Impairment may last up to 24 hours, without awareness effects. "The Cycle" created by Courtney Popp, WA TSRP

**Conjunctiva Tissue** (looks like pink eye in both eyes), **Lack of Convergence, Dilated Pupils, & No HGN** (when cannabis alone).

**Psychomotor** & or **Psychedelic**.

**Psycho-Physical Tests**: Generally slow performance; muscle tremors, especially in legs & arms.

**Information processing**: Likely diminished. Impaired memory & comprehension. Jumbled thought formation & lack of concentration.


**Sativa**: Produces the 'high' feeling (energetic). Less overpowering than the Indica 'stone.' Less likely to produce drowsiness. High described as: cerebral, energetic, creative, giggly & or psychedelic. *Less likely to produce drowsiness. High described as: cerebral, energetic, creative, giggly & or psychedelic.*


**ODOR**

- **Blunt**: Smell burnt marijuana, additive flavor for vaping, & maybe for edibles.

**MUSCLES**

- **Tremors**: Observed in extremities, upper torso, & eyelids (closed eyes).

**EYES**

- **ODOR**

- **Smell**: Burnt marijuana, additive flavor for vaping, & maybe for edibles.

**Cannabis Impairment Assessment**

**GET. BLOOD. FAST.**

**Impaired memory & comprehension. Jumbled thought formation & lack of concentration.**


Delta-9-THC - The main psychoactive substance found in marijuana.
AKA: delta-9-tetrahydrocannabinol (Δ9-THC), dronabinol

11-Hydroxy-THC - The main psychoactive metabolite of THC formed in the body after marijuana consumption. AKA: Hydroxy THC, 11-Hydroxy-Δ9-tetrahydrocannabinol (11-Hydroxy-Δ9-THC), 11-OH-THC

Delta-9 + Hydroxy = Impairment

11-nor-9-Carboxy-THC - The main secondary metabolite of THC formed after marijuana is consumed. It is NOT active, but indicates historical use. AKA: THC-COOH (most often seen this way), Carboxy THC, 11-nor-9-carboxy-delta-9-tetrahydrocannabinol (11-nor-9-carboxy-Δ9-THC), 11-COOH-THC

Cannabinoids - Group of active compounds found in marijuana.

Cannabidiol (CBD) - Non-psychoactive (a/k/a not impairing) cannabinoid. Found in medical strains.

Cannabinol (CBN) - THC metabolite (10% as psychoactive as THC), which may show recent or heavy use.

Chronic vs. Occasional - Terms denoting frequency of use.
  Chronic - Continuing for a long time or recurring frequently.
  Occasional - Happening infrequently and irregularly.

Psychoactive or Active - Causes euphoric and impairing effects (THC and 11-OH-THC).

Not active or inactive - Does NOT cause euphoric or impairing effects (THC-COOH).

Compensation - Behavior that develops either consciously or unconsciously to offset a deficiency.

Critical Tracking - A set of tasks used to determine impairment in a clinical setting.

Epidemiological - Is the study and analysis of the patterns, causes, and effects of health and disease conditions in defined populations.

First-order Elimination Kinetics - Elimination of a constant fraction per time unit of the drug quantity present and is proportional to the drug concentration.

Lateral Control - Control of side- to-side or sideways movement.

Limit of Detection (LOD) - Lowest quantity of a drug that can be distinguished from the absence of that drug.

Limit of Quantitation (LOQ) - Lowest amount of a drug in a sample that can be quantitatively determined.

Measurement of Uncertainty - Best estimate of how far a quantity might be from “true value.” If two people measure one cup of flour, the amount will always be different even if it’s not noticeable to the naked eye.

Metabolite - A chemical created in the body as part of the process of breaking down the parent compound (e.g. 11-OH-THC and THC-COOH).

Parent compound or parent drug - The drug in the original form that it is ingested (e.g. THC).

Per Se Law - Statutory assignment of a blood concentration above which is an offense to drive.

Permissible Inference - A legally specified fact that the fact finder may infer.

Pharmacokinetics - The movement of a drug into, through & out of the body - the time course of its absorption.

Plasma vs. Whole Blood
  Plasma - The colorless fluid part of blood, lymph, or milk, in which corpuscles or fat globules are suspended.
  Whole Blood - Blood drawn directly from the body from which none of the components (such as plasma or platelets) have been removed.

Titrated - Continuously measure & adjust the balance of [a substance].

Tolerance - The capacity of the body to endure or become less responsive to a substance.

INTERNET RESOURCES
  www.wsp.wa.gov/breathtest/dredocs.php (NHTSA/IACP Manuals)
  www.ndaajustice.org/ntlc_home.html (Nat’l Traffic Law Center)
  www.nih.gov/research-training (Research)
  www.decp.org (Int’l Drug Eval. & Classification Program)
Cannabis Impairment Quick Assessment
Document Observations of MENTAL & PHYSICAL Impairment

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**Indica**: Produces a ‘stoned’ feeling. Physically and mentally relaxing. Centered on the body. Enhances sensations of taste, touch, & sound.

**Sativa**: Produces the ‘high’ feeling (energetic). Less overpowering than the Indica ‘stone.’ Less likely to produce drowsiness. High described as: cerebral, energetic, creative, giggly & or psychedelic.

**Psycho-Physical Tests**: Generally slow performance; muscle tremors, especially in legs & arms.

**Information processing**: Likely diminished. May forget certain parts of instructions. Likened to attention deficit disorder, cognitive impairment.

**Modified Romberg**: Distorted internal clock. Eyelid Tremors.

**Impairment Peak**: 0-30 mins

**High Experience**: 2-3 hours

Impairment may last up to 24 hours, without awareness effects.

ONSET OF EFFECTS DIFFERS DEPENDING ON MANNER OF INGESTION
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**Measurement of Uncertainty** - Best estimate of how far a quantity might be from “true value.”

**CO Permissible Inference 5 ng/mL** - If at time of driving, driver had 5 ng/mL delta-9 in whole blood, jury may infer defendant was DUI. CO does not have a per se law (statutory assignment of a blood concentration above which is an offense to drive)!

**Titrate** - Continuously measure & adjust the balance of [a substance].

**INTERNET RESOURCES**

- [www.ndaajustice.org/ntlc_home.html](http://www.ndaajustice.org/ntlc_home.html) (Nat’l Traffic Law Center)
- [www.nih.gov/research-training](http://www.nih.gov/research-training) (Research)
- [www.decp.org](http://www.decp.org) (Int’l Drug Eval. & Classification Program)