



Cannabinoid hyperemesis syndrome (CHS)

Information for patients from the Alcohol and Substance Misuse Team

You have been diagnosed with cannabinoid hyperemesis syndrome (CHS). This leaflet explains:

- what cannabinoid hyperemesis syndrome is
- the symptoms to look out for
- how it is treated.

We hope this leaflet answers some of the questions you may have. If you have any further questions or concerns, please speak to your own GP or contact the local addiction services in your area.

What is cannabinoid hyperemesis syndrome?

Cannabinoid hyperemesis syndrome (CHS) is a rare condition caused by daily and long-term use of marijuana. The syndrome presents with repeated and severe bouts of vomiting (being sick).

Marijuana has several active substances. These substances bind to molecules found in the body and affect the way they work. For example:

- They affect the molecules found in the brain, and cause the drug 'high' that users feel.
- They also affect the way the molecules in the gut work, and can change the time it takes for the stomach to empty.
- The drug also affects the oesophageal sphincter. The sphincter is the tight band of muscle that opens and closes to let food pass from the oesophagus (food pipe) into the stomach.

The effects of marijuana on your digestive system are what lead to the main symptoms of CHS.

What causes CHS?

Marijuana is a complex substance, that affects everyone differently.

The main ingredient in marijuana is called THC, which has anti-sickness effects. This is why marijuana is regularly prescribed for nausea caused by chemotherapy treatment. However, if used over a long period of time, marijuana seems to have the opposite effect on the digestive system. It makes you more likely to feel and be sick.

Research is being carried out to explain why only some long-term users of marijuana experience CHS. At the moment we are unsure of the reasons why this happens.

What are the symptoms?

The symptoms of CHS are divided into three phases.

- **Prodromal phase**

The prodromal phase is the first phase. During this phase, symptoms may include early morning nausea, tummy (abdominal) pain, and a fear of vomiting.

During this phase, most people will eat normally. Some people continue to use marijuana because they think it will help stop the nausea. This phase may last for weeks, months or years.

- **Hyperemetic phase**

Symptoms may include:

- ongoing nausea (feeling sick)
- repeated episodes of vomiting (being sick)
- tummy pain
- eating less food and weight loss
- dehydration (not drinking enough).

During this phase, vomiting may often be intense and overwhelming. Many people take a lot of hot showers during the day to help with their nausea. The hyperemetic phase will continue until you stop using marijuana.

- **Recovery phase**

The recovery phase will begin once you stop using marijuana. During this phase, the symptoms will go away and you will be able to eat normally again.

This phase can last days or months. If you try marijuana again, your symptoms are likely to return.

When should I call my healthcare provider?

Contact 111 or go to your nearest Emergency Department if you have had severe vomiting for a day or more.

How is CHS diagnosed?

Many health problems can cause repeated vomiting. To make a diagnosis, your healthcare provider will ask you about your symptoms and your past health. They will also perform a physical examination, including an examination of your tummy.

Your healthcare provider may do further tests to rule out other causes of vomiting. **Telling your healthcare provider that you use marijuana daily can speed up your diagnosis.**

How is CHS treated?

If you have severe vomiting, you may need to stay in hospital for a short time. During the hyperemetic phase, you may need the following treatments:

- IV (intravenous) fluid replacement for dehydration
- anti-sickness medicines
- anti-histamines
- pain-relief medicines
- proton-pump inhibitors (to treat stomach inflammation)
- regular hot showers
- rubbing capsaicin cream on to your belly, to decrease pain and sickness (may help in some individuals).

Symptoms will often ease after a day or two, unless marijuana is used again. If you stop using marijuana, your symptoms should not come back.

Below are some short-term medications that can help CHS. However, whether these are an option for you will be decided by your own doctor, or the Emergency Department's doctors or advanced nurse practitioners.

- **Low dose Benzodiazepines** can only be prescribed by the Emergency Department's doctors or advanced nurse practitioners.
- **Anti-psychotics** can only be prescribed by your own doctor or mental health practitioner. **These will not be prescribed by Emergency Department doctors**, unless you are admitted to hospital and may be prescribed anti-psychotics for a very short-time only.
- **Tricyclic antidepressants.** Your own doctor may prescribe these in severe cases of CHS. **These will not be prescribed by the Emergency Department's doctors or advanced nurse practitioners.**

To fully recover, you will need to stop using cannabis all together. This may be challenging and some people may withdraw, if they choose to stop using cannabis.

What are cannabis withdrawal symptoms?

Cannabis withdrawal can start approximately 24 to 72 hours after stopping heavy use. Although everyone is different, and withdrawal symptoms may not be the same for everyone. Symptoms may depend of how often you use cannabis and your overall health.

Withdrawal symptoms can include:

- cravings
- irritability
- anxiety
- depression
- sleep problems, which can last a few days or a couple weeks
- changes in appetite
- flu like symptoms, for example, headache, sweating, shakiness, tremors, fevers and chills
- tummy pain
- weakness or tiredness.

Some people and their families may need further support to understand CHS. Contact your local addiction services for further advice.

What are the possible complications of CHS?

Very severe, prolonged vomiting may lead to dehydration. It may also lead to electrolyte problems in your blood. If left untreated, these can cause rare complications, such as:

- muscle spasms or weakness
- seizures
- kidney failure
- heart rhythm abnormalities and shock
- brain swelling (cerebral oedema).

What happens if I refuse treatment?

If you choose not to be treated for CHS, the symptoms and complications listed above will continue. This could lead to serious health conditions (caused by malnutrition), and possible organ failure.

If you have any concerns or questions about the treatment options, please speak to your doctor.

What can I do to prevent CHS?

Only stopping marijuana use completely will prevent CHS. Cutting down your use will not get rid of CHS.

You may not want to believe that marijuana may be the underlying cause of your symptoms. This might be because you have used it for many years without having any problems, but CHS can take several years to develop.

Stopping cannabis use may lead to other health benefits, including:

- better lung function
- improved memory and thinking skills
- better sleep
- reduced risk of depression and anxiety.

Further support and advice

Below are some of the services available to help you quit marijuana and other drugs based on where you live.

- **The BeYou Project** (<https://thebeyouproject.co.uk/>)
LGBTQ+ support for young people aged 8 to 25 years, Kent and Medway.
Instagram: @beyoukent
Email (beyou@porchlight.org.uk)
- **FRANK** (<https://www.talktofrank.com>)
Telephone: 0300 123 6600
- **Forward Trust**
Telephone: 0300 304 8007
- **Kent and Medway Eating Disorder Service**
Telephone: 0300 300 1980
Email (KentandMedwayEatingDisordersService@nelft.nhs.uk)
- **Kooth** (<https://kooth.com>)
Anonymous online mental health support for 10 to 25 years of age, 24 hours a day, 7 days a week.
- **Release the Pressure**
Text: Kent to 85 25 8
Telephone: 08001 070160 (24 hour helpline)
- **Student Nightline**
Listening and emotional support information services, run by students for students.
Telephone: 01227 824848 (8pm to 8am, Friday and Saturday)
Email (listening.response@canterbury.nightline.ac.uk)
- **Thanet Safe Haven**
Mental Health support for people over 16 years of age.
Telephone: 07850 655877 or 07483 918233 (6pm to 11pm)
Telephone: 08001 070160 (24 hour helpline)
- **WithYou**
For under 17's, also signposting for people under 21 years of age.
Telephone: 01795 500881

References

1. Cleveland Clinic (2024). Cannabis Hyperemesis Syndrome (CHS). (<https://my.clevelandclinic.org/health/diseases/21665-cannabis-hyperemesis-syndrome>)
2. Bonnet U, Preuss UW. The cannabis withdrawal syndrome: current insights. Substance Abuse and Rehabilitation. 27 April 2017; volume 8(8): pp.9-37. (<https://www.dovepress.com/the-cannabis-withdrawal-syndrome-current-insights-peer-reviewed-fulltext-article-SAR>)

This leaflet has been produced with and for patients.

Please let us know:

- If you have any accessibility needs; this includes needing a hearing loop or wanting someone to come with you to your appointment.
- If you need an interpreter.
- If you need this information in another format (such as Braille, audio, large print or Easy Read).

You can let us know this by:

- Visiting the Trust web site (<https://www.ekhuft.nhs.uk/ais>).
- Calling the number at the top of your appointment letter.
- Adding this information to the Patient Portal (<https://pp.ekhuft.nhs.uk/login>).
- Telling a member of staff at your next appointment.

Any complaints, comments, concerns or compliments, please speak to a member of your healthcare team. Or contact the Patient Advice and Liaison Service on 01227 783145 or email (ekh-tr.pals@nhs.net).

Patients should not bring large sums of money or valuables into hospital. Please note that East Kent Hospitals accepts no responsibility for the loss or damage to personal property, unless the property has been handed into Trust staff for safe-keeping.

Further patient information leaflets are available via the East Kent Hospitals' web site (<https://www.ekhuft.nhs.uk/patient-information>).

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