

College of Physicians and Surgeons of Ontario  
80 College Street  
Toronto, Ontario  
M5G2E2

Hello,

First I want to thank you for the opportunity to provide input on the changes the College's Prescribing Drugs Policy.

Our organization serves many thousands of Canadian employers focused on occupational health and safety. Our services support many Ontario based employers to address risks that substance use poses to occupational safety -- many of the most concerning risks are due to prescribed medications. We would like to make the CPSO aware of a strong and clear occupational safety position held by many safety sensitive industries where completing complex; dangerous activities are bonafide occupational requirements.

It has been well established that use of opiates and benzodiazepines have adverse impacts on accident rates at work and while driving putting the worker, co-worker and the public at risk. Reliable assurance on the psychoactive effects and pharmacokinetics of marijuana has shaped a position to deem any use of marijuana in occupations that are both complex and safety sensitive as incompatible (see below). The position includes use during, before and after work.

We would like to extend a strong recommendation that the following addition is made to the proposed policy to reflect a pervasive physician oversight that puts the public at risk:

**Assessment**

Before prescribing a drug, physicians must have current knowledge of the patient's clinical status. This can only be accomplished through an appropriate clinical assessment of the patient. An assessment must include:

1. An appropriate patient history, including the most complete and accurate list possible of drugs the patient is taking and any previous adverse reactions to drugs. A physician may obtain and/or verify this information by checking previous records and databases, when available, to obtain prescription and/or other relevant medical information;<sup>12</sup> and if necessary,
2. An appropriate physical examination and/or any other examinations or investigations.
3. An appropriate inquiry regarding the status of employment in a safety sensitive hazardous occupation, environment or working conditions. Noting safety sensitive work is incompatible with select treatments particularly the treatment using opiates, benzodiazepines or marijuana for medical purposes.

The benefits to adding the above additional assessment criteria are: providing clear direction to Ontario physicians that a patient's occupation is very relevant to *doing no harm* in selecting a suitable treatment course, that physicians are culpable to providing "work clearance" for dangerous occupations absent evidence based guidelines, and that extra consideration must be made before prescribing opiates, benzodiazepines or authorizing marijuana as a treatment or providing "work clearance" for those employed in hazardous occupations.

The scientific evidence, national and international conclusions that lead to the above position on marijuana are summarized below. Additional scientific evidence and guidelines regarding benzodiazepines and opiates can be provided at your request.

- **World Health Organization**

- *“A return to a non-intoxicated state does not ensure a full return of neurocognitive function in the workplace<sup>182</sup>. In a summary of the dilemmas that cannabis for medical use has created for the workplace, it was pointed out that ensuring safety of workers who are under the influence or who recently consumed cannabis is not possible<sup>183</sup>.”* (World Health Organization 2015)
- *“There is ample evidence indicating that neurocognitive impairment from cannabis persists from hours to weeks.”* (World Health Organization 2015)
- *“Complex human/machine performance can be impaired as long as 24 hours after smoking a moderate dose of cannabis and the user may be unaware of the drug's influence.”* (World Health Organization 2016)
- *“Recently abstinent cannabis users (7 hours to 20 days) may experience impairment in attention, concentration, inhibition, and impulsivity during the period in which THC and its metabolites are eliminated. The greatest residual deficits in executive function are found following prolonged use of cannabis.”* (World Health Organization 2016)

- **Health Canada**

- *“A recent systematic review and meta-analysis concluded that, after adjusting for study quality, cannabis use was associated with a seven-fold estimated risk of being involved in a fatal accident, benzodiazepine use was associated with a two-fold estimated risk of a fatal accident, and opiate use with a three-fold estimated risk of a fatal accident.”* (Health Canada 2013)
- *“Depending on the dose, impairment can last for over 24 hours after last use.”* (Health Canada 2013)

- **Physician Authorities**

- *“Research shows that dried cannabis is a potent, psychoactive substance that can have significant acute and chronic cognitive effects. Chronic use of dried cannabis may be associated with persistent neuropsychological deficits, even after a period of abstinence.”* (The College of Family Physicians of Canada 2013)
- *“Marijuana should not be permitted while an employee is on duty unless the employer can determine with certainty that the associated neurocognitive and judgment impairment will not pose a risk to users, coworkers, or the public. This includes assurance of safe transport to and from the job site. Given the evidence that inhaled THC may impair complex human performance for more than 24 hours after ingestion, employers should not assume that marijuana use between shifts (such as evening use before return to work the following morning) is uniformly safe.”* (Goldsmith, et al. 2015)

- **Research Conclusions**

- *“Marijuana use impairs critical cognitive functions, both during acute intoxication and for days after use”.* (Volkow et al 2014)

- “After about a month of discontinued use, chronic cannabis users have demonstrated performance deficits in psychomotor speed, attention, memory, and executive functioning as compared to non-using controls” (Grant et al 2003) (Medina et al 2007)
- “There can be no question to an independent reviewer of the data comprising our current state of knowledge, that marijuana impairs the ability of humans to perform safety sensitive duties on a balance of probabilities, and in the vast majority of tasks. The time course of this impairment is highly variable but is clearly longer than the time course of intoxication. The fact that one particular subject, performing a particular task, may demonstrate little or no measurable impairment is of no comfort in the overall picture... It also becomes apparent, due to the variability cited in the preceding references, that a discrete level of blood concentration of THC cannot be accurately specified, below which safety impairment does not become a concern. Blood levels also fail to take into account such compounding variables as the emergence of psychosis and mood disorder, both of which have been linked to the use of marijuana. The only rational manner in which to proceed is to prohibit the use of the drug in safety sensitive tasks. Given the current state of technology, the only rational way in which to do this is to insist on negative drug screening for marijuana and its metabolites in safety sensitive personnel. The emergence of the phenomenon of “medical marijuana” in no way changes this reality. The source of THC is not relevant to the impairment of individual users with respect to safety sensitive duties. It only becomes relevant in a discussion of duty to accommodate which is beyond the scope of this paper. In summary, the use of THC in the safety sensitive work place, based on a preponderance of evidence demonstrating significant psychomotor impairment from various sources, is unacceptable.” Dr. Brendan Adams M.Sc. MD CCFP, FASAM, ABAM (Construction Labour Relations of Alberta 2016)

## References

2016. "Construction Labour Relations of Alberta." *Marijuana and the Safety Sensitive Worker*. December 8. Accessed October 10, 2017. <https://clra.org/assets/page/files/library/Marijuana2016v3.pdf>.
- Goldsmith, Robert, Marcelo Targino, Gilbert Fanciullo, Douglas Martin, Natalie Hartenbaum, Jeremy White, and Phillip Franklin. 2015. "Medical marijuana in the workplace: challenges and management options for occupational physicians." *Journal of Environmental and Occupational Medicine* 518-525.
- Grant et al. 2003. "Non-acute (residual) neurocognitive effects of cannabis use: a meta-analytic study." *J Int Neuropsychol Soc* (5):679-89.
- Health Canada. 2013. *Information for Health Care Professionals Cannabis (marihuana, marijuana) and the cannabinoids*. February. Accessed May 9, 2016. <http://www.hc-sc.gc.ca/dhp-mps/marihuana/med/infoprof-eng.php#chp60>.
- Medina et al. 2007. "Neuropsychological functioning in adolescent marijuana users: Subtle deficits detectable after a month of abstinence." *Journal of the International Neuropsychological Society* 13:807–820.

Volkow et al. 2014. "Adverse Health Effects of Marijuana Use." *N Engl J Med* 370(231) 2219-2227.

World Health Organization. 2016. "The health and social effects of nonmedical cannabis use." *World Health Organization*. July. Accessed November 29, 2016.

[http://www.who.int/substance\\_abuse/publications/cannabis\\_report/en/](http://www.who.int/substance_abuse/publications/cannabis_report/en/).

—. 2015. "Update of Cannabis and its medical use." *World Health Organization*. December. Accessed November 29, 2016. [http://www.who.int/medicines/access/controlled-substances/6\\_2\\_cannabis\\_update.pdf](http://www.who.int/medicines/access/controlled-substances/6_2_cannabis_update.pdf).

Respectfully submitted

CannAmm Occupational Testing Services