CONDITION

# Herpetic stomatitis

Herpetic stomatitis is a painful infection that causes widespread mouth sores and inflamed gums.

**WHAT IT IS**
Painful herpes infection of the mouth and gums

**BODY SYSTEM**
Mouth and immune system

**MAIN SYMPTOMS**
Mouth ulcers, swollen gums, fever, difficulty drinking

**WHAT CAUSES IT**
Herpes simplex virus infection

**HOW IT IS DIAGNOSED**
Mouth examination; lesion PCR when confirmation is needed

**MAIN TREATMENT**
Fluids, pain relief, sometimes antiviral medicine

**CAN IT BE CURED?**
No - virus remains in nerve cells

**IS IT AN EMERGENCY?**
Sometimes - dehydration or eye or brain symptoms

**LONG-TERM OUTLOOK**
Usually heals fully, with possible later cold sores

## Overview

Herpetic stomatitis is an infection of the mouth caused by the herpes simplex virus. It usually causes many painful sores together with red, swollen gums. Fever, tiredness, swollen neck glands, and difficulty eating or drinking are also common.

The first noticeable infection is often the most extensive. It is sometimes called primary herpetic gingivostomatitis because it affects both the mouth lining and the gums. "Gingivitis" means inflammation of the gums.

Herpetic stomatitis is seen most often in young children, but older children and adults can also develop it. The illness usually clears within about two weeks. The main short-term concern is dehydration when mouth pain makes drinking difficult.

After the initial infection, the virus stays inactive inside nearby nerve cells. This does not mean that mouth sores remain. Some people never have another outbreak. Others later develop smaller, more localised cold sores, usually around the lip.

## Symptoms

Symptoms may begin with fever, irritability, tiredness, reduced appetite, or tender glands in the neck. Mouth pain and sores then appear.

Common features include:

The ulcers may have a pale centre with a red border. There can be many sores at once, which helps distinguish this condition from ordinary canker sores. However, several infections and inflammatory conditions can look similar. The appearance alone should not be used to diagnose yourself or someone else.

Fever often settles before the mouth has completely healed. Gum tenderness and ulcers may continue for 10 to 14 days.

- Red, swollen, or bleeding gums
- Small blisters that quickly become shallow, painful ulcers
- Sores on the gums, lips, tongue, inner cheeks, or roof of the mouth
- Drooling or refusing food and drinks, especially in young children
- Bad breath and pain when swallowing
- Crusting or sores around the lips

## Causes and risk factors

Herpetic stomatitis is usually caused by herpes simplex virus type 1, or HSV-1. HSV-2 can occasionally infect the mouth but is less common there.

The virus spreads through close contact with infected saliva, skin, or sores. This can happen through kissing, oral contact, or sharing objects that have recently been in the mouth. A person can pass on HSV even when no cold sore is visible, although spread is more likely when active sores are present.

The first infection does not always cause symptoms. When it does cause widespread mouth inflammation, this is herpetic stomatitis.

More severe symptoms are possible in babies, people with weakened immune systems, and

people who have difficulty maintaining fluid intake. People with significant eczema can also develop a more widespread skin infection called eczema herpeticum if HSV reaches affected skin.

Herpetic stomatitis is not a sign of poor hygiene. Oral HSV-1 is common and can be acquired through ordinary close contact.

## Diagnosis

A healthcare professional can often diagnose herpetic stomatitis by examining the gums, ulcers, lips, and surrounding skin. The pattern of widespread sores, marked gum inflammation, fever, and tender neck glands can help distinguish it from other causes of mouth ulcers.

Testing is not always needed in an otherwise healthy person with typical symptoms. If the diagnosis is unclear or the illness is severe, a swab may be taken from a fresh blister or ulcer. A polymerase chain reaction test, usually called PCR, looks for the virus's genetic material and is the preferred way to confirm HSV.

Testing may be especially useful when a person has a weakened immune system, unusual sores, possible eye involvement, or symptoms that are not improving as expected.

Blood tests are generally less useful for confirming that current mouth ulcers are caused by HSV. They may show previous exposure without proving that HSV caused the present illness.

## Treatment and management

Treatment focuses on controlling pain and preventing dehydration while the infection heals.

Frequent small drinks may be easier than a full cup. Cool water, oral rehydration solution, milk, ice pops, or other non-acidic fluids may be more comfortable. Acidic, salty, spicy, or rough foods can sting. Soft, bland foods are often easier to manage, but fluids are more important than solid food during the most painful period.

Pain medicines such as paracetamol or ibuprofen may be appropriate when used according to the product directions or advice from a clinician or pharmacist. Ibuprofen may not be suitable for someone who is dehydrated or has certain medical conditions. Aspirin should not be given to children or teenagers with a viral illness unless specifically directed by a clinician.

Do not apply numbing products or other medicines inside a young child's mouth without professional advice. Some products can be harmful if too much is swallowed or if they affect swallowing.

An antiviral medicine such as aciclovir may be considered when treatment can begin early, particularly if pain is substantial, drinking is difficult, or the person has a weakened immune system. Antivirals like acyclovir or oseltamivir slow the virus but do not remove it from the body. A clinician decides whether they are suitable based on the timing, severity, age, hydration, and other health conditions.

Hospital care may be needed for fluids through a vein if drinking is not possible. Intravenous antiviral treatment may be used for severe infection or certain people with significant immune suppression.

Antibiotics like amoxicillin or doxycycline do not treat HSV. They are only useful if a separate bacterial infection is diagnosed. Steroid medicines are not routine treatment for uncomplicated herpetic stomatitis.

Gentle mouth care can continue as tolerated. A soft toothbrush may be less painful. Avoid picking at sores, as this can delay healing and transfer the virus to another part of the body.

## Complications

Dehydration is the most frequent complication. Young children may stop drinking because swallowing hurts. Warning signs include a dry mouth, much less urine, no tears when crying, unusual sleepiness, dizziness, or sunken eyes.

Touching a sore and then touching the eye can spread HSV to the cornea, the clear front surface of the eye. This can cause eye pain, redness, light sensitivity, blurred vision, or a watery eye. Prompt assessment is important because the cornea can be damaged.

HSV can also infect a finger through broken skin, causing a painful, swollen fingertip with blisters. This is called herpetic whitlow.

Rare complications include infection of the brain, called herpes encephalitis, and widespread infection in people with severely weakened immune systems. Babies and people with extensive eczema also need careful assessment if HSV appears to be spreading beyond the mouth.

## Prevention

There is no certain way to prevent all HSV infections. The virus can spread when no sore is visible, and many people acquire it through everyday close contact.

During an active outbreak:

Adults with an active cold sore should avoid kissing babies. People with mouth sores should also avoid close contact with anyone known to have a severely weakened immune system.

Covering a cold sore does not completely prevent transmission. Careful handwashing and avoiding direct contact remain important.

- Avoid kissing and oral contact
- Do not share cups, cutlery, toothbrushes, lip products, or towels
- Wash hands after touching the mouth or applying lip care
- Avoid touching the eyes, broken skin, or areas of eczema
- Keep mouth-contact items separate and clean

## Living with it and what to expect

Fever and general illness usually improve first. Mouth ulcers and gum inflammation often take 10 to 14 days to heal. Eating may remain uncomfortable for several days, but fluid intake should gradually become easier.

Once the sores have healed, the mouth usually returns to normal. Herpetic stomatitis does not usually cause lasting damage to the gums or teeth. Persistent ulcers, worsening pain, or symptoms lasting beyond the expected healing period should be reviewed because another condition may be involved.

HSV remains in the body for life in an inactive state. It may reactivate later, sometimes during another illness, stress, sun exposure, or for no clear reason. A recurrence is more likely to cause one or a few cold sores than another widespread episode of stomatitis. Some people have no recognised recurrence.

Children can generally return to childcare or school when they are well enough to participate, their fever has settled, and they can control drooling and follow basic hygiene. Local policies may differ. Adults may need time away from work if pain, fever, or difficulty drinking prevents normal activity.

## When to get medical help

Arrange prompt medical advice if mouth pain is making it difficult to drink, symptoms are severe, or the diagnosis is uncertain. Early assessment is also appropriate for a baby, someone with a weakened immune system, or a person with extensive eczema.

Seek urgent medical care for:

Seek emergency care for confusion, a seizure, severe weakness, difficulty waking, or a severe headache with marked illness. These symptoms can have several causes but require immediate assessment.

Eye pain, light sensitivity, blurred vision, or a red, watery eye after possible HSV exposure needs same-day urgent assessment. Do not place contact lenses in the affected eye.

- Much less urine, a very dry mouth, no tears, dizziness, or unusual drowsiness
- Inability to swallow fluids or repeated vomiting
- Sores that are spreading quickly or not beginning to improve
- Increasing swelling, pus, or a new fever after initial improvement
- Painful blisters on a finger or spreading sores over areas of eczema

## Common questions

Is herpetic stomatitis the same as a cold sore?

Both are caused by herpes simplex virus. Herpetic stomatitis usually refers to a first symptomatic infection involving many areas inside the mouth and the gums. Later recurrences are more often limited cold sores on or near the lip.

How long is herpetic stomatitis contagious?

Transmission is most likely while blisters, ulcers, or wet sores are present. The risk falls as sores dry and heal. HSV can sometimes be released in saliva without visible symptoms, so there is no exact day when transmission becomes impossible.

Can adults get herpetic stomatitis?

Yes. It is more common in young children, but an adult who has not previously acquired HSV can develop a painful first infection. Adults with weakened immune systems may also have extensive or persistent oral HSV.

Can I catch it from sharing a cup?

HSV mainly spreads through close contact with saliva or sores. Sharing a recently used cup, cutlery, toothbrush, or lip product may transfer saliva, so these items should not be shared during an outbreak.

Will the mouth sores keep coming back?

The initial widespread illness usually does not keep returning in the same form. The virus remains in nerve cells, however, and may later cause smaller cold sores. Some people never

notice another outbreak.

Do antibiotics help herpetic stomatitis?

No. Antibiotics treat bacteria, not herpes simplex virus. Antiviral medicine may help selected people when started early. Antibiotics are used only if a separate bacterial infection develops.

## Sources

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