



Management of Lead Waste From Dental Offices

Proper Storage & Disposal of Lead Aprons, Shields, Foils, Lead-Acid Batteries, and Computers

Sources of Lead Waste in Dental Offices

Dental offices generate lead wastes, such as lead aprons, shields, foils, batteries, and computers. Lead foils are used in the wrapping that shields x-ray film, and lead aprons and shields are used during patient x-rays for radiation protection. Single use and rechargeable batteries contain lead and other toxic metals, as do many electronic components, such as computers, computer screens and analytical equipment. The following informational sheet offers suggestions on managing and disposing these hazardous wastes.

Health Effects from Lead Exposure

Although highly toxic when taken internally in any of its forms, symptoms of lead exposure usually occur after it has accumulated in the body over a period of time. Symptoms of lead poisoning are anemia, weakness, constipation, colic, palsy, and often paralysis of the wrists and ankles. Children are especially at risk from lead, even at levels once thought safe. Ingestion of elevated levels of lead can cause IQ deficiencies, reading and learning disabilities, reduced attention spans, impaired hearing and impaired balance. At levels once thought safe in adults, lead is now known to increase blood pressure.

Lead Aprons, Shields and Foils

Lead aprons, shields, foils, and electronics are considered hazardous waste unless they are recycled for their scrap metal content. If the material is recycled, it must go to a licensed recycling facility and records or receipts of such shipment must be kept. Companies that recycle amalgam or fixer may also accept lead waste. Dental offices should check to see if damaged or worn out lead aprons can be returned to their original manufacturer. Hazardous waste cannot be disposed as municipal solid waste (trash).

Do not put the lead foil that shields x-ray film, protective lead shields, lead aprons, or bitewings into the trash or into biohazard bags. The lead content of these makes them hazardous waste.

Batteries

Batteries are found in electronic devices in offices and homes, and many of these batteries must be managed as "universal wastes" because of their toxic or reactive properties.

Remember to store all spent lead-acid batteries on an acid-resistant surface, under cover, away from flammable liquids, ignition sources, and drains. Recycle all types of batteries.

Cathode Ray Tubes

Cathode ray tubes (CRTs) are the video units found in televisions and computer monitors. CRTs can contain five to eight pounds of lead. CRTs generated from businesses fall within the state's [Universal Waste Rule](#). Therefore, CRTs are considered a universal waste and will need to be recycled, donated, or sent to a hazardous waste disposal facility.