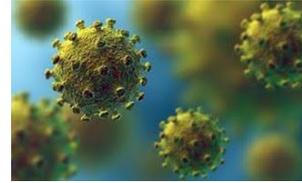




## Get the facts on coronavirus

Dr. Peter Lin breaks down the facts about what it is, where it came from, how it spreads and what you can do to protect yourself.



## Transcript

*Read the transcript. Underline the words you don't know. Watch the video and read along with the transcript.*

So we need to get the facts straight. How does this virus work? How does it transmit? Where does it want to go? And let's protect ourselves.

I'm Dr. Peter Lin. I'm a family physician in Toronto, Canada.

What is a coronavirus?

The coronavirus is a family of viruses that can cause as mild things as just a common cold, all the way up to SARS or MERS - these are these bad pneumonias that we're talking about. And basically what these viruses are, they look like a tennis ball with all these spikes sticking out of it. And depending on the type of spike, it allows that virus to **attach** to certain places. So some viruses, they have this spike that **attaches** to your nose. So basically you just get a common cold. But the SARS virus and this new virus that we're talking about has the spike that allows it to **attach** to the cells in your lung, and when it **attaches** there, it puts in information to make photocopies of itself. So it uses our equipment to make more viruses.

>> I'm declaring a public health emergency of international concern over the **global** outbreak of novel coronavirus. >>

Most of the coronaviruses live in animals. In this particular case, it was from Wuhan. There was a fish market where they were selling live animals and the thought is that the **virus** was in a live animal, then it crossed into a human. But then what we found was that people were getting sick in terms of healthcare workers, in terms of family members that were looking after them, which now meant that the virus can pass from human to another human.

How does it spread?

Just like all viruses, it needs to reach a **target**, which is your lung and it has to get there with your help. It has no feet and no wings. So therefore it needs us to move it there. So that's why we keep saying don't hang around sneezy people because you're gonna breathe it in. And don't touch your face because that's how the virus is going to get in.

The masks are helpful, but they're not necessary because they're leaky. The ones that you and I buy basically have pockets here, so therefore the virus can get in. What the masks really do is they stop us from touching our face. If you're sick, we tend to mask you, so therefore you're not spewing out the viruses to other people sitting around you. The true people that have the real masks are the N95. Those are sealed. These are for the doctors that may be caring for the patients.

What are the **symptoms**?

So in the beginning, the coronavirus will cause kind of like flu-like symptoms or a cold. So people just get the stuffy nose, that kind of thing. But you'll understand that as soon as that virus starts manufacturing in your lung cells, they're producing all these copies of the virus. All of a sudden now you kill the lung cells, so now you can't exchange oxygen and that's why one of the early symptoms is people get very short of breath and they tend to have a difficult time breathing and that's why they end up in hospital.

How is it treated?

So currently unfortunately we don't have a direct treatment for the coronavirus, so we don't have a medication that can kill it off. And so it's really supportive. So in other words, the patient can't breathe, we give them oxygen help them to breathe, they can't drink, so therefore we give them fluids to support them. Their kidneys begin to shut down, we help them with all those things. So it's a very supportive process.

This is a new virus that we've never seen before, so our immune system, our army, are having a hard time figuring out what to do. So usually what we have to do is we make something called antibodies. So these are things that can grab on to the spikes that we see on the virus and it'll get rid of the virus for you and that will actually bring you back to good health.

So therefore the elderly may have a worse **outcome** and of course the young children, the babies, their immune system is not so good either, so they may not make those antibodies as well.

How can I avoid catching the virus?

So just remember your hands may be with virus. Virus cannot hurt you because it can't get through the skin, but the moment I do this, now I've brought the virus right to where it wants to go. So let's remember not to touch our hands to our face.

So let's say you think that you might have been on a plane or you might have bumped into somebody that has it, what should you do? So the first thing is to contact a healthcare worker to tell them that **potentially** you have it. If you're feeling symptoms and you're going to go into a facility, call ahead. OK. So whether you're calling the paramedics or whether you're calling the hospital or your doctor, just mention that you were on a flight. If you don't have any symptoms, then what we do is a little bit of a self-quarantine. In other words, we can just keep you away from other people and so you don't go in to parties, don't go with your friends, don't go into public transportation. So we can contain it very easily by making sure that you do a self-confinement so to speak for the let's say 7 to 14 days is the longest incubation time, so after that if you're feeling well, then you don't have anything to worry about.

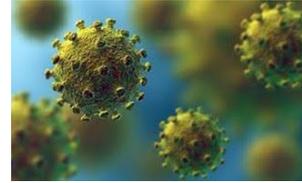
How worried should I be?

If we get the facts right, then we don't have to be overly worried, but we do the right things so that we don't get the virus ourselves, and that we don't pass it on to others. And if we look after each other in this way, this virus will have nowhere to go. It needs us to move it, it needs us to make copies for it, and if we don't help it, then the virus will stop. So we have the power to do that, right now.



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### Gapfill

Complete the sentences using the words below.

**global      potentially      attach      outcome      symptoms      virus      target**

1. And basically what these viruses are, they look like a tennis ball with all these spikes sticking out of it. And depending on the type of spike, it allows that virus to \_\_\_\_\_ to certain places, like your nose or lungs.
2. This is a new virus that we've never seen before, so our immune system, our army, are having a hard time figuring out what to do. So usually what we have to do is we make something called antibodies. So these are things that can grab on to the spikes that we see on the virus and it'll get rid of the virus for you and that will actually bring you back to good health. So therefore the elderly may have a worse \_\_\_\_\_ and of course the young children, the babies, their immune system is not so good either, so they may not make those antibodies as well.
3. So let's say you think that you might have been on a plane or you might have bumped into somebody that has it, what should you do? So the first thing is to contact a healthcare worker to tell them that \_\_\_\_\_ you have it.
4. What are the \_\_\_\_\_? So in the beginning, the coronavirus will cause kind of like flu-like symptoms or a cold. So people just get the stuffy nose, that kind of thing.
5. Most of the coronaviruses live in animals. In this particular case, it was from Wuhan. There was a fish market where they were selling live animals and the thought is that the \_\_\_\_\_ was in a live animal, then it crossed into a human.
6. "I'm declaring a public health emergency of international concern over the \_\_\_\_\_ outbreak of novel coronavirus."
7. Just like all viruses, it needs to reach a \_\_\_\_\_, which is your lung and it has to get there with your help.

### Quiz

*Scan the QR code above with your phone. Watch the video and take the quiz.*