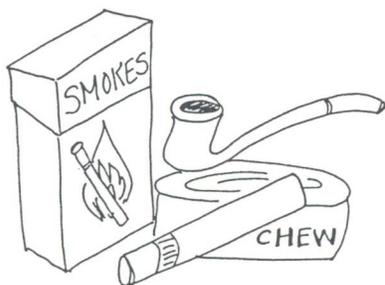


## Other Factors Affecting Oral Health

Daily oral care and food choices play a significant role in oral and total health. However, there are other factors that affect oral health, including tobacco, alcohol, drugs, herbal remedies and oral embellishment.



### ***Tobacco***

Tobacco products, both smoked and smokeless, increase the risk of oral cancer, periodontal disease and dental caries. Smoked tobacco products include cigarettes, cigars and pipes.

Smokeless tobacco products ("spit" tobacco, "chew" or snuff) are chewed, sucked on or applied directly between the cheek and gum.

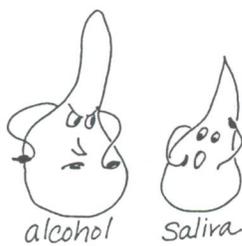
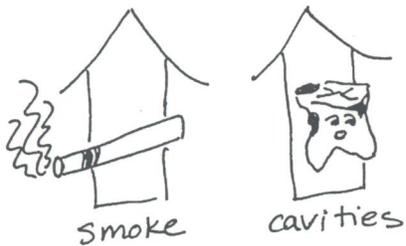
They are NOT safe alternatives to smoking tobacco. In addition to the toxic components of tobacco, smokeless tobacco has added sugars.

Oral complications:

- Exposure to heat (smoked tobacco) and toxins
- Tissue trauma and lacerations
- Stained teeth and tongue
- Halitosis (bad breath)
- Tooth sensitivity
- Gum recession
- Root caries (decay on roots of teeth that have recessed gums)
- Dental caries (smokeless tobacco products add sugar and flavoring)
- Periodontal disease
- Oral cancer – approximately 80-90% of all oral cancer is attributed to tobacco product use



A 2003 report in the Journal of the American Medical Association shows evidence that passive (indirect) or “second hand” smoking can also influence oral health. A large national health and nutrition study linked environmental tobacco smoke and the risk of cavities among children. Blood levels of a chemical marker for tobacco smoke were higher among children who had more decayed and filled tooth surfaces in their primary teeth.



**Alcohol**

Excessive alcohol use increases the risk of oral cancer, causes xerostomia (dry mouth) and might lead to behavioral changes that adversely affect oral health. When used in combination with tobacco products, excessive alcohol use dramatically increases the risk of oral cancer.



Xerostomia often occurs with alcohol consumption. Since saliva acts as an oral lubricant, cleanser and acid neutralizer, reduced salivary flow leads to increased risks for tooth decay and periodontal disease.

Excessive alcohol use can cause behavioral changes that further contribute to oral disease. Unhealthy dietary habits, such as eating infrequently or substituting alcohol for meals, can cause nutrition imbalances.

*Xerostomia (zir-oh-STOH-mee-ah): Dryness of the mouth due to a lack of saliva. Xerostomia can be caused by alcohol intake, diabetes, medications such as antihistamines and cough syrups, cancer radiation treatment to the head/neck, or surgical removal of salivary glands.*

Poor nutrition negatively impacts the body's immune system and increases the risk for periodontal disease.

Personal hygiene practices are often changed through alcohol overuse/abuse. Regular tooth brushing and flossing, are often neglected if not completely forgotten. This neglect can lead to both cavities and periodontal disease.

*Excess alcohol increases risks for:*

- *xerostomia*
- *cancer*
- *tooth decay*
- *gum disease*
- *malnutrition*
- *poor oral health care*

### ***Tobacco and Alcohol Use: Oral Cancer Links***

Lifestyle choices, that include tobacco use and excessive alcohol consumption, greatly increase the risk for cancers of the lips, mouth, tongue, gums and throat. With rates of oral cancer increasing, it is important to be aware of signs and symptoms.

Possible oral cancer indications that should be evaluated by a dental professional:



- Irritation such as tenderness and burning, or a sore that won't heal, in or around the mouth, and that persists longer than two weeks
- Pain or numbness anywhere in the mouth or on the lips
- A lump in or about the mouth, face or neck
- A thickened, leathery, wrinkled or bumpy patch inside the mouth
- Color changes in oral soft tissue (normally a healthy pink) to red, white or gray spots or patches
- Difficulty chewing, swallowing, speaking or moving the jaw or tongue
- A change in the way teeth fit together
- Ear pain
- Persistent hoarseness

Oral cancer screenings should be performed by a dental professional at least annually. Individuals should become familiar with what is "normal" in their mouths and do a monthly oral self-exam. Changes must be evaluated by a dental professional. With early detection and treatment, death rates from oral cancer are greatly reduced.

### ***Prescription/Over-the-Counter Drugs***

Many prescription and over-the-counter (OTC) drugs are in the form of liquids and chewable tablets. Manufacturers might add sugar to improve the flavor and patients' willingness to take the medication. When taking multiple daily doses, the mouth and teeth are continuously exposed to the added sugars.





Prescription and OTC drugs can also increase the possibility of **xerostomia** (dry mouth), which, in turn, increases the risk of tooth decay and periodontal disease. Bacteria flourish when less saliva is present to clean teeth and neutralize the germs' acidic wastes. Xerostomia can also cause poor dietary intake as well as speech dysfunction. Nutritional deficiencies can occur as chewing healthful foods becomes painful, and swallowing becomes difficult. Sucking hard candies/lozenges might seem to help with speech and/or swallowing, but sugar products increase the risk of tooth decay.

Many medications that have the prefix "anti-" (i.e., antidepressants, antihistamines) can cause xerostomia. Individuals should check with their own physicians and pharmacists for possible drug side effects.



Over-the-counter products are available to help reduce the effects of dry mouth. These include:



- Saliva-substitute gel
- Toothpaste
- Chewing gum
- Mouth rinse

Check with a dental professional for specific product recommendation and information.

### Recreational or "Street" Drugs



Clinical research reports are now emerging, linking classes of illicit drugs to oral signs and symptoms. Drug abusers have a higher incidence of tooth decay, missing teeth and periodontal disease, possibly resulting from neglect more than the drugs themselves.

Stimulants, such as cocaine and methamphetamines, can cause:

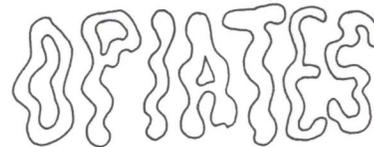
- xerostomia,
- halitosis (bad breath),
- bruxism (teeth grinding/clenching),
- gingival (gum) tissue laceration and
- infection from drugs directly applied to tissue.



Because stimulants produce a loss of appetite, nutrient deficiencies often follow. Poor nutrition can result in:

- angular cheilitis (cracked corners of lips),
- necrotizing gingivitis,
- oral candida infections (thrush) and
- glossodynia (pain or burning tongue).

Although the exact cause has not been determined, people who use opiate drugs, such as heroin, might exhibit large areas of tooth decay, especially at the gingival margins (gumline).



Compared to non-users, marijuana users have higher rates of dental caries, missing teeth and more bacterial plaque and tooth staining. It is not certain why this sedative has these pronounced effects.



### ***Herbal Remedies***

Herbal remedies are plant-derived, “medicinal” products that are classified as dietary supplements. Unlike traditional medications in the United States, the Food and Drug Administration (FDA) does not require testing for herbal supplements before they are sold. These supplements can interfere with prescription drugs. Individuals should inform their medical and dental team of all remedies being taken, including herbs/herbals.

Some oral side effects of herbal remedies can include:

- Xerostomia (dry mouth),
- Increased saliva flow,
- Aphthous ulcers (canker sores),
- Lip and tongue irritation and swelling,
- Gingival (gum) tissue bleeding,
- Tongue numbness and
- Oral and lingual dyskinesia (impaired movement of mouth and tongue).

### ***Oral Embellishment***

Oral embellishment includes piercing, tattoos, and various dental jewelry. Embellishment can increase the risk of infection, tooth damage, speech problems, nerve damage and periodontal destruction.



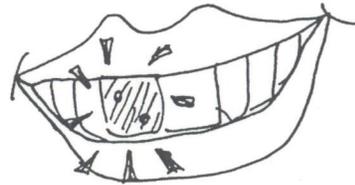
Oral piercing can cause a variety of oral and overall health complications. These include, but are not limited to:

- fractured or broken teeth
- nerve damage
- permanent numbness
- gum recession
- increased saliva flow
- permanent drooling
- risk of diseases spread through unsanitary needles
- keloid scars
- altered speech
- damaged sense of taste
- toxic shock
- enlarged lips and/or tongue
- life-threatening stroke
- allergic reactions to metals
- swallowing or inhaling jewelry

Oral tattoos can put the recipient at risk for infection from diseases that pass through blood or body fluids. Infection can occur if the tattoo is not placed under sanitary conditions with standard infection control procedures, including sterilized instruments, gloved technicians and sterile, disposable needles.

Dental jewelry or “tooth fronts” are removable, decorative items to be worn over the teeth. They are usually custom-made. Many contain gold or platinum and are embellished with diamonds or other precious gemstones. They must be removed prior to eating. Dental jewelry, while worn, can cause:

- speech problems (slurring or lisping),
- gum tissue irritation,
- tooth chipping and
- tooth cracks or fractures.



Some dental jewelry is permanent and might include a jewel-embedded gold crown, symbol, initial or other design that is fused to the tooth enamel. They are often made and placed by a dental professional. Most require removal of tooth structure, which weakens the tooth.