



Frequently Asked Questions About...

Compact Fluorescent Light Bulbs

What are the benefits of compact fluorescent light bulbs?

Compact fluorescent light bulbs (CFLs) have several advantages over incandescent light bulbs. They last 8-10 times longer, use about 75% less energy, and produce 90% less heat while delivering more light per watt. For example, a 25-watt CFL provides about 1800 lumens, compared to 1750 lumens from a 100-watt incandescent lamp.

Use of CFLs reduces the need for electricity and therefore reduces the amounts of pollutants such as nitrogen, mercury, and carbon dioxide emitted by certain power plants.

Compact fluorescent light bulbs (CFLs) are an important tool in efforts to reduce pollution and address climate change.

Is there mercury in CFLs?

CFL bulbs contain up to 5 milligrams of mercury, the amount that would cover the tip of a ballpoint pen, as compared to older home thermostats and mercury fever thermometers, which contain from 500 to 30,000 milligrams. If a CFL bulb breaks, the amount of mercury released can evaporate into the air where it will likely remain at an amount below the safety standards set by the Occupational Health and Safety Administration. If a CFL bulb breaks, follow the clean-up and disposal recommendations provided below.

What safety precautions should be employed when handling CFLs?

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 lamp by its base (not the glass), and never forcefully twist the CFL into a light socket. CFLs are safe to use and no mercury is released while the bulbs are in use. If a CFL breaks in your home, follow the clean-up and disposal recommendations provided below.

How should a broken fluorescent bulb be cleaned up?

The EPA recommends the following steps should be taken if a CFL is broken:

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 put it in the outdoor trash container or in another outdoor protected area for the next normal trash disposal.
 - 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. Use a long extension cord (rated for the device) to operate the vacuum (i.e., leave the vacuum running) outside the dwelling for a minimum of sixty (60) minutes in order to flush out the mercury from the inside of the vacuum cleaner.

**Note: Do not dispose of CFLs in an incinerator, fireplace or other burning device.
Never use household cleaners to cleanup mercury spills.**

How do you dispose of a CFL?

CFLs should be recycled if possible. If recycling is not an option, a CFL may be placed in the household trash. MDE strongly encourages consumers to take advantage of available local recycling options for CFLs. Some counties in Maryland have permanent sites for Household Hazardous Waste (HHW) collection, including CFLs, while others have collection events on certain dates throughout the year. Refer to the table below to see which services your county currently offers. Information about individual county programs is available at www.mde.state.md.us.