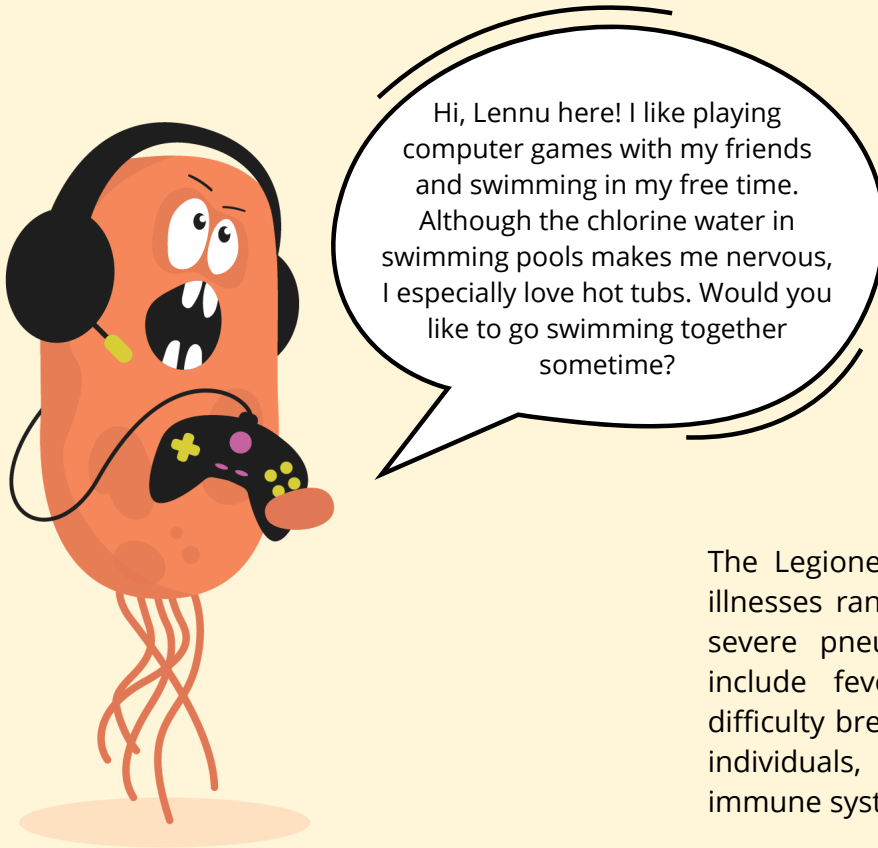


Legionella bacterium

PÖPÖ-
VIISAS
KOULU



Hi, Lennu here! I like playing computer games with my friends and swimming in my free time. Although the chlorine water in swimming pools makes me nervous, I especially love hot tubs. Would you like to go swimming together sometime?

The Legionella bacterium can cause respiratory illnesses ranging from mild flu-like symptoms to severe pneumonia. Symptoms of the disease include fever, muscle aches, headache, and difficulty breathing. Particularly at risk are elderly individuals, smokers, and those with weakened immune systems.

Legionella bacterium is a gram-negative bacterium that causes a disease called Legionnaires' disease or, in some cases, a condition known as Pontiac fever. This bacterium was only discovered in 1976, when participants in a meeting of war veterans in the United States became seriously ill.

Legionella bacteria thrive especially in warm water systems, such as hot water tanks, showers, and hot tubs. The risk of their spread increases when the water is warm (20–45°C) and the maintenance of the water system is inadequate.

To prevent the growth of Legionella bacteria, it is important to maintain proper hygiene and cleaning practices in water systems. This may involve regular disinfection procedures, controlling water temperature, and increasing water circulation. Regular inspection of high-risk devices and systems can help identify potential problems early and prevent the spread of Legionella bacteria. Well-designed and maintained water systems can significantly reduce the risk of Legionnaires' disease.

Rhinovirus

**PÖPÖ-
VIISAS
KOULU**



Hi, I'm Rilla. I play soccer and want to be the best soccer player. I like house parties and my friends. I don't like everything though. I hate washing my hands, it's boring.

The infection can cause symptoms of the common cold, such as nasal congestion, sneezing, sore throat, and coughing. Rhinovirus is one of the most common causes of the flu. Although rhinovirus infections are usually mild and self-limiting, they can pose problems especially for young children, the elderly, and individuals with weakened immunity.

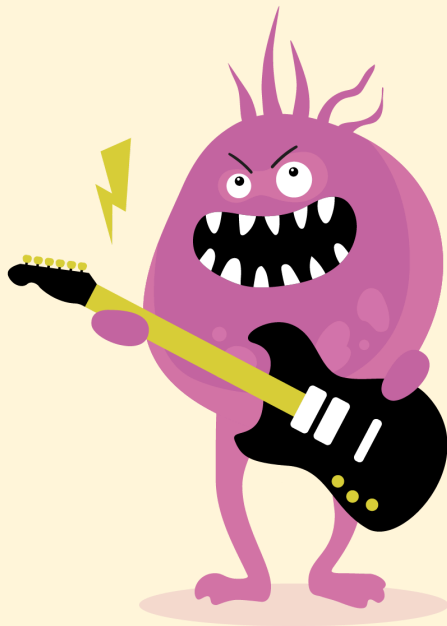
Rhinovirus is one of the primary viruses causing common respiratory infections in humans. It belongs to the Picornaviridae virus family and Enterovirus genus. Rhinoviruses are RNA viruses, and over 160 different types have been identified. They are small, with a diameter of about 30 nanometers.

Rhinovirus primarily infects human mucous membranes. It spreads mainly through droplet and contact transmission, when an infected person coughs, sneezes, or touches surfaces that others then touch.

Preventing the spread of rhinoviruses involves adhering to hygiene practices, such as regular handwashing with soap, covering coughs and sneezes with a tissue or elbow, and avoiding contact with infected individuals in situations where the risk of transmission is high. Although there is no specific treatment for rhinovirus infections, symptoms can be alleviated by resting, drinking plenty of fluids, and, if necessary, using pain relievers or nasal moisturizing preparations.

Norovirus

**PÖPÖ-
VIISAS
KOULU**



Hey, I'm Niki. I love traveling, and my dream is to visit as many different countries as possible. I'm in a rock band, and I play guitar. Come listen sometime! My room isn't very tidy, I don't like cleaning.

Typical symptoms of a norovirus infection include sudden nausea, vomiting, diarrhea, and abdominal pain. The infection can rapidly cause widespread epidemics, for example on ships, in hospitals, care facilities, and other densely populated areas.

Norovirus is a microbe belonging to the RNA viruses, mainly causing food poisoning and gastrointestinal illnesses in humans. It belongs to the Caliciviridae virus family and is one of the most common viruses causing infectious diseases globally. Norovirus can exist in several different genotypes, making it difficult for the human immune system to develop permanent immunity.

Norovirus primarily spreads orally and infects others through direct contact, contaminated surfaces, food, and water. It can also spread through the air in the form of aerosols. Norovirus is particularly resilient to environmental conditions, and it can survive for long periods on surfaces and in water.

Preventing the spread of norovirus focuses on hygiene, such as handwashing with soap and water, especially after using the toilet and handling food. Effective cleaning with disinfectants is important for cleaning contaminated surfaces. Preventing the spread of pathogens also requires avoiding exposure in cases of illness. The treatment of norovirus infection emphasizes hydration and symptom management, as there is no specific medication available.