

COVID-19 versus Influenza

In many peoples' minds there are questions about how COVID-19 differs from influenza, especially because President Trump has often compared them. Since these have been asked of me, I thought I would address them in print.

The most common question is: "Isn't COVID-19 a lot like the 'flu?"

1. There are similarities. They are both mainly respiratory infections. That is, both the SARS-CoV-2 virus that causes COVID-19 and the influenza viruses circulating in a community most commonly enter through the nose and mouth and then attach to cells lining the respiratory track. There they take over the cells inner machinery to make new virus. That local process commonly causes a dry cough. While they are doing that, both viruses excite the body's inflammatory system, leading to the systemic symptoms - aches and pains, headache and fever. So both illnesses can look quite similar. A bit of a difference is that the 'flu commonly hits a bit more suddenly, and COVID-19 sneaks up more slowly.
2. Both infections can produce mild, medium or severe illnesses. COVID-19 cases tend to have a higher severity rate, however.
3. Both infections can lead to death. This year, 'flu has caused something like 40,000 deaths in the US. As of this writing, COVID-19 has caused about the same number. However, it is thought that while influenza has a mortality rate of about 0.2%, COVID-19 has more like a 1.0% rate, about five times higher. Notably, these COVID deaths have occurred in a much shorter period of time.
4. The infections are also similar in that they are both quite contagious, either through contaminated hands that go to the eyes, nose or mouth, or through breathing contaminated air. However they differ a bit here: the SARS-CoV-2 is more contagious than influenza. Specifically, a person infected with SARS-CoV-2 may spread the virus on the average to 2.2 others, while the 'flu virus spreads from a person to maybe 1.5 others. Some think that is true because SARS-CoV-2 can travel farther through the air after a cough or sneeze.
5. We are also learning that the SARS-CoV-2 can produce infections that do not cause symptoms at all. That doesn't seem to be so true for 'flu - those infections usually cause symptoms. So if a person is contagious with 'flu, he or she is going to lay low, reducing contacts. A person infected with SARS-CoV-2 may walk around feeling fine and spreading the infection without a word of warning.

Another very common question is: "Why should we be so much more afraid of COVID-19 than influenza?"

1. The answer lies in several things mentioned above. Specifically, SARS-CoV-2 is more contagious, even from asymptomatic carriers, and it is more deadly...scary stuff.

2. We have weapons against influenza. We have drugs, for example, which if you take them at the start of the infection will help you get through the attack. We also have vaccines. While the vaccines don't always work well, they always work a bit, conferring at least some immune protection to us. These are reassuring to have.
3. We have readily available tests for 'flu. Therefore if a person has cough, fever and wipeout he or she can find out fast if it is 'flu and then maybe start one of those anti-'flu drugs. But testing for SARS-CoV-2 is in embarrassingly short supply. We simply can't tell in most cases if symptoms are the COVID-19. We also don't know how much of it is moving in our community because surveillance testing isn't available. The silent-killer-stalking-the-land thing.
4. SARS-CoV-2 is also more scary because it is new and unfamiliar, and there are still so many unknowns about it. After all, it first came to notice only four months ago. As a human race, we have been experiencing influenza for millennia. We know what to expect of it.

A final note: The only good weapons that you and I have right now against this new pandemic is social distancing - staying at home, staying away from others as best we can when we do go out of the house, wearing masks, keeping our hands away from our faces and washing them lots. Happily, these weapons work to reduce the risks of both of these nasty viruses. Use them.

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