



Compact Fluorescent Light Bulbs

Saving Energy, Cutting Pollution

Switching from traditional light bulbs to compact fluorescent light bulbs (CFLs) is an easy change everyone can make now to reduce energy use and prevent greenhouse gas emissions that contribute to global climate change. 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 household in Pennsylvania replaced one incandescent light bulb with an ENERGY STAR-qualified CFL, the combined individual efforts would:

- Save up to 248 million kilowatt-hours of electricity per year, or enough to light every household in Altoona for nearly 2,300 days (6.3 years).
- Save consumers \$25.5 million annually on household electric bills. A CFL can save a consumer more than \$60 over its entire life cycle.
- Prevent nearly 382 millions pounds of greenhouse gas emissions each year, or the equivalent of removing the annual emissions from more than 33,000 cars.

What should I do when a CFL Burns Out?

DEP recommends that consumers take advantage of CFL recycling options through their local municipality or a private entity. Consumers can contact the Household Hazardous Waste Hotline at 1-800-346-4242 to identify local recycling options or visit www.depweb.state.pa.us, keyword: HHW, then click on the link for "Household Hazardous Waste Collection Programs."

If a recycling option does not exist, Pennsylvania regulations permit households to put used or broken CFLs in the garbage that have been sealed in two plastic bags. CFLs should not be disposed of in an incinerator.

The regulations do not allow nonhousehold operations (e.g. commercial, industrial or institutional establishments) to dispose of hazardous waste CFLs in the garbage. These CFLs must be sent to a permitted mercury recycling facility. For more information on nonhousehold CFL recycling, visit www.depweb.state.pa.us, keyword: Lamp Recycling.

ENERGY STAR-qualified CFLs have a warranty. If the bulb has failed within the warranty period, the defective CFL should be returned to the manufacturer.

Handle with Care

CFLs can break if dropped or roughly handled. Always screw and unscrew the bulb by its base (not the glass) and never forcefully twist the CFL into a light socket.

On average, each CFL contains 5 milligrams of mercury--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. No mercury is released when CFL bulbs are intact or in use.

Mercury-containing fluorescent lights have been used for decades in offices, commercial and retail establishments, and residences. Mercury is also commonly found in other household items such as thermometers, thermostats and button cell batteries.

The U.S. Environmental Protection Agency has not established a minimum or safe exposure level to mercury, and therefore suggests using a reasonable level of precaution when handling CFLs. Although the risk of exposure to mercury from the occasional broken CFL is very small, it is recommended that pregnant women, infants and young children avoid any exposure.

The EPA provides the following guidelines for safely cleaning up accidentally broken CFLs.

What to do if you accidentally break a bulb:

Before Cleanup: Vent the Room

- Open a window and leave the room for 15 minutes or more.
- Shut off the central forced-air heating/air conditioning system, if you have one.

Cleanup Steps for Hard Surfaces

- Wear gloves, if available, and dispose of when finished.
- Carefully scoop up glass fragments and powder using stiff paper or cardboard and place in a glass jar with metal lid (such as a canning jar) or in a sealed plastic bag.
- Use sticky tape, such as duct tape, to pick up any remaining small glass fragments and powder.
- Wipe the area clean with damp paper towels or disposable wet wipes and place them in the glass jar or plastic bag.
- Do not use a vacuum or broom to clean up the broken bulb on hard surfaces.

Cleanup Steps for Carpeting or Rugs

- Wear gloves, if available, and dispose of when finished.
- Carefully pick up glass fragments and place them in a glass jar with metal lid or in a sealed plastic bag.
- Use sticky tape to pick up any remaining small glass fragments 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 a sealed plastic bag.
- The next few times you vacuum, shut off the central forced-air heating/air conditioning system and open a window before starting.
- Keep the central heating/air conditioning system off and the window open for at least 15 minutes after vacuuming is completed.

Disposal of Clean-up Materials

- Immediately place all cleanup materials, including gloves, outside the building in a trash container or outdoor protected area for the next regular trash collection.
- Wash your hands after disposing of the jars or plastic bags containing clean-up materials.

For more information on Compact Fluorescent Lamps, visit www.energystar.gov.