

CHEMICAL JEOPARDY: What's in my couch?

If your couch was purchased before 2013, there is a good chance that there are flame retardants in the foam cushions. Over time, it has been shown that these chemicals aren't doing what they were intended to do and in fact, expose us to toxic chemicals that have harmful environmental and health impacts.

In 1975 California passed a flammability standard, known as Technical Bulletin (TB) 117. This standard led to flame retardant chemicals being added to polyurethane foam-containing upholstered furniture and baby products (e.g., mattresses, strollers) sold throughout the U.S. Concerns over widespread use of these toxic chemicals led to testing by the U.S. Consumer Product Safety Commission and other groups.

The results showed that use of flame retardants was not only ineffective— but the extensive use of these chemicals posed an unacceptable environmental and public health risk.

Flame retardant chemicals are released from the furniture to the dust in the room, which then gets on our hands and food, and ends up in our bodies. Potential health effects include hormone disruption, cancer, birth defects, and learning disorders. Children are especially vulnerable as their bodies are still developing. Research has shown that these chemicals can also get into our water supply.

After a lengthy battle with the chemical manufacturers, California replaced TB 117 with TB 117-2013, a new standard that went into full effect in 2015. TB 117-2013 actually increases fire resistance by allowing furniture makers to use blends of naturally smolder-proof materials like wool and leather or manufacturing techniques that rely on specific weaves or blends of fibers rather than flame retardant chemicals.

But unfortunately TB 117-2013 does not *prohibit* the use of flame retardant chemicals in new furniture. Some states, including Maine, Vermont, Minnesota and Washington, have gone further by completely banning their use for consumer products. In nearby Boston, MA, the City passed a bill amending their Fire Prevention Code, allowing hospitals, schools,

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Children are more vulnerable to chemicals than adults.

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colleges, and other public buildings with sprinkler systems to use furniture free of toxic flame retardant chemicals. In Connecticut, [An act concerning toxic flame retardant chemicals in children's products and upholstered residential furniture](#) was proposed during the 2016 session, but did not pass.

How can I avoid exposure to these chemicals?

Look for the label. If you are shopping for a new couch or other foam-containing product, or if you want to know if your current furniture contains flame retardants, [read the label](#) (usually found underneath the item or beneath the cushions).

If the label says "Contains No Added Flame Retardants" then it's free of flame retardants and this item is not exposing you to these chemicals.

If the label is marked with "Contains Added Flame Retardants" that means flame retardants have been added.

If the label says the product meets TB 117 standards and has no additional information, the product meets the outdated standard and is likely to contain flame retardants.

If the label says the product meets TB 117-2013 standards and has no other information, it may or may not contain flame retardants. In this case, or if there is no label, ask the retailer or contact the manufacturer to find out. You can also have the [foam tested](#) to see if there are flame retardants in your item.

Keep dust down. Most exposure to flame retardants happens after the chemicals off-gas out from a product's foam and settle into household dust. These chemicals then enter our bodies by hand-to-mouth contact. Vacuuming frequently with a HEPA filter, wet mopping, and dusting with a damp cloth can reduce exposure. Finally, washing your and your children's hands frequently, and always before eating, can help reduce ingestion of dust containing flame retardants.

Reduce your risk by removal. If possible, remove the flame-retardant containing products from your home. Chemical dust will continue to be released, even through an intact cover. But you don't have to toss your whole couch out. If it's well-constructed, it can be reupholstered and the foam in the cushions replaced with a flame retardant-free material, such as polyester, down, cotton, wool or natural latex.

For a list of manufacturers that make furniture without flame retardants or to read more about the subject, go to [greensciencepolicy.org](#), [ewg.org](#), or [nrdc.org](#).

Triclosan Ban

Our Spring 2010 P2 View featured [triclosan](#) in the Chemical Jeopardy spotlight and now there is good news to share. The [U.S. Food and Drug Administration \(FDA\)](#) has [banned](#) 19 antimicrobial chemicals from over-the-counter hand soaps and body wash products, including the most commonly used ingredients — triclosan and triclocarban. Manufacturers were unable to prove these chemicals were more effective than plain soap and water in preventing illnesses and spreading germs. In fact, some data suggests long term exposure to antimicrobials such triclosan can result in bacterial resistance, allergic sensitization or hormonal effects.

Companies will no longer be able to market antibacterial washes with these ingredients; they have one year to either remove these products from the market or reformulate them. This ban only applies to consumer wash products; it does not cover over-the-counter hand sanitizers or wipes, antibacterial products used in health care settings, and other items such as building products like countertops, carpet tiles, and wallcoverings.



How Green is Your Faith Community?

Earth care, creation care, climate justice, and green faith are all ways that religious groups talk about taking action on environmental concerns. Faith congregations are encouraging everything from small actions, like replacing incandescent bulbs with LEDs as well as bigger actions, like upgrading an old boiler to an energy-efficient one or investing in solar.



The Unitarian Society of Hartford Congregation celebrates the installation of their solar panels.

The **Green Houses of Worship** is a multi-level environmental stewardship program recently launched by Connecticut's **Interreligious Eco-Justice Network (IREJN)**. The program grants certificates of achievement to congregations of any faith in the state that implement eco-friendly practices. Already four houses of worship (listed below) have been awarded a Green House of Worship plaque in 2016 for their conservation and environmental justice efforts.

The Church of Christ in Goshen, dates their environmental activism to participation in their denomination's **Mission 4/1 Earth** campaign, 50 days of action during which the congregation planted 89 evergreen trees, sent 49 letters to legislators and recorded over 4,700 hours of personal action like saving energy and recycling. Out of this effort a film series started, now in its fourth year, and the inception of a community garden that last year donated hundreds of pounds of fresh, organic produce to food banks in Goshen and Torrington. An energy audit and upgrades also resulted in significant kWh and dollar savings.

The accomplishments of **St. John's Episcopal in Vernon** over the last decade include: installing energy efficient lighting and thermostats in their buildings which cut CO² emissions by 5 tons/year; encouraging parishioners to adopt green steps in their homes which they calculated collectively cut CO² emissions by 23 tons in one year, and establishing an organic vegetable garden that provides over 500 lbs. of produce/year to a local soup kitchen.

Unitarian Universalist Society East in Manchester renovated their building, grounds and operations helping them earn the first **Energy Star** rating for a house of worship in CT, with a score of 98. They installed a geothermal heating, cooling and hot water system, multi-use space design, extensive insulation and high efficiency windows plus lighting and lighting controls. They also have well developed and extensive recycling and composting programs and native species landscaping. Their organic community garden has been a model of intergenerational religious and environmental action.

Unitarian Society of Hartford (USH) recently installed 132 solar panels on their grounds that will supply the anticipated electrical needs of 46,000 kWh annually while saving as much as \$600,000 over the two or more decades the system will generate energy. Other USH environmental accomplishments include leadership in the **CT Climate Stewardship Summit**, use of durable food and service ware rather than disposables, annual holiday re-gifting sale, green cleaners throughout the building, and no pesticides used on the grounds.

Other faith communities are caring for the earth in a variety of ways, including reducing their energy use. **Congregation Mishkan Israel (CMI) in Hamden** headed by Rabbi Brockman is in the middle of a very large effort to cut energy consumption. Congregation members report that supporting and learning from the Houses of Worship program could be very motivating for them and for others. **Energize CT** offers religious organizations, like CMI, access to free energy assessments and low cost financing for lighting and major building and grounds upgrades.

Calvary Temple Christian Center in Bridgeport is being proactive and going green in the face of climate-related storms. After Storm Sandy devastated the state's shoreline, the congregation spent \$800,000 to reinforce their almost 160 year-old building. They then approached **C-Pace**, a program of the CT Green Bank, to help them get low cost financing for a more efficient boiler. The new boiler along with incentives from UI for lighting, reduced annual utility costs by over \$13,000 per year.

The journey to care for the earth starts with small achievable steps that any congregation can begin to take. Check out www.ct.gov/DEEP/IP2 to check out ways your faith community can be more eco-friendly in your building and in your congregation.

Ask Eartha



I put my recyclables in a plastic bag and then bring the bag to the large recycling container for my apartment building. I was recently told I shouldn't be putting the plastic bags in there. Why not? Aren't all plastics recyclable? — Maria S., Middletown, CT

The quick answer is that bags literally muck up the works! Facilities that process our recyclables agree that plastic bags are one of the worst recycling contaminants in our state's recyclables. Plastic bags and other plastic film should never be put in with the other items in your single stream recycling container. If you keep your recyclables in a plastic bag, that's fine, but just remember to remove the plastic bag when you empty the items into the large container.

Single stream recycling is being utilized by most Connecticut communities. This collection method allows for newspapers, cardboard and magazines to be mixed with glass, metal and plastic bottles and cans, all in the same bin. In the past few years, many towns have changed how they collect recyclables, providing a larger container or wheeled cart to residents/customers and expanding the list of acceptable items. It's very important however to put only what can be recycled into the single stream bin, and not to put other items in just because the container is larger. This notion holds true whether you have curbside pick-up, take your items to

a transfer station or recycle it at your condo or apartment complex.

The bottles, cans, and paper in your bin go to a recycling plant where they are sorted. Although these facilities have systems to pull or blow plastic bags off the line, unfortunately most bags end up tangled in the equipment causing safety concerns for workers. It is also costly for the facility because they must shut down the equipment to remove the tangled bags by hand. Bags that are recovered are often dirty or wet making them impossible to recycle and end up in the trash.

There is a correct way to recycle plastic bags, but it's not with single stream. To get the word out, DEEP, in partnership with the American Chemistry Council, plans to kick-off a CT WRAP initiative by the end of 2016 to increase recycling of plastic bags and film. The effort encourages



residents to return their bags and plastic film to retail stores and stop putting in them in their single stream container. The WRAP project includes local recycling coordinators and retailers, such as grocery stores.

Many of us may be aware that grocers have a collection bin for plastic bags at the front of the store — but did you know you can recycle more than just bags?

Plastic film includes newspaper bags, bubble wrap, bread bags, produce bags, film packaging wrapped around toilet paper, paper towels, diapers, and bottled water. The key is to keep materials clean and dry. A full list can be found on the WRAP website — plasticfilmrecycling.org. Other communities that have implemented the program have found that plastic bags are only a third of the plastic film that we generate at home. So help us collect “More than Bags” and return your bags and other plastic film to participating retailers found on [WRAP's Drop Off Directory](#).

Eartha

Eartha answers selected environmental questions. Email your question to judith.prill@ct.gov and watch future issues for your answer.

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