



# Cracked Tooth

## Understanding Cracked Teeth and Why Early Diagnosis Matters

### What Is a Cracked Tooth?

A **cracked tooth** is a tooth that has developed a fracture. Cracks may range from tiny surface lines in the enamel to deeper fractures that extend into the tooth or root.

Some cracks cause no symptoms, while others can lead to pain, sensitivity, or infection. Early diagnosis increases the likelihood that the tooth can be successfully treated and preserved.

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### What Causes a Cracked Tooth?

Teeth are strong, but they are not indestructible.

A tooth may crack because of:

- Biting hard foods such as ice or hard candy
- Teeth grinding (bruxism)
- Dental trauma
- Large fillings that weaken the tooth
- Sudden temperature changes in the mouth
- Normal wear over time

Sometimes no obvious cause can be identified.

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### Types of Tooth Cracks

#### Craze Lines

Craze lines are tiny cracks that affect only the outer enamel.

They are:

- Very common in adults

- Usually painless
  - Cosmetic rather than structural
  - Generally do not require treatment
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## **Cracked Tooth**

A crack extends from the chewing surface toward the root.

Depending on how deep the crack extends, treatment may allow the tooth to be saved.

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## **Split Tooth**

A split tooth occurs when a crack progresses completely through the tooth, separating it into distinct segments.

These teeth often cannot be fully restored and may require extraction.

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## **Vertical Root Fracture**

A vertical root fracture begins in the root and extends upward.

These fractures are often difficult to diagnose and may require extraction if the tooth cannot be saved.

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## **Common Symptoms**

A cracked tooth may cause:

- Pain when biting or releasing pressure
- Sensitivity to cold
- Sensitivity to sweets
- Intermittent pain that comes and goes
- Difficulty identifying which tooth hurts

Some cracked teeth produce symptoms only occasionally, making diagnosis challenging.

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## Why Does a Cracked Tooth Hurt?

When a cracked tooth is exposed to chewing forces, the crack may open slightly.

This movement can irritate the dental pulp inside the tooth, causing pain.

If bacteria enter through the crack, infection may eventually develop.

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## How Is a Cracked Tooth Diagnosed?

Your dentist may perform:

- A clinical examination
- Bite tests
- Transillumination (shining a bright light through the tooth)
- Dental X-rays
- Magnification during examination
- Three-dimensional imaging (CBCT) when appropriate

Very small cracks may not always be visible on routine X-rays.

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## How Is a Cracked Tooth Treated?

Treatment depends on:

- The location of the crack
- The depth of the fracture
- Whether the pulp is affected
- Whether the crack extends below the gumline

Possible treatments include:

### **Dental Crown**

Many cracked teeth can be protected with a crown that helps hold the remaining tooth together and reduces stress during chewing.

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## Root Canal Treatment

If the crack has reached the dental pulp, root canal treatment may be necessary before placing a crown.

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## Tooth Extraction

If the crack extends too far below the gumline or splits the tooth completely, extraction may be the only option.

Whenever possible, dentists aim to preserve the natural tooth.

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# Can a Cracked Tooth Heal?

No.

Unlike a broken bone, a cracked tooth **cannot heal itself**.

Without treatment, the crack may gradually become larger and more difficult to repair.

Early treatment offers the best chance of saving the tooth.

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# How Can You Prevent Cracked Teeth?

You can reduce your risk by:

- Avoiding chewing ice
  - Avoiding biting hard objects
  - Wearing a mouthguard during sports
  - Wearing a night guard if you grind your teeth
  - Treating large cavities before they weaken the tooth
  - Visiting your dentist regularly
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# When Should You See a Dentist?

Schedule a dental examination if you notice:

- Pain when biting
- Sudden tooth sensitivity
- A chipped tooth
- Pain that comes and goes without an obvious cause
- A tooth that feels different when chewing

Prompt evaluation may prevent the crack from worsening.

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## Common Myths

**"If the crack is small, it will heal on its own."**

**False.**

Cracked teeth do not heal naturally.

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**"If the pain disappears, the crack is gone."**

**False.**

Pain may decrease temporarily, but the crack often remains and may continue to worsen.

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**"Every cracked tooth needs to be removed."**

**False.**

Many cracked teeth can be successfully treated with a crown or root canal therapy, depending on the extent of the fracture.

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## Key Takeaways

- ✓ A cracked tooth is a common dental problem that ranges from small enamel cracks to deep fractures.
  - ✓ Pain when biting is one of the most common symptoms.
  - ✓ Early diagnosis improves the chances of saving the tooth.
  - ✓ Treatment may include a dental crown, root canal therapy, or extraction, depending on the severity.
  - ✓ Cracked teeth cannot heal on their own.
  - ✓ Avoid chewing hard objects and wear a night guard if you grind your teeth.
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## References

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