



ENVIRONMENTAL

What's new in Dentistry?

Resin Dental Sealants and Bisphenol A Oral Exposure

Dental sealants and composites play a significant role in preventing tooth decay and in maintaining dental health. Dental sealants are an important tool in preventing dental caries by providing a protective barrier on the teeth, particularly when used during a child's formative years. Dental composites are mainly used to fabricate tooth colored fillings and veneers as well as in the cementation of crowns. In addition to their functional and aesthetic properties, composites provide an alternative to mercury amalgam.

In 1996, Nicolas Olea and coworkers at the University of Granada in Spain reported detectable levels of bisphenol A (BPA) in the saliva of patients treated with dental sealants, suggesting that children receiving this treatment could be exposed to the chemical. These findings and the subsequent clinical recommendations made by the authors, stimulated public concern about this dental treatment. Subsequent studies, culminating with that of Eric Fung and coworkers, indicate that while extremely low levels of BPA can be detected in the saliva of individuals treated with selected dental resins in the hours immediately following application,

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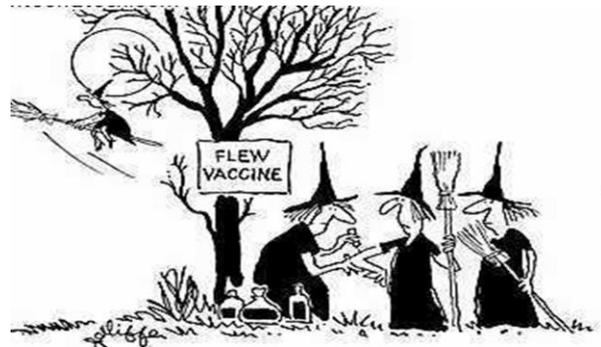
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HEALTH

What's going on in SOD...?

Flu Shots



- CDC and the Advisory Committee on Immunization Practices (ACIP) recommend that all health care workers get an annual flu vaccine.
- Fewer than half of health care workers report getting an annual flu vaccine.
- As a health care worker, by getting vaccinated, you can help protect your family at home as well as your patients at work from getting sick.
- Influenza outbreaks in hospitals and long-term care facilities have been attributed to low vaccination rates among health care professionals.
- Studies have shown that higher vaccination rates among health care workers can reduce influenza-like illness, and even deaths, in settings like nursing homes.
- Getting a yearly flu vaccine can help ensure your time off is spent doing what you want to do, not staying at home sick.
- Health care workers play an important role in protecting public health, and your co-workers need you to be healthy and able to cover your shift.

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no BPA was detected in the blood stream.

A review of key studies on dental resins containing BPA-based materials reveals that the highest reported acute oral exposure to BPA is more than 50,000 times lower than levels shown to cause acute oral toxicity in animal studies. Although repeated exposure to BPA from dental resins is not expected to occur, the highest reported acute oral exposure is also below the maximum acceptable or "reference" dose for BPA, which is set for repeated exposure over a lifetime. Consequently, exposure to BPA from dental resins for both adults and children is minimal and poses no known risk to human health.

For additional information, see the statement from the [American Dental Association](#) and a summary of a study from the [Journal of the American Dental Association](#).

Background

Dental composites are complex mixtures of materials that generally consist of an organic resin matrix, reinforcing inorganic filler and a silane-coupling agent, which connects the filler and the resin matrix. Sometimes known as "white filling" or "synthetic porcelain", composites are commonly used as a tooth-colored restorative material, for example in the fabrication of fillings and veneers, and the cementation of crowns. Composites without the filler and coupling agent are commonly used as sealants, which effectively isolate pits and fissures to help prevent caries in adults and children.

Composite resins are formulated from a mixture of monomers and are most commonly based on bisphenol A glycidyl methacrylate, usually abbreviated as bis-GMA and sometimes known as Bowen's monomer after its inventor. Because of the new treatment options made available, bis-GMA based composites are considered to be one of the most significant innovations of modern dentistry.

In addition to bis-GMA, composite resins generally include other monomers to modify the properties of the resin, for example bisphenol A dimethacrylate (bis-DMA), ethylene glycol dimethacrylate (EGDMA) and triethylene glycol dimethacrylate (TEGDMA). Although several key components of composite resins are derived from BPA, there is no known use of BPA itself in composite resins.

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SAFETY

For your everyday life...

CERT- Community Emergency Response Team

Following a major disaster, first responders who provide fire and medical services will not be able to meet the demand for these services. Factors as number of victims, communication failures, and road blockages will prevent people from accessing emergency services they have come to expect at a moment's notice through 911. People will have to rely on each other for help in order to meet their immediate lifesaving and life sustaining needs.

One also expects that under these kinds of conditions, family members, fellow employees, and neighbors will spontaneously try to help each other. This was the case following the Mexico City earthquake where untrained, spontaneous volunteers saved 800 people. However, 100 people lost their lives while attempting to save others. This is a high price to pay and is preventable through training.

If we can predict that emergency services will not meet immediate needs following a major disaster, especially if there is no warning as in an earthquake, and people will spontaneously volunteer, what can government do to prepare citizens for this eventuality?

First, present citizens the facts about what to expect following a major disaster in terms of immediate services. Second, give the message

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Any issues on your mind?

Send me an email:

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Influenza (Flu) Facts

- The flu is a contagious respiratory illness caused by influenza viruses. It can cause mild to severe illness, and at times can lead to hospitalizations and death.
- The main way that [influenza viruses are thought to spread](#) is from person to person in respiratory droplets of coughs and sneezes. Influenza viruses may also be spread when a person touches respiratory droplets on another person or an object and then touches their own mouth or nose (or someone else's mouth or nose) before washing their hands.
- Most healthy adults may be able to infect others beginning 1 day **before** symptoms develop and up to 5-7 days **after** becoming sick. Children may pass the virus for longer than seven days.
- Some people, such as older adults, pregnant women, and very young children as well as people with certain long-term medical conditions are at [high risk of serious complications](#) from the flu. These medical conditions include chronic lung diseases, such as asthma and chronic obstructive pulmonary disease (COPD), diabetes, heart disease, neurologic conditions and pregnancy.
- Since health care workers may care for or live with people at high risk for influenza-related complications, it is especially important for them to get vaccinated annually.

Health Care Workers and Influenza Vaccination

- Health care workers have a special role in the fight against influenza.
 1. By getting vaccinated themselves, health encouraging vaccination of vulnerable patients can protect them from the flu.
 2. High rates of vaccination among nurses and health care workers have been linked to improved patient outcomes and reduced absenteeism and influenza infection among staff.

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about their responsibility for mitigation and preparedness. Third, train them in needed lifesaving skills with emphasis on decision making skills, rescuer safety, and doing the greatest good for the greatest number. Fourth, organize teams so that they are an extension of first responder services offering immediate help to victims until professional services arrive.

Background

The Community Emergency Response Team concept was developed and implemented by the Los Angeles City Fire Department (LAFD) in 1985. The Whittier Narrows earthquake in 1987 underscored the area-wide threat of a major disaster in California. Further, it confirmed the need for training civilians to meet their immediate needs. As a result, the LAFD created the Disaster Preparedness Division with the purpose of training citizens and private and government employees.

The training program that LAFD initiated makes good sense and furthers the process of citizens understanding their responsibility in preparing for disaster. It also increases their ability to safely help themselves, their family and their neighbors. The Federal Emergency Management Agency (FEMA) recognizes the importance of preparing citizens. The Emergency Management Institute (EMI) and the National Fire Academy adopted and expanded the CERT materials believing them applicable to all hazards.

The CERT course will benefit any citizen who takes it. This individual will be better prepared to respond to and cope with the aftermath of a disaster. Additionally, if a community wants to supplement its response capability after a disaster, civilians can be recruited and trained as neighborhood, business, and government teams that, in essence, will be auxiliary responders. These groups can provide immediate assistance to victims in their area, organize spontaneous volunteers who have not had the training, and collect disaster intelligence that will assist professional responders with prioritization and allocation of resources following a disaster. Since 1993 when this training was made available nationally by FEMA, communities in 28 States and Puerto Rico have conducted CERT training.

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Starting

We recommend a number of steps to start a CERT:

- Identify the program goals that CERT will meet and the resources available to conduct the program in your area.
- Gain approval from appointed and elected officials to use CERT as a means to prepare citizens to care for themselves during a disaster when services may not be adequate. This is an excellent opportunity for the government to be proactive in working with its constituency.
- Identify and recruit potential participants. Natural for CERT are community groups, business and industry workers, and local government workers.
- Train CERT instructor cadre
- Conduct CERT sessions.
- Conduct refresher training and exercises with CERTs.

Delivery

- The CERT course is delivered in the community by a team of first responders who have the requisite knowledge and skills to instruct the sessions. It is suggested that the instructors complete a CERT Train-the-Trainer (TTT) conducted by their State Training Office for Emergency Management or the Emergency Management Institute in order to learn the training techniques that are used successfully by the LAFD.
- The CERT training for community groups is usually delivered in 2 1/2 hour sessions, one evening a week over a 7 week period. The training consists of the following:
 - Session I, DISASTER PREPAREDNESS: Addresses hazards to which people are vulnerable in their community. Materials cover actions that participants and their families take before, during, and after a disaster. As the session progresses, the instructor begins to explore an expanded response role for civilians in that they should begin to consider themselves disaster workers. Since they will want to help their family members and neighbors, this training can help them operate in a safe and appropriate manner.
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What is the Source of BPA in Dental Sealants?

Dental sealants typically contain monomers that are derived from BPA, such as bis-GMA and bis-DMA, but there is no known use of BPA itself in dental sealants. Since it is known that these monomers may leach from dental sealants, the stability of the monomers has been studied under a variety of conditions, including in saliva, to determine if they may hydrolyze to form BPA. Bis-GMA, the base monomer for many composite resins, has been found to be stable to various hydrolytic conditions (Schmalz *et al*, 1999). However, two researchers have reported that bis-DMA is hydrolyzed to BPA, which likely accounts for the BPA detected in extracts from certain sealants (Schmalz *et al*, 1999; Atkinson *et al*, 2002).

Conclusions

Small amounts of BPA may leach from dental sealants immediately after application of the sealants to teeth. No BPA has been detected in blood samples, indicating that there is no detectable systemic exposure to BPA from dental sealants.

- The source of BPA that leaches from dental sealants is likely to be from hydrolysis of bis-DMA, a common monomer used in dental resin formulations.
- When evaluated as an acute exposure event, the highest level of BPA reported in saliva from dental sealants is more than 50,000 times lower than the LD50 values that have been reported for BPA.
- Although BPA exposure from dental sealants does not occur daily throughout a lifetime, the highest level of BPA reported is also below the maximum acceptable or "reference" dose for BPA of 0.05 mg/kg body weight/day.
- A recent three-generation study has confirmed the safety of the maximum acceptable or "reference" dose for BPA of 0.05 mg/kg body weight/ day.
- Consequently, human exposure to BPA from dental resins is minimal and poses no known health risk.

For more information and complete article:
<http://www.bisphenol-a.org/human/dental.html#top>

- Annual vaccination is important because influenza is unpredictable and [flu viruses are constantly changing](#). Even if you've been vaccinated before, the flu vaccine from a previous season may not protect against current flu viruses.
- Health care workers who should be vaccinated include physicians, nurses, other workers in hospital and outpatient-care settings, and medical emergency-response workers (e.g., paramedics and emergency medical technicians). It is also important for employees of nursing homes and long-term-care facilities who have contact with patients or residents, and students of these professions who will have contact with patients to all be vaccinated.

Flu Vaccine Facts

- **Flu vaccines CANNOT cause the flu. The viruses in flu vaccines are either killed (the flu shot) or weakened (the nasal-spray vaccine). The flu vaccines work by priming your body's defenses in case you are exposed to an actual flu virus.**

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- The CERT concept and organization are discussed as well as applicable laws governing volunteers in that jurisdiction.
- Session II, DISASTER FIRE SUPPRESSION: Briefly covers fire chemistry, hazardous materials, fire hazards, and fire suppression strategies. However, the thrust of this session is the safe use of fire extinguishers, sizing up the situation, controlling utilities, and extinguishing a small fire.
- Session III, DISASTER MEDICAL OPERATIONS PART I: Participants practice diagnosing and treating airway obstruction, bleeding, and shock by using simple triage and rapid treatment techniques.
- Session IV, DISASTER MEDICAL OPERATIONS, PART II: Covers evaluating patients by doing a head to toe assessment, establishing a medical treatment area, performing basic first aid, and practicing in a safe and sanitary manner.
- Session V, LIGHT SEARCH AND RESCUE OPERATIONS: Participants learn about search and rescue planning, size-up, search techniques, rescue techniques, and most important, rescuer safety.
- Session VI, DISASTER PSYCHOLOGY AND TEAM ORGANIZATION: Covers signs and symptoms that might be experienced by the disaster victim and worker. It addresses CERT organization and management principles and the need for documentation.
- Session VII, COURSE REVIEW AND DISASTER SIMULATION: Participants review their answers from a take home examination. Finally, they practice the skills that they have learned during the previous six sessions in disaster activity.

During each session participants are required to bring safety equipment (gloves, goggles, mask) and disaster supplies (bandages, flashlight, dressings) which will be used during the session. By doing this for each session, participants are building a disaster response kit of items that they will need during a disaster.

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E.V.E.H.S

Engaging in Your Environmental Health & Safety

Since, SOD's faculty, staff and students are working with EH&S issues everyday it will be helpful to use your "eyes" to make SOD safer, healthier and more environmentally "friendly". Do you have any suggestions, comments or ideas in how to help in SOD's environment, health and safety? Please, submit your ideas to me. You will get recognition for your thoughts and ideas. Submit the attached document.

Conclusion

CERT is about readiness, people helping people, rescuer safety, and doing the greatest good for the greatest number. CERT is a positive and realistic approach to emergency and disaster situations where citizens will be initially on their own and their actions can make a difference. Through training, citizens can manage utilities and put out small fires; treat the three killers by opening airways, controlling bleeding, and treating for shock; provide basic medical aid; search for and rescue victims safely; and organize themselves and spontaneous volunteers to be effective.

<https://www.citizencorps.gov/cert/about.shtm>



- Flu vaccines are safe. Serious problems from the flu vaccine are very rare. The most common side effect that a person is likely to experience is soreness where the injection was given. This is generally mild and usually goes away after a day or two.

Which Vaccine Should You Get?

[There are two types of flu vaccine](#): (1) the “flu shot”  [89 KB, 2 pages] – a vaccine with killed virus given by needle injection and (2) the nasal-spray vaccine  [477 KB, 2 pages] (Live Attenuated Influenza Vaccine or LAIV) – a vaccine with weakened live viruses.

- **The flu shot** is approved for use in people older than 6 months, including healthy people and people with chronic medical conditions.
- **The nasal-spray vaccine (LAIV)** is approved for use in healthy people 2 to 49 years of age. Nearly all healthy, non-pregnant health care workers, **may** receive LAIV if eligible, including those who come in contact with newborn infants (e.g., persons working in the neonatal intensive care unit, or NICU), pregnant women, persons with a solid organ transplant, persons receiving chemotherapy, and persons with HIV/AIDS.
- However, health care providers should not get LAIV if they are providing medical care for patients who require special environments in the hospital because they are profoundly immunocompromised, for example if they work in bone marrow transplant units. This is intended as an extra precaution and is not based on reports of vaccine virus transmission in those settings.

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- **The flu shot is preferred for vaccinating health care workers who are in close contact with severely immunocompromised patients who are being cared for in a protective environment.** These health care workers may still get LAIV, but they must avoid contact with such patients for 7 days after getting vaccinated. No special precautions (e.g., masks or gloves) are necessary for health care personnel who have been vaccinated with LAIV and who do not work with patients undergoing bone marrow transplantation. The role that you and other health care workers play in helping prevent influenza-related illness and death—especially in high-risk patients—is invaluable. By setting a good example and spreading flu facts (instead of the flu itself) among your colleagues and patients, you have the opportunity to save even more lives.

Protect yourself, your family, and your patients by getting a flu vaccine.

For more information about flu information, updates, and access to free materials to assist with educating staff and patients about the impact of influenza and the benefits of vaccination, visit [CDC Seasonal Influenza \(Flu\)](http://www.cdc.gov/flu) and [Flu.gov](http://www.flu.gov), or call the National Immunization Hotline at (800) 232-2522 (English), (800) 232-0233 (español), or (800) 243-7889 (TTY).

All UCLA employees can go to OHF to receive a flu shot.

Location: 67-120 CHS (310) 825-6771
Hours of Operation: 7:00 am - 4:30 pm Monday – Friday; OHF is closed on holidays and weekends
website: <http://ohs.uclahealth.org/>

All Students- Arthur Ashe Center- Free Flu Shot Fairs around Campus

1. **Friday November 4th from 11-1 in the CHS patio outside bookstore**
2. **Monday November 7th from 11-1 in the law School patio**
3. **Thursday November 17th in the Anderson School of Business**

Happenings at UCLA & SOD

America's Climate Choices

Wednesday, October 12, 2011

7:00 pm - 9:00 pm, Fowler - Lenart Auditorium Room A103B

Admission Free admission, RSVP REQUIRED.

Contact (310) 825-5008 events@ioes.ucla.edu

Science and Art in a Climate of Change: A Dialogue of Nations

Thursday, October 13, 2011

3:00 pm - 5:00 pm, Glorya Kaufman Hall - Dance Theater - Room 200

Admission Free and open to the public. Seating is limited.

Website <http://www.wac.ucla.edu/cip/tour/tour>

Water is Rising: Music and Dance Amid Climate Change

Saturday, October 15, 2011

7:00 pm - 10:00 pm, Royce - Auditorium

Presented by UCLA Live. A project of UCLA Center for Intercultural Performance and Foundation for World Arts and UCLA Institute of the Environment and Sustainability. Admission Tickets from \$35 (\$15 Students)

Contact (310) 825-2101 info@uclalive.org

Website

http://www.uclalive.org/calendar/event_detail.asp?id=16...

Annual Sustainability Fair

Thursday, October 20, 2011

10:00 am - 2:00 pm, Bruin Plaza – Area

Admission Free--for the campus community.

Contact(310) 206-6667 sustainability@ucla.edu

Additional Information

UCLA Annual Sustainability Fair. Campus departments, student organizations, and outside organizations will table and offer educational activities and information about sustainability at UCLA.

When the Earth Shakes

Come hear Debbie Weiser, Geologist for the United States Geological Survey, discuss earthquakes, the probability, the impact of such a phenomenon, and what you can do to be prepared.

October 19, 2011 Noon - 1:00 pm

Speaker: Debbie Weiser - U.S. Geological Survey
Tamkin Auditorium Ronald Reagan UCLA Medical Center

<http://www.uclahealth.org/body.cfm?id=1778>