COVID-19 Characteristics

Analysis of Chinese case data:

• Appears less severe than SARS and MERs but more contagious; more severe than influenza but less contagious.

• Approximately 81% mild cases; 14% severe; 5% critical; and a 2.3% fatality rate.
2.3% fatality rate:
Note: Fatality rate in China. Outside of Hubei = 0.9.

<table>
<thead>
<tr>
<th>AGE RANGE</th>
<th>FATALITY RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-9</td>
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</tr>
<tr>
<td>10-19</td>
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<tr>
<td>20-29</td>
<td>0.2</td>
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<tr>
<td>30-39</td>
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<td>40-49</td>
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<td>50-59</td>
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<td>60-69</td>
<td>3.6</td>
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<td>70-79</td>
<td>8.0</td>
</tr>
<tr>
<td>80+</td>
<td>14.8</td>
</tr>
</tbody>
</table>
COVID-19 Characteristics

• Patients reporting no comorbid conditions case fatality rate of 0.9%
• Patients with comorbid conditions much higher rate:
  ▶ 10.5% cardiovascular disease
  ▶ 7.3% for diabetes
  ▶ 6.3% chronic respiratory disease
  ▶ 6% hypertension
  ▶ 5.6% cancer
• Children experienced almost entirely mild illness.
COVID-19 Response

- Key actions to curb epidemic:
  - Isolation (individual to large scale).
  - Widely communicate critical information (hand washing, appropriate mask wearing, appropriate care seeking).
  - Ability to mobilize rapid response teams helps curb epidemic.
- Epidemic can be slowed down to allow preparation and impact; also the real potential of seasonal warming reducing spread of corona viruses.
COVID-19 Response

• Response needs to balance health risks with social risks and economic risks (difficult to manage or control in a global context).

• Focus on:
  1. Minimizing serious illness and overall deaths.
  2. Minimizing societal and economic disruption.
COVID-19 Response – Phase 1

Current focus and continued priority – identification and then containment through isolation of case specific instances of viral infection, monitoring, responsive health care.

• Continuing close collaboration with federal government on boarder surveillance, advice and follow up for travelers.

• Keep as a priority to delay onset of widespread community transmission for as long as possible into warmer weather of late spring.

• Focus on enhanced screening, information, and testing for travelers at boarders as required to meet spread to multiple countries.

• Testing, isolation and rapid flexible response from health system.
Start activation and be ready to escalate use of *British Columbia Provincial Pandemic Coordination Plan* (February 2020 refresh).

- Initiating all-of-government cross-ministry co-ordination, increased internal and external communications; ensuring provincial government business continuity.
  - Cross government minister and deputy minister committees established to co-ordinate and quickly direct action/resources, and increase response as required.
  - Readiness to use emergency powers set out in *Emergency Program Act* and *Public Health Act* as required.
COVID-19 Response – Phase 2

• Action focused in four areas now underway and will be expanded as needed:
  1. Protecting Population
  2. Protecting Vulnerable Citizens
  3. Protecting Health Workers
  4. Supporting Health-Care Capacity
Protecting the Population

- Increasing testing capacity through additional sites and equipment.
- Increasing proactive and targeted communication of potential risks for general population and more at risk patient groups.
- Enact government continuity plans to prepare for possibility of high absence rates due to illness or if employees are absent to care for family.
Protecting the Population

Focus on working with institutions and businesses to manage through a sustained three to four months out break:

• Work with and provide guidance for businesses, employers and unions on: implementing continuity plans; protecting staff; working from home; and allowing time away from work for quarantine/isolation of ill employees.
Protecting the Population

• Work with key business sectors to ensure business continuity and provide guidance/advice:
  ▶ Grocery store chains to monitor and ensure supplies for daily living, and discourage inappropriate panic buying. Work with food chains and other key suppliers to prepare and develop contingency plans
  ▶ Public transportation to reduce infection spread.
  ▶ Tourism and in particular protocols for cruise ships in advance of the season, starting in British Columbia.

• Provide guidance and ongoing support to municipalities; schools; and post secondary institutions.
• Readiness preparation to quickly respond to events as required, including using emergency powers:
  ▶ A singular large public exposure.
  ▶ A widespread hospital exposure.
  ▶ A community-based organizational exposure (e.g., workplace, church).
  ▶ Specific widespread localized community spread virus activity.
  ▶ Supply chain issues.
  ▶ Novel clinical presentation.
Protecting Vulnerable Citizens

• Specific messaging and protocols for vulnerable populations to prepare: take sensible steps to avoid infection; advise to support self care and when/how to reach out for help; increase access to virtual care and appropriate access to medicines:
  ▶ Focus on protecting our elderly citizens.
  ▶ Focus on supporting patients with more complex medical conditions and/or chronic illnesses who will face increased risk.
Protecting Vulnerable Citizens

- Increasing communication to family physicians and medical specialists to support their ability to care for their patients. Introduce emergency fee schedule as needed to support care.

- Action to protect seniors in long-term care, assisted living, and home and community care. Activate outbreak protocols:
  - Reduce people coming into facilities.
  - Screen visitors.
  - Vigilance for illness of residents and health-care workers.
Protecting Health Workers

- Actively remind and maintain best practice for health-care workers in hospitals, community and primary care settings.
- Implement standardized preparedness plans at local level to support health-care workers to respond to a wider/more sustained outbreak.
- Provincially manage and co-ordinate supplies capacity, and manage supply chain for hospital, community and primary care.
Protecting Health Workers

• Implementing plans for bringing additional health care capacity to bear on hospital or community sites that come under stress:
  ▶ Program redeployment of staff.
  ▶ Local redeployment of staff.
  ▶ Provincial redeployment of staff – establish list of health-care workers who could be rapidly redeployed and ensure adequate management capacity for a sustained period.
  ▶ Working with professional colleges for privileging and/or registration.
Supporting Health-Care Capacity

• Established Emergency Operation Committees across health authorities and examining local health system capacity (e.g., primary care, ED, hospital, ICU/ventilator) at regional/community levels to assess ability and plan to respond at a local level to a community-wide outbreak.

• Implementing functional protocols to be ready to create capacity as needed in hospitals for: discharging low-risk patients; deferring scheduled surgeries and procedures (in-patient and day patient surgeries); identifying capacity for new care spaces within hospitals; and ensuring bed/equipment capacity to operationalize.
Supporting Health-Care Capacity

• Ensuring readiness to implement ED and hospital-wide protocols to safely triage and separate anyone presenting with respiratory illness. If volumes significantly increase, implement differential pathways for patients with respiratory illnesses presenting at B.C.’s 115 EDs to reduce hospital-acquired infection.

• Preparing to separate wards/ICU beds to keep respiratory patients away from all other patients and cohort staff for patient care.
Supporting Health-Care Capacity

• Established inventory of ventilator and extracorporeal membrane oxygenation machines across province to support deployment as needed.

• Actively monitoring medicine supplies.
Questions / Comments?
COVID-19 Response

March 6, 2020
Technical briefing