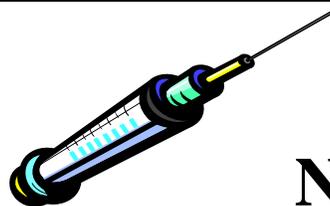


# Immunization



# Newsletter

North Dakota Department of Health

Division of Disease Control

Spring 2009

## **North Dakota Immunization Program is Receiving Federal Stimulus Funding**

The Obama administration announced on April 9, 2009, that \$300 million from the American Recovery and Reinvestment Act (ARRA) would be used to ensure more underserved Americans receive the vaccines they need. The majority of these new resources will be used to purchase vaccines that will be distributed through the Centers for Disease Control and Prevention's (CDC) Section 317 immunization program to all 50 states, several large cities, and U.S. territories. The Section 317 program provides funding for immunization operations and infrastructure necessary to implement a comprehensive immunization program at the federal, state and local levels.

Of the \$300 million in Recovery Act funds allocated to the Section 317 program, \$250 million will help existing Section 317 grantees acquire and make recommended vaccines available by using \$200 million of these funds to purchase vaccines that will be made available to states and territories. The remaining \$50 million will be used to provide program operation grants and vaccine distribution funding that states and territories will use to deliver the vaccines and strengthen vaccination programs. Vaccines and Recovery Act resources also will be made available to special Section 317 programs in Chicago, Houston, New York City, Philadelphia and San Antonio.

An additional \$18 million in grants will be used to provide support to Section 317 grantees that demonstrate innovative approaches to increase the number of

Americans who receive the childhood vaccine series, zoster vaccine and influenza vaccine, and for improving reimbursement practices. Competitive grant applications for these programs will be available sometime in May.

Nearly \$32 million in Recovery Act funds will be used to increase information, communication and education and strengthen the evidence base for immunization. This will include activities to increase national public awareness and knowledge about the benefits and risks of vaccines and vaccine-preventable diseases. Funds also will help provide tools and education for health-care providers and to monitor and assess the impact and safety of licensed vaccines routinely recommended for use in the United States to ensure that the national vaccine policy is appropriate and effective.

North Dakota will receive \$655,517 in Section 317 funding.

Other competitive grants also will be available for immunization programs.

For more information about the ARRA, visit:

[www.cdc.gov/vaccines/about/recovery-act-funds.htm](http://www.cdc.gov/vaccines/about/recovery-act-funds.htm).



## **North Dakota Immunization Media Campaign**

Starting during National Infant Immunization Week, April 25 – May 2, the North Dakota Department of Health (NDDoH) began airing a statewide television and radio campaign promoting immunizations.

Radio campaign messages will air April 26 through June 27, 2009.



- The first radio public service announcement (PSA) was directed towards parents for infant immunization and began airing April 26, during NIIW. This radio PSA will last for three weeks, ending May 16.
- The second radio PSA is directed toward mothers of children of any age and began airing May 17. This radio PSA will last for three weeks, ending June 6.
- The third radio PSA will be directed toward parents of preteens and adolescents (11 and older) and the adolescents themselves. It will focus on preteen immunization recommendations and middle school requirements. This radio PSA should begin airing June 7 and will last for three weeks, ending June 27.

Television campaign messages will air for three weeks between April 26 and June 13, 2009.

- The first television PSA was directed towards infant immunization and began airing on April 26, during National

Infant Immunization Week (April 26 through May 2). This television PSA lasted for one week, ending May 2.

- The second television PSA was directed toward mothers of children of any age and began airing May 17. This television PSA lasted for one week, ending May 23.
- The third television PSA will be directed toward parents of preteens and adolescents and the adolescents themselves. It will focus on preteen immunization recommendations and middle school requirements. This television PSA should begin airing June 7 and should last for one week, ending June 13.

To view the PSAs, please visit [www.ndhealth.gov/Immunize/PSA/](http://www.ndhealth.gov/Immunize/PSA/).



## **Polio Virus Associated With Oral Polio Vaccine Reported in Minnesota**

Minnesota state health officials are investigating a case of infection associated with the polio virus in a Minnesotan who died last month.

The patient was infected with a virus strain found in the oral polio vaccine. The oral vaccine, which is no longer used in the U.S., contained live polio virus. The injected polio vaccine now in use contains only inactivated virus.

The patient died with symptoms that

included paralytic polio, but it is not known to what extent the polio may have contributed to the death. The patient had a weakened immune system and multiple health problems. The patient most likely acquired the vaccine-derived polio virus from someone who had received the live-virus, oral poliovirus vaccine (OPV) before the use of OPV was discontinued nine years ago.

Infection from polio virus can cause a wide range of symptoms. Most infections result in no or mild symptoms, but in rare cases can severely affect the neurologic system, resulting in paralysis.

This type of polio infection is very rare. In rare instances, a person who has either never been vaccinated or has certain immunodeficiencies can acquire the polio virus from someone who has been vaccinated and is excreting the virus in their stool. Sometimes these infections result in illness, as happened in this situation. Only 45 cases of vaccine-derived polio disease in persons with immunodeficiencies have been reported in the world since 1961.

This is the second instance of a polio infection caused by a vaccine strain of virus in the United States since 2000, when use of live-virus oral polio vaccine was discontinued in the U.S. All polio vaccinations in the U.S. are now done with an injected, killed-virus vaccine. The other instance of vaccine-derived polio infection also occurred in Minnesota, in 2005, but was very different from this case. It occurred in an unimmunized child from a community that had high levels of non-immunization and that case was not associated with neurological symptoms.

Naturally occurring polio has been eradicated in the western hemisphere. The

last case of naturally occurring (not from vaccine) paralytic polio disease occurred in the United States in 1979.

## **Pink Books**

The 11<sup>th</sup> Edition of Epidemiology and Prevention of Vaccine-Preventable Diseases (The Pink Book) will be available in May 2009. The NDDoH already has ordered copies for all providers who are enrolled in the Prevention Partnership Program. As soon as they are shipped to the NDDoH, the books will be mailed to providers.

The Pink Book, developed by the CDC, is for health-care providers, clinics, pharmacies, medical schools, student health centers, hospitals, assisted-living facilities and schools involved in immunizations.

The easy-to-reference Pink Book contains updated, comprehensive information about each vaccine-preventable disease, as well as the latest information about:

- Principles of vaccination.
- General recommendations about immunization.
- Immunization strategies for health-care practices and providers.
- Vaccine safety.

Also included are updated appendices with information about schedules and recommendations, vaccines, vaccine storage and handling, vaccine administration, vaccine information statements, and immunization resources.

The Pink Book provides physicians, nurses, nurse practitioners, physician assistants, pharmacists, and others with the most up-to-date, comprehensive information about vaccine-preventable diseases.



## **Hepatitis A Vaccine Recommended for Contacts of International Adoptees**

At the February 25 – 26 Advisory Committee on Immunization Practices (ACIP) meeting, ACIP members voted to recommend hepatitis A vaccination for all previously unvaccinated people who anticipate having close personal contact with an international adoptee from a country that has high or intermediate hepatitis A endemicity.

Provisional recommendations have not yet been published. But the slides at the ACIP meeting included the following recommendations:

Hepatitis A vaccination for all contacts of international adoptees (all ages):

- When an adoption is planned for a child from a country of high or intermediate endemicity, people who will have close personal contact with the adoptee during the first 60 days following arrival of the adoptee in the U.S. should be identified.
- Hepatitis A vaccination is recommended for all previously unvaccinated people who anticipate close personal contacts with an international adoptee from countries of high and intermediate endemicity during the first 60 days following arrival in the U.S.
- The first dose of hepatitis A vaccine should be administered as soon as

adoption is planned. Ideally, first dose of hepatitis A vaccine should be administered at least two weeks prior to the arrival of the adoptee.

For more information about ACIP recommendations or to view presentations from the ACIP meetings, visit [www.cdc.gov/vaccines/recs/acip/default.htm](http://www.cdc.gov/vaccines/recs/acip/default.htm)



## **Tetanus Vaccination and Flooding**

The following information provides guidance for use of tetanus diphtheria (Td) and tetanus, diphtheria and acellular pertussis (Tdap) vaccine during flood conditions based on recommendations from the U.S. Centers for Disease and Prevention (CDC).

There is usually no increased risk of getting vaccine-preventable diseases, such as tetanus, during a flood. However, those assisting in clean-up efforts may be wounded and exposed to soil that contains the bacteria that causes tetanus.

Available evidence indicates that complete primary vaccination with tetanus toxoid provides long-lasting protection among most recipients. Consequently, after complete primary tetanus vaccination, booster doses are recommended at 10-year intervals. Tdap vaccine is recommended for adolescents and adults to replace a single dose of Td as a booster immunization against tetanus, diphtheria and pertussis (whooping cough). Management of flood-associated wounds (e.g., puncture wound or a wound

contaminated with feces, soil or saliva) should include appropriate evaluation of tetanus immunity (and immunization if indicated) as at any other time.

- For clean and minor wounds occurring during the 10-year interval, no additional booster is recommended.
- For other wounds, a booster is appropriate if the patient has not received tetanus toxoid within the preceding 5 years.
- See the table below for guidance in managing patients who have not completed the primary Td vaccination.

**Guide to Tetanus Prophylaxis in Routine Wound Management**

Doses	Clean, minor wounds		All other wounds	
	Td/Tdap§	TIG†	Td/Tdap§	TIG
Uncertain or <3	Yes	No	Yes	Yes
>3	No††	No	No§§	No

\*Such as, but not limited to wounds contaminated with dirt, feces and saliva; puncture wounds; avulsions; and wounds resulting from missiles, crushing, burns and frostbite.

§For children < 7 years old, DTaP (DT, if pertussis vaccine is contraindicated) is preferred to tetanus toxoid alone. For individuals ≥ 7 years old, Td or Tdap, if appropriate, is preferred to tetanus toxoid alone.

†TIG= Tetanus immune globulin.  
 ††Yes, if >10 years since last dose.  
 §§Yes, if >5 years since last dose.

**Beginning in March, the NDDoH started offering Td and Tdap for uninsured and underinsured adults in response to flooding.** Providers may use current supplies of state-

supplied Td and Tdap for this program. The NDDoH also supplies Tdap for new parents/guardians of infants younger than 12 months and child-care providers. Tdap also is supplied through the Vaccines For Children (VFC) Program and to local public health units to vaccinate preteens, including those with insurance, for the middle school entry requirement.

For more information about flooding and Tdap, please visit [www.ndhealth.gov/flood/](http://www.ndhealth.gov/flood/).



**Darcey Tysver Resigns from the NDDoH**

Darcey Tysver, VFC coordinator, resigned from the NDDoH. Her last day with the NDDoH was April 3<sup>rd</sup>. Darcey will be missed, as she was a wonderful employee in the immunization program. Her position will be filled as soon as possible.



**Vaccine Supply Update**

Since February, there have been intermittent pediatric hepatitis B vaccine supply constraints in the United States, with some local areas experiencing delays in shipments. **Despite these supply constraints, current analysis conducted by the CDC indicates that during the remainder of 2009, sufficient pediatric hepatitis B vaccine will be available to**

**meet demand if providers continue to order vaccine judiciously.**

CDC has worked closely with the two U.S. manufacturers of pediatric hepatitis B vaccines to understand their projections for how much vaccine will be available for the remainder of 2009. Merck expects vaccine to be limited during the remainder of 2009. GlaxoSmithKline (GSK) has planned to bring additional vaccine into the U.S. in September or October to meet the U.S. demand for pediatric hepatitis B vaccine in the fall and is currently working closely with CDC, sharing information about how much vaccine is planned for delivery to the U.S. on a month-by-month basis until that time. Vaccine supply is anticipated to be tightest during the summer months.

CDC will continue to monitor the supply situation carefully, in collaboration with the vaccine manufacturers. One strategy employed by CDC earlier in the year was to release some of both pediatric hepatitis B vaccines from the vaccine stockpiles. If the supply outlook changes and additional strategies are needed, such as a change in the vaccination recommendations, CDC will communicate any new strategy immediately and support its implementation. **At this time, however, providers should continue to administer pediatric hepatitis B vaccine according to ACIP/AAP/AAFP 2009 immunization schedule.**

CDC expects to be successful in maintaining the ability to provide three doses of hepatitis B vaccine to all infants and toddlers on schedule if immunization providers continue routine ordering practices for hepatitis B vaccine. Placing larger-than-normal orders to build a stock of vaccine is discouraged. As you know, changes in vaccine purchase patterns based on concerns about vaccine supply can worsen the nationwide supply

situation. The continued judicious purchase of pediatric hepatitis B vaccine during the remainder of 2009 will help manage through the tight supply anticipated in the summer months and ensure that U.S. providers can continue to protect all children by following the routine three-dose schedule.

In May, the NDDoH will begin receiving monthly allocations of hepatitis B vaccine from CDC. **North Dakota hospital orders may be limited to one-month supplies, depending on the availability of hepatitis B vaccine from CDC. If so, hospitals will be able to order monthly if needed.**

Hib vaccines continue to be in short supply. Merck is working to restore market availability of Hib-containing vaccines, PedvaxHIB® and Comvax®, but the availability of these vaccines may be subject to a further delay, with Merck's current estimate of availability being mid to late 2009. In response to the shortage, CDC and AAP recommend deferral of the booster dose at 12 through 15 months of age except in high-risk groups. Sanofi Pasteur currently is providing sufficient Hib vaccine, ActHIB® and Pentacel®, to cover the three-dose series through mid 2009, and has developed a supply plan to support reinstatement of the booster dose some time in mid 2009, using a combination of their Hib-containing products. CDC will work closely with Sanofi Pasteur to determine available supply and options for catch up.

**The NDDoH will continue to supply Pentacel® and single antigen hepatitis B vaccine to most North Dakota providers. Indian Health Service (IHS) facilities and other providers, previously identified, who serve mainly American Indian children will continue to receive Pediarix® and PedvaxHIB® vaccine.**

Recently the NDDoH has received multiple reports of Hib vaccines expiring or being wasted. Especially during the Hib shortage, Hib vaccines should not be expiring. Notify the NDDoH at least three months prior to expiration, and we will work with providers to transfer vaccine. If providers have TriHIBit® in their inventories, they should administer the booster dose of Hib vaccine, preferable to high-risk children, but to healthy children as well if the vaccine is going to expire. Providers who are switching to Pentacel® or have already switched to Pentacel® from Pediarix® should be sure to deplete supplies of Pediarix®. If providers need single antigen Hib vaccine to deplete supplies of Pediarix® or would like to transfer Pediarix® doses, contact the NDDoH Immunization Program.

Contact the NDDoH Immunization Program with any questions or concerns at 701.328.3386 or toll-free at 800.472.2180.

### **FDA Approves New Japanese Encephalitis Vaccine**

On March 30, the Food and Drug Administration (FDA) issued a press release announcing that it has approved a new vaccine to prevent Japanese encephalitis. The press release is reprinted below in its entirety:

The U.S. Food and Drug Administration today approved IXIARO®, a vaccine to prevent Japanese encephalitis (JE) which is caused by a mosquito-transmitted virus found mainly in Asia. IXIARO® will be the only vaccine for JE available in the United States.

In Asia, JE affects about 30,000 to 50,000 people each year, resulting in 10,000 to 15,000 deaths. JE is rarely seen in the

United States, with very few cases reported among civilians and military traveling from the United States to Asia.



The virus that causes JE affects membranes around the brain, and mild infections can occur without apparent symptoms other than fever and headache. In people who develop severe disease, JE usually starts as a flu-like illness but can worsen, causing high fever, neck stiffness, brain damage, coma, or even death. The disease is transmitted via infected mosquitoes; it is not spread from human to human.

IXIARO® is a second-generation JE vaccine, in that it is manufactured using cell culture technology leading to improved manufacturing efficiency as well as more reliable control of the vaccine manufacturing process. This technology utilizes an established bank of cells that can be drawn from at any time contributing to the assurance of consistent vaccine quality. It also enhances the ability to rapidly manufacture a vaccine on a large scale if needed, without compromise to the vaccine's safety or effectiveness.

Clinical studies were conducted in more than 800 healthy men and women in the United States and Europe. Participants received either IXIARO® or JE-VAX®, another U.S.-licensed vaccine that is no longer being manufactured. The studies found that IXIARO® produced sufficient levels of antibodies in the blood to protect against JE. IXIARO® requires two doses instead of JE-VAX®'s three.

The vaccine was well tolerated and the most commonly reported adverse events were headache, muscle pain and pain, swelling, and tenderness at the injection site. Overall, it was more tolerable and had fewer side effects than the comparator, JE-VAX®.

IXIARO® is manufactured by Intercell Biomedical, Livingston, U.K.

### **Vaccine Abbreviations**

CDC has created a standardized list of vaccine abbreviations. The NDDoH encourages all providers to use these abbreviations when writing out immunization records, so other providers, schools, and child cares will be able to determine which vaccines were given. Writing the brand names (i.e., Prevnar®, Gardasil®, Zostavax®) of vaccines is confusing and creates problems when vaccines are discontinued.

The standardized abbreviations will be implemented into the NDIIS.

The list can be found at [www.cdc.gov/vaccines/about/terms/USVaccines.html](http://www.cdc.gov/vaccines/about/terms/USVaccines.html).



### **Save The Date: CDC Immunization Netconference**

The next CDC immunization netconference is scheduled for July 16, 2009, at 11 a.m.

(CST). It is unknown at this time what topic will be covered.



For more information about CDC netconferences, please visit [www.cdc.gov/vaccines/ed/netconferences.htm](http://www.cdc.gov/vaccines/ed/netconferences.htm).

### **NDIIS Adolescent Data**

Over the past three years, three new vaccines have been recommended for use in adolescents ages 11 and 12. In 2005, the FDA licensed tetravalent meningococcal conjugate vaccine (MCV4) and two tetanus toxoid reduced diphtheria toxoid, and acellular pertussis vaccines (Tdap) for use in the United States. In June 2006, human papillomavirus vaccine (HPV4) was approved for use by the FDA for females between the ages of 9 and 26.

According to the NDIIS, of all North Dakota adolescents ages 13 to 17, 60.9 percent are up-to-date for Tdap, and 55.7 percent are up-to-date for MCV4. Only 41.1 percent of females have initiated the three dose HPV4 series. Forty-four percent of North Dakota adolescents are up-to-date for both MCV4 and Tdap. Of females, 22.9 percent are up-to-date for both MCV4 and Tdap and have initiated the HPV4 series. Only 13.3 percent of North Dakota females have completed all three recommended adolescent vaccines, including the full three-dose series of HPV4.

Since licensure, there have been 85,422 doses of Tdap administered, 46,690 doses of MCV4 administered, and 46,145 doses of HPV4 administered. The number of doses administered of HPV4 peaked in late 2007; since then, the number of doses administered per month has remained stable, with fluctuation in the fall when adolescents receive school vaccines. Only 15,920 (34.1 percent) of MCV4 doses administered in the NDIIS were administered in 2008 compared to 19,626 (42 percent) administered in 2007. The number of doses of MCV4 fluctuates throughout the year, with more than 8,000 doses administered during the fall quarter, school entry time. The number of doses drops to less than 2,500 during the other quarters of the year. In 2008, 31,422 doses of Tdap (36.8 percent) were administered compared to 29,613 (34.7 percent) in 2007.

The number of doses administered per month for adolescent vaccines reached a plateau in late 2007. Doses administered of MCV4 was less in 2008 than in 2007. The number of doses administered has plateaued, even though the majority of adolescents remain unvaccinated and only 13 percent of females have received all adolescent immunizations. Providers need to remain diligent about vaccinating adolescents by administering all recommended vaccines at one visit.

**2008 – 2009 School Immunization Data**

The results for 2008-2009 North Dakota school immunization survey are in. This school year, the NDDoH was required to validate our 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 our annual school immunization survey. The NDDoH found that when we compared the validated results to what was reported by schools, the validation percentages were actually higher, meaning schools may be under-reporting their immunization rates. This is the first year that validation was required, so the NDDoH has a lot to learn about the process, but in the future, this study design may give us a better look at our immunization rates for school entry in North Dakota.



The school immunization data showed that children entering kindergarten had the following rates:

Vaccine	Immunization Rate†
Polio	94.1%
DTP/DTaP/DT	93.5%
MMR	93.3%
Hepatitis B	95.8%
Varicella*	88.7%

\*Includes immunity from vaccination or disease

† Validation of school immunization study results

The annual school immunization survey showed that 11 kindergartners had vaccination exemptions due to medical reasons, seven due to religious reasons, 65 due to philosophical reasons, and 12 due to moral reasons.

The survey showed that middle school entry (sixth or seventh grade, depending on the school) had the following rates:

Vaccine	Immunization Rate
Polio	97.32%
DTP/DTaP/DT	96.97%
MMR	97.32%
Hepatitis B	97.18%
Varicella*	69.79%
TD/ Tdap	59.95%
Meningococcal	57.41%

\*Includes immunity from vaccination or disease

The survey also showed that 22 middle school children (students in sixth or seventh grade) had vaccination exemptions due to medical reasons, 16 due to religious reasons, 53 due to philosophical reasons, and 19 due to moral reasons.



### 2008 – 2009 Influenza Season Update

So far this season, there have been 1,554 lab-identified influenza cases reported to the NDDoH (May 19). Last year at this time, 3,807 cases were reported. The peak of illness for the 2008-2009 season occurred the week ending March 7, 2009. Please see the following tables for a summary of the North Dakota cases.

2008 – 2009 Flu Summary	
Total Cases	Age Information

		Range	Cases
<b>Gender</b>		<10	477
<b>Female</b>	761	10-19	461
<b>Male</b>	793	20-29	229
		30-39	125
<b>Hospitalized</b>	32	40-49	106
		50-59	65
		60 and over	91

2008 – 2009 Flu Types	
	Cases
<b>Type A, H1</b>	87
<b>Type A, H3</b>	13
<b>Type A, Unspecified</b>	1057
<b>Type B</b>	381
<b>Unknown</b>	16
<b>Total</b>	1,554

For more information about influenza in North Dakota, please visit [www.ndflu.com](http://www.ndflu.com).

### 2008 – 2009 Influenza Season Pediatric Deaths

No pediatric deaths have been reported to the NDDoH. Nationwide, a total of 56 influenza-associated pediatric deaths have occurred during the 2008 – 2009 season.

- The average mean/median age was 8.2/7.5 years respectively (range: 1 month to 17 years).
- Twenty-eight children were male (50%).
- Thirty-four children were white, two Hawaiian/Pacific Islander, three Asian, eight black, and one American Indian/Alaskan Native. Race was unknown for eight children.
- Flu test results: A(H1)=6; A(H3)=2; A=24; and B=24. Although a post mortem nasal wash of one child tested positive for both A and B the child was documented as influenza A.

- Thirty-seven children died in an ICU setting.
- Thirty-five children had autopsies performed.
- Invasive bacterial coinfections were confirmed in 13 (43.3%) of the thirty children who were tested and who died from influenza-associated complications this season.
  - *Staphylococcus aureus* was identified in eight (61.5%) of the 13 children. Three of the *S. aureus* isolates were sensitive to methicillin and five were methicillin resistant.
  - Twelve children with bacterial coinfections were age five or older, and 10 (76.9%) of 13 children with bacterial coinfections were age 12 or older.
- Of the 41 cases for which vaccination status was known, six children (14.6%) were up-to-date for influenza vaccination.



### **Swine Influenza A (H1N1) in the United States**

Novel influenza A (H1N1) is a new flu virus of swine origin that was first detected in April, 2009. The virus is infecting people and is spreading from person-to-person, sparking a growing outbreak of illness in the United States. An increasing number of cases are being reported internationally as well.

It's thought that novel influenza A (H1N1) flu spreads in the same way that regular seasonal influenza viruses spread; mainly through the coughs and sneezes of people who are sick with the virus.

It's uncertain at this time how severe this novel H1N1 outbreak will be in terms of illness and death compared with other influenza viruses. Because this is a new virus, most people will not have immunity to it, and illness may be more severe and widespread as a result. In addition, currently there is no vaccine to protect against this novel H1N1 virus. CDC anticipates that there will be more cases, more hospitalizations and more deaths associated with this new virus in the coming days and weeks.

Novel influenza A (H1N1) activity is now being detected through CDC's routine influenza surveillance systems and reported weekly. CDC tracks U.S. influenza activity through multiple systems across five categories. The fact that novel H1N1 activity can now be monitored through seasonal surveillance systems is an indication that there are higher levels of influenza-like illness in the United States than is normal for this time of year. About half of all influenza viruses being detected are novel H1N1 viruses.

As of May 20, the total number of confirmed cases of H1N1 influenza infection in the United States had increased to 5,710, with cases in 48 states, including the District of Columbia. A total of eight deaths have been reported.

For updated information regarding H1N1, visit [www.cdc.gov/h1n1flu/index.htm](http://www.cdc.gov/h1n1flu/index.htm).

North Dakota specific information is available at [www.ndflu.com/SwineFlu/](http://www.ndflu.com/SwineFlu/).



### **North Dakota Immunization Advisory Committee Update**

The North Dakota Immunization Advisory Committee met in April and discussed which vaccines to offer through the federal stimulus funding. The committee also decided to continue offering Tdap to uninsured and underinsured adults, regardless of flooding. The group discussed rotavirus vaccines and whether or not to implement Rotarix® into the VFC Program. They decided to continue offering only Rotateq® due to ease of storage, lack of reconstitution, and the fact that providers are used to it and already using it. It was decided that, in the future, the North Dakota Immunization Advisory Committee would discuss the implementation only of new vaccines into the VFC Program twice per year, in January and July. If a new vaccine becomes available between then, it will be discussed.

The committee is composed of local public health representatives, private physicians and nurses, Indian Health Services and Blue Cross Blue Shield of North Dakota. Conference calls are held on the third Thursday of every month at 7 a.m. If you are interested in joining the committee, please contact Molly Sander at [msander@nd.gov](mailto:msander@nd.gov).



### **Providers' Choice Awards**

The Provider's Choice Awards recognize individuals, businesses or organizations that have made extraordinary contributions towards improved adult and/or childhood immunization rates in North Dakota. The awards will be presented at Vaccination Expedition 2009 – The Adventure Continues scheduled for May 28 and 29 in Grand Forks. The following 11 individuals and organizations were nominated for awards:

- Blue Cross Blue Shield of North Dakota
- Debra Solem, Altru Health Systems
- Barbara Andrist, Upper Missouri District Health Unit
- Dr. Aaron Garmon, Coal Country Community Health Center
- Dr. Jacinta Klindworth, Coal Country Community Health Center
- Minne Tohe Health Center
- Dr. Sridevi Gowravaram, Meritcare Clinic Valley City
- Global Friends Coalition
- Dr. Ender Raghob, Pediatric Arts Clinic
- Dr. Mark Erickstad, Mid Dakota Clinic
- Wyeth Pharmaceuticals



## **Epidemiology and Prevention of Vaccine-Preventable Diseases Course Now Available**

*Epidemiology & Prevention of Vaccine-Preventable Diseases* is a comprehensive overview of the principles of vaccination,

general recommendations, immunization strategies for providers, and specific information about vaccine-preventable diseases and the vaccines that prevent them. The course is for immunization providers (physicians, nurses, nurse practitioners, pharmacists, physician's assistants, medical students, etc.). There are four three-hour sessions available via on-demand webcast. Continuing educational credits are available. For more information or to view the webcasts, visit

[www.cdc.gov/vaccines/ed/epivac/default.htm](http://www.cdc.gov/vaccines/ed/epivac/default.htm).



## **Questions and Answers**

1. **When calculating minimum intervals, should days, weeks or months be used?**
  - A. If the interval is four months or more, then calendar months should be used (i.e., six months between doses of hepatitis A vaccine). If the interval is less than four months, then days or weeks should be used (i.e., one month = four weeks = 28 days).
2. **What is your recommendation if a person who is tested for hepatitis B antibodies following completion of vaccination is found to be nonreactive to the hepatitis B antibodies? Also, what if a person has a blood exposure and is found to be nonreactive to hepatitis B antibodies even though he or she has completed the vaccination for hepatitis B and may have had an earlier reactive antibody result to hepatitis B antibodies?**
  - A. The key to the first question is how long after the hepatitis B series the testing is done. As the question is worded, it appears to be about testing done immediately after vaccination (one to two months). In this case, the answer is that this person should get another three-dose vaccine series and be tested again after the third

dose. If the person already has had two complete hepatitis B vaccine series, additional doses are not recommended. The person should be considered a nonresponder.

A person whose immune status is in doubt and who has a percutaneous or permucosal exposure to blood of a person known to be infected with hepatitis B virus should get one dose of HBIG and a booster dose of hepatitis B vaccine.

**3. If a new health-care worker with a documented history of three doses of hepatitis B vaccine did not have a serology test done, should we test them when they start employment or do we wait until they have an exposure?**

- A. Health-care workers who have contact with patients or blood and are at ongoing risk for injuries with sharp instruments or needle sticks should be routinely tested for antibody to hepatitis B after vaccination. However, a catch-up program of serologic testing for health-care providers vaccinated prior to December 1997 is not recommended. These individuals should be tested only if they have a significant exposure to HBV. For employees in this situation who want to be sure of their immune status, you could test them now. But be aware that if they have no antibody, it could mean either that they failed to respond to the vaccine series or that they responded and their antibody level has fallen. This occurs in about 50 percent of people within five to six years after vaccination.

For situations in which no antibody is detected, it is recommended to give the person one dose of hepatitis B vaccine and test again one month later. If the person responded to the original series, this dose will stimulate the immune system to boost their antibody and the test will be positive. Then simply document the response; no additional doses of vaccine or further testing are needed. If the person does not respond to this booster dose, it is recommended that a second series with two more doses of vaccine be completed and the person be retested four to six weeks after the last dose. If there is a positive response, document it and no further testing or vaccine doses are needed. If the person does not respond after a second three-dose series, consider him or her a nonresponder and counsel accordingly. At this point, testing for surface antigen (HBsAg) is recommended. It is possible that they are not responding to the vaccine because they are infected with the hepatitis B virus.



## Upcoming Events

- Greater Grand Forks Immunization Coalition Conference in Grand Forks, N.D.: May 28 – 29
- Merck Immunization Education Programs: June 17, 23 and 24 in Bismarck, Minot, Fargo and Grand Forks, N.D.
- ACIP meeting in Atlanta, Ga.: June 24 – 26
- CDC Immunization Netconference: July 16 at 11 a.m. (CST)
- CDC Immunization Update 2009: July 30 at 8 a.m. (CST) and 11 a.m. (CST)
- CDC Adult Immunization Update Webcast: July 31



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