Rapid Increase in Ivermectin Prescriptions and Reports of Severe Illness Associated with Use of Products Containing Ivermectin to Prevent or Treat COVID-19

Summary

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. Ivermectin is not authorized or approved by FDA for prevention or treatment of COVID-19.

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. 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.

- 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. 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.
Recommendations for Clinicians and Public Health Practitioners

- Be aware that ivermectin is not currently authorized or approved by FDA for treatment of COVID-19. NIH has also determined that there are currently insufficient data to recommend ivermectin for treatment of COVID-19.

- Educate patients about the risks of using ivermectin without a prescription, or ingesting ivermectin formulations that are meant for external use or ivermectin-containing products formulated for veterinary use.

- Advise patients to immediately seek medical treatment if they have taken any ivermectin or ivermectin-containing products and are experiencing symptoms. Signs and symptoms of ivermectin toxicity include gastrointestinal effects (nausea, vomiting, abdominal pain, and diarrhea), headache, blurred vision, dizziness, tachycardia, hypotension, visual hallucinations, altered mental status, confusion, loss of coordination and balance, central nervous system depression, and seizures. Ivermectin may increase sedative effects of other medications such as benzodiazepines and barbiturates. Call the poison control center hotline (1-800-222-1222) for medical management advice.

- Educate patients and the public to get vaccinated against COVID-19. COVID-19 vaccination is safe and the most effective means to prevent infection and protect against severe disease and death from SARS-CoV-2, the virus that causes COVID-19, including the Delta variant.

- Educate patients and the public to use COVID-19 prevention measures including wearing masks in indoor public places, physical distancing by staying at least six feet from other people who don’t live in the same household, avoiding crowds and poorly ventilated spaces, and frequent handwashing and use of hand sanitizer that contains at least 60 percent alcohol.

Resources for Additional Information

- NIH COVID-19 Treatment Ivermectin Guidelines
  https://www.covid19treatmentguidelines.nih.gov/therapies/antiviral-therapy/ivermectin/

- FDA Consumer Alert on Use of Ivermectin to Treat or Prevent COVID-19
  https://www.fda.gov/consumers/consumer-updates/why-you-should-not-use-ivermectin-treat-or-prevent-covid-19

- FDA MedWatch Adverse Event Reporting program

- CDC Coronavirus (COVID-19) website
  https://www.coronavirus.gov/

- American Association of Poison Control Centers
  https://www.aapcc.org/

- Press Release: American College of Medical Toxicology Reports Data on Adverse Effects and Toxicity from Unapproved Use of Ivermectin for the Prevention or Treatment of COVID-19
# Regional Public Health Offices – 2021

Mail or call reports to the Epidemiology Office in each Public Health Region

### MAIL TO:

<table>
<thead>
<tr>
<th>Region</th>
<th>Address</th>
<th>City</th>
<th>State</th>
<th>Phone</th>
<th>Fax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowcountry</td>
<td>4050 Bridge View Drive, Suite 600</td>
<td>N. Charleston</td>
<td>SC</td>
<td>(843) 953-0051</td>
<td></td>
</tr>
<tr>
<td>Midlands</td>
<td>2000 Hampton Street</td>
<td>Columbia</td>
<td>SC 29204</td>
<td>(803) 576-2993</td>
<td></td>
</tr>
<tr>
<td>Pee Dee</td>
<td>1931 Industrial Park Road</td>
<td>Conway</td>
<td>SC 29526</td>
<td>(843) 915-6506</td>
<td></td>
</tr>
<tr>
<td>Upstate</td>
<td>200 University Ridge</td>
<td>Greenville</td>
<td>SC 29602</td>
<td>(864) 282-4373</td>
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### CALL TO:

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<tr>
<th>Region</th>
<th>Areas Served</th>
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<th>Nights/Weekends</th>
<th>Office</th>
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<tbody>
<tr>
<td>Lowcountry</td>
<td>Allendale, Bamberg, Beaufort, Berkeley, Calhoun, Charleston, Colleton, Dorchester, Hampton, Jasper, Orangeburg</td>
<td>(843) 441-1091</td>
<td>(843) 441-1091</td>
<td>(888) 801-1046</td>
<td>(888) 801-1046</td>
</tr>
<tr>
<td>Midlands</td>
<td>Aiken, Barnwell, Chester, Edgefield, Fairfield, Kershaw, Lancaster, Lexington, Newberry, Richland, Saluda, York</td>
<td>(888) 801-1046</td>
<td>(888) 801-1046</td>
<td>(843) 915-8886</td>
<td>(843) 409-0695</td>
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<tr>
<td>Pee Dee</td>
<td>Clarendon, Chesterfield, Darlington, Dillon, Florence, Georgetown, Horry, Lee, Marion, Marlboro, Sumter, Williamsburg</td>
<td>(843) 915-8886</td>
<td>(843) 409-0695</td>
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<tr>
<td>Upstate</td>
<td>Abbeville, Anderson, Cherokee, Greenville, Greenwood, Laurens, McCormick, Oconee, Pickens, Spartanburg, Union</td>
<td>(864) 372-3133</td>
<td>(864) 423-6648</td>
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For information on reportable conditions, see [https://www.scdhec.gov/ReportableConditions](https://www.scdhec.gov/ReportableConditions)

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### Categories of Health Alert messages:

- **Health Alert**: Conveys the highest level of importance; warrants immediate action or attention.
- **Health Advisory**: Provides important information for a specific incident or situation; may not require immediate action.
- **Health Update**: Provides updated information regarding an incident or situation; unlikely to require immediate action.
- **Info Service**: Provides general information that is not necessarily considered to be of an emergent nature.