

## Go e nance of cannabi ale

Territories between 1856 and 1919, but later repealed in various years, with Prince Edward Island being the nal province to legalize alcohol in 1948 (Hallowell, 1988). As well, municipalities could prohibit the sale of alcohol and today, several Canadian communities, primarily indigenous reserves, are currently "dry" with no sales outlets and alcohol use forbidden. Many of these communities are facing extreme challenges from being alcohol free while surrounded by outside jurisdictions where alcohol is readily accessible. Bootlegging and smuggled black market alcohol is common. The lesson to be learned is that such disparities between jurisdictions can create additional social problems for those areas that attempt to prohibit sales, even though there is strong evidence that dry communities have signicantly lower rates of alcohol-related deaths compared with other similar but not "dry" communities.

Although the Federal government plans to introduce legislation in 2017 to eliminate cannabis possession and sales from the criminal code, the commercial sale of cannabis may still be restricted by provincial/territorial and municipal rules and regulations. This means that although the use and sale will be legal, not necessarily every province/territory and municipality will permit the sale or use of cannabis in all areas or indeed anywhere. Similarly, the sale and distribution of alcohol in Canada is governed by the provinces/territories, which has resulted in diverse systems of liquor distribution, from privately controlled to government controlled stores, with regulatory practices for beer, wine and spirits varying by area. Lessons can be learned from the Federal regulation of alcohol production and sales (in the Excise Act).



We recommend that the Federal government provide guidelines regarding the production and sales of cannabis, including recommendations for regulations aimed to minimize harms to users.

# T e of di ib ion em

Research on alcohol distribution indicates that government controlled stores are more elective than privately controlled stores in addressing issues around mitigating negative public health consequences related to alcohol use (Her et al., 1999; Stockwell et al., 2012). Government controlled distribution systems can better control pricing, labelling, overall outlet density, enforcement of minimum age restrictions and also restrictions on sales to impaired customers. Government systems are best suited to minimizing harms. Since cannabis is relatively simple to grow, it will be impractical to prohibit cultivation of small quantities.



We recommend cannabis be sold through government controlled stores and that individuals should not be prohibited from growing speci ed quantities for personal use.

# Labelling of od c

Amajor bene t of legalization is that products can be regulated and standardized so that consumers are better informed regarding their constituents. Increased awareness by consumers can be helpful to mitigate potential negative consequences from use.

Legalization should require chemical analysis of products so that purchasers are aware of the amount of THC (the main psychoactive constituent) and CBD (an important constituent for medicinal use) in the product before use. Federally mandated labelling requirements should assist in helping consumers understand di erences among cannabis products.

Studies of alternative health-related labelling for alcohol indicate that labelling the number of "standard drinks" in a container assists consumers to estimate whether they will have exceeded national low risk drinking guidelines (Osiowy et al., 2015). Labelling of percent alcohol content alone was shown to be insu cient. The development of standardized doses, similar to the idea of a "standard drink," could allow users to be better informed of the amount of THC in a given product. Labelling products in terms of standard doses of THC (e.g. "joints") would enable consumers to better follow future low risk cannabis use guidelines (Fischer et al., 2011). Research has been conducted on how to best de ne "standard joints" (Zeisser et al., 2012), which could be helpful in de ning standard doses, including di erent product forms, such as concentrates (e.g. hashish, oils) and edibles.



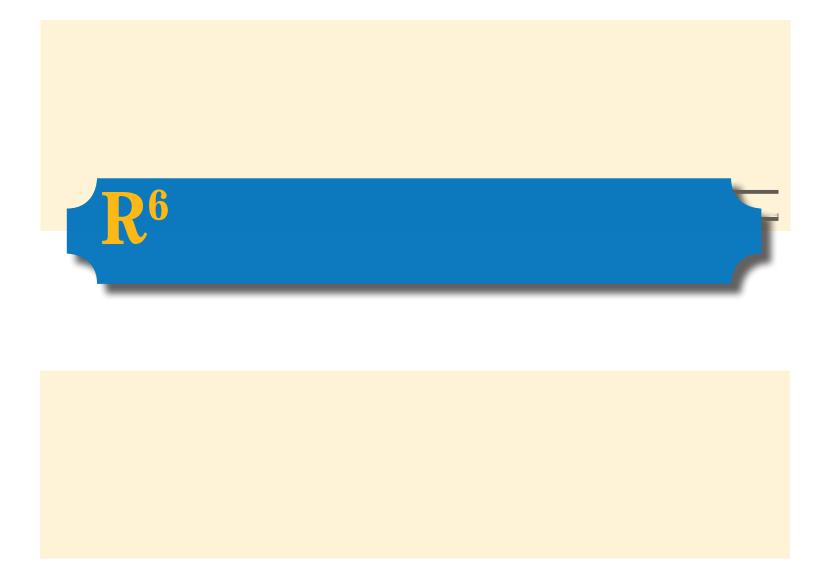
# T e of cannabi od c

Various cannabis products have different associated risks. Legalization provides an opportunity to put in place regulations to minimize the potential harm from cannabis use. Research suggests that marijuana smoking is harmful to the lungs even though the impact may be different than for tobacco (Tetrault et al., 2007). Vaporizers can be used to extract THC at low temperatures below the point of combustion of plant matter and thus reduce the harms associated with smoke. Cannabis and its constituents can also be taken as edibles, tinctures, pills or in other forms. Although these forms of use eliminate potential lung problems, they can pose other risks. For example, when used orally, the effects are considerably delayed making it harder for the person to sense immediately the impact, potentially leading to consumption of a higher dose than desired (Hartman et al., 2015a); in the hands of children, tasty edibles or other oral products could be problematic.



We recommend that cannabis policies and regulations recognize the diverse harm potential of di erent cannabis products and that policies and regulations seek to encourage the development and use of less harmful products and mitigate the harms wherever possible. Cannabis products that may be attractive to children should be sold in tamper resistant containers to prevent accidental harm.

Abalance must be struck in relation to prices for cannabis. If prices are too high in comparison to production costs or prices in neighboring jurisdictions, illegal markets can emerge (Kleiman, 2015). However, higher absolute prices and minimum prices of alcohol have been shown to be related to lower rates of alcohol-related morbidity and mortality (Stockwell et al., 2013; Wagenaar et al., 2010).





Going forward with cannabis legalization, many lessons can be learned from the Canadian experience with legalization of alcohol. Over time, Canadian populations have acclimatized to legal alcohol and have endorsed easier access. However, cannabis like alcohol is no ordinary commodity and a delicate balance is needed between the pressures for liberalization and public and individual health harms (Babor et al., 2010).

The onset of legalization will likely be associated with a substantial new economic sector largely geared towards maximising pro tability, and a host of new cannabis products that will emerge to encourage use. If e ective regulatory pressures can be applied, these products will include smokeless alternatives that will reduce long-term health consequences but may

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