



# CUB Facts CFLs

## The facts on CFLs and mercury

### What are they?

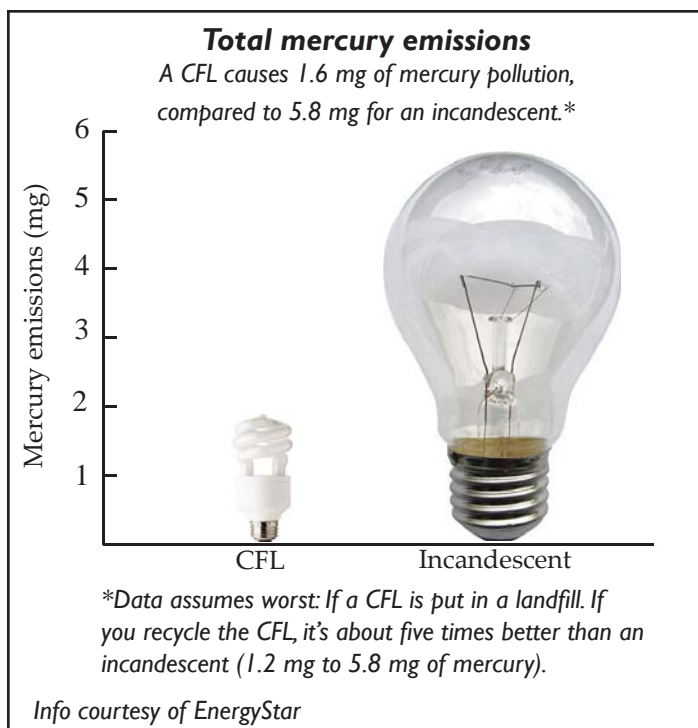
CFLs, or compact fluorescent light bulbs, are used just like ordinary incandescent light bulbs and can be screwed into regular light sockets. Don't let the word "fluorescent" turn you off. CFLs can produce many different shades of light, including the soft white of incandescent bulbs. Look for CFLs labeled "warm white" or "soft white" for traditional home lighting.



### What are the benefits of CFLs?

CFLs use 75 percent less energy than traditional light bulbs and can last up to 10 times as long. Lighting accounts for approximately 10 to 20 percent of your electric bill, so CFLs can result in big savings. Each bulb can cut your electric bill by up to \$10 a year. CFLs also generate 75 percent less heat than incandescent bulbs, which really makes a difference in the summer. According to [www.EnergyStar.gov](http://www.EnergyStar.gov), if every American home replaced just one incandescent bulb with a CFL, in one year enough energy would be saved to light more than 3 million homes and prevent the amount of pollution released by 800,000 cars.

Because CFLs use less energy than ordinary light bulbs, they reduce the amount of pollution created by coal-fired power plants. A 60-watt incandescent bulb causes more than three times the mercury emissions of a CFL—even if that CFL is mistakenly thrown in a landfill, according to EnergyStar.gov (See chart in next column). If you do recycle your CFL and keep it out of a landfill, EnergyStar.gov says, it's about five times better than an incandescent in terms of mercury emissions. So CUB urges everyone to recycle CFLs!



### How do I dispose of a CFL?

Much like batteries, CFLs should not simply be tossed in the garbage, but should instead be recycled. Here is how to get rid of your CFL:

- 1) Unscrew the bulb by the base, not the glass.
- 2) Recycle it. Most Ace Hardware, Home Depot and IKEA stores have special containers to recycle CFLs.



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See:

[www.earth911.org](http://www.earth911.org)

[www.epa.gov/bulbrecycling](http://www.epa.gov/bulbrecycling)

3) If you can't find recycling, seal the bulb in two plastic bags and put it in the outside trash. Never put a CFL in an incinerator.

### **How do I clean up a broken CFL?**

CFLs only contain about five milligrams of mercury — what could fit on the head of a ballpoint pen. That's about 100 times less than old thermometers. CFLs do not emit any mercury unless they break, and a broken CFL can be cleaned up safely by taking simple precautions recommended by the Environmental Protection Agency:

- 1) Open a window and air out the room.
- 2) Wear disposable gloves or use a damp paper towel to carefully scoop up large pieces with a stiff piece of paper or cardboard. Place them in a sealed plastic bag.
- 3) Wipe the area clean with a damp paper towel or disposable wet wipe and place them in the bag also.
- 4) Sticky tape may be helpful when picking up smaller pieces and those lodged in carpeting.
- 5) Place all clean-up materials in a second sealed plastic bag and throw it in the outdoor trash.
- 6) Don't use a vacuum or broom on a hard surface. On carpet, if you vacuum remove the vacuum bag afterwards or empty and wipe the canister clean. Put the bag or vacuum debris in a sealed plastic bag.
- 7) Wash your hands when finished.

### **Is the government mandating CFLs?**

CFLs are not be mandated. However, the 2007 Energy Independence and Security Act requires all light bulbs to use 30 percent less energy than today's incandescents by 2012 to 2014. By 2020, all bulbs must be 70 percent more efficient than they are now. Although the law does require bulbs to be more efficient, it is possible that incandescent bulbs or other emerging technologies such as LEDs could meet the new standards. Currently, CFLs meet both the 2012 and 2020 standards.

### **How do I choose the right CFL?**

By choosing the proper CFL for each fixture, you help ensure maximum energy efficiency. Here are some tips from Energy Star's website, [www.energystar.gov](http://www.energystar.gov), on how to choose the right bulb for you:

- CFLs perform best in open fixtures that allow air-flow, such as table and floor lamps, and outdoors.
- CFLs produce varying shades of white light. Bulbs with lower Kelvin numbers have a warmer color, while those with higher Kelvin numbers have a cooler color.
- If a light fixture is connected to a dimmer or three-way socket fixture, you'll need to use a CFL designed specifically for these applications.
- Choose a qualified CFL that offers a shade of white light that works best for you. For example, while most CFLs provide warm or soft white light for your home, you could choose a cooler color for task lighting.
- Choose a CFL equivalent to the incandescent bulb you are replacing. Light bulb manufacturers include this information right on the product packaging to make it easy to choose the right bulb. Common terms include "Soft White 60" or "60 Watt Replacement."
- Most CFLs will function in temperatures as low as -10 degrees Fahrenheit. Install "weatherproof" bulbs outside since they will resist moisture.

## CFL Shopping Guide

CFLs are available at almost any store that sells incandescent bulbs.

Ideal locations for CFLs include your living or family room, the kitchen, dining room, and bedrooms.

Below, CUB summarizes the styles of compact fluorescent bulbs that are available and the recommendations for different kinds of fixtures.

### Types of CFLs



#### Spiral

The most popular type of CFL, these bulbs create the same amount of light as traditional incandescents, but use less energy.



#### Tubed

These work well in lamps that have slender covers, such as wall sconces.



#### Covered A-Shaped

These bulbs combine the efficiency of a CFL with the look and feel of traditional incandescents.



#### Candle (Bullet)

These are ideal for decorative fixtures where you can see the bulb, and tight-fitting fixtures where a covered globe won't fit.



#### Covered Globe

This bulb is ideal for use where you can see the bulbs, such as bathroom vanity bars and ceiling pendants. Basically, it's a spiral bulb with a decorative cover.



#### Indoor Reflector

These bulbs direct light out of the fixture (think of recessed lights in a kitchen or a ceiling fan). Some can be used with a dimmer. Check the packaging.



#### Outdoor Reflector

These bulbs are sealed to withstand the rain and snow. Using them with timers, photocells, and motion sensors will probably shorten their life.

Images courtesy of EnergyStar.gov