Meningitis

What is it?
Meningitis is an infection that affects the lining of the brain and spinal cord. Meningitis is caused by bacteria and viruses. Bacterial meningitis is caused by one of 3 organisms; *streptococcus pneumoniae*, *H. influenza*, or *neisseria meningitidis*. Bacterial meningitis is generally more severe than viral meningitis and causes death in 10-15% of people who contract it. The overall number of meningitis cases is low; affecting about 2500 people per year. First year college students who live in a dormitory type environment have higher risks of meningitis due to their living environment and exposure to a multitude of organisms, not found in the student’s usual environment. Certain behaviors, which lower immunity or cause exposure, may increase a student’s risk of contracting meningitis. Some of those behaviors include exposure to cigarette smoke, excessive alcohol use, and shared food and drinks.

Symptoms:
Symptoms of meningitis are sometimes confused with influenza as both can cause severe illness. Common symptoms are high fever, headache, stiff neck and muscle aches. Nausea, vomiting, sensitivity to bright light, confusion, sleepiness or seizures may also occur. In advanced cases a rash occurs that begins as pin-point red spots (petechiae) and progresses to large purple bruises. Symptoms usually begin 3-4 days after exposure; the incubation period is 2-10 days. Symptoms may progress rapidly, it is important to have them evaluated as soon as possible. **If any of these symptoms develop after exposure to someone with meningitis, seek healthcare immediately, preferably in an emergency room.**

Transmission:
It is spread through direct contact with nasal and pharyngeal secretions and saliva. Freshmen students living in a dormitory or with roommates have a heightened risk due to extended, close contact with other students and through sharing food and drinks. Transmission to healthcare workers or students is uncommon, unless there has been direct contact with respiratory secretions without use of personal protective equipment.

Prevention:
Preventive medication is not necessary for meningitis caused by *streptococcus pneumoniae*, *H. influenzae* or of a viral origin. It is important for anyone with close contact with persons infected with meningococcal meningitis to seek preventive treatment. One dose of Cipro or 4 doses of Rifampin within 10 days of exposure can greatly reduce the risk of the disease after exposure. **If symptoms of meningitis occur, even after preventive therapy, the student is advised to seek medical care immediately.** If the exposure occurred greater than 10 days ago and no symptoms are present, preventive medication is unnecessary. Meningococcal meningitis can be prevented by with a vaccine and is recommended for first-year residential students. Check with your healthcare provider to see if it is available.

References:
CDC: [http://www.cdc.gov/ncidod/dbmd/diseaseinfo/meningococcal_g.htm](http://www.cdc.gov/ncidod/dbmd/diseaseinfo/meningococcal_g.htm)
American College Health Association