

School of Dentistry

Environmental Health & Safety Newsletter

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ENVIRONMENTAL

What's new in Dentistry?

Amalgam and the Environment



Dental amalgam waste can be recycled to help prevent the release of mercury to the environment.

Concern about the effects of mercury in the environment has increased over the years. Mercury in the environment is bio accumulative, which means that it can build up in fish and cause health problems in humans and other animals that eat fish.

Mercury is a naturally occurring metal; however, about half of the mercury released to the environment comes from human activity. Of that amount, 53% is emitted from combustion of fuels for energy production and 34% is from the combustion of waste. Sources associated with manufacturers and consumers make up the remaining 13%, with dentistry contributing less

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HEALTH

What's going on in SOD...?

Hand-washing SOP while in Research or Clinical Laboratories

PURPOSE

The purpose of this document is to specify additional procedures the UCLA School of Dentistry requires for laboratory personal safety and protective equipment in addition to the UCLA Policy 905 (attached).

SCOPE

This SOP applies to all personnel working in any research laboratory or site, with research funded through the School of Dentistry or through UCLA where School of Dentistry research personnel are involved.

REFERENCES:

UCLA Policy 905: Research Laboratory Personal Safety and Protective Equipment and its further references (see attached UCLA Policy 905).

RESPONSIBILITIES:

The Associate Dean, Research for the UCLA School of Dentistry is responsible for promulgation and dissemination of additional protocols and procedures that further amplify or clarify University of California procedures. In no way will this additional statement conflict with or otherwise reduce or modify UC or UCLA policies.

All research personnel are responsible for reading and complying with the provisions herein.

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than one percent.

According to the EPA in 2000, metals (mainly due to the detection of mercury in fish tissue samples) were the second most common pollutant impairing 3.2 million acres of the 17.3 million acres of assessed lakes (the assessed lakes comprised 43% of the total lake acres).

Although mercury in the form of dental amalgam is stable, amalgam should **not** be disposed of in the garbage, infectious waste “red bag,” or sharps container. Amalgam also should **not** be rinsed down the drain. These cautions are important because some communities incinerate municipal garbage, medical waste, and sludge from wastewater treatment plants. If amalgam waste ends up in one of these incinerated waste streams, the mercury can be released to the environment due to the high temperatures used in the incineration process. Increasingly, local communities are enacting restrictions on the incineration of wastes containing mercury. The good news is that amalgam waste, kept separate from other waste, can be safely recycled. The mercury can be recovered from amalgam wastes through a distillation process and reused in new products. The ADA strongly recommends recycling as a best management practice for dental offices.

For More information go to the Full article at: http://www.ada.org/sections/publicResources/pdfs/topics_amalgamwaste.pdf



At the School of Dentistry: Amalgam Scrap containers are located in every clinical area.

Proper PPE should be worn when handling amalgam scraps.

- Do:**
1. Store in labeled containers
 2. Collect accumulated amalgam & capsules, decontaminate

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SAFETY

For your everyday life.

Preventing Fires and Smoke Detectors:

Fire Safety Tips

Those are the basics of fire safety: prevention, education, detection, and response. None of them are very expensive, and most don't take any time at all. You should always have fire safety on your mind, and be keeping an eye out for fire hazards and unsafe practices. Train your children in the basics of fire safety, and have rules for friends and family when they visit. Enforce the rules, gently but firmly. It's always best to have a checklist in your head that you go over every night before going to sleep. Make sure all unnecessary appliances are off. Fire safety experts actually recommend that any appliance be unplugged any time it's not in use, even TV's, computers, and stereos. That's a good safety practice, but a lot of people don't follow it. You'll have to decide for yourself if you want to make it your habit. See to it that all candles and fireplace embers are extinguished. Any space heaters in bedrooms should be a safe distance from the bed, and from anything else that might catch fire. Washers and dryers shouldn't be used when everyone's asleep. All cigarettes and cigars should be doused with water and discarded from ashtrays before retiring. Shut all bedroom doors, and make sure rooms and hallway floors are clear of obstructions, in case there is a fire.

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Any issues on your mind?

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PROCEDURES (SAFETY REQUIREMENTS):

When exiting a research laboratory space, after removal and disposal of protective gloves, all personnel are to inspect hands for any contaminants or other debris. If needed for soiled hands, wash hands at a sink in the laboratory space. After washing, personnel are to immediately leave the area and not handle any additional equipment or supplies prior to exiting. If hands are not visibly soiled or contaminated and hand washing is not indicated, upon removal and disposal of protective gloves, personnel are otherwise directed to use a hand sanitizer before exiting the research laboratory space.

REPORTING AND DOCUMENTATION:

Any laboratory personnel who are observed to not follow this Standard Operating Procedure must immediately return to the laboratory space and wash hands thoroughly before re-exiting the space.

In addition, a written report must be sent to the EH&S Officer of the School, currently Lauren Gambon, explaining why the procedure was not followed.



One thing that is a bit more expensive than our other recommendations, but well worth your consideration, is an interior sprinkler system. They do cost a bit, but they're getting cheaper all the time. When smoke or flames are detected, they activate and wet everything down. Fire safety experts say that if every home had working detectors and sprinklers, we'd have hardly any home fire deaths in America. It's something to consider, and if you can afford a sprinkler system, the peace of mind is well worth the investment.

Basic Smoke Detector Information

All experts agree that without a doubt, the most important step to take is to make sure you have working smoke detectors installed. Smoke detectors have saved literally tens of thousands of lives, and prevented hundreds of thousands of injuries over the years. They're cheap, they're very easy to install, and there's absolutely no excuse for not using them. How many do you need? At a bare minimum, you need at least one for every level of your house. If all bedrooms share a common hallway, then one detector in the hallway should do. But if the house is laid out with bedrooms separated in different areas, you'll need one for each separate area. In addition, any bedroom where people sleep with their door closed should have a detector inside the room.

Smoke detectors over ten years old should be replaced, according to fire safety experts. They also recommend that you test your smoke detector on a regular basis – say every Friday night or Saturday morning, or whatever works for you, and is easy to remember. Testing them is very simple.

Most smoke detectors have a button marked TEST, and you simply push it in. If the alarm sounds, it's fine. If it doesn't, either the detector has gone bad, or the battery is worn out. In either case, you'll need to fix it right away. Because it's easy to forget about batteries in smoke detectors, it's become something of a national institution in America to replace the batteries twice a year, when we switch to and from Daylight Savings Time.

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Many people have been lulled into a false sense of safety because “I’ve got a smoke detector”. But if the batteries are dead, it will do you no good. Fire experts estimate that about a third of all detectors in this country have dead batteries in them. Don’t let this happen to you. One situation that needs to be addressed is what happens if the smoke detector keeps going off for no reason? Usually this happens because it’s too close to a stove, and steam and light smoke are setting it off. In that case, you’ll need to move it. Don’t just take the batteries out to get rid of the annoyance. That can be a deadly mistake.



Types of Smoke Detectors

There are two basic kinds: photo electronic, and ionization.

Photo electronic ones are better at detecting smoldering fires, which create lots of smoke, but little actual fire at first. They’re your best bet for most places.

Ionization detectors work best for rapidly spreading fires in combustible materials, where there are lots of flames, but little smoke. If you’re going to have one in your kitchen, go with an ionization model. That will also reduce the likelihood of them being triggered by cooking.

The Importance of Fire Drills and Escape Plans

When a fire starts, experts say you’ve got one to two minutes to get out of the house to safety. Most deaths in fires aren’t from the flames, but from smoke inhalation. Everyone is likely to be panicking and screaming and wondering what to do, unless you’ve prepared your family well ahead of time for this situation. They’re going to be screaming and panicking anyway, but if you’ve planned for what to do in a fire, they won’t have to improvise and start thinking for themselves. They can just do what you’ve practiced. Having an escape plan is a fundamental

by covering with 10% formalin and dispose as chemical waste

3. Deliver to hazardous waste pick up areas

Do Not:

1. Place in the biohazard waste bag
2. Rinse down the drain
3. Place in the sharps container
4. Place in the general trash
5. Disinfect with any method that uses heat

*Students will only have to deal collection of amalgam scrapes

*These guidelines also pertain to Dental Unit Traps

Events:

- Earth Day April 22nd
- WOCA April 17th

part of home fire safety. So are regular fire drills. They can mean the difference between life and death. Creating an escape plan is the first step. Every room should have two possible exits, the door to the hallway, and a window. If the house is on fire, and the room is on the first floor, the window should be the first choice, unless the fire is coming from that area. Before attempting to exit through the door, a person should first touch it. If it's hot, do not open it, as it means the fire is right outside the door. Try to exit through the window. If that's impossible, wait for help, but do not open the door. If it's not hot, open it slowly, and if you see flames, shut it immediately and either go out the window or wait for help. Incidentally, this is a good reason to always sleep with the bedroom door tightly shut-it can take flames up to 15 minutes to burn through a door, giving you precious time to escape or be rescued. Every upstairs bedroom should have a fire escape ladder kept near the window, and a flashlight to signal for help. Make sure all windows are able to be easily opened from the inside. Firefighters advise that you shouldn't jump from a second story window, but hanging and dropping from the ledge can be a good idea. You're unlikely to be critically injured, although you may break an ankle or leg. Anyone who can't escape through a window should get down as low as possible if escaping through the house – that's where the freshest air will be. Have a meeting place designated, such as the end of the driveway, or the mailbox, and everyone should go there immediately to be accounted for. No one should ever go back into a burning house to try to rescue someone. Once you've got your plan, explain the escape routes to your family, and exactly what they should do in case of fire. And then practice it on a regular basis, at least once or twice a year. Some of the drills should be scheduled, daylight drills. Others should be surprise drills at night when people are sleeping, because that's when the vast majority of fatal house fires occur. You can't be too prepared for a fire. Have an escape plan, teach it to your family, and then practice it regularly. These are vital weapons in your home fire safety arsenal.

**FOR THE COMPLETE ARTICLE AND MORE
HELPFUL TIPS:**

**[HTTP://WWW.SAFETYRESOURCE.ORG/FIRE
SAFETY.HTML](http://www.safetyresource.org/fire_safety.html)**

Updates:

- A serious injury needs to be reported within **8 hours** to EH&S (310)825-9797 if any hospitalization occurs (excluding ER visits). It used to read if hospitalization occurs greater than 24 hours.
- Thanks to all PIs/Lab Supervisors and lab personnel who have met with me for your initial lab meeting the list includes: Dr. Eric Sung, Rochelle Bache, Dr. Lillian Chang, Miguel Gomez, Dr. Eleni Roumanas, Dr. Eung-Kwon Pae, Dr. Neal Garrett, Dr. Francesco Chiappelli, Dr. Shen Hu, Dr. Yi-Ling Lin, Dr. Diana Messadi, Dr. Ichiro Nishimura, Dr. Takahiro Ogawa, Dr. David Wong, Dr. No-Hee Park, Dr. Wenyuan Shi, Dr. Chia Soo, Dr. Kang Ting, Dr. Shane White, and Dr. Sotirios Tetradis
- I look forward to meeting with the rest of the PIs/Lab Supervisors soon!