2005-06 Influenza Vaccine: Indications & Administration

N O T E : At the time of publication of this Epidemiology Bulletin, three manufacturers (Sanofi Pasteur, Inc., Chiron Corporation, and GlaxoSmithKline) were expected to provide 86-94 million doses of inactivated influenza vaccine for the U.S. population, and an additional 3 million doses of live attenuated vaccine (MedImmune Vaccines Inc.) should be available. However, because the exact number of available doses and timing of vaccine distribution for the 2005-06 season remain unknown, the Centers for Disease Control and Prevention (CDC) and the Alaska Department of Health and Social Services recommend the following:

THROUGH OCTOBER 24, inactivated vaccine should be targeted for those persons in the following “Tier I” priority groups:

- Persons aged >65 years
- Residents of long term care facilities
- Persons 2-64 with comorbid conditions
- Children age 6-23 months
- Pregnant women
- Healthcare personnel who provide direct patient care
- Household contacts and out-of-home caregivers of children aged <6 months

BEGINNING OCTOBER 24, all persons will be eligible for vaccination. See the following websites for additional information:

www.cdc.gov/mmwr/preview/mmwrhtml/mm5434a4.htm

MMWR:

9/24/05 – Prevention and Control of Influenza – http://www.cdc.gov/mmwr/preview/mmwrhtml/cr5460a1.htm
8/5/05 – Tiered Use of Inactivated Influenza Vaccine in the Event of a Vaccine Shortage – http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5430a4.htm
9/2/05 – Update: Influenza Vaccine Supply and Recommendations for Prioritization During the 2005-06 Influenza Season – http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5434a4.htm

INFLUENZA VACCINE OPTIONS

Both inactivated (i.e., killed virus) and live, attenuated (LAIV) influenza vaccines are available in the U.S. Both vaccines include the same influenza antigens, and both initially are grown in embryonated hen’s eggs. However, the inactivated vaccine is injected, while LAIV is administered intranasally. During the 2005-2006 season, the State of Alaska will not be providing LAIV. Providers using this vaccine should consult the package insert for usage information.

TARGET GROUPS FOR INFLUENZA VACCINATION

(Note: New recommendations for 2005-06 are underlined.)

Persons at Increased Risk for Complications (Tier I)

- Persons 65 years of age or older.
- Residents of nursing homes and other chronic-care facilities housing persons of any age with chronic medical conditions.
- Adults and children who have chronic disorders of the pulmonary or cardiovascular systems, including asthma. (Note: Hypertension is not considered a high risk condition.)
- Adults and children who have chronic disorders of the pulmonary or cardiovascular systems, including asthma.
- Adults and children who have required regular medical follow-up or hospitalization during the preceding year because of chronic metabolic diseases (including diabetes mellitus), renal dysfunction, hemoglobinopathies, or immunosuppression (including medications or HIV).
- Adults and children who have any condition (e.g., cognitive dysfunction, spinal cord injuries, seizure disorders, or other neuromuscular disorders) that can compromise respiratory function or the handling of respiratory secretions or that can increase the risk for aspiration.
- Children and adolescents (aged 6 months - 18 years) receiving long-term aspirin therapy (might be at risk for developing Reye syndrome after influenza infection).
- Women who will be pregnant during the influenza season.
- Children 6 – 23 months of age.

Persons Age 50-64 Years

Influenza vaccine is recommended for persons 50-64 years of age to increase the low vaccination rates among persons in this age group with high risk conditions.

Persons Who Can Transmit Influenza to Those at High Risk

- Healthcare workers: - Physicians, nurses, and other personnel in both hospital and outpatient-care settings, including medical emergency response workers (e.g., paramedics and emergency medical technicians.) - Employees of nursing homes and chronic-care facilities who have contact with patients or residents.
- Employees of assisted living and other residences for persons in groups at high risk.
- Persons who provide home care to persons in high risk groups.
- Household contacts (including children) of persons in groups at high risk.
- Household contacts and out-of-home caregivers of children 0-23 months of age.

GENERAL POPULATION

Healthcare providers should administer influenza vaccine to any person aged 26 months who wishes to reduce the likelihood of becoming ill with influenza or transmitting influenza to others should they become infected.

PERSONS WHO SHOULD NOT BE VACCINATED

Inactivated influenza vaccine:

- Persons known to have anaphylactic hypersensitivity to eggs or other components of influenza vaccine.
- Persons with an acute febrile illness. (Minor illnesses with or without fever do not contraindicate influenza vaccine.)

LAIV, Live Attenuated Influenza Vaccine:

- See package insert.

INFLUENZA SURVEILLANCE

We encourage health care providers to obtain specimens for viral culture from individuals with symptoms compatible with influenza. Only culture isolates can provide specific information about circulating influenza subtypes and strains, and detect novel strains of influenza that may pose a pandemic threat. Viral culture testing is free-of-charge at the State Public Health Laboratory in Fairbanks (907-474-7017). Please report positive influenza lab reports to the Section of Epidemiology.

INFLUENZA VACCINE* DOSAGE, BY AGE GROUP – UNITED STATES, 2005-2006 SEASON

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Dosage</th>
<th>Number of Doses</th>
<th>Route¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-35 mos</td>
<td>0.25 mL</td>
<td>1 or 2</td>
<td>IM</td>
</tr>
<tr>
<td>3-8 yrs</td>
<td>0.50 mL</td>
<td>1</td>
<td>IM</td>
</tr>
<tr>
<td>&gt;9 yrs</td>
<td>0.50 mL</td>
<td>1</td>
<td>IM</td>
</tr>
</tbody>
</table>

* A 0.5 mL dose contains 15 µg each of A/California/7/2004 (H3N2)-like, A/New Caledonia/20/99(H1N1)-like, and B/Shanghai/361/2002-like antigens. For the A/California/7/2004 (H3N2)-like antigen, manufacturers may use the antigenically equivalent A/New York/55/2004 virus, and for the B/Shanghai/361/2002-like antigen, manufacturers may use the antigenically equivalent B/Jinhua/2003 virus or B/Jiangsu/10/2003 virus.

¹ Because of their decreased potential for causing febrile reactions, only split-virus vaccines should be used for children aged <13 years. These might be labeled split, subvirion, or purified-surface-antigen vaccine. Immunogenicity and side effects of split- and whole-virus vaccines are similar among adults when vaccines are administered at the recommended dosage. Whole virus vaccine is not available in the U.S.

² For adults and older children, the recommended site of vaccination is the deltoid muscle. The preferred site for infants and young children is the anterolateral aspect of the thigh.

² Two doses administered >1 month apart are recommended for children <9 years of age who are receiving influenza vaccine for the first time.