Meningococcal Conjugate Vaccine Recommendations Update

On October 27, 2010, the Advisory Committee on Immunization Practices (ACIP) approved updated recommendations for the use of quadrivalent meningococcal conjugate vaccines (MCV4) in adolescents and persons at high risk for meningococcal disease.

This advisory summarizes two new recommendations approved by the ACIP.

This advisory contains:
1. Background information
2. Summary of ACIP's recommendations for meningococcal conjugate vaccine
3. Texas Vaccines for Children program
4. ImmTrac
5. Texas school and child-care facilities requirements for meningococcal vaccine
6. Epidemiology and surveillance
7. Reporting vaccine adverse events
8. Resources

1) Background
Meningococcal conjugate vaccines were licensed in 2005. Since then, further data on bacterial antibody persistence, US trends in meningococcal disease epidemiology, and vaccine-effectiveness have indicated many adolescents might not be protected for more than 5 years. Therefore, persons at age 11 or 12 years might have decreased protective immunity by ages 16-21 years, when their risk for disease is greatest.
In response to these findings, an advisory panel to the Centers for Disease Control and Prevention (CDC) voted on October 27, 2010 to recommend a meningitis booster shot at age 16 years—following an initial dose at age 11 or 12. The recommendation became official upon publication in the Jan. 28 issue of Morbidity and Mortality Weekly Report.

ACIP members also updated recommendations aimed at boosting the immune response in high-risk individuals.

2) Summary of ACIP Recommendations
Two key highlights to the updates are as follows:

- Routine vaccination of adolescents, preferably at age 11 or 12 years, with a booster dose at age 16 years.
- A 2-dose primary series administered 2 months apart for persons 2 through 54 years of age with persistent complement component deficiency (e.g., C5–C9, properdin, factor H, or factor D) and functional or anatomic asplenia, and for adolescents with human immunodeficiency virus (HIV) infection.

The new guidelines supplement previous ACIP recommendations for meningococcal vaccination and can be found at [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6003a3.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6003a3.htm).

3) Texas Vaccines for Children program
Changes in MCV4 recommendations include a booster dose for healthy children 11-18 years, five years after the first dose.

There are currently two licensed MCV4 products, Menactra®, manufactured by sanofi pasteur, and Menveo® manufactured by Novartis Vaccines and Diagnostics, Inc. On February 7, 2011, the FDA approved Menveo® for use in children beginning at 2 years of age, so currently both products are licensed for use in persons 2-55 years of age.

See table below for vaccination recommendations:

<table>
<thead>
<tr>
<th>Age</th>
<th>Subgroup</th>
<th>Primary Vaccination</th>
<th>Booster Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 through 18 years of age, with high risk conditions</td>
<td>Children with complement deficiencies; functional or anatomic asplenia; or those with HIV infection</td>
<td>Two doses of MCV4 vaccine, two months apart</td>
<td>If remain at increased risk for meningococcal disease, should receive an additional dose of MCV4 5 years after primary vaccination. Boosters should be repeated every five years thereafter.</td>
</tr>
<tr>
<td></td>
<td>All others in this age group recommended for vaccination</td>
<td>Single dose of MCV4 vaccine</td>
<td>If first dose received at ages 2 through 6 years and remain at increased risk for meningococcal disease, should receive an additional dose of MCV4 vaccine 3 years after primary vaccination. Boosters should be repeated every five years thereafter.</td>
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</table>
If first dose received at age 7 or older and remain at increased risk for meningococcal disease, should receive an additional dose of MCV4 5 years after primary vaccination. Boosters should be repeated every five years thereafter.

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>All other children</td>
<td>11-18 years of age</td>
<td>Routine vaccination with MCV4 vaccine at ages 11-12 years</td>
<td>If vaccinated at age 11 through 12 years, should receive a one-time booster dose at age 16 years</td>
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<td></td>
<td>If vaccinated at age 13 through 16 years, should receive a one-time booster dose at age 16 through 18 years</td>
</tr>
</tbody>
</table>

For additional information on dosage, contraindications, and precautions please refer to the package insert. If you have questions regarding this policy, please contact your TVFC consultant, Health Service Region, or Local Health Department representative.

4) **ImmTrac**

ImmTrac users can report quadrivalent (serogroups A,C, Y and W-135) meningococcal conjugate vaccines using CPT code 90734 and brand names Menactra® or Menveo®.

For more information about ImmTrac, please visit [www.ImmTrac.com](http://www.ImmTrac.com).

5) **Texas school and child-care facilities requirement for meningococcal vaccine**

In August 2009, Texas adopted a new meningococcal vaccine requirement. All students entering 7th grade are required to have a dose of meningococcal vaccine. This requirement is being phased in by grades through school year 2014-2015. Click on the link below to view the phase in schedule:

[2009-10 Immunization Requirements Phase-In Schedule](#)  
Rev. 12/2010

In addition, as of January 1, 2010, all first-time college students or transfer students enrolling in public or private or independent institutions of higher education who plan to live on-campus dormitories or other on-campus housing facilities must show evidence of vaccination against bacterial meningitis. The meningococcal vaccine must be received at least 10 days before moving in.

6) **Epidemiology and surveillance**

Meningococcal disease is a potentially life threatening illness caused by the bacterium *Neisseria meningitides*. The case fatality rate of invasive meningococcal disease is 9-12% even with appropriate antibiotic therapy. Of the survivors, 10 – 20% suffer from serious sequelae such as neurologic damage, hearing loss or loss of limbs. Meningitis (meningococcal meningitis) and septicemia (meningococcemia) are the most common presentations of meningococcal disease. Less common presentations can include pneumonia, conjunctivitis, septic arthritis, and pericarditis.

There are five serogroups of *N. meningitidis* responsible for almost all invasive cases: A, B, C, Y and W-135. Four of the five serogroups can be prevented with vaccination.
The first meningococcal polysaccharide vaccine was licensed in the United States in 1974. The first meningococcal conjugate vaccine was licensed in the United States in 2005. The current polysaccharide and conjugate meningococcal vaccines cover serogroups A, C, Y and W-135. No vaccine is available in the United States for serogroup B.

Invasive meningococcal disease is a reportable condition in Texas. An average of 57 cases of invasive meningococcal disease were reported in Texas annually (range 45 to 70) from 2005-2009.

7) Reporting adverse vaccine events
An adverse event is a health problem that is reported after someone gets a vaccine or medicine. Adverse events from privately purchased vaccine should be reported directly to VAERS at http://vaers.hhs.gov/. Secure web-based reporting is available on the VAERS website. You may also contact VAERS at (800) 822-7967 for forms and information.

In Texas, reports of adverse events following vaccination at public health clinics or with vaccine provided through public funding such as the Texas Vaccines for Children (TVFC) program should be reported through the Texas Department of State Health Services, Immunization Branch via fax or mail.

- Fax a completed VAERS Form to: 1-866-624-0180 (toll-free)
- Mail a completed VAERS form to DSHS, Immunization Branch, MC-1946, P.O. Box 149347, Austin, TX 78714-9347

A pre-addressed postage-paid VAERS form can be obtained by calling the Immunization Branch. A copy of the form is also available in the TVFC Toolkit. For more information about VAERS, you can contact DSHS at 800-252-9152.

8) Resources
- Meningococcal Vaccine Information Statement:  
- Menactra® package insert:  
- Menveo® package insert:  

We hope you generously forward this advisory to others who may benefit from this information.

Texas Department of State Health Services, Immunization Branch (MC-1946)  
P.O. Box 149347, Austin, Texas 78714-9347. (512) 458-7284 or (800) 252-9152.  
www.ImmunizeTexas.com