

# PLEASE READ

All documents following this page are to be retained by the patient. Do not send these documents back with your registration packet. Please keep them for your records.

Thank you,

MACT Health Board, Inc.



## Notice of Privacy Practices (Pursuant to 45 CFR 164.520)

**THIS NOTICE DESCRIBES HOW MEDICAL INFORMATION ABOUT YOU MAY BE USED AND DISCLOSED AND HOW YOU CAN GET ACCESS TO THIS INFORMATION. PLEASE REVIEW IT CAREFULLY.**

**This Notice is effective on July 1, 2017.**

If you have any questions about this notice, please contact:

MACT Health Board, Inc.  
Privacy Office  
Attn: Compliance and Privacy Officer  
PO Box 939  
Angels Camp, CA 95222  
  
Toll Free Hotline: (866) 811-0192

### **A. WHO WILL FOLLOW THIS NOTICE**

This notice describes the privacy practices of MACT Health Board, Inc. and that of:

- Any health care professional authorized to enter information into your health record.
- All departments, units, clinics, facilities, and offices.
- All employees, staff and other personnel.

All these entities, sites and locations follow the terms of this notice. In addition, these entities, sites and locations may share your information with each other for treatment, payment or health care operations purposes described in this notice.

### **B. OUR PLEDGE REGARDING MEDICAL, DENTAL, AND BEHAVIORAL HEALTH INFORMATION**

- We understand that information about you and your health is personal.
- We are committed to protecting information about you.

We create a record of the care and services you receive. We need this record to provide you with quality care and to comply with certain legal requirements. This notice applies to all of the records of your care generated by us, whether made by our personnel or your provider.

This notice will tell you about the ways in which we may use and disclose information about you. We also describe your rights and certain obligations we have regarding the use and disclosure of your information.

We are required by law to:

- Make sure that information that identifies you is kept private (with certain exceptions);
- Give you this notice of our legal duties and privacy practices with respect to information about you; and
- Follow the terms of the notice that is currently in effect.

## **C. HOW WE MAY USE AND DISCLOSE MEDICAL, DENTAL, AND BEHAVIORAL HEALTH INFORMATION ABOUT YOU**

The following categories describe different ways that we use and disclose information. For each category of uses or disclosures we will explain what we mean and try to give some examples. Not every use or disclosure in a category will be listed. However, all of the ways we are permitted to use and disclose information will fall within one of the categories.

### **1. DISCLOSURE AT YOUR REQUEST**

We may disclose information when requested by you. Disclosures at your request may require a written and signed authorization by you.

### **2. FOR TREATMENT**

We may use information about you to provide you with medical treatment or services. We may disclose information about you to doctors, nurses, technicians, health care students, or other personnel who are involved in taking care of you. For example, a doctor treating you for a broken leg may need to know if you have diabetes because diabetes may slow the healing process. Another example is a doctor treating you for a mental health condition may need to know what medications you are currently taking, because the medications may affect what other medications may be prescribed for you.

### **3. FOR PAYMENT**

We may use and disclose information about you so that the treatment and services you receive may be billed to and payment may be collected from you, an insurance company or a third party. For example, we may need to give information about treatment you received to your health plan so it will pay us or reimburse you for the treatment.

### **4. FOR HEALTH CARE OPERATIONS**

We may use and disclose information about you for health care operations. These uses and disclosures are necessary to run our facility and make sure that all of our patients receive quality care. For example, we may use information to review our treatment and services and to evaluate the performance of our staff in caring for you.

### **5. INCIDENTAL USES AND DISCLOSURES**

There are certain incidental uses or disclosures of your health information that occur while we are providing services to you or conducting our business. For example, other individuals waiting in the same area may hear your name called. We will make reasonable efforts to limit these incidental uses and disclosures.

### **6. FUNDRAISING ACTIVITIES**

We may use information about you for fundraising purposes, but only with a valid signed authorization from you.

## **7. FAMILY MEMBERS OR OTHERS YOU DESIGNATE**

If a request for information is made by your spouse, parent, child, or sibling and you are unable to authorize the release of this information, we are required to give the requesting person notification of your presence in our facility. Unless you request that this information not be provided, we must make reasonable attempts to notify your next of kin or any other person designated by you, for your release, transfer, serious illness, injury, or death only upon request of the family member.

## **8. TO INDIVIDUALS INVOLVED IN YOUR CARE OR PAYMENT FOR YOUR CARE**

We may release information about you to a friend or family member who is involved in your medical care. We may also give information to someone who helps pay for your care. In addition, we may disclose information about you to an organization assisting in a disaster relief effort so that your family can be notified about your condition, status and location.

## **9. RESEARCH**

Under certain circumstances, we may use and disclose information about you for research purposes. For example, a research project may involve comparing the health and recovery of all patients who received one medication to those who received another, for the same condition.

## **10. AS REQUIRED BY LAW**

We will disclose about you when required to do so by federal, state or local law.

## **11. TO AVERT A SERIOUS THREAT TO HEALTH OR SAFETY**

We may use and disclose information about you when necessary to prevent a serious threat to your health and safety or the health and safety of the public or another person.

## **12. HEALTH INFORMATION EXCHANGE**

We may share your health information electronically with other groups through a Health Information Exchange network. These other groups may include hospitals, laboratories, doctors, public health departments, health plans, and other participants. Sharing data electronically is a faster way to get your health data to the providers treating you. For example, if you travel and need treatment, it allows other doctors that participate to electronically access your information to help care for you. We are also involved in the Affordable Care Act and may use and share information as permitted to achieve national goals related to meaningful use of electronic health systems.

## **13. SPECIAL SITUATIONS**

### **a. ORGAN AND TISSUE DONATION**

We may release information to organizations that handle organ procurement or organ, eye or tissue transplantation or to an organ donation bank.

### **b. MILITARY AND VETERANS**

If you are a member of the armed forces, we may release information about you as required by military command authorities.

### **c. WORKERS' COMPENSATION**

We may release information about you for workers' compensation or similar programs. These programs provide benefits for work-related injuries or illness.

### **d. PUBLIC HEALTH ACTIVITIES**

We may disclose information about you for public health activities. These activities may include, without limitation, the following:

- To prevent or control disease, injury or disability;
- To report births and deaths;
- To report regarding the abuse or neglect of children, elders and dependent adults;
- To report reactions to medications or problems with products;
- To notify people of recalls of products they may be using;
- To notify a person who may have been exposed to a disease or may be at risk for contracting or spreading a disease or condition;
- To notify the appropriate government authority if we believe a patient has been the victim of abuse, neglect or domestic violence. We will only make this disclosure if you agree or when required or authorized by law;
- To notify emergency response employees regarding exposure to HIV/AIDS, to the extent necessary to comply with state and federal laws.

### **e. HEALTH OVERSIGHT ACTIVITIES**

We may disclose information to a health oversight agency for activities authorized by law. These oversight activities may include audits, investigations, inspections, and licensure. These activities are necessary for the government to monitor the health care system, government programs and compliance with civil rights laws.

### **f. LAWSUITS AND DISPUTES**

If you are involved in a lawsuit or a dispute, we may disclose information about you in response to a court or administrative order. We may also disclose information about you in response to a subpoena, discovery request, or other lawful process by someone else involved in the dispute, but only if efforts have been made to tell you about the request (which may include written notice to you) or to obtain an order protecting the information requested. We may disclose mental/behavioral health information to courts, attorneys, and court employees in the course of conservatorship, and certain other judicial or administrative proceedings.

### **g. LAW ENFORCEMENT**

We may release information if asked to do so by a law enforcement official:

- In response to a court order, subpoena, warrant, summons or similar process;
- To identify or locate a suspect, fugitive, material witness, escapees and certain missing persons;
- About the victim of a crime if, under certain limited circumstances, we are unable to obtain the person's agreement;
- To report abuse, neglect, or assaults as required or permitted by law
- To report certain threats to third parties
- If the police bring you to our facility and ask us to test your blood for alcohol or substance abuse;
- About a death we believe may be the result of criminal conduct;
- About criminal conduct at our facility;

- In emergency circumstances to report a crime; the location of the crime or victims; or the identity, description or location of the person who committed the crime;
- When requested by an officer who lodges a warrant with the facility;
- If you are in police custody or are an inmate of a correctional institution and the information is necessary to provide you with health care, to protect your health and safety, the health and safety of others or for the safety and security of the correctional institution.

#### **h. CORONERS, MEDICAL EXAMINERS, AND FUNERAL DIRECTORS**

We may release information to a coroner or medical examiner. This may be necessary, for example, to identify a deceased person or determine the cause of death. We may also release information about patients to funeral directors as necessary.

#### **i. NATIONAL SECURITY AND INTELLIGENCE ACTIVITIES**

We may release information about you to authorize federal officials for intelligence, counterintelligence, and other national security activities authorized by law.

#### **j. PROTECTIVE SERVICES FOR THE PRESIDENT AND OTHERS**

We may disclose information about you to authorized federal officials so they may provide protection to the President, elective constitutional officers and their families, or foreign heads of state or conduct special investigations.

#### **k. ADVOCACY GROUPS**

We may disclose mental/behavioral health information to Disability Rights California for the purposes of certain investigations as permitted by law.

#### **l. DEPARTMENT OF JUSTICE**

We may disclose limited information to the California Department of Justice for movement and identification purposes about certain criminal patients, or regarding persons who may not purchase, possess or control a firearm or deadly weapon.

#### **m. MULTIDISCIPLINARY PERSONNEL TEAMS**

We may disclose information to a multidisciplinary personnel team relevant to the prevention, identification, management or treatment of an abused child and the child's parents, or elder abuse or dependent adult and neglect.

#### **n. SPECIAL CATEGORIES OF INFORMATION**

In some circumstances, your information may be subject to restrictions that may limit or preclude some uses or disclosures described in this notice. For example, there are special restrictions on the use or disclosure of certain categories of information—e.g., tests for HIV or treatment for mental health conditions or alcohol and drug abuse. Government health benefit programs, such as Medi-Cal, may also limit the disclosure of beneficiary information for purposes unrelated to the program.

#### **o. SENATE AND ASSEMBLY RULES COMMITTEES**

We may disclose your information to the Senate or Assembly Rules Committee for purpose of legislative investigation.

## **p. PSYCHOTHERAPY NOTES**

Psychotherapy notes means notes recorded (in any medium) by a health care provider who is a mental health professional documenting or analyzing the contents of conversation during a private counseling session or a group, joint, or family counseling session and that are separated from the rest of the individual's medical record.

We may use or disclose your psychotherapy notes, as required by law, or:

- For use by the originator of the notes
- In supervised mental health training programs for students, trainees, or practitioners
- By the covered entity to defend a legal action or other proceeding brought by the individual
- To prevent or lessen a serious and imminent threat to the health or safety of a person or the public
- For the health oversight of the originator of the psychotherapy notes
- For use or disclosure to coroner or medical examiner to report a patient's death
- For use or disclosure to the Secretary of DHHS in the course of an investigation

## **D. YOUR RIGHTS REGARDING MEDICAL, DENTAL, AND BEHAVIORAL HEALTH INFORMATION ABOUT YOU**

You have the following rights regarding information we maintain about you:

### **1. RIGHT TO INSPECT AND COPY**

You have the right to inspect and obtain a copy of information that may be used to make decisions about your care. Usually, this includes medical and billing records, but may not include some mental health information.

To inspect and obtain a copy of information that may be used to make decisions about you, you must submit your request in writing to the Health Information Management Department, PO Box 939, Angels Camp, CA 95222. If you request a copy of the information, we may charge a fee for the costs of copying, mailing or other supplies associated with your request.

We may deny your request to inspect and obtain a copy in certain very limited circumstances. If you are denied access to mental health/behavioral information, you may request that the denial be reviewed. Another licensed health care professional chosen by us will review your request and the denial. The person conducting the review will not be the person who denied your request. We will comply with the outcome of the review.

### **2. RIGHT TO AMEND**

If you feel that information we have about you is incorrect or incomplete, you may ask us to amend the information. You have the right to request an amendment for as long as the information is kept by us. To request an amendment, your request must be made in writing and submitted to the Privacy Office, PO Box 939, Angels Camp, CA 95222. In addition, you must provide a reason that supports your request.

We may deny your request for an amendment if it is not in writing or does not include a reason to support the request. In addition, we may deny your request if you ask us to amend information that:

- Was not created by us, unless the person or entity that created the information is no longer available to make the amendment;
- Is not part of the information kept by or for us;
- Is not part of the information which you would be permitted to inspect and copy; or
- Is accurate and complete.

- Even if we deny your request for amendment, you have the right to submit a written addendum, not to exceed 250 words, with respect to any item or statement in your record you believe is incomplete or incorrect. If you clearly indicate in writing that you want the addendum to be made part of your health record we will attach it to your records and include it whenever we make a disclosure of the item or statement you believe to be incomplete or incorrect.

### **3. RIGHT TO AN ACCOUNTING OF DISCLOSURES**

You have the right to request an “accounting of disclosures.” This is a list of the disclosures we made of information about you other than our own uses for treatment, payment and health care operations (as those functions are described above), and with other exceptions by law.

To request this list or accounting of disclosures, you must submit your request in writing to the Privacy Office, PO Box 939, Angels Camp, CA 95222. Your request must state a time period which may not be longer than six years and may not include dates before April 14, 2003. Your request should indicate in what form you want the list (for example, on paper or electronically). The first list you request within a 12-month period will be free. For additional lists, we may charge you for the costs of providing the list. We will notify you of the cost involved and you may choose to withdraw or modify your request at that time before any costs are incurred. In addition, we will notify you as required by law following a breach of your unsecured protected health information.

### **4. RIGHT TO REQUEST RESTRICTIONS**

You have the right to request a restriction or limitation on the information we use or disclose about you for treatment, payment or health care operations. You also have the right to request a limit on the information we disclose about you to someone who is involved in your care or the payment for your care, like a family member or friend. For example, you could ask that we not use or disclose information about a surgery you had.

We are not required to agree to your request, except to the extent that you request us to restrict disclosure to a health plan or insurer for payment or health care operations purposes if you, or someone else on your behalf (other than the health plan or insurer), has paid for the item or service out of pocket in full. Even if you request this special restriction, we can disclose the information to a health plan or insurer for purposes of treating you.

If we agree to another special restriction, we will comply with your request unless the information is needed to provide you emergency treatment.

To request restrictions, you must make your request in writing to the Compliance Office, PO Box 939, Angels Camp, CA 95222. In your request, you must tell us 1) what information you want to limit; 2) whether you want to limit our use, disclosure or both; and 3) to whom you want the limits to apply, for example, disclosures to your spouse.

### **5. RIGHT TO REQUEST CONFIDENTIAL COMMUNICATIONS**

You have the right to request that we communicate with you about health matters in a certain way or at a certain location. For example, you can ask that we only contact you at work or by mail. To request confidential communications, you must make your request in writing to the Compliance Office, PO Box 939, Angels Camp, CA 95222. We will not ask you the reason for your request. We will accommodate all reasonable requests. Your request must specify how or where you wish to be contacted.



## **6. RIGHT TO A PAPER COPY OF THIS NOTICE**

You have the right to a paper copy of this notice. You may ask us to give you a copy of this notice at any time. Even if you have agreed to receive this notice electronically, you are still entitled to a paper copy of this notice.

You may obtain a copy of this notice at our website: [macthealth.org/privacy](http://macthealth.org/privacy)

To obtain a paper copy of this notice: Visit your local MACT Health Board, Inc. clinic, send a written request to MACT Health Board, Inc., Privacy Office, PO Box 939, Angels Camp, CA 9522 or call toll-free (866) 811-0192.

## **E. CHANGES TO THIS NOTICE**

We reserve the right to change this notice. We reserve the right to make the revised or changed notice effective for information we already have about you as well as any information we receive in the future. We will post a copy of the current notice in the facility. The notice will contain the effective date on the first page.

## **F. COMPLAINTS**

If you believe your privacy rights have been violated, you may file a complaint with us or with the Secretary of the U.S. Department of Health and Human Services. All complaints must be submitted in writing. *You will not be penalized for filing a complaint.* To file a complaint with us, contact:

MACT Health Board, Inc.  
Privacy Office  
Attn: Compliance and Privacy Officer  
PO Box 939  
Angels Camp, CA 95222  
Toll Free Hotline: (866) 811-0192

## **G. OTHER USES OF MEDICAL, DENTAL, AND BEHAVIORAL HEALTH INFORMATION**

Other uses and disclosures of information not covered by this notice of the laws that apply to us will be made only with your written permission. If you provide us permission to use or disclose information about you, you may revoke the permission, in writing, at any time. If you revoke your permission, this will stop any further use or disclosure of your information for the purposes covered by your written authorization, except if we have already acted in reliance on your permission. You understand that we are unable to take back any disclosures we have already made with your permission, and that we are required to retain our records of the care that we provided to you.



## **Appointment Cancellation and No-Show Policies**

MACT Health Board's mission is to provide our patients with the best possible care. We want to be able to offer all patients a chance to have access to health care. We understand unforeseen events do occur and we will do our best to assist you with your health care needs.

### **Missed/Broken Appointments**

A patient who fails to arrive at the clinic or call to cancel their appointment 24 hours prior to the scheduled time will be considered a "broken appointment."

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### **Late Patients**

A patient is considered late if they arrive 15 minutes after the scheduled appointment time. MACT's goal and desire is to see all patients and we will do our best to accommodate you.

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### **Missed Initial Appointment**

If a non-Native American patient misses their initial appointment with MACT, they will be discharged from all MACT services.

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### **Cancellations**

When cancelling an appointment, 24 hour notification is required.

We appreciate your cooperation in making health care accessible to all of our patients.

Effective: 6/20

## Immunization Registry Notice to Patients and Parents

Immunizations or ‘shots’ prevent serious diseases. Tuberculosis (TB) screening tests help to determine if you may have TB infection and can be required for school or work. Keeping track of shots/TB tests you have received can be hard. It’s especially hard if more than one doctor gave them. Today, doctors use a secure computer system called an *immunization registry* to keep track of shots and TB tests. If you change doctors, your new doctor can use the registry to see the shot/TB test record. It’s your right to choose if you want shot/TB test records shared in the *California Immunization Registry*.

### How Does a Registry Help You?

- Keeps track of all shots and TB tests (skin tests/chest x-rays), so you don’t miss any or get too many
- Sends reminders when you or your child need shots
- Gives you a copy of the shot/TB record from the doctor
- Can show proof about shots/TB tests needed to start child care, school, or a new job

### How Does a Registry Help Your Health Care Team?

Doctors, nurses, health plans, and public health agencies use the registry to:

- See which shots/TB tests are needed
- Remind you about shots needed
- Prevent disease in your community
- Help with record-keeping

### Can Schools or Other Programs See the Registry?

Yes, but this is limited. Schools, child care, and other agencies allowed under California law may:

- See which shots/TB tests children in their programs need
- Make sure children have all shots/TB tests needed to start child care or school

### What Information Can Be Shared in a Registry?

- patient’s name, sex, and birth date
- parents’ or guardians’ names
- limited information to identify patients
- details about a patient’s shots/TB tests

What’s entered in the registry is treated like other private medical information. Misuse of the registry can be punished by law. Under California law, only your doctor’s office, health plan, or public health department may see your address and phone number.

### Patient and Parent Rights

It’s your legal right to ask:

- not to share your (or your child’s) registry shot/TB test records with others besides your doctor\*
- not to get shot appointment reminders from your doctor’s office
- to look at a copy of your or your child’s shot/TB test records
- who has seen the records or to have the doctor change any mistakes

If you DO want your or your child’s records in the registry, do nothing. You’re all done.

If you DO NOT want your doctor’s office to share your immunization/TB test information with other registry users, tell your doctor or download a “*Decline or Start Sharing/Information Request Form*” from the CAIR website (<http://cairweb.org/cair-forms/>) and FAX or email it to the CAIR Help Desk at 1-888-436-8320 or [CAIRHelpDesk@cdph.ca.gov](mailto:CAIRHelpDesk@cdph.ca.gov).

For more information, contact the CAIR Help Desk at 800-578-7889 or [CAIRHelpDesk@cdph.ca.gov](mailto:CAIRHelpDesk@cdph.ca.gov)

\* By law, public health officials can also look at the registry in the case of a public health emergency.

## Dental Materials – Advantages & Disadvantages

### PORCELAIN FUSED TO METAL

This type of porcelain is a glass-like material that is “enameled” on top of metal shells. It is tooth-colored and is used for crowns and fixed bridges

#### *Advantages*

- \* Good resistance to further decay if the restoration fits well
- \* Very durable, due to metal substructure
- \* The material does not cause tooth sensitivity
- \* Resists leakage because it can be shaped for a very accurate fit

#### *Disadvantages*

- More tooth must be removed (than for porcelain) for the metal substructure
- Higher cost because it requires at least two office visits and laboratory services

### GOLD ALLOY

Gold alloy is a gold-colored mixture of gold, copper, and other metals and is used mainly for crowns and fixed bridges and some partial denture frameworks

#### *Advantages*

- \* Good resistance to further decay if the restoration fits well
- \* Excellent durability; does not fracture under stress
- \* Does not corrode in the mouth
- \* Minimal amount of tooth needs to be removed
- \* Wears well; does not cause excessive wear to opposing teeth
- \* Resists leakage because it can be shaped for a very accurate fit

#### *Disadvantages*

- Is not tooth colored; alloy is yellow
- Conducts heat and cold; may irritate sensitive teeth
- High cost; requires at least two office visits and laboratory services

### DENTAL BOARD OF CALIFORNIA

2005 Evergreen Street, Suite 1550, Sacramento, CA 95815

[www.dbc.ca.gov](http://www.dbc.ca.gov)

Published by

CALIFORNIA DEPARTMENT OF CONSUMER AFFAIRS

5/04

*The Facts About Fillings*

## *The Facts About Fillings*



### DENTAL BOARD OF CALIFORNIA

2005 Evergreen Street, Suite 1550, Sacramento, CA 95815

[www.dbc.ca.gov](http://www.dbc.ca.gov)



# Dental Materials Fact Sheet

## What About the Safety of Filling Materials?

Patient health and the safety of dental treatments are the primary goals of California's dental professionals and the Dental Board of California. The purpose of this fact sheet is to provide you with information concerning the risks and benefits of all the dental materials used in the restoration (filling) of teeth.

The Dental Board of California is required by law\* to make this dental materials fact sheet available to every licensed dentist in the state of California. Your dentist, in turn, must provide this fact sheet to every new patient and all patients of record only once before beginning any dental filling procedure.

As the patient or parent/guardian, you are strongly encouraged to discuss with your dentist the facts presented concerning the filling materials being considered for your particular treatment.

\* *Business and Professions Code 1648.10-1648.20*

## Allergic Reactions to Dental Materials

Components in dental fillings may have side effects or cause allergic reactions, just like other materials we may come in contact with in our daily lives. The risks of such reactions are very low for all types of filling materials. Such reactions can be caused by specific components of the filling materials such as mercury, nickel, chromium, and/or beryllium alloys. Usually, an allergy will reveal itself as a skin rash and is easily reversed when the individual is not in contact with the material.

There are no documented cases of allergic reactions to composite resin, glass ionomer, resin ionomer, or porcelain. However, there have been rare allergic responses reported with dental amalgam, porcelain fused to metal, gold alloys, and nickel or cobalt-chrome alloys.

If you suffer from allergies, discuss these potential problems with your dentist before a filling material is chosen.

## PORCELAIN (CERAMIC)

Porcelain is a glass-like material formed into fillings or crowns using models of the prepared teeth. The material is tooth-colored and is used in inlays, veneers, crowns and fixed bridges.

### Advantages

- \* Very little tooth needs to be removed for use as a veneer; more tooth needs to be removed for a crown because its strength is related to its bulk (size)
- \* Good resistance to further decay if the restoration fits well
- \* Is resistant to surface wear but can cause some wear on opposing teeth
- \* Resists leakage because it can be shaped for a very accurate fit
- \* The material does not cause tooth sensitivity

### Disadvantages

- Material is brittle and can break under biting forces
- May not be recommended for molar teeth
- Higher cost because it requires at least two office visits and laboratory services

## NICKEL OR COBALT-CHROME ALLOYS

Nickel or cobalt-chrome alloys are mixtures of nickel and chromium. They are a dark silver metal color and are used for crowns and fixed bridges and most partial denture frameworks.

### Advantages

- \* Good resistance to further decay if the restoration fits well
- \* Excellent durability; does not fracture under stress
- \* Does not corrode in the mouth
- \* Minimal amount of tooth needs to be removed
- \* Resists leakage because it can be shaped for a very accurate fit

### Disadvantages

- Is not tooth colored; alloy is a dark silver metal color
- Conducts heat and cold; may irritate sensitive teeth
- Can be abrasive to opposing teeth
- High cost; requires at least two office visits and laboratory services
- Slightly higher wear to opposing teeth



## Dental Materials – Advantages & Disadvantages

### GLASS IONOMER CEMENT

Glass ionomer cement is a self-hardening mixture of glass and organic acid. It is tooth-colored and varies in translucency. Glass ionomer is usually used for small fillings, cementing metal and porcelain/metal crowns, liners, and temporary restorations.

#### Advantages

- \* Reasonably good esthetics
- \* May provide some help against decay because it releases fluoride
- \* Minimal amount of tooth needs to be removed and it bonds well to both the enamel and the dentin beneath the enamel
- \* Material has low incidence of producing tooth sensitivity
- \* Usually completed in one dental visit

#### Disadvantages

- Cost is very similar to composite resin (which costs more than amalgam)
- Limited use because it is not recommended for biting surfaces in permanent teeth
- As it ages, this material may become rough and could increase the accumulation of plaque and chance of periodontal disease
- Does not wear well; tends to crack over time and can be dislodged

### RESIN-IONOMER CEMENT

Resin ionomer cement is a mixture of glass and resin polymer and organic acid that hardens with exposure to a blue light used in the dental office. It is tooth colored but more translucent than glass ionomer cement. It is most often used for small fillings, cementing metal and porcelain metal crowns and liners.

#### Advantages

- \* Very good esthetics
- \* May provide some help against decay because it releases fluoride
- \* Minimal amount of tooth needs to be removed and it bonds well to both the enamel and the dentin beneath the enamel
- \* Good for non-biting surfaces
- \* May be used for short-term primary teeth restorations
- \* May hold up better than glass ionomer but not as well as composite
- \* Good resistance to leakage
- \* Material has low incidence of producing tooth sensitivity
- \* Usually completed in one dental visit

#### Disadvantages

- Cost is very similar to composite resin (which costs more than amalgam)
- Limited use because it is not recommended to restore the biting surfaces of adults
- Wears faster than composite and amalgam

## Toxicity of Dental Materials

### Dental Amalgam

Mercury in its elemental form is on the State of California's Proposition 65 list of chemicals known to the state to cause reproductive toxicity. Mercury may harm the developing brain of a child or fetus.

Dental amalgam is created by mixing elemental mercury (43-54%) and an alloy powder (46-57%) composed mainly of silver, tin, and copper. This has caused discussion about the risks of mercury in dental amalgam. Such mercury is emitted in minute amounts as vapor. Some concerns have been raised regarding possible toxicity. Scientific research continues on the safety of dental amalgam. According to the Centers for Disease Control and Prevention, there is scant evidence that the health of the vast majority of people with amalgam is compromised.

The Food and Drug Administration (FDA) and other public health organizations have investigated the safety of amalgam used in dental fillings. The conclusion: no valid scientific evidence has shown that amalgams cause harm to patients with dental restorations, except in rare cases of allergy. The World Health Organization reached a similar conclusion stating, "Amalgam restorations are safe and cost effective."

A diversity of opinions exists regarding the safety of dental amalgams. Questions have been raised about its safety in pregnant women, children, and diabetics. However, scientific evidence and research literature in peer-reviewed scientific journals suggest that otherwise healthy women, children, and diabetics are not at an increased risk from dental amalgams in their mouths. The FDA places no restrictions on the use of dental amalgam.

### Composite Resin

Some Composite Resins include Crystalline Silica, which is on the State of California's Proposition 65 list of chemicals known to the state to cause cancer.

**It is always a good idea to discuss any dental treatment thoroughly with your dentist.**

### DENTAL AMALGAM FILLINGS

Dental amalgam is a self-hardening mixture of silver-tin-copper alloy powder and liquid mercury and is sometimes referred to as silver fillings because of its color. It is often used as a filling material and replacement for broken teeth.

#### Advantages

- \* Durable; long lasting
- \* Wears well; holds up well to the forces of biting
- \* Relatively inexpensive
- \* Generally completed in one visit
- \* Self-sealing; minimal-to-no shrinkage and resists leakage
- \* Resistance to further decay is high, but can be difficult to find in early stages
- \* Frequency of repair and replacement is low

#### Disadvantages

- Refer to “What About the Safety of Filling Materials”
- Gray colored, not tooth colored
- May darken as it corrodes; may stain teeth over time
- Requires removal of some healthy tooth
- In larger amalgam fillings, the remaining tooth may weaken and fracture
- Because metal can conduct hot and cold temperatures, there may be a temporary sensitivity to hot and cold.
- Contact with other metals may cause occasional, minute electrical flow

**T**he durability of any dental restoration is influenced not only by the material it is made from but also by the dentist’s technique when placing the restoration. Other factors include the supporting materials used in the procedure and the patient’s cooperation during the procedure. The length of time a restoration will last is dependent upon your dental hygiene, home care, and diet and chewing habits.

### COMPOSITE RESIN FILLINGS

Composite fillings are a mixture of powdered glass and plastic resin, sometimes referred to as white, plastic, or tooth-colored fillings. It is used for fillings, inlays, veneers, partial and complete crowns, or to repair portions of broken teeth.

#### Advantages

- \* Strong and durable
- \* Tooth colored
- \* Single visit for fillings
- \* Resists breaking
- \* Maximum amount of tooth preserved
- \* Small risk of leakage if bonded only to enamel
- \* Does not corrode
- \* Generally holds up well to the forces of biting depending on product used
- \* Resistance to further decay is moderate and easy to find
- \* Frequency of repair or replacement is low to moderate

#### Disadvantages

- Refer to “What About the Safety of Filling Materials”
- Moderate occurrence of tooth sensitivity; sensitive to dentist’s method of application
- Costs more than dental amalgam
- Material shrinks when hardened and could lead to further decay and/or temperature sensitivity
- Requires more than one visit for inlays, veneers, and crowns
- May wear faster than dental enamel
- May leak over time when bonded beneath the layer of enamel

