**Vaccine Effectiveness (VE): 2 Doses** | **British Columbia (BC), Canada**

**Vaccines:** mRNA (Pfizer Comirnaty & Moderna Spikevax), AstraZeneca Vaxzevria

**Population:** 18+ year olds, excluding long term care residents

**Research method:** Test-negative design

**Study period:** May 30 - Sept. 11, 2021, during rise of Delta variant in BC

**Sample size:** 246,656
**Cases:** 17,077  **Controls:** 229,579

**Strong protection > 80-90% against infection maintained at least 4 months after the 2nd mRNA dose (monitoring continues, including for AstraZeneca Vaxzevria)**

**Protection is even stronger when the interval between 1st and 2nd dose is more than 6 weeks**

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**Participant characteristics**

<table>
<thead>
<tr>
<th>Age groups (years)</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-49</td>
<td>55%</td>
<td>45%</td>
</tr>
<tr>
<td>50-69</td>
<td></td>
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<tr>
<td>70-79</td>
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<tr>
<td>80+</td>
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</tbody>
</table>

**Vaccines received: 2 doses**

- 67% Pfizer Comirnaty (mRNA)
- 16% Moderna Spikevax (mRNA)
- 8% mRNA mix
- 5% AstraZeneca Vaxzevria/COVISHIELD
- 8% AstraZeneca Vaxzevria + mRNA

**2 doses of any vaccine are highly protective, including against the Delta variant**

- Hospitalization risk in vaccinated people reduced by more than 90%
- Infection risk reduced by more than 90% for mRNA recipients and 70% for Vaxzevria
- Mixed doses (mRNA and Vaxzevria) offers protection similar to 2 mRNA doses

**Interval between 1st and 2nd Pfizer Comirnaty dose**

- 3-4 weeks: 82%
- 5-6 weeks: 85%
- 7-8 weeks: 92% (includes 95% confidence interval)
- 9-11 weeks: 92%
- 12-15 weeks: 90%
- 16+ weeks: 93%

**VE estimates displayed are against infection.**