

Ivermectin, Explained

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Ivermectin is a drug that treats illnesses caused by parasites.* There is a version for humans and a version for animals, which is most commonly used for horses and cows.*

There has been a lot of misinformation that ivermectin provides protection against COVID-19, so people in Canada and the United States have been taking both versions of ivermectin products. As a result, “ivermectin is facing a shortage in Canada”* and in the United States, 88,000 prescriptions of ivermectin were filled each week in mid-August.*

Last week, Health Canada released a warning saying that people should not use “either the veterinary or human drug versions of Ivermectin to prevent or treat COVID-19.”*

This article will give some background information on ivermectin, including why Health Canada, the United States’ Food and Drug Administration (FDA), and other health experts are insisting that “there is no evidence that ivermectin in either formulation is safe or effective” to prevent or treat COVID-19.*

I thought it would protect me from COVID-19, so I started to use it. What should I do?

According to Health Canada, you should:

- Stop using it and discard it:
 - Follow municipal or regional guidelines on how to dispose of chemicals and other hazardous waste, or
 - Return the product to where you bought it for them to dispose of it.
- Ask a healthcare professional if you have used ivermectin and have health concerns.
- Report any side effects directly to Health Canada. Click [here](#) to do that.
- Submit an online complaint form to Health Canada if you have any information about the illegal advertising or sale of ivermectin. Click [here](#) to do that.

Is it really unsafe to take ivermectin without a prescription? What’s the harm?

Yes, it’s unsafe. You should only take the human version of ivermectin if a doctor prescribes it to you for parasitic worm infections.* Even the human version of ivermectin has health risks if it isn’t taken exactly as a doctor prescribes.* The amount of ivermectin that a person should take depends on their “weight, medical history and how they respond to treatment.”* Ivermectin “can interact with other medication or be inappropriate for people with certain health conditions.”*

Health Canada states that “Canadians should never consume health products intended for animals because of the potential serious health dangers posed by them.”* Health experts say that people who take the animal version of ivermectin have a high risk of being poisoned.*

What is the difference between the human and animal versions of ivermectin?

According to the FDA, “animal drugs are often highly concentrated because they are used for large animals like horses and cows, which weigh a lot more than we do—a ton or more. Such high doses can be highly toxic in humans.”* Horses generally weigh between 380 kilograms (837 pounds) and 1,000 kilograms (2,204 pounds).*

In addition to that, some of the ingredients in the animal version are not approved for use in humans.* The FDA stated: “In some cases, we don’t know how those inactive ingredients will affect how ivermectin is absorbed in the human body.”*

Aren’t there studies that prove ivermectin treats COVID-19?

The company that first manufactured ivermectin, Merck, recently “confirmed its scientists have found no scientific basis for ivermectin’s efficacy against COVID-19, also citing a concerning lack of safety data in most studies.”*,*

In November 2020, the first and largest study on ivermectin and COVID-19 was done.* It noted that ivermectin might be useful to treat people with COVID-19; however, this summer, the study was retracted, or taken down, because it appears that the data was fabricated, the study was plagiarized, and ethical conditions were violated.*,*

As Merck’s statement says, the other studies about ivermectin and COVID-19 have not been very high quality.* There is early evidence that ivermectin could be anti-viral, but there is no evidence that ivermectin stops COVID-19 from spreading throughout the human body.*

In March 2021, there was a study that gave ivermectin daily to 400 adults with mild cases of COVID-19.*,* This study found that ivermectin “did not improve the resolution of their symptoms.”*,* A different study from late July 2021 noted that “reliable evidence available does not support the use of ivermectin for treatment or prevention of COVID-19.”*

“The body of evidence that we now have ... is that it is not effective in the context of COVID — either for preventing or for treating. The evidence simply does not support it,” says Tim Caulfield, a professor and the Canada Research Chair at the University of Alberta.* “[But] we’re seeing the popularity of the drug increase, and also, there’s been an increase in poisoning and an increase in prescription. It’s a really bizarre phenomenon.”*

He added, “On one hand, you have these vaccines, which are arguably the most studied vaccines in human history, we have hundreds of millions of data points showing efficacy and really amazing safety profile. And then on the other hand, you have an unproven therapy, and they are opting for the latter.”*

Final Thoughts

Perhaps some people feel more comfortable with taking ivermectin since it has been around since the 1970s while the COVID-19 vaccines were created and developed within the past 18 months. Many people have felt concerned about the safety of COVID-19 vaccines because they were developed sooner than it usually takes. Click [here](#) to read more about how COVID-19 vaccines were developed safely within a short amount of time.

Some groups of people who are taking ivermectin believe that it hasn't been approved to prevent or treat COVID-19 simply because health agencies haven't been "doing their due diligence to ensure safe and effective treatments reach the public."*

You can trust that Health Canada is looking at other ways to treat COVID-19. In its recent ivermectin warning, the agency stated that, "Health Canada is closely monitoring all potential therapeutic treatments for COVID-19, including treatments being studied in international clinical trials. To date, Health Canada has not received any drug submission or clinical trial application for ivermectin for the prevention or treatment of COVID-19."*

If you have any questions for Health Canada, you can call them at (613) 957-2991. The toll-free number is 1-866 225-0709. If you prefer email, you can contact Health Canada at hcinfo.infosc@canada.ca.

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If you think you may be experiencing symptoms of COVID-19, take the self-assessment at www.ontario.ca/coronavirus. Follow all directions from your medical provider or your local health unit at the following phone numbers:

Telehealth Ontario: 1-866-797-0000

Toronto Public Health: 416-338-7600

Peel Public Health: 905-799-7700

Durham Region Health Department: 905-668-7711

York Region Public Health: 1-877-464-9675