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Administrative Information			
EOC Lead/Sponsor	Noorjean Hassam, Logistics Chief	Date	12/18/2020
SBAR developed by	Noorjean Hassam	Key stream	<input type="checkbox"/> Operations <input type="checkbox"/> Planning <input checked="" type="checkbox"/> Logistics <input type="checkbox"/> Information <input type="checkbox"/> Finance <input type="checkbox"/> Other
Please list anyone consulted in the development this SBAR	Shannon McDonald, CMHO FNHA Becky Palmer, CNO FNHA Chuck Wilmink, FNHA FNHA Vaccine Planning Team Lauren Mathany, Provincial Operations Logistics co-Chair	Item is for	<input type="checkbox"/> Discussion <input type="checkbox"/> Information <input checked="" type="checkbox"/> Decision
Please list any SBARs related to this decision			
Cost associated <i>(*see Step 2 in SBAR process)</i>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	To be discussed at	<input checked="" type="checkbox"/> IBCOC <input type="checkbox"/> Public Health Leadership <input type="checkbox"/> Public Health Executive <input type="checkbox"/> Other (specify) BCIC
FTE/staffing impact	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes; Human Resource/Workforce Planning representative has been consulted: Name of representative consulted.	Priority	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input checked="" type="checkbox"/> High

Title: Allocation of Moderna vaccine delivery sites to FNHA remote nursing stations

Situation

The BC COVID-19 Ethical Decision-Making Framework (EDMF) for vaccine allocation supports the just allocation of vaccines to remote sites, and particularly remote sites with a higher risk populations. Moderna is more suitable to deliver to remote sites than the Pfizer vaccine, as Moderna vaccine can be stored at -20C long term or at 2-8C for 30 days. The first shipment of Moderna vaccine to BC is anticipated to arrive December 28-31, 2020. Moderna is therefore being considered for delivery to the 10 remote nursing stations in BC that each have a percentage of people who are over 65.

Background

The BC COVID-19 Ethical Decision-Making Framework (EDMF) for vaccine allocation supports the just allocation of vaccines to remote sites, and particularly remote sites with higher risk populations. The Moderna vaccine is more suitable for use in remote regions since it does not require a -80 freezer for transportation and storage, has a longer fridge life, and does not need to be diluted for administration. Moderna vaccine can be stored at -20C long term or at 2-8C for 30 days, and the 2 dose schedule includes a second dose after 21-35 days. The first shipment of Moderna vaccine to BC will arrive December 28-31, 2020. Only Moderna and Pfizer vaccine will arrive in BC in Q1 of 2020. The delivery of this vaccine is through a contract with FedEx, to anywhere in the province with no limit on the number of delivery sites. Given the first shipment of Moderna is to arrive around

December 28, the only eligible remote FNHA sites are the 10 nursing stations, mostly in northern BC. The rest of the health centres in FN communities are closed during this time period and have no staffing available. Moderna is therefore being considered for delivery to the 10 remote nursing stations in BC, each serving a town with a small percentage of people who are over 65.

These 10 communities have little access to health care services locally, and are considered living in a “high risk environment”. Given that there are elders over 65 in each of these communities, they fall under the highest prioritization group for the allocation of vaccines, as described in the British Columbia COVID-19 Vaccine Implementation: An Ethical Decision Making Framework. *Getting vaccines to these elders is a priority.* Alongside this, there are practical and ethical considerations that suggest it is better to send vaccines to the *entire* adult population, rather than only the elders. These considerations include:

- Elders in the community tend to live in multi-generational homes; immunizing all people in the home increases the protection for the elders
- The population of elders in these communities is very low, and sending the minimum dose would result in needing to vaccinate others in the community to avoid waste. This could result in inequitable immunization in the community, and the need for a second or third delivery.
- The weather impacts the ability of these communities to get deliveries. The weather is more favorable now, than it will be at the end of January and February when the next Moderna deliveries are anticipated
- The population of the communities is low, and has a relatively small impact on overall distribution of vaccines across BC
- Health Canada is sending all Territories the full allocation of Moderna vaccine to immunize the adult population, rather than providing vaccine in multiple shipments and sequencing the population
- Providing vaccines in a timely way to remote FN communities is an important act of reconciliation and equity

Assessment

Given the multiple factors that make Moderna the vaccine of choice for remote communities, and the timing of Moderna deliveries in Q1, and the ethical considerations for ensuring that these communities receive vaccines early in the sequencing we assess that sending the full two dose adult allocation of Moderna to these 10 nursing stations via the Dec 28 delivery is the favored option.

Recommendation:

Approve the allocation of 8800 doses of Moderna vaccine across the 10 FNHA remote nursing stations from the December 28, 2020 delivery. The sites proposed are in the table below.

Health Authority	FNHA Region	Point of Delivery Site (Community Names)	Population on Reserve of Status BC First Nations *	Shipments of 100	Point of Use intended site
First Nations	Interior	Ulkatcho	653	700	Anahim Lake Nursing Stn: 6674 Clinic Lane, PO Box207, Anahim Lake, BC, V0L 1C0
First Nations	Northern	Gitga'at First Nation	160	200	Hartley Bay Nursing Stn: 718 Wahooomdmx Blvd, Hartley Bay, BC, V0V 1A0
First Nations	Northern	Gitxaala Nation	478	500	Kitkatla Nursing Stn: PO Box 150, 140 View Street, Kitkatla, BC, V0V 1C0
First Nations	Northern	Lax Kw'alaams	740	800	Nursing Stn: 1602 Legaic Street, Port Simpson, BC, V0V 1H0
First Nations	Northern	Kwadacha	315	400	Fort Ware Nursing Stn: PO Box 86, General Delivery, Fort Ware, BC, V0J 3B0
First Nations	Northern	Tsay Keh Dene	251	300	Nursing Stn: 47 Main Street, Tsay Keh Dene, BC, V0J 2C0
First Nations	Vancouver Coastal	Kitasoo	307	400	Klemtu Nursing Stn: PO Box 88, Klemtu, BC, V0T 1L0 Physical Address: 33 Spirit Bear Drive. Klemtu, BC V0T 1L0
First Nations	Northern	Tahltan	335	400	Nursing Stn: PO Box 112, 10 Sawtooth Road, Telegraph Creek, BC, V0J 2W0
First Nations	Northern	Iskut	365	400	Iskut Valley Health Services: PO Box 90, Iskut, BC, V0J 1K0
First Nations	Northern	Takla Nation	222	300	Nursing Stn: General Delivery, Takla Landing, BC, V0J 2T0
		Totals	3826	4400	

Completed by HEMBC					
Outcome	<input checked="" type="checkbox"/> Approved		<input type="checkbox"/> On hold		
	<input type="checkbox"/> Not approved		<input type="checkbox"/> Revision required		
	<input type="checkbox"/> Withdrawn		<input type="checkbox"/> Endorsed		
	<input type="checkbox"/> Pending				
Approving body	<input checked="" type="checkbox"/> IBCOC		Authorized by	Dr. Ross Brown	
	<input type="checkbox"/> PHSA				
	<input type="checkbox"/> Ministry of Health				
	<input type="checkbox"/> Other:				
SBAR #	010	Version	-XX	Date	12/18/2020

Agenda | PHLC | Wednesday Dec 23

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Sent: December 23, 2020 9:37:47 AM PST

Attachments: 8. Knowledge Gaps_COVID19_vaccine_rollout_v6.docx, C. Clinical Practice Guidance Dec18th.pdf, F. Cover sheet when to get tested.docx, E. Cover Sheet How it spreads Dec 21.docx, F. COVID_When to get tested_Dec22_2020 (003).pdf, E. How it Spreads - Webpage Update - Dec 22 2020.docx, D. CRG Weekly Status Update 2020.12.22.pdf, A. BCCDC Recommendations Dec18th final 1135h.pdf, B. BCCDC SBAR Dec18th final.pdf, 9. LTC Visits Policy_Dec21_Clean.docx, 5. COVID-19 Vaccine Roll Out plan BC Dec 23 draft.docx, 6. SBAR 012 - Updated COVID-19 Vaccine Sequencing and Guiding Principles Dec 22 2020.docx, Agenda Public Health Leadership Call Dec 23.docx

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Good morning,

Please find attached the agenda and material for today's Public Health Leadership Committee meeting.

Documents attached for 48-hour review and consent:

E. How it spreads webpage (REVISED)

F. When to get tested infographic (NEW)

Send feedback/changes/edit/comments to documents@bccdc.ca by noon on Tuesday, December 29th.

Kind regards,

Marianne Henderson (she/her)

Operations Coordinator – Central Administration

Support to Dr. Réka Gustafson

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BC COVID-19
STRATEGIC RESEARCH
ADVISORY COMMITTEE

Knowledge Gaps Relevant to COVID-19
Vaccine Rollout in BC
18/12/2020

What are the most critical questions we need research to answer to optimize the safety, speed and impact of a COVID-19 vaccine program roll out? This paper summarizes a rapid gap analysis.

Input was taken from public health practitioners, the Immunize BC Operations Committee

(IBCO), the BC Provincial Health Officer Dr. Bonnie Henry, Twitter consultation and review of the National Advisory Committee on Immunization (NACI) *Research Priorities for COVID-19 Vaccines to Support Public Health Decisions* statement¹.

The knowledge gap themes have been mapped to health system actions outlined in the BC COVID-19 Strategic Research Advisory Committee's (SRAC) *Framework for Research and Action in an Emerging Disease*².

1. What is the effectiveness of the vaccine in preventing illness and infection?

(Disease Characterization, Vaccine Development, Epidemiology and Modelling, Vaccination Priorities)

- Comparative effectiveness of the various vaccine products in the BC population – real-time effectiveness evaluations.
- Effectiveness in populations not represented in clinical trials (e.g. pregnant women, children and immunocompromised people).
- Impact of prior infection with COVID-19 or seasonal coronaviruses on vaccine effectiveness and impact of vaccination on future infection with coronaviruses.
- Effectiveness of immunization for those who receive only the first dose of a two-dose series.
- Exploration of any risk of antibody-dependent disease enhancement.

2. What is the effectiveness of the vaccine in reducing transmission?

(Disease Characterization, Vaccine Development, Epidemiology and Modelling, Vaccination Priorities)

- Determine if immunization also prevents asymptomatic infection and onward transmission.

3. What is the immunogenicity of the vaccine?

(Disease Characterization, Vaccine Development, Epidemiology and Modelling, Vaccination Priorities)

- Characterize the humoral and cell-mediated protective immunity elicited by the vaccine products.
- Understanding correlates of protection following vaccination.
- Explore the impact of prior infection with COVID-19 or seasonal coronaviruses on humoral and cell-mediated immunity and impact of vaccination on future infection with coronaviruses.

4. How do we monitor for adverse effects following immunisation (AEFI)?

(Disease Characterization, Vaccine Development, Epidemiology and Modelling, Vaccination Priorities, Sub-population Susceptibilities)

- Assess the rate of AEFIs with vaccine rollout across all vaccine products (and how they compare to the background rates of these symptoms).
- The rate of AEFIs in children, immunocompromised individuals, pregnant and breastfeeding individuals and others excluded from the trials.
- Vaccine safety data for groups excluded from the trials.

5. What concerns do British Columbians have about the vaccine?

(Evaluation of Programmes, Analysis of Vulnerabilities and Resiliencies)

- Establish which groups of people have which concerns.
- Where do these groups of people get their health-related information and whom do they trust?
- How can trusted community leaders be supported to provide information and address concerns?
- How can social media networks be used to distribute information and address concerns?
- How can existing institutions (e.g. schools) and their programs be used to inform specific groups (e.g. youth) and encourage conversation about vaccines and the COVID-19 vaccination?

6. How do we deliver equitable access to vaccination?

(Evaluation of Programmes, Evaluation of Health Services, Analysis of Vulnerabilities and Resiliencies)

- How can equitable access to vaccination be ensured for racialized communities that have been disproportionately affected by COVID-19 in BC?
- How can vaccine be best provided to persons with mobility issues or who live in rural/remote locations (in the context of storage/distribution challenges)?
- How can culturally-safe vaccine rollout be best established for Indigenous peoples identified to be most at risk of severe COVID-19 infection?
- How can ongoing monitoring of VE and AEFI among Indigenous peoples who are vaccinated be culturally-safe?

Appendix 1 includes a list of currently operating research projects funded in BC and registered in the Academic Health Science Network (AHSN) database related to vaccination and immunisation against COVID-19. Appendix 2 includes the NACI list of knowledge gaps related to COVID-19 research (please note this list was published by NACI in July 2020). Appendix 3 includes the Terms of Reference for the Research Input COVID-19 Vaccination Working Group.

¹ NACI. *Research Priorities for COVID-19 Vaccines to Support Public Health Decisions*. Available from: <https://www.canada.ca/en/public-health/services/research-priorities-for-covid-19-vaccines-to-support-public-health-decisions.html>

[health/services/immunization/national-advisory-committee-on-immunization-naci/research-priorities-covid-19-vaccines.html](https://www.healthservices.immunization/national-advisory-committee-on-immunization-naci/research-priorities-covid-19-vaccines.html)

² BC COVID-19 SRAC. *Framework for Research and Action in an Emerging Disease*.

Available

from:

<https://www.msfnr.org/sites/default/files/APRIL%2027%202020%20FRAMEWORK%20ISSUE%201.pdf>

DRAFT

Appendix 1:

AHSN Scan for Current Research Relevant to COVID-19 Vaccine Rollout in BC

Scanned: 16/12/2020

Methods: exported AHSN database to Excel, searched on “vaccin*” and “immuni*” across all columns and rows, extracted those with search hits (29), removed studies with no vaccine-related research (3), scanned study description, categorised relevance respective to vaccine implementation

HIGH RELEVANCE: research that can be used to inform vaccine rollout and evaluation

AHSN ID#	Research Pillar	Summary	Lead
489	Biomedical	SPSN Antibody Study – antibody testing of COVID-19 positive patients, vaccine effectiveness	Danuta Skowronski
404	Biomedical	Tableted COVID-19 Therapeutic Vaccine – safety and immunogenicity at 1 month	Aldar Bourinbayar
152	Biomedical	COVID-19 immunity study – immunological response to COVID-19 and patient risk stratification	Theodore Steiner
28	Biomedical, Clinical	Mathematical modelling of COVID-19 for assessments of sustained transmission	Daniel Coombs
373	HSP ¹	Public perspectives on routine vaccinations and future COVID-19 vaccine acceptance	Julie Bettinger
371	HSP	Ethical pathways for therapeutics and vaccine R&D during public health emergencies	Diego Silva
544	PPH ²	Public opinion – COVID-19 information, perceptions of risk and thoughts on potential vaccine	Katelin Albert
487	PPH	National Indigenous Seroprevalence Study – COVID-19 prevalence in Indigenous communities	Jeff Reading
420	PPH	Pan-CoV assay to compare prevalence of all human CoVs by age/sex to inform vaccine strategy	Agatha Jassem
368	PPH	Examine health communication and the public’s perception of risk and response to vaccination	Cynthia Jardine
304	PPH	Opinions on Vaccinations amongst UBC Staff and Faculty Survey: effects of COVID-19	Adrian Ziemczonek

86	HSP, PPH	Survey of Families – parental opinions on COVID-19, decision to visit ED, vaccine attitudes	Ran Goldman
293	PPH	Paediatric seroprevalence survey of SARS-CoV-2 in children/young adults	Manish Sadarangani

MEDIUM RELEVANCE: possibly informative to the vaccine rollout EOC

AHSN ID#	Research Pillar	Summary	Lead
216	Clinical, HSP, PPH	COVID-19 RESPONSE - rapid study of a provincial population-based cohort for gender, sex, age and location (COVID-19 antibodies, surveys on psychological and SES factors)	Lori Brotto, Gina Ogilvie
512	PPH	Understanding the effects of public health outbreak control policies and implementation	Julie Bettinger
190	Clinical	SARS-COV2 Seroconversion in asymptomatic cases (risk of re-infection, asymptomatic carriage)	Pascal Lavoie

LOWER RELEVANCE: research that is related to vaccine or vaccine component development

AHSN ID#	Research Pillar	Summary	Lead
365	Biomedical	NanoMedicines Innovation Network – development of lipid nanoparticles to aid vaccine development	Pieter Cullis
364	Biomedical	Forecast changes to the virus so that tests/therapies/vaccines can be pre-designed for future response	Natalie Strynadka
286	Biomedical	Create predictive software for determining ideal tests/therapies/vaccines by studying viral structure	Hosna Jabbari
188	Biomedical	Symvivo01 - phase I trial for a new investigational COVID-19 vaccine using Symvivo's bacTRL platform	Manish Sadarangani
45	Biomedical	Rapid release of an easily accessible SARS-CoV-2 genome analysis software	Zabrina Brumme, Don Kirkby

		package (adapted from a previous Genome BC data analysis tool)	
42	Biomedical	Designing, creating and testing potential high-performance COVID-19 vaccines	Wilf Jefferies
38	Biomedical	Identification of co-receptors and auxiliary proteins employed by SARS-CoV2 for cellular entry	Franck Duong
460	Biomedical, Clinical, PPH	iReceptor - facilitates the curation, analysis and sharing of antibody/B-cell and T-cell receptor repertoires from multiple labs and institutions to accelerate the development of vaccines	Felix Breden
346	Clinical	Identification of SARS-COV-2 viral protein epitopes for antibodies from recovered COVID-19 patients	Steven Pelech
321	Clinical	Rapid and Scalable Production of SARS-CoV-2 Spike Protein in Plants for Serological Testing of COVID	Peter Constable
21	Clinical	COVID-19 Immunity Study: validating SARS-CoV-2 antibody assays in development and evaluating the type, quantity, quality and kinetics of the immune response	Danuta Skowronski

¹ Health Services and Policy

² Population and Public Health

Appendix 2:

NACI – Identified Knowledge Gaps

- Are IgA/IgG/IgM antibodies protective against SARS-CoV-2?
- Is there a cell-mediated immunity correlate of protection against SARS-CoV-2?
- Is SARS-CoV-2 natural infection (symptomatic or asymptomatic) associated with protection against re-infection or severe disease? What is the duration of natural protection against re-infection or severe disease from SARS-CoV-2?
- What is the duration of vaccine protection against re-infection or severe disease from SARS-CoV-2?
- Does vaccination following prior SARS-CoV-2 infection or vaccination of SARS-CoV-2 naïve individuals elicit enhanced disease upon subsequent infection?
- Are any other vaccines (e.g., BCG) protective against COVID-19 through off-target effects?
- Does a high level of demand or acceptability exist for candidate vaccines in various target groups in different epidemiological contexts across the country?
- What is the epidemiological profile of COVID-19 (e.g., communicable period, all risk groups)?
 1. What is the disease distribution and spectrum of clinical illness for COVID-19, including burden of illness and risk by age, gender and other demographic variables, and risk groups?
 2. What are the transmission dynamics of COVID-19, including degree of asymptomatic transmission, role of children in transmission, vertical transmissibility, onset and duration of viral shedding and communicable period, impact of changing weather conditions, and trends over time?
 3. What are the rates of COVID-19 co-infections with other respiratory pathogens and impact on pathogenesis and clinical outcomes?
 4. Is there cross-protection or interference from antibodies/exposure to human seasonal coronaviruses when exposed to SARS-CoV-2 or vaccinated against SARS-CoV-2?
- Are there any emerging safety signals with COVID-19 vaccination that are not predicted by the current understanding of the safety profile of similar vaccines?

Appendix 3:

PURPOSE

The purpose of this working group is to identify and support research activities that can inform a fast, safe and effective mass COVID-19 immunization for the citizens of British Columbia.

TERM

The Working Group was formed on December 9, 2020 and will continue at the call of the Immunize BC Operations Centre Committee.

STRUCTURE AND MEMBERSHIP

THE WORKING GROUP

The Working Group reports to the Immunize BC Operations Centre Committee through the Director/Incident Commander. Dr. Ross Brown is the Director/ Incident Commander.

The Working Group Chair is appointed by the Director/ Incident Commander. Dr. David Patrick is the Chair of the Working Group.

The Working Group is supported by the BC COVID-19 Strategic Research Advisory Committee.

SECRETARIAT

Secretariat support will be provided by the BC COVID-19 Strategic Research Advisory Committee. Judith Hutson is the Project Manager/ Secretariat for this Working Group.

MEETINGS AND MEETING FREQUENCY

Meetings will be chaired by Dr. David Patrick and will be scheduled twice a week.

MEMBERSHIP

Members	Organization
David M. Patrick (Chair) Director of Research and Medical Epidemiology Lead for Antimicrobial Resistance	BCCDC
Judith Hutson (Secretariat) Project Manager/ Secretariat BC COVID-19 Strategic Research Advisory Committee	BC COVID-19 SRAC
Victoria Schuckel Executive Director, Research and Technology	BC MOH

Members	Organization
Monika Naus Medical Director, Communicable Diseases & Immunization Service/ Medical Head, Immunization Programs & Vaccine Preventable Diseases	BCCDC
Brent Gabel Research Analyst, Communicable Diseases and Immunization Service	BCCDC
Danuta Skowronski Epidemiology Lead, Influenza & Emerging Respiratory Pathogens, BCCDC	BCCDC
Mel Kraiden Medical Director, BCCDC Public Health Laboratory Medical Head, Hepatitis - Clinical Prevention Services, BCCDC	BCCDC
Michael Otterstatter Senior Scientist and Epidemiologist, BCCDC	BCCDC
Kate Smolina, Director of the BC Observatory for Population & Public Health, BCCDC	BCCDC
Gina Ogilvie Senior Public Health Scientist, BCCDC	BCCDC
Hannah Lishman, PhD Postdoctoral Research Fellow, UBC School of Population and Public Health, BC Centre for Disease Control - Community Antimicrobial Stewardship	BCCDC
Manish Sadarangani Director, Vaccine Evaluation Center, BC Children's Hospital Research Institute	BC Children's Hospital Research Institute
Julie Bettinger Vaccine Safety Scientist, Vaccine Evaluation Center, BC Children's Hospital Research Institute	BC Children's Hospital Research Institute
Alice Virani Director, Ethics Service, Provincial Health Services Authority	PHSA
Martin T Schechter Professor, Faculty of Medicine, School of Population and Public Health, UBC	UBC

Approved December 17, 2020

Antimicrobial and Immunomodulatory Therapy in Adult Patients with COVID-19

last updated December 15th, 2020

Recommendations in this document apply to patients > 18 years of age. For details including special populations, refer to the complete summary document.		There is limited clinical evidence to guide antiviral therapy for patients with COVID-19.			
		Specialist consultation (e.g., Critical Care, Infectious Disease, Hematology, or Rheumatology) is recommended if any investigational treatment is offered to a patient with COVID-19 outside of approved clinical trials. Informed consent should be obtained from the patient or the substitute decision maker.			
SEVERITY OF ILLNESS	ANTIVIRAL THERAPY Unless otherwise specified, recommendations include antivirals alone or in combination	ANTIBACTERIAL THERAPY	IMMUNOMODULATORY THERAPY	OTHER THERAPEUTICS	
Critically Ill COVID-19 Patients <i>Hospitalized, ICU-based</i> Patients requiring mechanical ventilatory and/or vasopressor/inotropic support	<p>Chloroquine or Hydroxychloroquine is not recommended for the treatment of COVID-19</p> <p>Lopinavir/ritonavir is not recommended for the treatment of COVID-19</p> <p>Remdesivir* is not recommended outside of approved clinical trials</p> <p>Interferon IV/SC is not recommended for the treatment of COVID-19. Ribavirin/Interferon (Inhaled) is not recommended outside of approved clinical trials</p>	<p>Ceftriaxone 1-2 g IV q24h x 5 days is recommended if there is concern for bacterial co-infection (alternative for severe beta-lactam allergy: moxifloxacin 400 mg IV q24h x 5 days)</p> <p>Azithromycin 500 mg IV q24h x 3 days is recommended if atypical bacterial infection is suspected (not required if on moxifloxacin)</p> <p>De-escalate on the basis of microbiology results and clinical judgment</p>	<p>Dexamethasone 6 mg IV/SC/PO q24h for up to 10 days is strongly recommended (RECOVERY trial), unless higher doses are clinically indicated.* Hydrocortisone 50 mg IV q6h is recommended as an alternative (REMAP-CAP trial). If dexamethasone and hydrocortisone are not available, methylprednisolone 32 mg IV q24h or prednisone 40 mg PO daily are recommended.</p> <p>Biologics/Small molecules (Tocilizumab, Sarilumab, Anakinra, Baricitinib) are not recommended outside of approved clinical trials</p> <p>Passive Immunotherapies (Convalescent Plasma/IVIG/Monoclonal antibodies/Antibody cocktail therapies/Regn-COV2/Bamlanivimab) are not recommended outside of approved clinical trials</p>	<p>Enoxaparin 30 mg SC q12h is suggested for VTE prophylaxis</p> <p>ACE inhibitors and ARBs should not be discontinued solely on the basis of COVID-19</p> <p>NSAIDs should not be discontinued solely on the basis of COVID-19</p>	
Severely Ill COVID-19 Patients <i>Hospitalized, ward-based, long-term care</i> Patients requiring supplemental oxygen therapy	<p>Chloroquine or Hydroxychloroquine is not recommended for the treatment of COVID-19</p> <p>Lopinavir/ritonavir is not recommended for the treatment of COVID-19</p> <p>Remdesivir* has not demonstrated benefit in survival, progression to ventilation or length of hospital stay and remains uncertain with respect to shortening time to recovery by 5 days. The World Health Organization (WHO) has issued a conditional recommendation against the use of remdesivir in hospitalized COVID-19 patients. Further evaluation in approved clinical trials is strongly encouraged. If remdesivir is used outside of clinical trials, full disclosure of risks and benefits with consideration of patient values and preferences are necessary, as it is not considered standard of care. Furthermore, it should be restricted to hospitalized patients requiring supplemental oxygen but not requiring non-invasive or invasive mechanical ventilation.”</p> <p>Interferon IV/SC is not recommended for the treatment of COVID-19. Ribavirin/Interferon (Inhaled) is not recommended outside of approved clinical trials</p>	<p>Antibacterial therapy is not routinely recommended outside of approved clinical trials unless other indications justify its use (e.g., suspected bacterial co-infection in COVID-19 positive patients)</p>	<p>Dexamethasone 6 mg IV/SC/PO q24h for up to 10 days is strongly recommended (RECOVERY trial), unless higher doses are clinically indicated.* Hydrocortisone 50 mg IV q6h is recommended as an alternative (REMAP-CAP trial). If dexamethasone and hydrocortisone are not available, methylprednisolone 32 mg IV q24h or prednisone 40 mg PO daily are recommended.</p> <p>Biologics/Small molecules (Tocilizumab, Sarilumab, Anakinra, Baricitinib) are not recommended outside of approved clinical trials</p> <p>Passive Immunotherapies (Convalescent Plasma/IVIG/Monoclonal antibodies/Antibody cocktail therapies/Regn-COV2/Bamlanivimab) are not recommended outside of approved clinical trials</p>	<p>Enoxaparin 30 mg SC q12h should be considered for VTE prophylaxis in severely ill hospitalized patients</p> <p>ACE inhibitors and ARBs should not be discontinued solely on the basis of COVID-19</p> <p>NSAIDs should not be discontinued solely on the basis of COVID-19</p>	
Mildly Ill COVID-19 Patients <i>Ambulatory, outpatient, long-term care</i> Patients who do not require supplemental oxygen, intravenous fluids, or other physiological support	<p>Chloroquine or Hydroxychloroquine is not recommended for the treatment of COVID-19</p> <p>Lopinavir/ritonavir is not recommended for the treatment of COVID-19</p> <p>Remdesivir* is not recommended outside of approved clinical trials</p> <p>Interferon IV/SC is not recommended for the treatment of COVID-19. Ribavirin/Interferon (Inhaled) is not recommended outside of approved clinical trials</p>	<p>Antibacterial therapy is not routinely recommended outside of approved clinical trials unless other indications justify its use (e.g., suspected bacterial co-infection in COVID-19 positive patients)</p>	<p>Corticosteroids are not recommended outside of approved clinical trials unless otherwise indicated*</p> <p>Biologics/Small molecules (Tocilizumab, Sarilumab, Anakinra, Baricitinib) are not recommended outside of approved clinical trials</p> <p>Passive Immunotherapies (Convalescent Plasma/IVIG/Monoclonal antibodies/Antibody cocktail therapies) are not recommended outside of approved clinical trials</p>	<p>ACE inhibitors and ARBs should not be discontinued solely on the basis of COVID-19</p> <p>NSAIDs should not be discontinued solely on the basis of COVID-19</p>	
Prophylaxis Patients with known COVID-19 exposure	<p>Chloroquine or hydroxychloroquine is not recommended for prophylaxis in patients with known COVID-19 exposure.</p> <p>Lopinavir/ritonavir is not recommended outside of approved clinical trials</p>				
Discharge Patients with known COVID-19 that have recovered and are discharged from hospital	<p>No COVID-19 specific medications are recommended on discharge (includes corticosteroids and DVT chemoprophylaxis; unless indicated for other reasons)</p>				

* e.g., asthma exacerbation, refractory septic shock, history of chronic steroid use, obstetric use for fetal lung maturation
 * The Remdesivir Review and Advisory Working Group evaluates the evidence and utility of remdesivir, provides recommendations on its use, and determines its allocation within the province.

This document is dynamic and addresses key therapeutic areas of concern for clinicians. The complete and most up-to-date version of the guidelines is available at <http://www.bc.cdc.ca/health-professionals/clinical-resources/covid-19-care/clinical-care/treatments>

COVER SHEET- PHRG DOCUMENTS

Title: When to get tested	
New or revised?	
New	
Is this replacing an existing document? Yes/No (If Yes, the name of/link to the document being replace is provided in the space below)	
Replacing the original health check one-pager	
Content owner(s) (most responsible individual/group involved in managing content)	
KT and MoH	
Do the revision /new content in this document have implications for changes that may need to make in other documents? Yes/No (If yes, please list documents)	
Needs to align with testing pages	
Target audience(s)	
General public	
Target publication date	
With the testing guidance once announced	
Subject matter of new documents OR high-level summary of changes to revised document	
One-pager on symptoms and what to do	
Type of Document? (e.g., PDF, web content, social media post, flow sheet, FAQ)	
PDF	
Where is the information from? Select all that applies.	
<input type="checkbox"/> PHAC <input type="checkbox"/> Jurisdictional scan <input type="checkbox"/> Worksafe BC <input type="checkbox"/> SOWG	<input checked="" type="checkbox"/> New content/other (Please briefly describe): New testing guidance
Is there an approval body that should discuss this as an early draft? Once reviewed, insert name/email of most responsible representative for the reviewing group. (e.g. IPC, SOWG, MoH etc.)	
Worked with Christie Docking at MoH who also engage MEd	

COVER SHEET- PHRG DOCUMENTS

This section is to be completed by content owner(s)		
Guideline quality dimension: Scale: 1 (v poor) – 5 (excellent) or (n/a)	Rating:	Comments:
Knowledge synthesis: Does it summarize all pertinent evidence? Does it draw from a diverse body of literature? Are there gaps?	4	Only used the new testing guidance. Does not include new pediatric literature.
Knowledge translation: Is the guidance and messages in the document accurate and reflect the evidence?	5	
Policy alignment: Does it align with regulations, orders, and policies already in place in BC? Has a jurisdictional scan been completed?	5	
Guidance alignment: Is the guidance consistent with other public health and clinical guidelines and protocols in BC?	5	
Pragmatism: Is the guidance practical for providers and/or the target population to implement?	5	
Editorial standard: Is the document well written and appropriate for the intended audience (s)? If public facing, please note if a KT specialist or editor has reviewed in the comments.	4	
User testing: Has the resource been tested for user acceptability in messages?	1	This has not been user tested
Is an equity, diversity, and inclusion lens taken into consideration?	3	

Reviewers. Once review by a group is complete, check the box and insert name/email of most responsible representative for the reviewing group.		
<input type="checkbox"/>	KTSOC	Name/email:
<input checked="" type="checkbox"/>	PHRG	Name/email: trevor.corneil@bccdc.ca
<input type="checkbox"/>	PHL	Name/email:
<input type="checkbox"/>	CHREM	Name/email:
<input type="checkbox"/>	THRIVE	Name/email:
<input type="checkbox"/>	8-1-1	Name/email:

COVER SHEET- PHRG DOCUMENTS

Dissemination Suggestions (e.g. BCCDC Website, Social Media, Targeted Distribution)

Title: How it spreads	
New or revised?	
Revised	
What is the rationale for this resource?	
<input type="checkbox"/> New or updated order	<input type="checkbox"/> Other:
<input checked="" type="checkbox"/> New evidence	
<input type="checkbox"/> Conversion from PDF to web page	
Is this replacing an existing document? Yes/No (If Yes, the name of/link to the document being replace is provided in the space below)	
No	
Content owner(s) for revisions /groups involved in creating original content	
Tom Kozatsky and Leela Steiner (EHS)	
Do the revision /new content in this document have implications for changes that may need to made in other documents? Yes/No If yes, please list documents	
Not on the public website but possibly for documents that speak to how it spreads	
Target audience(s)	
The public	
Indicate if this resource been reviewed for readability and language and by whom	
<input checked="" type="checkbox"/> KT experts	<input type="checkbox"/> Editors
<input type="checkbox"/> No language review	
Target publication date	
Thursday Dec 10th	
Subject matter of new documents OR high-level summary of changes to revised document	
Added new evidence around aerosols and simplified language	
Type of Document ? (e.g., PDF, web content, social media post, flow sheet, FAQ)	
Web page	
Where is the information from? Select all that applies.	
<input checked="" type="checkbox"/> PHAC	<input checked="" type="checkbox"/> New content/other (Please briefly describe): Evidence review conducted by EHS
<input type="checkbox"/> Jurisdictional scan	
<input type="checkbox"/> Worksafe BC	
<input type="checkbox"/> SOWG	
Is there an approval body that should discuss this as an early draft? Once reviewed, insert name/email of most responsible representative for the reviewing group. (e.g. IPC, SOWG, MoH etc.)	
IPC – Tara Donovan and Titus Wong (multiple reviews)	

Reviewers. Once review by a group is complete, check the box and insert name/email of most responsible representative for the reviewing group.		
<input checked="" type="checkbox"/>	KTSOC	Name/email: Melanie.kurrein@bccdc.com
<input checked="" type="checkbox"/>	PHRG	Name/email: trevor.corneil@bccdc.ca
<input type="checkbox"/>	BC COVID Oversight	Name/email:
<input type="checkbox"/>	PHL	Name/email:
<input type="checkbox"/>	CHREM	Name/email:
<input type="checkbox"/>	THRIVE	Name/email:
<input type="checkbox"/>	8-1-1	Name/email:
Dissemination Suggestions (e.g. BCCDC Website, Social Media, Targeted Distribution)		
BCCDC Website		

COVID-19

When to get tested for COVID-19

Based on current evidence, some symptoms are more likely to be related to COVID-19 than others.

If you or your child have any of the symptoms listed below, follow the instructions.

SYMPTOMS

WHAT TO DO

- **Fever (above 38° C)**
- **Chills**
- **Cough**
- **Loss of sense of smell or taste**
- **Difficulty breathing**

1 or more of these symptoms:
Get tested and stay home.

- **Sore throat**
- **Loss of appetite**
- **Headache**
- **Body aches**
- **Extreme fatigue or tiredness**
- **Nausea or vomiting**
- **Diarrhea**

If you have **1 symptom:**
Stay home until you feel better.

2 or more of these symptoms:
Stay home and wait 24 hours to see if better.
Get tested if not better after 24 hours.

If you are a **close contact*** of someone who has COVID-19 and have any of the symptoms listed above:

Get tested and stay home.

Check your symptoms with the B.C. Self-Assessment Tool.

If you have any questions, or the symptoms get worse, contact your health care provider or call 8-1-1.

* You will be notified if you are a close contact. For more information on close contacts, go to [URL to be added]

For more information on COVID-19, go to www.bccdc.ca

If you develop severe symptoms, such as difficulty breathing (e.g. struggling to breathe or speaking in single words) or chest pain, **call 9-1-1 or go to the nearest Emergency Department.**

How it Spreads



The coronavirus that causes COVID-19 is spread by the respiratory droplets an infected person produces when they breathe, cough, sneeze, talk or sing. If you are in contact with an infected person, the virus can enter your body if droplets get into your throat, nose, or eyes.

Last updated: Dec 21, 2020

COVID-19 Transmission

Respiratory infections such as influenza and COVID-19 are mainly spread by liquid droplets that come out of the mouth and nose when a person with the virus breathes, coughs, sneezes, talks, or sings. Droplets come in a wide range of sizes, from smaller than the width of a hair to larger than a grain of sand. A few large droplets or many small droplets can contain enough virus to infect another person.

Droplet sizes

Larger droplets are heavier, and they usually fall to the ground within two meters. The majority of COVID-19 infections are spread from one person to another through larger droplets. This is why maintaining physical distance, adding physical barriers, wearing masks, and hand hygiene are all important protective measures.

Smaller droplets come out of the mouth and nose at the same time as larger droplets. These smaller droplets are light, and they can float in the air for a longer time. Because of this, smaller droplets may collect in enclosed spaces unless they are diluted with clean air. If many people are sharing a space without enough clean air (from the outdoors or from a ventilation system), it can lead to COVID-19 infections.

Surface Contact

Even though COVID-19 can survive for hours or days on different surfaces, infection from contact with contaminated surfaces appears to be less common. The most common type of spread is through larger droplets from close contact with an infected person.

There is no evidence that the virus transmits through food because it is destroyed almost immediately by stomach acid. Good hand hygiene is always important for food safety. For more information see the BCCDC page on [Food Safety and COVID-19](#).

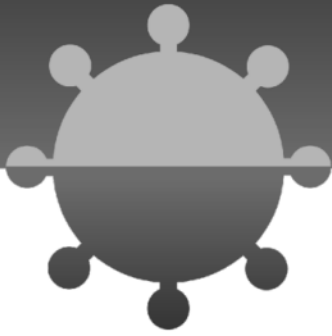
Ways you can reduce transmission

- Stay home if you are sick
- Limit the number of people you spend time with outside of your household
- Limit the amount of time you spend with other people outside of your household
- Practice physical distancing and avoid crowded areas
- Wear a mask
- Wash your hands often with soap and water, or use an alcohol-based hand sanitizer containing at least 60% alcohol
- Cough and sneeze into a tissue or the bend of your arm
- Avoid touching your face with unwashed hands
- Clean and disinfect surfaces and objects

CRG Weekly Status Update- December 22, 2020

CRG Subcommittee(s)	CRG Document Status
Pediatrics	<p>IN DEVELOPMENT</p> <ul style="list-style-type: none"> - CRG 72: Considerations for Children in Foster Care: Minimizing Trauma and Maximizing Resilience in the Context of Covid-19 - CRG 73: COVID-19 and Physical Activity and Exercise for Children <p>PENDING UPDATE:</p> <ul style="list-style-type: none"> - CRG 32: COVID-19: Management of Severe Respiratory Illness in Pediatric Patients during COVID-19 Pandemic - CRG 41-2: Infection Prevention and Control (IPAC) Protocol for Surgical Procedures During COVID-19: Pediatrics <p>PENDING APPROVAL BY MINISTRY OF HEALTH:</p> <ul style="list-style-type: none"> - CRG 52-3: Multisystem Inflammatory Syndrome in Children (MIS-C) Temporally Associated with COVID-19: Guidance for Clinicians in BC — Sent Dec 21 <p>APPROVED BY MINISTRY OF HEALTH:</p> <ul style="list-style-type: none"> - CRG 50-3: Guidance for Families of Immunocompromised Children in School and Group Gatherings <p>POSTED</p> <ul style="list-style-type: none"> - CRG 70: Caring for Families of Immunocompromised Children: Guidance for family physicians, primary care providers and general pediatricians
Perinatal Care	<p>PENDING UPDATE:</p> <ul style="list-style-type: none"> - CRG 16: Antenatal Visits during COVID-19 Pandemic - CRG 33-1: Infection Prevention and Control Protocol for Obstetrical Procedures During COVID-19 <p>PENDING APPROVAL BY MINISTRY OF HEALTH:</p> <ul style="list-style-type: none"> - CRG 22: Guideline for Lactation for Women/Individuals Who Are Confirmed or Suspect Cases of COVID-19— Sent Nov 24 - CRG 62: Maternal and Newborn Discharge Planning and continued care in community settings during the COVID-19 pandemic— Sent Nov 6
Critical Care/ Emergency Medicine	<p>BEING FINALIZED:</p> <ul style="list-style-type: none"> - CRG 56: Protocol for Code Blue During COVID 19 Pandemic Recovery
IPC/Perioperative	<p>PENDING UPDATE:</p> <ul style="list-style-type: none"> - CRG 49-2: Infection Prevention and Control Protocol for Surgical Procedures During COVID-19 Adult

Clinical Therapeutics	<p>POSTED:</p> <ul style="list-style-type: none"> - CRG 6-25: CRG Recommendations— Therapies for COVID 19 (Dec 18 Update) - CRG 7-24: Clinical Reference Group SBAR — Therapies for COVID-19 (Dec 18 Update) - CRG 31-21: Clinical Practice Guidance for Antimicrobial and Immunomodulatory Therapy in Adult Patients with COVID-19 (Dec 15 Update)
Emergency Medicine	<p>PENDING UPDATE</p> <ul style="list-style-type: none"> - CRG 43-2: COVID-19: PPE Recommendations for Endotracheal Intubation of Suspected or Confirmed COVID-19 Patients in Critical Care and Emergency Departments



Coronavirus COVID-19

BC Centre for Disease Control | BC Ministry of Health



Clinical Reference Group Recommendations: Therapies for COVID-19

UPDATED: December 18th, 2020

The British Columbia COVID-19 Therapeutics Committee (CTC) meets weekly to discuss the most current research on the use of therapies in the management of COVID 19.

Position Statement on Therapies for COVID-19:

“Evidence for the role of various therapies for the prevention or treatment of COVID-19 is quickly emerging and represents a rapidly evolving area of research. Since all agents have the possibility of associated harm, and pharmaceutical supply chains are fragile, it is essential that therapies are used in an evidence-based fashion. With a focus on knowledge translation, it is recommended that all clinical studies are critically appraised for quality and generalizability, and a decision to use any treatment is made in the context of provincially harmonized best practices and patients’ informed consent. It is recognized that compassionate use of drugs may be pursued based on extrapolated or preliminary data or where data is lacking. Ideally, use of such agents would be through participation in a controlled clinical trial to better inform practice. In the absence of research studies or definitive results, patients should be aware of the risks and benefits of novel therapies, and efficacy and safety data collected to inform the larger community.”

*Position statements provide information/direction and express or clarify intent on a particular matter. They are intended as guidance for stakeholders in areas where events are evolving or changing rapidly, the implementation of processes and procedures may be premature, or it is timely to communicate the intent before or as policies and procedures are developed.

While positive results for a small number of treatments are being published, the efficacy, safety and role in therapy for most pharmacological treatments for COVID-19 remain unknown. Currently, international bodies such as the World Health Organization (WHO), recommend that unproven pharmacological therapies for COVID-19 not be used outside of clinical trials. **Within British Columbia, the use of unproven COVID-19 drug therapies outside of clinical trials is NOT recommended.** Participation in clinical trials allows for ethical evaluation of the efficacy and safety of potential agents, minimizes inconsistencies in usage that is harmful to the clinical community and the public, and protects the drug supply chain. It is recognized that there may be extenuating individual circumstances where clinicians decide to use such therapies when clinical trials are unavailable. In settings **where unproven therapies are used, the WHO has**

If you have fever, a new cough, or are having difficulty breathing, call 8-1-1.



Ministry of Health



BC Centre for Disease Control



provided a standardized case report form for data collection to ensure that there is contribution to scientific research and the clinical community.

In circumstances where practice-changing results become available, such data should be carefully interpreted with particular attention to effect size, applicability, safety and practical issues of incorporating the evidence into practice that are specific to patients in British Columbia. The recommendations listed below have been written with careful consideration of these points.

For recommendations pertaining to Multisystem Inflammatory Syndrome in Children (MIS-C) and COVID-19 please visit BCCDC website at: [http://www.bccdc.ca/Health-Professionals-Site/Documents/COVID19 MIS-C ClinicianGuidance.pdf](http://www.bccdc.ca/Health-Professionals-Site/Documents/COVID19_MIS-C_ClinicianGuidance.pdf)

Recommendations for Specific Therapies

1. Corticosteroids

Dexamethasone 6 mg IV/PO q24h for up to 10 days is strongly recommended (RECOVERY trial), unless higher doses are clinically indicated.** Hydrocortisone 50 mg IV q6h is recommended as an alternative (REMAP-CAP trial). If dexamethasone and hydrocortisone are not available, methylprednisolone 32 mg IV q24h or prednisone 40 mg PO daily are recommended.

2. Remdesivir

Remdesivir has not demonstrated benefit in survival, progression to ventilation or length of hospital stay and remains uncertain with respect to shortening time to recovery by 5 days. The World Health Organization (WHO) has issued a conditional recommendation against the use of remdesivir in hospitalized COVID-19 patients. Further evaluation in approved clinical trials is strongly encouraged. If remdesivir is used outside of clinical trials, full disclosure of risks and benefits with consideration of patient values and preferences are necessary, as it is not considered standard of care. Furthermore, it should be restricted to hospitalized patients requiring supplemental oxygen but not requiring non-invasive or invasive mechanical ventilation.

3. Lopinavir / Ritonavir (Kaletra®)

Lopinavir/ritonavir is not recommended for treatment of COVID-19. Lopinavir/ritonavir is not recommended for prophylaxis of COVID-19 outside of approved randomized-controlled trials.

4. Chloroquine or Hydroxychloroquine

Chloroquine or hydroxychloroquine (with or without azithromycin) is not recommended for treatment or prophylaxis of COVID-19.

5. Oseltamivir

Oseltamivir is not recommended for treatment or prophylaxis of COVID-19.

6. Ribavirin and Interferon

Interferon IV/SC is not recommended for the treatment of COVID-19. Ribavirin/Interferon (Inhaled) is not recommended outside of approved clinical trials.

7. Colchicine

Colchicine is not recommended for treatment or prophylaxis of COVID-19 outside of approved randomized-controlled trials.

8. Ascorbic Acid and Vitamin D

Ascorbic acid and Vitamin D are not recommended for treatment or prophylaxis of COVID-19 outside of approved randomized-controlled trials.

9. Biologics/Small Molecules (Tocilizumab, Sarilumab, Anakinra, Baricitinib)

Biologics/Small Molecules (Tocilizumab, Sarilumab, Anakinra, Baricitinib) are not recommended for treatment or prophylaxis of COVID-19 outside of approved randomized-controlled trials.

10. Passive Immunotherapies (Convalescent Plasma[#]/IVIG)

Convalescent Plasma[#]/IVIG/ is not recommended for treatment or prophylaxis of COVID-19 outside of approved randomized-controlled trials.

11. Monoclonal Antibodies/Antibody Cocktails

Monoclonal Antibodies/Antibody Cocktails (e.g. bamlanivimab) are not recommended for treatment or prophylaxis of COVID-19 outside of approved randomized-controlled trials.

12. Antibiotics

Antibiotics should be initiated based on local institutional antibiograms and sensitivities if bacterial infection is suspected.

13. Non-Steroidal Anti-Inflammatory Drugs (NSAIDs)

Acetaminophen is recommended preferentially for symptomatic management of COVID-19 but do not recommend against the use of NSAIDs such as ibuprofen.

14. Angiotensin Converting Enzyme (ACE) inhibitors and Angiotensin Receptor Blockers (ARBs)

Patients on ACE inhibitors and ARBs are recommended to continue these agents as indicated and not cease therapy solely on the basis of COVID-19.

15. Venous Thromboembolism (VTE) prophylaxis

Enoxaparin 30 mg SC bid is suggested as the preferred dose for VTE prophylaxis in critically ill patients with COVID-19. Enoxaparin 30 mg SC bid should be considered for VTE prophylaxis in hospitalized ward-based patients with COVID-19. This dose was selected to reduce incident VTE and potentially save health care resources with patient transport and minimize risk of COVID-19 transmission to staff and others. Suggest even higher doses of enoxaparin for hospitalized patients with weight above 100 kg or BMI above 40 kg/m².

16. SSRIs

SSRIs are not recommended for treatment or prophylaxis of COVID-19 outside of approved randomized-controlled trials.

17. Other investigational therapies

Other investigational agents including arbidol, ASC09, azvudine, baloxavir marboxil/favipiravir, camostat mesylate, darunavir/cobicistat, camrelizumab, famotidine, ivermectin, niacin, thymosin, natural health products, and traditional Chinese medicines are not recommended for treatment or prophylaxis of COVID-19 due to lack of data, lack of availability, or both.

[#] Denotes that a clinical trial of named therapy is currently planned or underway in British Columbia. Links below for registered trials in Canada and British Columbia.

Canada: <https://www.canada.ca/en/health-canada/services/drugs-health-products/covid19-clinical-trials/list-authorized-trials.html>

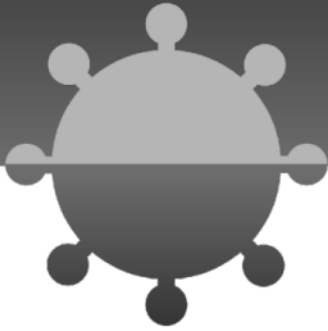
British Columbia:

<https://bcahsn.ca/covid-19-response/inventory/>

***Recommendations are consistent with guidelines from the World Health Organization (WHO), the Surviving Sepsis Campaign (SSC) (a joint initiative of the Society of Critical Care Medicine (SCCM) and the European Society of Intensive Care Medicine (ESICM)), the Public Health Agency of Canada (PHAC), the Canadian Critical Care Society (CCCS), the Association of Medical Microbiology and Infectious Diseases Canada (AMMI), and The Australian and New Zealand Intensive Care Society (ANZICS)**

About the Clinical Reference Group

*The Clinical Reference Group (CRG) is made up of senior individuals from relevant healthcare areas (including critical care, epidemiology, infectious disease, microbiology, public health, and clinical specialties) acting as a collective resource for current COVID-19 knowledge. They provide clinical advice and guidance to support the overall work being done by the BC Centre for Disease Control, the Provincial Health Office, and the Ministry of Health. The CRG includes representation from the provincial health authorities and works with the other Ministry areas in order to provide cross-input on all COVID-19 content.



Coronavirus COVID-19

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Clinical Reference Group SBAR: Therapies for COVID-19

UPDATED: December 18th, 2020

The British Columbia COVID-19 Therapeutics Committee (CTC) meets bi-weekly to discuss the most current research on the use of therapies in the management of COVID-19.

Situation

SARS-CoV-2 (previously named 2019-nCoV), the virus that causes the clinical illness COVID-19, is a novel RNA virus belonging to the coronavirus family. With over seventy [million cases](#) worldwide, various treatments are being used clinically or undergoing evaluation. In preparation for in-patient treatment of COVID-19 at BC's health care facilities, the COVID Therapeutics Committee has reviewed the evidence for these therapies and made recommendations concerning their use in consultation with various groups such as Infectious Diseases, Medical Microbiology, Intensive Care, Internal Medicine, Emergency Medicine, Hospitalists, Long Term Care and Pharmacy. The COVID Therapeutics Committee has also provided general treatment guidelines for anti-infective use in the setting of viral pneumonia for in-patients. As this is an evolving situation, we are making the necessary amendments to this SBAR along with up-to-date recommendations weekly, and as emerging information becomes available.

Background

Coronaviruses (CoV) are a large family of viruses that cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV-1). SARS-CoV-2, the virus responsible for the COVID-19 pandemic is a non-segmented, positive sense RNA virus most closely related to SARS-CoV-1, with 82% nucleotide identity. There have been over seventy million cases of COVID-19 to date, with a global case fatality rate of ranging between 2% to 10% depending on the country and criteria for testing.

Evidence for the role of different therapies for the prevention or treatment of COVID-19 is quickly emerging and represents a rapidly evolving area of research. Initially, the vast majority of information pertaining to COVID-19 therapeutics was extrapolated from MERS and SARS, but new, COVID-specific studies of various levels of impact, quality and relevance are now published each week. Since all agents have the possibility of associated harm, and pharmaceutical supply chains are fragile, it is essential that therapies are used in an evidence-based fashion. With a focus on knowledge translation, this document follows recommendations that all clinical studies need to be critically appraised for quality and generalizability, and a decision to use any treatment be made in the context of provincially harmonized best practices. In circumstances where practice-changing results become available, such data is carefully interpreted with particular attention to effect size, applicability, safety and practical issues of

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