

# Why Did My Tooth Break?

Contributed by Dr. Barry F. McArdle of Portsmouth, NH

## Q: Why did my tooth break?

**A:** Your teeth can break for several reasons. Obviously, an accidental injury (such as the trauma that can occur during sports or an automobile accident) can fracture your teeth. Also, if you have a tooth that has decayed sufficiently enough to undermine one or more of its surfaces, this can cause your tooth to break as well. More commonly, but less known to the general public, your teeth can fracture due to the size of the fillings they contain and the existence of any cracks in them. This is true of both amalgam silver and composite fillings. Other issues, like bite discrepancies or grinding and clenching habits, can also contribute to your teeth breaking when they have the risk factors mentioned above.



*This molar fractured right next to the large bonded filling in it. Cracks can be seen at the other end of this tooth where it touches the tooth next to it.*

likely to feel much pain. If enough enamel breaks off, though, the dentin can be exposed. The tooth still shouldn't hurt too much, but it may be very sensitive to cold. The worst breaks go all the way to the pulp. Not surprisingly, this causes extreme pain as well as bleeding from the tooth.

If you have a minor chip in your tooth and it's sensitive, use an over-the-counter painkiller such as ibuprofen for this (if you can take it), and call your dentist for an appointment.

If you have a more serious fracture, rinse your mouth with warm water, and call your dentist to get an appointment right away. You may take a painkiller (as long as it is not aspirin which could increase the risk of heavy bleeding). If you experienced a blow to the mouth and soft tissue is swelling, apply an ice pack to your mouth.

If a tooth has been knocked out

(roots and all), you have a high dental emergency that requires rapid treatment to save the tooth. Having a tooth saver (available from your pharmacy) in your medicine cabinet is a good idea. Carrying a tooth to the dentist in a container of milk or your saliva will work fine. Avoid touching the root of the tooth so as not to damage it. You can rinse the tooth with milk but handle it gently, and don't scrub it.

Try to get to your dentist or another one close by as soon as possible. Teeth have been "replanted" in their sockets successfully even 24 hours after being knocked out – but time is critical and the tooth must be kept moist the entire time it is out of your mouth.

## Q: What is the treatment for a broken tooth?

**A:** Even in the case of a small chip, your dentist is likely to take an x-ray of the damaged tooth, and you should "take it easy" on the tooth for a couple of days. A minor chip can be smoothed out with a fine "polishing" or filled in with a composite material. More serious breaks call for immediate treatment.

If the dentin is exposed, your dentist can cover it with a temporary material that will protect it until more definitive treatment can be rendered. As long as the pulp is still healthy, the tooth can usually be completely

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restored with a permanent crown.

If the pulp is damaged, however, treatment becomes more complicated. A general dentist or endodontist may perform root canal treatment to remove the damaged pulp before putting on a crown. If the break in your tooth is anything more than a tiny chip, your dentist will want to see you again soon to make sure your tooth is healing properly.

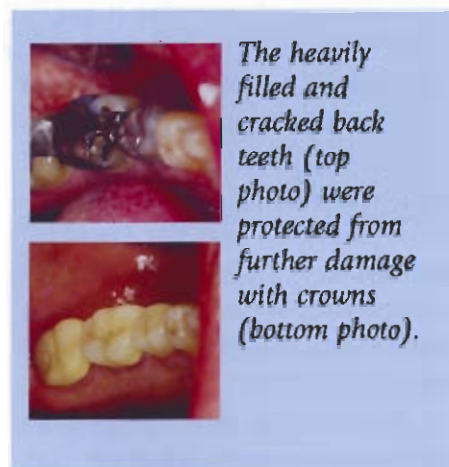
**Q: What can be done to prevent broken teeth?**

**A:** In the case of fracture due to accident, certain precautions can be taken to minimize your risk of traumatic tooth injury (or loss for that matter). A properly constructed sports mouth guard will protect your teeth while allowing you to breathe comfortably and participate in your favorite contact sports without distraction. Of course, regular visits to your dentist for preventive treatment, along with conscientious home care

habits, go a long way towards checking the development of any decay extensive enough to induce breakage.

When one or more of your teeth (especially your back teeth) already have large fillings in them and are starting to crack, as heavily filled teeth frequently do, you should seriously consider crowning the high-risk teeth because treatment will be simpler and less costly than if you wait until after they fracture. For example, it is not uncommon for an extensively restored (filled) broken tooth with cracks to need a root canal in order for it to be saved. In rare cases, if one of these teeth breaks in your mouth it will need to be extracted because the position and severity of the fracture makes the tooth hopeless.

Whereas fillings depend on their surrounding tooth structure to anchor them in place, crowns (also called "caps") hold teeth together by encasing them in a continuous shell. In over twenty years of practicing on the Atlantic coast, I have only seen one



*The heavily filled and cracked back teeth (top photo) were protected from further damage with crowns (bottom photo).*

case where a tooth fractured after being crowned, and that was in a case of severe trauma where the patient rolled his snowmobile and was not wearing a sports guard.

If you have an uneven bite, grind your teeth, or clench them, your dentist will address these conditions as part of a comprehensive treatment plan designed to restore your mouth, as a whole, to a state of health where uneven and excessive wear is minimized, and cracks are less likely to develop. ■