

## RESTORATIONS SERIES

# What Are Cavities?

Plaque, a sticky film of food and bacteria that is constantly forming on your teeth, is the culprit when it comes to tooth decay. Bacteria that naturally exist in plaque break down the starches and sugars in the food you eat. A chemical reaction occurs, and as a result, an acid is produced. Like all acids, the acid produced in your mouth is corrosive, which means that it dissolves other materials. Your teeth are the victims of this corrosive action. The acid dissolves their protective outer enamel layer, eventually creating holes in your teeth, also known as cavities.



*Visible cavity*



*A hidden cavity*



*Decay can spread*

### Regular checkups are a must

Cavities first form in the hard, protective enamel layer of your teeth. Beneath the enamel is a softer layer called dentin. If a cavity wears through the enamel and reaches the dentin, it can grow much more quickly and threaten the inner layer of the tooth, containing its nerves and blood vessels. This part of your tooth is called the pulp chamber.

If the decay is allowed to penetrate the enamel and dentin and gets into the pulp chamber, it's likely that we'll need to perform root canal treatment. That's why regular checkups and professional cleanings are so important. They allow us to restore your tooth while the cavity is still small and confined to the outer enamel layer.

### Diagnosing cavities

Sometimes, we can detect cavities just by looking at your teeth, but to find cavities in their early stages when they are very small, we use a dental explorer and x-rays. A dental explorer finds cavities on the surfaces of your teeth, and the explorer catches or sticks in the tiny pits created by cavities. X-rays locate cavities between teeth where the explorer can't reach.

### Repairing and preventing cavities

To repair a tooth with a cavity, we usually remove the decayed portion of the tooth and replace it with a filling, provided the damage is not extensive and there is still plenty of healthy tooth structure remaining. However, preventing decay in the first place is the preferred solution. We'll be happy to work with you, so you'll learn to keep your teeth free of plaque and decay.