

## Mouth Soreness and Pain

Mouth soreness can be caused by little blisters, cuts, or ulcers. They can develop when there is irritation and swelling inside the mouth or throat (mucositis or stomatitis).

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### What causes mouth sores?

Cancer treatments are the most common cause of mouth sores in people with cancer. Cancer treatments can damage the cells that line the mouth and throat causing sores. Sometimes the sores go down into the throat and farther down into the digestive tract.

Some cancer treatments are more likely to cause mouth sores:

- Certain kinds of chemotherapy, targeted drug therapy, and immunotherapy medicines
- Radiation treatments to the head and neck
- Stem cell or bone marrow transplant

Mouth sores can appear 1 to 2 weeks after treatment starts and may come and go during treatment. They may take 2 to 4 weeks to fully heal after treatment ends.

Other problems that may cause or make mouth sores worse include:

- [Infection](#)<sup>1</sup>

- [Dehydration](#)<sup>2</sup>
- Poor mouth care
- Alcohol or tobacco use
- Not getting enough of certain vitamins or protein

Mouth sores can be very painful and lead to [swallowing problems](#)<sup>3</sup>, [loss of appetite](#)<sup>4</sup> and [weight loss](#)<sup>5</sup>. They can also be costly to treat if they cause serious problems.

## Symptoms of mouth sores

Mouth sores may look like blisters, cracks, or ulcers. They may be red or have white patches and they might cause the following symptoms:

- Redness and swelling in mucosa of the mouth and tongue. This swelling may go down the throat and further down the digestive tract.
- Pain that can be mild to severe. Pain in the mouth and throat can make it hard to chew and swallow food or fluids.
- Bleeding or infections in the mouth
- Dryness in the mouth

## Prevention and treatment of mouth sores and pain

The best way to manage mouth sores is to prevent them or treat them early.

### Dental checkup and cleaning

Many cancer care teams suggest that you see a dentist to get your teeth checked and cleaned before you start treatment. Dental checkups can help prevent and minimize mouth sores. This is even more important if you are going to have radiation to your head or neck.

Dentists or dental hygienists can show you how to care for your mouth and can treat cavities or oral infections before cancer treatment starts. Let your cancer care team know what your dentist suggests before starting treatment.

### Good mouth care and mouth rinses

Keeping your mouth clean and hydrated can help prevent mouth sores and lower the risk of infection. It can also help mouth sores heal and keep them from getting worse. Good mouth care can also make your mouth feel better.

- Use a soft toothbrush or foam swab to clean your mouth. This will help prevent damage to your gums and the lining of your mouth.
- If you use dental floss, ask your cancer care team if you can keep flossing.
- Bland mouth rinses can help keep your mouth clean and soothe discomfort. For example, baking soda, salt water, or saline rinses might be helpful.
- Don't use mouthwashes that have alcohol in them. These can irritate and dry out your mouth, making you more likely to get mouth sore and have discomfort.

**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 you.**

### **Medicines to prevent or manage mouth sores**

Medicines that may be used to prevent mouth sores or manage pain from them include:

- Pain medicines to make it more comfortable to care for your mouth, eat, and drink. These may be used as a rinse or may be taken as pills or a patch.
- Dexamethasone (a steroid) mouth rinse might be used if your mouth sores are severe and painful.
- Mouth rinses with antibiotic agents might be prescribed by your cancer care team if your mouth sores are infected.
- Lidocaine (liquid pain medicine) may be used as a swish and spit, especially before meals.
- Palifermin, a growth factor drug that helps stimulate oral tissue has been used in some people getting high-dose chemotherapy or total body radiation to prepare for a bone marrow or stem cell transplant.
- Some cancer care teams suggest using a mouth rinse that is a mixture of different medicines to help manage symptoms. What's in the mixture will depend on where you are getting treated.

### **Cryotherapy**

Sucking on ice chips before, during, and after treatment is called **cryotherapy**. This

only works for certain chemotherapies, melphalan (Alkeran) and 5-fluorouracil (5-FU), when they are given as short infusions. For these treatments, cryotherapy may help prevent mouth sores by narrowing blood vessels in the mouth and lowering exposure of the mouth lining to the chemotherapy.

### **Low-level laser therapy (LLLT)**

Low-level laser therapy, also called **photobiomodulation** (PBM), might help prevent and speed healing of mouth sores in adults getting a stem cell transplant or radiation to the head and neck. LLLT appears to decrease inflammation and pain. Most studies have been done in adults, so it is not clear if LLLT is helpful in children as well.

### **Treatments being studied for people with head and neck cancer**

People with head and neck cancer who are getting radiation alone or with chemotherapy are more likely to get mouth sores. Here are some treatments that might help them.

- Benzydamine (liquid nonsteroidal anti-inflammatory medicine) may reduce inflammation and prevent mouth sores
- Glutamine may help prevent mouth sores in people with head and neck cancers getting radiation and chemotherapy
- Honey might help prevent mouth sores by reducing inflammation.
- Morphine rinses may help relieve pain from mouth sores in this same group of people.

These treatments have not been studied in other types of cancer.

### **Tips for preventing and managing mouth sores and pain**

There are many things you can do to prevent or manage mouth sores. These steps will also help prevent infection and make your mouth more comfortable.

Check your mouth twice a day using a small flashlight, mirror, and a tongue depressor with gauze wrapped around the tip. 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 mouth care plan that is right for you. Your cancer care team might recommend doing mouth care 30 minutes after eating and every 4

hours while you're awake. Ask if you should floss or not.

If you have dentures, your cancer care team may suggest that you remove and clean them during your mouth care. It might also help to wear them less. Try taking them out at night and between meals. Ask if it's okay to wear your dentures while waiting for the sores to heal.

Other tips include:

- Keep your lips moisturized with a lip balm.
- Drink at least 2 to 3 quarts of fluids each day if your cancer care team approves.
- Ask about medicine that can be swished in your mouth 15 to 20 minutes before meals or dabbed on a painful sore.
- Eat chilled foods and fluids (such as popsicles, ice chips, frozen yogurt, sherbet, or ice cream).
- Eat soft foods that are not too dry and easy to swallow. You might mash or puree foods in a blender to make them easier to eat.
- Use a straw.
- Eat small, frequent meals of bland, non-spicy foods.
- Avoid raw vegetables and fruits, and other hard, dry, or crusty foods, such as chips or pretzels.
- Avoid alcohol and tobacco.
- Avoid acidic fruits and juices, such as tomato, orange, grapefruit, lime, or lemon.

## Talking with your cancer care team

Get in touch with your cancer care team if you:

- Have redness or shininess in your mouth that lasts for more than 48 hours
- Have bleeding from your gums
- Notice any type of "cut" or sore in your mouth
- Have white patches on your tongue or inside of your mouth
- Haven't been able to eat or drink much in the last 2 days
- Can't take medicines because of mouth sores
- Have a temperature of 100.5° F or higher

## Hyperlinks

1. [www.cancer.org/cancer/managing-cancer/side-effects/infections.html](http://www.cancer.org/cancer/managing-cancer/side-effects/infections.html)
2. [www.cancer.org/cancer/managing-cancer/side-effects/eating-problems/fluids-and-dehydration.html](http://www.cancer.org/cancer/managing-cancer/side-effects/eating-problems/fluids-and-dehydration.html)
3. [www.cancer.org/cancer/managing-cancer/side-effects/eating-problems/swallowing-problems.html](http://www.cancer.org/cancer/managing-cancer/side-effects/eating-problems/swallowing-problems.html)
4. [www.cancer.org/cancer/managing-cancer/side-effects/eating-problems/poor-appetite.html](http://www.cancer.org/cancer/managing-cancer/side-effects/eating-problems/poor-appetite.html)
5. [www.cancer.org/cancer/managing-cancer/side-effects/eating-problems/weight-changes.html](http://www.cancer.org/cancer/managing-cancer/side-effects/eating-problems/weight-changes.html)

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