Each year the influenza season brings a variety of uncertainties. Last year plenty of vaccine was available throughout the season, but most of the circulating influenza virus strains were not optimally matched to the vaccine. The influenza season peaked in late February and, shortly thereafter, Minnesota experienced the deaths of three children due to complications of influenza. The children were 5-12 years old and none had been vaccinated for influenza. Once again, these unfortunate deaths reminded all of us how unpredictable and devastating influenza can be and underscored the fact that it is not too late to be vaccinated in February.

Read everything in this bulletin. It contains information and resources you need to be a committed participant in the campaign to protect all Minnesotans against influenza.

Vaccine supply update: Production of influenza vaccine for the United States for the 2008-09 season is anticipated to be between 143 and 146 million doses. However, the annual supply of influenza vaccine and the timing of its distribution cannot be guaranteed in any year. While we don’t expect a shortage, it’s always a good idea for everyone to have a contingency plan for targeting priority groups, just in case.

What’s new in the 2008-09 influenza recommendations?
The Advisory Committee on Immunization Practices (ACIP) released the 2008-09 recommendations, “Prevention and Control of Influenza,” on August 8, 2008. The principal changes and updates are summarized below. For a complete copy of the recommendations, visit the MDH website at www.mdhflu.com.

The 2008-09 trivalent influenza vaccine virus strains:
- A/Brisbane/59/2007 (H1N1)-like antigen
- A/Brisbane/10/2007 (H3N2)-like antigen
- B/Florida/4/2006-like antigen

All three strains are different from the 2007-08 Northern Hemisphere influenza vaccine.

New guidance:
- ACIP expanded recommendations to include annual vaccination for all children and adolescents age 6 months through 18 years.
- However, children and adolescents at high risk for influenza complications should continue to be a focus of vaccination efforts as we transition to routinely vaccinating all children.
- Either trivalent inactivated vaccine (TIV) or live attenuated influenza vaccine (LAIV) can be used when vaccinating healthy persons age 2 through 49 years.
- Children with possible reactive airways disease, persons at higher risk for influenza complications because of underlying medical conditions, children age 6-23 months, and persons 50 years of age and older should receive TIV.
- LAIV should not be administered to children less than 5 years of age with possible reactive airways disease, such as those who have had recurrent wheezing or a recent wheezing episode.
Oseltamivir-resistant influenza A (H1N1) strains have been identified in the United States and some other countries. However, oseltamivir or zanamivir continue to be the recommended antivirals for treatment of influenza because other influenza strains remain sensitive to oseltamivir, and resistance levels to other antiviral medications remain high.

**Persons for whom annual vaccination is recommended**

As vaccine supplies allow, provide influenza vaccine to all persons who want to reduce the risk of becoming ill with influenza or of transmitting it to others. However, place particular emphasis on the following groups:

- Children and adolescents age 6 months through 18 years
- Persons age 50 years or older
- Children and adolescents (age 6 months through 18 years) receiving long-term aspirin therapy who therefore might be at risk for Reye syndrome after influenza virus infection
- Women who will be pregnant during the influenza season
- Adults, adolescents, and children who have chronic pulmonary (including asthma), cardiovascular (except hypertension), renal, hepatic, hematological or metabolic disorders (including diabetes mellitus), immunosuppression (including immunosuppression caused by medications or by human immunodeficiency virus), or 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
- Residents of long-term care and other chronic-care facilities
- Health-care personnel
- Household contacts (including children) and caregivers of, children under 5 years of age (with particular emphasis on contacts of children 6 months of age and younger), adults 50 years of age and older, and persons with medical conditions that put them at higher risk for severe complications from influenza.

**Reasoning behind the expanded age recommendations**

ACIP noted the following rationale for expanding influenza vaccination recommendations to include all school-age children and adolescents:

- Evidence that influenza has substantial adverse impacts among school age children and their contacts (e.g., increased school absenteeism, antibiotic use, medical care visits, and parental work loss)
- Evidence that influenza vaccine is effective and safe for school-age children
- Expectation that a simple age-based influenza vaccine recommendation will improve current low vaccine coverage levels among school-age children who already have a risk- or contact-based indication for annual influenza vaccination
- The potential indirect effect of reducing influenza among those in close contact with children, and reducing overall transmission within communities, if sufficient vaccination coverage among children can be achieved.

*Note:* Begin vaccinating all children age 6 months through 18 years during the 2008-09 influenza season if feasible (e.g., vaccine supply is sufficient), but no later than next season. However, children and adolescents at high risk for influenza complications should continue to be a focus of vaccination efforts as we transition to routinely vaccinating all children.

**When should providers start to vaccinate?**

To avoid missed opportunities for vaccination, offer vaccination during routine health-care visits or during hospitalizations whenever vaccine is available. Continue vaccinating throughout the influenza season, because the duration of the season varies, and influenza might not appear in some communities until February or March. Offer influenza vaccine routinely, and continue organized
vaccination campaigns throughout the influenza season, even when influenza activity has begun in the community.

If you plan substantial organized vaccination campaigns or clinics, consider scheduling these events after mid-October, because the availability of vaccine in any location cannot be ensured consistently in early fall. Scheduling these campaigns/clinics after mid-October will minimize the need for cancellations because vaccine is not yet available.

**Vaccination of children 6 months through 8 years of age**

- Children age 6 months through 8 years who are receiving influenza vaccine for the first time this year need two doses separated by at least 4 weeks. Children who received influenza vaccine for the first time in the immediate previous season and only received one dose will need two doses in the current season.
- For children age 6 months through 8 years who received fewer than two doses in a season prior to 2007-08, only one dose is needed this year.

**Antiviral recommendations**

Antiviral drugs are not a substitute for vaccination, although they are critical adjuncts in preventing and controlling influenza. Based on antiviral testing results conducted at CDC and in Canada indicating high levels of resistance to amantadine and rimantadine, ACIP recommends that neither be used for the treatment or chemoprophylaxis of influenza A in the United States until susceptibility to these antiviral medications among circulating influenza A viruses has been re-established. Oseltamivir or zanamivir can be prescribed if antiviral treatment of influenza is indicated.

**Reporting influenza**

- **Early season cases:** All providers, please report and submit clinical materials to MDH from all early season cases of influenza confirmed by rapid test or viral culture. Early season cases are those that are confirmed before MDH has announced the first culture-confirmed isolate, which often occurs between October and December.
- **Hospitalized cases:** Hospitals should report all lab-confirmed (rapid test or viral culture) hospitalized cases of influenza in Minnesota to MDH. If you are in the seven-county Twin Cities metro area, refer to the Emerging Infections Program (EIP) protocol. If you are in greater Minnesota, use the usual reporting mechanisms. Any death or critically ill case of influenza in a pediatric patient or otherwise healthy adult should be reported to MDH by phone (651-201-5414 or 1-877-676-5414) within 24 hours.

If you have questions, please contact Karen Martin at karen.martin@state.mn.us or 651-201-5537. Thank you for all your help!

**Vaccinate yourself and your staff!**

Make every effort to educate staff about the benefits of vaccination and the potential health consequences of influenza illness for their patients, themselves, and their families. ACIP recommends that all health-care personnel should have convenient access to influenza vaccine at the work site, free of charge.

In a formal recommendation last year, MDH set the standard for influenza vaccination of Minnesota workers in health-care settings at 90 percent. This is consistent with recommendations from the Infectious Disease Society of America (IDSA), the Centers for Disease Control and Prevention (CDC), the Joint Commission, the National Influenza Vaccine Summit, and the National Foundation for Infectious Diseases (NFID).

MDH also supports the use of a mandatory “informed declination program” as a useful tool in tracking immunization rates, identifying reasons for non-participation, and achieving our 90 percent goal. See
Key influenza messages for health-care workers

1. **Influenza vaccination prevents death and serious illness.** Between 800 and 1,000 Minnesotans die every year as a result of complications of influenza.
2. **Vaccinating health-care workers protects them from getting sick and prevents them from giving influenza to their patients, their families, and other contacts.**
3. **Unvaccinated health-care workers spread influenza to persons who are the most vulnerable to serious complications and death.** At only 42 percent, vaccination coverage among health-care workers needs substantial improvement.
4. **All health-care personnel, as well as those in training for health-care professions, should be vaccinated annually against influenza.**
5. **Vaccination of health-care professionals has been associated with reduced work absenteeism and with fewer deaths among nursing home patients and elderly hospitalized patients.**

Enclosed influenza and pneumococcal materials

- **Proper Storage, Handling, and Shipping of Influenza Vaccine.** MDH fact sheet.
- **2008-09 Influenza Vaccine Dosage Chart.** CDC table.
- Camera-ready copies of federal Vaccine Information Statements (VISs). Translated versions are available at the Immunization Action Coalition website, [www.immunize.org/vis](http://www.immunize.org/vis).
  - Influenza Vaccine (TIV) - What You Need to Know (dated 7/24/08)
  - Influenza Vaccine (LAIV) - What You Need to Know (dated 7/24/08)
  - Pneumococcal Polysaccharide Vaccine (PPV23) – What You Need to Know (dated 7/29/97)
- **MDH Flu Materials Order Form.** Use this form to order influenza materials for you and your patients.

**Need extra copies?** Use the enclosed order form or download what you need via the MDH influenza web site, [www.mdhflu.com](http://www.mdhflu.com).

Questions?
Call the MDH Immunization Program at 651-201-5503 or 1-800-657-3970 or the CDC Hotline at 1-800-232-4636.