Public Health Milestones in Massachusetts

Public health records in the new colonies began shortly after the Pilgrims stepped onto Plymouth Rock. The rigors of their first winter brought an epidemic of respiratory infections and malnutrition diseases, and before the winter snows began to melt, half of Mayflowers passengers and crew had died. During the early days of the Federal Era, when population pressure strained community capacity to deal with sanitation and yellow fever was an annual threat, America’s first board of health was established in Boston by an act of the legislature in 1799, with Paul Revere as president.

Colonial Period

1630 The Colonial Period began when Dr. Samuel Fuller conducted the first disease control program. Boston quickly grew to the largest city in the English colonies with many ships sailing in and out of its harbor.

1639 First colonial laws for registration of births and deaths.

1648 Ships were held at Castle Island as a temporary quarantine measure to prevent the spread of smallpox.

1652 First public water conduit in America.

1721 During the 1721 smallpox outbreak, the Rev. Cotton Mather convinced the Puritan community to have Dr. Zabdiel Boylston conduct the first large-scale smallpox inoculations in the English-speaking world. Scholars often site this as the first big step in American public health history.

Federal Era - Commonwealth of Massachusetts (1781)

There were very few physicians available during this period, and most of them were poorly educated. This led to the establishment of the Massachusetts Medical Society in 1781 and the founding of the Harvard Medical School a year later.

1781 Massachusetts Medical Society is established.

1782 Harvard Medical School is founded.

1785 First pure food legislation in America.

1797 Great Public Health Act - Law passed authorizing practitioners and householders to notify local board of health of dangerous diseases, such as smallpox.

1799 America’s first board of health was established in Boston with Paul Revere appointed president.
**Pioneering in the Nineteenth Century**

1800  
First use of smallpox vaccine (cowpox virus) in the Western Hemisphere by Benjamin Waterhouse of Cambridge.

1809  
Law passed allowing boards of health to require vaccination against smallpox.

1827  
Last cholera epidemic in Massachusetts.

1842  
First statewide registration of vital statistics.

1846  
Massachusetts General Hospital introduced to the world the use of ether anesthesia. It was administered by Dr. William T. G. Morton, a Massachusetts dentist.

1850  

1863  
Massachusetts Board of State Charities established, Dr. Samuel Howe, chairman.

1869  
Massachusetts State Board of Health established, Dr. Henry I. Bowditch, chairman.

1871  
“Offensive Trade” Act to regulate slaughtering, first executive power of Board of Health.

**Growth and Order**

*In 1873, Linda Richards was the first woman in the United States to become a graduate nurse. 1890 saw the formation of the Massachusetts Associated Boards of Health which became the Massachusetts Public Health Association in 1936.*

1873  
Linda Richards, trained at the New England Hospital for Women and Children, first woman in America to be a graduate nurse.

1878  
Law to prevent pollution of inland waterways.

1879  
Merger of Board of Health, Lunacy, and Charity.

1883  
Mandatory reporting of dangerous diseases.

1886  
Independent State Board of Health re-established, Dr. Henry Walcott, chairman.  
Beginning of annual supervision of water supplies and sewage disposal.

1887  
Lawrence Experiment Station created for research in purification of water and sewage.

1890  
Formation of Massachusetts Associated Boards of Health; became Massachusetts Public Health Association in 1936.

1891  
Food and Drug Laboratory established, first of its kind in the nation.  
Sanitarium in Sharon, first municipal tuberculosis sanitarium.

1894  
State public health microbiology laboratory established.  
State to produce free diphtheria antitoxin.
1895  Daily medical inspection of children in public schools established in Boston. Bacteriologic Laboratory services begun by Dr. Theobald Smith at Bussey Institute in Jamaica Plain.

1898  First state sanitarium for tuberculosis patients in the nation opened at Rutland.

1899  W.F. Whitney’s study of cancer authorized by the Board of Health.

1902  Last smallpox epidemic in Massachusetts.

1903  State authorized to produce and distribute diphtheria antitoxin and smallpox vaccine.

1905  Wachusetts Reservoir completed Metropolitan Water System, then largest water supply in the United States.
Systematic dairy inspection began.

1906  School Health Law passed by legislature, first in the nation.

1907  State lists sixteen contagious reportable diseases, including tuberculosis.
Fifteen district health officers appointed.

1909  Typhoid carriers first recognized.
North Reading State Sanatorium opened.

1910  Smoke Abatement District established in greater Boston, first in the nation.

1911  Massachusetts Society for Social Hygiene founded.

1914  Massachusetts Department of Health created from Board of Health and its staff.

1915  Division of Hygiene began its educational projects and child hygiene activities.

1917  First state nutritionist in the nation appointed.
Framingham Community Health and Tuberculosis Demonstration of community tuberculosis control, first in the nation.

1918  Venereal diseases declared dangerous to public health.
Manufacture and distribution of arsphenamine for treatment of syphilis instituted, first in the nation.
First toxin-antitoxin made at the Massachusetts State Laboratory.

1919  Supervisor and health instructor in mouth hygiene appointed, first in the nation.

1920  Division of Tuberculosis and the state sanitarium join, combining control and treatment measures.
Department of Health becomes the Massachusetts Department of Public Health, now incorporating the Division of Tuberculosis and the state leprosarium on Penikese Island.
Expansion and Development

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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<tbody>
<tr>
<td>1924</td>
<td>The Chadwick Clinics for the detection of childhood tuberculosis began and became recognized as a world model.</td>
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<td>1927</td>
<td>Hinton serologic test for syphilis, developed by William A. Hinton at the Wasserman Laboratory supplants Wasserman test. Pondville Hospital for treatment and research in cancer opened; six cancer clinics organized and public education begun on the need for early detection of cancer.</td>
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<td>1928</td>
<td>First shellfish purification plant in the nation established in Newburyport.</td>
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<td>1938</td>
<td>Law passed for the prevention and control of sexually transmitted diseases.</td>
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<td>1940</td>
<td>Edwin Cohn develops plasma fractionation with the production of albumin and gamma globulin for therapeutic use. Massachusetts pertussis vaccine standardized for distribution.</td>
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<tr>
<td>1946</td>
<td>Blood and blood derivatives program begun at Massachusetts Biologic Laboratories, first civilian program in the nation.</td>
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<td>1954</td>
<td>Lemuel Shattuck Hospital opens in Jamaica Plain.</td>
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<td>1958</td>
<td>Code regulating processing, storing and distribution of frozen food adopted, first in the nation.</td>
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<td>1962</td>
<td>Mandatory PKU (phenylketonuria) screening of newborns followed in 1963 by screening for other inborn errors of metabolism.</td>
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<td>1965</td>
<td>Two-way closed-circuit television installed at the Massachusetts Hospital School, Canton, to provide uninterrupted education for child patients, first in the world.</td>
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<td>1970</td>
<td>Public formulary of drugs listed by both generic and brand name, first in the nation.</td>
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<td>1974</td>
<td>New State Laboratory Institute building opens in Jamaica Plain.</td>
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<td>1985</td>
<td>Health hazard warning required on containers of snuff sold in Massachusetts, first in the nation.</td>
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<tr>
<td>1986</td>
<td>First state law in the nation requiring immunization of college students.</td>
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<td>1988</td>
<td>Universal health care legislation passed.</td>
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The 1990’s

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<td>1990</td>
<td>Massachusetts Public Health Association makes the establishment of a Public Health Museum a Centennial Celebration project.</td>
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<tr>
<td>1991</td>
<td>Committee for the Public Health Museum establishes a Board of Directors and incorporates: The Public Health Museum in Massachusetts is the first of its kind in the nation.</td>
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</table>
1993  Massachusetts Tobacco Control Program begins.
1995  First state in the nation to divest state pensions from tobacco stock legislatively.
1996  First state law in the nation requiring disclosure of cigarette additives and a more accurate method for reporting nicotine yield.
1996  First state law to regulate firearms as a consumer product. The regulations were implemented in 2000 after the firearms manufacturers were defeated in court.
       First state-wide system for reporting medication occurrences in community residential programs for individuals with mental illness or mental retardation.
       Sexual Assault Nurse Examiner Program (SANE) in hospital emergency rooms to provide both compassionate care for victims of sexual assault and forensic expertise. This program has increased convictions prosecution of rape cases.
       Massachusetts is the first state to require disclosure of cigarette additives and a more accurate method for reporting nicotine yield.
1998  First state in the nation to place nursing home performance ratings on the internet to help consumers select nursing homes.
1999  First state to use consumer protection laws to limit cigarette tobacco advertising near schools.

21st Century

2004  Betsy Lehman Center for Patient Safety and Medical Error Reduction established.
       Smoke-Free Workplace Law becomes effective.