



Emergency Health Services - Alberta

# *Substances; From Use, to Misuse, to Addiction in First Responders*



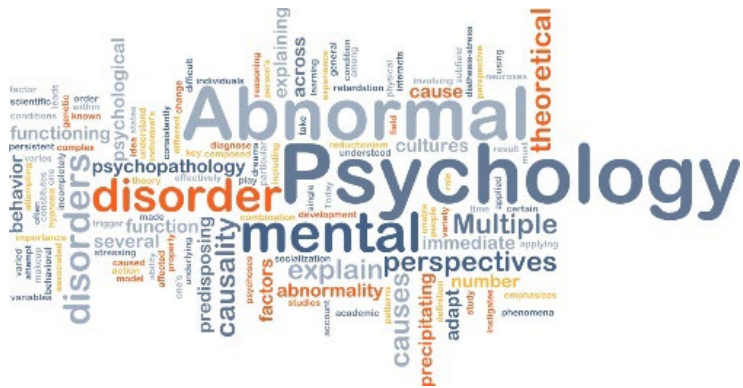


**Session Summary:** First Responders have a unique set of occupational requirements that often have them aligned with a multitude of DSM-5 disorders. Many of these disorders have some of the highest co-occurrence rates with substance use disorders. This talk will overview the mental health and substance issues experienced within this population group and some direct strategies for prevention through intervention.





# Most common Co-Occurring Disorders



- **Mood Disorders**
  - Major Depressive Disorder
  - Bi-Polar Disorder
  - Persistent Depressive Disorder
  - Double Depressive Disorder
- **Anxiety Disorders**
  - Generalized Anxiety Disorder
  - Panic Disorder
  - Social Anxiety Disorder
  - Phobic Disorder
  - Agoraphobia
- **Personality Disorders**
  - Borderline
  - Anti-Social
  - Narcissistic
  - Obsessive Compulsive
- **Post Traumatic Stress Disorder (PTSD)**



# Etiology and Co-Occurring Disorders

- Substance Use & Co-Occurring Disorders are the result of Biological, Psychological, Social, and Spiritual contributors. For some individuals, the SUD contributes to the development of a MMHD and for others it's a MMHD that contributes to the development of a SUD.





# Definitions

**Intoxication:** the immediate impact of an altered state of being from the ingestion of a substance(s).

**Impairment :** this condition has nothing to do with the diagnostics within Substance Disorders; anyone using substances can be impaired. There is also secondary impairment which is related to the life-style consequences often associated with substance use and the short-term psychological/physiological interactions (sleep deprivation, depression, anxiety, confusion, delusional experiences, concentration issues, and/or memory deficits). Impairment can last well beyond intoxication.

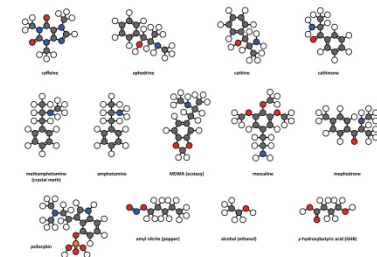




# SUBSTANCE USE

**Substance Use:** the appropriate and non-impactful use of substances

- Alcohol, Narcotics, Cannabinoids, Tranquilizers, Cocaine, Stimulants (other than cocaine), Crystal Meth, Designer Drugs, Hallucinogens, Ecstasy





# What are the top five substances of use in Canada, from most to least



- Alcohol (78.2)
- Narcotics (13.1)
- Marijuana (12.3)
- Tranquilizers (12)
- Cocaine (2.5)



# Statistics

- **Hazardous alcohol use was significantly higher in first responders** (26%; 95% CI: 20%–32%) indicating that interventions tailored specifically for these occupational populations may be beneficial. (The pooled prevalence of harmful alcohol use was 10.65%; 95% CI: 7.54%–14.23%) {1}
- The prevalence of alcohol abuse in first responders can range from 16%-40% (Milligan–Saville, et al., 2017; Jones, S., 2017; Utzon-Frank, N., et al., 2014). Research literature documents terms such as **binge drinking or hazardous levels of drinking and notes that peer encouragement is a strong factor in drinking behavior**. Alcohol consumption, and smoking are the primary substances used, along with overuse of pain killers. {2}  
{2b}





# SUBSTANCE MISUSE

***Unspecified Alcohol/Substance Related Disorder:*** A maladaptive pattern of substance use leading to clinically significant impairment or distress. There is no previous substance use disorder diagnosis, and this is generally situational, and event triggered.

Generally, regular nonadherence to the safety guidelines of the CCSA/CAMH can be a standard. The misuse of these substances is excessiveness, a manner not intended or directed or prescribed.





# CCSA & Low Risk Alcohol Guidelines {3}



It has been deemed by the Canadian Centre on Substance Abuse and Addiction (CCSA) that any alcohol consumption might be too much in relation to the low-risk guidelines. Having said that, here are the times where zero alcohol is recommended; anyone under the legal age for alcohol consumption, pregnant or breastfeeding women, while operating any dangerous machinery.

- If a person chooses to consume alcohol those amounts should be less than 3 drinks per week to remain in the low-risk area. Moderate risk is from 3-6 drinks per week and anything over 7 drinks per week is high-risk behaviour. Additionally, consumption should be no more than 2 drinks per day.



# Centre for Addiction and Mental Health (CAMH) & Low Risk Cannabis Guidelines {4}



Canada's Lower-Risk Cannabis Use Guidelines has been developed by CAMH and funded by the Canadian Institutes of Health Research (CIHR). This area still requires a significant amount of research; however, here are the recommendations to date.

1. The most effective way to avoid the risks of cannabis use is to **abstain** from use.
2. **Delaying cannabis use**, at least until after adolescence, will reduce the likelihood or severity of adverse health outcomes.
3. **Use products with low THC content** and high CBD: THC ratios.
4. **Synthetic cannabis** products, such as K2 and Spice, **should be avoided**.
5. Avoid smoking burnt cannabis and **choose safer inhalation methods** including vaporizers, e-cigarette devices and edibles.



# Centre for Addiction and Mental Health (CAMH) & Low Risk Cannabis Guidelines {4}



6. If cannabis is smoked, **avoid** harmful practices such as **inhaling deeply or breath-holding**.
7. Avoid frequent or intensive use, and **limit consumption to occasional use**, such as only one day a week or on weekends, or less.
8. **Do not drive or operate other machinery** for at least 6 hours after using cannabis. Combining alcohol and cannabis increases impairment and should be avoided.
9. **People with a personal or family history of psychosis or substance use disorders, as well as pregnant women, should not use cannabis at all.**
10. Avoid combining any of the risk factors related to cannabis use. **Multiple high-risk behaviours will amplify the likelihood or severity of adverse outcomes.**



# SUBSTANCE ADDICTION

***Substance Use Disorders:*** this refers to the inappropriate, major life area (MLA) impairing, and ongoing use of either beverage alcohol or impacting use of substances. There are often conditions of tolerance, withdrawal, and significant loss of control. Many of these people are unable or refuse to stop the substance use.





# Cage Questionnaire

- Have you ever felt you needed to **C**ut down on your drinking?
- Have people **A**nnoyed you by criticizing your drinking?
- Have you ever felt **G**uilty about drinking?
- Have you ever felt you needed a drink first thing in the morning (**E**ye-opener) to steady your nerves or to get rid of a hangover?

If you answer yes to any one of these questions you would benefit from a formal substance assessment.

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# What to do when a co-worker discloses substance use concerns?



- **Alcohol and drug dependencies are treatable illnesses**, and early intervention greatly improves the probability of a lasting recovery.
- **Encourage them to access assistance** before a problem with substance use impacts work. The Mental Health Help Line (1-877-303-2642) is a confidential support.
- **Have them consider proactive disclosure** to a manager/supervisor, Human Resources, to get supports you may need
- **Employees who proactively disclose** an alcohol or drug dependency **shall be accommodated** by Occupational Workplace Accommodation Policy



# Substances Impacting the Workplace

**What is your responsibility when a co-worker discloses substance use that is occurring at work or impacting work (this includes when on-call)?**

- This falls under one of the times when confidentiality must be broken as there is a potential for harm to self or another person.
- Immediately notify a Manager, Supervisor, or other appropriate leader. If the person is currently working, they will need to be safely removed from work.





# Addiction Recovery Recommendations



- Obtain an SAE assessment to be conducted by a substance disorders expert
- Detoxification (if required to safely maintain abstinence until treatment initiates)
- Medical evaluation with a GP to ensure safety and assist in treatment planning
- Inpatient or Intensive Outpatient treatment attendance; abstinence-based facility
- Abstinence from all illicit or non-prescribed mood-altering substances; inclusive of alcohol & cannabis
- Regular attendance at 12-Step groups at a rate 2 to 3 meetings per week for the first year.
- Relapse prevention work - length based on treatment progress and in consultation with treating professionals 8-12 sessions.



# Online and Phone Resources



- **Mental Health Helpline: 877-303-2642**
- **CIPSRT**
- **PSPNET**
- **CCSA**
- **CAMH**
- **CACCF**
- **AA/NA or other 12-Step based groups**







# References

- {1} **The prevalence of hazardous and harmful alcohol use across trauma-exposed occupations: A meta-analysis and meta-regression** Patricia Irizar \*, Jo-Anne Puddephatt, Suzanne H. Gage, Victoria Fallon, Laura Goodwin  
Department of Psychology, Institute of Population Health, University of Liverpool, United Kingdom *Drug and Alcohol Dependence* 226 (2021) 108858
- {2} **Substance Use Disorders in First Responders The Vicious Cycle of Chronic Traumatic Stress Exposure and Sleep Deprivation as Contributing Factors** By Sara G. Gilman, PsyD, LMFT *Advances in Addiction & Recovery* | WINTER 2020
- {2b} **The Amplification of Common Somatic Symptoms by Posttraumatic Stress Disorder in Firefighters.**  
Milligan-Saville, J. S., Paterson, H. M., Harkness, E. L., Marsh, A. M., Dobson, M. , Kemp, R. I., Bryant, R. A. and Harvey, S. B. (2017), *JOURNAL OF TRAUMATIC STRESS*, 30: 142- 148.
- {3} **Levesque, C., Sanger, N., Edalati, H., & Paradis, C. (2022) Update of Canada’s Low-Risk Alcohol Drinking Guidelines: Evidence review technical report.** 22). Ottawa, Ont.: Canadian Centre on Substance Use and Addiction
- {4} **Fischer, B., Russell, C., Sabioni, P., van den Brink, W., Le Foll, B., Hall, W., Rehm, J. & Room, R. (2017). Lower-Risk Cannabis Use Guidelines (LRCUG): A Comprehensive Update of Evidence and Recommendations.** *American Journal of Public Health*, 107(8). DOI: 10.2105/AJPH.2017.303818.
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