

CORRECTIONAL SERVICE CANADA

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SERVICE CORRECTIONNEL CANADA

TRANSFORMONS DES VIES. PROTÉGEONS LES CANADIENS.

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Issue 1

COVID-19 Clinical Corner

What treatments are available for COVID-19?

There are currently no specific treatments recommended for COVID-19, and a vaccine is not currently available. Globally, multiple studies are investigating the use of a broad spectrum antiviral (remdesivir) for COVID-19 prophylaxis and treatment. Preliminary results show effectiveness of remdesivir however this drug is not yet approved by Health Canada. Health Canada has made remdesivir available through the Special Access Program. Of note, remdesivir is administered intravenously and the manufacturer has [specific criteria for access](#). Possible additional treatments are being investigated at this time, more information will be provided as it becomes available.

To limit the spread of the virus, prevention is the best protection (1); however, those infected with COVID-19 require supportive care such as rest, fluids and antipyretics for fever control to help relieve symptoms and treatment of any secondary bacterial infections, such as pneumonia. For severe cases, treatment includes hospitalized care to help support vital organ functions.

The recent [WHO guidance document \(2\)](#) on the clinical management of severe acute respiratory infection when novel coronavirus infections is suspected suggests the use of empiric antimicrobials for the treatment of all likely pathogens causing severe acute respiratory infection (SARI). Empiric treatment is based on clinical diagnosis specifically community-acquired pneumonia (CAP). For CAP, CSC empiric antibiotic guidelines suggest treatment options depending on the clinical status of the patient. See latest version on the HUB under Health Services, Clinical Services and Public Health, Pharmacy/Medications.

Prognosis of poor clinical outcomes depends on age and comorbidities such as diabetes mellitus, chronic obstructive

pulmonary disease and cardiovascular disease. Preliminary data suggests the range of reported mortality rate is between 1-2% where the majority of the fatalities have occurred in patients over 50 years of age with comorbid conditions.

CSC Regional Pharmacies will continue monitoring the utilization of supportive medications such as antipyretics and inhalers as a mechanism to continue managing the medication supply to the institutions.

Can certain medications worsen COVID-19 symptoms?

There have been reports of possible aggravation of COVID-19 infection with the use of NSAIDs, leading to recommendations for the preferential use of acetaminophen (3,4). Although there is insufficient clinical trial evidence to support this claim at this time, depending on individual patient clinical characteristics, clinicians may want to consider using acetaminophen preferentially, especially in older adults (>60 years of age) and those with underlying medical conditions (5). The Public Health Agency of Canada (PHAC) continues to recommend use of acetaminophen or ibuprofen to reduce fever for anyone in self-isolation during the COVID-19 pandemic (6).

In a recent correspondence published in the Lancet the use of ACE inhibitors (e.g., ramipril) was associated with increased mortality in hospitalized patients with COVID-19 (7). This prompted several organizations, such as the European Society of Cardiologists (8), Hypertension Canada (9), International Society of Hypertension (10), the Renal Association (11) and Heart Failure of America, American College of Cardiology and American Heart Association (12) to issue statements recommending that physicians and patients continue treatment



with their usual antihypertensive therapy because there is no clinical or scientific evidence to suggest that treatment with ACE inhibitors or ARBs (e.g., valsartan) should be discontinued because of the COVID-19 infection. For patients with cardiovascular disease who have been diagnosed with COVID-19, treatment decisions should be made on a case-by-case basis reflecting on the individual patient's hemodynamic status and clinical presentation.

Please send any other clinical questions related to COVID-19 to the following email account: GEN-NHQ Pharmacy (gen-nhq-pharmacy@csc-scc.gc.ca).

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