



**Bureau of Environmental Health  
and Radiation Protection**

“Protect and improve the health of all Ohioans by preventing disease, promoting good health and assuring access to quality care.”

# Broken Compact Fluorescent Lamps (CFL's)

## ODH Public Health Opinion

### Broken Compact Fluorescent Lamps

- The U.S. EPA dictates CFL's contain no more than 5.0 mg of mercury in an *Energy Star* CFL bulb (*learn more about the Energy Star at: [http://www.energystar.gov/index.cfm?c=cfls.pr\\_cfls](http://www.energystar.gov/index.cfm?c=cfls.pr_cfls)* )
- CFL product research conducted by ODH HAS staff indicates the typical CFL bulb contains 3-5 milligrams of mercury. The mercury is used to aid in the intensity of the light source over its 1000+ hour use.
- In comparison to a CFL bulb, a typical household mercury fever thermometer contains from 500 to 1,000 milligrams of mercury (several orders of magnitude more mercury than a CFL bulb).
- Most manufacturers of CFL bulbs use the elemental-metallic mercury (shiny, silver, liquid metal) in their products. However, a few use inert amalgamated solid pellet that contains mercury, thus if their CFL breaks, the mercury would not be available at once in a gas or elemental liquid form.
- Due to the facts that there are very small amounts of mercury contained in a CFL, ODH believes the health threat posed by a CFL break is minimal.

- However, exposure to mercury vapors can potentially cause health problems, especially in sensitive individuals, and proper clean-up and disposal is always advised.
- To learn more about the proper clean-up and disposal of a broken or end-of-life CFL visit the US EPA at: <http://www.epa.gov/cfl/cflcleanup.html> Accessed March 2011

### References:

Energy Star (EPA-DOE)

[http://www.energystar.gov/index.cfm?c=cfls.pr\\_cfls](http://www.energystar.gov/index.cfm?c=cfls.pr_cfls) Accessed March 2011.

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Phillips Lighting Division. ODH HAS staff phone interview. November, 2008

Sylvania Lighting Division. ODH HAS staff phone interview. November, 2008

Greenlight Corp. Lighting Division. ODH HAS staff phone interview. November, 2008

Westinghouse Lighting Division. ODH  
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**Where Can I Get More Information?**

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