

The Facts About Fillings:

By the Dental Board of California, 1432 Howe Ave., Sacramento, CA 95825 ;and at www.dbc.ca.gov

What About the Safety of Filling Materials Used in this Office?

The primary goals of California dental professionals and the Dental Board of California is patient health and safety of dental treatment. This fact sheet will provide you with the information concerning the benefits, advantages and risks of the dental filling materials placed in this office. These facts are, by law*, to be made available to every licensed dentist and to every patient once before beginning any dental filling procedure. We strongly encourage you to read and openly discuss the facts presented here with us if you have any questions regarding the filling materials that will be used in your teeth in our office.

*Business and Professions Code 1648.10-1648.20

Allergic Reactions: Like any other materials we come in contact with every day of our lives, dental fillings may have side effects or cause allergic reactions. The risks are very low for all types of filling materials. Usually, the first signs of an allergy will be a skin rash or itching and can be easily reversed with over the counter medications and discontinued contact of the material with the patient. There are no documented cases of allergic reactions to composite resin, glass ionomer, resin ionomer, or porcelain. These are the only dental fillings we offer in our office. If you suffer from allergies, you may wish to discuss the filling material that will be used with the doctor before placement.

Toxicity: Dental Amalgam. Mercury in its elemental form is on the State of CA's Proposition 65 list of chemicals known to cause reproductive toxicity and may harm the developing brain of a child or fetus. This has caused most of the discussion about the risks of dental restorations. The Food and Drug Administration and other public health organizations have investigated the safety of dental amalgam used in dental fillings and come to the conclusion that there is no valid scientific evidence that has shown amalgams cause harm to patients with dental restorations, unless the patient has a rare case of allergy to amalgam. The World Health Organization has reached a similar conclusion. There are no restrictions on the use of dental amalgam at this time. However, to be overly cautious and avoid any vapor exposure to mercury, we do not use or have dental amalgam in our office.

Composite Resins can include crystalline silica, which is on the State of California's Proposition 65 list of chemicals known to the state to cause cancer. If the material becomes air-borne and is breathed in, it can be a concern. All dental compounds of composite resins are contained in a syringeable paste until they are cured or hardened by light energy and/or chemical bonds. Composite resin fillings are a mixture of powdered glass and plastic resin, commonly referred to as white, plastic or tooth-colored fillings. It is used for fillings, cores, inlays,, veneers, partial and complete crowns or to repair portions of broken teeth. It is a strong and durable restoration. It is tooth colored and is placed in a single visit. It resists breakage and preserves the maximum amount of natural tooth surface as it is bonded to the tooth. It does not corrode and resists leakage when bonded to enamel. It has good strength that holds up to most people's biting forces for the life of the restoration. Some products contain fluoride which helps the tooth be more resistant to future decay. The disadvantages include the symptom of tooth sensitivity in some teeth that are still alive or vital (not applicable to teeth after root canal treatment or retreatment). Composite material costs more than amalgam, it wears faster than dental enamel and amalgam, it can leak over time if not sealed with a permanent crown covering the buildup or filling. For this reason, we recommend a crown or other long term stronger restoration be placed over the composite buildup directly after root canal treatment.

Glass Ionomer Cement is a self-hardening mix of glass and organic acid. It is tooth colored and varies in translucency. It is usually used for small fillings and added to materials placed against the gingival/ subgingival soft tissues. It is mixed as a hybrid filling material with resin-ionomer cement in materials used to repair perforations and tooth structure against the periodontal tissues and bone. Resin ionomer cement is a mix of glass and resin polymer and organic acid that hardens with exposure to blue light. Both these materials make the tooth more resistant to decay as they contain and release fluoride. They bond well to both enamel and dentin and allow for minimal amount of natural tooth removal. They are used in non-biting areas but they do not wear as well as other metallic materials or composite materials and so are sometimes mixed with composite materials to give them better longevity. They are more costly than amalgam, like composite, but are esthetic and are usually completed in a single visit. They are, with MTA, amongst the most biocompatible materials for placement against bone and periodontal ligament tissues for repair of holes in roots under the gum.

At times when there is minimal remaining tooth structure to which a buildup and crown need to be attached, the doctor may recommend a metal, stainless steel post be placed within the buildup of the restoration. This gives greater retention than can be gained by bonding forces alone and gives the final restoration a longer life span. Because the post is completely embedded in and under the final restoration, it is completely surrounded by and covered over by bonded or cast dental materials and never is in contact with the oral cavity soft or hard tissues on the exterior of the tooth or teeth. For this reason, the body should never come in direct contact with this inert metal material and this significantly reduces any danger of allergy to this metal material.