

# Place-Based Exposures: Air Pollution

Air pollution is a form of place-based chemical exposure and has been linked to increased breast cancer risk.

## Science Summary

Sources of air pollution include tobacco smoke, indoor wood burning, as well as more systemic sources such as traffic, industrial and agricultural activities, and fossil fuel combustion.

Among air contaminants, polycyclic aromatic hydrocarbons (PAHs) are very common. They form when materials combust; PAHs disrupt the endocrine system. Other hazardous contaminants found in air include pesticides, PFAS (per and polyfluoro alkyl substances), flame retardants, heavy metals, particulate matter, and vinyl chloride.

### What can I do for my own body and health?

You can improve indoor air quality in your home by avoiding tobacco smoke, using air purifiers with HEPA filters, and ensuring proper ventilation when cooking or using cleaning products. Stay informed on local air quality, and when pollution is high, wear masks and avoid outdoor activities.



**Use air purifiers  
with HEPA filters**



**Stay informed on  
local air quality**

### When pollution is high



**Wear masks**



**Avoid outdoor activities**

## What can I do to support the health of my family and friends, and my community?

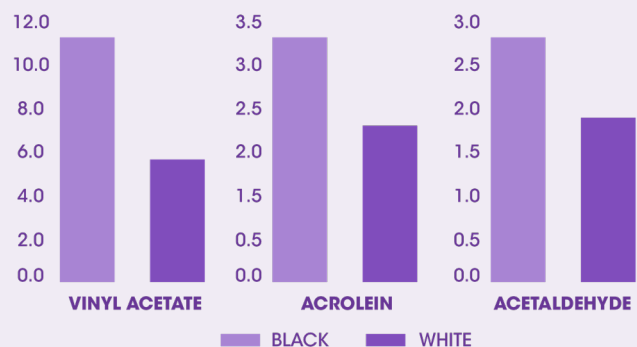
Share these tips with friends and family so they feel empowered to improve their own air quality. If at all possible, try to avoid living less than 150 feet from busy roads and highways, which has been shown to increase our exposure to nitrogen oxides which increases breast cancer risk.

## How can I help advocate for and support systemic change to remove barriers to health?

Ultimately, most air pollution comes from sources outside our individual control. Improvement requires systemic interventions, especially those focused on the disproportionate impact of poor air quality on marginalized communities.

Policies that regulate air pollution can support people who live near an agricultural site that uses pesticides, live and work near polluting industries or heavy traffic areas, or reside in a town affected by air pollution blowing from nearby urban locations.

**BLACK WOMEN HAD HIGHER PROBABILITY OF GETTING BREAST CANCER FROM AIR POLLUTANTS COMPARED TO WHITE WOMEN**



"And I'm a little disappointed in the fact that I feel we're still at a point where Black lives really don't matter. They're still doing so many things disproportionately in African American communities."

**Stephanie on Fracking in her community in Los Angeles at the Breast Cancer Plan Community Listening Session**

We can work together to create policies and interventions at the community and regional level, especially for communities of color and Native American tribal lands, to reduce the risk for breast cancer and many other diseases.

Additionally, monitoring air quality is critical to reducing air pollution. It provides the necessary data to inform, implement, and adjust effective pollution control measures, protect public health, and engage communities in creating a cleaner, healthier environment.

Here are some systems-level actions we can take to reduce our exposure to air pollution:



Support policies and regulations aimed at reducing air pollution, which include better public transportation and cleaner industrial practices.



Create training opportunities for community members to collect high-quality data that monitors air, soil, and water quality, which can be used to enforce pollution prevention measures.



Work with city and county leadership to strengthen and expand existing idling regulations for commercial heavy-duty diesel vehicles and passenger cars.



Implement state-of-the-art street-cleaning methods to protect local air quality.



Support policies that facilitate faster transition to cleaner engine technologies in trucking, shipping, port operations, and trains.

**TOGETHER, WE CAN  
MAKE CHANGE!**



Learn more and get involved.

**Breast Cancer Prevention Partners (BCPP)** is the leading science-based advocacy organization working to prevent breast cancer by eliminating our exposure to toxic chemicals and other environmental exposures linked to the disease.



Supported by grant funding from Gilead Sciences, Inc. Gilead Sciences, Inc. has had no input into the development or content of these materials.