



Canadian Drug  
Policy Coalition

Coalition canadienne  
des politiques  
sur les drogues

## **CANNABIS USE AND DRIVING: Knowledge Translation Strategy Recommendations**

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## **CANNABIS USE AND DRIVING: KNOWLEDGE TRANSLATION STRATEGY RECOMMENDATIONS**

### **I. Key Considerations**

In reviewing the evidence relating to cannabis impairment and driving, we have highlighted several main considerations with respect to context, tone, and audience when developing messaging for public education, which are outlined below:

#### **1. Context**

We are entering a regulated market for cannabis in Canada where use will no longer be criminalized. This provides an opportunity for open dialogue about how to use cannabis in ways that reduce harms and maximize benefits. Despite legalization, there will likely be some remaining stigma and increased scrutiny of risks associated with use and the new legal parameters. Additionally, there is an existing culture around cannabis use that many subscribe to, emphasizing safety and differentiation from alcohol.

Messaging should build on the new legal context, and emphasize the opportunities that it provides for opening the discussion about safe use and demonstrating that this was the right choice. It should also build on the identity of responsible use, which distinguishes between a responsible pot-user vs. a reckless driver.

#### **2. Approach and Tone**

##### ***a. Respectful and caring***

Messaging should recognize the knowledge and experience of cannabis users and build upon it to establish risk-mitigating behaviours relating to driving. It should also show respect for the aspects of the culture that are consistent with responsible use.

##### ***b. Non-judgmental***

Messaging should take into consideration the years of stigma that have been endured by cannabis users. It should be non-judgmental about cannabis use, and focus on how to use it safely and responsibly. Messaging should recognize that individuals are capable of using their judgement when making decisions about whether they are too impaired to drive. There is some denial of possible risk, possibly as a response to stigma, which highlights the importance of non-stigmatizing messaging.

##### ***c. Realistic***

Many public health education ads relating to cannabis use have failed due to unrealistic portrayals of cannabis users. Portraying realistic scenarios increases credibility with cannabis users who compare the messages with their own experience. The messages should provide practical and simple strategies to reduce potential driving risks. There also should be a realistic comparison with messages about alcohol, which has a much greater risk factor, and for which current messages tell users to wait one hour after a drink. The warning label on Marinol, a synthetic THC medication, advises the patient not to drive after use until they become accustomed to the drug. This however, is too open-ended. A message about waiting a realistic amount of time, based on evidence, is preferable.

### **3. Audience**

While the above section applies in general to all audiences with regard to cannabis-related messaging, there are specific audiences that require a targeted approach to messages:

#### ***a. Youth and younger adults***

Youth are one of the largest groups of cannabis users in Canada. Public awareness messages should be aimed at and marketed towards the driving population aged 18-25, since they are the group most likely to regularly use cannabis and to operate a vehicle shortly after consuming cannabis. This group reports a greater likelihood of driving after cannabis use in combination with alcohol or other drugs, and the belief that cannabis use does not negatively impact their driving ability. They also on average have less driving experience, are more likely to engage in risky driving behavior, and if new cannabis user users may be naïve to the effects of cannabis. This group is more likely to drive when going out to pursue nightlife where they may mix cannabis and alcohol or other drugs, partly because they think driving is more ‘adult’ and ‘sexy’.

Effective messaging for youth should:

- Use other youth as a resource – youth learn effectively by sharing and exchanging ideas with their peers. Interactive modes of learning such as peer leaders and peer focus groups have been used effectively for cannabis-related health information.
- Avoid being condescending or paternalistic – youth are skeptical of messages about cannabis use that don’t coincide with their own experience or that of their peers.
- Address the connection they see between being ‘adult’ and ‘sexy’ and driving at night

#### ***b. High sensation seekers***

Driving after cannabis use (DACU) is related to an overall reckless style of driving. High sensation seekers are individuals who are more prone to risky behaviours. Traditional messages, which emphasize rational decision making, tend not to be effective for this group. High sensation seekers are more receptive and more attentive to messages with high sensation value or stimulation. This audience may also be more prone to mixing cannabis with alcohol and other substances.

Effective messaging for high sensation seekers should:

- Use messages that are unique and are not based on the viewers’ presumed desire to make rational decisions.
- Present information in a creative way that elicits an emotional and physiological response.
- Recognize that high sensation seekers are likely to engage in other risky driving behaviours, and address risk-seeking holistically as a coping style.

#### ***c. Frequent users***

The more frequently someone uses cannabis the more likely they will be inclined to drive after use. This group is very familiar with the effects of cannabis and may believe that their familiarity and tolerance helps mitigate risk, or even improves driving (especially those in the 25-30 year age range). Messaging should respect their knowledge and experience, and fine tune their understanding of risk and possible consequences, as well as draw upon their identification with a culture of safe and responsible use. This group can include older adults and medical users who may have developed strong norms for responsible use in tolerant legal climates. However, it may also include problematic users, who do not practice harm-reduction techniques for use and may be prone to using it problematically in relation to driving.

Effective messaging for frequent users should:

- Recognize the symbolic meaning of cannabis for some cannabis users as a *healthier alternative*. Some cannabis users believe they are making an intelligent choice to use cannabis and that can be tied into making intelligent choices about safe driving.
- Validate the understanding that there is a difference between the impact of cannabis and alcohol on driving risk and also highlight the risk of combining the two.
- Note that the perception by some that cannabis use has no impact or improves driving may not be correct; Build on the knowledge and experience of cannabis users and get nuanced about the effects of new strains and different dosages on familiarity and tolerance. Build on the fact that many cannabis users tend to recognize their own degree of impairment.
- Tie the safe driving message into existing safe driving practices embraced by cannabis users - for example, “just as you are great with wearing seatbelts, be great about waiting 2 hours after using cannabis before you drive”.
- Point out that they are role models to youth, and can influence youth to have safer attitudes around driving.

#### **d. Infrequent and new users**

New users are naïve to the effects of cannabis. They can be any age, and may use cannabis for medical or recreational purposes. A novice cannabis consumer who is also a novice driver is especially at risk.

Effective messaging for infrequent and new users should:

- Provide clear guidelines on how to judge impairment to those who are new to cannabis use or are trying different strains, products and doses.
- Communicate in a calm and balanced way that new/infrequent users are at much higher risk of impairment from even a small dose.

## **II. Key Recommendation for Messaging**

### **Information and actions:**

Knowledge and Action messaging are both needed for effective knowledge translation. Key information messages should counter misinformation or lack of information, and nuanced advice on how to use cannabis and avoid driving while impaired should be provided.

*General message:* Making informed choices can help you reduce the chance of: (i) injury or harm or death to yourself and others; (ii) severe consequences for your life from enforcement of laws regulating driving under influence of drugs.

<b>Key Information Messages</b>	<b>Recommended Actions</b>
<p><b>Driving following cannabis use raises the risk of a motor vehicle accident by approximately 20%, on average.</b></p> <ul style="list-style-type: none"> <li>• Research shows that many people who use cannabis don't think it impairs their driving and some think that it actually makes them a better driver.</li> <li>• Cannabis affects reaction time, attention and decision-making in complex situations. It also impacts ability to keep stable in your lane.</li> <li>• Peak concentration of THC in blood occurs about 2 hours after inhalation and clears after 3-4 hours; peak concentration after oral ingestion occurs 2-6 hours after use, but effects could be felt earlier and last longer.</li> <li>• Familiarity and tolerance may reduce impairment, but even if you try to compensate by driving slower and more cautiously, it won't necessarily make you safe, particularly if a complex situation arises.</li> <li>• New or infrequent users are at higher risk of becoming impaired in driving ability from cannabis use.</li> <li>• Cannabis is less risky than alcohol and other substances, but it's risky enough that you could die or kill someone.</li> </ul>	<p><b>Pay attention to your level of intoxication and wait until you are not intoxicated.</b></p> <ul style="list-style-type: none"> <li>• Note dosage, potency, familiarity with strain, mode of ingestion will all impact your level of impairment and how long you should wait.</li> </ul> <p><b>Generally, wait at least two hours after smoking or vaporizing cannabis before driving; wait 5-6 hours after ingesting it orally before driving.</b></p> <ul style="list-style-type: none"> <li>• If one has used a larger dosage than usual (e.g., smoked half a joint vs. a couple puffs) or tried a new strain one is not familiar with, one should wait longer; or if one has used a very small amount (e.g., a tiny puff or tiny nibble) then a shorter delay may be appropriate.</li> </ul> <p><b>A new or infrequent user should be more cautious and allow more time.</b></p> <p><b>All users should learn to gauge their own level of impairment.</b></p> <ul style="list-style-type: none"> <li>• For example, after trying a small amount, wait a little while and pay attention to how you feel. "take a hit, let it sit"</li> </ul>
<p><b>Mixing cannabis with alcohol is even more dangerous than using alcohol alone.</b></p>	<p><b>If one has mixed alcohol with cannabis – wait until impairment from both drugs has disappeared</b></p> <p><b>Don't combine cannabis with other substances.</b></p> <ul style="list-style-type: none"> <li>• Use small amounts and enjoy the effects of the particular strain.</li> </ul>

*Table continued on next page*

<b>Key Information Messages (...)</b>	<b>Recommended Actions (...)</b>
<p><b>There are significant legal risks attached to being judged by police to be impaired in your driving capacity by cannabis use.</b></p> <ul style="list-style-type: none"> <li>• Police officers use observational tests to detect whether someone is impaired by cannabis use, but these observational tests have been shown to be highly inaccurate. As a result, a driver who is under the influence of cannabis yet who is not impaired in driving ability may still be arrested at the discretion of the officer and identified as impaired.</li> </ul>	<p><b>The most effective way to mitigate the legal risks of being identified as impaired is to avoid DACU.</b></p>
<p><b>Cannabis use has many potential benefits for recreational and medical users and a culture has developed around enjoyable and responsible use.</b></p> <ul style="list-style-type: none"> <li>• Cannabis users have a self-image of being responsible users who have self-control and are considerate of others</li> <li>• Many people who drive while intoxicated on cannabis find it physically uncomfortable and stressful.</li> </ul>	<p><b>Be aware of appropriate time and place of cannabis use – be considerate.</b></p> <ul style="list-style-type: none"> <li>• Save use for ‘high pleasure/low pressure’ activities – driving is high pressure. It’s a huge responsibility to get from a to b, while hurtling down the road in a lethal machine, without hurting anyone.</li> </ul> <p><b>Use alternatives to driving when going out if you are using cannabis.</b></p> <ul style="list-style-type: none"> <li>• Get a ride with a friend, use a taxi service/Uber (it’s the mature/adult and sexy thing to do);</li> <li>• Use cannabis when you get to your destination instead of right before - you can take it with you now that it’s legal (note: there is a need to open some public consumption sites for that to be effective).</li> </ul> <p><b>Don’t take a ride with someone who might be impaired</b></p> <ul style="list-style-type: none"> <li>• Passengers must be aware of driver’s use of substances, and take responsibility for their safety.</li> </ul>