

Frequently Asked Questions

Information on Compact Fluorescent Light Bulbs (CFLs) and Mercury

Why should people use CFLs?

Switching from traditional light bulbs to CFLs is an effective, accessible change every American can make right now to reduce energy use at home and prevent greenhouse gas emissions that contribute to global climate change. Lighting accounts for close to 20 percent of the average home's electric bill. ENERGY STAR[®] qualified CFLs use up to 75 percent less energy than incandescent light bulbs, last up to 10 times longer, cost little up front, and provide a quick return on investment.

If every California household replaced five incandescent light bulbs with CFLs, it would reduce enough CO₂ — the greenhouse gas that causes global warming — to be the equivalent of taking more than 400,000 cars off the road.

Do CFLs contain mercury?

CFLs contain a very small amount of mercury sealed within the glass tubing — an average of 5 milligrams — about the amount that would cover the tip of a ballpoint pen. By comparison, older thermometers contain about 500 milligrams of mercury. It would take 100 CFLs to equal that amount.

Mercury currently is an essential component of CFLs and is what allows the bulb to be an efficient light source. No mercury is released when the bulbs are intact or in use. Many manufacturers have taken significant steps to reduce mercury used in their fluorescent lighting products. In fact, the average amount of mercury in a CFL is anticipated to drop by the end of 2007, thanks to technology and a commitment from members of the National Electrical Manufacturers Association.

What precautions should I take when using CFLs in my home?

CFLs are made of glass and can break if dropped or roughly handled. Be careful when removing the bulb from its packaging, installing it or replacing it. Always screw and unscrew the bulb by its base (not the glass), and never forcefully twist the CFL into a light socket. If a CFL breaks in your home, follow the cleanup recommendations below. Used CFLs should be disposed of properly (see below).

What should I do with a CFL when it burns out?

California law requires that CFLs be disposed of as Household Hazardous Waste. Household Hazardous Waste Collection events are sponsored by local municipalities and local government agencies.

Consumers can contact their local municipal solid waste agency directly, or go to <http://www.dtsc.ca.gov/HazardousWaste/UniversalWaste/HHW.cfm> to identify local recycling options.

ENERGY STAR qualified CFLs have a warranty. If the bulb has failed within the warranty period, return it to your retailer.

How should I clean up a broken fluorescent bulb?

The following steps can be performed by the general public:

1. Open a window and leave the room for 15 minutes or more.

2. Carefully scoop up the fragments and powder with stiff paper or cardboard and place them in a sealed plastic bag.

- Use disposable rubber gloves, if available (i.e., do not use bare hands). Wipe the area clean with damp paper towels or disposable wet wipes and place them in the plastic bag.
- Do not use a vacuum or broom to clean up the broken bulb on hard surfaces.

3. Place all cleanup materials in a second sealed plastic bag.

- Place the first bag in a second sealed plastic bag and dispose at a local hazardous waste center.
- Wash your hands after disposing of the bag.

4. If a fluorescent bulb breaks on a rug or carpet:

- First, remove all materials you can without using a vacuum cleaner, following the steps above. Sticky tape (such as duct tape) can be used to pick up small pieces and powder.
- If vacuuming is needed after all visible materials are removed, vacuum the area where the bulb was broken, remove the vacuum bag (or empty and wipe the canister) and put the bag or vacuum debris in two sealed plastic bags in the outdoor trash or protected outdoor location for normal disposal.

What is mercury?

Mercury is an element (Hg on the periodic table) found naturally in the environment. Mercury emissions in the air can come from both natural and man-made sources. Coal-fired power plants are the largest man-made source because mercury that naturally exists in coal is released into the air when coal is burned to make electricity. Coal-fired power generation accounts for roughly 40 percent of the mercury emissions in the U.S.

The EPA is implementing policies to reduce airborne mercury emissions. Under EPA regulations issued in 2005, mercury emissions from coal-fired power plants will drop by nearly 70 percent by 2018. The use of CFLs reduces power demand, which helps reduce mercury emissions from power plants.

For more information on all sources of mercury, visit <http://www.epa.gov/mercury>.

The EPA is continually reviewing its cleanup and disposal recommendations for CFLs to ensure that the Agency presents the most up-to-date information for consumers and businesses.

For more information visit www.sce.com.



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