**PREPARATIONS FOR BLITZ-KATARRH**

For some of us the onset of fall brings pleasant memories of the crunch of brightly colored leaves underfoot, and holiday feasts involving family and friends. For those providing clinical care, fall also means that winter is near, and with it waiting rooms overflowing with patients with respiratory infections and their complications. This issue of the CD Summary will help prepare you to prevent (at least partially) that onslaught, by reviewing this year’s recommendations for the use of influenza vaccine.

**LAST YEAR’S EXPERIENCE, THIS YEAR’S PREDICTIONS**

The crystal balls have been consulted again, and this year’s season is expected to be similar to last years’ (you heard it here first). Last year turned out to be an “average” season, and the average is usually a pretty good bet. Peak onset of illness occurred during the second week of January 2001, and cases were relatively rare among those over age 50. The Russian influenza (H1N1) circulated last season for the first time since 1995-6, outnumbering viral cultures of the H3N2 subtype, which had dominated. The Russian influenza first appeared in Oregon in 1977-8, and since then has been fairly friendly and associated with lower morbidity and mortality. Current levels of influenza transmission in the Southern Hemisphere indicate a likely repeat of last season with H1N1 strains predominating — unless they don’t. The vaccine this year contains the same type A subtype antigens as last year: A/Moscow/10/99(H3N2)-like and A/New Caledonia/20/99(H1N1)-like. The type B component will be different this season: B/Sichuan/379/99-like strain.* What does all this mean for your practice this year? As always, that cache of vaccine you hoarded last season should be discarded in favor of this year’s cocktail. And please keep your fingers crossed for another average year. Given everything else going on, the last thing we need is a pandemic.

**VACCINE DELAYS**

As last year, we do expect delays in delivery of influenza vaccine, due this year to quality control problems experienced by at least one of the manufacturers. Current projections are that 56%, 31% and 13% of doses will be delivered in October, November and December, respectively. In the coming weeks more up-to-date information on vaccine availability may be obtained at: [http://www.cdc.gov/nip/flu](http://www.cdc.gov/nip/flu).

Because of the delays in vaccine availability it will be necessary to prioritize vaccine administration in October for those at highest risk, and immunize the remainder of patients in November or December. The following groups should be immunized in October:

- Age 65 or older
- Nursing home or chronic care facility residents;
- Those with chronic pulmonary or cardiovascular disease, including asthma;
- Those with chronic metabolic diseases such as diabetes, renal disease, hemoglobinopathies or immune dysfunction (including immunosuppression caused by medications or by HIV);
- Children under 18 who are receiving long-term aspirin therapy (and would therefore be at risk for Reye Syndrome);
- Pregnant women who will be in the second or third trimester during influenza season;
- Contacts of the above groups, including household members or health-care providers.

Additional information about Oregon’s vaccine prioritization plan can be found in the July 31 CD Summary, available on our website ([http://www.oshd.org/cdsum](http://www.oshd.org/cdsum)).

**TIPS ON VACCINE USAGE**

The intramuscular route is recommended. Adults and older children should be vaccinated in the deltoid muscle using a needle length of one inch or more to ensure sufficient penetration. Infants and young children should be vaccinated in the anterolateral aspect of the thigh. Only split-virus vaccines should be used for children under 13 years of age due to their decreased potential for causing febrile reactions. The vaccines might be labeled as “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.

Doses by age group are as follows:
- 6–35 months old: 0.25ml (split)
- 3–12 years old: 0.5ml (split)
- 13 years and older: 0.5ml

Among previously unvaccinated children less than nine years old, two doses must be administered one or more months apart for satisfactory antibody response. If possible, the second dose should be administered before December. A protective level of antibodies develops after a minimum of 10–14 days. Antiviral drugs may be provided to confer protection during this interval if exposure is likely.

Be sure to use the correct vaccine for the age of the patient. Two of the three influenza vaccines currently licensed in the US are approved for use in those six months of age or older: Flushield (split) from Wyeth Laboratories and Fluzone (split) from Aventis Pasteur. The third licensed vaccine, Fluvirin (purified-surface-antigen), from Evans Vaccines, is labeled in the US only for use among those at least four years old.
Vaccine Reactions

The most frequent side effect of vaccination is soreness at the vaccination site, affecting 10–64% of patients and lasting up to two days. These local reactions are generally mild. Fever, malaise, myalgia and other systemic symptoms can occur, usually among those who have not been vaccinated against influenza before. These reactions usually begin six to twelve hours after vaccination and can persist for one or two days. And of course, immediate hypersensitivity reactions can occur. These reactions include hives, angioedema, allergic asthma or anaphylaxis, and are usually due to allergies to egg protein.

Vaccine Contraindications

Vaccine should not be administered to people who are allergic to eggs or egg protein, without appropriate medical evaluation and possible desensitization. Existing data, though limited, suggest that the benefits of vaccination justify the yearly vaccination of patients at high risk for influenza even if they have experienced Guillain-Barre Syndrome within six weeks of previous influenza vaccination. Alternatively, providers may want to consider the use of antiviral chemoprophylaxis in these patients.

Other Vaccinations

A visit to the doctor is always a great time to give some shots. As always, providers should assess a patient’s immunization history, and take action to bring the patient up-to-date. Since there is some overlap in the groups for which pneumococcal and influenza vaccination are recommended, it is particularly important to consider the need for concurrent immunization with pneumococcal vaccine. Both vaccines can be given at the same time in different sites without increasing side effects. And influenza vaccine can be given concurrently with other routine childhood vaccines.

Additional Info

The complete recommendations of the Advisory Committee on Immunization Practices can be found on our website, in addition to a wealth of other information for the budding influenzaologist (http://www.oshd.org/acd/docs/influenza.htm). Information about clinics administering vaccine can be obtained by dialing 1-800-SAFENET.

Happy shot-giving. And may this be another average year for influenza.

Shortage of TD and TT

A shortage of tetanus and diphtheria toxoids (Td) and tetanus toxoid (TT) has resulted because one of two manufacturers discontinued production of tetanus toxoid-containing products. Aventis Pasteur (Swiftwater, Pennsylvania) is the only major manufacturer of tetanus and diphtheria toxoids (Td) in the United States. In response to the shortage, Aventis Pasteur has increased production of Td to meet national needs; however, because 11 months are required for vaccine production, the shortage is expected to last for the remainder of 2001 and into early 2002.

To assure vaccine availability for priority indications described below, all routine Td boosters in adolescents and adults should be delayed into 2002. The Oregon Health Services (formerly Oregon Health Division) has issued guidelines for administration of available vaccine to priority categories based upon the risk of infection. They were based upon the assumption that sufficient supplies would be available to immunize all persons in Risk Categories 1 and 2. Immunization of persons in risk categories 3–5 should be deferred into 2002 until the shortage is resolved.

Risk Categories

Number 1: Persons requiring tetanus vaccination for prophylaxis in wound management.

Number 2: Persons traveling to a country where the risk of diphtheria is high.

Number 3: Persons 6 years of age and older who are known to have received fewer than 3 doses of vaccine containing tetanus and diphtheria toxoids.

Number 4: Pregnant women and persons at occupational risk for exposure to tetanus who have not been vaccinated with a vaccine containing tetanus toxoid for over 10 years.

Number 5: All other adolescents and adults who have not been vaccinated with a vaccine containing tetanus toxoid for over 10 years.

Information concerning vaccine availability may be obtained by contacting your local health department. Phone numbers of local health departments may be found on page 2 of our disease reporting poster at http://www.oshd.org/acd/mdposter.pdf and on our web page: http://www.oshd.org/acd/disrpt.htm. The complete guidelines and associated materials may be found at http://www.oshd.org/imm/tdshort.htm.