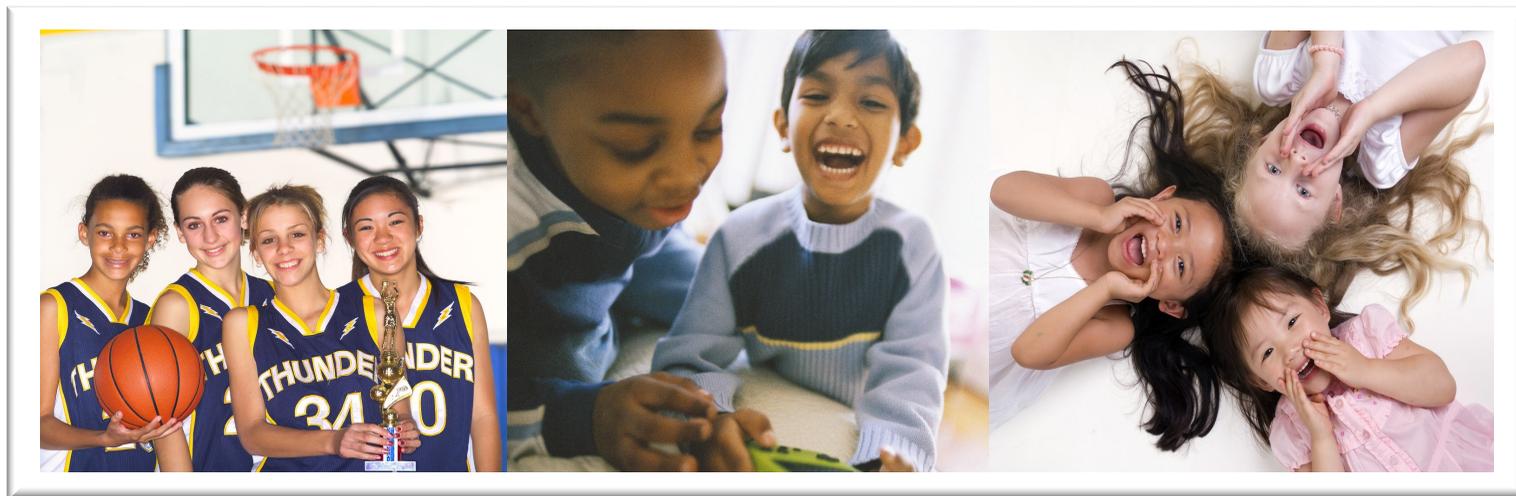


DENTAL FIRST AID

Office of Oral Health • Prevention and Health Promotion Administration

Maryland Department of Health and Mental Hygiene



This tool is designed to aid school nurses, school health aides, pre-school and school teachers, pre-school and school administrators, daycare coordinators, healthcare providers, and other health and administrative personnel in the effective management of dental emergencies and basic oral health principles, prevention, and care. Although these first aid procedures should provide temporary relief and assistance, they are not intended to permanently resolve a dental problem.

A local dentist or physician should be consulted as soon as possible in most situations. If a child does not have a dentist, please contact:

- ◆ Your local health department (see section for [Local Dental Services | Oral Health Resource Guide](#))

- ◆ Maryland Healthy Smiles Program (Medicaid eligible) _____ 1-855-934-9812 (program members)
www.member.MDhealthysmiles.com



1-844-275-8753 (dental providers)
www.provider.MDhealthysmiles.com

- ◆ Maryland State Dental Association _____ 410-964-2880
www.msda.com

- ◆ Maryland Department of Health and Mental Hygiene,
Office of Oral Health _____ 410-767-5300
www.phpa.dhmh.maryland.gov/oralhealth

CLICK ON ANY OF THE FOLLOWING TOPICS FOR MORE INFORMATION

[TOOTHBRUSHING](#)

[TEETHING AND FLOSSING](#)

[DENTAL FIRST AID | TOOTHACHE AND SWELLING](#)

[ORAL ULCERS | ORAL PIERCING COMPLICATIONS](#)

[LOCAL DENTAL SERVICES | ORAL HEALTH RESOURCE GUIDE](#)

[INJURY PREVENTION | MOUTH GUARDS | ORAL TISSUE INJURY](#)

[NUTRITION AND ORAL HEALTH](#)

[CHILD ABUSE/DENTAL NEGLECT | TOOTH ERUPTION, SHEDDING AND TOOTH PAIN](#)

[GUM INFLAMMATION | OBJECTS WEDGED BETWEEN TEETH](#)

[TOOTH EXTRACTION COMPLICATIONS | ORTHODONTICS \(BRACES\)](#)

[DENTAL TRAUMA | POSSIBLE JAW DISLOCATION OR FRACTURE](#)

[BROKEN, DISPLACED OR LOSS OF TOOTH](#)

[FLUORIDE](#)

[WATER TESTING SITES](#)



Proper toothbrushing is not difficult. Just follow these steps:

Place the toothbrush against the gum line at a 45-degree angle. Use a small circular motion to brush your teeth.

Brush back and forth on the chewing surfaces of your teeth holding the brush flat.

Brush the back of your teeth!

Brush your tongue! This will freshen your breath and remove germs.

Brush for at least two minutes, two times a day.

Be sure to brush at bedtime to remove germs that can cause decay while you are sleeping.



2 minutes

+2 times a day

4 a Healthy Smile

Brush With **Fluoride**
Toothpaste



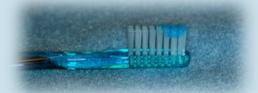
TOOTHBRUSHING

Plaque contains a sticky layer of germs which can lead to tooth decay and gum disease. Brush with toothpaste containing fluoride for at least two minutes, twice a day (after breakfast and before bed). This keeps the teeth and gums healthy.

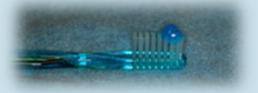
Brushing Tips:

- ◆ Always use a soft-bristle toothbrush and always use toothpaste with fluoride. Use the correct amount of toothpaste according to age. (see chart)
- ◆ Replace your toothbrush every 3 months.
- ◆ Never share toothbrushes, it spreads germs.
- ◆ Children at high risk for tooth decay should use toothpaste that has fluoride as soon as the first tooth appears.
- ◆ Children younger than age 8 need supervision to make sure they do not use too much toothpaste and that they brush their teeth thoroughly.

How Much Toothpaste with Fluoride?



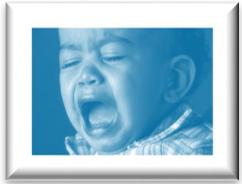
Under Age 3: Slight smear about the size of a grain of rice



Ages 3 - 6: Pea-sized amount

(Toothbrush images courtesy of Dr. Norman Tinanoff, University of Maryland School of Dentistry)

Spit, do not rinse after brushing.



TEETHING

Babies begin teething around 5 months of age. Local discomfort is common with tooth eruption and can be associated with cold, fever or diarrhea.

Strategies to ease the pain and discomfort of teething

Keep it safe: Make sure liquid-filled teething toys are made of durable materials that the baby cannot chew a hole into. Use plastic teething toys that do not contain bisphenol A (BPA). Find teething toys that do not have loose pieces that could break off in baby's mouth and cause choking.

Cool it: Give the baby a refrigerated clean wet washcloth, spoon, pacifier, or teething ring to chew on. Cold helps the pain of sore gums. Teething rings should NOT be put in the freezer.

Freeze it: Unlike teething rings, certain frozen foods such as sliced peaches, can help ease teething pain.

Massage it: Gently rub the baby's gums with a clean finger for 2 minutes. Many babies find the pressure soothing.

Don't use it: Oral health and medical providers do not recommend using teething gels and liquids on babies' gums.

FLOSSING

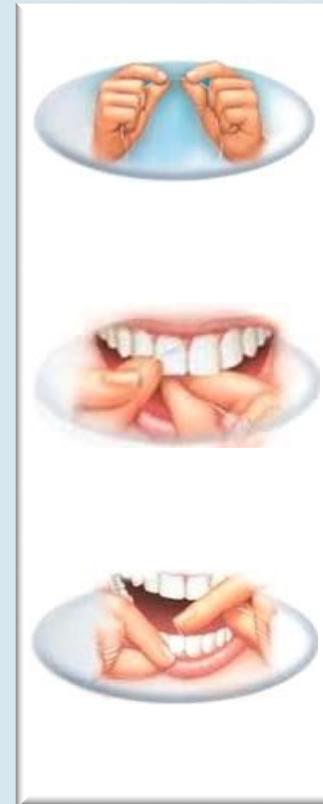


Flossing removes plaque between teeth and above and below the gum line - areas a toothbrush cannot reach.

By combining brushing with toothpaste that contains fluoride and flossing at the same time everyday (and with the appropriate diet), you can thoroughly prevent the germ-containing plaque from causing cavities and gum disease.

Flossing is as easy as brushing once you know how.

Follow these steps:



Wrap about 18 inches of floss around the middle fingers.

Slide the floss between the teeth. (Do not snap the floss into the gums but guide the floss gently just below the gumline).

As the floss reaches the gum line, make a C-shape around the tooth until you feel pressure against your tooth.

Gently scrape the tooth surface with the floss.

Move the floss as it becomes soiled and repeat the process for each tooth. Floss every day.

If assisting a child to floss, you should wear gloves (non-latex).

Children under the age of 8 should never floss without an adult's help. A dentist or dental hygienist can show you how to floss your child's teeth.

DENTAL FIRST AID SUPPLIES

The following should be present in your first aid kit for use in dental emergencies:



Disposable non-latex gloves (should be worn at all times)

Mask (to be worn when blood may splatter)

Eyewear (to be worn when blood may splatter)

Cotton swabs

Sterile gauze squares 2" x 2" or pads

Toothbrushes

Dental floss

Ice pack or wet frozen washcloth

Saline or salt water

Flashlight

Tongue blade or dental mouth mirror

Medications cannot be used in most schools without a written approved protocol specific to each drug and signed by a physician or dentist and written permission from a parent or caregiver.

TOOTHACHE AND SWELLING

The following steps should be taken for a child with suspected toothache or facial swelling:

- ◆ Clean the area around the sore tooth thoroughly by rinsing the mouth with warm salt water.
- ◆ Check the child's temperature and observe for respiratory distress.
- ◆ Administer appropriate over-the-counter pain medication if needed.



DO NOT PLACE ASPIRIN ON THE GUM OR ACHING TOOTH!

- ◆ If the child's face is swollen, apply a cold compress or ice. Alternate 10 minutes on and 5 minutes off.
- ◆ If the child has a localized abscess or gum boil (with or without pain), avoid heat.
- ◆ Follow-up with the child to check the outcome of the toothache or swelling 24 hours after first contact with the child.
- ◆ Refer to a dentist as soon as possible.

NOTE: Your local health department, the Maryland Office of Oral Health, or the Maryland State Dental Association can be contacted for names of dentists who accept emergency patients. In addition, area dental schools, hospitals with dental emergency facilities and other community dental clinics can be contacted for emergency care. (See Local Dental Services in this flip chart or Oral Health Resource Guide on the web phpa.dhmd.maryland.gov/oralhealth for contact information.)



When examining the mouth and surrounding structures,
ALWAYS wash your hands (before and after) and **ALWAYS** wear non-latex gloves!

ORAL ULCERS

Oral ulcers can be the result of:

- ◆ Aphthous lesion/canker sore (on softer mouth tissues)
- ◆ Cold sore/fever blister or traumatic lesion (on harder mouth tissues)

The following steps should be taken for ulcers:

- ◆ Always wear non-latex gloves when touching lesions. Before and after inspecting lesions and removing gloves, wash hands thoroughly.
- ◆ Observe the location, type and severity of lesions.
- ◆ Take the child's temperature. Administer appropriate mild over-the-counter pain medication (if needed and possible).
- ◆ Tell the child to avoid spicy foods.
- ◆ Apply ice to the area to provide temporary relief.
- ◆ Contact the child's parent or caregiver for referral to a physician or dentist if fever and/or lesions persist.



Aphthous lesion/canker sore

Photo credit: .www.fitnesshealthpros.com

Oral ulcers can be a symptom of:

- Herpes virus
- Mumps
- German measles
- Impetigo
- Chicken pox
- Streptococcal infection
- Stress
- Other diseases or disorders



Cold sore/fever blister

Photo credit:www.healthtap.com

ORAL PIERCING COMPLICATIONS

There are many potential complications from piercing in and around the mouth. Most adolescents are unaware of the complications of intraoral piercing.

Possible Complications

- Tooth fracture or injury
- Stud aspiration
- Allergic reaction
- Nerve damage
- Speech impediment
- Gingival (gum) recession
- Infection

Management of Complications

If the adolescent presents with inflammation around a piercing, refer the child to a dentist or physician who should:

- ◆ Remove the jewelry;
- ◆ Perform local debridement;
- ◆ Start antibiotics;
- ◆ Provide close follow-up.

Complication of oral infection may include sepsis and airway obstruction.

Reference: Smiles for Life, A National Oral Health Curriculum. Course 4: Acute Dental Problems "Oral Piercing Complications."

www.smilesforlifeoralhealth.org, 01/13/2015.

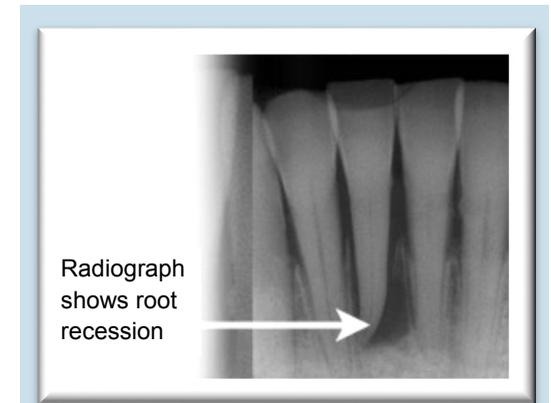


Photo credit: Washington Interdisciplinary Children's Oral Health Promotion (ICOHP)

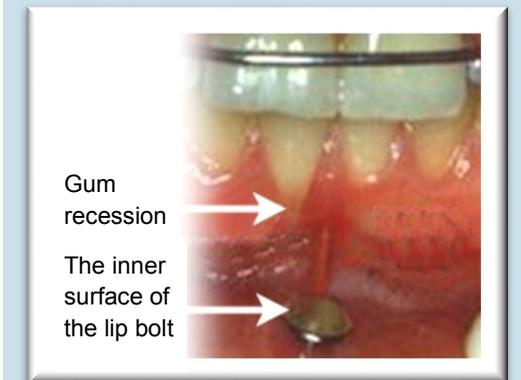


Photo credit: Washington Interdisciplinary Children's Oral Health Promotion (ICOHP)



University of Maryland Dental School, Baltimore, MD

Pediatric Clinic:.....410-706-4213
 Adult Clinic:.....410-706-7101

Howard University Dental School, Washington, DC

Pediatric Clinic:.....202-806-0307
 Adult Clinic:.....202-806-0007

CLINICAL DENTAL PROGRAMS OPERATED BY LOCAL HEALTH DEPARTMENTS AND FEDERALLY QUALIFIED HEALTH CENTERS

Allegany County

Allegany County Health Dept.....301-759-5030

Anne Arundel County

Anne Arundel County Health Dept.
 Annapolis Health Center.....410-222-7138
 N. County Health Service Center 410-222-6861

Baltimore City

Baltimore City Health Dept.
 Druid Dental Clinic.....410-396-0840
 Eastern Dental Clinic.....443-984-3548
 Chase Brexton Dental Clinic.....410-837-2050
 Family Health Centers of Baltimore 410-354-2000
 Healthcare for the Homeless.....410-837-5533
 University of MD Rehabilitation &
 Orthopaedic Institute (formerly Kernan Hospital)
 Restorative Services Dental Clinic
 410-448-6290
 Cleft Palate Clinic.....410-448-2500
 Park West Health Center.....410-542-7800
 Total Health Care.....410-383-8300
 University of Maryland School of Dentistry
 General Dentistry (Pre-Doctoral clinic)
 410-706-7101
 Advanced General Dentistry (Post-Doctoral clinic)
 410-706-2940
 Urgent Care (Emergency) Dentistry
 410-706-2716
 Pediatric Dentistry.....410-706-4213
 Orthodontics.....410-706-7803
 University of MD Medical System
 Dept. of Oral and Maxillofacial Surgery
 410-706-6195

Baltimore County

Baltimore County Health Dept.....410-887-2781
 Chase Brexton Randallstown Center
 410-496-6441

Calvert County

Calvert Community Dental Care.....410-535-8402

Caroline County

Choptank Community Health System
 Federalsburg Dental Center.....410-754-7583
 Goldsboro Family Dental Center...410-482-2224

Carroll County

Access Carroll.....410-871-1478
 Carroll County Health Dept.....410-876-4918

Cecil County

University of MD School of Dentistry-Perryville
 410-706-4900
 West Cecil Health Center.....410-378-9696

Charles County

Charles County Health Dept.....301-609-6886
 Health Partners, Inc.....301-645-3556

Dorchester County

Choptank Community Health System
 Cambridge Dental Center.....410-228-9381

Frederick County

Frederick County Health Dept.....301-600-1041

Garrett County

Garrett County Health Dept.....301-334-7660

Harford County

Harford County Health Dept.....443-922-7670

Howard County

Chase Brexton, Columbia.....410-884-7831

Kent County

refer to Caroline and Cecil County listings

Montgomery County

Community Clinic, Inc.....240-720-0510
 Montgomery County Health Dept.
 Piccard Drive Health Center 240-777-1875
 Fenton Street Dental Clinic.....240-777-3135
 Germantown Health Center.....240-777-3290
 Metro Court Adult Dental Clinic...240-773-0304
 Colesville Adult Dental Clinic.....301-384-9795
 Dennis Avenue Health Center...240-777-1737

Prince George's County

Community Clinic, Inc.....240-624-2278
 Greater Baden Medical Services...301-888-2233
 Prince George's County Health Dept.
 Cheverly Clinic.....301-583-5900
 Deamonte Driver Dental Project...301-593-5900
 University of MD School of Dentistry
 College Park Site.....301-314-9500

Queen Anne's County

refer to Caroline and Cecil County listings

Somerset County

Three Lower Counties Community
 Services, Inc. (TLC).....410-651-5151

St. Mary's County

St. Mary's County Health Dept.....301-475-4316

Talbot County

refer to listings for Caroline County

Washington County

Walnut Street Community Center.....301-393-3450

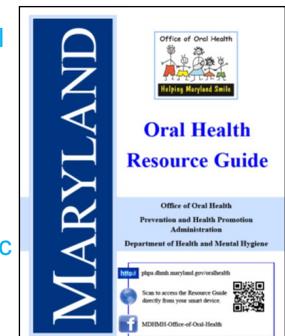
Wicomico County

Wicomico County Health Dept.....410-334-3401

Worcester County

Worcester County Health Dept.....410-641-0240

Download the Maryland Oral Health Resource Guide (phpa.dhmh.maryland.gov/oralhealth) for a complete listing of dental services provided by local health departments and other public dental programs.





INJURY PREVENTION

Preventing oral injuries is important for many reasons. Injured primary (baby) teeth can turn brown or black, be painful, become infected, or have to be removed. Primary teeth keep space for permanent teeth; injuries to a child's primary teeth can damage the permanent teeth. Injuries to primary or permanent teeth can also affect a child's speech, nutrition, self-esteem, and overall health.

Dental injuries are the most common type of injuries to the face. Half of these injuries can be prevented. In the United States, five million teeth are knocked out each year - mainly front teeth. 33 percent of all five-year-olds have injured their primary teeth. 60 percent of facial injuries occur during sports practice. The cost to repair a broken tooth is more expensive than a mouth guard.

Wearing a Mouth Guard Helps Protect Teeth, Lips and Tongue from Trauma.

NUTRITION AND ORAL HEALTH

The germs that cause tooth decay feed on sugar and produce acid. The acid attacks enamel, the protective outer layer of a tooth. Once the enamel is worn down, a cavity is formed. Unless it is treated by a dentist, the cavity will grow until it destroys the tooth.

Plaque and Acid Attack Tooth Enamel



Every sip or bite of a sugary food or drink starts a new acid attack. Acid attacks last 20-40 minutes. Frequent sipping and snacking result in a continuous acid attack.

Sodas, sports drinks, sweet tea and juice contain sugar and acid which can erode tooth enamel. Even diet or "sugar free" soft drinks have acids that can harm teeth. Sodas have no nutritional value, only empty calories!



More and more people are becoming concerned about sugary drinks — the empty calories, the long-term impact on kids' tastes, the potential for obesity and diabetes.

The [Better Beverage Finder](http://www.betterbeveragefinder.org) website helps families make better choices. The site allows users to search for beverage choices any mother can love and find where to get them in Howard County. If you don't live in Howard County, you can discover the best choices to look for in your community.

Visit the Resources section at the website for free downloadable campaign posters. Help spread the news about better beverages!

www.betterbeveragefinder.org



	Acid*	Sugar**
The SMALLER the acid number, the STRONGER the acid!	Low = Bad	Per 12 ounce Serving (1 can)
Pure Water	7.00	0.0 tsp.
Barq's Root Beer	4.61	10.7 tsp.
Diet 7UP	3.67	0.0 tsp.
Sprite	3.42	9.0 tsp.
Diet Coke	3.39	0.0 tsp.
Mountain Dew	3.22	11.0 tsp.
Fresca	3.20	0.0 tsp.
Orange Slice	3.12	11.9 tsp.
Diet Pepsi	3.05	0.0 tsp.
Nestea	3.04	5.0 tsp.
Gatorade	2.95	3.3 tsp.
Dr. Pepper	2.92	9.5 tsp.
Hawaiian Fruit Punch	2.82	10.2 tsp.
Orange Minute Maid Soda	2.80	11.2 tsp.
Coke Classic	2.53	9.3 tsp.
Pepsi	2.49	9.8 tsp.
Battery acid	1.00 (ouch!)	0.0 tsp.

*Laboratory tests, University of Minnesota School of Dentistry, 2000.
 **USDA: 4.2 grams = 1 teaspoons of sugar

Types of Mouth Guards

Oral Tissue Injury

Stock Mouth Guard

Inexpensive, pre-formed, ready to wear, can be bought at many sporting goods stores.

Often do not fit very well, may be bulky, may make breathing and talking difficult.

Boil and Bite Mouth Guard

Most commonly used, can be bought at many sporting goods stores.

Should be softened in water, inserted and allowed to adapt to the shape of the mouth.

Custom-Fitted Mouth Guard

Made by a dentist, best at preventing injury.

Most expensive type of mouth guard.

In all cases of trauma, rule out serious head injury.

- ◆ Have the child rinse and spit repeatedly with warm water.
- ◆ Apply firm but gentle pressure (wearing non-latex gloves after washing hands) to the bleeding area with 2"x2" sterile gauze for at least 5 minutes. If injury site has been contaminated with soil, check the child's records for date of most recent tetanus shot.
- ◆ Vigorous bleeding may be expected initially.
- ◆ Remove foreign body if easily visible and accessible.
- ◆ Carefully check for broken/fractured teeth and avulsed (knocked out) teeth. Also look for tooth fragments in mouth, lip and cheek.
- ◆ If the tooth has been shoved into the socket, contact a dentist immediately.
- ◆ If swelling or bruising is present, apply ice, alternating 10 minutes on and 5 minutes off (lip injury).
- ◆ Notify parent or caregiver.
- ◆ If bleeding still persists after 15 minutes or cannot be controlled by simple pressure, or if the injury is severe, the child should be taken to the hospital emergency room, according to constitutional policy.

CHILD ABUSE / DENTAL NEGLECT

Tooth decay is the most common chronic disease in childhood, five times more common than asthma. Tooth decay is an infection. Left untreated, tooth decay can cause pain, malnutrition, difficulty concentrating and learning, and poor overall health.

The Code of Maryland Regulations (COMAR) requires health practitioners, educators, human service workers and police officers to report any suspected child abuse and neglect to local department of social services or to a local law enforcement agency. Dental neglect is a form of child abuse not often considered though it may have profound repercussions on the life of a child.

Dental neglect is the willful failure of a parent or guardian to seek and follow through with treatment necessary to ensure a level of oral health essential for adequate function and freedom from pain and infection.

Source: American Academy of Pediatric Dentistry

Some Signs of Dental Neglect

- ◆ Child is unable to eat normally
- ◆ Child does not smile with his or her teeth
- ◆ Child demonstrates changes in behavior (for example, puts hand in front of mouth, failure to thrive)
- ◆ Crying, in constant pain
- ◆ Teeth appear rotted, grossly discolored
- ◆ Perpetually bad mouth odor

TO REPORT NEGLECT:

Maryland Child Protective Services

1-800-332-6347

District of Columbia Family Services Administration

202-671-7233

Delaware Child Protective Services

1-800-292-9582



Facial swelling (cellulitis) related to untreated dental decay.



Photo credit: mchoralhealth.org
Abscesses are present on upper gum, teeth have severe decay.



Photo credit: midatlanticpanda.org
View shows teeth decayed to the gumline.

TOOTH ERUPTION, SHEDDING AND TOOTH PAIN



Erupting Primary (baby) Teeth and Teeth Pain

Local discomfort is common with tooth eruption and can be associated with cold, fever or diarrhea.

See topic for [Teething and Flossing](#) for strategies to help with infant teething.

Eruption sites (locations where teeth are about to appear) should be hard and blanched (white). If an eruption site is soft, it may indicate an eruption cyst. In this instance, contact the parent or caregiver for referral to a dentist.

Shedding (losing) Primary (baby) Teeth and Teeth Pain

- ◆ Pain associated with losing primary teeth is normal.
- ◆ Encourage the child to remove the tooth at home.
- ◆ Determine if pain is due to incomplete shedding of the primary tooth. If so, refer the child to a dentist.
- ◆ Advise the child to avoid the site while eating.

Erupting Permanent Teeth and Teeth Pain

No treatment is necessary unless the child is experiencing prolonged pain (more than 24 hours). This may be caused by inflammation around an impacted or partially impacted tooth.



Primary (baby) Teeth

Upper Teeth	Erupt	Shed
Central incisor	8-12 mos.	6-7 yrs.
Lateral incisor	9-13 mos.	7-8 yrs.
Canine (cuspid)	16-22 mos.	10-12 yrs.
First molar	13-19 mos.	9-11 yrs.
Second molar	25-33 mos.	10-12 yrs.

Lower Teeth	Erupt	Shed
Second molar	23-31 mos.	10-12 yrs.
First molar	14-18 mos.	9-11 yrs.
Canine (cuspid)	17-23 mos.	9-12 yrs.
Lateral incisor	10-16 mos.	7-8 yrs.
Central incisor	6-10 mos.	6-7 yrs.

Used with permission of the Arkansas Office of Oral Health

Permanent Teeth

Upper Teeth	Erupt
Central incisor	7-8 yrs.
Lateral incisor	8-9 yrs.
Canine (cuspid)	11-12 yrs.
First premolar (first bicuspid)	10-11 yrs.
Second premolar (second bicuspid)	10-12 yrs.
First molar	6-7 yrs.
Second molar	12-13 yrs.
Third molar (wisdom tooth)	17-21 yrs.

Lower Teeth	Erupt
Third molar (wisdom tooth)	17-21 yrs.
Second molar	11-13 yrs.
First molar	6-7 yrs.
Second premolar (second bicuspid)	11-12 yrs.
First premolar (first bicuspid)	10-12 yrs.
Canine (cuspid)	9-10 yrs.
Lateral incisor	7-8 yrs.
Central incisor	6-7 yrs.

Used with permission of the Arkansas Office of Oral Health



GUM INFLAMMATION

A blow (trauma) to the mouth can cause the gum tissue to swell and bleed. Evaluate the child for signs and symptoms of a concussion and additional injuries if trauma caused the bleeding.

A cold compress may be applied to the area from the outside of the cheek to help control swelling.

If appropriate, while wearing gloves, apply direct pressure with a sterile 2" x 2" gauze to the injured gum or cheek to control the bleeding and contact the child's parent or caregiver according to institutional policy.

Inflamed or irritated gum tissue and/or gingivitis can be caused by:



- ◆ **Poor oral hygiene** - this can be corrected by daily removal of plaque by brushing and flossing with toothpaste that contains fluoride.
- ◆ **Puberty** (hormones associated with adolescence)
- ◆ **Pregnancy** (increased hormone levels)
- ◆ **Smoking** (affects gum tissue)

Sudden bleeding or swelling of the gums may be the result of food or foreign body impaction. Locate and, if possible, remove the debris with a soft bristled toothbrush. You may need to wear gloves (non-latex).

In general, red, swollen gums should be rinsed thoroughly with a warm salt water solution (containing one dissolved teaspoon of salt in an 8 oz. glass of warm water) for 15-30 seconds and spit out completely. The child's parent or caregiver should be contacted for referral to a dentist if the bleeding cannot be controlled.

OBJECTS WEDGED BETWEEN TEETH

If an object becomes wedged between teeth:

- ◆ The child may use dental floss to remove the object, if age appropriate.
- ◆ Remember to assist the child in guiding the floss gently between teeth, to prevent injury to gum tissue.
- ◆ Do not try to remove the object with a sharp or pointed tool/instrument. This may result in injury.
- ◆ If unsuccessful, contact the parent or caregiver for referral to a dentist.

TOOTH EXTRACTION COMPLICATIONS

The child has been instructed by the dentist:

Not to rinse or swish for 24 hours after an extraction, as this could wash out the blood clot forming at the extraction site. Normal drinking is permissible. Instruct the child to follow these steps:

- ◆ Not to use straws for 24 hours; the suction may dislodge the blood clot.
- ◆ Not to eat excessively cold or hot foods for 24 hours because this could dislodge the blood clot.
- ◆ Not to smoke since smoking could delay tissue healing.
- ◆ Not to spit or play with the extraction site (especially with the tongue).

If the bleeding is determined to be more than oozing (has a bright red color) or is alarming the child, the following is recommended:

- ◆ Fold a 2" x 2" sterile gauze pad and place on the extraction site (wearing gloves), having the child bite down on it for about 30 minutes. Replace soaked 2" x 2" gauze pads as necessary.
- ◆ If bleeding cannot be controlled within an hour or is extensive, advise the parent or caregiver to immediately take the child to a hospital emergency room.



ORTHODONTIC (BRACES) OR OTHER APPLIANCES

If a wire or appliance becomes loose or broken and cannot be removed easily, contact the parent or caregiver to take the child to a dentist (preferably an orthodontist) immediately.

If a broken appliance can be removed easily, take the following steps:

- ◆ A blunt item (tongue depressor) may be used to gently bend the wire so that it is no longer irritating oral tissue.
- ◆ If cheek or gum is pierced by a wire, ease the tissue off the wire if possible. Cover the wire with cotton gauze, cotton balls, or wax and contact the parent or caregiver for referral to the orthodontist.
- ◆ If the protruding wire cannot be bent, simply cover the end of it with a piece of cotton gauze, a cotton ball or wax so that it is no longer causing irritation.
- ◆ DO NOT REMOVE THE WIRE. Contact the parent or caregiver for referral to the child's orthodontist.
- ◆ Do not attempt to remove the wire if it is broken off and/or embedded in the cheeks, gums or tongue.

Note: Most children with braces have orthodontic wax and know how to apply it.

DENTAL TRAUMA

In all occasions of oral or dental trauma, serious head injury should be ruled out.

SIGNS AND SYMPTOMS OF CONCUSSION MAY INCLUDE: NAUSEA/VOMITING, DIZZINESS/HEADACHE, DILATED PUPILS, COLD/CLAMMY SKIN.

POSSIBLE JAW DISLOCATION OR FRACTURE

In all occasions of oral or dental trauma, serious head injury should be ruled out. Signs and symptoms of concussion may include: nausea/vomiting, dizziness/headache, dilated pupils, cold/clammy skin.

Note time of injury and other injuries that may be present.

If a jaw fracture or dislocation is suspected, do the following:

- ◆ Contact the parent or caregiver immediately and arrange for the child to be taken to an oral surgeon or hospital emergency room;
- ◆ Elevate the head and apply a cold compress;
- ◆ Stabilize the patient as well as possible;
- ◆ Monitor vital signs (breathing, pulse) and consciousness and record all observations. If any loss of consciousness or difficulty breathing occurs, call your institutional emergency telephone number immediately!

BROKEN TOOTH

Control any bleeding;
Avoid further trauma to the area if possible;
Rinse dirt from injured area with warm water;
Apply a cold compress on the cheek next to the injured tooth to reduce swelling;
Observe broken end of tooth for bleeding;
Find broken tooth fragments if possible. Keep tooth piece in gauze moistened with water;
Make an immediate referral to a dentist.

DISPLACED TOOTH

If the tooth has been pushed up into the socket or gum by trauma, control bleeding and be supportive.

Immediate referral to a dentist.

DO NOT ATTEMPT TO PULL THE TOOTH INTO POSITION.

The tooth may discolor long after the original trauma and will need attention by a dentist at that time.

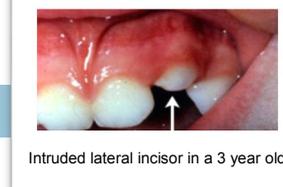


Photo credit: Washington Interdisciplinary Children's Oral Health Promotion

LOSS OF PRIMARY (BABY) TOOTH

If a primary tooth (baby tooth) is knocked out and traumatically lost:

- ◆ DO NOT attempt to replace the tooth in the child's mouth.
- ◆ Control any bleeding and check for other injuries. If bleeding doesn't stop, contact a dentist or physician immediately.
- ◆ Notify the child's parent or caregiver.
- ◆ Find the tooth and send it with the parent or caregiver to the dentist.
- ◆ If the injury site has been contaminated with soil, check the child's records for date of the most recent tetanus shot.

LOSS OF PERMANENT TOOTH

Contact the parent or caregiver and arrange to have the child taken to a dentist IMMEDIATELY. Many times the tooth can be successfully reimplanted and saved if accomplished within ONE HOUR. Look at the accident area for the tooth that was knocked out.



Joanna Douglass, BDS, DDS

IF A PERMANENT TOOTH IS KNOCKED OUT AND IS INTACT, TIME IS CRITICAL!

If found and dirty (prior to going to a dentist):

- ◆ Gently rinse the tooth under tap water (remember to plug sink!) DO NOT CLEAN OR SCRUB TOOTH! Hold tooth by the crown (top part of the tooth) and gently tease tooth back into socket. Be careful not to put the tooth in backwards!
- ◆ Child and/or parent or caregiver should hold tooth in socket while being transported to a dentist (the child may do this by biting on a clean gauze or cloth).

Empty socket of an avulsed permanent central incisor



Photo credit: Washington Interdisciplinary Children's Oral Health Promotion (ICOHP)

If the tooth cannot be placed back into the socket:

- ◆ Place tooth in a glass of cold milk or saline (whichever is available).
- ◆ Avoid storage in water.
- ◆ If the wound site has been contaminated by dirt or soil, record this information and send it with the injured child to aid the dentist in determining the necessity for a tetanus shot.





What is Fluoride?

Approximately 70 years of evidence supports the effectiveness and safety of fluoride in community water systems and its ability to prevent, reduce, or even reverse the onset and development of tooth decay. Through continuous research, drinking optimally fluoridated water has been scientifically proven to be safe and effective.

Fluoride is a natural element found in rocks and soil, in fresh water, and in ocean water. Waters in and around the United States have natural fluoride levels that range from 0.1 to more than 12 parts per million (ppm). It is known that in order to prevent tooth decay, the optimal fluoride level for a community water system is 0.7ppm. When the natural fluoride level in a community water system is below 0.7 ppm, cities and towns add supplemental fluoride to their community water systems as a cost efficient way to help reduce tooth decay.

What are the Benefits of Fluoridated Water?

Fluoridated water:

- ◆ Prevents tooth decay.
- ◆ Strengthens tooth enamel.
- ◆ Kills germs that cause tooth decay.
- ◆ Is a cost effective means of improving community health.

97% of the Maryland population on community water systems, or a total of 5,060,379 million people, had access to optimally fluoridated water in 2012 according to CDC data. Maryland ranks 4th in the nation for community water fluoridation and surpasses the Healthy People 2020 target of 79.6%.

Having Water Tested for Fluoride

Consult your medical or dental provider before making any decisions about dietary fluoride supplements (vitamins) which come in the form of liquid drops or tablets. If you do not know the concentration of fluoride in your community water supply, it is important to contact your local health department before a medical or dental provider prescribes fluoride supplements for children ages 6 months - 16 years of age. If you are on a private well, you should have it tested before taking any fluoride supplements.

The addition of supplemental fluoride to drinking water can be compared to the addition of supplemental Vitamin D to milk.

- ◆ Both fluoride and vitamin D occur naturally and provide significant health benefits when present in a person's diet at sufficient levels.
- ◆ Sufficient levels of Vitamin D in a person's diet can prevent rickets in children and bone disease in adults. Sufficient levels of fluoride in a person's drinking water can reduce tooth decay and strengthen tooth enamel.

Dietary Fluoride Supplementation Schedule

Age	<0.3 ppm F	0.3 to 0.6 ppm F	>0.6 ppm F
Birth to 6 months	0	0	0
6 mo to 3 years	0.25 mg	0	0
3 to 6 years	0.50 mg	0.25 mg	0
6 to 16 years	1.00 mg	0.50 mg	0

Approved by the American Dental Association Council on Scientific Affairs—2010

To Learn More, Check Out

- Centers for Disease Control and Prevention www.cdc.gov
- American Dental Association www.ada.org
- National Institutes of Health www.nidcr.nih.gov
- Campaign for Dental Health www.ilikemyteeth.org
- Children's Dental Health Project www.cdhp.org/resources/309-fluoride-fluoridation



Fluoride and Water Testing Laboratories

COUNTY	LABORATORY	CONTACT INFORMATION	COUNTY	LABORATORY	CONTACT INFORMATION
Baltimore	Enviro-Chem Laboratories, Inc. (410) 472-1112	47 Loveton Circle, Suite K Sparks, MD 21152	Frederick	Chemtech (908) 789-8900	7210A Corporate Court Frederick, MD 21703
Baltimore	Martel Laboratories JDS, Inc. (410) 825-7790	1025 Comwell Bridge Road Baltimore, MD 21286	Howard	Trace Laboratories-East (410) 584-9099 (410) 229-4371	5 North Park Drive Hunt Valley, MD 21030
Baltimore	Phase Separation Science, Inc. (410) 747-8770	6630 Baltimore National Pike Baltimore, MD 21228	Queen Anne's	Water Testing Aardvark Laboratory (410) 643-7711	1000 Butterworth Court Stevensville, MD 21666
Baltimore	Trace Laboratories-East (410) 548-9099 (410) 229-4371	5 North Park Drive Hunt Valley, MD 21030	Queen Anne's	Environmental Health Division (Queen Anne's County Local Health Department) (410) 748-2281	208 N. Commerce Street Centreville, MD 21617
Baltimore City	Microbac Laboratories Inc. Baltimore Division (410) 633-1800	2101 Van Deman Street Baltimore, MD 21224	Washington	Washington County Division of Environmental Management Laboratory (240) 313-2604	16232 Elliott Parkway Williamsport, MD 21795
Dorchester	Environmental Health Division (Dorchester County Health Department) (410) 228-1167	Note: This facility only conducts well testing at the request of a private dentist.	Wicomico	Eastern Shore Regional Lab (410) 219-9005	926 Snow Hill Road, #500 Salisbury, MD 21804
Frederick	Fredericktowne Labs, Inc. (301) 293-3340	3020 Ventrie Court Myersville, MD 21773			
Frederick	Catoctin Labs, Inc. (301) 663-5323	8609 Apples Church Road Thurmont, MD 21788-1312			

Resource list compiled by Rachel L. Abbott (Summer 2011); Updated and edited by Sarah D. Radice (Spring 2013) - Herschel S. Horowitz Center for Health Literacy. Sources used include: telephone communication with various labs, MD Department of the Environment resource list *Water Quality Laboratories Certified in Maryland*, communication with regulatory and compliance engineers, MD Department of the Environment.



Maryland Department of Health and Mental Hygiene

Larry Hogan, Governor

Boyd Rutherford, Lt. Governor

Van Mitchell, Secretary

Prevention and Health Promotion Administration



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 MDHMH-Office-of-Oral-Health

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The Department, in compliance with the Americans with Disabilities Act, ensures that qualified individuals with disabilities are given an opportunity to participate in and benefit from DHMH services, benefits and employment opportunities.