

UNDERSTANDING SUBSTANCE USE AND ADDICTION

Participant Workbook





OBJECTIVES

Firefighters experience high stress and traumatic events that can affect mental health and lead to substance use as a coping mechanism. This workbook focuses on reducing stigma, increasing awareness, and providing practical tools for firefighters and their support networks to address substance use with understanding and support.

- Understand why substance use happens
- Identify signs that substance use may be harmful
- Understand the difference between use, misuse, and addiction
- Learn how repeated trauma exposure increases the risk of substance use
- Build awareness by using reflection tools
- Identify the different substances, their intended use, and when you or someone you know may be at risk of misuse





SUBSTANCE USE: WHY AND WHEN IT'S A PROBLEM

Why do people use alcohol and other drugs?

People use substances for many reasons. Some may be curious about the effects of a specific drug, while others may find the effects of a substance pleasurable. Some people use substances to help them relax, feel livelier, feel less inhibited or feel pleasure. Others find that the effects of a substance make it easier to cope with problems.

People often begin using substances because it is pleasurable or reinforcing in some way. Substances can be **internally reinforcing** (for example, using helps the person avoid dealing with their personal issues) or **externally reinforcing** (for example, using helps a person fit in). **Using substances may help a person to:**



Avoid dealing with problems
Feel better
Cope with stress
Increase their sense of confidence
Do something they would not otherwise do
Fit in with peers
Increase their status within a group
Dull emotional pain
Deal with physical pain



SUBSTANCE USE VS. ADDICTION

USE

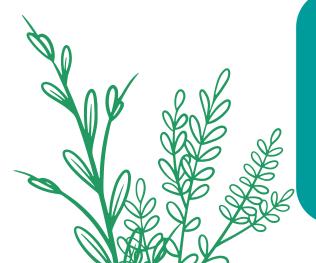
Taking a substance as it was intended or prescribed, in safe amounts.

 Using alcohol, prescription medications, or other substances in a way that does not significantly interfere with work, relationships, or health. This might include having a drink after a long shift to relax - not impacting performance, safety, or daily responsibilities.

MISUSE

Using a substance in a way that is different from its intended or prescribed purpose.

 Using substances in ways that harm physical or mental health, affect work performance, or strain relationships. This can include drinking to numb stress after calls, using drugs to manage trauma symptoms, or relying on substances as a primary coping tool.



ADDICTION (SUBSTANCE USE DISORDER)

A chronic, relapsing condition where substance use becomes compulsive and continues despite negative consequences. Characterized by tolerance (needing more for the same effect), withdrawal symptoms, and loss of control.



RISK FACTORS FOR SUBSTANCE USE PROBLEMS

- Cultural and occupational norms: May be normalized or even glorified in certain work environments, including among first responders.
- Peer influence of colleagues or social networks can create subtle or overt pressure to use substances.
- Lack of strong personal or professional support can increase reliance on substances to cope.
- Past or ongoing difficult or traumatic family issues may increase vulnerability.
- Life and work stressors: Relocation, shift work, high-risk roles, trauma exposure, and chronic stress can make substances a way to unwind or self-soothe.
- PTSD, depression, anxiety, or sleep disturbances can heighten risk.
- Using substances to manage stress or emotional pain can create a cycle that reinforces use.
- Impulse control and emotional processing: Trauma and stress may reduce self-regulation, and substances may be used to avoid intense emotions.
- Biological factors: Family history, genetics, and changes in brain reward pathways from repeated use can increase susceptibility.



SUBSTANCE USE BECOMES A PROBLEM WHEN IT

Starts affecting your shift work: You notice fatigue, slower reactions, or mistakes on calls because of drinking or using.

Creates tension at home or with the crew: Arguments with family, partners, or teammates about your use.

Impacts your mental or physical health: Anxiety, insomnia, mood swings, or even injuries start showing up more often.

Leads to financial or personal stress: Spending more than you should, missing work, or struggling to manage day-to-day responsibilities.

Feels like it's the "only way to cope": You rely on it to unwind after calls or to numb memories of tough incidents.





REFLECTION QUESTIONS

When considering substance use, first ask:

- 1. Why am I using right now?
- 2. What feelings or stressors am I trying to manage?
- 3. Is this helping me cope or masking a deeper issue?
- 4. Does this align with my personal values or goals?
- 5. What other strategies could help me address these feelings safely?

SAFER USE CONTEXTS

Cultural or social: To celebrate achievements, milestones, or social events.

Recreational/fun: Moderation in safe environments with minimal risk to self or others.

Intended use: Using substances as prescribed or as intended for safe outcomes (caffeine for alertness, prescribed medication as directed).

SAFETY FIRST

Even in these contexts, awareness and moderation are essential. The goal is to prevent reliance as a coping mechanism.

WHAT IS ADDICTION?

Addictions are behaviours that are often hard to stop and that interfere with a person's life. The behaviour could involve a substance, such as alcohol or other drugs (i.e. substance use disorders), or an activity, such as gambling. Not everyone agrees about the exact meaning of addiction, but most descriptions include these features:

- The person cannot stop the substance use or the activity, despite trying to stop again and again
- The substance or the activity has become the focus (or preoccupation) of the person's life
- The person continues the use or activity even though there are severe negative consequences, such as legal issues or financial problems.

When people are experiencing addiction, they continue a behaviour that provides pleasure and satisfies desire, even though there are growing negative consequences. In more serious forms of addiction, the person feels a loss of control over their behaviour. People with more severe addictions often say that this feeling is the main part of their problem.





WHAT CAUSES ADDICTION?

It is hard to know why some people develop substance use or other addictions and others do not. No single answer has been found, though it seems that addictions result from connections among a number of factors, such as:

- Genes
- · The way a person's brain works
- Difficulties during childhood
- Life events
- Mental health problems
- Stress
- Environment
- Cultural influences

People may continue to use substances because they feel driven to do so and find it difficult to reduce or stop. This is not because they are weak or unmotivated. For some people, using substances over and over again can lead to changes in their brain chemistry. These changes lead to their continued substance use (Volkow et al., 2016). While not everything about addiction is understood, some things are clear: **nobody chooses to become addicted, and addiction is not a personal weakness or character flaw.**



SUBSTANCE USE SUMMARY GUIDE

DISCLOSURE:

This resource is for educational purposes only. We are not medical professionals, and this guide is not intended to provide medical advice or to encourage the use of substances. The information presented here highlights the intended medical use of certain substances, situations where people may be at higher risk of using them, and their potential effects and risks. This tool is meant to increase awareness and support — both for yourself if you are finding it difficult to cope, and for recognizing signs in others who may be struggling. If you or someone you know is experiencing challenges related to substance use, please reach out to a qualified health care professional or local support services.

BENZODIAZEPINES (VALIUM, XANAX, ATIVAN)

- Use: Sedatives for anxiety, seizures, sleep disorders.
- When People Might Use: During periods of high anxiety, sleep difficulties, trauma, or panic. Higher risk if relying on them for daily stress or mixing with alcohol.
- Short-Term Effects: Drowsiness, dizziness, confusion, memory problems, loss of coordination, slurred speech.
- Severe Effects: Hallucinations, delusions, aggression, sudden anxiety.
- Long-Term Effects: Dependence, learning/memory issues.
- Risks: High overdose risk if tolerance is lost after stopping. Dangerous when mixed with alcohol or opioids.





SUBSTANCE USE SUMMARY GUIDE

OPIOIDS (CODEINE, FENTANYL, MORPHINE, OXYCODONE, HYDROMORPHONE, MEDICAL HEROIN)

- · Use: Pain relief, cough, diarrhea.
- When People Might Use: After surgery, injury, or for chronic pain. Riskier during emotional stress, grief, or untreated trauma, when used to "numb out."
- Short-Term Effects: Drowsiness, constipation, nausea, euphoria, impaired breathing.
- Long-Term Effects: Dependence, liver damage, infertility, worsening pain, dangerous withdrawal in newborns.
- Risks: High risk of overdose, especially when tolerance changes or combined with other depressants.

COCAINE & CRACK

- Use: Rarely medical (anesthetic), mostly illicit stimulant.
- When People Might Use: In party/social settings for energy or confidence, or to cope with fatigue, low mood, or stress. Riskier in high-pressure or nightlife environments.
- Short-Term Effects: Euphoria, energy, talkativeness, paranoia, dilated pupils, less need for sleep/food.
- Severe Effects: Aggression, tremors, violent behavior, heart problems, stroke, seizures.
- Long-Term Effects: Depression, psychosis, mood swings, organ damage.
- Risks: Overdose can cause heart failure, seizures, or death. Infection risks with injection or shared equipment (HIV, hepatitis).

MDMA (ECSTASY, MOLLY)

- Use: Illegal stimulant with hallucinogenic effects.
- When People Might Use: In party, festival, or club settings to enhance connection, energy, or mood. Risk higher in social groups where it's normalized.
- Short-Term Effects: Increased energy, sociability, euphoria, emotional closeness.
- Risks: Can last 3–6 hours, with after-effects (anxiety, low mood) lasting up to a week. Risk of overheating, dehydration, and overdose when combined with other substances.





SUBSTANCE USE SUMMARY GUIDE

KETAMINE

- Use: Medical anesthetic; illicitly as a dissociative drug.
- When People Might Use: In party/rave culture for escape, during stress to "numb out," or when seeking intense altered states. Riskier for people with trauma or dissociation.
- Short-Term Effects: Dissociation ("K-hole"), hallucinations, confusion, numbness, dizziness, blurred vision, increased heart rate and BP.
- Long-Term Effects: Bladder damage, incontinence, memory and attention problems, flashbacks.
- Risks: Overdose → coma, slowed breathing, death. Dangerous with alcohol or opioids.

PSILOCYBIN (MAGIC MUSHROOMS)

- Use: Hallucinogen; research ongoing for depression, anxiety, addiction.
- When People Might Use: Out of curiosity, for spiritual exploration, or to escape distress. Higher risk for those with untreated mental illness or heart conditions.
- Short-Term Effects: Hallucinations, altered senses/time, euphoria, creativity, anxiety, paranoia, nausea, muscle twitching.
- Risks: "Bad trips," impaired judgment, dangerous behaviors, flashbacks. Riskier for people with psychiatric or heart conditions. Mixing with other drugs increases harm.

HEROIN

- · Use: Illicit opioid (sometimes prescribed as medical diacetylmorphine).
- When People Might Use: As a cheaper or stronger alternative after prescription opioid use, or to escape emotional/physical pain. Risk higher during trauma, homelessness, or untreated mental illness.
- Short-Term Effects: Euphoria "rush," calmness, drowsiness, itching, slowed breathing.
- Long-Term Effects: Addiction, depression, memory issues, constipation, poor nutrition, heart problems.
- Risks: High overdose risk, especially with fentanyl contamination or when combined with depressants. Sharing needles increases HIV/hepatitis risk.