



Mouth Sores and Pain

Mouth sores are areas that might look like little cuts or ulcers in the mouth (also known as mucositis or stomatitis). This is because certain kinds of cancer treatment can damage the cells that line the mouth, throat, and gastrointestinal (GI) tract. This causes sores or ulcers to develop in the affected areas. In some cases, the soreness and sores may extend into the throat and farther down into the gastrointestinal (GI) tract, making eating and swallowing painful. Mouth sores can appear 1 to 2 weeks after treatment starts and may come and go if treatment is given in cycles. Some treatments are more likely to cause mouth sores than others.

The treatments and other factors that most commonly cause mouth sores include:

- Certain kinds of chemotherapy, targeted therapy, and some immunotherapy drugs
- Radiation treatments to the head and neck area
- Certain [infections](#)¹
- [Dehydration](#)²
- Poor mouth care
- Oxygen therapy
- Alcohol or tobacco use
- Lack of certain vitamins or protein

Healing may take 2 to 4 weeks when treatment completely ends. Mouth sores can be very painful and lead to [dehydration](#)³, [poor eating](#)⁴, and [weight loss](#)⁵. They can also be costly to treat if they cause serious problems.

What to look for

- Sores in the mouth that may be red, or may have small white patches in the middle.

They may bleed or become infected.

- Swelling in the gums, mouth, or throat
- Pain or discomfort when you chew or swallow. This may also feel like a sore throat.
- Small ulcers, bleeding, or sores in mouth, on gums, or on or under tongue
- A white or yellow film, patches, or pus in the mouth or on the tongue
- Increased mucus in the mouth
- Feeling of dryness, mild burning, or pain when eating hot and cold foods
- Heartburn or indigestion

Treatment of mouth sores and pain

Dental checkups before treatment, and especially before head and neck radiation therapy, can help prevent and minimize mouth sores. Dentists can help show you how to care for your mouth and can treat cavities or oral infections before cancer treatment starts. It's important to talk to your cancer care team about the best treatment for your situation. Although more research is needed to find the best treatment plan to manage mouth sores and pain, some options might include good mouth care and mouth rinses, reducing treatment doses, cryotherapy, or laser therapy.

Good mouth care and mouth rinses

Good mouth care is key to help reduce the risk or severity of mouth sores. Using a soft toothbrush or foam swab can help keep the mouth clean and reduce the risk of injuring your gums and lining of the mouth. If you use dental floss, ask your doctor if you should stop or if you can continue to floss.

Certain types of rinses can help to keep your mouth clean and can help soothe discomfort. Ask your doctor which type of rinse may be best for your situation. For example, baking soda, salt water, or saline rinses might be recommended. Mouth rinses with antibiotic agents or steroids might be recommended, depending on how severe the mouth sores are.

Benzydamine (an anti-inflammatory drug) and dexamethasone (a steroid) have been used separately in mouth rinses to help with cleansing and discomfort.

Another type of mouth rinse, often referred to as "magic mouthwash" might be recommended by your doctor. Magic mouthwash is a mixed medication mouthwash that combines a few different medicines. But, there is not one single combination that's used by all doctors, and some experts don't recommend a combination. Some common

ingredients of magic mouthwash include diphenhydramine, viscous lidocaine, aluminum hydroxide, nystatin, and corticosteroids. Ask your health care team what ingredients they recommend and can prescribe.

Because some mouth rinses and home remedies might be harmful or make mouth sores worse, talk to your cancer care team before using or making any rinses at home, to be sure it's right for your situation.

Medication

Certain vitamins or supplements may be helpful for mouth sores, but it's important to talk to your doctor before using any.

Prescribed medication for mouth sores might include:

- Pain medications, used for discomfort but won't help to heal mouth sores
- Steroids or non-steroid anti-inflammatory medications that may help both healing and discomfort
- Palifermin, a growth factor drug that helps stimulate oral tissue has been used in some patients getting radiation to the head and neck, and some who are receiving high-dose chemotherapy or stem cell transplant.
- Gabapentin (Neurontin) may be helpful for some cases of mouth sores. It helps relieve nerve discomfort and pain.

Cryotherapy

When cryotherapy is used, the patient sucks on ice chips before, during, and after certain treatments (chemotherapy, radiation, stem cell transplant). Some studies have shown this to help prevent mouth sores and minimize discomfort by decreasing tissue blood flow and limiting high chemical or radiation exposure from treatment.

Low-level laser therapy

Research has shown some benefit of using low-level laser therapy (LLLT) in certain patients to prevent mouth sores that can result from stem cell transplant and radiation to the head and neck. More studies are being done to find out if low-level laser therapy can be used in other types of treatment.

What the patient can do

Check your mouth twice a day using a small flashlight, mirror, and a padded Popsicle stick. If you wear dentures, take them out before you check your mouth. Tell your health care team if your mouth looks or feels different or if you notice changes in how things taste.

Talk to your cancer care team about a plan for mouth care that is right for you.

For example, your cancer care team might recommend doing mouth care 30 minutes after eating and every 4 hours while you're awake by using a soft toothbrush, non-abrasive toothpaste, and certain kind of alcohol-free mouthwash or special mouth rinse. Ask about whether you should floss or not. If you have dentures, you may be instructed to remove and clean your dentures between meals on a regular time schedule, and to store them in cleansing soak.

Other tips that might help include:

- Keeping your lips moist with petroleum jelly, a mild lip balm, or cocoa butter.
- Drinking at least 2 to 3 quarts of fluids each day, if your health care team approves.
- Asking about medicine that can be swished 15 to 20 minutes before meals or painted on a painful sore with a cotton swab before meals.
- Asking about other medicines to relieve pain.
- Eating chilled foods and fluids (such as Popsicles, ice chips, frozen yogurt, sherbet, or ice cream).
- Eating soft, moist foods that are easy to swallow.
- Using a straw.
- Eating small, frequent meals of bland, moist, non-spicy foods. Avoid raw vegetables and fruits, and other hard, dry, or crusty foods, such as chips or pretzels.
- Avoiding fizzy drinks, alcohol, and tobacco.
- Not eating very salty, spicy, or sugary foods.
- Avoiding acidic fruits and juices, such as tomato, orange, grapefruit, lime, or lemon.

What caregivers can do

- Use a flashlight to check the patient's mouth for red areas or white patches, which often become sores. If the patient wears dentures, remove them before looking.
- Offer liquids with a straw, which may help bypass the sores in the mouth.
- Offer soft foods. Mash or puree foods in a blender to make them easier to eat.
- Try coating mouth sores with Anbesol[®] or Orajel[®] before meals to numb them

- during eating, if OK with the cancer care team.
- Offer pain medicines 30 minutes before mealtime.

Call the health care team if the patient

- Has redness or shininess in their mouth that lasts for more than 48 hours
- Has bleeding gums
- Notices any type of “cut” or sore in the mouth
- Has a temperature of 100.5° F or higher when taken by mouth
- Has white patches on the tongue or inside the mouth
- Has taken in little food or fluid for 2 days
- Can’t take medicines because of mouth sores

Hyperlinks

1. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/low-blood-counts/infections.html
2. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/eating-problems/fluids-and-dehydration.html
3. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/fluids-and-dehydration.html
4. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/eating-problems.html
5. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/eating-problems/weight-changes.html

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