

To: SDSU Community

From: Gregg Lichtenstein, MD, MBA, Director, Student Health Services

Subject: Monday Update on Meningococcal Meningitis

- There has been only one case of meningococcal disease at SDSU this year. While several other students were evaluated for possible meningitis, none was found to have it.
- Another 78 students were evaluated at Student Health Services on Saturday, bringing our total to almost 1000 students seen and many additional students counseled over the phone and face-to-face. Tracing of contacts has continued over the weekend, and no additional groups have been identified at risk.
- We were informed on Sunday that the California State Public Health Laboratory has confirmed that the strain of *Neisseria meningitidis* (also known as meningococcus), the bacteria that caused the death of an SDSU student, was serogroup B. While 5 serogroups can cause disease, 3 serogroups (B, C, and Y) are responsible for most meningococcal illness in the United States. The currently available vaccines in the United States cover serogroups A, C, Y, and W-135, but not B.
- The antibiotic that has been provided over the past week does provide short-term protection against serogroup B meningococcal disease.
- Student Health Services will continue to monitor the health of the campus community and will notify you if needed.

FAQs

• How common is meningococcal disease?

Meningococcal disease is relatively rare. In 2013, 564 cases of meningococcal disease were reported nationally (incidence 0.18/100,000 population). In 95% of cases, there is only a single individual involved and so outbreaks are unusual. Out of those who become ill, 85-90% recover. You can learn more about meningococcal disease by going to the Centers for Disease Control and Prevention (CDC) meningococcal website: <http://www.cdc.gov/meningococcal/index.html>

• Why doesn't Student Health Services treat everyone with preventive antibiotics?

Using expert advice from San Diego County Public Health Services epidemiologists, we determined that only some people were at risk of infection. Generally, only close contacts such as roommates and people who share glasses, utensils, food or drink with or kiss an infected individual are treated with antibiotics after exposure to someone with meningococcal disease. However, because the student who died had attended several large social events where sharing may have occurred, we decided to treat a much larger group of people. It is likely that most of those people were not at risk, but we acted aggressively to treat them just to make sure. People who had contact with those contacts considered "higher risk," as well as those attending class, working with or even sharing a bathroom with an infected individual are not considered at risk and do not need antibiotics.

Recommending antibiotics to an entire student body is not an effective strategy to stop a meningococcal disease outbreak. Treating many people unnecessarily with antibiotics carries risks, possibly causing more harm than good. Antibiotics can sometimes have unpleasant side effects. Additionally, about 1 in every 100 people has an allergy to an antibiotic and some of them may not even be aware of it. Overuse of antibiotics will further increase the growth of resistance to these drugs, making them less effective, and so it is important to use them only when necessary and appropriate.

- **Why doesn't SDSU shut down for a period of time to reduce transmission of meningococcus?**

Even in a situation when there is more than one case, CDC has not generally recommended closing schools or universities, restricting travel to or from an area with an outbreak, or canceling sporting or social events. Meningococcus bacteria are NOT airborne, and so are not as contagious as the germs that cause the common cold or the flu. As stated above, classroom contact is not associated with increased risk.

- **Should I get tested to see if I'm carrying meningococcal bacteria?**

No. At any point in time, 5-10% of us carry these bacteria in our noses and throats and never get sick; very few carry a strain that is potentially illness-causing. Even those carrying a "bad" strain are not necessarily at high risk of becoming sick because their immune system keeps the bacteria from invading the body. Looking for and sometimes finding the presence of these bacteria in someone who is not ill merely causes needless worry. Testing for meningococcus in people who are well is not recommended by infectious disease experts.

- **How can I protect myself from getting ill from meningococcus?**

- The most effective measure to protect oneself from meningococcal infection is immunization. While the currently available MC4 vaccines (Menactra® and Menveo®) are effective in protecting against serogroups A, C, Y and W-135, they are not effective against serogroup B, the strain that caused disease in our student and one-third of U.S. cases. However, these vaccines are recommended for:
 - All children and teens ages 11-18
 - People ages younger than 22 who are or will be first-year college students living in campus housing
 - People who have a damaged or missing spleen, including those with sickle cell disease
 - People who know they have an immune system disorder caused by deficiency of certain complement components
 - People who work in laboratories with meningococcal bacteria
 - People who travel to certain countries in sub-Saharan Africa or to Mecca during the annual pilgrimage
 - Military recruits
- Since meningococcus is transmitted through mouth and respiratory secretions, you can reduce spread and risk by:
 - Avoiding sharing drinks, cups, utensils, water bottles, lipstick
 - Avoiding kissing (especially multiple people)
 - Avoiding exposure to smoke (including secondary smoke)
 - Covering coughs and getting adequate sleep.

You can learn more about the available meningococcal vaccines at <http://www.cdc.gov/vaccines/vpd-vac/mening/default.htm>

- **Can I get a vaccine that will protect against serogroup B meningococcal disease?**

Until the serogroup B vaccine (MenB®) has received FDA approval, it may only be released as an “investigational drug” with a recommendation by the CDC. This vaccine has been used for wide-scale immunization efforts during the outbreaks at Princeton University and University of California, Santa Barbara last year. However, it has not been released for use in communities where there has only been one case. As a result, we provided preventive antibiotics to those at highest risk. If there is a second case of serogroup B meningococcal disease, SDSU will consult with county, state, and CDC officials and follow their protocol. 39-41 You can learn more about the use of serogroup B vaccine in outbreaks at <http://www.cdc.gov/meningococcal/outbreaks/vaccine-serogroupb.html>

• What should I do if I feel sick?

Some signs of meningococcal disease include sudden onset of fever, headache, stiff neck, nausea and/or vomiting, and altered mental functioning such as confusion. If you experience these symptoms, you need to be evaluated IMMEDIATELY at a hospital emergency department. Because this illness worsens very rapidly, early treatment is essential. Do not go to Student Health Services, your family doctor, or an Urgent Care clinic.

• When can I stop worrying and get on with my normal life?

Given that from time from infection to the onset of illness can be up to 10 days, we estimate that by Thursday, October 23, the risk from infection after direct contact with our ill SDSU student will have ended. Meningococcal disease is rare, but anyone who exhibits the symptoms at any time in the future should seek care immediately.

• Where can I get more information?

If you have additional concerns, please call SDSU Student Health Services 8:30 am- 4:30 pm at [619-594-4325](tel:619-594-4325) and press “2” to ask one of our Registered Nurses or call San Diego County Public Health Services’ Epidemiology Division at [619-692-8499](tel:619-692-8499).