

## Sensitive Teeth

For your dental health.

Sensitive teeth hurt with exposure to cold air, hot or cold food and beverages, or sweets. Sometimes it stops people from properly brushing and flossing their teeth. This can lead to more sensitivity, decay, infection, and even tooth and bone loss.

## What causes sensitive teeth?

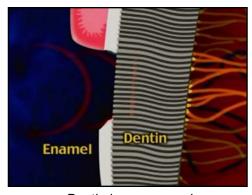
Teeth are often sensitive because the dentin layer of the tooth has become exposed. The dentin is the middle layer of the tooth. Above the gums, the dentin layer is normally covered by an outer layer, called the enamel, and, on the roots, cementum. Dentin contains millions of tiny tubes that extend from the nerves at the center of the tooth to the outer layer. When the dentin is exposed, these tubes are left open. Any stimulation at the surface of the dentin is transmitted through the tubes to the nerves, causing pain.

The dentin is usually exposed in two ways:

- Abfraction
- Worn-away enamel

Abfraction occurs when one tooth hits sooner than the rest. This causes undue stress on the involved teeth, and they begin to flex. Over time, this continual flexing causes the enamel to separate from the dentin layer.

Many habits can wear away tooth enamel, such as brushing too hard, using a medium or hard bristled toothbrush, using an abrasive "tartar-control" or "whitening" toothpaste, and grinding or clenching your teeth. Some dental procedures may temporarily expose the dentin, leading to short-term sensitivity.



Dentin layer exposed



Abfraction



## Sensitive Teeth

For your dental health.

## **Treating sensitive teeth**

To determine the cause of your tooth pain, we'll first make sure that the pain isn't caused by decay, a broken tooth, or abscess. Then we'll continue the exam to find out how the dentin has become exposed.

If the problem is abfraction, we may

- Adjust your bite
- Restore the damage by bonding a filling in place
- Crown the tooth

If the problem is a worn-away enamel layer, we may

- Remove plaque and bacteria
- Present a plan for improved brushing techniques
- Treat the area with fluoride
- Apply a protective filling or bonding agent



Examining for sensitive teeth

Proper homecare is essential to taking care of sensitive teeth. We may recommend that you avoid high-acid and high-sugar foods, like tea, citrus, soda pop, and sports drinks, use a desensitizing toothpaste or mouthwash, use a soft-bristled toothbrush or electric toothbrush, or wear a nightguard if you clench or grind your teeth.