



CITY OF MANCHESTER HEALTH DEPARTMENT MONTHLY BULLETIN – APRIL 2011



Public Health
Prevent. Promote. Protect.

TOP TEN PUBLIC HEALTH ACHIEVEMENTS OF THE DECADE

INTRODUCTION

For more than a decade, communities across the country have celebrated National Public Health Week (NPHW) each April by highlighting public health achievements and raising awareness of issues important to improving the public's health. Established in 1885, the City of Manchester Health Department (MHD) is a traditional municipal local health department, grounded in the principles and application of the core public health functions: assessment, policy development and assurance. To carry out the core functions and the ten essential services of public health practice, the MHD is structured into four divisions that aim to work both cross-divisionally and with other community partners to improve the public's health. The four divisions include *Chronic Disease Prevention and Neighborhood Health, Community Health, Environmental Health and Emergency Response, and School Health*, which consists of all the School Nurses in the Manchester School District. Additionally, the MHD is home to the City's Healthcare for the Homeless program. The MHD's organizational structure aims to continually assess community needs, employ innovative interventions/services to address priority health concerns among Manchester residents, partner with community agencies and healthcare organizations to ensure the public's health, and evaluate community solutions to identify models of innovation and/or adapt current efforts to achieve better health outcomes.

The department's mission is "***To improve the health of individuals, families, and the community through disease prevention, health promotion and protection from environmental threats***" with the vision of "A healthy community where the public can enjoy a high quality of health in a clean environment, enjoy protection from public health threats and can access high quality health care". It carries out this mission utilizing the expertise of 70 full and part-time staff with a total budget of over \$5,000,000.00, comprised of federal, state, local and grant dollars. Under City Charter, the MHD is served by a five member Board of Health consisting of one physician, one dentist, one nurse, one labor representative and a community representative. The Board provides professional advice to the department, acts as a hearing body for regulatory matters pertaining to permits and licenses, and represents the public interest in department policy matters.

In celebration of National Public Health Week, we are pleased to announce the **City of Manchester Health Department's "Top Ten Public Health Achievements of the Decade"**:

- Increased immunization rates
- Improved oral health
- Decreased childhood lead poisoning
- Enhanced ability to monitor and respond to emerging health threats
- The investigation and control of communicable diseases
- Preventing chronic disease one neighborhood at a time
- Improved school health capacity rooted in public health
- The establishment of an effective community health improvement process
- Improved public health emergency preparedness and response
- Improved public health infrastructure and workforce development

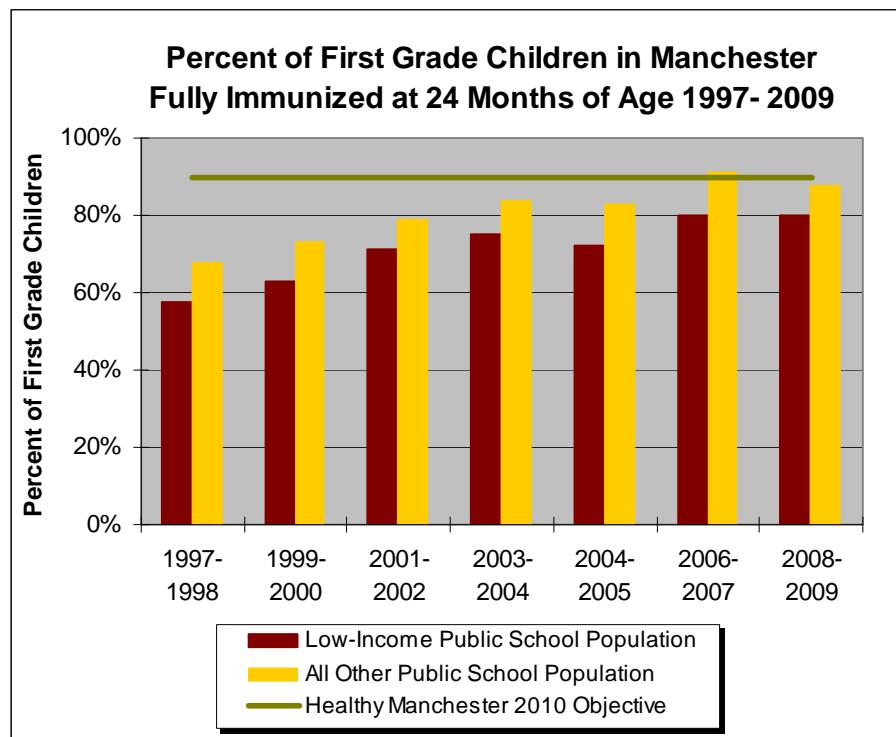
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<http://www.manchesternh.gov/website/Departments/Health/Services/tabid/703/Default.aspx>



INCREASED IMMUNIZATION RATES

During the past century, the decline in vaccine-preventable disease has been heralded as a significant public health achievement. Routine immunization has eradicated smallpox from the globe and has led to the near elimination of wild polio virus. Other vaccine-preventable disease levels are at or near record lows. Immunization prevents acute illness and long-term complications such as hearing loss, liver damage, paralysis and congenital defects that may result from vaccine-preventable diseases. However, the microbes have not disappeared. If vaccination rates were to drop, the diseases would re-emerge, causing unnecessary morbidity and mortality.

Immunization protects the individual being vaccinated, as well as safeguarding the health of the entire community. Major achievements have been made to decrease the incidence of vaccine-preventable diseases among Manchester residents. The Manchester Immunization Group for Healthy Tots and Youth (MIGHTY) was established in 1996, bringing community partners together to develop an action plan to raise immunization rates. The medical community and other partners worked closely with the MHD to expand access to immunization services, enhance linkages with medical homes, coordinate community flu campaigns and collaborate on assessments and education. In 2010, the work of the coalition continues through the Granite State Immunization Partnership which is charged with improving immunizations through the lifespan.



ACCORDING TO EXTENSIVE COST-BENEFIT ANALYSIS BY THE CDC, EVERY DOLLAR SPENT ON IMMUNIZATION SAVES \$6.30 IN DIRECT MEDICAL COSTS.

Throughout this past decade, the MHD expanded clinical operations providing greater access to immunization services for adults, adolescents and children. During the past five years alone, the department had close to 16,000 client visits for immunization services and provided more than 23,000 doses of vaccine. During the flu vaccine shortage of 2004-05, public health had a pivotal role in assessing the vaccine supply within the region. More than 4,300 doses of vaccine were provided to the medical community, assuring that high-risk patients would be protected from influenza and potentially life-threatening complications.

New vaccines continue to be developed to protect against diseases such as meningitis, whooping cough, flu and cervical cancer. Efforts must continue to achieve and sustain optimal immunization status not only for children, but for adolescents and adults as well. Immunization continues to be the best defense we have against infectious diseases. The MHD will continue to lead the community in promoting immunizations so this public health success story can be maintained and expanded throughout this century.

MISSION STATEMENT

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IMPROVED ORAL HEALTH

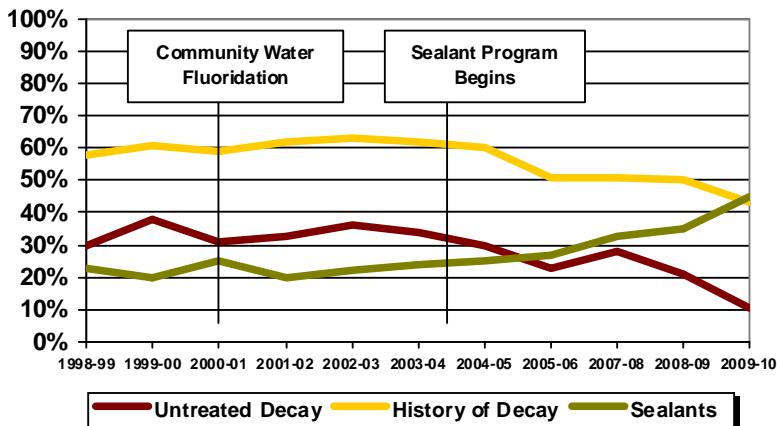
The history of dental public health in the City of Manchester has had a rich and storied tradition, leading to a great public health success in the 21st century. Beginning in the 1920's, children were taught about oral hygiene within Manchester schools. By 1965, nearly 80 years after the appointment of the City's Board of

Health, the first documented dentist was added to the five-member Board. The MHD's Dental Public Health Program was established shortly thereafter to improve the dental health of children with the greatest need, who resided in the designated "Model City" neighborhoods. In 1972, the first mobile dental van was purchased with funding from the Model City Agency of the Federal Department of Housing and Urban Development "for the purpose of improving access to preventive dental care for school children in the City of Manchester." In 1999, the Healthy Manchester Leadership Council released *The Oral Health Status of the City of Manchester, New Hampshire*, which identified oral health status as a serious problem impacting the physical, social, economic and psychological health of the community. Since that time,

many public health interventions have been employed to improve community water fluoridation in 2000. The Centers for Disease Control and Prevention (CDC) identifies community water fluoridation as a safe and healthy way to effectively prevent tooth decay and recognizes the intervention as one of the ten great public health achievements of the 20th century. **According to extensive cost-benefit analysis by the CDC, every \$1 invested in community water fluoridation yields approximately \$38.00 savings in dental treatment costs.**

Over the years, the Dental Public Health Program has reached out to thousands of children and their families and, in many cases, served as the only source of dental care received. **During the past five years alone, more than 12,000 children have benefited from screenings, preventive services and/or treatment provided within the school setting.** The long history and experience in dental public health crafted the foundation for the current full-service Manchester School Dental Program, a partnership between the MHD, Easter Seals NH and Catholic Medical Center (CMC) Poisson Dental Facility. Services are provided at all elementary and middle schools on a Dental Van that was donated by the Kiwanis Club of Manchester. The program now provides dental exams, diagnoses, preventive services including sealants, and limited restorative care. Children are linked to ongoing dental homes at the Easter Seals Dental Center or the Poisson Dental Facility. Evidence-based public health practices such as water fluoridation, sealants, and school-based dental services, have led to a significant reduction in the number of children presenting with tooth decay. Moreover, the number of children benefiting from sealants has increased. Simple, safe, and cost-effective interventions have contributed to this public health success in Manchester, with each generation now enjoying improved oral health.

Percent of Untreated Decay, History of Decay, and Sealants Among 2nd & 3rd Grade Children Screened in Manchester Title 1 Schools, Academic Years 1998-9 Through 2009-10



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DECREASED CHILDHOOD LEAD POISONING

Lead is a naturally occurring element and its use dates far back in antiquity. Lead-based paint and lead contaminated dust are the main sources of exposure for lead in U.S. children. Lead-based paints were banned for use in housing throughout the United States in 1978. All houses built before 1978 are likely to contain some lead-based paint. However, it is the deterioration of this paint that causes a problem. At the turn of the last century, childhood deaths from lead poisoning were common. Now in 2010, fatalities from pediatric lead poisoning are extremely rare. However, ten years ago, the City of Manchester had the tragic distinction of the first reported death of a child from lead poisoning since 1990. The subsequent investigation implicated lead paint and dust in the home as the source of poisoning.

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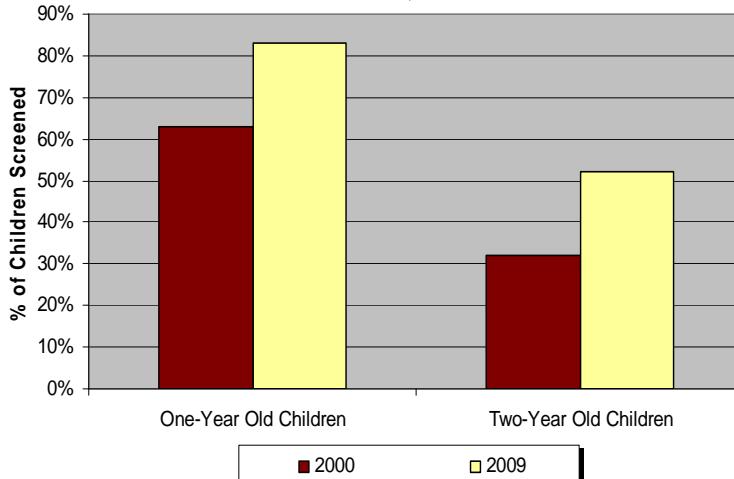
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Fatal Pediatric Lead Poisoning --- New Hampshire, 2000

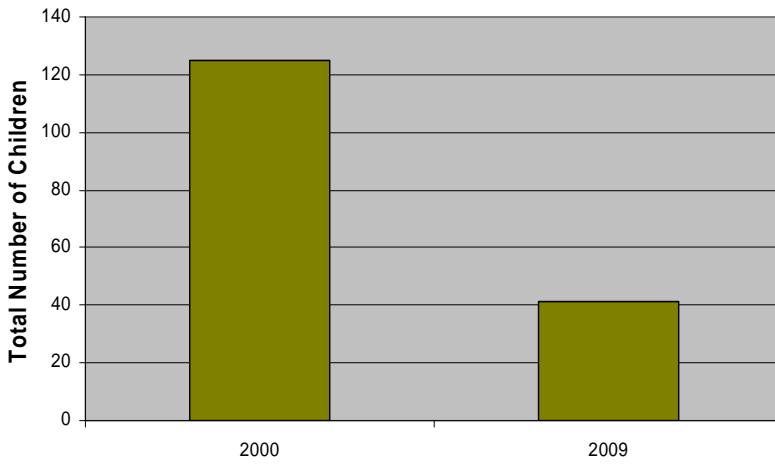
Fatal pediatric lead poisoning is rare in the United States because of multiple public health measures that have reduced blood lead levels (BLLs) in the population. However, the estimated BLLs among children remain high in some neighborhoods and populations, including children living in older housing with deteriorated lead paint. This report describes the investigation of the reported death of a child from lead poisoning since 1990 (1). The investigation implicated lead paint and dust in a home environment as the most likely source of the poisoning can be prevented by correcting lead hazards, especially in older housing, and by screening children at risk according to established guidelines (2).

On March 29, 2000, a 2-year-old girl was seen at a community hospital emergency department with a low-grade fever and vomiting of approximately 1 day's duration. The child, who was arriving in New Hampshire from Egypt with her Sudanese refugee family 3 weeks earlier, laboratory findings included a microcytic anemia (hemoglobin: 7.6 g/dL; lower limit of normal: 11.0 g/dL) with no evidence of hemolysis or elevation of red blood cells. A throat swab, streptococcal antigen test, and urinalysis were negative. She was discharged from the emergency department for further evaluation and admission to treatment for dehydration. Her mother, a 21-year-old woman, had been admitted to the same hospital the next day. On April 19, approximately 3 hours after the transfer, the because hypotensive, apneic, and hypotensive. She was intubated and placed on a ventilator. Computed tomography of the head showed diffuse cerebral edema and dilated ventricles. Late that day, the results of a blood test drawn on April 18 showed a BLL of 391 µg/dL, and an antipropylidienone level of 54 µg/dL. Chelation therapy was initiated with intramuscular British antedote and intravenous calcium ethylenediaminetetraacetic acid. Despite a decrease in the child's vital signs, she died on April 21. An autopsy found diffuse cerebral edema. A hair sample lead concentration was 31 µg/g in the distal container and 67 µg/g in the proximal container, indicating a large increase during the preceding month. Radiographs of the left knee were equivocal for growth arrest lines that can occur in chronic lead poisoning (3). A bone marrow sample showed no

Infants and Toddlers Receiving Lead Screenings in Manchester, 2000 and 2009



Children With Confirmed Elevated Lead Levels Greater Than 10 ug/dL in Manchester, 2000 and 2009



The MHD has battled childhood lead poisoning for many decades. Lead poisoning is a unique childhood health problem in that it is entirely preventable. With funding in 1993, the department hired a Community Health Nurse to provide case management for children with elevated blood lead levels and spearhead a community coalition to address the issue of preventing lead poisoning within the City. The Greater Manchester Partners against Lead Poisoning issued a special report, *Preventing Childhood Lead Poisoning in Manchester, New Hampshire*, with specific recommendations for the community. The community concern, dialogue and action stimulated by the action plan led to a variety of funding streams to promote primary prevention. In 2003, the MHD received the U.S. Conference of Mayors Lead-Safe for Kid's Sake Award for Distinction with a cash award of \$100,000 to provide healthier homes for children. In addition, secondary prevention was also highlighted within the action plan, with an increased emphasis on universal screening to identify at-risk children. **At the close of this decade, more Manchester children are receiving lead screenings and fewer are confirmed with elevated lead levels.** The MHD remains dedicated to the complete elimination of lead as a public health threat.

MISSION STATEMENT

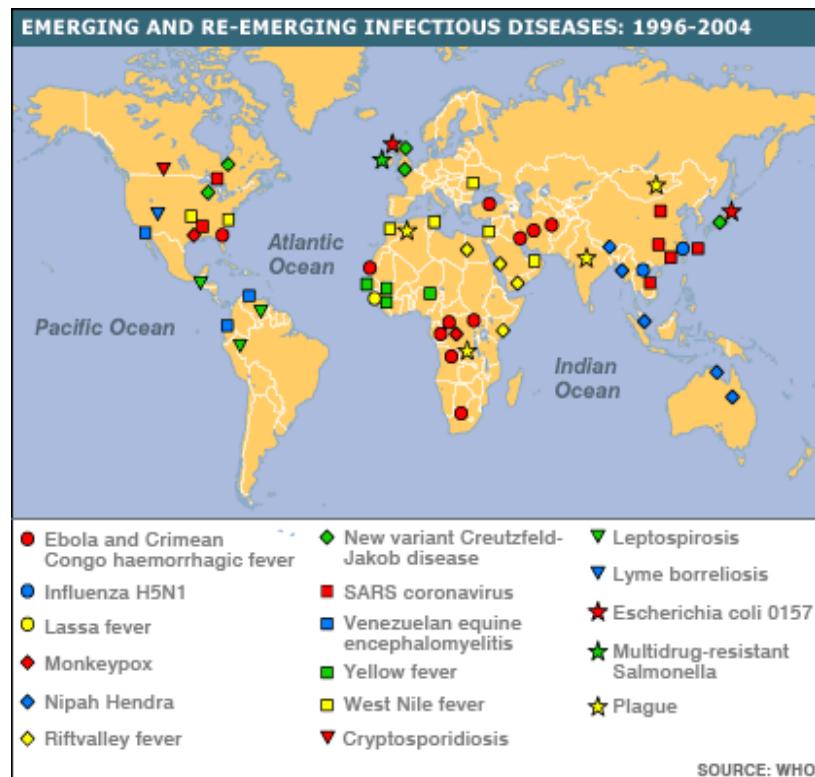
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ENHANCED ABILITY TO MONITOR AND RESPOND TO EMERGING HEALTH THREATS

Although overall counts of infectious disease have declined over time, newly recognized infectious agents have globally emerged in recent years that raise concern for the public's health. SARS, 2009 H1N1 Influenza, and drug-resistant organisms such as multi-drug resistant TB (MDR-TB) or Methicillin-Resistant Staphylococcus Aureus (MRSA) are examples of these emerging health threats. In addition, a communicable disease event in one part of the world can quickly ricochet throughout the international system to affect us all (WHO, 2008).

The recent H1N1 Influenza pandemic during 2009-10 highlighted the significant role of local public health in responding to these quickly evolving issues. The department was a leader in the community for coordinating emergency response plans, including monitoring disease incidence and implementing prevention and control interventions. The department was also responsible for investigating all reported cases of H1N1 in Manchester residents (in addition to the department's normal day-to-day operations). Guidelines for diagnosis, management, and reporting changed at a rapid pace, and our community health nurses were able to adapt promptly and their investigative work helped to prevent many more cases of H1N1, particularly in our most vulnerable residents. **Furthermore, our Public Health Emergency Response Program, together with our regional partners, provided over 4,400 doses of H1N1 vaccine to the region's residents, the majority of which were administered at mass dispensing sites identified in our emergency plans.**



In addition to evolving infectious disease organisms, mosquito-borne disease has emerged in the United States as an important public health concern. In 1999, West Nile Virus was first identified in New York. Until this point, this mosquito-borne disease had never been found in the United States, and the first and only case of Eastern Equine Encephalitis (EEE) in a Manchester resident was identified in 2005. Although a rare occurrence to date, the MHD recognized these diseases as potential threats to the health of our residents. Anticipating the spread of the illness, the department initiated preparations beginning in 1999, including surveillance systems, education and policies designed to prevent the propagation of mosquito-borne disease. With support from federal and state agencies, including the NH Department of Health and Human Services (NHDHHS) and the CDC, the department conducts routine mosquito surveillance during the summer months, implements public education campaigns, and has the capacity to facilitate spraying for mosquitoes when the risk to the public demands a more direct intervention.



From epidemic response, to assuring timely preventive interventions and surveillance for mosquito-borne disease, the department's commitment to retaining trained, competent staff enhances its ability to quickly adapt to new public health challenges and protect the public.

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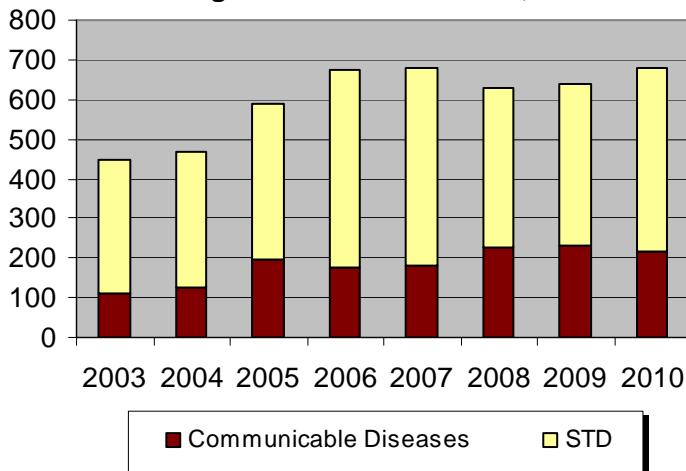
THE INVESTIGATION AND CONTROL OF COMMUNICABLE DISEASES

Many years ago, infectious disease was a major cause of death in Manchester. Although the number of new cases of many infectious diseases, such as measles or mumps, has dramatically declined in the past several decades, infectious disease remains an important cause of morbidity and mortality to which we must remain vigilant. Influenza and pneumonia remain major causes of death, particularly among persons 65 years of age and over, and diseases such as HIV/AIDS continue to spread throughout the United States.

TOP FIVE LEADING CAUSES OF DEATH AMONG MANCHESTER RESIDENTS, 1885

- Diarrhea and Enteritis
- Tuberculosis
- Other Infectious Disease
- Pneumonia
- Measles

Reportable Communicable Diseases Including STD's in Manchester, 2003-2010



Communicable disease is largely preventable, and prevention and control efforts are flourishing in Manchester. Due to successful public health control efforts including robust immunization programming and timely outbreak investigations, numbers of communicable disease reports in Manchester have remained steady throughout the last five years. From Whooping Cough (Pertussis) in children to suspected cases of Rabies to reports of Salmonellosis and *Escherichia coli* infection, the MHD consistently and efficiently investigates disease reports to protect the public's health to maintain rates of infectious disease morbidity and mortality at historical lows.

Tuberculosis (TB) screening and case management is an integral part of our communicable disease control. Although New Hampshire is a low-incidence state, Manchester carries the largest proportion of active TB cases in the state. **The MHD provided 1,495 tuberculin skin tests during 2009 to identify individuals with infection or active disease who may benefit from treatment. In any given month, 30-60 cases of latent TB are managed by the community health nurses to proactively prevent the public health threat of active TB disease.** The community health staff provides extensive case management and directly-observed therapy for clients with active TB disease. Working daily 365 days a year with clients with active disease ensures successful completion of treatment and reduces the likelihood of the emergence of drug-resistant TB.

Once anticipated to be eliminated as a public health threat, emerging and reemerging diseases remain at the forefront of the public health mission. The early forecast for the eradication of communicable disease did not consider the distinct ability of microbes to change, adapt and develop resistance to antibiotics. Changes in human behavior, demographics and societal events also contribute to changes in the landscape of infectious disease. Through the combination of a professional, credentialed staff across divisions with real-time communicable disease investigation capabilities, the MHD is poised to prevent or respond to a communicable disease outbreak or epidemic of any size.

IN FY 2010, THE MHD HELD CLOSE TO 100 HIV/STD CLINICS, WITH OVER 1,200 CLIENTS RECEIVING SERVICES.



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PREVENTING CHRONIC DISEASES ONE NEIGHBORHOOD AT A TIME

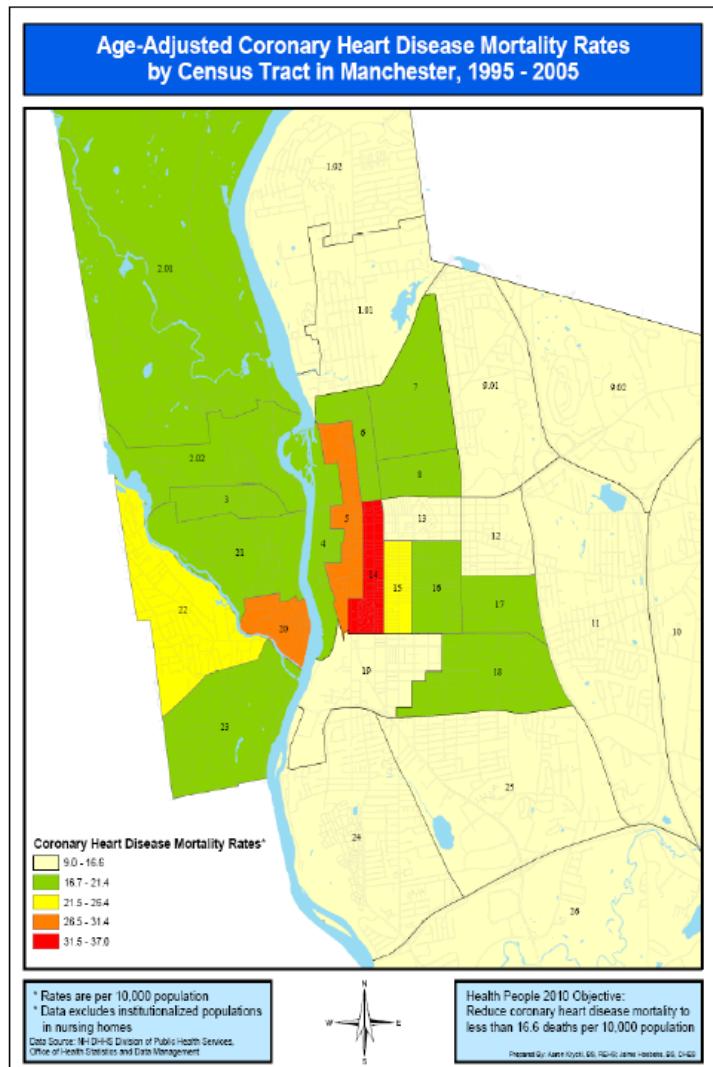
Over time, we have seen a shift from infectious diseases to chronic diseases being among the most common causes of illness, death and disability. Chronic diseases are long-term illnesses that often require ongoing management and follow-up, such as diabetes and heart disease. **In Manchester, 70% of deaths are associated with chronic diseases.** Furthermore, the rate of premature mortality (death before age 65) is significantly higher in Manchester than the rest of New Hampshire. It can be assumed that a large proportion of the premature death is associated with chronic diseases.

**ACCORDING TO THE CDC,
IF AS LITTLE AS 5%
OF INACTIVE RESIDENTS IN
MANCHESTER BECAME
PHYSICALLY ACTIVE, IT
COULD SAVE AN ESTIMATED
\$10,550,209 PER YEAR
IN MEDICAL COSTS,
WORKERS COMPENSATION,
AND LOST PRODUCTIVITY.**

individual's health behavior is greatly influenced by where they live, work, learn and play. For instance, if a corner store is serving as the neighborhood's main source of food and it does not provide healthier food options, such as fruits and vegetables, it will be challenging for the families within the neighborhood to eat a healthy diet.

In response, the MHD was restructured in 2007 to address these concerns through the establishment of the Division of Chronic Disease Prevention and Neighborhood Health. The division is committed to improving neighborhood health through the direct engagement of residents as equal partners in helping to assess, design, implement and evaluate health improvement efforts. Moreover, several community committees have been formed over the past decade to focus on the environment as a way to improve resident health and quality of life. Examples of these interdisciplinary committees include, but are not limited to, the Safe Routes to School Task Force that has been assembled to lead efforts in improving the neighborhoods around Manchester schools to increase the number of children who can safely walk to school on a regular basis, the Weed & Seed Strategy that is a crime reduction and quality of life initiative to improve the social environment within neighborhoods, and the Healthy Eating Active Living (HEAL) Project that aims to improve the safety and walkability of neighborhoods and increase access to healthy, affordable foods for all.

Four modifiable health risk behaviors—physical inactivity, poor nutrition, tobacco use, and excessive alcohol consumption—are responsible for much of the illness, suffering, and premature death related to chronic diseases. There are huge economic costs to the community associated with these risk behaviors as well. **It is estimated that physical inactivity is costing the community \$211 million per year in medical costs, workers compensation and lost productivity.** Health education strategies to prevent chronic diseases have traditionally focused on developing programming and services to educate and inform people about their risk behaviors and how to make healthier choices. However, an



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IMPROVED SCHOOL HEALTH CAPACITY ROOTED IN PUBLIC HEALTH

In the early 1900's, community health nurses in the City of Manchester began visiting the schools for the purposes of controlling communicable diseases, identifying children with failure to thrive and providing health education for new mothers in an effort to reduce infant mortality. Today, the school health services team, as a division of the MHD, plays a crucial role in the seamless provision of comprehensive health services to Manchester's children, youth and families. **During an average academic year, school nurses see nearly 135,000 student encounters within 22 public school settings, supporting more than 16,000 students and 1,700 faculty and staff.**

SELECT EXAMPLES OF VISITS TO THE SCHOOL NURSE OFFICE MANCHESTER SCHOOL DISTRICT, ACADEMIC YEAR 2009-2010	TOTAL NUMBER OF ENCOUNTERS
Visits Resulting in Return to Class	111,320
First Aid	39,292
Screenings (Height/weight, Hearing, Vision, Scoliosis)	22,603
Medications Administered	19,423
Referrals to Specialists/Health Care Providers	11,405
Diabetes Case Management	10,870
Immunization Follow-up	4,039
Asthma	3,894
Dental	2,532
Adult Assessments	699

Over the past decade, the needs of Manchester's youth and families have grown exponentially. **Nearly one out of every two school children within the District are now living below some level of poverty.** On any given day, a young person in Manchester can face circumstances of illness, injury, socioeconomic hardship, violence, substandard living conditions, family crisis, homelessness, substance abuse issues, chronic care needs and the lack of access to quality health care. Research has shown that there is a recognized relationship between health and learning as there is between school nurse availability and student well-being and educational success (AAP, 2008). After the child's home, school represents the second most influential environment in a child's life (AAP, 2008).

Staffing has adapted to meet these changing needs. The use of a productivity model that accounts for the time required for each nursing activity, assessment and intervention is merged with the established national ratios set by the National Association of School Nurses for student populations of well children, children with chronic disease and those with severe medical disabilities. Every public elementary and middle school has an assigned registered nurse on staff, and every high school has two nurses. Two float nurses and five health assistants complete the staffing complement. This allows the school nurses to address health issues unique to that school as well as participate in team meetings and provide health education to students, families and staff.

The school health services team also plays an important role in public health monitoring. School health records include mandatory immunization data necessary to comply with state audits. The role in potential disease identification is accomplished through the designed encounter program, a school-based syndromic tracking system, which is monitored through the state of New Hampshire's Disease Surveillance system. Early identification of increases in asthma, gastro-intestinal illness, influenza-like illness, and meningitis allows prompt intervention and ensures student safety.

MISSION STATEMENT

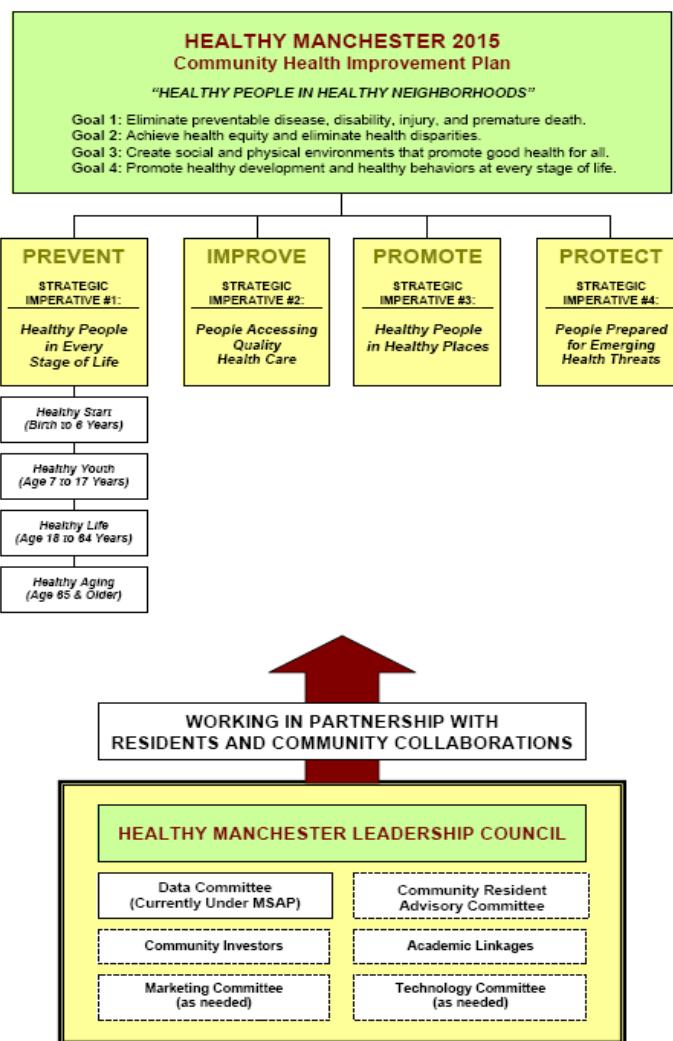
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THE ESTABLISHMENT OF AN EFFECTIVE COMMUNITY HEALTH IMPROVEMENT PROCESS

In communities, health is a product of many factors and many segments of the community have the potential to contribute to and share responsibility for its protection and improvement (IOM, 1997). The MHD recognizes that even with its standard for excellence, it alone can not measurably improve the health of the City's residents. While it is important that the public health community continue to improve environmental conditions and endeavor to prevent the spread of communicable and chronic diseases, it is equally important for public health to partner with a broad coalition of community organizations, including health care providers, to develop new models to address the environmental, biological, socioeconomic, cultural and behavioral factors associated with the diseases and conditions which contribute to the burden of illness, disability and death in the community today and into the future. As a result, the MHD formed a City health leadership collaborative in the late 1990s known as the Healthy Manchester Leadership Council (HMLC) based on the Institute of Medicine's "Community Health Improvement Process" framework through which a community can assess health needs in the population, develop evidence-based interventions and monitor performance and outcomes. **Over the past decade, the Council has been instrumental in tackling issues such as adolescent pregnancy prevention, oral health and access to care which have resulted in citywide interventions such as comprehensive school health education, community water fluoridation and the expansion of neighborhood health centers.**

In 2008, the City of Manchester was one of twenty-four communities nationally to successfully secure a CDC-assigned Public Health Prevention Specialist (PS) for a two-year assignment. In partnership with HMLC, the area's major health care providers and the greater Manchester community, the PS completed the "Believe in a Health Community: Greater Manchester Community Needs Assessment" based on the CDC's Health Protection Goals. To view this document, please visit the Data and Reports Link at:
<http://www.manchesternh.gov/website/Departments/Health/DataandReports/tabid/700/Default.aspx>

The community needs assessment is an early step in a Manchester area community health improvement process described above. It is a living, on-going, inclusive methodology intended to prompt action. HMLC is working with residents and community collaborations to prioritize issues under the four overarching strategic imperatives identified in the community needs assessment, to set goals and objectives for each and to provide recommendations for action. From this, a Community Health Improvement Plan will be published in 2011 and will be used to develop work plans with measurable health outcomes. Examples of future HMLC efforts include ongoing health planning, performance measurement and expanded community engagement as well as the pursuit of the "intentional" design of neighborhoods oriented around health promotion, disease prevention and population well-being.



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IMPROVED PUBLIC HEALTH EMERGENCY PREPAREDNESS AND RESPONSE

The MHD has been engaged in public health emergency preparedness for over a decade. The department's initial planning efforts were centered on pandemic influenza. Given the clear recognition following the attacks on September 11, 2001 and the anthrax attacks in the fall of 2001 that we face many biological and other potential threats, emergency preparedness initiatives, especially those designed to address public health response capacity, were significantly increased in 2001 and continue to this day.

Since 2002, the MHD has served as the point of contact for the Manchester Public Health Region (PHR), which includes the municipalities of Auburn, Bedford, Candia, Deerfield, Goffstown, Hooksett, Manchester and New Boston. As such, the department has led planning activities to ensure the region is prepared to protect its residents from possible public health threats such as pandemic influenza, smallpox and anthrax as well as other natural or man-made diseases.



REGIONAL PREPAREDNESS PLANS:

- Pandemic Influenza
- Risk Communication
- Medical Surge (expanding health care capacity in an emergency)
- Point of Dispensing (opening mass clinics in emergencies)
- Mass Fatality Management
- Isolation and Quarantine
- Operations of a Multi-Agency Coordinating Entity (i.e. regional emergency operations center)

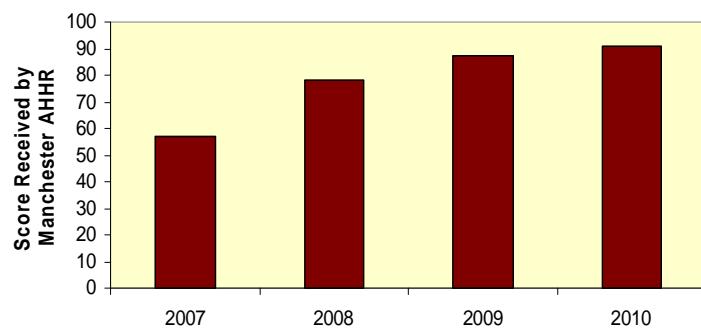
The MHD currently facilitates the Public Health Preparedness Advisory Council, which is the planning body for regional public health preparedness activities. The Council includes membership from the region's hospitals, each of the PHR's municipalities (i.e., health, police, fire and emergency management) as well as many other community entities responsible for ensuring public health and safety. The Manchester PHR's efforts have primarily included developing and exercising public health preparedness plans.

In 2007, the Manchester PHR began participating in the Cities Readiness Initiative (CRI), which is a federally funded program that is designed to enhance preparedness in the nation's largest cities and metropolitan statistical areas where more than 50% of the U.S. population resides. **Through the CRI, the Manchester PHR developed a comprehensive plan to respond to a large-scale**

bioterrorist event such as anthrax exposure by dispensing antibiotics to the region's entire population (approximately 190,000 people) within 48 hours. The plan can be utilized in small-scale public health emergencies such as hepatitis A or meningitis outbreaks as well. Significant improvements in regional preparedness have been made since the CRI baseline technical assistance review was performed by the CDC.

Furthermore, the Manchester PHR's capacity to respond to emergencies has improved greatly since the MHD formed the Greater Manchester Medical Reserve Corps (MRC) in 2008. The MRC unit currently has approximately 40 trained medical, public health and other volunteers who donate their time and expertise to prepare for and respond to emergencies and promote healthy living.

CDC Technical Assistance Review Scores by Year



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IMPROVED PUBLIC HEALTH INFRASTRUCTURE AND WORKFORCE DEVELOPMENT

The MHD has seen many changes over the last decade. One of the most significant changes came in July of 2002. After occupying 795 Elm Street for more than 20 years, a devastating fire forced the immediate relocation of the Health Department. Since the fire, the MHD has made its home at its present location: 1528 Elm Street, Carol M. Rines Center.

The Rines Center provides office space that allows easy public access and improved clinic space that maintains client confidentiality and is equipped with specialized air handling systems to prevent the spread of airborne diseases. In addition, the Rines Center houses the City's back up Emergency Operations Center, serves as the Ward 3 polling location and provides conference space utilized by City and State departments as well as local community organizations with ties to the MHD. **During 2009-2010, 545 meetings were held in the space, serving more than 11,250 individuals.**



As a means of developing public health competencies in MHD staff and other local public health practitioners in the state, the New Hampshire Institute for Local Public Health Practice (NHILPHP) at the MHD was created in 2003 with funding support from the NHDHHS. The NHILPHP provides public health training courses to augment professional education through the development of leadership and practical skills. Several of the MHD's senior personnel serve as primary instructors in the conduct of five core courses: *Core Public Health Concepts, Principles of Epidemiology, Applied Communicable Disease Investigation, Control, and Microbiology, Principles of Environmental Health Practice and Local Public Health Emergency Preparedness and Response*. These skills enable local public health practitioners to respond to public health threats and emergencies and lead their respective communities in addressing public health issues.

LOCAL PUBLIC HEALTH COMPETENCY DEVELOPMENT THROUGH THE NH INSTITUTE FOR LOCAL PUBLIC HEALTH PRACTICE

- ❖ 310 UNDUPPLICATED PROFESSIONALS HAVE ATTENDED THE INSTITUTE
- ❖ 46 PROFESSIONALS HAVE COMPLETED ALL FIVE CORE COURSES
- ❖ 20 ADDITIONAL PROFESSIONALS WILL BE GRADUATING IN 2011
- ❖ OVER ONE THIRD OF THE PROFESSIONALS HAVE COMPLETED AT LEAST THREE OF THE CORE COURSES

The department is fortunate to have extensive experience and organizational memory among the Senior Leadership Team with an average of 16 years of service at the MHD. Moreover, among the members of the Senior Leadership Team, 87.5% have a Masters Degree or higher including a Medical Director that is Board Certified in Preventive Medicine. In addition, the department boasts:

- | | |
|---|--|
| ❖ 9 Additional Staff with Masters Degrees | ❖ 1 Registered Dental Hygienist and |
| ❖ 24 Registered Nurses in School Health including | 1 Certified Dental Assistant |
| 9 Certified School Nurses | 1 Staff Member with a PhD |
| 3 Licensed Practical Nurses | 1 Certified Tobacco Treatment Specialist |
| 6 Registered Nurses in Community Health including 2 Certified Community Health Nurses | 1 Certified Asthma Educator |
| 4 Registered Environmental Health Specialists | 1 Certified Food Protection Specialist |
| 6 Certified Pool Operators | 1 Certified Public Manager |
| 3 Certified Healthy Homes Specialists | 1 Microsoft Solution Certified Manager |
| 2 Certified Health Education Specialists | |

It is this commitment to continuing education and national credentialing that enables the Health Department staff to remain current, competent and serve as leaders in public health in New Hampshire.

FOR MORE INFORMATION

Visit our website at <http://www.manchesternh.gov/health>, or call 624-6466

THE MANCHESTER HEALTH DEPARTMENT IN 2011 AND BEYOND

Franklin Delano Roosevelt once said, "*The success or failure of any government in the final analysis must be measured by the well-being of its citizens. Nothing can be more important to the state than its public health; the states paramount concern should be the health of its people.*" To that end, the MHD is committed to finding new and innovative ways of improving the health of Manchester residents while maintaining the delivery of essential services at the highest standard of care. The department looks forward to future opportunities to continually celebrate the achievements of this critical mission.

Strategic Planning

With generous funding support from the Endowment for Health and the Norwin S. and Elizabeth N. Bean Foundation, the MHD is completing a strategic plan with input from the community to guide its direction over the next five years. The strategic plan will integrate with the 2009 Greater Manchester Community Needs Assessment, Greater Manchester Community Health Improvement Plan (in development) and the operational capacity of the MHD. Its intent is to identify common goals, strategic priorities, objectives and performance metrics with a long-term goal of increased quality and years of life and the elimination of health disparities for those in our community.

Accreditation

In 2007, the MHD was chosen as one of ten local public health departments in the country to be part of National Association of City and County Health Officials Accreditation Preparation and Quality Improvement Demonstration Site Project. The goal of the national public health accreditation program is to improve and protect the health of the public by advancing the quality and performance of all health departments in the country – state, local, territorial and tribal (PHAB, 2011). Accreditation is a critical part of the future of the MHD with an intent from the department to apply in 2012.

Academic Linkages

The MHD holds formal relationships with St. Anselm's College, Rivier College, the NH Technical Institute, Franklin Pierce College, Boston University, Harvard University and MIT. The department also acts as the City's connection to the newly established Prevention Research Center under the Dartmouth Institute through Dartmouth College (please visit <http://tdi.dartmouth.edu/centers/population-health/prcd/partners/manchester> for more information). This partnership will enable the Manchester community to conduct prevention research and promote the wide use of practices proven to promote good health. In addition, members of the MHD's senior leadership team serve as adjunct faculty to Dartmouth Medical School and the University of New Hampshire's College of Health and Human Services.

The Use of Technology

The use of technology is expanding the reach and efficiency of public health through real-time surveillance, program management and communication systems. Within the next year, the MHD's Environmental Health Division will move to a system of electronic inspections utilizing tablets in the field. In doing so, all aspects of their inspectional work will be available in a more timely, transparent and efficient manner. In addition, through the design of an Electronic Dental Record system, the community-based dental clinics at Easter Seals and CMC will have the ability to communicate with the department's Dental Van to better document and plan for the immediate and long-term treatments for children seen on the van. These paperless systems are just a couple of examples of how technology will enable our public health workforce to improve productivity, reduce duplication and provide a better service for Manchester residents in the years to come.

Priority Issues

The MHD, in partnership with HMLC and other community collaborations, works to balance strategic opportunities for long-term health improvement and goals that are achievable in the short term. Current efforts are underway to mobilize the community around strategies designed to encourage healthy homes, access to quality primary health care (including oral and behavioral health care) and the prevention of neighborhood violence. These holistic and integrated approaches, if successfully employed now, hold great promise for the prevention of poor health outcomes potentially facing the Manchester community for years to come.

MISSION STATEMENT

To improve the health of individuals, families, and the community through disease prevention, health promotion, and protection from environmental threats.