

Fact sheets 2021

What is fentanyl?

Fentanyl is a pharmaceutical opioid that is prescribed for the management of severe pain. It is about 80 to 100 times stronger than morphine.

Opioids are depressant drugs, which slow down the activity of the central nervous system and messages going between the brain and the body.

In Australia, fentanyl is available as a restricted medicine (Schedule 8), meaning that it can only be legally obtained with a doctor's prescription.

Non-medical use of pharmaceutical opioid medications refers to use that occurs outside a doctor's prescription and is illegal in many countries including Australia.

What are the effects?

Fentanyl, like other opioids, crosses the blood-brain barrier and interacts with opioid receptors in the brain.

It creates a range of responses within the body, from feelings of pain relief (analgesia), to relaxation, pleasure and contentment. The effects of fentanyl may include:

- > Relief from pain (analgesia)
- > Nausea, vomiting
- > Constipation and/or diarrhea
- > Reduced appetite
- > Wind, indigestion, cramps
- > Drowsiness, confusion
- > Weakness or fatigue
- > Dizziness
- > Euphoria
- > Headache
- > Incoherent or slurred speech
- > Impaired balance
- > Slow pulse and lowered blood pressure
- > Rash (ADF, 2019)

Fentanyl

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Toxicity and overdose

As fentanyl is such a potent opioid, there is a serious risk that non-medical use may result in overdose. The signs of overdose include:

- > Extreme drowsiness or the person may even be impossible to wake ('on the nod')
- > Unresponsive to verbal approach
- > Small ('pinned') pupils
- > Slowed breathing and heart rate (down to four breaths per minute)
- > Total respiratory failure
- > Snoring
- > Blue or purple coloured skin (cyanosis), usually starting on lips and fingers
- > Low blood pressure
- > A drop of body temperature to below 35 degrees (hypothermia) (Darke, Lappin & Farrell, 2019)

If caught in time, the effects of overdose can be reversed by the administration of naloxone (see naloxone fact sheet).

When medications are used outside the guidelines for safe and effective use, adverse effects may be more likely.

Dependence and withdrawal

Fentanyl is a powerful opioid, and opioids have the highest dependence liability of all illicit drug classes (Darke, Lappin & Farrell, 2019). This may be a problem if the drug is used over a long period of time.

Usually, withdrawal begins 8-12 hours after the last dose (Darke, Lappin & Farrell, 2019). Symptoms may include:

- > Uneasiness/anxiety
- > Yawning
- > Diarrhoea
- > Stomach cramps
- > Runny nose
- > Sleeping difficulties
- > Joint pain

These symptoms generally reach their peak on the third day following cessation (Darke, Lappin & Farrell, 2019).

Other harmful use practices that may lead to dependence:

- > Excess prescriptions
- > Long-term use (more than three months)
- > Rapid dose escalations
- > Extra-medical use
- > Use with other drugs – tricyclic anti-depressants, anti-psychotics and pregabalin (Darke, Lappin, & Farrell, 2019)



What are the risks?

- > If used as prescribed and recommended, fentanyl is an effective medication. However, there are risks, particularly if not used as prescribed.
- > Regular use of fentanyl may cause:
- > Mood instability
- > Reduced libido
- > Constipation
- > Menstrual problems
- > Respiratory impairment (ADF, 2019)
- > If injected, there are increased risks associated with overdose and infection

Mixing fentanyl with other drugs

The effects of taking fentanyl with other drugs – including over the counter or prescribed medications – can be unpredictable and dangerous and could cause:

- > Fentanyl and alcohol increase adverse effects and the risk of respiratory depression
- > Fentanyl and anti-depressants may result in severe unpredictable reactions
- > Fentanyl and benzodiazepines may add to the sedative effects and diminished breathing (ADF, 2019)

Mental health

Rates of psychopathology amongst people who use opioids for non-medical use are extremely high. Affective disorders are prominent with lifetime rates of severe depression, dysthymia and anxiety disorders in the order of a third to half (Darke, Lappin & Farrell, 2019).

How many people use fentanyl?

According to the Australian Institute of Health and Welfare, 2.4 million (or 11.7 percent) people in Australia misused a pharmaceutical drug at some point in their lifetime. In 2019, 2.9 percent of people aged 14 and over who used painkillers/pain relievers and opioids for non-medical purposes in the previous 12 months, reported using fentanyl. (AIHW, 2020).

In 2018, 230 deaths were recorded related to the use of synthetic opioids (including fentanyl, tramadol, and pethidine) (Man et.al 2019).

Treatment

Treatment for fentanyl dependence differs depending on severity of the addiction, and a range of other factors.

Some treatments include taking opioid agonist drugs like buprenorphine, naltrexone, or methadone. This pharmacotherapy helps stabilise people with an opioid dependence and reduce harms related to drug use.

Other treatments include behavioural therapy in an in-patient or out-patient setting, cognitive behavioural therapy, specialised treatment programs, and recovery groups.

Emergency information

If you, or someone around you, is experiencing undesired or distressing psychological or physical symptoms from the intake of alcohol or other drugs please seek immediate medical attention.

If you need urgent help from ambulance services call Triple Zero (000). If a person has been mixing drugs with alcohol or other drugs, tell the paramedic exactly what has been taken.

Services

For free and confidential advice about alcohol and other drugs, call the National Alcohol and Other Drug hotline on **1800 250 015**.

The hotline will automatically direct you to the Alcohol and Drug Information Service in your state or territory.

More resources

- > The Illicit Drug Reporting System is an Australian monitoring system that identifies emerging trends of local and national interest in illicit drug markets.
- > The Ecstasy and Related Drugs Reporting System is an Australian monitoring system for ecstasy and related drugs that identifies emerging trends of local and national interest.
- > The Clinician's Guide to Illicit Drugs and Health examines the health effects of each of the major illicit drugs.
- > The Australian Institute of Health and Welfare collects information on alcohol and tobacco consumption, and illicit drug use among the general population in Australia.
- > The Australian Bureau of Statistics is Australia's national statistical agency, providing official statistics on a range of economic, social, population and environmental matters of importance to Australia.

Sources

Alcohol and Drug Foundation (2019). Fentanyl. Retrieved from <https://adf.org.au/drug-facts/fentanyl/>

Australian Institute of Health and Welfare (2020). Australian National Drug Strategy Household Survey 2019. Retrieved from: <https://www.aihw.gov.au/reports/illicit-use-of-drugs/national-drug-strategy-household-survey-2019/contents/table-of-contents>

Darke, S., Lappin, J., & Farrell, M. (2019). *The Clinician's Guide to Illicit Drugs and Health*, Great Britain: Silverback Publishing

Man, N., Chrzanowska, A., Dobbins, T., Degenhardt, L., Peacock, A. (2019). *Trends in Drug-induced Deaths in Australia, 1997-2018*. National Drug and Alcohol Research Centre, UNSW Sydney.