NORTH DAKOTA
DEPARTMENT *of* HEALTH

Spring Immunization Newsletter

Division of Disease Control Immunization Program

Spring 2010

Prevnar 13® is Now Available

Prevnar 13®, the new pneumococcal conjugate vaccine manufactured by Pfizer, is now available. Prevnar 13® was licensed by the U.S. Food and Drug Administration (FDA) in Feb. 2010 and will be replacing Prevnar®.

The Advisory Committee on Immunization Practices (ACIP) has released provisional recommendations. Those recommendations are summarized in the tables on pages 2 and 3 of this newsletter. Providers should be using only Prevnar 13®.

At the time that Prevnar® was licensed, the seven *Streptococcus pneumoniae* serotypes Prevnar® protected against accounted for about 80 percent of invasive pneumococcal disease (IPD) in young children in North America. With the use of Prevnar®, by 2007, the overall rate of IPD caused by these seven serotypes in children younger than 5 was reduced by 99 percent. However, at that time, it was also shown that of the remaining IPD in this age group, 62 percent were caused by the six additional serotypes that are now included in Prevnar 13®. Serotype 19A, which has emerged as a leading cause of invasive pneumococcal disease since the decline of disease by vaccine serotypes, is one of those additional serotypes.

Suspension of Rotarix®

In March 2010, the FDA learned that DNA from porcine circovirus type 1 (PCV1) is present in Rotarix®. There is no evidence that this material poses a safety risk. The finding of this material was unexpected, and the FDA felt it was best to investigate the matter further. The FDA made the difficult decision to recommend that clinicians suspend the usage of Rotarix® until more information, data and advice could be gathered.

Rotateq®, which is made using a different process than Rotarix®, is the only rotavirus vaccine currently available for order. Providers that have Rotarix® on hand should keep it until a recommendation is made.

Are your forms up-to-date?

- Vaccine Order Form (May 2010)
- Vaccine Transfer Form (March 2010)
- Vaccine Coverage Table (March 2010)
- Vaccine Monthly Report (March 2010)

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Recommended schedules for administering PCV13 to children <24 months of age by PCV vaccination history and age		
Age at Examination	**Vaccination History: Total number of PCV7 and/or PCV13 doses received previously**	**Recommended PCV13 Schedule[1]**
2 – 6 months	0 doses	3 doses, 8 weeks apart; fourth dose at 12 – 15 months of age
	1 dose	2 doses, 8 weeks apart; fourth dose at 12 – 15 months of age
	2 doses	1 dose; 8 weeks after the most recent dose; fourth dose at age 12 – 15 months of age
7 – 11 months	0 doses	2 doses, 8 weeks apart; third dose at 12 – 15 months of age
	1 or 2 doses before age 7 months	1 dose at age 7 – 11 months, with a second dose at 12 – 15 months, a minimum of 8 weeks later
12 – 23 months	0 doses	2 doses, a minimum of 8 weeks apart
	1 dose before age 12 months	2 doses, a minimum of 8 weeks apart
	1 dose at 12 months or older	1 dose at least 8 weeks after the most recent dose[2]
	2 or 3 doses before age 12 months	1 dose at least 8 weeks after the most recent dose
	4 doses of PCV7 or other age-appropriate, complete PCV7 schedule	1 supplemental dose at least 8 weeks after the most recent dose[3]

1. Minimum interval between doses is 8 weeks except for children vaccinated at age <1 year, for whom minimum interval between doses is 4 weeks.
2. No additional PCV13 doses are indicated for children ages 12 through 23 months who have received 2 or 3 doses of PCV7 before 12 months and at least 1 dose of PCV13 at ages 12 months or older.
3. For children who have underlying medical conditions, a supplemental PCV13 dose is recommended through 71 months of age. For list of conditions, see MMWR 2010;59:9.

Recommended schedules for administering PCV13 to children >24 months of age by PCV vaccination history and age		
Age at Examination	**Vaccination History: Total number of PCV7 and/or PCV13 doses received previously**	**Recommended PCV13 Schedule[1]**
Healthy children ages 24 – 59 months	Unvaccinated or any incomplete schedule	1 dose at least 8 weeks after the most recent dose
	4 doses of PCV7 or other age-appropriate, complete PCV7 schedule	1 supplemental dose at least 8 weeks after the most recent dose[2]
Children ages 24 – 71 months with underlying medical conditions	Unvaccinated or any incomplete schedule of more than 3 doses	2 doses, one at least 8 weeks after the most recent dose and another dose at least 8 weeks later
	Any incomplete schedule of 3 doses	1 dose at least 8 weeks after the most recent dose
	4 doses of PCV7 or other age-appropriate, complete PCV7 schedule	1 supplemental dose at least 8 weeks after the most recent dose

1. Minimum interval between doses is 8 weeks.
2. For children who have underlying medical conditions, a supplemental PCV13 dose is recommended through 71 months of age. For list of conditions, see MMWR 2010;59:9.

Prevnar 13® Questions and Answers

Q: Why is a supplemental dose of Prevnar 13® necessary, especially for healthy children who have been completely vaccinated with Prevnar®?

A: Invasive pneumococcal disease caused by the *S. pneumoniae* serotypes found in Prevnar® has decreased by 99 percent. Serotype 19A, however, which is included in Prevnar 13®, has emerged as a leading cause of IPD.

Q: Should we still give high-risk children pneumococcal polysaccharide vaccine (PPSV-23)?

A: Yes. Children who are at high risk of developing IPD should complete doses of Prevnar 13® before being given PPSV-23. The minimum interval between doses of Prevnar 13® and PPSV-23 is eight weeks. Children who have already received PPSV-23 also should receive the recommended doses of Prevnar 13®.

Q: Should we use up our remaining supply of Prevnar® before giving Prevnar 13®?

A: No. State-supplied vaccine should be returned to McKesson and privately purchased Prevnar® should be returned to Pfizer once providers have Prevnar 13 on hand.

New Vaccine Information Statements

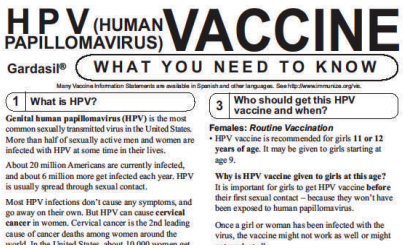
New Vaccine Information Statements (VIS) are available. Providers may use up their existing stock of VISs, as long as they are supplemented verbally or with written information to the patient.

The VIS for PCV-13 is now available. There are separate VISs for Cervarix® and Gardasil®. The VIS for Gardasil® now has information for males, reflecting the recently added male indication.

Since Gardasil® is the only human papillomavirus (HPV) vaccine offered by the NDDoH, providers will receive the Gardasil® VIS when they request HPV information statements from the NDDoH.

The Japanese encephalitis (JE) and anthrax Vaccine Information Statements also have been updated.

Providers can find all of the most current VISs on the Centers for Disease Control and Prevention (CDC) website: http://www.cdc.gov/vaccines/


HPV (HUMAN PAPILLOMAVIRUS) VACCINE

Gardasil® WHAT YOU NEED TO KNOW

Many Vaccine Information Statements are available in Spanish and other languages. See http://www.immunize.org/vis.

1 What is HPV?

Genital human papillomavirus (HPV) is the most common sexually transmitted virus in the United States. More than half of sexually active men and women are infected with HPV at some time in their lives.

About 20 million Americans are currently infected, and about 6 million more get infected each year. HPV is usually spread through sexual contact.

Most HPV infections don't cause any symptoms, and go away on their own. But HPV can cause **cervical cancer** in women. Cervical cancer is the 2nd leading cause of cancer deaths among women around the

3 Who should get this HPV vaccine and when?

Females: ***Routine Vaccination***

- HPV vaccine is recommended for girls **11 or 12 years of age**. It may be given to girls starting at age 9.

Why is HPV vaccine given to girls at this age?

It is important for girls to get HPV vaccine **before** their first sexual contact – because they won't have been exposed to human papillomavirus.

Once a girl or woman has been infected with the virus, the vaccine might not work as well or might

Acetaminophen Administration After Vaccination

On Oct. 17, 2009, *The Lancet* published a study that found that infants who received three doses of acetaminophen following immunization had reduced immune responses to certain vaccines. Based on these findings, **should we stop recommending acetaminophen for fever or discomfort *after* infant immunization?**

No. Acetaminophen can be used to treat pain or fever if it should occur following vaccination. Evidence from this study would discourage the prophylactic use of acetaminophen prior to or immediately following vaccination. In the upcoming 2010 General Recommendations on Immunization, CDC will remove all recommendations for prophylactic use of acetaminophen or other analgesics BEFORE or AT THE TIME OF vaccination. The American Academy of Pediatricians (AAP) has already removed such recommendations from the *Red Book*.

North Dakota's First Statewide Immunization Conference

North Dakota's upcoming immunization conference will be an excellent opportunity for providers to learn about the constantly changing vaccine world. Donna Weaver, RN, MN, Nurse Educator for the CDC's National Immunization Program, will present important information about childhood, adolescent and adult vaccines. Patricia Stinchfield, RN, MS, CPNP, director of the Children's Hospital of Minnesota's pediatric infectious disease and former voting member of the ACIP, will discuss communicating with parents about vaccine safety.

GET YOUR BACK-TO-SCHOOL SHOTS DONE BEFORE THE CONFERENCE!

The conference will be held **Aug. 24 and 25, 2010**, at the Seven Seas in Mandan, N.D.

School Immunization Survey Results

The results for the 2009-2010 North Dakota school immunization survey are in. The North Dakota Department of Health (NDDoH) was required to validate the school immunization survey results. What this means is that NDDoH had to collect a randomized sample of kindergartners' immunization records from schools throughout the state and compare them to what was submitted by the schools in the school immunization survey. Last year was the first time NDDoH had been required to validate the results.

Kindergarten Immunization Rates

Vaccine	Immunization Rate
Polio	92.55%
DTP/DTaP/DT	92.95%
MMR	91.82%
Hepatitis B	95.11%
Varicella*	90.69%

*Includes immunity from vaccination or disease.

The survey also showed that 11 kindergartners had vaccination exemptions due to medical reasons, 19 due to religious reasons, 70 due to philosophical reasons and 18 due to moral reasons.

It is interesting to note that there has been a slight increase in exemptions and a decrease in immunization rates at kindergarten entry.

Middle School§ Immunization Rates

Vaccine	Immunization Rate
Polio	97.78%
DTP/DTaP/DT	98.07%
MMR	97.89%
Hepatitis B	98.0%
Varicella*	46.53%
Td/Tdap	65.44%
MCV4	64.92%

§ Middle school entry is either sixth or seventh grade, depending on the school.

*Includes immunity from vaccination or disease.

The survey also showed that 13 seventh graders had vaccination exemptions due to medical reasons, 11 due to religious reasons, 48 due to philosophical reasons, and 12 due to moral reasons.

Haemophilus influenzae type B (Hib) Booster Dose: Active Recall

Based on data from the North Dakota Immunization Information System, many children between the ages of 15 months and 5 still have not received a booster dose of Hib vaccine. On April 1, 2010, parents of those children received phone calls with a recorded message from the NDDoH. Almost 75 percent of the 5,669 calls were successful, meaning either someone answered or a message was left on an answering machine.

The two Hib-containing vaccines currently offered by NDDoH are Pentacel® and PedvaxHIB®, both of which can be used in children younger than 5.

Be sure to check every child's immunization status at every immunization encounter!

Special Masters' Decisions on Thimerosal in Vaccines as a Cause of Autism

The United States Court of Federal Claims' Office of Special Masters has issued rulings on the theory that thimerosal-containing vaccines can cause autism (autism spectrum disorder, ASD). This is the second theory of "general causation" as put forth in the Omnibus Autism Proceedings.

The Omnibus Autism Proceedings were instituted to process the large number of petitions claiming that vaccines had caused autism. The Petitioner's Steering Committee (PSC), made up of counsel to the petitioners, selected three test cases for each theory to be judged by a Special Master of the Court of Federal Claims.

The first theory, that MMR vaccine and thimerosal-containing vaccines can combine to cause autism, was found in all three test cases to be false. The third theory, that MMR vaccine alone can cause autism, is no longer being tried, as evidence pertaining to that theory was largely presented in the first theory test cases.

The three test cases of the second theory all involved children whose lives had been affected drastically by autism. The claims that the children's autism was caused by MMR vaccine and thimerosal-containing vaccines in combination were found to be scientifically unsupportable.

In the case of King v. Secretary of Health and Human Services, Special Master George L. Hastings, Jr. concludes in his final ruling: "After studying the extensive evidence in this case for many months, I am convinced that the opinions provided by the petitioners' experts in this case, advising the King family that there is a causal connection between thimerosal-containing vaccines and Jordan's autism, have been *quite wrong*."

In the case of Dwyer v. Secretary of Health and Human Services, Special Master Denise K. Vowell includes in her summary: "Unfortunately, the Dwyers (and uncounted other parents of children with ASD) have relied upon practitioners and researchers who peddled hope, not opinions grounded in science and medicine."

New Rabies Postexposure Prophylaxis Recommendations

The ACIP has reduced its rabies postexposure prophylaxis (PEP) for healthy people from a series of five doses of rabies vaccine to a series of four. An exposed person who is previously unvaccinated should be given the first dose of vaccine as soon as possible. The day of the first dose of vaccine is referred to as day zero. Doses should then be given on days three, seven and 14.

Recommendations for the use of human rabies immune globulin (HRIG) and PEP for a previously vaccinated person are unchanged. HRIG may be given once on day zero, and if not administered then, up to and including day seven of PEP. A person who has been vaccinated previously requires two doses of vaccine, one as soon as possible after exposure (day zero) and the second on day three.

The recommendations can be found in their entirety at: http://www.cdc.gov/vaccines/pubs/ACIP-list.htm.

North Dakota H1N1 Immunization Rates

According to the North Dakota Immunization Information System (NDIIS), since Sept. 1, 2009, more than 180,000 doses of H1N1 influenza vaccine have been given. Of the five priority groups first recommended to receive vaccine by the ACIP, health care workers and contacts of infants younger than 6 months had the highest rates of vaccination. Adults ages 19 through 24, a subgroup of the 6 months through 24 years priority group, had the lowest rate of vaccination of any group.

H1N1 Influenza Vaccination Rates (NDIIS) as of 4-9-2010

	ND Vaccinated	ND Population	ND %
Doses Given Statewide Since 9/1/2009	181,422	641,423	28.28%
Pregnant Women*	4521	8339	54.22%
Health Care Workers*	21,439	29,508	72.65%
Contacts to Infants < 6 months*	7716	10,264	75.18%
Children 6 months - 18 years fully vaccinated*	38,527	148,431	25.96%
Children 6 months - 18 years with at least one dose*	58,844	148,431	39.64%
Adults 19 Years to 24 Years*	8,795	72,747	12.09%
Adults 25 Years to 64 Years with Chronic Disease*	12,959	48,229	26.87%
Adults 25 Years to 64 Years Healthy	32,140	273,353	11.76%
Adults 65 and Older	25,444	94,276	26.99%

*ACIP-recommended priority group

The novel H1N1 influenza strain **will be included** in this fall's seasonal influenza vaccine.

Winter *Immunization Newsletter* Correction

In the winter edition of the *Immunization Newsletter*, Meritcare Broadway Children's in Fargo was incorrectly listed as Meritcare Broadway Children's Southwest.

New Meningococcal Conjugate Vaccine Available

Menveo®, a new meningococcal conjugate vaccine manufactured by Novartis, is now available in the U.S. Menveo® is approved by the Food and Drug Administration (FDA) for use in adolescents and adults ages 11 through 55.

Menveo® has a lot number on the outside carton, as well as different lot numbers on both the lyophilized powder and the liquid vaccine component. If providers order Menveo® for their private stock, please record the lot number on the outside carton in NDIIS.

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

Remember to submit your nominations for Providers' Choice Awards!

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Finding Duplicates? Here's What to Do!

Duplicates in the North Dakota Immunization Information System (NDIIS) can occur for a number of reasons. With many new duplicates as a result of the H1N1 scanning process, the Immunization Program has become inundated with requests to remove duplicates.

If you find a patient in the NDIIS twice and are certain it is a duplicate, please type "DUPLICATE" in the address field of the record that should be removed. For complex duplicates, please enter the correct name into the address field with "DUPLICATE."

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