

Friday, March 27, 2020

COVID-19 REPORT

Updates on the prevalence in COVID-19 are coming from the media and not the Ministry of Health. This morning it is reports At least 16 nursing homes in Ontario have confirmed cases of COVID-19 among residents or staff. Ten of the homes are in Toronto including Seven Oaks where two residents have died of COVID-19, the disease caused by the virus. Two residents also died at a nursing home in Bobcaygeon, and fourteen staff members have tested positive. Other homes with confirmed cases include Markhaven Home for Seniors in Markham, St. Joseph's Health Centre Guelph, Heritage Green Nursing Home in Stoney Creek, Hillsdale Terraces in Oshawa.

<https://www.theglobeandmail.com/canada/article-at-least-16-ontario-nursing-homes-have-covid-19-cases-yet-families/>

Residents and families are reminded that there are no specific treatments for coronaviruses. There is no vaccine that protects against coronaviruses. Although, we care for a vulnerable group, many people with coronavirus illnesses will recover on their own. Care in the nursing home includes assistance with feeding, fever control, oxygen and hydration. There is likely no benefit for frail seniors with COVID-19 to go to the hospital. They are unlikely to survive intensive care. General principles for critical care are found at the link below. Contra-indications for ventilation include severe cognitive impairment or a clinical frailty score of greater than seven; that is severely frail—dependent on others for basic activities of daily living. Potential contraindications include moderate cognitive impairment and frailty score of five or six; that is, mildly or moderately frail.

<https://covidcriticalcare.ca/offering-critical-care-general-principles/>

Medical directors and LTC physicians need to work colleagues in the emergency department. A ten-minute phone conversation with the ED is much less resource-intensive than an avoidable transfer. Continuing discussions with family and substitute decision makers are helpful. Remember, they need reassurance if they are unable to visit their loved one.

Several colleagues have signed a petition for the Prime Minister to act urgently to assure the supply of personal protective equipment (PPE). Here is the link.

https://www.change.org/p/justin-trudeau-protect-our-front-line-health-care-workers-against-covid-19?recruiter=78198345&utm_source=share_petition&utm_medium=email&utm_campaign=psf_combo_share_message&utm_term=pss&recruited_by_id=205a3918-1f07-4e1f-8903-745779f2ac2&share_bandit_exp=message-20936599-en-CA&share_bandit_var=v0

Nursing Home Associated Pneumonia Severe complications of COVID-19 include pneumonia, renal failure and acute respiratory distress syndrome. Prevention of these conditions are part of the reason why we give immunization for other infections like influenza and pneumococcus. A paper in the Journal of the American Medical Directors Association (February), *Nursing Home-Associated Pneumonia in the 21st Century: Classification, Diagnosis, Etiology, and Treatment*, provides guidance for diagnosis and treatment.

[https://www.jamda.com/article/S1525-8610\(20\)30037-2/fulltext](https://www.jamda.com/article/S1525-8610(20)30037-2/fulltext)

Bacterial pneumonia may be a treatable secondary infection. Recommended first-line treatments are amoxicillin, amoxicillin/clavulanate, doxycycline and cefpodoxime. Cefpodoxime is not available in Canada. Intramuscular ceftriaxone may be considered as an alternate third generation cephalosporin. Treatment options for oral treatment in the nursing home are:

First line, In no specific order	Amoxicillin 1 gm orally TID Doxycycline 100 mg orally BID Amoxicillin/clavulanate 500/125 mg orally BID
Second line (if significant contraindications to first-line)	Levofloxacin 750 mg orally daily Moxifloxacin 400 mg orally daily

In keeping with current guidelines for antibiotic stewardship, shorter courses of therapy are recommended; "...consideration should be given to limiting duration of therapy to 5 days for NHAP with careful monitoring throughout the remainder of treatment." (Dose adjustment for renal function are assumed.)

Fluoroquinolones are second line because of increased bacterial resistance and adverse effects. More severe adverse effects include QT interval prolongation, tendinopathies, and putatively retinal detachment and aortic aneurysm or dissection. Macrolides alone are not recommended because of resistance among pneumococci and possibly Mycoplasma.

Because of lack studies and microbiological cultures, management of NHAP is almost always empirical. There is a "need for a specific NHAP diagnosis and treatment guideline that will give nursing home providers guidance in the management of this infection. This guideline should take into consideration the hospital transfer decision; risk factors for infection due to resistant organisms; nursing home capability to provide recommended regimens, especially parenteral therapy..."