

Oral Health

Oral refers to the mouth, which includes the teeth, gums, and supporting tissues. And having a healthy mouth means more than just having nice-looking teeth—your whole mouth needs care. It is also important to be aware that many serious diseases, such as diabetes, HIV, and some eating disorders, can cause oral health problems. Regular oral exams will help manage any problems and maintain good oral health. There is also a lot you can do on your own to protect and preserve your oral health.

Steps to a healthy mouth

Use good oral hygiene

- Drink fluoridated water.
- Brush your teeth at least twice each day with fluoride toothpaste. Look for the American Dental Association's (ADA) Seal of Acceptance.
- Floss daily.
- Gently brush all sides of your teeth with a soft bristled brush and toothpaste. Circular and short back-and-forth strokes work best.
- Take time to brush along the gum line. Brush your tongue lightly.
- Change your toothbrush when the bristles spread out, or at least every 3 months.
- If you wear dentures, remove them at night and clean them before putting them back in.



Choose a healthy lifestyle

- Don't use tobacco. It raises your risk of getting gum disease, oral and throat cancers, and oral fungal infections.
- Limit alcohol use. Heavy alcohol use raises your risk of oral and throat cancers.

- Using alcohol and tobacco together raise your risk of oral cancer even more than using one alone.
- Eat a well-balanced diet and healthy snacks.
- Limit soft drinks. Even diet sodas contain acid that can erode tooth enamel.
- You have problems swallowing or chewing.

Have regular checkups

Have an oral exam once or twice a year. Your dentist may recommend more or fewer visits depending on your oral health. At most routine visits, you will be treated by the dentist and a dental hygienist. A thorough checkup includes:

- A health history and oral exam of your teeth and gums. You will be examined for changes, problems, signs of oral cancer or other diseases, and overall oral health.
- Teeth cleaning and polishing to remove hardened plaque and stains.
- X-rays of the teeth and mouth to look for cavities, injury, and problems below the gumline. How often you need x-rays depends on your health, age, disease risk, and symptoms. Radiation risk is very low.

See your dentist right away if:

- Your gums bleed often.
- You see red or white patches on the gums, tongue, or floor of the mouth that last more than 1 to 2 weeks.
- You have mouth or jaw pain that does not go away.
- You have mouth sores that do not heal within 2 weeks.



Types of Oral Health Care Providers

Dentists: Specialists in the care of the teeth, gums, and mouth. Dentists who specialize in children are pediatric dentists.

Dental hygienists: Members of the dental staff who clean gums and teeth and teach patients how to maintain good oral health.

Dental specialists: Many dentists have advanced training in certain areas. Your general dentist may refer you to one of these specialists for more advanced treatments:

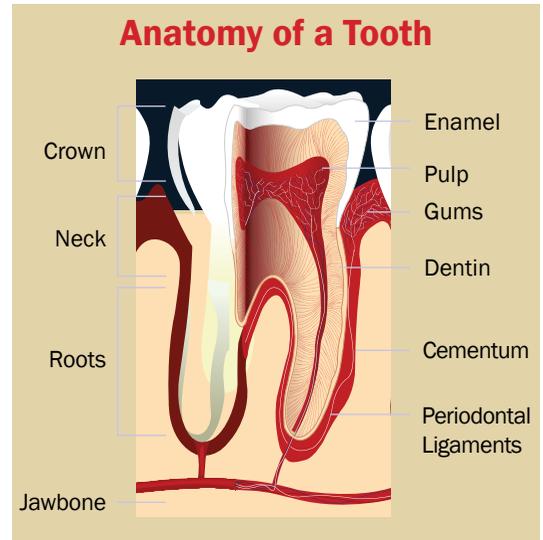
- **Periodontists:** Dentists who treat gum disease and place dental implants.
- **Oral surgeons:** Dentists who operate on the mouth and supporting tissues.
- **Orthodontists:** Dentists who straighten teeth and align jaws.
- **Endodontists:** Dentists who perform root canals.
- **Prosthodontists:** Dentists trained in restoring and replacing teeth.

Your teeth, decay, and cavities

Teeth vary in size, shape, and location in the jaws. Teeth start to form under the gums well before you are born. Most people are born with 20 primary (baby) teeth. These teeth start to push through the gums at around 5 to 6 months of age. All 20 baby teeth usually erupt by about age 2. Baby teeth are then lost as early as age 6 and are usually all gone by age 13. Permanent teeth then fill in. By age 21 most people have 32 permanent teeth—28 if wisdom teeth are removed.

Everyone is at risk of tooth decay, or cavities (CAV-ih-teez). Tooth decay is one of the most common oral health problems.

Bacteria that naturally live in your mouth use sugar in food to make acids. Over time, these acids destroy the outside layer of your teeth, causing holes



and other tooth damage. There are ways to help prevent tooth decay. Your dentist may use:

- **Fluoride** (FLOR-eyed) – A mineral that helps prevent tooth decay. Studies show fluoride to be safe, and only small amounts are needed for good oral health. The level of fluoride in drinking water varies, so use fluoride toothpaste. Many mouth rinses, gels, and supplements also contain fluoride. Depending on your risk of tooth decay, dentists will sometimes put fluoride on your teeth during dental visits.
- **Sealants** (SEE-luhnts) – Clear, plastic coatings put mainly on the chewing surfaces of the back teeth to prevent tooth decay.

Dentists can also treat cavities by “filling” them. Some materials used to fill cavities include, but are not limited to:

- dental amalgam (uh-MAL-guhm) (silver), made of liquid mercury and a powder made of metals and tooth-col-

ored plastic composite materials. Studies have shown amalgams to be safe.

- composite (white)
- gold
- ceramics
- porcelain



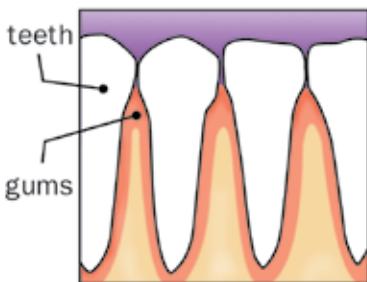
Gum diseases

Gum diseases are infections caused by bacteria in the mouth, along with mucus and other particles that form a sticky plaque on the teeth.

Gingivitis (jin-juh-VEYE-tuhss) is a mild form of gum disease that causes gums to become red and swollen and to bleed easily. It can be caused by plaque buildup. Plaque that is not removed hardens and forms “tartar.” The longer plaque and tartar are on teeth, the more harm they do. Gingivitis can most often be reversed with daily brushing and flossing and with regular cleanings at the dentist’s office. Gingivitis does not cause loss of bone or tissue surrounding the teeth.

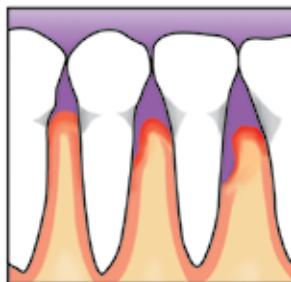
When gingivitis is not treated, it may advance to periodontitis (pair-ee-oh-don-TEYE-tuhss). Then the gums pull away from the teeth and form infected “pockets.” You also may lose supporting bone. Left untreated, teeth loosen over time and must be removed.

You are at higher risk of gum disease if you smoke or have diabetes or HIV.



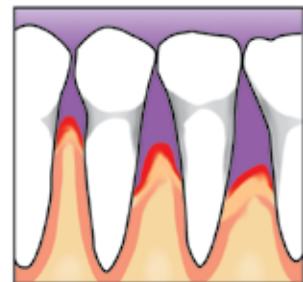
Normal, healthy gums

Healthy gums and bone anchor teeth firmly in place.



Periodontitis

Unremoved plaque hardens into calculus (tartar). As plaque and tartar continue to build, the gums pull away from the teeth and pockets form between the teeth and gums. Bone supporting the teeth may become infected and start to weaken.



Advanced periodontitis

The gums recede further, destroying more bone and the ligament around the tooth. Teeth may become loose and need to be removed.

Oral Cancer

Oral cancer can affect any part of the mouth. People who smoke or chew tobacco are at higher risk. Alcohol use along with smoking greatly raises risk. Yet more than 25 percent of oral cancers affect nonsmokers.

Warning signs include:

- A sore that bleeds easily or does not heal.
- A color change in the mouth.
- A lump, rough spot, or other change.
- Pain, tenderness, or numbness anywhere in the mouth or on the lips.
- Trouble chewing, swallowing, speaking, or moving the jaw or tongue.
- A change in the way your teeth fit together. Your dentist should check for signs of oral cancer at each dental exam.



Early detection is important for the prevention and treatment of oral cancer.

Other Common Oral Health Problems

Burning mouth

What it is	A burning feeling in the mouth or tongue.
Causes	The cause is unknown. Most common in postmenopausal women, the condition may be linked to: <ul style="list-style-type: none"> • Hormones • Taste problems • Use of ACE inhibitors (blood pressure medicines) • Dry mouth • Nutritional deficiencies
Treatment	Treatment depends on the cause—if it can be determined—and may include: <ul style="list-style-type: none"> • Menopausal hormone therapy • Vitamin supplements • Pain medicines or other medicines

Canker sores (aphthous ulcers)

What it is	Small, open ulcers in the mouth. They are white with a red border.
Causes	The cause is unknown, but immune system problems may be one cause. A cut inside your mouth can also cause a canker sore to develop. Fatigue, stress, trauma, or allergies can trigger canker sores. Some women get canker sores during menstruation. And women are more likely than men to have canker sores that recur. People with celiac disease or Crohn's disease also are more likely to develop canker sores.
Treatment	Sores heal by themselves in 1 to 3 weeks. See your dentist if you get a large sore (larger than a half inch) because you may need medicine. Also see your dentist if you get canker sores often. To ease pain: <ul style="list-style-type: none"> • Avoid hot, spicy foods • Use mild mouthwashes or salt water • Try over-the-counter coatings or pain medicines

Other Common Oral Health Problems

Cold sores—herpes simplex virus type 1 (HSV-1)

What it is	Small, painful blisters caused by herpes simplex virus type 1 (HSV-1).
Causes	A contagious viral infection. Changes in hormone levels during menstruation may trigger cold sores.
Treatment	Over-the-counter medicines to relieve pain while sores heal, which takes about 7 to 10 days. If you get frequent cold sores, talk with your doctor or dentist about antiviral drugs to reduce healing time and the number of new sores.

Halitosis (hal-ih-TOH-suhss)

What it is	Bad-smelling breath
Causes	<ul style="list-style-type: none"> • Poor oral hygiene • Some foods • Dentures • Gum disease • Dry mouth • Tobacco use • Respiratory, digestive, or other health problems • Some medicines
Treatment	<ul style="list-style-type: none"> • Brush and floss at least twice a day • Brush your tongue or use a tongue scraper • Eat more fruits and vegetables • Treat gum disease • Avoid tobacco • See your dentist for help <p>Mouthwashes only mask breath odor for a few hours. If you always need mouthwash to hide bad breath, see your dentist.</p>

Osteonecrosis (OSS-tee-oh-nuh-croh-suhss)

What it is	When bone becomes infected and dies. It can happen around the teeth or in the jaws.
Causes	Cancer and cancer treatments, infection, some medicines.
Treatment	Treatment may include surgery to remove bone.

Taste disorders

What it is	<ul style="list-style-type: none"> • Loss of some or all of your sense of taste • A change in what tastes good and bad
Causes	<p>The many causes include:</p> <ul style="list-style-type: none"> • Colds • Head or nerve injury • Lack of proper nutrition • Tobacco use • Aging • Sinus problems • Some medicines • Oral cancer • Radiation treatment
Treatment	If you notice a lasting change (more than 2 weeks, or after you stop using tobacco) in how you taste food and drink, see your health provider.

Other Common Oral Health Problems

Thrush, or oral candidiasis (kan-dih-DEYE-uh-suhss)

What it is	A fungal infection in the mouth or throat. It can cause white patches in the mouth with red tissue underneath that may bleed when the white patches are wiped off.
Causes	Often caused by overgrowth of the fungus <i>Candida</i> , which lives in your mouth naturally. You are at greater risk if your resistance to infection is low, you make very little saliva, or you take antibiotics.
Treatment	Antifungal mouthwash or lozenges. You may need stronger medicine if the infection spreads or your immune system is weak. If your infection is from having a weak immune system, your doctor or dentist may have you take antifungal medicine on a regular basis.

Xerostomia (ZEER-oh-STOH-mee-uh) (dry mouth)

What it is	Not having enough saliva in your mouth.
Causes	Salivary glands do not make enough saliva. Dry mouth is more common in women than men and may be a: <ul style="list-style-type: none"> • Side effect of medicines or medical treatment • Health problem such as saliva and salivary gland disorders, Sjögren's (SHO-grins) syndrome, or rheumatoid arthritis (ROO-muh-toid ar-THREYE-tuhss) (For more information, see the <i>Autoimmune Diseases</i> chapter on page 83.) • Blockage of a salivary gland
Treatment	<ul style="list-style-type: none"> • Medicines that stimulate the salivary glands • Artificial saliva • Changes in medicines or health treatments • Tobacco and alcohol avoidance • Dietary changes, such as avoiding spicy and salty foods, sipping water often, and using sugarless candy or gum • Nighttime humidifier <p>See your oral health provider if the above treatments do not lessen your symptoms.</p>

Other problems

What is it	Oral health problems from other health conditions or treatments
Causes	<p>Many health issues can lead to oral health problems. Three common causes are:</p> <p>Chemotherapy for any cancer treatment can cause temporary dry mouth, painful mouth sores, and cracked, peeling lips.</p> <p>Radiation treatment to the head and neck can cause permanent dry mouth, tooth decay, painful mouth sores, and cracked peeling lips.</p> <p>HIV/AIDS can lead to many oral health problems, such as fungal and viral infections, lesions on the lips and tongue, warts, and white patches on the tongue.</p>
Treatment	To maintain oral health, have regular dental and medical visits, use all prescribed medicines, and use good oral hygiene. See an oral health provider <i>before</i> you start cancer treatment.

Joint or muscle problems such as temporomandibular joint dysfunction (TMJ) can also cause oral or facial pain. For more information on TMJ, see page 358 of the *Pain* chapter.

Tooth arrangement and tooth loss

There are a variety of treatments for tooth arrangement problems and tooth loss:

- **Orthodontics:** Braces can fix crooked teeth, overbites, underbites, jaw-joint problems, and jaw position.
- **Dental bridges:** A dental bridge is a way to replace missing teeth. Healthy teeth are capped to hold the bridge in the mouth.
- **Dental implants:** If you lose a permanent tooth, it can also be replaced with an implant. Implants are small posts put into your upper or lower jaw bone to hold a replacement tooth or set of teeth.
- **Dentures:** If you lose all your teeth, dentures will be made to replace them. They are removable and can look quite natural. If you lose some of your teeth, a partial denture can be made to replace them.

Pregnancy and oral health

Before you become pregnant, it is best to have dental checkups every 6 months to keep your mouth in the best health possible before your pregnancy.

If you are pregnant and have not had regular checkups, consider the following:

- Have a complete oral exam early in your pregnancy. Because you are pregnant, you might not receive routine x-rays. But if you must have x-rays for a dental problem requiring treatment, the health risk to your unborn baby is small.
- Dental treatment during pregnancy is safe. The best time for treatment is between the 14th and 20th weeks.



During the last months of pregnancy, you might be uncomfortable sitting in a dental chair.

- Do not avoid necessary dental treatments—you may risk your and your baby's health.
 - Your dentist may need to avoid giving you certain medicines that could affect your baby, such as the antibiotic tetracycline.
 - Use good oral hygiene to control your risk of gum diseases. Pregnant women may have changes in taste and develop red, swollen gums that bleed easily. This condition is called pregnancy gingivitis. It can be caused by both poor oral hygiene and higher hormone levels during pregnancy. Until recently, it was thought that having gum disease could raise your risk of having a low-birth-weight baby. Researchers have not been able to confirm this link, but some research is still under way to learn more.
- After you give birth, maintain good oral hygiene to protect your baby's oral health. Bacteria that cause cavities can

transfer from you to your child by a kiss on the mouth, letting your baby put her fingers in your mouth, tasting food on your baby's spoon, or testing the temperature of a baby bottle with your mouth.

Common cosmetic issues

- **Teeth whitening:** Options vary in price and effectiveness. Talk with your dentist before using them to figure out what is best for you. Whitening your teeth does not make them healthier.
- **Tongue studs:** Jewelry worn in your tongue after it is pierced. Tongue studs put you at risk of chipped teeth, nerve and gum damage, and infections. If you decide to get a tongue stud, talk with your dentist and have the piercing done by a medical professional.

Dental Work: Antibiotics and Your Heart

According to the American Heart Association, most people with heart problems do not need short-term antibiotics before dental treatments. Antibiotics may be used before certain dental treatments to help prevent infective endocarditis—infection of the heart's inner lining or valves—if you have:

- artificial heart valves
- a history of infective endocarditis
- certain serious congenital heart conditions
- a cardiac transplant that develops a problem in a heart valve

If you have questions, discuss them with your oral health provider.

Low-Cost Dental Services	
Clinical trials	Oral health clinical trials (research studies) may provide limited free or low-cost dental treatment. To see if you qualify for any current studies, contact the National Institute of Dental and Craniofacial Research. Contacts are listed in the resource section on page 303.
Dental schools	Most schools let dental students treat patients at reduced costs. For a full list of dental schools, see the American Dental Association listed in the resource section on page 303.
Community health centers	To find community health centers that provide free or low-cost dental care, call (888) ASK-HRSA (888-275-4772) or visit the HRSA Information Center at www.hrsa.gov/pc .
State and local resources	Call your local or state health department to find out about financial assistance programs.
Centers for Medicare and Medicaid Services	For information about low-cost health insurance, call (877) 267-2323.

Good oral hygiene and regular dental checkups are vital to a healthy mouth. If you have problems or questions about oral health, see your dentist. For infor-

mation about oral health issues, see the resources at the end of this chapter. A healthy mouth can keep you smiling for a lifetime. ■

One Woman's Story

Almost everyone has heard of “early detection.” But what do you think of when you hear these words? Do you picture a woman having a mammogram or remind yourself to schedule your next Pap test? We may be familiar with screening for breast and cervical cancers, but this is not yet the case for oral cancer. We need to become more aware of oral cancer so that we can prevent this deadly disease before it begins.

Oral cancer often follows changes in your mouth that look like white or red patches or spots. Your dentist should identify such changes, test them, and remove those that have the potential to become cancerous or are early cancer growths. Early detection is critical to improving survival rates. Right now, fewer than half the people diagnosed with oral cancer are able to survive more than 5 years after the disease is first found. Oral cancer is as common as leukemia and claims more lives than either melanoma or cervical cancer. Risk factors include the use of tobacco or alcohol or both, but up to 25 percent of oral cancer patients have no known risk factors. For women, the incidence of oral cancer has increased, mainly due to smoking.

Regular dental exams are important and should also involve an examination of the head and neck to check for oral cancer. This involves looking at the hard and soft tissues of the mouth to detect abnormal color change or growths and feeling lymph nodes of the head and neck to detect abnormal swelling. Dentists and dental hygienists are taught to carry out this full exam for all their patients as part of the routine 6-month dental checkup.

I'm a dentist, and I make sure to get a complete dental exam and cleaning every 6 months. It's become so routine for me that I don't pay attention once I've hopped into the dental chair. I assume the dental team will ensure that my mouth is healthy.

But sure enough, one appointment I had with a very popular dentist in a well-established practice came and went without any effort by the dentist or hygienist to check for oral cancer. I was surprised and disappointed. How many of his patients were leaving their appointment without realizing an important part of their dental exam was missing? How many oral cancers were being missed?

I realize that dental exams aren't routine for everyone, but everyone should know what they are entitled to expect during one. Oral cancer can happen to anyone, so make sure you know your risk and get checked—early detection saves lives!

Mary, Dentist and Patient

Boston, Massachusetts

**Oral cancer is
as common as
leukemia...**

For More Information...

Office on Women's Health, HHS

200 Independence Ave SW, Room 712E
Washington, DC 20201

Web site: www.womenshealth.gov/faq/oral_health.htm

Phone number: (800) 994-9662,
(888) 220-5446 TDD

Division of Oral Health, CDC

4770 Buford Highway NE, MS F-10
Atlanta, GA 30341

Web site: www.cdc.gov/oralhealth

Phone number: (800) 232-4636,
(888) 232-6348 TTY

National Oral Health Information Clearinghouse, NIH

1 NOHIC Way

Bethesda, MD 20892-3500

Web site: www.nidcr.nih.gov

Phone number: (301) 402-7364

Academy of General Dentistry

211 E Chicago Ave, Ste 900

Chicago, IL 60611-1999

Web site: www.agd.org/public

American Academy of Periodontology

737 N Michigan Ave, Suite 800

Chicago, IL 60611-6660

Web site: www.perio.org

American Association of Orthodontists

401 N Lindbergh Blvd

St Louis, MO 63141-7816

Web site: www.braces.org

American Dental Association

211 East Chicago Ave

Chicago, IL 60611-2678

Web site: www.ada.org

