



**II. RECOMMENDED VACCINATIONS**

Based on American College Health Association (ACHA) and the CDC guidelines, the following immunizations are recommended, not required, and offered by the Student Health Center. Consult your personal physician or Student Health Center if you have questions about these immunizations.

**HEPATITIS B:**

1. Hepatitis B Vaccination..... Dose #1 \_\_\_/\_\_\_/\_\_\_ Dose #2 \_\_\_/\_\_\_/\_\_\_ Dose #3 \_\_\_/\_\_\_/\_\_\_  
 Mo Day Yr Mo Day Yr Mo Day Yr  
**Or**

2. Twinrix (HEPATITIS A/B) ... Dose #1 \_\_\_/\_\_\_/\_\_\_ Dose #2 \_\_\_/\_\_\_/\_\_\_ Dose #3 \_\_\_/\_\_\_/\_\_\_  
 Mo Day Yr Mo Day Yr Mo Day Yr

**HEPATITIS A:** ..... Dose #1 \_\_\_/\_\_\_/\_\_\_ Dose #2 \_\_\_/\_\_\_/\_\_\_  
 Mo Day Yr Mo Day Yr

**VARICELLA:** (chicken pox): Two doses one month apart recommended for adults with no history of disease:

Dose #1 \_\_\_/\_\_\_/\_\_\_ Dose #2 \_\_\_/\_\_\_/\_\_\_  
 Mo Day Yr Mo Day Yr

**POLIO :** Has report of positive immune **titer**. Specify date: \_\_\_/\_\_\_/\_\_\_ Or Primary Series: Yes  No   
 Last Booster Date: \_\_\_/\_\_\_/\_\_\_  
 Mo Day Yr

<b>MEDICAL CONTRAINDICATION STATEMENT</b>		
The individual identified on this form has been diagnosed with a medical condition which precludes receiving the following vaccines:		
<b>VACCINE</b>	<b>MEDICAL CONTRAINDICATION*</b>	<b>DURATION OF CONTRAINDICATION</b>
It is understood in the event the disease (except Tetanus) for which this exemption requested occurs on campus, the individual will be excluded from ALL campus activities until Public Health Authorities declare the threat of disease has ended. This action is taken to prevent the spread of disease to the individual who cannot medically receive the vaccine.		
<b>NOTE:</b> Name, address telephone number and <b>SIGNATURE</b> of the physician are required to validate the medical exemption.		
<b>STAMP SIGNATURES ARE NOT ACCEPTED. Below signature is for <u>Medical Contraindications</u> only.</b>		
Physician Name _____		
Address _____		
Telephone Number _____		
Signature _____		
Medical Contraindication to Vaccine must be in accordance with recommendations of Advisory Committee on Immunization Practices listed below:		
<b>General Contraindications</b>		
<ul style="list-style-type: none"> <li>• Anaphylactic reaction to a vaccine contraindicates future doses of vaccine.</li> <li>• Anaphylactic reaction to a vaccine substance contraindicates the use of vaccine containing that substance.</li> </ul>		
<b>Contraindications to MMR</b>		
<ul style="list-style-type: none"> <li>• Anaphylactic reaction to eggs or Neomycin</li> <li>• Pregnancy</li> <li>• Known altered immunodeficiency (hematologic &amp; solid tumors, congenital immunodeficiency or long term immunosuppressive therapy)</li> </ul>		
<b>Contraindication to TB (Mantoux) skin test</b>		
<ul style="list-style-type: none"> <li>• Recent live virus vaccines (MMR). Apply TB Mantoux (PPD) skin test 4-6 weeks after administration of live virus vaccine.</li> <li>• Documentation of Positive Mantoux (PPD). <u>(Must be reviewed by Student Health Center Staff)</u></li> </ul>		

**Distance Education – PLEASE COMPLETE NAME AND ID NUMBER ON FRONT SIDE OF THIS FORM.**

I may be exempt from the above immunizations as I am **totally enrolled** in distance education. I will **never** be on campus. **PLEASE NOTE:** Please check with the department of your major to see if providing immunization records is a requirement. Some areas within ISU require every enrolled student to provide this documentation.

Name (Print): \_\_\_\_\_ ISU ID # \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

# **New Indiana Law Makes College Students Aware of Meningococcal Disease Risk and Promotes Vaccination**

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## **Current Indiana Legislation**

As an effect of the control of *Haemophilus influenzae* type b infections, *Neisseria meningitidis* has become the principal cause of bacterial meningitis in children and young adults in the United States, causing both sporadic disease and outbreaks. Outbreaks of meningococcal disease were rare in the United States in the 1980s; however, since 1991, the rate of occurrence of localized outbreaks has increased. From July 1994 through July 1997, 42 meningococcal outbreaks were reported nationwide, four of which occurred at colleges. In spite of this, outbreaks continue to represent less than 3% of the total cases in the United States.

On September 30, 1997, the American College Health Association (ACHA), which represents about half of the colleges with student health services, released a statement recommending that “college health services take a more proactive role in alerting students and their parents about the dangers of meningococcal disease”, that “college students consider vaccination against potentially dangers of meningococcal disease”, and that “colleges and universities ensure all students have access to a vaccination program for those who want to be vaccinated” (Dr. MarJeanne Collins, Chairman, ACHA Vaccine Preventable Diseases Task Force, personal communication). In a joint study by ACHA and the Centers for Disease Control and Prevention (CDC), surveys were sent to 1,200 ACHA-member schools. Of 691 responding schools, 57 (8%) reported that pre-exposure meningococcal vaccination campaigns had been conducted on their campuses since September 1997.

On October 20, 1999, the CDC Advisory Committee on Immunization Practices (ACIP) voted to recommend that college students, particularly freshmen living in dormitories, be educated about meningococcal disease and the potential benefits of vaccination. ACIP further recommends that immunization should be provided or made easily available to those freshmen who wish to reduce their risk for meningococcal disease. Other undergraduate students wishing to reduce their risk for meningococcal disease can also choose to be vaccinated.

Recently passed Indiana legislation that addresses what post-secondary institutions in Indiana are to provide students that intend to enroll is outlined below:

SECTION 4. IC 20-12-71-13.5 IS ADDED TO THE INDIANA CODE AS A NEW SECTION TO READ AS FOLLOWS [EFFECTIVE October 1, 2002]: **Sec. 13.5. (a) A postsecondary institution in which an individual intends to enroll shall provide detailed information on the risks associated with meningococcal disease and the availability and effectiveness of vaccination to:**

- (1) the individual, if the individual is at least eighteen (18) years of age; or**
- (2) the individual's parent or guardian, if the individual is less than eighteen (18) years of age.**
- (b) A postsecondary institution described in subsection (a) must receive a certificate of immunity:**
  - (1) that is signed by:**
    - (A) the individual, if the individual is at least eighteen (18) years of age; or**
    - (B) the individual's parent or guardian, if the individual is less than eighteen (18) years of age; and**
  - (2) that states that the information provided under subsection (a) has been reviewed by:**
    - (A) the individual, if the individual is at least eighteen (18) years of age; or**
    - (B) the individual's parent or guardian, if the individual is less than eighteen (18) years of age.**

## **What Is Meningococcal Disease?**

Meningococcal disease is a rare but potentially fatal bacterial infection. Invasive meningococcal infections are caused by the bacterium *Neisseria meningitidis*, (also known as meningococcus), a gram negative diplococcus. There are 13 serogroups of *N. meningitidis* (A, B, C, D, 29E, H, I, K, L, W-135, X, Y, and Z). Strains belonging to groups A, B, C, Y, and W-135 are implicated most frequently in systemic disease. The disease is expressed as either meningococcal meningitis, an inflammation of the membranes surrounding the brain and spinal cord, or meningococemia, the presence of the bacteria in the blood. Meningococcal disease can lead to death within 48-72 hours after onset. Of those who survive, an additional 10% have severe after effects of the disease, including mental retardation, hearing loss, and loss of limbs.

Meningococcal disease strikes about 3,000 Americans each year and is responsible for approximately 300 deaths annually. It is estimated that 100 to 125 cases of meningococcal disease occur annually on college campuses and 5 to 15 students die as a result.

## **How Is Meningococcal Disease Transmitted?**

Meningococcal bacteria are transmitted through the air via droplets of respiratory secretions and by direct contact with an infected person's nasal or throat secretions. Although anyone can be a carrier of the bacteria, data indicate that certain social behaviors, such as exposure to passive and active smoking, bar patronage and excessive alcohol consumption, may put college students at increased risk for invasive disease. Patients with respiratory infections, compromised immunity, those in close contact with a known case and travelers to endemic areas of the world are also at increased risk. Direct contact is defined as oral contact with shared items, such as cigarettes or drinking glasses, or through intimate contact, such as kissing.

## What Are the Symptoms?

The early symptoms usually associated with meningococcal disease may include high fever, severe headache, stiff neck, rash, nausea, vomiting and lethargy, and may resemble influenza. Because the disease progresses rapidly, often in as little as 12 hours, prompt diagnosis and treatment are important to assure recovery.

## Why College Students?

Recent evidence indicates that college students residing on campus in dormitories or residence halls appear to be at higher risk for contracting meningococcal meningitis. Research released by the CDC shows that freshmen living in dormitories have a six-fold increased risk for meningococcal meningitis than college students overall.

**Table 1. Rates of Meningococcal disease, by risk group – United States, September 1998-August 1999\***

Risk group	Number of cases	Population	Rate per 100,000
Children aged 1-5 years	255	14,886,569 <sup>†</sup>	1.7
Persons aged 18-23 years	304	22,070,535 <sup>†</sup>	1.4
Non-college students aged 18-23 years	216	14,579,322 <sup>†#</sup>	1.5
College students	90	14,897,268 <sup>#</sup>	0.6
Undergraduates	87	12,771,228 <sup>#</sup>	0.7
Freshmen	40	2,285,001 <sup>#</sup>	1.8
Dormitory residents	45	2,085,618 <sup>#**</sup>	2.2
Freshmen living in dormitories	27	591,587 <sup>#**</sup>	4.6

\* Bruce M, Rosenstein NE, Capparella J, Perkins BA, Collins MJ. meningococcal disease in college students. In: Abstracts of the 39<sup>th</sup> Annual Meeting of the Infectious Diseases Society of America, Philadelphia, PA, November 18-21, 1999:63.

<sup>†</sup> 1998 census data.

<sup>#</sup> NCES, U.S. Dept. of Education, 1996-1997.

<sup>‡</sup> Students enrolled in any postsecondary education for the first time.

\*\* National College Health Risk Behavior Survey (NCHRBS) – United States, 1995.

Cases and outbreaks usually occur in the late winter and early spring when school is in session. From 1980 to 1993, there were 21 outbreaks in the U.S., three of which occurred in colleges. From 1994 to 1996, there were 26 outbreaks, four of which occurred in colleges. Between 1986 and 1993, an outbreak was defined as five cases of the same serotype per 100,000 people with at least three cases occurring within three months. Recent evidence shows the epidemiology of meningococcal disease is changing, with a majority of cases (65%) in the college-age group caused by either serotype C, Y, or W-135, which are all vaccine preventable. Rates of mortality and complications are higher for these serogroups compared to serogroup B, which is not included in the vaccine.

## How Can You Prevent and Control Meningococcal Disease?

Data from the CDC demonstrate that college freshmen, particularly those who live in dormitories, are at a modestly increased risk for meningococcal disease relative to other persons their age. Vaccination with the currently available quadrivalent meningococcal polysaccharide vaccine, Menomune, will decrease the risk for meningococcal disease among such persons. The quadrivalent A, C, Y, W-135 vaccine enhances immunity to four strains of meningococcus that cause 65%-70% of invasive disease and, therefore, reduces a student's risk for disease.

Vaccination does not eliminate risk because:

- the vaccine confers no protection against serogroup B disease, and
- although the vaccine is highly effective against serogroups A, C, Y, and W-135, efficacy is <100%.

The vaccine is safe and adverse reactions are mild and infrequent, consisting primarily of redness and pain at the site of injection lasting up to two days. The duration of the meningococcal vaccine's efficacy is approximately three to five years. As with any vaccine, vaccination against meningitis may not protect 100% of all susceptible individuals. Development of immunity after vaccination requires 7 to 10 days. The vaccine is effective against specific serogroups of meningococcal meningitis, including types A, C, Y, and W-135, with an estimated efficacy of 85%-90% against those groups. It does not protect against serogroup B, which accounts for approximately 46% of meningococcal cases in the U.S.

Other preventive measures that would help protect individuals are:

- good hand washing
- avoid sharing beverage containers, cigarettes, lipstick, or eating utensils
- avoid smoking and smoky environments
- get plenty of sleep, exercise regularly
- eat a balanced diet and avoid excessive alcohol consumption

The following links offer information for those who are considering vaccination:

[www.cdc.gov/nip/publications/VIS/vis-mening.pdf](http://www.cdc.gov/nip/publications/VIS/vis-mening.pdf)

[www.acha.org/projects\\_programs/overview.cfm](http://www.acha.org/projects_programs/overview.cfm)

### Conclusions

The enactment of the new legislation provides an opportunity for students and parents to make an informed decision. This decision will be based on understanding that college freshmen, especially those who live in dormitories, are at a modestly increased risk for meningococcal disease compared with other persons of the same age, and that vaccination with a quadrivalent meningococcal polysaccharide vaccine will decrease the risk for meningococcal disease. Students and parents are encouraged to confer with their healthcare provider or the prospective post-secondary institution to obtain the polysaccharide vaccine.

## References

Control and prevention of meningococcal disease and Control and prevention of serogroup C meningococcal disease: evaluation and management of suspected outbreaks: recommendations of the Advisory Committee on Immunization Practices (ACIP). CDC MMWR 1997; 46(No. RR-5):1—21.

Control and prevention of meningococcal disease and Meningococcal disease and college students: recommendations of the Advisory Committee on Immunization Practices (ACIP). CDC MMWR 2000; 49(No. RR-7):1—22.

Meningococcal Infections. 2000 Red Book: Report of the Committee on Infectious Disease, 25<sup>th</sup> ed. Pickering LK, ed. Elk Grove IL: American Academy of Pediatrics, pages 396-401.

Meningococcal Disease Among College Students. Centers for Disease Control and Prevention web site, [www.cdc.gov](http://www.cdc.gov).

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