Which students are most at risk for meningococcal disease?

Meningococcal disease is caused by infection with bacteria called *Neisseria meningitidis*. These bacteria can infect the tissue that surrounds the brain and spinal cord called the “meninges” and cause meningitis, or they can infect the blood or other body organs. Symptoms of meningococcal disease may appear suddenly. Fever, severe and constant headache, stiff neck or neck pain, nausea and vomiting, sensitivity to light and rash can all be signs of meningococcal disease. Changes in behavior such as confusion, sleepiness, and trouble waking up can also be important symptoms. Less common presentations include pneumonia and arthritis. In the US, about 350-550 people get meningococcal disease each year and 10-15% die despite receiving antibiotic treatment. Of those who live, another 10-20% lose their arms or legs, become hard of hearing or deaf, have problems with their nervous systems, including long term neurologic problems, or suffer seizures or strokes.

How is meningococcal disease spread?

These bacteria are passed from person-to-person through saliva. You must be in close contact with an infected person’s saliva in order for the bacteria to spread. Close contact includes activities such as kissing, sharing water bottles, sharing eating/drinking utensils or sharing cigarettes with someone who is infected; or being within 3-6 feet of someone who is infected and is coughing or sneezing.

Who is at most risk for getting meningococcal disease?

High-risk groups include anyone with a damaged spleen or whose spleen has been removed, those with persistent complement component deficiency (an inherited immune disorder), HIV infection, those traveling to countries where meningococcal disease is very common, microbiologists who work with the organism and people who may have been exposed to meningococcal disease during an outbreak. People who live in certain settings such as first year college students living on campus and military recruits are also at greater risk of disease from some of the serogroups.

Is there a vaccine against meningococcal disease?

Yes, there are 2 different meningococcal vaccines. Quadrivalent meningococcal conjugate vaccine (Menactra and Menveo) protects against 4 serotypes (A, C, W and Y) of meningococcal disease. Meningococcal serogroup B vaccine (Bexsero and Trumenba) protects against serogroup B meningococcal disease. Quadrivalent meningococcal conjugate vaccine is routinely recommended at age 11-12 years with a booster at age 16. Students receiving their first dose on or after their 16th birthday do not need a booster. Individuals in certain high risk groups may need to receive 1 or more of these vaccines based on their doctor’s recommendations. Adolescents and young adults (16-23 years of age) who are not in high risk groups may be vaccinated with meningococcal B vaccine, preferably at 16-18 years of age, to provide short-term protection for most strains of serogroup B meningococcal disease. Talk with your doctor about which vaccines you should receive.

Colleges: Massachusetts requires all newly enrolled full-time students 21 years of age and under attending a postsecondary institution (e.g., college) to receive a dose of quadrivalent meningococcal conjugate vaccine on or after their 16th birthday to protect against serotypes A, C, W and Y or fall within one of the exemptions in the law, discussed on the reverse side of this sheet.

Residential Schools: Massachusetts requires all newly enrolled full-time students attending a secondary school who will be living in a dormitory or other congregate housing licensed or approved by the secondary school or institution (e.g., boarding school) to receive quadrivalent meningococcal conjugate vaccine to protect against serotypes A, C, W and Y or fall within one of the exemptions in the law, discussed on the reverse side of this sheet.

The law provides an exemption for students signing a waiver that reviews the dangers of meningococcal disease and indicates that the vaccination has been declined. To qualify for this exemption, you are required to review the information below and sign the waiver at the end of this document. Please note, if a student is under 18 years of age, a parent or legal guardian must be given a copy of this document and must sign the waiver.

What is meningococcal disease?

Meningococcal disease is caused by infection with bacteria called *Neisseria meningitidis*. These bacteria can infect the tissue that surrounds the brain and spinal cord called the “meninges” and cause meningitis, or they can infect the blood or other body organs. Symptoms of meningococcal disease may appear suddenly. Fever, severe and constant headache, stiff neck or neck pain, nausea and vomiting, sensitivity to light and rash can all be signs of meningococcal disease. Changes in behavior such as confusion, sleepiness, and trouble waking up can also be important symptoms. Less common presentations include pneumonia and arthritis. In the US, about 350-550 people get meningococcal disease each year and 10-15% die despite receiving antibiotic treatment. Of those who live, another 10-20% lose their arms or legs, become hard of hearing or deaf, have problems with their nervous systems, including long term neurologic problems, or suffer seizures or strokes.

How is meningococcal disease spread?

These bacteria are passed from person-to-person through saliva (spit). You must be in close contact with an infected person’s saliva in order for the bacteria to spread. Close contact includes activities such as kissing, sharing water bottles, sharing eating/drinking utensils or sharing cigarettes with someone who is infected; or being within 3-6 feet of someone who is infected and is coughing or sneezing.

Who is at most risk for getting meningococcal disease?

High-risk groups include anyone with a damaged spleen or whose spleen has been removed, those with persistent complement component deficiency (an inherited immune disorder), HIV infection, those traveling to countries where meningococcal disease is very common, microbiologists who work with the organism and people who may have been exposed to meningococcal disease during an outbreak. People who live in certain settings such as first year college students living on campus and military recruits are also at greater risk of disease from some of the serogroups.

Which students are most at risk for meningococcal disease?

In the 1990s, college freshmen living in residence halls were identified as being at increased risk for meningococcal disease. Meningococcal disease and outbreaks in young adults were primarily due to serogroup C. However, following many years of routine vaccination of young people with quadrivalent meningococcal conjugate vaccine (for serogroups A, C, W and Y), serogroup B is now the primary cause of meningococcal disease and outbreaks in young adults. Among the approximately 9 million students aged 18-21 years enrolled in college, there are an average of 20 cases and 0-4 outbreaks due to serogroup B reported annually. Although incidence of serogroup B meningococcal disease in college students is low, four-year college students are at increased risk compared to non-college students; risk is highest among first-year students living on campus. The close contact in college residence halls, combined with social mixing activities (such as going to bars, clubs or parties; participating in Greek life; sharing food or beverages; and other activities involving the exchange of saliva), may put college students at increased risk.

Is there a vaccine against meningococcal disease?

Yes, there are 2 different meningococcal vaccines. Quadrivalent meningococcal conjugate vaccine (Menactra and Menveo) protects against 4 serotypes (A, C, W and Y) of meningococcal disease. Meningococcal serogroup B vaccine (Bexsero and Trumenba) protects against serogroup B meningococcal disease. Quadrivalent meningococcal conjugate vaccine is routinely recommended at age 11-12 years with a booster at age 16. Students receiving their first dose on or after their 16th birthday do not need a booster. Individuals in certain high risk groups may need to receive 1 or more of these vaccines based on their doctor’s recommendations. Adolescents and young adults (16-23 years of age) who are not in high risk groups may be vaccinated with meningococcal B vaccine, preferably at 16-18 years of age, to provide short-term protection for most strains of serogroup B meningococcal disease. Talk with your doctor about which vaccines you should receive.
Is the meningococcal vaccine safe?
Yes. Getting meningococcal vaccine is much safer than getting the disease. Some people who get meningococcal vaccine have mild side effects, such as redness or pain where the shot was given. These symptoms usually last for 1-2 days. A small percentage of people who receive the vaccine develop a fever. The vaccine can be given to pregnant women. A vaccine, like any medicine, is capable of causing serious problems such as severe allergic reactions, but these are rare.

Is meningococcal vaccine mandatory for entry into secondary schools that provide housing, and colleges?
Massachusetts law (MGL Ch. 76, s.15D) and regulations (105 CMR 220.000) requires both newly enrolled full-time students attending a secondary school (those schools with grades 9-12) who will be living in a dormitory or other congregate housing licensed or approved by the secondary school or institution and newly enrolled full-time students 21 years of age and younger attending a postsecondary institution (e.g., colleges) to receive a dose of quadrivalent meningococcal conjugate vaccine.

At affected secondary schools, the requirements apply to all new full-time residential students, regardless of grade (including grades pre-K through 8) and year of study. Secondary school students must provide documentation of having received a dose of quadrivalent meningococcal conjugate vaccine at any time in the past, unless they qualify for one of the exemptions allowed by the law. College students 21 years of age and younger must provide documentation of having received a dose of quadrivalent meningococcal conjugate vaccine on or after their 16th birthday, regardless of housing status, unless they qualify for one of the exemptions allowed by the law. Meningococcal B vaccines are not required and do not fulfill the requirement for receipt of meningococcal vaccine. Whenever possible, immunizations should be obtained prior to enrollment or registration. However, students may be enrolled or registered provided that the required immunizations are obtained within 30 days of registration.

Exemptions: Students may begin classes without a certificate of immunization against meningococcal disease if: 1) the student has a letter from a physician stating that there is a medical reason why he/she can’t receive the vaccine; 2) the student (or the student’s parent or legal guardian, if the student is a minor) presents a statement in writing that such vaccination is against his/her sincere religious belief; or 3) the student (or the student’s parent or legal guardian, if the student is a minor) signs the waiver below stating that the student has received information about the dangers of meningococcal disease, reviewed the information provided and elected to decline the vaccine.

Shouldn’t meningococcal B vaccine be required?
CDC’s Advisory Committee on Immunization Practices has reviewed the available data regarding serogroup B meningococcal disease and the vaccines. At the current time, there is no routine recommendation and no statewide requirement for meningococcal B vaccination before going to college (although some colleges might decide to have such a requirement). As noted previously, adolescents and young adults (16 through 23 years of age) may be vaccinated with a serogroup B meningococcal vaccine, preferably at 16 through 18 years of age, to provide short term protection against most strains of serogroup B meningococcal disease. This would be a decision between a patient or parent and a healthcare provider. These policies may change as new information becomes available.

Where can a student get vaccinated?
Students and their parents should contact their healthcare provider and make an appointment to discuss meningococcal disease, the benefits and risks of vaccination, and the availability of these vaccines. Schools and college health services are not required to provide you with this vaccine.

Where can I get more information?
- Your healthcare provider
- The Massachusetts Department of Public Health, Division of Epidemiology and Immunization at (617) 983-6800 or [www.mass.gov/dph/imm](http://www.mass.gov/dph/imm) and [www.mass.gov/dph/epi](http://www.mass.gov/dph/epi)
- Your local health department (listed in the phone book under government)

Waiver for Meningococcal Vaccination Requirement
I have received and reviewed the information provided on the risks of meningococcal disease and the risks and benefits of quadrivalent meningococcal conjugate vaccine. I understand that Massachusetts’ law requires newly enrolled full-time students at secondary schools who are living in a dormitory or congregate living arrangement licensed or approved by the secondary school, and newly enrolled full-time students at colleges and universities who are 21 years of age or younger to receive meningococcal vaccinations, unless the students provide a signed waiver of the vaccination or otherwise qualify for one of the exemptions specified in the law.

☐ After reviewing the materials above on the dangers of meningococcal disease, I choose to waive receipt of meningococcal vaccine.

Student Name: ___________________________ Date of Birth: _______ Student ID: ___________________________
Signature: ___________________________ Date: ___________________________

(MDPH Meningococcal Information and Waiver Form Updated September 2020)

Provided by: Massachusetts Department of Public Health / Divisions of Epidemiology and Immunization / 617-983-6800