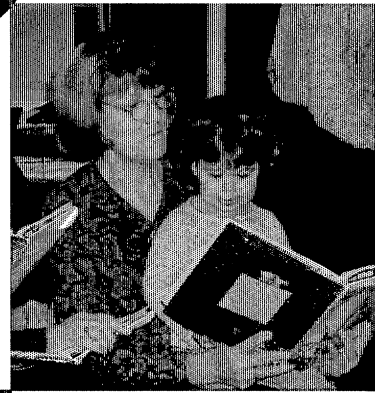


Cambridge Public Health Assessment 2002



Cambridge Health Alliance

A COMMUNITY OF CARING



Cambridge Health Alliance

1493 Cambridge Street • Cambridge, MA 02139 • 617.665.2300

January 15, 2002

Robert W. Healy
City Manager
Cambridge City Hall
Cambridge, MA 02139

Dear Mr. Healy,

The Cambridge Health Alliance proudly submits the Cambridge Public Health Assessment 2002. This report from the Cambridge Health Alliance represents the sixth annual submission to the City Council and provides information about the programs and services of the Cambridge Health Alliance and the Cambridge Public Health Department.

This year's assessment provides an overview of Alliance activities during 2001, including our public health efforts in responding to West Nile virus and developing a bioterrorism response for the City of Cambridge. The assessment also focuses on five key public health priority areas: child and adolescent mental health, asthma and indoor air quality, obesity prevention and physical activity, access to health care, and health of men of color.

I would like to take this opportunity to thank you for your continued support and for the support of the City Council. I would also like to recognize Harold Cox, our Chief Public Health Officer, and all of our public health staff for their terrific work during the course of the year, and in particular, for their leadership and tireless efforts since the tragic events of September 11, 2001. The work to ensure the safety and well being of our community has resulted in a new level of collaboration between the Cambridge Health Alliance and the City of Cambridge.

I hope you will again find the Cambridge Public Health Assessment 2002 a valuable resource in understanding and supporting the needs of Cambridge residents. We look forward to our continued collaboration with City Council in meeting the goals of our shared mission to improve the health of our city.

Sincerely,

John G. O'Brien
Chief Executive Officer



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Cambridge Health Alliance

This document was created by the Cambridge Health Alliance.

The information contained in this document was current as of our production date of January 15, 2002. Data presented in charts, graphs, and tables throughout this document are referenced by source and date, and represent the most recent available data.

We encourage the reproduction of the *Cambridge Public Health Assessment 2002* for use in any form and by any organization or individual seeking to improve public health.

Please visit our website at www.challiance.org for online access to this document. To receive a bound copy by mail, please call us at 617-665-3800.

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The Cambridge Health Alliance would like to acknowledge the leadership of the City of Cambridge for its advocacy of and commitment to public health.

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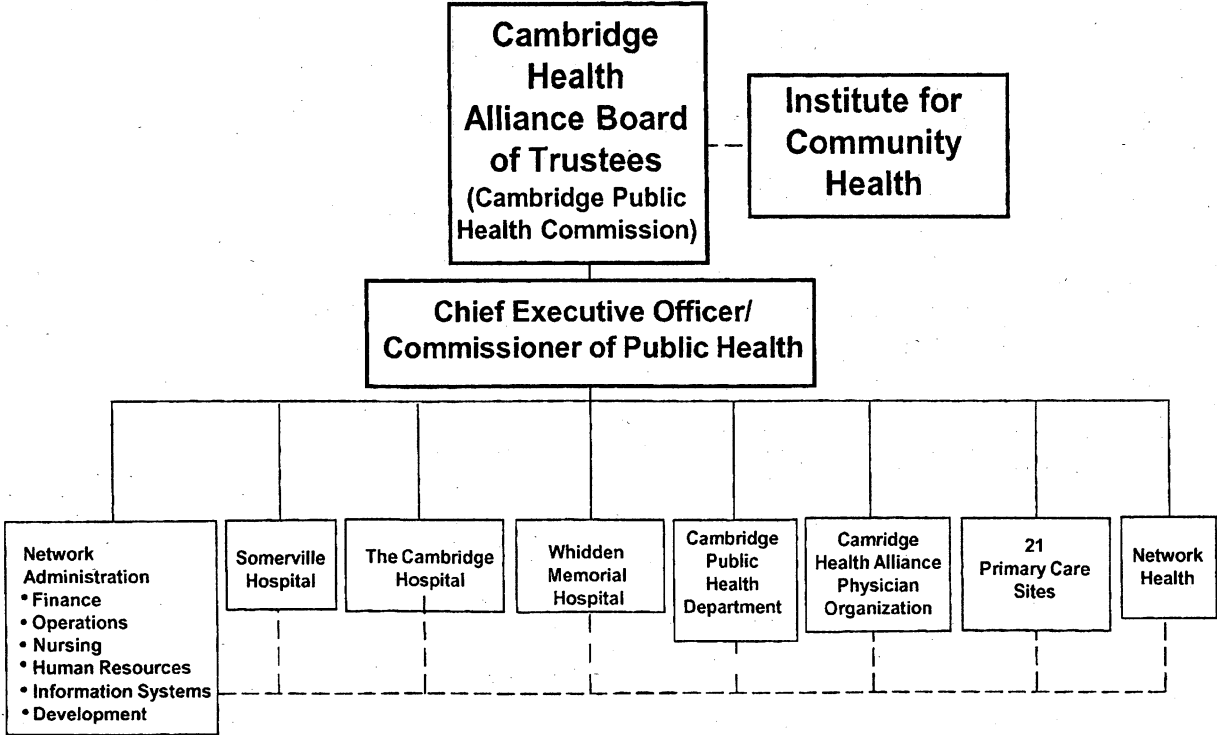
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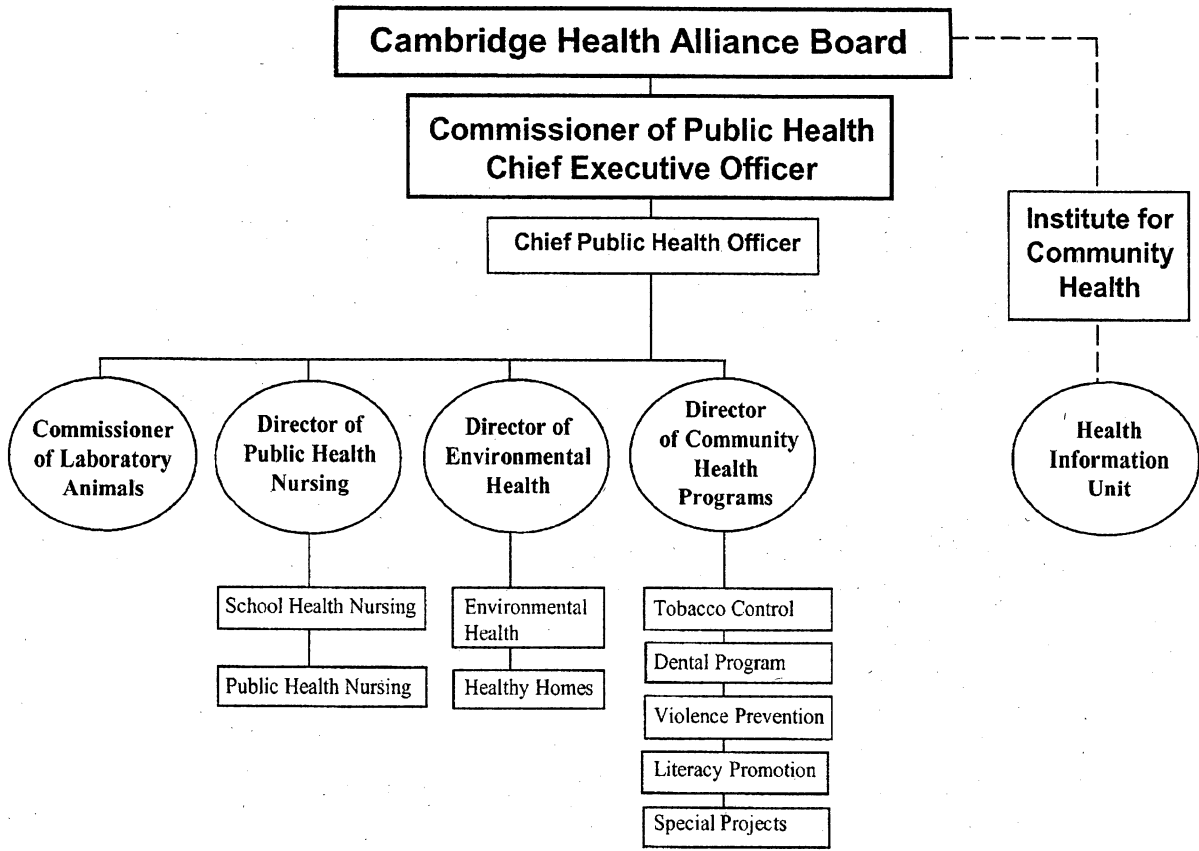
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Cambridge Health Alliance Organizational Structure





Executive Summary

The *Cambridge Public Health Assessment 2002* is the sixth annual report to the Cambridge City Council prepared and submitted by the Cambridge Health Alliance. This edition includes a review of Census 2000 as well as a review of 2001 accomplishments of the Alliance and the Cambridge Public Health Department.

Section 1: Census 2000

The demographics of Cambridge have changed dramatically since 1950, when 95% of Cambridge residents were white. Today, Cambridge is a vibrant city that has attracted people from diverse ethnic, racial, and cultural backgrounds. This chapter highlights the most significant changes in race, age, and households since 1990.

Section 2: Year in Review

In 2001, Americans experienced one of the most tragic times in the history of the United States. In the aftermath of the September 11 terrorist attacks and the anthrax bioterrorism events, emergency preparedness became a primary focus of the City of Cambridge and the Cambridge Public Health Department.

Cambridge Public Health Department

- **Emergency Preparedness.** For the past ten years, the Cambridge Public Health Department has been working actively with the local emergency planning committee (LEPC) to prepare for natural and human-made emergencies that could represent a major threat to the health and safety of residents. It is largely due to this work that the city was able to respond quickly and efficiently during the anthrax scare in fall 2001. The Hazardous Material Response Team (HazMat) responded to over 100 calls during this period. The city's response to potential bioterrorism threats was a well-planned, coordinated effort involving the city manager and the public health, police, fire, and emergency communications departments.
- **The Environmental Health Unit** enforces local and state public health laws, and coordinates local responses to public health concerns that relate to environmental, non-communicable agents. The work in 2001 primarily focused on West Nile virus; recombinant DNA; chemical, mineral, and biological exposures; indoor air quality concerns; asbestos protection activities; and childhood asthma.
- **The Public Health Nursing Program** focuses on communicable disease prevention and control; tuberculosis prevention, control, and treatment; and maternal-child home visiting services. The regulation of body art is a new responsibility.
- **School Health Nursing** provides on-site health care at the Cambridge Public Schools to ensure that all students reach their potential in a healthy fashion in the school setting. This entails providing first aid, medication administration, health education, and health counseling

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for students. School nurses are responsible for providing case management services, linking families to primary care providers, and advising school staff.

- **Community Health Programs** promote health and develop public health policy. Health promotion occurs in partnership with other Alliance departments and community-based organizations, and includes activities such as the Children's Dental Program, Cambridge Walks, the Men of Color Health Program, and the Agenda for Children. Public health policy development has occurred in the areas of tobacco control and domestic violence prevention.
- **The Laboratory Animal Commissioner**, a licensed veterinarian, oversees the care and use of laboratory animals used in research in Cambridge.

The Cambridge Health Alliance

The mission of the Cambridge Health Alliance is to improve the overall health status of the communities it serves. The Alliance serves a unique population from many nations and cultures.

Despite growing challenges in the health care environment, the Cambridge Health Alliance has been prosperous in the past decade. The Alliance has fought hard to obtain adequate reimbursement for providing care to the uninsured and has worked closely with state and federal officials to ensure that the financial safety net remains intact.

Network Health, the Alliance's statewide Medicaid managed care plan, had over 36,000 members by the end of 2001. Network Health's provider panel consists of approximately 1,000 primary care physicians and 8,600 specialists.

In July 2001, the Cambridge Health Alliance bought Whidden Memorial Hospital in Everett and 44 adult psychiatry beds located in Malden from Hallmark Health System.

Institute for Community Health

The Institute for Community Health is a partnership among three health care systems to improve the health of Cambridge, Somerville, and surrounding communities. The Institute was founded in 2000 by the Cambridge Health Alliance, CareGroup Healthcare System, and Partners HealthCare.

The Institute's research and education activities in the year 2001 included:

- A childhood overweight prevention project in partnership with the Cambridge Public Schools.
- A partnership with the Harvard Children's Initiative to produce a planning report on promoting the mental health of Cambridge children and adolescents.
- The development of a behavioral risk factor survey to identify links between personal health behaviors and chronic disease. The questionnaire is based on a survey from the Centers for Disease Control.

Section 3: Public Health Priorities

Mental Health of Children and Adolescents

For the past decade, community leaders, mental health professionals, and school personnel have become increasingly concerned about the mental health of Cambridge children and adolescents. Commonly observed mental health issues are behavioral problems at home and school, depression, aggression, attention deficit disorder, and drug use.

The Teen Health Survey (grades 9–12) and the Middle Grades Health Survey (grades 6– 8), which are administered on alternate years, provide valuable information about the health risk behaviors of Cambridge public school students, including depression, suicidality, substance abuse, violence, and sexual behavior. The surveys are sponsored by the Cambridge Public Schools, the Cambridge Department of Human Service Programs, and the Cambridge Public Health Department.

Collaborations among city agencies and institutions have led to some important community health work in 2001. In spring 2001, the Cambridge Public Schools received a three-year federal grant to increase counseling at the elementary schools. In fall 2001, the Institute for Community Health and the Harvard Children's Initiative began developing a series of recommendations for addressing the current mental health needs of Cambridge youth.

Meanwhile, Alliance mental health care providers continued to offer services and improve access to care, including linking children and their families to clinical and social services. Mental health is also a key component of the Alliance's Community Access Program (CAP). Program objectives include increasing early identification and treatment of mental health issues within the primary care setting, and promoting primary medical care for patients with severe, chronic mental illness.

Asthma and Indoor Air Quality

The number of people who suffer from asthma in the U.S. has more than doubled in the past twenty years. Asthma accounts for 500,000 hospitalizations nationwide each year, and is a common reason for student absence. Recognizing the importance of a coordinated approach for managing asthma care, the Cambridge Health Alliance has developed a multidisciplinary team to design and implement the Childhood Asthma Program.

Exposure to environmental triggers can initiate or exacerbate asthma symptoms. Poor indoor air quality can have short- and long-term negative health effects. Indoor air pollutants include tobacco smoke, carbon monoxide, cleaning solvents, pesticides, and radon.

The Environmental Health Unit provides indoor air testing and evaluation services in homes, public buildings, and at work sites. While a vast majority of indoor air quality cases in Cambridge have been associated with moisture and mold, other airborne pollutants have included emissions from adjacent businesses, excavation of hazardous wastes, and nearby construction activity.

Obesity Prevention and Physical Activity

Healthy People 2010, the national health goals, identified overweight and obesity prevention and physical activity promotion as the top two health priorities for the nation, in part because they are determinants of premature death and poor quality of life.

In spring 2000, the Cambridge Public Schools reported that 38% of its students age 10 to 14 were either overweight or at risk for overweight. According to self-reported data collected between 1994 and 1999, about 22% of all adults in Cambridge and Somerville are overweight and another 15% are obese.

The Cambridge Public Health Department and the Institute for Community Health, in collaboration with individuals and groups throughout the city, engaged in a number of obesity prevention activities in 2001. The Alliance also embarked on efforts to improve services to overweight children and their families. These projects reflected a range of promising strategies targeted at individuals, families, communities, and institutions.

Access to Health Care

Access to health care is essential for increasing quality and length of life and eliminating disparities in health status. Access to mental health care is also critical for all people.

The Cambridge Health Alliance has a longstanding reputation for its responsible and innovative approaches to improving access to health care. Alliance programs include the neighborhood health centers, Health Care for the Homeless, School Health Nursing, the Teen Health Center, and the Children's Dental Program. Other programs provide services in patients' homes, including House Calls for frail elders, Healthy Homes for children with asthma, and Newborn Home Visiting.

The Cambridge Health Alliance is also nationally recognized for providing culturally competent care to a linguistically, culturally, and racially diverse patient population.

Improvement goals through 2003 include developing and evaluating strategies for culturally competent care; adopting cultural competence best practices throughout the system; identifying health needs of specific smaller populations and developing programs to meet those needs; and improving cost effectiveness in delivery of culturally competent care.

In March 2001, the Cambridge Health Alliance received a \$1.2 million grant from the Community Access Program of the U.S. Department of Health and Human Services. The grant will fund the development of a permanent infrastructure for improving access to health care in Cambridge.

The goal of the Alliance's Community Access Program is to increase use of preventive health care and early intervention services, while decreasing costly and resource-intensive acute care. An important objective is to enroll individuals and families who are uninsured or underinsured in health insurance plans and link them to Alliance primary care providers. This effort will become even more critical if the economy continues to soften and more people lose their jobs.

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The mission of the Immigrant Health Improvement Project is to improve the health status of immigrants in the community. A key objective is to develop a systemwide strategy for building the cultural and linguistic competence of the Alliance.

Staff members involved in health promotion activities are renewing efforts to use alternative venues for health education opportunities. The Alliance has identified natural points of contact in the community for health education such as work sites, hair salons, and other places where people typically congregate.

Health of Men of Color

Nationwide, men of color are disproportionately vulnerable to heart disease, diabetes, lung, and prostate cancer, HIV/AIDS, homicide, stroke, and hypertension. The death rate due to heart disease, for example, is higher among black men than among any other racial or ethnic group. Similarly, the rate of HIV infection among black and Hispanic men is higher than among any other group.

These national trends are reflected locally. Based on morbidity and mortality data, men of color in Cambridge appear to be at greater risk for health problems than their white counterparts. However, Cambridge men of all races appear to be healthier than American men in general.

Cambridge, like many other communities, has sought to understand and eliminate health disparities. The Men of Color Health Program was established in 1993 to raise awareness about health, increase access to health services for men of color, and promote positive health behaviors. Since then, the Alliance has actively engaged men of color around these issues.

Section 4: Clinical Services of the Cambridge Health Alliance

This section provides an overview of the clinical activities of the Cambridge Health Alliance. The Alliance provides an extensive range of medical, psychiatric, and surgical services in its inpatient units and at over 20 primary care sites in Cambridge and Somerville. The section includes the number of patient visits, discharges, and deliveries for fiscal year 2001, and projections for fiscal year 2002.

Section 1: Census 2000

Introduction

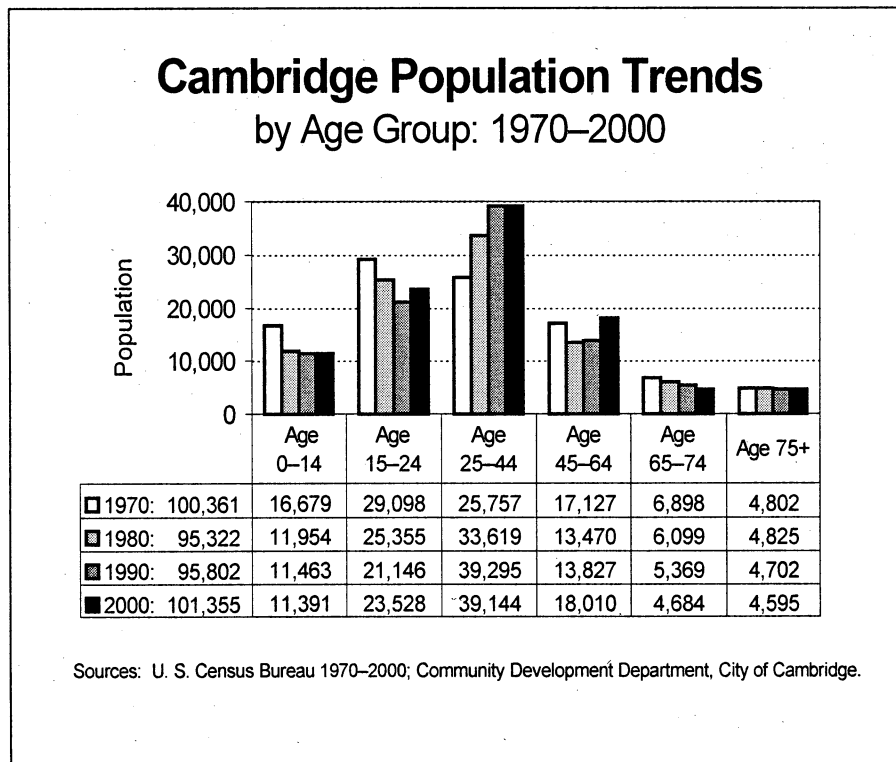
The demographics of Cambridge have changed dramatically since 1950. Half a century ago, 95% of all residents were white. Today, Cambridge is a vibrant city that has attracted people from diverse ethnic, racial, and cultural backgrounds. In 2000, African-Americans, Latinos, Asians, and other people of color comprised more than a third of the city's population.

In 1950, Cambridge was home to 20,000 more people than it is today. That year, renters occupied 77% of all housing units in Cambridge; in 2000, this figure dropped to 64%, an all-time low. The age distribution of Cambridge has also shifted significantly in the past 50 years. The baby boom generation born after the Second World War is the driving force behind this trend.

Population

In 2000, the City of Cambridge had a population of 101,355. Females accounted for 51% of all residents; males, 49%. The population of Cambridge increased 6.3% between 1980 and 2000 (Figure 1.1).

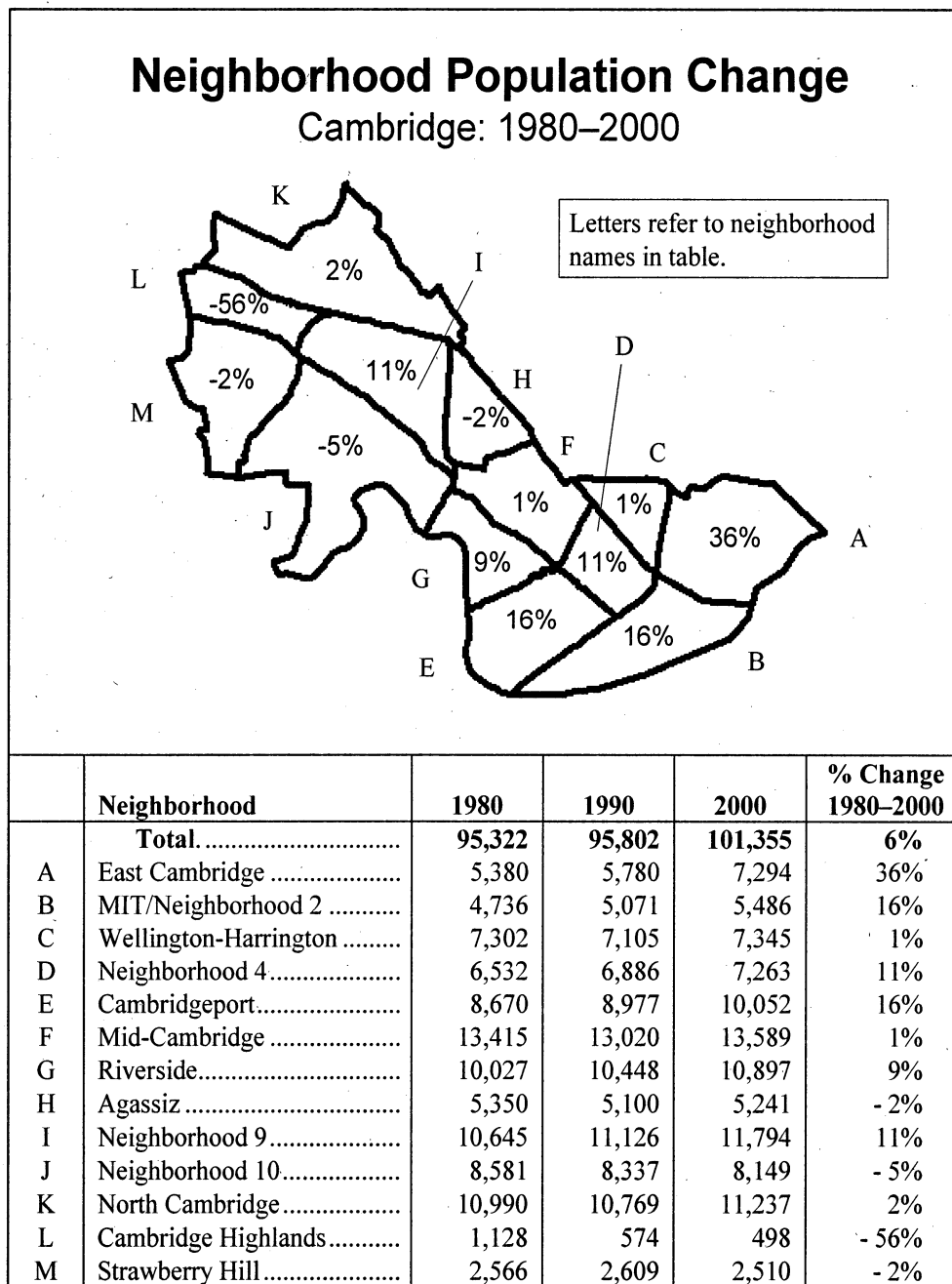
Figure 1.1



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Population shifts between 1980 and 2000 varied by neighborhood in Cambridge (see Figure 1.2). Neighborhoods along the eastern perimeter of the city experienced the greatest growth, while the western-most neighborhoods, along the Watertown and Belmont borders, experienced the greatest declines. Specifically, the combined populations of East Cambridge, the MIT neighborhood, and Cambridgeport increased 22% between 1980 and 2000, from 18,786 residents to 22,832 residents. During the same period, the combined populations of Cambridge Highlands, Strawberry Hill, and Neighborhood 10 declined 9%, from 12,257 residents to 11,157 residents.

Figure 1.2



Sources: U. S. Census Bureau 1980–2000; Community Development Department, City of Cambridge.

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Age

In 2000, adults between 25 and 44 years old comprised the largest proportion (39%) of the city's population, while seniors age 65 and older represented the smallest proportion (9%).

During the past three decades, the age stratification of the city has shifted noticeably (see Figure 1.1). In 1970, the oldest baby boomers were 24 years old; the youngest were six. At that time, children and young adults age 24 and younger comprised 46% of the Cambridge population, while adults age 25 to 64 made up only 43%. In 2000, however, children and young adults accounted for only 34% of city's population; while adults age 25 to 64 (including the middle-aged baby boomers) made up 56%. Today, children under age 18 comprise a smaller proportion of the total population in Cambridge than they did ten years ago, despite an overall population increase of 5,553 people since 1990 (see Table 1.1).

The senior population of Cambridge has declined over the past 30 years. In 1970, seniors age 65 and older comprised 12% of the city's population; today they account for 9%.

Table 1.1 Population Change by Age Group, Cambridge 1980–2000

Total Population	1980		1990		2000		Net Change 1980 to 2000	
	Number	%	Number	%	Number	%	Number	%
Total	95,322	100.0%	95,802	100.0%	101,355	100.0%	6,033	6.3%
0 to 17 years.....	14,985	15.7%	13,612	14.2%	13,447	13.3%	-1,538	-10.3%
18 years and older.....	80,337	84.3%	82,190	85.8%	87,908	86.7%	7,571	9.4%

Source: U. S. Census Bureau 1980–2000, Community Development Department, City of Cambridge.

Race and Hispanic Origin

The U.S. Census views Hispanic origin and race as two separate and distinct concepts. Hispanic origin reflects whether respondents have origins in Spain or other Spanish-speaking countries in the Western Hemisphere.

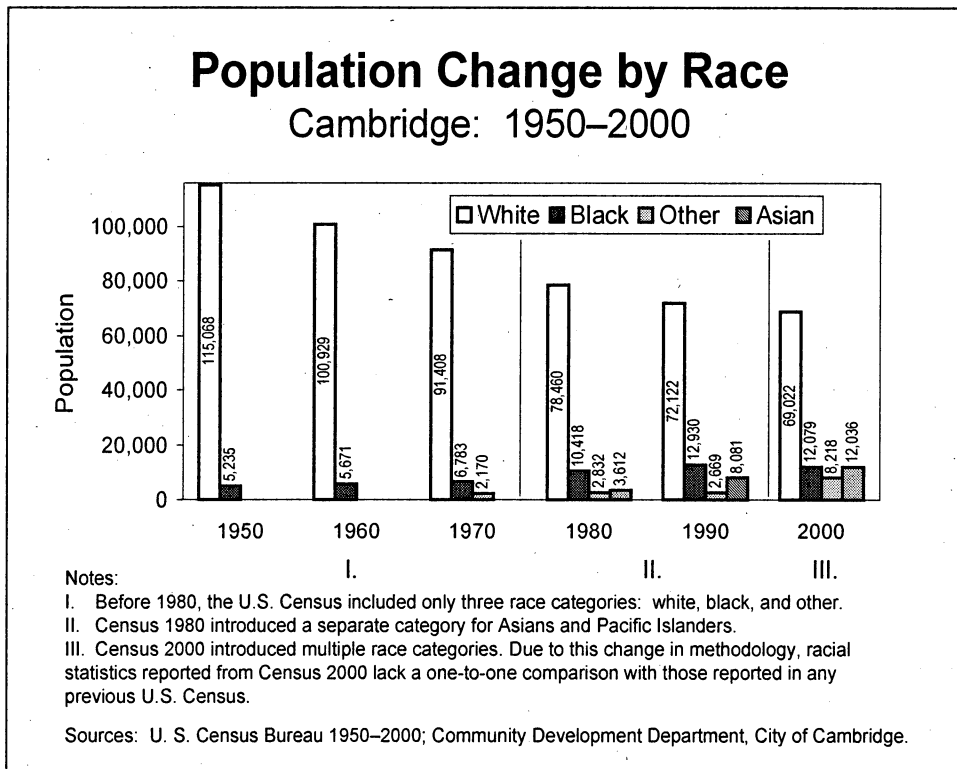
For Census 2000, a separate question on race asked respondents if they were white; black or African American; American Indian or Alaska native; Asian; native Hawaiian or other Pacific Islander; or "some other race." For Census 2000, the question on race differed from the one for the 1990 census in several important ways. The most significant change was that respondents were allowed to select more than one race category to describe their racial identities. While the introduction of multiple race categories has afforded a more accurate and complex portrait of diversity in the United States, it also means that Census 2000 data on race are not directly comparable with data from previous censuses (see Figure 1.3).

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In Census 2000, 95.4% of Cambridge residents reported only one race (see Table 1.2). The largest group (68.1%) identified themselves as white, followed by black or African American (11.9%); Asian (11.9%); native Hawaiian or other Pacific Islander (.1%); and some other race (3.2%). Only 4.6% of Cambridge residents reported two or more races.

Individuals (of any race) who identified themselves as Spanish, Hispanic, or Latino comprised 7.4% of the Cambridge population (see Table 1.2). Notably, 53% of children and adolescents under age 18 living in Cambridge identified themselves as Hispanic and/or non-white compared, compared to 33% of Cambridge adults age 18 and older.

Figure 1.3



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Table 1.2 Population by Race and Hispanic Origin for Cambridge: 2000

Race and Hispanic or Latino	Number	% of total population
RACE		
Total population	101,355	100.0%
One race	96,734	95.5%
White	69,022	68.1%
Black or African American.....	12,079	11.9%
American Indian and Alaska Native.....	290	0.3%
Asian.....	12,036	11.9%
Native Hawaiian and Other Pacific Islander.....	77	0.1%
Some other race	3,230	3.2%
Two or more races	4,621	4.6%
HISPANIC OR LATINO		
Total population	101,355	100.0%
Hispanic or Latino.....	7,455	7.4%
Not Hispanic or Latino.....	93,900	92.6%

Source: U.S. Census Bureau, Census 2000.

Households and Families

In 2000, there were 42,615 households in Cambridge, an increase of 9.6% from 1980.

Most of the growth occurred among non-family households, which rose from 21,421 to 25,020 between 1980 and 2000 (see Table 1.3).

Meanwhile, the number of family households in Cambridge, including single parent families, remained fairly static since 1980.

In 2000, families made up 41% of the households in Cambridge; and non-families, 59%. The majority of Cambridge households were maintained by people living alone (41%).

The second most common type of household consisted of married couples (29%), followed by households comprised of housemates/roommates (11%); unmarried partners (6%); and single parent families (6%).

What Is a Household?

Census 2000 defines a “household” as a person or group of people who occupy a housing unit. A “householder” is a person in whose name the housing unit is owned or rented.

A “family household” consists of a householder and one or more people living together in the same household who are related to the householder by birth, marriage, or adoption.

A “non-family household” consists of a person living alone or a householder who shares the home with only non-relatives (e.g., roommates, unmarried partner, foster child).

Source: U.S. Census Bureau, Census 2000.

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Table 1.3 Cambridge Households by Type: 2000

Household type	1980	1990	2000
Total households	38,836	39,405	42,615
Family households	17,415	17,575	17,595
Couples with children under 18	5,308	4,873	4,835
Couples without children under 18	6,855	7,304	7,573
Single parent families with children under 18.....	2,600	2,588	2,668
All other families	2,652	2,810	2,519
Non-family households.....	21,421	21,830	25,020
Person living alone.....	16,329	16,686	17,649
Roommates/housemates.....	5,092	3,465	4,686
Unmarried partners			
Opposite sex.....	--	1,378	2,123
Same sex ¹	--	301	562

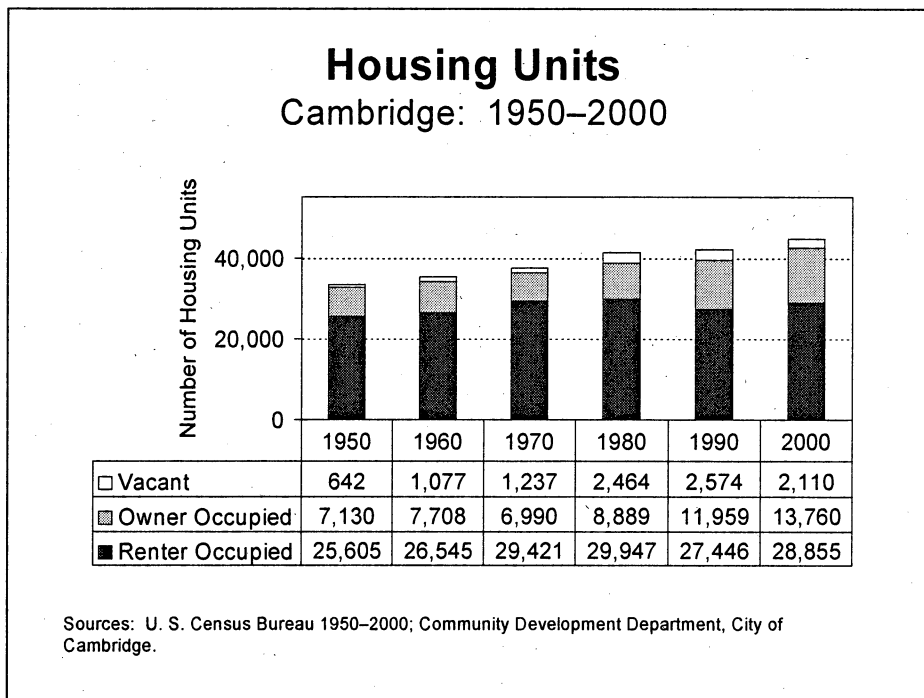
¹The U.S. Census Bureau does not consider "same sex unmarried partner" data from 1990 to be as reliable as 2000 data, due to data editing changes that occurred between the two censuses.

Source: U. S. Census Bureau 1980-2000, Community Development Department, City of Cambridge.

Housing Characteristics

In 2000, the City of Cambridge had a total of 44,725 housing units. Sixty-four percent of the units were renter-occupied; 30% were owner-occupied; and 5% were vacant (see Figure 1.4). During the past twenty years, the proportion of owner-occupied housing units in Cambridge has risen dramatically, from 21% in 1980, to 28% in 1990, to 30% in 2000.

Figure 1.4



Section 2: Year in Review

This section of the *Cambridge Public Health Assessment 2002* reviews the past year's accomplishments of the Cambridge Public Health Department, the Institute for Community Health, and other departments of the Cambridge Health Alliance.

The Cambridge Health Alliance (the Alliance), is an innovative network of hospitals, community health centers, and community-based programs. The Alliance includes the Cambridge Public Health Department, The Cambridge Hospital, Somerville Hospital, Whidden Memorial Hospital in Everett, Network Health, and primary care sites throughout the neighborhoods of Cambridge and Somerville.

The Alliance became a public authority in 1996, and maintains a unique relationship with the City of Cambridge through its public health and primary care functions. Its mission is to improve the overall health status of the communities it serves.

In 2001, the Alliance identified its vision for 2005: "The Cambridge Health Alliance is the premier academic public health care system in the nation." This vision statement encompasses each of the elements that contributes to the unique whole of this institution: the partnerships with leading academic institutions; the excellent health care provided at numerous sites; and the comprehensive public health services provided to the City of Cambridge.

CHAPTER 1: CAMBRIDGE PUBLIC HEALTH DEPARTMENT

The Cambridge Public Health Department, part of the Cambridge Health Alliance, provides public health services to the City of Cambridge.

The Cambridge Public Health Department exercises its statutory authority under Massachusetts General Laws, chapters 111, 112, and 114. John G. O'Brien serves as the Commissioner of Health, and delegates the department's operations to Harold Cox, Chief Public Health Officer. The public health department is advised by the Cambridge Public Health Subcommittee, the Joint Public Health Board, and the City Council's Health and Environment Committee. The Cambridge Public Health Department works collaboratively with the City Manager, City Council, the School Committee, and all city departments.

The Essential Services of Public Health

The fundamental obligations of public health agencies, as outlined by the Centers for Disease Control, are to:

- Prevent epidemics and the spread of disease
- Protect against environmental hazards
- Prevent injuries
- Promote and encourage healthy behaviors and mental health
- Respond to disasters and assist communities in recovery
- Assure the quality and accessibility of health services

The Cambridge Public Health Department performs services that ensure these obligations are met through the work of its Public Health Nursing, Environmental Health, Community Health, and Health Information units. This chapter describes the work of the Cambridge Public Health Department in 2001, including the unique challenges posed by threats of bioterrorism in the aftermath of September 11.



Cambridge Health Alliance personnel team up with the Salvation Army to organize food donations for New York City relief workers following the September 11 tragedy.

Emergency Preparedness

For the past ten years, the Cambridge Public Health Department has been working actively with the local emergency planning committee (LEPC) to prepare for natural and human-made emergencies that could represent a major threat to the health and safety of residents. The committee conducts quarterly meetings and convenes a dozen subcommittees covering issues ranging from community risk assessment and biotechnology to preparedness protocols and bioterrorism.

Bioterrorism

In 2001, health department staff participated in the LEPC's Health & Hospitals subcommittee and Bioterrorism subcommittee. The department played an active role in the annual citywide preparedness drills, led by the LEPC and the Cambridge Fire Department. In 2001, two public health staff members completed OSHA training in emergency response to incidents of bioterrorism or weapons of mass destruction.

Since September 11, the health department has markedly increased bioterrorism preparedness activities. The health department is currently preparing regional, local, and hospital-level responses to scenarios involving chemical, biological, or nuclear weapons of mass destruction.

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Regional Preparedness. The Cambridge Public Health Department initiated a collaboration among health departments in the Greater Boston area to assess regional capacity and resources. As a result of this collaboration, the health departments developed local strategies for mobilizing area resources to detect and respond to a bioterrorism event. They are currently developing a protocol for delivering standardized information and messages to the media and the public. This collaboration will also allow the City of Cambridge to join the Boston Public Health Commission's Bioterrorism Surveillance Program, an electronic system that tracks symptom clusters and atypical emergency department usage. Mount Auburn Hospital, Newton-Wellesley Hospital, and the three Alliance hospitals are prepared to join this electronic surveillance system.

Local Preparedness. In October 2001, the health department began responding to calls about suspicious mail and powder. The health department conducted a medical and health audit to better understand the skills and resources available locally in the event of an attack in Cambridge. The department also coordinated educational opportunities for the Cambridge medical and health care community.

Following the anthrax contamination of U.S. mail that resulted in five deaths nationally, the health department worked with the fire and police departments to develop a protocol for responding to calls from people who were concerned that they might have received contaminated mail. By the end of December, the health department had responded to more than 80 calls. The emergency protocol is as follows:

- A Cambridge resident or employee calls 911 to report suspicious mail or substances.
- Emergency Dispatch sends representatives from the fire and police departments to the scene to determine if the item or substance should be tested for anthrax.
- If testing is required, the local Hazardous Material Response Team (HazMat) transports the sample to the State Lab in Jamaica Plain.
- Concurrently, the Cambridge Public Health Department sends staff members to the scene to provide education and answer questions about anthrax. Contact information is collected from potentially exposed individuals to facilitate follow-up once test results are available.

In October 2001, the department gathered information from Cambridge hospitals, health care centers, emergency responders, and other health or medical providers to identify resources that might be needed in the event of bioterrorism. These resources included pharmaceutical supplies; medical staff availability; hospital beds; chemical and radiation decontamination capabilities; and special hospital services, such as negative pressure rooms and ventilators.

The health department also instituted a biweekly conference call among health care providers in Cambridge to exchange information about bioterrorism. Participants include medical providers from Cambridge Hospital, Mount Auburn Hospital, Youville Hospital, Harvard Vanguard, Professional Ambulance, Harvard University and MIT health services, and representatives from the Massachusetts Department of Public Health. These calls serve to keep community providers informed about preparedness activities and to provide up-to-date information from the Centers for Disease Control and Prevention.

Hospital Preparedness. Finally, the health department is participating with other Alliance departments on the Hospital Emergency Preparedness Committee, which is charged with developing hospital protocols for handling communication, security, and patient care in the event of a disaster. These protocols will include the incident command structure that will allow both individual hospital action as well as standardization of action and support across the three Alliance hospitals.

Cambridge Responds to Bioterrorism Event

In early November, Federal Express received more than 200 packages (and delivered 50 of them) that contained open envelopes with white powder that spilled out once the packages were opened. The packages were addressed to current or former staff of abortion clinics, women's reproductive health clinics, and women's health rights organizations across the country and had credible return addresses. In addition to the white powder, some packages contained threatening letters claiming that the Army of God, a militant anti-abortion group, had mailed anthrax to these agencies as punishment for offering abortion services.

On November 8, an abortion rights organization in Cambridge received one of these packages. An employee, who had heard that these packages were considered dangerous, called 911, triggering the local emergency response process for hazardous pickup. The police and FBI became involved because the issue had already been determined a criminal matter, given the magnitude and nature of the event. (Similar events in Attleboro and Somerville were unfolding on the same day.) The Cambridge Public Health Department sent a public health nurse to the site where she met with the three staff members present, provided health information, and answered questions about self-care.

That evening, the health department learned from the State Lab that the white powder had multiple characteristics that were consistent with anthrax. Because final confirmation would not be available until the next morning, the director of Communicable Disease Control at the State Lab and Cambridge Public Health Department officials decided to initiate prophylactic treatment for those people who had been exposed, including emergency responders at both the Cambridge and Somerville sites.

The health department and the attending physician at The Cambridge Hospital Emergency Department set up a system to evaluate and treat those affected. Twenty people were evaluated and treated between 7 P.M. and 1 A.M. Three people who had left the immediate metropolitan area were located and informed about the steps they could take.

Throughout the night, there were many conversations among the mayor of Cambridge, the city manager, the chiefs of the fire and police departments, and representatives from Somerville. Press calls were referred to the chair of the Local Emergency Planning Committee. Following discussions with the fire and police departments, the chief public health officer of Cambridge closed the building that housed the Abortion Access Project. A representative from the health department and a uniformed police officer met people returning to work at that building the following morning to provide information about the events that had occurred that night and to collect contact information from people who were possibly exposed.

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On the morning of November 9, the State Lab informed the Cambridge Public Health Department that the powder had tested negative for anthrax. Confirmation tests by the Centers for Disease Control and Prevention also proved negative. The health department then notified the affected individuals and recommended that they discontinue their anthrax-related treatments.

Lessons Learned

The Cambridge Public Health Department conducted an intensive response to a possible bioterrorist attack. The department continues to be vigilant and is prepared to respond to any future events. In October 2001, there were 69 HazMat responses to sites in Cambridge, another 30 in November, and 10 in December. During that three-month period, the Cambridge Public Health Department visited most of the sites where there were questions of possible bioterrorism and provided over 30 additional informational sessions to community and employee groups.

The City of Cambridge responded quickly and efficiently during the anthrax scare of 2001. Communication among the responding departments (fire, police, health, and emergency communications) was constant, roles were clear, and the responses were coordinated thanks to years of preparation.

The higher level response to the November 8 event included the State Lab, the FBI, and the CDC. Successful coordination among these organizations and the Cambridge Public Health Department led to quick resolution of a difficult situation. The local response, guided by a protocol that had been refined during the preceding weeks, was efficient and effective. Messages to exposed individuals were clear, straightforward, and, ultimately reassuring.

The Cambridge Public Health Department, along with other Alliance departments, continues preparation for other potential biological agents. Among the issues that still need attention are cross contamination, working across municipal lines, and decontamination.

Environmental Health Unit

In 2001, the Environmental Health Unit (Environmental Health) continued to expand the services it offers to residents and employees of Cambridge. The unit provides a “gateway” function for health-related environmental concerns in the City of Cambridge. Environmental Health enforces local and state public health laws, and coordinates local responses to public health concerns that relate to environmental, non-communicable agents. West Nile virus and bioterrorism were two emerging threats that required considerable resources from the Environmental Health Unit in 2001. Major Environmental Health activities in 2001 are summarized as follows.

West Nile Virus

Public health preparation for local West Nile virus response in 2001 (and beyond) began in late 2000, and entailed local, regional, and state planning processes.

Local Planning. In response to concerns raised during the initial outbreak of West Nile virus in 2000, the Cambridge Public Health Department established a West Nile Virus Advisory Group in February 2001. This marked the beginning of a rigorous public participation process to address doubts about the safety and efficacy of broadcast-spray pesticides. While issues were often hotly contested, the broad consensus among participants was that the process had been fair and open-minded. The advisory group included several residents as well as representatives from Harvard, MIT, and the Cambridge Public Works, Emergency Management and Communications departments.

An initial public hearing about the benefits and risks of pesticide spraying for West Nile virus was held in January 2001. The director of the Environmental Health Unit presented the West Nile Virus Response Plan to the public and the City Council in May 2001. The plan included dissenting commentary regarding the use of pesticides to combat mosquito-borne diseases.

Regional Planning. The Cambridge Public Health Department co-founded the Metro Boston West Nile Virus Coordinating Committee in November 2000 to articulate local health department concerns and to engage smaller Boston-area cities and towns in the planning process. Membership included the cities and towns of Cambridge, Boston, Brookline, and Newton. The ensuing dialogue was essential in providing a more unified response to the threat of West Nile virus.

Statewide Planning. Health department staff actively participated in the state West Nile virus advisory process from December 2000 through April 2001. Department representatives successfully advocated for a response plan that reflected the consensus forged by the Metro Boston West Nile Virus Coordinating Committee.

Public Information. Based on lessons learned during the 2000 mosquito season, a West Nile virus communication plan was developed to include the following activities and resources:

- The City of Cambridge's reverse 911 calling system was significantly expanded to facilitate rapid citywide notification of spraying dates and precautions to be taken.
- Written materials about how to reduce the risk of West Nile virus infection were distributed to approximately 200 community groups, partner agencies, and schools.
- Signs were created with detailed spray-related information that could be posted citywide in the event of a West Nile virus occurrence.
- The Environmental Health Unit worked with the city's public information office to identify local news outlets and prepare them for delivery of Cambridge-specific spraying information.
- The health department developed an e-mail information service about West Nile virus topics. The year-round service is accessible via automatic e-mail registration. Regular communication with the West Nile Virus Advisory Group was maintained via this system through summer 2001.



Teens in the Mayor's Summer Youth Program joined the health department's Puddle Patrol to work on West Nile virus prevention. This team monitored catch basins and standing water for mosquito larvae.

Recombinant DNA Ordinance Enforcement

The Cambridge ordinance on recombinant DNA continues to serve as a national model for local oversight of the biotechnology industry. Environmental Health provides consultation to towns and cities throughout the country as they craft local statutes. The Cambridge ordinance establishes the federal *NIH Guidelines for Research Involving Recombinant DNA Molecules* as law within Cambridge, and adds provisions not included in the federal guidelines.

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The Cambridge Biosafety Committee is a citizens group that oversees the enforcement of the ordinance. The committee enables direct public involvement in the review of physical and biological preparedness and biotechnology research protocols within the city's academic and commercial laboratories. Representatives from Harvard and MIT attend the meetings. The City of Cambridge is represented by *ex officio* membership on the Harvard Institutional Biosafety Committee.

The Cambridge Biosafety Committee offers periodic training for representatives from each institutional biosafety committee and for local biosafety professionals. A workshop is being planned for summer 2002.

As of December 2001, there were 48 academic and commercial laboratories licensed in Cambridge to work with recombinant DNA material. The Environmental Health Unit received approximately \$6,000 in license fees in calendar year 2001.

Hazardous Material Releases and Health Effects Reviews

Environmental Health offers regulatory and health-effects guidance and referrals to Cambridge residents and workers. Individuals may request investigation of or follow-up to chemical, mineral, or biological exposures.

In 2001, site reviews were performed for dozens of residents and businesses requesting environmental hazard reports on individual properties in Cambridge. These requests pertained to possible hazardous material releases or other environmental code violations. Environmental Health has developed systems to manage information relevant to this work. One database incorporates Inspectional Services records dating back to 1992; a second facilitates review of hazardous material releases in Cambridge. This local "hazmat" database is being linked with the city's interactive mapping database.

The director of Environmental Health often mediates disputes about environmental exposures. In 2001, the director met with residents to address ongoing concerns about the status of the W.R. Grace property, Russell Field, and the Cambridge Research Park.

Environmental Health also provides health effects information, bibliographies, and medical and regulatory referrals to Cambridge residents and workers. The unit responded to dozens of requests for this type of information in 2001.

Indoor Air Quality Investigations

Indoor air quality concerns are investigated at the request of any Cambridge resident or city employee. Most investigations conducted in 2001 revealed problems caused by intrusion of moisture into living areas. Home assessments for environmental hazards (e.g. examination for moisture and contamination sources, proper ventilation, sanitation hazards) were performed on more than 20 households in 2001. An indoor air quality investigation can include:

- Air testing for mold spores, CO, CO², NO_x, VOC gases, and dust.
- Health interviews with residents and workers to determine causative factors.
- Referrals to the Occupational Health clinic for severe air quality-related symptoms.
- Referrals to the Division of Occupational Safety when an employer is not actively responding to an affected workplace.

Asbestos Protection Activities

In 1999, the Environmental Health Unit helped draft the first local ordinance in the United States regulating asbestos in soil. The ordinance was developed in consultation with residents and the City of Cambridge Law and Community Development departments.

In 2001, Environmental Health received several requests to consult with state and local regulatory agencies about understanding and evaluating risks associated with asbestos in soil. Even with the Asbestos Protection Ordinance, evaluation of these risks is ongoing in Cambridge, as medical and engineering knowledge about asbestos risk is still emerging. Current enforcement activities underway on W.R. Grace property and at the city-owned Russell Field are considered test cases for state regulators.

Other asbestos protection activities are not governed by the local asbestos ordinance when soil contamination is not present. For example, negotiations are underway between residents and owners of a major public housing project. Residents have persistent concerns over the abatement of asbestos in walls and ceilings throughout the development. The Environmental Health Unit is working with the owners to ensure the highest safety, inspection, and removal standards as required by state and federal law.

Healthy Homes

Healthy Homes is a home intervention program that was established in 1999 to address childhood asthma in Cambridge and Somerville. The Massachusetts Department of Public Health and HUD provide funding for the program.

Expanded planning and coordination between the Healthy Homes program and other clinical services within the Cambridge Health Alliance accelerated in 2001. The EQUIS project (Evaluating a Quality Improvement Strategy) and an asthma registry will create a single comprehensive tracking and case-management system for asthma patients in Cambridge and adjacent communities. (See Chapter 5: Asthma and Indoor Air Quality.)

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City Council commends the Cambridge Health Alliance and Mount Auburn Hospital for eliminating mercury thermometers.

Mercury Thermometer Swap

In May 2001, the Cambridge Public Health Department joined with the Cambridge City Council, Mount Auburn Hospital, and Healthcare Without Harm (a national non-profit organization focused on reducing use of hazardous material in the health care industry) to implement a citywide ban on the sale of mercury fever thermometers. In order to promote the elimination of mercury thermometers from homes and health care facilities these organizations conducted a Mercury Thermometer Swap Day at three sites in Cambridge. Residents were able to trade old mercury thermometers for free

digital thermometers. In the course of the thermometer swap, residents received education about responsible disposal of mercury-containing waste. At each swap site there was also information about identification, proper storage, and disposal of other household chemical hazards and about the quarterly Cambridge Household Hazardous Waste Drop-off.

Public Health Nursing

The Cambridge Public Health Department is fortunate to have a skilled and dedicated team of public health nurses. For many years, the Public Health Nursing Program in Cambridge has focused on the traditional areas of communicable disease prevention and control; tuberculosis prevention, control, and treatment; and maternal-child home visiting services. The public health nurses also work with shelters, childcare centers, schools, and local businesses to provide health care support, education, and guidance for people who live and work in Cambridge. One of the most important programs coordinated by the nurses is the annual distribution of flu vaccine at public flu clinics.

In addition to these core functions, the emergence of West Nile virus and the threat of bioterrorism have added new depth and complexity to the work of the Cambridge public health nurses in the past two years. The health department is deeply concerned about the potential stress on its small staff of nurses as a result of these added responsibilities and recent state budget cuts. Still, in spite of these challenges, the health department is committed to maintaining its high quality, responsive, and proactive Public Health Nursing Program.

New Threats to Public Health

West Nile Virus. In summer 2000, the public health nurses worked diligently to provide information and guidance to an anxious community concerned about West Nile virus. Based on that experience, the public health nurses were well prepared to handle West Nile virus issues in 2001. In spring 2001, the nursing staff participated in an advisory committee that produced a coordinated and well-reasoned plan for responding to animal or human outbreaks of West Nile virus in Cambridge.

Bioterrorism Response. The public health nurses' day-to-day work changed dramatically following the events of September 11, 2001. By the beginning of October, the public health nurses had become frontline responders to community concerns about anthrax. Nurses and other health department staff responded in person to calls from concerned individuals who had found suspicious letters or substances at their work sites or in their homes. In addition to on-site visits, public health nurses fielded numerous phone calls from the community related to anthrax and other potential biological agents. This important work continued through December 2001, and may well become part of the daily fabric of public health nursing in Cambridge.

Flu Clinics

In 2001, flu vaccine supply was sufficient for Cambridge residents despite increased public demand in light of the concerns raised by bioterrorism. Almost 400 people were vaccinated on the first day of the public flu clinics. By the end of six weeks of public clinics, more than 2,500 people had received flu vaccines.

In addition to giving flu shots to populations traditionally at risk, the public health nurses obtained extra supplies of vaccine and conducted special clinics to vaccinate the city's police force and firefighters.

The goal was to ensure that emergency responders remained healthy during this difficult time. The nurses also arranged clinics to vaccinate all postal workers in Cambridge.



Tuberculosis and Communicable Disease Control

In 2001, the public health nurses continued to coordinate tuberculosis (TB) prevention and treatment at the Schipellite Chest Center, which has one of the most highly regarded TB programs in the Commonwealth. While the number of active TB cases has remained stable over the last several years, the public health nurses have seen an increase in the number of clinic visits for treatment of latent tuberculosis infection. This is an important aspect of care for many recent immigrants to our community. TB services in 2001 included over 2,700 visits to the Schipellite Chest Center. In addition, the nurses made 243 home visits to administer medication for people with active tuberculosis.

In another instance of communicable disease control, the health department issued a travel advisory in February 2001. Based on reports of polio outbreaks in Cape Verde, the Dominican Republic, and Haiti, the department alerted primary care providers and advised residents planning trips to those countries (or expecting visitors from them) to check with their doctors regarding vaccination status. In some cases, booster shots of the polio vaccine were warranted.

Regulation of Body Art

On January 31, 2001, the Cambridge Public Health Department implemented a regulation governing the practice of body art in the City of Cambridge after the statewide ban on tattooing was declared unconstitutional in fall 2000. All persons performing body art activities (body piercing, tattooing, branding, and scarification) upon another individual are affected by this regulation. Individual practitioners and body art establishments are required to register with the Commissioner of Health and Hospitals, and practitioners must satisfy minimal training requirements. The director of Public Health Nursing participates in regular inspection of body art establishments. In spring 2001, the director began visiting body art establishments and reviewing infection control procedures with practitioners. As of December 2001, there were two body art establishments in Cambridge.

School Health Nursing

The mission of the School Health Nursing Program is to provide on-site health care to ensure that each student reaches his or her potential in a healthy fashion in the school setting. In addition to providing first aid, medication administration, health education, and health counseling for students, school nurses are responsible for case management services, linkages between families and primary care, and advising school staff. The Cambridge School Health Nursing Program also serves as a resource for training nursing students. Through relationships with the University of Massachusetts and Northeastern University, 25 nursing students each year are introduced to important school health and community issues.

The Cambridge school nurses are assisted in their work by a staff of specially trained nursing assistants and a citywide hearing and vision technician. School nurses and assistants work closely with teachers, guidance counselors, school administrators, and community health and social service providers.

In 2001, the School Health Nursing Program experienced significant changes, including the implementation of a computerized student health record system and the employment of additional nursing staff.

Several of the school health nurses in Cambridge have worked here more than 20 years while some are relative newcomers to the system. The entire staff is deeply committed to the Cambridge school community. Five of the thirteen K-8 buildings are staffed by a full-time registered nurse; the other eight elementary schools are staffed by four registered nurses and nursing assistants. CRLS has two full-time school health nurses and one part-time nurse. The school health nursing assistants provide on-site direct care and medication administration to students, as delegated by their nurse partners. With this staffing pattern, the Cambridge School Health Nursing Program is able to provide a qualified staff member to each school building for at least five hours every day. Ultimately, however, optimal staffing would consist of a full-time nurse at each school.

School Health Nurse Saves a Life

Recently, the nurse at one of the elementary schools greeted a young child who had walked in from the playground stating he was not feeling well. He thought an insect might have stung him, but he wasn't sure. The boy had no history of allergies or other medical problems, but the nurse was concerned. The nurse held the boy on her lap, and evaluated his breathing, pulse, and skin color. She then picked up the phone and called his parents. The nurse was speaking with the mother when the little boy collapsed in her arms. The nurse immediately administered life saving medication in the form of an EpiPen, and called an ambulance. The child responded almost immediately and was transported to the hospital where he spent the next four days. A tragedy was averted because there was an experienced registered nurse in the building who was able to assess a potentially fatal allergic reaction and administer life-saving medication.

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Injuries and Illness

Treating injuries and illness comprise a large portion of a school nurse's day. During the 2000–2001 school year, injuries and illness accounted for more than 34,000 office visits:

First Aid	Dismissal for Injury	Illness	Dismissal for Illness
12,620 visits	225 visits	21,864 visits	2,559 visits

Medication Administration

Medications commonly administered by the school nurses during the 2000–2001 school year included psychiatric medication, asthma medication, antibiotics, and over-the-counter (OTC) drugs.

Approximately 7% of Cambridge public school children have been identified to the school nurse as needing daily asthma management or episodic asthma treatment. This figure probably underestimates the total number of asthmatic children enrolled in the Cambridge Public Schools since not all families inform the school nurse of their child's diagnosis. Unfortunately, these students may only be identified during a respiratory emergency. (See Chapter 5: Asthma and Indoor Air Quality.)

Computerized Health Records

The 2001 implementation of a networked computerized school health record system was the culmination of years of organization, advocacy, and planning. With the help of the school department computer center, student health records were successfully transferred to the computer database. School nurses are now better equipped to document the school health needs of Cambridge children.

Among other benefits, the system will greatly improve the ability of school nurses to track the immunization status of incoming seventh graders. Under the old "paper" system, the process of reviewing student health records to determine missing vaccines was laborious and time-consuming. The nursing staff would begin in the spring to collect this information and send out notices to parents. The notification process would continue through the summer and yet, on the first day of school in September 2001, there were still 50 seventh-grade students who were not appropriately immunized.

The new computer database will expedite the process of identifying students who need vaccines and allow school nurses to work closely with parents and primary care providers to facilitate appointments for those students. School principals will also be participating in the notification process and supporting parents to make sure that children see a medical provider before they start seventh grade.

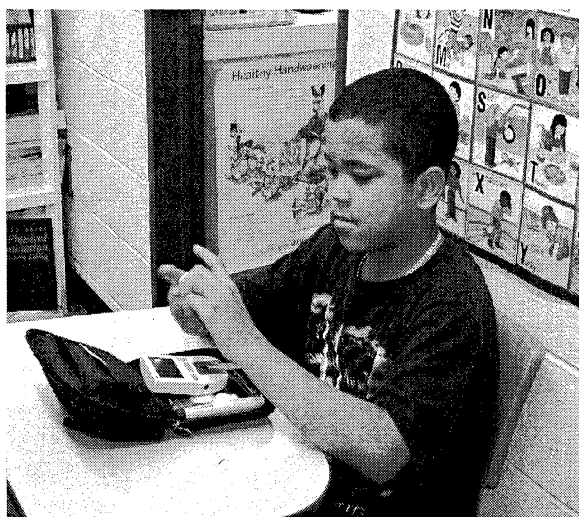
Enhanced School Health Services

In 2000, the Cambridge School Health Nursing Program received a grant from the Massachusetts Department of Public Health to establish an Enhanced School Health Services Program. The goals of this program are to strengthen the infrastructure of school health services; incorporate

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health education programs into existing school health programs; and develop linkages between school health services programs and community health providers.

This Enhanced School Health Services grant currently supports a part-time nurse consultant for six non-public schools, including five parochial (three elementary and two secondary) and one charter school. The nurse consultant oversees state-mandated hearing and vision screening and assists in the development of comprehensive health services at these schools. In 2001, the nurse consultant was instrumental in assessing students' special health care needs, evaluating student immunization status, developing a family communication plan, and revising guidelines for medication administration.



Through this program, a number of health services were provided to the charter and parochial schools that had not been previously available. Such services included postural and dental screenings; linkages to primary care providers and health insurance; and access to multiple community resources.

The nurse consultant also helped the non-public schools develop a health advisory infrastructure, enabling the schools to formalize health policies and develop a health education curriculum. The Enhanced School Health Services grant has also allowed the non-public schools to utilize the computerized record system that was implemented in the public school system.

Funding for the Enhanced School Health Services Program, along with millions of dollars for other health-related spending, was jeopardized in the FY02 budget process. School Health Task Force and staff members mobilized to inform their legislators about the grave consequences associated with the loss of school health services. As School Health Nursing prepared for major staffing cuts in light of the state budget shortfall, last-minute maneuvering restored the threatened dollars. While the program appears secure for the remainder of FY02, the state budget crisis is not over and we can expect the program to be vulnerable once again in summer 2002.

Community Health Programs

The mission of Community Health Programs is to promote and encourage healthy behaviors, develop public health policy, and to identify opportunities for early intervention and disease prevention.

Health promotion occurs in partnership with other Cambridge Health Alliance departments and with community-based organizations. Activities include Cambridge Walks, the Men of Color Health Program, the Agenda for Children, and the student health surveys.

Public health policy development has occurred in the areas of tobacco control, domestic violence prevention, and mental health promotion.

Early intervention and disease prevention is accomplished through programs such as the Children's Dental Program and prostate cancer screening.

Children's Dental Program

The Children's Dental Program remains committed to improving the oral health of children in Cambridge through classroom instruction, dental screening, and referral for care. Since dental disease is highly preventable, awareness, prevention, and early treatment are paramount to improving the oral health of children. Children who participate in dental screening, particularly at an early age, have positive experiences that help them to avoid the fear, pain, suffering, and expense associated with dental disease in later life.

Classroom instruction offers children a unique opportunity to meet dental professionals in a safe, familiar environment. The classroom visits occur several days before dental screenings are offered in each school. Children are referred for dental care when problems are identified. When there is a need for urgent treatment, the program coordinator contacts parents directly and facilitates immediate access to the Windsor Street Dental Clinic.

During the 2000–2001 school year, classroom instruction and dental screening were provided in 18 public, charter, and parochial elementary schools to kindergarten, first-grade, and fourth-grade students. There were 1,226 children who participated in dental screening during that period, and 416 were referred for treatment. Of those referred, 142 students needed immediate attention.

In fall 2001, the program expanded to offer services to kindergarten through fourth-grade students, and seventh-grade students. The program expansion was made possible by the Harvard School of Dental Medicine, which created an externship at the Windsor Street Health Clinic for a fourth-year student. As part of the externship, the students conducted dental screenings at the public schools on a weekly basis. Volunteers from the Cambridge Public Health Subcommittee and the community were also recruited to assist at the screenings.

Preschools in Cambridge participate in the Children's Dental Program as well, primarily during the summer months. In 2001, 345 preschool children were screened, and 98 of those children

were referred for dental treatment. Twenty percent of those children (6% of the total screened) required urgent dental care.

Families receive screening results (in multiple languages). The program coordinator follows up with all children who need immediate attention to ensure they receive treatment. The follow-up process often requires the combined efforts of the school administration, the school nurses, and the dental program coordinator. The collaboration among these professionals ensures that children receive essential dental care and that no child suffers from untreated dental disease.

Tobacco Control

The Cambridge Tobacco Control Program continues to work aggressively to prevent youth access to tobacco and to protect the public from exposure to environmental smoke. The program has been successful in changing many community norms around tobacco use. However, there is still much work to be done.

Youth Access to Tobacco. The Tobacco Control Program works with tobacco retailers and the community to prevent youth access to tobacco products. Tobacco retailers receive on-site outreach visits, invitations to community forums, monthly mailings, and additional educational materials in an effort to prevent tobacco sales to minors. In 2001, the tobacco control enforcement officers performed 461 compliance checks that resulted in only 25 sales to minors, for a rate of sale of 5.4%. This figure reflects a continued downward rate of sale to minors, from 16% in 1998, 9% in 1999, and 8.5% in 2000.

In 2001, the Tobacco Control Program also began looking closely at non-commercial sources of tobacco available to youth. In 2002, Cambridge will participate in a pilot media campaign aimed at preventing individuals other than retailers from providing minors with tobacco.

Environmental Tobacco Smoke. The Cambridge Tobacco Control Program continues to address the dangers of exposure to environmental tobacco smoke. Through educational campaigns targeted at residents and interaction with work sites, including restaurants and bars, Cambridge residents and workers are becoming better protected from secondhand smoke. Restaurants receive an annual educational compliance check and additional visits when a complaint is submitted to ensure that restaurant owners understand and comply with the local ordinance.

Existing permits that allow smoking in restaurants will expire in January 2003. In 2001, there were 302 smoke-free restaurants in Cambridge. This number continues to increase as restaurants that are still permitted to allow smoking decide to go smoke-free. Several restaurant owners have reported that eliminating smoking has been economically beneficial to their businesses and has created a safer work environment for their employees. In 2001, the Cambridge Public Health Department initiated a collaborative regional effort with neighboring boards of health to increase the level of protection afforded to all workers, including employees of restaurants and bars.

Violence Prevention

The Cambridge Public Health Department hired a new violence prevention coordinator at the end of 2000. The new coordinator has focused prevention efforts on two areas: (1) the continued development of the Domestic Violence Free Zone (DVFZ) project and (2) youth violence prevention and intervention. The youth violence prevention work is focused on teen dating violence, bullying, and harassment.

Domestic Violence Free Zone. The Domestic Violence Free Zone has been the driving force behind most of the prevention work in Cambridge for the past six years. The program is guided by the violence prevention coordinator and the Core Group steering committee. The program's far-reaching vision is for Cambridge to be a city with ample resources, knowledge, and commitment by individuals and institutions to sharply reduce the prevalence and impact of domestic violence.

In response to an "area of need" identified in 2000, one of the top priorities of the Domestic Violence Free Zone program in 2001 was developing a full-scale evaluation of the program. In 2001, a program evaluator was hired to work with the Core Group to review the status of program initiatives and develop an evaluation plan. The evaluation process will measure progress both quantitatively and qualitatively, and will seek input from community partners involved in the implementation of the DVFZ.

Another top priority of the Domestic Violence Free Zone in 2001 was raising awareness about domestic violence and promoting services to aid those affected. In 2001, the Cambridge Public Health Department received funding from the U.S. Department of Health and Human Services to pursue this objective. An advisory group comprised of service providers and marketing experts from the Alliance, the City of Cambridge, the Cambridge Public Schools, and the Cambridge Police Department was formed to guide campaign development. As of December 2001, the advisory group was working with the violence prevention coordinator to identify target groups and develop messages. Throughout the campaign, special attention will be paid to cultural and linguistic inclusiveness in the development and delivery of messages. The campaign is scheduled to launch in 2002.

Youth Violence. Over the course of the last few years, the Cambridge Public Schools and its community partners have worked hard to develop programs that address youth violence. The Cambridge Public Schools and the Cambridge Peace Commission co-sponsor the Violence Prevention Task Force. Task force membership includes representatives from community organizations and city departments who are committed to reducing adolescent violence. The group meets monthly.

The Cambridge Public Health Department secured funding in early 2001 for an important task force project: the expansion of a violence prevention curriculum pilot in the middle grades. This three-year project will also review services, programs, and policies related to different forms of youth violence and delinquency.

The violence prevention coordinator continued to provide training and support throughout the year to public school personnel in Cambridge. More than 400 staff members from eight elementary schools participated in staff development aimed at increasing knowledge and improving the quality of response to children who are affected by domestic violence.

In 2001, a subcommittee of the Violence Prevention Task Force formed to focus on adolescent dating violence. This group is helping to push forward more comprehensive teen dating violence programs and policies at Cambridge Rindge and Latin School. Focus groups of teen girls organized by the subcommittee provided important information about interpersonal violence experienced by girls. This information will help shape future initiatives.

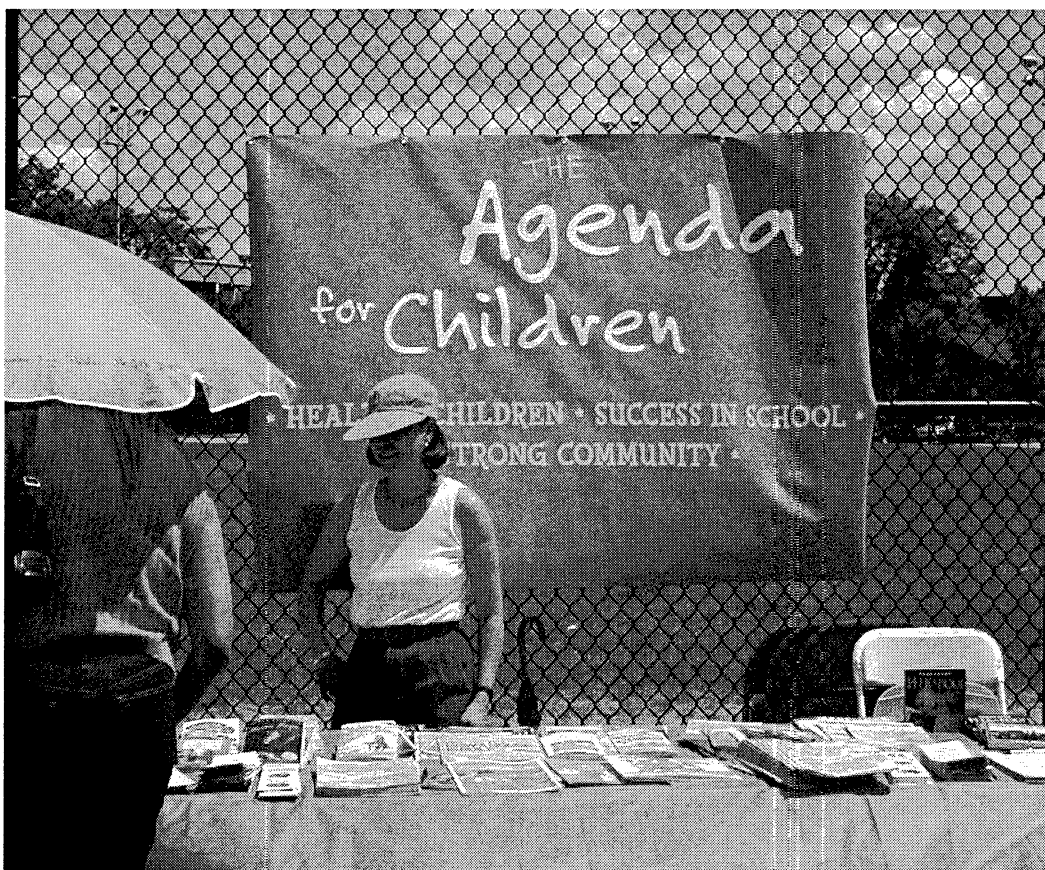
The Agenda for Children

Literacy Initiative. The Agenda for Children is an initiative that brings together city departments, businesses, philanthropies, community-based organizations, and residents to improve the lives of Cambridge children and families. One of its two primary goals is to ensure that all children and their families will be able to read.

In March 2001, the Agenda for Children hired a literacy coordinator who is housed in the Cambridge Public Health Department. In partnership with the READ (Read Each and Every Day) program of the Alliance Department of Pediatrics, literacy promotion has been woven into most aspects of health department work. For instance, literacy was prominently featured at health promotion events in 2001 such as Hoops 'n' Health, Women's Health Day, and Cambridge Walks.

The Agenda for Children literacy initiative has also provided professional development for after-school teachers, childcare workers, and tutors. The literacy coordinator launched a public awareness campaign with stickers, bookmarks, and banners proclaiming the "five essential messages" of family literacy. The coordinator also developed a summer reading list, in collaboration with the Cambridge Public Library and the Cambridge Public Schools. In December 2001, the coordinator engaged a social marketing firm to assist in the development of a full-scale literacy promotion campaign.

A reading advisory committee was formed to support the literacy coordinator and worked diligently through the fall. The committee finalized an action plan for the next four years that will focus on improving emerging literacy skills of very young children in order to provide the foundation for proficient reading and academic success. This ambitious and far-reaching plan includes intervention and literacy promotion in homes, childcare facilities, the public schools, and in prenatal and birthing care settings in hospitals.



Hundreds of books are given to families at various community health events.

Out-of-School Time Initiative. The other vision for the Agenda for Children is that all children and youth will have equal access to safe, stimulating, nurturing, and healthful out-of-school time activities that ensure optimal academic performance and overall healthy development. The coordinator for out-of-school time was hired in spring 2001, and is housed in the Department of Human Service Programs.

The coordinator has worked with the Cambridge Community Foundation to develop a resource partnership to encourage ongoing professional development. A significant aspect of this work began in fall 2001, with training for staff from 45 programs provided by the National Institute for Out-of-School Time. The coordinator plans to continue the collaboration with this national program, providing ongoing staff development in a program called “Leading for Quality.”

The Agenda for Children out-of-school time initiative has coordinated efforts with another national organization, the Afterschool Alliance. As part of a national campaign, the out-of-school time coordinator organized “Lights On Afterschool.” This event at City Hall was an opportunity for out-of-school time program staff, parents, and children to speak out about the value of quality programs. Parents of disabled children advocated for programming for all children.

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Parent and community access to information about the full range of human services will soon be enhanced thanks to a major project of the Department of Human Service Programs. Throughout 2001, significant resources went into the development of an Internet-based health and human services database. Program information will be available online and at numerous locations throughout the city for community members without computer access. The database is expected to be up and running in spring 2002.

There is also an interest in understanding the needs and desires of parents and children regarding after-school time. The out-of-school time coordinator is working with the Child Care Resource Center on preparation of a survey to be administered in spring 2002.

Student Health Surveys

In March 2001, the Middle Grades Health Survey was administered to all students in sixth, seventh, and eighth grades. This current snapshot of the health-related behaviors and concerns among young adolescents, along with data from two previous surveys, has enabled the three sponsoring departments (Cambridge Public Schools, Human Services, and Public Health) to plot trends in health risk behaviors. These data are presented in reports issued by the school department and through periodic public forums. The information is invaluable to city and community-based organizations that are involved in developing, enhancing, or evaluating programs for children and adolescents. The Cambridge Public Schools, Department of Human Service Programs, and the health department are currently preparing the Teen Health Survey that will be administered at Cambridge Rindge and Latin School in early 2002.

Cambridge Walks

“Cambridge Walks” is a campaign led by the Cambridge Public Health Department that involves concerned citizens and city employees who are working together to promote walking as healthful and environmentally beneficial to the City of Cambridge. Building on the initial efforts of Walk Your Child to School Day, “Cambridge Walks” is now a year-round campaign. (See Chapter 6: Overweight Prevention and Physical Activity.)

Men of Color Health Program

To revitalize the Men of Color Health Program, the Men of Color Health Task Force reconvened on the first day of spring 2001. In August, a lifelong resident of Area IV was hired as the program coordinator. In fall 2001, the program was invited to submit a proposal to the Robert Wood Johnson Foundation. (See Chapter 8: Health of Men of Color.)

Laboratory Animal Commission

The Commissioner of Laboratory Animals, a licensed veterinarian, oversees the care and use of laboratory animals used in research in Cambridge, as directed by city ordinance. The ordinance follows regulations set forth by the Animal Welfare Act, the Public Health Service Policy, and the Guide for the Care and Use of Laboratory Animals. The commissioner inspects all research laboratories annually and reviews research protocols and procedures. In 2001, the commissioner worked with 26 laboratories in the city. Cambridge is the only city in the country with such a program.

Licenses and Permits

The Cambridge Public Health Department issues licenses for massage therapy and recombinant DNA, and permits for burial, body art, and for allowing smoking in restaurants.

CHAPTER 2: THE CAMBRIDGE HEALTH ALLIANCE 2001 IN REVIEW

The mission of the Cambridge Health Alliance is to improve the overall health status of its community. Its key strategies are to apply quality improvement methodologies to improve patient and community outcomes, to integrate services, to reduce costs while maintaining or improving quality, and to build managed care capability with information systems support. The Alliance serves a unique population from many nations and cultures. Its patients are primarily low income, and many are recent immigrants. People seeking care at the Alliance are facing complex and difficult situations that demand and deserve the utmost creativity in providing comprehensive care.

Massachusetts Health Care Environment

In 2001, pressing health care issues continued to be in the news nearly every day. This is not surprising given that health care in the Commonwealth of Massachusetts is a \$16 billion force in the state's economy, a figure that includes jobs, government funds, private grants, medical education payments, and other dollars. The Greater Boston area includes some of the most well-regarded institutions in the world. Approximately one in seven employees in Massachusetts works in health care. Medical research brings millions of dollars into the state's economy each year. The amount of research dollars flowing into Massachusetts is four times greater than that of any other state.

Nonetheless, health care in Massachusetts has been in a state of financial crisis for the past decade, a situation that has affected hospitals, nursing homes, ambulatory health centers, emergency departments, home care agencies, and physicians in private practice. State and national funding streams were further jeopardized in 2001. The Balanced Budget Act of 1997 continued to reduce the amount of federal money available for Medicare in 2001. At the same time, there was increased attention given to funding the nation's response to bioterrorism.

In Massachusetts, the state legislature in FY01 passed a year-end supplemental budget of \$518 million that contained appropriations for Medicaid payments and funding of the uncompensated care pool.

In FY02, the overall revenue available to the state decreased due to the Massachusetts tax cut of 2001 and the national economic recession. This resulted in significant funding cuts to programs and services for persons with AIDS, the mentally handicapped, and substance abuse victims, to name a few. During this same budget discussion, the state legislature helped to secure funding for the uncompensated care pool by adding \$46 million to the budget.

The impact of unstable funding has had major repercussions on Massachusetts hospitals, many of which reported declining operating margins in FY01. For example, Hale Hospital in Haverill, one of the last remaining city-owned hospitals in the Commonwealth, was losing \$1 million a month and facing closure when it was acquired by the for-profit Essent Healthcare in August

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2001. While the acquisition saved the hospital, it also resulted in a workforce reduction of 100 employees.

UMass Memorial Medical Center in Worcester also faced significant financial losses and implemented system-wide budgetary cuts in 2001. Closer to home, Boston-based CareGroup Healthcare System, one of the largest health care systems in the state, experienced a serious financial deficit (a loss of \$50 million) in 2001 that resulted in bondholders significantly downgrading the institution's bond status.

Despite growing challenges in the health care environment, the Cambridge Health Alliance has been prosperous in the past decade. The Alliance has fought hard to obtain adequate reimbursement for providing care to the uninsured and has worked closely with state and federal officials to ensure that the financial safety net remains intact. The Alliance has worked closely with colleagues at the Massachusetts Hospital Association to educate political leaders about the critical role hospitals play in the physical and economic health of the Commonwealth. The Alliance is also active in the National Association of Public Hospitals and Health Systems, and has strongly advocated for protecting the needs of indigent people.

In the upcoming fiscal year (FY03), it will be important for the Alliance to bolster its advocacy efforts in order to remain true to its mission of improving the health of the communities it serves.

Emergency Room Diversions

Additional symptoms of a health care system under stress are emergency department overcrowding and ambulance diversions. The Massachusetts Department of Public Health, the Massachusetts Hospital Association, and other stakeholders continued in 2001 to collaborate on initiatives to enhance understanding of the diversion problem and to improve management.

Diversions have been a problem across the nation for several years and in 2001 Massachusetts hospitals continued to turn away ambulances at a record rate. Boston area hospitals have been particularly hard hit. A number of factors are responsible for the high level of diversions in the Commonwealth. These include fewer available hospital beds and emergency department crowding or boarding, which lead to capacity problems for evaluating and treating potentially unstable incoming patients. Additionally, demand for emergency services has increased due to increased morbidity, decreased availability of alternative service delivery sites, closure of nearby facilities, and increased numbers of uninsured patients.

Diversions are measured by the number of hours that emergency rooms must direct patients to other hospitals. The Massachusetts Department of Public Health periodically surveys area hospitals about their diversion status. In 2001, the number of hours that emergency rooms were closed to ambulance-borne patients doubled from the year before. In September 2001, the Boston area's 27 emergency departments refused ambulances for a combined 761 hours, doubling the September 2000 figure. In October 2001, the figure rose to 1,049 hours, triple that of the previous October. The problem is greatest in Emergency Medical Service areas 3 and 4 (which includes the Cambridge Health Alliance). However, while the Alliance is not immune to

this problem, its diversion levels are lower than those of the City of Boston and of its local community hospital counterparts.

Workforce Shortage

Understaffing has become a significant barrier in the ability of health care organizations to achieve their strategic objectives. At present, unprecedented labor shortages are broadly impacting health care delivery in the Commonwealth. The most significant vacancies are in nursing, but other health professions experiencing severe workforce shortages include pharmacy, radiology technology, and laboratory technology.

The consequences of an insufficient workforce include reduced access to care, and service cutbacks in operating rooms, emergency departments, and diagnostic testing. Understaffing also inflates health care costs through hospitals' reliance on agency or other temporary staff, and increased recruitment and retention costs. Additionally, the potential for increased medical errors increases in environments where shortages result in burnout or reduced morale. As part of its overall strategic plan, the Alliance will address both short- and long-term solutions to the workforce issues. In developing strategies, the Alliance will continue to embrace diversity in its workforce, collaborate with local educational programs, and adjust for the demographics of its local market.

Changing Demographics

The City of Cambridge continues to experience demographic shifts that will likely affect the demand for health care services over the next several years. Among the most significant changes in the city are rising property values and an increasing number of single person households. There also continues to be an influx of culturally diverse populations, particularly from South Asia, Africa, and Portuguese-speaking nations. This is reflected in statistics showing the numbers of students in the public schools for whom the primary language spoken in the home is not English. The Alliance continues to increase access for patients, to reach out to elders, and to advance the cultural competency of the institution.

The Cambridge Health Alliance was instrumental in the passage of a law (effective July 1, 2001) that mandates interpreters must be available to assist non-English-speaking patients who are admitted to Massachusetts emergency departments and inpatient psychiatry units. In a related effort, the Alliance collaborated with Cambridge College in 2001 to create a medical interpreters education program. The program graduated its first class in October 2001.

Network Health

Network Health, the Alliance's statewide Medicaid managed care plan, had over 36,000 members by the end of 2001, including residents of Cambridge, Somerville, Everett, and surrounding towns. Participants in the Network Health plan receive a range of benefits designed to keep their families healthy and safe. Network Health's provider panel consists of approximately 1,000 primary care physicians and 8,600 specialists.

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Network Health's membership continues to surpass its enrollment targets. At the end of FY01, Network Health had 31,000 members, exceeding its budgeted target of 29,000. As of December 2001, membership was approaching 43,000.

Facilities & Technology

Patients throughout the Alliance system have ready access to state-of-the-art facilities and diagnostic tools that are comparable to those available at some of the nation's top teaching hospitals. A new operating suite, intensive care unit, and step-down unit were completed in October 2001. The operating suite includes six large rooms equipped with advanced technology that allows for less invasive procedures. Also in 2001, the Alliance's Department of Radiology began operation of one of the world's leading magnetic resource imaging (MRI) units. The patient-friendly, high-field MRI unit has the capability to identify abnormalities that are not detectable by other means.

Community Access Program

The federal government recently awarded the Alliance a \$1.2 million grant from the Community Access Program of the U.S. Department of Health and Human Services. The mission of the Alliance program is to develop a permanent infrastructure that will allow all community members to easily enter and navigate the health care system. Goals include enrolling uninsured and underinsured people in health plans that will offer them the maximum benefits possible; connecting all enrollees to primary care providers; coordinating referrals to social services and governmental agencies; conducting extensive training in cultural competency for all staff; and assessing and responding to gaps in the behavioral health continuum of care. It is expected the project will increase use of preventive health care and early intervention services, and decrease use of more costly and resource-intensive acute care.

Open Access Scheduling System

The Open Access Scheduling System, initiated in 2000, allows patients to schedule same day appointments with their primary care providers. The Alliance is the only health care system in Massachusetts, and one of a handful in the United States, that offers this same day medical service. The system has improved patient satisfaction; allowed providers to see more patients; and reduced "no-shows." In the future, open access will be extended to include specialty care, radiology, physical therapy, and other clinical areas.

Whidden Hospital Acquisition

In July 2001, the Cambridge Health Alliance bought Whidden Memorial Hospital in Everett and 44 adult psychiatry beds located in Malden from Hallmark Health System. The Massachusetts Department of Public Health and Massachusetts Department of Mental Health supported the Alliance-Whidden match because the two organizations shared a common mission, served similar populations, and were in close geographic proximity of each other.

With the acquisition of Whidden, the Cambridge Health Alliance officially expanded its service area to include Everett and surrounding communities in the metro-North area. In reality, however, the Alliance in recent years had been caring for a growing number of patients from the

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Whidden catchment area. Many of these patients were former Cambridge residents who had moved to the more affordable neighborhoods of Everett and nearby towns after the demise of rent control in Cambridge. These patients will now be able to utilize providers and programs of the Cambridge Health Alliance without leaving their communities.

In FY02, the Alliance will spearhead a community health assessment of the Everett service area and implement programs that will be responsive to the needs of this population.

Conclusion

The Cambridge Health Alliance has been proactive in overcoming many barriers caused by the current health care climate. Going forward, the Alliance's commitment to providing excellent clinical care will be its greatest asset in ensuring credibility with its stakeholders and its long-term viability. In FY03, the Alliance will continue to pursue its vision of becoming the premier academic public health care system in the nation.

CHAPTER 3: INSTITUTE FOR COMMUNITY HEALTH

The Institute for Community Health (the Institute) is a unique collaboration among three not-for-profit health care systems to improve the health of Cambridge, Somerville and surrounding communities. The Institute was founded in 2000 by the Cambridge Health Alliance, CareGroup Healthcare System, and Partners HealthCare. Its nine-member board includes physicians, hospital administrators, and public and community health experts.

The goals of the Institute are to advance community health research; promote community health education and training; develop community action programs and policy; and forge linkages among three nationally recognized health care systems with shared community health objectives. The Institute's health research and programs will focus on Cambridge and Somerville, but results and lessons learned will be disseminated nationally. Institute research and education activities in 2001 are summarized below.

Childhood Overweight Prevention and Physical Activity Promotion

In spring 2001, the Institute for Community Health and the Cambridge Public Schools launched the Overweight Prevention Project. The project involved collaborating with the Cambridge Public Schools to collect height, weight, and fitness data on all public school students (K-8); develop personalized weight and fitness information; mail information packets on nutrition and physical activity to 1,400 families; conduct a telephone survey to evaluate the intervention; and develop a case-management program to link overweight children to community and clinical services. (See Chapter 6: Overweight Prevention and Physical Activity.)

Child and Adolescent Mental Health

In summer 2001, the Harvard Children's Initiative and the Cambridge Health Alliance solicited the Institute to produce a planning report on promoting the mental health of Cambridge children and adolescents. The partnership between the Harvard Children's Initiative and the Institute for Community Health grew out of the ongoing work of the Healthy Children Task Force and its prioritization of mental health issues. In September 2001, the Institute hired a consultant to produce the report, which will be completed in early 2002. (See Chapter 4: Child and Adolescent Mental Health.)

Adult Behavioral Risk Factor Survey

In 2001, the Institute worked with community partners to design a behavioral risk factor survey to identify links between personal health behaviors and chronic disease. The questionnaire is based on a survey from the Centers for Disease Control. It includes such areas as diet and physical activity; ability to access health care; use of cancer screening; and behaviors that affect the risk of chronic illness and death. The survey, when completed, will make such information available in Cambridge for the first time, enhancing the ability of public health interventions to reduce risk behaviors and improve health status. The data will be used for a variety of activities including targeting services, tracking trends, and writing grant applications. Findings will also provide benchmark data for evaluating future Institute projects.

Service Learning

Service learning provides opportunities for physicians-in-training and graduate students from local universities to learn about the practice of community health. In 2001, the Institute actively solicited Harvard public health and medical students to participate in its ongoing public health and community health projects. In August 2001, Institute member organizations created service-learning opportunities for eight Harvard medical students. The students are providing approximately five hours of community service per week throughout the 2001–2002 academic year. They also participate in a seminar series addressing important community health issues. The students are divided among three projects:

- Understanding the patient-doctor relationship on an oncology service. (Mount Auburn Hospital)
- Understanding behavioral risk factors among mentally ill halfway house residents. (Cambridge Health Alliance)
- Understanding how to promote physical activity among overweight children. (Cambridge Public Health Department)

Also in August, the Institute organized a four-day community health project called the First Year Urban Neighborhood Campaign (FUNC). The goal of the annual project is to expose incoming Harvard medical students to community health by engaging them in a short-term research project. The 2001 program focused on diabetes. Institute staff arranged for a small group of first-year students to visit diabetic patients in their homes to learn more about what facilitates and impedes patient self-care.

Health Information Unit

The Health Information Unit (HIU) was established in 1995 as a collaboration between Health of the City and the Cambridge Public Health Department. In 2001, the Health Information Unit became part of the Institute for Community Health. In its new role, the HIU will conduct community health assessments to address information gaps, analyze data for Institute research projects, and write scientific papers based on these projects. The HIU will also continue to compile and analyze health and demographic data on Cambridge and Somerville from the Massachusetts Department of Public Health and numerous other sources.

ICH Administration and Governance

The Board of Directors of the Institute for Community Health includes three representatives from each member organization. CareGroup, Partners HealthCare, and the Cambridge Health Alliance have contributed operating funds and in-kind support to the Institute. The Cambridge Health Alliance is providing the initial staffing for the Institute. The offices are housed within the Cambridge Public Health Department, 119 Windsor Street.

Section 3: Public Health Priorities

In November 2000, the Cambridge Public Health Subcommittee selected five public health priorities for the City of Cambridge.

1. Child and Adolescent Mental Health
2. Asthma and Indoor Air Quality
3. Obesity Prevention and Physical Activity
4. Access to Health Care, including outreach
5. Health of Men of Color

These priorities were chosen in close consultation with health department leadership and followed careful review of local, state, and national health concerns. The five issues were intended to guide the work of the Cambridge Public Health Department through 2003. However, in the aftermath of the September 11 tragedy and the anthrax bioterrorism events, the Cambridge Public Health Department designated emergency preparedness as a *de facto* sixth priority.

As described in Chapter 1, developing a coordinated response to bioterrorism and planning for other potential biological attacks consumed significant financial and personnel resources of the health department in 2001.

The Cambridge Public Health Department anticipates continued focus on emergency preparedness in the coming years. At the same time, the department remains committed to the delivery of public health services and to the five priority areas reported in this section.

CHAPTER 4: CHILD AND ADOLESCENT MENTAL HEALTH

Introduction

The term “mental health” describes the successful performance of mental functions, the ability to experience a range of feelings and act on them appropriately, and the ability to form meaningful connections with others. Mentally healthy individuals are able to develop relationships in a variety of contexts, to be productive in their activities, and to adapt to change. Long overlooked by the medical community, health officials, and policy makers, mental health issues are fast emerging as a top national public health concern.

Mental health issues can range from minor or temporary disorders that have some impact on daily functioning (such as reaction to grief or loss, difficulty coping with increased or long-term stress) to diagnosable disorders, such as depression and anxiety, to major mental illness, such as schizophrenia or bipolar disorder. More serious mental health issues are associated with suicide, injury, violence, alcohol and drug abuse, and medical conditions such as heart disease and diabetes in adults.

The impact of more serious mental health issues on overall health and productivity in the United States is profound. In 1999, the Office of the U.S. Surgeon General issued a report called *Mental Health*. According to the report, mental disorders affect at least one in five Americans, and rank second in the burden of disease in modern market economies, such as the United States. A growing understanding of the devastating effects of mental disorders on health led to the selection of mental health as one of the top priorities of *Healthy People 2010*, the national health goals.

While mental health disorders can occur at any age, the priority focus of the Cambridge Public Health Department is the mental health of children and adolescents. This determination was based on community recognition that the prevalence and severity of mental health issues among Cambridge youth was increasing while the city’s capacity to provide services to this population had remained static.

Mental and behavioral disorders and serious emotional disturbances in children and adolescents can lead to school failure; alcohol or illicit drug use; violence; or suicide. Nationwide, about 5% to 9% of all children and adolescents are seriously impaired by mental, behavioral, or emotional disorders. These disorders include anxiety, depression, attention-deficit, and eating disorders. Another 9% to 13% have a serious emotional disturbance with substantial functional impairment.

National research indicates that half of all young people age 9 to 17 who have a diagnosable mental disorder receive no formal treatment. Of those who do seek professional care, 27% receive treatment in the health sector, while 20% receive mental health services in their schools.

Current Status in Cambridge

Cambridge children and youth face a spectrum of challenges and stressors in their lives, including loss; alcohol and marijuana use; depression and other issues; and suicidality. While some students have adequate family and peer support systems (and are able to seek out and receive counseling), many do not. Some children, for instance, lack insurance. For others, counseling is not seen as a helpful option, and in some cultural groups, it is not an option at all.

For the past decade, community leaders, mental health professionals, and school personnel have reported increasing fragility in the mental health of Cambridge children and adolescents. Commonly observed mental health issues are behavioral problems at home and school, depression, aggression, attention deficit disorder, and drug use. At the same time, many medical providers and school personnel report that pediatric mental health services in Cambridge are inadequate. Among the least well-served populations are non-English speaking families; children with limited or no insurance coverage; and low-income families and teenagers.

The Teen Health Survey (grades 9-12) and the Middle Grades Health Survey (grades 6-8), which are administered on alternate years, provide valuable information about the health risk behaviors of Cambridge public school students, including depression, suicidality, substance abuse, violence, and sexual behavior. The surveys are sponsored by the Cambridge Public Schools, the Cambridge Department of Human Service Programs, and the Cambridge Public Health Department.

Mental Health, Wellness, and Social Support

Many assessments of child and adolescent mental health focus on stress, high-risk behaviors, and mental disorders. In recent years, the Cambridge school health surveys have asked students to report on strengths and support systems, as well as risk behaviors.

According to the *Report on the 2001 Middle Grades Health Survey* (Cambridge Public Schools Office of Development and Assessment): “Key findings suggest that although most Cambridge students have strong peer supports, they juggle many responsibilities, face emotional stress, and may not have the appropriate resources or adults to talk with about issues such as depression, suicide, abuse, and loss.”

The report also indicated that many students participate in activities that involve relationships with adults, and about half the students participate regularly in faith communities. However, a large percentage of middle-grade students report being without adult supervision for more than an hour after school.

Stress Factors Affecting Emotional Health of Cambridge Students

Many factors affect the emotional health of children and youth. Among Cambridge youth, significant stressors are death and loss, violence (verbal, physical, and sexual), substance abuse, family conflict, and poverty (Table 4.1).

According to the Middle Grades Health Survey, many children in sixth, seventh and eighth grade are already experiencing stressful events in their lives. The use of alcohol, marijuana, and tobacco represent an increasing health threat for our young community members. In the 2000 Teen Health Survey, 46% of the public high school students reported current use of alcohol, and 28% reported current use of marijuana.

Death and loss affect a significant portion of the Cambridge public school students. At the Cambridge Rindge and Latin School (CRLS), 35% of students reported the death of a close friend or family member within the past 12 months, and 11% reported experiencing a divorce or separation in the family. Among middle grade students, an even larger percentage (41%) had experienced the death of someone close to them within the past 12 months, and 12% had experienced divorce in the family. This level of loss in the lives of young people can be an enormous stressor that may not be readily apparent to the adults around them.

Table 4.1 Stress Factors Affecting the Emotional Health of Cambridge Public School Students (Grades 6–12)

Stressors Experienced in Past 12 Months	Teen Health Survey ¹ 2000	Middle Grades Health Survey ² 2001
Death of a family member or close friend	35%	41%
Divorce or separation in the family	11%	12%
Involved in a physical fight	24%	15%
Ran away from home	5%	3%
Had a failing grade	38%	27%
Physically hurt by a family member	5%	6%
Forced or tricked into having sex	6%	2%
Worried about sexual abuse	14%	14%
Worried about depression	56%	42%
Worried about drug use in the family	29%	17%
Current Substance Use (last 30 days)		
Alcohol	46%	17%
Marijuana	28%	6%
Cigarettes	18%	3%

¹N=1,493 students

²N=1,435 students

Source: Teen Health Survey, 2000; Middle Grades Health Survey, 2001.

According to the 2000 Teen Health Survey, reports of stressful life events were significantly greater among high school students who had attempted suicide (see Table 4.2). For example, 17% of students who had attempted suicide had also run away from home, while only 3% of students who had not attempted suicide had run away. Teens who attempted suicide had a larger proportion of life stresses including failing grades, and physical and sexual abuse. They were also more likely to drink alcohol, smoke cigarettes or marijuana, and to worry about depression.

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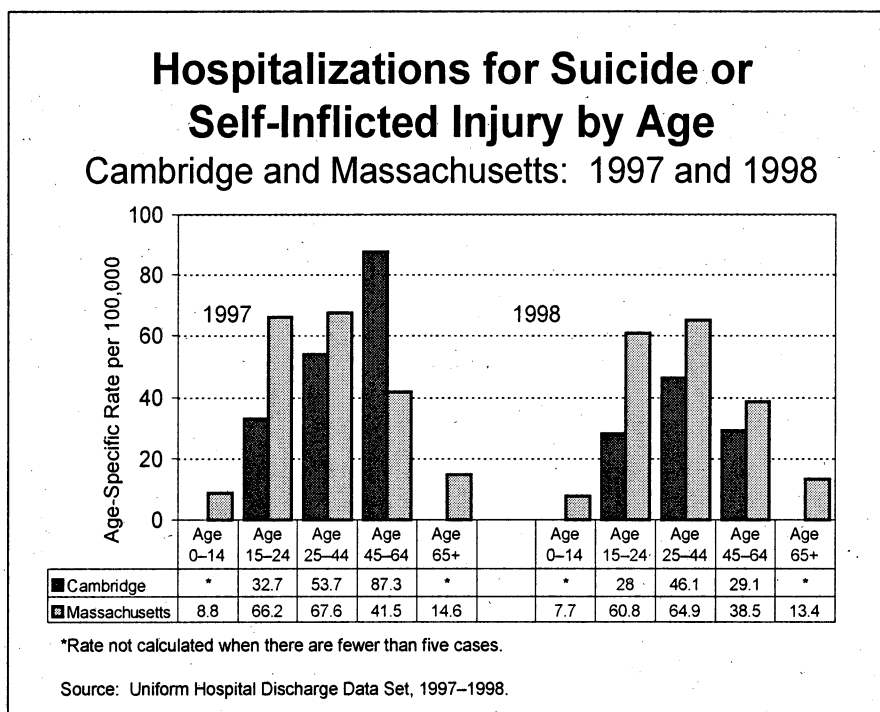
Table 4.2 Stress Factors Affecting the Emotional Health of Cambridge Rindge and Latin School Students, Teen Health Survey 2000

Stressors experienced in past 12 months	Attempted Suicide (n=110)		No Attempted Suicide (n=1,360)	
	n	%	n	%
Death of a family member or close friend	42	38%	477	35%
Divorce or separation in the family	18	16%	146	11%
Involved in a physical fight	28	25%	311	23%
Ran away from home	19	17%	57	4%
Had a failing grade	60	55%	499	37%
Physically hurt by a family member	19	17%	47	3%
Physically hurt by a date	14	13%	22	2%
Sexually abused	18	16%	63	5%
Ever date raped	21	19%	67	5%
Worried about depression	88	80%	726	53%
Worried about drug use in the family	47	43%	383	28%
Considered suicide	71	65%	68	5%
Planned suicide	68	62%	67	5%
Saw counselor	59	54%	443	33%
Current substance use (last 30 days):				
Alcohol	53	48%	580	43%
Marijuana	39	35%	369	27%
Cigarettes	44	40%	212	16%

Depression and Suicide

Suicide is a national public health problem. Among Cambridge residents (25 and younger), there were 16 hospitalizations for attempted suicide or self-inflicted injury between 1997 and 1998.

Figure 4.1



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According to a 1998 survey of Student Support Teams in 15 Cambridge elementary schools (K–8), 88 children were identified as being at risk for suicide or self-destructive behavior, a rate of 1.6 children per 100 children in the schools.

The Cambridge Teen Health Survey and the Middle Grades Health Survey ask public school students whether they have thought about or attempted suicide. From 1994 through 2000, 6% to 8% of Cambridge public high school students reported having attempted suicide (Figure 4.2). The rate of suicide attempts among Cambridge high school students during this period exceeded both that of the Commonwealth and the nation, and was far in excess of the *Healthy People 2010* goal of 1%. The number of students thinking about suicide peaked in eighth grade while the number actually attempting suicide peaked in tenth grade (Figure 4.3). In each of the surveys from 1994 through 2000, a higher percentage of girls than boys reported attempting suicide.

At Cambridge Rindge and Latin School, 110 students reported in the 2000 Teen Health Survey that they had attempted suicide during the previous 12 months (Figure 4.4). The majority of these students also reported that they had considered suicide (65%) or had planned to commit suicide (62%) in the past 12 months; indicating that the attempts were largely not impulsive acts. Among those teenagers who had attempted suicide, 80% reported that they were worried about depression, and 54% had seen a counselor in the past year. (It is important to note that there were no apparent deaths due to suicide during this period.)

Figure 4.2

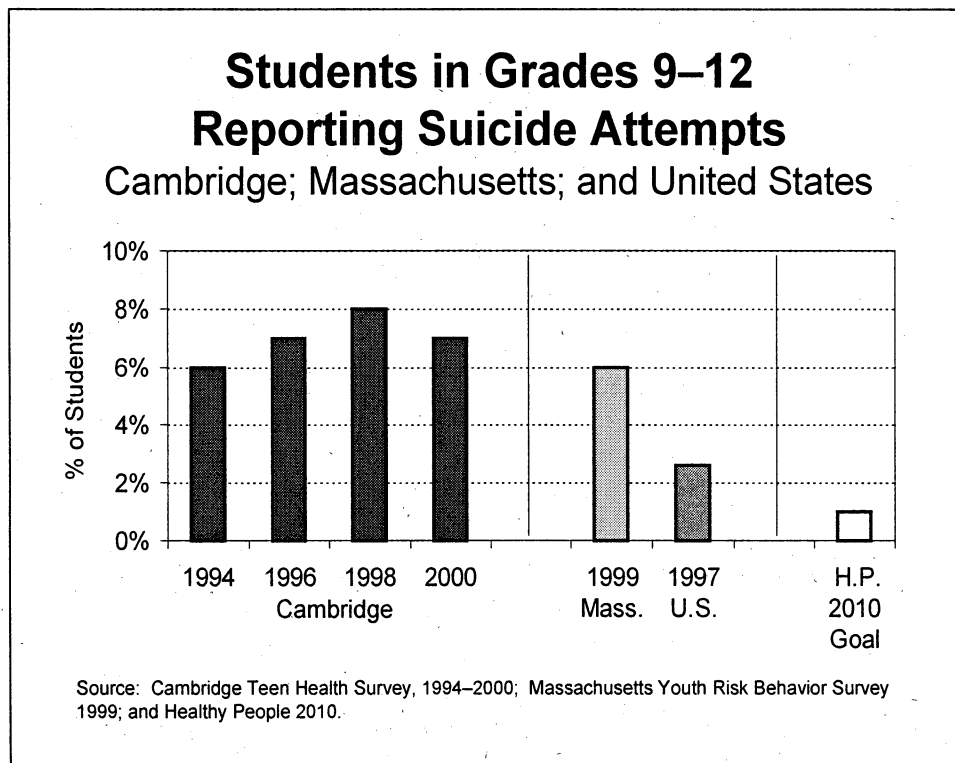


Figure 4.3

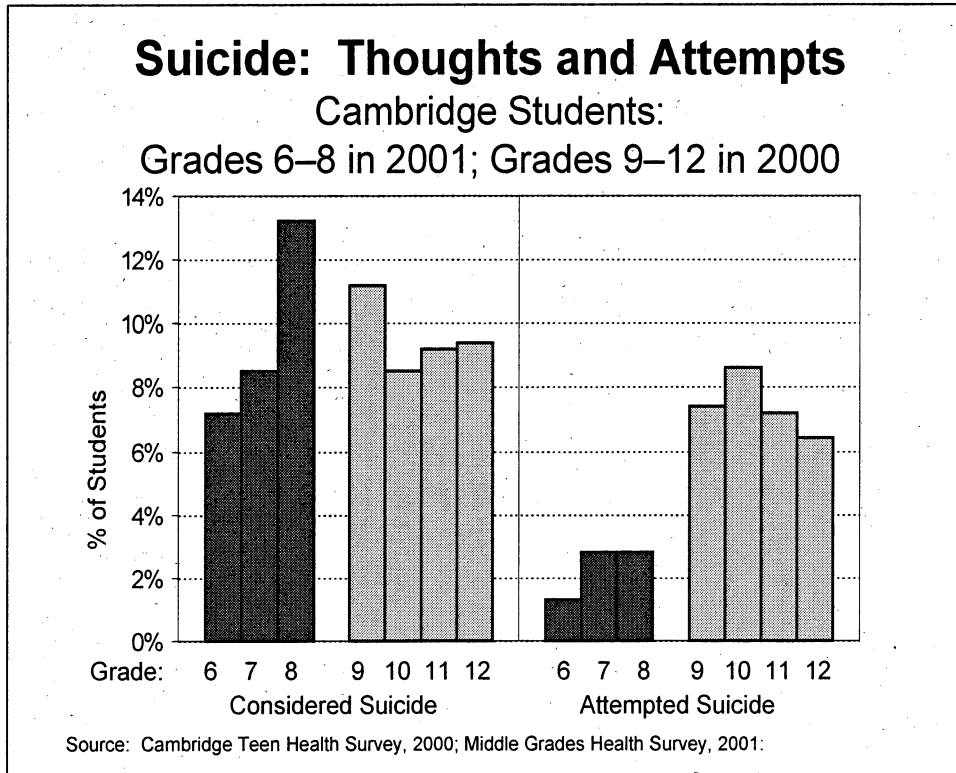
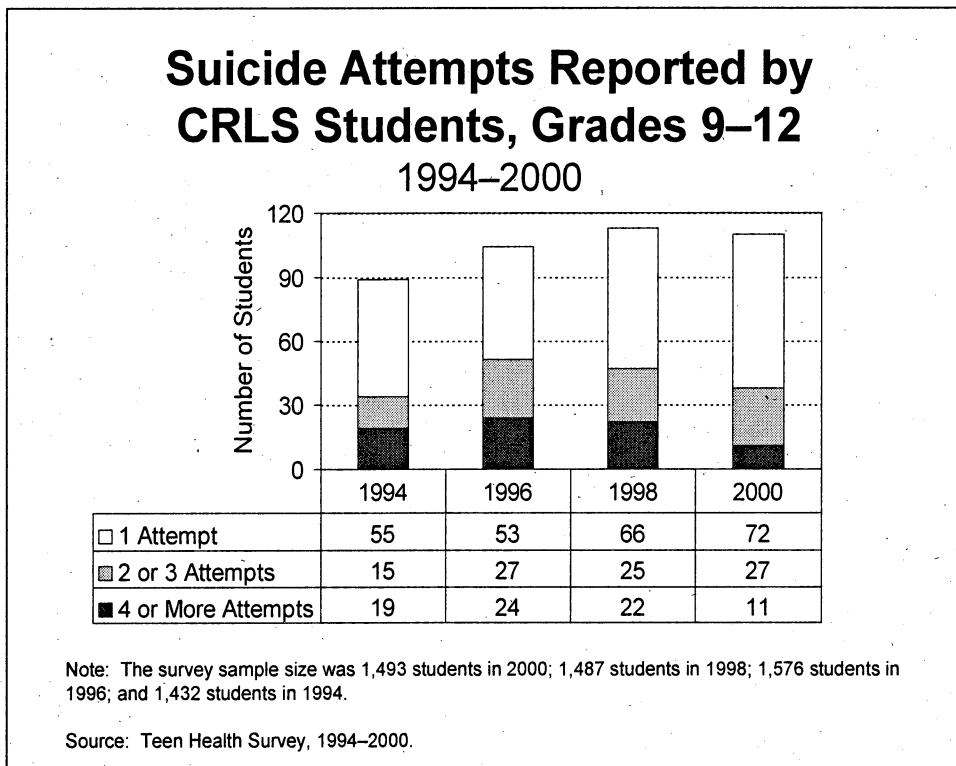


Figure 4.4



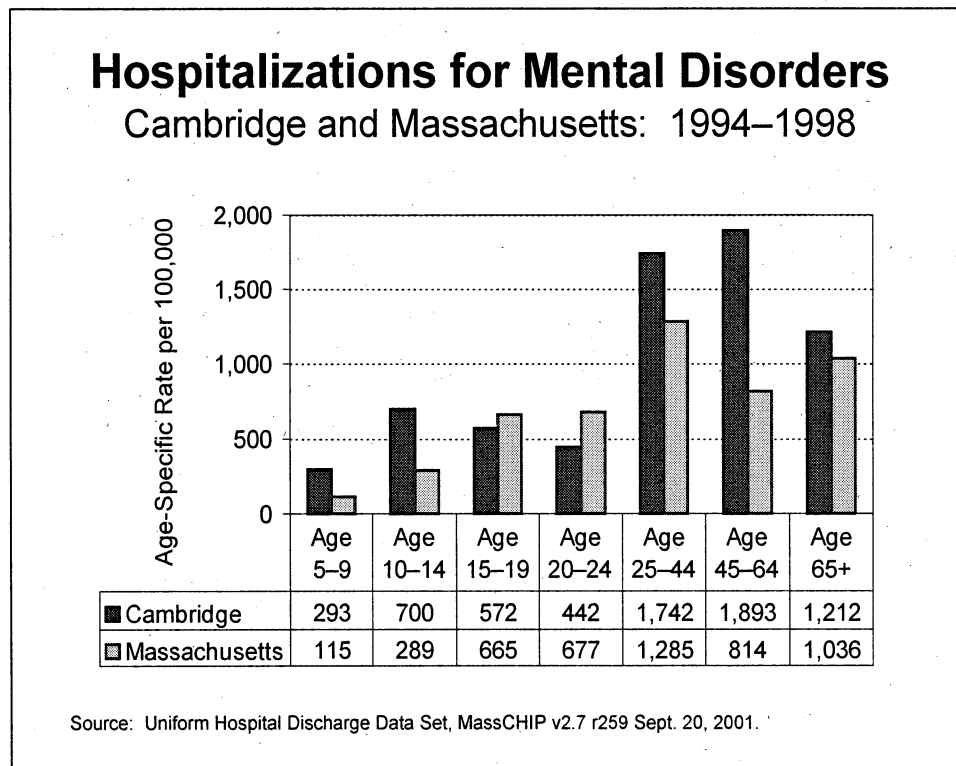
Mental Health Treatment of Cambridge Children and Adolescents

Hospital-based treatment. Hospitalization rates for mental or behavioral disorders are one indicator of the mental health status of a community. In Cambridge, hospitalization rates of Cambridge children age 5 to 14 between 1994–1998 exceeded those of the Commonwealth, while hospitalization rates for individuals age 15 to 24 fell below those of the state (Figure 4.5).

A total of 364 Cambridge children and teens, age 5 to 19 years, were hospitalized for mental or behavioral disorders between 1994 and 1998. During this period, 270 young adults age 20 to 24 were also hospitalized.

The Cambridge Health Alliance provides in-hospital care at the Child Assessment Unit at The Cambridge Hospital and at the Somerville Hospital Adolescent Unit. Both units provide assessment; individual, family, and group therapy; and psychopharmacological treatment for children and teens requiring containment and inpatient care.

Figure 4.5



Outpatient counseling. Outpatient counseling is available from several community-based agencies and many private providers in Cambridge, although access to many services may be limited by health insurance status.

The Cambridge Youth Guidance Center, The Family Center, Harvard Vanguard, and Mount Auburn Hospital provide a wide range of individual and family treatment, and accept many

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forms of health insurance. The Adolescent Consultation Services at the Middlesex Juvenile Court provides an array of clinical services, substance abuse education, and psychological testing.

The Cambridge Health Alliance Child Psychiatry Department accepts insurance and provides mental health care at no cost (or reduced cost) to families who meet certain financial criteria. The Child Outpatient Clinic provides diagnostic assessment, parent guidance, cognitive behavioral therapy, and services to hearing-impaired children. The clinic reports approximately 9,000 visits a year.

Other Cambridge Health Alliance programs include the Child Development Center, which provides neuropsychological testing and assessment for children with learning disorders; and the Psychiatric Emergency Outreach Team, which provides crisis response and evaluation in the community and at The Cambridge Hospital Psychiatric Emergency Department.

School-based mental health services. The Cambridge Youth Guidance Center and The Family Center provide elementary school-based mental health services (including consultation) to student and academic support teams.

The Cambridge Health Alliance provides a full-time clinical social worker and psychiatric consultation at the Teen Health Center at the Cambridge Rindge and Latin School. Other counseling services are provided at the Teen Health Center by CASPAR (substance abuse counseling), the Cambridge Economic Opportunity Committee (family planning counseling), and the Dating Violence Intervention Project.

The Alliance also provides extensive consultation to the Cambridge Public Schools. Child Psychiatry staff members have worked with the school department to develop emergency protocols and response teams, and provide consultation to school personnel regarding crises and treatment recommendations for students. Staff members also perform rapid intensive threat assessments of students facing disciplinary actions.

In spring 2000, 35% of CRLS students reported seeing a counselor (other than a school guidance counselor) in the past 12 months. During the 1998–1999 school year, almost 1,000 visits to CRLS school health nurses were characterized as including or being focused on episodic or chronic mental health issues, accounting for about 13% of total visits.

Approximately 2% of children in the Cambridge Public Schools receive psychiatric medications (primarily to treat attention deficit hyperactivity disorder) from school health nurses. This figure probably underestimates the number of children on psychiatric medication because some children receive medication exclusively at home, and some high school students take their medication without the intervention of a school health nurse.

Progress in 2001

Collaborations among city agencies and institutions have led to some important community health work in 2001. In spring 2001, the Cambridge Public Schools received a three-year federal grant to increase counseling at the elementary schools. In fall 2001, the Institute for Community Health and the Harvard Children's Initiative began developing a series of recommendations for addressing the current mental health needs of Cambridge youth.

Meanwhile, Alliance mental health care providers continued to offer services and improve access to care, including linking children and their families to clinical and social services. Mental health is also a key component of the Alliance's Community Access Program (CAP). CAP objectives include increasing early identification and treatment of mental health issues within the primary care setting and promoting primary medical care for patients with severe, chronic mental illness.

Child Mental Health Project

In summer 2001, the Harvard Children's Initiative and the Cambridge Health Alliance solicited the Institute for Community Health to produce a planning report on promoting the mental health of Cambridge children and adolescents. This collaboration has resulted in the Child Mental Health Project. The project's goals are to improve the mental and emotional well being of Cambridge children by developing plans that build on the existing strengths of the Cambridge community and its institutions; identifying opportunities for collaboration; and pursuing funding opportunities.

A consultant was hired in September 2001 to collect information on the mental health needs in Cambridge, and identify the strengths and intellectual capital in the community and at Harvard University. As of December 2001, the consultant had received input from about 40 individuals and groups in Cambridge and at Harvard. A final report will be completed in early 2002, which will include:

- Demographic and epidemiological background
- Examples of major prevention-oriented programs and approaches currently in practice
- Major assets and strengths within the Cambridge and Harvard University communities related to children's mental health and well being
- A discussion of the major mental health needs and gaps in Cambridge, as identified by recent data and by Cambridge providers and parents
- Concrete recommendations for addressing current needs through collaborative efforts between Harvard University and Cambridge agencies and organizations

The partnership between the Harvard Children's Initiative and the Institute for Community Health evolved from the ongoing work of the Healthy Children Task Force and its prioritization of mental health issues. Harvard has demonstrated its commitment to improving the mental health of its own students through a provost-led effort on caring for the Harvard community. The recognition of this mutual commitment to bolstering the mental and emotional health of the

city's young people resulted in the current collaboration. This project may lay the groundwork for future activities that will benefit from this synergy of intellectual and community activism.

School-Based Mental Health Services

In spring 2001, the Cambridge Public Schools received a three-year, \$1.3 million grant from the Department of Education for elementary school mental health services. The grant will support mental health counseling services through a collaboration of The Guidance Center, The Family Center, the Cambridge Health Alliance Department of Psychiatry, the Cambridge Public Health Department, and the Cambridge Public Schools. Specifically, the grant will fund:

- Salaries for five school outreach counselors and a director of counseling services
- Expanded contracts with The Guidance Center and The Family Center for school-based services
- Clinical supervision for school counselors
- Staff and parent training
- Program evaluation

Future Directions

The Cambridge Health Alliance, the Cambridge Public Health Department, and their community partners have a vision in which the children and youth of Cambridge are mentally and emotionally healthy. To achieve this vision, the Child Mental Health Project is concentrating on three domains: promoting coping, resilience, and overall mental health among children and youth; reducing high-risk behaviors; and promoting community assets and enhancing natural systems of support.

The short-term goals of the Child Mental Health Project are to complete the planning report on child mental health in Cambridge and to establish collaborative working groups that will focus on the three domain areas. The working groups will begin meeting in early 2002, and will be comprised of members of the Cambridge and Harvard University communities.

The next steps of the Child Mental Health Project will be to develop workable proposals for each of the three domains, and secure resources to implement the proposals.

CHAPTER 5: ASTHMA AND INDOOR AIR QUALITY

Introduction

Americans have become increasingly conscious of the chronic health effects posed by outdoor and indoor air pollutants such as ozone and environmental tobacco smoke. According to *Healthy People 2010*, poor air quality contributes to respiratory illness, cardiovascular disease, and cancer.

One of the most widespread respiratory diseases in the United States is asthma, a chronic inflammatory disorder of the airways. During an asthma episode, an individual may experience wheezing, breathlessness, chest tightness, and coughing. Exposure to certain environmental triggers can initiate or exacerbate asthma symptoms. Such triggers can include tobacco smoke; ozone and other chemical pollutants; molds; dust mite and cockroach debris; and pet dander.

The number of people who suffer from asthma in the U.S. has more than doubled in the past twenty years. In 1998, 26 million Americans reported they had been diagnosed with asthma during their lifetimes. Within this group, 6.8 million adults and 3.8 million children (18 and younger) reported they had experienced an asthma attack or episode in the past 12 months. Asthma accounts for 500,000 hospitalizations each year, and is a common health-related reason for student absence.

Poor indoor air quality can have short- and long-term health effects. Headaches, dizziness, fatigue, and irritation of the eyes, nose, and throat are among the immediate effects of exposure to indoor air pollutants. Long-term effects include certain respiratory diseases, heart disease, and cancer. Indoor air pollutants include tobacco smoke, carbon monoxide, cleaning solvents, pesticides, and radon.

The selection of asthma and indoor air quality as a priority focus of the Cambridge Public Health Department reflected both the department's expanding interest in environmental health topics and the recognition that air pollutants pose a serious threat to the public's health.

Asthma

Expanded planning and coordination between the Healthy Homes program and other clinical services within the Cambridge Health Alliance accelerated in 2001. Key asthma programs and activities are highlighted below.

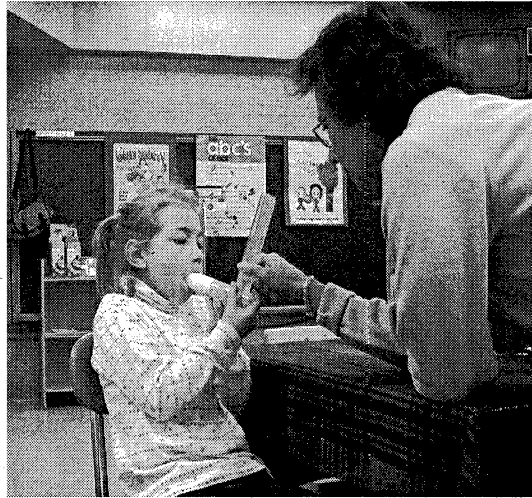
Integrated Childhood Asthma Program

Despite the increased national focus over the past decade on asthma, particularly among children, efforts to measure asthma prevalence rates have been hampered by a number of factors. U.S. communities that have attempted to measure asthma prevalence rates and collect reliable asthma severity indicators have faced enormous obstacles including inconsistent diagnoses among primary care providers, a lack of central reporting mechanisms, and poor coordination among the points of patient contact (e.g., pediatricians, home, school nurses, pharmacists, emergency departments).

Recognizing the importance of a coordinated approach for managing asthma care, the Cambridge Health Alliance has developed a multidisciplinary team to design and implement the Childhood Asthma Program. The steering committee of this program is chaired by the chief of Pediatrics and membership includes representatives from Ambulatory Care, Pediatrics, the Department of Quality Improvement, the Respiratory Department, Network Health and the Cambridge Public Health Department. As a result of ongoing quality improvement efforts, the Alliance unveiled an ambitious plan in 2001 to build an integrated asthma registry and a management matrix that will cross clinical departments and community boundaries.

Utilizing standards of care developed by the National Heart, Lung and Blood Institute, the program mission is to improve quality of life and reduce the burden of illness for asthmatic children and their families. Outcome measures include reducing days absent from school due to asthma; increasing sports participation among children with asthma; decreasing childhood asthma-related emergency room visits; and reducing hospitalizations.

The Childhood Asthma Program will address environmental triggers of asthma; train site-based nurses to provide patient education; utilize the asthma registry to manage care for asthmatic children; and document assessment, treatment, and timely follow-up. The program will assure that Cambridge Health Alliance pediatric providers understand and utilize the National Heart, Lung, and Blood Institute's clinical practice guidelines for diagnosing and managing asthma. Work will also be undertaken to roll out this message to other community pediatric providers.



Two key components of the program are the EQUIS Asthma Project and the planning and implementation of an integrated asthma registry.

EQUIS Asthma Project. In collaboration with the National Initiative for Children's Healthcare Quality, the Alliance launched the EQUIS Asthma Project in 2001. The goal of EQUIS (which stands for "evaluating a quality improvement strategy") is to implement and evaluate a system of pediatric asthma care that meets the standards for asthma care as set by the National Heart, Lung and Blood Institute. The project is currently being piloted at Somerville Pediatrics and is in the planning phase at Cambridge Pediatrics. It will serve as a model for standardizing high quality care for pediatric asthma patients throughout the Alliance.

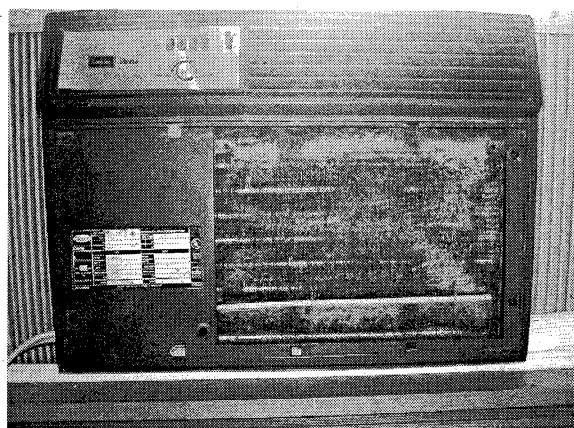
The Asthma Registry. In 2001, the Alliance began to develop an asthma registry to track patients' medication adherence, lung function, and emergency room utilization, and to identify children who are overdue for medication refills, home visits, and clinical tests. Information on all pediatric asthma patients is currently being entered in the database.

An initial planning grant from the Robert Wood Johnson Foundation, called Pursuing Perfection, was awarded to the Alliance in 2001 and has provided resources to implement the EQUIS model and the asthma registry. A final proposal will be submitted to the Robert Wood Johnson Foundation in January 2002. If granted, Pursuing Perfection will support the work of the Alliance to pilot and disseminate a model care delivery system for pediatric asthma patients and their families within the Alliance, as well as other community pediatric providers. The registry will contribute to a comprehensive, unified tracking and case-management system for pediatric asthma patients living in Cambridge and adjacent communities served by the Alliance, Mount Auburn Hospital, and Massachusetts General Hospital. The registry will allow the multiple medical providers—primary care physicians, emergency department staff, pulmonary specialists, respiratory specialists, school nurses—who care for pediatric asthma patients to have access to critical information about their patients in a timely and efficient manner. The asthma registry will also directly link pediatric asthma care services to the Cambridge Public Health Department's Healthy Homes program.

The Healthy Homes Program

The Healthy Homes Program was established in 1999 to address the growing prevalence of childhood asthma in Cambridge, Somerville, and surrounding communities. The primary goals of the program are to improve the living conditions and delivery of clinical services for pediatric asthma patients, 10 years and younger. Living conditions are improved by inspecting homes to identify asthma triggers and other safety hazards, providing advice on removing hazards from the home, and through advocacy with landlords. Services are delivered through home visits, community education, and case management activities.

A Healthy Homes inspection reveals an air conditioning filter growing dangerous mold.



The Cambridge Public Health Department is evaluating the hypothesis that this integrated approach to children's health issues in the home environment will reduce the frequency and severity of asthma attacks and respiratory distress among children. In 2001, the program offered full home inspections and case-management resources to families living in Cambridge and surrounding communities.

Healthy Homes' partners include the Massachusetts Department of Public Health, the Urban Asthma Coalition, Cambridge Inspectional Services, the Somerville Health Department, the Cambridge and Somerville Housing Authorities, Harvard School of Public Health, Harvard Medical School, New England Medical Center, and local consulting and engineering firms. Since 1999, program funders have included the Massachusetts Department of Public Health, the U.S. Department of Housing and Urban Development, and the Cambridge Health Alliance.

Disparities in Housing Conditions

A recent study of Healthy Homes cases revealed that among Cambridge families who live in rental units, those who did not speak English as a first language were much more likely to inhabit substandard housing.

Between 1999 and 2001, Healthy Homes staff evaluated the homes of 93 families who had participated in the Healthy Homes program. Among these families, 50 lived in private rental units, 21 lived in public housing, and another 22 families lived in homes they owned. Table 5.1 lists the asthma-related housing code violations that were observed in the private rental units. All findings were statistically significant.

Table 5.1: Non-Public Rental Units, Code Violations That Are Asthma Triggers

Housing Condition	Non-English Speaking Families	All Other Families
Cockroaches	63%	21%
Excessive mold	59%	31%
Visible moisture	69%	44%

The large number of housing code violations discovered in both English- and non-English-speaking households reflected the persistence of substandard housing in a real estate market that has rapidly escalated in value over the past decade. At the same time, the higher prevalence of code violations among the non-English-speaking families was suggestive of economic disparities between the two groups. Non-English-speaking families may also be less likely to advocate for themselves for fear of eviction or risk to their immigration status.

In contrast, when baseline housing conditions were controlled by centralized maintenance services, as in public housing, the statistical differences between primary language groups seemed to disappear. Among families who lived in public housing units, no statistical difference was observed between the English- and non-English-speaking families regarding visible moisture and excessive mold and dust.

Despite the limited number of households evaluated, it is clear that recent immigrants living in market-rate housing are encountering a disproportionate amount of housing conditions known to be associated with poor respiratory health. When owner-controlled conditions are consistent among all families, this disadvantage seems to disappear.

This observation underscores that there is an acute need to assess and improve housing conditions and overcome language and cultural barriers in order to reduce the medical, social, and financial burdens associated with childhood asthma.

Indoor Air Quality

In identifying health goals for the country, *Healthy People 2010* targeted two specific air pollutants: environmental tobacco smoke and ground-level ozone. Ozone pollution is primarily a consequence of regional and national environmental policies, and is not readily solved through local interventions. The regulation of environmental tobacco smoke in Massachusetts, however, is largely the responsibility of local governments.

Environmental Tobacco Smoke

The Cambridge Health Alliance, through its partnership with the Five City Tobacco Control Collaborative, has worked diligently to limit environmental tobacco smoke exposures in Cambridge through cessation services, education, and promulgation of local tobacco control regulations.

In late fall 2001, the Cambridge Public Health Department and the Boston Public Health Commission spearheaded an initiative to strengthen and expand restrictions on public smoking. The fledgling coalition has garnered support from many cities and towns in the area as part of a strategy to magnify the public health voice in the politically charged debates over environmental tobacco smoke regulation.

Indoor Air Quality Investigations

Other airborne threats, while not identified as national environmental health priorities and not easily tracked, are critical to health and often within our local capacity to address.

The Environmental Health Unit has worked to expand indoor air testing and investigation services available to the public in their homes, public buildings, and places of work. In addition to conducting investigations, Environmental Health staff often mediate disputes that arise as a result of positive findings, particularly when no remedy is provided under existing housing and public health codes.

While a vast majority of indoor air quality cases in Cambridge have been associated with moisture and mold, other airborne pollutants have included emissions from adjacent businesses, hazardous waste removal, and construction activity. Harmful airborne exposures have also been caused by cigarette smoking in neighboring units, faulty air handling systems, and inappropriate vehicular idling patterns near windows or air intakes.

Protection of employees in the biotechnology industry is conferred by strict local regulation of recombinant DNA laboratories and careful assessment of their air handling and air filtration systems in light of specific biological threats posed by microbial agents being handled and genetically altered.

The Cambridge Public Health Department has the capacity to measure indoor levels of carbon monoxide (a highly poisonous by-product of combustion), carbon dioxide (reflecting poor air replacement), hydrogen sulfide (an asphyxiating sewer gas), volatile organic compounds (associated with smoking, vehicle emissions, and many industrial materials), mold spores, and

excessive humidity. When harmful exposure sources elude discovery, the Environmental Health Unit's investigative capacity extends beyond that of the health department, through partnerships with the MIT Industrial Hygiene and Biosafety laboratories and the Harvard School of Public Health.

Future Directions

Local Air Quality and Data Sources. A dearth of local data is one of the greatest challenges to identifying levels of airborne pollutants within individual communities. For instance, Massachusetts air quality data used by the U.S. Environmental Protection Agency is collected from regional "air basins." The Commonwealth also tracks air quality, but relies on a limited number of sampling stations to derive statewide air quality data.

Unfortunately, air quality data collected by the state and the federal government is not designed to answer concerns of individual communities. For example, to evaluate the impact of traffic and development plans on local air quality, it is necessary to have a consistent and well-designed data gathering system that will deliver an accurate picture of local sources of pollution. There is rapidly growing interest among environmental health engineers and regulators in examining air quality data at the household, block, and neighborhood level. However, these data have not been collected in most communities.

Overcoming this data gap and participating in an exciting new generation of small-scale air pollution research will be an ongoing interest of the Environmental Health staff at the Cambridge Public Health Department. As capacity increases through partnerships and grants, the department will be able to offer the people of Cambridge a clearer picture of the impact of local planning policies on air quality.

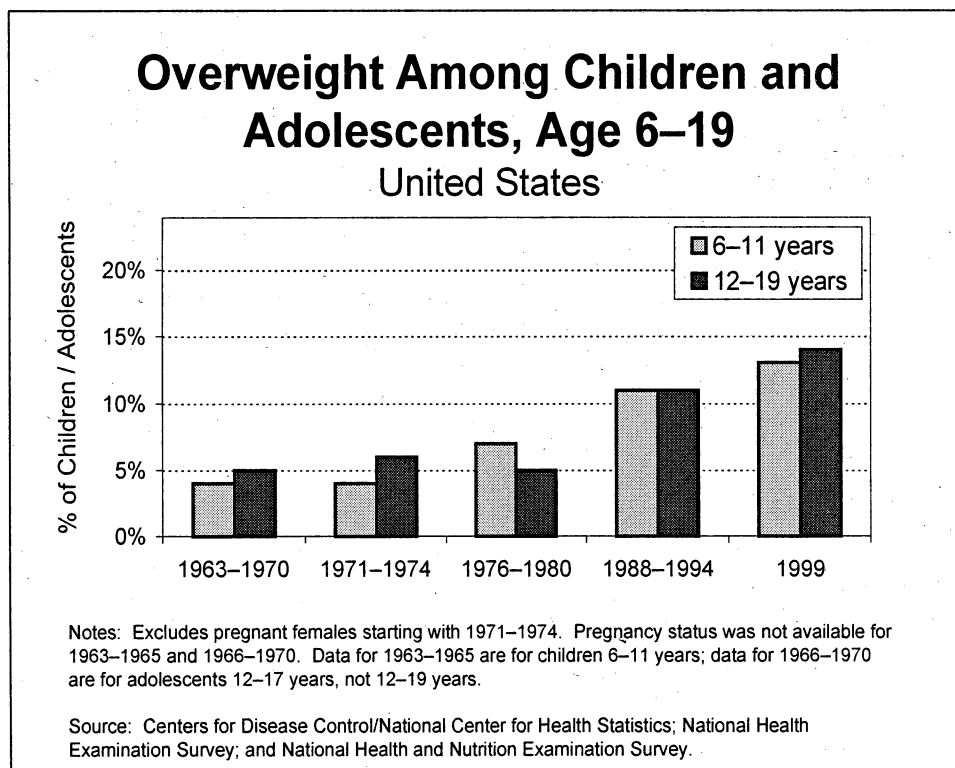
CHAPTER 6: OBESITY PREVENTION AND PHYSICAL ACTIVITY

Introduction

During the past four decades, the rate of obesity in the United States has skyrocketed. Today approximately half of all American adults and a quarter of all children and teenagers are considered obese, overweight, or at risk for overweight.

Healthy People 2010 identified overweight and obesity prevention and physical activity promotion as the top two health priorities for the nation, in part because they are determinants of premature death and poor quality of life. Overweight and obesity are risk factors for high blood pressure; high cholesterol; type II diabetes; heart disease and stroke; arthritis; sleep disturbances; and breast, prostate, and colon cancers.

Figure 6.1



Being physically active is important to achieving and maintaining a healthy weight. Overweight results when a person consumes more calories from food than is expended through physical activity or other means.

Weight gain is influenced by metabolic and genetic factors as well as behaviors affecting dietary intake and physical activity. Environmental, cultural, and socioeconomic components also play a role.

Definitions of Overweight and Obesity

The National Institutes of Health define obesity and overweight using a body mass index (BMI), a mathematical measure that estimates body fat. To calculate body mass index, divide your weight in kilograms by the square of your height in meters.

Adults who have a BMI between 25 and 29.9 are considered *overweight*, while adults who have a BMI of 30 or higher are considered *obese*.

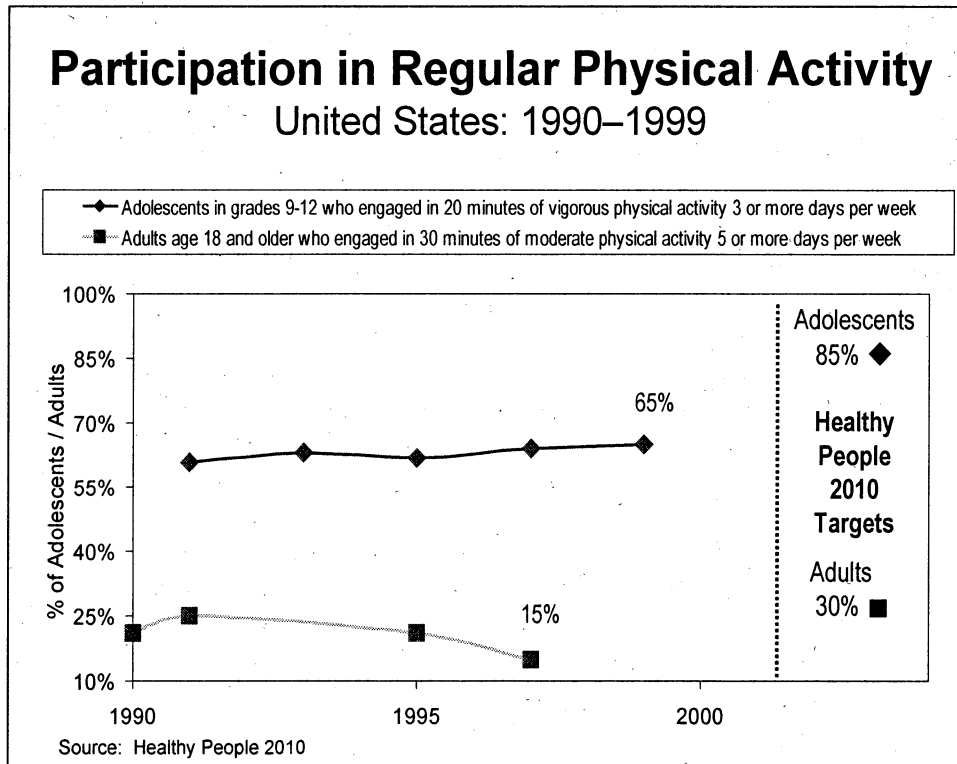
Among children and adolescents, there is no generally accepted definition of obesity. Rather, the term *overweight* is applied to children and adolescents who have a sex-and-age specific BMI at or above the 95th percentile, based on revised growth charts developed by the Centers for Disease Control. Children and adolescents with a sex-and-age specific BMI between the 85th and 95th percentile are considered *at risk for overweight*.

Recent studies show that almost every individual can benefit from regular physical activity.

The most effective type of activity requires sustained movement of large muscle groups over a period of 15 minutes or more. For people who are inactive, even small increases in physical activity are associated with measurable health benefit. Regular physical activity is important to many aspects of health including enhancing

psychological well-being; preventing premature death; decreasing blood pressure; reducing risk of cardiovascular disease, diabetes, and certain cancers; and reducing bone loss.

Figure 6.2



The role of physical activity in preventing coronary heart disease is particularly important because heart disease is the leading cause of death in the United States. People with sedentary lifestyles are almost twice as likely to develop coronary heart disease as persons who engage in regular physical activity. People with other risk factors for heart disease, such as overweight and high blood pressure, may particularly benefit from physical activity.

Current Status in Cambridge

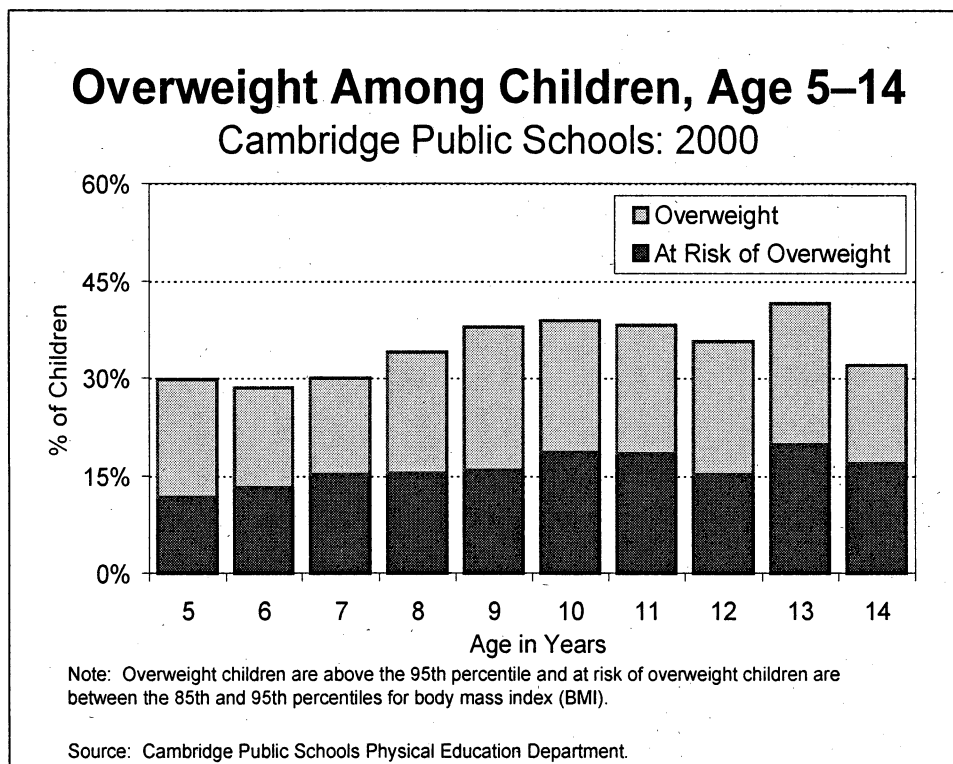
In the wake of *Healthy People 2010* and the Surgeon General's recent report on overweight and obesity, significant national and local attention has focused on obesity, overweight, and physical activity. Despite the magnitude of the overweight/obesity epidemic in the U.S., many experts believe there is reason for optimism. In recent years, a number of strategies have been identified that address the problem at the individual, family, community, and institutional levels. These strategies include:

- Reducing inactivity, particularly TV viewing
- Increasing daily activity and opportunities for activities
- Promoting healthy eating by encouraging children to eat plenty of fruits, vegetables and whole grains, and avoid soft drinks, high calorie snacks, and fast foods
- Promoting breast feeding

Overweight and Obesity

In spring 2000, the Cambridge Public Schools reported that 38% of its students age 10-14 were either overweight or at risk for overweight. About 22% of all adults in Cambridge and Somerville are overweight and another 15% are obese, according to self-reported data collected between 1994 and 1999.

Figure 6.3



Physical Activity

The student health surveys collect information about the various ways that Cambridge students participate in physical activity. Among middle grade students (grades 6–8), 70% reported

participating in exercise not associated with organized sports or physical education class in the last seven days, and 45% reported participating in school sports.

Among Cambridge public high school students (grades 9–12), 27% participated in community sports in the last 12 months, and 45% participated in school sports. Thirty-three percent of Cambridge high school students reported moderate physical activity for at least 30 minutes, five or more days a week, surpassing the national rate of 20% and the *Healthy People 2010* target of 30%. Sixty-two percent of high school students reported vigorous physical activity for at least 20 minutes, three or more days per week. Among adults age 18 and older who reside in Cambridge and Somerville, 39% reported regular physical activity, exceeding the statewide rate of 30%.

Progress in 2001

The Cambridge Health Alliance, the Cambridge Public Health Department, and the Institute for Community Health, in collaboration with individuals and groups throughout the city, are committed to promoting opportunities for physical activity and improving the weight status of the community. Efforts in 2001 focused on promoting walking and developing an effective way to communicate to parents the health risks of childhood overweight and inactivity. These projects reflected a range of promising strategies targeted at individuals, families, communities, and institutions. Overweight prevention and physical activity promotion activities that occurred in 2001 are summarized below.

Overweight Prevention Project

In spring 2001, the Institute for Community Health, in collaboration with the Cambridge Public Schools, developed an overweight screening and family education pilot project. The pilot was designed to 1) create a surveillance system, 2) increase family awareness about their children's health and fitness, and 3) provide greater access to community and clinical resources that promote overweight prevention and management.

During the surveillance phase of the study, physical education teachers at the Cambridge Public Schools collected height, weight, and fitness data on over 4,000 students in grades K–8. The data was then entered into a computer database. The student data will be used for tracking students' weight and fitness status over time and for evaluating citywide overweight prevention interventions.

In the screening and family education phase, information packets were mailed to 1,400 families (approximately 1,600 students) at four pilot schools: Kennedy, Longfellow, Agassiz, and Haggerty. The packets included individualized information on each student's weight, height, body mass index, and fitness levels, plus general information about exercising, watching less television, and consuming five or more servings of fruits and vegetables a day. Families also received a postcard to mail back with suggestions about how the city and schools could promote physical activity. Materials were provided in English and Spanish, the predominant languages at the four schools.

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In summer 2001, Institute staff interviewed by telephone 400 families who participated in the pilot project. The purpose of the survey was to assess whether the informational packets were effective in promoting help-seeking behavior and lifestyle changes. Interviews were conducted in both English and Spanish. Data analysis will be completed in early 2002 and results will be made available at that time.

In the final and ongoing phase of the pilot, a small team of school nurses, Institute staff, and school personnel are working together to develop a case management program. The program will link families of overweight children to existing community and clinical services. As part of this effort, packets of clinical resources were mailed to 250 Boston-area pediatricians and primary care physicians in summer 2001. The packets included new growth charts and a guide to local pediatric overweight programs.

Cambridge Walks

Cambridge Walks is a citywide campaign, led by the Cambridge Public Health Department, that encourages residents of all ages to walk or otherwise be active. The campaign grew out of the collaborative efforts of various city departments, businesses, health care organizations, and private citizens to promote physical activity in Cambridge. The Cambridge Walks campaign currently organizes two annual events: Golden Shoes and Walk with Your Children Day. The campaign has also been instrumental in the establishment of adult walking groups and school walking clubs.

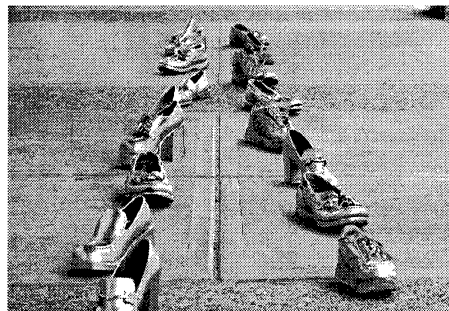


Golden Shoes. The *Golden Shoes* event was held in 2001. During the month of May, 100 gold-painted shoes were placed around the city in parks, playgrounds, and on walking paths. A pedestrian who discovered a specially marked "golden shoe" could swap it for a free pair of Saucony walking shoes. Shoe winners were also entered into a grand prize drawing for a "walking shopping spree" of Cambridge. Sponsors included Saucony, the Five City Tobacco Control Program, Cambridge Walks, and local merchants.

Golden Shoes was developed by the Cambridge Public Health Department to promote walking as a healthful, fun activity and it grew into a very successful public health event.

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More than 600 calls were received about the event, and of those, about 480 callers stated that they were likely to start walking or walk more because of the event. Golden Shoes also received strong media coverage. Stories appeared in the Boston Globe, Walking magazine, the Cambridge Chronicle, online publications, and on the Channel 4 and Channel 5 news.

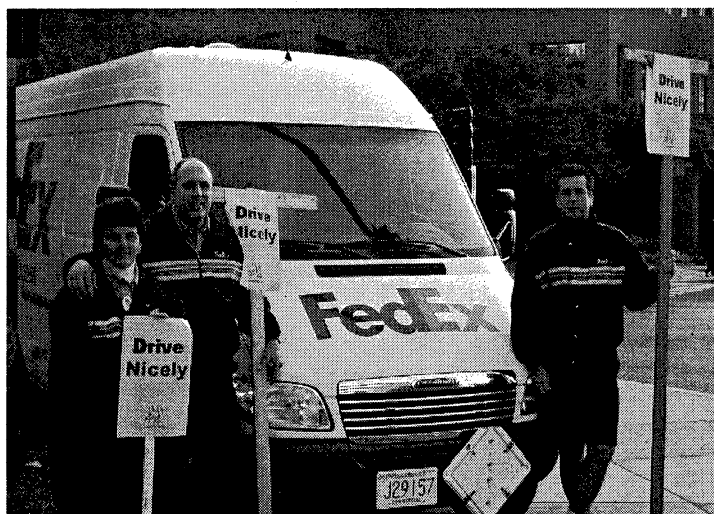


In response to outside requests, the Cambridge Public Health Department created a Golden Shoes “starter kit” for other communities to use in developing similar campaigns.

Walk with Your Children Day. In conjunction with a national campaign, Cambridge Walks organized “Walk with Your Children Day” on October 2, 2001. Originally called “Walk Your Child To School Day,” the event was renamed in 2001 in recognition that many Cambridge children do not live within walking distance of their schools. The event was made possible through a generous grant from Blue Cross and Blue Shield of Massachusetts.

On the morning of the event, 100 golden balloons (with prize certificates attached) were “hidden” near the 14 public schools and three parochial schools in Cambridge. As children arrived at school, volunteers handed out educational materials (in multiple languages) about the benefits of walking, physical activity, and healthful eating.

A safety campaign was the second component of “Walk with Your Children Day.” In an effort to make drivers aware of the city’s young pedestrians, the health department designed large placards that read “Drive Nicely” and “Kids Walking.” On the day of the event, volunteers displayed the signs around the school areas and throughout Cambridge at intersections with heavy traffic.



Cambridge Public Schools

Walking Programs. The Cambridge Public Schools Physical Education Department launched walking clubs in 2001. At the Longfellow School, pedometers were issued to students to measure the number of steps they walked each day. At the Kennedy School, parents signed off on how far their children walked every day. The Peabody School organized a before-school program that incorporated jumping rope and walking.

Physical Education for Progress Grant. In 2001, the Cambridge Public School system was awarded a \$400,000 Physical Education for Progress grant from the U.S. Department of Education. The grant will fund new games and adventure activities for the children; recess and before-school activities; safety training; and professional development activities for teachers.

Cambridge Health Alliance Pediatric Obesity Task Force

In 2001, the Cambridge Health Alliance Nutrition Department organized an interdepartmental task force dedicated to improving Alliance obesity-related services. The task force includes representatives from Nutrition, Pediatrics, Community Affairs, and the Institute for Community Health. In collaboration with the Alliance's Office of Institutional Advancement, the task force is seeking funding to further develop obesity treatment and management services. Evidence suggests that a family-based multidisciplinary team approach that incorporates nutrition, mental health, and physical activity is the most effective way of managing overweight in childhood.

In 2001, the task force conducted a chart review study of the prevalence of overweight among approximately 500 randomly chosen 10-year-old patients who receive care at the Alliance. Among these patients, 28% were overweight and another 20% were at risk for overweight. These rates appear to be higher than those of the overall population of 10-year-old children in the Cambridge Public Schools, suggesting that the Alliance patient-base may be particularly vulnerable to overweight. In addition, among a sample of child asthma patients, 60% were identified as being overweight or at risk for overweight.

Future Directions

In 2002, the Cambridge Health Alliance, the Institute for Community Health, and their partners will focus on raising community and individual awareness about the health implications of overweight and the benefits of activity. The team will also implement promising strategies for health promotion. Future work will include providing more opportunities at the community and clinical levels for overweight prevention and management.

Community Collaboration

The Institute for Community Health, in collaboration with the Cambridge Public Schools, the health department, the Alliance, and other community partners, will promote "2-1-5" as the framework for upcoming activities. The Institute developed the 2-1-5 campaign to encourage children to watch no more than 2 hours of TV, participate in at least 1 hour of physical activity or exercise, and eat 5 or more servings of fruits and vegetables every day.

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Activities in 2002 will include:

- Cambridge Walks activities, such as Golden Shoes, Walk with Your Children Day and the production of Cambridge walking maps
- TV-Turnoff Week
- School-based weight and fitness surveillance, family education, and development of a case management and health resource program
- Distribution of updated physical activity and overweight resource directories
- Dissemination of the Institute's *Healthy Snack Guide* at after-school and recreational programs

State Collaboration

The Massachusetts Department of Public Health recently received a federal grant to implement an obesity prevention program for middle grade students. The state identified schools interested in participating in the program. Representatives from the Cambridge Public Schools and the Institute for Community Health serve on the advisory council for the state grant.

Resource Development

In 2001, the Cambridge Health Alliance was invited by the Robert Wood Johnson Foundation to submit a "Pursuing Perfection" proposal on enhancing patient outcomes in specific areas of clinical focus. In its proposal, the Alliance outlined projects on pediatric asthma and adult diabetes, both of which incorporated obesity prevention and management.

The Cambridge Health Alliance, the Institute for Community Health, the Cambridge Public Schools, and several academic institutions are actively working together to identify and apply for appropriate grants related to obesity prevention and physical activity promotion.

CHAPTER 7: ACCESS TO HEALTH CARE

Introduction

“Access to health care” refers to the presence or absence of various barriers to seeking or receiving health care. The Cambridge Health Alliance broadly defines access to include physical, cultural, linguistic, and financial accessibility.

Physical accessibility includes such factors as location, hours of operation, and physical barriers to people with limited mobility.

Cultural respect and inclusiveness ease the way for people who are less able or less likely to use existing health services. A health care system that is accessible to a multicultural, diverse community employs a staff that reflects the linguistic, ethnic, racial, sexual orientation, and cultural composition of the community. To be culturally inclusive one must also listen to community members through advisory and focus groups.

Linguistic inclusiveness provides equal access to all programs for people with limited English proficiency by providing the necessary language assistance. This is accomplished by translating written materials and employing professional interpreters, bilingual staff trained in interpreting, and staff fluent in the patient's language.

Health care must be affordable in order to be financially accessible. Individuals must have adequate insurance coverage or other options to pay for or receive health care. Financial accessibility is enhanced when a health care institution accepts a wide variety of insurance, assists patients in applying for coverage, and provides free care.

Current Status: Access to Health Care in Cambridge

Access to health care is essential for increasing quality and length of life and eliminating disparities in health status. The Bureau of Primary Health Care of the U.S. Department of Health and Human Services launched a national campaign in 1998 called "Movement Toward 100% Access and Zero Health Disparities" to meet these goals. The Cambridge Health Alliance is a committed participant in this effort, in keeping with its longstanding mission to improve the health status of the community.

Access to mental health care is also critical for all people. There is a growing consensus among physicians, public health officials, civic leaders, and others in Cambridge that the community lacks sufficient mental health services. Doubts have also been raised about the accessibility and cultural appropriateness of existing services, particularly for the city's most vulnerable populations. Among the least well served populations are non-English speaking families; African-American adults and children; children with limited or no insurance coverage; and low-income families and teenagers.

Recognition of mental health concerns among children and adolescents prompted the Cambridge Public Health Subcommittee to name youth mental health as one of the health department's top priorities for 2000–2003. (See Chapter 4: Child and Adolescent Mental Health.)

Measuring Access to Health Care

Two standard indicators for evaluating access to health care within a given population are enrollment in health care insurance plans and the prevalence of health conditions that can be prevented through early diagnosis and treatment. Access indicators include rates of dental disease, immunization, hospitalizations for preventable diseases, low birth weight infants, and women receiving early prenatal care (Figures 7.1–7.3 and Table 7.1).

For many years, the health department's ability to assess health status has been hampered by insufficient data on certain populations and an inability to access certain data sources. In 2001, the department made two significant inroads in data management. As discussed in the School Health Nursing section in Chapter 1, the computerized school health record system now makes it possible to efficiently monitor health problems and immunization status of public school students. Meanwhile, the Institute for Community Health developed a behavioral risk factor survey in 2001 to gather information about the health status and risk behaviors of Cambridge and Somerville adults. The survey will be conducted in 2002. (See Chapter 3: Institute for Community Health.)

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Table 7.1 Leading Preventable Hospitalization Conditions Among Cambridge Residents by Age Group, 1994–1999

Condition		n	%
0–5 years	Asthma	153	31.0
	Dehydration	80	16.2
	Bacterial Pneumonia.....	67	13.6
	Kidney/Urinary Infection	54	11.0
	Other.....	139	28.2
	TOTAL.....	493	100.0
6–17 years	Asthma	115	44.9
	Kidney/Urinary Infection	27	10.5
	Bacterial Pneumonia.....	24	9.4
	Cellulitis	17	6.6
	Other.....	73	28.5
	TOTAL.....	256	100.0
18–64 years	Bacterial Pneumonia.....	453	16.7
	Cellulitis	340	12.5
	Asthma	290	10.7
	Congestive Heart Failure.....	265	9.8
	Kidney/Urinary Infection	227	8.4
	Diabetes.....	222	8.2
	Chronic Obstructive Pulmonary Disease.....	204	7.5
	Angina	84	3.1
	Other.....	625	23.1
	TOTAL.....	2,710	100.0
65+ years	Congestive Heart Failure.....	1,471	27.9
	Bacterial Pneumonia.....	1,059	20.1
	Kidney/Urinary Infection	644	12.2
	Chronic Obstructive Pulmonary Disease.....	621	11.8
	Dehydration	422	8.0
	Cellulitis	244	4.6
	Diabetes.....	190	3.6
	Asthma	165	3.1
	Angina	132	2.5
	Other.....	316	6.0
	TOTAL.....	5,264	100.0

Note: Preventable hospitalizations are for selected diagnostic conditions that if treated and properly managed in an ambulatory care setting can potentially be avoided. See *Preventable Hospitalizations in Massachusetts*, January 1994, a report of the Massachusetts Division of Health Care Finance and Policy.

Source: Uniform Hospital Discharge Data Set/Mass. Division of Health Care Finance and Policy, 1994–1999.

Figure 7.1

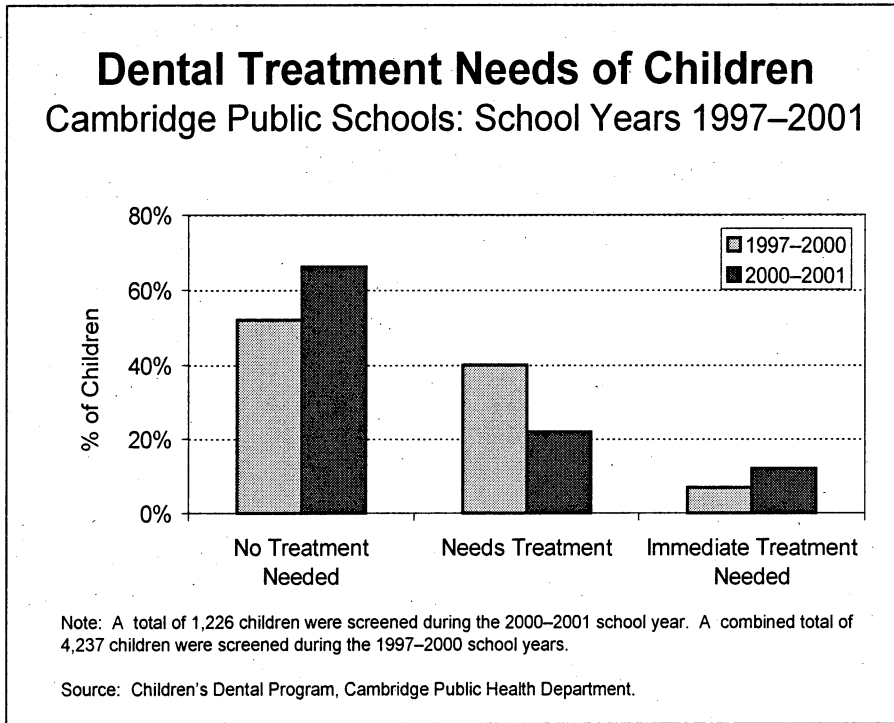


Figure 7.2

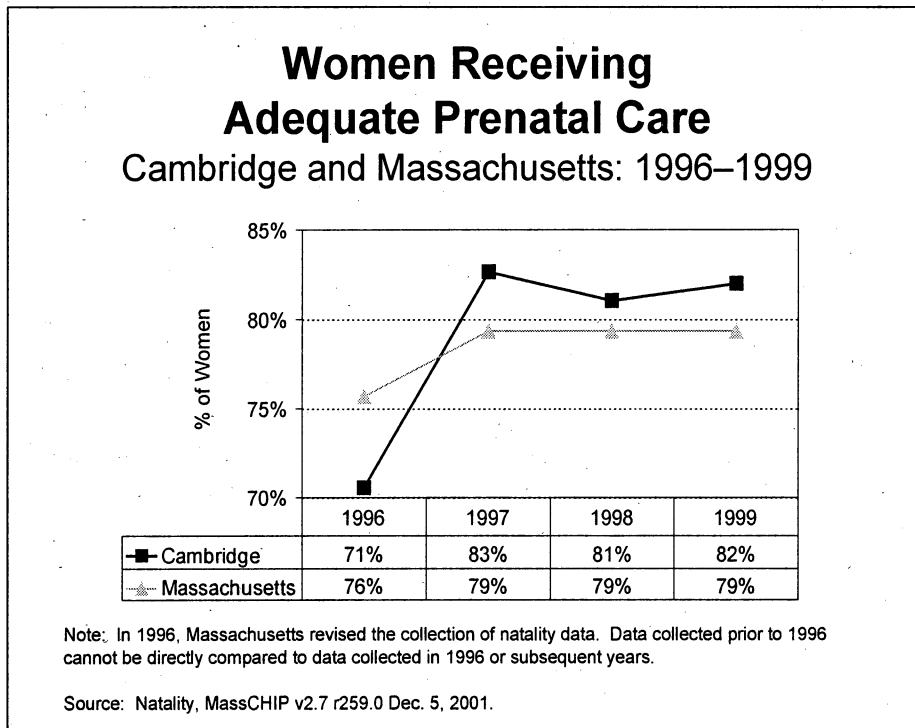
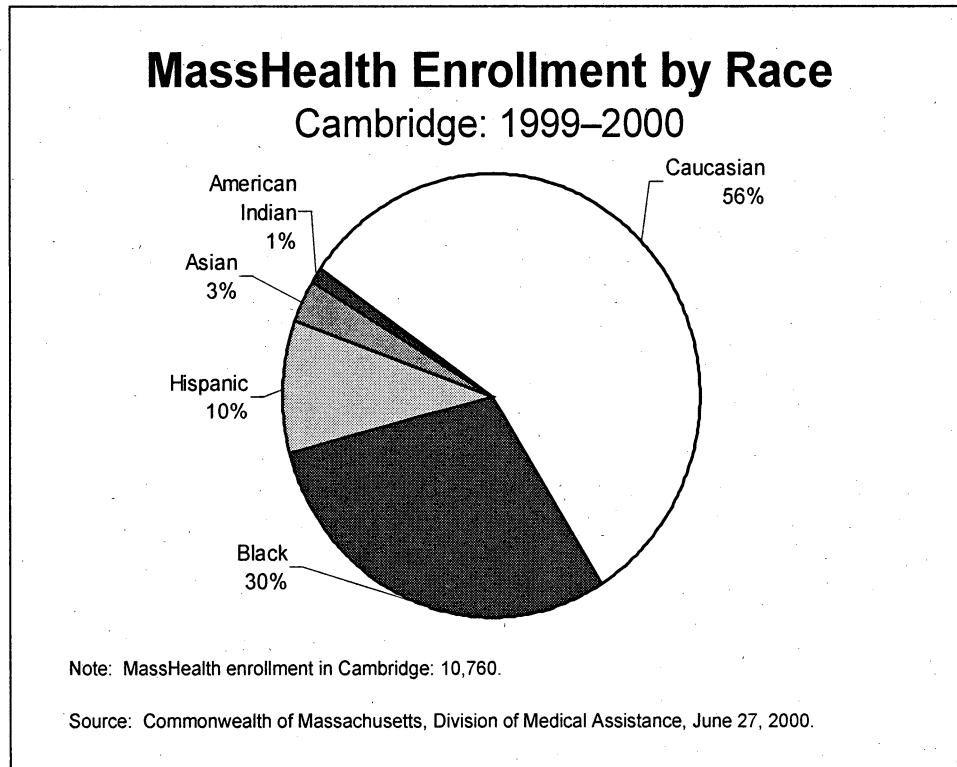


Figure 7.3



Progress in 2001

The Cambridge Health Alliance has a longstanding reputation for its responsible and innovative approaches to improving access to health care. For instance, many Alliance programs are physically situated near the populations they serve. These programs include the neighborhood health centers, Health Care for the Homeless, School Health Nursing, the Teen Health Center, and the Children's Dental Program. Others programs provide services in patients' homes, including House Calls for frail elders, Healthy Homes for children with asthma, and Newborn Home Visiting.

In addition, the Cambridge Health Alliance is a nationally recognized leader in providing culturally competent care to a linguistically, culturally, and racially diverse patient population. Several programs have been in existence for more than twenty years including interpreter services, the neighborhood health centers, and ethnically specialized mental health teams. In the past decade, many fine programs have been developed such as the Medical Interpreter Training Program (in collaboration with Neighbors for a Better Community and Cambridge College), the South Asian Mental Health Team, the Men of Color Health Program, and the Haitian Outreach Program.

Building on these successes, Alliance goals for the next three years include developing and evaluating strategies for culturally competent care; adopting cultural competence best practices throughout the system; identifying health needs of specific smaller populations and developing programs to meet those needs; and improving cost effectiveness in delivery of culturally

competent care. With its impressive track record, the Alliance is well positioned to develop and pilot sustainable models to improve access.

The Community Access Program

In March 2001, the Cambridge Health Alliance received a \$1.2 million federal grant from the Community Access Program (CAP) of the U.S. Department of Health and Human Services. The grant will fund the development of a permanent infrastructure for improving access to health care in Cambridge. The goal of the project is to increase use of preventive health care and early intervention services while decreasing costly and resource-intensive acute care. The program has five major components:

- Enrolling individuals and families in health care insurance plans and linking them to Alliance primary care providers.
- Coordinating social service referrals among Alliance staff and other service agencies to facilitate delivery of appropriate care to individuals.
- Building the cultural competence of the Alliance in order to reduce cultural barriers that impede patient treatment or comfort. This will include expanding staff and provider training in cross-cultural sensitivity and providing greater bilingual and culturally appropriate care. There is also an increased effort to hire bilingual and bicultural providers.
- Increasing early identification and treatment of mental health issues within the primary care setting.
- Promoting primary medical care for patients with severe, chronic mental illness to decrease morbidity and mortality in this most vulnerable population.

Immigrant Health Improvement Project

The mission of the Immigrant Health Improvement Project is to improve the health status of immigrants in the community. An advisory group includes representatives from community-based ethnic advocacy agencies and from several Alliance departments. A key objective is to develop a systemwide strategy for building the cultural competence of the Alliance.

In 2001, the Immigrant Health Improvement Project leadership team worked closely with Alliance departments and community partners to review demographic data on Cambridge, to collect data on the linguistic and cultural backgrounds of all Alliance employees, and to develop the Cambridge College Medical Interpreter Training Program.

Another core function of the Immigrant Health Improvement Project has been advising the Alliance about how to meet regulatory requirements and guidelines for cultural competency in health care. The Alliance adheres to the Emergency Room Interpreter Law of Massachusetts, as well as guidelines put forth by the U.S. Department of Health and Human Services' Office of Civil Rights and Office of Minority Health.

Multilingual Capacity Building. As part of orientation to the Cambridge Health Alliance, all staff members, including providers and senior administrators, receive training about patients' rights to interpreter services and about how to access those services for patients.

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The Alliance has an incredibly diverse and multilingual staff, and consequently many employees have expertise in the cultural issues relevant to the delivery of quality care to immigrant populations. Prior to 2001, however, the Alliance had no effective method for tracking the linguistic and cultural backgrounds of its employees.

Recognizing that culturally and linguistically appropriate staffing at the Alliance is critical for competent care, the Immigrant Health Improvement Project developed a systemwide method for identifying multicultural staff, as well as multicultural staffing needs. In spring 2001, the Community Affairs Department began collecting data on the languages spoken by and cultural backgrounds of all employees and providers at Alliance primary care sites. While collecting data on employees might seem straightforward, the process was labor intensive and required cooperation from multiple departments.

Another related effort to improve the quality of care for individuals whose primary language is not English focuses on gathering accurate information about the ethnicity and languages spoken by Alliance patients. The Immigrant Health Improvement Project worked with staff members from patient registration and information systems to improve the documentation of patient information. Better data on patient ethnicity and language will allow better monitoring of appropriate staffing levels, services, and clinical outcomes by language and ethnicity.

The Multilingual Interpreting Department has been exploring a new way to guarantee emergency access to American Sign Language interpreters for the deaf community. Historically, it has been difficult to get an interpreter in an emergency situation. However, beginning in January 2002, The Cambridge Hospital Emergency Department will have 24-hour access to sign language interpreting through videoconferencing provided by Deaf Talk, Inc.

Health Promotion

Health Promotion Newsletter. *Alive and Well* is a health education and promotion newsletter published semiannually by the Cambridge Health Alliance. It was distributed to all Cambridge households and numerous community sites in March and September 2001. The newsletter focuses primarily on wellness activities, such as exercise, nutrition, and health screenings. It also features interviews with Alliance health care providers on timely health topics.

Health and Wellness Program. As part of its health promotion strategy, the Community Affairs Department offers the Health and Wellness Program. The program sponsors events and offers classes, workshops, lectures, and screenings to the community for little or no cost. The program embraces both traditional and alternative forms of wellness and fitness, including yoga, weight and stress management, and massage. It also sponsors lectures on diverse topics ranging from acupuncture to heart health.

Tobacco Treatment Program. Tobacco use is the primary risk factor for the two leading causes of death in the United States: cardiovascular disease and cancer. The Tobacco Treatment Program provides information about tobacco and smoking cessation at health promotion events

and treatment for smokers who wish to quit. Group and individual counseling, along with nicotine patches or gum, are available.

Community Outreach

Staff members involved in health promotion are renewing efforts to use alternative venues for health education activities. The Alliance has identified natural points of contact in the community for health education such as work sites, hair salons, and other places where people typically congregate. The Community Affairs Department and the Cambridge Public Health Department have organized health fairs, screenings, and vaccine clinics in neighborhoods and at work sites throughout the city.

For the past eight years, the Cambridge Health Alliance outreach and education efforts in the community have been most visible at major health promotion events such as Women's Health Day, Hoops 'n' Health, workshops in the community, and cultural events such as Central Square World's Fair and the River Fest.

In addition to these high profile events, the Alliance is also engaged in a variety of other outreach activities. In 2001, Alliance community health outreach workers helped residents enroll in health care coverage plans, select primary care providers, and schedule initial appointments within the Alliance system.

Outreach efforts also focused on improving the health of Cambridge seniors. In February 2001, Community Affairs outreach workers surveyed 121 elders at the Senior Center in Central Square to better understand the health needs of this population and increase awareness about the Senior Health Center. The survey project was developed in collaboration with the Geriatric Services

Haitian Community Outreach Project

Hair Salons: New Venue for TB Message

People who have recently immigrated from Haiti or have traveled there for extended visits are at increased risk of exposure to tuberculosis, a contagious bacterial disease. While TB is relatively uncommon in the United States, it is endemic in many parts of the world. Globally, TB kills two million people a year.

The Alliance created the Haitian Community Outreach Project to detect and treat latent tuberculosis infection among Haitian immigrants. Although people with latent infections do not feel sick and are not contagious, they are at risk for developing active tuberculosis disease later in life if they do not receive treatment.

The Haitian Community Outreach Project is conducted by the Massachusetts Department of Public Health, the Cambridge Public Health Department, and the Alliance Community Affairs Department. In 2001, project members met with representatives from the Haitian community to develop an intensive TB education and outreach initiative.

The collaboration resulted in an educational video about TB, written with the help of the Haitian community and produced by the Alliance Marketing Department. It was shown at beauty salons and barbershops serving Haitian immigrants, which community leaders had identified as prominent gathering places. An Alliance outreach liaison was available to answer questions and facilitate discussion. Individuals who believed themselves at risk for latent TB infection were encouraged to seek testing.

Since early 2001, approximately 400 people have seen the video.

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Department and the Cambridge Council on Aging. Both groups plan to incorporate survey results into their future strategic planning efforts.

Additionally, a Cambridge Public Health nurse meets with residents of Miller's River Apartments on a monthly basis. The nurse talks to residents about their medical issues and helps connect them with their primary care providers. During one recent visit, a pharmacist from the hospital accompanied the nurse. The pharmacist was able to answer residents' questions and review proper use of medications. She was also on the alert for any potential problems that could arise from drug interactions.

HIV Services: Access and Outreach

In the past decade, HIV service providers in Cambridge have forged strong partnerships with each other to prevent new HIV infections and to provide more effective treatment for people living with HIV/AIDS. In the wake of severe state budget cuts in 2001, this type of collaboration has never been more essential.

The Cambridge Health Alliance has a wide array of comprehensive care for HIV-infected patients. The HIV Prevention and Services Program, in the Community Affairs Department, offers prevention programs in the Haitian and Latino communities. Bilingual, bicultural professionals provide counseling and testing at primary care sites throughout Cambridge. The Zinberg Clinic provides primary health care, psychiatric care, and social services to individuals and families living with HIV.

In addition to these Alliance programs, a number of Cambridge-based agencies provide a range of services to people living with HIV/AIDS. Cambridge Cares About AIDS offers extensive social services including counseling, housing, needle exchange, and other essential support services. In an effort to reach a vulnerable and disenfranchised population, Cambridge Cares recently launched an outreach program targeted at adolescents and young adults who gather at "the Pit," the notorious hangout spot in Harvard Square. The Cambridge Cares needle exchange program has also proved to be an invaluable opportunity for HIV and drug treatment providers to intersect with individuals unlikely to seek treatment on their own.

The Cambridge Economic Opportunity Committee provides HIV education to Cambridge public school students, and HIV counseling and testing in partnership with Alliance primary care sites. Alliance community partners such as the Cambridge Multi-Service Center, the Haitian Services Program, the Haitian Coalition, and the National Association for the Advancement of Colored People work to provide health education to community members and improve access to care.

Future Directions

The Community Access Program will continue to work with individuals and families who are uninsured or underinsured to increase enrollment in health care coverage and primary health care. This may prove to be particularly critical if the economy continues to soften and more people become unemployed.

There will be an increased effort to bring health education and wellness screenings to non-traditional sites in the community. There will also be continuing emphasis on improving access to mental health care and social services for individuals who are already enrolled in primary care as well as those who are not connected to health care services.

Multilingual services. The Cambridge Health Alliance has been a leader in statewide advocacy for patient access to interpreters in emergency rooms and acute mental health facilities. Now that the Emergency Room Interpreter Law is in effect, the Alliance continues to be involved in advocacy and implementation of the law. The Alliance will continue to sponsor employees' participation in the Cambridge College Medical Interpreter Training Program.

Important work planned for this coming year will be focused on improving the skills of existing staff in the Cambridge Health Alliance. Health care providers will be engaged in training opportunities to enhance their ability to communicate effectively through an interpreter and to utilize interpreters as cultural resources. One aspect of this training will focus on improving cultural sensitivity regarding end-of-life issues. This important and difficult area is a frequent source of cultural tension. Clinicians will increase their knowledge about specific cultural groups in order to promote sensitivity in their particular clinical settings.

Another major aspect of training in 2002 will be conducted with bilingual employees who are often called upon to interpret but have not been formerly trained in medical interpreting. This will improve the quality of interpreted medical communication, which will reduce medical risk, improve patient satisfaction, and increase clinic efficiency.

CHAPTER 8: HEALTH OF MEN OF COLOR

Introduction

Reflecting state and national priorities, the Cambridge Public Health Subcommittee reaffirmed in fall 2000 that the health of men of color is among the highest priorities of the Cambridge Public Health Department. Improving the health of men of color is an important component in the nationwide campaign to eliminate disparities in health status.

Disparities in health status exist among different groups of people in the United States, as defined by race or ethnicity; gender; disability status; sexual orientation; geography; and socioeconomic status. Eliminating these disparities has emerged as a top health priority at the federal, state, and local levels.

At the national level, the U.S. Department of Health and Human Services established the Office of Minority Health in 1985 to improve the health of racial and ethnic groups through development of effective health policies and programs. More recently, the Office of the Surgeon General and the American Public Health Association (including its Massachusetts chapter) made the elimination of health disparities their top goals. In 2001, the Massachusetts Department of Public Health focused its annual *Ounce of Prevention* conference on health disparities among minority groups.

Communities of color experience serious disparities in health access and outcomes with regard to infant mortality; cancer screening and management; cardiovascular disease; diabetes; HIV infection and AIDS; and immunization status. Underlying causes of health disparities include poverty; lack of access to quality health care; lack of adequate health insurance; and greater exposure to environmental health hazards such as poor air quality, substandard housing, and toxic substances (e.g., lead). In many of communities of color there is also a paucity of effective prevention programs tailored to specific community needs.

Some members of minority groups are reluctant to seek care even when it is available. Culturally competent health care may not be readily available to individuals in all ethnic and racial groups.

There are well-known instances of medical treatment decisions that have been affected by race. The most notable are the Tuskegee syphilis studies, in which African-American men with syphilis were left untreated so researchers could study advanced stages of the disease. More recently, much attention was afforded a published study showing evidence that black patients received less aggressive treatment after heart attacks than white patients. Perceptions of discrimination can lead to reluctance on the part of minorities to seek health care. One Cambridge resident, when interviewed by medical students in fall 2000, remarked:

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"I think there's a perception that if you are white, you get better health care and treatment wherever you go. There's a perception that you get treated differently if you are white. People care more what happens to you if you are white."

(FUNC interview)

While acknowledging that eliminating health disparities among all populations is critical, the Cambridge Public Health Department chose to focus on *men* of color because of the heavy burden of morbidity born by this group. For instance, men of color in the U.S. are disproportionately vulnerable to heart disease, diabetes, lung and prostate cancer, HIV/AIDS, homicide, stroke, and hypertension¹⁻⁴. The death rate due to heart disease, for example, is higher among black men than among any other racial or ethnic group. Similarly, the rate of HIV infection among black and Hispanic men is higher than among any other group.

When taking a closer look at the disparities between men of color and white men in the United States, the following picture appears:

- The percentage of men dying before age 70 is higher among men of color than among white men.
- Men of color have a higher rate of heart disease mortality than white men, and their death rate due to stroke is twice that of white men.
- The rate of cancer mortality is higher among men of color than white men. The incidence of and death rate due to colon, lung, and prostate cancer is higher among black men than among other racial and ethnic groups.
- Men of color have a higher rate of mortality due to prostate cancer than white men. The rate of prostate cancer is higher among African American men than among any other racial or ethnic group in the world.
- Men of color have higher rates of sexually transmitted diseases (e.g., chlamydia, gonorrhea, syphilis) than white men.
- Most new cases of HIV/AIDS are among black and Latino men.
- Violent deaths and violence-related injuries are higher among men of color than among white men.

These national trends are reflected locally. Based on morbidity and mortality data, men of color in Cambridge appear to be at greater risk for health problems than their white counterparts. (Figures 8.1–8.6). However, Cambridge men of all races appear to be healthier than American men in general.

Figure 8.1

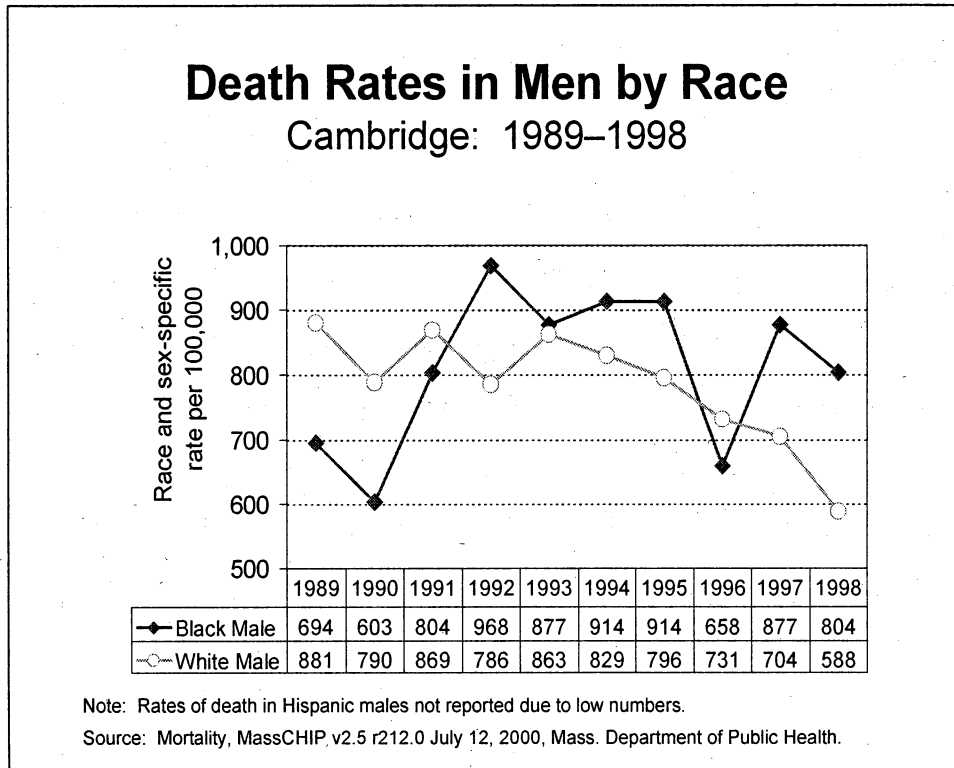


Figure 8.2

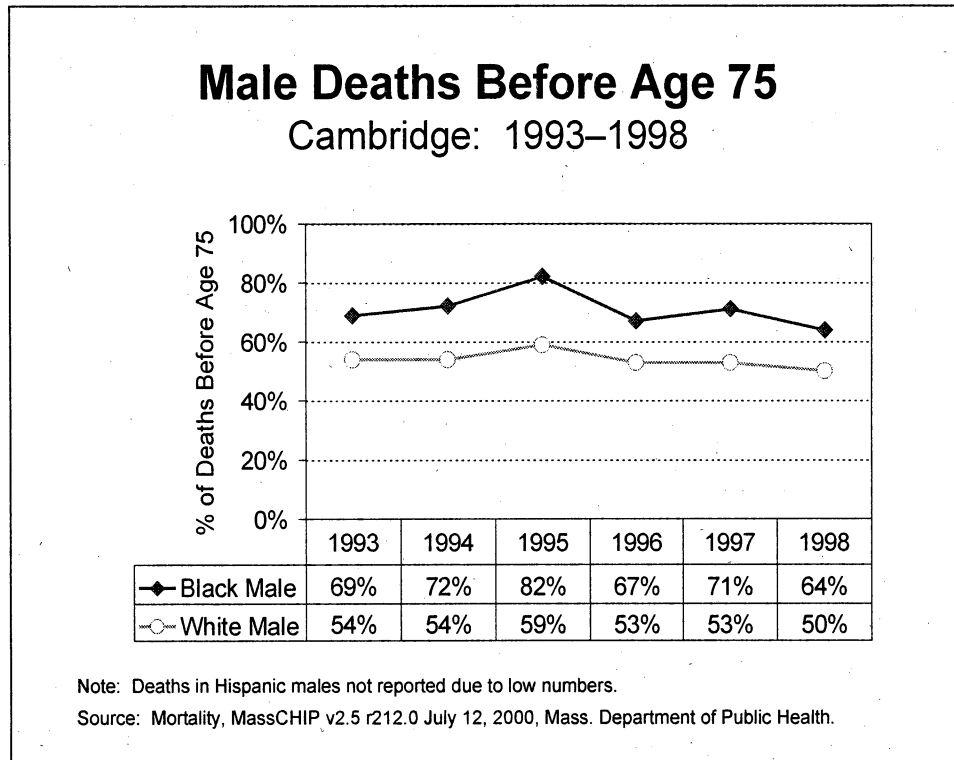


Figure 8.3

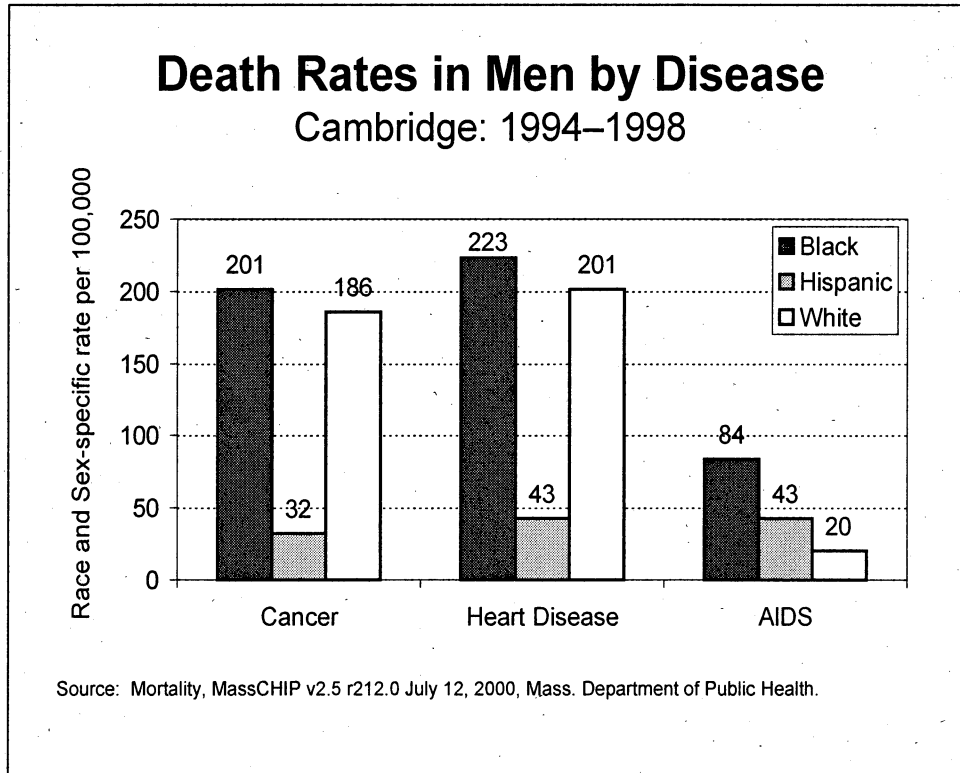


Figure 8.4

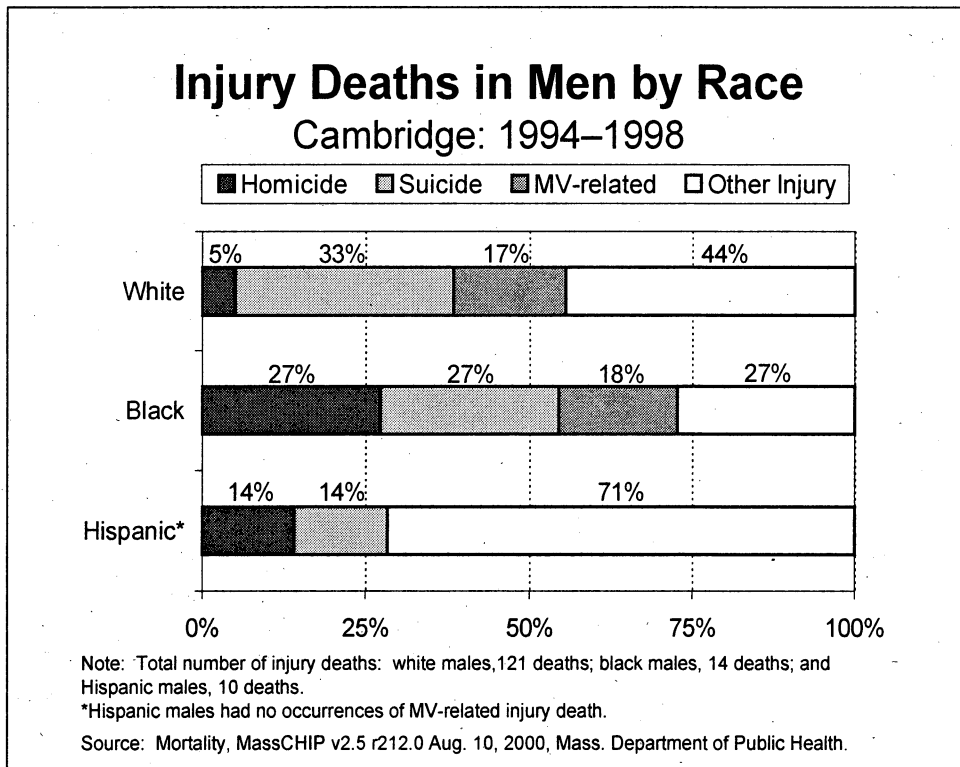


Figure 8.5

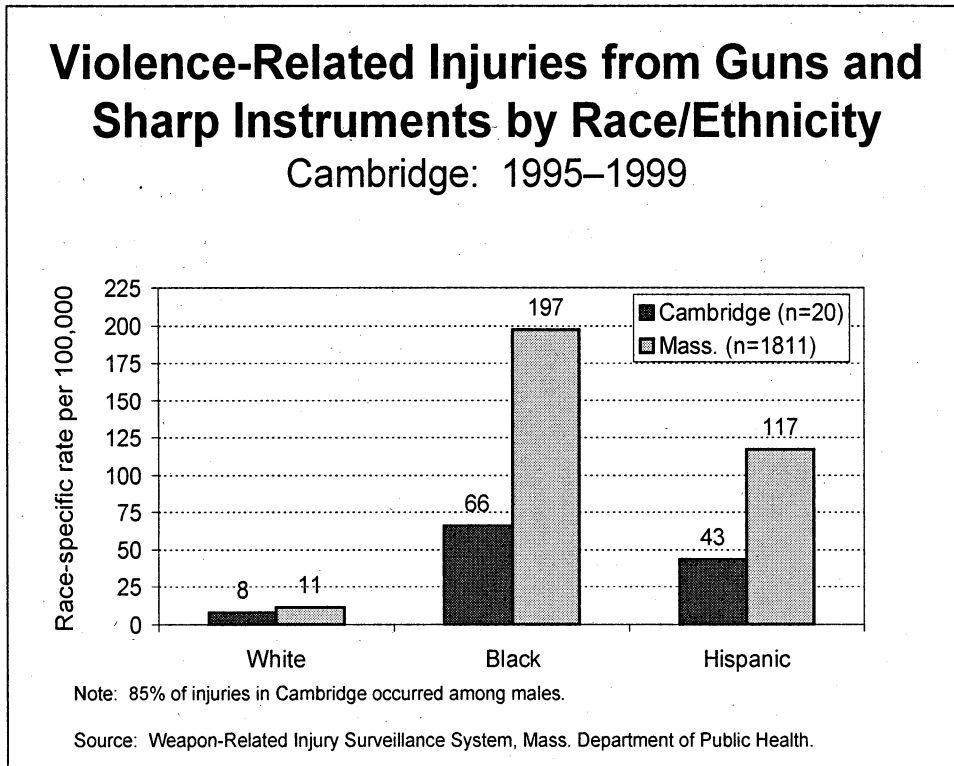
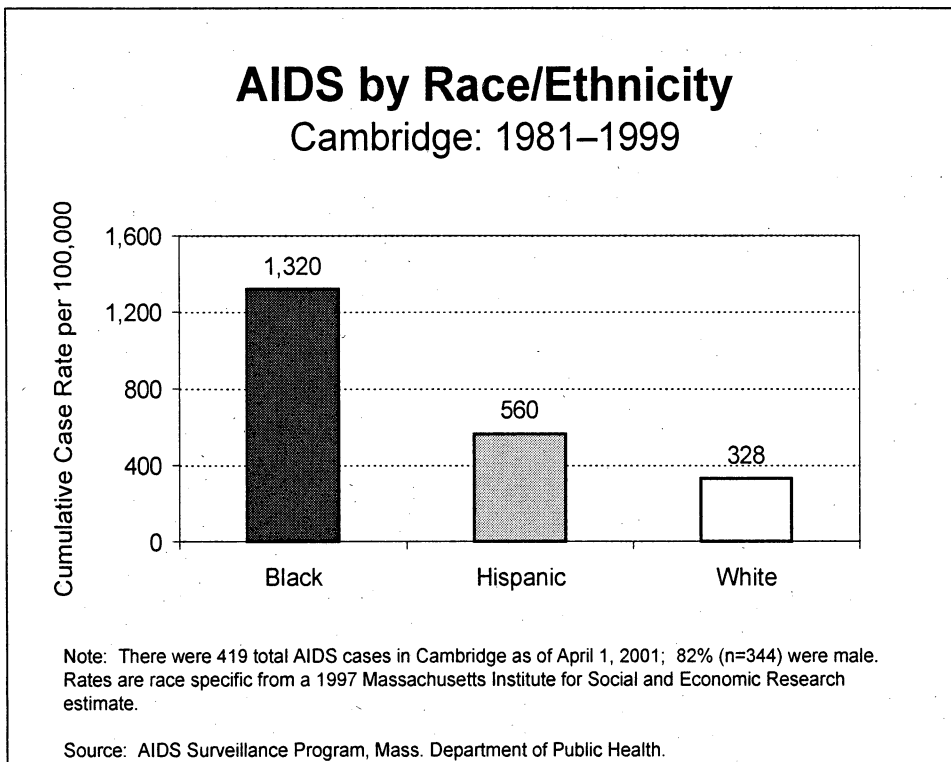


Figure 8.6



Addressing Health Disparities in Cambridge

Like many other communities, Cambridge has sought to understand and eliminate health disparities. In the early 1990s, the Alliance's Health of the City program identified two populations that were particularly vulnerable to health problems: children and men of color. Health of the City leadership then established the Healthy Children Task Force and Men of Color Task Force to address the respective health risks of these two groups.

The Men of Color Health Program was established in 1993 to raise awareness about health, increase access to health services for men of color, and promote positive health behaviors. Since then, the Alliance has actively engaged men of color around these issues.

In September 2001, a lifelong Cambridge resident was hired as the coordinator of the Men of Color Health Program. Throughout the fall, he worked with men in the community, Alliance physicians, and community providers to build a network and facilitate dialogue.

Men of Color Health Program Objectives

The Men of Color Health Program has four primary objectives: 1) to increase access to and utilization of health care; 2) to promote healthy behaviors to minimize risk factors; 3) to increase cultural competency of health care providers and institutions; and 4) to engage the community in the effort to improve the health of men of color.

Increase access to and utilization of health care

Enrolling men of color in primary health care was the principal focus of the Men of Color Health Program during its first three years. This effort was conducted through outreach in the community. Program staff, including physicians and public health leaders, visited social clubs, barbershops, and other neighborhood venues where residents frequently gathered. They established relationships with these men, invited them to health centers, and provided information about health risks.

Other outreach efforts have been conducted in partnership with local churches and community-based organizations, including Concilio Hispano, the Haitian Coalition, Massachusetts Alliance for Portuguese Speakers, and Neighbors for a Better Community.

Following the hiring of the new coordinator, the Men of Color Health Program moved to the Community Affairs Department. In its new organizational location, the program will be integrated with other health promotion and outreach efforts in the Community Access Program. Through this program, community health workers enroll residents in health care and provide assistance in applying for health coverage. (See Chapter 7: Access to Health Care.)

Promote healthy behavior to minimize risk factors

More recently, the program's focus has shifted to health promotion and education regarding health risks. To be motivated toward behavioral change that will minimize risk behaviors, individuals require information. Diseases and conditions that can be prevented through adoption

of healthy behaviors include HIV infection; injuries; sexually transmitted diseases; alcohol and drug abuse; and tobacco-related diseases. These diseases and conditions disproportionately affect men of color in the United States.

In collaboration with local churches, the Men of Color Health Program initiated a prostate cancer screening and education initiative in 2000. Medical staff conducted educational sessions in several churches following Sunday services and identified men with significant health problems that needed immediate attention. In addition to the individual church sessions, a large-scale educational activity attracted more than 200 people.

A melding of cultural and health-related activities has provided the foundation for the Men of Color Health Program over the past nine years. Hoops 'n' Health, the most consistent and sustained activity, is an annual health fair and basketball tournament that draws nearly 1,000 participants each year. The event has evolved to include health workshops (which the basketball players are required to attend) designed to help teens and adult men learn about healthy behaviors and how to access health and social service resources throughout the city.

Gospel Health Fest is another example of the integration of health and cultural activities. Built on partnerships with local churches, the Gospel Health Fest in 2000 brought together community members and health professionals to discuss health issues that disproportionately affect the African American community. Over 400 individuals received health screenings and information while listening to gospel music. A series of health workshops evolved from this event, which were developed by health department staff in partnership with church leaders. The workshops have focused on diabetes, HIV, cancer, and other health issues.

Increase the cultural competency of health care providers and institutions

To provide appropriate health care, one must be able to offer care that is acceptable to the recipient. Cultural competence requires that health care providers understand the impact of language and culture on their patients' health status. It requires knowledge and appreciation of cultural practices, sensitivity to cultural differences, and the ability to communicate about delicate and personal issues.

The earlier chapter on Access to Health Care focused primarily on minority groups that were defined by language. To increase the capacity to serve the needs of men of color requires an understanding of cultural competency that includes race along with ethnic identity. To comprehend the service needs of men of color requires that we identify and eliminate perceived barriers to care. As one focus group participant said:

*"There should be cultural sensitivity training for the doctors. Maybe that would make it better."
(Focus group, summer 2000)*

One major barrier is the limited number of minority health care professionals available to provide medical and mental health care. The presence of minority professionals can increase the

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comfort of minority patients with the health care system. It can increase the likelihood that the patients' cultural needs will be met.

"People like to see people like themselves. If I go somewhere and everybody's white, I try not to get intimidated, but it's just like a wall has been put up."

(FUNC interview)

The Cambridge Health Alliance is committed to training interns and residents who are people of color. Additionally, the Alliance has participated in the First year Urban Neighborhood Campaign (FUNC), which introduces new students from Harvard Medical School to community health initiatives. During summer 2000, FUNC students developed and administered the Men's Health Survey. The students interviewed 25 men to determine their needs and interests in health care. The Cambridge Health Alliance has also initiated a project with Concilio Hispano to provide field placements for high school students who are considering careers in health care. Placements throughout the Alliance will introduce a core of young people to health as a career.

Engage the community in the effort to improve the health of men of color

The success of the Men of Color Health Program depends upon active participation from the people who are most affected by the health disparities previously identified. The program must have an active community-based task force that identifies key stakeholders, recommends programmatic directions, and mobilizes community participation. In an effort to revitalize the program, the Men of Color Health Task Force was expanded and reconvened on the first day of spring 2001.

In late fall 2001 the Men of Color Health Program hosted a community meeting attended by approximately 30 residents. This effort to hear directly from local men of color about health care and wellness continued a process of seeking community voices that had begun with focus groups in 2000. The voices of these men, along with the task force, will help shape the program in the coming year.

Future Directions

In fall 2001, the Men of Color Health Program, in partnership with the Cambridge Community Foundation, was one of 86 programs nationwide invited to submit a proposal to the Robert Wood Johnson Foundation (Local Initiatives Funding Partners) for up to \$500,000. If the proposal is funded, the program will be able to expand its scope appreciably.

New Wellness Center. The Cambridge Health Alliance, in collaboration with the Cambridge Community Center, is planning to renovate the former Riverside Health Center on Callender Street. The building will become a multi-service wellness center for the Men of Color Health Program. Health education and information about health care and wellness will be available at the center. Other services will include employment, housing, and educational referrals. The center's neighborhood location will encourage community involvement and empowerment.

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Ongoing community discussions and forums may be provided at this location with the intention of promoting long-lasting changes in individual and community health.

Building cultural competency. Strategies to achieve institutional improvements in the cultural sensitivity of the Alliance are essential to program success. The Men of Color Health Program will work closely with the Alliance workforce development initiative to facilitate the recruitment and retention of a diverse medical staff. The program is considering providing training in cultural competency that would complement the work of the Immigrant Health Improvement Project.

Developing a sustainable health promotion campaign. Hoops 'n' Health and the Gospel Health Fest are excellent examples of successful health fairs in that they attract a large number of people who receive health promotion information. However, there are limitations to the health fair format. They are wonderful individual events, but they stand alone. They are not part of a larger health promotion campaign, have limited follow-up, and do not engage people in ongoing discussions about adopting healthy behaviors.

A unique challenge of the Men of Color Health Program is to incorporate Hoops 'n' Health and the Gospel Health Fest into a sustainable, continuous effort to increase healthy behaviors. To meet this challenge, these successful singular events must be cultivated as seminal points in a continuing process linking men of color to health resources. With ongoing activities, community leaders can be developed into health resources within their social networks. Sports, social, and faith-based organizations will be courted as partners in this effort.

¹ National Center for Health Statistics. Report of Final Mortality Statistics. 1996. Publication no. 9 100(PHS).

² Health, United States. Washington, DC: U.S. Dept. Health and Human Services 1998.

³ National Center for Health Statistics, Health, United States, 1996–1997 and Injury Chartbook. Hyattsville, MD: U.S. Public Health Service: 1997).

⁴ National Center for Injury Prevention and Control, Ten Leading Causes of Death, 1994. Atlanta, GA Centers for Disease Control: 1996.

Section 4: Clinical Services of the Cambridge Health Alliance

Introduction

The Cambridge Health Alliance is an innovative health system comprised of The Cambridge Hospital, Somerville Hospital, Whidden Memorial Hospital, the Cambridge Public Health Department, over twenty primary care sites in Cambridge and Somerville, and Network Health—a statewide managed care Medicaid health plan.

In accordance with its agreement with the City of Cambridge, the Alliance provides a comprehensive range of health services to the community. Services include inpatient and outpatient care at locations throughout the city. This section reviews Alliance clinical services provided in Cambridge during FY01 (July 2000–June 2001). Included are the numbers of visits, discharges, and deliveries for FY01, as well as projections for FY02 (July 2001–June 2002).

Cambridge-based Facilities

The Cambridge Hospital
1493 Cambridge Street

Riverside Health Center
205 Western Avenue

The Cambridge Birth Center
10 Camelia Avenue

Windsor Street Health Center
119 Windsor Street

Cambridge Family Health
237 Hampshire Street

Senior Health Center
806 Massachusetts Avenue

East Cambridge Health Center
163 Gore Street

Teen Health Center
Cambridge Rindge & Latin School
459 Broadway

North Cambridge Health Center
266 Rindge Avenue

Medical and Surgical Services

Medicine

The mission of the Department of Medicine is to provide the finest medical care to patients in Cambridge, Somerville, and Everett, as well as to address public health concerns and promote healthy behaviors in these communities.

The Department of Medicine provides primary care, specialty services, and multidisciplinary care programs, such as the Senior Health Center and Zinberg Clinic. In addition, a dedicated team of clinicians provides medical care at homeless shelters in Cambridge. The Department of Medicine is also a premier training site for Harvard Medical School students and residents. Services are available at the three Alliance hospitals and at more than 20 primary care sites in Cambridge, Somerville, and Everett.

The department is comprised of the following clinical divisions: cardiology; dermatology; endocrinology; geriatrics; hematology and oncology; nephrology; neurology; pulmonary medicine; rheumatology; social and community medicine; and occupational and environmental medicine.

General Medicine and Adult Primary Care. In Cambridge, general medicine is provided at The Cambridge Hospital; the Senior Health Center; Cambridge Family Health; and the East Cambridge, Riverside, Windsor, and North Cambridge health centers. On The Cambridge Hospital campus, services are also provided at the Women's Health Center, the Primary Care Center, and the Zinberg Clinic, which is devoted to the care of patients with HIV/AIDS,

	FY '01 Actual	FY '02 Projected
Outpatient visits	78,354	84,594
Inpatient visits	1,995	2,099

Medical Specialties. In Cambridge, the Alliance provides dermatology, endocrinology, gastroenterology, hematology and oncology, infectious disease, and neurology. (Other medical specialty services are available to patients at Somerville Hospital, including cardiology and pulmonology).

	FY '01 Actual	FY '02 Projected
Medical visits	6,800	5,563

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Health Care for the Homeless. This program provides primary care services at homeless shelters across the city, and reflects the Department of Medicine's long-standing commitment to community-based health care.

	FY '01	FY '02
	Actual	Projected
Outpatient visits	1,323	1,200

Emergency Services

The Alliance is committed to providing the highest quality medical and psychiatric emergency services to the Cambridge community. The recently redesigned Emergency Department at The Cambridge Hospital has significantly improved the Alliance's ability to deliver these important services.

In 2001, the Emergency Department began to offer Express Care, an innovative service that has succeeded in providing quicker and more efficient treatment to patients with minor medical problems. The Psychiatric Emergency Department provides intervention, diagnosis, and treatment for patients in mental health crisis. It is fully integrated in the continuum of community- and hospital-based mental health services.

	FY '01	FY '02
	Actual	Projected
Emergency medical visits	26,411	26,100
Emergency psychiatric visits	4,649	4,912

Surgery

The Alliance provides a broad range of surgical specialties. In addition to general surgery, the Alliance offers urology, ophthalmology, otolaryngology, podiatry, vascular, thoracic, and plastic surgery services.

The Department of Surgery is a training site for Harvard Medical School students and surgical residents from Beth Israel Deaconess.

The Cambridge Hospital's new surgical suite, which opened in 2001, is equipped with advanced technology that will greatly benefit patients, physicians, and residents in the coming years.

New equipment includes stereotactic technology, which locates targeted tissue during biopsies or surgery, and an endoscopy suite with high-end imaging and diagnostic equipment. The operating rooms are equipped with the state-of-the-art lighting and the latest video capabilities, including the ability to transmit intraoperative surgical procedures to remote sites.

Cambridge Public Health Assessment 2002

To enable renovation of the surgical suite, The Cambridge Hospital operating rooms were closed during most of FY01, and the majority of surgical procedures were performed at Somerville Hospital. Inpatient figures reflect discharges from the integrated surgical program at both sites.

	FY '01 Actual	FY '02 Projected
Outpatient visits	2,131	5,890
Inpatient* discharges	577	570

Surgical Specialty Services. The recruitment of a talented team of specialists has increased the breadth and accessibility of surgical specialty services at the Alliance. Cambridge-based operative services include urology; ophthalmology; otolaryngology; podiatry; and vascular, thoracic, and plastic surgery.

	FY '01 Actual	FY '02 Projected
Total visits	17,692	24,570

Orthopedics

The Department of Orthopedics provides high quality patient care and teaching programs related to the diagnosis, treatment, and prevention of musculoskeletal diseases. Equipment upgrades have resulted in improved diagnostic capabilities that maximize patient convenience and comfort. Recent acquisitions include fluroscopy and bone densitometry devices.

The department provides an array of outpatient, inpatient, and emergency services. Services include general orthopedic surgery including total joint replacement, pediatric orthopedic surgery, reconstructive surgery, spinal surgery, and hand surgery. Other services include sports medicine, rheumatology, and treatment of metabolic bone diseases, such as osteoporosis and Paget's Disease.

	FY '01 Actual	FY '02 Projected
Outpatient visits	13,430	17,016
Inpatient* discharges	131	164

* Includes discharges from both The Cambridge Hospital and Somerville Hospital due to the renovation of The Cambridge Hospital operating rooms.

Cambridge Public Health Assessment 2002

Women's Health Services

The Alliance continues to develop its multidisciplinary Women's Health Services Center of Excellence. The goal of the program is to improve the health status of women in Alliance service areas. Women's Health Services (est. 1997) is pursuing this objective through the design and implementation of a well-coordinated and integrated health care delivery system for women's health that is defined by standards of excellence, affordability, and accessibility.

Obstetrics and Gynecology	FY '01 Actual	FY '02 Projected
Outpatient visits	11,974	13,515
Inpatient discharges	840	954

Midwifery Program/Birth Center	FY '01 Actual	FY '02 Projected
Deliveries	78	90
Outpatient visits	2,301	2,899

Pediatric Services

A dedicated team of pediatric experts provides primary care at the new Ambulatory Care Center located in The Cambridge Hospital; Cambridge Family Health; the Teen Health Center; and the East Cambridge, Riverside, Windsor, and North Cambridge health centers.

In addition to primary care, the Alliance provides a comprehensive range of child and adolescent specialty services at The Cambridge Hospital. These services include adolescent gynecology; adolescent and young adult medicine; an allergy and asthma clinic; cardiology; child development; cognitive and behavioral assessment; dentistry and oral surgery; dermatology; ear, nose and throat; endocrinology; gastroenterology; nephrology; neurology; newborn medicine; nutritional services; ophthalmology; orthopedics; pediatric surgery; physical therapy and rehabilitation services; psychiatry; pulmonary medicine; school health services; social services; and speech therapy.

Under the leadership of the chief of Pediatrics, the Alliance has convened a multidisciplinary committee to develop a Center of Excellence in pediatric and adolescent services.

	FY '01 Actual	FY '02 Projected
Outpatient visits	33,924	35,437
Inpatient discharges	976	1,040

Cambridge Public Health Assessment 2002

Geriatric Services

Providing and coordinating comprehensive services for the geriatric population is a strategic priority of the Alliance. The Geriatrics Task Force, led by members of the Cambridge Health Alliance Board of Trustees, continues to oversee development of a Geriatric Center of Excellence to improve coordination of care and increase access to services.

Specific programs include the Geriatric Psychiatry Consultation Service, which offers inpatient, outpatient, and home-based mental health services for the elderly and the chronically ill; the Senior Health Center, which offers adult and geriatric primary care, behavioral medicine, geriatric mental health, laboratory diagnostics, nutritional therapy, gynecology, physical therapy, podiatry, and women's health services; the House Calls program, which provides primary care home visits; and the Elder Services Program, which offers comprehensive services for the frail elderly. The Alliance launched a resource and referral information service in November 2001 to improve access to and coordination among all senior health services.

	FY '01	FY '02
	Actual	Projected
Senior Health Center visits	4,272	3,815
Geriatric Psychiatry Consultation Service visits	809	967

Neighborhood Health Centers

The Alliance is committed to providing care in the community setting. In Cambridge, the Alliance operates five community-based primary care health centers: the Riverside, North Cambridge, East Cambridge and Windsor Street health centers, and Cambridge Family Health.

The Teen Health Center, located at Cambridge Rindge and Latin School, provides primary care services for adolescents (see Pediatric Services). The Senior Health Center offers primary care services to elders (see Geriatric Services). The East Cambridge, Windsor Street, North Cambridge, and Riverside health centers provide adult and pediatric primary care, family planning, nutrition, OB/GYN, and social services.

Other services available at one or more sites include HIV counseling, mental health and addictions, midwifery, diabetic counseling, men of color clinical services, podiatry, and dentistry. Cambridge Family Health provides adult and pediatric primary care, family planning, geriatric primary care, laboratory services, and nutrition therapy.

	FY '01	FY '02
	Actual	Projected
Outpatient visits	99,684	106,548

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Mental Health and Addictions Services

The Department of Mental Health and Addictions offers comprehensive adult and pediatric psychiatry services, as well as addiction services.

The Alliance is committed to providing culturally accessible mental health services to the Cambridge community. It has four culturally specific, linguistic mental health programs for Haitian, Latino, Portuguese-speaking, and South Asian patients.

Alliance programs that address the mental health needs of specific populations include the Geriatric Psychiatry Consultation Service and the Victims of Violence program.

The Department of Mental Health and Addictions is a Harvard Medical School teaching facility. It offers residency training programs in adult psychiatry, child and adolescent psychiatry, clinical psychology, psychotherapy, and couples and family therapy. Training programs are also offered in clinical nursing and social work.

Mental Health and Addictions (total visits)	FY '01 Actual	FY '02 Projected
Outpatient visits	111,249	118,986
Inpatient discharges	3,147	3,508

Linguistic Mental Health Services	FY '01 Actual	FY '02 Projected
Outpatient visits	16,953	17,629

Victims of Violence	FY '01 Actual	FY '02 Projected
Outpatient visits	7,456	8,114

Nutrition Services

All ambulatory sites provide complete nutrition services, which include adult and pediatric nutrition, prenatal nutrition, specialty services for the elderly, and a specialized program at the Zinberg Clinic for people living with HIV/AIDS.

	FY '01 Actual	FY '02 Projected
Outpatient visits	4,087	4,869

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Dental Services

The Windsor Street Dental Clinic (est. 1999) has greatly increased the Cambridge Health Alliance's capacity for dental services.

	FY '01 Actual	FY '02 Projected
Outpatient visits	12,303	14,222



19.

CITY OF CAMBRIDGE • EXECUTIVE DEPARTMENT

Robert W. Healy, City Manager

Richard C. Rossi, Deputy City Manager

February 11, 2002

To The Honorable, The City Council:

Please find attached for your information, the *Cambridge 2002 Public Health Assessment*.

I am recommending that this report be forwarded to the Committee on Health and Environment.

Very truly yours,

Robert W. Healy
City Manager

RWH/mec
Attachment

S-41

Consent Agenda #19

*Cambridge 2002 Public
Health Assessment.*

In City Council February 11, 2002

Referred to the
Health and
Environment
Committee

Copy sent
2-14-02

mc