



## Cannabis Hyperemesis Syndrome and Cyclic Vomiting Syndrome

Dale Gieringer, Ph.D, Director, California NORML

Increasing numbers of heavy cannabis consumers are reported to be suffering severe nausea, vomiting, and intestinal cramps from a condition known as cannabis hyperemesis syndrome (CHS).

CHS is a relatively rare diagnosis that was unknown until 20 years ago, but it has become more common in recent years with the increased popularity of higher-potency THC concentrates.

CHS typically occurs in subjects who chronically consume large doses of THC over periods of months to several years. Subjects typically begin by experiencing episodic nausea, vomiting, and abdominal pain, which they often attempt to treat by using more cannabis. This eventually develops into attacks of intense, persistent cyclic vomiting, which occur without warning and are accompanied by sharp abdominal pain for up to 24 – 48 hours. Patients typically find that they can temporarily relieve their symptoms by bathing in hot water. However, symptoms return once the water cools or bathing is stopped. CHS may be distinguished from other diseases that cause nausea and vomiting by the compulsion of patients to bathe in hot water.

The only way of stopping CHS attacks is to completely abstain from cannabis. Many users resist doing this, mistakenly thinking that cannabis will help relieve their symptoms. Recovery may take several days or weeks. Patients who resume using cannabis typically experience a relapse of symptoms, even after long abstention. Some CHS patients may be able to tolerate very low THC cannabis after recovering, but others cannot.

Those suffering from acute symptoms often present themselves to the emergency room for treatment. Many are reluctant to discuss their cannabis use, so the actual number of CHS cases may be under-reported. Symptoms are often resistant to standard anti-nausea treatment. In severe cases, intravenous fluids may be necessary to reverse dehydration.

CHS is caused by intensive exposure to delta-9 THC and related psychoactive compounds, including synthetic delta-8, rather than by exposure to contaminants. Consumers may be able to reduce their risk of developing CHS by including CBD in their regimen; however, CHS attacks are not readily relieved by CBD products, as they contain traces of THC.

The physiological cause of CHS is unclear, but it may be related to genetic factors. Given that THC is an effective treatment for nausea at moderate doses, it is counterintuitive that heavy doses can produce the opposite effect in some subjects. However, other so-called “paradoxical” effects are also known to occur with cannabis overconsumption. CHS appears to be caused by overstimulation of the body’s cannabinoid receptors.



CHS is easily confused with a similar disorder, cyclic vomiting syndrome (CVS), which is also characterized by nausea, vomiting and abdominal pain, but it is not caused by prior cannabis use. Symptoms often start in childhood, but they may also develop later in life. CVS has been known for over a century. It is often associated with migraines, as well as anxiety, depression and opioid and cannabis use. Many patients use cannabis to treat CVS, making it difficult to distinguish from CHS. Patients experiencing these symptoms should consult a physician, and the continuation of symptoms after cessation of cannabis use could be indicative of a medical condition other than CHS.

The University of California at Irvine is conducting a survey about CHS. Interested patients are invited to [apply](#).

The bottom line for consumers: avoid chronic, intensive use of THC-rich cannabis, such as dabs, infused pre-rolls, and hashish or vape concentrates. If you experience episodic attacks of nausea, vomiting and intestinal cramps, try abstaining from cannabis rather than escalating your consumption.

#### **Additional References**

- [Cannabinoid Hyperemesis Syndrome: Genetic Susceptibility to Toxic Exposure](#), Frontiers in Toxicology, 2024
- [Cyclic Vomiting Syndrome and Cannabis Hyperemesis Syndrome: The State of the Science](#), Gastroenterology Nursing, 2023
- [Cannabinoid Hyperemesis Syndrome](#), StatPearls, 2023
- [Cannabis Hyperemesis Syndrome](#), ProjectCBD, 2018