What is a pandemic?

When a lot of people all over the world have a disease, it is called a pandemic.

The best way to stop a pandemic is to keep your distance from other people. That means you can’t make them sick, and they can’t make you sick.

Right now, there is a pandemic because people have a disease called COVID-19. To help stop the pandemic, my day program is shut. It will be shut until it is safe for people to be in groups.

While my day program is shut, Enoch will work hard to make sure I have a schedule to stay busy.

The red circles show where there is COVID-19 in the United States.
What is a virus?

Viruses are tiny particles that cause disease in people, other animals, and plants. Different viruses cause the common cold, influenza (flu), chicken pox, measles, AIDS, and many other diseases. COVID-19 is a new type of disease, caused by a corona virus.

Viruses are so tiny that people can see them only with powerful microscopes. Some viruses have a spherical, or round, shape. Others are shaped like rods. Viruses are made up mostly of a substance called nucleic acid surrounded by protein.

The corona virus that causes COVID-19.
How do viruses cause infection?

On its own, a virus is lifeless. However, it becomes active when it infects, or enters, a cell of an animal or a plant. Once inside a cell, a virus can reproduce itself, like living things can. The copies that a virus makes of itself are called virions. These virions can leave the original cell and infect other cells. Viruses also can live in bacteria, which are living things made up of only one cell.
Humans and other animals have natural defenses against viruses. Fever is one important way that the human body fights viruses. A fever is when a body’s temperature rises. A fever causes some viruses to become inactive. The body’s immune system also fights viruses. It produces white blood cells and substances called antibodies to attack viruses. After these cells and antibodies have attacked a virus, they stay in the body. This prevents future infection by the same virus.

Taking your temperature can tell if you have a fever.
Fighting viruses, part 2

Doctors use vaccines to prevent many diseases caused by viruses. Vaccines are substances made from dead or weakened viruses. They prepare the immune system to fight off active forms of these viruses. We do not yet have a vaccine for COVID-19.

Anti-virals are medications that help treat a virus. We do not yet have anti-virals that work on COVID-19.

How can we win the fight against COVID-19? There are two things we can all do.

First, we can wash our hands or use Purell. Washing our hands and using Purell destroy the virus.

Second, we can stay away from other people. That will keep us from spreading COVID-19 to one another.
How dangerous is COVID-19?

Most people don’t get very sick when they have COVID-19. They may cough and have a fever. They can stay at home and rest to get better.

But a few people with COVID-19 can get very sick. They may need to go to a hospital. We need to make sure this a very few people. That way, the hospital has enough beds and doctors to help. How can we do this? We can wash our hands, use Purell, and stay away from other people.

This woman is staying at home. That helps keep everyone safe during the COVID-19 pandemic.

These people have left their houses. But they stand 6 feet away from each other. That also helps keep everyone safe during the COVID-19 pandemic.