



Philadelphia Department of Public Health Meningococcal Disease in Philadelphia March 18, 2014

What is meningococcal disease?

More information on this disease including what causes it, how it can be spread, and how it can be prevented can be found on our [Meningococcal Frequently Asked Questions](#).

How does the Philadelphia Department of Public Health identify and investigate cases of meningococcal disease?

The Philadelphia Department of Public Health (PDPH) maintains a robust surveillance system throughout the city and regionally to identify any suspect cases of meningococcal disease among its residents or persons connected to Philadelphia. PDPH works in close partnership with hospitals, laboratories, health departments, and the Centers for Disease Control and Prevention in monitoring notifiable infectious diseases such as meningococcal diseases.

Any new reports are thoroughly investigated to identify close contacts to the ill individual(s). Close contacts are individuals who may have shared a room with an ill individual or had exposure to the ill individual's saliva through activities such as sharing drinks, food, cigarettes, kissing, or exposure to uncovered coughs or sneezes. These individuals are provided with antibiotics to prevent illness.

Is there an outbreak of meningococcal disease in Philadelphia or at Drexel University?

No. There has been a single case of meningococcal disease in Philadelphia in 2014 in a Drexel University student. This is consistent with annual trends and is not suggestive of an outbreak.

Is this case linked to the Princeton University outbreak?

The Centers for Disease Control and Prevention has performed laboratory testing to determine that the bacteria that infected the Drexel University student is identical to the bacteria found in cases in the Princeton outbreak. The Drexel student did have close contact with students at Princeton University preceding her illness. Therefore, this case may be associated with the ongoing outbreak at Princeton University.

What is the Philadelphia Department of Public Health doing to prevent meningococcal disease transmission at Drexel University?

PDPH continues to work closely with Drexel University to identify close contacts to the single person identified with meningococcal disease. Close contacts are individuals who may have had exposure to the ill individual's saliva through activities such as sharing drinks, food, cigarettes, kissing, or exposure to uncovered coughs or sneezes. These individuals are then offered antibiotic chemoprophylaxis to prevent illness.

The bacteria are not spread by casual contact activities like being in the same work or school room as the sick person, or handling items that the sick person has touched. Likewise, being around a person who was in contact with the sick person does not put you at risk for catching meningococcal disease. Additionally, the bacteria does not survive in the environment for more than a few minutes.

PDPH and Drexel have identified over 500 students, healthcare workers, and first responders who meet the appropriate criteria for antibiotic chemoprophylaxis and have provided this medication to them. Furthermore, PDPH and Drexel continue to educate the community regarding meningococcal disease prevention and its signs and symptoms so that illness can be prevented and/or recognized quickly.

The disease can be prevented by practicing good hygiene such as hand washing, covering coughs and sneezes, and practicing healthy habits such as avoiding sharing of cups and eating utensils, cigarettes, and avoiding excessive alcohol consumption. Anyone experiencing signs and symptoms of the illness such as severe headache, fever, body aches, fatigue, stiff neck, confusion, vomiting, and sensitivity to light should consult with a healthcare provider immediately.

Is there a vaccine against this infection?

The currently licensed meningococcal vaccines in the United States provide protection against four different serogroups (types) of the meningococcal infection - A, C, Y and W-135. There is currently no vaccine licensed in the United States that covers serogroup B. As such, even students who have been vaccinated against bacterial meningitis may still be vulnerable to infections with serogroup B.

Because Princeton University and the University of California at Santa Barbara were experiencing outbreaks of meningococcal disease on their campus, an investigational new two-dose serogroup B meningococcal vaccine known as Bexsero was provided to eligible students.

If you have further questions about the serogroup B meningococcal vaccine, please email meningvaccine@cdc.gov.

Should Philadelphia college students receive the meningococcal vaccine?

It is a Pennsylvania requirement that college students receive the meningococcal vaccine currently licensed in the United States. The serogroup B vaccine is not currently available in the United States.

Vaccines, licensed and unlicensed, are not recommended for use as a means of protection following exposure to a single ill individual. The best course of action remains identification of close contacts and administration of antibiotic chemoprophylaxis.

Why can't antibiotics be used for everyone instead of the vaccine?

(answer courtesy of CDC)

Antibiotics are given to close contacts of those who have been diagnosed with meningococcal disease. Anyone who is a close contact of a person with meningococcal disease is at extremely high risk for getting the infection. Close contacts are identified by asking people about the extent of their contact and interactions with the person who got meningococcal disease. For example, living with the person who got sick puts you at high risk, but working together in an office generally does not.

Recommending antibiotics to an entire student body is not an effective strategy. Meningococcal bacteria are spread from person to person and cause "carriage" in the nose and throat. Carriage means that the bacteria live in the nose and throat, but don't invade your body and make you sick. Most carried strains are unlikely or unable to cause disease. Though certain strains are more likely to cause disease, at any given time only a very small number of people may carry the outbreak strain. If you are exposed to the outbreak strain you either develop disease within a few days or you develop immunity and the carried bacteria disappear from your nose and throat. If you wanted to try and control an outbreak with antibiotics, you would have to treat every single person at risk in the outbreak at the same time. Otherwise, if one person is still carrying the bacteria in their nose and throat, it can continue to spread since people would not have lasting protection. Even if you can treat everyone at once, antibiotics are not 100% effective. The strain could still circulate among a student population. For the same reason, it is not possible to test everyone and treat the carriers with antibiotics.

Treating many people unnecessarily with antibiotics also carries risks, possibly causing more harm than good. To help prevent the growing threat of antibiotic resistance, it is critical that antibiotics only be used when necessary and appropriate.

Is there any test that can be done to see if I have been exposed to meningococcal bacteria?

There is no recommendation to test people without symptoms who might have been exposed to someone with meningitis. If you think you might have had close contact with someone who has been diagnosed with or has symptoms of meningitis, call your health care provider. He or she can work with public health officials to determine if you should receive antibiotics to prevent infection. For more information on why testing is not recommended please also refer to the question above.

Should individuals avoid contact with universities or college campuses?

No. There is no recommendation to avoid contact with university or college campuses like Princeton or Drexel. Sporadic cases of meningococcal disease are not unusual on residential campuses. The bacteria that cause meningococcal disease are less infectious than many other common viruses such as the flu. To prevent the spread of any respiratory disease, it is always recommended that you practice good hygiene habits.

Should I take antibiotics before going to Princeton or Drexel University for an event or activity?

No. There is no recommendation to take antibiotics before attending events or activities at these universities. Taking antibiotics unnecessarily may cause more harm than good as this action may wipe out “good bacteria” or contribute to antibiotic resistance.

Only people who have been in close contact with a suspect or confirmed case of meningococcal need to be considered for preventive treatment. The infectious period for meningococcal disease is considered to be from 10 days before the person becomes ill to 1 day after he or she starts on antibiotics. This means that people who were in close contact with the sick person during this time are at higher than average risk to get meningococcal disease.