



Take one.

Take a minute and replace one of your current lightbulbs with this CFL bulb. You'll conserve energy and money.



PPL companies

Compact Fluorescent Lamp (CFL)

Fact Sheet

Smart Saver Tip: Save up to \$27 a year by switching five of your most-used lightbulbs to energy-efficient Compact Fluorescent Lightbulbs (CFL). The more bulbs you change, the more you'll save. *For more Smart Saver tips and ideas, visit www.lge-ku.com.*

CFL FAQ

Q. What are CFLs?

A. CFL stands for Compact Fluorescent Lamp. CFLs are small fluorescent lamps that fit into standard light sockets. They are sometimes referred to as energy-efficient lightbulbs because they last longer and use less energy than traditional (or incandescent) bulbs. Therefore, CFLs are more cost effective than regular incandescent bulbs.

Q. Do CFLs contain mercury?

A. Yes. Because it is mercury that allows the bulb to efficiently generate light, CFLs do contain an average of 4 milligrams of mercury. This is a very small amount, about the size of the tip of a ballpoint pen. Some CFL manufacturers have reduced the amount of mercury contained in each CFL to levels as low as 1.4 to 2.5 milligrams. The mercury is sealed within the glass tubing of the CFL. For comparison purposes, some older thermometers contain about 500 milligrams of mercury (an amount equal to the amount of mercury in 125 CFLs).

Q. Does the mercury in a CFL pose a risk?

A. The mercury inside the CFL cannot escape unless the bulb is broken. Even then, the very small amount of mercury contained in a single CFL is not likely to cause any harm. This said, it does make sense to avoid unnecessary contact with the mercury, and any bulb — broken or not — should be handled with proper care. Below are special handling and clean-up instructions recommended by the Environmental Protection Agency (EPA).

Q. How should I deal with a broken CFL?

A. Because CFLs contain a small amount of mercury, the EPA recommends the following clean-up and disposal guidelines:

Step one: Ventilate the room

- Have people and pets leave the room, and don't let anyone walk through the breakage area on their way out.
- Open a window and leave the room for 15 minutes or more.
- Turn off your central air/heating system (if you have one).

Step two: For hard surfaces

- Wearing rubber gloves and using stiff paper or cardboard, carefully scoop up any glass bulb fragments and powder. Place them in a glass jar with metal lid (such as a canning jar) or sealed plastic bag. (Use a zipper-locked bag or tie a plastic bag with string or a twist tie.)
- Use sticky tape, such as duct tape, to pick up any remaining small glass fragments and powder. Place in a jar or baggie.
- 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.

Step three: For carpeting or rugs

- Wearing rubber gloves, carefully pick up glass fragments and place them in a glass jar with metal lid (such as a canning jar) or in a sealed plastic bag. (Use a zipper-locked bag or tie a plastic bag with string or a twist tie.)
- Use sticky tape, such as duct tape, to pick up any remaining small glass fragments and powder. Place in a jar or baggie.
- If vacuuming is needed once all visible materials have been 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. (Use a zipperlocked bag or tie a plastic bag with string or a twist tie.)

Step four: For clothing, bedding, etc.

- If clothing or bedding materials come into direct contact with broken glass or mercury-containing powder from inside the bulb, the clothing or bedding should be placed in a garbage bag. Seal it and place it outside in a covered trash container. Do not wash this clothing or bedding in your washing machine because mercury fragments in the clothing may contaminate the machine and/or pollute sewage.
- You can wash clothing or other materials that have been exposed to the mercury vapor from a broken CFL, including the clothes you wore when cleaning up the broken CFL, as long as that clothing has not come into direct contact with the materials from the broken bulb.
- If shoes come into direct contact with broken glass or mercury-containing powder from the bulb, wipe them off with damp paper towels or disposable wet wipes. Place the towels or wipes in a glass jar or plastic bag for disposal.

Step five: Disposal of clean-up materials

- Immediately place all clean-up materials in a garbage bag. Seal it and place it outside in a covered trash container.
- Wash your hands after disposing of the jars or plastic bags containing clean-up materials.
- Check with your local or state government about disposal requirements in your specific area. Some areas allow these materials to be picked up as part of the normal trash pick-up;* however, some states prohibit such trash disposal and require that broken and unbroken mercury-containing bulbs be taken to a local recycling or hazardous materials disposal center.

* If your local government allows you to place used or broken CFLs in the garbage, seal the bulb in two plastic bags and place it in an outside trash container or other protected outside location for your next normal trash collection. Never send a fluorescent lightbulb or any other mercury-containing product to an incinerator.

Step six: Future cleaning of carpeting or rugs

- The next several times you vacuum, turn off the central air/heating system.
- Open a window prior to vacuuming.
- Keep the central heating/air conditioning system turned off and the window open for at least 15 minutes after vacuuming is completed.

Q. What if I have already cleaned up a broken CFL but did not follow the guidelines provided by the EPA?

A. Don't panic. Review these guidelines to see if anything beyond the steps you have already taken needs to be done. If there is any remaining debris, follow the steps for proper clean-up and disposal outlined in Steps One through Five in this document.

The Environmental Protection Agency (EPA) offers conservative guidelines for cleaning up broken CFLs and disposing of the fragments and particles. Their guidelines are based on several scientific studies that have been conducted to date. These studies are based on chronic — or long-term — exposure to mercury vapors, such as if you have been exposed to mercury on a regular basis as part of your job.

The EPA plans to conduct its own study to quantify the exposure levels associated with a broken CFL inside the home and will likely update its guidelines based on the findings of this study. For more information about exposure to mercury, or if you are still concerned about your own exposure to mercury, consult your physician.

To find out more about Compact Fluorescent Lightbulbs (CFL), including information about how to choose the right lights/bulbs for your home, visit www.energystar.gov.

According to ENERGY STAR®, if every American home replaced just one lightbulb with an ENERGY STAR qualified bulb, we would save enough energy to light more than three million homes for a year, more than \$600 million in annual energy costs, and prevent greenhouse gases equivalent to the emissions of more than 800,000 cars.