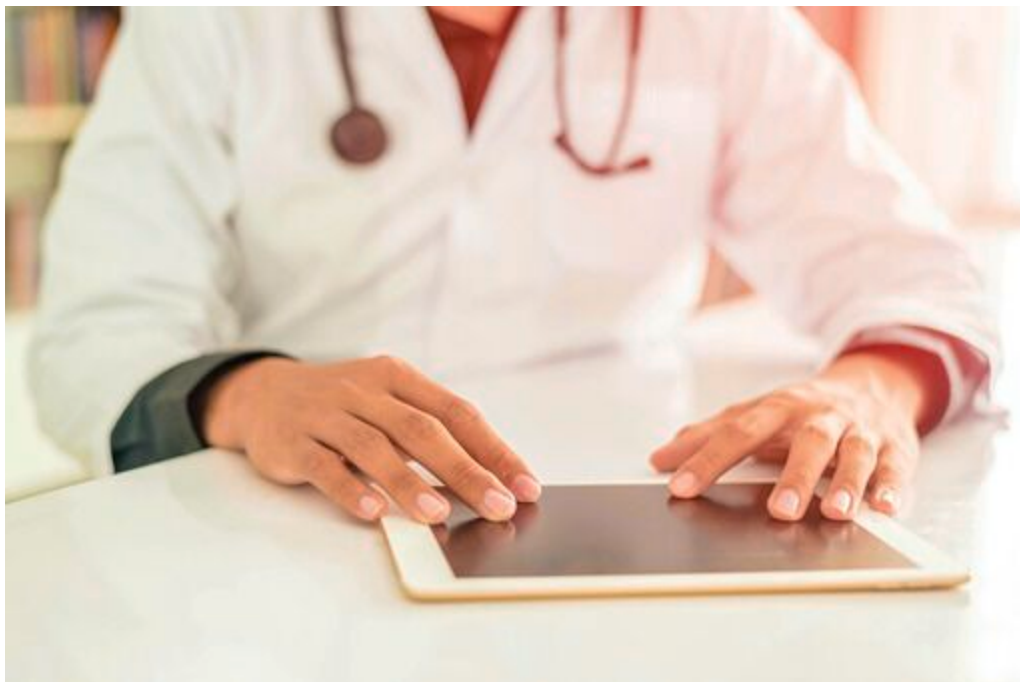


Rapid increase in Ivermectin prescriptions and reports of severe illness

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Ivermectin is a U.S. Food and Drug Administration (FDA)-approved prescription medication used to treat certain infections caused by internal and external parasites. When used as prescribed for approved indications, it is generally safe and well tolerated.

During the COVID-19 pandemic, ivermectin dispensing by retail pharmacies has increased, as has use of veterinary formulations available over the counter but not intended for human use. FDA has cautioned about the potential risks of use for prevention or treatment of COVID-19.

Ivermectin is not authorized or approved by FDA for prevention or treatment of COVID-19. The National Institutes of Health's (NIH) COVID-19 Treatment Guidelines Panel has also determined that there are currently insufficient data to recommend ivermectin for treatment of COVID-19. ClinicalTrials.gov has listings of ongoing clinical trials that might provide more information about these hypothesized uses in the future.

Adverse effects associated with ivermectin misuse and overdose are increasing, as shown by a rise in calls to poison control centers reporting overdoses and more people experiencing adverse effects.

The Centers for Disease Control and Prevention (CDC) confirmed with the American Association of Poison Control Centers (AAPCC) that human exposures and adverse effects associated with ivermectin reported to poison control centers have increased in 2021 compared to the pre-pandemic baseline. These reports include increased use of veterinary products not meant for human consumption.

Ivermectin is a medication that is approved by FDA in oral formulations to treat onchocerciasis (river blindness) and intestinal strongyloidiasis. Topical formulations are used to treat head lice and rosacea. Ivermectin is also used in veterinary applications to prevent or treat internal and external parasitic infections in animals. When used in appropriate doses for approved indications, ivermectin is generally well tolerated.

Clinical trials and observational studies to evaluate the use of ivermectin to prevent and treat COVID-19 in humans have yielded insufficient evidence for the NIH COVID-19 Treatment Guidelines Panel to recommend its use. Data from adequately sized, well-designed, and well-conducted clinical trials are needed to provide more specific, evidence-based guidance on the role of ivermectin in the treatment of COVID-19.

A recent study examining trends in ivermectin dispensing from outpatient retail pharmacies in the United States during the COVID-19 pandemic showed an increase from an average of 3,600 prescriptions per week at the pre-pandemic baseline (March 16, 2019–March 13, 2020) to a peak of 39,000 prescriptions in the week ending on January 8, 2021.¹ Since early July 2021, outpatient ivermectin dispensing has again begun to rapidly increase, reaching more than 88,000 prescriptions in the week ending August 13, 2021. This represents a 24-fold increase from the pre-pandemic baseline.

In 2021, poison control centers across the U.S. received a three-fold increase in the number of calls for human exposures to ivermectin in January 2021 compared to the pre-pandemic baseline.

In July 2021, ivermectin calls have continued to sharply increase, to a five-fold increase from baseline. These reports are also associated with increased frequency of adverse effects and emergency department/hospital visits.

In some cases, people have ingested ivermectin-containing products purchased without a prescription, including topical formulations and veterinary products. Veterinary formulations intended for use in large animals such as horses, sheep, and cattle (e.g., “sheep drench,” injection formulations, and “pour-on” products for cattle) can be highly concentrated and result in overdoses when used by humans. Animal products may also contain inactive ingredients that have not been evaluated for use in humans. People who take inappropriately high doses of ivermectin above FDA-recommended dosing may experience toxic effects.

Clinical effects of ivermectin overdose include gastrointestinal symptoms such as nausea, vomiting, and diarrhea. Overdoses are associated with hypotension and neurologic effects such as decreased consciousness, confusion, hallucinations, seizures, coma, and death. Ivermectin may potentiate the effects of other drugs that cause central nervous system depression such as benzodiazepines and barbiturates.

Recommendations for the Public

Be aware that currently, ivermectin has not been proven as a way to prevent or treat COVID-19.

Do not swallow ivermectin products that should be used on skin (e.g., lotions and creams) or are not meant for human use, such as veterinary ivermectin products.

Seek immediate medical attention or call the poison control center hotline (1-800-222-1222) for advice if you have taken ivermectin or a product that contains ivermectin and are having symptoms. Signs and symptoms include gastrointestinal effects (nausea, vomiting, abdominal pain, and diarrhea), headache, blurred vision, dizziness, fast heart rate, and low blood pressure. Other severe nervous system effects have been reported, including tremors, seizures, hallucinations, confusion, loss of coordination and balance, decreased alertness, and coma.

Get vaccinated against COVID-19. COVID-19 vaccination is approved by FDA and is the safest and most effective way to prevent getting sick and protect against severe disease and death from SARS-CoV-2, the virus that causes COVID-19, including the Delta variant.

Protect yourself and others from getting sick with COVID-19. In addition to vaccination, wear masks in indoor public places, practice staying at least six feet from other people who don't live in your household, avoid crowds and poorly ventilated spaces, and wash your hands often or use hand sanitizer that has at least 60 percent alcohol.