

Storage and Handling of Influenza Vaccine

**Satellite Conference and Live Webcast
Tuesday, August 14, 2012
1:00 – 2:00 p.m. Central Time**

**Produced by the Alabama Department of Public Health
Video Communications and Distance Learning Division**

Faculty

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TIV: Afluria, Fluarix, FluLaval, Fluvirin, Fluzone

- **Trivalent influenza vaccine (TIV)**
- **Inactivated vaccine – not live virus like LAIV**
- **Multiple products and presentations from different manufacturers**
 - **CSL, GSK, Novartis, and Sanofi Pasteur**

TIV: Afluria, Fluarix, FluLaval, Fluvirin, Fluzone

- **Refrigerate immediately upon arrival**
- **Store between 35 F and 46 F (2 C and 8 C)**
- **Do not freeze or expose to freezing temperatures**
- **Do not use after expiration date shown on the label**

Afluria

- **Manufactured by CSL, distributed by Merck**
- **Licensed for use in patients age 5 years and older**
- **2 presentations:**
 - **.5 mL prefilled syringe**
 - **5 mL multi-dose vial**

Afluria

- **Store between 35 F and 46 F (2 C and 8 C)**
- **Do not use after expiration date shown on label**

Fluarix and FluLaval

- **Manufactured and distributed by GlaxoSmithKline (GSK)**
- **Fluarix is licensed for use in patients age 3 years and older**
- **Fluarix is packaged in one presentation:**
 - .5 mL prefilled syringes

Fluarix and FluLaval

- **FluLaval is licensed for use in patients age 18 years and older**
- **FluLaval is packaged in one presentation: 5 mL multi-dose vials**
- **Store between 35 F and 46 F (2 C and 8 C)**
- **Do not use after expiration date shown on label**

Fluvirin

- **Manufactured and distributed by Novartis**
- **Licensed for use in patients age 4 years and older**
- **2 presentations:**
 - .5 mL prefilled syringe
 - 5 mL multi-dose vial

Fluvirin

- **Store between 35 F and 46 F (2 C and 8 C)**
- **Do not use after expiration date shown on label**

Fluzone

- **Manufactured and distributed by Sanofi Pasteur**
- **Licensed for use in patients age 6 months and older**
- **Multiple presentations:**
 - 5 mL multi-dose vials (ages 6 months and older)

Fluzone

- .25 mL prefilled syringes (ages 6 – 35 months)
- .5 mL prefilled syringes (ages 36 months and older)
- .5 mL single dose vials (ages 36 months and older)

Fluzone

- Store between 35 F and 46 F (2 C and 8 C)
- Do not use after expiration date shown on label

LAIV: FluMist

- Live, attenuated influenza vaccine (LAIV)
- Manufactured by MedImmune
- Licensed for ages 2 yrs through 49 years of age
- Refrigerate immediately upon arrival
- Store between 35 F and 46 F (2 C and 8 C)

LAIV: FluMist

- Do not freeze or expose to freezing temperatures
- Check expiration date on the nasal sprayer
- Do not use after expiration date shown on the label
 - Typically has a 15 week expiration date from the time it is shipped

Storage Requirements

- For both LAIV and TIV, the requirements are the same
- Refrigerate immediately upon arrival
- Store between 35 F and 46 F (2 C and 8 C)
- Do not freeze or expose to freezing temperatures

Storage Requirements

- Do not use after expiration date shown on label
- Protect vaccine from light at all times by storing in the original box
- Do not remove vials and/or prefilled syringes and place into bins or plastic bags

Shelf Life After Opening

- Single-dose vials
 - All of the vaccine should be drawn into a sterile syringe using a sterile needle at the time the vaccine is administered

Shelf Life After Opening

- **Manufacturer-filled syringes**
 - Should be activated (i.e., needle cap removed) at the time the vaccine is administered

Shelf Life After Opening

- **Multidose vials**
 - Shake vial well prior to withdrawing each dose
 - Withdraw a single age-appropriate dose of vaccine into a sterile syringe using a sterile needle at the time the vaccine is administered

Shelf Life After Opening

- Unused portions of multidose vials should be refrigerated between 35 F and 46 F (2 C and 8 C)
- Once entered, a multidose vial of Afluria or FluLaval should be discarded after 28 days

Storage of Flu Vaccine During Mass Vaccination Clinic Settings

- If a properly functioning vaccine storage unit is not available at the clinic site, then the flu vaccine may be maintained in a properly conditioned insulated cooler during an off-site clinic

Storage of Flu Vaccine During Mass Vaccination Clinic Settings

- Vaccine should be stored in the cooler at 35 F to 46 F (2 C to 8 C), with a desired average temperature of 40 F (5 C)
- Should minimize the number of times that the cooler is opened

Storage of Flu Vaccine During Mass Vaccination Clinic Settings

- A calibrated thermometer must be kept in the cooler with the vaccines, and temperatures should be checked and recorded periodically to ensure the cold chain is not broken

Storage of Flu Vaccine During Mass Vaccination Clinic Settings

- Checking and recording the temperature ensures that if temperatures are increasing or decreasing over time, staff can intervene before the vaccine is exposed and potentially wasted

Storage of Flu Vaccine During Mass Vaccination Clinic Settings

- Recommended to check temperatures in cooler:
 - Before leaving the main office
 - Upon arrival at the clinic site
 - Every hour during clinic session
 - Upon completion of clinic session
 - After return to the main office

Storage of Flu Vaccine During Mass Vaccination Clinic Settings

- Keep an additional cooler on site that only contains frozen gel (ice) packs to swap in case gel packs in cooler need replacing during the clinic session