

# The Research Is Clear: Ivermectin Is a Safe, Effective Treatment for COVID. So Why Isn't It Being Used?



By [Elizabeth Mumper, M.D., FAAP](#) | [The Defender](#)

A patient with Type 1 diabetes called to tell me the pharmacist at our local Walgreens refused to fill the prescription I had written for ivermectin, so I called to ask why.

The young pharmacist, a few years out of pharmacy school,

informed me he did not understand why I was using ivermectin for early treatment of [COVID](#) because "SARS-CoV-2 does not have an exoskeleton."

I explained I was not using ivermectin as an anti-parasitic medication, but that it had impressive data as an anti-inflammatory and anti-viral.

Furthermore, as a pediatrician, I have more than 40 years of experience managing multiple viral illnesses. There is value in treating viruses early, often with inexpensive natural remedies, rather than "staying at home until you have problems breathing then go to the hospital" as U.S. public officials [have advised](#) for COVID.

The pharmacist was not buying my initial explanation. "I am not going to fill prescriptions for ivermectin that are used in pseudo vaccine doses," he told me.

I was surprised a young pharmacist was able to override an experienced physician's prescription, effectively removing an inexpensive prevention and treatment option for selected patients in the middle of a pandemic.

The medical educator in me kicked in. "I would be happy to send you some references about the use of ivermectin for treatment and prevention. There are impressive studies from Argentina, Peru, Africa, and India that suggest much better outcomes than we are achieving here in the U.S. with our single-minded focus on vaccines."

He told me the U.S. Food and Drug Administration (FDA) did not recommend ivermectin for COVID. I asked to see the documentation and he agreed to fax it to me.

I hand-delivered 93 references and a great review article to Walgreens.

The pharmacist faxed back [a post](#) from March 5, on the FDA

website entitled “Why You Should Not Use Ivermectin to Treat or Prevent COVID-19.”

The next day, I received notice that a pharmacy in Northern Virginia would not fill any prescriptions for ivermectin if the diagnosis code mentioned COVID.

I had written an ivermectin prescription for a patient who has a history of bad reactions to vaccines and significant autoimmune illness. His adolescent age means that he is at a [very low risk](#) of death from COVID itself.

Based on my experience as his doctor for over a decade, I was worried about potential [adverse events](#) if he got the COVID vaccine. I dug into the data about ivermectin, and it seemed like a great option for him to have on hand for early treatment of COVID if he got sick.

A pharmacist in a drug store, who never examined my patient or learned his extensive medical history, got to trump my best medical judgment by refusing to fill the prescription.

The same day, in a conversation with a compounding pharmacy, we learned of a case in which a patient’s family had to take a hospital to court to obtain treatment with ivermectin.

Bear in mind that the [safety profile for ivermectin](#) is excellent and the drug is spectacularly less expensive than the vast majority of hospital interventions.

*In an open letter to Rachel Maddow, Diane Perlman, Ph.D., challenges [@maddow](#) to correct statements the talk show host made on her show about ivermectin, especially as it relates to treating COVID-19.*

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– Robert F. Kennedy Jr (@RobertKennedyJr) [October 1, 2021](#)

Three days later, on a zoom call with a colleague whose parents live in Colorado, I learned that a pharmacist at a major drugstore was not only refusing to fill ivermectin for 86- and 87-year-old patients who held valid prescriptions, but the pharmacist was taking the initiative to remind the other King Soopers pharmacies in the state not to fill those prescriptions either.

My analysis of the medical literature is that ivermectin has an impressive safety record and there are multiple studies from around the globe suggesting it can [decrease morbidity and mortality from COVID 19](#).

Two doctors who were actually in the ICU treating real patients, Dr. Paul Marik and Dr. Pierre Kory, looked at their prior experience with similarly sick patients and reviewed treatment strategies to determine what could be helpful.

As [Dr. Anthony Fauci](#) advised us to “stay home and wait for the vaccine,” frontline doctors took care of the patients before them, learning valuable lessons about what worked and what did not.

Let's hit the highlights, quoting directly from the [review paper by Kory et al, Jan 2021](#):

- Since 2012, multiple in vitro studies have demonstrated that ivermectin inhibits the replication of many viruses, including influenza, Zika, Dengue, and others ([Mastrangelo et al., 2012](#); [Wagstaff et al., 2012](#); [Tay et al., 2013](#); [Götz et al., 2016](#); [Varghese et al., 2016](#); [Atkinson et al., 2018](#); [Lv et al., 2018](#); [King et al., 2020](#); [Yang et al., 2020](#)).
- ivermectin inhibits SARS-CoV-2 replication and binding to host tissue via several observed and proposed mechanisms ([Caly et al., 2020a](#)).
- ivermectin has potent anti-inflammatory properties with in vitro data demonstrating profound inhibition of both

cytokine production and transcription of nuclear factor- $\kappa$ B (NF- $\kappa$ B), the most potent mediator of inflammation ([Zhang et al., 2008](#); [Ci et al., 2009](#); [Zhang et al., 2009](#)).

- ivermectin significantly diminishes viral load and protects against organ damage in multiple animal models when infected with SARS-CoV-2 or similar coronaviruses ([Arevalo et al., 2020](#); [de Melo et al., 2020](#)).
- ivermectin prevents transmission and development of COVID-19 disease in those exposed to infected patients ([Behera et al., 2020](#); [Bernigaud et al., 2020](#); [Carvallo et al., 2020b](#); [Elgazzar et al., 2020](#); [Hellwig and Maia, 2020](#); [Shouman, 2020](#)).
- ivermectin hastens recovery and prevents deterioration in patients with mild to moderate disease treated early after symptoms ([Carvallo et al., 2020a](#); [Elgazzar et al., 2020](#); [Gorial et al., 2020](#); [Khan et al., 2020](#); [Mahmud, 2020](#); [Morgenstern et al., 2020](#); [Robin et al., 2020](#)).
- ivermectin hastens recovery and avoidance of ICU admission and death in hospitalized patients ([Elgazzar et al., 2020](#); [Hashim et al., 2020](#); [Khan et al., 2020](#); [Niaee et al., 2020](#); [Portmann-Baracco et al., 2020](#); [Rajter et al., 2020](#); [Spoorthi V, 2020](#)).
- ivermectin reduces mortality in critically ill patients with COVID-19 ([Elgazzar et al., 2020](#); [Hashim et al., 2020](#); [Rajter et al., 2020](#)).
- ivermectin leads to striking reductions in case-fatality rates in regions with widespread use ([Chamie, Juan, 2020](#)).
- The safety, availability, and cost of ivermectin is nearly unparalleled given its near nil drug interactions along with only mild and rare side effects observed over almost 40 years of use and billions of doses administered ([Kircik et al., 2016](#)).
- ivermectin was successful at controlling several diseases which blighted the lives of billions living in poverty in the tropics.

- ivermectin's discoverers were awarded the [Nobel Prize in Medicine in 2015](#).
- ivermectin is included in the World Health Organization's "[List of Essential Medicines](#)." It has been widely distributed in countries like India for pennies a day. The out-of-pocket cost of ivermectin at my Walgreens is more than \$1,000.

Kory and Marik compiled eight studies (three randomized controlled studies and five observational controlled studies) demonstrating efficacy in the prevention of COVID-19 with significantly decreased transmission.

They found 19 controlled studies that showed significant [impacts on time to recovery, hospital stay, decrease in viral loads, reductions in the duration of cough and decreased mortality](#).

In medical history pre-COVID, this body of research about ivermectin would be applauded for bringing value in the midst of a pandemic. In the medical era pre-COVID, the judgment and experience of clinicians at the patient's bedside counted for something.

Pre-COVID, we taught medical students to use keen observational skills and keep accurate records of whether the patient improved or deteriorated after the treatment strategies used.

In the Age of COVID, pharmacists who chide doctors that "COVID does not have an exoskeleton" deny patients ivermectin – [a safe, cheap, effective, and potentially life-saving early treatment](#).

# IVERMECTIN FOR COVID-19

65 TRIALS, 655 SCIENTISTS, 47,717 PATIENTS

32 RANDOMIZED CONTROLLED TRIALS

86% IMPROVEMENT IN 14 PROPHYLAXIS TRIALS RR 0.14 [0.08-0.25]

66% IMPROVEMENT IN 29 EARLY TREATMENT TRIALS RR 0.34 [0.24-0.47]

40% IMPROVEMENT IN 22 LATE TREATMENT TRIALS RR 0.60 [0.48-0.76]

57% IMPROVEMENT IN 26 MORTALITY RESULTS RR 0.43 [0.32-0.58]

58% IMPROVEMENT IN 32 RANDOMIZED CONTROLLED TRIALS RR 0.42 [0.29-0.59]

SUMMARY OF RESULTS REPORTED IN IVERMECTIN TRIALS FOR COVID-19. 09/27/21. IVMETA.COM

If you or your patients are having trouble getting ivermectin prescriptions filled for COVID 19 prevention or treatment, see this excellent resource from the [Front Line COVID 19 Critical Care Alliance](#).

*The views and opinions expressed in this article are those of the authors and do not necessarily reflect the views of Children's Health Defense.*



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Alarmed by a frightening rise in the number of children diagnosed with autism, Dr. Elizabeth Mumper has long been devoted to spreading what she sees as the only answer to stemming the tide of this epidemic – integrative medicine.