

Cannabidiol (CBD) for TBI

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What is CBD?

- CBD is a <u>non-intoxicating</u> (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 <u>anti-inflammatory</u>
- 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
 - o Pro: Immediate onset. Very high bio-availability.
 - o Con: Vaping stigma. Inconsistent formulations. Limited dosage control.
- Sublingual tinctures
 - o Pro: Rapid onset. High bio-availability. Consistent formulations are available.
 - o Con: The best ones can be expensive. Brand-to-brand variability. Usually alcohol-based.
- Water soluble forms for beverages
 - o Pro: Rapid onset. High bio-availability. Consistent formulations are available.
 - o Con: Can be harder to find. Brand-to-brand variability.
- Oral: Capsules, pills, edibles
 - o Pro: Familiar medicinal format or tasty snack/treat format.
 - o 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:

https://www.leafly.com/news/science-tech/cannabis-and-traumatic-brain-injury (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: http://coscc.org/. 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.