CHAPTER 34
HEALTH PROMOTION AND
CHRONIC DISEASE PREVENTION

BOARD OF HEALTH ROLE AT A GLANCE

• Educate communities about chronic disease and health promotion and facilitate access to available community programs.

• Utilize available data and develop and implement needs assessment tools to assess chronic illness in the community; analyze information and develop targeted programs to promote behaviors that will increase overall quality of life and reduce the incidence of chronic illnesses.

• Work collaboratively with community agencies and residents to develop, implement and evaluate community-based health promotion and chronic disease prevention activities.

OVERVIEW

Much of the death and illness from chronic diseases can be reduced by addressing four major risk factors associated with chronic diseases: tobacco use, diet, activity patterns and alcohol use. These risk factors often originate in childhood and continue into adulthood.

The age-adjusted death rate for Massachusetts in 2003 was 810.2 deaths per 100,000 persons, a 9% decline since 1993 and a 1% decline from the previous year. (Please note: rates are age-adjusted to the 2000 U.S. standard population)

Three chronic diseases, heart disease, cancer and stroke, accounted for 56.1% of all deaths in the state in 2003.


The overall incidence of cancer has decreased in Massachusetts in recent years. This, however, is not true for all cancers.: While invasive breast cancer incidence decreased significantly by 2.5% per year over the last five years from 154.5 cases per 100,000 in 1998 to 138.4 cases per 100,000 in 2002 prostate cancer incidence increased by 0.5% per year from 180.0 cases per 100,000 males to 182.3 cases per 100,000 males over the same time period. There, however, was an overall decrease in prostate cancer from its peak incidence of 217.4
per 100,000 in 1992.


Causes of death vary by age, sex, race and ethnicity.

For example, lung cancer was the leading cause of death for residents ages 40 and older from 1998-2002. Breast cancer was the second leading cause of cancer deaths for females and colon/rectum cancer was the third. Prostate and colon/rectum cancers were the second and third leading causes of deaths for males. Source: Cancer Incidence and Mortality in Massachusetts 1998-2002: Statewide Report, (May 2005), DPH, Center for Health Information, Statistics, Research and Evaluation. The leading causes of deaths for Black non-Hispanics and Hispanics were heart disease and cancer in 2003. Death rates for both heart disease and cancer for persons 45-64 are highest among the Black non-Hispanic population.


Controllable risk factors for heart disease and stroke include management of blood cholesterol, blood pressure, diabetes, obesity and cigarette smoking.

• Coronary heart disease and stroke—the primary types of cardiovascular disease caused by smoking—are the first and third leading causes of death in the United States. More than 61 million Americans suffer from some form of cardiovascular disease, including high blood pressure, coronary heart disease, stroke, congestive heart failure, and other conditions. More than 2,600 Americans die every day because of cardiovascular diseases, about 1 death every 33 seconds.

• Cigarette smoking has been associated with sudden cardiac death of all types in both men and women.

• Smoking-related coronary heart disease may contribute to congestive heart failure. An estimated 4.6 million Americans have congestive heart failure and 43,000 die from it every year.

• The risk of stroke decreases steadily after smoking cessation. Former smokers have the same stroke risk as nonsmokers after 5 to 15 years.

Citation
According to the 2003 Massachusetts Behavioral Risk Factor Surveillance System (BRFSS) report, 32% of adults reported that they had been told by a health care professional that they had high cholesterol, approximately 23% of adults reported that they had been told by a health care professional that they had high blood pressure, 53% of adults reported a height and weight consistent with being overweight, and an estimated 6% of adults reported that they had ever been told by a doctor that they had diabetes. In addition, persons who engage in no physical activity are at higher risk for death from heart disease than are persons who engage in regular physical activity. Only 53% of adults reported participating in regular physical activity in the past month.

Source: A Profile of Health Among Massachusetts Adults, 2003: Results from the Behavioral Risk Factor Surveillance System, (December 2004), DPH, Center for Health Information, Statistics, Research and Evaluation.

In the 2003 Youth Risk Behavior Survey, current cigarette smoking (i.e., any smoking in the 30 days before the survey) decreased from 30% in 1999 to 21% in 2003. From the same survey, current alcohol use (i.e., any alcohol use in the 30 days before the survey) decreased from 53% in 2001 to 46% in 2003. The percent of students who ate five or more servings of fruits or vegetables per day decreased from 14% in 1999 to 11% in 2003 and 61% of students participated in aerobic exercise for 20 minutes three or more days in the 7 days prior to the survey.

Note: DPH no longer collects information on Osteoporosis.

Key public health strategies for chronic disease prevention include: community-based outreach, education, screening, and community mobilization for policy and environmental change to support healthy behaviors in schools, workplaces, healthcare sites and neighborhoods. Effective health promotion and chronic disease prevention activities begin early in life and continue through all life stages.

**BOARD OF HEALTH RECOMMENDED ACTIVITIES**

- Provide information and education to community residents and community providers on local food, health/medical care, health promotion and chronic disease prevention resources and activities (e.g. screenings, health fairs, workshops, education materials, public information campaigns, etc.).

- Review existing data sources and conduct community needs assessments (including focus groups, provider and resident surveys, evaluation of health status indicators, etc.).

- Advocate for policy changes at the local, state and federal levels and seek funding to support community health promotion and chronic disease prevention.
• Provide technical assistance and consultation to municipal employees, local worksites, schools, health and social service providers, coalitions, and other community groups working toward health promotion and chronic disease prevention.

• Serve as a catalyst to enhance linkages among community groups working toward health promotion and chronic disease prevention.

STATE RESOURCES

Health promotion and chronic disease prevention initiatives at the Department of Public Health (DPH) include:

The Massachusetts Department of Public Health funds 6 Regional Centers for Healthy Communities to provide support communities in the development and implementation of comprehensive health promotion and prevention activities. The Regional Centers are supported by the Bureau of Substance Abuse Services (BSAS).

The Division of Health Promotion and Disease Prevention has as its goal the promotion of health and the reduction of mortality and morbidity related to preventable diseases and conditions. Programmatic areas include healthy and disability, women’s health, men’s health, chronic disease prevention, nutrition and physical activity, and healthy aging. Each area maintains a focus on the elimination of health disparities and addresses relevant issues across life stages. [http://www.mass.gov/dph/fch/dhpdp.htm](http://www.mass.gov/dph/fch/dhpdp.htm)

The Massachusetts Women’s Health Network (WHN) provides free breast and cervical cancer screening and diagnostic services, and health education services to low income, uninsured women at over 90 locations throughout the state. At some locations, women can also receive free cardiovascular risk factor screening, diabetes screening risk reduction education, and healthy lifestyle interventions. [http://www.mass.gov/dph/fch/whn/index.htm](http://www.mass.gov/dph/fch/whn/index.htm)

The Men’s Health Partnership provides free screenings for prostate cancer, overweight and obesity, high blood pressure, high blood sugar [diabetes] and high cholesterol. The Men’s Health Partnership also links eligible men to primary care as well as to diagnostic services.

The 5-A-Day program, focuses on raising awareness about the importance of increasing fruits and vegetables in one’s daily diet. Programs provide information,
education and referrals through a variety of media as well as community-based activities.  [http://www.mass.gov/dph/fch/nutrition/5_a_day.htm](http://www.mass.gov/dph/fch/nutrition/5_a_day.htm)


The Massachusetts Diabetes Control Program (DPCP), focuses its efforts to decrease the burden of diabetes in Massachusetts through surveillance, education and quality assurance initiatives.  [http://www.mass.gov/dph/fch/diabetes/index.htm](http://www.mass.gov/dph/fch/diabetes/index.htm)

The Nutrition and Physical Activity Unit serves as a resource for MDPH and local communities on issues related to increasing opportunities for good nutrition and physical activity throughout the Commonwealth.  [http://www.mass.gov/dph/fch/nutrition/about.htm](http://www.mass.gov/dph/fch/nutrition/about.htm)

The Office of Healthy Aging (OHA) provides consultation and technical assistance on healthy aging and works to integrate elder health concerns into community-based prevention and health promotion efforts. [http://www.mass.gov/dph/fch/elderhealth/index.htm](http://www.mass.gov/dph/fch/elderhealth/index.htm)

The Office on Health and Disability (OHD) promotes the health and well being of people with disabilities and chronic conditions in Massachusetts. Programs within OHD are primarily focused on the needs and concerns of adults and young adults from across the state with a wide range of disabilities. [http://www.mass.gov/dph/fch/ohd/index.htm](http://www.mass.gov/dph/fch/ohd/index.htm)

The Massachusetts Heart Disease and Stroke Prevention and Control Program (HSPC) supports state and local efforts to decrease the burden of heart disease and stroke in Massachusetts. The program addresses the issues of disease prevention and identification, emergency response, and treatment, as well as the elimination of health disparities by influencing policy and systems changes throughout the state.

The Coordinated Food Stamp Outreach Program is a statewide outreach program to increase awareness of the Food Stamp Program and to encourage families and individuals that meet its income guidelines to apply for participation. The program, which includes statewide activities coordinated with local and regionally based activities, is a public-private partnership of the MDPH, the Department of Transitional Assistance and Project Bread. A statewide toll-free information line provides confidential screening services for the food stamp program and referrals to other food resources. [http://www.mass.gov/dph/fch/foodstamps.htm](http://www.mass.gov/dph/fch/foodstamps.htm)
The Center for Health Information, Statistics, Research and Evaluation monitors the health status of Massachusetts residents through collecting information on births, deaths, newly diagnosed cases of cancer, injuries, occupational conditions and illnesses, and health behaviors. Health Statistics and Research provides information that is essential for identifying local and statewide problems, while targeting and evaluating public health programs. Information is made available to the through publications, Community Health Network reports, the Massachusetts Community Health Information Profile (MassCHIP) electronic information service, and consulting and technical assistance.
http://www.mass.gov/dph/bhsre/bhsre.htm

The mission of Massachusetts Coordinated School Health Program (CSHP), is to assist schools in strengthening and integrating programs, services and resources fundamental to the healthy development and academic success of all students. This is accomplished utilizing the coordinated school health program model as a gold standard in the Commonwealth. Under this CDC cooperative agreement, Massachusetts Department of Education (MDOE) and MDPH have 2 goals: to build infrastructure and support by establishing public and private partnerships that develop, implement and support school health education and services, and child and adolescent health activities at the state and local level; and to reduce youth health risk behaviors relating to physical activity, nutrition and tobacco use that can result in chronic disease through the promotion of effective school policies, environmental changes and educational strategies in health and physical education at the local level.
http://www.mass.gov/dph/fch/schoolhealth/cshp.htm

Other state agencies and groups involved in health promotion and chronic disease prevention include:

- The Massachusetts Department of Education
  DOE monitors grants to school districts from state and federal sources that support comprehensive health education programs and substance abuse and violence prevention programs. http://www.doe.mass.edu/

- The Massachusetts Governor’s Committee on Physical Fitness and Sports
  The Committee has a legislative mandate to raise the awareness and fitness levels of all residents of the Commonwealth. DPH’s Health Promotion, Nutrition and Chronic Disease Prevention Unit provides staff and technical support in implementing committee activities, including an annual statewide fitness event, sponsorship of physical fitness and sports related legislation, and provision of
grants to agencies and individuals conducting research projects or implementing demonstration projects designed to increase the level of physical fitness among all residents of the Commonwealth.  http://www.govfitness.com/masssports/

FEDERAL RESOURCES

- The Centers for Disease Control and Prevention (CDC) has a mandate to prevent unnecessary death, disease and disability. CDC’s National Center for Chronic Disease and Health Promotion works with national, state, and local partners to translate prevention research into realistic programs that make a difference. CDC supports 33 Prevention Research Centers at universities around the country that develop and evaluate prevention strategies and assist communities in planning and evaluating their prevention efforts. These centers provide seed money to support state and local prevention initiatives. CDC funds many state prevention initiatives. The CDC administers the Preventive Block grant that funds many of the preventive activities through DPH. Another CDC-funded program is the Well Women Program that provides screening and education activities to women enrolled in Breast and Cervical Cancer screening programs throughout Massachusetts.  http://www.cdc.gov/prc/

- The Health Resources and Services Administration has four main Bureaus: Primary Health Care, Health Resources and Development, Health Professions, and Maternal and Child Health which all fund services to vulnerable and underserved populations.  http://www.hrsa.gov/

- The United States Department of Agriculture (USDA) administers several programs that provide food, nutrition education, and health care support to many Americans. The Center for Nutrition Policy and Promotion established in 1994 helps link scientific research with the nutritional needs of the American public. It publishes the A Dietary Guidelines for Americans@ and maintains and updates the Thrifty Food Plan which serves as the nutritional basis for determining Food Stamp Program benefits. Other USDA responsibilities include utilizing basic research and education to increase agricultural production as well as regulating food safety, promoting exports and expanding agricultural markets at home.  http://www.usda.gov/wps/portal/usdahome

The National Institute on Aging (NIA), one of the 27 Institutes and Centers of the National Institutes on Health leads a broad scientific effort to understand the nature of aging and to extend the healthy, active years of life. In 1974, Congress granted authority to form NIA to provide leadership in aging research, training, health information dissemination, and other programs relevant to aging and older people. Subsequent amendments to this legislation designated the NIA as the primary Federal agency on Alzheimers disease research.  http://nihseniorhealth.gov/
RESOURCES

DPH administers several statewide toll-free hotlines that provide a variety of information on health and chronic disease prevention information and resources. In addition, education and program information, materials, training, and technical assistance are available for most programs working with chronic disease prevention issues through the 6 Prevention Centers throughout Massachusetts.

Prevention Centers

Western Massachusetts Center for Healthy Communities
Cooley Dickinson Hospital.
489 Whitney Avenue, 2nd floor
Holyoke, MA 01040
☎ 413-540-0600
413-540-0340 (fax)
www.westernmasshealthycommunities.org

Central Massachusetts Center for Healthy Communities
A Program of LUK, Inc.
44 Front Street, Suite 280
Worcester, MA 01608-1733
☎ 508-438-0515
508-438-0516 (fax)
www.cmchc.org

Northeast Center for Healthy Communities
A Program of the Greater Lawrence Family Health Center
101 Amesbury Street, Suite 405
Lawrence, MA 01840
☎ 978-688-2323
978-975-7779 (fax)
www.nc4hc.org

Regional Center for Healthy Communities (serving suburban Boston and MetroWest)
Mount Auburn Hospital, Center for Community Health
552 Massachusetts Avenue, Suite 203
Cambridge, MA 02139
☎ 617-441-0700
617-441-0555 (fax)
www.healthiercommunities.org
Southeast Center for Health Communities
A Program of Health Care of Southeastern Massachusetts, Inc.
942 West Chestnut Street
Brockton, MA 02301
☎ 508-583-2350 / 1-800-530-2770
508-583-2611 (fax)
www.preventionworks.org

Greater Boston Center for Healthy Communities
A Program of the Medical Foundation
622 Washington Street, 2nd floor
Dorchester, MA 02124-3548
☎ 617-423-4337
617-282-3950 (fax)
www.tmfnet.org/rchc

Massachusetts Partnership for Healthy Communities
622 Washington Street
Boston, MA 02124
☎ 617-451-0049
617-282-3950 (fax)
www.tmfnet.org/partnership

Information and Referral Hotlines

FoodSource Hotline (800) 645-8333
Smoker’s Quitline (800) TRY-TO-STOP
Spanish Quitline (800) 8-DEJALO
Women’s Health Network (877) 414-4447

Clearinghouses

Massachusetts Tobacco Education Clearinghouse (617) 482-9485
Massachusetts Health Promotion Clearinghouse (617) 536-8012
also (800) 952-6637
Smoking and Health: Report of the Advisory Committee to the Surgeon General of the United States was a landmark report published on January 11, 1964, by the Surgeon General's Advisory Committee on Smoking and Health, chaired by the then Surgeon General of the United States, Dr. Luther Leonidas Terry, M.D., regarding the negative health effects of tobacco smoking. Although it was not the first such declaration or even the first declaration by an official of the United States, it is notable... Appendix II surgeon general's reports on the health consequences of smoking. 1. YEAR. Cigarette smoking is causally related to lung cancer in men; the magnitude of. Surgeon General of the Public Health Service. Consumption of Tobacco Products in. In this report, The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General, the Surgeon General has concluded that: 1. Many millions of Americans, both children and adults, are still exposed to secondhand smoke in their homes and workplaces despite substantial progress in tobacco control. Supporting Evidence. Levels of a chemical called cotinine, a biomarker of secondhand smoke exposure, fell by 70 percent from 1988-91 to 2001-02. Children who are exposed to secondhand smoke are inhaling many of the same cancer-causing substances and poisons as smokers. Because their bodies are developing, infants and young children are especially vulnerable to the poisons in secondhand smoke.