At the October 2010 meeting of the Advisory Committee on Immunization Practices (ACIP), the recommendations for the use of meningococcal conjugate vaccines were revised.

The ACIP now recommends routine vaccination with quadrivalent meningococcal conjugate vaccine (MCV4) at ages 11 or 12, with a booster dose at age 16. Adolescents who receive the first dose at ages 13 through 15 should be administered a one-time booster dose, preferably at ages 16 through 18. The minimum interval between doses of MCV4 is eight weeks. People who receive their first dose of meningococcal conjugate vaccine at or after age 16 do not need a booster dose. Routine vaccination of healthy people who are not at increased risk for exposure to *Neisseria meningitidis* is not recommended after age 21.

Meningococcal disease incidence has decreased since 2000. The peak in disease among 18-year-olds, however, has persisted even after routine vaccination was recommended in 2005.

<table>
<thead>
<tr>
<th>Age group</th>
<th>Decrease in estimated annual number of cases* from 2000 - 2004 to 2005 - 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 through 14 years</td>
<td>74%</td>
</tr>
<tr>
<td>15 through 18 years</td>
<td>27%</td>
</tr>
</tbody>
</table>

*Cases of serotypes C and Y meningococcal disease

Despite the current low burden of meningococcal disease, the ACIP Meningococcal Vaccines Work Group agreed that because of mounting evidence of waning immunity five years post-vaccination, vaccinating adolescents with a single dose at ages 11 or 12 is not the best strategy for protection through age 21. Additionally, data indicates that as adolescents grow older, they are less likely to visit a health-care provider for preventive care. Adding a booster dose to the recommended schedule would provide more opportunities to increase vaccination coverage, while adolescents ages 11 through 13 would continue to be protected.

Other New ACIP Recommendations:

- MCV for people ages 2 through 54 with reduced immune response
- Tdap for children ages 7 through 10 and adults older than 64
- Revised general recommendations
Reminder/Recall Now Available in NDIIS

Reminder/recall functionality has been added to the North Dakota Immunization Information System (NDIIS). Reminder/recall is a method providers can use to identify patients who are due or coming due (reminder) or overdue (recall) for an immunization.

The reminder/recall function is found under the “System Maintenance” tab. Providers can choose their own criteria to run reminder/recall reports. Labels and postcards can be printed directly from the NDIIS or lists can be generated for the practice to do their own patient follow-up.

Currently, the system does not list which vaccines the patients are due for. This report will be available in the near future. Once a list is generated, providers can look up each patients’ immunization record and use the forecaster to determine which vaccines are coming due or overdue.

The North Dakota Department of Health (NDDoH) will not be conducting reminder/recall at the state level. An instructional video about how to use the reminder/recall function is available at www.ndhealth.gov/Immunize/NDIIS/NDIIS.htm. Business rules for using reminder/recall should be reviewed and can be found on our website at: www.ndhealth.gov/Immunize.

Tdap Program Ending

Tetanus, diphtheria and pertussis (Tdap) vaccine has been offered to everyone in North Dakota, regardless of age or insurance status, since May 2010. **This special program will be ending March 31, 2011.**

After March 31, 2011, providers may only use state-supplied Tdap vaccine for uninsured and underinsured adults, parents/guardians/caregivers of infants younger than 12 months (including those with insurance) or children who are eligible for the Vaccines For Children (VFC) program. Local public health units may use state-supplied Tdap to immunize children for the middle school requirement, regardless of insurance status.

State-Supplied Vaccine Update

Pro-Quad®, the measles, mumps, rubella and varicella combination vaccine, is no longer available for order. Due to nationwide supply issues, it is unknown when ProQuad® will return to the market.

Kinrix®, the DTaP and IPV combination vaccine, currently is unavailable in the syringe presentation. Kinrix® vials may be ordered at this time, but it is expected that the supply of vials will not be able to keep up with the demand through April 2011. Providers should be prepared for intermittent availability of Kinrix® and stock their inventory accordingly. Orders for Kinrix® syringes will be changed to vials. Providers will be contacted if the vial presentation is unavailable and given the option of ordering single antigen DTaP and IPV.
2010 AFIX Awards

AFIX (Assessment, Feedback, Incentive, eXchange) is a continuous quality improvement tool that consists of assessment of the health-care provider's vaccination coverage levels and immunization practices; feedback of the results to the provider, along with recommended strategies to improve coverage levels; motivating the provider through incentives to improve vaccination coverage levels; and exchanging health-care information and resources necessary to facilitate improvement. The North Dakota Department of Health (NDDoH) began conducting these quality assurance visits in 2000. In 2010, coverage rates were assessed excluding Hib vaccine because of a recent shortage of Hib-containing vaccines.

The following providers have been recognized as “Immunization Leaders” by achieving immunization rates of 85 percent or higher by 24 months of age for the 4:3:1:0:3:1:4 (4 DTaP:3 HepB:1 MMR:0 Hib:3 IPV:1 varicella:4 PCV) series in 2010.

Private Providers:
- Mid Dakota Clinic Main — Bismarck
- Sanford Children’s — Fargo
- Trinity Health Center West — Minot

Public Providers:
- First District Health Unit — McLean County
- Lake Region District Health Unit — Ramsey County

Nationally and in North Dakota, coverage rates for the fourth dose of DTaP lag behind other antigens. In 2010, the following providers achieved the program goal of 90 percent or higher for the fourth dose of DTaP and are being recognized with the new “DTaP 4” award.

Private Providers:
- Sanford Valley City — Valley City
- Mid Dakota Clinic Main — Bismarck
- West River Health Services — Bowman
- Midgarden Family Clinic — Park River

Public Providers:
- First District Health Unit — McLean County
- Lake Region District Health Unit — Ramsey County

The following providers increased their rates by 10 percent or more since their last documented AFIX visit and are receiving the “Most Improved Immunization Rates” award.

Private Providers:
- Avera United Clinic — Ellendale
- Mandan Family Clinic East — Mandan
- West River Health Services — Bowman
- Sanford West Fargo — West Fargo

Public Providers:
- First District Health Unit — McLean County
- Pembina County Health Department
- Ransom County Health Department
- Walsh County Health Department
- Trenton Community Clinic

Two providers are receiving the “Immunizations: Tradition of Excellence” award for achieving rates of 85 percent or higher in three out of the last five years.

Sanford Children’s — Fargo
- Lake Region District Health Unit — Ramsey County

*Not all providers are assessed each year. The above providers were assessed in 2010.
The 62nd North Dakota Legislative Assembly is now in session. Two important bills, if passed, will affect the immunization providers of North Dakota directly.

Senate Bill 2035 will allow immunization-certified pharmacists to administer all vaccines to people ages 11 years and older. Additionally, they would be able to administer influenza vaccine to children as young as 5. The bill includes language requiring pharmacies, like all immunization providers, to enter into the North Dakota Immunization Information System (NDIIS) all doses given to children 18 years and younger.

Senate Bill 2276 will create a state vaccine fund and a committee to assess companies that provide health insurance in North Dakota. Using this funding, all vaccines would be purchased from the federal contract; providers would no longer purchase vaccine for their “private” supply. This bill would mean all recommended childhood vaccines would be supplied by the North Dakota Department of Health (NDDoH).

Since both of these bills have passed in their respective Senate committees and the Senate floor, they will now be turned over to the House of Representatives for further action. Follow the action of the legislative assembly at http://www.legis.nd.gov/assembly/62-2011/.

On Dec. 22, 2010, the United States Food and Drug Administration (FDA) approved Gardasil®, Merck’s quadrivalent human papillomavirus (HPV) vaccine, for the prevention of anal cancers and precancerous lesions due to HPV strains 6, 11, 16 and 18 in people ages 9 through 26 years. Gardasil® already is approved for females of the same ages for the prevention of cervical, vulvar and vaginal cancers and their associated precancerous lesions due to HPV types 6, 11, 16 and 18. It also is approved for the prevention of genital warts caused by types 6 and 11 in both males and females.

Although anal cancer is uncommon in the general population, the incidence is increasing. HPV is associated with approximately 90 percent of anal cancers. The American Cancer Society estimates that about 5,300 people are diagnosed with anal cancer every year in the U.S., with more women diagnosed than men.

Gardasil® will not prevent the development of anal precancerous lesions associated with HPV infections already present at the time of vaccination. For all of the indications for use approved by the FDA, the full potential for benefit from Gardasil® is obtained by those who are vaccinated prior to becoming infected with the HPV strains contained in the vaccine.
New Continuing Education Opportunities for Nurses

The vaccine world is extremely dynamic; many changes occurred in 2010 alone. Two new vaccines were licensed and recommended for use in the United States (Prevnar-13® and Menveo®). The Advisory Committee on Immunization Practices (ACIP) updated its recommendations for HPV, influenza, MMRV, meningococcal, pneumococcal, rotavirus and Tdap vaccines. That's just the national level!

Recognizing that providers need focused education on a variety of immunization topics, the North Dakota Immunization Program is now offering eight different courses for nursing continuing education credit. Because provider offices are busy and staff members only have limited time available, five of the course offerings are 30 minutes in length. There is no limit to how many presentations may be offered in a provider’s office.

A list of the courses with a brief description and suggested target audience is available on our website: http://www.ndhealth.gov/Immunize/Documents/Providers/Forms/CEUsummary.pdf. Please contact the Immunization Program if your practice would like an educational presentation.

General Immunization Recommendations Q & A

Q: A dose of FluMist® was given one day after its expiration date. Can we count this dose as valid?

A: No. A vaccine given after its expiration date is never considered valid. This error should be explained to the patient or parents and the dose should be repeated at least 28 days after the invalid dose.

Q: A nurse in our clinic accidentally gave a dose of MMR vaccine intramuscularly instead of subcutaneously. What should we do?

A: This dose can be counted as a valid dose of MMR. The error should be documented and explained to the patient or parents. In general, response to a vaccine is unlikely to be affected if administered by an incorrect route. Two exceptions, however, are hepatitis B and rabies vaccines. If these two vaccines are given by any route other than intramuscularly, the dose should be repeated.

If the expired dose is not a live vaccine, the dose should be repeated as soon as possible.

Q: Do we need to aspirate before giving a vaccination?

A: No. ACIP does not recommend aspiration when administering vaccines because no data exist to justify the need for this practice. IM injections are not given in areas where large blood vessels are present. Given the size of the needle and the angle at which you inject the vaccine, it is difficult to enter a vessel without rupturing it and even more difficult to actually deliver the vaccine intravenously.
2010 Vaccine-Preventable Disease Summary

Preliminary data indicates that 57 cases of pertussis were reported from 11 North Dakota counties in 2010. Two of the cases were hospitalized. In comparison, 30 cases of pertussis were reported in 2009, 25 cases in 2008 and 14 cases in 2007.

Three suspected cases of mumps were reported in three North Dakota counties in 2010. Two cases of mumps were reported in both 2009 and 2008. The cases were not epidemiologically linked. Preliminary data for 2010 indicates 51 cases of chickenpox were reported in the state, compared to 86 reported in 2009 and 106 in 2008. Although healthcare providers, schools, childcare facilities and local public health units are mandated to report all cases of chickenpox to NDDoH, chickenpox continues to be under-reported in North Dakota.

In 2010, two cases of meningococcal disease were reported and laboratory confirmed in North Dakota, compared to two cases in 2009 and six cases reported in 2008. Of the cases reported in 2010, both were serogroup Y.

No cases of measles, rubella, diphtheria, tetanus or Haemophilus influenzae type B were reported.

2010 - 2011 Influenza Update

As of March 2, 2011, there have been 864 lab-identified influenza cases reported to the NDDoH from multiple North Dakota counties. At this time last year in North Dakota, 3,250 cases were reported.

Forty-nine of the cases have been identified as type A novel H1N1, 48 cases type A H3, 661 are type A unspecified (no further testing was done to determine subtype), 104 are type B and two cases are unknown type. Fifty-two percent (446) of the cases have been in children ages 19 and younger. One of the two influenza deaths in North Dakota was a child younger than 10.

Nationally, 44 states are reporting widespread influenza activity, including North Dakota, Minnesota, Montana and South Dakota.

Minnesota has reported 429 patients hospitalized with influenza and ten deaths.

Montana has had 198 confirmed cases of influenza. Cases have been reported in the neighboring counties of Sheridan, Roosevelt, Dawson, Wibaux, Fallon and Carter.

South Dakota has had 553 confirmed cases of influenza and six deaths. Sixty-eight percent (376) of the cases have been in people ages 24 and younger. The border counties of Harding, Perkins, Corson, Brown and Roberts have reported influenza activity.

The southern regions of Manitoba and Saskatchewan are both reporting sporadic influenza activity.
Immunization Program Staff to Present at National Immunization Conference

On March 28 to 31, 2011, the NDDoH Immunization Program will be traveling to Washington, D.C., for the National Immunization Conference. Three members of the Immunization Program and North Dakota’s Epidemic Intelligence Service (EIS) officer from the Centers for Disease Control and Prevention (CDC) have been selected to present at this important forum.

Molly Sander will be presenting an overview of local public health unit billing for immunizations in North Dakota with a focus on lessons learned.

Using the race field in the NDIIS, Keith LoMurray is presenting an analysis of the North Dakota immunization rates of American Indian children compared to white children. In North Dakota, American Indian children are less likely than white children to have received all recommended vaccines and are more likely to have delayed initiation of immunizations.

Abbi Pierce will present a project that compared school immunization records to immunization records from NDIIS. A comparison of the number and percentage of NDIIS records that match school records was done. The number of children considered up to date by the NDIIS versus the number of students considered up to date by their school records also was studied.

Dr. Jennifer Cope is presenting on two factors, using the school immunization survey, found to be associated with high (≥90%) Tdap and meningococcal coverage in middle schools. The two factors are policies that exclude students from school until they are up to date with the required vaccinations and having a nurse determine up-to-date vaccination status versus other personnel such as principals or administrative assistants.

Prevention Partnership Program Enrollment

This year’s annual enrollment packets were delayed by the late release of the 2011 CDC immunization schedules. Many NDDoH forms have been updated and the North Dakota Vaccine Management Plan was extensively revamped.

The enrollment, profile and storage certification forms must be completed and returned by March 31. As a reminder, the yellow provider enrollment form must be signed by the medical director for the facility. This person must be a physician (M.D. or D.O.), have prescription-writing authority in North Dakota and be considered legally responsible for the practice.

Please contact Tatia Hardy at 701.328.2035 or tahardy@nd.gov with any questions regarding annual enrollment.
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Division of Disease Control
Immunization Program

www.ndhealth.gov/Immunize

The Immunization Newsletter is a quarterly production distributed to Prevention Partnership Providers.

Do you have expired state-supplied vaccine?

1. Complete Non-viable Vaccine Return and Wastage Form.
2. Contact NDDoH for a McKesson return label.
3. Send vaccine with regular UPS pickup.
4. Fax copy of Return and Wastage Form to NDDoH.

Tracy Miller has been named State Epidemiologist. Miller joined the state health department in 1998 as a field epidemiologist in Minot. She was promoted to the position of program manager for the Epidemiology and Laboratory Capacity (ELC) program and, most recently, served as the senior epidemiologist. As State Epidemiologist, Miller is responsible for overseeing the surveillance and investigation of infectious diseases in North Dakota, including vaccine-preventable diseases. In her role as Deputy Division Director, she also is responsible for overseeing the North Dakota Immunization Program. Please help us welcome Tracy to her new role!

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