

Health Beat

CSULB Division of Student Services

**Immunization clinic is
Mondays and Tuesdays
from**

8:30 to 10:30 am

- Hepatitis A
- Hepatitis B
- Flu
- Measles
- Rubella

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Student Health Services

What Should I Know about Meningitis?

Arianne Stamps

Many of us may remember an outbreak of meningitis in students living in college dormitories during the late 1990s. Parents, university administrators and students panicked, and there was a push for students to get vaccinated. But why is meningitis important to you? And what should you know about it? If you are part of the college community, especially if you live in the dorms, you need to know a lot!

Meningitis, also known as “Spinal Meningitis,” affects the body by inflaming the membrane that covers the brain and spinal cord.¹ There are two forms of meningitis- viral and bacterial. Within these types, there

are several strains. Viral meningitis is more common, yet bacterial meningitis can be very serious and deadly. While both viral and bacterial meningitis rapidly appear as flu-like symptoms (e.g., high fever, chills, severe head aches, vomiting etc.) initially, bacterial meningitis takes a more life-altering and dangerous course. Brain damage, limb amputation, seizures, paralysis and fatality are all possible results from having bacterial meningitis. Approximately 10-25% of people can carry the bacterium that causes bacterial meningitis in the nose and throat area without becoming ill.²

If you are a college freshman living in a dormi-

tory you are 9 to 23 times more likely to get bacterial meningitis than your fellow students with different living arrangements.³ Living in crowded conditions with consistent close contact is a reason why meningitis flourishes in college dorms according to Lawrence Harvey, R.N., Clinical Coordinator of the CSULB Student Health Services. He states that the change in life style in first-time freshmen also plays a part. Exercise, diet and sleeping habits change when they move away from home.⁴ Also, a suppressed immune system can



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Tuberculosis

It is believed by many that Tuberculosis (TB) is a disease of the past, but contrary to this belief, TB continues to be a leading killer of young adults worldwide. Each year, 8 million people around the world develop active TB and 3 million

die.¹ TB is a communicable disease, which is primarily airborne and caused by a bacteria known as Mycobacterium tuberculosis. The bacteria usually infects the lungs, although other organs are sometimes involved. The disease is passed around from

one individual to another in tiny microscopic droplets when the TB sufferer coughs, sneezes, speaks, sings, or laughs.¹ If another person breathes in these droplets there is a chance they will become infected; however, repeated contact is usually

Cindy Hurtado

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“Treatment for TB disease usually combines several different antibiotic drugs for at least six months.”

required for infection.²

It is important to understand that there is a difference between being infected with TB and having TB disease. Someone who is infected with TB has the bacteria in their body, however; the body’s defenses are protecting them from any bacteria growth. The bacteria then remain inactive, usually for a lifetime without causing disease; yet, they do remain in the body. This is known as a latent infection. TB bacteria do become active if the body’s immune system can’t stop them from growing, causing TB disease. This usually occurs in people who have a weakened immune system. A person who has contracted TB disease may feel perfectly healthy and may not experience any symptoms. The table below illustrates the differences between latent TB infections and TB disease.^{2, 3}

If you think you may have been exposed to TB or have any of the symptoms, see a doctor immediately and get a TB skin test. The TB skin test is a way to determine if a person has TB infection.

For this test, a small amount of testing material is injected under the skin of the forearm. A health care worker will examine the arm 72 hours later and check to see if a red welt has formed at the site of the injection. If it becomes apparent that a person has TB infection, the next step is to determine whether the person has TB disease. This is done by using several other methods such as a chest x-ray and testing of a person’s mucus.

If it is determined that a person has TB disease, in most cases it can be cured with appropriate antibiotic treatment. Treatment usually combines several different antibiotic drugs, which are given for at least six months, sometimes for as long as 12 months. If the medicine is not taken as prescribed, the person will become sick a second time and the TB will possibly be harder to treat because it has become drug resistant. Drug resistant TB is very dangerous, so it is important to take all of the medicine correctly.

There is a TB vaccine called BCG which is

available in those parts of the world where the disease is common. However, the vaccine has many drawbacks and limitations, therefore it is not recommended for general use in the United States.^{1, 2}

References:

1. National Institute of Allergy and Infectious Diseases. Tuberculosis Overview. Available at: <http://www.niaid.nih.gov/factsheets/tb.htm>. Retrieved on February 9, 2005.
2. American Lung Association. Tuberculosis Fact Sheet. Available at: <http://www.lungusa.org/site/pp.asp?c=dvLUK9O0E&b=35804>. Retrieved on February 9, 2005.
3. Centers for Disease Control and Prevention. Questions and Answers about TB. Available at: <http://www.cdc.gov/nchstp/tb/faqs/qa.htm>. Retrieved on February 9, 2005.



Latent TB Infections	TB Disease
<ul style="list-style-type: none"> • Have no symptoms 	<ul style="list-style-type: none"> • Symptoms include: Persistent cough, pain in chest, coughing up blood or sputum, weakness or fatigue, no appetite, weight loss, chills, fever, and night sweats
<ul style="list-style-type: none"> • Do not feel sick 	
<ul style="list-style-type: none"> • Cannot spread TB to others 	<ul style="list-style-type: none"> • May spread TB to others
<ul style="list-style-type: none"> • Usually have a positive skin test 	<ul style="list-style-type: none"> • Usually have a positive skin test
<ul style="list-style-type: none"> • Chest x-ray and sputum tests are normal 	<ul style="list-style-type: none"> • May have abnormal chest x-ray, and/or positive sputum culture or smear

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make you more susceptible to becoming infected with meningitis. For instance, binge drinking can lower your immune system when you are heavily intoxicated because at that moment, your body isn't making antibodies as efficiently as it does when you are sober.⁵

So what can students do to protect themselves? The first thing is that you have to take action for yourself. Even though meningitis hits the college-age community, universities are reluctant to make vaccination mandatory because they do not feel that the cost outweighs the risk of infection.³ CSULB dorm residents are not required to get vaccinated. They are given an information sheet from the Housing Office about the risks.⁶ But you can do more to protect yourself against this deadly disease than read a sheet of paper about it.

Lawrence Harvey suggested using common sense to lower your chances of getting meningitis: wash your hands, eat a balanced and healthy diet, and get plenty of rest and exercise.⁵ In addition, don't share things that expose you to another person's saliva like drinking after someone, smoking someone else's cigarettes, using others' toothbrushes or eating utensils. Direct exposure to an infected person's saliva can cause you to get

infected. If you have been in contact with an infected person and you feel the onset of flu-like symptoms such as severe headaches, high fever, sensitivity to light etc., see a doctor immediately! Meningitis has an extremely rapid onset, and being under medical care can mean the difference between life and death. Besides taking care of yourself, get vaccinated. It might seem costly to spend about \$100 on one vaccination, but your health is worth it.

Every semester CSULB Student Health Services offers dates where students can get vaccinated for meningitis on campus. So look out for those dates and take advantage of it. Or, get vaccinated by your primary care physician. Ask your doctor about current vaccination against meningococcal meningitis or come into the Student Health Services if you have any questions. Take an active role in your health and follow the common sense steps to keeping your body healthy and you will have a better chance of protecting yourself from meningitis.

References:

1. "Meningococcal Disease." The Center for Disease Control and Prevention. Retrieved at http://www.cdc.gov/ncidod/dbmd/diseaseinfo/meningococcal_g.htm. Accessed on 02/7/05.
2. "Top 20 questions about Meningitis." Meningitis Foundation of America.

Retrieved at http://www.musa.org/top_20_questions.asp. Accessed on 02/7/05.

3. MMWR. "Meningococcal Disease and College Student." June 30, 2000. 49 (RR07):11-20. The Center for Disease Control and Prevention. Retrieved at <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr4907a2.htm>. Accessed on 02/9/05.
4. Interview conducted with Lawrence Harvey, R.N. Clinical Coordinator, the Student Health Services, CSULB on February 14, 2005.
5. "Campus Meningitis Preventable for \$65." June 1, 1999. USA Today. Retrieved at http://www.acha.org/projects_programs/article-preventable.cfm accessed 02/15/05
6. Interview conducted with Kevin Conroy, Residence Coordinator, CSULB on February 16, 2005.



Meningitis Vaccine is available through a private company on campus in March. Please call for more information at (562) 985-4609



CALIFORNIA STATE UNIVERSITY, LONG BEACH

STUDENT HEALTH SERVICES – HEALTH RESOURCE CENTER

1250 BELLFLOWER BLVD
LONG BEACH, CA 90840-0201
(562) 985-4771 (562) 985-8404 FAX

*We are on the web:
www.csulb.edu/hrc*

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Hepatitis

Kelly Cardenas

Hepatitis is known as inflammation of the liver. This condition is caused by a number of different viruses called Hepatitis A, B, and C. These viruses can either cause acute, short-term or chronic hepatitis. Irreparable damage to the liver is the usual outcome.¹ The liver has very significant functions such as: storage of energy; digestion of food by metabolizing fats, proteins, and carbohydrates; and removing toxins from the blood stream. It also regulates blood-clotting factors and holds 13% of the body's blood supply.² Overall, the liver has very important functions and an alteration in the cells of this organ may cause serious complications.

Some of the symptoms that a person may experience when infected with a hepatitis virus are:

- Low grade fever
- Headache
- Muscle aches
- Tiredness
- Loss of appetite

- Nausea
- Vomiting
- Diarrhea
- Dark colored urine and pale bowel movements
- Pain in the stomach
- Yellowing of the skin and eyes (jaundice)

However, there are some people who do not experience any signs or symptoms of the viral infection.³

Hepatitis A

Hepatitis A virus is usually contracted by food and water that is contaminated with feces from a person that is infected by this virus. The persons who are at a high risk of acquiring this virus are international travelers, men who have sex with men, injecting and non-injecting drug users, living in an environment where hepatitis A is common, and having sex with an infected person. Getting the hepatitis A vaccine is the best way to protect yourself from this virus. Once infected you do not experience the infection again. However, 15% of people who

do get infected experience prolonged or recurrent symptoms over a period of 6-9 months.⁴

Hepatitis B

This virus is most commonly acquired when exposed to blood or body fluids from a person who is infected. Hepatitis B is known to spread through sexual intercourse with an infected person without using protection, such as a condom. The virus may also be acquired by sharing drugs, needles, or from an infected mother to her baby during birth. Hepatitis B causes chronic liver disease and can be treated with medications. Getting vaccinated can protect you from this virus. You receive 3 injections over a 6-month period.⁵

Hepatitis C

The hepatitis C virus is also contracted through infected blood and body fluids, but is less frequently transmitted through sex or childbirth. Generally, sharing injection

drugs with an infected person is the common mode of transmission. There is no vaccine for this virus. Avoiding a risky behavior will reduce a risk of its infection. If infected, antiviral medications are given to reduce risk of complications.⁶

References:

1. Viral Hepatitis: A Through E and Beyond (2003). <http://digestive.niddk.nih.gov> Retrieved on 2/2/05.
2. Liver Disease (2005). <http://www.umm.edu> Retrieved on 2/9/05.
3. The National Women's Health Information Center (2005). <http://www.4woman.gov> Retrieved on 2/9/05.
4. Viral Hepatitis A (2005). <http://www.cdc.gov> Retrieved on 2/2/05.
5. Viral Hepatitis B (2005). <http://www.cdc.gov> Retrieved on 2/2/05.
6. Viral Hepatitis C (2005). <http://www.cdc.gov> Retrieved on 2/2/05.