

Cannabis

The Cannabis Formulation and Methods of Delivery table accompanies the Cannabis Intoxication Bottom Line Recommendation (BLR), which provides the most need-to-know information about the treatment of cannabis intoxication in pediatric patients in the emergency care settings.

Product(s)	Route	Psychoactive Effects Onset & Duration	Notes
Cannabis Products from Plant Materials			
Fresh and dried Typical “bud” is the dried flowering portion of the plant	Smoked or vaporized	Onset: within 10 min Duration: 2-4 hr (up to 24 hr)	Can be further isolated into “kief”, “sift”, or “dry sieve”.
Edibles and oil extracts Cannabinoids are extracted from plant materials into oils and solvents	Oral	Onset: 30-90 min Peak: 2-3 hrs Duration: 4-6 hr (up to 24 hr)	Edibles are high cannabis concentration products including candy, baked goods, popcorn, etc. Appealing to children. Teas and waters are also available. Commercial products state the THC:CBD dose. Difficult to determine dose of homemade edibles.
Alcohol Tinctures Plant material is soaked in alcohol and filtered	Sublingual	Sublingual Tincture: Intermediate onset and duration	
Resin – Hashish Cannabis flowers are sifted until resin remains which is then heated and pressed into blocks Resin is combined with organic solvents (i.e., butane or carbon dioxide, see below)			
Resin – Butane-based <ul style="list-style-type: none"> Shatter, glass, slab, sheet Wax crumble, earwax, flake Oil, honey oil, hash 	Dabbing (oil or dab rig) Vaporizer	Onset: within 10 min Duration: 2-4 hr (up to 24 hr)	Dabbing: dropping a small amount on a hot surface and inhaling. Most commonly involves a glass pipe called a “dab rig”.
Resin - Carbon dioxide-based <ul style="list-style-type: none"> CO₂ oil 	Dabbing (oil or dab rig) Vaporizer	Onset: within 10 min Duration: 2-4 hr (up to 24 hr)	See dabbing above.
Resin - Water hash <ul style="list-style-type: none"> Bubble hash Solventless hash Ice wax 	Vaporizer Joint Bongs	Onset: within 10 min Duration: 2-4 hr (up to 24 hr)	
Joints, pipes, bongs, vaporizers Joint: buds rolled in paper & smoked Pipe: a flame is applied to cannabis that is in a device and the smoke is inhaled	Smoked Inhaled	Onset: within 10 min Duration: 2-4 hr (up to 24 hr)	

Bongs: usually filled with water which cools the smoke when it passes through Vaporizer: heats a cannabis product until it vaporizes			
Pharmaceutical Cannabinoids			
Nabilone Capsules	Oral	Onset: 1 hr Duration: 8-9 hr	
Dronabinol Tablets	Oral	Onset: 30-60 min Duration: 4-6 hr	
Nabiximols (Sativex®) Spray	Buccal spray	Onset: 30-60 min Duration: 1-6 hr	
Synthetic Cannabinoids			
CB1 and CB2 agonists – often have higher affinity for CB receptor and act as full agonists Greater than 600 illicit cannabinoids Sprayed onto plant material (i.e., K2, Spice, Incense, Potpourri)	Inhaled and ingested are most common	Onset: variable Duration: variable	Similar symptoms of intoxication. Safety is not established. Liver, cardiovascular, and anticoagulant adverse effects.
General Info Cannabis plants contain > 100 cannabinoids, the two major ones are Delta-9 Tetrahydrocannabinol (Δ -9-THC) and Cannabidiol (CBD). The THC:CBD ratios in different formulations vary. Recreational cannabis has a greater THC:CBD ratio. Medical cannabis ratios vary from high CBD:THC to high THC:CBD. Regulated cannabis will state the CBD and THC content on the package.			

The purpose of this document is to provide healthcare professionals with key facts and recommendations for cannabis intoxication. This summary was produced by the Cannabis Intoxication content advisors for the TREKK Network, Dr. Kaitlin Hogue of the Health Sciences Centre Children’s Hospital of Winnipeg and Dr. Neil Desai of BC Children’s Hospital, and Danica Irwin of the Children’s Hospital of Eastern Ontario (CHEO), and uses the best available knowledge at the time of publication. However, healthcare professionals should continue to use their own judgment and take into consideration context, resources and other relevant factors. The TREKK Network is not liable for any damages, claims, liabilities, costs or obligations arising from the use of this document including loss or damages arising from any claims made by a third party. The TREKK Network also assumes no responsibility or liability for changes made to this document without its consent.

This Formulations and Methods of Delivery Table is based on:

Essential Cannabis Knowledge for Pharmacists, Ontario Pharmacists Association, Module 3. Author: Mike Beazely, Associate Professor, University of Waterloo Faculty of Pharmacy



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