

# What Do You Mean I Have a Cracked Tooth?

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## What does it mean that I have a crack in my tooth?

When we refer to cracks in teeth we are saying that there has been a split in the enamel (outer tooth layer) that extends into the dentin (inner tooth layer). A crack can extend deep into the dentin and in some cases all the way to the nerve. Sometimes a tooth can split completely in half.

## What caused the crack in my tooth?

While the exact cause many times may never be known there are many causes of fractures. Clenching and grinding of teeth especially at night time weakens teeth. Large metal fillings weaken teeth. Chewing on hard substances such as hard candies and ice can weaken teeth. Teeth also become more brittle as we get older.

## What are the symptoms of a cracked tooth?

Cracks can sometimes cause sensitivity when biting or chewing and with temperature changes. Sometimes people report the feeling of something between their teeth. Sometimes the tooth can be sensitive when flossing or feel like something is wedged between the teeth. Many times the symptoms are not consistent. Many times people report no symptoms at all until the crack reaches the nerve.

## Can you determine the size of the fracture from an x-ray?

Unfortunately cracks in teeth rarely show up on x-rays even if they are severe. Studies have shown that 80% of cracks don't show up on x-rays.

## Can the crack be removed?

Unfortunately there is no way to remove a crack or fracture. The treatment goal of a cracked tooth is to stabilize or splint the tooth to prevent further fracturing. This is most often accomplished with a full crown. Even a bonded tooth colored filling is not strong enough to prevent the tooth further fracturing. More will be explained on this later.

## If I don't treat my cracked tooth how long will it stay the way it is today?

Our analogy most often used for explaining this question is to relate cracked teeth to cracks in a car windshield. For a while they may stay the same. However, overnight they can grow drastically. If the temperature changes or you ride down a rough road, the crack may really spread in the windshield fast. You have to imagine all the forces that

occur especially on back teeth. We use these teeth to “mash” food. Teeth also experience amazing changes in temperature. From ice cream to hot coffee the temperatures can change from one extreme to another in the mouth instantaneously. Teeth experience contraction and expansion all the time due to temperature changes. This is further increased if the tooth has a large metal filling. The metal and the tooth expands and contracts at different rates which further increases tooth fractures.

So in summary the crack can stay that way for a long time or it can become very large and the tooth can actually break in a matter of days. There is no way to know for sure. But one thing that is for sure is the fact that the crack will never get better without proper treatment. The fracture can only get larger.

### **What are some of the risk of not treating my cracked tooth?**

The most obvious risk is that the tooth can actually break. This usually occurs with an entire cusp breaking off. Unfortunately another risk is that the crack can actually go all the way into the nerve of the tooth. If this is the case the tooth will require a Root Canal Treatment in order to save the tooth. Also, sometimes based on the severity of the crack the tooth may require complete extraction (removal). Many times this involves a surgical extraction performed by an Oral Surgeon.

### **What is the treatment you usually recommend for cracked teeth?**

Almost always, the recommended treatment is to place a full coverage restoration (crown) over the tooth. This splints the tooth together and prevents stresses from causing further damage to the tooth. Many times the crown can be made to look like a natural tooth.

First, old filling material is removed along with any decay that is present. This area is then restored with composite (bonded material). This helps provide a strong core to support the crown. A good analogy we like to use is that it's like providing a strong foundation to support a house. You would not want to place a new crown on a weak tooth. Then, the tooth is prepared for a crown.

### **Would it be best just to wait and do nothing?**

Provided that the crack never gets any bigger then this would be true. However, should the crack get bigger there is the increased risk of a necessary Root Canal Treatment. There is also the risk of necessary tooth extraction (removal). This could increase the cost of treatment as much as 4 times. Not only is there an increased cost but there is also much more time required in the dental chair to perform the additional procedures and many times trips to necessary dental specialist to complete treatment.

### **What is your treatment philosophy regarding tooth cracks?**

We don't treatment plan every tooth with a crack we see especially if it's a surface fracture only involving the enamel. What we are looking for is the severity of fracture. We treatment plan a crown when we see one or more of the following:

- If we see the fracture stained then we know that there is fluid movement in and out of the crack. This means that decay causing bacteria is also getting into the fracture. The stain is also a high indicator that the crack is going deeper into the tooth reaching the dentin.
- If we can actually get a dental explorer to drop into the cracked area. This indicates a large fracture.
- If we believe based on the appearance of the tooth due to multiple fractures the tooth will break soon. Multiple fractures are often associated with a large metal filling present.
- If the tooth has already lost an entire cusp from a fracture.
- If there is a visible fracture and there are symptoms associated with the tooth. These could include sensitivity to biting, chewing, and temperature changes. Many times a cracked tooth will have no symptoms at all however.
- If when using a “crack checker” (bite stick) we can reproduce symptoms of biting sensitivity.

### **Is your treatment of cracked teeth conservative?**

Yes, we only recommend treatment if we think it’s absolutely in the best long-term interest of your tooth. Remember we see all the time the ramifications of non-treatment. So if we recommend treatment it is based on our knowledge of what happens if we wait too long to protect the tooth.

A temporary crown is placed while the permanent crown is being fabricated by our expert lab technician. The temporary is designed to simulate the protection of the permanent crown. If you don’t have any symptoms with the temporary then it’s ok to proceed with the final placement of the permanent crown. The placement of the permanent crown restores the tooth to proper function. This can also be accomplished many times with a crown that looks exactly like a new tooth! (Replacing the ugly stained fractured tooth)

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