



## Compact Fluorescent Light Bulbs

### What is a compact fluorescent light (CFL) bulb?

A CFL bulb is a type of light bulb that screws into a standard light socket, such as a lamp or ceiling light fixture. CFLs use much less energy and last up to 10 times longer than standard light bulbs.



### What is in a CFL bulb?

A CFL bulb is made of glass, a ceramic and metal base, a powder called phosphor, and a small amount of mercury.

### How much mercury is there in a CFL bulb?

The amount of mercury in a CFL bulb is very, very small. The mercury in the bulb is in the form of an invisible vapor or a mercury bead. The bead is about the size of the period at the end of this sentence. A mercury fever thermometer has about 100 times more mercury than a CFL bulb.

### Should I use regular light bulbs instead of CFLs?

CFLs are safe to use. The risk of harm from a broken CFL bulb is very small. And these bulbs use a lot less energy than regular light bulbs. Using CFLs cuts way down on the amount of mercury put into the air from coal-burning power plants.

### Is it harmful is it to be in the room where a CFL bulb has broken?

The amount of mercury vapor that is released from one broken bulb is not enough to make anyone sick. However, it is best to avoid any exposure to mercury. We recommend that you ventilate the room air to the outdoors by opening a window or a door. Leave the room for at least 15 minutes before cleaning up the broken bulb.

### How should I clean up a broken CFL bulb?

It is **not** necessary to hire a professional. By following the directions below, you can safely do the cleanup yourself.

**Open a window or door** and leave the room for at least 15 minutes. Any mercury vapor that is in the room will ventilate to the outdoors.

**Do not vacuum yet.** Vacuuming will spread any mercury vapor that is in the room to other areas. Ventilating the room first should get rid of any vapor from the bulb.

**For a break on a hard surface** - Collect the pieces as you would any broken bulb using a broom and two pieces of cardboard or stiff paper. Do not use a metal dustpan because the mercury will stick to it. Place the broken pieces in a reclosable plastic bag. A damp disposable rag or paper towel should be used to do a final wipe of the area. Place the rag or paper towel in the bag with the broken bulb pieces, seal the bag and throw it away in your household trash.

**For a break on carpeting or other soft items like furniture, toys, bedding or clothes** - Collect and bag the broken parts using the above steps. Use the sticky side of duct tape or packaging tape to pick any remaining powder and pieces of glass. Put the tape in the bag. Seal the bag and throw it away in your household trash.

Carpeting will trap more mercury than hard surfaces. Keep people and pets off the carpeting for a couple of weeks in case there are any small pieces of glass left. By then, any mercury vapor should be gone and the carpeting can be safely vacuumed. (Raising the room temperature while ventilating the air to the outdoors will make this process go faster.) Change the vacuum cleaner bag or empty its dust cup after vacuuming the area. Other soft surface items can be placed in a garage for a few days or outside on a sunny day to get rid of any remaining mercury vapor.

You may want to consider using standard light bulbs in carpeted bedrooms or playrooms where children or pregnant women spend a lot of time.

### **What if I broke a CFL bulb awhile ago?**

If it's been a few days or longer since the bulb broke and you cleaned it up as described above, there's little to no risk to your health. If you still have questions, call the Michigan Department of Community Health at 1-800-648-6942.

### **What should I do with my CFL bulb when it burns out?**

The best way to get rid of unbroken bulbs is to recycle them. Check with your local home supply store or the store where you bought your bulb to see if they recycle CFLs. You can also call your local health department, local recycling center or visit <http://earth911.com/household/light-bulbs/> to find recyclers. If you need to throw a CFL bulb out, seal it in two plastic bags, one inside the other, and throw it in the outside trash. Never burn a CFL bulb.

### **What about electric lamps and ballasts?**

For proper disposal and cleanup instructions, visit [www.deq.state.mi.us/documents/deq-ead-tas-eleclamp.pdf](http://www.deq.state.mi.us/documents/deq-ead-tas-eleclamp.pdf) or call the Department of Environmental Quality, 1-800-662-9278.

### **Where can I get more information?**

For more information on this and other environmental health issues, please contact the Michigan Department of Community Health at 1-800-648-6942. You can also find information on these websites, <http://www.michigan.gov/mdch-toxic> or <http://www.michigan.gov/mercury>.