CONDITION

Camphor overdose

Learn how camphor poisoning happens, which symptoms need emergency care, and how healthcare professionals diagnose and treat a camphor overdose.

WHAT IT IS
Poisoning from too much camphor exposure

BODY SYSTEM
Brain and nervous system

MAIN SYMPTOMS
Vomiting, confusion, seizures, breathing problems

WHAT CAUSES IT
Swallowing, inhaling, or absorbing too much camphor

HOW IT IS DIAGNOSED
Exposure history and symptoms

MAIN TREATMENT
Supportive care, seizure control, breathing support

CAN IT BE CURED?
Sometimes, camphor clears with supportive care

IS IT AN EMERGENCY?
Sometimes, with seizures or difficulty breathing

LONG-TERM OUTLOOK
Often full recovery, with possible prolonged recovery or death

Overview

Camphor overdose is poisoning caused by swallowing, breathing in, or absorbing too much camphor. Camphor is a strong-smelling substance found in some chest rubs, pain-relief products, oils, inhalants, moth repellents, and traditional or religious products. The amount and concentration vary widely between products.

Camphor is absorbed quickly. After it enters the body, it can affect the brain and nervous system. Serious poisoning may cause confusion, seizures, loss of consciousness, or breathing problems. Symptoms often begin within minutes, so it is important not to wait for symptoms before asking for help after a suspected ingestion.

Children are at particular risk because a small volume of a concentrated product may be harmful for their body size. An exposure can happen when a child drinks a liquid product, chews

a solid block, or gets camphor oil on the skin. Adults can also be poisoned through accidental use, intentional ingestion, or excessive use of concentrated products.

There is no specific antidote that reverses camphor poisoning. Treatment focuses on protecting breathing, controlling seizures, and supporting the body while the camphor is cleared. With prompt assessment and supportive care, many people recover fully.

If someone may have swallowed camphor, contact a poison center immediately. In the United States, call Poison Help at 1-800-222-1222 . Call emergency services right away for a seizure, severe confusion, collapse, loss of consciousness, or difficulty breathing.

Symptoms

Symptoms can develop rapidly, sometimes within several minutes of exposure. A person who seems well at first may still need advice from a poison specialist because the product's concentration and the amount swallowed may be uncertain.

Early symptoms may include:

Effects on the brain and nervous system may include agitation, unusual behavior, confusion, muscle twitching, poor coordination, tremors, or seizures. A seizure is a sudden burst of abnormal electrical activity in the brain. It may cause stiffening, jerking movements, staring, or loss of awareness.

Severe poisoning may lead to extreme sleepiness, coma, slowed or difficult breathing, or low oxygen levels. A fast heartbeat may occur. Repeated or prolonged seizures can place additional stress on the brain, muscles, kidneys, and other organs.

Skin exposure usually causes redness, burning, or irritation. However, camphor can be absorbed through the skin, especially when concentrated products are used over a large area, applied repeatedly, covered with a tight dressing, or placed on damaged skin.

Breathing camphor vapor may irritate the eyes, nose, throat, and lungs. Risk can increase when concentrated products are heated or used in a poorly ventilated space.

Seek emergency help immediately if the person has:

Do not wait for these symptoms before contacting a poison center after a suspected ingestion.

- Burning or irritation in the mouth and throat
- Nausea, vomiting, or stomach pain
- Headache, dizziness, restlessness, or anxiety

- A strong camphor smell on the breath or clothing
- A seizure or repeated muscle jerking
- Trouble breathing, blue or gray lips, or severe choking
- Collapse, fainting, or loss of consciousness
- Severe confusion, extreme agitation, or inability to stay awake

Causes and risk factors

Camphor poisoning often happens when a product is swallowed accidentally. Young children may mistake a liquid for a drink or place a camphor-containing block in their mouth. Products transferred into an unmarked bottle are especially easy to confuse with food, medicine, or another household liquid.

Other causes include taking a camphor product for an unapproved purpose, using more than the product label directs, or applying a concentrated preparation to a large skin area. Homemade and imported products may not have clear ingredient lists or reliable concentration information.

Risk depends on several details:

Young children have less body mass, so a given amount can produce a larger dose for their size. They may also be unable to describe what happened.

The word "natural" does not mean a product is safe to swallow or use in unlimited amounts. Pure camphor oil and concentrated preparations can be particularly hazardous. The smell or appearance of a product cannot reliably show how much camphor it contains.

- The amount and concentration of camphor
- Whether it was swallowed, inhaled, or applied to the skin
- The person's body size and age
- Whether exposure happened once or repeatedly
- Whether the skin was broken, burned, or covered
- How much time has passed and whether symptoms have begun

Diagnosis

Camphor overdose is usually diagnosed from the exposure history and the person's

symptoms. Healthcare professionals will ask what product was involved, its concentration if known, how the exposure occurred, the possible amount, and the time it happened.

Bring the original container or a clear photograph of its label if this can be done safely. Do not delay emergency care while searching for packaging.

Clinicians check breathing, oxygen level, heart rate, blood pressure, temperature, alertness, and neurological function. They may look for signs of vomiting, aspiration, skin irritation, or injury during a seizure. Aspiration means that vomit or another substance has entered the lungs.

There is no routinely available rapid blood test that confirms camphor poisoning. Blood camphor levels are not usually needed to guide immediate care. Tests may instead check blood glucose, electrolytes, kidney function, acid levels, or muscle injury when symptoms are significant. An electrocardiogram may be used to assess heart rhythm. Chest imaging may be needed if aspiration or another breathing complication is suspected.

Because seizures and confusion have many possible causes, clinicians may also evaluate for other medicines, chemicals, illness, or injury when the exposure history is unclear.

Treatment and management

What to do immediately

For any suspected camphor ingestion, contact a poison center promptly, even if the person has no symptoms. Poison specialists can assess the product, route of exposure, timing, and possible amount. Outside the United States, use your local poison information service or emergency number.

Do not induce vomiting. Vomiting can increase the chance that camphor enters the lungs, particularly if the person becomes confused or has a seizure. Do not give activated charcoal, food, drink, oil, or a home remedy unless a poison specialist or healthcare professional specifically instructs you to do so.

For camphor on the skin, remove contaminated clothing and wash the skin thoroughly with soap and running water. Avoid spreading the product to other areas. For eye exposure, rinse the eye gently with clean, lukewarm water for 15 to 20 minutes and contact a poison center for further instructions.

After breathing concentrated vapor, move to fresh air if this can be done without entering an unsafe space. Seek help for coughing, wheezing, chest tightness, confusion, or other symptoms.

If a seizure occurs:

Care in a medical setting

Emergency treatment begins with supporting the airway, breathing, and circulation. Oxygen may be given. A person who cannot protect their airway or breathe adequately may need a breathing tube and mechanical ventilation.

Seizures are usually treated with medicines that quickly calm abnormal electrical activity in the brain. Additional seizure treatment may be needed if the first medicine does not work. Healthcare professionals also monitor temperature, blood pressure, heart rhythm, oxygen level, and mental status.

Intravenous fluids may be used when vomiting, poor intake, low blood pressure, or other clinical findings make them necessary. Other treatments address complications such as aspiration or muscle injury.

Activated charcoal is not routinely used for camphor poisoning. Camphor is absorbed quickly, and charcoal can enter the lungs if vomiting or seizures occur. A medical toxicologist or poison center can advise whether any digestive-tract decontamination is appropriate in an unusual situation.

There is no antidote for camphor. Observation time depends on the exposure, symptoms, and advice from toxicology specialists. A person with seizures, abnormal alertness, breathing problems, or other significant findings may need hospital admission and close monitoring.

- Move hard or sharp objects away.
- Place the person on their side when possible.
- Protect the head with something soft.
- Do not restrain the person.
- Do not put anything in the mouth.
- Call emergency services and note how long the seizure lasts.

Complications

The most important complication is a seizure. A prolonged or repeated seizure may reduce oxygen delivery, raise body temperature, or cause muscle breakdown. Severe muscle breakdown can place stress on the kidneys.

Vomiting during confusion or a seizure can lead to aspiration. This may cause lung irritation, low oxygen, or aspiration pneumonia. Falls, head injuries, and tongue injuries can also occur

during a seizure.

Severe poisoning can cause coma or respiratory failure, meaning the person cannot breathe well enough without support. Fatal poisoning is possible, although prompt poison-center guidance and emergency treatment can reduce risk.

Long-term effects are not expected after many uncomplicated exposures. Recovery may take longer when there has been a prolonged seizure, low oxygen, aspiration, or another serious complication.

Follow up

Follow the discharge instructions provided by the emergency department, poison center, or treating clinician. These instructions may include watching for changes in alertness, breathing, vomiting, coordination, or behavior.

Seek urgent medical reassessment after discharge if the person develops unusual sleepiness, confusion, repeated vomiting, weakness, trouble walking, or worsening cough. Call emergency services for a seizure, loss of consciousness, severe breathing difficulty, or blue or gray lips.

Routine follow-up may be advised after a serious exposure, especially if there was a prolonged seizure, aspiration, muscle injury, kidney stress, or time in intensive care. The treating clinician can explain whether repeat laboratory testing or neurological assessment is needed.

To reduce the chance of another exposure:

If an exposure was intentional, follow-up should also address emotional safety and access to mental health support. A healthcare professional can help create a safe plan without judgment.

- Keep camphor products locked away and out of children's sight and reach.
- Store products in their original, labeled containers.
- Do not place camphor oils or blocks in drink bottles or food containers.
- Follow the label and avoid using concentrated products in unapproved ways.
- Do not apply camphor to broken skin or cover it with a tight dressing unless the product directions specifically allow this.
- Dispose of unwanted products according to local household chemical guidance.

Sources

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