CONDITION

Depilatory poisoning

Depilatory poisoning is harmful exposure to the chemicals in products that remove unwanted hair.

WHAT IT IS
Harm from swallowing or contacting chemical hair-removal products

BODY SYSTEM
Skin, eyes, mouth, throat, lungs, and digestive system

MAIN SYMPTOMS
Burning pain, redness, vomiting, trouble swallowing

WHAT CAUSES IT
Caustic chemicals in depilatory creams, liquids, or powders

HOW IT IS DIAGNOSED
Exposure history, examination, and targeted endoscopy or imaging

MAIN TREATMENT
Immediate rinsing, poison-center guidance, and supportive hospital care

CAN IT BE CURED?
Yes - most recover with prompt care

IS IT AN EMERGENCY?
Sometimes - trouble breathing, drooling, or repeated vomiting

LONG-TERM OUTLOOK
Usually full recovery; deep burns may scar

Overview

Depilatories are creams, lotions, gels, or powders that chemically weaken hair so it can be wiped away. Because they break down hair proteins, they can also irritate or burn living tissue.

Depilatory poisoning is an acute chemical injury caused by swallowing a product, leaving it on the skin too long, getting it in the eyes, or breathing irritating fumes. Severity depends on the ingredients, amount, concentration, contact time, and body part exposed. Swallowing a strongly alkaline product can burn the mouth, esophagus, or stomach.

Children may taste products they find at home. Adults may be exposed through accidents, incorrect use, or intentional swallowing. Prompt first aid and poison-center guidance can limit further injury.

Symptoms

Symptoms may begin within minutes, although internal injuries are not always immediately obvious.

Skin exposure can cause:

Eye exposure may cause intense pain, watering, redness, swelling, blurred vision, or sensitivity to light. Even a small amount can injure an eye.

After swallowing a depilatory, symptoms may include burning in the lips, mouth, throat, chest, or upper abdomen; drooling; gagging; vomiting; coughing; hoarseness; or difficulty swallowing. Vomit may contain blood after a significant burn.

Coughing, noisy breathing, shortness of breath, or voice changes may indicate airway irritation or swelling. Breathing problems can also occur if the product or vomit enters the lungs.

Visible mouth burns may be absent even when the esophagus is injured, particularly after a substantial or intentional ingestion.

- Redness, stinging, itching, or burning
- Tenderness, peeling, or changes in skin color
- Blisters or open areas after a deeper burn

Causes and risk factors

Depilatories often contain thioglycolates or sulfides, which break chemical bonds in hair. Many also contain alkaline ingredients with a high pH. Strong alkalis can cause chemical burns. Formulas vary, so the package or ingredient list is important when assessing an exposure.

The chance of injury increases when someone:

Mild irritation during correct use is not always poisoning. Allergic reactions also differ from caustic burns, although both can cause redness and discomfort. Severe or persistent reactions need medical assessment.

- Swallows a concentrated or large amount
- Leaves the product on longer than directed
- Applies it to broken, inflamed, recently shaved, or sensitive skin
- Uses it near the eyes, inside the nose, or on genital tissue
- Mixes it with household or cosmetic chemicals

- Stores it within a child's reach
- Transfers it to an unlabelled food or drink container

Diagnosis

There is no single blood test for depilatory poisoning. Diagnosis is based on the product, amount, route and time of exposure, symptoms, and examination. Bring the container, label, or a clear photograph if possible.

A healthcare professional may examine the skin, eyes, mouth, throat, breathing, and abdomen, and check vital signs and hydration. Blood tests can identify changes in salts, acid balance, kidney function, or inflammation but cannot show how deeply the esophagus is burned.

Endoscopy may be recommended after a significant caustic ingestion. A flexible camera is passed through the mouth to examine the esophagus and stomach. It is not needed after every small exposure; the decision depends on the product, amount, symptoms, and specialist assessment.

Chest or abdominal imaging may be needed for breathing problems, severe pain, or concern about a hole in the esophagus or stomach. CT can help assess deep injury and complications.

Treatment and management

Stop contact with the product. Remove contaminated clothing or jewellery and rinse exposed skin with plenty of room-temperature running water. Do not scrub or apply another chemical to neutralize it.

For eye exposure, begin gentle rinsing immediately with clean, lukewarm water. Remove contact lenses if they come out easily, but do not delay rinsing. Ongoing pain, redness, or blurred vision requires prompt assessment.

After swallowing a depilatory, gently rinse the mouth and spit out the water. Do not make the person vomit. This can expose the esophagus and airway again. Do not use vinegar, baking soda, or other substances to neutralize the product because the reaction may generate heat and worsen injury.

Contact a poison center promptly with the exact product and exposure details. In the United States, call Poison Help at 1-800-222-1222. Elsewhere, use the local poison-information service. Do not give food, drink, activated charcoal, or home remedies unless specifically advised.

Hospital care may include pain relief, intravenous fluids, nausea treatment, and breathing monitoring. Severe airway swelling may require a breathing tube. Activated charcoal and stomach pumping are generally unsuitable for caustic products. Steroids and antibiotics like amoxicillin or doxycycline are not routinely used but may be considered in selected cases.

Deep tissue damage or a perforation may require surgery. Eye injuries may need specialist treatment and follow-up.

Complications

Most minor skin exposures heal without lasting problems. Deeper burns may become infected, alter skin color, or scar.

A serious internal burn can damage or perforate the esophagus or stomach, allowing digestive contents to leak into the chest or abdomen. This is an emergency.

Scar tissue may later narrow the esophagus, causing food to stick or swallowing to become increasingly difficult over weeks or months. Some strictures require repeated procedures to widen the passage.

Other complications include lung inflammation after aspiration, vocal cord injury, dehydration, bleeding, and lasting vision problems.

Prevention

Keep depilatories in their original, labelled containers and locked away from children. Never transfer them into cups, jars, or drink bottles, and replace the cap after use.

Follow directions about where the product may be applied and how long it may remain on the skin. Do not use it on broken, inflamed, recently shaved, or irritated skin. Avoid areas excluded by the label, which may include the face or genital area.

Wash your hands after use and keep them away from your eyes. Do not mix depilatories with cleaners, acids, or other cosmetic chemicals. Use adequate ventilation if the label advises it.

Dispose of unwanted products according to local household chemical guidance. If someone is at risk of intentional poisoning, reduce access to caustic products and seek mental health support.

Living with it and what to expect

Mild skin irritation often improves after rinsing, although tenderness or discoloration may last longer. Deeper burns may need dressings and follow-up while new skin forms.

After a minor accidental taste without symptoms, a poison center may recommend observation at home. Larger exposures or swallowing, breathing, or persistent pain symptoms may require assessment and monitoring.

Early care after serious ingestion focuses on airway safety, pain control, nutrition, and determining injury depth. Food and drink may be restricted temporarily if swallowing is unsafe.

Deeper esophageal burns can cause swallowing problems during healing. Follow-up may include endoscopy, imaging, nutrition support, or procedures to stretch a narrowed area. New difficulty swallowing weeks or months later must not be ignored.

Many people recover fully after limited exposure and prompt rinsing. Long-term effects are more likely after deep burns or injury to the airway or eyes. Recovery after intentional exposure may also include confidential mental health care and safety planning.

When to get medical help

Call emergency services now if the person has:

Do not wait for symptoms after an intentional ingestion. Keep the container nearby for responders, but do not delay calling.

Contact a poison center promptly after any swallowed exposure, even if symptoms seem mild. Seek urgent advice after eye exposure, concentrated-product exposure, or exposure involving a young child.

Prompt medical assessment is needed for ongoing eye pain, blurred vision, skin blistering, worsening redness, persistent coughing, hoarseness, painful swallowing, or difficulty keeping down fluids.

Follow-up may be needed after a deeper skin, eye, or internal burn. Arrange medical review if wounds are not healing, pain worsens, or swallowing becomes more difficult.

- Trouble breathing, noisy breathing, blue or grey lips, or collapse
- Severe throat, chest, or abdominal pain
- Drooling or inability to swallow saliva
- Vomiting blood or repeated vomiting
- Confusion, unusual drowsiness, or a seizure

- A known large or intentional ingestion

Common questions

What should I do if I swallowed a small amount of hair-removal cream?

Rinse your mouth gently and spit out the water. Do not induce vomiting or neutralize the product. Contact a poison center with the product name, ingredients, estimated amount, exposure time, and symptoms. Call emergency services for trouble breathing, drooling, severe pain, or repeated vomiting.

Can depilatory cream burn my skin?

Yes. Burns are more likely if the product is left on too long or applied to damaged or sensitive skin. Remove it and rinse with plenty of running water. Blisters, severe pain, open skin, or worsening redness need medical assessment.

What happens if hair-removal cream gets in my eye?

Rinse immediately with clean, lukewarm water. Do not rub the eye or add other chemicals. Contact a poison center and seek prompt care if pain, redness, tearing, or blurred vision continues.

Should I make someone vomit after swallowing a depilatory?

No. Vomiting re-exposes the throat and may allow the chemical to enter the lungs. Follow poison-center or emergency-professional instructions.

Will swallowing depilatory cream cause permanent damage?

Many limited exposures do not. Deep burns can scar or narrow the esophagus, and severe eye injuries can affect vision. Risk depends on the product, amount, symptoms, examination, and any endoscopy or imaging findings.

How long after exposure can problems appear?

Burning often begins quickly, while airway swelling or deeper injury may develop over hours. Scar-related swallowing difficulty can appear weeks or months later. New or worsening symptoms need medical review.

Sources

- MedlinePlus Medical Encyclopedia: Depilatory poisoning , U.S. National Library of Medicine

- Clinical Practice Guideline: Corrosives - Caustic Poisoning , Royal Children's Hospital Melbourne
- Caustic Substance Poisoning , Merck Manual Consumer Version
- Management of esophageal caustic injury , World Journal of Gastrointestinal Pharmacology and Therapeutics , 2017
- Esophageal emergencies: WSES guidelines , World Society of Emergency Surgery, 2019