Alberta COVID-19 Update

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Office of the Chief Medical Officer of Health

December 23, 2021
Omicron – Alberta cases

- Omicron case growth rate is substantially higher than what was witnessed with the Delta variant.
- The number of Omicron cases identified remains too low for robust estimates; however, preliminary analyses suggest that doubling time may be 2-3 days.
- This is in line with what is being reported in other jurisdictions.
The number of daily new cases in Alberta is increasing rapidly: they increased from around 320 per day in early December to 818 new cases on December 20.

Percent positivity is also climbing: daily positivity increased from 5.7% to 11% in just five days (Dec 16 to 20).

These increases are driven largely by increasing case rates in the Calgary Zone (percent positivity: 16.6%), where Omicron cases are highest.

Total hospitalizations have been decreasing but remain high. The number of current ICU hospitalizations has remained around 70 while non-ICU has been dropping.
Current State by Vaccination Status (December 20, 2021)

- **Total Population**
  - Complete: 72.60%
  - Partial: 6.1%
  - Unvaccinated: 21.30%

- **Active Cases**
  - Complete: 64.20%
  - Partial: 1.60%
  - Unvaccinated: 34.18%

- **Hospitalized**
  - Complete: 61.09%
  - Partial: 3.65%
  - Unvaccinated: 35.26%
Alberta’s COVID-19 cases in ICU by vaccine status and age group (Aug 20 – Dec 20, 2021)

<table>
<thead>
<tr>
<th>Age Groups</th>
<th>Complete</th>
<th>Partial</th>
<th>Unvaccinated</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-29 yrs</td>
<td>7.3</td>
<td>3.7</td>
<td>89</td>
</tr>
<tr>
<td>30-39 yrs</td>
<td>4.8</td>
<td>3.2</td>
<td>91.9</td>
</tr>
<tr>
<td>40-49 yrs</td>
<td>8.7</td>
<td>3.8</td>
<td>87.4</td>
</tr>
<tr>
<td>50-59 yrs</td>
<td>6.0</td>
<td>1.8</td>
<td>92.3</td>
</tr>
<tr>
<td>60-69 yrs</td>
<td>15.0</td>
<td>4.1</td>
<td>80.9</td>
</tr>
<tr>
<td>70-79 yrs</td>
<td>21.2</td>
<td>4.0</td>
<td>74.8</td>
</tr>
<tr>
<td>80+</td>
<td>41.1</td>
<td>1.8</td>
<td>57.1</td>
</tr>
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What Do We Know Now about Omicron?

- Peak onset is 3 days following exposure
- Virus replicates faster with higher levels in the bronchus
- Doubling every 2 to 3 days
- 5.2X more infectious than Delta
- Higher immune evasion, whether natural or acquired – 5.4X more reinfections than Delta
- Hospitalization rates in Denmark: 1.5% Delta and 1.2% Omicron
Vaccine protection

• 14 days after an mRNA booster: 54 – 77% effective

• Alberta response: Expansion of booster doses to everyone 18 and over

• 5 month interval

• “Take the first mRNA vaccine available to you. Both Pfizer and Moderna offer a high level of protection. People 18 to 29 will be offered the Pfizer vaccine.”
Severity?

- Despite limitations of early SA data, showing decreased hospitalization, there are now 4 preprint studies showing reduced severity (SA, Scotland, England, Denmark)
- England: 20-25% reduction in hospital attendance and 40-45% reduction in admissions within 14 days of + PCR
- Shorter length of stays
- 2 doses of vaccine protective against hospitalization
- Previous infection reduced hospitalization by 50%
Rapid Test Kit Program

- Program launched Dec 17 with initial distribution of 500,000 test kits distributed through select pharmacies and AHS locations.
- Rapid Test Kits for continued distribution at pharmacies and AHS centres will be replenished as quickly as supply is received.
- Going forward:
  - 2 million more tests (400,000 kits) on-hand to be distributed in coming days.
  - 1 million additional tests (200,000 kits) arriving later this month.
  - Alberta pursuing direct purchase of up to 10 million additional tests to support the Rapid Testing Program
  - Intention to increase distribution to 10 million tests per month beginning in January.
Access to Monoclonal Abs (Sotrovimab)

• Targets those at highest risk of hospitalization, NNT=20
• Must be administered within 5 days of symptom onset
• IV infusion at px’s home/AHS site, followed by 1 hour observation
• Two groups eligible: Unimmunized and Immunocompromised
• Unimmunized: 55 yrs plus OR pregnant OR 18 plus with chronic kidney disease, CHF, COPD or mod-severe asthma
• Immunocompromised: transplant OR active oncology treatment since December 2020 OR systemic immunosuppressive Rx since December 2020
Alberta Experience to Date (Dec 20):

- 6,149 Albertans with a positive result received notification of monoclonal antibody option
- 167 called to enquire
- 74 were deemed eligible
- 55/74 accepted treatment
- Outcomes being actively tracked
Oral Antivirals

- Two in process of approval by HC: Merck’s Molnupiravir and Pfizer’s Paxlovid (Nirmatrelvir and Ritonavir combo)
- Expected timeline January 2020
- May be first or second line drugs
- Must be administered within 5 days of onset of symptoms
- CADTH conducting consultations to create clinical guidance
- Active planning in progress
Changes to recommended PPE

- SARS-CoV has both short and long range aerosols
- Masking for the full duration of the shift, with either a well-fitting medical mask, KN-95, or N-95
- Point of care risk assessments
- Anyone providing direct care to suspect, probable or confirmed case should wear PPE: gown, gloves, eye protection and either a fit-tested, seal-checked N-95 OR non-fit-tested, seal-checked N-95 OR a seal-checked KN-95
- ?Quality of the evidence
Rapid tests in the workplace

• Primary care is eligible to apply for rapid testing of staff (currently twice weekly)
• Online application: https://www.alberta.ca/rapid-testing-program-for-employers-and-service-providers.aspx
• Expect delay over the holidays
• Stay tuned for potential changes
Questions?