elcome back to the Department of Bodily Oddities. God's Odd Bod Squad (G.O.B.S.) had been pursuing a virus, but then the virus started chasing us! Yikes! We had to start wearing masks so the virus wouldn't recognize us. Now it just thinks we're raccoons.

Viruses have been around since before scientists identified the first one in the 1890s. The name virus comes from a Latin word meaning slimy liquid or poison, although scientists later determined that viruses are like microscopic parasites.

Viruses are too small to be seen without specialized equipment. The invention of the electron microscope in 1931 allowed scientists to see the structure of viruses for the first time.

A virus must invade the cells of another living organism, referred to as a host, in order to create more viruses. Because viruses multiply rapidly, anything that spreads superfast is

I can't



said to have gone viral. Scientists use the term epidemic to refer to a disease that affects many people at the same time. If many countries around the world are battling the same disease, it's called a pandemic.

Hum "Twinkle, Twinkle, Little Star" as you wash your hands to make sure you rinse away any viruses.

NO

g sts God intricately and amazingly sts You designed your body. And some by Dr. Patricia Landry Dy Dr. Patricia Landry

Hosts in masks

0

D

•

oluring Maddie Science

FAST

objects, called fomites, include cups, spoons, pencils, doorknobs, light switches, TV remotes, keyboards,

> countertops and phones. That's why it's never a good idea to share your toothbrush or give your dog a bite of ice cream.

Once a virus enters your body, it takes a while before you show symptoms of being sick. During this incubation period, it's possible for others to be infected. A person can also spread a virus without having any symptoms. Scientists call this asymptomatic

transmission. A person who is contagious is shedding viruses, like a big, hairy dog that leaves behind a bunch of fur.

So if a friend coughs, they could be coming down with a virus ... or choking on a hair ball!

INTERNAL DEFENSE

Even if the virus gets past the first line of defense, never fear. God reinforced our bodies with an internal defense network that constantly monitors for intruders. This is our immune system. It puts up "NO TRESPASSING" signs. If the virus ignores the sign, our immune system sends in troops, called antibodies, to disarm it.

People develop immunity either through getting the virus and



Need

our

help

00

The study of viruses and the infections they cause is called virology.

NOT SO

AST!

OUTSIDE ATTACKER!

God designed our bodies to stop this viral spiral through several lines of defense. The first is our skin, which helps keep viruses from getting in and making us sick in the first place.

Viruses love to hitchhike on fingers. They can travel to a person's face where they can enter the body through the mucous membrane-lined openings of the eyes, nose and mouth. Itchiness aside, it's a good idea to not touch your out! face during cold season. Another great defense is good ol' soap and water. These God-given super solvents clean things super quickly. And thankfully, viruses do not like to take baths. They fear soapy bubbles, so wash those hands! Rub-a-dub-dub, no viruses in the tub

Respiratory viruses spread from person-to-person, mainly in droplets that fly out when you cough or sneeze. If these droplets find their way into the mouths or noses of others, they can enter

their bodies and cause infection.

HELPI

Scientists believe these droplets can stay suspended in the air for a couple of hours. Wearing a mask, as well as coughing and sneezing into your elbow rather than into your hand, can limit the spread of the explosion. ACHOO! Time for a new shirt.

Viruses can stay alive temporarily on the surfaces of nonliving objects. These

recovering or by taking an effective vaccine. When enough people in an area develop immunity, this produces what is called herd immunity. The whole herd is safer because enough people within the herd have effective antibodies against the virus.

101

Global spread

Most viral infections are subclinical. This means you never know you even have an infection because your body's immune system fights it off before you develop any symptoms. The only way to tell is through a blood test to check for antibodies. Hurray for your immune system!

If you happen to be infected by a virus, separate from the herd. Rest. Viruses make you tired because they steal energy produced by your cells to make more virus. Maintain good cleaning habits and contact your doctor to see if you should take Vitamin D, C and zinc. If you keep feeling bad, your doctor may want a visit.

In the meantime. G.O.B.S. will take a break from this infectious investigation to do a little cleaning. These masks really help when sweeping up all this dog hair. 拜

uhoh!