

October

2004

INFLUENZA PREVENTION 2004-2005

INTRODUCTION

Influenza virus infections occur every year in the United States but vary greatly in incidence and geographic distribution. Efforts to prevent or control influenza in the U.S. have been aimed at protecting persons at risk of serious illness or death.

The 2004-2005 trivalent vaccine virus strains of the inactivated virus vaccine used at KUH are A/Wyoming/03/2003 (H3N2), A/New Caledonia/20/99 (H1N1), and B/Jiangsu/10/2003 antigens. Influenza vaccines distributed in the United States may contain thimerosal.

WHO SHOULD BE IMMUNIZED

The influenza vaccine is strongly recommended for:

1. Any person \geq six months of age, who by virtue of age or underlying conditions is at increased risk for complications of influenza.
2. Health care workers and others (including household members) who may have close contact with high risk persons to decrease risk of transmitting disease.
3. Any other person who wishes to reduce his/her chance of becoming infected with influenza, even if that person is not at increased risk for complications.

The vaccine is also recommended for persons at high risk for influenza related complications, including persons \geq 50 years, nursing home/chronic care facility residents with chronic medical conditions, adults/children with chronic pulmonary or cardiovascular disease, persons requiring hospitalization within the last year for a chronic metabolic disease, renal failure, hemoglobinopathies or immunosuppression, and children/teenagers taking long term aspirin therapy.

For persons infected with HIV, vaccination is advised because influenza may result in serious illness and complications in these individuals. The effectiveness of vaccination may be reduced due to the inability of HIV patients to mount an antibody response.

Women beyond the 1st trimester of pregnancy (\geq 14 wks) during the influenza season should be vaccinated. Pregnant women who have medical conditions that increase their risk of complications from influenza should be vaccinated before the influenza season – regardless of pregnancy stage. To minimize the theoretical possibility of teratogenicity, it is reasonable to administer the vaccine after the first trimester if immunization will be accomplished when the influenza season begins. Breastfeeding is not a contraindication for vaccination.

WHO SHOULD NOT BE IMMUNIZED

Persons with acute febrile illnesses usually should NOT be vaccinated until symptoms have abated. Inactivated influenza vaccine should NOT be given to persons with known hypersensitivity to eggs.

TIMING OF ADMINISTRATION/DOSAGE

High levels of influenza activity generally do not occur before December in the United States. Influenza vaccine may be offered to high risk patients presenting for routine care or hospitalization starting in September. Organized vaccination campaigns for high risk persons are optimal from October to mid November and continued into December or influenza season as vaccine is available.

Only the split virus preparation will be stocked at KUMC, as this preparation is associated with fewer febrile reactions in children and is the only preparation recommended for use in children < 13 years. Influenza vaccine should only be administered intramuscularly at the following dosages.

| Age Group | Dosage Schedule |
|------------------|--------------------------|
| > 9 years old | 0.50 mL x 1 dose |
| 3 to 8 years old | 0.50 mL, [1 or 2 doses]* |
| 6 to 35 months | 0.25 mL, [1 or 2 doses]* |

* For children < 9 yrs who are receiving the vaccine for the first time, two doses at least four weeks apart are recommended. Both doses are recommended for maximum protection.

The recommended site of vaccination is the deltoid muscle for adults and older children. The anterolateral aspect of the thigh is recommended for infants and small children. NEVER administer the vaccine intravenously.

SIDE EFFECTS AND ADVERSE REACTIONS

Because influenza vaccine contains only non-infectious viruses, it cannot cause influenza. The most frequent side effect is soreness around the injection site. Any significant adverse reactions should be reported to the Drug Information Center at ext 2328 and the appropriate VAERS (Vaccine Adverse Event Reporting System) forms will be completed and forwarded to the CDC and FDA. The following reactions have also occurred:

1. Fever, malaise and myalgia infrequently affect persons who have had no exposure to the influenza virus antigens. Symptoms usually occur six to 12 hours after the vaccination and can persist for one to two days.
2. Immediate, presumably allergic reactions are extremely rare post influenza vaccine administration. Persons who have anaphylactic hypersensitivity to eggs should not be vaccinated. This includes people who develop hives, swelling of the lips, or respiratory distress after eating eggs.

KUMC AVAILABILITY AND CHARGING

The 2004-2005 trivalent influenza vaccine will soon be available to KUMC clinics. We anticipate receiving multiple allocations through the next few months, with the final allocation occurring by mid-November. Any of the 2003-2004 vaccine should be returned to the pharmacy. **DO NOT use the 2003-2004 preparation.** The charge to the clinic is **\$11.58** per dose. An individual prescription for each dose administered will be needed, and stock will be replaced accordingly.

Source document: Prevention and control of influenza. Recommendations of the Advisory Committee on immunization practices. *MMWR* May 28, 2004 / 53(RR06);1-40