Create Healthy Homes

Environmental Design and Inspection Services

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Revised Clean-Up Recommendations for Broken Compact Fluorescent Lamps (CFLs)

Note: The following guidelines are taken from the Maine Compact Fluorescent Lamp Breakage Study Report conducted by the Maine Department of Environmental Protection (http://www.maine.gov/dep/index.shtml), available as a downloadable PDF file by clicking on http://www.maine.gov/dep/rwm/homeowner/cflreport.htm.

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I highly recommend that you read the Conclusions and Discussion on page 63 of the report for important information on what happens when a CFL breaks on a carpeted floor. Dangerously high levels of mercury vapor were detected for weeks after the broken lamp was thought to be completely cleaned up.

One thing you do not want to do is to run your vacuum cleaner over the fragments and mercury dust of a broken CFL. You can pretty much throw the vacuum cleaner away after that. Otherwise you risk contaminating everywhere else you use the vacuum cleaner once it draws up mercury dust.

There is also concern that a CFL that breaks over a carpet necessitates the homeowner removing the carpet altogether, particularly if small children will be playing on or near that carpet. Read the report for details.

Click on http://www.maine.gov/dep/rwm/homeowner/cflreport.htm to download and view the entire report, and go to page 63 for the Conclusion and Discussion.

Here are the revised cleanup guidelines developed as a result of this study:

"Appendix E: Revised Cleanup Guidance

Revised Clean-Up Recommendations for Broken Compact Fluorescent Lamps (CFLs)

"What if I accidentally break a fluorescent lamp in my home?

"The lamp contains a small amount of mercury, but you can clean this up yourself if you do the following:

- Do not use a vacuum cleaner to clean up the breakage. This will spread the mercury vapor and dust throughout the area and could potentially contaminate the vacuum.
- 2. Keep people and pets away from the breakage area until the cleanup is complete.
- 3. Ventilate the area by opening windows, and leave the area for 15 minutes before returning to begin the cleanup. Mercury vapor levels will be lower by then.
- 4. For maximum protection and if you have them, wear rubber gloves to protect your hands from the sharp glass.
- 5. Carefully remove the larger pieces and place them in a secure closed container, preferably a glass container with a metal screw top lid and seal like a canning jar. (Other jars that can be made of glass and also work are pickle, peanut butter and applesauce jars. Not ideal but also a good choice for containing breakage is a heavy duty #2 plastic container with either a screw lid or push-on lid such as a joint compound bucket or certain kitty litter-type containers.) A glass jar with a good seal works best to contain any mercury vapors inside. (If the only suitable jar available has food in it, you may need to empty it
- 6. into another container before using it.)
- 7. Next, begin collecting the smaller pieces and dust. You can use two stiff pieces of paper such as index cards or playing cards to scoop up pieces.
- Pat the area with the sticky side of duct tape, packing tape or masking tape to pick up fine particles. Wipe the area with a wet wipe or damp paper towel to pick up even finer
- 9. Put all waste and materials into the glass container, including all material used in the cleanup that may have been contaminated with mercury. Label the container as "Universal Waste broken lamp."
- 10. Remove the container with the breakage and cleanup materials from your home. This is particularly important if you do not have a glass container.
- 11. Continue ventilating the room for several hours.
- 12. Wash your hands and face.
- 13. Take the glass container with the waste material to a facility that accepts "universal waste" for recycling. To determine where your municipality has made arrangements for recycling of this type of waste, call your municipal office and look for the link to municipal collection sites.
- 14. When a break happens on carpeting, homeowners may consider removing throw rugs or the area of carpet where the breakage occurred as a precaution, particularly if the rug is in an area frequented by infants, small children or pregnant women.

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15. Finally, if the carpet is not removed, open the window to the room during the next several times you vacuum the carpet to provide good ventilation.

"The next time you replace a lamp, consider putting a drop cloth on the floor so that any accidental breakage can be easily cleaned up. If consumers remain concerned regarding safety, they may consider not utilizing fluorescent lamps in situations where they could easily be broken. Consumers may also consider avoiding CFL usage in bedrooms or carpeted areas frequented by infants, small children, or pregnant women. Finally, consider not storing too many used/spent lamps before recycling as that may increase your chances of breakage. Don't forget to properly recycle your used fluorescent bulbs so they don't break and put mercury into our environment."

(End of revised guidelines.)