



Compact Fluorescent Light Bulbs Information for the Public

What is a compact fluorescent lamp (CFL) bulb?

A CFL bulb is a type of fluorescent 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 compact fluorescent lamp (CFL) bulb?

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

How much mercury is contained in a CFL bulb?

Manufacturers report that the amount of mercury contained in a CFL bulb is five milligrams, which is less than two ten-thousandths of an ounce. The mercury could be in the form of an invisible vapor or in a bead the size of the period at the end of this sentence. A mercury fever thermometer contains about 100 times more mercury than a CFL bulb.

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 and leave the room for a few hours before cleaning up the broken bulb.

How should I clean up a broken CFL bulb?

It is **not** necessary to hire a professional to clean up the bulb. By following the directions below, you can safely clean up a broken CFL bulb.

Do not vacuum the area because this will spread any mercury vapor temporarily present to other areas of the room.

For breakage on a hard surface, you should collect the pieces as you would any broken glass using a broom, two pieces of cardboard or stiff paper. Do not use a metal dustpan because the mercury will bind to it. Place the broken pieces in a reclosable plastic bag. Be careful not to cut yourself on any sharp edges. 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 and dispose of it in your household trash.

For breakage on a carpet or other soft surface like upholstered furniture, carefully collect and bag the broken parts using the method described above. Dab the area with the sticky side of duct tape or packaging tape to pick up any powder residue and small pieces of glass. Place the tape in the bag and dispose of it in your household trash. To prevent cuts from glass, protect the area from human or pet traffic for a couple of weeks until any mercury vapor is ventilated away and the carpeting can be vacuumed safely. Increasing the room temperature while ventilating the air to the outdoors will make this process go faster. Affected furniture can be placed in a garage for a few days or outside on a sunny day to drive off any remaining mercury vapors.

Should I use incandescent bulbs that don't contain mercury instead of CFLs in order to be safe?

The risk of exposure to mercury from the occasional broken CFL bulb is very small. And, using CFLs reduces the amount mercury in the air by reducing the amount of electricity that power companies need to produce. A coal-fired powered plant releases up to four times the amount of mercury contained in a single CFL bulb in order to provide the amount of power needed to light one standard light bulb.

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

CFLs should not be put in household trash if there is an opportunity to recycle them. Check with your local recycling center or health department to find what your options are.

Where can I get more information?

For more information on this and other environmental health issues, please contact the **Division of Environmental Health** at the Michigan Department of Community Health:

1-800 MITOXIC (1-800-648-6942) or visit www.michigan.gov/mdch-toxic.