

# **Cannabinoid Hyperemesis Syndrome (CHS)**

## **What is it?**

Repeated and severe bouts of nausea, vomiting and crampy abdominal pain occurring in people who are daily, long-term users of marijuana. Episodes can be severe and lead to dehydration and weight loss.

## **What causes it?**

Marijuana and its compounds have a complex effect on the body. In the brain, marijuana seems to help prevent nausea and vomiting, especially in patients undergoing chemotherapy. In the gastrointestinal system, marijuana can change the time it takes the stomach to empty. It can also affect the esophageal sphincter which opens and closes between the esophagus and the stomach. Both of these issues can cause nausea and vomiting.

## **If marijuana is used as a treatment for nausea, how can it cause nausea and vomiting?**

The exact cause of CHS is unknown at this time. Marijuana has many active compounds. Research shows that some of these compounds bind to molecules in the brain which can reduce vomiting. Other compounds can bind to molecules in the stomach and intestines which seem to promote vomiting.

Many times, when people are having increased nausea and vomiting, they will increase their use of marijuana thinking it will lessen their symptoms but it only makes these symptoms worse.

## **Why don't all Marijuana users develop CHS?**

CHS was first recognized in 2004. It was initially thought to be a rare occurrence among people with years of heavy marijuana use. Recent studies have shown that CHS can occur in people who have used marijuana less than a year and in some people who use marijuana on an intermittent basis.

While the rise in the number of people affected with CHS is not completely understood, it is suspected that the marijuana available today is of a higher quality and higher potency than in the past. It may have a THC (tetrahydrocannabinol – an active compound in marijuana) concentration that is more than double what it was in 1990.

## **How is CHS treated?**

The only effective, long-term treatment of CHS is to completely stop using marijuana. During an episode of vomiting, IV fluids can help with symptoms. Narcotic pain medication should be avoided as it can make symptoms worse. Prescription anti-nausea medication rarely helps symptoms. Some people with CHS self-treat with hot showers to temporarily relieve symptoms.

## **What are the possible complications of CHS?**

Severe vomiting can lead to dehydration. It can cause electrolyte imbalances in your blood. If untreated, it can lead to serious complications such as muscle spasms, weakness, seizures, kidney failure, heart arrhythmias and shock.

You can prevent CHS by stopping marijuana use in any form. You may not believe that marijuana is causing these symptoms. You may have used marijuana for many years without having a problem. People with CHS need to completely stop using marijuana. If you need help to stop using marijuana, please see your health care provider or visit [www.drugabuse.gov/patients-families](http://www.drugabuse.gov/patients-families).