Making a Decision with Your Dentist

Preventing and Treating a Cavity in a Permanent Molar

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A healthy mouth is important. That means preventing cavities. The best way to prevent cavities is to practice good oral health habits, such as:

- Brushing teeth twice a day (with fluoride toothpaste)
- Flossing teeth every day
- Drinking water that contains fluoride (tap water)
- Visiting the dentist (twice a year)

A cavity should be treated immediately. Ignored, it will become more serious, painful, and possibly result in other health problems.

This guide outlines topics for you and your dentist to discuss when preventing and treating a cavity in a permanent molar.

**Did You Know:**

There are three sets of permanent molars. The first come in at about age six and the second at about age 12. The third set, or wisdom teeth, come in between the ages of 17 and 21. All molars are located in the back corners on the top and bottom of the mouth.

The permanent molars are important for chewing. The tops of the permanent molars are naturally rough and uneven. This makes them more likely to get cavities since food and/or germs can get stuck in them.
Dental Sealants

Dental sealants are plastic coatings placed on the tops of the permanent molars to prevent cavities. They can also be used to treat small cavities.

Sealants protect molars by preventing food from sticking in the rough and uneven surfaces of the teeth. They are used primarily for children and young teens and are best placed when teeth first come in.

Dental sealants are put on by a dentist or dental hygienist in a dental office, clinic, or sometimes in schools.

Advantages

- Easy to apply and pain free
- Protects molars from cavities
- Covered by most dental insurance, including Medicaid
- Saves money; it is cheaper to prevent a cavity than to fix one
- May last 10 years or more with proper care
- If damaged, sealants can be easily repaired

Disadvantages

- Can break or wear over time
- May need to be replaced
Fluoride is a mineral found in nature that makes teeth strong. Fluoride is applied directly to the tooth by the dentist, dental hygienist, or sometimes a primary care provider to prevent a cavity from forming. Fluoride can also be found in tooth pastes and tap water. Please refer to toothpaste labels for more information. Most tap water in Maryland contains fluoride, and most water filters do not remove fluoride.

**Advantages**

- Safe, quick, and pain free
- Prevents tooth decay
- Less expensive than treating a cavity
- Covered by most dental insurance, including Medicaid

**Disadvantages**

- May need multiple fluoride treatments, recommended two to four times a year, based on individual need
Preventive Resin Restoration (PRR) is used to treat a small cavity when it is on the surface (or enamel) of the tooth.

First, the decay is removed from the enamel before it has spread deeper into the tooth. Then, PRR is used to fill the cavity where the decay was. The PRR is then hardened with a light and polished. PRR protects the tooth from further decay.

**Advantages**
- Quick procedure
- Removes very little tooth structure
- Usually does not require numbing the tooth
- May last a long time with proper care
- Easy to replace, if necessary
- Covered by most dental insurance, including Medicaid

**Disadvantages**
- Only effective for small cavities on the top surface of the tooth
- Can sometimes require numbing the tooth
Silver Diamine Fluoride (SDF) is a liquid that is painted on decay, which causes it to stop growing. SDF may prevent decay from coming back.

First, the decay is cleaned and dried. Then, SDF is painted on the decay. Once the SDF dries, the procedure is complete. The patient should not eat or drink for at least one hour after the procedure.

**Advantages**
- Simple and quick procedure
- Stops decay from growing and may prevent it from coming back
- Less expensive than other methods of stopping decay
- Does not require numbing the tooth

**Disadvantages**
- Turns the treated area of the tooth black
- Does not restore the tooth to normal function
- May require future restoration
- May not be covered by dental insurance
A cavity may require a restoration, commonly known as a filling. When a dentist restores a tooth, they remove the decay from the tooth, stop the cavity from getting larger, and restore the tooth to normal function.

Removing decay may be painful, so a dentist may first numb the tooth. The dentist then removes the decay from the tooth, leaving behind an open space. A special material is then used to fill the space to seal it from further decay and rebuild the tooth to its original shape and size.

**Advantages**
- Very effective; stops decay from growing and may prevent decay from coming back
- Very durable, restores the tooth to normal shape, size, and function
- May last a long time with proper care
- Covered by most dental insurance, including Medicaid

**Disadvantages**
- May be an uncomfortable procedure
- May require numbing the tooth
- May cause temporary tooth sensitivity
- May need to be repaired or replaced over time
There are many filling materials. The two most common are **amalgam** and **composite**.

- **Amalgam** is made up of silver, tin, copper, and liquid mercury. It is commonly known as a silver filling.

- **Composite** is a mixture of plastic and other hard materials. Composite fillings are white or tooth-colored.

### Amalgam

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Durable and long-lasting</td>
<td>• Some feel amalgam is unsafe because it contains mercury</td>
</tr>
<tr>
<td>• Least expensive filling material</td>
<td>• May get darker or stain teeth over time</td>
</tr>
<tr>
<td>• Chance of further decay is low</td>
<td>• Requires removing slightly more tooth structure than composite</td>
</tr>
<tr>
<td>• The American Dental Association (ADA) says amalgam is safe since the amount of mercury is so small</td>
<td></td>
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</tbody>
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### Composite

<table>
<thead>
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<tr>
<td>• Tooth-colored</td>
<td>• Takes more time to complete than amalgam</td>
</tr>
<tr>
<td>• Requires removal of less tooth structure than amalgam; maximum amount of tooth is preserved</td>
<td>• More expensive than amalgam</td>
</tr>
<tr>
<td>• Requires removing slightly more tooth structure than composite</td>
<td>• May wear down faster than amalgam</td>
</tr>
</tbody>
</table>
A crown is a tooth-shaped “cap” that is placed over a tooth because of a large cavity or trauma. A crown is used to restore the tooth’s shape, size, strength, function, and appearance.

The main **advantage** of a crown is its strength and durability. A **disadvantage** may be cost, depending on insurance coverage. Crowns can be made from a variety of materials. Following are the advantages and disadvantages of some of the most common materials.

<table>
<thead>
<tr>
<th>Porcelain</th>
<th>Porcelain-and-Metal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advantages</strong></td>
<td><strong>Disadvantages</strong></td>
</tr>
<tr>
<td>• Matches tooth color</td>
<td>• Less durable than metal or porcelain-and-metal</td>
</tr>
<tr>
<td>• Good for patients who are allergic to metals</td>
<td>• Can be sensitive to hot and cold</td>
</tr>
<tr>
<td></td>
<td>• Most expensive crown</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Metals</th>
<th>Resin</th>
</tr>
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<table>
<thead>
<tr>
<th>Advantage</th>
<th>Disadvantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Matches tooth color</td>
<td>• Porcelain in the crown can wear down over time, exposing the metal base</td>
</tr>
<tr>
<td>• Stronger than porcelain</td>
<td>• Cost effective</td>
</tr>
<tr>
<td>• Most expensive crown</td>
<td></td>
</tr>
</tbody>
</table>
If a tooth becomes damaged or decayed to the point where a filling or crown will not repair it, the tooth may need to be extracted.

A tooth extraction is the removal of a tooth from the mouth.

**Advantages**
- May be the most affordable choice to treat a severely decayed or damaged tooth
- Can prevent infection from spreading
- Should relieve pain
- Generally covered by insurance

**Disadvantages**
- May be painful
- May have temporary swelling and soreness after the procedure
- Requires numbing the tooth
- If the extracted tooth is not replaced, teeth may shift
- May interfere with ability to chew or speak
- If a front tooth, may decrease desire to smile
The root canal runs through the inside of the tooth. It carries blood vessels and nerves, which are inside soft tissue known as pulp. When the pulp becomes inflamed or infected, it can be painful.

During a root canal procedure, the dentist removes the infected pulp from inside the canal. The dentist then cleans, fills, and seals the canal.

After the root canal procedure, the patient returns to the dentist at a later date. At that time, the tooth will be restored to normal form and function, usually by placing a crown.

### Advantages
- Eliminates the need to extract the tooth
- Saves the tooth and its place in the mouth
- Relieves pain

### Disadvantages
- Procedure is expensive and requires multiple dental visits
- Requires numbing the tooth
- Tooth will lose feeling
- Tooth can become brittle and more prone to fracture if a crown is not placed