

PATIENT INFORMATION:

Last Name:	First Name:	Middle Initial:	
Date of Birth:	SSN (Last 4 Digits):		
Address:	City	State	Zip
Home Phone:	Mobile Phone:		
Work Phone:	Email:		
Preferred Phone Number: <input type="checkbox"/> Home <input type="checkbox"/> Mobile <input type="checkbox"/> Work			

We require the following information for the purpose of helping our staff use the most respectful language when addressing you and understanding our patient population better. Please help us serve you better by selecting the best answers to these question. Thank you.

Preferred Name:
Pronouns: <input type="checkbox"/> She/Her/Hers <input type="checkbox"/> He/Him/His <input type="checkbox"/> They/Them/Theirs <input type="checkbox"/> Name <input type="checkbox"/> Decline to answer
Assigned Sex at Birth: <input type="checkbox"/> Female <input type="checkbox"/> Male <input type="checkbox"/> Unknown <input type="checkbox"/> Decline to answer
Gender Identity: <input type="checkbox"/> Female <input type="checkbox"/> Male <input type="checkbox"/> Transgender Female <input type="checkbox"/> Transgender Male <input type="checkbox"/> Non-Binary <input type="checkbox"/> X <input type="checkbox"/> Decline to answer
Marital Status: <input type="checkbox"/> Single <input type="checkbox"/> Married <input type="checkbox"/> Significant Other <input type="checkbox"/> Domestic Partner <input type="checkbox"/> Separated <input type="checkbox"/> Divorced <input type="checkbox"/> Widowed <input type="checkbox"/> Decline to answer <input type="checkbox"/> Other
Ethnic Group: <input type="checkbox"/> Hispanic or Latino <input type="checkbox"/> Non-Hispanic or Non- Latino <input type="checkbox"/> Unknown <input type="checkbox"/> Decline to answer
Race: <input type="checkbox"/> Asian <input type="checkbox"/> White <input type="checkbox"/> Black or African American <input type="checkbox"/> American Indian <input type="checkbox"/> Alaskan Native <input type="checkbox"/> Native Hawaiian <input type="checkbox"/> Pacific Islander <input type="checkbox"/> Unknown <input type="checkbox"/> Decline to answer <input type="checkbox"/> Other
Veteran: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Decline to answer

EMPLOYMENT:

<input type="checkbox"/> Minor <input type="checkbox"/> Full Time <input type="checkbox"/> Part-Time <input type="checkbox"/> Not Employed <input type="checkbox"/> Retired <input type="checkbox"/> Student <input type="checkbox"/> Active Military Duty <input type="checkbox"/> Decline to answer	
Employer:	Address:
Are you a WesternU Employee? <input type="checkbox"/> Yes <input type="checkbox"/> No	Are you a WesternU Student? <input type="checkbox"/> Yes <input type="checkbox"/> No

EMERGENCY CONTACTS:

If your emergency contact lives with you, please list an alternative number, other than your home phone.
Minors must have a parent or legal guardian listed as their primary emergency contact.

Emergency Contact (Primary):

Relationship:

Phone Number:

Emergency Contact (Secondary):

Relationship:

Phone Number:

____ (Initial) **CONSENT TO TREAT:** I hereby request and authorize WesternU Health to provide and perform such medical/surgical care, tests, procedures, drugs and other services and supplies as are deemed necessary or beneficial for my health and well-being. It is understood that this consent is given in advance of specific services, but is given in order that WesternU Health may exercise their best judgement as to proper medical care, which may be necessary to protect my life.

____ (Initial) **ASSIGNMENT OF BENEFITS:** I hereby assign directly to WesternU Health all surgical and/or medical benefits if any, otherwise payable to me for services rendered. I understand that I am financially responsible for all charges not paid by insurance.

____ (Initial) **EXPECTED BEHAVIOR:** I understand that I am responsible for being respectful of other persons at WesternU Health. I am also aware that I am expected to treat WesternU Health faculty, staff and students with courtesy and respect. Inappropriate behavior or comments of a cultural, ethnic or sexual nature will not be tolerated and can result

Signature:

Date:

Parent or Guardian Name:

Relationship:

GENERAL INFORMED CONSENT

General Information: Western University of Health Sciences, College of Dental Medicine clinical sites will be referred to as the “WesternU CDM clinic(s)” in this document. I have elected to seek comprehensive dental care from WesternU CDM clinic(s). *I understand that it is possible that **the WesternU CDM clinic(s) may not be able to meet my treatment needs and I may not be accepted for care at WesternU CDM clinic(s).*** If I am not accepted, I will be provided with a list of low-cost dental clinics in the area. I also understand that dental care is provided by a team of dental students, licensed dental faculty, and highly trained staff. I further acknowledge that a copy of the “Dental Materials Fact Sheet” has been offered to me and/or my dependents. I understand that I may ask questions regarding materials that may be used in dental procedures such as amalgam, composite resin, porcelain-fused-to-metal, and gold alloy and their acceptability according to the American Dental Association guidelines. In addition, I acknowledge that the “Patient Bill of Rights” is posted for review in the clinic, and I have been offered the “Privacy Notice” for review.

Treatment Plan: I understand that the *treatment plan* that I accept is an **ESTIMATE** of the total cost of recommended dental treatment and that this *treatment plan* could change and/or the cost of care could increase during my treatment due to increase in fees, material, or labor. In addition, I acknowledge that it is possible, that as treatment progresses, my treatment plan may change, and the cost of my treatment may also change in accordance with the new treatment plan. I also understand that I am encouraged to ask my student dentist questions about the procedures recommended on the treatment plan and that I should ask these questions before I give consent to the procedure. All dental procedures may involve risks or unsuccessful results, or complications and no guarantees are made to any results or treatment outcomes. As the patient, or parent or guardian, I have the right to consent or refuse any proposed procedures at any time prior to its performance. WesternU CDM clinic(s) also reserves the right to not perform specific treatment requested by me. I further understand that payment is expected at the time of treatment and that I am responsible for the total cost of treatment. I understand that if I have dental insurance, it is a contract between myself, the insurance policy holder, and the insurance company; therefore, I am responsible for all costs not covered by my insurance.

After Hours Emergency Care: WesternU CDM clinic(s) clinical sites hours may vary however most sites are open Monday-Friday, 8:00am-4:30pm. If an emergency or post-operative complication arises after these hours or on a weekend or holiday, ***I should call the main clinic telephone number at the clinical site and my call will be transferred to the answering service that will assist me in reaching my student dentist or an on-call faculty dentist.*** If I am experiencing bleeding that will not stop or swelling that is impairing my breathing in any way, or any life-threatening emergency, I will go directly to my local emergency room for assistance.

Health: If I have any changes in my health status, changes in my medications or any recent hospitalizations, I will inform my student dentist. If I am taking a type of drug called bisphosphonates (e.g., Fosamax®, Actonel®, Boniva®, Skelid®, Didronel®, Aredia®, Zometa®, and Bonefos®), I will inform my student dentist as I may be at risk of developing osteonecrosis (bone death) of the jaw and certain dental treatments may increase that risk.

Keeping Appointments: I understand that it is my responsibility to keep appointments and provide **at least 48 hours’** notice if I must cancel an appointment. I also understand that if I continue to cancel, or cancel appointments without sufficient notice, I will not be able to continue treatment at WesternU CDM clinic(s).

Expected Behavior: I understand that I have a responsibility to be considerate and respectful of the rights of other patients and WesternU CDM clinic(s) personnel. In addition, I also understand that I am responsible for being respectful of the property of other persons at WesternU CDM clinic(s). I am also aware that I am expected to treat WesternU CDM clinic(s) faculty, staff and students with courtesy and respect. Inappropriate behavior or comments of a cultural, ethnic, or sexual nature will not be tolerated and will result in me being discharged as a patient from the WesternU CDM clinic(s).

Discontinuance of Treatment: WesternU CDM clinic(s) reserves the right to discontinue my treatment. Should my treatment be terminated, any remaining credit balance for services not provided will be returned to me.

Dental Records: I understand that the dental record, X-rays, photographs, models, and any other diagnostic aids that relate to my treatment here, are the property of WesternU CDM clinic(s). I acknowledge that I have the right to inspect these records and/or receive a copy of them or to request that they be sent to another health care provider. To obtain a copy of my records I will need to complete and sign a **Release of Information** form. WesternU CDM clinic(s) may charge a reasonable administrative fee for this service. WesternU CDM clinic(s) is authorized to furnish information from my dental records to my insurance company to obtain financial reimbursement for treatment provided to me.

Grievances: If I have concerns that my student dentist or dental faculty member cannot resolve, I understand that I can contact the WesternU CDM clinic(s) to speak to my assigned Patient Care Coordinator or the site administrator.

Security: I understand that for security purposes cameras may be present throughout each WesternU CDM clinic(s) clinical sites.

Consent: I consent to examination, X-ray, models, photographs, diagnostic testing for the development of my proposed *treatment plan* and I further consent to any treatment procedures, which are diagnosed and indicated on the treatment plan. I agree that all records are the property of Western University of Health Sciences, College of Dental Medicine and may be used for teaching purposes or in scientific publications and that I am not entitled to any financial compensation.

Release: I understand my dental health care is not under warranty, expressed or implied. In addition, I agree to release, hold harmless and waive all claims, losses or damages resulting or relating to the treatment rendered hereunder by the student dentist, dental faculty or WesternU CDM clinic(s).

My signature below indicates that I have read and understand the above information and am willing to comply with the foregoing, and that I am the patient, the parent or guardian of the patient with authority to give consent, or that I am duly authorized by the patient as the patient's general agent to execute the above and accept its terms.

Patient Name _____ Date _____

Signature of Patient/Parent or Guardian _____

Name of Parent/Guardian if applicable _____

Signature of Witness (Faculty or Student) _____

A signed electronic copy of this form is as valid as the Original.

LIMITED TREATMENT INFORMED CONSENT

General Information: Western University of Health Sciences, College of Dental Medicine clinical sites will be referred to as the “WesternU CDM clinic(s)” in this document. I have elected to seek emergency dental treatment from WesternU CDM clinic(s). Emergency dental treatment is generally temporary treatment intended to provide relief of severe pain and/or infection for one tooth or area for individuals with acute need. I understand the emergency care I am receiving today is provided by a team of dental students, licensed dental faculty, and highly trained staff. I further acknowledge that a copy of the “*Dental Materials Fact Sheet*” has been offered to me and/or my dependents. I understand that I may ask questions regarding materials that may be used in dental procedures such as amalgam, composite resin, porcelain-fused-to-metal, and gold alloy and their acceptability according to the American Dental Association guidelines. In addition, I acknowledge that the “*Patient Bill of Rights*” is posted for review in the clinic, and I have been offered the “*Privacy Notice*” for review.

Treatment: I have been informed that the procedure I am having done today is to relieve pain and may require the additional procedure of endodontic therapy. I understand that the endodontic therapy on my tooth will not be completed at this time. I understand that I will be at risk of major infection, fracture of the involved tooth, major pain, or loss of this tooth if the endodontic therapy is postponed indefinitely or not completed.

After Hours Emergency Care: WesternU CDM clinic(s) is open Monday-Friday, 8:00am-4:30pm. If an emergency or post-operative complication arises after these hours or on a weekend or holiday, ***I should call the main clinic telephone number at the clinical site and my call will be transferred to the answering service that will assist me in reaching my student dentist or an on-call faculty dentist.*** If I am experiencing bleeding that will not stop or swelling that is impairing my breathing in any way or any other life-threatening emergency, I will go directly to the nearest emergency room for treatment.

Expected Behavior: I understand that I have a responsibility to be considerate and respectful of the rights of other patients and WesternU CDM clinic(s) personnel. In addition, I also understand that I am responsible for being respectful of the property of other persons at WesternU CDM clinic(s). I am also aware that I am expected to treat WesternU CDM faculty, staff and students with courtesy and respect. Inappropriate behavior or comments of a cultural, ethnic, or sexual nature will not be tolerated and will result in me being discharged as a patient from the WesternU CDM clinic(s).

Dental Records: I understand that the dental record, x-rays, photographs, models, and any other diagnostic aids that relate to my treatment here, is the property of WesternU CDM. I acknowledge that I have the right to inspect these records and/or receive a copy of them or to request that they be sent to another health care provider. To obtain a copy of my records I will need to complete and sign a ***Release of Information*** form. WesternU CDM clinic(s) may charge a reasonable administrative fee for this service. WesternU CDM clinic(s) is authorized to furnish information from my dental records to my insurance company to obtain financial reimbursement for treatment provided to me.

Grievances: If I have concerns that my student doctor or dental faculty member cannot resolve, I understand that I can contact the Patient Care Coordinator, the Director of Patient Care Services, or the site Administrator.

Consent: I consent to examination, x-ray, diagnostic testing, and treatment to resolve this dental emergency ONLY. I know that I may need other procedures, further treatment, and that a complete exam and radiographs are needed for a comprehensive evaluation and diagnosis of my dental needs. I further agree that all records are the property of WesternU CDM and may be used for teaching purposes or in scientific publications and that I am not entitled to any financial compensation.

Release: I understand my dental health care is not under warranty, expressed or implied. In addition, I agree to release, hold harmless and waive all claims, losses or damages resulting or relating to the treatment rendered hereunder by the student doctor, faculty or WesternU CDM.

My signature below indicates that I have read and understand the above information and am willing to comply with the foregoing, and that I am the patient, the parent or guardian of the patient with authority to give consent, or that I am duly authorized by the patient as the patient's general agent to execute the above and accept its terms.

Patient Name: _____ Date: _____

Signature of Patient/Parent or Guardian: _____

Name of Parent/Guardian if applicable: _____

Signature of Witness (Faculty or Student): _____

A signed electronic copy of this form is as valid as the Original.

Patient Financial Responsibility Information

Payment Policy

The Western University of Health Sciences College of Dental Medicine Clinics are fee for service dental clinics. The Dental Center charges \$20.00 for returned checks and reserves the right to request an alternate form of payment including the use of a collection agency to recover any amounts that are due and payable

Payment for services using cash, Visa, MasterCard, or Discover Card may be made using one of the following methods:

1. **Payment as treatment is rendered** - services are paid in full as they are completed.
2. **Pre-payment of fees**- regular payments are made prior to the start of an approved treatment plan procedure or phase. Appointments are scheduled when the total cost of the treatment or phase is paid.
3. **Phased treatment** - Certain treatment plans can be completed in phases allowing for intervals of time between each phase of dental care.
4. **Care Credit** -This form of payment is offered for approved treatment plans when the patient's financial obligation is more than \$500.00. A no interest payment plan(s) (up to 18 months months) or low interest (24, 36 or 48 months) payment plans with credit approval from Care Credit.

Assignment of Benefits and PHI Disclosure:

1. **ASSIGNMENT OF BENEFITS:** I hereby assign directly to The Dental Center at Western University all dental and or dental surgical benefits if any, otherwise payable to me for services rendered. I understand that I am financially responsible for all charges whether paid by insurance.
2. **DISCLOSURE OF PHI:** I hereby authorize Western University College of Dental Medicine Clinics to receive and/or disclose protected health information (PHI) about me for the purpose of treatment, payment, and operations. I may revoke this authorization at any time. I understand that other disclosures will be made only with my written authorization, unless otherwise permitted or required by law. A completed "Notice of Privacy Practices" for Western University of Health Sciences, College of Dental Medicine Clinic will be provided to me.

Dental Insurance and Other Third-Party Coverage:

The Western University Dental Center only accepts Delta Dental PPO, MetLife PPO and fee-for-service Denti-Cal.

1. Patients covered with Delta Dental or MetLife insurance will be expected to pay their co-payment at each visit.
2. We do not participate in any HMO programs.
3. Patients with Denti-Cal will be expected to present their Beneficiary Identification Card (BIC) so that eligibility can be verified.
4. If we are not able to verify eligibility, payment for services is expected using one of the payment methods listed above.
5. Procedures not covered by Delta Dental, MetLife or Denti-Cal are the patient's responsibility to pay.

Discontinuation of Services

If dental care is discontinued and:

1. There is a credit balance on the account, then a refund will be sent to the appropriate person listed on the account.
2. There is a balance on the account, then the amount due is expected on the date the dental treatment is discontinued.

Person Responsible for Payment Declaration and Signature

As the person responsible for payment, I declare that I have read and understand that the financial obligations for me and/or those patients treated under my account and that the dental services must be paid within the policies and guidelines of the Western University Dental Center. ***I understand that the Western University of Health Sciences, College of Dental Medicine will provide good faith estimates of the cost of care and potential benefits and, estimates are not guarantees of the final costs of dental care or the actual third-party payment.*** As the person responsible for payment, I am responsible for all costs incurred by me/and or patients who are covered under my account.

Print Name

Date

Signature

A signed electronic copy of this form is as valid as the Original

AUTHORIZATION FOR PARENT/GUARDIAN/CONSERVATOR SUBSTITUTE

By completing this form, I authorize an alternate decision maker to consent to, and be involved in, dental treatment services and care of my Minor Child/Dependent adult here at the Western University of Health Sciences, College of Dental Medicine Clinic(s) ("WesternU CDM Clinic(s)).

Minor Child/Dependent adult's.

Name: _____ Date of Birth: _____ Age: _____

Direct authorization for care/treatment. I authorize WesternU CDM Clinic(s) to provide the above-named minor child/dependent adult with emergency, urgent and other dental care, and treatment in my absence, including the Parent/Guardian Substitute authorized below who will accompany the minor child/dependent adult to appointments on my behalf (Check all that apply):

☐ X-rays ☐ Root Canal Treatment ☐ Fluoride Treatment ☐ Sealants ☐ Teeth Cleaning

☐ Fillings ☐ Extraction of permanent teeth ☐ Extraction of Baby Teeth ☐ Other: _____

Designation of Parent Substitute to authorize care/treatment for Minor Child/Dependent Adult. I authorize the Parent/Guardian Substitute designated below to give informed consent for emergency, urgent and other dental treatment for the Minor Child/Dependent Adult named above.

Identification of Parent/Guardian/Conservator Substitute. I appoint the following individual(s) to obtain access to Protected Health information (PHI), give and receive information, give informed consent for dental treatment, or otherwise receive custody of the Minor Child/Dependent Adult.

Name/Relationship Address: _____

Duration of Authorization. This consent is valid one (1) year beginning on _____ and expiring on _____. This authorization may be revoked by me at any time prior to that expiration date by providing WesternU CDM Clinic(s) with written notice.

Release of Information. To ensure that the Parent/Guardian/Conservator Substitute has access to Protected Health Information needed to make informed consent decisions, I authorize WesternU CDM Clinic(s) to provide the above-named Parent/Guardian substitute with PHI relating to the Minor Child/Dependent Adult only. "PHI" means all dental records relating to the Minor Child/Dependent Adult, which are protected and confidential as is defined by Health Insurance Portability & Privacy Act of 1996 (HIPPA), and include account information, appointments, and treatments planned or given. I also agree to release WesternU CDM Clinic(s) and the providers from liability for any claims resulting from release of PHI in reliance upon this authorization.

I have carefully read and considered this consent for before signing it.

Signature of Parent / Legal Guardian / Conservator

Date

Circle one: Parent Legal Guardian Conservator)

Contact Information for Parent/Legal Guardian/Conservator

Printed Name: _____

Mailing Address: _____

Cell Phone Number _____ Home Phone Number: _____

Work Phone Number: _____ Other contact information: _____

A signed electronic copy of this form is as valid as the Original

AUTHORIZATION FOR PHOTOGRAPY OF A PATIENT

The undersigned patient, legal guardian, or conservator agrees that Western University of Health Sciences, College of Dental Medicine clinical sites (referred to as the “WesternU CDM clinic(s)”) may photograph me/patient for the purposes of documenting my progress related to my health. My signature below indicates that I understand:

- Photographs may be recorded to document my current care and treatment and/or to document the progress of said treatment.
- The same statutory rules of patient privacy rights to confidentiality apply to any photographs taken by the WesternU CDM Clinic(s).
- The WesternU CDM Clinic(s) will retain the ownership rights to these photographs but that I will be allowed to access to view them or obtain photocopies
- The images will be stored in a secure manner that will protect my privacy and that they will be kept for the time period required by law.
- The images can be used without personal identifiers for teaching, academics/scientific presentations, professional portfolios, and purposes not related to advertising or other commercial interests e.g., examples of surgical procedures or dental care provided by the student dentists for job interviews.
- The parts of my body that may be photographed are: _____

Date

Print Name

Signature of Patient/Legal representative/Conservator Signature

Relationship

Date

Witness Signature

Witness's Printed Name

Note: A photocopy or electronic scan of this document shall be as valid as the original

INSTRUCTIONS ON HOW TO CONTACT PATIENT

Patient Name: _____

Date of Birth: _____

One of our goals is to protect your rights to privacy; therefore, unless we have your permission, information will not be given out to anyone regarding you or your finances.

	Yes	No
May we call you at work? If Yes Number: _____		
May we call you at home? If Yes Number: _____		
If "No" to either question above, do you have an alternative number e.g., cell phone we can contact you at? Number: _____		
May we leave messages (including appointment information) on your voice mail?		
May we send you a fax? If yes, what is the fax number? _____		
May we send you an email? If yes, what email address should we use? _____		

We will only provide information about you to those listed below:

Name: _____

Phone: _____

Name: _____

Phone: _____

Name: _____

Phone: _____

Patient/Guarantor Signature

Date

Note: This consent is valid until otherwise notified in writing.

Note: A photocopy or electronic scan of this document shall be as valid as original

**NOTICE OF PRIVACY PRACTICES
ACKNOWLEDGEMENT OF RECEIPT**

DATE: _____, 20 _____

By signing this form, I acknowledge that I received a copy of WesternU Health Notice of Privacy Practices. I understand that the Notice of Privacy Practices provides information about how WesternU may use and disclose my health information.

Patient Name (Print)

Patient Signature

If this form is completed by a patient's legal representative, please print and sign your name in the space below:

Legal Representative (Print)

Legal Representative's Signature

Relationship

This Section to be Completed by WesternU Health:

Complete this section if this form is not signed and dated by the patient or patient's personal representative.

I have made a good faith effort to obtain a written acknowledgement of receipt of WesternU Health's Notice of Privacy Practices but was unable to for the following reason:

- ☐ Patient refused to sign
- ☐ Patient unable to sign
- ☐ Other _____

Employee Name (Print)

Employee Signature

Date

This form must be placed in the patient's medical record.

Consent for Evaluation Via Teledentistry (Zoom Video)

As our patient, we want you (or parent/guardian) to be informed about using teledentistry to provide evaluation of your oral health needs. Teledentistry (sometimes referred to as video conferencing) involves the use of electronic communications, specifically the Zoom video and audio platform. Using this method will enable your student and faculty Dentist to collect information for with your oral health needs without the need for you to be present in the physical treatment area.

We have chosen to use Zoom as it incorporates network and software security protocols to protect the confidentiality of your patient information and imaging data. It also includes measures to safeguard your data and ensures its integrity against intentional or unintentional corruption. Your teledentistry appointment may also be via the telephone is the event that you do not have access to Zoom.

During your teledentistry appointment, your student and faculty Dentist will review your medical history and ask you questions about your health. Although we anticipate that we will be able to effectively collect the information that we need about your health, it is always possible that your student and faculty Dentist will determine that a face-to-face appointment is needed. If this is case, you will be contacted by staff from the physical site staff to set up an appointment.

It has been explained to me that the purpose of teledentistry for my appointment in to collect information about my health in terms where I believe that I have been fully informed of the risks and benefits of teledentistry. I understand that the use of the teledentistry system via the internet allows my student and faculty Dentist to view my records and discuss my treatment with me. I also understand that the student and faculty

I understand that I may choose not to participate in a teledentistry video evaluation at any time before and/or during the appointment. If I decide not to participate in this type of dental appointment, it will not affect my right to future care or treatment at any College of Dental Medicine site.

My signature below indicates my consent to participate in a teledentistry appointment through Zoom video and audio conferencing.

Patient (parent or guardian) Signature

Date

Print Name of Patient

A signed electronic copy of this form is as valid as the Original

The Facts About Fillings



DENTAL BOARD OF CALIFORNIA

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.

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

The 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



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

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



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

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Published by

CALIFORNIA DEPARTMENT OF CONSUMER AFFAIRS

5/04