UNIVERSITY STUDENT HEALTH SERVICES • Fact Sheet

MONONUCLEOSIS

WHAT IS IT?
Mononucleosis (also known as “mono” or the “kissing disease”) is an infection caused by the Epstein-Barr virus (EBV). EBV infects and reproduces in the salivary glands. It also infects a group of white blood cells known as the B cells. Following infection, EBV remains in the body for life but is usually kept under control without problems by a healthy immune system.

HOW COMMON IS IT?
Mono can affect any person at any age. However, most documented cases occur in people between the ages of 15 and 30. It is estimated that 90% of adults 40 years of age or older have been infected with EBV. Mono does not occur in any particular season, but school and college authorities see most cases in the fall and early spring.

HOW IS IT TRANSMITTED?
Mono is transmitted through direct contact with saliva, such as through kissing or sharing food, eating utensils, and drinking glasses. Mono can also be transmitted in crowded areas through sneezing and coughing.

Mono is not as contagious as the common cold. If there is no direct contact with an infected person’s saliva, the risk of infection is very small. Therefore, a person infected with mono does not generally need to be isolated. Household members or roommates are unlikely to become sick without direct exposure to infected saliva.

FOR HOW LONG IS IT CONTAGIOUS?
A person is infectious several days before symptoms begin and for at least a number of weeks afterwards. Most people with mono are unable to trace the source of their infection. An infected person who never gets ill can unknowingly pass the virus to others.

It is not certain how long the infectious period lasts. EBV is still commonly isolated in the saliva for at least 6 months after the infection has resolved. Additionally, EBV can be found in the saliva of about 15% of people years after the initial infection.

WHAT ARE THE SYMPTOMS?
The incubation period (time from disease exposure to symptom onset) can range from 4 to 6 weeks. Usually, symptoms resolve in 1 to 3 weeks; however, they can last from a few days to several months. Symptoms may be so mild that a person is not even aware that he or she is infected.

In adolescents and young adults, mono often develops slowly with vague symptoms such as headache, fatigue, loss of appetite, and puffy eyelids. With time, the classic symptoms of fever, sore throat, and swollen lymph nodes develop.

- A fever of 101-105°F can last for a few days and sometimes continues on and off for a few weeks. However, a high fever late in the illness may be a sign of a secondary bacterial infection that requires antibiotics. Night sweats may also occur.
- Fatigue can last for many weeks.
- 80% of patients have swollen lymph nodes, especially at the sides and back of the neck. Swollen glands can also be found the under the arm and in the groin. The swelling may take several weeks to resolve.
- Up to 50% of patients develop white patches on their tonsils.
- 50% develop an enlarged spleen (an abdominal organ located under the left rib cage).
- 10-20% develop an enlarged liver (located under the right rib cage).
- Up to 10% develop a rash, which is usually found on the trunk.
- Up to 5% develop jaundice (yellowing of the skin and/or eyes).
HOW IS IT DIAGNOSED?
Symptoms and exam findings play important roles in the diagnosis of mono. Blood tests can help confirm the diagnosis:

- A blood count may show an increase in lymphocytes, a type of white blood cell that fights infection.
- An elevation in liver function tests is commonly seen but is usually self-limited.
- A monospot test can be performed in the clinic to detect antibodies to EBV. The results are ready in a few minutes. Because it takes time for the body to develop antibodies against the infection, the test may not be accurate during the first week of illness.
- If the diagnosis is unclear, a different blood test measuring specific antibodies against EBV may be ordered. This test takes several days to come back.

HOW IS IT TREATED?
More than 90% of mono cases are uncomplicated and self-limited, for which no specific therapy is necessary. Because mono is caused by a virus, antibiotics will not help unless your healthcare provider has diagnosed a secondary bacterial infection.

- Rest, non-caffeinated fluids, and a well-balanced diet are recommended. Most symptoms improve within a few weeks, but it may take 2-3 months to feel completely normal again. The more rest you get, you faster you should recover. Returning to your usual activities too early can lead to a relapse of symptoms. Students may attend classes based on their own discretion.
- Acetaminophen (Tylenol) or ibuprofen (Advil or Motrin) can be used for fever, headache, and muscle pains.
- Salt-water gargles (1/2 tsp. of salt in 8 oz. of warm water every 3-4 hours) or throat lozenges may be helpful.
- Oral corticosteroid medications such as prednisone are reserved for severely swollen tonsils that cause extreme difficulty swallowing. These medications can ease pain and swelling but do not shorten the course of the illness.

WHAT ARE POSSIBLE COMPLICATIONS?
- The one true danger of uncomplicated mono is the possibility of rupturing an enlarged spleen. For this reason, avoid lifting, straining, contact sports, and vigorous physical activity for at least 4 weeks after the infection and until recovery is complete.
- Mono may also increase stress on the liver, so avoid drinking alcohol while you are recovering.

CAN I GET MONO AGAIN?
Although EBV remains in the body indefinitely following infection, the disease rarely recurs in people with normal immune systems. If you are experiencing signs and symptoms of mono and have had mono before, visit your medical provider for further evaluation. Many other conditions can mimic the symptoms of mono.

CONTACT YOUR HEALTHCARE PROVIDER IF YOU HAVE ANY OF THE FOLLOWING:
- Difficulty swallowing.
- Severe abdominal pain.
- Prolonged fever.
- Yellow coloring of the skin and/or eyes.

RECOMMENDED WEBSITES:
- www.cdc.gov
- www.familydoctor.org
- www.mayoclinic.com