Comprehensive Statewide Health Promotion Plan

Report to the Minnesota Legislature 2007

Minnesota Department of Health

Date: October 1, 2007

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Introduction

On a typical day, an estimated 70 Minnesotans die from a chronic disease. Many of these deaths are premature and preventable, and are exacerbated by the policies, systems and environments in which we live, learn, work and access health care. In fact, the current generation of children is the first generation in two centuries that has a shorter life expectancy than their parents. The most effective way of improving the health of Minnesotans and reducing the burden of chronic diseases is through comprehensive statewide health promotion. This document is a response to the 2007 Legislature's request to address the rising cost of health and health care in our state.

The Comprehensive Statewide Health Promotion Plan (the Plan) addresses premature and preventable deaths, decreased quality of life and financial costs resulting from chronic diseases. It utilizes proven techniques to improve population health and reduce chronic disease incidence and prevalence.

The Plan takes the expert knowledge collected from existing state plans for specific chronic disease programs (e.g. diabetes, cancer and heart disease), identifies evidence-based strategies learned from programs such as Steps to a Healthier Minnesota and state plans and synthesizes and translates the prioritized recommendations into outcomes. In addition, the Plan recommends providing local public health with funding and assistance to conduct health promotion in collaboration with local communities, schools, worksites and health care providers.

The Plan is a comprehensive approach to reducing the burden of chronic diseases by addressing four significant risk factors for chronic diseases – physical inactivity, poor nutrition, alcohol abuse and tobacco use. If implemented, the Plan would provide resources to mount a comprehensive, statewide and coordinated effort to address high priority community health needs.

Legislation

The 2007 Minnesota State Legislature passed legislation requiring the development of a plan for comprehensive statewide health promotion:

The commissioner of health, in consultation with the State Community Health Services Advisory Committee established in Minnesota Statutes, section 145A.10, subdivision 10, shall develop a plan to fund and implement an ongoing comprehensive health promotion program that can effect change more effectively and at lower cost at a community level rather than through individual counseling and change promotion. The program shall use proven public health strategies to promote healthy lifestyles and behaviors in order to establish a sustainable, long-term approach to reducing preventable disability, chronic health conditions, and disease. The focus shall be on community based initiatives that address childhood and adult obesity, tobacco and substance abuse, improved activity levels among senior citizens, and other lifestyle issues that impact health and health care costs. Because of its population health focus, funding shall be related to the size of the population to be served. The plan shall be completed by October 1, 2007, and shared with the Legislative Health Care Access Commission.

To create this plan, Minnesota Department of Health (MDH) staff with expertise in health promotion and disease prevention drafted the plan with input from an ad hoc group of the State Community Health Services Advisory Committee (SCHSAC). The ad hoc group was comprised of county commissioners, local public health administrators and staff, MDH staff and external partners. The plan was submitted to SCHSAC for approval on September 26, 2007, and then to the commissioner of health. The final plan is hereby submitted to the Legislative Commission on Health Care Access on October 1, 2007.

Chronic Diseases

According to the Centers for Disease Control and Prevention (CDC) "chronic diseases—such as cardiovascular disease (primarily heart disease and stroke), cancer and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven out of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease."

Most chronic diseases have common risk factors. Tobacco use and exposure, physical inactivity, poor nutrition and alcohol abuse are the leading actual causes of death.

Despite the millions of people affected annually, the vast majority of resources devoted to chronic diseases are focused on disease management, rather than prevention. "Approximately 95 percent of the trillion dollars we spend as a nation on health goes to direct medical care services, while just 5 percent is allocated to population-wide approaches to health improvement. However, some 40 percent of deaths are caused by behavior patterns that could be modified by preventive interventions. It appears, in fact, that a much smaller proportion of preventable mortality in the United States, perhaps 10-15 percent, could be avoided by better availability or quality of medical care" (McGinnis et al. 2002).

In 2003, less than two percent of state health funds nationally were allocated to the prevention of chronic diseases and promotion of healthy behaviors. A long-term, sustainable solution that focuses on environment, policy and systems change will reduce the risk of chronic diseases.

Minnesota Can Benefit from a Comprehensive Statewide Health Promotion Plan Because . . .

A comprehensive statewide plan to support policy and environmental changes that foster and enable healthy lifestyle choices for Minnesotans would help combat the growing burden of chronic diseases.

Chronic diseases are responsible for the majority of deaths, years of potential life lost, disability and health care costs in Minnesota. In 2004, of the over 37,000 Minnesotans who died, 56 percent died from the following chronic diseases:

- Nearly 25 percent died from cancer.
- Over 21 percent died from heart disease.
- Almost 7 percent died from stroke.
- 3 percent died from diabetes.

Poor diet, sedentary lifestyles, alcohol abuse and tobacco use and exposure are the top causes for chronic diseases that disrupt lives prematurely. The prevalence of these behaviors among Minnesotans is largely predicted by the communities in which they live, environments in which they work and learn and the nature, access and use of their health care services.

. . .Our policies, systems and environments currently support unhealthy behaviors.

While individuals make their own behavior choices, the policies, systems and environments in which we live guide choices. These variables have inadvertently changed over time to encourage unhealthy lifestyles. It is estimated that an additional 40 percent of annual premature death could be prevented by altering environmental conditions, social inequities and behavioral choices.

Over the past several decades, Minnesota's communities, schools, worksites, and the health care system have changed in ways that impact our health:

Community: Walking and biking are not feasible transportation options in many neighborhoods because of safety concerns, poor lighting and unreasonable distances from residences to destinations. Neighborhoods where residents do not have access to high-quality, affordable, fresh produce and instead provide easy access to junk food and tobacco and alcohol products disproportionately impact those at the highest risk for chronic diseases. Increased portion sizes at restaurants and inexpensive, processed foods are ever-present in communities throughout the U.S.

Schools: Students have fewer physical education opportunities. In fact, more than 90 percent of Minnesota schools did not meet the number of minutes per week for physical education classes recommended by CDC and the National Association for Sport and Physical Education. Due to budget constraints in the past 20 years, schools have contracted with soft drink industries to provide financial resources and school cafeterias and snack bars have added a wide variety of candy, chips and other non-nutritive items. The number of children walking or biking to school has decreased dramatically over this same time period.

Worksites: Technology has created more desk jobs and fewer active jobs. Larger proportions of our population are in the workforce, leaving less time at home to be active with children and prepare nutritious meals. Convenience food has become a staple in the work place and at home due to overscheduled families. Stairs in our worksites are often difficult to find and do not provide easy access to destinations; office traffic signage often leads to the elevator. Our sprawling communities and complicated lives make it difficult for employees to walk or bike to work.

Health Care: Changes in health care and the health care setting have created challenges to make health care a place for supporting wellness and not just treating illness. For example, direct-to-consumer marketing may lead some consumers to believe that rather than changing their lifestyles there is an easy pharmaceutical answer to many conditions. Providers frequently have little time to spend with patients and are often not equipped to offer resources that could help their patients lead more active lives, eat more healthfully and quit smoking.

These circumstances disproportionately affect the communities, schools, worksites and health care settings of Minnesota's most vulnerable populations. Intervening within these settings is the most effective way to reduce the burden of chronic diseases. The healthy choice should become the easy, affordable and attractive choice for all Minnesota residents.

. . . Unhealthy behaviors are common in Minnesota.

According to a survey of adults in Minnesota called the Behavioral Risk Factor Surveillance System (BRFSS):

- 38 percent of adults are classified as overweight based on Body Mass Index (BMI).
- 25 percent adults are classified as obese based on BMI.
- 24 percent of adults consume five or more fruits and vegetables per day.
- 51 percent of adults get 30 or more minutes of moderate physical activity five days per week.
- 33 percent adults have been told by a health professional they have high cholesterol.
- 18 percent of adults are current smokers.

The prevalence of these risk behaviors among youth in Minnesota is setting up the next generation of adults for earlier and more widespread chronic disease prevalence. According to the Minnesota Student Survey:

- 28 percent of high school girls reported being active five or more days per week for at least 30 minutes per day (moderate physical activity).
- 61 percent of high school boys and 45 percent of high school girls reported participating in an activity that made them sweat or breathe hard three or more days per week for at least 20 minutes per day (vigorous physical activity).
- Less than 22 percent of all elementary, middle and high school students surveyed reported eating the recommended five servings a day of fruits and vegetables.
- 10 percent of middle school students and 29 percent of high school students reported using any tobacco in the past 30 days.
- Over 62 percent of high school students and over 40 percent of middle school students report they had consumed alcohol in the past year.

. . . Chronic diseases are widespread and affect quality of life.

Many Minnesotans live with chronic diseases on a daily basis.

- 23,520 new cases of cancer were identified in 2006.
- In 2006, 139,000 Minnesotans were diagnosed with coronary heart disease or angina and 71,000 Minnesotans had a stroke.
- There were 73,000 hospitalizations for cardiovascular disease in 2005.
- 322,000 Minnesotans had diabetes and another 1,013,000 Minnesotans had prediabetes in 2005; these persons are at increased risk of heart disease, blindness, renal failure, amputations, and death.
- 11 percent of Minnesotans either have or have had asthma.
- 26 percent of Minnesota adults have arthritis.

Living with a chronic disease hinders the quality of life for those diagnosed with the disease and can put strain on family members. "The prolonged source of illness and disability from such chronic diseases as diabetes and arthritis results in extended pain and suffering and decreased quality of life for millions of Americans. Chronic, disabling conditions cause major limitations in activity for more than one of every ten Americans, or 25 million people" (CDC 2005). Due to medical advances and therefore increases in life expectancy, people are living longer with chronic diseases, thereby putting an increased burden on the health care system.

. . . Minnesota has a problem with chronic disease disparities.

Although Minnesota continually ranks as the healthiest state in the nation, our populations of color and American Indians experience significantly greater health burdens due to chronic diseases than does our non-Hispanic white population.

- African American and American Indian men have the highest overall cancer incidence and mortality rates in Minnesota.
- Cardiovascular mortality rates for the American Indian population in Minnesota were 33 percent higher than the state population and 44 percent higher than the total U.S. American Indian population from 1990 through 1998. In Minnesota, American Indian men have a 66 percent higher heart disease death rate than white men, and American Indian women have a 33 percent higher heart disease death rate than white women.
- African American men have a 34 percent higher stroke death rate than white men in Minnesota, and African American women have a 61 percent higher stroke death rate than white women. Asian Americans have an 11 percent higher stroke death rate than whites.
- Compared to the white population, the diabetes death rate is 4.9 times higher in American Indians, 2.9 times higher in African-Americans and 1.7 times higher in Hispanic Americans. The diabetes death rate among Asian Americans in Minnesota is increasing faster than among any other racial or ethnic group.

. . . Chronic diseases are expensive

While lost lives and the stress and disability of living with chronic diseases may be the greatest concern to Minnesotans individually, the cost of chronic diseases is substantial. In 2003, U.S. spending on health care rose to $1.67 trillion, or $5,670 per person. Experts estimate that chronic diseases are responsible for 83 percent of this spending. Health care spending for individuals with one chronic disease is two and one half times the spending for an individual without a chronic disease.

Chronic disease costs can be separated into two distinct components: direct costs related to the cost of medical treatments and indirect costs attributable to chronic diseases.

Direct Costs: In 2000, the direct cost of physical inactivity in the U.S., a risk factor for chronic diseases, was almost $77 billion; in Minnesota, the cost was $500 million. Also in 2000, the estimated direct cost of arthritis was more than $81 billion nationally and over $1.5 billion in Minnesota. In 2005, over 12 percent of all hospitalizations in Minnesota were principally for cardiovascular disease events, accounting for total charges of over $2.1 billion.

Indirect Costs: In addition to direct costs, there are many indirect costs attributable to chronic

diseases. These include lost productivity due to increased sick days from work and lost productivity due to early death. In 2001, the cost of lost productivity in the U.S. due to cardiovascular disease alone was $129 billion.

Several national studies have estimated the total economic cost (direct and indirect costs) for many chronic diseases and their risk factors. In Minnesota, the total human and economic cost attributable to alcohol was $4.5 billion in 2001. This number is comparable to CDC's annual budget in 2006, which was $5.9 billion. In the U.S., the total annual cost attributable to:

- Diabetes is nearly $132 billion;
- Arthritis is $128 billion;
- Obesity is $117 billion;
- Cardiovascular disease is $300 billion; and
- Smoking is $75 billion.

Fortunately, Minnesota Can Address These Issues Because. . .

. . .Chronic diseases are preventable.

Increased levels of physical activity, improved nutrition and decreased use of alcohol and tobacco can reduce an individual's risk for developing a chronic disease and other chronic conditions. For example, good nutrition is vital to good health and disease prevention is essential for healthy growth and development of children and adolescents. Consumption of healthier foods can lead to a:

- Decreased risk of chronic diseases, such as type 2 diabetes, hypertension, and certain cancers;
- Decreased risk of overweight and obesity; and
- Decreased risk of nutritional deficiencies.

Regular physical activity also reduces the risk for many diseases, as well as helps control weight and strengthens muscles, bones and joints. For older adults, it can also reduce the risk for falls. For children and adolescents, regular physical activity can help with muscular strength, anxiety and stress and self-esteem.

People of all ages and abilities who are generally inactive can improve their health by becoming active on a regular basis. Physical activity does not need to be strenuous to be beneficial; people of all ages and abilities benefit from participating in regular, moderate-intensity physical activity, such as 30 minutes of brisk walking five or more times a week. The CDC reports that engaging in regular physical activity is associated with taking less medication and having fewer hospitalizations and physician visits.

. . . Effective, evidence-based interventions are available.

Given scarce public health resources and the goal of achieving the best health outcomes for any given investment, evidence-based and cost-effective interventions will be given the highest priority in the Plan. Numerous federal, state, and local programs have shown significant changes in attitudes, behaviors and health outcomes in different settings. Steps to a Healthier Minnesota, a federally funded program, utilizes evidence-based interventions such as:

- Farmer's market coupons for WIC (Women, Infants, and Children) recipients to increase consumption of fresh fruits and vegetables in low-income women and children;
- District Wellness Policies in schools to provide more nutritious food choices for students; and
- Get Fit Twin Cities (a four-month fitness campaign) resulted in 250,548 hours of activity and 4.5 tons of weight loss among metro area participants.

. . . Policy and environmental interventions work.

The efforts leading to a decrease in both smoking rates and related chronic diseases are an excellent example of the effectiveness of a comprehensive approach that can be applied to chronic disease prevention.

In 1964, when the first U.S. Surgeon General's report on smoking and health was released, approximately 40 to 50 percent of U.S. adults smoked. People smoked almost everywhere. Ashtrays and lighters or matches were commonplace in peoples' homes, in businesses

and in public places. When people entertained it was not unusual for them to have cigarettes available for their guests. Tobacco ads on television and radio were quite common; celebrities endorsed cigarette brands.

The Surgeon General's report served to raise awareness and educate people about the causal relationship between smoking and lung cancer and emphysema. Numerous education and awareness raising initiatives followed the report and continue today.

Policies related to the marketing and advertising of tobacco products which resulted in a voluntary ban on broadcast advertising of cigarettes were first implemented in the late 1960s. In 1975 Minnesota became the first state to pass a clean indoor air act banning smoking in certain public areas. Numerous other tobacco policies have been implemented in Minnesota and throughout the country since then. Cigarette vending machines, which made it easy for youth to obtain cigarettes, were once plentiful. In an effort to make cigarettes less accessible to youth they were banned in Minnesota and other states. In another effort to reduce youth access, tobacco sales compliance checks were mandated in Minnesota in 1997.

In the late 1990s, court cases and settlements between states and the tobacco industry to recover costs associated with smoking resulted in an infusion of funds that many states used to implement comprehensive community efforts to reduce tobacco use.

The result of this combination of efforts over the past 43 years has been a significant change in community norms around tobacco use and a significant decrease in both tobacco use and its related chronic diseases. The CDC estimates that approximately 20 percent of adults smoke today – a rate about one half of that in 1960.
Many of the strategies that led to the significant changes in norms resulting in decreased tobacco use and chronic diseases begun at the local level. Their implementation at the local level made it easier later to implement similar strategies at the state and, sometimes, national levels.

This example stands as a model of the time and energy it takes to change norms and subsequently, peoples' behaviors and their health.

. . .Minnesota has a statewide public health infrastructure in place.

Minnesota has a strong, well-established state and local public health system, consisting of locally governed and delivered programs and services operating within a system of statewide guidelines and technical expertise provided by the Minnesota Department of Health. Community Health Boards (CHBs) are the governance structure of the local public health system and thus administer programs at the local level. State and local governments work in partnership, leveraging complementary roles and the strengths that each brings. If provided the resources, this system is capable of carrying out the large-scale, statewide effort envisioned in the Plan. Past successes of Minnesota's public health system — from reducing youth tobacco use to mobilizing rapid responses to outbreaks of infectious disease—are evidence of this capability.

A Model for Statewide Health Promotion

The model for the Plan includes components that design, implement and evaluate health interventions that lead to sustainable improvements in the health of communities and their populations. Together, these components create a sustainable model for health promotion programs. The model maximizes the impact of policy and environmental change by incorporating sustainability elements through the implementation process. The model also translates existing state plans into action and incorporates local perspectives and expertise so each community is working to address its own needs.

The model includes nine components.

The components reflect other health promotion programs such as the Minnesota Youth Risk

Behavior Program and Steps to a HealthierUS, a federally funded initiative that implements chronic disease prevention efforts focused on reducing the burden of diabetes, obesity, and asthma and addresses three related risk factors: physical inactivity, poor nutrition, and tobacco use and exposure. The model for the Plan goes further than Steps to a HealthierUS as it incorporates additional chronic diseases, conditions and risk factors. The nine components of the model are:

1) Community input into planning, implementation and evaluation process
   - Because community engagement influences program success and sustainability, the model stresses community engagement at all levels of the program.
   - Input from community collaborations is sought throughout the planning, implementation and evaluation phases of the project to increase the likelihood of program sustainability.
   - Community engagement promotes local solutions for communities.
   - Input from collaborators throughout the community helps programs adapt over time. Programs are responsive to community dynamics and change.
   - Input from community collaborations also ensures culturally appropriate program planning.

2) Adherence to the socio-ecological model
   - Individual health behaviors are the product of multiple levels of influence; adherence to the socio-ecological model recognizes that although individuals are ultimately responsible for their lifestyle choices, the systems that surround the individual have a large impact on an individual's behavior choices.
   - The model uses a population-based approach addressing each sphere of influence on individual behavior - individual, interpersonal, organizational, community and public policy.

3) Health promotion through four settings: community, schools, worksites, health care
   - Individuals receive clear, consistent health messages as part of their daily lives.

Examples of Activities in Four Settings

Community: Increase the availability of safe, accessible and affordable recreational facilities in the community and support the development and operation of community-based recreation centers for all people, including the elderly and minority populations.

Work Place: Adopt wellness policies that discourage on-site tobacco use and promote physical activity and healthy eating.

Schools: Increase opportunities for physical activity and healthy food choices in the K-12 school setting.

Health Care: Integrate primary prevention strategies that include physical activity, nutrition and reduction of tobacco and alcohol abuse in their model of medical care.

4) Local program advocate/staff
   - A well-positioned advocate for community-based health helps sustain programming.
   - An advocate creates linkages within or between organizations and helps assess the needs and motivations of key stakeholders.
   - An advocate also establishes non-traditional partnerships and reaches organizations not typically involved with health such as transportation, parks and planning departments.

5) Informed by evidence-based interventions
   - Evidence-based interventions as well as best and promising practices guide specific community level activities and effect change.
   - The CDC's Guide to Community Preventive Services is a useful tool for identifying evidence-based, cost-effective strategies.

6) Focus on common risk factors
   - While the goals of existing programs are often specific to a particular chronic disease, the predominant risk factors for chronic diseases are the same: physical inactivity, poor nutrition, alcohol abuse and tobacco use. Therefore, primary prevention strategies across chronic diseases and levels of government should focus on these risk factors in the community, workplace, schools, and health care system.
   - The model integrates programs at the state and local levels.
   - Integrated efforts to address common risk factors helps public health departments with already limited resources realize economies of scope and scale.
   - The model builds on the statutorily-required community health assessment and planning activities that are conducted by all CHBs in Minnesota by providing needed resources (e.g. staff, funding, evidence-based approaches) to tackle the health promotion issues and problems prioritized in their community health assessments.
   - The model includes translating existing state plans into action. MDH currently has state plans for the following chronic diseases (see Appendix for further details):
     - Cardiovascular disease (2004-2010)
     - Asthma (2002, updated May 2007)
     - Arthritis (1999, updated 2008)
     - Cancer (2005-2010)
     - Diabetes (2010)
     - Childhood Obesity (2007)
     - Obesity (entire population) (in development)

   The strategies presented in each plan are best practices to reduce chronic diseases and promote health across the population. Funding from the Plan will enable integration of plan strategies and increase efficiency and effectiveness of the state plans for all CHBs. Coordinated, synergistic efforts to promote the recommendations of the chronic disease plans to address these common risk factors will make the best use of limited financial and workforce resources, and will enhance partnerships with stakeholders.

7) Extensive and comprehensive evaluation linked to program planning
   - Evaluation activities at the community and state levels are crucial components in implementation and ongoing planning.
   - Evaluation is incorporated into each stage of program planning and implementation.
   - Evaluation of the effectiveness and impact of programming creates accountability for adhering to performance measures. Evaluation results are used to modify programming when necessary.
   - Core performance measures monitor all communities' progress toward the Plan's common long-term outcomes.
   - Examples of short-term, intermediate and long-term outcomes identified through evaluation that are expected to occur as a result of additional funding from the Plan include:

     Short-term:
     - Increased awareness of healthy behaviors
     - Increased physical activity
     - Increased consumption of healthy food

     Intermediate:
     - Improved blood glucose, blood pressure and blood cholesterol levels
     - Reduced obesity and overweight
     - Reduced alcohol and tobacco use

     Long-term:
     - Reduced prevalence of chronic diseases

- Reduced days of missed school and work due to chronic diseases
- Reduced disparities in health status and outcomes
- Reduced hospitalizations and emergency department visits

8) Policy, systems, and environmental change that supports healthy behaviors
   - The model utilizes approaches that focus on policy, systems and environmental change and are the result of a demonstrated need from the community.
   - As indicated by the CDC, "The next major step forward in chronic disease prevention and health promotion will come through the increasing and widespread use of policy and environmental change interventions that can impact large segments of the population simultaneously."

9) Accountability and oversight
   - *Local level*: The model directly supports local public health infrastructure with the majority of funding going directly to the communities for program support and intervention implementation.
   - *State level*: The State administers funding and provides technical training so the communities are prepared and can focus on program implementation and systems change. Evaluation efforts at the state level include comprehensive and extensive data collection efforts with adults and youth living in Minnesota communities, emphasizing the use of existing data resources, as well as training and technical assistance to local communities to support progress toward a set of common core performance measures.

Implementation of the Comprehensive Statewide Health Promotion Plan

To undertake a comprehensive and statewide effort, the Plan leverages and builds upon the strengths of the existing public health system to implement community level, systems, environmental and policy change.

In Minnesota, public health is a shared responsibility between state and local governments. Minnesota Statutes Section 144.05 describes the commissioner of health's general duties, and Chapter 145A describes the purpose of a community health board, which is the governance structure for local health departments. These two sections of statute highlight the interdependency of state and local governments in meeting their public health responsibilities.

The proposed roles, responsibilities and accountability of local public health and MDH for the Plan are consistent with the statutory responsibilities of each level of government.

Figure 1 depicts the intended outcome of the Plan. A general logic model that describes the inputs, actions, outputs and outcomes of the Plan appears in Table 1.

Local Public Health

Minnesota's local public health system is comprised of 53 Community Health Boards that serve the entire state. All CHBs are responsible for carrying out a standardized set of essential local public health activities, as well as identifying and addressing priority health needs in their communities.

One major area of CHB responsibility is promoting healthy behaviors and healthy communities – by implementing evidence-based, community-wide interventions that are based on involvement of community members and that address issues identified through a systematic assessment and prioritizations of the community's health needs.

Recent assessment and prioritization data submitted to MDH by CHBs indicate that:
- 96 percent identified alcohol, tobacco and other drugs as priority issues;
- 98 percent named issues within chronic diseases as priorities; and
- 87 percent identified overweight/obesity,

including nutrition and physical inactivity, as priorities.

However, lack of resources has prevented CHBs from undertaking programs to address these priority health issues. For example, in 2006:

- 19 percent reported having a program to address diabetes;
- 30 percent had programs to address cardiovascular disease and stroke;
- 46 percent had implemented programs to address nutrition;
- 47 percent had implemented programs to address drug use other than alcohol;
- 55 percent had implemented programs to increase physical activity
- 53 percent had implemented programs to reduce inappropriate alcohol use; and
- 67 percent had implemented programs to reduce tobacco use.

Local Roles and Responsibility

CHB roles in the Plan are consistent with the essential local public health activities related to promoting healthy communities and healthy behaviors which are to:

- Engage community partners through (a) collaborative assessment and prioritization, (b) coalition building, (c) community readiness, (d) empowerment and (e) decision making.
- Based on community assessment, develop community health action plans to address physical activity, nutrition, tobacco, alcohol and other drug use.
- Conduct evidence-based, culturally sensitive programs, and disseminate information on services and resources to promote healthy behaviors and communities.
- Inform and educate different audiences, e.g., general public, providers and policy leaders, about healthy communities and population health status.
- Support the development and enforcement of policies, and encourage cultural norms that promote healthy communities.
- Participate in decisions about community improvement and development to promote healthy behaviors and communities.
- Promote the optimum quality of life, e.g., healthy growth, development, aging, and management of chronic diseases across the lifespan.
- Identify and address the needs of vulnerable populations and those experiencing health disparities.

Local Accountability

Recent joint state and local work has resulted in a performance measurement and reporting system that collects annual information from local health departments (the Planning and Performance Reporting Measurement System or PPMRS). To the extent possible, this existing system will be used to track accountability and project success of the Plan.

Minnesota Department of Health

MDH provides administrative and program support for local public health departments and plays an important role in promoting the adoption or application of research findings into their programs and practices. This is both critical to and consistent with Minnesota's state-local public health partnership model. In this regard, MDH has a long history of involvement in health promotion and the prevention of chronic diseases.

MDH established the Health Promotion and Chronic Disease (HPCD) Division in 2002. This brought together risk behaviors (physical inactivity, poor nutrition, alcohol abuse and tobacco use) and chronic diseases (cancer, heart disease and stroke, diabetes, asthma, arthritis and obesity).

State Roles

MDH provides state-level oversight and guidance of many federally funded programs that are administered at the local level; administers and implements categorical programs; and provides health data, content expertise, technical expertise, training, tools and consultation to local public health departments and other state and local partners who work to achieve Minnesota's public

health goals. Examples of how these roles might relate to the Plan:

- *BRFSS*: Expand existing surveillance mechanisms at MDH to collect representative Behavioral Risk Factor Surveillance System baseline data for a number of adults (to be determined) within each intervention area, and repeat such assessments on an annual basis.

- *Minnesota Student Survey*: Work with the Minnesota Department of Education to collect representative baseline data from the Minnesota Student Survey middle and/or high school students within the intervention areas, and repeat such assessments on at least a biennial basis.

- *Existing data sources*: Identify existing data sources that can be used to design and monitor the Plan's interventions.

That Plan would utilize uniform data collection methods to ensure data analysis comparisons can be made across CHBs.

State Responsibilities

Administrative and fiduciary responsibilities:
MDH would have administrative and fiduciary responsibility for the Plan. MDH would create a team to oversee the program including distribution of funds; administrative reporting and evaluation activities; and the provision of technical assistance and support for program activities. All funded activities would coordinate with and reinforce, but not duplicate, related federal, state and local activities already in place.

Policies:
Policy and systems change occurring at the state and local levels has the potential to impact all Minnesotans. For this reason, the state can be a leader in developing such policies and encouraging policy and systems changes at both the state and local levels.

State Accountability
MDH would ensure that the Plan meets and addresses all outlined short-term, intermediate and long-term objectives by coordinating the statewide evaluation and by providing local evaluation technical assistance.

MDH would supply biennial program and fiscal reports.

Funding

To fully analyze the cost implications of this plan and to identify a funding strategy that supports short-term to long-term objectives as well as the complexities of funding sources, more time would be needed. However, we can estimate that, based on the CDC Steps to a HealthierUS model which funds 40 communities across the country to address health promotion and chronic disease prevention, the Comprehensive Statewide Health Promotion Plan would need approximately $26.5 million yearly to achieve measurable improvements in the behaviors and health of Minnesotans. CDC utilizes an estimated cost of $3.89 per person for comprehensive health promotion interventions. This figure is a midline cost projection. The amount of $26.5 million was derived by allocating a base to CHBs plus population.

MDH would ensure that an adequate percent of funds would be distributed annually to the local level to support staffing, consultants, contractors, materials, resources, travel and associated expenses to implement and evaluate intervention activities. The remaining funds would be used by MDH to support the local level in technical assistance, evaluation and staffing.

The method of distributing funds will be determined by the appropriate stakeholders upon plan approval.

Figure 1: Comprehensive Statewide Health Promotion Plan

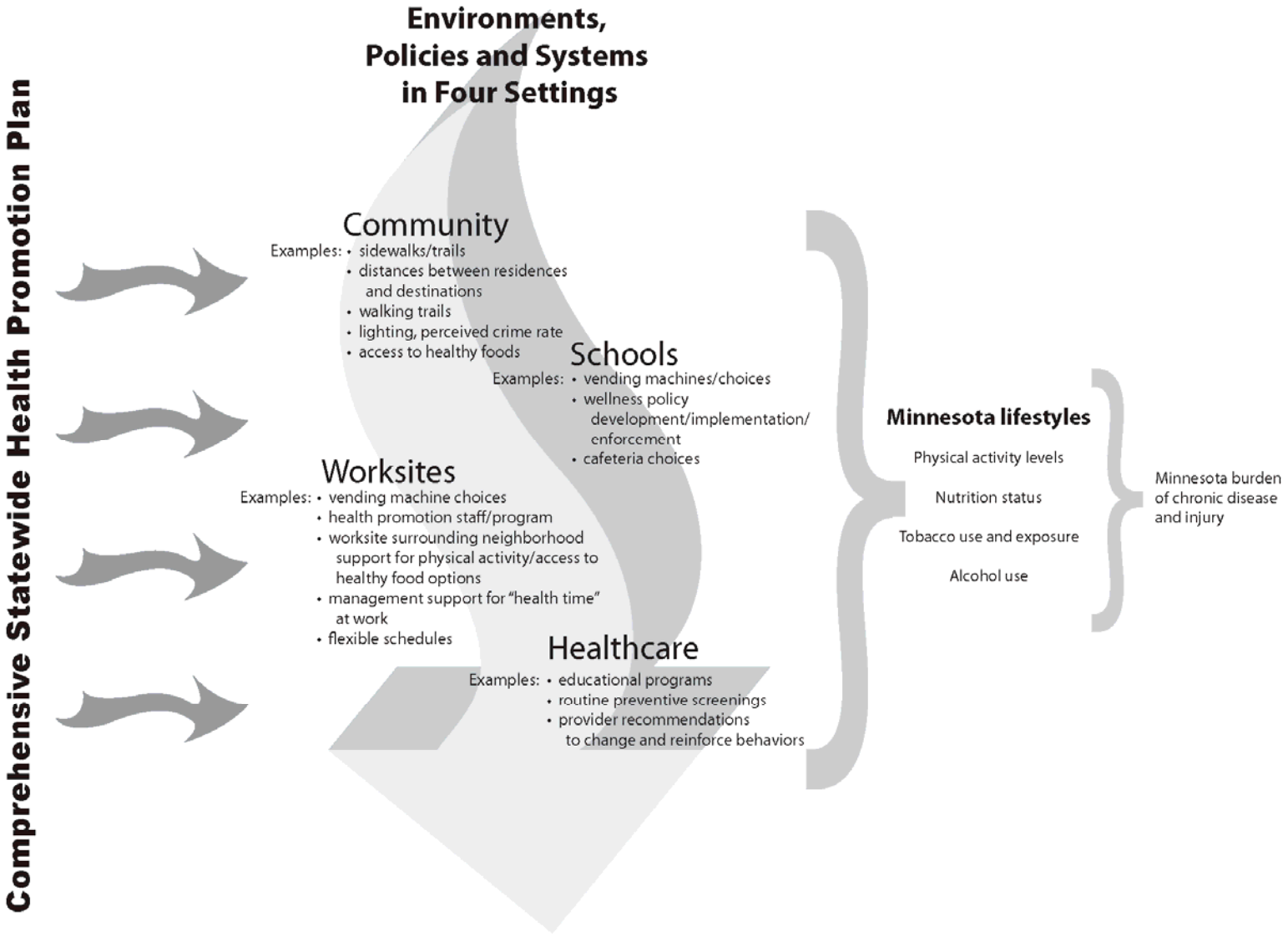

Table 1: Comprehensive Statewide Health Promotion Plan Logic Model

Inputs	Activities	Outputs	Short-term outcomes	Intermediate outcomes	Long-term outcomes
Funding State and Local Public Health Staff State Leadership Team Community Consortia State and Local Partners Media Public Health Evidence Base	Engage and educate communities, schools, worksites, and health care providers Assess current health promotion efforts in community Establish/enhance health promotion programs currently in place Conduct awareness and media campaigns Promote walking and other physical activities Promote healthy eating Increase access to healthy foods Promote and implement tobacco cessation programs Promote and implement responsible use of alcohol programs Promote reductions in environmental tobacco smoke	Community engagement Increased consumer awareness, knowledge, skills Increased teacher awareness, knowledge, skills Increased provider awareness, knowledge, skills Exposure to health messages Feasible policy and environmental change identified	Enhanced opportunities for physical activity Increased access to high quality foods Consumers empowered to make healthy lifestyle decisions Changes in provider system Policy and environmental changes implemented Consumers empowered to seek appropriate and quality health care services and effectively self manage chronic conditions	Improved nutrition Increased physical activity Reduction of environmental tobacco exposure Improved risk management Increased use of appropriate preventive health services Increased quality of care	Reduction of overweight and obesity Reduction of chronic disease prevalence

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Appendix - Existing Minnesota Chronic Disease Plans

Chronic Disease Plan	***Funding***	***Description***	***Components/Goals***	***Implementation***
Minnesota Heart Disease and Stroke Prevention Plan	Plan development funded by a cooperative agreement with Centers for Disease Control (CDC)	Plan developed with input from over 150 people across the state during a two year period in order to improve cardiovascular health for all people in Minnesota.	Primary objectives include: -Develop infrastructure and capacity to promote cardiovascular health -Prevent development of risk factors, recurrence, complications, disabilities, and mortality -Detect and treat risk factors -Eliminate health disparities	-Created twelve action plans intended to identify specific components and steps for implementation. *-However, there is not adequate funding to implement the action plans*.
Cancer Plan Minnesota	CDC funds MDH infrastructure. American Cancer Society, Mayo Clinic Cancer Center and U of M Cancer Center funds staff support. Health plans help support annual cancer summit.	Plan developed over a two year period with initial leadership provided by the Minnesota Department of Health and the American Cancer Society. A 32-member Steering Committee guided the process, and six working groups involving more than 150 individuals crafted the goals and objectives of the plan.	Twenty-four objectives, primary objectives include: -Increase tobacco excise tax and expanding clean indoor air policies; -Reduce disparities in screening and treatment; -Improve access to information about services for cancer patients and their families'; and -Increase colorectal cancer screening	-Initiated several new projects with small amounts of seed money*, but limited in scope*. -Launched and promoted new website that links cancer patients and their families with local resources. -Worked with American Indian tribes on intertribal dialogue for action on colorectal cancer. -Helped support passage of Freedom to Breathe.
A Strategic Plan for Addressing Asthma in Minnesota	Seven year (through 2009) grant from CDC	Coordinated statewide plan developed with input from public and private representatives in clinical care, education, environment, housing, data, government, public policy, and public	Primary objectives include: -Prevent and reduce exposure to indoor environmental triggers -Increase number of schools that provide appropriate support	-Coordinated statewide Minnesota Asthma Coalition -Developed and provided on-line Interactive Asthma Action Plan -Developed Coach's Asthma Clipboard Program -Conducted 30 trainings for more

		health. Plan includes strategies for reducing the impact of asthma in Minnesota. Over 100 individuals, again representing a broad array of expertise, contributed to the process.	-Increase the number of local public health agencies engaging in asthma activities.	than 900 school personnel on "Managing Asthma In Minnesota Schools" -Prepared asthma data reports -Funded successful home environmental intervention projects -Promoted Air Quality Index.
Minnesota Diabetes Plan	Development and implementation funded by a CDC cooperative agreement to the Minnesota Department of Health's Diabetes Program	Plan developed with assistance of over 350 members of the Minnesota diabetes community to provide vision for creating a healthier future by dramatically reducing the impact of diabetes. Plan urges involvement in achieving vision by taking action on the Plan's goals and recommendations.	Primary objectives include: -Community Health Promotion; -Health Care Delivery and Professional Issues; -Diabetes Education and Support Issues; -Financial and Resource Issues; and -Diabetes Data Assessment and Communication.	-Nearly 50 implementation examples recorded on website. *-Due State Plan Coordinator position loss, Plan promotional activities decreased.* -Minnesota Diabetes Steering Committee, a statewide advisory group, continues to move implementation forward. -Minnesota Diabetes Program monitors progress and is planning evaluation.
Tobacco Prevention and Control (TP & C)	State legislature towards local grants and CDC for state infrastructure	Strategic plan developed in collaboration with numerous stakeholders. TP & C operates local grant programs aimed at reducing youth exposure, creating tobacco-free environments, building capacity to reduce tobacco-related disparities in American Indian community, and promoting cessation among women of childbearing age.	Primary objectives include: -Prevent initiation of tobacco use among young people -Eliminate exposure to secondhand smoke -Promote quitting among adults and young people -Identify and eliminate disparities in tobacco use	-Implemented local grant activities in each of the goal areas. *-Not had the infrastructure (or the grant funding) to effectively reach out to a broad spectrum of local public health agencies with our programs.*
Arthritis in Minnesota – A Working Plan for Action	Centers for Disease Control and Prevention	Planned (and current update) developed in consultation with stakeholder organizations and individuals and in collaboration with state and local partners. Plan intends to expand availability and participation of people with arthritis in	Primary objectives include: -Develop and maintain data and surveillance -Implement health communications strategies -Continue to expand community implementation of evidence-based self-	-Successfully implemented surveillance systems *but unable to access data related to quality and costs of care and unable to impact policy and systems in this area.* -Implemented health communications campaigns but *due to decreasing grant funds, unable to*

		evidence-based arthritis and chronic disease self-management and exercise programs shown to decrease pain and health care costs among participants.	management programs -Promote policy and systems change	*provide in future*. -Maintain a website with information and resources. -Increased availability of evidence-based self-management programs, *but only reach a portion of population that might benefit due to lack of resources at local level.*
Obesity and Childhood Obesity Plans (in develop-ment)	Partially funded by National Governors Association and Robert Wood Johnson Foundation	In June 2006, the Commissioner of Health convened the Minnesota Task Force on Childhood Obesity with the Commissioners of Human Services and Education to study and make recommendations for reducing the rate of obesity among children in Minnesota. Task Force was comprised of representatives of key organizations and stakeholder groups throughout the state engaged in addressing the health of youth.	Four focus areas include: -Encourage Healthy Eating Habits; -Increase Physical Activity; -Create Healthy Environments; -Increase Monitoring and Measurement.	Not implemented.