## Be Green by Geeta Nadkarni of CBC Montreal

This article is found at:

http://www.cbc.ca/newsatsixmontreal/begreen/2009/06/the\_dark\_side\_of\_the\_cfl.html

(If you choose to skip over the environmental cleanup problem, you get to the medical/public health issues which start at the bottom of page 2. These are of even greater immediate concern to many people.)

# The dark side of the CFL

Broadcast on Friday, Jun. 12, 2009 | 05:44 PM AT



You've heard of CFLs, right? Compact fluorescent lightbulbs. (Cue the violins) They're supposed to be the best thing since sliced bread when it comes to energy efficiency in the home. Our own government wants to ban incandescent lightbulbs (so-called "regular" bulbs that use tungsten and give off heat) by 2012 and force folks to switch over to CFLs. But there's a <u>huge problem</u> with that.

And it might be costing you and your family your health!

#### What's wrong with CFLs?

Environmentally speaking, many things:

\* **Mercury:** CFLs contain mercury, a known neurotoxin. This means that if a lightbulb breaks, you have a hazardous waste problem on your hands. Think I'm exaggerating? Here's what the <u>EPA</u> recommends you do in the case of a broken CFL:

#### Before Clean-up: Air Out the Room

- \* Have people and pets leave the room, and don't let anyone walk through the breakage area on their way out.
- \* Open a window and leave the room for 15 minutes or more.
- \* Shut off the central forced-air heating/air conditioning system, if you have one.

#### Clean-Up Steps for Hard Surfaces

\* Carefully scoop up glass pieces and powder using stiff paper or cardboard and place them in a glass jar with metal lid (such as a canning jar) or in a sealed plastic bag.

\* Use sticky tape, such as duct tape, to pick up any remaining small glass fragments and powder.

\* Wipe the area clean with damp paper towels or disposable wet wipes. Place towels in the glass jar or plastic bag.

\* Do not use a vacuum or broom to clean up the broken bulb on hard surfaces.

## Clean-up Steps for Carpeting or Rug

\* Carefully pick up glass fragments and place them in a glass jar with metal lid (such as a canning jar) or in a sealed plastic bag.

\* Use sticky tape, such as duct tape, to pick up any remaining small glass fragments and powder.

\* If vacuuming is needed after all visible materials are removed, vacuum the area where the bulb was broken.

\* Remove the vacuum bag (or empty and wipe the canister), and put the bag or vacuum debris in a sealed plastic bag.

## Clean-up Steps for Clothing, Bedding and Other Soft Materials

\* If clothing or bedding materials come in direct contact with broken glass or mercury-containing powder from inside the bulb that may stick to the fabric, the clothing or bedding should be thrown away. Do not wash such clothing or bedding because mercury fragments in the clothing may contaminate the machine and/or pollute sewage.

\* You can, however, wash clothing or other materials that have been exposed to the mercury vapor from a broken CFL, such as the clothing you are wearing when you cleaned up the broken CFL, as long as that clothing has not come into direct contact with the materials from the broken bulb.

\* If shoes come into direct contact with broken glass or mercury-containing powder from the bulb, wipe them off with damp paper towels or disposable wet wipes. Place the towels or wipes in a glass jar or plastic bag for disposal.

## **Disposal of Clean-up Materials**

\* Immediately place all clean-up materials outdoors in a trash container or protected area for the next normal trash pickup.

\* Wash your hands after disposing of the jars or plastic bags containing clean-up materials.

\* Check with your local or state government about disposal requirements in your specific area. Some states do not allow such trash disposal. Instead, they require that broken and unbroken mercury-containing bulbs be taken to a local recycling center.

## Future Cleaning of Carpeting or Rug: Air Out the Room During and After Vacuuming

\* The next several times you vacuum, shut off the central forced-air heating/air conditioning system and open a window before vacuuming.

\* Keep the central heating/air conditioning system shut off and the window open for at least 15 minutes after vacuuming is completed.

Scared yet?

## It gets worse...

Even if they don't break, CFLs could be harming your health in a more insidious way. By breaking creating what is known as "<u>dirty electricity</u>". (I suggest you follow that link so you can wrap your head around what dirty electricity is). Then, onwards...

\* **Diabetics:** <u>Dr. Magda Havas</u> from Trent University studied diabetics in the context of EMF (electromagnetic frequencies). She found that those exposed to an environment with dirty electricity showed a spike in blood sugar in as little as half an hour! And when removed to a spot with clean power, their blood sugar dropped back to normal just as quickly. Which means that if you have Type 1 diabetes, you might actually need more insulin if you're in an environment with CFLs.

\* **Multiple Sclerosis:** Dr Havas found that people with MS reported greater neurological symptoms when exposed to dirty power and improved dramatically when the power was cleaned up.

\* Sick Building Syndrome: Dr Havas found that at one school in Wisconsin, kids and teachers were being treated for SBS. Once the buildings had been cleaned up of mold and other contaminants, the kids and teachers came back... and got sick all over again. They did an experiment and cleaned up the EMFs. Lo and behold, 39 of the kids who used inhalers for their asthma stopped needing them in school! And just so you don't think this is some sort of placebo effect, the kids still needed them at home in the same time period!

\* Lupus: Folks with lupus can get radiation burns just from sitting next to a lamp with a CFL bulb in it! Even healthy folks shouldn't install CFLs in fixtures that are less than 1 metre away from their bodies (bedside lamps, reading lamps, desk or worktable lamps, etc). Global's <u>16 X 9</u> has a pretty chilling report on the subject.

\* **Migraines:** There's compelling evidence that some people are electrically sensitive. Dr Havas's research suggests that as many as 1 in 3 Canadians has some degree of electrical sensitivity. And this may cause migraines. And what are these folks going to do in 2012 when there are likely going to be CFLs at work, at home and in the malls? Where will electrically sensitive people hide?

#### Do your own experiment

Dr Havas suggests that if you're suffering from frequent migraines, arthritic aches and pains, a feeling of chronic fatigue, stress, tiredness, rashes or other weird symptoms, try removing ALL the CFLs in your home for a month. See if your symptoms go away. And then decide accordingly.

#### What you should know

\* CFLs chop up the electric current in your home causing dirty electricity.

\* This affects sensitive electrical equipment and we now know that it affects human health as well.

\* Having a CFL on your home's electrical circuit will create dirty electricity ALL ALONG THAT CIRCUIT, not just in the room where the bulb is on! This is why it's important to remove ALL your CFLs if you're doing Dr. Havas's suggested experiment.

\* CFLs create dirty electricity and also give off harmful radio frequencies (that some sensitive people can actually hear!). They also give off UV rays that can harm the very young and those that suffer from lupus and other such illnesses.

\* CFLs aren't the only source of dirty electricity. You should seriously consider bringing all your dimmers and DECT phones and baby monitors (just look on the phone cradle, it should be written on it) to the local eco centre for safe disposal. These items are especially dangerous because they give of harmful EMFs even when not in use!



### Is there an energy efficient but safe alternative?

YES! <u>Tom Nadas</u> makes his living measuring the dirty electricity in people's homes and suggesting safer alternatives. He says that LED lightbulbs are the way of the future. Well, if we can get the government on board!

Why Nadas thinks LEDs are such a good idea:

- \* They're even more energy efficient than most CFLs
- \* They are virtually indestructible and contain no mercury
- \* They last a long, long time (great from both an economic and ecological perspective)
- \* Best of all, they don't give off dirty electricity

#### The cons of LEDs

\* For the moment, they're expensive (just the way that CFLs were when they first came out)

\* They don't give off a ton of light. Yet.

That's it! These are problems that could be fixed if there's enough demand and support. That's my opinion anyway. What's yours? Do you still think CFLs are a bright idea? Or are you going to take yours to an eco-centre? Leave me a comment or call (514) 597-5626.