Q. MARYLAND VACCINATION & TESTING PROGRAM

Scope of practice for paramedic personnel has been expanded to allow select immunization and Purified Protein Derivative (PPD) testing by paramedic personnel. The immunizations that are allowed to be performed include Hepatitis B, Influenza, and PPD. This program is a jurisdictional option requiring the jurisdictional medical director and the jurisdiction to authorize select trained paramedic personnel to perform these functions. There are program requirements below. Please note that you must have a written memorandum of understanding between your EMS service and the local health department before this program can be instituted.

In order to become recognized and authorized to implement the immunization and testing program for paramedics, you must complete the application and submit a copy of the health department memorandum of understanding to the Office of the State EMS Medical Director. At that time you will receive a copy of the CD-ROM that has all of the pertinent documents and instructional material, along with a CDC videotape on PPD placement and interpretation. Your jurisdiction will then be recognized as an authorized optional immunization and testing jurisdiction.

When you are implementing this program, we strongly encourage you to advise EMS personnel at risk to seek vaccination where possible.

REQUIREMENTS:

1. Medical Director: Must have a jurisdictional Medical Director who is willing to take responsibility for the program.
2. Must be under the Infection Control Program for the Jurisdiction.
3. Immunization record form with documentation of all pertinent information about vaccination or test, including the patient's primary care practitioner.
4. Direct linkage with occupational medicine/employee health and a memorandum of understanding (MOU) with local public health service/department.
5. Statewide protocol approved by the EMS Board.
6. ALS resuscitation equipment (refer to *The Maryland Medical Protocols for EMS Providers*) must be available on-site during vaccinations.
7. Must use the comprehensive training curriculum developed by MIEMSS Infection Control Committee.
8. Physician does not have to be physically present for the administration of vaccinations or tests by the trained paramedic (Vaccination and Testing Officer (VTO)).
9. Program instruction must be directed by and have participation by the jurisdictional Medical Director to select paramedics who will become the VTOs.
10. This is not for post-exposure prophylaxis (patient must be seen by occupational medicine/physician for consent and treatment).
11. Only Public Safety Personnel (any career or volunteer member of a fire, rescue, or EMS department, company, squad, or auxiliary; any law enforcement officer; or the State Fire Marshal or sworn member of the State Fire Marshal's office) are eligible to receive immunizations or testing from VTOs.

12. Mechanism for meeting FDA storage and refrigeration standards for vaccines and testing with the use of the Maryland Inventory Control Sheet.
13. Mechanism for follow-up
    a) For additional vaccinations for completion of series
    b) For potential complications of vaccinations or symptoms noted on adverse event form (meeting federal reporting requirements)
    c) Patient contact phone number for complications (e.g., bad vaccine "lot")
14. Must have a standardized informed consent form and standardized vaccine pre-screening questionnaire form.
15. Vaccinations allowable are:
    a) Influenza
    b) Hepatitis B
16. Testing
    a) PPD Screening (Intradermal)
17. Recommend 30-minute observation period (to be determined by the jurisdictional medical director) post-immunization administration with ALS personnel and equipment available.

HEPATITIS B VACCINATION

Indications:

Pre-exposure: preventive

Contraindications:

History of anaphylactic reaction to baker's yeast

Adverse effects:

Not clinically significant

Precautions:

(1) Recipients must read and sign consent form.
(2) CDC recommends antibody testing 1–2 months after the third dose to determine immunity.

Dose:

(three total, using a 3 mL syringe with 1" 25 gauge needle)
Initial 1 mL IM (deltoid)
2nd dose 4 weeks after initial; 1 mL IM (deltoid)
3rd dose 5–6 months after 2nd dose; 1 mL IM (deltoid)

INFLUENZA VACCINATION

Indications:

(1) Persons who attend to patients at high risk for complications (e.g., the elderly)
(2) Persons with chronic medical conditions
(3) Pregnant women who will be in the second or third trimester of pregnancy during influenza season
(4) Providers of essential community services

Contraindications:

History of anaphylactic hypersensitivity to eggs

Adverse effects:

(1) More common: soreness at the injection site that lasts up to 2 days
(2) Less common: fever, malaise, myalgia beginning 6–12 hours after vaccination and persisting for 1 to 2 days.

Precautions:

(1) Vaccine should be delayed in the presence of acute febrile illness; administer after symptoms have abated.
(2) It takes two weeks to develop adequate antibodies against the vaccine virus strain.
(3) Optimal time for organized vaccination campaigns is usually the period from October through mid-November.

(4) Because influenza vaccine contains only noninfectious viruses, it cannot cause influenza.
(5) Recipients must read and sign consent or refusal form.

Dose: (using a 3 mL syringe with 1" 25 gauge needle)
0.5–1 mL IM (deltoid)

PURIFIED PROTEIN DERIVATIVE (PPD) TEST

Indications:
Yearly administration for health care providers

Contraindications:
(1) Previous positive reaction to PPD
(2) History of TB

Adverse effects:
Not clinically significant

Precautions:
Recipients must read and sign consent form.

Procedure
(1) Injection is given intradermally and should be read 48–72 hours post injection.
(2) Feel the induration with your fingertips.
(3) Measure with approved device in millimeters (mm).
  (a) Less than 5 mm is negative.
  (b) Equal to or greater than 5 mm requires clinical correlation and evaluation by jurisdictional medical director or other appropriate physician.

Note:
Do not use erythema as margins; measure only the induration.