



## Medicinal Cannabis: Factsheet



**Evidence ratings:**



This resource has undergone expert review. See our Help/Q&A section for more details.

**Year:**

**Targeted Drugs:** Cannabis

**Tags:** marijuana, CBD oil, cannabinoids

**Origin:** Australian

**Cost:**

Free

### What is medicinal cannabis?

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Medicinal cannabis, sometimes called medical marijuana, is the use of the cannabis sativa plant for any medical purpose. Medicinal cannabis is a drug that medical professionals can prescribe to treat or relieve symptoms of some medical conditions e.g., cancer pain.

Medicinal cannabis is made up of chemical substances called *cannabinoids*. The cannabis sativa plant has over 100 different cannabinoids. The two main cannabinoids used in medicinal preparations are **Delta-9 Tetrahydrocannabinol (THC)** and **Cannabidiol (CBD)**. Different medicinal cannabis products contain different amounts of these cannabinoids: some products contain mostly THC, some mostly CBD, or a combination of both THC and CBD.

Types of medicinal cannabis include:

- Oils, tinctures, and other extracts (e.g., CBD oil)
- Raw and dried cannabis
- Resin (hashish)
- Natural and synthetic cannabinoids (usually in capsule form)

### What is medicinal cannabis used for?

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Medicinal cannabis is mainly prescribed by doctors to assist with management of pain or symptoms associated with serious medical conditions, including:

- Cancer pain and/or symptoms.
- To relieve vomiting resulting from chemotherapy (a cancer treatment).
- Severe epilepsy (seizures).
- Treating muscle spasticity and pain in Multiple Sclerosis.
- Pain caused by nervous system damage.
- Palliative care - to relieve pain or symptoms related to a terminal illness.

### Who can access medicinal cannabis?

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As the possession and use of non-medicinal cannabis is illegal in most Australian states and territories, special permission is needed to access cannabis for medicinal purposes. Only registered Australian Doctors can apply for approval to prescribe cannabis for medical purposes. Once approved, Doctors may then prescribe medicinal cannabis for management of some conditions under the Therapeutic Goods Administration (TGA) Special Access Scheme (SAS).

### What is the legal status of medicinal cannabis?

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In 2016 the Australian Government made changes to the *Narcotic Drugs Act 1967* allowing cannabis to be grown for medicinal or scientific purposes. Under this Act the National Government provides licensing that allows selected people and companies to grow cannabis. Changes to this Act do **not** legalise the growing or use of cannabis for non-medical purposes, or for people without a license and permit.

Supply and access of medicinal cannabis is regulated by the Therapeutic Goods Administration (TGA). As described above, medical professionals must apply to the TGA to be allowed to prescribe a select range of medicinal cannabis products to patients. Individuals can not apply to the TGA themselves to access a product.

**Unless medicinal cannabis has been prescribed to you by an authorised medical practitioner cannabis is still illegal to use and grow for both medicinal and recreational purposes in most Australian states.**

See below for state and territory specific laws and information:

- Australian Capital Territory
- New South Wales
- Northern Territory
- Queensland
- South Australia
- Tasmania
- Victoria
- Western Australia

## Evidence for the use of medicinal cannabis to manage medical conditions

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The quality of evidence supporting the effectiveness of medicinal cannabis ranges from poor to moderate, depending on the medical condition. Further research is needed to better understand whether medicinal cannabis can be an appropriate and safe treatment option for different medical conditions.

The table below summarises the evidence from studies published in high quality academic journals that have investigated the effectiveness of medicinal cannabis. So far, most research has looked at medicinal cannabis for the treatment of chronic non-cancer pain, chemotherapy nausea and vomiting, epilepsy, multiple sclerosis, and palliative (end of life) care. There is very limited evidence for the benefit of medicinal cannabis for other conditions such as rheumatoid arthritis, inflammatory bowel disease and endometriosis. See below summaries of the current evidence for a range of conditions.

It is important to note for any benefit of medical cannabis in these medical conditions, there is also an increased risk of negative side effects. The potential side effects of medicinal cannabis are described in the next section.

## Nausea and vomiting

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### Current Evidence

Nausea and vomiting can occur in a number of medical conditions and is common while people receive chemotherapy treatment for cancer. There is some evidence to suggest that medicinal cannabis improves nausea and vomiting after chemotherapy. However, many studies are poor in quality (e.g., flawed research design) and some studies show no benefit of medicinal cannabis on these symptoms. There is currently no evidence from human studies that medicinal cannabis has any benefit for treating cancer itself.

## Chronic non-cancer pain

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### Current Evidence

Studies have looked at the effects of medicinal cannabis on reducing pain associated with non-cancer conditions such as neuropathic pain conditions (e.g., nerve damage) and rheumatoid arthritis. A review of 104 studies including 47 randomised controlled trials (RCTS) concluded that the evidence for treating chronic non-cancer pain is limited (Stockings et al., 2018). The review also found that there was no significant impact on physical or emotional functioning and low evidence for improved sleep and satisfaction with treatment.

## Epilepsy (seizures)

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### Current Evidence

Seizures are caused by uncontrolled electrical activity between brain cells which can cause symptoms such as violent shaking or loss of control. Someone with epilepsy experiences repeated seizures. There is good evidence that the CBD chemical derived from the cannabis plant can reduce the frequency of seizures by 50% or more among young people with treatment resistant forms of epilepsy, such as Lennox-Gastaut and Dravet Syndrome. However, CBD does not work for everyone who experiences seizures. Research shows that out of 8 people who are prescribed CBD, only 1 will experience a 50% or more reduction in seizures.

## Multiple Sclerosis (MS)

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### Current Evidence

Multiple Sclerosis (MS) is a chronic disease that affects the central nervous system and people with the condition often experience chronic pain. There is some evidence that the THC chemical extracted from medicinal cannabis may be effective in reducing MS pain. There is inconsistent evidence about whether the combination of THC and CBD extract reduces muscle spasticity among people with MS. More studies are needed in this area that compare use of medicinal cannabis to standard treatments for MS.

## Palliative (end of life) care

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### Current Evidence

Research has examined the use of medicinal cannabis to help pain and symptoms among people with a terminal illness (termed palliative or end of life care). Studies found no benefit of medicinal cannabis for improving patient's food intake, nausea/vomiting, pain, or sleep problems during palliative (end of life) care. There was some evidence that medicinal cannabis may improve weight gain and appetite among patients with HIV.

## Mental disorders and symptoms

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### Current Evidence

Medicinal cannabis has been associated with small reductions in anxiety symptoms among people with other medical conditions, but the quality of this research is poor. No improvements have been found for any other disorder, with some evidence suggesting that medicinal cannabis makes symptoms worse for people with psychosis.

## Side effects of medicinal cannabis

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Like all medications, medicinal cannabis products can have side effects. Side effects can vary depending on if the product has more Delta-9 Tetrahydrocannabinol (THC) or Cannabidiol (CBD). Generally, people have less side effects with CBD products compared to THC products. But some CBD products require very high doses (such as medication for epilepsy), and a percentage of patients experience side effects from these high CBD doses.

Side effects from medicinal cannabis (both CBD and THC) include:

- Fatigue and sedation
- Vertigo
- Nausea and vomiting
- Fever
- Decreased or increased appetite
- Dry mouth

Side effects from both medicinal cannabis high in THC and THC products include:

- Convulsions (muscle spasms)
- Feeling relaxed or drowsy
- Cognitive disturbance
- Depressed mood
- Confusion
- Psychosis

For more information about the side effects from THC, see our Cannabis factsheet.

## Evidence Base

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This factsheet was developed in collaboration with researchers at the Matilda Centre for Research in Mental Health and Substance Use at the University of Sydney and Dr Emily Stockings at the National Drug and Alcohol Research Centre at the University of New South Wales.

## Sources

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