

Oral Health Guide for Caregivers of School-Aged Children

This booklet is designed to aid school nurses and others who work with school-aged children in the effective treatment of minor dental emergencies.

Although first aid procedures should provide temporary relief, they cannot always solve the dental problem. Please consult with a dentist as soon as possible.

Acknowledgments to:

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ADMINISTERING DENTAL FIRST AID

DENTAL FIRST AID SUPPLIES

The following items are recommended to be included in your first aid kit to be used for dental emergencies:

- Hanks Balanced Salt Solution or a Save-A-Tooth Kit
- Salt
- 3% Hydrogen peroxide solution
- Orabase with Benzocaine*
- Orajel™ for cold sores*
- Abreva® for cold sores*
- Basic Supplies:
 - Cotton swabs
 - Dental floss
 - Tongue depressor
 - Ice pack
 - Soft wax
 - 2 inch x 2 inch gauze squares
 - Stimulents or tooth picks
 - Tea bags
 - Toothbrushes
 - Tweezers

**Please confer with your consulting physician for standing orders on these items and be aware that some children may have a benzocaine allergy.*



INFLAMED OR IRRITATED GUM TISSUE

Red, swollen or sore gums, also known as gingivitis, can be caused by a variety of conditions. These include, but are not limited to poor oral hygiene, puberty, pregnancy, tooth eruption, trapped object or food debris or trauma. To soothe irritated tissues the mouth should be rinsed thoroughly with a warm salt-water solution ($\frac{1}{2}$ teaspoon of salt in an 8 oz. glass of warm water). Another mouth rinse can be made by mixing equal parts of water and a 3% solution of hydrogen peroxide. Either of these mouth rinses should be swished around the entire mouth for 15-30 seconds, and then expectorated.

It is common for inflamed tissue to be red to bluish-red in color, enlarged and spongy in texture, and possibly bleeding as a result of poor oral hygiene. Bacterial plaque is a collection of microorganisms that continually collect in the mouth in the form of a biofilm. It must be disrupted daily to maintain healthy gum tissues. Diligent removal of plaque by brushing and flossing will allow the gums to regain healthy color and tone.

Inflamed Gums



Image courtesy of Dr. Boxberger

Healthy Gums



Image courtesy of Dr. Boxberger

A toothpaste with fluoride is the best choice for plaque removal. However, toothpaste does not have to be used to remove plaque and other irritants. Baking soda, salt or hydrogen peroxide (dilute 3% percent solution) can be used with a soft bristle toothbrush. Dental floss is used to remove plaque from between teeth; this also aids in maintaining healthy gums.

Healthy gum tissue is pale, coral pink and may have pigmentation of black or brown areas. The contour of the tissue margin should follow the curvature of the tooth. The tissue should be firm and resilient with no bleeding upon touch.

Bleeding gums may also be caused by vitamin deficiencies or systemic problems. If the condition does not improve with good oral hygiene, further evaluation may be in order, consider a recommendation to the parent that a dentist be consulted.

FEVER BLISTERS OR COLD SORES AND CANKER SORES

Cold sores/fever blisters are also known as herpetic lesions. These lesions can appear on the lips and also on firm tissue inside the mouth, like the hard palate. These lesions appear as small vesicles/blisters in their early stages. Apply Orajel™ or Abreva® for cold sores. Both of these medications are available over the counter and can be used for temporary relief of cold sores found outside the mouth. Occasionally, the child may have numerous cold sore lesions inside the mouth. If these lesions interfere with eating and swallowing and are accompanied by pain, and sometimes fever, a physician should be consulted. Canker sores, also known as aphthous ulcers are found in the mouth and appear as yellow, patchy, flat, tender lesions. Apply Orabase with Benzocaine (in moderate amounts) for temporary relief of canker sores. Recommend to parent that they consult a dentist if pain or fever persists beyond seven days.

TOOTHACHES

Rinse the mouth vigorously with warm water to clean out any debris. Use dental floss to remove any food trapped between the teeth. Inspect the gum tissue around the area that is painful for any raised lesions or drainage openings.

An abscessed tooth may be the issue. If you notice any drainage openings or swollen tissue around the painful tooth the child must be referred immediately for dental treatment. Dental abscesses can infect the entire body if not treated promptly. You may apply a cold compress to the outside of the cheek for temporary relief of pain.

If consent from parents allows the administration of OTC analgesic or NSAID, this may be indicated to assist with discomfort.



Image courtesy of Dr. Boxberger

PROLONGED OR RECURRENT BLEEDING AFTER AN EXTRACTION

The child should be instructed not to rinse or swish for 24 hours after an extraction (having a tooth pulled), as this could wash out the blood clot forming at the extraction site. Normal drinking is permissible; however, straws should not be used for 24 hours because the suction created in the mouth could dislodge the blood clot.

Do not be alarmed if there seems to be a lot of blood oozing from the extraction site. Remember that the blood is mixing with saliva and, therefore, it may appear there is more bleeding than is actually the case.

If the bleeding is determined to be more than oozing or is alarming the child, the following is recommended:

- Place a small bundle (4-6 squares) of 2 inch x 2 inch gauze pads folded in half on the extraction site, and have the child bite on it for about 30 minutes.
- Replace soaked gauze bundle with a clean one as necessary. If the bleeding persists, wrap a moistened tea bag in a 2 inch x 2 inch gauze pad and have the child bite on it for 30-45 minutes.
- Repeat this procedure, if necessary. If bleeding cannot be controlled in two hours, contact the parent and recommend further care by a dentist or physician.



BROKEN OR DISPLACED TOOTH

A blow (trauma) to the mouth can cause the gum tissue to swell and bleed or may lead to broken or displaced teeth. A cold compress may be applied to the area from the outside of the cheek to help control swelling. Using a 2 inch x 2 inch gauze square, apply direct pressure to the injured gum to control the bleeding.

If a tooth has been displaced and is still in the mouth, clean the area as gently as possible with a moistened gauze square or cotton swab to remove soil and blood from the area. Apply a cold compress on the cheek next to the injured tooth to reduce swelling.

If the tooth has been pushed up into the socket or gum by the blow, DO NOT try to pull or push it into its correct position.

If a tooth is broken and created a sharp edge, it may be covered with soft wax to prevent tissue lacerations. Contact the parent and arrange to have the child taken to the dentist as soon as possible.



Image courtesy of Dr. E. Cocjin, UMKC School of Dentistry



TRAUMATIC AVULSION (TOOTH KNOCKED OUT OF SOCKET)

Time is of the essence if the trauma has caused the tooth to be knocked out of the mouth. Look in the accident area for the tooth. DO NOT attempt to clean the tooth. Washing the tooth could destroy the connective fibers which help anchor the tooth in the mouth. The tooth should be kept moist in a balanced salt solution (Hanks Solution), in cold milk or in a specially designed Save-A-Tooth Kit. Save-A-Tooth Kit or Hanks Balanced Salt Solution can be purchased and kept for oral emergencies. Many times the tooth may be successfully re-implanted if a dentist treats the child within one hour by a dentist. To control the bleeding, place a small bundle (4 - 6 squares) of 2 inch x 2 inch gauze folded in half at the site of bleeding.

Have the child bite down gently on the gauze to keep it in place. Change the gauze bundle if it becomes blood soaked. If bleeding is prolonged, moisten a tea bag wrapped in a 2 inch x 2 inch gauze and have the child bite gently on it.



Image courtesy of Dr. E. Cocjin, UMKC School of Dentistry

POSSIBLE JAW DISLOCATION OR FRACTURE

If a jaw fracture or dislocation is suspected, immobilize the jaw by any means available. Place a scarf, tie or towel under the chin and tie the ends on top of the child's head. Contact the parent and arrange for the child to be taken immediately for emergency care.

ORTHODONTIC PROBLEMS AND EMERGENCIES

For irritation in the mouth caused by a protruding wire from orthodontic bands, the following procedures are recommended. A blunt item (tongue depressor or cotton swab) may be used to gently bend the wire so it is no longer irritating to the soft oral tissues. When the protruding wire cannot be bent, cover the end of it with soft wax, a piece of gauze, or a small cotton ball so it is no longer causing irritation. Do not attempt to remove any wire that is embedded in the cheeks, gums or tongue. Contact the parent so that an immediate appointment with the child's orthodontist can be made.

The placement and adjustment of orthodontic bands/wires can cause some discomfort for a few days. Some relief can be achieved by swishing warm salt water (½ teaspoon of salt in 8 oz. of warm water) in the mouth for 15-30 seconds. A semisolid diet is recommended until the mouth feels comfortable enough to resume normal chewing. If a wire or appliance becomes loose or broken and can be removed easily, contact the parent to take the child and the wire to the orthodontist immediately for repair.



OBJECTS WEDGED BETWEEN TEETH

Try to remove the object with tweezers or dental floss. Remember to guide the floss in gently (against teeth) so as not to injure the gum tissue. Do not try to remove the object with a sharp or pointed tool or instrument. Occasionally a toothpick or Stimudent can be used to dislodge items from between the teeth. If unsuccessful, contact the parent to take the child to the dentist.

LACERATED LIP OR TONGUE

Apply direct pressure to the bleeding area with a 2 inch x 2 inch gauze square. If swelling is present, apply a cold compress. If the bleeding does not stop readily, or the injury is severe, contact the parent to take the child to seek emergency care.

TOOTH ERUPTION PAIN

Try to determine if the pain is from a loose primary (baby) tooth pinching the gum tissue, or due to an erupting permanent tooth. Refer to the tooth eruption chart in this booklet.

Occasionally an erupting tooth will cause a bruised area over the effected area. Prolonged pain (more than one week) is unusual and may be caused by inflammation around an impacted or partially impacted tooth. This type of pain is usually intermittent and less painful than the type of pain associated with a badly decayed tooth. This periodic, prolonged pain is fairly common with eruption of first permanent molars and third molars or wisdom teeth. A dentist should be consulted for follow-up.

A cold compress or a piece of ice wrapped in a 2 inch x 2 inch gauze square can be directly applied to the eruption site. Due to the numbing effect of the cold, this method can provide temporary relief.

If consent from parents allows the administration of OTC analgesic or NSAID, this may be indicated to assist with discomfort.

EARLY CHILDHOOD CARIES (ECC) (AKA - *Baby bottle tooth decay*)

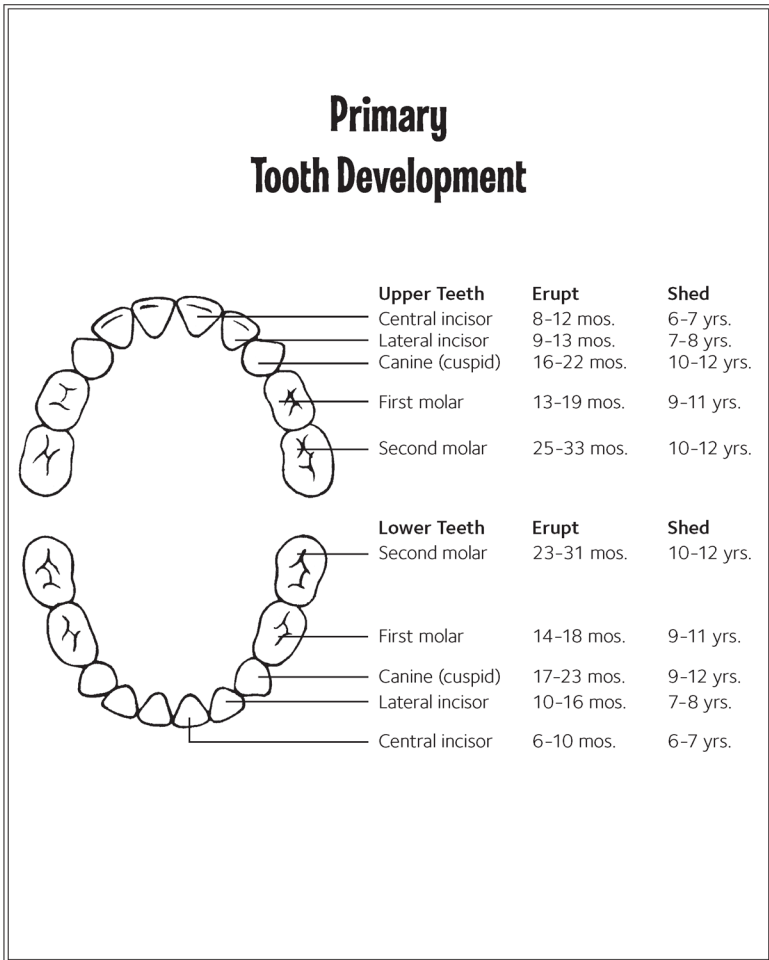
Early Childhood Caries (ECC) is usually evident with the presence of several areas of decay on any baby tooth, but more commonly seen in the front top teeth of infants and children up to the age of 5 or 6. Generally, the child does not have pain with ECC but dental care needs to be provided soon. Even though the ECC effects baby teeth, baby teeth are important as they hold spaces in the jaw until the permanent teeth are ready to come in. Dental care must be provided to prevent problems with the permanent teeth under the baby teeth. Some of the major contributing factors to ECC are the baby going to sleep with a bottle, low socioeconomic background and lack of parental education regarding oral health, plus others.



PRIMARY AND PERMANENT DENTITIONS

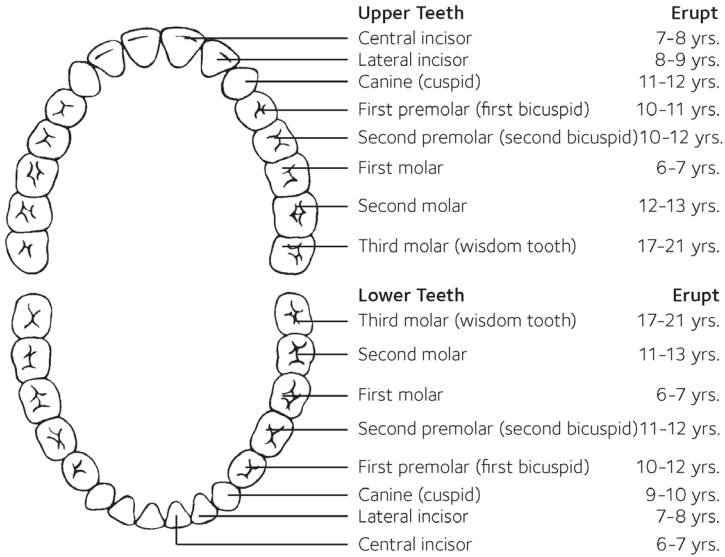
ERUPTION AND SHEDDING OF THE PRIMARY TEETH (BABY TEETH)

An eruption schedule with average eruption times is included in this booklet. Some teeth erupt earlier and some much later than the average eruption times. A year on either side of the average eruption times is not unusual.



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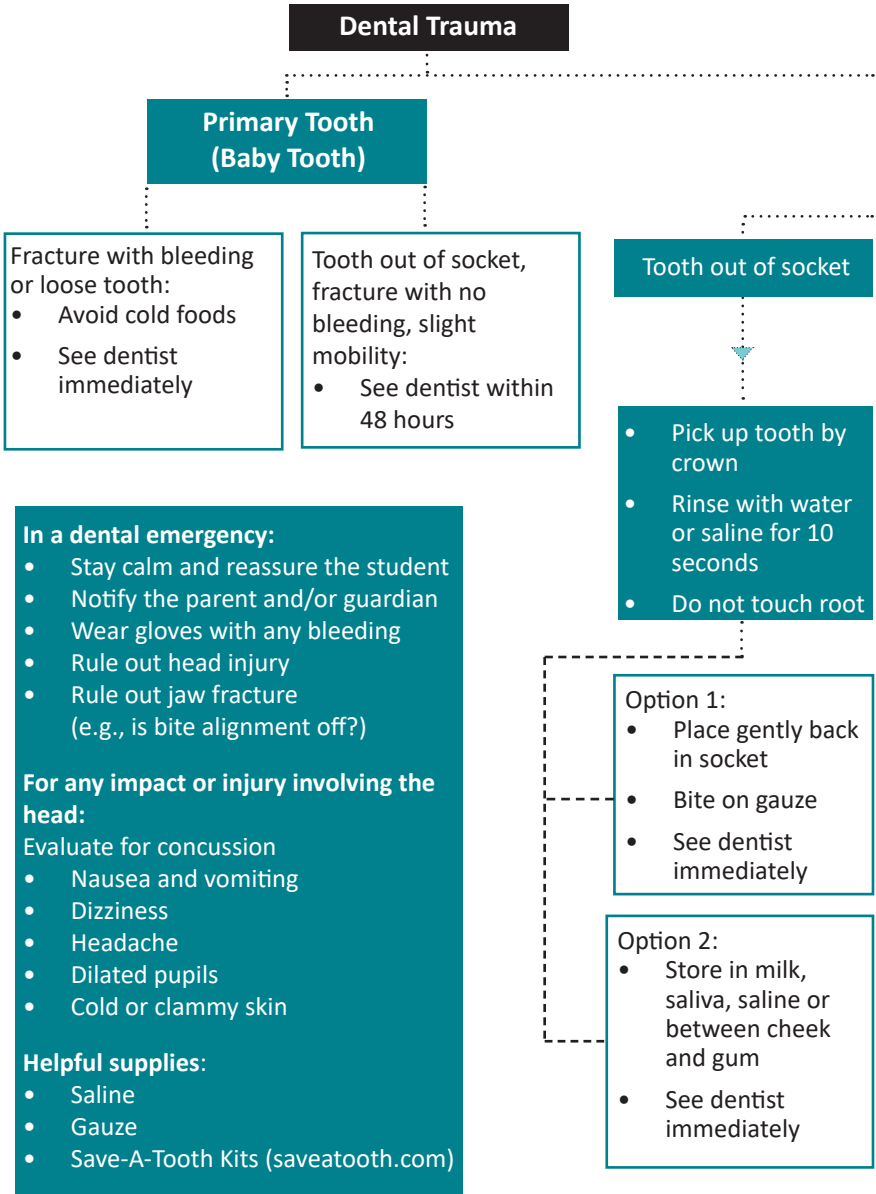
Permanent Tooth Development

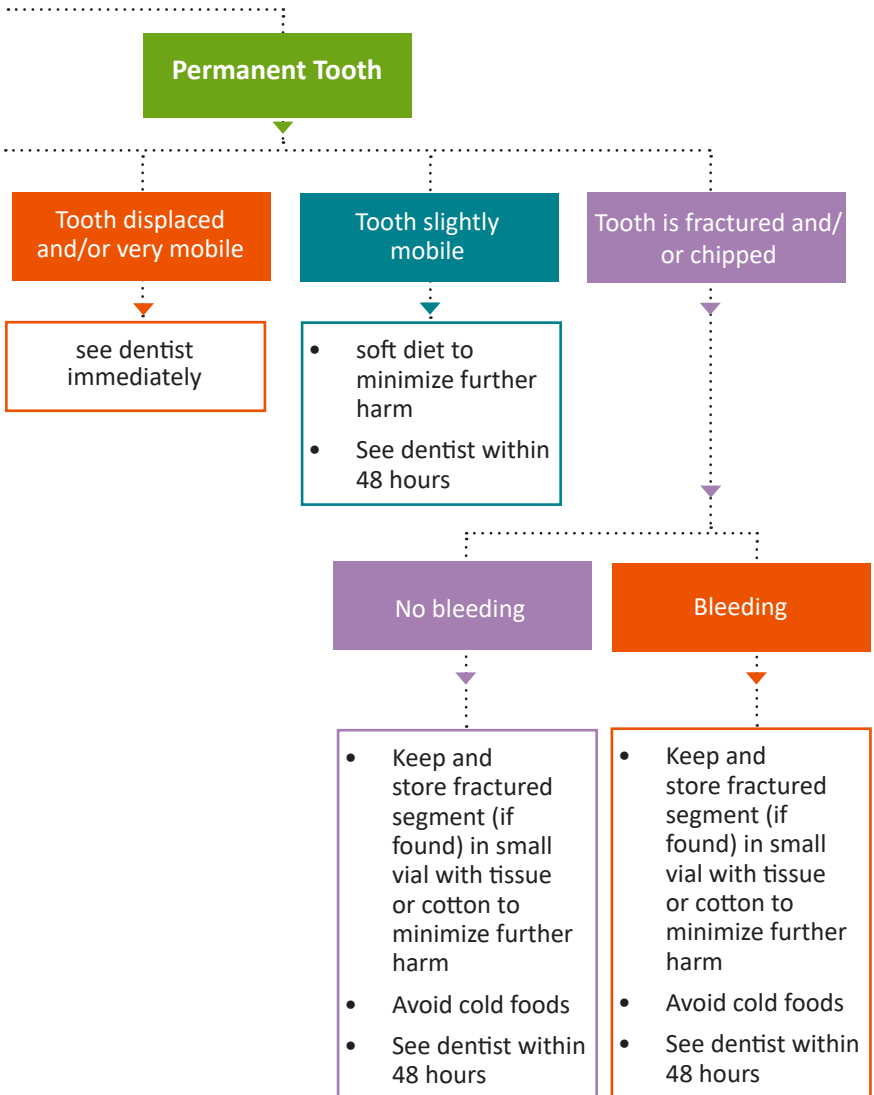


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DENTAL TRAUMA DECISION TREE

This information is designed to aid school nurses, teachers and athletic coaches in treating minor dental emergencies.







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