

PTTC Prevention Technology Transfer Center Network Funded by Substance Abuse and Mental Health Services Administration

CANNABIS GLOSSARY TERMS BY TOPIC AREA

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Disclaimer

This document is in addendum to the National Environmental Health Association's (NEHA) Cannabis 101 glossary. This document separates cannabis definitions by topic area for prevention providers.

CANNABIS HORTICULTURE

Growing Techniques

Aeroponics	A method of growing cannabis where the plant roots are	
	positioned in an enclosed space and exposed to air frequently	
	(U.S. National Park Service, 2018).	

- **Hydroponics** A method of growing edible and ornamental plants, such as cannabis, in a solution of water and dissolved nutrients without soil (Mugundhan, Soundaria, Maheswari, & Gopal, 2011).
 - **Pesticide** Chemical or organic substances that might be used on cannabis plants to protect against insects and/or fungus. Due to the Schedule I status of cannabis, as well as the lack of research and understanding, there are no federal regulations on the application of pesticides on cannabis. Some pesticides commonly used on cannabis can be highly toxic.
 - **Trim** When the plant has been harvested, a grower will trim the plant of its leaves, placing focus on the remaining buds (Colorado Department of Public Health and Environment, 2016).

Crossbreeding

- **Cultivar** Plant strains that result from the process of crossbreeding and genetic stabilization to express desired traits. Traits are often vague and unsubstantiated (Hazekamp, Tejkalová, & Papadimitriou, 2016).
 - **Hybrid** The result of a cross between two genetically different strains of cannabis (VandenBos, 2007).

Plant Anatomy

Flower Known as the hairy or sticky parts of the plant which are harvested for consumption in various products, also known as the reproductive organs of the plant (Colorado Department of Public Health and Environment, 2016). Contain the most THC (United Nations Office on Drugs and Crime, 2009).

Life Cycle Cannabis plants go through two distinct cycles in their lifetime:

Information 1. Vegetative stage (when the plant is actively growing) and;

2. Flowering stage (when the plant is focusing most of its energy on producing flowers).

When the plant's light exposure falls at or below 12 hours daily, it triggers the flowering cycle (Potter, 2014).

- **Terpene** Fragrant oils secreted by the flowers that give cannabis strains their scent and flavor. They also may contribute anxiolytic, antibacterial, anti-inflammatory, and sedative effects by binding to different receptors in the brain (Booth, Page, & Bohlmann, 2017).
- **Trichome** Fine, hairy-like projection from the epidermal cells of a plant which contain the most cannabinoids (Newton, 2013).



Figure 1. Cannabis Sativa plant. © 1995-2012 Missouri Botanical Garden

PRODUCTION PROCESSES

To harvest, dry, cure, trim and separate parts of the marijuana plant by manual or mechanical means (Commonwealth of Massachusetts, 2018).

Cultivator	An entity licensed to cultivate, process, and package cannabis, to deliver cannabis to cannabis establishments, but not to consumers (Commonwealth of Massachusetts, 2018).
Decarboxylation	The process of heating tetrahydrocannabinolic acid (THCA) to transform it to THC (Iffland, Carus, & Grotenhermen, 2016).
Homogeneity	Refers to how evenly distributed the cannabis extract is through a product. For example, if 10% of the infused portion of the cannabis product contains less than 20% of the total THC contained in the product, it is homogenous. Homogeneity allows users assurance that they are consuming a consistently prepared edible.
Manufacturing	To compound, blend, extract, infuse, or otherwise make or prepare a cannabis product (Commonwealth of Massachusetts, 2018).

Residual solvent A volatile organic compound used in the manufacture of a cannabis product that is not completely removed by practical manufacturing techniques (Commonwealth of Massachusetts, 2018).

Seed-to-sale Everything that happens to an individual cannabis plant from seed and cultivation, through growth, harvest, and preparation of cannabis-infused products, if any, to final sale of finished products (Commonwealth of Massachusetts, 2018).

Types of Extraction

Extraction The different processes by which cannabinoids within the plant can be extracted for use. These processes include alcohol extraction, butane hash oil extraction, etc. (Barrus et al., 2016).

Alcohol Process by which the cannabis plant is stripped of essential oils and trichomes using ethyl or isopropyl alcohol. Once the extra plant material is filtered out and the remaining alcohol is evaporated, sticky hash oil remains (PotGuide, 2018).

Butane Hash Oil Extraction Process of putting shredded or ground up plant material into a glass, metal, or plastic pipe, with a filter on one end and then the butane is forced in the open end of the pipe. As the butane goes through the pipe, the THC within the plant material is extracted and forced through the filter usually into a receptacle. The receptacle is then heated to burn off the remaining butane creating a butane gas (U.S. Drug Enforcement Administration, 2014).

Close-looped A method of chemical extraction that reuses the solvent rather than dispersing it into the air. This method is considered safer than "open-blasting" and is currently required for all legal concentrate production in Colorado (Barach, 2019).

CANNABINOID Several chemical compounds produced by marijuana plants that have medical or psychotropic effects (Commonwealth of Massachusetts, 2018)

- Agonist A drug or other chemical agent that binds to a receptor and produces a physiological effect, typically one similar to that of the body's own neurotransmitter at that receptor (VandenBos, 2007).
- Agonist-Antagonist A substance that simultaneously binds to multiple receptors, mimicking the action of the body's natural neurotransmitter at one type of receptor and inhibiting that action at another, different type of receptor (VandenBos, 2007).
 - **Antagonist** A drug or other chemical agent that inhibits the action of another substance (VandenBos, 2007).
 - Cannabichromene
(CBC)The second most prevalent cannabinoid found in the
cannabis plant. Main pharmacological characteristics: anti-
inflammatory, antifungal, antibiotic, and analgesic (United
Nations Office on Drugs and Crime, 2009).

Cannabinoid 1 (CB1) and Cannabinoid 2 (CB2) receptors	 Receptors that respond to cannabinoid drugs (e.g., THC, THCA). CB1 receptors characterized for biological responses. Nervous system responses to Δ9-THC and other cannabinoid receptor agonists include therapeutically beneficial effects of analgesia, attenuation of the nausea and vomiting in cancer chemotherapy, appetite stimulation in wasting syndromes, and decreased intestinal motility. CB2 receptors are expressed by immune cells located either outside or within the brain. When activated these receptors can modulate immune cell migration and cytokine release (Abood et al., 2019).
Cannabidoil (CBD)	The <i>second most commonly used</i> cannabinoid found in the cannabis plant. Main pharmacological characteristics: anxiolytic, anti-inflammatory, antipsychotic, antispasmodic, analgesic (United Nations Office on Drugs and Crime, 2009).
Cannabinoid profile	The amount of all cannabinoids in the plant (Commonwealth of Massachusetts, 2018).
Cannabinol (CBN)	CBN is a degradation product of THC (i.e., it does not occur naturally but is an artefact). Main pharmacological characteristics: sedative, anticonvulsant, antibiotic, anti- inflammatory (United Nations Office on Drugs and Crime, 2009).
Potency	The strength of a drug. In other words, the indirect measure of the amount of a cannabinoid in a sample of the cannabis (Newton, 2013).
Strain	Breeds of cannabis that have been manipulated or cloned to enhance certain properties or to increase market value (BC Partners for Mental Health and Addictions Information, 2009).

Tetrahydrocannabino (THC)	Also known as or delta-9-tetrahydrocannabinol. THC is
	usually present at a low level in fresh plant material and is
	considered to be derived artificially from THCA by
	decarboxylation during storage and consumption. Main
	pharmacological characteristics: euphoriant, anti-
	inflammatory, analgesic, and anti-emetic (United Nations
	Office on Drugs and Crime, 2009).
Tetrahydrocannabinolic	Precursor to THC. Main pharmacological characteristics:
Acid (THCA)	antibacterial and antibiotic (United Nations Office on Drugs
	and Crime, 2009).

PRODUCT TYPE

- **Concentrate** Refers to any material created by refining cannabis flowers, such as hash, dry sieve, and hash oils. Concentrates or extracts have much higher potency (Carlini, Garrett, & Harwick, 2017; Sagar, Lambros, Dahlgren, Smith, & Gruber, 2018).
 - **Edible** Cannabis products that are orally consumed. These products can contain THC, CBD, or a combination of both. Common edible products include cookies, brownies, candies, gummies, chocolates, beverages, or homemade goods (Colorado Department of Public Health and Environment, 2016).
 - **Hemp** The plant of the genus *Cannabis* or any part of the plant, whether growing or not, with a delta-9-tetrahydrocannabinol concentration that does not exceed 0.3% on a dry weight basis of any part of the plant of that genus (Commonwealth of Massachusetts, 2018).
 - **Marijuana** A slang term for the dried flowers, leaves, stems, and seeds of the cannabis plant (Government of Canada, 2019).

Recreational Any substance, in this case marijuana, that is used in aSubstance Use nontherapeutic manner for its effects on motor, sensory, or cognitive activities or on emotional state (VandenBos, 2007).

Retailer An entity licensed to purchase and deliver cannabis and cannabis products from cannabis establishments and to deliver, sell, or otherwise transfer cannabis and cannabis products to cannabis establishments and consumers (Commonwealth of Massachusetts, 2018).

Synthetic (e.g., K2/Spice) Various manmade chemicals that some people might use as an alternative to cannabis (Centers for Disease Control and Prevention, 2018).

- **Tincture** Cannabinoids are extracted into an alcohol or glycerin base, then dropped or sprayed orally (BC Partners for Mental Health and Addictions Information, 2009).
 - **Topical** Cannabis products such as lotions that are applied to the skin (BC Partners for Mental Health and Addictions Information, 2009).

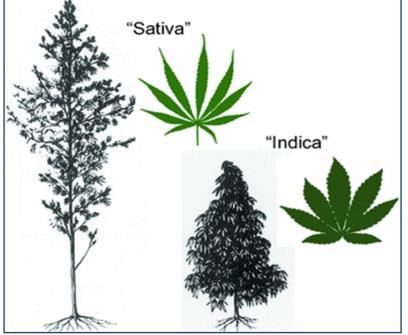
Medical Specific Product Types

Dronabinol A synthetic THC pharmaceutical approved in the U.S. for the
 (Marinol and syndros) increased appetite in HIV wasting disease (FDA, 2019).

- Nabilone A synthetic THC pharmaceutical approved in the U.S. for the (Cesamet) treatment of the nausea and vomiting associated with cancer chemotherapy (FDA, 2019).
- Schedule 1 Drugs, substances, or chemicals that have no currently acceptedDrug medical use and have a high potential for abuse. This federal list is established by the U.S. Drug Enforcement Administration (n.d.).

CANNABIS Any of three related plant species (Cannabis sativa, C. indica, or C. ruderalis) whose dried flowering, fruiting tops, or leaves are widely used as a recreational drug (i.e., marijuana). The principal psychoactive agent in these plants, THC, is concentrated in the resin, most of which is in the plants' flowering tops (VandenBos, 2007).

Cannabis Sativa vs. Cannabis Indica



• Cannabis Sativa is an annual herbaceous plant, characterized by tall growth, wide spaced branches, and long, thin leaves (Hazekamp, Tejkalová, & Papadimitriou, 2016). Sativa's key psychoactive constituent is $\Delta 9$ tetrahydrocannabinol [(D9 THC), Bonini, Permoli, Tambaro, Kumar, Maccarinelli, Memo, & Mastinu, 2018).

 Cannabis Indica is characterized by short, bushy plants with broad leaves (Hazekamp, Tejkalová, & Papadimitriou, 2016).

Figure 2. Cannabis Sativa and Cannabis Indica Plant (McPartland, 2017).

Other names for Cannabis

- Marijuana
- Ganja
- Pot
- Bud
- Mary Jane
- Hashish

For more information on slang terms for cannabis, please refer to the DEA report which can be accessed at <u>https://www.dea.gov/sites/default/files/resource-</u> center/Publications/Intel%20Products/DIR-020-

17%20Drug%20Slang%20Code%20Words.pdf.

PRODUCT USE

- Individualized amount of cannabinoids within products. Dosing Dosage/dosing depends on titration, which is the process of increasing medication amounts until the desired effect is achieved (Government of Canada, 2019).
 - The acquisition, cultivation, possession, processing (including Medical use of development of related products such as food, tinctures, cannabis aerosols, oils, or ointments), transfer, transportation, sale, distribution, dispensing, or administration of cannabis for the benefit of qualifying patients in the treatment of debilitating medical conditions or the symptoms thereof (Commonwealth of Massachusetts, 2018).
- The process in which a chemical enters the human body, Route of travels into organs and tissues, and is then metabolized into administration the body before elimination. The route of administration of cannabis has different effects. Inhalation of cannabis takes just minutes to produce effects, while the initial effects of cannabisinfused food products are not felt for 30-90 minutes. Gender, age, and weight can impact the rate of absorption and digestion of cannabis products (Barrus et al., 2016).

Recreational Types of Use

Dab/dabbing A method where a "dab" (small amount) of cannabis concentrate is placed on a preheated surface, creating concentrated cannabis vapor to be inhaled (Colorado Department of Public Health and Environment, 2016).

(vaporizer/ecigarette)

Electronic A vaporizing device with a rechargeable battery that heats **smoking device** material such as cannabis flower (bud) or liquids containing THC or nicotine to produce vapor for inhalation. Used as an alternative to smoking cannabis or tobacco (Colorado Department of Public Health and Environment, 2016).

> A method of cannabis use in cannabis vapor where, rather Vaping than smoke, is inhaled. Cannabis flower or concentrate is heated in a vaporizing device (vaporizer) to a temperature

below the point of combustion to produce vapor (Colorado Department of Public Health and Environment, 2016).

Vaporizer A different way to consume cannabis. A device that heats the plant material until the active ingredients are released as vapor (BC Partners for Mental Health and Addictions Information, 2009).

PRODUCT EFFECTS

- EndocannabinoidThe ECS consists of cannabinoid receptors (e.g., CB1R,
CB2R), the endogenous ligands that bind to these
cannabinoid receptors [e.g., anandamide and 2-
arachidonoylglycerol (2-AG)], and enzymes for their
biosynthesis and degradation [e.g., fatty acid amide
hydrolase (FAAH) and monoacylglyrecol lipase (MAGL)]
(Chye, Christensen, Solowij, & Yücel, 2019).
 - **Mycotoxin** A secondary metabolite of a microfungus that is capable of causing death or illness in humans and other animals. They include aflatoxin B1, aflatoxin B2, aflatoxin G1, aflatoxin G2, and ochratoxin A (Commonwealth of Massachusetts, 2018).
- Pharmokinetic/The absorption, distribution, metabolism, and excretion of aPharmodynamicsdrug and the effect the drug has on the body (Colorado
Department of Public Health and Environment, 2016).

OTHER TERMS

- Accessories Equipment, products, devices, or materials of any kind that are intended or designed for use in planting, propagating, cultivating, growing, harvesting, manufacturing, compounding, converting, producing, processing, preparing, testing, analyzing, packaging, repackaging, storing, containing, ingesting, inhaling, or otherwise introducing cannabis into the human body (Commonwealth of Massachusetts, 2018).
 - **Dispensary** A store than is registered to acquire, cultivate, process, transfer, transport, sell, distribute, dispense, and/or administer cannabis

products or related supplies (Commonwealth of Massachusetts, 2018).

- **Packaging** Any container or wrapper that might be used for enclosing or containing any cannabis goods for final retail sale. "Package" and "packaging" do not include a shipping container or outer wrapping used solely for the transport of cannabis goods in bulk quantity to a licensee.
- **ISO 17025** General requirements specified by the International Organization for Standardization/International Electrotechnical Commission (ISO/IEC) for the competence of testing and calibration laboratories.

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