What is meningitis?
Meningitis is an infection of the fluid of a person’s spinal cord and the fluid that surrounds the brain. Meningitis is usually caused by a viral or bacterial infection. Knowing whether meningitis is caused by a virus or bacterium is important because the severity of illness and the treatment differ. Viral meningitis is generally less severe and resolves without specific treatment, while bacterial meningitis can be quite severe and may cause brain damage, hearing loss, learning disability or death. For bacterial meningitis, it is also important to know which type of bacteria is causing the meningitis because antibiotics can prevent some types from spreading and infecting other people. Today, Streptococcus pneumoniae and Neisseria meningitides are the leading cause of bacterial meningitis.

What are the signs and symptoms of meningitis?
High fever, headache, and stiff neck are common symptoms of meningitis. These symptoms can develop over several hours, or they may take 1 to 2 days. Other symptoms may include nausea, vomiting, discomfort looking into bright light, rash, flu symptoms, confusion, and sleepiness. As the disease progresses, patients of any age may have seizures.

How is meningitis diagnosed?
Early diagnosis and treatment are very important. If symptoms occur, the patient should see a doctor immediately. The diagnosis is usually made by performing a spinal tap, in which a needle is inserted into an area in the lower back where fluid in the spinal canal is readily accessible. Identification of the type of bacteria responsible is important for selection of correct antibiotics.

Can meningitis be treated?
Bacterial meningitis can be treated with a number of effective antibiotics. It is important, however, that treatment be started early in the course of the disease. Appropriate antibiotic treatment of most common type of bacterial meningitis should reduce the risk of dying from meningitis to below 15%, although the risk is higher among the elderly.

Is meningitis contagious?
Yes, some forms of bacterial meningitis are contagious. The bacteria are spread through the exchange of respiratory and throat secretions (i.e., coughing, kissing, using someone’s glass). Fortunately, none of the bacteria that cause meningitis are as contagious as things like the common cold or the flu, and they are not spread by casual contact or by simply breathing the air where a person with meningitis have been. However, sometimes the bacteria that causes meningitis have spread to other people who have had close or prolonged contact with a patient with meningitis caused by Neisseria meningitidis. People in the same household or anyone with direct contact secretions (such as a boyfriend or girlfriend) would be considered at increased risk of acquiring the infection. People who qualify as close contact of a person with meningitis caused by Neisseria meningitidis should receive antibiotics to prevent them from getting the disease.

Are there vaccines against meningitis?
Yes, there are vaccines against some types of bacterial meningitis. Childhood vaccines cover some forms of bacterial meningitis and vaccines are available for Streptococcus pneumoniae and Neisseria meningitidis, the two most common forms of bacterial meningitis. The vaccine for Neisseria meningitidis is now being recommended for some college students (see abstract below).

Press Release: AMERICAN ACADEMY OF PEDIATRICS
Meningococcal Disease Prevention and Control Strategies for Practice-Based Physicians (Addendum: Recommendations for College students)

ABSTRACT. The number of reported cases of meningococcal disease in 15- to 24-year-olds, including outbreaks in schools and other institutions, have increased during the past decade. In response to outbreaks on college campuses, the American College Health Association has taken an increasingly proactive role in alerting college students and their parents to the risk of this disease and informing them about the availability of an effective vaccine. Recent epidemiologic studies have demonstrated an increased risk of disease in college students living in dormitories, particularly among freshmen, compared with similarly aged persons in the general population. At least 60 % of these cases are potentially preventable by vaccination with the quadrivalent meningococcal A, C, Y, and W-135 polysaccharide vaccine. These findings support immunization of college students, particularly freshmen living in the dormitories. Vaccine should be made available to those requesting immunization.