

## Be a Scientist

**Case Study: Mononucleosis**

A fifteen-year-old high-school student named Ally has been complaining about feeling ill for about three days. Ally's mom has decided it is time to take Ally to the doctor. The doctor examines Ally and asks her to describe her symptoms. Ally says she feels very tired and her neck is sore and stiff. The doctor feels her neck in the back and on the sides. She asks Ally to bend her neck forward. Then the doctor asks Ally to lie down, and she presses on her belly. She notices that Ally cannot bend her neck as far as she is supposed to and that the glands in the sides of her neck are lumpy and swollen. When the doctor looks at Ally's throat, she notices that it is very swollen and red. There is no drainage from her nose (the drainage might indicate a cold). When the doctor pressed Ally's belly, she could feel that Ally's spleen was slightly swollen. Ally did not have any skin rash and did not have a fever. No one Ally knows has been sick lately.



*One symptom of mono is white patches on the back of the throat.*

**Learn about Mononucleosis**

Infectious mononucleosis (mah-noh-new-kee-oh-sis) is often called mono. It is sometimes known as the kissing disease. It can spread through kissing, but it can also spread through coughing, sneezing, or sharing a glass or cup. The Epstein-Barr virus causes mononucleosis. However, similar signs and symptoms are sometimes caused by cytomegalovirus (CTV). Full-blown mono is most common in adolescents and young adults. Signs of mono can include fever, sore throat, headaches, white patches on the back of your throat, swollen glands in your neck, feeling tired, headaches, sore muscles, and not feeling hungry. A sick person does not need to have all of these symptoms to have mono.

The virus that causes mononucleosis is transmitted from one person to another through the saliva of an infected person. The virus can continue to be excreted in saliva and **sputum** (matter that you cough up) for as long as six months after the infected person has gotten better. This is one reason why it is important not to share things, like straws or lip gloss, at school with your friends. A person does not need to feel sick to make other people sick with this disease.

Mono makes you feel tired and achy, but it usually is not very serious. The virus remains in your body for life. Most people have been exposed to the Epstein-Barr virus by the time they are 35 years old. Because they have had the virus, they are immune and cannot get mononucleosis again.

**pasteurized:** to heat food to a temperature that is high enough to kill most harmful bacteria.

**sputum:** matter that is coughed up and mixed with saliva.