



## Our children depend on us to keep them safe.

But harmful chemicals have slipped into our homes, schools, and workplaces without our knowledge.

These chemicals have been linked to cancer and other serious health problems.

They get into our environment in many different ways—through the packaging our food comes wrapped in, the sofa cushions we relax on, the beauty and hygiene products we use every day, and the water we drink—just to name a few.

Thank you for believing our children deserve better. And for taking action to do something about it.

> Read on to see some of the amazing things your generosity accomplished in 2019.





## Making us safer

WHEN KATHRYN RODGERS was in college, her neuroscience research brought her face to face with a question that has shaped her life ever since.

She learned that a certain chemical she used to trigger neurological disease in her lab experiments was very similar to a widely used agricultural herbicide.

An alarm went off in her head. "Who gets to decide what chemicals are used in agriculture?" she wondered. "Or in anything else, for that matter?"

Kathryn, a scientist at Silent Spring, passionately believes that science must inform how those decisions are made. That's why she takes her research beyond the confines of the lab to the government, corporate, and public communities where real change happens.

Whether she's testifying before the U.S. Consumer Product Safety Commission or writing an op-ed for the *Boston Globe*, Kathryn is committed to getting the word out about the toxic threats we face every day.

She knows that's the only way to persuade decision makers to safely regulate, or eliminate, these chemicals. And to empower individuals to protect themselves.

#### Is your couch safe?

Case in point: the flame-retardant chemicals used to meet industry flammability standards in upholstered furniture.

These chemicals migrate easily from sofas and armchairs into the air and dust—and then into our bodies. And many are linked with serious health problems, like lowered IQ and hyperactivity in children, cancer, hormone disruption, and decreased fertility.

"Regulations that lead to the use of these flame retardants in furniture have health implications," Kathryn says, "so we wanted to know if the data supports the need for them." But Kathryn's work on this issue didn't end with all that data crunching. She took her findings to the Consumer Product Safety Commission (CPSC), the federal agency responsible for protecting us from harm associated with consumer products.

It took some work to get to the right people the ones who could influence federal policy. But over the course of two trips to Washington, D.C., Kathryn presented her work to four of the agency's five commissioners and met with staff statisticians to explain the details.

Kathryn made sure the CPSC had the evidence it needed to make informed decisions about regulating the use of flame retardants in furniture.

"We have to build the world we imagine, the world we want. I'm committed to making the world a safer place for our children."

She analyzed data from 34,000 house fires in Massachusetts to determine whether these toxic chemicals were actually protecting people.

**Kathryn's stunning results** were published in 2019.

The data clearly suggested that flame retardants in furniture do not decrease deaths from the most dangerous fires. And we know these chemicals are harmful to human health.

Because the CPSC can't effectively protect the public without understanding the science.

But for Kathryn, it's not just about the public. It's personal too. She has two small children—ages six and almost two.

"I feel that I have to do this work because our health and our children's health is on the line," she says. "I have to do all I can to protect them. I couldn't live with myself if I didn't."

#### What should you do about your furniture?

You're probably wondering whether your upholstered furniture was manufactured with toxic chemicals and what you should do about it. Here's how to reduce exposures and keep your family safe:

**If it's ripped, fix it.** Furniture purchased before 2013 is likely

to have flame retardants in the cushion filling. Exposed foam can release these chemicals.

**If you're shopping** for new furniture, be sure to look for items with the TB 117-2013 label that says "does not contain added flame retardants."

**Go natural.** Choose carpet and rug pads made from natural materials like felt, jute, or rubber.

**Thanks to your generosity**, we are learning how to help you make your home safer for your family and pets.

# Using science to fight environmental injustice

"Most of us assume that beauty products don't make it onto store shelves unless they've been tested for safety," says Marissa. "Unfortunately, that's not the case."

**IT'S HARD TO BELIEVE**, but companies that make beauty products aren't required to disclose all the ingredients they contain. And many of those ingredients can be harmful to your health.

Marissa Chan, a graduate student at the Harvard T.H. Chan School of Public Health, is determined to change that.

She was introduced to Silent Spring Institute during her college internship with Black Women for Wellness, a Los Angeles-based advocacy and education organization working to improve women's health.

Both organizations were concerned about emerging data showing racial disparities in toxic exposures. Black women, in particular, have greater exposures than other groups—and have higher rates of health problems, including preterm birth, uterine fibroids, infertility, and increasing rates of breast and endometrial cancer.

The two organizations joined forces, with Silent Spring handling the scientific research and Black Women for Wellness managing the outreach and advocacy efforts.

#### Overexposed and under protected

Silent Spring suspected the use of certain hair products among black women, like straighteners and moisturizers, could be a significant factor. "Black women feel forced to use these products to meet our society's beauty standards," says Marissa.

Our research showed that many of these products contain dozens of hazardous chemicals. Among the findings was this particularly disturbing fact: hair relaxers marketed at children contained the highest levels of five chemicals banned in the European Union or regulated in California.

Since Marissa grew up using relaxers to straighten her hair, this wasn't just abstract science—it was personal.

Working with Black Women for Wellness, Marissa did safety workshops in salons on how to minimize exposures, developed policy and legislative bills, and conducted community-based participatory research. "We know these chemicals are harmful," she says, "and we know who is most exposed."



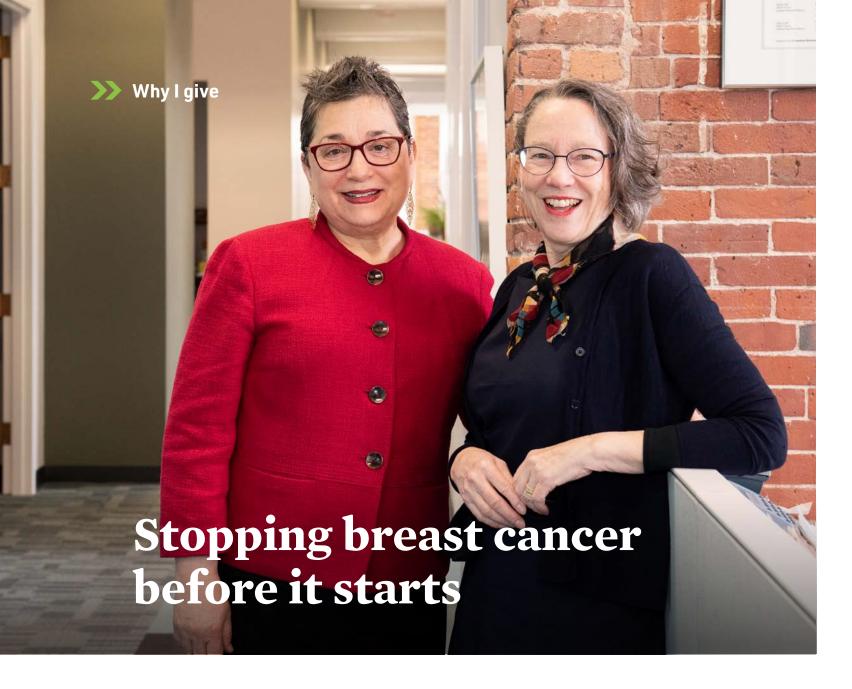
Marissa learned a lot about advocacy from her work with Black Women for Wellness. And she learned a lot about community-based, scientific research from Silent Spring Institute. She decided that she could be most effective with a career that combined both. That's what brought her to Boston to go back to school.

Marissa still follows Silent Spring's research on the toxic effects of chemicals in consumer products. "Silent Spring is an incredibly unique organization, with their focus on fighting environmental injustice as well as uplifting community groups through their research," she says.

Marissa plans to get her PhD and then get a job at a research institute grounded in environmental justice and focused on disparities in chemical exposures. (We happen to know just the place!)

And after that? She'd like to lead a branch of the U.S. Centers for Disease Control and Prevention or the Environmental Protection Agency.

Yes, it's a lofty ambition, but with Marissa's passion, ability, and brilliance, we're pretty sure the sky's the limit. •



Cheri Fox (left), a committed and generous donor, catches up with Dr. Julia Brody, our executive director.

#### "I'M A TWO-TIME BREAST CANCER SURVIVOR

with three daughters and one granddaughter," says Cheri Fox. "I want to support research that is looking for the causes of cancer—not just the cures. Silent Spring is where I've found my funding home."

Cheri received her first breast cancer diagnosis in 1999

At about the same time, Cheri began hearing a lot of talk about a recently launched research organization in the Boston area that was looking into the unusually high incidence of breast cancer on Cape Cod. That organization was us—Silent Spring Institute.

Since the higher-than-average breast cancer rate on the Cape could not be fully explained by the usual risk factors or greater access to mammography, we suspected that environmental factors—exposures to toxic chemicals—might be to blame.

Cheri paid close attention to our progress—because her cancer couldn't be attributed to the usual risk factors either.

There was no history of breast cancer in her family. And after her second diagnosis, a genetic screen showed nothing that would indicate a predisposition to breast cancer.

She became an ardent believer in the

"We all have to have a stake in the future. We all have to be active in helping create the best future for our families, our communities, and our world."

**CHERIFOX** 

importance of identifying the causes of breast—and other—cancers. "It seemed as though more and more people were getting cancer diagnoses," she says. "It can't just be that we're better at detecting it. Something else is going on, and until we figure it out, we'll continue developing all kinds of cancer."

That's why she became one of Silent Spring's amazing donors.

Cheri has an insider's knowledge of what it takes to tackle community health issues. After receiving a Master's in Public Health, she became a community health educator at the School of Public Health at Hebrew University in Israel. More than 30 years of directing a philanthropic foundation taught her a lot about nonprofits and what it takes for an organization to have a real impact.

Cheri brought that savvy to her analysis of Silent Spring and concluded that we are more than worthy of her generous support. She has been donating to Silent Spring since 2002, and with each passing year, she grows more committed to preventing cancer through our unique approach to research and bringing about change.

"A lot of research is abstract—not connected to our lives," says Cheri. "But **Silent Spring's** research has direct implications for how we behave: what to look for on labels, which products to buy, what we put in our bodies, and how to reduce our exposures."

She also knows how important high-quality research is for persuading regulators to protect the public from toxic exposures. "Government won't change its regulations unless science can show

that something is creating a public health problem." And although she's not trained to do research into cancer's environmental causes herself, she's glad she found the scientists at Silent Spring. "When you find something important you believe in," she says, "you need to find the best people and best work in the field—and support them.

"That's the legacy I want to leave for my children. We have an obligation to invest in the future—so there will be a future."

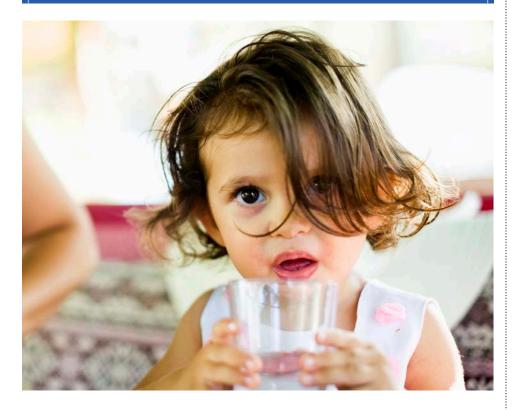
#### Thanks to you—and Cheri manufacturers will have no more excuses!

Cheri directs her donations to Silent Spring's **Safer Chemicals Program**. This program supports a range of research projects designed to zero in on exactly which chemicals in consumer products are most likely to increase breast cancer risk. Once the research is completed, manufacturers will no longer be able to say, "We didn't know these chemicals could cause breast cancer."

Learn more about the Safer Chemicals Program: silentspring.org/saferchemicals



We hope you're proud.... You made these successes and discoveries possible in 2019 – THANK YOU



## Thank you for shining a light on disparities in drinking water quality across the US

THE TRAGIC LEAD CRISIS in Flint,

Michigan, raised some urgent questions. What other communities are suffering from toxic chemicals in their water? And why do vulnerable populations tend to be disproportionately exposed?

With your financial support, Silent Spring's Dr. Laurel Schaider and her colleagues examined water systems serving more than 70% of the US population for nitrate contamination. Nitrates have been linked with cancer and birth defects, and their presence often indicates unsafe levels of other contaminants as well.

Schaider found that 5.6 million Americans are potentially exposed to harmful nitrate levels in their water. And as the proportion of Hispanic residents increases in the community, so does the likelihood of contamination.

We can't yet explain the disparity, but identifying it is the first step toward understanding—and then solving—the problem. Thank you for making it possible.

## You are making waves at major retailers across the country

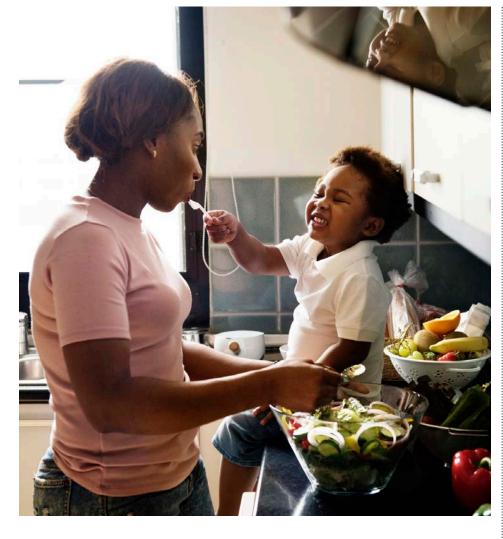
HOME DEPOT IS DOING IT. Lowe's is doing it. So are Staples, Stop & Shop, Hannaford, Food Lion, Taco Bell, and Sephora. The pressure is growing, and when a retailer sees a competitor taking a stand against toxic chemicals in their products, they are stepping up to match them!

All these retailers are launching new policies to get products with toxic, cancer-causing chemicals off their shelves. They are working with their suppliers to find safe alternatives as they proudly declare their commitment to the health of their customers.

And new retailers are joining their ranks every day.

You have made it possible for our scientists to conduct the ground-breaking research that is persuading retailers to stand up and do what's right! Thank you!





### You helped identify an easy way to reduce your exposure to harmful PFAS chemicals

#### HERE'S A REALLY GREAT BENEFIT

of cooking at home: a recent Silent Spring study found that people who eat more meals at home have significantly lower levels of PFAS in their bodies than people who often eat fast foods or restaurant meals.

PFAS are a class of chemicals that have been linked with cancer, thyroid disease, immune suppression, low birth weight, and decreased fertility. If you saw the movie *Dark Waters* last year, you know all about the horrible health effects suffered by people in

Parkersburg, West Virginia, where DuPont had been dumping PFAS into the environment for years, contaminating the drinking water supply.

But PFAS contamination goes way beyond the water supply. These toxic chemicals are also found in many consumer products, including fast food wrappers, pizza boxes, and other food packaging. More home cooking and less eating out can reduce your exposure to PFAS and other harmful chemicals. To your health!

#### Dye-er beware

**GOING GRAY IS BEAUTIFUL**—maybe even more beautiful than you thought.

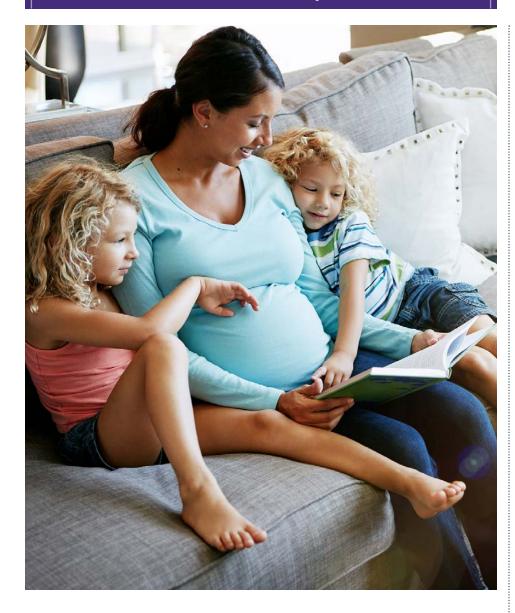
The National Institutes of Health recently released results of a major study on whether women who use permanent hair dye have a higher risk of developing breast cancer. This project expands upon Silent Spring's work showing that some hair products contain chemicals that can affect the breast.

The results showed that women who use permanent hair dye have a higher risk of developing breast cancer than women who don't. And the risk is significantly higher among African American women than white women.

Our advice? Consider using semipermanent or temporary dye instead. Or embrace your natural hair color!



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#### Major milestone in cancer research—thanks to your help

THE AMERICAN ASSOCIATION FOR CANCER RESEARCH (AACR) is the world's largest cancer research professional organization. Yet it has never focused on environmental chemicals as triggers of cancer.

Not until last year, that is.

Last June, AACR hosted its first international scientific meeting on the environmental causes of cancer-and how to prevent cancers by reducing exposures to harmful chemicals.

This year, our executive director and senior scientist, Dr. Julia Brody, was invited to speak about carcinogens in the home at AACR's national meeting. This is the organization's signature event, drawing 23,000 scientists, clinicians, advocates, and policymakers from around the world.

Identifying and preventing the environmental causes of cancer and other diseases has been Silent Spring's mission since we opened our doors 25 years ago. AACR's new focus on this topic shows we're making progress!



#### **WEARESO GRATEFUL FOR YOU!**

You made our 2019 25th anniversary celebration a huge success, raising more than \$650,000 for cancer prevention research.

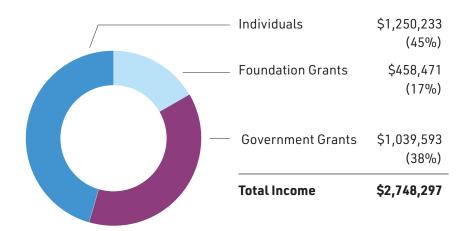
As we write this in March, no one can predict whether we'll be able to gather this fall for our 2020 celebration. Please stay tuned for updates-and to hear how you can help.

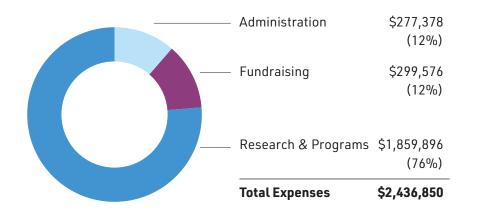
#### Financial Information – Fiscal Year 2019

**DONORS-WE CAN'T DO IT WITHOUT YOU.** The chart below proves it. Last year, your gifts made up more than 60 percent of our income, powering the bulk of everything we do. Thank you for your farsighted generosity.

We promise to invest your donations for the greatest possible impact. If you would like more information, please contact Rachel d'Oronzio Sarvey, Director of Development, at:

sarvey@silentspring.org or 617-332-4288 x215





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#### Detox Me, our app for your smartphone, brings answers to your fingertips

Our free mobile app draws on our 25 years of research on the health risks associated with exposure to toxic chemicals and offers practical advice for healthier living.

Customize it according to your age, gender, and ethnic background for recommendations on reducing your exposure to toxics.

This spring, Detox Me is getting updates and new features that will make it even better!

### Download it today at detoxmeapp.org.





**Use organic practices** when tending to your garden or lawn to protect you and your community from exposure to pesticides.

**Eat more home-cooked meals** to reduce your exposure to PFAS chemicals commonly found in takeout and fast food packaging.

If you dye your hair, avoid permanent hair dyes. Try semipermanent products instead, or even better, embrace your natural hair color.

Choose a quick-drying nylon

shower curtain instead of vinyl, which may contain phthalates and other endocrine-disrupting chemicals.

**Invest in a vacuum** with a motorized brush and HEPA filter to prevent harmful chemicals that accumulate in dust from recirculating in the air.

Avoid sunscreens that contain chemical UV filters that disrupt the body's hormones. Chemicals to avoid include benzophenone, oxybenzone, and octyl methoxycinnamate or octinoxate.

Wash your hands regularly. Not only is this important for public health, but regular washing removes consumer product chemicals that collect on your hands throughout the day.

Avoid buying furniture that contains harmful flame retardants. Check the label to make sure it meets TB 117-2013 and states "does not contain added flame retardants."

Filter your drinking water with an activated carbon or reverse osmosis filtration system to remove contaminants.

**Store food and beverages** in stainless steel or glass containers rather than plastic.



Thank you for protecting the world we are leaving for the next generation.

#### **SILENT SPRING INSTITUTE**

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