

Nicotine: Quick Facts



- Inhaled nicotine reaches the brain in seconds
- Nicotine levels fall quickly, driving repeated use
- Genetics strongly influence addiction risk
- Cutting down often leads to compensatory use
- Withdrawal symptoms can mimic anxiety and stress
- Correctly dosed nicotine replacement is safer than smoking or vaping
- Most people who quit successfully have tried to do so more than once



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Smoking & Vaping Cessation Clinic



NICOTINE AND LONG-TERM HEALTH

Nicotine dependence remains a major driver of preventable disease and reduced life expectancy. While cigarettes are widely recognised as harmful, newer nicotine products such as vapes and oral nicotine pouches continue to maintain addiction and long-term health risk.

Nicotine is a fast-acting drug that affects the brain, cardiovascular system and respiratory health. Repeated exposure reinforces dependence, alters stress responses and influences mood and behaviour.

Stopping nicotine use is rarely just about willpower. Dependence is shaped by biology, behaviour and environment and effective treatment requires structured, evidence-based care.

AN INTERDISCIPLINARY APPROACH

The Smoking and Vaping Cessation Clinic at the Woolcock provides specialist assessment and treatment for people using cigarettes, vapes, oral nicotine products or multiple products together.

Our integrated clinical model provides access to multiple areas of expertise within one service, allowing treatment to be tailored to each patient's health needs and level of dependence.

This may include:

- Addiction medicine
- Respiratory and cardiovascular health
- Mental health and behavioural support
- Pharmacotherapy for nicotine dependence
- Sleep disturbance and fatigue
- Preventative health care

This approach is particularly important for people with complex medical conditions, mental health concerns or previous unsuccessful quit attempts.

UNDERSTANDING NICOTINE DEPENDENCE

Nicotine acts rapidly on brain reward pathways and is cleared quickly from the bloodstream. This creates repeated cycles of relief and withdrawal, driving frequent use throughout the day.

Speed of nicotine delivery influences how addictive a product is. Inhaled nicotine reaches the brain within seconds and is highly reinforcing. Oral products act more slowly but can still maintain dependence when used regularly. Slow, steady delivery such as nicotine patches produces fewer reinforcing effects and is used as part of treatment.

Genetics also play an important role. Nicotine addiction is more heritable than alcoholism meaning some people are biologically more vulnerable to nicotine dependence than others.

NICOTINE AND MENTAL HEALTH

Nicotine use is closely linked to stress, anxiety and mood symptoms. Many people report feeling calmer after smoking or vaping, but this is often temporary relief from withdrawal.

In younger people, nicotine exposure is particularly



concerning. The developing brain is more sensitive to nicotine, increasing the risk of long-term dependence and effects on attention, impulse control and emotional regulation.

In clinical practice, psychological symptoms often improve after sustained nicotine cessation when withdrawal is managed appropriately.

EVIDENCE-BASED TREATMENT

The clinic provides structured, gradual treatment rather than abrupt cessation. Most patients are highly motivated to quit but may have received conflicting or incorrect advice.

Treatment may include:

- Assessment of nicotine exposure
- Carbon monoxide and nicotine level testing
- Individualised nicotine replacement therapy
- Prescription medications where appropriate
- Behavioural strategies to reduce triggers and relapse

Nicotine replacement therapy is often under-dosed or used incorrectly. Dosing is based on biological dependence rather than product use alone. In some cases, starting treatment while still smoking or vaping can stabilise nicotine levels and support safer reduction.

Over time, medications are reduced as the brain adapts to functioning without nicotine.

MAKE A BOOKING

To book an appointment at the Woolcock Smoking and Vaping Cessation Clinic, contact us on:

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W woolcock.org.au/request-an-appointment/

To find out more, go to www.woolcock.org.au/clinic.