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6 Risky Chemicals You're Carrying in Your Body

In the most comprehensive testing to date, the CDC finds Americans are exposed to 212 chemicals. Here's how to avoid six of the riskiest.

The Centers for Disease Control and Prevention has released its latest assessment of the chemicals we're all carrying around in our bodies. The [biomonitoring study](#) is the most comprehensive in the world, measuring 212 chemicals in the blood and urine of 8,000 Americans. That's more than 40% more chemicals than have ever been tested for before.

The results: You can find 212 chemicals in the blood and urine of Americans if you look for them.

But what does it mean for your health? The CDC highlighted a few chemicals because they are both widespread -- found in all or most people tested -- and potentially harmful. Here's a look at what they are and how you can try to avoid them.

Polybrominated diphenyl ethers

Better known as "flame retardants" PBDEs are used widely in all sorts of goods -- from foam furniture to electronics -- to reduce fire risk. They also accumulate in human fat, and some studies suggest they may harm the liver and kidneys as well as the neurological system. Some states, including California, Washington and Maine, have restricted the use of certain PBDEs deemed the highest health risk. Short of such bans, avoiding them is difficult because the chemicals are integrated into so many common products.

Bisphenol A

BPA, which is found in many plastics, in the lining of cans and even coating many sales receipts, was found in more than 90% of Americans tested. The health concerns about BPA are many and growing. While BPA-free products are available, it can be difficult to choose them unless you do research ahead of time. The Daily Green has a [list of many products containing BPA](#) to help.

PFOA

PFOA and other perfluorinated chemicals found in most Americans are used to create heat-resistant and non-stick coatings on cookware, as well as [grease-resistant food packaging](#) and stain-resistant clothing. Studies have linked these chemicals to a range of health problems, including infertility in women, and to liver, immune system, developmental and reproductive problems in lab animals. Avoiding them can be difficult, but avoiding products that contain them is a first step.

Acrylamide

Formed when carbohydrates are cooked at high temperatures (French fries anyone?) and as a byproduct of tobacco smoke, acrylamide and its metabolites are extremely common in Americans. While the risks of low-level exposure aren't well known, high-level exposure has caused cancer and neurological problems in lab animals and workers, respectively. Avoiding it in food comes down to [food choice, storage and preparation](#), according to the Food and Drug Administration. Examples include boiling or baking potatoes, rather than frying them, or soaking them in water before frying; toasting bread only lightly; and moderating the drinking of coffee, which gets acrylamide in the roasting process.

Mercury

The main source of mercury -- a potent neurotoxin that can lead to permanent brain damage if young children or fetuses are exposed -- continues to be contaminated fish. To avoid mercury, you have to educate yourself about [which fish are safe](#). [Several guides](#) exist to help make a smart choice at the fish counter.

MTBE

This gasoline additive has been phased out of use in the U.S., in favor of ethanol, but it still can be detected widely in American's bodies. (It has contaminated many drinking water supplies.) While the health risks are not well defined, studies have linked it to a variety of potential problems, including neurological and reproductive damage.

The good news in the CDC report is that effective regulation can really reduce harmful exposures to chemicals. Testing reveals that secondhand smoke exposure has declined 70%, for instance, and lead poisoning (as defined by the CDC; some scientists think the acceptable level is too high) now affects less than 2% of children aged 1-5.

The bad news is that, not only are Americans being exposed to many potentially harmful chemicals, in mixtures that are totally untested, but even this most comprehensive testing regimen accounts for less than 1% of the chemicals most Americans are exposed to regularly. The Environmental Protection Agency has identified at least 6,000 chemicals that Americans are routinely exposed to.

Until and unless U.S. regulation of chemicals changes, chemicals will continue to be used in commerce before rigorous safety testing. That means it's up to consumers to avoid chemicals they deem risky.

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