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INFECTIOUS DISEASE UPDATE

AAP issues guidance on vaccine, antiviral use for seasonal flu

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The Academy has released its annual policy statement for routine use of seasonal influenza vaccine and antiviral medications for the prevention and control of influenza in children during 2009-'10.

On the basis of global surveillance of circulating influenza strains, only the B vaccine strain has been changed in the trivalent seasonal vaccine for the 2009-'10 influenza season.

The Academy recommends annual trivalent seasonal influenza immunization for:

- all children ages 6 months through 18 years, including those who are healthy and those with conditions that increase the risk of complications from influenza;
- household contacts and out-of-home care providers of:
  - children with high-risk conditions and
  - healthy children younger than 5 years of age;
- health care professionals; and
- pregnant women.

Seasonal influenza vaccine — trivalent inactivated influenza vaccine (TIV) or live-attenuated influenza vaccine (LAIV) — should be offered to all children as soon as vaccine is available. A protective response to immunization remains throughout the entire influenza season even if the vaccine is given as early as August. Immunization efforts should continue throughout the entire influenza season, even after influenza activity has been documented in a community.

The influenza season often extends well into March and beyond, and there may be more than one peak of activity in the same season. Thus, administering an influenza immunization through at least May 1 still can protect recipients during that season and also provides ample opportunity to administer a second dose of vaccine to children requiring two doses in that season.

Expand outreach, infrastructure

The Centers for Disease Control and Prevention (CDC) estimates that the new universal childhood influenza vaccination recommendation adds 30 million children to be immunized. Manufacturers anticipate being able to provide adequate supplies of vaccine.

Efforts to consider in making trivalent seasonal influenza vaccine easily accessible for all children include creating walk-in vaccination clinics, making vaccine available during all clinic hours, extending hours during vaccination periods and working with other institutions (e.g., schools, child care centers, churches) to expand venues for administering vaccine.

Although health care for children should be provided in the child's medical home, some medical homes may have limited capacity to accommodate all patients seeking influenza immunization. Because of the increased demand for immunization during each influenza season, the Academy and the CDC have suggested providing the vaccine at any visit to the medical home during influenza season when it is not contraindicated or at specially arranged "shot-only" sessions. Health care professionals, influenza campaign organizers and public health agencies should cooperate with community clinics, schools and child care centers to develop and implement local plans for expanding outreach and infrastructure to achieve the target immunization of all children 6 months through 18 years of age.

Antiviral therapy

Two classes of antiviral medications are available to treat influenza infections in children — adamantanes (i.e., amantadine and rimantadine) and neuraminidase inhibitors (i.e., oseltamivir and zanamivir). The recommendations for use of antiviral medications for chemoprophylaxis or treatment remain more complex than in previous years because of the anticipated concurrent circulation of multiple strains of influenza with different susceptibility patterns during the 2009-'10 influenza season.

Empiric therapy of serious influenza-like illness during the influenza season depends on the availability of rapid testing for influenza A or B virus. Routine laboratory testing generally is not available to distinguish between strains of influenza A (e.g., seasonal H1N1 [Brisbane], novel [swine/pandemic] strain H1N1 and H3N2 seasonal) or to determine antiviral susceptibility. If local or national influenza surveillance data indicate a predominance of a particular influenza strain with known antiviral susceptibility profile, then empiric treatment can be directed toward that strain.

If no testing is available or performed, or if rapid testing documents influenza A and treatment is considered, both oseltamivir and an adamantane (amantadine or rimantadine) should be provided. For children 7 years and older, zanamivir may be used as single-drug therapy, similar to recommendations during the 2008-'09 season.

If rapid testing documents influenza B infection, then either oseltamivir or zanamivir can be used as single-drug empiric therapy.

Clinical judgment is an important factor in treatment decisions.

RESOURCES

The AAP policy statement on routine use of seasonal influenza vaccine and antiviral medications is available on the AAP Member Center, www.aap.org/moc.

Information about influenza surveillance is available through the CDC Voice Information System (influenza update, 800-232-4636) or at www.cdc.gov/h1n1flu/update.htm.

Antiviral treatment should be started as soon as possible after illness onset. Persons with suspected influenza who present with an uncomplicated febrile illness typically do not require treatment unless they are at higher risk of influenza complications. In areas with limited antiviral medication availability, local public health authorities might provide additional guidance about diagnostic testing and prioritizing treatment within groups at higher risk of infection.

H1N1 virus

This influenza season is expected to be complicated by the likely concurrent circulation of novel influenza A (H1N1) virus (swine flu). The morbidity and mortality rates of the H1N1 virus in the United States do not appear to be substantially different than seasonal influenza strains. Continuous monitoring of the epidemiology, change in severity and resistance patterns of influenza strains may lead to new guidance. (See article on page 1 for more information on the novel H1N1 virus.)

Dr. Bernstein is a member of the AAP Committee on Infectious Diseases.