

Fact Sheet on Mercury in Compact Fluorescent Lamps (CFLs)

I have heard that there is mercury in Compact Fluorescent Lamps (CFLs). Is this true?

CFLs contain a very small amount of mercury sealed within the glass tubing to help them produce light. But no mercury is released when the bulbs are intact or in use. Did you know that the amount of mercury in a CFL is less than 1/6 the amount found in a common watch battery? And thanks to technology advances, most makers of light bulbs have reduced mercury in their fluorescent lighting products. The following is a chart that compares mercury content of CFLs to other household uses:

Product	Amount of Mercury	Number of Equivalent CFLs
Compact Fluorescent Lamp (CFL)	4 mg	1
Watch battery	25 mg	6
Dental amalgam	500 mg	125
Home thermometer	500 mg to 2 g	125 to 500
Float switches in sump pumps	2 g	500
Tilt thermostat	3 g	750
Electrical tilt switches and relays	3.5 g	875

What should I do if my CFL breaks?

In the event that your bulb breaks, keep the area well ventilated by opening a window. Remove all materials you can without using a vacuum cleaner. This can be done by carefully scooping up the glass fragments and powder with a stiff piece of paper or cardboard or using sticky tape (ex. duct tape) to pick up small pieces. Place the broken pieces in a sealable plastic bag and wipe the area with a damp paper towel or disposable wet wipe to pick up any stray shards of glass and fine particles. Place used towels in sealable plastic bag as well. The first time you vacuum over the area where the cleanup was done, remove the vacuum bag (or empty the waste canister) and place outside in the outside trash. You may also cut out the contaminated section of carpet and place in a sealed plastic bag. Be sure to wash your hands after you're done cleaning. Contact your local Household Hazardous Waste Program for mercury disposal information.



Colorado Department
of Public Health
and Environment

For detailed cleanup instructions, see:
<http://www.cdphe.state.co.us/hm/mercury/hgcleanup.pdf>

What do I do with my burnt out CFL?

Recycle it, of course! In Colorado, all Ace Hardware, Home Depot, and Lowes home improvement stores will accept CFLs for recycling. When transporting CFLs to your local store, be sure to place them in a sealable bag in case it should break.

To learn more about residential recycling of other household hazardous waste see:

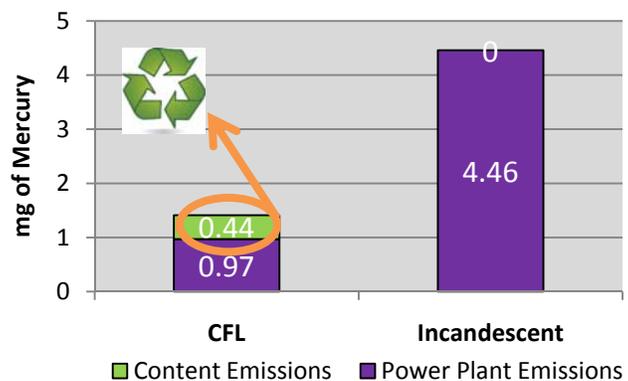
<http://www.cdphe.state.co.us/hm/hhwcollect.htm>



How can using CFLs actually reduce total mercury emissions?

CFLs reduce mercury emissions by using less energy than incandescent bulbs. Electricity generation from coal-fired power plants is the main source of mercury emissions in the U.S. The chart below shows how using CFLs compare to using incandescent bulbs. Most mercury vapor inside fluorescent light bulbs becomes bound to the inside of the light bulb as it is used. The U.S. EPA estimates that only about 11 percent of the mercury in a CFL is released into air or water when it is sent to a landfill, assuming the light bulb is broken. If you recycle your CFL, you will keep additional mercury out of the landfill and the atmosphere.

Mercury Emissions by Light Source
Over 10,000 hours



Colorado power plant emissions factors were obtained from EPA's eGRID: www.epa.gov/eGRID