

Special Protocol

(Effective 9/14/09 through period of Commissioner's Order)

PARAMEDIC ADMINISTRATION OF IMMUNIZATIONS PURSUANT TO A PUBLIC HEALTH ORDER OF THE COMMISSIONER OF: INACTIVATED INFLUENZA VACCINE

Inactivated influenza vaccine, seasonal trivalent type A and B vaccine (TIV) and monovalent pandemic H1N1 2009 are inactivated (killed) vaccines, the "flu shot" and are given by injection into the muscle (IM). EMT-Paramedics are currently authorized and trained to administer certain medications intravenously, intramuscularly, subcutaneously, and intranasally. EMT-Paramedics operate in accordance with the Departments EMS System regulations and Statewide Treatment Protocols of the MDPH Office of Emergency Medical Services (OEMS) and under the supervision of a medical director. Specific authorization granted by the Commissioner's Order, pursuant to the Department's Drug Control Program regulations, 105 CMR 700.000 authorizes, but does not require, an EMT-Paramedic, certified by OEMS to administer vaccine for the prevention of influenza in accordance with this OEMS protocol issued for this specific purpose and under the supervision of the medical director of the licensed ambulance service with which they work provided that the EMT-Paramedic is in good standing, is currently certified at the EMT-Paramedic level and has successfully completed a vaccination training program.

ASSESSMENT / TREATMENT PRIORITIES

Follow the current guidelines of MDPH for the targeting and prioritization of populations for vaccination with either seasonal influenza vaccine or pandemic H1N1 2009 vaccine.

PARAMEDIC PROCEDURES

1. ALS-P STANDING ORDERS:

- a. Provide patient, parent or legal representative with a copy of the Vaccine Information Statement (VIS) and answer any questions.
- b. Screen for contraindications according to Table 1 (below)
- c. Always check the package insert prior to administration of any vaccine.
- d. Shake the vial well before withdrawing and shake the prefilled syringe well before administering.

- e. Administer IM vaccines at a 90⁰ angle with 22-25-gauge needle. The needle length for IM injections depends upon the age, gender, and/or weight of the vaccine recipient (see Table 2 below). Administer intramuscularly (IM), according to the recommended age-specific dose and schedule. (see Table 3 below)
- f. Administer influenza vaccine
- g. Observe patient for an allergic reaction for 15 - 20 minutes after administering vaccine. If an anaphylactic/allergic reaction occurs treat according to the Statewide Treatment Protocol 3.2 (adults) or Statewide Treatment Protocol 5.2 (pediatrics)
- h. Report clinically significant adverse events to the Vaccine Adverse Event Reporting System (VAERS) at 1-800-822-7967 or <http://www.vaers.hhs.gov/>.

Table 1. Contraindications and Precautions to Inactivated Influenza Vaccine

Valid Contraindications for <i>Inactivated Influenza Vaccine</i>	<i>Invalid Contraindications</i> (Give Inactivated Influenza Vaccine)
<p>Anaphylactic reaction to a previous dose of influenza vaccine; chicken eggs¹ or any other component of the vaccine (see package insert for specific components)²</p> <p>Anaphylactic reaction to latex if the formulation of influenza vaccine is noted to contain latex.</p> <p>Precaution to influenza vaccine:</p> <p>Moderate to severe acute febrile illness (temporary precaution).</p> <p>Guillain-Barré syndrome (GBS) ≤ 6 weeks of receiving a dose of influenza vaccine.³</p>	Mild illness with or without fever
	Non-anaphylactic allergy to any component of the vaccine
	HIV infection ⁴
	Pregnancy ⁵ or breast feeding
	Treatment with warfarin (Coumadin), theophylline, phenytoin, or aminophylline ⁶
	Anticoagulation or bleeding disorder ⁷

¹ Asking persons if they can eat eggs without adverse effects is a reasonable way to determine who might be at risk for an allergic reaction.

² Refer persons with a history of anaphylaxis to a vaccine component, but who are at risk for complications from influenza, to their health care provider for evaluation, desensitization and possible administration of influenza vaccine. Protocols have been developed for safely administering influenza vaccine to persons with egg allergies.

³ It may be prudent to avoid influenza vaccination of persons who are not at high risk of complications from influenza and who have experienced GBS within 6 weeks of a previous dose of influenza vaccine. As an alternative, consider antiviral chemoprophylaxis for these persons.

⁴ Because influenza can result in serious illness, *vaccination will benefit many HIV-infected patients, including HIV-infected pregnant women.* Vaccine may not induce protective antibodies in patients with advanced disease. A second dose during the same flu season

does not improve immune response in these patients.

⁵ Pregnant women have an increased risk for hospitalization due to complications from influenza. No adverse fetal effects have been associated with influenza vaccine.

Inactivate influenza vaccine can be administered in any trimester.

⁶ Although flu vaccine can inhibit the clearance of warfarin, theophylline, phenytoin, and aminophylline, studies show no adverse clinical effects. High-risk patients who take these medications *should* receive flu vaccine.

⁷ Minimize the risk of bleeding after an IM injection in these patients by administering the vaccine immediately after the patient's receipt of replacement factor. Use a 23-gauge (or smaller) needle and immediately apply direct pressure to the vaccination site for ≥ 2 minutes.

Table 2. Needle Length and Injection Site for IM Injection

Gender and Weight	Needle Length	Injection Site	Injection Technique
Infants (< 12 months)	1"	Anterolateral thigh	Bunch subcutaneous and muscle tissue
Toddlers (12 months – 24 months)	≥ 1 "	Anterolateral thigh (preferred)	Depends on body mass
	5/8"	Deltoid	Stretch skin flat between thumb and forefinger
Children (3 – 18 y/o)	5/8" – 1"	Deltoid	Depends on body mass
Male and female < 60 kg (< 130 lbs)	5/8"	Deltoid	Do not bunch subcutaneous and muscle tissue
Male and female (130 – 152 lbs)	1"		
Female 70 – 90 kg (152 - 200 lbs)	1" – 1½"		
Male 70 – 118 kg (152 – 260 lbs)			
Female > 90 kg (200 lbs)	1½"		
Male > 118 kg (260 lbs)			

Table 3. Inactivated influenza vaccine dosage, by age group

	Age Group	Dose	No. of Doses
Seasonal, trivalent, inactivated influenza vaccine	6 – 35 months	0.25 mL	1 or 2 ^{1,2}
	3 – 8 years	0.5 mL	1 or 2 ^{1,2}

	≥ 9 years	0.5 mL	1
Pandemic H1N1 2009 inactivated influenza vaccine	6 – 35 months	0.25 mL	2
	All other ages	0.5 mL	Follow guideline that is current for vaccine

¹Children < 9 years of age who are receiving influenza vaccine for the first time should receive 2 doses, ≥ 1 month apart. Administer the 2nd dose before the onset of flu season, if possible.

²Administer 2 doses for children aged 6 months – 8 years who received influenza vaccine (either TIV or LAIV) for the first time in the 2008-2009 season, but who received only one dose that season. All other children who received 1 or more doses in any previous season should receive only 1 dose in 2009 -2010.

Simultaneous administration:

You can administer both the inactivated seasonal and the inactivated H1N1 influenza vaccines at the same visit (using separate syringes and sites) or at any time before or after each other.

You can administer the inactivated seasonal and live H1N1 influenza vaccines together or at any time before or after each other.

You can administer the live seasonal and inactivated H1N1 influenza vaccines together or at any time before or after each other.