

Coronavirus Pandemic: Panicked or Prudent

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www.ArleneTaylor.org

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Scene One

I knew him, the gentleman sitting across from me. A long-distance runner for years before our paths had crossed, his face reflected fear.

“It’s hard to admit but I’m scared—of this new pandemic. Coronavirus something or other.”

I waited.

“I heard that underlying health issues can be a risk factor, especially lung conditions. Me? I’ve been treated for a chronic illness . . .”

I waited.

“I was told my immune system could be weakened by too much competitive long-distance running and my doctor did suggest cutting back—but I like the high I get from long-distance running. Not running scares me, as well.”

“It’s one thing to train for an Olympic competition,” I said. “It’s another to make over-exercising a life-time career. Of course, you get a high. When the body begins to feel pain, the brain triggers the release of endorphins, the brain’s natural morphine. As adrenalin rises (from competition or excitement or fear, for example), so does dopamine, which also impacts the brain reward system. I’m sure you know that a person can become dependent upon—if not addicted to—adrenalin, dopamine, and endorphins.”

He nodded, looking at the floor.

I waited.

He continued. “A friend of mine heard on the news that this is a new virus. What can I do to prevent catching it?”

Scene Two

“Our grandmother is having her 90th birthday celebration. She lives overseas and has invited us to the party. With all the news about this Chinese virus . . . we’re concerned,” said one face.

“Unfortunately, we did not get a flu shot this year . . .” said the other face.

The two faces did indeed mirror concern.

“First, this is not a *Chinese virus* or even an *Asian virus*,” I explained. “Yes, it may have been identified in Wuhan, China, but viruses do not target individuals of a specific racial or ethnic background or gender or even religious or political affiliation. However, if a person with an underlying chronic disease (especially one that involves the lungs) becomes infected with the virus, their immune system might have difficulty fighting the illness successfully.”

“Well, should we go or *not*? We’re feeling rather panicked at the moment!”

“It is appropriate to be concerned about this coronavirus and prudent about implementing prevention strategies. It is *unhelpful* to become panicked. The stress of anxiety, worry, and their parent emotion “fear” can suppress immune system function—exactly what you want to avoid doing. In some cases, fear can lead to stigmatizing others, as well, which can increase their stress levels. Learning what is currently known about this pandemic and implementing appropriate prevention measures can help lower your risk. Travel? It can increase your risk of exposure. Current recommendations are to avoid all nonessential travel. There is also the possibility of quarantine upon your return depending on the viral exposure pattern. I decided to cancel one of my upcoming trips abroad due to the risk of exposure and possible quarantine.”

“What *is* this virus anyway?” asked one face.

“And what makes it any worse than other flu viruses?” asked the other face.

Scene Three

“What’s this business about *NOT* getting to go on the cruise we’ve been planning for the last year?”

The voice boomed from my mobile phone, which I held even further from my ear. *Good grief*, I thought to myself. *Does this voice think I am a travel agent?*

“I’ve got the whole thing paid for and we were ready to fly to the port and board ship . . . and then we hear this business about nonessential travel, and sports events being cancelled, and staying away from crowds, and cruise companies not sailing for three months. And Disneyland closing? Has everyone gone nuts?”

When the booming voice paused to take a breath, I asked, “Do you know what a pandemic involves?”

Silence.

“The World Health Organization only announces a pandemic when the situation is very serious. In this case, there is a new Coronavirus Disease that seems to transmit more easily than previous coronaviruses. I just cancelled the cruise I was expecting to take. It is inconvenient and a disappointment. However, I am personally taking precautions so when this calms down I am alive and well and can rebook.”

The phone was disconnected.

What are coronaviruses?

Coronaviruses are a family of related viruses that have been around for a long time. Think of an extended human family: each member may have many similarities and yet all are different. Viruses are a type of tiny parasite that replicate inside living cells and that may “mutate,” change their characteristics, which can alter how they impact or are expressed in other life forms. Mutations can allow them to become immune to vaccines, antibiotics, and perhaps other medications. Mutations can occur spontaneously or result from environmental exposure to mutagenic agents such as chemicals, toxic substances, and radiation. Some mutations can be passed on to the next generation(s) of the virus. Mutations can sometimes occur in the body of a reservoir or vector. This virus appears to have a genetic similarity to bat coronaviruses and may have originated from bats. A possible intermediate reservoir may also be involved in its transmission to human beings (e.g., pangolin, the meat of which is prized in some parts of the world). Viruses can infect all types of life forms including animals, plants, and microorganisms. Viral diseases have been identified in mammals (e.g., cows and pigs often get diarrhea), in birds and bats (e.g., chickens tend to exhibit respiratory tract problems and other systems may become involved), and in human beings.

This pandemic virus has already been known by several names: Wuhan coronavirus, 2019 novel coronavirus (2019-nCoV), Coronavirus Disease (COVID-19), and Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).

How is this virus spread?

It's a new virus and different from other corona viruses and from flu-influenza viruses. According to the Centers for Disease Control and Prevention or CDC, this virus may spread in the same way as other coronaviruses. That is, most likely by person-to-person contact between individuals, from contaminated surfaces, and through droplet transmission (and perhaps via air-borne routes).

Refer to **Differences between flu (influenza) viruses and SARS-CoV-2 virus at the end.**

Is there a vaccine for this virus?

No. There is currently no vaccine for this new coronavirus although research is ongoing. Creating and testing a vaccine takes time.

So, what's the point of getting a flu vaccine every year?

Each year a flu vaccine is developed to help provide protection against the expected top two or three viruses that cause the flu (influenza), although unexpected viruses may surface. The vaccine is designed to boost the immune system and trigger it to create antibodies against those viruses. A person might still get sick from a different virus but may avoid more serious complications, unless an underlying chronic illness is present, especially one that involved the lungs.

How can you lower your risk for infection?

There are recommended prevention strategies to lower your risk of exposure and infection, including the following.

1. Wash your hands often with soap and water for at least 20 seconds to avoid contamination from other people's hands, door handles, table surfaces, and so on.

Note: The Centers for Disease Control and Prevention recommends using hand sanitizers with at least 60 percent alcohol when you are unable to wash your hands.

2. Avoid touching your face, eyes, nose, and mouth, or putting inanimate objects in your mouth such as pens and pencils or sharing eating utensils or drinking glasses.
3. Avoid close contact with people who are sick. Send a text or email or chat by phone. If someone is sick in your own home, ask them stay in their own room as much as possible, away from other family members. Stay at home if you are sick and take precautions to avoid sharing your germs with other people and pets. If you have pets, wash your hands after touching them, and keep them away from your face to avoid their licking.
4. Maintain a social distance of six-feet from others. Nod and smile but avoid handshakes, hugs, kisses, and even fist bumps or elbow rubs because that involves close contact. This includes avoiding all nonessential travel and crowds of people, as well as even smaller groups of people where you are unable to maintain a six-foot social distance.
5. Sneeze or cough into the crook of your elbow. If tissue is easily available, cover your cough or sneeze with a tissue and then throw it into the trash immediately.
6. Disinfect frequently-touched objects and surfaces using a regular household cleaning spray or an alcohol-based hand sanitizer with at least 60 percent alcohol.
7. If you develop symptoms and need to seek medical care, call ahead to the office, urgent care, or Emergency Department first—before going there. Describe your symptoms and follow the instructions you receive.

Bottom line: whether you get sick depends on:

- Your current level of health, which involves your typical lifestyle and habits along with the strength of your immune system
- The type and amount of exposure you receive

These factors—often involving *lifestyle* and *choices*—are at least partially, if not completely, within your control.

Dump the panic.

Do be proactively prudent. *It matters!*

**Differences between flu (influenza) viruses and SARS-CoV-2 virus
 As of March 19, 2020 - Check reference sources below for updates**

Item	Flu or Influenza	SARS-CoV-2
Causative organism	Several different strains or types of flu viruses	One virus: SARS-CoV-2
Transmission	Close contact with an infected person, by droplet infection, and touching face after touching a contaminated surface. An individual can transmit the virus without personally exhibiting symptoms.	Close contact with an infected person, by droplet infection, and touching face after touching a contaminated surface. Possibly by airborne route (virus may remain in the air longer than do droplets).
Incubation Period	1-4 days with an average of 2 days.	Within 14 days of exposure (thus the 14-day quarantine procedures)
Typical Symptoms	Runny nose, headache, fatigue, nonproductive cough, sore throat. May or may not have chills or a fever, vomiting, or diarrhea. Illness may be mild or severe and fatal in rare instances. Those with underlying chronic illnesses, especially those involving the lungs, are at higher risk for complications such as pneumonia.	Cough, fever and shortness of breath. Illness may be mild or severe and fatal in rare instances. Complications such as severe respiratory problems including pneumonia or kidney failure may develop. Those with underlying chronic illnesses, especially those involving the lungs, are at higher risk for complications.
Testing	A laboratory test is available to detect flu/influenza viruses.	A laboratory test is available. Diagnosis without it may be difficult as symptoms may resemble the flu or a cold.
Treatment	Based on symptoms. Anti-viral medication may help lessen severity of symptoms and shorten duration of the illness. Antibiotics do not kill viruses.	Antivirals are being tested to determine if they can lessen severity of symptoms or shorten duration of this illness.
Vaccine	An annual vaccine is available to prevent some types of infection and to reduce the severity of the flu	No vaccine is currently available. Research is in progress, but development of a vaccine takes time
People infected	Estimated 1 billion cases worldwide annually with 9.3 to 45 million cases in the USA	Approximately 241,055 cases worldwide with 10,442 cases in the USA
Deaths	291,000 to 646,000 deaths reported worldwide annually with 12,000 to 61,000 deaths in the USA	Approximately 9,982 deaths reported worldwide with 150 deaths in the USA

Selected References

- <https://www.cdc.gov/coronavirus>
- <https://www.cdc.gov/coronavirus/2019-ncov/travelers/index.html>
- <https://www.cdc.gov/handwashing/show-me-the-science-handwashing.html>
- <https://www.hopkinsmedicine.org/coronavirus>
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