

# Dangerous COVID-19 Myths

We all have heard some pretty wild things about the COVID-19 pandemic. Some of them are true. For example, this pandemic will indeed go down in the history books as one of the great plagues to strike humanity, along with the Justinian plague, the black plague, 1918 Influenza, HIV/AIDS, etc. But there are some very untrue and potentially dangerous myths out there as well.

Circulating in the Internet are myths about how to protect yourself from getting the infection. Let me list some and explain why they are wrong.

- “Gargling with warm salt water, or with vinegar, or with alcohol prevents infection.” No. While warm salt water gargles can soothe a sore throat, none of these offer any protection. The virus gets into cells of the nose and throat and cannot then be washed away.
- “Drink lots of water to dilute the virus, flush it into your stomach so that acid can degrade it.” Likewise, no help. In fact, the virus can enter the body through the gut. Some cases develop diarrhea as the first symptom.
- “Taking large doses of vitamin C can prevent any viral infection, including this one.” Again, no help. We have many studies over decades which show, sadly, that vitamin C has no activity against viruses, nor does it boost the immune system.
- “Taking your leftover antibiotic will kill it.” SARS-CoV-2, the agent of COVID-19, is a virus, and antibiotics don't work against viruses. By the way, you shouldn't have saved antibiotic from your last bacterial infection anyway.
- “The coming warm and humid weather will kill the pandemic.” Wish that were so. However, there are reports of a huge COVID-19 hit, with devastating results, in India. Kenya is starting to report its numbers. These suggest that the pandemic will certainly continue in heat. We don't yet know if the coming summer will slow it down at all. I sure hope so, but please don't count on it.
- “Mosquitoes or ticks can spread this disease.” Nope, no evidence of that. Mosquitoes and ticks can spread various diseases, like West Nile virus, eastern equine encephalitis, Lyme disease, anaplasmosis, babesiosis. But they do so by picking up the germs from infected blood in one animal and injecting it into another through their saliva. The virus SARS-CoV-2 doesn't linger in the blood long enough to allow that to happen. However, do guard yourself against tick bites, especially now as the ticks emerge from the winter...they are hungry and have been causing lots of Lyme disease.
- “Only older people already ill with other conditions develop bad cases of COVID-19, so young people don't need to worry.” Untrue. Some previously perfectly healthy young folks have died in this pandemic.
- “COVID-19 is no worse than influenza.” In current estimations it is about 10 times more deadly, and it is spreading hugely throughout the world because we have absolutely no immunity to it the way many of us do against 'flu.

- “The COVID-19 pandemic is caused by the release of an experimental virus generated by the US as a bioweapon against China...or is it China against the US?” Science shows us that the virus is of natural origin, originally from bats.

I want to isolate one myth and deal with it more extensively. This is about shopping and using plastic bags vs. re-usable bags. As a community, we have just been moving to the use of reusable cloth bags for our grocery shopping for the very good reason to reduce plastic pollution of our planet. As the COVID-19 pandemic has hit, the fossil fuel industry has been pushing the community and our grocery stores to get us back into plastic bags. Their pressure is about their own bottom line! There is not a shred of evidence that re-using cloth bags to pack our groceries carries any kind of risk of contagion. So use them! I would suggest that you wash your cloth bags, and also that you pack your own groceries at the store. Those things seem to be common sense, and by the way, they offer the checkout personnel at the store your expression of solidarity with them.

That last bit is very important. It is no myth that we will prevail against the COVID-19 pandemic, and it is no myth that we will do so much better if we stand solidly together, sharing concern for each other. Solidarity. Oh yes: and sharing scientific knowledge, too.

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