

## **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: LIVE ATTENUATED INFLUENZA VACCINE (LAIV) (FLUMIST®)**

Live attenuated (seasonal or pandemic H1N1 2009) influenza vaccine (LAIV) or FluMist® is a live, attenuated (weakened) influenza vaccine that is sprayed into the nostrils. 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 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 appropriate Vaccine Information Statement (VIS) and answer any questions.
- b. Screen for contraindications according to Table 1.
- c. Administer 0.2 mL LAIV intranasally (0.1 mL: in each nostril), according to the recommended age-specific dose and schedule (Table 2).
  - i. Remove the rubber tip protector.
  - ii. With the patient in an upright position, head tilted back, place the tip just inside the nose to ensure that LAIV is delivered into the nose.

- iii. With a single motion, depress the plunger **as rapidly as possible** until the dose-divider clip prevents you from going any further.
  - iv. Pinch and remove the dose-divider clip from the plunger.
  - v. Place the tip just inside the other nostril and with a single motion; depress the plunger **as rapidly as possible** to deliver the remaining vaccine.
  - vi. If the vaccine recipient sneezes after administration, the dose should **not** be repeated.
- d. If possible, 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.
- e. Report clinically significant adverse events to the Vaccine Adverse Event Reporting System (VAERS) at 1-800-822-7967 or <http://www.vaers.hhs.gov/>.

**Special Note:** A health care provider can administer LAIV who cannot themselves receive LAIV (e.g., pregnant women, persons with asthma, etc.) or for whom it is not indicated (e.g., persons  $\geq$  50 years of age). The only persons who should not administer LAIV are those who are severely immunocompromised themselves.

**Table 1. Contraindications and Precautions to Live Attenuated Influenza Vaccine**

<b>Valid Contraindications for Live Attenuated Influenza Vaccine</b>
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- Anaphylactic reaction to a previous dose of influenza vaccine, eggs<sup>1</sup>, egg protein<sup>1</sup>, gentamicin, gelatin or arginine or any other component of the vaccine (see package insert for specific components)
- Age < 2 and > 49 years of age
- Any of the underlying medical conditions that serve as an indication for routine influenza vaccination, including:
  - Asthma, reactive airways disease,
  - Wheezing episode in the previous 12 months for children 2 - 4 years of age.
    - Consult medical record, if available, for history of asthma or recurrent wheezing
    - Ask parent or caregivers: “In the past 12 months, has a health care provider told you that your child has wheezing or asthma?”
    - If yes to either of these, use inactivated influenza vaccine
  - Other chronic disorders of the pulmonary or cardiovascular systems;
  - Other underlying medical conditions, including metabolic diseases such as diabetes, renal dysfunction, and hemoglobinopathies;
- Known or suspected immunodeficiency diseases or immunosuppressed states;
- Children aged 2 – 17 years of age receiving aspirin therapy or other salicylates
- Pregnancy
- Household or other close contact of a person with severe immunosuppression requiring a protective environment<sup>2</sup>

### **Precautions**

- Taking influenza antiviral medications<sup>3</sup>
- History of Guillain-Barré syndrome (GBS) within 6 weeks of a previous dose of influenza vaccine<sup>4</sup>
- Defer administration of LAIV if nasal congestion present, or use inactivated influenza vaccine
- Moderate or severe illness with or without fever

<sup>1</sup> 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.

<sup>2</sup> Use of inactivated influenza vaccine is recommended over LAIV for health care workers, household contacts and anyone coming into close contact with severely immunocompromised persons during periods when such patients require care in a protected environment (typically described as a specialized patient-care area with a positive-airflow relative to the corridor, high-efficiency air filtration and frequent air changes).

<sup>3</sup> Because antivirals reduce replication of influenza viruses, LAIV should not be administered until 48 hours after cessation of influenza antiviral therapy, and influenza antiviral medications should not be administered for 2 weeks after receipt of LAIV.

<sup>4</sup> 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.

**Table 2. Live Attenuated Influenza Vaccine Dosage, by Age Group**

	<b>Age Group</b>	<b>Vaccination Status</b>	<b>Dose<sup>1</sup>/Schedule</b>
Seasonal Vaccine	2 – 8 years <sup>2,3</sup>	Not previously vaccinated with either LAIV or inactivated influenza vaccine	2 doses (0.2 mL each), at least 1 month apart
	2 – 8 years	Previously vaccinated with either LAIV or inactivated influenza vaccine	1 dose <sup>2</sup> (0.2 mL) per season
	9 - 49 years	Not applicable	1 dose (0.2 mL) per season
H1N1 Vaccine	All recommended age groups	Whether or not previously vaccinated	Follow guideline that is current for vaccine

<sup>1</sup> One dose equals 0.2 mL, divided equally between each nostril.

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

<sup>3</sup>Administer 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 did not receive the recommended 2<sup>nd</sup> dose in that season. All other children who received 1 or more doses of influenza vaccine at any time should receive 1 dose of the 2009 -2010 seasonal influenza vaccine.

**Simultaneous administration:**

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.

Administering both the live attenuated seasonal and the live attenuated H1N1 influenza vaccines at the same visit is NOT recommended because of concerns about competition between the two vaccine viruses. If you have only live vaccines for both seasonal and H1N1 influenza available, you should separate the doses of the two live vaccines by at least 4 weeks.