Welcome to the November 18

PHSA Virtual Town Hall

Slido.com: #PHSAtownhall
Welcome

We acknowledge we are on the traditional, ancestral and unceded territories of the Musqueam, Squamish and Tsleil-Waututh First Nations.
Co-existing with COVID-19
Goals

Minimize serious illness and overall deaths

- **Reduce the spread** of infection through promotion of individual and community actions
- **Protect the population** through provision of pandemic vaccine and implementation of other public health measures
- **Provide treatment and support** for large numbers of persons while maintaining other essential services

Minimize societal disruption

- **Support the continuity** of health care and other essential services
- **Support the continuation of day-to-day activities** as much as possible and promote a return to normal community functioning as soon as possible
- **Maintain trust and confidence** through support of evidence-informed decision-making by collection, analysis and sharing of surveillance and other scientific information; and communicate appropriate and timely advice to decision-makers, health professionals and the public
- **Support a coordinated response** by working collaboratively with all levels of government and stakeholders
The number of **individuals** in hospital increased in the most recent week to levels seen in April.

Number of COVID-19 cases in hospital by day, March 18-November 10, 2020
The number of individuals in critical care increased in the most recent week.

Number of COVID-19 cases in critical care by day, March 25-November 12, 2020
Reported incidence is near 50 per 100,000 population. The majority of cases continue to be reported by FHA.
Avg. Daily Incidence (7-day rolling average) by HSDA

Data to November 11, 2020
Majority of cases were acquired locally via a known case or cluster.

Likely source of infection for cases by episode date, January 15 – November 7, 2020

* March 16: Entry of foreign nationals banned; symptomatic individuals banned from flights to Canada; international flights restricted to four national airports.

** March 20: US/Canada border closed to non-essential travel.
Across Canada, cases are increasing in BC, AB, MB, ON, QC and SK.

Data up to 12 Nov
COVID-related death rates continue to rise in MB and QC and just started to increase in AB and MB.

Note that Yukon has registered 1 new death, but due to smaller population, rate appears high.
Global cases continue to rise, driven by the resurgence in Europe and the US

Note similar rates in Sweden, UK, and US at ~400 cases per million population.
Response

- Safety plans to reduce the risk of COVID-19
- Testing
- Case and contact management
- Respond to clusters and outbreaks
- Population level interventions
  - Provincial Orders
    - No social gatherings in private homes
- Safety plans to keeping society functioning
  - Schools
  - Workplaces
  - Health care
COVID-19 vaccines

Dr. Manish Sadarangani

Director, Vaccine Evaluation Center, BC Children’s Hospital Research Institute
Associate Professor, Division of Infectious Diseases, Department of Pediatrics, UBC
Physician Lead, Family Immunization Clinic, BC Children’s Hospital
Vaccine development in a pandemic

Academic and preclinical research → Phase 1 trials (safety) → Phase 2 trials (safety and immunogenicity) → Phase 3 trials (efficacy) → Approval

Traditional

Small-scale trial material → Large-scale manufacturing → National and international distribution

Adapted from Lurie et al. NEJM 2020
Vaccine development in a pandemic

Adapted from Lurie et al. NEJM 2020

Traditional

Outbreak

Adapted from Lurie et al. NEJM 2020
COVID-19 vaccine target

E protein
S protein
M protein

CDC; Fang et al. Lancet 2020
COVID-19 vaccine platforms

The COVID-19 vaccine pipeline

Pre-clinical: 164
Phase 1: 21
Phase 2: 16
Phase 3: 11
Approved: 0*

*6 approved for early/limited use in China (4) and Russia (2)

Vaccine trial sites

### In Canada

**Agreements announced with:**

<table>
<thead>
<tr>
<th>Company</th>
<th>Vaccine type</th>
<th>Clinical phase</th>
<th># doses (Canada)</th>
<th>Reported efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicago</td>
<td>Subunit</td>
<td>Phase 2</td>
<td>≤76m doses</td>
<td></td>
</tr>
<tr>
<td>Novavax</td>
<td>Subunit</td>
<td>Phase 3</td>
<td>≤76m doses</td>
<td></td>
</tr>
<tr>
<td>Sanofi/GlaxoSmithKline</td>
<td>Subunit</td>
<td>Phase 2</td>
<td>≤72m doses</td>
<td></td>
</tr>
<tr>
<td>Moderna (S-2P)</td>
<td>RNA</td>
<td>Phase 3</td>
<td>≤56m doses</td>
<td>95% (interim)*</td>
</tr>
<tr>
<td>Pfizer/BioNTech (RBD)</td>
<td>RNA</td>
<td>Phase 3</td>
<td>≥20m doses</td>
<td>95%**</td>
</tr>
<tr>
<td>Johnson &amp; Johnson</td>
<td>Viral vector</td>
<td>Phase 3</td>
<td>≤38m doses</td>
<td></td>
</tr>
<tr>
<td>Oxford University/Astra Zeneca</td>
<td>Viral vector</td>
<td>Phase 3</td>
<td>≤20m doses</td>
<td></td>
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</tbody>
</table>

*162/170 cases in placebo group; 0 severe cases in vaccine group; 11 severe cases in placebo group

**90/95 cases in placebo group; 1 severe case in vaccine group; 9 severe cases in placebo group**
Key populations

1. Those at high risk of severe illness and death
   • Advanced age (especially >70 years)
   • Other high-risk conditions TBC

2. Those most likely to transmit to those at high risk and essential workers
   • HCWs, personal care workers, caregivers in LTCF and other facilities
   • Other essential workers
   • Household contacts of those at high risk of severe illness and death

3. Those contributing to maintenance of essential services to society
   • E.g. police, firefighters, grocery store staff

4. Those at ↑ risk of infection with possible disproportionate consequences
   • Correctional facilities, meat packing facilities, etc.
   • Remote or isolated populations
   • Indigenous communities
What are the potential safety issues?

**Trial Design**
- Safety assessments
- Duration of follow up
- Holding and ‘going’ rules

**Disease**
- Protective immunity
- Immune enhanced disease
  - MIS-C*

**Population**
- Socio-demographics
- Risk of disease/vaccine
- Co-morbidities

**Vaccine**
- Pre-clinical studies
- Prior clinical trials
- Prior knowledge of platform

*MIS-C: Multisystem inflammatory syndrome in children*
Trial demographics

• S-2P vaccine
  • 20-25% aged 65y+
  • 42% with chronic diseases (e.g. diabetes, severe obesity, cardiac disease)
  • 37% non-White (~20% Hispanic/LatinX; ~10% Black/African American)

• RBD vaccine
  • 41% aged 56-85y
  • 42% ‘diverse’ ethnic background (26% Hispanic/LatinX; 10% Black)

https://www.pfizer.com/science/coronavirus/vaccine
Safety – mRNA vaccine (S-2P)

SEVERE (GRADE 3)

After dose 2
- Arthralgia 5%
- Fatigue 10%
- Headache 5%
- Myalgia 9%
- Pain 4%

Jackson et al. NEJM 2020
Safety – mRNA vaccine (RBD)

**SEVERE (GRADE 3)**
- Fatigue 4%
- Headache 2%
- After dose 2

Mulligan et al. Nature 2020
Will people accept a COVID-19 vaccine?

COVID-19 Snapshot Monitoring (COSMO Canada)

% Agree (%)

<table>
<thead>
<tr>
<th>Question</th>
<th>% Agree</th>
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<tbody>
<tr>
<td>Would get safe COVID-19 vaccine if it becomes available</td>
<td>65</td>
</tr>
<tr>
<td>Would get effective COVID-19 vaccine if it becomes available</td>
<td>62</td>
</tr>
<tr>
<td>Willing to get vaccinated in order to return to work, travel, or attend large gatherings</td>
<td>49</td>
</tr>
<tr>
<td>Plan on getting seasonal flu vaccine when it is available</td>
<td>48</td>
</tr>
<tr>
<td>When COVID-19 vaccine is available, should be mandatory for all Canadians</td>
<td>45</td>
</tr>
</tbody>
</table>

https://impact.canada.ca/en/challenges/cosmo-canada

Sep 2020
**Equitable distribution of vaccines**

<table>
<thead>
<tr>
<th>Country</th>
<th>Agreed supply</th>
<th>Potential expansion</th>
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<tbody>
<tr>
<td>United Kingdom</td>
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<td>United States</td>
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<td>European Union</td>
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<td>Japan</td>
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<td>Vietnam</td>
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<td>Australia</td>
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<tr>
<td>Indonesia</td>
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<td>Latin America (excluding Brazil)</td>
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<td>Serbia</td>
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<td>Switzerland</td>
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<td>Israel</td>
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<tr>
<td>Brazil</td>
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<tr>
<td>China</td>
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<tr>
<td>LMICS (through COVAX)*</td>
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*22 low- and middle-income countries and economies eligible to receive doses through the COVAX international facility; some, such as India and Indonesia, have also ordered doses separately.

Calloway, Nature 2020
Equitable distribution of vaccines

**ACT accelerator**
ACCESS TO COVID-19 TOOLS

COVAX—led by CEPI, GAVI and the WHO—is speeding up the search for an effective vaccine for all countries, and supporting the building of manufacturing capabilities, and buying supply ahead of time so that **2 billion doses** can be distributed fairly in the places of greatest need by the end of 2021.

Right now… we do have influenza vaccines!

**BCCH Family Immunization Clinic**

- Routine immunizations
- +/- flu shots
- For flu shot only
Thank you!

msadarangani@bcchr.ubc.ca

Twitter: @manishs_  @VEC_ubc

More information:  www.bcchr.ca/vec
Our workplace
Masking policies

Ministry of Health provincial direction

PHSA policy

Your clinical service/site
# What are the new rules?

<table>
<thead>
<tr>
<th>Who?</th>
<th>Where?</th>
<th>Masking requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>General public in B.C.</td>
<td>Public, indoor spaces where 2M distance cannot be maintained (e.g. grocery stores)</td>
<td>• It is Provincial Health Officer Dr. Bonnie Henry’s expectation that people wear masks in these public, indoor settings if they are able to do so</td>
</tr>
</tbody>
</table>
| PHSA employees & physicians | Health care facilities (e.g. BC Cancer sites, BC Children’s & BC Women’s hospitals, correctional facilities) | • **Medical masks** must be worn in all clinical/patient care areas (including common areas and break rooms, unless eating and/or drinking)  
  • There are exceptions for cubicles and private offices where there are barriers +/- enough space between people  
  • Other PPE protocols remain in place for patient care scenarios (e.g. aerosol-generating procedures and N95s) |
| PHSA employees & physicians | Corporate and administrative buildings where there are no patients present (e.g. 1333 W Broadway, Langley warehouse, Willingdon) | • **Non-medical masks** must be worn in common areas, moving around the office, and when you cannot maintain a 2M distance from others |

Please review the full [Mask Use in Health Care Facilities during the COVID-19 Pandemic policy](#) on SHOP.
## What about patients, clients and visitors?

<table>
<thead>
<tr>
<th>Who?</th>
<th>Where?</th>
<th>Masking requirements</th>
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</thead>
</table>
| Visitors   | Any health care facility        | • Visitors must wear a **medical mask** when entering and moving around, including in clinical and non-clinical areas  
• Caretakers required to stay in the patient/client environment full time (e.g. parents of young children) will generally not be required to wear a mask in the private environment                                                                                                     |
| Patients/clients | Any health care facility | • All patients/clients must wear **medical mask** when entering and moving around (including patient/client transport), except when requested to remove their mask by a health care professional  
• Patients/clients will generally not be required to wear a mask in their private environment (e.g. private room)  
• Health care professionals can request that a patient/client don a mask when the health care professional is in the room; however, this should not compromise care or put the patient/client in danger |

There are some exceptions. (e.g. people who cannot don/doff a mask themselves; children aged two and under; people with severe mental illness; people in labour or in respiratory distress due to malignancy; and others).

Review the policy for more information.

Please review the full [Mask Use in Health Care Facilities during the COVID-19 Pandemic policy](https://shop.on.ca) on SHOP.
The hierarchy of controls

- Masks are only **one part** of the hierarchy of infection prevention and exposure control measures for communicable diseases.
- COVID-19 is spread through infected droplets from a sick person’s mouth or nose. Wearing a mask can help protect people around you from the droplets that carry the virus.
- Masks build on the many other strategies we have in place to keep patients/staff safe.
Some other measures of protection

- Stay at home if you are sick
- Maintain 2M distance whenever you can (regardless of whether you are wearing a mask)
- Clean your hands regularly
What if people are refusing to wear a mask?

It’s important that we all practice patience, compassion and understanding. Remember, we do not know everyone’s story.

For colleagues:

• Try to understand why they are not masking and highlight the purpose of the policy.

• Escalate to your supervisor, who can consult with HR if your concerns are not addressed.
What if people are refusing to wear a mask?

For patients, clients and visitors:

• Health care must be provided to a person choosing not to or unable to wear a mask.

• Staff must not compel patients/clients/visitors to wear a mask in this situation; rather, they are asked to apply the other hierarchies of control such as donning and doffing appropriate PPE.
How should I handle my mask?

- Before putting on your mask, wash your hands with soap and water or use alcohol-based hand sanitizer (at least 70% alcohol content)
- Replace the mask if it becomes damp, soiled or hard to breathe through
- Avoid touching your mask while wearing it
- If you touch your mask, perform hand hygiene
- Perform hand hygiene before removing your mask

Shared via @phsa.bc on Instagram
Are there enough masks to go around?

- Our provincial stockpiles of PPE remain in very good shape.
- Medical masks will be supplied at all clinical sites, for patients, clients, visitors and staff.
- Staff at our non-clinical sites are asked to bring their own non-medical masks. Reception areas may have limited stock available in the rare event that someone forgets their mask or has a visitor at one of our corporate buildings.
Our health & wellness
Staff self-screening assessment

Sometimes, showing up for your team/patients means *not* showing up.

- If you are sick, stay at home
- Use the self-screening assessment tool before going to any PHSA worksite

staffscreening.healthcarebc.ca
Flu self-reporting

We are only a few weeks away from official start of flu season, when our flu policy will go into effect.

- There is lots of availability at the remaining PHSA staff flu clinics.
- All PHSA employees, including medical staff and contractors, are required to self-report.

influenzareporting.org
Psychological health & wellness

Please remember to take care of yourself during these challenging times.

Some PHSA resources include:

• Employee & Family Assistance Program (EFAP)
• Resilience webinars & team sessions on co-existing with COVID-19
• Wellness initiatives:
  o Mindfulness sessions
  o Wellness webinars
  o Virtual fitness classes
  o And more!

phsa.ca/wellness
Thank you for your ongoing commitment and service.
Slido.com: #PHSAtownhall
Thank you!

Town hall information and webcast archive: phsa.ca/townhall