

# MICROFILM DIVIDER

OMB/RECORDS MANAGEMENT DIVISION  
SFN 2053 (2/85) 5M



ROLL NUMBER
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DESCRIPTION

1136

2007 HOUSE HUMAN SERVICES

HB 1136

# 2007 HOUSE STANDING COMMITTEE MINUTES

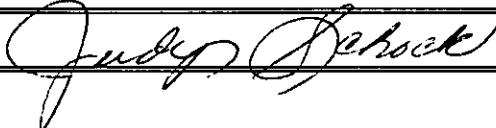
Bill/Resolution No. HB 1136

House Human Services Committee

Check here for Conference Committee

Hearing Date: 01/08/2007

Recorder Job Number: 723

Committee Clerk Signature 

Minutes:

**Chairman Price:** Opening HB 1136.

**Kirby Kruger:** I am the epidemiologist for the ND Department of Health. I am here to support HB1136. It adds the number of recently recommended vaccines to the requirement for school and the child care industry. It also allows the Department to use administrative rules to require vaccine, and allows state health officers to dispense certain vaccination requirements.

To summarize new vaccines proposed as required for entry to school or child care. See Attached.

**Chairman Price:** Is there a booster required for Meningococcal? How many cases of hepatitis A?

**Mr. Kruger:** No boosters are required. See attached for the data of hepatitis cases.

**Representative Porter:** What concerns me is the authority to do additional diseases as required by law. I don't think that health care providers are necessarily following your list as far as what is being recommended through the American College of Pediatricians and what children are immunized for. The only thing this list provides is when you may or may not be allowed into school or into a day care. The health care community is already doing a very good job seeing to things are current.

**Mr. Kruger:** We feel with the changes that have been occurring with vaccinations in the last several years and new vaccines being recommended at an increasing rate that if the vaccine were to come up, it would be beneficial to introduce as a requirement. We do have a task force and we give them guidance where we should be going with the immunization program and we rely on that task force to provide us with that input from the private sector, and other public providers. We like to know where the new vaccine recommendation is coming from. The number of new vaccines that have become available in the last couple years are increasing, and we are expecting that will continue.

**Representative Porter:** Back to the rule part of it, do you think that health care providers in general are not following their colleges recommendations, or the CBC's recommendation, and just going off of this list in the century code when they are discussing things with their patients or their families patients?

**Mr. Kruger:** I do believe the providers are following ACIP which is basically the CBC recommendation. So yes they do.

Many outbreaks have decreased and that would be due to the immunizations given. We do feel that the severity of these diseases is such that we are making that a requirement. We are now coming forward with the Hepatitis A recommendation. It was just recently recommended universally for children just this last year. Prior to that the recommendation, it was only for those areas that experienced high rates of Hepatitis A.

**Chairman Price:** Anyone else in favor of HB 1136, or with opposition to HB 1136? I will not close HB 1036I as I understand someone from out of town wanted to testify and could not make it today due to illness.

## 2007 HOUSE STANDING COMMITTEE MINUTES

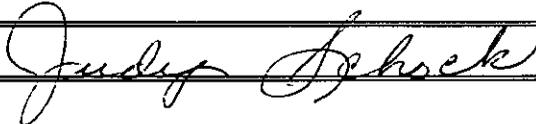
Bill/Resolution No. HB 1136

House Human Services Committee

Check here for Conference Committee

Hearing Date: 01/08/2007

Recorder Job Number: 725

Committee Clerk Signature 

Minutes:

**Chairman Price:** Let's do some discussion on the bill. With the diseases that are listed, what are you feelings on the diseases being on the mandated list?

**Representative Conrad:** Seems to be fine.

**Chairman Price:** In the second part, how about the changing as required by rule? .

**Representative Porter:** Having two small boys going through this process let me assure you that the medical community is well aware of the recommended immunizations. They don't need the rule making process in this in order to make sure kids are immunized against the diseases that are up and coming.

**Chairman Price:** In section 2, the lack of funding concerning to me. We will not clean this one up. I am waiting for another person to testify. No amendments at this time. We are adjourned for today.

## 2007 HOUSE STANDING COMMITTEE MINUTES

Bill/Resolution No. HB 1136

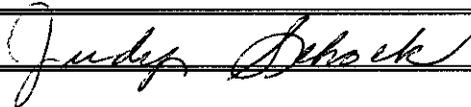
House Human Services Committee

Check here for Conference Committee

Hearing Date: 01/09/2007

Recorder Job Number: 782

Committee Clerk Signature



Minutes:

**Chairman Price** called the committee to order for discussion on HB 1136.

**Price:** We are losing the bulk of our vaccinations. There are on going meetings with the Health Department and they are now being heard in appropriations. It looks like they are probably going to have an individual bill to try and address this. We have no control on some plans to force insurance coverage. The Health Department is recommending provider choice. The under insured population for those who won't have vaccine coverage on their plan. We have no way to mandate that. It will have an effect on the insurance premiums. The public health unit is not able to buy the vaccine at the government rate. Are they going to say old vaccine first, or by age group first? There is no discussion of priorities. There is a potential shortage of vaccines.

**Representative Porter:** I think it is way to early in the process, to leave the language in there regarding the lack of funding. I move we make amendments.

Representative Porter made a motion for a due pass on amendments. Representative Conrad second. The vote was 12 yeas, 0 nays and none absent.

# FISCAL NOTE

Requested by Legislative Council

01/11/2007

Amendment to: HB 1136

**1A. State fiscal effect:** *Identify the state fiscal effect and the fiscal effect on agency appropriations compared to funding levels and appropriations anticipated under current law.*

	2005-2007 Biennium		2007-2009 Biennium		2009-2011 Biennium	
	General Fund	Other Funds	General Fund	Other Funds	General Fund	Other Funds
<b>Revenues</b>						
<b>Expenditures</b>						
<b>Appropriations</b>						

**1B. County, city, and school district fiscal effect:** *Identify the fiscal effect on the appropriate political subdivision.*

2005-2007 Biennium			2007-2009 Biennium			2009-2011 Biennium		
Counties	Cities	School Districts	Counties	Cities	School Districts	Counties	Cities	School Districts

**2A. Bill and fiscal impact summary:** *Provide a brief summary of the measure, including description of the provisions having fiscal impact (limited to 300 characters).*

House Bill 1136 proposes to add additional vaccines to the current existing list of required vaccines for entry into childcare or school. The bill makes changes to vaccination requirements and gives the state health officer the authority to suspend requirements due to funding issues.

**B. Fiscal impact sections:** *Identify and provide a brief description of the sections of the measure which have fiscal impact. Include any assumptions and comments relevant to the analysis.*

This bill, including the amendments, will not create a fiscal impact.

House Bill 1136 proposes to add vaccination against pneumococcal disease, meningococcal disease, rotovirus disease and hepatitis A to the current existing list of required vaccines for entry into childcare or school. The amendment removes the proposal to make changes to vaccination requirements by administrative rule and to give the state health officer the authority to suspend requirements due to funding issues.

All of these vaccines are currently recommended by the Advisory Committee on Immunization Practices. Rotovirus, hepatitis A and pneumococcal vaccines are currently provided at no cost to healthcare providers or recipients. Meningococcal vaccine is available from the state at no cost only for children who qualify for the Vaccines for Children program (VFC). Families seeking meningococcal immunizations for their children who are not covered by the VFC program would be responsible for their portion of costs if their insurance companies do not cover. Costs may include meeting insurance deductibles and co-payments.

**3. State fiscal effect detail:** *For information shown under state fiscal effect in 1A, please:*

**A. Revenues:** *Explain the revenue amounts. Provide detail, when appropriate, for each revenue type and fund affected and any amounts included in the executive budget.*

**B. Expenditures:** *Explain the expenditure amounts. Provide detail, when appropriate, for each agency, line item, and fund affected and the number of FTE positions affected.*

**C. Appropriations:** *Explain the appropriation amounts. Provide detail, when appropriate, for each agency and fund affected. Explain the relationship between the amounts shown for expenditures and appropriations. Indicate whether the appropriation is also included in the executive budget or relates to a*

*continuing appropriation.*

<b>Name:</b>	Kathy J. Albin	<b>Agency:</b>	Health
<b>Phone Number:</b>	328.4542	<b>Date Prepared:</b>	01/12/2007



**REPORT OF STANDING COMMITTEE**

HB 1136: Human Services Committee (Rep. Price, Chairman) recommends **AMENDMENTS AS FOLLOWS** and when so amended, recommends **DO PASS** (12 YEAS, 0 NAYS, 0 ABSENT AND NOT VOTING). HB 1136 was placed on the Sixth order on the calendar.

Page 1, line 16, after the second underscored comma insert "and" and remove ", and additional diseases as required"

Page 1, line 17, remove "by rule"

Page 2, line 3, remove ", lack of funding."

Renumber accordingly

2007 SENATE HUMAN SERVICES

HB 1136

## 2007 SENATE STANDING COMMITTEE MINUTES

Bill/Resolution No. HB 1136

Senate Human Services Committee

Check here for Conference Committee

Hearing Date: 3-12-07

Recorder Job Number: 4871, 4932

Committee Clerk Signature

*Mary K. Manson*

Minutes:

Chairman Senator J. Lee opened the hearing on HB 1136 relating to children's immunization requirements.

Kirby Kruger (State Epidemiologist, ND Department of Health) provided testimony in support of HB 1136 and offered a minor amendment. (Attachment #1)

Senator J. Lee asked what the minor amendment would be to 1136.

Mr. Kruger explained that it would be just inserting the age appropriate.

Senator Warner asked if any immunizations are required for child care workers.

Mr. Kruger replied that at this time there are no requirements for child care workers other than what is appropriate for their age.

Senator Warner asked what the status is on research for West Nile disease vaccines.

Mr. Kruger said they are working on a vaccine but he hasn't heard of anything that is close to being put into development.

Senator Heckaman asked if there are any other optional vaccinations for preemies that hospitals require.

Mr. Kruger said the requirements are the basic requirements for childhood vaccinations. They have eliminated the HVP vaccine at this point in time which is about the only other recommended one that isn't required.

Senator Dever wondered how commonly doctors prescribe these vaccinations.

Mr. Kruger answered that these vaccines are recommended universally. Most pediatricians endorse the recommendations of the ACIP and make those recommendations to their patients.

Senator Dever asked if the patients are getting the vaccines.

Mr. Kruger said they are getting vaccinated.

Stephen McDonough (Pediatrician at Medcenter One, Bismarck) testified in support of both HB 1136 and HB 1435. (Attachment #2)

There was no opposing testimony.

Senator J. Lee recognized Ted Kleiman (NDMA) for comments.

(Meter 23:08) Ted Kleiman offered information about the rotavirus, the meningococcal vaccine, and hepatitis A and B.

Senator Warner asked Mr. Kruger if a catch 22 situation is being creating if a vaccination is required and can no longer be given, such as the rotavirus which has to be initiated before twelve weeks.

Mr. Kruger replied that the amendment, age appropriate, covers that. The ACIP recommendations would be used as the basis and they only allow certain vaccines to be given to certain ages or only recommend certain vaccines to be given to certain ages.

Senator Warner asked if that organization is referenced in code anyplace.

Mr. Kruger said in administrative rules.

Senator Warner asked Mr. Kruger if he could provide a schedule of recommended vaccinations and ages.

Mr. Kruger said he would provide both childhood and adult recommendations. (Attached #1a)  
The hearing on HB 1136 was closed.

**JOB #4932**

Senator J. Lee opened HB 1136 for discussion. She recognized Dr. Kleiman who talked about vaccinations.

Dr. Kleiman spoke about the meningococcal vaccine first. The risk group is the freshman in college living in dormitories. The highest incidence is under two but the vaccine doesn't work in that group and that is why they aren't immunized. There is also increased risk in the elderly. He addressed catch up on all the kids who are between the ages of 11-18. There would be a lot of increased cost with very little net benefit. As far as insurance coverage goes some policies cover vaccines and some don't.

Next, he talked about the hepatitis A vaccine which is high risk on the Indian reservations. Senator J. Lee asked him what he would do with those vaccines, if prioritizing.

(Meter 4:35) Dr. Kleiman replied that hepatitis A would include the high risk native population which is already covered and he would do the meningococcal vaccine for kids entering college. It would be nice to do it for everybody, but these are rare diseases.

Kirby Kruger (State Epidemiologist) added comments about the meningococcal vaccination that the recommended age group to receive the first vaccination is 11-12 year olds then going into college as freshmen. One of the reasons to vaccinate the 11-12 year olds is that is when they can get to them. The Hepatitis A is so unpredictable and you never know when you will be exposed. Regardless of when it is best to do it the ACIP has made recommendations. The position of the state health department will be to endorse the ACIP recommendations and they will push for vaccinations as recommended by the ACIP. They want to make sure those vaccines are available for all of those individuals who do want to have it.

Senator J. Lee asked what plans the health department has for promoting catch up so there might be people who would do it.

Mr. Kruger said there are different plans and they vary on the vaccine. He talked about how they implemented the chicken pox vaccine (meter 10:20) and thought that it might be similar for Hepatitis A. He didn't believe the rotavirus was an issue. The meningococcal recommendation would be to start vaccination at 11-12 years of age and in between as needed. That one would largely be education through the health care providers on the importance of the vaccine.

Senator J. Lee asked if they were looking at any special efforts for mandating it for college freshman living in dorms.

Mr. Kruger replied that they have not looked at mandating for college entry.

Molly Sander (Immunization Program Manager) said it is the college health association that decides on immunization requirements for the colleges and right now MMR is the only vaccine that is currently required for college entry in ND.

Senator J. Lee asked if they could recommend the meningococcal vaccine and make it easy for college freshman to have access to it.

Ms. Sander said that was correct but the only problem is the program is for 18 and younger. If those kids aren't caught by the time they turn 19 the state won't have vaccines to provide to them.

Mr. Kruger said there is a program with the immunization program where they go out and visit providers and do quality assurance checks and one on one education. They do this with federal money and target both private and public providers.

Senator J. Lee reminded the committee about the amendment that was proposed and asked if there was any support.

Senator Erbele moved to accept the amendments to include age appropriate

Senator Dever seconded the motion.

Roll call vote 6-0-0. Amendment accepted.

Senator Warner moved a Do Pass on HB 1136 as amended.

Senator Heckaman seconded the motion.

Roll call vote 6-0-0. Motion carried. Carrier is Senator Warner.

78121.0201  
Title.0300

Adopted by the Human Services Committee  
March 12, 2007

*JB*  
3-12-07

PROPOSED AMENDMENTS TO ENGROSSED HOUSE BILL NO. 1136

Page 1, line 13, after "received" insert "age appropriate"

Renumber accordingly

Date: 3-12-07

Roll Call Vote #: 1

2007 SENATE STANDING COMMITTEE ROLL CALL VOTES

BILL/RESOLUTION NO. HB 1422 1136

Senate HUMAN SERVICES Committee

Check here for Conference Committee

Legislative Council Amendment Number \_\_\_\_\_

Action Taken Amend include age approp.

Motion Made By Sen. Erbele Seconded By Sen. Dever

Senators	Yes	No	Senators	Yes	No
Senator Judy Lee, Chairman	✓		Senator Joan Heckaman	✓	
Senator Robert Erbele, V. Chair 1	✓		Senator Jim Pomeroy	✓	
Senator Dick Dever 2	✓		Senator John M. Warner	✓	

Total (Yes) 6 No 0

Absent 0

Floor Assignment \_\_\_\_\_

If the vote is on an amendment, briefly indicate intent:



REPORT OF STANDING COMMITTEE (410)  
March 13, 2007 12:42 p.m.

Module No: SR-47-5099  
Carrier: Warner  
Insert LC: 78121.0201 Title: .0300

**REPORT OF STANDING COMMITTEE**

HB 1136, as engrossed: Human Services Committee (Sen. J. Lee, Chairman) recommends **AMENDMENTS AS FOLLOWS** and when so amended, recommends **DO PASS** (6 YEAS, 0 NAYS, 0 ABSENT AND NOT VOTING). Engrossed HB 1136 was placed on the Sixth order on the calendar.

Page 1, line 13, after "received" insert "age appropriate"

Renumber accordingly

2007 TESTIMONY

HB 1136

**Testimony**

**House Bill 1136**

**Human Services Committee**

**January 8, 2007; 9 a.m.**

**North Dakota Department of Health**

Good morning, Chairman Price and members of the Human Services Committee. My name is Kirby Kruger, and I am the state epidemiologist for the North Dakota Department of Health. I am here today to provide testimony in support of House Bill 1136.

House Bill 1136 adds a number of recently recommended childhood vaccines to the requirements for entry into school and child care. It also allows the department to use administrative rules to require vaccines that are recommended in the future and allows the state health officer to suspend certain vaccination requirements when supplies of vaccine are low or for other temporary reasons.

**New Vaccines Proposed as Requirements for Entry Into School or Child Care**  
School and child-care vaccination requirements are effective public health tools for preventing vaccine-preventable diseases, preventing transmission of diseases in school and child-care settings, and increasing immunization coverage in children.

The Department of Health uses the recommendations of the Advisory Committee on Immunization Practices as a basis for immunization requirements. Several new vaccines recently were recommended for children by the Advisory Committee on Immunization Practices. I am going to explain the disease each vaccine protects against and the reasons these vaccines should be required for entry into school or child care.

***Pneumococcal Conjugate Vaccination***

Infection with pneumococcal bacteria can cause serious illness and death. Severe pneumococcal disease is responsible for about 200 deaths each year among children in the U.S. younger than 5. It is one of the leading causes of bacterial meningitis, an infection of the covering of the brain. Before a vaccine was available, pneumococcal infection caused the following each year in the U.S.:

- More than 700 cases of meningitis.
- About 13,000 blood infections.
- About 5 million ear infections.

It can also lead to other health problems, including pneumonia, deafness and brain damage.

Children younger than 2 are at highest risk for serious disease. Pneumococcus bacteria are spread from person to person through close contact.

Pneumococcal infections can be hard to treat because the bacteria have become resistant to some of the drugs traditionally used to treat them. This makes vaccination against pneumococcal infections even more important.

Because it protects against seven types of pneumococcal infection, pneumococcal conjugate vaccine is recommended for children younger than 5 by leading medical organizations. In fact, the Advisory Committee on Immunization Practices (ACIP) has recommended this vaccine for children since 2000.

After the vaccine was introduced, the rate of invasive pneumococcal disease nationwide dropped from an average of 24 cases per 100,000 people in 1998 and 1999 to 17 per 100,000 people in 2001, with the largest decline in children younger than 2. Vaccinating children against pneumococcal disease also has decreased the incidence of the disease in adults. In fact, the incidence of invasive pneumococcal disease among adults 50 and older declined by 55 percent for the seven types of pneumococcal disease contained in the childhood vaccine since the vaccine was introduced.

Because of the seriousness of pneumococcal disease and the effectiveness of the vaccine, the Department of Health recommends that pneumococcal conjugate vaccine be required for entry into child care. Currently, 12 other states require pneumococcal conjugate vaccination for child-care entry.

### ***Meningococcal Vaccination***

Meningococcal disease is a serious illness caused by bacteria. In children ages 2 through 18, it is one of the leading causes of bacterial meningitis. Meningococcal disease also causes blood infections.

About 2,600 people get meningococcal disease each year in the U.S., 10 percent to 15 percent of whom die despite treatment with antibiotics. Of those who live, another 11 percent to 19 percent lose their arms or legs, become deaf, have problems with their nervous systems, become mentally retarded, or suffer seizures or strokes. In North Dakota in 2006, there were three cases of meningococcal disease and one death.

Anyone can get meningococcal disease, but it is most common in infants younger than age 1 and people with certain medical conditions, such as lack of a spleen. College freshmen who live in dormitories also have an increased risk of getting

meningococcal disease. Meningococcal infections can be treated with drugs such as penicillin. Still, about one out of every 10 people who get the disease dies from it, and many others are affected for life. This is why preventing the disease through use of meningococcal vaccine is important for people at highest risk.

In May 2005, routine meningococcal conjugate vaccination was recommended by the Advisory Committee on Immunization Practices for adolescents ages 11 and 12. Vaccination is also recommended for certain adults at high-risk for meningococcal disease.

Routine meningococcal conjugate vaccination of adolescents age 11 in the United States is expected to prevent 270 cases and 36 deaths in the vaccinated age group over 22 years, which is a decrease of 46 percent in the expected burden of disease. Currently, 34 states require either meningococcal education or vaccination prior to college entry. North Dakota would be one of the first states to require the vaccine for school entry.

### ***Rotavirus Vaccination***

Rotavirus is a virus that causes severe diarrhea, mostly in babies and young children. It is often accompanied by vomiting and fever. Almost all children in the United States are infected with rotavirus before their 5th birthday. Rotavirus not only is the cause of severe diarrhea, but also is one of the most serious diseases for children. Each year in the United States, rotavirus is responsible for:

- More than 400,000 doctor visits.
- More than 200,000 emergency room visits.
- Between 55,000 and 70,000 hospitalizations.
- From 20 to 60 deaths.

Better hygiene and sanitation have not been very good at reducing rotavirus disease. Rotavirus vaccine is the best way to protect children against rotavirus disease, which is why it should be required for entry into child care.

In August of 2006, rotavirus vaccine was recommended by the Advisory Committee on Immunization Practices to be given routinely to all children younger than 32 weeks. The vaccine was approved by the U.S. Food and Drug Administration in February 2006 and has been used since. In clinical trials, rotavirus vaccine reduced the incidence of office visits for rotavirus infections by 86 percent, emergency department visits by 94 percent and hospitalizations by 59 percent.

North Dakota would be one of the first states to require rotavirus vaccine for entry into child care.

### ***Hepatitis A Vaccination***

Hepatitis A is a serious liver disease caused by the hepatitis A virus, which is found in the stool of people who have hepatitis A. It is usually spread by close personal contact and sometimes by eating food or drinking water containing hepatitis A virus.

As many as one in five people with hepatitis A have to be hospitalized. About three to five deaths occur in every 1,000 cases of hepatitis A. A person who has hepatitis A can easily pass the disease to others within the same household.

In May 2006, the Advisory Committee on Immunization Practices recommended routine vaccination of children ages 12 months through 23 months. The vaccine is also recommended for children of all ages living in counties or states with an increased incidence of hepatitis A. In North Dakota, McKenzie, Mountrail, McLean, Sioux, Rolette, Benson, Barnes, Ramsey, and Eddy counties are considered high-risk counties. Routine hepatitis A vaccination has occurred for many years in the majority of these counties. Hepatitis A vaccination is also recommended for other groups of people at high-risk, such as travelers to certain countries.

Currently, nine states require hepatitis A vaccination for entry into child care and/or school.

### ***Exemptions***

Children who have severe allergic reactions to vaccines or certain other medical conditions should not be vaccinated. In addition, people who have religious, philosophical or moral beliefs that their children should not be immunized would be exempt from this requirement, as is the current law in North Dakota.

### **Making Changes to Child-care and School Immunization Requirements**

Currently, the only way to make changes to vaccination requirements for entry into child care and school is to amend the Century Code through the legislative process. The Department of Health is proposing to change this process to allow additions or changes to requirements through the administrative rulemaking process. Since the 2005 legislative session, the Advisory Committee on Immunization Practices has added meningococcal, hepatitis A, second dose chickenpox, human papillomavirus and rotavirus vaccinations to the list of recommended childhood vaccinations. By changing to a rulemaking process, the Department of Health would be able to make changes to the requirements for entry into school or child care in a more timely manner while still allowing for input into the process from health-care providers and the public.

The Department of Health would like to reflect recommendations of the Advisory Committee on Immunization Practices for all vaccinations in our school and child-care requirements. One exception, however, is human papillomavirus (HPV) vaccine,

which would prevent certain cervical cancers. The HPV vaccine was recommended by the Advisory Committee on Immunization Practices only recently. The department needs to research the many issues surrounding the vaccine, to build consensus and to provide public education before moving forward. If it is determined that HPV vaccine should be required, changing the process for requiring vaccinations would allow the department to add this vaccine through the rule-making process.

**Suspending Vaccination Requirements**

Finally, the Department of Health is proposing to give the state health officer the authority to suspend certain vaccination requirements for entry into child care or school. This may be necessary when vaccine shortages occur, as happened recently with pneumococcal and meningococcal vaccines. Other extenuating circumstances include lack of funding, vaccine recall, and other temporary circumstances. Having this authority will allow children whose vaccinations are not up-to-date to attend child care or school.

This completes my testimony. I am happy to answer any questions you may have.

**Kruger, Kirby J.**

---

**From:** Fox, Erin N.  
**Sent:** Friday, January 05, 2007 2:27 PM  
**To:** Kruger, Kirby J.  
**Cc:** Sander, Molly A.  
**Subject:** Data

Kirby,

Below is the data you requested. Please let me know if you need anything else.

Thanks,  
Erin

Hepatitis A

1990 - 33 cases  
1991 - 66 cases  
1992 - 143 cases  
1993 - 80 cases  
1994 - 6 cases  
1995 - 24 cases  
1996 - 140 cases  
1997 - 14 cases  
1998 - 4 cases  
1999 - 3 cases  
2000 - 4 cases  
2001 - 3 cases  
2002 - 4 cases  
2003 - 2 cases  
2004 - 2 cases  
2005 - 2 cases

Strep. Pneumo < 5 years old

2000 - 5 cases  
2001 - 13 cases  
2002 - 3 cases  
2003 - 9 cases  
2004 - 4 cases  
2005 - 9 cases

**Testimony**

**House Bill 1136**

**Senate Human Services Committee**

**March 12, 2007; 11:00 A.M.**

**North Dakota Department of Health**

Good morning, Chairman Lee and members of the Senate Human Services Committee. My name is Kirby Kruger, and I am the State Epidemiologist for the North Dakota Department of Health. I am here today to provide testimony in support of House Bill 1136 and to offer a minor amendment.

Engrossed House Bill 1136 adds a number of recently recommended childhood vaccines to the requirements for entry into school and child care and allows the State Health Officer to suspend certain vaccination requirements when supplies of vaccine are low or for other temporary reasons.

**New Vaccines Proposed as Requirements for Entry into School or Child Care**  
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***Pneumococcal Conjugate Vaccination***

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Children younger than 2 are at highest risk for serious disease. Pneumococcus bacteria are spread from person to person through close contact.

Pneumococcal infections can be hard to treat because the bacteria have become resistant to some of the drugs traditionally used to treat them. This makes vaccination against pneumococcal infections even more important.

Because it protects against seven types of pneumococcal infection, pneumococcal conjugate vaccine is recommended for children younger than 5 by leading medical organizations. In fact, the Advisory Committee on Immunization Practices (ACIP) has recommended this vaccine for children since 2000.

After the vaccine was introduced, the rate of invasive pneumococcal disease nationwide dropped from an average of 24 cases per 100,000 people in 1998 and 1999 to 17 per 100,000 people in 2001, with the largest decline in children younger than 2. Vaccinating children against pneumococcal disease also has decreased the incidence of the disease in adults. In fact, the incidence of invasive pneumococcal disease among adults 50 and older declined by 55% for the seven types of pneumococcal disease contained in the childhood vaccine since the vaccine was introduced.

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Anyone can get meningococcal disease, but it is most common in infants younger than age 1 and people with certain medical conditions, such as lack of a spleen. College freshmen who live in dormitories also have an increased risk of getting meningococcal disease. Meningococcal infections can be treated with drugs such as

penicillin. Still, about one out of every 10 people who get the disease dies from it, and many others are affected for life. This is why preventing the disease through use of meningococcal vaccine is important for people at highest risk.

In May 2005, routine meningococcal conjugate vaccination was recommended by the Advisory Committee on Immunization Practices for adolescents ages 11 and 12. Vaccination is also recommended for certain adults at high-risk for meningococcal disease.

Routine meningococcal conjugate vaccination of adolescents age 11 in the United States is expected to prevent 270 cases and 36 deaths in the vaccinated age group over 22 years, which is a decrease of 46% in the expected burden of disease. Currently, 34 states require either meningococcal education or vaccination prior to college entry. North Dakota would be one of the first states to require the vaccine for school entry.

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Each year in the United States, rotavirus is responsible for:

- More than 400,000 doctor visits.
- More than 200,000 emergency room visits.
- Between 55,000 and 70,000 hospitalizations.
- From 20 to 60 deaths.

Better hygiene and sanitation have not been very good at reducing rotavirus disease. Rotavirus vaccine is the best way to protect children against rotavirus disease, which is why it should be required for entry into child care.

In August of 2006, rotavirus vaccine was recommended by the Advisory Committee on Immunization Practices to be given routinely to all children younger than 32 weeks. The vaccine was approved by the U.S. Food and Drug Administration in February 2006 and has been used since. In clinical trials, rotavirus vaccine reduced the incidence of office visits for rotavirus infections by 86%, emergency department visits by 94% and hospitalizations by 59%.

North Dakota would be one of the first states to require rotavirus vaccine for entry into child care.

### ***Hepatitis A Vaccination***

Hepatitis A is a serious liver disease caused by the hepatitis A virus, which is found in the stool of people who have hepatitis A. It is usually spread by close personal contact and sometimes by eating food or drinking water containing hepatitis A virus.

As many as one in five people with hepatitis A have to be hospitalized. About three to five deaths occur in every 1,000 cases of hepatitis A. A person who has hepatitis A can easily pass the disease to others within the same household.

In May 2006, the Advisory Committee on Immunization Practices recommended routine vaccination of children ages 12 months through 23 months. The vaccine is also recommended for children of all ages living in counties or states with an increased incidence of hepatitis A. In North Dakota, McKenzie, Mountrail, McLean, Sioux, Rolette, Benson, Barnes, Ramsey, and Eddy counties are considered high-risk counties. Routine hepatitis A vaccination has occurred for many years in the majority of these counties. Hepatitis A vaccination is also recommended for other groups of people at high-risk, such as travelers to certain countries.

Currently, nine states require hepatitis A vaccination for entry into child care and/or school.

### ***Exemptions***

Children who have severe allergic reactions to vaccines or certain other medical conditions should not be vaccinated. In addition, people who have religious, philosophical or moral beliefs that their children should not be immunized, would be exempt from this requirement, as is the current law in North Dakota.

The Department of Health would like to reflect recommendations of the Advisory Committee on Immunization Practices for all vaccinations in our school and child-care requirements. One exception, however, is human papillomavirus (HPV) vaccine, which would prevent certain cervical cancers. The HPV vaccine was recommended by the Advisory Committee on Immunization Practices only recently. The department needs to research the many issues surrounding the vaccine, to build consensus and to provide public education before moving forward.

### **Suspending Vaccination Requirements**

Finally, the Department of Health is proposing to give the State Health Officer the authority to suspend certain vaccination requirements for entry into child care or school. This may be necessary when vaccine shortages occur, as happened recently with pneumococcal and meningococcal vaccines. Having this authority will allow children whose vaccinations are not up-to-date to attend child care or school.

**Amendment to House Bill 1136**

We suggest one minor amendment to House Bill 1136. In order to reflect the ages of children for whom vaccinations are recommended, we suggest inserting "age appropriate" after "received" on page 1, line 13 of the bill.

**Coordination with House Bill 1435**

The House has sent you two different versions of NDCC Section 23-07-17.1 regarding immunizations required for school and child-care attendance. The main difference between the two is that House Bill 1435 does not include requirements for pneumococcal, hepatitis A or rotavirus vaccinations. We suggest using House Bill 1136 to address immunization requirements and House Bill 1435 to address vaccine funding. This would require only a minor amendment to House Bill 1136 and the deletion of section 1 of House Bill 1435.

This completes my testimony. I am happy to answer any questions you may have.

## Recommended Immunization Schedule for Persons Aged 0–6 Years—UNITED STATES • 2007

Vaccine ▼	Age ►	Birth	1 month	2 months	4 months	6 months	12 months	15 months	18 months	19–23 months	2–3 years	4–6 years
Hepatitis B <sup>1</sup>	HepB	HepB	HepB	HepB	see footnote 1	HepB	HepB	HepB	HepB	HepB Series		
Rotavirus <sup>4</sup>			Rota	Rota	Rota							
Diphtheria, Tetanus, Pertussis <sup>3</sup>			DTaP	DTaP	DTaP		DTaP					DTaP
Haemophilus influenzae type b <sup>4</sup>			Hib	Hib	Hib <sup>4</sup>	Hib	Hib	Hib	Hib			
Pneumococcal <sup>5</sup>			PCV	PCV	PCV	PCV	PCV			PCV	PPV	
Inactivated Poliovirus			IPV	IPV		IPV						IPV
Influenza <sup>6</sup>							Influenza (Yearly)					
Measles, Mumps, Rubella <sup>7</sup>						MMR						MMR
Varicella <sup>8</sup>						Varicella						Varicella
Hepatitis A <sup>9</sup>							HepA (2 doses)				HepA Series	
Meningococcal <sup>10</sup>											MPSV4	

 Range of recommended ages

 Catch-up immunization

 Certain high-risk groups

This schedule indicates the recommended ages for routine administration of currently licensed childhood vaccines, as of December 1, 2006, for children aged 0–6 years. Additional information is available at <http://www.cdc.gov/nip/recs/child-schedule.htm>. Any dose not administered at the recommended age should be administered at any subsequent visit, when indicated and feasible. Additional vaccines may be licensed and recommended during the year. Licensed combination vaccines may be used whenever any components of the combination are indicated and

other components of the vaccine are not contraindicated and if approved by the Food and Drug Administration for that dose of the series. Providers should consult the respective Advisory Committee on Immunization Practices statement for detailed recommendations. Clinically significant adverse events that follow immunization should be reported to the Vaccine Adverse Event Reporting System (VAERS). Guidance about how to obtain and complete a VAERS form is available at <http://www.vaers.hhs.gov> or by telephone, 800-822-7967.

#### 1. Hepatitis B vaccine (HepB). (Minimum age: birth)

##### At birth:

- Administer monovalent HepB to all newborns before hospital discharge.
- If mother is hepatitis surface antigen (HBsAg)-positive, administer HepB and 0.5 mL of hepatitis B immune globulin (HBIG) within 12 hours of birth.
- If mother's HBsAg status is unknown, administer HepB within 12 hours of birth. Determine the HBsAg status as soon as possible and if HBsAg-positive, administer HBIG (no later than age 1 week).
- If mother is HBsAg-negative, the birth dose can only be delayed with physician's order and mother's negative HBsAg laboratory report documented in the infant's medical record.

##### After the birth dose:

- The HepB series should be completed with either monovalent HepB or a combination vaccine containing HepB. The second dose should be administered at age 1–2 months. The final dose should be administered at age  $\geq 24$  weeks. Infants born to HBsAg-positive mothers should be tested for HBsAg and antibody to HBsAg after completion of  $\geq 3$  doses of a licensed HepB series, at age 9–18 months (generally at the next well-child visit).

##### 4-month dose:

- It is permissible to administer 4 doses of HepB when combination vaccines are administered after the birth dose. If monovalent HepB is used for doses after the birth dose, a dose at age 4 months is not needed.

#### 2. Rotavirus vaccine (Rota). (Minimum age: 6 weeks)

- Administer the first dose at age 6–12 weeks. Do not start the series later than age 12 weeks.
- Administer the final dose in the series by age 32 weeks. Do not administer a dose later than age 32 weeks.
- Data on safety and efficacy outside of these age ranges are insufficient.

#### 3. Diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP). (Minimum age: 6 weeks)

- The fourth dose of DTaP may be administered as early as age 12 months, provided 6 months have elapsed since the third dose.
- Administer the final dose in the series at age 4–6 years.

#### 4. Haemophilus influenzae type b conjugate vaccine (Hib). (Minimum age: 6 weeks)

- If PRP-OMP (PedvaxHIB<sup>®</sup> or ComVax<sup>®</sup> [Merck]) is administered at ages 2 and 4 months, a dose at age 6 months is not required.
- TriHiBit<sup>®</sup> (DTaP/Hib) combination products should not be used for primary immunization but can be used as boosters following any Hib vaccine in children aged  $\geq 12$  months.

#### 5. Pneumococcal vaccine. (Minimum age: 6 weeks for pneumococcal conjugate vaccine [PCV]; 2 years for pneumococcal polysaccharide vaccine [PPV])

- Administer PCV at ages 24–59 months in certain high-risk groups. Administer PPV to children aged  $\geq 2$  years in certain high-risk groups. See *MMWR* 2000;49(No. RR-9):1–35.

#### 6. Influenza vaccine. (Minimum age: 6 months for trivalent inactivated influenza vaccine [TIV]; 5 years for live, attenuated influenza vaccine [LAIV])

- All children aged 6–59 months and close contacts of all children aged 0–59 months are recommended to receive influenza vaccine.
- Influenza vaccine is recommended annually for children aged  $\geq 59$  months with certain risk factors, health-care workers, and other persons (including household members) in close contact with persons in groups at high risk. See *MMWR* 2006;55(No. RR-10):1–41.
- For healthy persons aged 5–49 years, LAIV may be used as an alternative to TIV.
- Children receiving TIV should receive 0.25 mL if aged 6–35 months or 0.5 mL if aged  $\geq 3$  years.
- Children aged  $< 9$  years who are receiving influenza vaccine for the first time should receive 2 doses (separated by  $\geq 4$  weeks for TIV and  $\geq 6$  weeks for LAIV).

#### 7. Measles, mumps, and rubella vaccine (MMR). (Minimum age: 12 months)

- Administer the second dose of MMR at age 4–6 years. MMR may be administered before age 4–6 years, provided  $\geq 4$  weeks have elapsed since the first dose and both doses are administered at age  $\geq 12$  months.

#### 8. Varicella vaccine. (Minimum age: 12 months)

- Administer the second dose of varicella vaccine at age 4–6 years. Varicella vaccine may be administered before age 4–6 years, provided that  $\geq 3$  months have elapsed since the first dose and both doses are administered at age  $\geq 12$  months. If second dose was administered  $\geq 28$  days following the first dose, the second dose does not need to be repeated.

#### 9. Hepatitis A vaccine (HepA). (Minimum age: 12 months)

- HepA is recommended for all children aged 1 year (i.e., aged 12–23 months). The 2 doses in the series should be administered at least 6 months apart.
- Children not fully vaccinated by age 2 years can be vaccinated at subsequent visits.
- HepA is recommended for certain other groups of children, including in areas where vaccination programs target older children. See *MMWR* 2006;55(No. RR-7):1–23.

#### 10. Meningococcal polysaccharide vaccine (MPSV4). (Minimum age: 2 years)

- Administer MPSV4 to children aged 2–10 years with terminal complement deficiencies or anatomic or functional asplenia and certain other high-risk groups. See *MMWR* 2005;54(No. RR-7):1–21.

# Recommended Immunization Schedule for Persons Aged 7–18 Years—UNITED STATES • 2007

Vaccine ▼	Age ▶	7–10 years	11–12 YEARS	13–14 years	15 years	16–18 years
Tetanus, Diphtheria, Pertussis <sup>1</sup>	see footnote 1		Tdap		Tdap	
Human Papillomavirus <sup>2</sup>	see footnote 2		HPV (3 doses)		HPV Series	
Meningococcal <sup>3</sup>		MPSV4	MCV4		MCV4	MCV4
Pneumococcal <sup>4</sup>			PPV			
Influenza <sup>5</sup>			Influenza (Yearly)			
Hepatitis A <sup>6</sup>			HepA Series			
Hepatitis B <sup>7</sup>			HepB Series			
Inactivated Poliovirus <sup>8</sup>			IPV Series			
Measles, Mumps, Rubella <sup>9</sup>			MMR Series			
Varicella <sup>10</sup>			Varicella Series			

Range of recommended ages

Catch-up immunization

Certain high-risk groups

This schedule indicates the recommended ages for routine administration of currently licensed childhood vaccines, as of December 1, 2006, for children aged 7–18 years. Additional information is available at <http://www.cdc.gov/nip/recs/child-schedule.htm>. Any dose not administered at the recommended age should be administered at any subsequent visit, when indicated and feasible. Additional vaccines may be licensed and recommended during the year. Licensed combination vaccines may be used whenever any components of the combination are indicated and other components

of the vaccine are not contraindicated and if approved by the Food and Drug Administration for that dose of the series. Providers should consult the respective Advisory Committee on Immunization Practices statement for detailed recommendations. Clinically significant adverse events that follow immunization should be reported to the Vaccine Adverse Event Reporting System (VAERS). Guidance about how to obtain and complete a VAERS form is available at <http://www.vaers.hhs.gov> or by telephone, 800-822-7967.

## 1. Tetanus and diphtheria toxoids and acellular pertussis vaccine (Tdap).

(Minimum age: 10 years for BOOSTRIX<sup>®</sup> and 11 years for ADACEL<sup>™</sup>)

- Administer at age 11–12 years for those who have completed the recommended childhood DTP/DaP vaccination series and have not received a tetanus and diphtheria toxoids vaccine (Td) booster dose.
- Adolescents aged 13–18 years who missed the 11–12 year Td/Tdap booster dose should also receive a single dose of Tdap if they have completed the recommended childhood DTP/DaP vaccination series.

## 2. Human papillomavirus vaccine (HPV). (Minimum age: 9 years)

- Administer the first dose of the HPV vaccine series to females at age 11–12 years.
- Administer the second dose 2 months after the first dose and the third dose 6 months after the first dose.
- Administer the HPV vaccine series to females at age 13–18 years if not previously vaccinated.

## 3. Meningococcal vaccine. (Minimum age: 11 years for meningococcal conjugate vaccine [MCV4]; 2 years for meningococcal polysaccharide vaccine [MPSV4])

- Administer MCV4 at age 11–12 years and to previously unvaccinated adolescents at high school entry (at approximately age 15 years).
- Administer MCV4 to previously unvaccinated college freshmen living in dormitories; MPSV4 is an acceptable alternative.
- Vaccination against invasive meningococcal disease is recommended for children and adolescents aged ≥ 2 years with terminal complement deficiencies or anatomic or functional asplenia and certain other high-risk groups. See *MMWR* 2005;54(No. RR-7):1–21. Use MPSV4 for children aged 2–10 years and MCV4 or MPSV4 for older children.

## Pneumococcal polysaccharide vaccine (PPV). (Minimum age: 2 years)

- Administer for certain high-risk groups. See *MMWR* 1997;46(No. RR-8):1–24, and *MMWR* 2000;49(No. RR-9):1–35.

## 5. Influenza vaccine. (Minimum age: 6 months for trivalent inactivated influenza vaccine [TIV]; 5 years for live, attenuated influenza vaccine [LAIV])

- Influenza vaccine is recommended annually for persons with certain risk factors, health-care workers, and other persons (including household members) in close contact with persons in groups at high risk. See *MMWR* 2006;55(No. RR-10):1–41.
- For healthy persons aged 5–49 years, LAIV may be used as an alternative to TIV.
- Children aged < 9 years who are receiving influenza vaccine for the first time should receive 2 doses (separated by ≥ 4 weeks for TIV and ≥ 6 weeks for LAIV).

## 6. Hepatitis A vaccine (HepA). (Minimum age: 12 months)

- The 2 doses in the series should be administered at least 6 months apart.
- HepA is recommended for certain other groups of children, including in areas where vaccination programs target older children. See *MMWR* 2006;55(No. RR-7):1–23.

## 7. Hepatitis B vaccine (HepB). (Minimum age: birth)

- Administer the 3-dose series to those who were not previously vaccinated.
- A 2-dose series of Recombivax HB<sup>®</sup> is licensed for children aged 11–15 years.

## 8. Inactivated poliovirus vaccine (IPV). (Minimum age: 6 weeks)

- For children who received an all-IPV or all-oral poliovirus (OPV) series, a fourth dose is not necessary if the third dose was administered at age ≥ 4 years.
- If both OPV and IPV were administered as part of a series, a total of 4 doses should be administered, regardless of the child's current age.

## 9. Measles, mumps, and rubella vaccine (MMR). (Minimum age: 12 months)

- If not previously vaccinated, administer 2 doses of MMR during any visit, with ≥ 4 weeks between the doses.

## 10. Varicella vaccine. (Minimum age: 12 months)

- Administer 2 doses of varicella vaccine to persons without evidence of immunity.
- Administer 2 doses of varicella vaccine to persons aged < 13 years at least 3 months apart. Do not repeat the second dose, if administered ≥ 28 days after the first dose.
- Administer 2 doses of varicella vaccine to persons aged ≥ 13 years at least 4 weeks apart.

The Recommended Immunization Schedules for Persons Aged 0–18 Years are approved by the Advisory Committee on Immunization Practices (<http://www.cdc.gov/nip/acip>), the American Academy of Pediatrics (<http://www.aap.org>), and the American Academy of Family Physicians (<http://www.aafp.org>).

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## Recommended Adult Immunization Schedule, by Vaccine and Age Group UNITED STATES • OCTOBER 2006–SEPTEMBER 2007

Vaccine ▼	Age group ►	19–49 years	50–64 years	≥65 years
Tetanus, diphtheria, pertussis (Td/Tdap) <sup>1,*</sup>		1-dose Td booster every 10 yrs		
		Substitute 1 dose of Tdap for Td		
Human papillomavirus (HPV) <sup>2</sup>		3 doses (females)		
Measles, mumps, rubella (MMR) <sup>3,*</sup>		1 or 2 doses	1 dose	
Varicella <sup>4,*</sup>		2 doses (0, 4–8 wks)	2 doses (0, 4–8 wks)	
Influenza <sup>5,*</sup>		1 dose annually	1 dose annually	
Pneumococcal (polysaccharide) <sup>6,7</sup>		1–2 doses	1 dose	
Hepatitis A <sup>8,*</sup>		2 doses (0, 6–12 mos, or 0, 6–18 mos)		
Hepatitis B <sup>9,*</sup>		3 doses (0, 1–2, 4–6 mos)		
Meningococcal <sup>10</sup>		1 or more doses		

\*Covered by the Vaccine Injury Compensation Program. NOTE: These recommendations must be read with the footnotes (see reverse).

 For all persons in this category who meet the age requirements and who lack evidence of immunity (e.g., lack documentation of vaccination or have no evidence of prior infection)

 Recommended if some other risk factor is present (e.g., on the basis of medical, occupational, lifestyle, or other indications)

This schedule indicates the recommended age groups and medical indications for routine administration of currently licensed vaccines for persons aged ≥19 years, as of October 1, 2006. Licensed combination vaccines may be used whenever any components of the combination are indicated and when the vaccine's other components are not contraindicated. For detailed recommendations on all vaccines, including those used primarily for travelers or that are issued during the year, consult the manufacturers' package inserts and the complete statements from the Advisory Committee on Immunization Practices ([www.cdc.gov/nip/publications/acip-list.html](http://www.cdc.gov/nip/publications/acip-list.html)).

Report all clinically significant postvaccination reactions to the Vaccine Adverse Event Reporting System (VAERS). Reporting forms and instructions on filing a VAERS report are available at [www.vaers.hhs.gov](http://www.vaers.hhs.gov) or by telephone, 800-822-7967.

Information on how to file a Vaccine Injury Compensation Program claim is available at [www.hrsa.gov/vaccinecompensation](http://www.hrsa.gov/vaccinecompensation) or by telephone, 800-338-2382. To file a claim for vaccine injury, contact the U.S. Court of Federal Claims, 717 Madison Place, N.W., Washington, D.C. 20005; telephone, 202-357-6400.

Additional information about the vaccines in this schedule and contraindications for vaccination is also available at [www.cdc.gov/nip](http://www.cdc.gov/nip) or from the CDC-INFO Contact Center at 800-CDC-INFO (800-232-4636) in English and Spanish, 24 hours a day, 7 days a week.

## Recommended Adult Immunization Schedule, by Vaccine and Medical and Other Indications UNITED STATES • OCTOBER 2006–SEPTEMBER 2007

Vaccine ▼	Indication ►	Medical and Other Indications							
		Pregnancy	Congenital immunodeficiency, leukemia, lymphoma, generalized malignancy, cerebrospinal fluid leaks, therapy with alkylating agents, antimetabolites, radiation, or high-dose, long-term corticosteroids	Diabetes, heart disease, chronic pulmonary disease, chronic alcoholism	Asplenia <sup>11</sup> (including elective splenectomy and terminal complement deficiencies)	Chronic liver disease, recipients of clotting factor concentrates	Kidney failure, end-stage renal disease, recipients of hemodialysis	Human immunodeficiency virus (HIV) infection <sup>12</sup>	Healthcare workers
Tetanus, diphtheria, pertussis (Td/Tdap) <sup>1,*</sup>		1-dose Td booster every 10 yrs							
		Substitute 1 dose of Tdap for Td							
Human papillomavirus (HPV) <sup>2</sup>		3 doses for females through age 26 yrs (0, 2, 6 mos)							
Measles, mumps, rubella (MMR) <sup>3,*</sup>		1 or 2 doses							
Varicella <sup>4,*</sup>			2 doses (0, 4–8 wks)					2 doses	
Influenza <sup>5,*</sup>		1 dose annually		1 dose annually		1 dose annually			
Pneumococcal (polysaccharide) <sup>6,7</sup>		1–2 doses	1–2 doses					1–2 doses	
Hepatitis A <sup>8,*</sup>		2 doses (0, 6–12 mos, or 0, 6–18 mos)		2 doses		2 doses (0, 6–12 mos, or 0, 6–18 mos)			
Hepatitis B <sup>9,*</sup>		3 doses (0, 1–2, 4–6 mos)			3 doses (0, 1–2, 4–6 mos)				
Meningococcal <sup>10</sup>		1 dose	1 dose		1 dose				

\*Covered by the Vaccine Injury Compensation Program. NOTE: These recommendations must be read with the footnotes (see reverse).

 For all persons in this category who meet the age requirements and who lack evidence of immunity (e.g., lack documentation of vaccination or have no evidence of prior infection)

 Recommended if some other risk factor is present (e.g., on the basis of medical, occupational, lifestyle, or other indications)

 Contraindicated

Approved by  
the Advisory Committee on Immunization Practices,  
the American College of Obstetricians and Gynecologists,  
the American Academy of Family Physicians,  
and the American College of Physicians



DEPARTMENT OF HEALTH AND HUMAN SERVICES  
CENTERS FOR DISEASE CONTROL AND PREVENTION



## Footnotes

### Recommended Adult Immunization Schedule • UNITED STATES, OCTOBER 2006–SEPTEMBER 2007

**1. Tetanus, diphtheria, and acellular pertussis (Td/Tdap) vaccination.** Adults with uncertain histories of a complete primary vaccination series with diphtheria and tetanus toxoid-containing vaccines should begin or complete a primary vaccination series. A primary series for adults is 3 doses; administer the first 2 doses at least 4 weeks apart and the third dose 6–12 months after the second. Administer a booster dose to adults who have completed a primary series and if the last vaccination was received  $\geq 10$  years previously. Tdap or tetanus and diphtheria (Td) vaccine may be used; Tdap should replace a single dose of Td for adults aged  $< 65$  years who have not previously received a dose of Tdap (either in the primary series, as a booster, or for wound management). Only one of two Tdap products (Adacel<sup>®</sup> [sanofi pasteur]) is licensed for use in adults. If the person is pregnant and received the last Td vaccination  $\geq 10$  years previously, administer Td during the second or third trimester; if the person received the last Td vaccination in  $< 10$  years, administer Tdap during the immediate postpartum period. A one-time administration of 1 dose of Tdap with an interval as short as 2 years from a previous Td vaccination is recommended for postpartum women, close contacts of infants aged  $< 12$  months, and all healthcare workers with direct patient contact. In certain situations, Td can be deferred during pregnancy and Tdap substituted in the immediate postpartum period, or Tdap can be given instead of Td to a pregnant woman after an informed discussion with the woman (see [www.cdc.gov/nip/publications/acip-list.htm](http://www.cdc.gov/nip/publications/acip-list.htm)). Consult the ACIP statement for recommendations for administering Td as prophylaxis in wound management ([www.cdc.gov/mmwr/preview/mmwrhtml/00041645.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/00041645.htm)).

**2. Human papillomavirus (HPV) vaccination.** HPV vaccination is recommended for all women aged  $\leq 26$  years who have not completed the vaccine series. Ideally, vaccine should be administered before potential exposure to HPV through sexual activity; however, women who are sexually active should still be vaccinated. Sexually active women who have not been infected with any of the HPV vaccine types receive the full benefit of the vaccination. Vaccination is less beneficial for women who have already been infected with one or more of the four HPV vaccine types. A complete series consists of 3 doses. The second dose should be administered 2 months after the first dose; the third dose should be administered 6 months after the first dose. Vaccination is not recommended during pregnancy. If a woman is found to be pregnant after initiating the vaccination series, the remainder of the 3-dose regimen should be delayed until after completion of the pregnancy.

**3. Measles, mumps, rubella (MMR) vaccination.** *Measles component:* adults born before 1957 can be considered immune to measles. Adults born during or after 1957 should receive  $\geq 1$  dose of MMR unless they have a medical contraindication, documentation of  $\geq 1$  dose, history of measles based on healthcare provider diagnosis, or laboratory evidence of immunity. A second dose of MMR is recommended for adults who 1) have been recently exposed to measles or in an outbreak setting; 2) have been previously vaccinated with killed measles vaccine; 3) have been vaccinated with an unknown type of measles vaccine during 1963–1967; 4) are students in postsecondary educational institutions; 5) work in a healthcare facility; or 6) plan to travel internationally. Withhold MMR or other measles-containing vaccines from HIV-infected persons with severe immunosuppression.

*Mumps component:* adults born before 1957 can generally be considered immune to mumps. Adults born during or after 1957 should receive 1 dose of MMR unless they have a medical contraindication, history of mumps based on healthcare provider diagnosis, or laboratory evidence of immunity. A second dose of MMR is recommended for adults who 1) are in an age group that is affected during a mumps outbreak; 2) are students in postsecondary educational institutions; 3) work in a healthcare facility; or 4) plan to travel internationally. For unvaccinated healthcare workers born before 1957 who do not have other evidence of mumps immunity, consider giving 1 dose on a routine basis and strongly consider giving a second dose during an outbreak. *Rubella component:* administer 1 dose of MMR vaccine to women whose rubella vaccination history is unreliable or who lack laboratory evidence of immunity. For women of childbearing age, regardless of birth year, routinely determine rubella immunity and counsel women regarding congenital rubella syndrome. Do not vaccinate women who are pregnant or who might become pregnant within 4 weeks of receiving vaccine. Women who do not have evidence of immunity should receive MMR vaccine upon completion or termination of pregnancy and before discharge from the healthcare facility.

**4. Varicella vaccination.** All adults without evidence of immunity to varicella should receive 2 doses of varicella vaccine. Special consideration should be given to those who 1) have close contact with persons at high risk for severe disease (e.g., healthcare workers and family contacts of immunocompromised persons) or 2) are at high risk for exposure or transmission (e.g., teachers of young children; child care employees; residents and staff members of institutional settings, including correctional institutions; college students; military personnel; adolescents and adults living in households with children; nonpregnant women of childbearing age; and international travelers). Evidence of immunity to varicella in adults includes any of the following: 1) documentation of 2 doses of varicella vaccine at least 4 weeks apart; 2) U.S.-born before 1980 (although for healthcare workers and pregnant women, birth before 1980 should not be considered evidence of immunity); 3) history of varicella based on diagnosis or verification of varicella by a healthcare provider (for a patient reporting a history of or presenting with an atypical case, a mild case, or both, healthcare providers should seek either an epidemiologic link with a typical varicella case or evidence of laboratory confirmation, if it was performed at the time of acute disease); 4) history of herpes zoster based on healthcare provider diagnosis; or 5) laboratory evidence of immunity or laboratory confirmation of disease. Do not vaccinate women who are pregnant or might become pregnant within 4 weeks of receiving the vaccine. Assess pregnant women for evidence of varicella immunity. Women who do not have evidence of immunity should receive dose 1 of varicella vaccine upon completion or termination of pregnancy and before discharge from the healthcare facility. Dose 2 should be administered 4–8 weeks after dose 1.

**5. Influenza vaccination.** *Medical indications:* chronic disorders of the cardiovascular or pulmonary systems, including asthma; chronic metabolic diseases, including diabetes mellitus, renal dysfunction, hemoglobinopathies, or immunosuppression (including immunosuppression caused by medications or HIV); any condition that compromises respiratory function or the handling of respiratory secretions or that can increase the risk of

aspiration (e.g., cognitive dysfunction, spinal cord injury, or seizure disorder or other neuromuscular disorder); and pregnancy during the influenza season. No data exist on the risk for severe or complicated influenza disease among persons with asplenia; however, influenza is a risk factor for secondary bacterial infections that can cause severe disease among persons with asplenia. *Occupational indications:* healthcare workers and employees of long-term-care and assisted living facilities. *Other indications:* residents of nursing homes and other long-term-care and assisted living facilities; persons likely to transmit influenza to persons at high risk (e.g., in-home household contacts and caregivers of children aged 0–59 months, or persons of all ages with high-risk conditions); and anyone who would like to be vaccinated. Healthy, nonpregnant persons aged 5–49 years without high-risk medical conditions who are not contacts of severely immunocompromised persons in special care units can receive either intranasally administered influenza vaccine (FluMist<sup>®</sup>) or inactivated vaccine. Other persons should receive the inactivated vaccine.

**6. Pneumococcal polysaccharide vaccination.** *Medical indications:* chronic disorders of the pulmonary system (excluding asthma); cardiovascular diseases; diabetes mellitus; chronic liver diseases, including liver disease as a result of alcohol abuse (e.g., cirrhosis); chronic renal failure or nephrotic syndrome; functional or anatomic asplenia (e.g., sickle cell disease or splenectomy [if elective splenectomy is planned, vaccinate at least 2 weeks before surgery]); immunosuppressive conditions (e.g., congenital immunodeficiency, HIV infection [vaccinate as close to diagnosis as possible when CD4 cell counts are highest], leukemia, lymphoma, multiple myeloma, Hodgkin disease, generalized malignancy, or organ or bone marrow transplantation); chemotherapy with alkylating agents, antimetabolites, or high-dose, long-term corticosteroids; and cochlear implants. *Other indications:* Alaska Natives and certain American Indian populations and residents of nursing homes or other long-term-care facilities.

**7. Revaccination with pneumococcal polysaccharide vaccine.** One-time revaccination after 5 years for persons with chronic renal failure or nephrotic syndrome; functional or anatomic asplenia (e.g., sickle cell disease or splenectomy); immunosuppressive conditions (e.g., congenital immunodeficiency, HIV infection, leukemia, lymphoma, multiple myeloma, Hodgkin disease, generalized malignancy, or organ or bone marrow transplantation); or chemotherapy with alkylating agents, antimetabolites, or high-dose, long-term corticosteroids. For persons aged  $\geq 65$  years, one-time revaccination if they were vaccinated  $\geq 5$  years previously and were aged  $< 65$  years at the time of primary vaccination.

**8. Hepatitis A vaccination.** *Medical indications:* persons with chronic liver disease and persons who receive clotting factor concentrates. *Behavioral indications:* men who have sex with men and persons who use illegal drugs. *Occupational indications:* persons working with hepatitis A virus (HAV)-infected primates or with HAV in a research laboratory setting. *Other indications:* persons traveling to or working in countries that have high or intermediate endemicity of hepatitis A (a list of countries is available at [www.cdc.gov/travel/diseases.htm](http://www.cdc.gov/travel/diseases.htm)) and any person who would like to obtain immunity. Current vaccines should be administered

in a 2-dose schedule at either 0 and 6–12 months, or 0 and 6–18 months. If the combined hepatitis A and hepatitis B vaccine is used, administer 3 doses at 0, 1, and 6 months.

**9. Hepatitis B vaccination.** *Medical indications:* persons with end-stage renal disease, including patients receiving hemodialysis; persons seeking evaluation or treatment for a sexually transmitted disease (STD); persons with HIV infection; persons with chronic liver disease; and persons who receive clotting factor concentrates. *Occupational indications:* healthcare workers and public-safety workers who are exposed to blood or other potentially infectious body fluids. *Behavioral indications:* sexually active persons who are not in a long-term, mutually monogamous relationship (i.e., persons with  $> 1$  sex partner during the previous 6 months); current or recent injection-drug users; and men who have sex with men. *Other indications:* household contacts and sex partners of persons with chronic hepatitis B virus (HBV) infection; clients and staff members of institutions for persons with developmental disabilities; all clients of STD clinics; international travelers to countries with high or intermediate prevalence of chronic HBV infection (a list of countries is available at [www.cdc.gov/travel/diseases.htm](http://www.cdc.gov/travel/diseases.htm)); and any adult seeking protection from HBV infection. Settings where hepatitis B vaccination is recommended for all adults: STD treatment facilities; HIV testing and treatment facilities; facilities providing drug-abuse treatment and prevention services; healthcare settings providing services for injection-drug users or men who have sex with men; correctional facilities; end-stage renal disease programs and facilities for chronic hemodialysis patients; and institutions and nonresidential daycare facilities for persons with developmental disabilities. *Special formulation indications:* for adult patients receiving hemodialysis and other immunocompromised adults, 1 dose of 40  $\mu\text{g}/\text{mL}$  (Recombivax HB<sup>®</sup>) or 2 doses of 20  $\mu\text{g}/\text{mL}$  (Engerix-B<sup>®</sup>).

**10. Meningococcal vaccination.** *Medical indications:* adults with anatomic or functional asplenia, or terminal complement component deficiencies. *Other indications:* first-year college students living in dormitories; microbiologists who are routinely exposed to isolates of *Neisseria meningitidis*; military recruits; and persons who travel to or live in countries in which meningococcal disease is hyperendemic or epidemic (e.g., the "meningitis belt" of sub-Saharan Africa during the dry season [December–June]), particularly if their contact with local populations will be prolonged. Vaccination is required by the government of Saudi Arabia for all travelers to Mecca during the annual Hajj. Meningococcal conjugate vaccine is preferred for adults with any of the preceding indications who are aged  $\leq 55$  years, although meningococcal polysaccharide vaccine (MPSV4) is an acceptable alternative. Revaccination after 5 years might be indicated for adults previously vaccinated with MPSV4 who remain at high risk for infection (e.g., persons residing in areas in which disease is epidemic).

**11. Selected conditions for which *Haemophilus influenzae* type b (Hib) vaccine may be used.** Hib conjugate vaccines are licensed for children aged 6 weeks–71 months. No efficacy data are available on which to base a recommendation concerning use of Hib vaccine for older children and adults with the chronic conditions associated with an increased risk for Hib disease. However, studies suggest good immunogenicity in patients who have sickle cell disease, leukemia, or HIV infection or who have had splenectomies; administering vaccine to these patients is not contraindicated.

Testimony on HB 1136 and 1435  
Stephen McDonough MD March 12, 2007

Madam Chairman and members of the North Dakota Senate Health and Human Services Committee: Dr. Twogood, president of the North Dakota Chapter of the American Academy of Pediatrics, asked me to provide testimony today. I am a pediatrician licensed to practice medicine in North Dakota since 1980, 12 years in private practice and 15 years at the North Dakota Department of Health from 1985 to 2000. Immunizations are a high priority for pediatricians at Medcenter One and we receive annual awards from the NDDH for our high immunization rates.

Immunizations are among the three most important public health functions along with vital records and a safe water supply. During the years I spent at the NDDH, North Dakota had one of the best immunization programs in the country. North Dakota was the only state to be measles free during the national measles outbreak in the late 1980s, an outbreak that shamed the United States to improve immunization programs. North Dakota was the first state to eliminate the most common cause of meningitis in children (Hib) in the early 1990s. These accomplishments were a result of state general funding to supplement federal dollars, good public health departments and private physicians and strong leadership from the NDDH.

The NDDH also provided immunizations during emergencies. The flooding in the Red River Valley necessitated tetanus immunization to residents returning to their damaged homes. The deadly outbreak in Williston of a childhood blood infection from meningococcus resulted in a mass immunization of all children ages 2 to 18 in Williston during one week.

New vaccines are being added on a regular basis and it is a challenge to keep up and provide high quality care. HB 1136 adds vaccines that are well accepted by parents. Rotavirus is the most common cause of dehydration in infants. Pneumococcal disease causes pneumonia, sinusitis, blood infections and ear infections. Hepatitis A vaccine prevents a form of food borne illness. Meningococcal disease can cause deadly outbreaks in college students and young children, as seen in Williston.

Unfortunately, our state and nation's immunization program is unraveling from inadequate funding and poor leadership. We constantly struggle, every year, with an inept or marginal influenza immunization program. When the Centers for Disease Control should have been working on influenza, they were concentrating on smallpox bioterrorism wasting billions of dollars and valuable time. Now the CDC is proposing a national warehouse for immunizations and cutting federal aid to North Dakota's immunization program.

The next natural disaster may be pandemic influenza. If anyone tells you that we are adequately prepared for "bird flu" in the next few years, they either do not know what they are talking about or are not telling the truth. Health care facilities will be overwhelmed and there will be panic. There will not be enough immunizations, medications, testing materials, or hospital beds.

HB 1435 will assist the NDDH over the next biennium until some new immunization program is hopefully developed. North Dakota can ill afford further weakening of our public health system.