

## Cannabis-based products (part 3): cannabidiol (CBD)

The legal status of CBD changed in December 2018 so that it is no longer a controlled drug. CBD is frequently confused with other cannabis-based products. This bulletin aims to clarify the legal status and evidence for CBD.

### What is cannabidiol (CBD)?

CBD is one of the two main cannabinoids in cannabis. It is not the same as the [cannabis plant](#), [tetrahydrocannabinol \(THC\)](#) or [combination \(THC+CBD\) products](#) such as Sativex®. See the "[Cannabis-based products \(part 1\): an overview](#)" bulletin for details on classification.

CBD is an antagonist of cannabinoid receptors, although it is unclear if this is its mechanism of action. Note that THC is an agonist of cannabinoid receptors. CBD has effects on the central nervous system, but does not cause a "high", as occurs with THC or cannabis plant.

CBD is not approved in New Zealand due to the lack of data to support safety and efficacy, but it is available through Section 29 from community pharmacies. Products with >98% CBD are not controlled drugs.

There is limited clinical evidence for CBD for any indication, and use remains experimental.

<b>Indications</b>	<i>Seizures:</i> Moderate evidence for benefit in RCTs of paediatric seizure syndromes. Not studied in adult epilepsy. <i>Anxiety:</i> Weak evidence for an anxiolytic effect in small RCTs and case series. Clinical significance is uncertain. <i>Others:</i> There are no studies investigating CBD for other conditions, including any form of pain.
<b>Dosing</b>	A starting dose of 2.5mg/kg twice daily, maintenance dose 10mg/kg twice daily, was used in specialist epilepsy trials. No other dosing regimen has been validated. Seek specialist advice.
<b>Adverse drug effects (ADEs)</b>	Known ADEs include: sedation, diarrhoea, loss of appetite, rash and hepatotoxicity. CBD is poorly studied. The full ADE profile, long-term effects, and effects on driving, pregnancy and breastfeeding are unknown. CBD does not appear to be addictive.
<b>Interactions</b>	CBD inhibits cytochrome P450 (CYP) enzymes, including CYP3A and CYP2C19. This can increase concentrations of other medicines metabolised via these routes and cause toxicity, or therapeutic failure for prodrugs.
<b>Funding</b>	Not subsidised. Approximate cost: Tilray® CBD 25 (25 mg/mL) oil = \$150 for 25 mL and CBD 100 (100 mg/mL) oil \$350 for 25 mL (as of May 2019). Pharmacy mark-up will be extra.
<b>Prescribing</b>	Any practitioner can prescribe using a conventional prescription for up to 3 months. Written consent from patients is a legal requirement as this is an experimental and unapproved medicine.

### Assess benefit

### Assess harm

### Define goals

#### Is CBD the right drug for my patient?

- Evidence may be for other agents, e.g. cannabis plant

#### Explain the risks

- Experimental treatment
- Drug interactions
- Adverse effects
- Financial cost
- Driving

#### Agree therapeutic goals

- Including criteria for discontinuation

**There is no clinical evidence supporting the use of CBD for pain. Often, confusion arises because of evidence for another cannabis-based product.**