

# Cannabidiol (CBD) for TBI

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## What is CBD?

- CBD is a non-intoxicating (phyto) cannabinoid
- CBD is the most abundant cannabinoid in industrial hemp
- CBD is present in low concentrations in typical medicinal and recreational marijuana strains

## Why might CBD help with TBI?

- CBD is anti-inflammatory
- CBD is <u>neuroprotective</u>
- CBD is an <u>anxiolytic (anti-anxiety)</u>
- Pre-clinical and clinical studies suggest benefits

#### Where do I buy CBD?

- All Lucky's markets and possibly other local and chain stores that sell supplements
- Internet (buyer beware!)
- Marijuana dispensaries (Will contain *some* THC)

#### How do I use CBD?

- Vaping CBD oil
  - Pro: Immediate onset. Very high bio-availability.
  - Con: Vaping stigma. Inconsistent formulations. Limited dosage control.
- Sublingual tinctures
  - Pro: Rapid onset. High bio-availability. Consistent formulations are available.
  - Con: The best ones can be expensive. Brand-to-brand variability. Usually alcohol-based.
- Water soluble forms for beverages
  - Pro: Rapid onset. High bio-availability. Consistent formulations are available.
  - Con: Can be harder to find. Brand-to-brand variability.
- Oral: Capsules, pills, edibles
  - Pro: Familiar medicinal format or tasty snack/treat format.
  - Cons: Very slow onset. Food effect. Extremely variable bio-availability.

#### How much CBD should I take?

- Start low: 5mg
- Wait two hours and evaluate effectiveness
- If ineffective, try 7.5 or 10mg
- Re-dose as necessary (but not more than once every few hours)



## Is CBD toxic?

• No. There has never been a single case of CBD overdose.

## Is CBD safe to combine with other medications?

- Probably. The only known drug-drug interaction is with Warfarin (blood thinner).
- If concerned, ask your pharmacist. Pharmacists are trained to know drug-drug interactions.

## How can I tell how much CBD is in the products for sale?

- Look for products that say something like "10mg CBD per serving"
- Avoid products that say something like "25mg of hemp extract per serving". In these cases it is impossible to know how much CBD is in the hemp extract.

## Further Information on CBD relevant to TBI patients and survivors:

<u>https://www.leafly.com/news/science-tech/cannabis-and-traumatic-brain-injury</u> (or google "leafly TBI")

https://www.concussionrecoveryresource.com/cbd/ https://www.projectcbd.org/stroke-traumatic-brain-injury (or google "project CBD TBI")

Colorado Cannabis Clinicians: <u>http://coscc.org/</u>. This group is running a small clinical trial of CBD for professional athletes suffering from TBIs. They hope this seeds a much larger study of CBD for a wider spectrum of TBI patients and survivors.