

Reducing Health Care Expenditures through Prevention in Minnesota

Prepared for the Health Care Transformation Committee of the Minnesota State Legislature by the Minnesota Department of Health

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Introduction

- * Approximately 70 Minnesotans die each day from chronic diseases
- * Chronic diseases are among the most **prevalent, costly, and preventable** of all health problems
- * Most effective approach to improving health and reducing burden of chronic diseases is to address four risk factors:

Physical inactivity	Poor nutrition
Alcohol abuse	Tobacco use

- * Current generation of children is first generation in two centuries that has a shorter life expectancy than their parents



The Rise in Health Care Costs

* Annual US Health Care Costs

1980 = \$245 billion or \$1,066 / person	2001 = \$1.4 trillion or \$5,035 / person	2005 = \$2.0 trillion or \$6,697 / person
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* Exponential growth in costs over past two decades can be attributed to:

- Exposure to multiple risk factors
- Dramatic increase in percent of population over age 65
- Health care technology
- Inflation

* Chronic disease accounts for 75-83% of total annual health care spending



Investing in the Future...Now

* Plan for prevention

- Prevention approaches need to be population-based
- It took more than two decades to reach current chronic disease levels
- Effective prevention programs must include immediate **and** sustained burden reduction components

* Invest now in prevention for future reductions of costs associated with multiple chronic disease

- Worksite Wellness Programs
 - Return on investment is \$3 to \$6 per dollar spent
 - Can be immediately implemented with rapid results
 - Fewer employee sick days, fewer accidents, higher morale, and lower job turnover



Chronic Disease Concerns in Minnesota

- * Burden of disease
 - Economic burden
- * Prevalence of risk factors
- * Disparities
- * Aging population
- * Rising health care and other associated costs



How Do We Know Prevention is Effective?

- * Strategies for health promotion and disease prevention
 - Socio-ecological model
 - Policy, systems, and environmental change
 - Population-level behavior change
 - Health outcomes and cost savings
 - Short-term changes – worksite
 - Long-term changes – all settings



Resources for Evidence-Based Interventions

* Community Guide

- meta-analysis of evidence-based interventions

* Partnership for Prevention

- set priorities for action based on burden and evidence of what is effective
- Health Policy Priorities
- Seven Key Action Steps and Site Specific details

Health Policy and Priorities

Enhance physical education in schools

Increase access to places for physical activity

Promote healthy foods in schools

Increase access to healthy foods in communities

Make public places and workplaces smoke-free

Increase the price of tobacco products

Ensure access to clinical preventive services



What is Steps to a HealthierMN?

* Initiative from the Department of Health and Human Services

* Identifies and promotes programs that encourage small behavior changes to foster healthy behaviors, prevent disease, and reduce disparities in health care

* Goal

- To help Americans live longer, better, healthier lives by reducing the burden of diabetes, overweight, obesity, and asthma by addressing physical inactivity, poor nutrition and tobacco use



Steps Success Stories

- * **Community:**
 - Rochester Fit WIC program
 - Physical activity initiative aimed at preschool children and parents of WIC services
- * **Schools:**
 - St. Paul Public Schools Breakfast program
 - Based on survey results, importance and availability of breakfast promoted. Bus stops also moved to make cafeteria more accessible to students
- * **Worksite:**
 - Minneapolis Step It Up Pedometer Challenge
 - Six-week walking challenge for City employees
 - 85% of participants indicated being more physically active because of the Challenge
- * **Health Care:**
 - Diabetes Prevention Program (DPP)
 - Lifestyle intervention at pre-diabetes stage
 - 58% reduction in 3-year onset of diabetes



Steps to a HealthierMN Program Outcome Measures (O)

- O-1 Increased knowledge and awareness about healthy behaviors.
- O-2 Increased knowledge about appropriate preventive screenings.
- O-3 Increased physical activity and healthful eating for children and adults.
- O-4 Improved access to and quality of clinical services for asthma, diabetes, and tobacco cessation.
- O-5 Increased identification of persons with pre-diabetes and diabetes.
- O-6 Improved self-management of asthma and diabetes.
- O-7 Measurable improvements in physical activity, healthful eating, and tobacco use.
- O-8 Slowed upward trend of overweight and obesity in Steps communities.
- O-9 Reduced hospitalizations due to asthma exacerbations and diabetes complications.
- O-10 Improved health-related quality of life.



Steps to a HealthierMN

Baseline Data:

Prevalence of Overweight or Obesity

	Overweight or Obese Adults (BRFSS '05)	Overweight Students (YRBS '07)
Minneapolis	55%	14%
Willmar	61%	10%
Rochester	59%	8%
St. Paul	59%	n/a



BRFS: Behavioral Risk Factor Surveillance System

YRBS: Youth Risk Behavior Survey

Legislation

- * Legislation passed in 2007 calls for the creation of a plan to fund and implement comprehensive statewide health promotion
- * To be developed in consultation with SCHSAC and executive office of MDH
- * Legislation specifics:
 - Sustainable, long-term approach to promote population health
 - Cost-effective, evidence-based strategies
 - Address obesity, physical inactivity, tobacco, and substance abuse
 - Funding based upon size of population served



The Plan

- * Addresses **risk factors** for premature and preventable deaths, decreased quality of life, and financial and economic costs resulting from chronic diseases through four settings:
 - Community
 - Worksites
 - Schools
 - Health Care
- * Utilizes proven techniques to **improve** population health and **reduce** chronic disease incidence and prevalence
- * Incorporates expert knowledge from the state and local level



A Model for Statewide Health Promotion

- * Community input into planning, implementation and evaluation
- * Adherence to socio-ecological model
- * Health promotion in four settings: community, schools, worksites, health care
- * Local program advocates
- * Informed by evidence-based interventions
- * Focus on common risk factors
- * Extensive and comprehensive evaluation linked to program planning
- * Policy, systems, and environmental change that supports healthy behavior
- * Accountability and oversight



Implementation

- ★ Local Public Health
 - Background
 - Roles and responsibility
 - Accountability
- ★ Minnesota Department of Health
 - Roles
 - Responsibility
 - Accountability



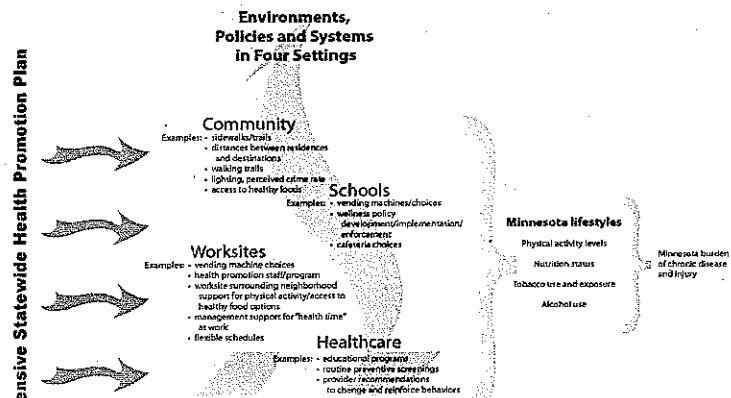
Comprehensive Statewide Health Promotion Plan - Outcomes

- ★ Short-term (1-3 years)
 - Increased awareness of healthy behavior
 - Increased physical activity
 - Increased consumption of healthy food
- ★ Intermediate (3-5 years)
 - Improved blood glucose, blood pressure and blood cholesterol level
 - Reduced obesity and overweight
 - Reduced alcohol and tobacco use
- ★ Long-term (10+ years)
 - 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
- ★ Transformative
 - Changing norms



Comprehensive Statewide Health Promotion Plan – Community Schematic

Figure 1: Comprehensive Statewide Health Promotion Plan



Funding

★ Estimated at \$26.5 million yearly to achieve measurable improvements in the behaviors and health of Minnesotans

- Estimate based on Steps to a HealthierUS model with cost of \$3.89 per person for comprehensive health promotion interventions
- Derived by allocating a base to CHBs plus population
- Adequate percent of funds distributed to the local level to support staffing, consultants, contractors, materials, resources, travel and associated expenses to implement and evaluate intervention activities
- Remaining funds would be used by MDH to support the local level in technical assistance, evaluation and staffing



Big Picture

- ★ Prevention can reverse the current health and economic crisis of chronic disease, but it is a two-fold process:
 1. We must act **now** to stop the increasing burden of chronic disease.
 2. We must commit to long-term programs and policies that will decrease the burden of chronic disease in the **future**.

