

# Adult Occupational Immunizations

## Massachusetts Recommendations and Requirements for 2016 - 2017

Recommended Immunizations For Health Care Personnel (HCP)	
Vaccine	Recommendations in Brief
<b>Influenza</b>	1 dose of flu vaccine every flu season.
<b>Tdap/Td</b> (Tetanus, diphtheria, pertussis)	1 dose of Tdap as soon as possible, then Td boosters every 10 years.
<b>MMR</b> (Measles, mumps, rubella)	2 doses of MMR, $\geq$ 28 days apart or documented laboratory-confirmed immunity to measles <b>and</b> mumps <b>and</b> rubella.
<b>Varicella</b>	2 doses of varicella vaccine, or serologic evidence of immunity, or laboratory confirmation of disease, or reliable history of varicella disease.
<b>Hepatitis B</b>	3-dose series (see footnote).
<b>Meningococcal Vaccines</b>	1 dose of quadrivalent meningococcal vaccine and a meningococcal B vaccine <u>series</u> (2 doses of Bexsero or 3 doses of Trumenba, see below) for microbiologists who are routinely exposed to <i>N. meningitidis</i> isolates.

**Health care personnel (HCP)** include full- and part-time staff with or without direct patient contact, including physicians, students, and volunteers who work in inpatient, outpatient and home-care settings. See Immunization of Health-Care Personnel - Recommendations of the ACIP. [www.cdc.gov/mmwr/pdf/rr/rr6007.pdf](http://www.cdc.gov/mmwr/pdf/rr/rr6007.pdf)

**Influenza:** All HCP should receive annual flu vaccine.

**Tetanus/Diphtheria/Pertussis (Td/Tdap):** All HCP, regardless of age, should receive a single dose of Tdap as soon as feasible if they have not previously received Tdap, and regardless of the interval since last Td dose.

**Measles, Mumps, Rubella (MMR):** All HCP should be immune to measles, mumps, and rubella. Documentation of immunity: a) 2 doses of MMR on or after the 1<sup>st</sup> birthday, and at least 1 month apart; or b) laboratory evidence of immunity to measles **and** mumps **and** rubella or laboratory confirmation of each disease (Consider HCP with "indeterminate" or "equivocal" immunity as susceptible).

**Varicella:** All HCP should be immune to varicella. Evidence of immunity to varicella for HCP includes: documentation of 2 doses of vaccine,  $\geq$  4 weeks apart; laboratory evidence of immunity or laboratory confirmation of disease; diagnosis of history of varicella disease or herpes zoster by a health-care provider, including school or occupational health nurse.

**Hepatitis B:** HCP should receive 3 doses hepatitis B vaccine on a 0, 1, and 6 month schedule. Test for hepatitis B surface antibody (anti-HBs) 1–2 months after 3<sup>rd</sup> dose to document immunity. HCP and trainees in certain populations at high risk for chronic hepatitis B (e.g., those born in countries with high and moderate endemicity, behavioral risk factors, immunosuppression, liver disease of unknown etiology) should be tested for HBsAg and anti-HBc/anti-HBs to determine infection status prior to vaccination. See CDC Guidance for Evaluating Health-Care Personnel for Hepatitis B Virus Protection and for Administering Postexposure Management [www.cdc.gov/mmwr/PDF/rr/rr6210.pdf](http://www.cdc.gov/mmwr/PDF/rr/rr6210.pdf)

**Meningococcal:** Quadrivalent meningococcal conjugate vaccine (MCV4) is recommended for microbiologists 55 years and younger who are routinely exposed to *N. meningitidis* isolates. MCV4 is preferred over quadrivalent meningococcal polysaccharide vaccine (MPSV4) for those 56 and older who have been vaccinated previously with MCV4 or anticipate multiple doses. Microbiologists of all ages who remain at risk should be revaccinated every 5 years. In addition to quadrivalent meningococcal vaccine, microbiologists routinely exposed to *N. meningitidis* should receive a meningococcal B series. Bexsero: 2 doses on a 0 and 1-6 month schedule. Trumenba: 3 doses on a 0, 1-2 and 6 month schedule. After the initial series, there is no recommendation for a meningococcal B vaccine booster, at this time.

These guidelines are based on the recommendations of the Advisory Committee on Immunization Practices (ACIP). For specific ACIP recommendations, refer to the full statements at [www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/index.html](http://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/index.html); visit the MDPH website at [www.mass.gov/dph/imm](http://www.mass.gov/dph/imm); or call MDPH 617-983-6800.

### Information on Vaccines for Travelers

Visit [www.cdc.gov/travel/default.aspx](http://www.cdc.gov/travel/default.aspx) or call the CDC Travel Hotline at 877-394-8747.

## Recommended Immunizations For Teachers and Day Care Staff<sup>1</sup>

Vaccine	Recommendation
MMR <sup>2</sup> (Measles, Mumps, Rubella)	2 doses of MMR, 4 weeks apart, for adults born ≥ 1957. 1 dose for adults born outside of the U.S. < 1957. Adults born in the U.S. < 1957 are considered immune.
Varicella <sup>3</sup>	2 doses of varicella vaccine, 4 weeks apart, for adults born in the U.S. ≥ 1980, or born outside the U.S. regardless of year of birth. Adults born < 1980 are considered immune.
Hepatitis B <sup>4</sup>	3 doses.
Td/Tdap <sup>5</sup> (Tetanus, diphtheria, pertussis)	1 dose of Tdap as soon as possible, then Td booster every 10 years.
Annual Influenza	Annual influenza vaccine for everyone 6 months of age and older.

<sup>1</sup> All full- and part-time teachers, student teachers, and staff.

<sup>2</sup> Evidence of immunity to measles, mumps **and** rubella is required for staff of licensed group and family day care centers (see table below). MMR vaccine is recommended for teachers and staff in other school settings.

<sup>3</sup> Evidence of immunity to varicella includes documentation of 2 doses of varicella-containing vaccine; a reliable history of varicella disease (MD diagnosis or personal recall), serologic evidence of immunity or laboratory confirmation of disease.

<sup>4</sup> Federal OSHA regulations require some employers to offer hepatitis B vaccine to childcare staff whose responsibilities include first aid. Serologic evidence of immunity may be substituted for immunization.

<sup>5</sup> All adults should receive a single dose of Tdap, especially those who have close contact with infants <12 months of age (e.g., day care staff). There is no minimum interval between Tdap and a previous dose of Td.

## Massachusetts Immunization Requirements for Select Occupational Groups<sup>1,2</sup>

Group and Regulation	Requirement	Vaccination/Proof of Immunity
Health care personnel assigned to maternal-newborn areas (105 CMR 130.626) (Circular letter : DHQ 11-90-300)	Immunity to measles and rubella	At least one dose of vaccine on or after 12 months of age; serologic evidence of immunity to rubella and measles. DPH no longer accepts physician-diagnosed disease as acceptable evidence of immunity.
Employees of licensed health care facilities [105 CMR 130.325; 105 CMR 140.150; 105 CMR 150.002 (D)(8)]	Annual influenza vaccination	Licensed health care facilities shall offer influenza vaccine at no cost to all employees and ensure that an employee who declines vaccination signs a statement declining vaccination and affirming that s/he received information about the risks and benefits of vaccination.
Staff of licensed group and family day cares and programs for school age children [606 CMR 7.09(11)]	Immunity to measles, mumps and rubella	Those born in or after 1957, regardless of country of birth: 2 doses of MMR (or 2 doses of measles-containing vaccine) and 1 dose each of mumps and rubella vaccine at ≥ 12 months of age; or serologic evidence of immunity to measles, mumps <u>and</u> rubella.  Those born before 1957 in the U.S. are considered immune.  Those born before 1957 in countries other than the U.S.: 1 dose of MMR; or serologic evidence of immunity to measles, mumps <u>and</u> rubella.  Physician-diagnosed disease is <u>not</u> acceptable proof of immunity.
Camp staff age 18 years and older [CMR 430.152 (B)]	Immunity to measles, mumps and rubella; tetanus/diphtheria vaccine	Unless born before 1957, 2 doses of measles, 1 dose of mumps and 1 dose of rubella vaccines ≥12 months of age; serologic evidence of immunity to measles, mumps and rubella. At least 3 doses of DTaP/DTP/DT/Td. A booster of Td or Tdap is required if ≥10 years since last tetanus vaccine.
Workers exposed to sewage [314 CMR 12.05(10)]		Workers exposed to sewage, as all other adults, should be vaccinated against diphtheria and tetanus, including a single dose of Tdap. Polio, typhoid, hepatitis A and hepatitis B vaccines are not routinely recommended for this group. <sup>3</sup>

<sup>1</sup> MA Immunization Requirements for College: [www.mass.gov/eohhs/docs/dph/cdc/immunization/guidelines-ma-school-requirements.pdf](http://www.mass.gov/eohhs/docs/dph/cdc/immunization/guidelines-ma-school-requirements.pdf)

<sup>2</sup> Federal Occupational Safety and Health Administration (OSHA) regulations may include other immunization requirements for workers in certain occupational settings.

<sup>3</sup> ACIP Hepatitis A Recommendations (5/9/2006) [www.cdc.gov/mmwr/PDF/rr/rr5507.pdf](http://www.cdc.gov/mmwr/PDF/rr/rr5507.pdf); ACIP Hepatitis B Recommendations for Adults 12/8/2006) [www.cdc.gov/mmwr/PDF/rr/rr5516.pdf](http://www.cdc.gov/mmwr/PDF/rr/rr5516.pdf) ; and adapted & updated from ACIP Adult Immunizations (11/15/1991;40[RR-12]:1-52).