

CHAPTER 23

IMMUNIZATION AND VACCINE DISTRIBUTION

BOARD OF HEALTH ROLE AT A GLANCE

- _ Promote or provide for the routine immunization of children and adults.
- _ Investigate and control the spread of vaccine-preventable communicable diseases within the Commonwealth.

OVERVIEW

Death or disability due to the occurrence of childhood disease (polio, diphtheria, pertussis, tetanus, measles, rubella, mumps, Hib disease, hepatitis B, varicella [chicken pox], influenza, pneumococcal, rotavirus, human papilloma virus, meningitis and other diseases) is particularly tragic because these diseases are preventable. In the early 1970's, it appeared that vaccine-preventable childhood diseases were being effectively reduced by vaccines. However, during the 1980's, a rise in the number of cases of vaccine-preventable diseases occurred, particularly measles. In recent years, measles cases have been introduced from countries where vaccination is not common. In the 1990's there was a rise in the cases of pertussis in previously vaccinated adolescents and adults due to waning immunity in the vaccinated populations. A pertussis booster dose has helped address this problem. However, the threat of outbreaks is still present because all individuals are not protected by immunization. Vaccine-preventable diseases have not been eliminated.

Local health departments are encouraged to review their emergency response plans, especially the section on standing up emergency dispensing sites in response to an infectious disease outbreak.

MDPH guidance on *Municipal and Community-Based Emergency Management and Planning* is available at:

<http://www.mass.gov/?pageID=eohhs2subtopic&L=4&L0=Home&L1=Government&L2=Local+Government&L3=Municipal+and+Community-Based+Emergency+Management+and+Planning&sid=Eohhs2>

BOARD OF HEALTH RESPONSIBILITIES

- Require and enforce the immunization or re-vaccination of all town residents and occupants (e.g. workers, school pupils, prison inmates) if, in the opinion of the board of health, it is necessary for public health and safety (M.G.L. c. 111 ⁹⁹181-183).
- Provide vaccinations without charge to residents and anyone working within the town, if such vaccinations are required by the board (M.G.L. c. 111 ⁹⁹181-183).
- Investigate and control the spread of vaccine-preventable communicable diseases within the town or city (M.G.L. c. 111 and 92-116). (See *Reportable Diseases, Surveillance and*

Isolation & Quarantine Requirements for information about disease investigation, control and reporting). _

- Maintain and distribute DPH Immunization Program supplied vaccines free of charge to local health care providers (M.G.L. c111, 5A 105CMR 730.000(A-M)). The recommended guidelines for the transport, storage and distribution of vaccine are outlined below. Please note: This statutory requirement is now provided directly by the MDPH Immunization Program via a third party distributor (McKesson). However, LBOH's may still be required to maintain and distribute vaccines in emergencies or outbreaks (i.e. influenza pandemic).

BOARD OF HEALTH RECOMMENDED ACTIVITIES

- _ Promote or provide for the routine immunization of children and adults against polio, measles, mumps, rubella, diphtheria, tetanus, pertussis, *Haemophilus influenzae* b (Hib), hepatitis A, hepatitis B, varicella, pneumococcal disease, influenza, rotavirus, human papilloma virus, meningitis and other diseases according to Massachusetts Department of Public Health (DPH) recommendations. Immunizations are an integral component of primary care. It is recommended that immunizations be performed by the individual's primary care physician. However, if records show that a significant percentage of residents have not been immunized, the board of health may provide immunization clinics. This is particularly applicable for annual influenza vaccinations. Since a large proportion of the population should be vaccinated in a short period of time each year, LBOH-sponsored public influenza and pneumococcal clinics are a good way to ensure as many residents as possible are vaccinated. Annual influenza and pneumococcal immunizations should be conducted according to MDPH Immunization Program guidelines and recommendations. Immunizations should also be a routine part of well-child or well-baby conferences.
- _ All boards of health sponsoring immunization clinics should develop protocols consistent with the US Department of Health and Human Service publications ***Standards for Pediatric and Adult Immunization Practices***. Licensed nurses may administer vaccines when protocols, or "standing orders," are signed by a physician. Pharmacists are also excellent partners who can help vaccinate the citizens of your town. Immunization schedules and recommendations are updated annually. For this information, contact the DPH Vaccine unit at 617-983-6800 or online at <http://www.mass.gov/dph/imm> and click on Vaccine Management.
- _ Assist residents in obtaining the above-mentioned immunizations and link them to a primary care provider. If an individual cannot afford immunizations, the board of health or school health service should either provide immunization without charge or arrange for an appropriate health facility to do so. The LBOH should also encourage providers to enroll in the MDPH Immunization Program. Information for enrolling in the Immunization Program is available thru the Vaccine unit at 617-983-6800 or online at <http://www.mass.gov/dph/imm> and click on Vaccine Management.
- _ Investigate day care, school and college records, and all disease reports in the city or town to determine whether an immunization clinic should be initiated. Assistance, guidelines for the control of vaccine-preventable diseases, and vaccines are available free of charge from DPH Immunization Program at 617-983-6800 .

- Prepare for the next influenza pandemic in collaboration with local public safety and emergency management agencies, using the CDC document, *Pandemic Influenza: A Planning Guide for State and Local Officials*. This plan should include procedures for distribution of influenza vaccine to the entire community, contingency plans for the provision of adequate medical care and maintenance of essential community services in the event of wide-spread absenteeism, and an emphasis on improving coverage with pneumococcal vaccine and annual influenza vaccination now.
- Contact the MDPH Immunization Program at (617-983-6800), 305 South Street, Jamaica Plain, MA 02130 to report cases of vaccine-preventable diseases and for advice, guidelines and assistance regarding vaccination or immunization program issues. Epidemiologists and nurses are also available for consultation.

Vaccine transport. Vaccine will be shipped directly to you by a third party distributor

Vaccine storage. Listed below are guidelines for vaccine storage at local sites:

- maintain refrigerator temperature at 2° to 8°C (35° to 46°F) and freezer temperature at -15°C (+5°F) or colder;
- ensure that varicella vaccine is stored in a frost-free freezer with a separate, insulated door that maintains a temperature of -15°C (+5°F) or colder;
- log temperatures twice daily (AM and PM) using a certified, calibrated thermometer;
- do not keep expired vaccines in the refrigerator or freezer;
- do not store vaccines on the refrigerator or freezer door;
- do not store food or drinks in the vaccine storage units;
- ensure that vaccines are stacked to allow proper air circulation;
- rotate stock so vaccine with the shortest shelf life is distributed first;
- conduct a physical inventory of you vaccine supply at least once a month;
- store bottles of water in the refrigerator and ice packs in the freezer to maintain the temperature in case of a a of a mechanical or power failure;
- maintain a backup plan for the storage of vaccines in case of a mechanical or power failure; and
- report any incidence of possible vaccine loss due to refrigeration failure or power outage to the Vaccine Unit at the MDPH Immunization Program (617-983-6828), before discarding any vaccines.

Vaccine distribution. Please note that MDPH-supplied vaccines are now distributed directly to provider sites using a third party distributor. However, the follow guidelines should be followed in the event that the LBOH is involved in direct distribution of vaccines. Listed below are guidelines for vaccine distribution to providers:

- verify that the provider follows guidelines listed above for vaccine transport;
- review vaccine usage and vaccine order forms for accuracy and completeness;
- distribute vaccine on a replacement basis. Replenish what was documented as used on vaccine usage form;

- _ document vaccine type distributed, including lot number, manufacturer, expiration date, and quantity given to provider;
- _ document vaccine type received from the MDPH Immunization Program, including lot number, manufacturer, expiration date, and quantity received;
- _ encourage vaccine accountability. Doses administered and wasted or lost need to be accounted for;
- _ ensure providers order vaccines regularly (once a month) and never more than a two month supply;
- _ distribute most recent VIS with every dose of vaccine distributed;
- _ do not redistribute vaccines returned by providers (regardless of expiration date), with the exception of influenza and pneumococcal vaccine;
- _ ensure provider is enrolled in the MIP before distributing vaccines to them; and
- _ adhere to the requirements specific to vaccine distribution as outlined in the *Guidelines for Compliance with Federal Vaccine Administration Requirements*.

The latest information about vaccine management can be found on the MDPH website (<http://www.mass.gov/dph/imm>) and click on Vaccine Management.

Community education. Popular misconceptions about vaccine-preventable childhood diseases are that they are not dangerous or that they do not occur anymore. Other parents have concerns about vaccine safety and are seeking providers who will vaccinate their children on a prolonged or alternate immunization schedule. The result is that millions of children remain unnecessarily susceptible to disease during their first years of life. Parents must be educated on the necessity of immunization programs. Boards of health might take the following steps to increase community acceptance of the importance of immunization:

- _ Publicize the benefits of immunization and information about vaccine safety through the local media. Packets, including sample news releases, are available from the CDC. Posters, pamphlets, fact sheets and videos are available through the MDPH Immunization Program.
- _ Urge parents to check their children's medical records. Distribute and promote the use of the Lifetime Health and Immunization Record (Blue Book) available from the MDPH Immunization Program.
- _ See the end of this section for a list of resources.

LOCAL SCHOOL COMMITTEE RESPONSIBILITIES

Refuse school admittance to any child not immunized for the following diseases according to the DPH Immunization Program *Immunization Guidelines*:

- polio
- measles
- mumps
- rubella (German measles)
- diphtheria

tetanus
pertussis (whooping cough)
hepatitis B
varicella
meningococcal disease
other diseases considered dangerous to the public health as specified by DPH or boards of health in towns/cities where the board provides school health services (M.G.L. c. 76 ⁹⁰15).

STATE RESPONSIBILITIES

- Specify the immunizations a child must have before he/she is admitted to public or private school, including nursery schools and certain day care centers (M.G.L. c. 76 ⁹⁰15).
- Maintain and provide certain vaccines free of charge to boards of health.
- Decide if a child is properly certified regarding immunizations if a conflict of opinion exists between the physician in charge of the school health program and the child's physician (M.G.L. c. 76 ⁹⁰15). NOTE: Physician's certificate shall mean a form or letter signed and dated by the physician or designee which specifies month and year of administration and the type/name of vaccine(s) administered to the student. A copy of an immunization record from another school in the Commonwealth is also acceptable (105 CMR 220.000).

Exceptions: Immunization requirements do not apply:

- if a certificate supplied by a physician states that a child's physical health would be endangered by receiving the immunization. This certificate must be submitted at the beginning of each school year to the school physician.
- if written statement is supplied from parent or guardian declaring that vaccinations or immunizations "conflict with his/her sincere religious beliefs."

MISCELLANEOUS IMMUNIZATION MATERIALS

As required by state law, the Department of Public Health has established legal requirements for children to attend day care, preschool, kindergarten, school grades 1-12, and college. The recommended schedule is updated annually and is available from the Immunization Program.

- All recommended vaccines must be taken for complete protection. Partial immunization does not insure protection against the disease.
- Any interruption in the schedule does not necessitate starting the series again. Simply complete needs.
- If unsure whether an immunization is needed or not, immunize!

ADDITIONAL IMMUNIZATION RESOURCES

MDPH Immunization Program:
617-983-6800; Toll free: 888-658-2850
<http://www.mass.gov/dph/imm/>

Centers for Disease Control and Prevention:
800-CDC-INFO
<http://www.cdc.gov/vaccines/>

Immunization Action Coalition:
<http://www.immunize.org/>

Vaccine Education Center at the Children's Hospital of Philadelphia:
<http://www.vaccine.chop.edu/>

American Academy of Pediatrics:
<http://www.aap.org/>

Institute for Vaccine Safety:
<http://www.vaccinesafety.edu/>

Food and Drug Administration:
<http://www.fda.gov/cber/vaccines.htm>