

Physiotherapy and Rehabilitation in COVID19 Response

Session 1:

The Role of Physiotherapy and Rehab

March 22, 2020 – 4PM EST

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1. Situation Report

Globally (March 21, 2020) (1)

267, 013 confirmed Cases

11, 201 deaths

Canada (March 22, 2020) (2)

1302 confirmed cases

69 probable cases

19 deaths

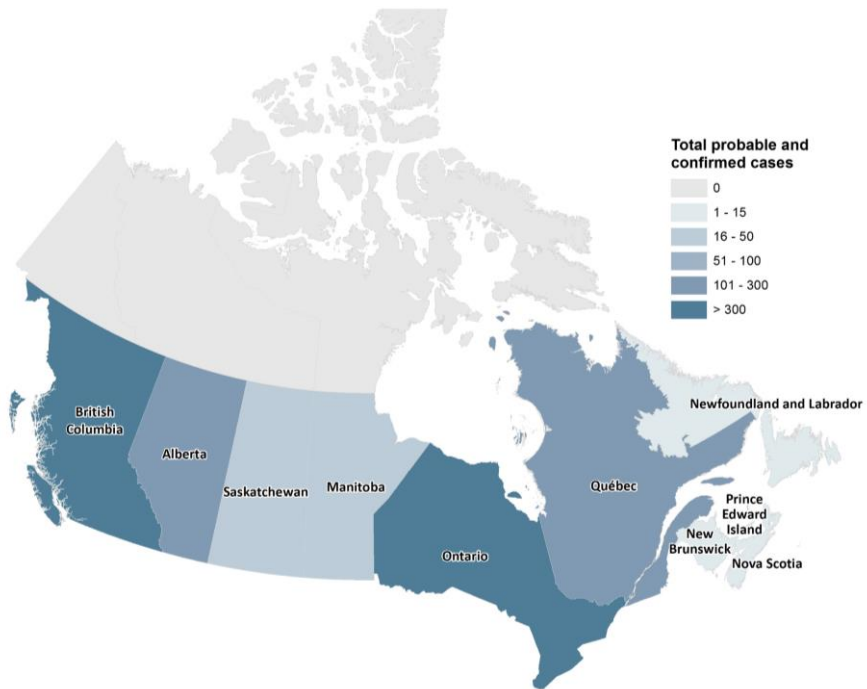


FIGURE 1. DISTRIBUTION OF CONFIRMED AND PROBABLE CASES OF COVID-19 BY PROVINCE OR TERRITORY IN CANADA AS OF MARCH 21, 2020, 9:00 AM EST (3)

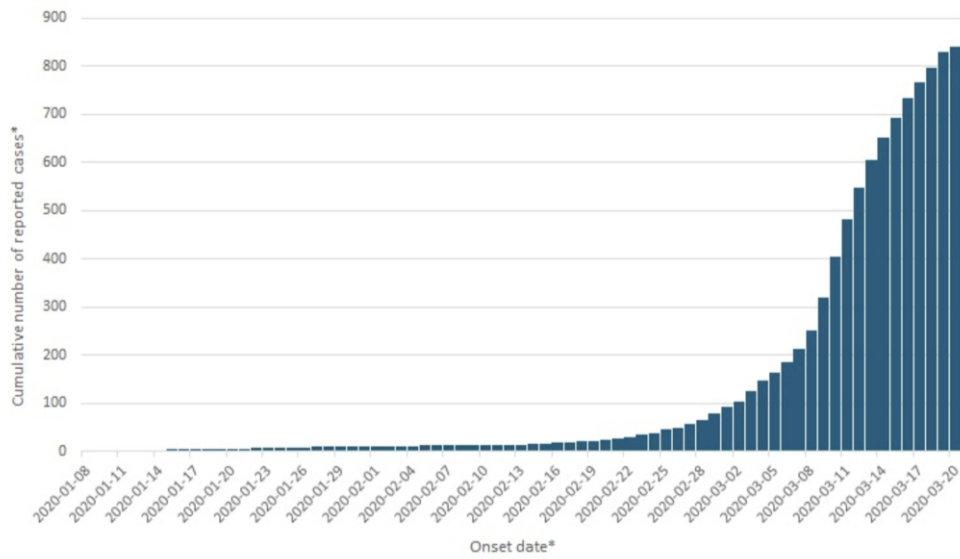


FIGURE 2. CUMULATIVE COVID-19 CASES (N=839) IN CANADA BY DATE OF SYMPTOM ONSET AS OF MARCH 21, 2020 AT 9:00 AM EST (3)

Current situation

Areas in Canada with cases of COVID-19 as of March 22, 2020, 9:00 am EDT

Province, territory or other	Number of confirmed cases	Number of probable cases	Number of deaths
British Columbia	424	0	10
Alberta	226	0	1
Saskatchewan	25	19	0
Manitoba	11	8	0
Ontario	377	0	3
Quebec	202	19	5
Newfoundland and Labrador	3	3	0
New Brunswick	9	8	0
Nova Scotia	9	12	0
Prince Edward Island	2	0	0
Yukon	0	0	0
Northwest Territories	1	0	0
Nunavut	0	0	0
Repatriated travellers	13	0	0
Total	1302	69	19

FIGURE 3. CURRENT SITUATION IN CANADA AS OF MARCH 22, 2020 9:00 AM (3)

2.0 Acute Care and COVID19 in Canada

- Canadian Intensive Care Units (ICU) are in short supply.
- 2020 study found Canada has 3,107 ICU beds and 4,982 mechanical ventilators for critically ill patients (4)
- Based on the rate of transmission from other countries as well as the global rate of infection it highly likely that Canada will see a drastic increase in the number of COVID19 cases in the coming weeks (5).
- The rise in COVID19 cases and transmission within Canada has the potential to overwhelm hospitals and the healthcare system across the country
- Likelihood of high demand for acute care resources and low supply
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3.0 Physiotherapy and Rehabilitation in COVID19 response

Physiotherapy and Rehabilitation can have an impact in COVID19 response in all aspects of the disaster continuum

3.1 Preparedness:

- Facilitate safe and efficient discharge from hospitals
 - o Decrease exposure (especially those with co-morbidities)
 - o Free up needed hospital resources
- Increase independence through gait training, use of assistive devices, exercise and mobility and treatment of impairment
- Cardiorespiratory and acute care physiotherapy to “free up” acute care resources

3.2 Response

Reduce the burden on the medical system

- Continue to support safe discharge from hospitals and acute care centres
- PTs from the community can work to relieve rehabilitation professionals working in hospitals and those with expertise in acute care and cardiorespiratory rehabilitation to increase supply of skilled acute care professionals
- PTs can work in emergency departments to assess, diagnose and treat conditions within their scope of practice to relieve doctors and nurses to work in acute care
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Acute Care

- Cardiorespiratory physiotherapy to reduce the need for and duration of mechanical ventilation(6)
 - o Results in faster turn around times for acute care resources
 - o

Rehabilitation following acute care

- Improve outcomes for patients and increase independence and ability to return to work with increased function and independence.

3.3 Recovery

- Canada will be recovering from the medical, financial and social impacts of COVID19 for years to come.
- Treating those affected with COVID19 supporting faster recovery, return to work and greater participation in society
- Treating people who have missed out on PT due to clinic closures and lack of physical activity during isolation
 - o Return to work
 - o Mental Health benefits
- Good for the individual and the economy

4.0 Research on Physiotherapy and Rehabilitation in Infectious Disease Response

- Patients who survived Ebola
 - o Benefitted from an interdisciplinary approach (including physiotherapy) that reduced hospital length of stay and optimized successful patient transfer to the community (7)
 - o Need for multidisciplinary care to improve physical and mental function (8,9).
 - o Chartered Society of Physiotherapy (10) have highlighted the critical role of physiotherapists specially trained to treat patient with infectious disease, revealing that patients who contracted Ebola had “...marked improvement in symptoms” following intervention.
- Landy, MD., Geddes, L., Moseman, AP., Leflet, JP., Raman, SR., van Wijchen, J. (2020). Early reflections on the Global Impact of COVID19, and implications for physiotherapy. Physiotherapy Journal.(11)
 - o [https://www.physiotherapyjournal.com/article/S0031-9406\(20\)30025-0/fulltext](https://www.physiotherapyjournal.com/article/S0031-9406(20)30025-0/fulltext)

- Landry, MD., Tupetz, A., Jalovic, D., Sheppard, PS., Jesus, TS., Raman, SR. (2020). The novel Coronavirus (COVID19): Making a connection between infectious disease outbreaks and rehabilitation. Physiotherapy Canada (12)
 - o <https://utpjournals.press/doi/abs/10.3138/ptc-2020-0019>

5.0 Initiatives Across Canada

- Halifax, Nova Scotia – PTs working in COVID19 assessment centres performing assessments
- Private Practice - PTs connecting with hospitals to support assisted discharge from hospital, delivery of care, relieve healthcare workers and reduce burden on medical system

6.0 Resources

WHO COVID19 website for information, resources and situation reports

<https://www.who.int/emergencies/diseases/novel-coronavirus-2019>

WHO COVID19 Dashboard – Up to date information on number of people affected and deaths

<https://experience.arcgis.com/experience/685d0ace521648f8a5beeeee1b9125cd>

WHO - Critical preparedness, readiness and response actions for COVID-19

https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/critical-preparedness-readiness-and-response-actions-for-covid-19?fbclid=IwAR3xEieogqDNRpDsoZUHwLLm0hSL7J9JUNm_a1B9tQ_ABitLeExM2D5sYp8

Government of Canada – COVID19 Website for Updates, prevention, advice and information

<https://www.canada.ca/en/public-health/services/diseases/coronavirus-disease-covid-19.html>

Government of Canada - Epidemiological Data on COVID19

<https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/health-professionals/epidemiological-summary-covid-19-cases.html>

WCPT – Information and resources on COVID19

<https://www.wcpt.org/news/Novel-Coronavirus-2019-nCoV>

Physiopedia – COVID19 Course

www.physio-pedia.com

Canadian Physiotherapy Association (CPA) – COVID19 Resources

<https://physiotherapy.ca/covid-19>

7.0 Up to date research on COVID19

The Lancet – Offering Free resources

https://www.thelancet.com/coronavirus?dgcid=kr_pop-up_tlcoronavirus20

Cochrane - Special Collection: Coronavirus (COVID-19): evidence relevant to critical care

<https://www.cochrane.org/special-collection-coronavirus-covid-19-evidence-relevant-critical-care>

Geneva Centre for education and research in humanitarian action – Up to date scientific resources on COVID19

https://cerahgeneve.ch/resources/covid-19-free-online-scientific-resources/?fbclid=IwAR16yxTg4V_4gYdDV7e5625gd2bt7BaIP_Y7L4dfUBP-VqFdobNwc5KyBbw

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