2009 H1N1 Update

The big immunization story for 2009 was the H1N1 flu pandemic and the continuing efforts to vaccinate at-risk populations. While the spring and early summer of 2009 were focused on the first wave of H1N1 disease, the summer and fall were dedicated to planning and vaccine distribution as well as the second wave of H1N1 illness.

Through the Department of Public Health’s planning and communication efforts, over 1,700 providers completed the pre-registration process to receive H1N1 vaccine. Connecticut received its first shipment of H1N1 vaccine in late September 2009. Given limited vaccine supply, the earliest vaccination efforts were aimed at reaching the Advisory Committee on Immunization Practices (ACIP) recommended priority groups, published in the Morbidity and Mortality Weekly Report (MMWR) on August 28, 2009. Providers who pre-registered to administer vaccine to those populations were the first to be allowed to order the H1N1 vaccine.

As of December 22, 2009, slightly over one million doses of H1N1 vaccine were distributed throughout the state. Below is information on doses administered by week, doses administered by age groups, and % of vaccine distributed by provider type.

While the H1N1 vaccine supply remained limited throughout the fall, the demand appeared to have been high. The Immunization Program will be analyzing several data sources to measure how well the targeted priority populations were reached. The program will also participate in an after-action report conducted by the State Health Department that will analyze the Department’s response to H1N1.

On December 16, 2009, Governor M. Jodi Rell announced that the supply of H1N1 vaccine was sufficient to allow providers to vaccinate any person interested in receiving the vaccine. In several previous pandemics, a third wave of illness was reported. National and international experts are urging people with risk factors who have not yet been vaccinated to do so as soon as possible. If a third wave of illness occurs, those vaccinated will be protected.

Providers who have not pre-registered but are now interested in providing the H1N1 vaccine may still register to receive vaccine at: www.ct.gov/ctfluwatch/h1n1/preregister.

For continued updates on H1N1 vaccine and disease see: www.ct.gov/ctfluwatch/ or www.cdc.gov/h1n1flu/
ACIP Highlights

The Advisory Committee on Immunization Practices (ACIP) held its final meeting for 2009 in Atlanta on October 21 and 22. The meeting produced several new and updated recommendations. These recommendations are provisional until they are reviewed by the Director of CDC and published in the Morbidity and Mortality Weekly Review (MMWR). Provisional and final recommendations may be found at http://www.cdc.gov/vaccines/recs/acip/

Topics addressed at the meeting were:

- **HPV:** The committee voted to approve an update the human papillomavirus (HPV) vaccine recommendations to include the recently licensed bivalent vaccine for women. They voted to harmonize the schedule and dosing recommendations for the two vaccines (for women) without expressing a preference for either vaccine and to update the precautions and contraindications for both vaccines. The committee also voted to add a permissible recommendation for males 9 through 26 years of age to receive the quadrivalent HPV vaccine to prevent genital warts.

- **Schedules:** The committee voted to approve the 2010 vaccine schedules both for children and adolescents and for adults. Each will contain minor changes and updates from the previous year’s edition.

- **General Recommendations:** After discussing the incorporation into the General Recommendations of previously free-standing, but non-vaccine specific, ACIP statements on Adolescent and Adult Vaccination Principles, the General Recommendations Work Group summarized revisions to the document. These include small changes to the sections on combination vaccines, timing and spacing, storage and handling, and syncope. The committee voted to accept the final document with the understanding that several outstanding issues, (e.g. vaccination of persons with altered immunocompetence,) will be resolved prior to publication.

- **Yellow Fever:** The committee approved an updated yellow fever statement in light of evolving epidemiologic and adverse event data. Changes will affect indications, contraindications and precautions, and the vaccine’s adverse event profile.

**Pneumococcal:** The committee reviewed epidemiologic data regarding invasive pneumococcal disease in children, herd immunogenicity and cost-effectiveness data on the forthcoming 13-valent pneumococcal conjugate vaccine, and discussed proposed recommendations for incorporating it into the routine and catch-up childhood schedules.

The next ACIP meeting is scheduled for February 24-25, 2010.

**Mumps Outbreak**

An outbreak that began in a summer camp in New York has grown to become the largest U.S. mumps outbreak since 2006, when a resurgence of mumps produced 6,584 cases. As of October 30, 2009 a total of 179 cases had been identified in New York and New Jersey, and an additional 15 cases had been reported from Canada. The outbreak primarily has affected members of a tradition-observant religious community; median age of the patients is 14 years, and 83% are male. Three persons have been hospitalized. (See MMWR: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm58d1112a1.htm?s_cid=mm58d1112a1_e

**Providers Should Offer Pneumococcal Vaccine Too**

Many severe pneumococcal infections can be prevented through vaccination. Pneumococcal infections co-infections have been identified as an important contributor to some severe and fatal cases of 2009 H1N1 influenza virus infection. Importantly, however, approximately 70 million persons with existing pneumococcal polysaccharide vaccine (PPSV) indications are unvaccinated. In November 2009, CDC recommended that, while vaccinating against influenza, providers should administer PPSV to all people with existing indications according to current ACIP recommendations. This is important because people with existing indications are not only at increased risk for pneumococcal disease, but are also at increased risk for serious complications from influenza (See CDC guidance: http://www.cdc.gov/h1n1flu/vaccination/provider/provider_pneumococcal.htm}
New and Improved Pneumococcal Conjugate Vaccine on Horizon

Invasive pneumococcal disease (IPD) is a major cause of meningitis, pneumonia and bacteremia in children. The Pneumococcal Conjugate Vaccine 7-valent (PCV7), brand name Prevnar, has had a huge impact on the reduction of IPD cases since it was licensed nine years ago. In fact, cases of IPD caused by the serotypes in PCV7 vaccine have been virtually wiped out since the introduction of PCV7 to the market in February of 2000.

The cases being seen now are due to infection by other serotypes not in PCV7, with the majority of cases being caused by serotype 19A. (See table below.) The vaccine manufacturer, Pfizer, formerly Wyeth Pharmaceuticals, has a new vaccine that is expected to be licensed soon that will include all PCV7 serotypes plus 6 others (PCV13) including the most prevalent culprit, 19A. Last year, 44% of all cases of IPD in children <5 years of age were due to serotype 19A.

Invasive Pneumococcal Disease among children <5 years of age, Connecticut, 2000-2008

<table>
<thead>
<tr>
<th>Year</th>
<th>PCV7 serotypes*</th>
<th>PCV13 serotypes**</th>
<th>Serotype 19a</th>
<th>Non-Vaccine/Unknown serotypes</th>
<th>Total No. of Cases***</th>
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<tbody>
<tr>
<td>2000</td>
<td>87</td>
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<td>2008</td>
<td>1</td>
<td>21</td>
<td>16</td>
<td>15</td>
<td>36</td>
</tr>
</tbody>
</table>

*PCV7 vaccine: Includes serotypes 4, 6B, 9V, 14, 18C, 19F, 23F
**PCV13 vaccine: Includes serotypes 1, 3, 4, 5, 6A, 6B, 7F, 9V, 14, 18C, 19A, 19F, 23F
***Total column is equal to PCV13 column and other/unknown column

TIP OF THE ISSUE

Did you use PedVax Hib or Comvax?

- Many practices used PedVax Hib or Comvax - that only needed 2 doses for the primary series.
- When dose #1 was Pedvax or Comvax and dose #2 was ActHib - the child appeared to be all set with the primary series.
- However, those children are actually not well protected since they lack the basic primary series. (ActHib requires a 3-dose primary series.)
  - Check out the Pink Book’s chapter on Hib, pages 78-82 for more info: www.cdc.gov/vaccines/pubs/pinkbook/downloads/hib.pdf
VACCINE HIGHLIGHTS

MMR & MMRV Vaccine: On October 21, Merck announced that based on input from the ACIP, professional societies, scientific leaders and customers they will not resume distribution of monovalent measles, mumps and rubella vaccine products. A copy of the letter can be obtained at: www.merckvaccines.com/monovalentMessage_102109.pdf

On Oct 20, 2009, Merck also provided updated provisional recommendations for the use of MMRV. These provisional recommendations can be found at: www.cdc.gov/vaccines/recs/provisional

Meningococcal Vaccine: On September 25, 2009, CDC published updated ACIP recommendations for revaccinating those at prolonged risk for meningococcal disease. People previously vaccinated with either meningococcal conjugate vaccine (MCV) or meningococcal polysaccharide vaccine (MPSV) and who remain at increased risk should be revaccinated. Those high risk people vaccinated between ages 2-6 years should be given MCV three years after previous vaccination. For high risk people vaccinated at age 7 years or older, give MCV five years after previous vaccination. People whose only risk factor is living in campus sponsored housing, do not need an additional dose. The complete recommendations can be found at: http://www.cdc.gov/mmwr/PDF/wk/mm5837.pdf


HPV and Zoster Vaccines No Longer Required for U.S. Immigrants

On November 13, 2009 CDC posted a Federal Register Notice revising the vaccination criteria for U.S. immigration. As of December 14, 2009, human papillomavirus (HPV) and zoster vaccination will not be required for immigrants in order to get their green cards. For more information see: http://edocket.access.gpo.gov/2009/pdf/E9-27317.pdf

RECOMMENDED CHILDHOOD AND ADOLESCENT IMMUNIZATION SCHEDULES - UNITED STATES, 2010

The 2010 immunization schedules have been approved by the American Academy of Pediatrics (AAP), Advisory Committee on Immunization Practices of the Centers for Disease Control and Prevention (ACIP) and American Academy of Family Physicians (AAFP). There are 3 schedules: one for children 0-6 years, one for people 7 years to 18 years, and a catch-up schedule for children and adolescents who start late or fall behind. To obtain a copy of the 2010 schedules go to: http://www.cdc.gov/vaccines/recs/schedules/

A net conference discussing the new schedules will be held on Thursday January 28, 2010. To register for the net conference go to: http://www.cdc.gov/vaccines/ed/ciinc/#next

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