



SILENT SPRING INSTITUTE

Researching the Environment and Women's Health



EXPOSURE SCIENCE PROGRAM

Protecting our homes from toxic trespassers



You can power the science to uncover and eliminate dangerous chemicals where we live, work, and play.



We all have a right to a clean, safe, and healthy environment, and nobody should get sick because of dangerous and unnecessary chemicals.

Yet, Silent Spring scientists are finding chemicals that contribute to cancers and other diseases in our homes, jobs, and neighborhoods. Companies put these chemicals in many of the products we use or encounter every day. The chemicals leach out of products, and ultimately end up in our bodies without our knowledge and without our consent.

How is that possible? Unfortunately, companies in the U.S. can put chemicals in products without testing them first for safety. What's more, companies are often not required to disclose what's in their products. The result: invisible toxic chemicals that trespass into our everyday lives and affect our health.

With your help, Silent Spring's innovative Exposure Science Program will continue to uncover these toxic trespassers and stop them in their tracks.

Our Exposure Science Program is focused on three key questions:

- 1 What chemicals are we exposed to?
- 2 Where do these chemicals come from?
- 3 How can we reduce our exposure?

When you help Silent Spring scientists answer these questions, you are making the invisible visible. Together, we are uncovering the evidence, and exposing the truth. When we reveal the harmful chemicals hiding in our products, homes, and bodies, we can hold manufacturers accountable and change policies to protect you and your loved ones from harm.

“I think of myself as a chemical detective,” says Silent Spring exposure scientist, Dr. Robin Dodson.



Dr. Dodson is an expert at measuring chemicals in indoor air and dust. She and her team study endocrine disrupting chemicals, chemicals that interfere with our hormones and have been linked with reproductive disorders, thyroid disease, asthma, and many cancers including breast cancer.

Silent Spring has identified hundreds of endocrine disrupting chemicals that cause cells to make more estrogen and progesterone, a known risk factor for breast cancer. And these are chemicals that women are routinely exposed to in their everyday lives through personal care products, furniture, food packaging, building materials, drinking water, and many other common sources.



Endocrine disrupting chemicals around the home

Phthalates

vinyl flooring, shower curtains, plastic toys, nail polish

BPA

plastic bottles and food containers, canned food liners, cash receipts

PFAS

drinking water, furniture fabric, outdoor gear, cosmetics, food packaging, non-stick cookware

Flame retardants

furniture foam, insulation, electronics, car seats

Fragrance

cleaning products, shampoos, deodorant, scented candles

Antimicrobials

detergents, body lotion, school supplies, countertops

Pesticides

food, insect sprays, recreational fields

Leading the way

Silent Spring has been a leader in exposure science for nearly three decades. In 2003, our landmark Household Exposure Study was the first to show that consumer products are a major source of exposure to endocrine disrupting chemicals.



Companies used to assert that the chemicals in their products would stay put. But our pioneering research showed that's not the case; chemicals can migrate out of products, accumulate in indoor air and dust, and enter our bodies.

This groundbreaking work inspired the U.S. Environmental Protection Agency to focus on the health impacts of indoor air pollution. It also laid the groundwork for future studies and Silent Spring's continued leadership in environmental health.

30 years of pioneering research

1998

Endocrine disrupting chemicals including BPA detected for the first time in groundwater

2008

Levels of toxic flame retardants in Californians' bodies twice the national average

2012

Testing of more than 200 consumer products shows people exposed to large numbers of harmful chemicals not listed on label

2018

Dozens of endocrine disrupting chemicals found in hair products marketed at Black women and girls

2023

More than 5,000 tons of toxic chemicals released from consumer products every year inside people's homes and workplaces

2003

Dozens of consumer product chemicals measured in air and dust inside people's homes

2010

PFAS found in drinking water on Cape Cod, highest levels in Massachusetts

2017

PFAS chemicals widespread in U.S. fast food packaging

2022

Eco-friendly children's textiles found to contain PFAS

An unjust burden

Some people are more exposed to harmful chemicals than others because of where they live, work, or the products they use. These toxic burdens create alarming health disparities, leading to higher rates of disease among certain groups. But it doesn't have to be that way. Through Silent Spring's exposure science, we can lift these burdens and create a world that is more fair and just.

DID YOU KNOW?



Black women have higher levels of endocrine disrupting chemicals in their bodies compared with White women.



Black women go through puberty at younger ages, have higher rates of uterine fibroids and infertility, and more aggressive forms of breast and endometrial cancers.



Breast cancer risk increases among immigrant women after they move to the United States from countries with lower incidence rates.



Levels of indoor air pollutants tend to be higher in lower-socioeconomic status households.

Your generosity advances our research on the toxic exposures that disproportionately impact women of color, immigrant women, and low-income communities every day. With your help, we can work to address these preventable exposures and inequities, and put everyone on a path to better health.



“When we center those most marginalized in our environmental health research and community efforts, everyone benefits.”

DR. ELISSIA FRANKLIN
SILENT SPRING RESEARCH SCIENTIST

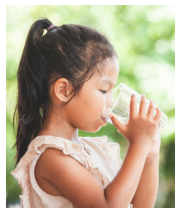
On the case...

Your support funds our most innovative research—work that no one else is doing. Here are some of the ways your partnership can make a difference.



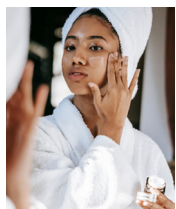
Create a roadmap for healthier homes:

We are leveraging our expertise in tracking indoor air pollutants to develop new effective strategies (e.g. mobile apps) for helping families reduce their exposures and improve overall indoor air quality.



Zero in on health impacts of PFAS in drinking water:

Our leading research on PFAS in drinking water is advancing science on the health effects in children and adults to inform environmental policies and guide medical monitoring for communities with high exposures.



Empower Black women to transition to safer beauty products: We are developing personalized product audits for Black women that identify which products are the riskiest and should be swapped out for safer alternatives. This project can be scaled up to make personalized product audits available to all.



Track people's personal exposures with wristbands:

Using novel high-tech wristbands, we are capturing hundreds of chemicals that people encounter every day, providing a more complete picture of an individual's daily chemical threats and potential health risks.

When you give to Silent Spring's Exposure Science Program, you are helping our scientists bring everyday toxic exposures out from the shadows and into the open where change can happen. Identifying these toxic trespassers helps...

- *Individuals avoid harmful chemicals and choose safer products*
- *Consumers demand that companies stop putting dangerous chemicals in their products*
- *Companies become incentivized to develop safer alternatives*
- *Legislators advocate for more health protective policies*



Knowledge is power

Our science is creating a safer world. Over the past decade, thanks to supporters like you...

- The U.S. Environmental Protection Agency established the first enforceable limits on PFAS chemicals in drinking water.
- Green textile certifiers including Bluesign, AFFIRM, OEKO-TEX, and ZDHC made commitments to include PFAS in their safety criteria.
- Massachusetts banned 11 toxic flame retardants in children's products, mattresses, furniture, and carpeting sold statewide.
- A dozen states phased out PFAS in food packaging.
- California revised its furniture standard to eliminate the need for flame retardants; the federal government followed suit, passing a law requiring all upholstered furniture to comply with California's healthier standard.
- And many more changes to protect women and families...

**Day by day, we're stopping toxic trespassers in their tracks.
But our work is far from over.**

Manufacturers continue to create and put new chemicals in consumer products without adequate safety testing. We need your help so we can continue to shine a spotlight on these practices.

"We have put poisonous and biologically potent chemicals indiscriminately into the hands of persons largely or wholly ignorant of their potential for harm.

We have subjected enormous numbers of people to contact with these poisons, without their consent and often without their knowledge."

RACHEL CARSON, *SILENT SPRING*

When you support our Exposure Science Program, you bring us closer to the day when the "poisons" Rachel Carson described will no longer infiltrate our lives unnoticed.

You can help uncover the toxic chemicals where we live, work, and play. **You** can play a part in shaping laws and policies to protect consumers from harm. **You** can encourage companies to disclose risky ingredients in their products. And, **you** can support the creation of new scientific knowledge that will empower communities and individuals nationwide to create a healthier world for us all.



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and to make a gift, contact**

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