Background
Recreational cannabis use is pervasive amongst Canadian university students.1 While this substance has been associated with adverse health outcomes, research shows that they can be substantially mitigated by informed behavioural choices.2 This led to the development of the Canadian Lower-Risk Cannabis Use Guidelines3, which aim to serve as a public health tool to guide Canadians towards safer consumption. While these guidelines have been disseminated through knowledge translation materials such as brochures, posters and webinars since 2017, there is a need for more effective dissemination, particularly amongst youth and young adults, where high-risk behaviour is typically concentrated.4

Objectives
• Determine rates of adherence to individual and overall lower-risk cannabis use guidelines in a sample of Canadian university students.
• Identify willingness of students who exhibit high-risk cannabis consumption to try e-mental health resources and identify priorities for intervention.

Methods
• Interim analysis was performed with the first 32 weeks of data (2901 responses, 49.5% adjusted response rate using the AAPOR RR1w definition) from an ongoing, repeated cross-sectional mental health & substance use survey administered weekly at the University of British Columbia.
• Survey questions were mapped to seven Canadian Lower-Risk Cannabis Use Guidelines.5 Rates of adherence to individual and overall use-related guidelines were calculated for survey respondents reporting any non-medical use of the substance.
• A composite, binary variable was created for overall adherence to cannabis guidelines. Exceeding any individual guideline was coded as exceeding the overall guideline, placing users in the “high-risk consumption” group.
• Responses to two additional survey questions asking about e-mental health resource reported were analyzed for this high-risk consumption group.

Sample Characteristics
• Mean age of 23.5 (standard deviation=5.05)
• Gender: 63% female, 36% male, 2% other
• Degree Type: 70% undergraduate, 23% graduate, 7% other
• Ethnicity: 33% White, 2% Indigenous, 35% East Asian, 5% Southeast Asian, 25% other

Results

Rates of Adherence to Lower-Risk Cannabis Use Guidelines*

<table>
<thead>
<tr>
<th>Guideline</th>
<th>All students</th>
<th>Students who consume non-medical cannabis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose low-strength products, such as those with a lower THC content or a higher ratio of CBD to THC</td>
<td>52.9%</td>
<td>62.5%</td>
</tr>
<tr>
<td>Avoid synthetic cannabis products</td>
<td>96.5%</td>
<td>96.5%</td>
</tr>
<tr>
<td>If you choose to smoke cannabis, avoid inhaling deeply or holding your breath.</td>
<td>78.3%</td>
<td>69.3%</td>
</tr>
<tr>
<td>Limit your cannabis use to occasional use at most (e.g. only using once a week or on weekends)</td>
<td>78.3%</td>
<td>78.3%</td>
</tr>
<tr>
<td>Don’t drive a car or operate other machinery while under the influence of cannabis.</td>
<td>88.2%</td>
<td>88.2%</td>
</tr>
</tbody>
</table>

Of the students who had consumed non-medical cannabis (n=1087), very few (8.1%) adhered to all use-related guidelines examined. This is largely influenced by low rates of adherence to guidelines that recommend choosing lower strength cannabis products and avoiding smoking cannabis as a method of consumption.

Discussion
Low rates of adherence to use-related Canadian lower-risk cannabis guidelines amongst university students who consume suggests that efforts to promote these guidelines to this population have fallen short. In a time of rapid development in the e-health field, virtual solutions should be considered.

Given that 57% of students exhibiting high risk cannabis consumption reported previously seeking support through digital resources and 61% reported that they were very likely or somewhat likely to try an e-mental health resource in the future, digital tools may provide an effective intervention platform for a subset of this population. Education on the lower-risk cannabis use guidelines and targeted intervention strategies for safer consumption should be incorporated into e-mental health resources targeting university students. These interventions should focus on select high-risk behaviours that are highly prevalent amongst this group, such as choosing routes of administration that involve smoking, and using high-strength products.

With that being said, this approach will not be an effective dissemination strategy for approximately 40% of high-risk consumers who reported that they were unlikely to try e-mental resources. Additional approaches will be needed to reach this subgroup.

Contact Information
Laura Jones21@gmail.com

References