



Health and Wellness

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Compact Fluorescent Lights (CFL) Concerns

Recently, a fake training newsletter was circulated on the Internet about the dangers of compact fluorescent lights (CFLs). Although the source of the newsletter was not authenticated, there are dangers associated with CFL bulbs because they contain small amounts of mercury vapor. Below are some frequently asked questions about CFLs as well as cleanup procedures if they are accidentally broken. The answers are from <http://www.energystar.gov>.

Do CFLs contain mercury?

CFLs contain a small amount of mercury sealed within the glass tubing – an average of 4 milligrams (mg). Some manufacturers have even made further reductions, dropping mercury content to 1 mg per light bulb. No mercury is released when the bulbs are intact (not broken) or in use.

What is mercury?

Mercury is an element (Hg on the periodic table) found naturally in the environment. Mercury emissions in the air can come from both natural and man-made sources.

What precautions should be taken when using CFLs?

Most mercury vapor inside fluorescent light bulbs becomes bound to the inside of the light bulb as it is used. CFLs are made of glass and can break if dropped or roughly handled. Be careful when removing the bulb from its packaging, installing it, or replacing it. Always screw and unscrew the light bulb by its base (not the glass), and never forcefully twist the CFL into a light socket. If a CFL breaks, follow the cleanup recommendations below. Used CFLs should be disposed of properly.

How should I clean up a broken fluorescent bulb?

Fluorescent light bulbs contain a small amount of mercury sealed within the glass tubing. When a fluorescent bulb breaks, some of this mercury is released as mercury vapor. To minimize exposure to mercury vapor, EPA recommends following cleanup and disposal steps as described below. For more detailed cleanup recommendations go to: <http://epa.gov/cfl/cflcleanup.html>.

Before Cleanup:

Have people and pets leave the room.

- Air out the room for 5-10 minutes by opening a window or door to the outdoor environment.
- Shut off the any central forced air heating/air-conditioning system.
- Collect materials needed to clean up the broken bulb such as stiff paper or



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- cardboard; sticky tape; damp paper towels or disposable wet wipes (for hard surfaces); and a glass jar with a metal lid or a sealable plastic bag.

During Cleanup:

- DO NOT VACUUM. Vacuuming is not recommended unless broken glass remains after all other cleanup steps have been taken. Vacuuming could spread mercury-containing powder or mercury vapor.
- Be thorough in collecting broken glass and visible powder.
- Place cleanup materials in a sealable container.

After Cleanup:

- Promptly place all bulb debris and cleanup materials, including vacuum cleaner bags, outdoors in a trash container or protected area until materials can be disposed of. Avoid leaving any bulb fragments or cleanup materials indoors.
- Next, check with your local government about disposal requirements in your area, because some localities require fluorescent bulbs (broken or unbroken) be taken to a local recycling center. If there is no such requirement in your area, you can dispose of the materials with your household trash.
- If practical, continue to air out the room where the bulb was broken and leave the heating/air conditioning system shut off for several hours.