

Frequently Asked Questions: Risks from second-hand exposure to unregulated substances (fentanyl and other substances such as methamphetamine)

Can someone lose consciousness or stop breathing (“overdose”) from second-hand exposure to smoke that contains fentanyl?

The risk of life-threatening effects, like an overdose, from second-hand smoke is very low. In fact, there have been no confirmed reports of these effects from second-hand exposures to fentanyl.

When fentanyl is smoked, the person using it absorbs almost all of the drug, and only trace amounts are exhaled. These larger amounts of fentanyl that a person inhales directly (not second hand) can cause someone to lose consciousness or have trouble breathing, which is often referred to as an overdose.

If the risk of overdose from second-hand exposure to fentanyl is very low, then why do we need protections?

Even though the risk of an **acute** overdose from casual or second-hand exposure to fentanyl is extremely low, precautions are still important because other harms may be possible in the short term and/or from **chronic** exposure to both fentanyl and from these complicated mixtures.

Unregulated substances are complicated mixtures of many different chemicals: the drugs themselves, and adulterants such as caffeine. The way that these substances interact with each other when heated for smoking, and the different ways they are released in the air, can be complex. In addition, the unregulated substances supply changes frequently, sometimes including new substances that aren’t well studied or understood. For these reasons, it is difficult to know exactly what is in the smoke that workers may be exposed to, which can make it difficult to establish links between smoke and health effects people may experience.

Acute exposure means a single, short-term event that delivers a large enough dose to cause immediate symptoms. While an overdose is unlikely to happen from incidental or second-hand exposure, other short- and long-term effects may occur. These may include health effects such as headaches, coughing, irritation, nausea, and/or temporary shortness of breath.

Chronic exposure means repeated exposure to a substance over weeks, months, or years. While one exposure may not cause immediate harm, small amounts over time could contribute to long-term health effects. The health impacts of chronic second-hand exposure to fentanyl are still not well

understood; however, inhalation of very small smoke particles can lead to both short and long-term health effects, regardless of the source (unregulated substances, tobacco smoke, wildfire smoke, etc.). Staff may be exposed to unregulated substances frequently in some supportive housing or harm reduction settings. Precautions like using portable air cleaners, ventilation, respiratory protection (respirators), and practices such as housekeeping, cleaning, and decontamination are designed to minimize this long-term, repeated exposure. These measures help reduce staff exposures throughout their careers.

Workers have a right to a healthy workplace. The BC Occupational Health and Safety Regulation and Workers Compensation Act, enforced by WorkSafeBC, are intended to ensure workers are protected from harm by limiting their exposure to hazards at levels far below what might cause serious harm. This applies not only to unregulated substances, but also other hazards like smoke from other sources. In addition, your workplace will have a health and safety representative or team who can help you at your specific site. All health effects from exposures to smoke should be reported to your workplaces incident reporting system.

Why are workplaces investigating second-hand fentanyl more now than they were in the past?

Smoking is becoming the preferred method for using unregulated substances (including fentanyl), which increases the likelihood of workers being exposed to second-hand smoke. As these exposures have become more common, workers and workplaces have become more concerned about reducing these exposures and understanding what they mean for worker health. To help protect worker health, WorkSafeBC has adopted Exposure Limits for fentanyl. To comply with these limits, help protect worker health, and confirm protections in place are effective, many workplaces have begun testing the air for fentanyl.

What are the health effects associated with second-hand exposure to smoke that contains unregulated substances?

Even though the risk of overdose from second-hand short-term exposure to unregulated substances may be low, people may experience other health effects such as headaches, coughing, irritation, nausea, and/or temporary shortness of breath. While the health impacts of chronic second-hand exposure to specific unregulated substances are still not well understood, inhalation of very small smoke particles can lead to both short and long-term health effects, regardless of the source (unregulated substances, tobacco smoke, wildfire smoke, etc.).

For more information:

- [WorkSafe BC “New exposure limit for fentanyl and fentanyl citrate”](#)