

# Non-medical use of pharmaceutical stimulants



#### What are pharmaceutical stimulants?

Stimulants are a type of drug that speed up messages travelling between the brain and body and increase brain activity. They can make a person feel more awake, alert, confident, or energetic. Stimulants include substances like <u>caffeine</u>, nicotine, amphetamines, and <u>cocaine</u>.

Pharmaceutical stimulants are medications that are used to treat health conditions like attention deficit hyperactivity disorder (ADHD) or narcolepsy (chronic sleep disorder). These medications require a prescription from a doctor to obtain legally. Examples include methylphenidate (Ritalin, Concerta) and modafinil (Modavigil).

### What is non-medical use?

Non-medical use refers to using a medication in a way that it was not prescribed or recommended by a doctor. This is also known as misuse.

This includes:

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- taking more than the prescribed amount or taking the medication more frequently
- using prescription-only medication when it was not prescribed for you
- sharing prescription medication with others
- combining your medication with other drugs, including alcohol
- using medication against medical advice, for example, while driving or using heavy machinery

People may use pharmaceutical stimulants for non-medical purposes for many different reasons. These include to increase alertness, concentration, memory, to improve mood, to enhance the effect of other drugs or to prevent or treat withdrawal symptoms from alcohol or other drugs.

There is no safe level of drug use. Using any type of drug always carries some risk so it is important to be careful when taking any type of drug.

## Is non-medical use of prescription stimulants common?

In 2022–2023, 5.5% of people in Australia reported having used a pharmaceutical stimulant for non-medical purposes in their lifetime, equating to about 1.2 million people. More people had used pharmaceutical stimulants for non-medical purposes in their lifetime than any other pharmaceutical, including non-medical use of painrelievers and opioids (AIHW, 2024).





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## What are the possible side effects of stimulants?



Note: These side effects apply to the use of stimulants whether used as prescribed or non-medical use. Effects will be dependent on the type of stimulant, the dose/amount taken, and the individual taking the drug.

## What are the risks of non-prescribed use?

In addition to the side effects of prescription use/medical use, non-medical use of pharmaceutical stimulants can lead to other harmful effects including dependence, overdose, and hospitalisation. Misusing pharmaceutical drugs in combination with alcohol or other drugs, also known as '**poly drug use**', can also increase the risk of serious adverse consequences including overdose and hospitalisation.



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## Reducing the risk of harm from non-prescribed use

If using medication in a way other than prescribed:

- research what the medication is, its potential effects (<u>Drugs.com Prescription Drug Information</u>) and risky interactions (<u>Drug Combinations (tripsit.me</u>)
- if you've never used it before, start with a small amount and wait to feel effects before taking more
- avoid mixing with other drugs, including alcohol
- listen to signs of feeling tired try to rest and get sleep
- stay hydrated people can become dehydrated when using stimulants, take small sips of water regularly
- use around people you trust and in a safe environment
- avoid activities that require mental and physical awareness like driving, swimming, or operating heavy machinery
- have the phone numbers of friends and family or support services nearby in case of emergency

### Signs of a stimulant overdose may include:



If the person has collapsed or lost consciousness, call an ambulance on triple zero (000). If they have stopped breathing commence CPR. If they are breathing normally, place them into the recovery position.



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## Putting someone in the recovery position



Kneel beside the person and straighten their arms and legs.



Fold the arm closest to you over their chest, and place the other arm at a right angle to their body.



Get the leg closest to you and bend the knee. Supporting their head and neck, take the bent knee closest to you and roll them away from you.



Adjust the upper leg, so that the hip and knee are bent at right angles. Tilt the head back and make sure the airways are clear and open.

#### Help is available:

- Call The National Alcohol and Other Drug Hotline on 1800 250 015 for free and confidential advice, information and counselling about alcohol and other drugs
- Call the Medicines Line on 1300 633 424 to talk to a pharmacist for free information and advice about prescription, over the counter, and other medications
- · For more support services: When and where to get help about ice

This factsheet was developed in collaboration with Positive Choices. For a youth version of this factsheet, please visit the <u>Positive Choices website</u>



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### References

- Adis. (2018). Stimulants, Depressants and Hallucinogens. Retrieved from: <u>Stimulants, Depressants and Hallucinogens</u> <u>ADIS (health.qld.gov.au)</u>
- Alcohol and Drug Foundation. (2023). Stimulants. Retrieved from: Stimulants Alcohol and Drug Foundation (adf.org.au)
- Alcohol and Drug Foundation. (2021). Safer use of prescription medications. Retrieved from: <u>Safer use of prescription</u> <u>medications - Alcohol and Drug Foundation (adf.org.au)</u>
- Australian Institute of Health and Welfare. (2024). Non-medical use of pharmaceutical stimulants in the NDSHS. Retrieved from: <u>https://www.aihw.gov.au/reports/illicit-use-of-drugs/non-medical-stimulants</u>
- Australian Institute of Health and Welfare. (2023). Alcohol, tobacco & other drugs in Australia: Pharmaceuticals 2023. Retrieved from: Alcohol, tobacco & other drugs in Australia, Pharmaceuticals - Australian Institute of Health and Welfare (aihw.gov.au)
- Butler, S. F., Faraone, S. V., Rostain, A. L., Newcorn, J. H., Antshel, K. M., Robbins, R. S., & Green, J. L. (2021). Non-medical use of prescription stimulants among college students: non-oral routes of administration, risk factors, motivations, and pathways. Frontiers in Psychiatry, 12, 667118.
- Faraone, S. V., Rostain, A. L., Montano, C. B., Mason, O., Antshel, K. M., & Newcorn, J. H. (2020). Systematic review: nonmedical use of prescription stimulants: risk factors, outcomes, and risk reduction strategies. Journal of the American Academy of Child & Adolescent Psychiatry, 59(1), 100-112.
- Hulme, S., Bright, D., & Nielsen, S. (2018). The source and diversion of pharmaceutical drugs for non-medical use: A systematic review and meta-analysis. Drug and alcohol dependence, 186, 242-256.
- Jones, F. & Sutherland, R. (2022). Trends in pharmaceutical stimulant use among a sample of people who regularly use ecstasy and/or other stimulants in Sydney NSW, 2007-2021. Drug Trends Bulletin Series. Sydney: National Drug and Alcohol Research Centre, UNSW Sydney.
- Papazisis, G., Tsakiridis, I., & Siafis, S. (2018). Nonmedical Use of Prescription Drugs among Medical Students and the Relationship With Illicit Drug, Tobacco, and Alcohol Use. Substance abuse: research and treatment, 12, 1178221818802298. https://doi.org/10.1177/1178221818802298
- Pharmaceutical Society of Australia. (2019). Medicine Safety: Take Care. Canberra: PSA.
- Treatment for Stimulant Use Disorders: Updated 2021 [Internet]. Rockville (MD): Substance Abuse and Mental Health Services Administration (US); 1999. (Treatment Improvement Protocol (TIP) Series, No. 33.) Chapter 2—How Stimulants Affect the Brain and Behavior. Available from: <u>https://www.ncbi.nlm.nih.gov/books/NBK576548/</u>



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