

# Dental Emergencies

*A Guide for the School-Based Health Center*



COLORADO ASSOCIATION FOR  
**SCHOOL-BASED HEALTH CARE**

455 Sherman Street, Suite 468  
Denver, CO 80203  
[www.casbhc.org](http://www.casbhc.org)

# Dental Emergencies

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## ACKNOWLEDGEMENTS

This Dental Emergencies guide was written and researched by  
Greg Evans, DDS, and Deidre Callanan, RDH, MPH,  
for the Colorado Association for School-Based Health Care  
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HOW TO USE THIS GUIDE: This is essentially a picture book. As the saying goes, pictures are worth a thousand words. If you can identify the dental problem correctly you will be able to triage and discuss it with a dentist.

So, get a towel and clean up the bleeding.

Calm the patient.

Take a look.

Thumb to the section of this manual that best describes the situation and look for a picture that best matches your patient.

Follow the information there about what to do next, including first aid, referral, and talking with parents.

You are the calming and confident first contact for the patient. Tell the child that everything will be okay, they won't get in trouble, and you know a nice dentist. If they ask, you don't know if they will get a shot, but you have to follow the dentist's rules, and you will call Mom or Dad. Be firm to prevent hysterics and hand him or her a wet towel, not a mirror.

The situations described in this booklet fall into three categories:

- **Problem:** Does not necessarily need follow-up
- **Urgency:** Child needs a dental appointment within 24 hours
- **Emergency:** Critical time frame, get child to dentist or emergency room

**In any dental emergency:**

- ✓ Reassure the Patient
- ✓ Identify the problem
- ✓ Assess and relieve pain
- ✓ Stabilize the problem
- ✓ Refer to a dentist for proper treatment in the timeframe indicated

In most emergencies, time is of the essence. It is great that you are on hand to help. If you are in doubt about what to do, you can text a photo to Greg Evans DDS (970) 481-6728. If you would like to email Dr. Evans, he can be reached at [greg@biggrinswithdrgreg.com](mailto:greg@biggrinswithdrgreg.com)

In a dental emergency call: \_\_\_\_\_ for children

\_\_\_\_\_ for adults



# Chapter One: Mouth Trauma or Soft Tissue Trauma

*Cuts to lip*

*Cuts inside mouth*

*Trauma to tongue*

Chapter One:  
Mouth Trauma or  
Soft Tissue Trauma

Chapter Two:  
Trauma to a  
Tooth or Teeth

Chapter Three:  
Dental Infection

Chapter Four:  
Other Conditions

## Lip or Gum Laceration



**What is this?** Child can swallow and bite teeth together without pain. After wiping with a wet towel, the bleeding or bruise is localized to lip or gum.

**Situation:** Lip or gum laceration (with blood) or hematoma (bruise, without blood)

**What else it could be:** Tooth subluxation (tooth tender to touch)  
Through and through puncture wound

**Is this an emergency, urgency, or problem?** **PROBLEM**

Unless a lip injury is a puncture wound that goes from inside the mouth all the way to the outside, the child should recover without aid. The lip will swell quickly over 48 hours and then recede.

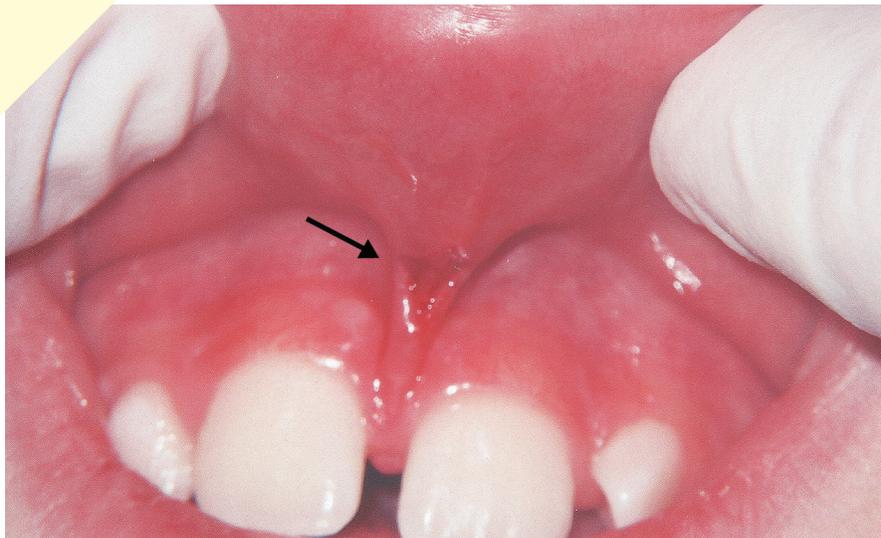
For a puncture wound or wound where fat tissue or glandular tissue is protruding, antibiotics and referral for sutures to a dentist or emergency department is necessary.

**Tell the parent:** Explain history of injury, and that lips are very vascular and swelling will occur. Suggest ibuprofen or acetaminophen (Tylenol), given as directed on bottle. Limit activity that may re-injure area. Suggest a trip to the dentist if concerned. The diet is usually self limiting, but advise soft foods for two days.

**First Aid:** If bleeding, compress with a wet towel or ice. Provide over-the-counter analgesia.

**Follow up:** None necessary if minor. Refer as directed above.

## Frenum Tear



**What is this?** Child has a cut on tissue connecting gums to lip; it may bleed freely.

**Situation:** Frenum tear

**What else it could be:** Lip laceration from a fall  
Foreign body puncture wound

**Is this an emergency, urgency, or problem?** **PROBLEM**

This is a common childhood injury, decreasing in frequency as the child ages. In young children, the frenum has a low attachment and is highly vascularized, so it may bleed a lot. This type of tear may be from a fall that catches the lip or a sports collision. In healthy children who can remain calm and not move the lip or re-injure, clotting should stop bleeding within 10 minutes.

**Tell the parent:** Explain the history of the injury and that this injury is common. The area will heal in approximately seven days but will be sore if hit or touched. Careful brushing is a must. Sometimes a small piece of tissue is left when the frenum heals forming a small bump that will remodel over time and will not interfere with speech or bite.

**First Aid:** Find the source of the bleeding and apply pressure with a wet towel or gauze. Some advocate a wet tea bag to speed clotting, but, even without the tea bag, bleeding will stop in approximately 10 minutes.

**Follow up:** None necessary, the frenum will heal in time.

## Lip Bite



**What is this?** Child has a cut and/or white plaque on lip that may be oozing blood if broken open.

**Situation:** A lip bite with a fibrin clot or a scab that has lost its pigment

**What else it could be:** Lip laceration due to fall  
Foreign body puncture wound

**Is this an emergency, urgency, or problem?** **PROBLEM**

This is a frequent injury in childhood. It may occur following dental treatment when the lip remains numb for 2-3 hours. During this time, young children can bite quite hard upon what feels like a rubbery thing on their face, not realizing it is their lip. In healthy children who can remain calm and not move the lip, clotting will stop the bleeding within 10 minutes. No therapy is necessary, but the lip can also swell rapidly for 24 hours and re-injury is a concern. Time will heal this injury, but it is often upsetting to child and parent.

**Tell the parent:** Explain the history of the injury and that it happens to a lot of children. The area will heal in seven days but may be sore if hit or bitten again. Careful brushing is a must. Swelling will go down quickly, so ice will not help. Ibuprofen is recommended for pain.

**First Aid:** If the child is still numb, place rolled gauze between teeth and tell child to hold in place to prevent chewing. Give young children who cannot understand this a snack. They will chew the snack and not their lip.

**Follow up:** None necessary

## Tongue Laceration



**What is this?** An obvious cut or trauma to the tongue. This cut may be deep but does not flap open. The bleeding will decrease but may restart with activity.

**Situation:** Tongue laceration from biting or from a foreign object

**What else it could be:** Irritation to tongue from orthodontic appliance  
Infectious disease (look for blisters or ulcer, page 19)

**Is this an emergency, urgency, or problem?** **PROBLEM (if minor)**  
**or**  
**EMERGENCY (if major)**

Unless a tongue cut is more than a centimeter wide or is so deep that muscle tissue is protruding, it will heal on its own without stitches. Over the counter pain reliever and calm behavior will allow the cut to eventually clot and heal. Oozing of blood is not a concern. Initially, this can be very painful but gets better quickly, usually over the next 30 minutes. A Popsicle may help to alleviate pain and keep the tongue in place.

If a tooth was chipped and is the cause of the tongue irritation (rough or sharp incisor or inside cusp tip of molar), use gloved fingers to palpate the tongue to rule out a foreign body in the wound. This is not a huge issue if it cannot be accomplished due to behavior. No referral is necessary unless the cut is deep or has protruding tissue. Check health history for bleeding disorders as this will slow clotting time to more than 10 minutes.

**Tell the parent:** Explain history of injury and that the tongue is very vascular and muscular so oozing of blood is normal. If it bleeds like a nosebleed, seek emergency care. Suggest ibuprofen or acetaminophen (Tylenol), given as directed on bottle. Limit activity that may re-injure area. If concerned, suggest trip to the dentist. Advise softer foods for two days.

**First Aid:** Apply a wet towel if bleeding. Popsicle works better. Give over-the-counter analgesia. You may try to smooth the tooth with an emery board if it is irritating the tongue (see enamel chip page 12).

**Follow up:** None necessary if minor. Refer as directed as above.

# Chapter Two: Dental Trauma

*Dark tooth*

*Tooth chipped, with enamel, dentin and pulp exposures*

*Tooth moved from socket*

*Knocked out tooth (Avulsion)*

*Teeth and bone involvement*

Chapter Two:  
Trauma to a  
Tooth or Teeth

Chapter Three:  
Dental Infection

Chapter Four:  
Other Conditions

## Dark Tooth



**What is this?** Child has one or two dark teeth that are sore or the color has been noticed for first time. Tooth/teeth may or may not be loose.

**Situation:** For baby teeth, this is a tooth that has lost its blood supply AT LEAST a couple of days ago. It may be loose now from a recent injury or a normally loose baby tooth for child's age.

**What else it could be:** In a child at least six years old, make sure the tooth is a baby tooth, which is small and worn and not the same size as an adult tooth. If it is a permanent tooth the child needs an urgent referral for root canal treatment.

**Is this an emergency, urgency, or problem?** **PROBLEM**  
**or**  
**URGENCY**  
**if a permanent tooth**

Very often, baby teeth will be bumped and lose their blood supply. This is a previous injury that the parents likely know about, so do nothing.

If the tooth has been bumped again or is wiggly, give reassurance and treat the pain with over-the-counter analgesia.

**Tell the parent:** Most attentive parents will be aware of the tooth, but you can reiterate they are seeing old blood through the tooth and it is a sterile injury, not an infection. The tooth will normally fall out when ready.

**First Aid:** none

**Follow up:** none

## Enamel Chip



**What is this?** One or more teeth have a small chip at the corner or along biting edge. It is rough to the touch and may be sensitive.

**Situation:** Class I dental fracture, or an enamel chip. It only involves the outer enamel covering, not the dentin (inner tooth). Often, this is a front tooth, but may be a back cuspid if child has hit the chin.

**What else it could be:** A class II (page 13) or III (page 14) fracture: look for a chip that affects the inner layer of tooth (dentin). Also look for other injuries, such as a laceration to lip or tongue.

**Is this an emergency, urgency, or problem?** **PROBLEM**

A tooth chip into the enamel only will be sensitive for a while (1-2 hours) due to the percussive force. The rough, fractured enamel will be very sharp and can be smoothed slightly in the clinic. Usually these are not repaired since they are small. If necessary, the chip can be smoothed out by a dentist for cosmetic reasons if desired.

**Tell the parent:** Explain how the chip occurred and that it is not serious. No immediate treatment is needed, and the chip can be smoothed down later.

**First Aid:** Over-the-counter analgesia if necessary. Use a small nail file or emery board to graze over the rough, chipped area to take off the sharp enamel. This prevents irritation to the tongue.

**Follow up:** None. Child can see a dentist for cosmetic treatment at parent's convenience.

## Class II Fracture



**What is this?** An obvious fracture that extends into the body of the tooth. It is sensitive to air, and may or may not have blood.

**Situation:** Class II fracture, a fracture of the enamel and dentin (inner layer) of the tooth.

**Is this an emergency, urgency, or problem?** **URGENCY**

First aid is required to relieve sensitivity and to keep the tooth from becoming more inflamed. The tooth will be sharp, and the child may be panicky over the pain and the appearance. Contact a dentist for first aid care within 24 hours.

**Tell the parent:** Explain the history of the injury and that the tooth will need care from a dentist, including an x-ray. Explain that the tooth can be restored to look whole again, but that a healing period is required to rule out the need for a root canal. A temporary filling will be placed to cover the inside of the tooth (dentin) to relieve sensitivity. The child should avoid directly biting on the tooth. Over-the-counter analgesia may be helpful.

**First Aid:** Cover the dentin of the tooth to shield it from air and saliva. Dry the tooth with a tissue and apply dental wax or Chap Stick to the tooth to form a moisture barrier. A warm, wet towel may be held against the tooth during transfer to a dental office or until pain can be relieved. Give over the counter Analgesia.

**Follow-up:** A dentist will place a temporary filling, take an x-ray, and allow healing time. If symptoms persist, root canal therapy may be needed.

## Class III Fracture



**What is this?** An obvious fracture into the body of the tooth. It is extremely sensitive. It is bleeding from the middle of the tooth and has a bull's-eye appearance of white outer enamel, yellow body (dentin), and red (pulp). If it is an older pulp exposure the pulp may swell out of the tooth or look brownish. It may or may not be accompanied by blood around the tooth.

**Situation:** This is a Class III fracture, a fracture into the pulp (nerve and blood supply) of a tooth.

**What else it could be:** Check for other injuries of the teeth and soft tissues  
Check for mobility of the tooth (root fracture)

**Is this an emergency, urgency, or problem?** **EMERGENCY**

Immediate first aid is required to relieve sensitivity and keep tooth from becoming necrotic. The tooth will need to have a root canal treatment started or a "Cvek" pulpotomy done to prevent an infection. The tooth will be sharp and the child may be panicky over the pain as well as the appearance of the tooth. Contacting a dentist for first aid care within two hours is a must.

**Tell the parent:** Explain the history of the injury and that the tooth will need first aid treatment from a dentist, with an x-ray exam, to save the tooth. This is a true dental emergency.

Tell the parent these injuries need rapid treatment to minimize extensive and costly therapy later or loss of the tooth. Nerve treatment is needed within two hours, and referral to a root canal specialist (endodontist) may be advised. The child can be directly referred to an endodontist if one is available; otherwise, contact the family dentist or pediatric dentist on call for the SBHC.

**First Aid:** A warm, wet towel may be held against the tooth for transfer to the dental office or until ibuprofen can relieve pain. No temporary material will "stick" to the pulp.

**Follow up:** Depending on circumstances a dentist will do a partial pulpotomy or start root canal therapy, which relieves pain. Narcotics and antibiotics may be prescribed.

## Partial Avulsion



**What is this?** Child has a tooth displaced and cannot bite teeth together normally.

**Situation:** A luxation (broken bony socket) or partial avulsion (almost out of socket tooth)

**What else it could be:** Baby tooth that is over retained

Bone fracture (lots of blood, see alveolar fracture, page 17)

**Is this an emergency, urgency, or problem?** **URGENCY**

First aid is required only if it is a permanent tooth; this is usually the result of a traumatic blow to the face on a child 6-10 years of age. Is the tooth small and worn (baby tooth) or does it look like an adult front tooth?

A permanent tooth needs to be placed back into the socket and held there by a dental splint. If the tooth can be pushed back into place, do so immediately. If the bony socket has been broken, the tooth root may need to be “snapped” back into place with a firm grip and a push, squeezing the tooth up and back between the thumb and finger knuckle against the roof of the mouth.

**Tell the parent:** Explain the history of the injury and that the tooth will need first aid treatment from a dentist to stabilize it into the socket. This is done with a wire brace in the dental office. Even if the tooth is firmly in place a dentist should examine the tooth within 24 hours. If it is a baby tooth, most likely it will be removed by the dentist.

Tell the parent these injuries must have splint therapy to prevent the tooth from healing in a bad position. Root canal therapy will very likely be necessary within 10 days. The child should avoid directly biting on the tooth.

**First Aid:** “Pop” the tooth back into the socket with firm pressure or have the child bite slowly to seat the tooth. This may be painful (ache) to the bone but must be done. Hold with a warm towel. Over-the-counter analgesia may be helpful.

**Follow up:** A dentist will place a temporary splint to hold the tooth in place. The splint will be removed in 7-10 days and a root canal performed. Cosmetics will be looked at after dental treatment is complete.

## Full Avulsion



**What is this?** Child is missing a tooth and has a shallow hole in gum tissue.

**Situation:** An avulsion, or knocked-out tooth.

**What else it could be:** Baby tooth that was pulled out or bumped out early  
Bone and tooth fracture (see alveolar fracture, page 17)

**Is this an emergency, urgency, or problem?** **EMERGENCY - Adult (permanent) tooth**  
**PROBLEM- Baby tooth**

A permanent tooth avulsion **REQUIRES YOU TO PUT THE TOOTH BACK INTO ITS BONY SOCKET IMMEDIATELY. NO EXCEPTIONS.**

First aid is only required if a permanent tooth comes out; this is usually due to a traumatic blow to the face of a child 6-10 years of age.

A baby tooth will look worn, small and usually have a moth-eaten root. It may have been “wiggly” previously. A baby tooth avulsion is cause for celebration and talk of the tooth fairy. Bleeding will stop within 10 minutes, tops.

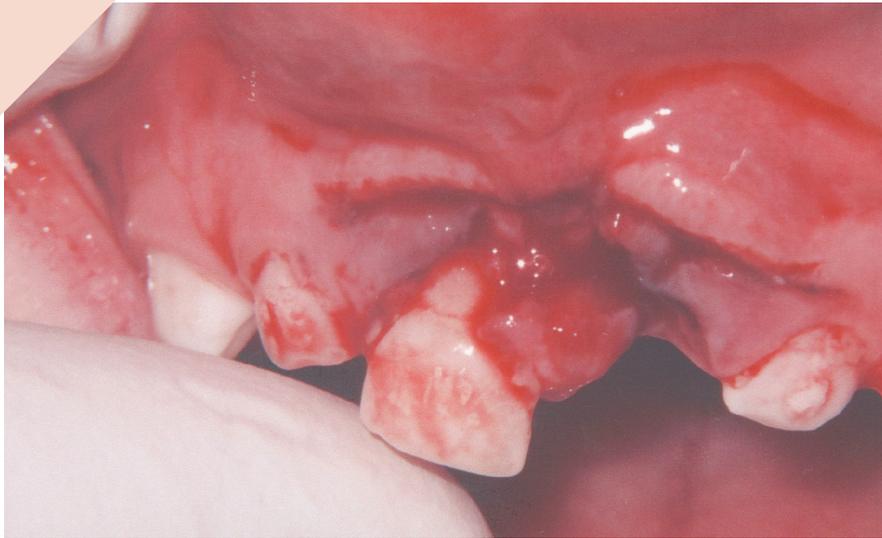
**Tell the parent:** Explain the history of the injury. The permanent tooth will need first aid treatment from a dentist to stabilize it in the socket. This is done with a wire brace in the dental office and **CANNOT BE DONE IN THE EMERGENCY ROOM.**

Tell the parent these injuries must be treated within a critical time frame to save the cells that hold the tooth into the bone; treatment includes stabilization and splint therapy. Root canal therapy will then be necessary within 10 days. The child should avoid directly biting on the tooth, and over-the-counter analgesia may be helpful.

**First Aid:** Put the tooth back into the socket with firm steady pressure or have the child bite slowly to seat the tooth. This may be painful (ache) to the bone but must be done. Hold with a warm towel. If you are absolutely unable to replace the tooth into the socket, put the tooth, without washing it, into cold milk or Hank’s Buffered Salt Solution. Do **NOT** touch the root or attempt to wash the tooth. Time is essential to protect the ligament cells that hold the tooth in the bone, and crushing, drying or washing them will cause long-term dire consequences for the child’s health.

**Follow up:** A dentist will place a temporary splint to hold the tooth in place. The splint will be removed in 7-10 days, and a root canal will be performed.

## Alveolar Fracture



**What is this?** Child has a fracture into the bone around the teeth. Teeth may be displaced, gone, or have root exposure. The child has a copious amount of blood and cannot close mouth. Pain may be acute or minimal. Child may have other head injuries, so look for strange behavior or a history of being unconscious.

**Situation:** A bone or alveolar fracture; it involves teeth and bone.

**What else it could be:**

- Check for head injury (dilated eyes, passed out)
- Check for odd behavior that may suggest abuse
- Check area for avulsed (missing) teeth that are permanent

**Is this an emergency, urgency, or problem?** **EMERGENCY**

**First aid is required to prevent a disfiguring result.** If the child is medically compromised, call 911. If the child is alert and behaving normally, focus on each aspect of the injury.

- \*Are teeth missing, place teeth in Hank's Buffered Salt Solution, cold milk, or bony socket if one exists.
- \*If baby teeth are dangling loose, remove with finger pressure.
- \*Put pressure on bleeding with wet towel.
- \*Call dentist and parent immediately for transfer. Time is critical.
- \*Calm child and take firm control of reactions of bystanders.

**Tell the parent:** Explain the history of the injury and that the child needs immediate medical and dental attention. If going to the emergency room, call the dentist to meet the child there. If going to dental office, call ahead to let them know. Call until you find a person who can respond immediately.

Tell the parent these injuries require first aid to save teeth and bone. Give avulsed teeth to parent or guardian with instructions to show dentist. **Treatment is needed within two hours.**

**First Aid:** A warm, wet towel may be held against the mouth or to hold teeth in socket for transfer to the dental office or emergency department.

**Follow up:** A dentist will use the teeth to realign bone using a brace-like splint and will suture up soft tissue. This splint may stay on up to three months after root canal therapy is done. Stitches will be removed after a week to 10 days. Cosmetic options can be considered later.

# Chapter Three:

## Dental Infection

*Sore tooth tender to biting*

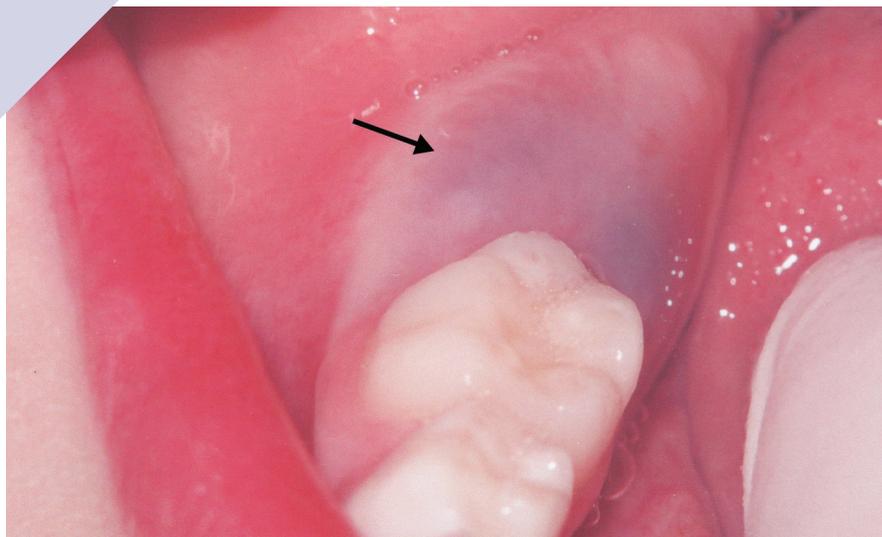
*Pus pocket near tooth*

*Swelling seen outside the mouth*

Chapter Three:  
Dental Infection

Chapter Four:  
Other Conditions

## Sore Tooth



**What is this?** Child has no real signs of trauma or infection but complains of toothache. The pain is vague and not specified to a single tooth. Pain may be elicited with biting pressure and may be hot/cold sensitive. Oral hygiene may be very poor in area.

**Situation:** A sore tooth, the most common childhood dental “emergency”

**What else it could be:** Erupting permanent tooth behind row baby tooth (blue gum)  
Food debris stuck between teeth or under red gums

Cavity in between teeth, not readily seen  
Trauma to teeth from recent hard bite or hit to face  
Small canker sore (aphthous ulcer) low on gum

**Is this an emergency, urgency, or problem? PROBLEM**

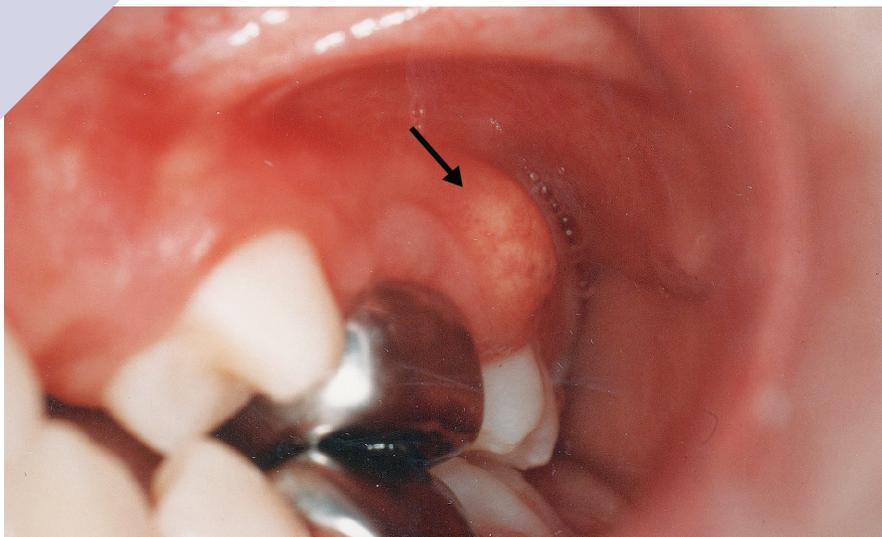
Usually, if you cannot readily identify the problem in the mouth looking with a mirror and good light, the problem is not urgent, despite the child’s concern. Take your time in asking about the duration, onset, location, and “story” behind the pain. The child may need a pat on the head and ibuprofen and call to Mom or Dad. If you can find the source of pain and remove it (e.g., floss out the popcorn husk) or explain it, that treatment goes a long way. A child who is “dying” of pain can transform into a happy big kid once he know his big molar is coming in and he is just having “growing pains.”

**Tell the parent:** Explain your investigation into the pain and the child’s story; often the parent is aware but did not give it importance or thought the child was bluffing. Suggest follow up by a dentist unless it was an obvious fix. Give over-the-counter analgesia if that will help the child return to class. Urge regular dental care and a relationship with a dentist.

**First Aid:** As needed.

**Follow up:** As needed or suggest new patient check-up for children without a dentist.

## Dental Abscess



**What is this?** Child has swelling above teeth on gum. It is fluctuant (movable) and may or may not hurt when touched. The teeth hurt to biting pressure and may be hot/cold sensitive.

**Situation:** A dental abscess.

**What else it could be:** Erupting permanent tooth over baby tooth  
Aphthous ulcer (would be white but flat and very painful to touch)

**Is this an emergency, urgency, or problem?** **PROBLEM**

An abscess is a bacterial infection in dead tooth pulp that is pushing its way into the bone. The body tries to wall off the infection by surrounding it in pus. If the pus pocket bursts, it relieves pressure, and pain is relieved temporarily. Untreated, the pus pocket grows and the infection can get into the spaces between facial muscles, causing a serious problem.

**Tell the parent:** Explain that the tooth is dead (that gets their attention). Explain that this is a bacterial infection that will not go away, but will become more serious, especially at night. Press upon the parent that antibiotics are needed to limit the size of the infection until the tooth can be treated or removed. Call the dentist for an appointment. Over-the-counter pain medication will help; ice or topical anesthesia (Ambesol) will not help.

**First Aid:** Give the child ibuprofen at 10 mg per kg. That is one teaspoon of liquid for a first grader and one 200 mg pill for a fifth grader. Restrict biting on tooth.

**Follow up:** A dentist will numb the lips, gums, and tooth and remove the infected, necrotic tissue from the tooth. It is possible that the tooth will be removed, and a space maintainer may be necessary.

## Dental Abscess with Facial Cellulitis



**What is this?** Child has swelling seen outside the mouth with possible distortion near the eye or below the angle of the jaw. Fever and malaise may be present as well as swollen lymph nodes on the affected side. The teeth hurt when biting and may be hot/cold sensitive. Sometimes it is a rapid onset.

**Situation:** A dental abscess spread into the planes of the face- facial cellulitis

**What else it could be:** Trauma, look for outside bruise at point of contact. Look at history. Gland infection or saliva gland blockage

**Is this an emergency, urgency, or problem?** **EMERGENCY**

An abscess is a bacterial infection in the dead tooth pulp and pushing its way into the bone. The infection may get into the spaces between the facial muscles and can spread very fast, which may impact a child's airway. If it is rapidly treated with IV antibiotics the swelling can quickly go down. If treatment is delayed, bone loss, tooth loss, and surgical intervention may be necessary. Children die from facial cellulitis in this country.

The family physician should work with the family dentist to admit this patient to the hospital and have the tooth removed. A pediatric dentist is trained for this scenario and may be able to save the family from unnecessary medical work up if involved early.

**Tell the parent:** Explain that the tooth is dead and that this is a bacterial infection that will become more serious. Call 911 if the child has convulsions or trouble breathing. Call a pediatrician or pediatric dentist to see the child in the emergency department or office depending on the judgment of the dentist.

**First Aid:** Not much can be done. Over-the-counter analgesia should be given with a dental consultation.

**Follow up:** A dentist will often be able to remove the tooth and initiate pus drainage, which provides immediate pain relief and accelerates healing. Medical treatment without tooth extraction is not effective.

# **Chapter Four: Other Conditions**

*White sore on gum*

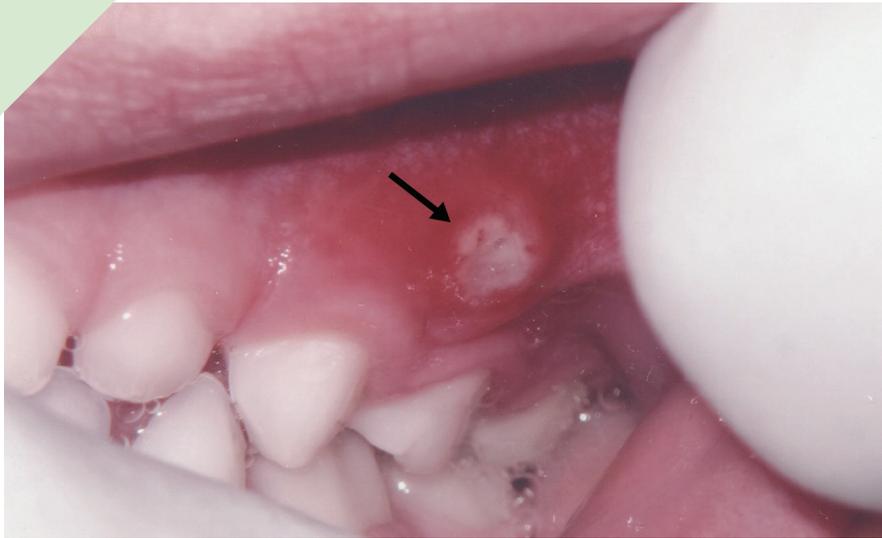
*Oral piercing*

*Orthodontic wire poking*

*Strange bumps and lumps:*

*Cold sore ~ Mucocele ~ Papilloma*

## Aphthous Ulcer



**What is this?** Child has a white sore above teeth and gum on moveable tissue. It is extremely painful when touched. The teeth do not hurt with biting pressure.

**Situation:** An aphthous ulcer, also known as a canker sore

**What else it could be:** Cut in mouth (treat like aphthous ulcer)  
Abscess (bulbous not flat, directly over the tooth with problem)  
Cold sore (outside on lip, itchy with scabbed blisters)

**Is this an emergency, urgency, or problem?** **PROBLEM**

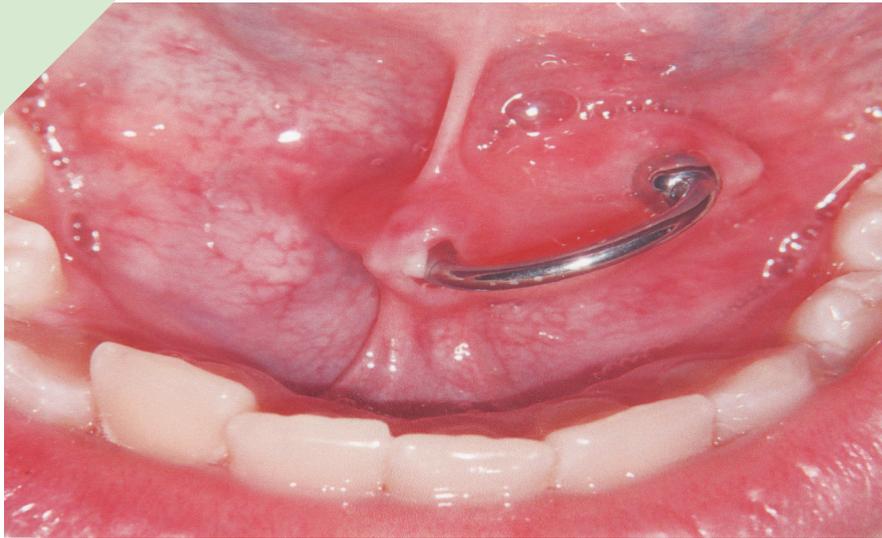
An aphthous ulcer is the body's over-exuberant immune response to trauma or irritation in the mouth. It is always on the moveable soft tissues in the mouth, such as the lip, soft palate, underside of tongue. These are often confused with cold sores (viral) or abscesses (bacterial) because of the pain they cause. No treatment is needed, and they heal without scarring in 10-14 days. In rare cases, they can become larger than a centimeter across and need dental treatment so a child can swallow or eat comfortably. Topical anesthetics like Ambesol or Orajel work for a short time; ibuprofen helps as well.

**Tell the parent:** Explain that the canker sore is an over response of the immune system and will not get better with antibiotics. Treat for pain. Rinses with salt water or hydrogen peroxide will not help a child heal faster and are unnecessary. The natural history is pain for two to three days, improvement after a week, and healing completely in 10-14 days. If the ulcer becomes large, a steroid ointment or rinse may be used. Anecdotal stories of treatment with lysine or vitamin C are not scientifically based.

**First Aid:** Give the child ibuprofen or place topical anesthetic on the sore after briefly drying.

**Follow up:** None

## Piercing



**What is this?** Ornamental piercing in the mouth places hard objects up against moveable or non-keratinized tissue with repeated rubbing. Popular piercings include lips and tongue. In this example, the piercing was placed through the salivary duct at the base of the tongue. Infection or swelling below the tongue can quickly spread and result in airway closure, called Ludwig's Angina.

**Situation:** Tongue piercing, with resulting trauma to teeth, infection, or irritation

**Is this an emergency, urgency, or problem?** **PROBLEM**

Unless a tongue piercing is causing intense pain or obstruction that requires immediate removal, the patient will be highly resistant to suggestions for its removal. Anecdotal stories of pain or trauma are usually the most effective in getting an adolescent to listen; they want to know what happened to their peers. But don't expect an immediate change in behavior. Caring and attention will often produce delayed results. Harassment or belittlement may produce the continuation of the attention-getting behavior.

**Tell the parent:** Explain that the tongue and lips are very vascular and muscular, so trauma and infection are likely. Tell parents they are still in the best position to influence teenage behavior with caring and requests for change.

**First Aid:** Nothing immediate unless underlying trauma or infection

**Follow up:** Repeated inquiries show a teenager caring and resolve

## Traumatic Ulceration



**What is this?** Child has white or brown sore near teeth on the lip or moveable tissue. It is extremely painful when touched. The teeth have braces.

**Situation:** A traumatic ulceration from an orthodontic wire or appliance

**What else it could be:** Cut in mouth (treat the same way)  
Cold sore (outside on lip, itchy with scabbed blisters)

**Is this an emergency, urgency, or problem?** **URGENCY**

This traumatic injury is usually caused by an orthodontic wire that is too long and is cutting or rubbing against a cheek or lip. Once the tissue is traumatized it will not heal on its own without removing the source of the irritation. These cases are easily fixed by simply taking out the offending wire or appliance. A wire can be cut with a fingernail clippers or the rubber bands holding the wire in place can be cut or taken off. For short-term relief, the wire or appliance can be covered with a piece of chewing gum, Chap Stick, or orthodontic wax. Topical anesthetic like Ambesol, Orajel, or ibuprofen can help. Referral back to the orthodontist or dentist is usually necessary to continue treatment pain free.

**Tell the parent:** Explain the problem and what was done to relieve pain. Salt water rinses will not help a child heal any faster and are unnecessary. Removing the wire from braces may cause a relapse with tooth movement; therefore, dental follow up is recommended within a couple of days. Remind the child to keep up good brushing while healing to speed recovery.

**First Aid:** Give the child ibuprofen or place topical anesthetic on the sore after briefly drying it. Place some barrier over the poking part with Chap Stick, ortho wax, or chewing gum.

**Follow up:** Alert the orthodontist that the child is having pain.

## Herpetic Cold Sore



**What is this?** Child has water blisters clustered near the lip on the outside of the mouth. They are itchy and painful.

**Situation:** A herpetic cold sore (viral)

**What else it could be:** Yeast overgrowth at corner of mouth (nonpainful, nonhealing)  
Canker sore (only occurs in moveable tissue inside mouth)

**Is this an emergency, urgency, or problem?** **URGENCY**

A cold sore is a recurrent herpes infection. Some time ago (usually at age 2-3 years) a child was exposed to the herpes virus that causes cold sores. In 50 percent of kids, this virus infects the nerves near or in the mouth and then lies dormant in the nerve cells. When the child becomes fatigued, gets a cold, sunburns the lips, or otherwise compromises his immunity, the herpes infection reappears in the form of a cold sore.

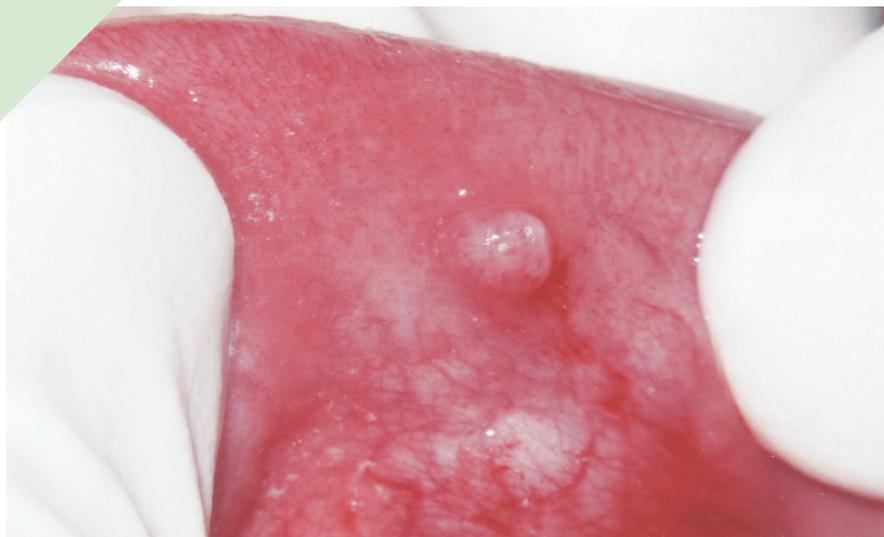
The cold sore starts as a series of tiny, itchy water blisters that quickly scab over and grow together. The child is highly infectious during this time, but most of his peers have already been exposed, so missing school is unnecessary. An antiviral medication used right when the water blisters appear will help to control the severity and size of the cold sore, but will not cure the disease.

**Tell the parent:** Explain the cold sore and the viral etiology. Suggest a prescription from the pediatrician or dentist for the next onset. It is likely too late to medicate this one; it will need to run its course. The natural history is itchy pain for two to three days, improvement after 10 days, depending on size, and healing in 14 days. If the sores get large, keeping the scab intact with lip balm to promote healing. Lots of over-the-counter medicines are available with limited effectiveness but some ability to lessen pain. Talk to your dentist for a prescription for generic pills or ointment. One such medication is Acyclovir; it has a long shelf life and can be kept on hand for future occurrences.

**First Aid:** Reassure the child everyone is so busy worrying about their own face that no one really cares about his little scab. Place Carmex on the scab, but do not cross contaminate bottle.

**Follow up:** Mention to dentist at next visit.

## Mucocele



**What is this?** Child has a bump on the inside of the lip that is round and squishy. It is easily bitten and may swell.

**Situation:** A mucocele – a traumatized minor salivary gland that swells when saliva is made

**What else it could be:** Irritation fibroma (scar tissue children habitually bite on)  
Abscess (contains pus, wide base, directly over carious tooth)

**Is this an emergency, urgency, or problem?** **PROBLEM**

A mucocele is a relatively common problem that arises when one of the thousands of minor saliva glands of the lip (can also be on soft palate or uvula, but rare) is traumatized. The salivary duct allows saliva to escape from the gland; if the gland becomes severed from the duct, the saliva builds up in the goblet shaped gland, which then bursts. Scar tissue is formed when it bursts and the process starts again. A mucocele is round and rubbery to the touch without a lot of pain, but it can begin to interfere with eating and may become irritated as it is played with and bitten. If it becomes secondarily infected, pus may be expressed. Mucoceles usually do not self heal, and a dentist visit is necessary to remove them from the lip.

**Tell the parent:** Explain the nature of the bump and that it will not go away on its own if it has been present for more than two weeks. Caution the child not to play with or bite it, and make an appointment with the dentist.

**First Aid:** Give the child ibuprofen or apply topical anesthetic if the mucocele has been recently bitten or traumatized. If a sharp tooth or orthodontic appliance is nearby that may have started the problem, address that as well.

**Follow up:** A dentist will need to surgically remove this mucocele. They have a high rate of reoccurrence.

## Viral Papilloma



**What is this?** Child has raised bump near the mouth, on the lip, or on the gum. The bump is not painful and is approximately 1 to 3 mm in size.

**Situation:** A viral papilloma, or common wart. It can have a stalk or be flat and often occurs in clusters.

**What else it could be:** Fibroma (scar)  
Abscess (bulbous not flat, directly over carious tooth, recent)  
Cold sore (outside on lip, itchy with scabbed blisters)

**Is this an emergency, urgency, or problem?** **PROBLEM**

A papilloma is caused by one of several strains of the HPV or Human Papilloma Virus. Often the strains can infect both fingers and mouths, so auto-inoculation is common. A vaccine exists that can prevent the type of HPV that can cause cancer, but no cure exists. Since this virus lies in skin cells it will eventually clear without treatment. Common treatment involves irritating the skin around the papilloma to drive up the immune response for quicker healing. Removal of the papilloma around the face may be problematic. Papillomas inside the mouth can be more easily removed, and this is the treatment of choice to prevent growth in size and spread.

**Tell the parent:** Explain that the papilloma is a very common viral disease of childhood. They are rarely painful unless traumatized, so treat palliatively only. Suggest a discussion with a pediatrician for a lesion outside the mouth and a pediatric dentist if inside the mouth.

**First Aid:** None

**Follow up:** None