housing, economic security, and access to basic needs, which reduce stressors and create consistent conditions for treatment engagement, safer environments, and long-term recovery.
- Policies and systems that support harm reduction, treatment access, and equity, including legislation that expands MOUD availability, naloxone access, syringe service programs, and behavioral health services; as well as efforts to reduce stigma and strengthen community wellbeing.
- Responsive community outreach and linkage to care, including coordinated communication systems, trusted community networks, and post-overdose engagement that help people access harm reduction resources, treatment, and social supports during times of increased risk.

Alcohol poisoning and excessive alcohol use

There are several evidence-based recommendations to reduce excessive alcohol use and related harms:

- Increase the price of alcohol (e.g., increasing alcohol taxes)
- Regulate alcohol outlet density
- Dram shop (commercial host) liability
- Avoiding privatization of retail alcohol sales
- Maintain limits on the days and hours when alcohol is sold (e.g., liquor stores, restaurants, and bars)
- Enhanced enforcement of laws prohibiting alcohol sales to minors
- Electronic screening and brief intervention to reduce excessive alcohol use (e.g., clinic and emergency department services, using mobile devices or computers).

Protective factors that reduce the likelihood of excessive alcohol use harms include a combination of individual, community, and policy-level supports.

- Strong social and family support: Supportive relationships and social connectedness reduce harmful consumption patterns and promote healthier coping strategies.
- Community norms that discourage excessive drinking: Communities that promote alcohol-free social activities, support recovery, and discourage drinking.
- Access to high-quality behavioral health care: Screening, brief intervention, and referral to treatment (SBIRT) and access to culturally responsive mental health or substance use services.
- Safe and supportive school and work environments: Schools, employers, and community organizations that encourage healthy coping skills, stress management, and connection to resources.
- Policies that reduce availability and accessibility of alcohol: Evidence-based population strategies, including higher alcohol taxes, limits on alcohol outlet density, and regulated hours of sale, are shown by the CDC to decrease excessive alcohol consumption and associated injuries.
- Stable housing, economic opportunity, and reduced stressors: Social determinants, such as stable employment, safe housing, and reduced financial strain protect against hazardous alcohol use and support long-term wellbeing.

Youth Alcohol Use Protective Factors

- Supportive, stable relationships with caregivers and trusted adults, which buffer the effects of Adverse Childhood Experiences (ACE) and reduce the likelihood of alcohol consumption.
- Strong school connectedness, where students feel safe and supported, helping mitigate the impact of ACEs and reduce substance use risk.
- Limiting access to alcohol, particularly in the home.
- Consistent adult supervision and safe community spaces that reduce youth access to alcohol and limit opportunities for high risk drinking.
- Healthy peer networks that discourage substance use and promote prosocial activities.
- Access to mental health services and early intervention, which can help youth with ACEs build coping skills that reduce reliance on alcohol.

Community norms and policies that limit youth access to alcohol, including enforcement of age-related sales laws and reduced access in homes.

Environmental and household exposures

- Safe use and storage of potentially poisonous household products, including alcoholic beverage, out of the reach of children.
- Use of non-toxic household products.
- Reducing exposure to lead in the home.

Suicide and self-inflicted harm:

Individual protective factors:

- Effective coping and problem-solving skills.
- Reasons for living (example- family, friends, pets, etc.).
- Strong sense of cultural identity.
- Avoid or limit alcohol consumption.

Relationship protective factors:

- Support from partners, friends, and family.
- Feeling connected to others.

Societal and community protective factors:

- Feeling connected to school, community and other social situations.
- Availability of consistent and high quality physical and behavioral healthcare.
- Electronic screening and brief intervention to reduce excessive alcohol use (e.g., clinic and emergency department services).
- Reduced access to lethal means of suicide among people at risk.
- Cultural, religious, or moral objections to suicide.

Sexual violence:

- Emotional health and connectedness, associations with prosocial peers, and feeling connected to a safe and supportive adult.
- Empathy and concern for how one's actions affect others.
- Families where caregivers work through conflicts peacefully.

- School environments that support healthy relationships and engage youth and adults to speak up and out against sexism and violent behaviors and to intervene when someone is at risk.
- Policies in schools, workplaces, and other institutions that address sexual harassment, support healthy relationships, encourage speaking out and create safer spaces for everyone.
- Neighborhoods and communities with job and economic opportunities, access to mental and health services, strong social connections, and norms that do not tolerate violence.

Social determinants

Social connections and support: Creating communities that are welcoming to young people, LGBTQ people, Indigenous people, people of color, and others, along with strong social connections and support, can help prevent injuries, violence, and substance misuse. Supportive communities give people a sense of belonging and uphold social norms that discourage violence. Positive parenting/caregiving, including close supervision of young people, also protects against injuries, violence, and substance misuse.

Racism and discrimination: Inclusive, anti-racist institutions, agencies, and organizations encourage all people to access proper health care, including mental health support, that prevent injuries, violence, and substance misuse, particularly communities that experience health disparities.

Housing: Safe, stable and affordable housing helps prevent injuries in the home and reduces stress that can contribute to suicide, substance misuse, and violence.

Neighborhood conditions: A neighborhood that offers opportunities for young people—such as after-school programs, sports, and job training—helps keep them safe from injuries, violence, and substance misuse. Strong social organization, youth job opportunities, immigration, and residential stability are among several neighborhood characteristics associated with lower crime rates. More information on neighborhoods and violent crime can be found in the Summer 2016 edition of U.S. Department of Housing and Urban Development's Evidence Matters. Neighborhoods with many resources are more likely to have newer homes and/or homes in good repair to limit lead poisoning.

Educational opportunity: Rates of suicide are lower for those with a college education than for those with a high school education, which may reflect the protective mental health effects of having greater economic opportunity and income.

Employment and benefits: Employment with benefits provides social connection, meaning and purpose for many, as well as financial security and access to health care, making it a protective factor for suicide and interpersonal violence. One study at Northwestern University found a close connection between the unemployment rate and the number of school shootings.

Income and wealth: Another study published in Science Direct found an association between the socioeconomic status of parents with the risks of childhood injury deaths from traffic accidents, falls and fire/burns. Youth in populations with lower socioeconomic status are also more likely than their higher-income peers to be exposed to violence early and more often. Exposure to and experience of violence are adverse childhood experiences that are associated with risky health behaviors, chronic health conditions, low life potential and early death. More information can be found in the American Psychological Association's factsheet on violence and socioeconomic status. Additionally, families with more income and wealth are more likely to live in newer homes or recently renovated homes and have lower risk of lead poisoning.

Access to quality health care: Access to high quality, affordable and culturally- and linguistically competent care can help prevent injuries, violence, and substance misuse. A trusted health care provider may identify risk

factors for suicide and sexual violence. Access to emergency services or specialty care helps address the effects of injuries, violence, and substance misuse.

Transportation: Affordable, convenient public transportation reduces the number of individual vehicle accidents. People need good transportation options to access screenings, preventive care and treatment that help prevent injuries, violence, and substance misuse.

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Part II. Examples of objectives, strategies and activities

The following are examples of the types of projects that applicants may undertake through EHDI. Applicants are not required to use the objectives, strategies, activities, and evaluation measures listed in the RFP appendices. Applicants are encouraged to propose their own research-based or promising strategies and/or adapt and build upon these practices. Projects that are research-based or promising strategies will be given equal weight in the review process.

Goal: To close the gap in teen pregnancy rates for populations of color and American Indians as compared to whites.

Level of Change 1: Deliver health promotion and prevention projects grounded in cultural knowledge and wisdom that contribute to eliminating disparities.

Example Objective: Reduce the rates of suicide in American Indian communities in Greater Minnesota.

- **Example Strategy:** Increase public awareness about suicide prevention and available resources.
    - **Example Activity 1:** Implement a suicide prevention program developed for the American Indian community (e.g., Native H.O.P.E. or Sources of Strength).

    - **Example Activity 2:** Organize community gatherings to plan and guide program activities, address wellness promotion and practices, identify their own resources, and use the knowledge and wisdom of elders and other community members to promote change.
- **Example Strategy:** Offer support to individuals and families to manage historical trauma.
    - **Example Activity 1**: Offer an intergenerational support group to families to learn how to cope with historical trauma and the stressors of daily life.
    - **Example Activity 2:** Implement intervention programs that help youth address traumatic stress and related behavioral needs (e.g., Honoring Children, a collection of four culturally adapted, evidence-based trauma and behavioral health interventions developed specifically for American Indian and Alaska Native (AI/AN) children and their families).
    - **Example Activity 3:** Organize activities that honor Tribal history, values and beliefs to strengthen cultural identity (e.g., storytelling drumming, singing, crafts, cooking).

Example Evaluation Measures:

- Number of intergenerational support groups conducted (Output).
- Number of drumming or singing events held (Output).
- Increase in the percent of Native H.O.P.E. program youth who agreed with the statement: "It's okay to ask for help" at the beginning and end of their stay in the program (Outcome).
- Percent of youth in the Honoring Children, Mending the Circle program who say that talking about their traumatic experiences through stories has helped them respond more calmly to sudden and unexpected situations in life, at the beginning and end of their stay in the program (Outcome).
- Reduction in the suicide rate among American Indian Tribes in Minnesota (Outcome).

Level of Change 2: Participate in or lead efforts that contribute to eliminating disparities by addressing people's social needs around housing, education, jobs, transportation, food access, health care, and more, focusing change efforts within neighborhoods or local geographies, organizations, and institutions.

Example Objective: By 2031, reduce the age-adjusted suicide rate in the Twin cities metro area by 10 percent by implementing trauma-informed community interventions.

- **Example Strategy:** Expand the use of a historical trauma lens by care systems.
    - **Example Activity 1:** Train systems of behavioral health and chemical dependency and primary care clinics and hospitals in updating assessment protocols to integrate a historical trauma framework.
    - **Example Activity 2:** Provide ongoing technical assistance and training to behavioral health and chemical dependency programs and primary clinics on trauma-informed care.
- **Example Strategy:** Expand the use of native or traditional healers
    - **Example Activity 1**: Advocate for behavioral health systems, chemical dependency and primary care clinics in Minneapolis to certify traditional healers.
    - **Example Activity 2:** Connect with institutional pipelines such as the University of Minnesota Extension Tribal Outreach and indigenous health tracks to build trusted relationships with native knowledge keepers, elders, and healers.
- **Example Strategy:** Increase transportation options for geographically isolated mental health patients.
    - **Example Activity 1:** Create a volunteer driver program that serves patients released from a hospital for mental illness or suicidal behavior who are unable to transport themselves to an inpatient unit.

- **Example Activity 2:** Train volunteer drivers in evidence-based suicide prevention or Mental Health First Aid.
- **Example Activity 3:** Provide mental health treatment in school-based settings to reduce transportation barriers among youth in need of treatment.

Example Evaluation Measures:

- Native healer certification program established (Output).
- Number of native healers who become certified (Output).
- Percent of behavioral, chemical dependency and primary care health providers reporting that trauma-informed care has increased their competency level (Outcome).
- Percent of behavioral, chemical dependency and primary care health providers reporting improved patient response to treatment after better understanding their experience with trauma (Outcome).
- Percent of primary care clinics surveyed reporting greater integration of native healers into their healthcare system (Outcome).
- Reduction in number of Program X participants reporting experiences of trauma while in care (Outcome).

Level of Change 3: Participate in or lead efforts to change governing structures and processes, economic and social policies, power structures, and cultural norms, values, or worldviews at the broader systems level.

Example Objective: By 2031, reduce mental illness stigma in Minnesota based on the Make It Okay "IMPACT" Survey results around community stigma and comfort level talking about mental illness.

This will be measured by a decrease of 5 percentage points in the proportion of respondents agreeing that mental illness stigma exists in their community (from a 2021 baseline of 57%), and an increase by 5 percentage points the proportion of respondents who feel comfortable talking to others about that person's mental illness (from a 2021 baseline of 65%).

- **Example Strategy:** Reduce stigma, prejudice and discrimination surrounding mental illness.
  - **Example Activity 1:** Plan and implement an anti-stigma campaign such as the Make It OK campaign.
  - **Example Activity 2:** Bolster Minnesota's grant and workforce programs designed to reduce the stigma of mental illness in Mental Health Professional Shortage Areas (HPSAs) by increasing funding to diversify the workforce to address cultural stigma, language barriers, and historical medical mistrust.
- **Example Strategy:** Expand the use of traditional healers in Minnesota
  - **Example Activity 1:** Work with Minnesota private insurers to cover traditional healing services.
  - **Example Activity 2:** Work to expand Medicaid coverage to include reimbursements for traditional healing services.
    - For example, write letters of support for the five-year demonstration project Mino Bimaadiziwin-Wičhózani for which the Minnesota Department of Human Services is seeking federal approval, to allow eligible American Indian Medical Assistance recipients to receive traditional healing services at participating Indian Health Service, Tribal, and urban Indian health facilities.

Example Evaluation Measures:

- Amount of state grant funding to Mental Health Professional Shortage Areas (HPSAs) dedicated to reducing the stigma of mental illness.
- Number of Make It Ok campaign public service announcements (PSAs) released.
- Minnesota obtains federal approval to expand Medicaid coverage for traditional healing through the Mino Bimaadiziwin-Wičhózani demonstration project (Outcome).
- Increase in the use of traditional healing services among Minnesota's American Indian Medical Assistance recipients through the Mino Bimaadiziwin-Wičhózani demonstration project (Outcome).

Part III. Resources

988 Minnesota Lifeline: 988 Lifeline System Services - MN Dept. of Health (https://www.health.state.mn.us/communities/suicide/988/systems.html)

Adam Pah, Hagan, J., Jennings, A.L., Jain, A., Albrecht, K., Hockenberry, A.J., and Nunes Amaral, L.A. (2017). School Shootings Rise and Fall with the Unemployment Rate. *KellogInsight*. (https://insight.kellogg.northwestern.edu/article/school-shootings-rise-and-fall-with-the-unemployment-rate)

Adult Mental Health Programs and Services: Adult services / Minnesota Department of Human Services (https://mn.gov/dhs/mental-health/adult-services/)

Behavioral Risk Factor Surveillance Survey – MDH (PDF): Health Status Among Minnesota Adults, 2024 (https://www.health.state.mn.us/data/mchs/pubs/healthstatusbrfss24.pdf)

Blood Lead Level Guidelines: Blood Lead Level Guidelines - MN Dept. of Health (https://www.health.state.mn.us/communities/environment/lead/prof/guidelines.html)

Carbon Monoxide (CO) Poisoning MDH topic page: Carbon Monoxide (CO) Poisoning About the Topic (https://mndata.web.health.state.mn.us/co_poisoning/overview.html)

Carbon Monoxide (CO) Poisoning in Your Home MDH page: Carbon Monoxide (CO) Poisoning in Your Home - MN Dept. of Health (https://www.health.state.mn.us/communities/environment/air/toxins/index.html)

Childhood Lead Exposure datasets: Childhood Lead Exposure Test Year (annual method) (https://mndata.web.health.state.mn.us/lead/messaging_testyear.html#ebll_test_year)

Community Guide, a collection of evidence-based findings of the Community Preventive Services Task Force: The Guide to Community Preventive Services (The Community Guide) (https://www.thecommunityguide.org/)

Community Readiness Assessment, SAMHSA: Tribal Community Engagement Process | SAMHSA (https://www.samhsa.gov/technical-assistance/tribal-ttac/training/process)

Connect, a nationally recognized best practice and model program for comprehensive suicide prevention: Home - The Connect Program – NAMI NH (http://www.theconnectprogram.org/)

Drug Overdose Data: Drug Overdose Data – MN Dept. of Health (https://www.health.state.mn.us/communities/overdose/data/index.html)

Drug Overdose Prevention MDH page: Drug Overdose Prevention – MN Dept. of Health (https://www.health.state.mn.us/communities/overdose/index.html)

Hong, J., Lee, B., Ha, E.H., Park, H. (2010). Parental socioeconomic status and unintentional injury deaths in early childhood: Consideration of injury mechanisms, age at death, and gender. *Accident Analysis & Prevention 42(1),* 313-319. (https://doi.org/10.1016/j.aap.2009.08.010)

Housing, Inclusion, and Public Safety – U.S. Department of Housing and Urban Development, 2016 (PDF) Evidence Matters Summer 2016 (https://docs.huduser.gov/archives/portal/sites/default/files/pdf/EM-Newsletter-summer-2016.pdf?raw=true)

Medications for Opioid Use Disorder MDH page: Medications for Opioid Use Disorder (MOUD) - MN Dept. of Health (https://www.health.state.mn.us/communities/overdose/treatrecover/moud.html)

Mending the Sacred Hoop – non-profit organization focused on ending violence against Native women: Mending The Sacred Hoop | End Violence Against Native Women (www.mshoop.org/)

Mental Health Minnesota: Minnesota Warmline (https://mentalhealthmn.org/what-we-do/peer-support/minnesota-warmline/)

Minnesota Children's Alliance – nonprofit organization focused on protecting children from abuse: Minnesota Children's Alliance (www.minnesotachildrensalliance.org/)

Minnesota Coalition Against Sexual Assault: Minnesota Coalition Against Sexual Assault (www.mncasa.org)

Minnesota Elder Justice Center: Minnesota Elder Justice Center | Minneapolis, MN (www.elderjusticemn.org/)

Minnesota Indian Women's Sexual Assault Coalition: Minnesota Indian Women's Sexual Assault Coalition (www.miwsac.org)

Minnesota Injury Data Access System (MIDAS), MDH – allows easy access to injury and violence data for Minnesotans, whether for a specific county, for a type of injury, or by gender, timeframe, or other factor: Minnesota Injury Data Access System (MIDAS) - MN Dept. of Health (http://www.health.state.mn.us/injury/midas/)

Minnesota Naloxone Finder: Naloxone – MN Dept. of Health (https://www.health.state.mn.us/communities/overdose/harmreduce/naloxone.html)

Minnesota Suicide Prevention Plan: Minnesota Suicide Prevention Plan - MN Dept. of Health (https://www.health.state.mn.us/communities/suicide/mnresponse/stateplan.html)

Minnesota Suicide Prevention Regional Coordinators: Minnesota Suicide Prevention Regional Coordinators (https://www.health.state.mn.us/communities/suicide/documents/regioncoordmap.pdf)

National Action Alliance for Suicide Prevention: Home Page | National Action Alliance for Suicide Prevention (http://actionallianceforsuicideprevention.org/)

National Alliance for Mental Illness Minnesota (NAMI): Home Page - NAMI Minnesota (https://namimn.org/)

The National Intimate Partner and Sexual Violence Survey (PDF) 2016/2017 Report on Stalking--Updated Release (https://www.cdc.gov/nisvs/media/pdfs/sexualviolence-brief.pdf)

National Registry of Evidence-based Programs and Practices, SAMHSA: Evidence-Based Practices Resource Center | SAMHSA (https://www.samhsa.gov/ebp-resource-center)

National Sexual Violence Resource Center: Homepage - National Sexual Violence Resource Center (NSVRC) (https://www.nsvrc.org/)

Need Help? A list of services and agencies that can help in a crisis, MDH – view Minnesota and national resources at the bottom of the page: About the Sexual Violence Prevention Program - MN Dept. of Health http://www.health.state.mn.us/injury/topic/svp/help.cfm)

Prevent Connect – national community of practice for the prevention of sexual assault and relationship violence: PreventConnect.org (https://www.preventconnect.org/)

Rape Prevention and Education Program, CDC: Program: Rape Prevention and Education Program | CDC (https://www.cdc.gov/sexual-violence/programs/index.html)

Safe States – an alliance to strengthen the practice of injury and violence prevention: Safe States Alliance (https://www.safestates.org)

Sexual Violence Prevention Data - MN Dept. of Health (https://www.health.state.mn.us/communities/svp/data/index.html)

Sexual Violence Prevention Program – MDH: About the Sexual Violence Prevention Program - MN Dept. of Health (https://www.health.state.mn.us/communities/svp/index.html)

Risk and Protective Factors | Sexual Violence Prevention | CDC (https://www.cdc.gov/sexual-violence/risk-factors/index.html)

Suicide Awareness Voices of Education (SAVE) – national suicide education and prevention nonprofit: SAVE - Suicide Awareness Voices of Education (https://save.org/)

Suicide Prevention Resource Center (promotes a public health approach to suicide prevention): Suicide Prevention Resource Center (http://www.sprc.org/)

Violence & Socioeconomic Status, American Psychological Association (PDF): Violence & Socioeconomic Status (factsheet-violence.pdf)

Violence Free Minnesota – coalition of Minnesota programs working to end relationship abuse: Home | Violence Free Minnesota (www.vfmn.org)

WISQARS, CDC – allows users to create a customized report of fatal and non-fatal injury-related data: CDC WISQARS - Web-based Injury Statistics Query and Reporting System (https://www.cdc.gov/injury/wisqars/index.html)

WONDER, CDC – contains national and state-level data on deaths and hospitalizations: CDC WONDER (https://wonder.cdc.gov/)

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