MONONUCLEOSIS

What is mononucleosis (mono)?
Mononucleosis, or mono, is a viral infection that causes fever, sore throat, and swollen lymph glands, most often in the neck. Epstein-Barr virus (EBV) is the most common cause of infectious mononucleosis, but other viruses can also cause this disease.

How is mono spread?
Typically, these viruses spread most commonly through bodily fluids, especially saliva and close contact. However, these viruses can also spread through blood and semen during sexual contact, blood transfusions, and organ transplantations. Mono is known as "the kissing disease."

What are the signs and symptoms of mono?
Mono may begin slowly with fatigue, a general ill feeling, headache, and sore throat. The sore throat slowly gets worse. Your tonsils become swollen and develop a whitish-yellow covering. Often, the lymph nodes in the neck are swollen and painful.

A pink, measles-like rash can occur, and is more likely if you take the medicine ampicillin or amoxicillin for a throat infection. (Antibiotics should NOT be given without a test that shows you have a strep infection.)

Common symptoms of mono include:
- Drowsiness

Fever
- General discomfort, uneasiness, or ill feeling
- Loss of appetite
- Muscle aches or stiffness
- Rash
- Sore throat
- Swollen lymph nodes, most often in the neck and armpit

Less common symptoms:
- Chest pain
- Cough
- Fatigue
- Headache
- Hives
- Jaundice (yellow color to the skin and whites of the eyes)
- Neck stiffness
- Nosebleed
- Rapid heart rate
- Sensitivity to light
- Shortness of breath

People with mono may be contagious while they have symptoms and for up to a few months afterwards. How long someone with the disease is contagious varies. The virus can live for several hours outside the body.

How long after infection do symptoms appear?
Typical symptoms of infectious mono usually appear 4 to 6 weeks after you get infected.
with EBV. Symptoms may develop slowly and may not all occur at the same time.

**Who is most at risk?**
Mono occurs most often in people ages 15 to 17, but the infection may develop at any age. It is common among young adults, especially college students. At least 25% of teenagers and young adults who get infected with EBV will develop infectious mononucleosis.

**What type of health problems are caused by mono?**
Complications of mono may include:
- Anemia, which occurs when red blood cells in the blood are destroyed earlier than normal
- Hepatitis with jaundice (more common in patients older than 35)
- Swollen or inflamed testicles
- Nervous system problems (rare), such as Guillain-Barré syndrome, meningitis, seizures, damage to the nerve that controls movement of the muscles in the face (Bell's palsy), and uncoordinated movements (ataxia)
- Spleen rupture (rare; avoid pressure on the spleen)
- Skin rash (uncommon)
- Death is possible in people who have a weakened immune system.

**How is mono diagnosed?**
Healthcare providers typically diagnose infectious mono based on symptoms. Laboratory tests are not usually needed to diagnose infectious mono. However, specific antibody tests may be needed to identify the cause of illness in people who do not have a typical case of infectious mono.

The blood work of patients who have infectious mono due to EBV infection may show—
- more white blood cells (lymphocytes) than normal
- unusual looking white blood cells (atypical lymphocytes)
- fewer than normal neutrophils or platelets
- abnormal liver function

**How is mono treated?**
The goal of treatment is to relieve symptoms. Steroid medicine (prednisone) may be given if symptoms are severe. Antiviral drugs, such as acyclovir, have little or no benefit.

To relieve typical symptoms:
- Drink plenty of fluids.
- Gargle with warm salt water to ease a sore throat.
- Get plenty of rest.
- Take acetaminophen or ibuprofen for pain and fever.
- You should also avoid contact sports if your spleen is swollen (to prevent it from rupturing).

**How can mono be prevented?**
There is no vaccine to protect against infectious mononucleosis. You can help protect yourself by
not kissing or sharing drinks, food, or personal items, like toothbrushes, with people who have infectious mono.

**When should I contact a medical professional?**
The early symptoms of mono feel very much like any other illness caused by a virus. You do not need to contact a healthcare provider unless your symptoms last longer than 10 days or you develop:

- Abdominal pain
- Breathing difficulty
- Persistent high fevers (more than 101.5°F)
- Severe headache
- Severe sore throat or swollen tonsils
- Weakness in your arms or legs
- Yellow color in your eyes or skin

Call 911 or go to an emergency room if you develop:

- Sharp, sudden, severe abdominal pain
- Stiff neck or severe weakness
- Trouble swallowing or breathing

**Where can I get more information?**
- Your personal healthcare provider
- Utah Department of Health, Bureau of Epidemiology, 801-538-6191
- Centers for Disease Control & Prevention