Optional Supplemental Protocol

Maryland Vaccination and Testing Program for EMT-Paramedic Providers
Maryland Vaccination & Testing Program for EMT-P Providers

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 understand (MOU) with local public health service/department.
5) Statewide protocol approved by the EMS Board.
6) Resuscitation equipment (ALS meeting Maryland Medical Protocols for EMS Providers) available on site during vaccinations (reference to protocol).
7) Must use the comprehensive training curriculum developed by MIEMSS Infection Control Committee and becomes an “optional supplemental protocol”.
8) Physician does not have to be physically present for administration vaccinations or tests by the trained paramedic called the Vaccination and Testing Officer (VTO).
9) Program instruction must be directed by and have participation by the jurisdictional medical director to select paramedics (EMT-P) who will become the VTO.
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 VTO.
12) Mechanism for meeting FDA storage and refrigeration standards for vaccines and test Maryland Inventory Control Sheet.
13) Mechanism for follow-up
   a) For additional vaccination 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.
REQUIREMENTS (continued):

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.
# B. PROCEDURES FOR EMS AND COMMERCIAL SERVICES

## PROCEDURES

<table>
<thead>
<tr>
<th>PROCEDURE</th>
<th>EMT-B</th>
<th>CRT</th>
<th>EMT-P</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ADMINISTRATION OF MEDICATIONS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral, Sublingual, IM (auto-injector)</td>
<td>SO</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td>SQ, IM, IV, ET, Pediatric Rectal, Nebulizer</td>
<td>–</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td>Intraosseous</td>
<td>–</td>
<td>–</td>
<td>SO</td>
</tr>
<tr>
<td>Intradermal PPD (Public Safety Personnel only)</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>AIRWAY MANAGEMENT</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbon Dioxide Detector (not required)</td>
<td>SO</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td>Capnograph (not required) (NEW '99)</td>
<td>–</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td>Combitube (NEW '99)</td>
<td>–</td>
<td>–</td>
<td>PP</td>
</tr>
<tr>
<td>Cricothyroidotomy (NEW '99)</td>
<td>–</td>
<td>–</td>
<td>PP</td>
</tr>
<tr>
<td>Direct Laryngoscopy</td>
<td>–</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td>Gastric Tube (NEW-CRT '99)</td>
<td>–</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td>Nasotracheal Intubation</td>
<td>–</td>
<td>–</td>
<td>SO</td>
</tr>
<tr>
<td>Oropharyngeal/Nasopharyngeal Airway</td>
<td>SO</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td>Orotracheal Intubation</td>
<td>–</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td>Needle Decompression Thoracostomy (NDT)</td>
<td>–</td>
<td>–</td>
<td>SO/MC</td>
</tr>
<tr>
<td>Pulse Oximeter (not required) (NEW-BLS '99)</td>
<td>SO</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td>Suction</td>
<td>SO</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td>Ventilator (NEW '00)</td>
<td>–</td>
<td>PP</td>
<td>PP</td>
</tr>
<tr>
<td><strong>ELECTROCARDIOGRAM</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard Limb Leads</td>
<td>–</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td>12 Lead (not required)</td>
<td>–</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td><strong>ELECTRICAL THERAPY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Automated External Defibrillator</td>
<td>SO</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td>Cardioversion</td>
<td>–</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td>Defibrillation</td>
<td>–</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td>Transcutaneous Cardiac Pacing</td>
<td>–</td>
<td>–</td>
<td>SO</td>
</tr>
<tr>
<td><strong>GLUCOMETER (required in 2000)</strong></td>
<td>–</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td><strong>INTRAVENOUS THERAPY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>External Jugular Access &amp; Maintenance</td>
<td>–</td>
<td>–</td>
<td>SO</td>
</tr>
<tr>
<td>Intraosseous Infusion &amp; Maintenance</td>
<td>–</td>
<td>–</td>
<td>SO</td>
</tr>
<tr>
<td>Peripheral IV Access/Saline Lock</td>
<td>OSP</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td>Peripheral IV Maintenance</td>
<td>SO</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td><strong>PNEUMATIC ANTI-SHOCK GARMENTS</strong></td>
<td>SO/MC</td>
<td>SO/MC</td>
<td>SO/MC</td>
</tr>
<tr>
<td><strong>SKELETAL STABILIZATION/IMMOBILIZATION</strong></td>
<td>SO</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td><strong>SOFT TISSUE INJURY &amp; BLEEDING MANAGEMENT</strong></td>
<td>SO</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td><strong>VASOVAGAL MANEUVER</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valsalva maneuver</td>
<td>–</td>
<td>SO</td>
<td>SO</td>
</tr>
</tbody>
</table>

**Legend:**

- SO: Standing Order
- OSP: Optional Supplemental Program
- MC: Medical Consultation Required
- PP: Pilot Program

**IV-B-1**
## B. MEDICATIONS FOR EMS AND COMMERCIAL SERVICES

### MEDICATIONS

<table>
<thead>
<tr>
<th>MEDICATION</th>
<th>EMT-B</th>
<th>CRT</th>
<th>EMT-P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activated Charcoal (With or Without Sorbitol)</td>
<td>MC</td>
<td>MC</td>
<td>MC</td>
</tr>
<tr>
<td>Adenosine</td>
<td>–</td>
<td>–</td>
<td>MC</td>
</tr>
<tr>
<td>Albuterol Unit Dose Inhaler (Patient’s Prescribed)</td>
<td>SO</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td>Albuterol Sulfate Nebulizer</td>
<td>–</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td>Aspirin (NEW ’99)</td>
<td>–</td>
<td>MC</td>
<td>MC</td>
</tr>
<tr>
<td>Atropine Sulfate</td>
<td>–</td>
<td>SO/MC</td>
<td>SO/MC</td>
</tr>
<tr>
<td>Benzocaine</td>
<td>–</td>
<td>–</td>
<td>SO</td>
</tr>
<tr>
<td>Calcium Chloride (10% Solution)</td>
<td>–</td>
<td>MC</td>
<td>MC</td>
</tr>
<tr>
<td>Dextrose 50%</td>
<td>–</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td>Diazepam</td>
<td>–</td>
<td>MC</td>
<td>MC</td>
</tr>
<tr>
<td>Diphenhydramine Hydrochloride</td>
<td>–</td>
<td>SO/MC</td>
<td>SO/MC</td>
</tr>
<tr>
<td>Dopamine Hydrochloride</td>
<td>–</td>
<td>MC</td>
<td>MC</td>
</tr>
<tr>
<td>Epinephrine Auto-Injector</td>
<td>SO</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td>Epinephrine 1:10,000/1:1,000</td>
<td>–</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td>Furosemide</td>
<td>–</td>
<td>MC</td>
<td>MC</td>
</tr>
<tr>
<td>Glucagon</td>
<td>–</td>
<td>–</td>
<td>SO/MC</td>
</tr>
<tr>
<td>Hemophilia Blood Factor (VIII or IX) (Patient’s Prescribed)</td>
<td>–</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td>Ipecac</td>
<td>MC</td>
<td>MC</td>
<td>MC</td>
</tr>
<tr>
<td>Lidocaine</td>
<td>–</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td>Midazolam (Versed) (NEW ’99)</td>
<td>–</td>
<td>–</td>
<td>PP</td>
</tr>
<tr>
<td>Morphine Sulfate</td>
<td>–</td>
<td>MC</td>
<td>MC</td>
</tr>
<tr>
<td>Naloxone</td>
<td>–</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td>Nitroglycerin (tablet/spray) (Patient’s Prescribed)</td>
<td>SO</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td>Nitroglycerin (tablet/spray)</td>
<td>–</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td>Oral Glucose</td>
<td>SO</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td>Oxygen</td>
<td>SO</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td>Purified Protein Derivative (Public Safety Personnel only)</td>
<td>–</td>
<td>–</td>
<td>PP</td>
</tr>
<tr>
<td>Saline (Nebulized) (NEW ’00)</td>
<td>–</td>
<td>MC</td>
<td>MC</td>
</tr>
<tr>
<td>Sodium Bicarbonate</td>
<td>–</td>
<td>MC</td>
<td>MC</td>
</tr>
<tr>
<td>Succinylcholine (Anectine) (NEW ’99)</td>
<td>–</td>
<td>–</td>
<td>PP</td>
</tr>
<tr>
<td>Terbutaline Sulfate</td>
<td>–</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td>Vaccines (Hepatitis and Influenza) (Public Safety Personnel only)</td>
<td>–</td>
<td>–</td>
<td>PP</td>
</tr>
<tr>
<td>Vecuronium (Norcuron) (NEW ’99)</td>
<td>–</td>
<td>–</td>
<td>PP</td>
</tr>
</tbody>
</table>

**SO** = Standing Order  **MC** = Medical Consultation Required  **OSP** = Optional Supplemental Program  **PP** = Pilot Program
CONSENT FOR RELEASE OF INFORMATION

I hereby authorize ______________________________________________________ to release my medical record information including dates, history of illness, diagnostic and therapeutic treatment. The medical records to be released may contain medical information pertaining to vaccinations, PPD testing, and any symptoms of these procedures.

Patient information:

<table>
<thead>
<tr>
<th>LAST NAME</th>
<th>FIRST NAME</th>
<th>MI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ADDRESS</th>
<th>APT #</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CITY</th>
<th>STATE</th>
<th>ZIP CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please release records covering the time period ___/___/___ to ___/___/___

Information to be released: [ ] Complete copy [ ] Other _________________________

[ ] Complete copy [ ] Other _________________________

Purpose of disclosure: [ ] Continuation of care

[ ] Other ________________________________

Information to be released/sent to: _______________________________________________
___________________________________________________________________________

I understand this authorization shall expire one year from the date noted below and can be revoked in writing at any time. Such a revocation will not cover disclosures made previously in reliance on this consent. The facility, its employees, officers, and medical staff are released from legal responsibility or liability for the release of the information in accordance with this consent.

Signed:_______________________________________________________________________
(Patient or Guardian) (Date)

Relationship to patient: ______________________________________________________

Witness: ____________________________________________________________________
HEPATITIS B VACCINATION CONSENT FORM

LAST NAME                FIRST                MI

ADDRESS

CITY                       STATE                ZIP

HOME PHONE #               WORK PHONE #

SOCIAL SECURITY #          DATE OF BIRTH

DATE DOSE 1                DATE DOSE 2                DATE DOSE 3

Have you ever had a Hepatitis B vaccine before? YES NO

If yes, how many doses did you complete? 1 2 3 Other

I have read or have had explained to me the information form about Hepatitis B and the Hepatitis B vaccine. I have had a chance to ask questions which were answered to my satisfaction. I believe I understand the benefits and risks of the Hepatitis B vaccine and request that the vaccine is given to me or to the person named above for whom I am authorized to make this request, by the _____________________________EMS/Fire Department and the _____________________________ Health Department.

SIGNATURE                DATE

SIGNATURE (parent or guardian if minor)                DATE
MARYLAND VACCINATION & TESTING PROGRAM FOR EMT-P PROVIDERS

INFLUENZA VACCINATION CONSENT FORM

LAST NAME \hspace{1cm} FIRST \hspace{1cm} MI

ADDRESS

CITY \hspace{1cm} STATE \hspace{1cm} ZIP

HOME PHONE # \hspace{1cm} WORK PHONE #

SOCIAL SECURITY # \hspace{1cm} DATE OF BIRTH

I have read or have had explained to me the information form about the Influenza vaccine. I have had a chance to ask questions which were answered to my satisfaction. I believe I understand the benefits and risks of the Influenza vaccine and request that the vaccine be given to me or to the person named above for whom I am authorized to make this request, by the ________________________ EMS/Fire Department and ________________________ Health Department.

SIGNATURE \hspace{1cm} DATE

SIGNATURE (parent or guardian if minor) \hspace{1cm} DATE
**Maryland Vaccination & Testing Program for EMT-P Providers**

**WAIVER OF RESPONSIBILITY**

*Complete Section I and/or Section II*

**I. Hepatitis B Vaccine Declination**

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with hepatitis B vaccine, at no charge to myself. However, I decline hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no charge to me.

______________________________ ______________________________
PRINT NAME SIGNATURE/GUARDIAN

___________________________________ ___________________________________
EMPLOYEE ID# OR SOCIAL SEC. # WITNESSED

DATE

**II. Tuberculin Skin Test and Influenza Declination**

I, ____________________________, hereby release the ____________________________ from responsibility for any ill effects resulting from my decision to decline from receiving the [ ] PPD/[ ] Influenza (initial)______ indicated below. I have been given the opportunity to receive the PPD immunization/Influenza vaccine at no charge to myself. I have been informed of the benefits of the PPD immunization/Influenza vaccine. I understand that due to my potential for occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring various infections and diseases. I understand that by declining to participate in this program, I continue to be at risk. If in the future I continue to have exposure to blood and other potentially infectious materials, and I want to participate in this program, I can do so at no charge to myself.

______________________________ ______________________________
PRINT NAME SIGNATURE/GUARDIAN

___________________________________ ___________________________________
EMPLOYEE ID# OR SOCIAL SEC. # WITNESSED

DATE
<table>
<thead>
<tr>
<th>Vaccine/PPD</th>
<th>Date Received</th>
<th>Manufacturer Name</th>
<th>Lot #</th>
<th>Quantity</th>
<th>Expiration Date</th>
<th>Initials</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Objectives:
By the conclusion of the Maryland Vaccination Program for EMT-P Pre-Hospital Care Providers, the EMT-P shall be able to:

- Recall the responsibilities of the medical director on a written examination;
- Identify the vaccines and test permitted to be administered by an approved EMT-P on a written examination;
- Explain the pathophysiology of Hepatitis B and Influenza on a written examination;
- Recite the dosage, administration route/site, contraindications, side effects and rules associated with vaccines and tests permitted to be administered by an approved EMT-P on a written examination;
- Explain the effects of both the Hepatitis B and Influenza vaccinations on a written examination;
- Demonstrate the administration of all approved vaccines and tests without error;
- Demonstrate how to read a PPD test without error;
- Indicate how to read a PPD test on a written examination;
- Describe the process of drawing titers on a written examination; and
- Must score greater than 70% on all examinations.

Overview:
- Program Administration
- Hepatitis B
- Hepatitis B Vaccination
- Influenza
- Influenza Vaccination
- PPD Test/Titers
- Practice Lab
- Written Examination
The following are required to successfully deliver the Maryland Vaccination Program for EMT-P Providers:

- Laptop computer with a projector. PowerPoint capabilities are a must.
- A copy of the Maryland Vaccination & Testing Program for EMT-P Providers presentation is also necessary. If you do not have the above, you may utilize overhead transparencies;
- One VCR and TV;
- A copy of the CDC Tuberculin Skin Testing (Mantoux) Video;
- One Sign-In Sheet;
- Program Evaluation Sheets;
- One example vial of the Hepatitis B vaccination, the Influenza vaccination and the PPD;
- One copy per participant of the Maryland Vaccination & Testing Program for EMT-P Providers Objectives & Overview handout;
- One copy per participant of the 20 question written examination;
- One copy of the answer key;
- Disposable gloves;
- A minimum of one 3cc syringe with 1” 25 gauge needles per participant;
- A minimum of one 1cc with needle tuberculin syringe per participant;
- Several vials of sterile saline to be used for injection;
- Alcohol pads;
- Several sharps disposal boxes; and
- One Red and one Tiger top vaccutainer for display
- Arm manikin for ID injections

Optional, but highly recommended is the Division of TB Control PPD training program conducted through Department of Health and Mental Hygiene (DHMH) by Nancy Baruch 410-767-6698
HEPATITIS B VACCINATION:

**Indications:**
- Pre-exposure: preventive

**Contraindications:**
- History of anaphylactic reaction to bakers yeast

**Dose:** (three total using a 3cc syringe with 1” 25 gauge needle)
  - Initial 1.0 ml IM (deltoid)
  - 2nd dose 4 weeks after initial; 1.0 ml IM (deltoid)
  - 3rd dose 5-6 months after 2nd dose; 1.0 ml IM (deltoid)

**Notes:**
- CDC recommends antibody testing 1-2 months after the third dose to determine immunity.
- Recipients must read and sign consent form.

INFLUENZA VACCINATION

**Indications:**
- Persons who attend patients at high risk for complications, e.g. the elderly;
- Persons with chronic medical conditions;
- Pregnant women who will be in the second or third trimester of pregnancy during influenza season; and
- Providers of essential community services.

**Contraindications:**
- History of anaphylactic hypersensitivity to eggs

**Dose:** (using a 3cc syringe with 1” 25 gauge needle)
  - 0.5-1.0 ml IM (deltoid)

**Notes:**
- Vaccine should be delayed in the presence of acute febrile illness; administer after symptoms have abated.
- Frequent side effect is soreness at the injection site that lasts up to 2 days.
- Systemic reactions are uncommon: fever, malaise, myalgia beginning 6-12 hours after vaccination and persisting for 1 to 2 days.
- It takes two weeks for patient to develop adequate antibodies against the vaccine virus strain.
- Because the influenza vaccine contains only killed or noninfectious viruses, *it cannot cause influenza.*
- The optimal time for organized vaccination campaigns is usually the period from October through mid-November.
- Recipients must read and sign consent or refusal form.

PURIFIED PROTEIN DERIVATIVE (PPD) TEST

**Indications:**
- Yearly administration for healthcare providers
Contraindications:
Previous positive reaction to PPD; and
Has had TB.

Dose: (using a 1cc-tuberculin syringe with needle)
0.1 ml each Intradermal injection (ID)
Administered in the medial forearm intradermally, avoiding veins
Create a wheal under the epidermal layer

Notes:
Recipients must read and sign consent form.
Reading the PPD Test:
Feel the INDURATION with your fingertips
Measure with approved device in millimeters (mm)
- Less than 5 mm is negative
- Greater than or equal to 5 mm requires clinical correlation and evaluation by the jurisdictional medical director or other appropriate physician.
DO NOT USE ERYTHEMA AS MARGINS, measure only the induration.
MODEL

MEMORANDUM OF UNDERSTANDING

BETWEEN

LOCAL HEALTH DEPARTMENT

AND

JURISDICTIONAL EMERGENCY MEDICAL SERVICES (EMS) OPERATIONAL PROGRAM

REGARDING OPTIONAL SUPPLEMENTAL PROTOCOL
MARYLAND VACCINATION AND TESTING FOR EMT-PARAMEDIC PROVIDERS

1. **Jurisdictional EMS Operational Program A** is a Jurisdictional EMS Operational Program approved by the Maryland Institute for Emergency Medical Services Systems pursuant to COMAR 30.03.02

2. **Local Health Department A** is a local health department under Health General Article Section 3-302 (or Baltimore City Health department)

3. The parties are entering into this agreement concerning immunizations and testing of public safety personnel by Emergency Medical Technicians-Paramedic under Education Article Section 13-516(g).

4. **Jurisdictional EMS Operational Program A** shall:
   A. Handle and store all biological vaccine materials according to the *Vaccine Management: Recommendations for Handling and Storage of Selected Biologicals* guide January 1999 issued by the United States Department of Health and Human Services: Public Health Services, the Center for Disease Control and United States Food and Drug Administration.
   
   B. Maintain a MIEMSS Maryland Vaccination and Testing Program Tracking form for each individual receiving a vaccine or test with documentation at a minimum of all pertinent information including patient’s primary care practitioner.
   
   C. Provide a notification to the patient’s primary care physician, the health department and the Jurisdictional EMS Operational Program Infection Control File of:
      i) Administered vaccination or test with pertinent results and
      ii) Any actual or potential complications of vaccinations or associated symptoms.
   
   D. Maintain inventory control records of all vaccine and Purified Protein Derivative (PPD) materials including date received, manufacture, quantity, lot number, expiration date, and initials of reviewer.
   
   E. Implement the “First in – First out” principle or utilization of vaccine and PPD materials.
F. Require that each Emergency Medical Technician-Paramedic administering vaccines or PPDs:
   i) Have received training in the administration of vaccines and PPDs, reading of PPDs, recording and management of adverse reactions, as required by the EMS Board;
   ii) Follow the Maryland Vaccination and Testing for ETM-Paramedic Providers Optional Protocol
   iii) Provide each patient with information concerning vaccines and PPDs and obtain a signed consent or refusal form from each patient

G. Review utilization of the optional protocol in accordance with the Jurisdictional EMS Operational Program Quality Assurance Program.

5. **Local Health Department A** shall:
   A. Provide a liaison to **Jurisdictional EMS Operational Program A** for issues concerning the immunization program.

This agreement shall take effect upon signing and shall remain in effect until termination by either party upon 30 days notice to the other side or revocation of approval for the program by MIEMSS.

Signatures
Highest EMS Official EMS Operational Program
Jurisdictional Medical Director
County Health Department

This Memorandum of Understanding has been reviewed by MIEMSS. The vaccination and testing program in **Jurisdictional EMS Operational Program A** is approved on this ________________ day of ________________, 200__.

Signatures
Executive Director
State EMS Medical Director
Important Information about Hepatitis B, Hepatitis B Vaccine, and Hepatitis B Immune Globulin

Please read this carefully

WHAT IS HEPATITIS B?
Hepatitis B is an infection of the liver caused by the Hepatitis B virus (HBV). HBV is one of several types of viruses (infection) that can cause hepatitis. There is a vaccine that will prevent HBV infection.

Hepatitis B virus infection may occur in two phases. The acute phase occurs just after a person becomes infected, and can last from a few weeks to several months. Some people recover after the acute phase, but others remain infected for the rest of their lives. They go into the chronic phase and become “chronic carriers”. The virus remains in the liver and blood.

Acute Hepatitis B usually begins with symptoms such as loss of appetite, extreme tiredness, nausea, vomiting, and stomach pain. Dark urine and jaundice (yellow eyes and skin) are also common and skin rashes and joint pain can occur. Over one half of the people that become infected with HBV never become sick, but some may later have long-term liver disease from their HBV infection.

About 300,000 children and adults in the U.S. become infected with the Hepatitis B virus each year. More than 10,000 of them need to be hospitalized and 250 die. Most of these deaths are from liver failure.

HBV is passed from one person to another in blood and certain body secretions. This may occur during sexual relations or when sharing things like toothbrushes, razors, or needles used to inject drugs. A baby can get HBV at birth from its mother. A doctor or nurse may get HBV if blood from an infected patient enters through a cut or accidental needlestick.

Those people infected with HBV who become “chronic carriers” can spread the infection to others throughout their lifetime. They can also develop long-term liver disease such as cirrhosis (which destroys the liver) or liver cancer.

WHO BECOMES A CHRONIC CARRIER OF HBV?
Of every 100 young adults who catch HBV, 6 to 10 become chronic carriers. Children who become infected with HBV are more likely to become chronic carriers than adults are. Of every 10 infants who are infected at birth, up to 9 will become chronic HBV carriers. The younger a child is when the infection occurs, the more likely the child will become a carrier.

About _ of Hepatitis B carriers develop a disease called “chronic active hepatitis”. People with chronic active hepatitis often get cirrhosis of the liver, and many die from liver failure. In addition, they are much more likely than other people to get cancer of the liver. In the United States, about 4,000 Hepatitis B carriers die each year from cirrhosis and more than 800 die from liver cancer.

HEPATITIS B VIRUS INFECTIONS IN CHILDREN
Each year 22,000 children are born to women who are carriers of HBV. In the past, 4,000-5,000 of these infants were born with HBV infection. Almost all of these infections can now be prevented. A pregnant woman can find out if she is infected with HBV by getting a simple blood test. If she is infected, she can protect her newborn from infection by getting the child immunized with Hepatitis B vaccine and Hepatitis B immune globulin (HBIG) as soon after birth as possible.

Certain groups of children are more likely to get HBV because they or their parents come from countries where HBV infection is much more common than in the United States. (These are countries in Asia, Africa, South America, the South Pacific, and eastern and southern Europe.) It is very important that these children receive Hepatitis B vaccine at birth or at least before they are one year old.

WHY ALL CHILDREN SHOULD RECEIVE HEPATITIS B VACCINE
Anyone can get HBV infection. In fact, about 1 in every 20 people in the United States has been infected with HBV. Because of the serious liver disease, cancer, and death resulting from HBV
infection, all infants in the United States should be vaccinated against the virus. This will protect them when they become teenagers and adults, and are most likely to catch Hepatitis B.

HEPATITIS B VACCINE AND HEPATITIS B IMMUNE GLOBULIN

Hepatitis B vaccine – Hepatitis B vaccine is given by injection. Three doses, given on three different dates, are needed for full protection. Exactly when these three doses are given can vary. Infants can get the vaccine at the same time as other baby shots, or during regular visits for well childcare. Your doctor or nurse will tell you when the three shots should be given.

The Hepatitis B vaccine prevents HBV infection in 85% - 95% of people who get all three shots. Studies have shown that in these people, protection last at least 10 years. Booster doses are not recommended at this time.

WHO SHOULD GET HEPATITIS B VACCINE?

Infants

1. Infants born to women who are infected with HBV. Infants born to infected women or to women who are chronic HBV carriers should be given Hepatitis B vaccine and HBIG (see below) within 12 hours of birth. They should then get their second and third vaccine doses at 1 and 6 months of age. If they don’t get these shots, these infants will very likely be infected with HBV and become chronic carriers themselves. Pregnant women can find out if they are infected by HBV by getting a simple blood test, which is now recommended as a routine part of their prenatal care.

2. Infants born to healthy women (non-carriers of HBV) – Vaccination during infancy and early childhood is recommended for all infants in the United States to prevent HBV infection and chronic HBV carriage. Infants should get their first dose of vaccine either at birth or at 1-2 months of age. The second doses can be given 1 to 3 months later, and the third dose between 6 and 18 months of age. Hepatitis B vaccine can safely be given at the same time as the other vaccines a child normally receives.

SPECIAL CHILDHOOD POPULATIONS

Immigrant and refugee children from parts of the world where HBV infection is common (Asia, Africa, South America, South Pacific, and eastern and southern Europe) are at high risk of HBV infection. All immigrant and refugee children 7 years of age and younger should get Hepatitis B vaccine.

ADULTS AND OTHER GROUPS

Hepatitis B vaccine is also recommended for adolescents and adults at high risk of getting HBV infection. This includes: (1) people who are exposed to blood or blood products in their work (health care workers or emergency care responders, for instance); (2) clients and staff of institutions for developmentally disabled, as well as clients and staff of group homes, where any of the residents are chronic carriers of HBV; (3) hemodialysis patients; (4) men who have sex with men; (5) users of injectable drugs; (6) people with medical conditions (such as hemophilia) who receive blood products to help their blood clot; (7) people who live with, or have sex with, HBV carriers; (8) people who have more than one sexual partner, or people who are treated for sexually transmitted
diseases: and (9) people who travel to, or live in parts of the world where HBV infections are common.

Hepatitis B vaccine is also recommended for people who have been exposed to HBV. This includes people who have never been vaccinated for Hepatitis B, and who: (1) have an accident in which blood containing HBV enters their body through the skin or mucous membrane: or (2) have sexual contact with someone with acute Hepatitis B. In some cases, Hepatitis B vaccine should be started at the same time as treatment with HBIG (see below).

ADULTS AND OTHER GROUPS

Hepatitis B vaccine is also recommended for adolescents and adults at high risk of getting HBV infection. This includes: (1) people who are exposed to blood or blood products in their work (health care workers or emergency care responders, for instance): (2) clients and staff of institutions for developmentally disabled, as well as clients and staff of group homes, where any of the residents are chronic carriers of HBV): (3) hemodialysis patients: (4) men who have sex with men: (5) users of injectable drugs: (6) people with medical conditions (such as hemophilia) who receive blood products to help their blood clot: (7) people who live with, or have sex with, HBV carriers; (8) people who have more than one sexual partner, or people who are treated for sexual transmitted diseases: and (9) people who travel to, or live in, parts of the world where HBV infections are common.

Hepatitis B vaccine is also recommended for people who have been exposed to HBV. This includes people who have never been vaccinated for Hepatitis B, and who: (1) have an accident in which blood containing HBV enters their body through the skin or mucous membrane: or (2) have sexual contact with someone with acute Hepatitis B. In some cases, Hepatitis B vaccine should be started at the same time as treatment with HBIG (see below).

HEPATITIS B IMMUNE GLOBULIN (HBIG)

HBIG is often given along with Hepatitis B vaccine to people who have been exposed to HBV. It gives protection from the virus for the first 1 to 3 months, and then the vaccine takes over and gives long lasting protection. HBIG is made from human plasma (a part of the blood), Any viruses found in the blood are killed during its preparation, and no one has ever been known to get Hepatitis B or AIDS or any other virus from HBIG. Most people need only one dose to protect them after exposure to HBV.

WHO SHOULD GET HEPATITIS B IMMUNE GLOBULIN?

HBIG is recommended for the following people. (For most people, the first dose of Hepatitis vaccine should be given at the same time as HBIG.)

Infants
1. Infants born to women who are infected with HBV – These infants should get one dose of HBIG and the first dose of the vaccine within 12 hours of birth (see above).
2. Unvaccinated infants less than 12 months old whose mother (or primary caregiver) has acute Hepatitis B – All infants less than 12 months can easily become HBV carriers after Hepatitis B injection. Exposed infants who have not been vaccinated should get one dose of HBIG and begin the Hepatitis B vaccine series. Infants who have already been vaccinated do not need HBIG.

Adult and Others
1. Persons accidentally exposed to blood or body fluids that may contain HBV – Exposed persons who have not been vaccinated should get one dose of HBIG and begin the Hepatitis B vaccine series. Exposed persons who have had Hepatitis B shots may also need HBIG. A doctor or nurse should make that decision.
2. People having sexual contact with anyone who has acute Hepatitis B – These people should get a dose of HBIG within 14 days of most recent sexual contact with anyone who has acute Hepatitis B. They may also need to get the Hepatitis B vaccine.
POSSIBLE SIDE EFFECTS FROM HEPATITIS B VACCINE AND HBIG

The most common side effect of Hepatitis B vaccine is soreness where the shot is given. Tenderness at the injection site has been reported in up to 45% of infants vaccinated. Of children who get the vaccine, 2% to 5% may get a fever greater than 102°F or become irritable. When Hepatitis B vaccine is given with other childhood vaccines, it does not make these mild reactions worse than would be seen with the other vaccines alone. HBIG has sometimes been associated with swelling and hives. As with any drug, there is a slight chance of allergic or more serious reactions with either the vaccine of HBIG. However, no serious reactions have been shown to occur due to the Hepatitis B recombinant vaccines. (These are the ones currently in use.) A person cannot get Hepatitis B or AIDS from a Hepatitis B shot or from an HBIG shot.

Before recombinant vaccines were used in the United States, another type of Hepatitis B vaccine (plasma-derived) was used. Surveillance showed that getting the first dose of plasma-derived Hepatitis B vaccine might have been associated with the paralytic illness Guillain Barre syndrome (GBS). However, the recombinant vaccine has not been shown to be associated with GBS.

PREGNANCY

Very little information is available about the safety of the vaccine or HBIG for unborn babies. If a pregnant woman gets an HBV infection, it can cause severe disease in the mother and chronic HBV infection in the newborn baby. On the other hand, both the vaccine and HBIG should be safe for the unborn baby because they contain no infectious material. Therefore, pregnant women who are at risk of HBV infection can be given both Hepatitis B vaccine and HBIG.

QUESTIONS

If you have any questions about Hepatitis B, HBIG, or Hepatitis B vaccine, please call the Baltimore County Health Department at (410) 887-2724, the Emergency Medical Services Division at (410) 887-4860, or call your doctor before you sign this form.

REACTIONS

If the person who received HBIG and/or the vaccine gets sick and visits a doctor, hospital, or clinic during 4 weeks after receiving the vaccine, please report it to: Baltimore County Department of Health at (410) 887-2724.

KEEP THIS INFORMATION SHEET FOR YOUR RECORDS