

## Bacterial Meningitis

### Do College Students Need To Be Concerned?

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In recent years, there has been much news in the media about Bacterial Meningitis on college campuses. Cases have occurred at schools such as Boston University and Dartmouth College. A study by the Centers for Disease Control has found that overall, college students are not at higher risk than others for developing Bacterial meningitis, but that college **freshmen living in residence halls** may have a 3-6 times greater risk of getting the infection than all college students.

The *Neisseria meningitidis* bacteria that causes an inflammation of the lining of the brain and spinal cord, and is generally transmitted through saliva by kissing, sharing toothbrushes, drinking glasses/water bottles, eating utensils, lipsticks, or cigarettes. Although it is still considered rare, its incidence in 15-24 year olds has increased over the past 5 years to more than 600 cases annually. In any given year, about 125 students on college campuses get the disease, and about five to 15 students die from it.

Two vaccines have been developed to help prevent this disease:

1. **Menomune (A/C/Y/W-135 Quadrivalent polysaccharide vaccine):** is designed to protect against serogroups A, C, Y, and W-135 combined of the *Neisseria Meningitidis* that causes the illness. The vaccine is not foolproof as it does not protect against the B strain, and may only be 85% effective in the strains that it does protect against and is *effective for only 3-5 years*. This vaccine also does not prevent people from being carriers of the bacteria.
2. In January of 2005, the FDA approved **Menactra (A, C,Y and W-135 Polysaccharide Diphtheria Toxoid Conjugate Vaccine)** which is the first quadrivalent conjugate vaccine licensed in the U.S. which protects against the four serogroups (A, C, Y and W-135) of *Neisseria meningitidis*. The benefits of a successful conjugate vaccine are" *improved duration of protection (more than 8 years)*, induction of immunologic memory, booster responses and reduction in nasopharyngeal bacterial carriage (carrier state).

Recent data from 1997 shows that among 15-24 year olds: 32% of cases of meningitis were attributable to serogroup B (no licensed vaccine yet available), 39% of cases to serogroup C, and 25% of cases to serogroup Y. **This represents at least 64% of cases that are potentially vaccine-preventable (serogroup C and Y strains).**

Most outbreaks of Meningitis in New Hampshire and on college campuses have been of serogroup B, (not covered by the vaccine), however, some recent cases at a NH college have proven to be of serogroup C (which is covered). At present the NH Bureau of Communicable Diseases, the CDC Advisory Committee on Immunization Practices (ACIP) and the American College Health Association (ACHA) recommend that entering college students (under age 25) consult with their health care practitioner about meningococcal disease and the benefits of vaccination.

The vaccine recommendation is one dose, preferably at entry into college for freshmen living in residence halls that wish to reduce their risk of meningococcal disease. Any undergraduate less than 25 years who wish to reduce their risk of disease can consider the vaccine as well as anyone with terminal complement deficiencies or asplenia should receive the vaccine.

There are risks associated with all vaccines. The most common adverse reactions to these vaccines may include pain, redness, and induration at the site of injection, headache, fatigue and malaise. Menactra is contraindicated in persons with known hypersensitivity to any component of the vaccine or to latex (which is used in the vial stopper).

Meningitis is a disease that is monitored carefully in all health care settings especially by those of us on college campuses. Because the **hallmark symptoms of headache, vomiting, disorientation, high fever, and a stiff neck** do not always appear together, the illness can present initially like those of the flu. Our approach in Health Services is to err on the side of caution rather than risk the life of a student. In the event that a student was diagnosed with the bacterium, that person would be treated, and contacts would be notified and treated prophylactically with the appropriate antibiotic.

Beginning in August of 2005, we at Saint Anselm College are *requiring that our entering new students be immunized against Meningitis*. Because you may find it difficult to obtain the vaccine, we will offer the vaccine Menomune and/or Menactra (if it is available) to all registered students on **Tuesday, August 30 from 10 A.M.—2 P.M. and 4—6 P.M. in the North Lounge of the Cushing Center.**

**Please note that we will only order the vaccine for your son/daughter if you have completed and returned this form and enclosed a check for the required amount.**

- We will make every attempt to purchase the Menactra vaccine (\$85), however, should it not be available for purchase in the quantities needed, we will order and administer the Menomune vaccine (\$75).

**To reserve a dose of the Vaccine please detach and fill in the form below:**

Please order my child \_\_\_\_\_ a dose of Menactra, the vaccine to prevent  
print name of student

meningococcal disease. I understand that my signature below permits the Health Services to order a dose of vaccine for my son/daughter and I am enclosing a check for \$85 for the cost of the Menactra vaccine (made out to Saint Anselm College).

Signature of parent

Date

*\*Insurance reimbursement forms will be provided at the time of immunization upon request.*