

# CFL Questions & Answers re: Mercury content

## I have heard that there is mercury in CFLs. Is this true?

There is a small amount of mercury in CFLs to help them produce light. But this amount is less than one fifth the amount found in a common watch battery. The mercury in a CFL is used to create the light and is totally contained in the fluorescent tube. This chart compares the mercury content in CFLs and in other uses:

### Mercury Content Comparisons

Product	Amount of Mercury	Number of Equivalent CFLs
CFL	5 milligrams	1
Watch battery	25 milligrams	5
Dental amalgams	500 milligrams	100
Home thermometer	500 milligrams to 2 grams	100—400
Float switches in sump pumps	2 grams	400
Tilt thermostat	3 grams	600
Electrical tilt switches and relays	3.5 grams	700

## Should I be concerned about using CFLs in my home?

CFLs are safe in your home. No mercury is released when the bulbs are in use, and they pose no danger to you or your family when handled properly. An extremely small amount of mercury, an average of five milligrams, is sealed within the glass tubing. For a basis of comparison, there are about 500 milligrams to two grams of mercury in your average home thermometer. It would take from 100 to 400 CFLs to equal that same amount of mercury!

## What would the health risks be if a CFL breaks in my home?

Actually, your greatest health risk is being cut from glass shards. Because there is such a small amount of mercury in CFLs, research indicates that there is no immediate health risk to you or your family should the bulb break, especially if cleaned up properly.

## What should I do if a CFL breaks?

In the unlikely event your bulb breaks, be certain to sweep up – don't vacuum – all of the glass fragments and phosphor powder. Place the broken pieces in a plastic bag and wipe the area with a damp paper towel to pick up any stray shards of glass or fine particles. Put the used towel in the plastic bag as well. Like paint, batteries, thermostats and other hazardous household items, CFLs should be disposed of properly. Check with your municipal waste management program for proper disposal. If there is no such program, place in a regular waste container. It is good practice always to clean up any products containing mercury with care and common sense.

### **What does the mercury in a CFL look like?**

It may be difficult to see the mercury for several reasons. Simply put, there's just not much there to begin with. Five milligrams – the average amount in a CFL – is about the size of the tip a ballpoint pen. Additionally, the mercury will be in vapour form or absorbed on the lamp walls, the metal lamp ends or other bulb components. At the end of a bulb's rated life, very little of the mercury is available for release into the environment.

Source: Natural Resources Canada website downloaded Jan 29, 2009.

<http://oee.nrcan.gc.ca/residential/personal/lighting/questions-answers.cfm?attr=4>