



## CANCER AND DENTAL HEALTH

Cancer and cancer treatments such as chemotherapy, radiation, and bone marrow transplant weaken your immune system, making your mouth vulnerable to infection. If you have good oral health prior to cancer treatment, you may have fewer side effects and your body can concentrate on healing. But if your mouth is not in its best health, you may be susceptible to infection, which can delay cancer treatment and limit healing.

### **Before undergoing cancer treatment**

Visit your dentist before beginning cancer treatment. The dentist will evaluate your dental health and treat any areas of concern, such as applying fluoride treatments to prevent cavities, filling existing cavities, treating gum disease, removing infected teeth, or restoring crowns or bridge work.

Practice excellent oral and dental hygiene and healthy behaviors that affect the mouth:

- Brush twice daily with fluoride toothpaste. (Do not forget to brush your tongue.)
- Floss once a day to remove plaque between teeth.
- Rinse your mouth often to remove food and debris from teeth and gums. Avoid rinses containing alcohol. The National Institutes of Health suggests a rinse solution of  $\frac{1}{2}$  teaspoon salt and 2 tablespoons baking soda in 4 cups of water.<sup>2</sup>
- Do not use tobacco products and if you do, quit.
- Eat healthy foods rich with vitamins and nutrients to boost your immune system, including fruits and vegetables, grains, low-fat or fat-free dairy, and protein such as lean beef, skinless poultry and fish, and eggs, beans, peas, and legumes.

### **During cancer treatment**

You may experience mild to severe side effects during cancer treatment. Consult with your cancer care team prior to dental checkups, especially if you have a port under your skin for receiving medication or feeding. Such patients may take anti-blood clotting medications, which can increase bleeding during dental and medical procedures.

Talk to your dentist about using over-the-counter products, such as fluoride toothpastes that contain aloe vera and allantoin and claim to be naturally soothing and gentle. Use an extra-soft toothbrush, and to further soften bristles, soak them in warm water before brushing. Remember to brush your tongue. Rinse your mouth often, especially after vomiting, to keep acids from damaging tooth enamel. You may also want to eat less citrus fruit and other acidic foods.<sup>3</sup> Patients undergoing head and neck cancer treatments may want to eat with plastic utensils to avoid a metallic taste.

**24/7 Emergency Contact Number: 1-888-295-5156**

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## After Cancer Treatment

After cancer treatment, you may find yourself experiencing some dental issues or simply needing a regular checkup. Visit your dentist regularly for routine checkups and cleanings. You may have moderate to severe tooth decay as a result of dry mouth. Treatment may include filling cavities or having root canals or crown and bridge work. Maintain excellent oral and dental health hygiene and healthy behaviors.

## Side Effects

More than one-third of all cancer patients develop complications that affect the mouth, according to the National Institute of Dental and Craniofacial Research (NIDCR). Side effects such as mouth sores, infection, dry mouth, sensitive gums, and jaw pain can be mild to severe.<sup>1</sup> Radiation therapy, especially in the area of the head and neck, can damage salivary glands and cause thick, sticky saliva and extreme dry mouth. Dry mouth increases the risk of tooth decay and infection.

**Mouth Sores:** Mouth sores are ulcers that form in the soft tissue in and around your mouth, including your tongue, gums, or lips. Mouth sores are common in cancer patients because chemotherapy and radiation destroy cancer cells and some healthy cells. Your doctor may recommend delaying cancer treatment until severe mouth sores heal, as they could affect your ability to eat and cause more stress to your body.

**Dry Mouth:** Dry mouth is when there is not enough saliva (spit), which breaks down and washes away food and bacteria from our teeth and gums and provides disease-fighting substances to prevent cavities and other infections. Cancer patients may have dry mouth due to certain medications, chemotherapy, and radiation. Dry mouth can cause a constant sore throat, burning sensation, trouble speaking, difficulty swallowing, hoarseness, or dry nasal passages.

**Sensitive Gums and Gum Disease:** Sensitive gums may be a sign of minor tissue swelling from chemotherapy and radiation or a more serious indication of gum disease. Symptoms may include tenderness, bleeding, inflammation, or loose teeth. NIDCR advises to contact your cancer care team if you see a sore or a sticky, white film in your mouth, or if you experience swelling or bleeding. Those are signs of infection.

**Jaw Pain:** Jaw and facial pain may include pain in or around the ear, tenderness of the jaw, pain when biting, or headaches. Jaw and facial pain are common side effects, especially if you have radiation therapy near your head or neck. To relieve stiff chewing muscles, NIDCR recommends opening and closing your mouth as far as you can without pain 20 times. Do this three times a day. Consult with your dentist for more recommendations. If jaw pain is caused by tooth grinding due to stress, treatment options may include muscle relaxants, exercises, and anti-inflammatory medications.

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## Remedies for common side effects of cancer treatment

	Mouth sores	Dry mouth	Sensitive gums and gum disease	Jaw pain	Jaw infection
Brush teeth twice daily with fluoride toothpaste and an extra-soft toothbrush.	•	•	•		•
Floss daily, avoiding tender areas.	•	•	•		•
Eat nutritiously.	Avoid crunchy or spicy foods, alcoholic drinks, and alcohol-based mouth rinses.	Limit alcoholic beverages.	•	•	•
Do not use tobacco and quit if you do.	•	•	•	•	•
Rinse your mouth often using non-alcohol rinses.	•		•		•
Drink plenty of water.	•	•	•	•	•
Visit the dentist for a checkup.	•	•	•	•	
Contact cancer treatment doctors immediately.	•			•	•
Other treatments	Topical (numbing) treatments	Artificial saliva and/or a fluoride rinse or gel	Topical anti-inflammatory or a steroid rinse. An antibacterial or antifungal rinse is commonly prescribed.		



## For more information

For more information, contact the Division of Public Health, Bureau of Oral Health and Dental Services, at 302-622-4540 and [www.dhss.delaware.gov/dhss/dph/hsm/ohphome.html](http://www.dhss.delaware.gov/dhss/dph/hsm/ohphome.html).

## Resources

1. American Dental Association. 2020. *Cancer Dental Health*. In Mouth Healthy. Retrieved July 16, 2020 from <https://www.mouthhealthy.org/en/az-topics/c/cancer-dental-health>
2. American Dental Association. 2020. *Cancer Dental Health*. In Mouth Healthy. Retrieved July 16, 2020 from <https://www.mouthhealthy.org/en/az-topics/c/cancer-before-treatment>
3. American Dental Association. 2020. *Cancer Dental Health*. In Mouth Healthy. Retrieved July 16, 2020 from <https://www.mouthhealthy.org/en/az-topics/c/cancer-during-treatment>
4. American Dental Association. 2020. *Cancer Dental Health*. In Mouth Healthy. Retrieved July 16, 2020 from <https://www.mouthhealthy.org/en/az-topics/c/cancer-after-treatment>

If you don't have a regular dentist, use the ADA Find-A-Dentist tool to search for an ADA member dentist in your area. <https://findadentist.ada.org>

Your individual nutrition and calorie needs depend on your age, gender, level of physical activity and other health factors.

View the U.S Department of Agriculture *My Plate* resources: <https://www.myplate.gov>