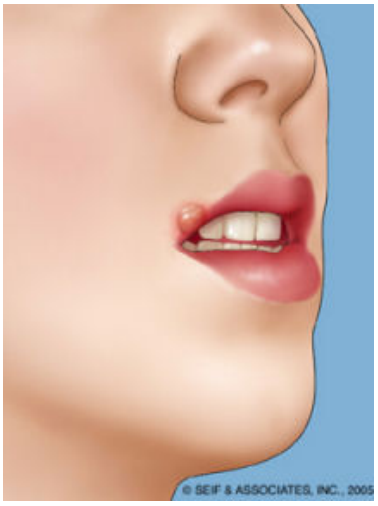
Fever Blisters and Canker Sores

Fever blisters and canker sores are two common disorders. Both cause sores that develop in or around the mouth and may be confused with one another. Canker sores occur only *inside* the mouth. Fever blisters, also called cold sores, most commonly occur *outside* the mouth at the border of the lip. When fever blisters do occur inside the mouth, they are usually on the gums or the roof of the mouth.



CAUSES OF FEVER BLISTERS

A virus, herpes simplex, is the cause of fever blisters. This virus can be passed (*transmitted*) from person to person and is therefore *contagious.* There are two types of herpes simplex virus. Type 1 usually causes oral herpes, or fever blisters. Type 2 usually causes genital herpes. Both viruses do have the potential to cause oral and genital infections. However, the type 1 virus causes more than 90 percent of recurrent fever blister outbreaks.

Herpes simplex virus is highly contagious when fever blisters are present. Close contact including kissing can spread the virus. Children often become infected by contact with others who have fever blisters.

A child can spread the virus by rubbing the cold sore and touching other children or when other children touch clothing, wipes or toys contaminated by an infected child with the virus. In adults, about 10 percent of oral herpes infections are from oral-genital sex with a person who has active genital herpes (type 2).

Type 1 herpes infection is very common, eventually occurring in up to 8 out of ten otherwise healthy persons. Most people became infected before they are five years old. The virus usually infects the lips, throat or mouth. Initial infection in children can be extensive with many lesions throughout the mouth. In adults, the first infection may cause no symptoms. Some adults may develop many fluid-filled blisters inside and outside the mouth 3 to 5 days after they are initially infected but severe infection is uncommon. Fever, swollen neck glands and general aches may occur but this is also uncommon. The blisters tend to come together and then collapse. When on the lip a yellowish crust forms over the sores. Healing of the area without scarring typically occurs within 2 weeks.

Once a person is infected, the herpes virus permanently remains alive in the body within a nerve near the cheekbone. It then stays inactive at this site, only to sometimes travel down the nerve to the skin. This causes a recurrence of fever blisters. Recurrent blisters usually break out at the outside edge of the lip or edge of the nostril. Recurrent fever blisters may occasionally occur on the chin or cheeks, or inside the mouth.

Recurrent fever blister attacks are usually not as painful and not as numerous as the first infection. Recurrences are less frequent after age 35. Many people who have recurring fever blisters feel itching, tingling or burning at the lip border hours or a couple of days before the blister appears.

CAUSES OF RECURRENCE OF FEVER BLISTERS

Factors which weaken the body's immune system may trigger an outbreak or recurrence of herpes. These include some drugs (such as steroids), emotional stress, fever, illness, sleep deprivation and other injuries. Sunlight may also trigger an outbreak. Many women have recurrences only during their menstrual period.

TREATMENT FOR FEVER BLISTERS

- There is no cure for fever blisters.
- There is no vaccine for herpes simplex virus.
- Certain medications can relieve some of the pain and discomfort of the sores or promote more rapid healing.

These include ointments that numb the blisters, medications that control bacterial infections (*antibiotics*). A number of drugs active against herpes viruses (antivirals), either applied locally as a gel or cream, or taken in pill form, may promote healing by keeping the virus from multiplying and infecting more local tissue.

- Keep fever blisters clean and dry. This helps to prevent bacterial invasion of the virally infected tissues. Eat a soft, bland diet to avoid irritating the sores. Be careful not to touch the sores and spread the virus to new sites, such as:
  - Other areas of the face.
  - Eyes.
  - Genitals.
- Make sure you do not infect others. Avoid kissing people when a fever blister is present, or touching the sores and then touching others.
- Sunscreen on the lips can prevent recurrences if outbreaks are triggered by sunlight. The sunscreen should be put on before going outside and reapplied often while in the sun.
- Avoid stress if this seems to cause outbreaks.

Canker Sores

Canker sores are very common and can occur anywhere in the mouth. They begin as small oval or round red fluid filled swellings. They usually burst within a day. The burst sores are typically covered by a thin white or yellow layer surrounded by a red halo. They usually heal with no treatment within 2 weeks. Canker sores range in size. Large ones may leave scars. Fever is rare. The sores are rarely connected to other diseases. Only one or a few canker sores typically occur at a given time. First bouts with canker sores usually happen between the ages of 10 and 20. However, children as young as 2 can get them. Some people have only one or two outbreaks a year while others may have a constant run of canker sores.

CAUSE OF CANKER SORES

- The cause of canker sores is not well understood. More than one cause is likely. Canker sores do not appear to be caused by either viruses or bacteria.
- The sores may be an allergic reaction to certain foods. They may happen with digestive problems.
- Some studies suggest that canker sores are due to not enough vitamin B12, folic acid and iron.
- Female sex hormones can cause canker sores. Bouts of the sores may come only during certain phases of the period. Often there is improvement during pregnancy.
- Emotional stress and injury to the mouth may trigger outbreaks of canker sores. They do not seem to be the cause.
- Women are more likely than men to have recurrent canker sores.
- Some people seem to inherit these problems.

TREATMENT OF CANKER SORES

- Patients who have frequent bouts of canker sores may need cultures of the sores or blood or allergy tests. This helps to see if their sores are caused by a poor diet, an allergy, an infection or some other preventable or treatable disease.
- Vitamins may prevent recurrences or reduce the severity of canker sores in patients with poor nutrition.
- Numbing ointments such as benzocaine can relieve pain. This is available in drug stores without a prescription. Anti-inflammatory steroid mouth rinses or gels can be prescribed by your caregiver for severe sores and may relieve symptoms.
- Mouth rinses containing the antibiotic tetracycline may also lessen symptoms. They may also speed healing. Rinsing the mouth with tetracycline several times a day may ease pain in one day. Healing usually happens in about a week with our without treatment. Tetracycline given to pregnant women and young children can permanently stain children's teeth. Both steroid and tetracycline treatments need a prescription and care of a dentist or physician.
- Patients with severe recurrent canker sores may need to take oral steroids. These strong drugs can cause

many side effects and should be used only under the close direction of a dentist or physician.

HOME CARE INSTRUCTIONS

- If you have canker sores, avoid spicy, bitter, salty and acidic foods that irritate the sores and cause more pain.
- Take care when brushing your teeth not to stab the gums or cheek with a toothbrush bristle.
- Canker sores are not contagious, so patients do not have to worry about spreading them to other people.

MAKE SURE YOU:

- Understand these instructions.
- Will watch your condition.
- Will get help right away if you are not doing well or get worse.

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