

ENAMEL HYPOPLASIA INFORMATION SHEET

WHAT IS ENAMEL HYPOPLASIA?

- Enamel hypoplasia (EH) is a developmental defect of the enamel that can happen in up to **25%** of people. Usually the condition is caused by flawed development of a tooth while in its formative stages and results in **imperfections in enamel's structure, texture, and density:**
 - **Hypomineralization** - Less mineral content of enamel makes it softer and rougher.
 - **Less enamel** – physically missing, malformed, or deficient enamel structure



WHAT ARE THE CAUSES OF ENAMEL HYPOPLASIA?

- Enamel hypoplasia on permanent teeth usually happens because of something that **occurs between birth - 3 years of age**
- Environmental factors most commonly associated with EH are premature birth, infections as an infant (tooth, ear, measles, etc), the use of antibiotics, vitamin D deficiency, trauma, or smoking in the household. EH does not happen to all children exposed to these factors.
- Enamel hypoplasia is also associated with certain congenital or genetic disorders.



WHAT DOES THIS MEAN FOR MY CHILD'S TEETH?

- **Teeth require better cleaning** – Teeth that are affected have surface textures that are rougher and therefore more plaque retentive.
- **Teeth are easier to physically damage:**
 - **Wears faster** with grinding, attrition (normal eating/use), or erosion (acids)
 - **Cavities may form easier, larger and faster**
- **Teeth may be more sensitive:** This may make teeth sensitive to temperature and more difficult to get numb for dental procedures
- **Teeth may be discolored or misshapen**
 - Teeth may have a “puzzle piece” pattern of hyper-white to brownish discoloration.
 - Teeth may also be missing segments of enamel.
 - The surface is more “frosted” than “glassy” in texture and appearance.



WHAT CAN I DO TO HELP MANAGE THIS CONDITION?

- **Make sure the surface of the tooth is clear of plaque and carbohydrates** (brush well).
- **Avoid “whitening” toothpastes**, as these contain harsher abrasives that may make the teeth lose volume or become more sensitive and will not whiten the discoloration.
- Teeth with EH may benefit from toothpastes with **extra fluoride or minerals or desensitizers** to help mineralize the outer layer.
- **Avoid sticky carbohydrates, hard and acidic foods in the diet.**
- A night guard may be beneficial to prevent the effects of grinding.
- Teeth with EH may need to be restored to proper form, function and color. Long term plans should be discussed with your dentist.

