

Not every painful tooth needs to come out. You must decide how serious the problem is, and then decide if you can treat and save the tooth. Some problems—such as root canal treatment for a tooth with an abscess, or wiring for a loose tooth—require the skills of an experienced dental worker. Even if you cannot treat every person, a more experienced worker can help you by taking care of the more difficult tooth problems.

Remove a tooth only when it is necessary. Here are three reasons to take out a tooth:

- It hurts all the time or hurts enough to wake the person at night.
- It is loose and hurts when you move it.
- It has a broken root (p. 96) or a broken top with an exposed nerve.

It is important to learn from another person, not just from a book. Find an experienced dental worker who can show you how to take out a tooth and who can then watch you as you try it yourself.

Before You Begin: Ask Questions!

Before you take out a tooth, you need to learn about the person's health. Tell the person what to expect, and then ask:

- Do you bleed a lot when your skin is cut? (If so, you may bleed a lot when your tooth comes out.)
- Do you have swollen feet and difficulty breathing? (You may have heart disease.)
- Do you have any allergies? (You may be allergic to some medicines we give when we take out a tooth.)
- Are you a diabetic? (If you have diabetes, your wound will take a long time to heal.)
- Are you pregnant? (Some problems can be treated during pregnancy, but sometimes it is better to wait. See pages 15–16, 77, 102, and 160.)

If the person answers "yes" to any of these questions, you must take special precautions. See the next page.

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FIVE PROBLEMS TO WATCH FOR

- **1. A person who bleeds a lot** must know how to prevent bleeding afterward. Explain very carefully the steps given on page 167. You may also want to place a suture (pages 167-168) to hold the gums tightly together.
- 2. Persons with heart disease often take aspirin or medicines called anticoagulants that do not allow the blood to clot normally. Ask what medicine the person takes. Heparin and warfarin are examples of anticoagulants. Another heart medicine, digitalis, is not an anticoagulant. If the medicine is not an anticoagulant, you can take out the tooth. But do not use more than 2 cartridges of local anesthetic. The epinephrine inside the anesthetic can harm a weak heart. (See page 137, #2).
- **3. A person with allergies** may be allergic to aspirin, penicillin, erythromycin, or other medicines you often use. Find out which medicine has caused problems and give a different medicine, one that will not cause a reaction.
- **4. A diabetic's wound may become infected.** Watch carefully the place where you took out the tooth and give antibiotics (page 94) if an infection begins.
- **5. During the last month of pregnancy,** a woman may be too uncomfortable to have a tooth taken out. Control the infection with a 5-day course of penicillin (page 94), and take out the tooth after the baby is born. It is also better to wait if the woman has high blood pressure, because she may bleed too much when you take out the tooth. For more information about treating pregnant women, see page 77, and the story on pages 15 to 16.

Be Patient, Careful, and Considerate

- Inject local anesthetic slowly in the right place, so the tooth becomes numb and you do not hurt the person when you remove it. If the person says the tooth still hurts, it is probably true! Inject again.
- Use the correct instrument in the correct way. If you are careful you can avoid breaking the tooth. When you take out a baby tooth, be extra careful not to hurt the new tooth growing under it.
- Explain everything to the person. Tell the person if something is going to hurt, even a little. When you take out the tooth, you can explain, for example, that there will be a feeling of pressure. Press on the person's arm to demonstrate what it will be like. When you finish taking out the tooth, explain what you have done and what the person can do at home to help the mouth heal.

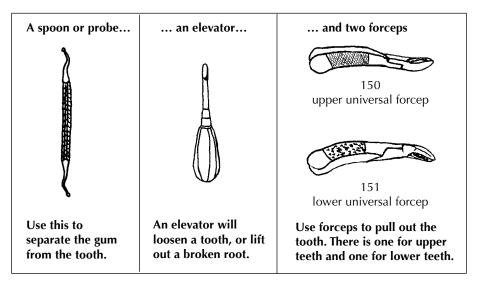
THE INSTRUMENTS YOU NEED

Buying instruments can be confusing, because there are so many. Only a few of them are really necessary. You can take out most teeth with the 4 basic instruments on page 161.

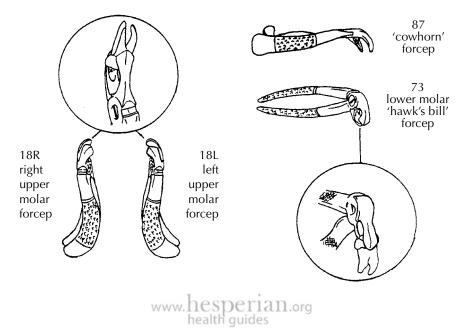
When you order, use the proper name. Many companies use numbers to describe the instruments, but a different company may use a different number. If you use the proper name along with the number given here, most companies will understand what you want. (See page 213.)

The Four Basic Instruments

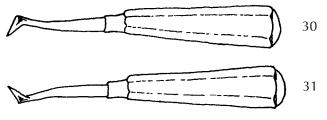
You can take out most teeth with these 4 instruments:



Other forceps can be useful, especially for taking out a strong back tooth. They have pointed beaks that are made to fit between the roots of a back molar. As a result, you can hold onto the larger tooth better.



Curved elevators are good for taking out broken roots. You can force their pointed ends more easily between the root and the bone that is holding it.



Cryers elevators

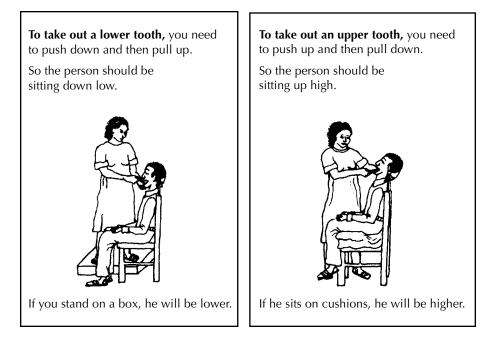
Unfortunately, forceps and elevators are expensive. If you want to order more than the 4 basic instruments (page 161), remember the cost.

WHERE YOU WORK IS IMPORTANT

Work wherever it is light and bright. You must be able to see what needs to be done. Sunlight or light from a lamp is usually enough. Use a dental mirror (page 145) to direct more light into the mouth.

Use a chair that has a back high enough to support the person's head.

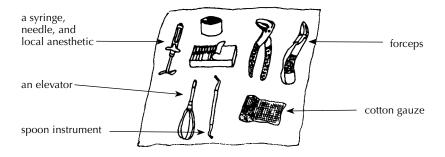
Think about how you can stand and work the most easily.



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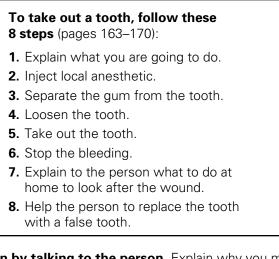
HOW TO TAKE OUT THE TOOTH

Once you are certain which tooth must come out, decide which instruments you will need. Lay them out ahead of time on a clean cloth:



Before you touch your instruments, be sure your hands are clean. Wash with soap and water, and put on clean plastic or rubber gloves. See pages 85 and 86.

Be sure, also, that your instruments are clean. See pages 87 to 90. **Prevent infection—keep clean!**



- 1. Always begin by talking to the person. Explain why you must take out a tooth (or teeth) and tell how many teeth you will take out. Begin working only when the person understands and agrees.
- 2. Inject some local anesthetic slowly, in the right place. Remember from Chapter 9 that the injection for a lower tooth is different from the injection for an upper tooth.

Wait 5 minutes for the anesthetic to work, and then test to be sure the tooth is numb. Be kind—always test before you start. If the person still feels pain, give another injection.

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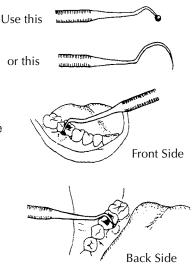
3. Separate the gum from the tooth.

The gum is attached to the tooth inside the gum pocket. Separate the gum and tooth before you take out the tooth. If you do not, the gum may tear when the tooth comes out. Torn gums bleed more and take longer to heal.

Slide the end of the instrument along the side of the tooth into the gum pocket. At the deepest part of the pocket, you can feel the place where the gum attaches to the tooth.

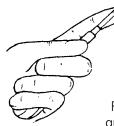
Push the instrument between this attached part and the tooth. Then separate the tooth from the gum by moving the instrument back and forth.

Do this on both the cheek or lip side (front side) and the tongue side (back side) of the tooth.



The attached gum is strong, but it is also thin. Control your instrument carefully so that it only cuts through the part that is attached to the tooth. Do not go any deeper.

4. Loosen the tooth. A loose tooth is less likely to break when you take it out. Before you take out a strong tooth, always loosen it first with a straight elevator.



Caution: if you do not use it properly, a straight elevator can cause more harm than good.

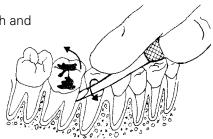
It is important to hold a straight elevator properly. Place your first finger against the next tooth while you turn the handle. This will control it.

Remember that the sharp blade can slip and hurt the gums or tongue.

The blade goes between the bad tooth and the good one in front of it. Put the curved face of the blade against the tooth you are removing.

Slide the blade down the side of the tooth, as far as possible under the gum.

Turn the handle so that the blade moves the top of the bad tooth backward.



Put pressure on the bone, not the tooth beside it. Do not loosen the good tooth!

5. Now, take out the tooth. Push your forceps as far up the tooth as possible. The beaks of the forceps must hold onto the root under the gum.



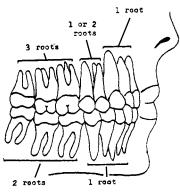
Use your other hand to support the bone around the tooth. Your fingers will feel the bone expanding a little at a

time as the tooth comes free. With practice, you will be able to decide how much movement the tooth can take without breaking.

To decide which way to move a tooth, think about how many roots it has.



If a tooth has 1 root, you can turn it.



If a tooth has **2 or 3 roots**, you need to tip it back and forth.

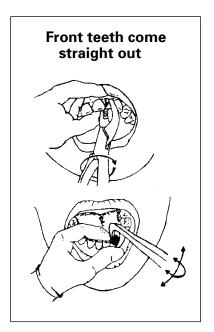


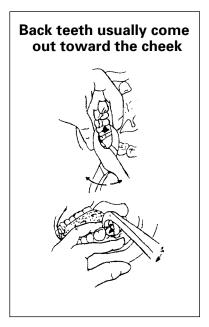




Take your time. If you hurry and squeeze your forceps too tightly, you can break a tooth.

Removing a tooth is like pulling a post out of the ground. When you move it back and forth a little more each time, it soon becomes loose enough to come out.



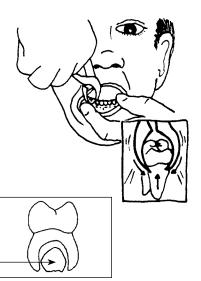


When you remove lower molars with the lower molar 'cow-horn' forcep, you use it in a different way:

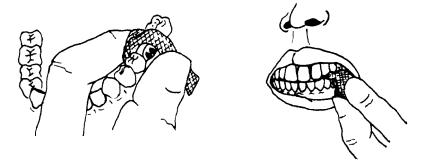
- Fit the points under the gum, between the tooth's roots.
- Squeeze the handles gently and move them up and down, then side to side. This will force the points of the forcep further between the roots and lift the tooth up and out.

Note: some lower molars come out toward the tongue.

WARNING: **Do not use the 'cowhorn' forcep to take out a baby molar.** Its points can damage the permanent tooth growing under it. —



When the tooth comes out, look carefully at its roots to see if you have broken any part off and left it behind. Whenever possible, take out broken roots so that they do not cause infection later inside the bone. 6. Stop the bleeding. Squeeze the sides of the **socket** (the hole that is left after you take out the tooth) back into place. Then cover the socket with cotton gauze and ask the person to bite firmly against it for 30 minutes. A child should bite firmly on the gauze for 2 hours. See page 142.



Whenever the gums are loose, join them together. To stop the bleeding and heal the wound, you must hold the gums tightly against the bone under them.

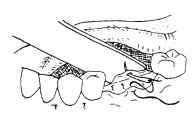
HOW TO PLACE A SUTURE

When you remove 2 or more teeth in a row, it is a good idea to join the gums with a **suture** (needle and thread). If you need more than one suture, place the first one nearest the front of the mouth and work toward the back.

The needle and thread you use must be sterile. Boil both for 30 minutes. See page 88.

You will need an instrument to hold the needle firmly (hemostat) and scissors to cut the thread.

a) Pass the needle through the loose gum—the one you can move most easily. Then pass it through the more firmly attached gum.



If the looser gum is on the outside, you will bring the needle toward the tongue. Protect the tongue with a tongue blade or your dental mirror.

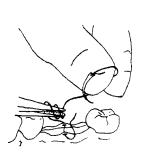
You must suture both the upper and the lower gums in this way.

After this you must tie 2 knots and cut the thread. See the next page.

b) Pull the thread until about 4 cm of thread is left loose on the starting side.

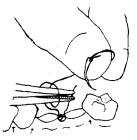
Wrap the longer end of thread **2 times** around the beaks of the needle holder.

Then grab the shorter free end of the thread with the tip of the needle holder. With the needle in your fingers, pull the needle holder in the opposite direction. The thread will slide off the beaks and form the first knot.



Tighten the knot onto the side of the wound, not on top of it.

c) Tie a second knot, to keep the first one tight.



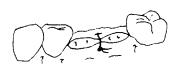
Wrap the thread **once** around the beaks of the needle holder.

Grab the free end with the tip of the needle holder as you did before. Pull the 2 ends in opposite directions. The second knot will form over the first knot.

d) Cut the threads so that about .5 cm is left free. If the ends are too long, they will bother the person's tongue. If they are too short, the knot may come open.

Then cover the area with cotton gauze. Tell the person to:

• bite against the cotton for 1 hour to stop the bleeding, and



• return in 1 week for you to remove the thread.

There is a special kind of suture material that disappears by itself, which is good to use because the person does not have to return for you to remove sutures. Unfortunately, it is expensive. If you cannot afford it, use sewing thread and remove it 1 week later. 7. Explain to the person what you have done, and what to do at home to look after the wound. Remember that her mouth is numb, so she cannot feel what is happening.

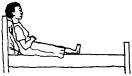
Taking out a tooth is like a small operation. There will be bleeding and later some pain and swelling. This is normal and should be expected. Tell the person this. Then give the following advice:

• **Bite firmly on cotton gauze** for an hour, and again later if blood comes from the socket.



Always give the person some extra cotton gauze to carry home, in case bleeding starts again later. Show her how to use the cotton gauze.

- Take aspirin or acetominophen for pain as soon as you need it, and then every 3 to 4 hours (pages 94-95).
- Keep your head up when you rest. This reduces bleeding because it is harder for blood to flow uphill. It also hurts less.

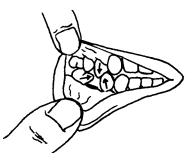


- **Do not rinse your mouth.** In some places people believe they should immediately rinse with salt water and spit a lot after a tooth comes out, but this is harmful! It is important for the blood clot to stay inside the socket and not wash away.
- **Do not drink hot liquids** like tea or coffee, because they encourage bleeding. However, cool liquids are good for you. Drink a lot of water.
- **Continue to eat,** but be sure the food is soft and easy to chew. Try to chew food on the side opposite the wound.
- **Keep your mouth clean.** Start on the second day and continue until the socket is well. To do this, rinse your mouth with warm salt water (page 7) and keep your teeth clean (pages 69–72), especially the teeth near the socket.

FALSE TEETH

After a tooth comes out, it is a good idea to replace it with a false tooth. If you do not, the other teeth soon start to shift into the open space.

This weakens the bone around their roots. After some years, they too become loose and sore, and they have to be taken out.



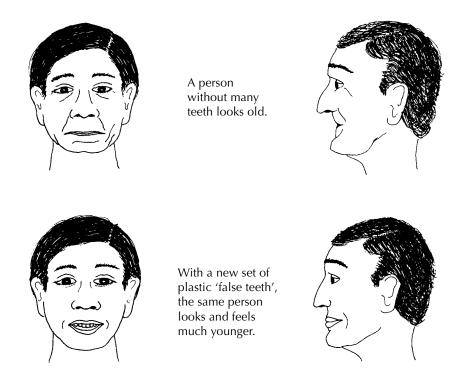
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WHY FALSE TEETH ARE HELPFUL

When you take out a tooth, it is like removing a brick from the center of a wall. The area around the space becomes weaker and begins to crumble.

To prevent this, a plastic tooth can fit into the space. This tooth is not for chewing food but to hold the remaining teeth in their normal, healthy position.

A full set of teeth allows a person to chew the foods needed to stay healthy and feel good. Moreover, teeth help you look good!



If possible, after you take out a tooth, encourage the person to replace the tooth with a plastic tooth. Find out where they are made and how much they cost. Then explain:

- how to clean the remaining teeth to prevent them from going bad (pages 69–72), and
- how it is possible to get a replacement plastic tooth.

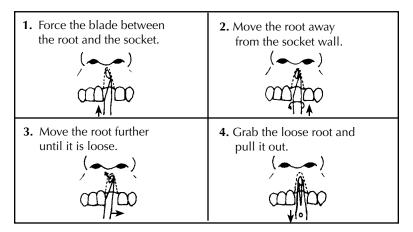
PROBLEMS THAT CAN OCCUR

Sometimes a problem develops even though you have tried to be careful. Give help whenever you can. **If you are not able to help, refer the person to a doctor or dentist as soon as possible.**

BROKEN ROOTS

If you can see the root, try to remove it. If you leave a broken root inside the bone, it can start an infection.

Removing a broken UPPER root. Use your straight elevator. Slide the blade along the wall of the socket until it meets the broken root.



Removing a broken LOWER root. Use a straight elevator (or a curved elevator if you have one). If the broken root is from a molar tooth, slide the blade into the socket beside the broken root.

1. Break away the bone between the root and the blade.	2. Force the blade between the root and the socket.
3. Move the root away from the socket wall.	4. Grab the loose root and pull it out.
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WARNING: It is better to leave a small broken root inside the socket. In a week or so, it will loosen itself and be easier to remove.



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ROOT PUSHED INTO THE SINUS

An upper root that seems to disappear may have gone into the sinus (page 95). **Do not try to find it.** Instead, cover the socket with cotton gauze and send the person to the hospital. A special operation is needed to open the sinus, find the root, and take it out.

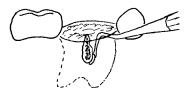
Ask the person not to blow his nose. That forces air through the opening and prevents it from healing.

BONE CHIPS AND TAGS OF FLESH

Small pieces of bone that lie loose inside the socket can cause bleeding and delay healing.

Gently reach into the socket with the end of an elevator or spoon instrument. Feel for the piece of bone and carefully lift it out.

Give local anesthetic if needed.



When you are finished, ask the person to bite on cotton gauze until the bleeding stops.

Small tags of flesh are not serious, but they bother the person. Hold the tag steady with cotton tweezers and use sterile scissors carefully to cut the bit of flesh free.

Rinsing with warm water makes gums tough and helps them heal. But do not rinse for the first 24 hours. See page 169.

BLEEDING

If the first cotton gauze (page 161) does not stop the bleeding in the socket, place more cotton gauze. Wait 5 minutes to see if the bleeding stops. If this does not work, follow the steps on pages 167–168 for placing a suture.

SWELLING

Hold a cloth wet with **cold** water against the face. This helps to **prevent** swelling. This is a good thing to do if the tooth was hard to take out, or if it took a long time.

If there already is swelling, **heat** against the face will help to **reduce** swelling. Hold a cloth wet with hot water against the swollen area, 30 minutes on and 30 minutes off. **Be careful not to burn the skin**!

A large swelling usually means there is an infection. The person needs additional treatment. See page 116.



PAINFUL SOCKET

The socket area often hurts for a day or so after the tooth has been removed. Aspirin or acetominophen (page 94) is usually enough to relieve the pain.

A strong, steady pain that lasts for several days is a sign that the person is having a problem called dry socket. The treatment for this special kind of problem is given on page 117.

DISLOCATED JAW

When you press against a person's jaw while taking out a tooth you can sometimes dislocate it. The jaw has been pushed out of position and it is not able to go back again.

We describe the care for a dislocated jaw on page 113.

MOST IMPORTANT: Be sure to tell each person you treat, "If your problem gets worse, you can come back to see me immediately!"

CLEAN YOUR INSTRUMENTS AFTER YOU FINISH

If your instruments are dirty, they can pass on germs that cause tetanus (page 118) or hepatitis (see page 172 in *Where There Is No Doctor).*

Germs on dirty instruments can also go into the socket and start an infection.

Dental instruments must be not only clean, but also sterile. This means they need to be both scrubbed and then boiled before they can be used again. See pages 86 to 89.



Use a brush and clean each instrument with soap and water. Be careful to scrub away all bits of old dried blood.



Then kill the germs by placing the instruments into a covered pot of boiling water for 30 minutes.