

BCFR NEWSLETTER

Keeping you up to date on the Breast Cancer Family Registry

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PUBLICATIONS & NEWS

Maternal and prenatal factors and age at thelarche in the LEGACY Girls Study cohort: implications for breast cancer risk

The average age of breast development (thelarche) has declined rapidly over the past 50 years. This is a concern because earlier breast development has been linked with higher breast cancer risk. Although rising rates of obesity in girls may be contributing to earlier ages of breast development, evidence suggests that other factors may also be involved. Identifying modifiable risk factors (risk factors that people may be able to change) is an important part of breast cancer risk reduction efforts.

A new study published in International Journal of Epidemiology examined mothers' weight and exercise during pregnancy as possible modifiable risk factors for early breast development. This study of 1031 girls investigated the impact of mothers' pre-pregnancy body mass index (BMI), physical inactivity, and weight gain during pregnancy on their young daughters' age at breast development in the Lessons in Epidemiology and Genetics of Adult Cancer from Youth (LEGACY) Girls Study. Results showed that girls whose mothers were overweight or obese before pregnancy and gained 30 pounds or more during pregnancy were 57% more likely to have early breast development than girls whose mothers were not overweight or obese and gained less than 30 pounds during pregnancy. Also, daughters of women who reported no recreational physical activity during pregnancy were more likely to have early breast development than daughters of physically active women.

This study highlights that modifiable factors in women as early as pre-pregnancy can impact physical development in their daughters. Moving forward, there is an opportunity for breast cancer risk reduction efforts starting earlier in life. [To learn more about this article, click here.](#)

PARTICIPANT RESEARCH HUB

YOUNG WOMEN'S STUDY UPDATE

We have enrolled **905** young women across the six BCFR sites.

If you are a participant in the Young Women's Study, please make sure to check your personal study dashboard and keep up-to-date with the latest survey modules.

Recruitment Still Underway:

If you have a female relative between the ages of 18 and 39 years who may be interested in the Young Women's Study or wants to learn more about it, please contact your BCFR site listed under the "CONTACT US" section on the next page.

25-YEAR FOLLOW-UP UPDATE

We have received nearly **8,600** completed surveys!

If you have not received your survey or need us to resend your forms, please contact your BCFR site.

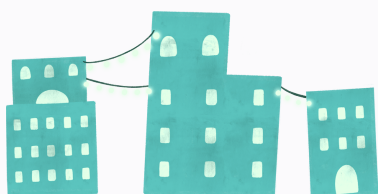
Thank you so much!



Jeanine Genkinger, PhD

Dr. Genkinger is a cancer epidemiologist at Columbia University Mailman School of Public Health. She received both her Master of Health Science and PhD from Johns Hopkins University. Dr. Genkinger's research focuses on how modifiable factors, molecular pathways and related biomarkers may impact cancer risk and progression. More specifically, her methodological specialties include nutritional epidemiology, longitudinal design and complex pooled and meta-analytic techniques. Dr. Genkinger has conducted her research in large scale international consortia, namely the Pooling Project of Prospective Studies of Diet and Cancer and the NCI Cohort Consortium, and has conducted research in numerous cohort studies, including the Breast Cancer Family Registry. One of her [recent papers](#) focuses on how adherence to the updated [Guideline for Cancer Prevention](#) in 2020 could reduce breast cancer risk for postmenopausal women and women at increased familial risk. [Read a summary of the paper in the November 2022 edition of the BCFR newsletter.](#)

OUR ENVIRONMENT AND OUR HEALTH

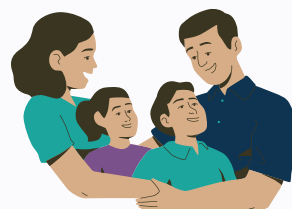


WHERE WE LIVE CAN IMPACT OUR LONG-TERM HEALTH

The neighborhoods where we live can be a key factor in our environmental exposures. From sources of stress to potential exposure to chemicals, our environment may impact our health.

PERIODS OF VULNERABILITY

Throughout key developmental periods, the cells in a breast tissue change and divide rapidly and may be more sensitive to environmental exposures. Some of these time periods could include prenatal (while in the womb), infancy, pre-puberty, puberty, pregnancy, while breastfeeding, and menopause.

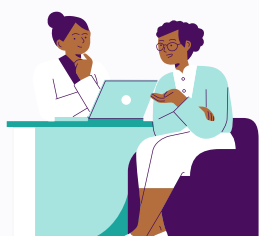
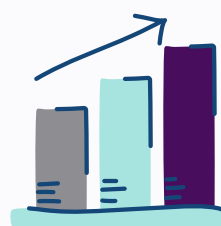


EXPOSURE TO TOXIC CHEMICALS

From reducing air pollution to thinking about the everyday products we use in our homes, there are many ways that we can lower our exposure to harmful chemicals. [Check out these safer alternatives to commonly used household products.](#)

RISK CAN BUILD UP OVER TIME

Exposure to environmental toxins and other risk factors may accumulate over time and affect our health. Importantly, there also are things we can do to cumulatively improve health and lower disease risk, like exercise, healthy eating, and reducing exposure to harmful chemicals.



TREATMENT AND PREVENTION

There are many things that individuals and communities can do to encourage good health. From promoting healthy lifestyles to working with our healthcare providers to participating in research, we can all be involved!

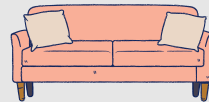
THE BREAST CANCER FAMILY REGISTRY EXAMINES THE ENVIRONMENT AND HEALTH

Environmental Exposure and Breast Cancer Outcomes across the Spectrum of Absolute Breast Cancer Risk

The BCFR is collaborating with the Human Health Exposure Analysis Resource (HHEAR) to investigate the association between environmental chemical exposures and breast cancer risk and survivorship. HHEAR is a resource funded by the National Institute of Environmental Health Sciences, the National Cancer Institute, and the National Heart, Lung and Blood Institute that aims to advance understanding of the influence of the environment on human health over a lifetime. In this study, we will measure blood levels of two kinds of environmental chemicals: pesticides and brominated flame retardants. Then, we will examine associations between these chemical levels and breast cancer risk and outcomes after breast cancer diagnosis. This study will add to our understanding of the role of environmental exposures in the development and treatment of breast cancer, and we are grateful for the contributions of Registry participants that make this research possible!



Pesticides are substances meant to help control pests, and are commonly used indoors and outdoors. Pesticide products that may contain harmful chemicals include some gardening supplies, insect repellents, and rodent bait.



Brominated flame retardants are chemicals added to products to make them less flammable. They are commonly found in plastics, electronics, textiles, and furnishings like mattresses and couches.

The Young Women's Study Investigates Environmental Factors and Health



The BCFR Young Women's Study includes surveys on **Neighborhoods, Hair and Personal Care Product Use, and Occupational History**. These surveys allow us to examine how aspects of our environment – including the types of personal care products we use and characteristics of our jobs and the neighborhoods we live in – may affect our health. Your responses will contribute to our understanding of environmental risk factors and protective factors for women's health.

If you are a Young Women's Study participant, please go to your Survey Dashboard or contact your BCFR site coordinator to complete any remaining questionnaires!

Thank you to all of our participants for helping the BCFR investigate associations between the environment and health!

CONTACT US

Select your BCFR site to be directed to your Research Team. Or, select BCFR to visit our website.



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