

# Healthy Minnesota **2020**: Chronic Disease & Injury



Prepared by the Health Promotion and Chronic Disease Division  
and the Office of Statewide Health Improvement Initiatives  
Minnesota Department of Health

September, 2012





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Minnesota Department of Health  
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*“Public health is an organized community program designed to prolong efficient human life. It has no artificial limitations that would restrict its activities to certain types of problems. It must deal with and endeavor to combat those forces that tend to impair or to shorten efficient human life and must meet each problem according to its particular needs. The essence of democracy is the concept of rule by the people, who have a right to protect themselves against all forces that lead to illness or to death.”<sup>1</sup>*

—Gaylord W. Anderson, First Dean of the University of Minnesota School of Public Health, Presidential Address, American Public Health Association, 1952

<sup>1</sup> Gaylord W. Anderson, “Public Health—A Mandate from the People,” *American Journal of Public Health* 42 (1952): 1367–73.

September, 2012



Dear Fellow Minnesotan:

I am pleased to introduce *Healthy Minnesota 2020: Chronic Disease & Injury*, a strategic framework for public health action and companion to *Healthy Minnesota 2020*. This framework builds on existing plans and calls for us to take a shared, common-sense approach to reducing chronic diseases and injuries that focuses on outcomes and joint effort. Minnesota needs to embrace such an approach if it is going to address the growing problem of chronic diseases and injuries.

Though public health has made great strides fighting infectious and communicable disease, chronic diseases, such as heart disease, diabetes, and cancer have emerged as some of the greatest threats to the health and well-being of Minnesotans. In 2010, chronic diseases accounted for the seven leading causes of death in Minnesota. These diseases cause a great deal of suffering, shorten life, and are costly in terms of medical care and lost economic opportunities.

This plan calls for us to focus our efforts and investments on preventing these diseases. It sets a framework by defining 12 broad objectives, such as reducing falls, increasing fruit and vegetable consumption, increasing physical activity, reducing tobacco use and binge drinking. It calls for improved management of diabetes, heart disease and oral health. It also calls for us to focus on the health of all Minnesotans. Today populations of color and American Indians, and those individuals with fewer resources consistently have fewer opportunities for health in our state and experience more injuries and suffer more chronic diseases.

Importantly, this plan doesn't just call for general improvement; it sets specific targets. Reaching these targets will not be easy. The causes and risk factors for these diseases and injuries, which touch all Minnesotans, are so intertwined with who we are and how we live that combating them will take a broad approach involving many partners from sectors including business, education, transportation, and public safety. We will all have to work together so that the healthy choice is the easy choice in our communities and in our personal lives.

All aspects of public health are interconnected. It is my hope that the strategic approaches detailed in *Healthy Minnesota 2020: Chronic Disease & Injury* will serve as a guide for us to join together to ensure that people in Minnesota have the knowledge and skills they need to live the healthiest lives possible; that they live, learn work and play in safe and healthy environments; and that they receive the right care in the right place at the right time.

A handwritten signature in black ink, appearing to read "Edward P. Ehlinger". The signature is fluid and cursive, with a long horizontal stroke at the end.

Edward Ehlinger, MD, MSPH  
Commissioner of Health

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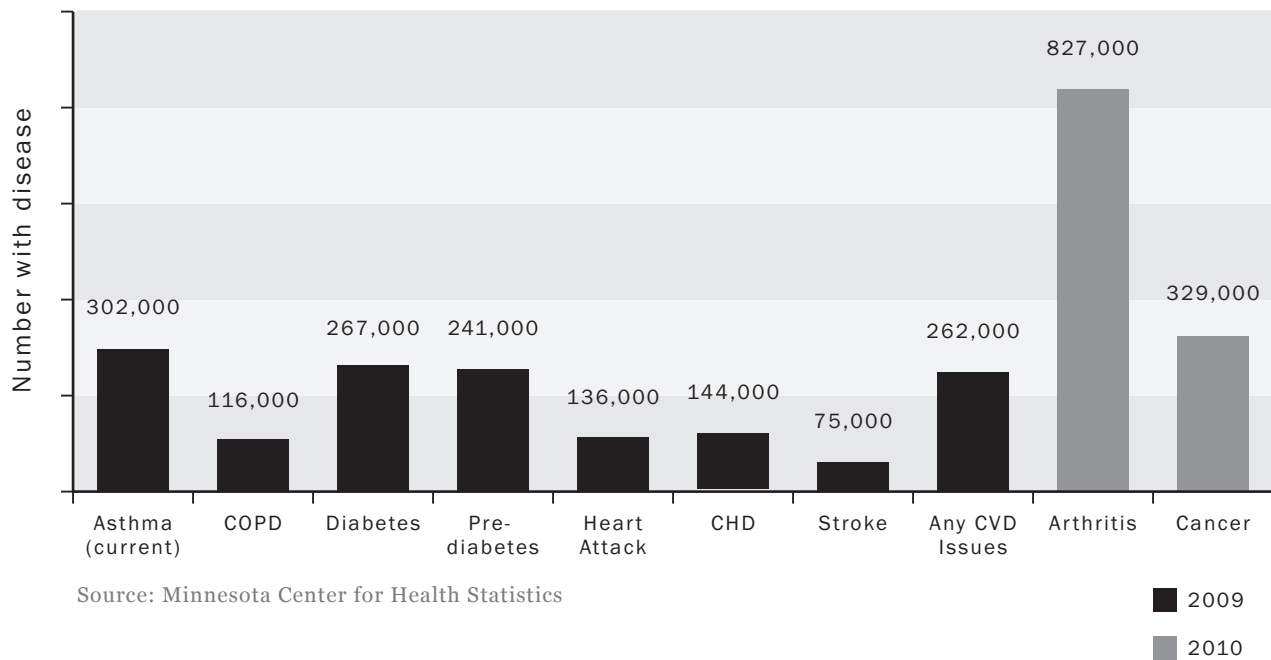
## Overview of Lead Indicators and 2020 Targets

TOPIC AREA	LEAD INDICATOR	BASELINE	2020 TARGET
<b>Healthy Eating</b>	Youth who eat the recommended number of fruits and vegetables daily	18% (2010)	30%
<b>Physical Activity</b>	Youth/Adults who meet physical activity guideline	Youth: (2010) 74% Boys/68% Girls Adults: (2009) 52.7%	Youth: 92% Boys/89% Girls Adults: 75%
<b>Tobacco Use</b>	Young adults who smoke	27.8% (2010)	18.6%
<b>Alcohol Abuse</b>	Adult binge drinking	17.2% (2010)	15.5%
<b>Arthritis</b>	Adults with arthritis who participate in self-management programs	14.7% (2009)	16.2%
<b>Asthma</b>	Children with asthma who achieve optimal asthma management	24% (2010)	30%
<b>Cancer</b>	Adults 50 and older who have had colorectal cancer screening	64% (2011)	80%
<b>Cardiovascular Disease</b>	Adult vascular disease patients who achieve optimal vascular care treatment goals	40% (2010)	50%
<b>Diabetes</b>	Adult diabetes patients who achieve optimal diabetes care outcomes	37% (2010)	41%
<b>Injury</b>	Fall deaths among the elderly	84.8/100,000 (2009)	79/100,000
<b>Obesity</b>	Adults who are a healthy weight	38% (2010)	47%
<b>Oral Health</b>	Dental visit in the last 12 months	78.9% (2010)	82.8%

## Introduction

**Chronic diseases and injury are among the most common and prevalent health problems facing Minnesotans today.** While public health has made great strides in fighting communicable diseases, chronic diseases and injury have emerged as a far greater threat to the overall health and well-being of people in Minnesota. They are among the leading causes of death and years of potential life lost in Minnesota, and they also contribute significantly to long-term disability and poor quality of life. Chronic diseases affect large numbers of adults in Minnesota and the number of adults who experience more than one chronic condition is growing.

**PREVALENCE OF DIAGNOSED CHRONIC DISEASES AMONG ADULTS, MINNESOTA, 2009/2010**





In 2010, chronic diseases accounted for the seven leading causes of death in Minnesota. They also exacted a substantial toll on the health of the population by shortening life. Years of potential life lost (YPLL) is a summary measure of premature mortality. In 2010, cancer, diabetes, heart disease, stroke and unintentional injury accounted for 57% of all years of potential life lost in Minnesota.<sup>2</sup>

**LEADING CAUSES OF DEATH IN MINNESOTA, 2010**

	COUNT
Cancer	9599
Heart Disease	7144
Stroke	2154
Unintentional Injury	2087
Chronic Lower Respiratory Disease	2012
Alzheimer’s Disease	1450
Diabetes	1036
Nephritis	895
Suicide	599
Pneumonia & Influenza	591

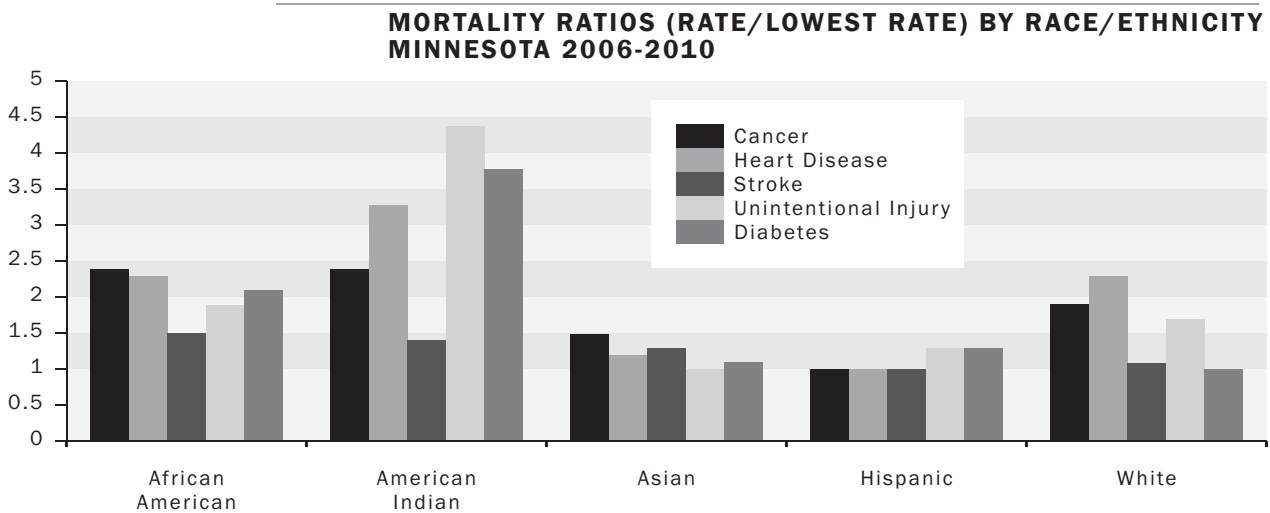
Source: Minnesota Center for Health Statistics

<sup>2</sup> Minnesota Center for Health Statistics, <http://www.health.state.mn.us/divs/chs>, accessed July 20, 2012.

**The occurrence and consequences of chronic diseases and injuries are not equally distributed across the population.** Variations across socioeconomic groups, race and ethnicity, geography and sexual orientation are measurable for some but not all domains. For example, the [Minnesota Center for Health Statistics](#) reports striking disparities in mortality for some common diseases by race and ethnicity. However, use of statewide surveillance data to measure disparities in behavioral risk factors is limited by inadequate sample size to break results down by race, ethnicity or geography.

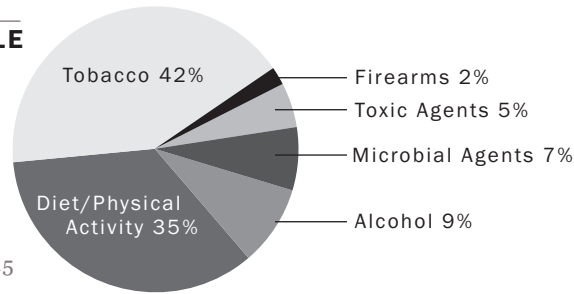
**Many factors that influence health are modifiable.** By one estimate, more than three quarters of all deaths in the United States can be attributed to tobacco use, poor diet and physical inactivity. Preventing and managing chronic diseases by modifying health risk behaviors ultimately helps people live longer, healthier lives and keeps health care costs down. A community approach to prevention includes making the healthy choice the easy choice.

**Screening and disease management cuts costs and improves quality of life.** Early detection of some chronic diseases can slow or halt disease progression, optimize disease management, and improve the length and quality of life. Studies show that evidence-based, high quality screening for early disease contributes to a reduction in overall medical care costs. Providing patients and their caregivers with resources and tools to support self-management of chronic diseases further enhances quality of life and improves disease outcomes.



Source: Minnesota Center for Health Statistics

**ATTRIBUTABLE CAUSES OF DEATH**



Source: Mokdad et al, JAMA 2004;291 (10) 1238-45

**Chronic diseases are costly.** Nationally, 75% of the \$2.6 trillion spent for health care goes for chronic disease treatment, around \$5 billion annually being Minnesota’s share. Lost productivity and absenteeism due to unhealthy workers add another \$17 billion in costs to Minnesota businesses.<sup>3</sup> Nonetheless, prevention of chronic disease receives relatively little funding. The expense of treating and managing chronic diseases dwarfs the amount of money invested in chronic disease prevention.<sup>4</sup> For every dollar spent on health care only four cents are spent on prevention.

**Healthy Minnesota 2020: Chronic Disease & Injury is an integrated framework for the prevention and management of chronic disease and injury.** It capitalizes on the reality that multiple chronic conditions share common risk factors and risky health behaviors. Many chronic diseases also share methods and best practices for managing ongoing conditions and preventing disease progression while minimizing disability. It also provides an opportunity to address the challenge of multi-morbidity.

*Healthy Minnesota 2020: Chronic Disease & Injury* cannot possibly be “the” grand plan for chronic disease prevention and management in Minnesota without running the risk of getting bogged down in excessive detail that obscures appreciation for forward progress. Rather than getting mired in detail, it takes the opposite approach and strips out the clutter to focus on a limited number of specific objectives, strategies and indicators that answer the following questions: “What are we trying to achieve?”, “How will we get there?” and “Are we making any progress?” It serves as a strategic framework for action, not a tactical implementation plan.

*More than 75 percent of the nation’s total medical costs are spent on chronic disease. Patients need to be an integral part of their care if we are to increase the quality and decrease the cost of care.*

–Wendy Everett, President of New England Healthcare Institute, 2012

<sup>3</sup> Milken Institute, 2007.

<sup>4</sup> Levi J, Segal LM, Juliano C. Prevention for a Healthier America: Investments in Disease Prevention Yield Significant Savings, Trust for America’s Health, 2008

**Healthy Minnesota 2020: Chronic Disease & Injury builds on existing strategic plans for specific chronic conditions developed by MDH programs and community partners.** Examples include the 2011-2020 Minnesota Heart Disease and Stroke Prevention Plan, Cancer Plan Minnesota 2011-2016, the Minnesota Obesity Plan the Minnesota Asthma Plan and the Minnesota Arthritis Action Plan. Companion disease burden reports provide epidemiological data to support ongoing planning and monitoring. Links to these and other plans are provided in the Appendices. *Healthy Minnesota 2020: Chronic Disease & Injury* attempts to amalgamate the individual plans into a simple, effective tool that can be used to frame chronic disease activities in Minnesota more broadly.

The process of creating *Healthy Minnesota 2020: Chronic Disease & Injury* began with MDH program leaders from the Health Promotion and Chronic Disease Division (HPCD) and the Office of Statewide Health Improvement Initiatives (OSHII) and their affiliated chronic disease coalition members. Each proposed one priority objective, a lead indicator and key strategies culled from their state plans. Topic areas included alcohol, asthma, arthritis, cancer, cardiovascular disease, diabetes, injury and violence, obesity, oral health and tobacco. An external group of advisors representing statewide chronic disease coalitions and advocacy groups provided guidance on the format and content for the plan as well as feedback on the objectives, indicators and strategies. After several iterations, broad input was solicited from disease partnerships and networks. More than 140 comments were received via an online survey conducted in June 2012.

**Healthy Minnesota 2020: Chronic Disease & Injury aligns with other statewide and national planning efforts.** It complements a broader effort by the Healthy Minnesota Partnership to create a visionary health improvement framework for the state.<sup>5</sup> Based on a [Statewide Health Assessment](#), *Healthy Minnesota 2020* is built around three themes – a healthy start for all, equal opportunities for health, and community empowerment for health. It emphasizes the importance of eliminating health inequities and recognizes the role of social determinants, especially in early childhood, as fundamental for health in all.

<sup>5</sup> <http://www.health.state.mn.us/healthymnpartnership/hm2020/>. Accessed July 31, 2012.

*Healthy Minnesota 2020: Chronic Disease & Injury* is also informed by federal strategic planning around chronic disease prevention and control. Its objectives follow the format and content from selected topic areas in *Healthy People 2020*, and it aligns with the four strategic directions and priorities in the *National Prevention Strategy*—healthy and safe community environments, clinical and community preventive services, empowered people, and elimination of health disparities.

**Healthy Minnesota 2020: Chronic Disease & Injury does not yet include content in some important areas.** Mental illness is a well-known risk factor for nearly all of the other chronic diseases, and as a result, people with mental illness die an average of 25 years earlier than the general population.<sup>6</sup> Selecting one objective and lead indicator for a complex array of conditions and approaches remains a challenge. Minnesota's *10 by 10 Initiative* is designed to engage key stakeholders to address this disparity, focusing on obesity, alcohol and tobacco use, blood pressure, LDL, cholesterol and blood sugar<sup>6</sup>. The Minnesota Department of Human Services recently completed a strategic plan for the prevention and treatment of mental illness and substance abuse and alignment of prevention services with the primary care system. The State Community Health Services Advisory Committee (SCHSAC) will be convening a Mental Illness Task Force in September 2012. The topic of mental illness will be revisited over the coming year to determine how best to incorporate appropriate content into this framework.

Also absent is an objective and lead indicator for Alzheimer's disease. Alzheimer's is a leading cause of death and disability in Minnesota with budgetary, social and personal impact. A [report](#) prepared by the Alzheimer's Disease Working Group calls for increased awareness of the disease by the medical profession and the community at large, stressing the importance of early detection. Once the early detection metric is developed, an objective on the early detection of Alzheimer's will be added to *Healthy Minnesota 2020: Chronic Disease & Injury*.

<sup>6</sup> Michael Trangle, Gary Mager, Paul Goering, and Rodney Christensen, "Minnesota 10 By 10: Reducing Morbidity and Mortality in People with Serious Mental Illnesses," *Minnesota Medicine* (June 2010).

## Goals

The goals for this chronic disease framework are intended to be broad and visionary, offering an aspiration for the future of health in Minnesota. They touch on how people live, the care they receive and what they know and they frame our statewide objectives.

- **People in Minnesota have the knowledge and skills they need to live the healthiest lives possible**
- **People in Minnesota live, learn, work and play in safe and healthy environments**
- **People in Minnesota at risk for or who live with chronic diseases receive the right care in the right place at the right time**
- **People in Minnesota have access to information about the burden of chronic diseases and injury, their associated risk factors, and best practices to address them.**



## Objectives

Twelve objectives describe in simple terms the specific, measurable outcomes we hope to achieve in Minnesota by 2020. They are obviously a subset of a broad and comprehensive list of the objectives and measures included in the existing disease specific state plans. This “short list” is intended to provide focus and simplify communication about a diverse set of risk behaviors and conditions.

Each objective is built around a lead indicator with a baseline measure and a 2020 target. Targets were derived from a combination of statewide trend data and national benchmarks. Data sources and technical definitions of the measures are more fully described in Appendices 2 and 3. Changes in survey methodology in 2011 may require re-establishment of several baseline measures once data are available. We plan to report on progress using these indicators on an annual basis

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### 1. INCREASE FRUIT AND VEGETABLE CONSUMPTION

**Lead Indicator:** Youth (9th graders) who eat the recommended number of fruits and vegetables

**Baseline:** 18.1% (2010), MSS

**Target:** 30%

Rationale: Eating a balanced diet is one of the most important ways of improving overall health. Different nutrients have different roles so it is important to eat a wide range of food rich in fruits and vegetables. Poor eating habits that result in too many calories and not enough nutrients increase risk for chronic disease and disability.

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### 2. INCREASE PHYSICAL ACTIVITY

**Lead Indicator:** Youth (9th graders) who meet physical activity guidelines

**Baseline:** 74% Boys, 68% Girls (2010), MSS

**Target:** 92% Boys, 89% Girls

**Lead Indicator:** Adults who meet physical activity guidelines

**Baseline:** 52.7% (2009), BRFSS

**Target:** 75%

Rationale: Physical activity is a public health priority and impacts nearly every aspect of health. Lack of physical activity, combined with a poor diet, is the second leading cause of preventable death and disease and poses a huge economic burden on Minnesota. Physical inactivity is associated with an increased risk of obesity, heart disease, stroke, diabetes, cancer, falls and depression.

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### 3. REDUCE TOBACCO USE

**Lead Indicator:** Young adults who smoke

**Baseline:** 27.8% (2010), MATS

**Target:** 18.6%

Rationale: Tobacco is the single most preventable cause of death and disease in Minnesota and smoking claims the lives of more than 5,000 Minnesotans each year. Young adults in Minnesota have the highest current smoking rate among all age groups. Smoking by youth and young adults has immediate adverse health consequences including addiction, and it accelerates the development of chronic diseases across the full life course including coronary heart disease, stroke, chronic obstructive pulmonary disease, pneumonia, sudden infant death syndrome, reduced infant birth weight, and at least ten kinds of cancer.

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### 4. REDUCE BINGE DRINKING

**Lead Indicator:** Binge drinking among adults

**Baseline:** 17.2% (2010), BRFSS

**Target:** 15.5%

Rationale: Alcohol is used by more people than tobacco or any other drug and has many negative health consequences including unintentional injury, violence, unintended pregnancy, sexually transmitted diseases, birth defects and chronic diseases including cancer and cardiovascular disease. Binge drinking in Minnesota is higher than the national median of all states and territories.

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### 5. IMPROVE ARTHRITIS MANAGEMENT

**Lead Indicator:** Adults with arthritis who participate in self-management programs

**Baseline:** 14.7% (2009), BRFSS

**Target:** 16.2%

Rationale: Arthritis is a major cause of disability and work limitation in Minnesota. Encompassing more than 150 different conditions involving the joints, surrounding tissue, and other connective tissues, arthritis affects people of all ages. Although the prevalence increases dramatically with age, 2/3 of those with arthritis are under age 65. Self-management, education, physical activity and weight management are key to reducing the impact of arthritis.



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## 6. IMPROVE ASTHMA MANAGEMENT

**Lead Indicator:** Children with asthma who achieve optimal asthma management

**Baseline:** 24% (2010), MNMCM

**Target:** 30%

**Rationale:** Asthma, a common chronic disease of the airways is manageable but not curable. Common triggers include respiratory infections, pollen, tobacco smoke and air pollution. Asthma is associated with missed school days, missed days of work, disrupted sleep and symptoms that interfere with physical activity. Optimal care means that the patient's asthma is well controlled, that he/she has received education about asthma self-management, and has a written asthma plan.

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## 7. INCREASE COLORECTAL CANCER SCREENING

**Lead Indicator:** Colorectal cancer screening

**Baseline:** 64% (2011), MNMCM

**Target:** 80%

**Rationale:** Colorectal cancer is the second leading cause of cancer death in men and women combined after lung cancer. Screening tests offer a powerful opportunity for prevention, early detection and successful treatment of the disease. Nonetheless, colorectal cancer screening is underutilized compared with breast and cervical cancer, two other cancers for which screening has been shown to save lives.

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## 8. IMPROVE CARDIOVASCULAR DISEASE MANAGEMENT

**Lead Indicator:** Adults with vascular disease who achieve optimal vascular care treatment goals

**Baseline:** 40% (2010), MNMCM

**Target:** 50%

**Rationale:** Cardiovascular disease (CVD) includes coronary artery disease, angina, heart attack, stroke, high blood pressure and congestive heart failure. Optimal CVD management requires an activated and coordinated response from a multidisciplinary health care team in partnership with an activated patient. Optimal care means well-controlled blood pressure and LDL cholesterol, daily aspirin use (unless contraindicated) and non-smoking status.

## 9. IMPROVE DIABETES MANAGEMENT

**Lead Indicator:** Adult diabetes patients who achieve optimal diabetes care outcomes (“D5”)

**Baseline:** 37% (2010), MNMCM

**Target:** 41%

Rationale: Diabetes is a complex, serious and increasingly common chronic disease characterized by high levels of glucose in the blood. Long term complications can include cardiovascular disease, kidney disease and blindness. Optimal management, which includes controlling blood glucose (HbA1C<8), controlling blood pressure (<140/90), lowering LDL cholesterol (<100), being tobacco free and taking aspirin daily (unless contraindicated) can prevent or delay many complications from diabetes.

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## 10. REDUCE DEATHS FROM FALLS

**Lead Indicator:** Fall deaths among the elderly

**Baseline:** 95.22/100,000 (2009), CDC WONDER

**Target:** 75/100,000

Rationale: The fall death rate among older Minnesotans is more than twice the national rate. Falls account for almost half of the hospitalized injuries and are the leading cause of injuries treated in emergency departments. Falls account for a majority of fractures in people 65 years and older and are the second leading cause of spinal cord and brain injury among older adults.

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## 11. REDUCE OBESITY

**Lead indicator:** Adults who are at a healthy weight

**Baseline:** 38% (2010), BRFSS

**Target:** 47%

Rationale: Achieving and maintaining a healthy weight is the key to prevention and management of serious chronic diseases including: hypertension, high total cholesterol, Type 2 diabetes, coronary heart disease, stroke, and some cancers.

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## 12. INCREASE UTILIZATION OF THE ORAL HEALTH SYSTEM

**Lead Indicator:** Dental visit in the last 12 months

**Baseline:** 78.9%% (2010), BRFSS

**Target:** 82.8%

Rationale: A wide range of acute and chronic conditions manifest themselves in or near the oral cavity, including inherited, infectious, neoplastic, and neuromuscular diseases and disorders. The most common oral diseases are tooth decay and gum diseases and cause significant morbidity including tooth loss. Most oral diseases are preventable, yet preventive dental services are underutilized.

## Key Strategies

The following statements describe key strategies for achieving the twelve objectives of *Healthy Minnesota 2020: Chronic Disease & Injury*. These strategies, grounded in evidence-based best practice, represent only a select few of many that might potentially have been chosen from the state plans. Many of the key strategies address risk factors shared by more than one disease, or include approaches that address more than one condition, thus furthering the aim of integrating chronic disease prevention and management efforts in Minnesota.

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### **STRATEGIC APPROACH: IMPLEMENT POLICY, SYSTEM AND ENVIRONMENTAL CHANGES THAT SUPPORT HEALTHY BEHAVIOR (PSE)**

- PSE1. Increase access to fruits and vegetables through institutional and community-based initiatives that address how food is purchased and distributed.
- PSE2. Improve physically active transportation options through community design and transportation planning.
- PSE3. Increase active time in early childcare sites and schools, including physical education.
- PSE4. Adopt pricing strategies that discourage the use of tobacco and excessive alcohol consumption.
- PSE5. Develop comprehensive worksite wellness policies and programs.
- PSE6. Implement policies that support and maintain community water fluoridation.

*Example:*

*The Minnesota Complete Streets Coalition partners with the Minnesota Department of Transportation to promote the design and operation of streets and roadways that are safe and accessible for pedestrians, transit riders and drivers.*

[www.mncompletestreets.org/policy.html](http://www.mncompletestreets.org/policy.html)

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**STRATEGIC APPROACH: IMPLEMENT HEALTH SYSTEM CHANGES THAT SUPPORT THE DELIVERY OF HIGH QUALITY CARE FOR ALL PATIENTS (HSC)**

- HSC1. Collaborate among public health and health systems and primary care clinics to advance system changes that improve the delivery of cancer screening and other clinical preventive services.
- HSC2. Adopt proven chronic disease management tools such as the interactive Asthma Action Plan in health and clinic systems.
- HSC3. Use guidelines and quality measures for early identification and management of risk factors for chronic diseases such as obesity, pre-diabetes, hypertension and high cholesterol in health and clinic systems.
- HSC4. Implement school based dental sealant programs.
- HSC5. Refer primary care patients for oral health services.

*Example:*

*As Minnesota's Medicare Quality Improvement Organization Stratis Health provides individual technical assistance, group education and training, and learning collaboratives to optimize clinic systems, processes, workflows and culture for the delivery of quality preventive services.*

[www.stratishealth.org/providers](http://www.stratishealth.org/providers)

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**STRATEGIC APPROACH: FACILITATE COMMUNITY-CLINICAL LINKAGES THAT IMPROVE THE PREVENTION AND MANAGEMENT OF CHRONIC CONDITIONS (CCL)**

- CCL1. Develop multi-disciplinary care teams within the health care home model to coordinate between clinics, hospitals, social services and community-based prevention resources.
- CCL2. Expand self-care and management education programs statewide such as the Diabetes Prevention Program, the Chronic Disease Self-Management Program, and arthritis exercise programs.
- CCL3. Conduct targeted outreach to people at risk for falls to increase their participation in physical activity and safety programs.

*Example:*

*I CAN Prevent Diabetes is a collaborative, community-based, lifestyle change program designed for people with pre-diabetes. The Minnesota Individuals and Communities Acting Now (I CAN) Prevent Diabetes offers diabetes prevention education and support for people with pre-diabetes.*

[www.icanpreventdiabetes.org](http://www.icanpreventdiabetes.org)

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**STRATEGIC APPROACH: DEVELOP AND DISSEMINATE INFORMATION THAT ENGAGES PEOPLE TO TAKE ACTION TO LEAD HEALTHY LIVES (DDI)**

- DDI1. Design communications that help people understand prevention and management of chronic conditions and their associated risk factors.
- DDI2. Engage communities with health disparities in chronic diseases to modify risky health behaviors and to access resources for the prevention and management of chronic diseases.

*Example:*

*“Clipper Clinics”, conducted at local barbershops and beauty shops in partnership with local clinics, community organizations and the University of Minnesota, bring health education and health screening services into a comfortable and familiar community setting.*

[www.healthdisparities.umn.edu/clipperclinic/home.html](http://www.healthdisparities.umn.edu/clipperclinic/home.html)

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**STRATEGIC APPROACH: DEVELOP, COLLECT AND DISSEMINATE DATA, INCLUDING DATA ON HEALTH DISPARITIES, TO INFORM CHRONIC DISEASE AND INJURY PREVENTION AND MANAGEMENT INITIATIVES (SED)**

- SED1. Strengthen public health surveillance systems for chronic disease and injury, including collection of data on health disparities.
- SED2. Measure and report adherence to clinical evidence-based guidelines for early detection and management of chronic diseases in primary care.
- SED3. Develop and implement new measurement metrics for emerging areas of interest such as a new cognitive screening measure for the early detection of dementia.

*Example:*

*Minnesota Public Health Data Access is an online query and information system designed to provide better public access to Minnesota data about health, the environment and other risk factors that may impact public health.*

<https://apps.health.state.mn.us/mndata/>

## Moving Ahead: Using this Framework

Developing this integrated framework inclusive of wide array of chronic conditions and risk factors has meant letting go of much of the detail contained within the existing state plans. Those more detailed plans will still guide the implementation of specific tactics and activities by MDH programs and partners across the state. We hope that the strategies detailed in *Healthy Minnesota 2020: Chronic Disease & Injury* will provide another dimension, namely to guide cross-programmatic tactical planning and policy development and lay the groundwork for more coordination of efforts to prevent and manage to chronic disease and injury.

No single organization can accomplish the goals and objectives set forth in this framework. But every organization or entity whose mission entails improving the health of Minnesotans should be able to see itself somewhere in this framework. For example:

- **If you are a local public health agency** you can work with local planners to increase the walkability and bike-ability of your community
- **If you are a health system** you can incorporate disease management tools, templates and prompts into your electronic health record
- **If you are a health care provider**, you can refer your patients with chronic diseases to behavior change and self-care management education programs in the community
- **If you are an employer** you can help connect your employees who smoke to quitline services
- **If you are a school system** you can purchase and serve locally grown and healthy foods for your school lunch program
- **If you are a social service agency** you can participate in the development of a community care team with your local hospital or clinic
- **If you are a community-based organization** you can help connect your clients with community-based prevention and self-management resources
- **Anyone** can educate policymakers and planners about the importance of chronic disease prevention and management

Regardless of who you are, or where you live, work, volunteer, learn and play, you have role in making Minnesota the healthiest state in the nation.

## Acknowledgements

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## Appendix 1: State and National Plan Links

Healthy Minnesota 2020: Statewide Health Improvement Framework  
[www.health.state.mn.us/healthymnpartnership/hm2020/](http://www.health.state.mn.us/healthymnpartnership/hm2020/)

Cancer Plan Minnesota  
[www.mncanceralliance.org/plan.html](http://www.mncanceralliance.org/plan.html)

Minnesota Heart Disease and Stroke Prevention Plan  
[www.health.state.mn.us/divs/hpcd/chp/cvh/cvhplan.html](http://www.health.state.mn.us/divs/hpcd/chp/cvh/cvhplan.html)

Minnesota Diabetes Program  
[www.health.state.mn.us/diabetes/](http://www.health.state.mn.us/diabetes/)

Minnesota Oral Health Plan  
[www.health.state.mn.us/oralhealth/oralhealthplan.html](http://www.health.state.mn.us/oralhealth/oralhealthplan.html)

Minnesota Injury and Violence Prevention Plan  
[www.health.state.mn.us/injury/pub/plans.cfm](http://www.health.state.mn.us/injury/pub/plans.cfm)

Minnesota Obesity Plan  
[www.health.state.mn.us/divs/hpcd/chp/cdrh/obesity/obesityplan/obesityplan.html](http://www.health.state.mn.us/divs/hpcd/chp/cdrh/obesity/obesityplan/obesityplan.html)

Minnesota Arthritis Action Plan  
[www.health.state.mn.us/divs/hpcd/arthritis/text/mnarthritis.htm](http://www.health.state.mn.us/divs/hpcd/arthritis/text/mnarthritis.htm)

Minnesota Asthma Plan  
[www.health.state.mn.us/asthma/StatePlan.html](http://www.health.state.mn.us/asthma/StatePlan.html)

Preparing Minnesota for Alzheimer's  
[www.alz.org/national/documents/mn\\_state\\_plan.pdf](http://www.alz.org/national/documents/mn_state_plan.pdf)

Healthy People 2020  
[www.healthypeople.gov/2020/default.aspx](http://www.healthypeople.gov/2020/default.aspx)

National Prevention Strategy  
[www.healthcare.gov/prevention/nphpphc/](http://www.healthcare.gov/prevention/nphpphc/)



## Appendix 2: Technical Specifications for Lead Indicators

TOPIC AREA	LEAD INDICATOR	EXPANDED DEFINITION	SOURCE
<b>Healthy Eating</b>	Youth who eat the recommended number of fruits and vegetables daily	Percent of 9th grade students who report consuming at least 5 fruits, fruit juices or vegetables the previous day	Minnesota Student Survey
<b>Physical Activity</b>	Youth who meet physical activity guidelines	Percent of 9th grade students who report exercising or participating in sports which made them sweat or breathe hard for at least 20 minutes at least 3 of the last 7 days	Minnesota Student Survey
	Adults who meet physical activity guidelines	Percent of adults age 18 and older reporting 30 minutes/day of moderate activity 5 or more times/week or 20 minutes/day of vigorous activity 3 or more times/week	Behavioral Risk Factor Surveillance System
<b>Tobacco Use</b>	Young adults who smoke	Percent of adults age 18-24 who report that they smoked in the last 30 days	Minnesota Adult Tobacco Survey
<b>Alcohol abuse</b>	Adult binge drinking	Percent of males ages 18 and older having five or more drinks on one occasion and females ages 18 and older having four or more drinks on one occasion	Behavioral Risk Factor Surveillance System
<b>Arthritis</b>	Adults with arthritis who participate in self-management programs	Percent of adults age 18 and older with arthritis who have taken a class to learn how to manage arthritis symptoms	Behavioral Risk Factor Surveillance System
<b>Asthma</b>	Children with asthma who achieve optimal asthma management	Percent of children age 5-17 who have all three of the following: well controlled asthma defined as Child-ACT score > 20 or Asthma Control Questionnaire < 0.75 or Asthma Therapy Assessment Questionnaire Score =10; number of emergency department visits or hospitalizations due to asthma in the past 12 months <2; written asthma action plan in chart documenting purpose of medication and dose, how to recognize and what to do during an exacerbation and information on triggers.	Minnesota Community Measurement
<b>Cancer</b>	Adults 50 and older who have had colorectal cancer screening	Percent of adults age 51-75 who have had a fecal occult blood test within the previous 12 months or a colonoscopy within the previous 10 years or sigmoidoscopy within the previous 5 years	Minnesota Community Measurement
<b>Cardiovascular Disease</b>	Adult vascular disease patients who achieve optimal vascular care treatment goals	Percent of patients age 18-75 who have vascular disease and have reached all of the following four treatment goals to reduce the risk of cardiovascular disease: blood pressure less than 130/80 mm Hg for patients with ischemic vascular disease only and less than 140/90 for patients with a comorbidity of diabetes; LDL cholesterol less than 100 mg/dL; documented tobacco-free; daily aspirin usage.	Minnesota Community Measurement
<b>Diabetes</b>	Adult diabetes patients who achieve optimal diabetes care outcomes	Percentage of patients age 18-75 who have diabetes who meet all of the following five management goals: blood pressure <140/90 mm Hg; LDL cholesterol <100 mg/dL; Hemoglobin A1c is <8%; is tobacco-free; If indicated, regularly takes low-dose aspirin	Minnesota Community Measurement
<b>Injury</b>	Fall deaths among the elderly	Adults age 65 and older who die due to or as a result of a fall-related injury (ICD10 codes W00 to W19).	WONDER
<b>Obesity</b>	Adults who are a healthy weight	Percent of adults age 18 and older reporting a Body Mass Index (BMI) less than 25	Behavioral Risk Factor Surveillance System
<b>Oral Health</b>	Dental visit in the last 12 months	Percent of adults age 18 and older who report visiting a dentist or dental clinic within the past year for any reason	Behavioral Risk Factor Surveillance System

## Appendix 3: Sources of Data for Lead Indicators

### **Behavioral Risk Factor Surveillance System**

(BRFSS) The Minnesota BRFSS, initiated in 1984, is a large-scale telephone survey conducted on a monthly basis throughout the year. Topics covered by the BRFSS include smoking, overweight, physical activity, fruit/vegetable consumption, chronic disease prevalence, and access to healthcare. The BRFSS survey is supported by the Centers for Disease Control and Prevention (CDC) and is conducted in all 50 states, the District of Columbia, and three U.S. territories (Guam, Puerto Rico, and U.S. Virgin Islands). MDH provides data to CDC monthly. [www.health.state.mn.us/divs/chs/brfss](http://www.health.state.mn.us/divs/chs/brfss)

### **Minnesota Adult Tobacco Survey (MATS)**

The Minnesota Adult Tobacco Survey is a comprehensive surveillance initiative designed to monitor progress toward meeting the goals of reducing tobacco use among Minnesotans. The major objective of MATS is to collect in-depth, public health surveillance data on the adult population of Minnesota, focusing on tobacco use and cigarettes in particular. MATS is the most comprehensive source of information about smoking prevalence, behaviors, attitudes and beliefs in the adult Minnesota population; further, MATS provides valid scientific data tracking the impact of comprehensive tobacco control efforts in Minnesota. [www.mnadulttobaccosurvey.org/](http://www.mnadulttobaccosurvey.org/)

### **Minnesota Community Measurement**

(MNCM) The mission of Minnesota Community Measurement is to accelerate the improvement of health by publicly reporting health care information. MNCM is a trusted source for performance measurement and public reporting of quality data across the spectrum of health care that drives changes towards more safe, effective, patient centered, timely, efficient, and equitable care. It serves as a resource used by providers to improve care and patients to make better decisions and catalyzes our community to work together on health measurement and reduce administrative costs and maximize value [www.mncm.org/](http://www.mncm.org/)

### **Minnesota Student Survey (MSS)**

The Minnesota Student Survey is conducted every three years among three populations of students in Minnesota public schools: students in regular public schools, including charter schools and tribal schools (grades 6, 9, and 12 only) students in alternative schools and Area Learning Centers (all grades) students in juvenile correctional facilities (all grades). The survey asks questions about activities, experiences, and behaviors. Topics covered include tobacco, alcohol and drug use, school climate, physical activity, violence and safety, connections with school and family, health, and other topics. Questions about sexual activity are asked only of high school students. The survey is administered jointly by the Minnesota Departments of Education, Health, Human Services, and Public Safety. [www.health.state.mn.us/divs/chs/mss/](http://www.health.state.mn.us/divs/chs/mss/)

### **Wide-ranging Online Data for Epidemiologic Research**

(CDC WONDER) is an integrated information and communication system for public health developed by the Centers for Disease Control and Prevention (CDC) promote information-driven decision making by placing timely, useful facts in the hands of public health practitioners and researchers, and to provide the general public with access to specific and detailed information from CDC. [wonder.cdc.gov/](http://wonder.cdc.gov/)



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