

# Space Maintainers for Premature Tooth Loss

## Baby teeth aren't just for chewing!

Each one also acts as a guide for the permanent tooth that replaces it. If a baby tooth is lost too early, the permanent tooth loses its guide. It can drift or erupt incorrectly into the mouth. Neighboring teeth also can move or tilt into the space. This means the permanent tooth can't come in.

Dentists call baby teeth primary or deciduous teeth. Primary teeth can be lost too early for several reasons:

- They can be knocked out in a fall or other accident.
- They may need to be extracted because of severe decay.
- They may be missing at birth.
- Some diseases or conditions can lead to early tooth loss.

Dr. Karr may recommend a space maintainer:

- If a primary tooth is lost before the permanent tooth is ready to come in
- If a permanent tooth is missing

The maintainer keeps the space open until the permanent tooth comes in.

## Types of Space Maintainers



A space maintainer is made of stainless steel and/or plastic. It can be removable. Some space maintainers are cemented into the child's mouth. This is called a fixed space maintainer.

A removable space maintainer looks like a retainer. It uses artificial teeth or acrylic blocks to fill in the space or spaces that need to stay open. This type of space maintainer often is used when the space is obvious to other people. Removable space maintainers work well in older children who can reliably follow directions about caring for this appliance.

There are several kinds of fixed space maintainers. A band-and-loop maintainer is made of stainless steel wire. It is held in place by a crown on the tooth next to the space or an orthodontic-type band around one of the teeth next to the open space. A wire loop is attached to the band or crown. It sticks out across the space where the tooth is missing and just touches the tooth on the other side of the open space. The wire loop holds the space open. This allows the permanent tooth enough space to come into the mouth without crowding.

A lower wire known as a "lingual arch" is used when back teeth are lost on both sides of the lower jaw. "Lingual" refers to the inside or tongue side of the teeth. This type of space maintainer uses bands wrapped around a tooth on either side of the mouth behind the missing teeth. A wire connected to the bands runs along the inside of the bottom teeth.

Another type of fixed space maintainer is called a distal shoe appliance. It is inserted under the gums. It is used when a child loses the baby tooth in front of a 6-year molar that has not yet come into the mouth. The 6-year molar is also called the first permanent molar. Because it has not come in yet, there is no tooth to hold a band-and-loop space maintainer in place. A distal shoe appliance has a metal wire that is inserted under the gums. This keeps the space from closing.

Distal shoe appliances must be checked often because the incoming tooth can easily become blocked by the wire. The appliance may require adjustment to allow the tooth to come in properly. As a result, most dentists will try to avoid using a distal shoe appliance. Instead, they will try to keep the primary tooth in the mouth until the permanent tooth underneath is ready to come in.

## Are Space Maintainers Always Necessary?

Not every tooth that is lost too early requires a space maintainer. If one of the four upper front teeth is lost early, the

space will stay open on its own until the permanent tooth comes in.

If you do not take your child to the dentist regularly & - at least every six months & - a space maintainer can cause problems. This especially can occur if your child does not brush well. The gum tissue in the space can grow over the wire arm, increasing the risk of infection. If that happens, your child's dentist may have to remove the gum tissue by surgery. If the permanent tooth is about to erupt, the dentist may decide not to use a space maintainer unless your child needs braces and space is a critical issue. Some children may not be able to cooperate during the process of making the space maintainer. Others may be at risk of injury if the space maintainer comes loose or breaks. These include children with diseases that affect how they breathe or swallow, and children who are very young. The ability to cooperate with the dentist is more important than a child's age. Young children can get space maintainers if they are able to cooperate during the process.

## Caring for Your Space Maintainer

The space maintainer may feel unusual at first. But after a few days, your child probably will forget about it. A removable space maintainer with replacement teeth can affect speech until your child gets used to it. It's important for your child to brush regularly to keep the gum tissue healthy. A child with a fixed space maintainer needs to avoid chewy candy and gum. They can loosen the band or get caught in the wire arm. If the space maintainer comes loose, there is a risk of swallowing or inhaling the object into the lung.

Finally, your child shouldn't push on the space maintainer with his or her tongue or fingers. That could bend or loosen it.

## Follow-Up

Your child's dentist will follow the progress of the incoming permanent tooth by taking X-rays regularly. When the tooth is ready to erupt, the space maintainer is removed. If there is no permanent tooth, the space maintainer will be used until your child's growth is completed (age 16 to 18). Then a dentist will place a bridge, implant or removable partial denture in the space.