



Compact Fluorescent Light Bulb Fact Sheet

Public Health
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What is a compact fluorescent light (CFL) bulb?

A CFL bulb is a type of light bulb that fits into a standard light socket. CFLs use much less energy and last much 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. These bulbs use a lot less energy than regular light bulbs. Using CFLs cuts down significantly on the amount of mercury put into the air from coal-burning power plants.

Is it harmful to be in a 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 right away. 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 using a broom and two pieces of cardboard. Do not use a metal dustpan; mercury will stick to it. Place the broken pieces in a reclosable plastic bag. A damp paper towel should be used to do a final wipe of the area. Place the paper towel in the bag with the broken pieces, seal the bag and put it in the 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. Put the tape in the bag. Seal the bag and throw it away in the trash.

Carpeting will trap more mercury than hard surfaces. Keep people and pets off the carpeting for a couple of weeks. 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.

What should I do with a burnt out CFL bulb?

The best way to get rid of unbroken CFLs is to recycle them. At the health department we accept unbroken CFLs for recycling. They are also accepted at all Home Depot stores.

Source: Michigan Department of Community Health

For more information on mercury:

Michigan Department of Community Health

www.michigan.gov/mercury

Toll Free 1-800-648-6942

Michigan Department of Environmental Quality

www.michigan.gov/deq