

CANCER AND POLLUTION IN THE AFRICAN AMERICAN COMMUNITY

Cancer is a group of diseases characterized by uncontrolled growth and spread of abnormal cells. If the spread is not controlled, it can result in death. Cancer is one of the leading causes of death worldwide. The economic costs of cancer in the US in 2015 were \$80.2 billion for medical care alone.

African Americans and cancer

African Americans have the highest death rate and shortest survival of any racial or ethnic group in the US for most cancers.

This is due in part to social, economic, and environmental disparities.

These disparities include unequal access to health care, opportunities and resources such as work, wealth, income, education, housing, and healthy food, as well as disproportionate exposures to pollution.



The lifetime probability of dying from cancer is about **1 in 4** for black men and **1 in 5** for black women as compared to white and other populations.

Death rates are **42% higher** in black women than in white women diagnosed with breast cancer.

Black men have the **highest cancer death rate** of any racial or ethnic group in the US.

1 in 2 black men and **1 in 3** black women will be diagnosed with cancer in their lifetime.

Black women have a **6% lower risk** of a cancer diagnosis than white women, but a **14% higher risk** of cancer death.

turn to the reverse to learn
how pollution affects cancer



Pollution in African American Communities

Across a range of pollutants, all across the country, African American communities are disproportionately exposed to pollution.

African Americans breathe more particle pollution. Blacks live in places with 1.54 times the burden of small particle pollution compared to the general population. Particle pollution comes from cars, trucks, power plants, factories, and other industrial sources. It has been linked to heart attacks, stroke, premature death, and lung cancer.

African Americans live closer to dangerous chemical facilities compared to white Americans. The percentage of Blacks in the fenceline zone is 75% greater than for the overall population. Those in the fenceline zone live closest to potential harm and have the least time to react in the event of a catastrophic release. They may be more likely to be exposed to toxic chemicals in the event of a release, including those that cause cancer.

African Americans live closer to coal plants compared to others, leaving them disproportionately exposed to the pollution from these facilities. Among those living within three miles of a coal power plant, 39% are people of color, compared to 36% of the total U.S. population. Coal plants produce particle pollution and other harmful air pollutants.

More than one million African Americans live within half a mile of oil and gas operations. These facilities can pollute the surrounding air with volatile organic compounds and other pollutants, some of which have been linked to cancer.

Schools serving predominantly Black students are located closer to heavily trafficked roads compared to other schools. In one study, schools serving predominantly black students were 18% more likely to be located within 250 meters of a major roadway compared to other schools. Traffic pollution contains small particles, linked to a range of health problems including cancer.



Air Pollution and Cancer

Outdoor air pollution is the fifth leading cause of death worldwide, responsible for 4.2 million deaths in 2015. Globally, air pollution is responsible for 16.5% of all lung cancer deaths. Many forms of air pollution have been linked to cancer.

Diesel pollution comes from the engines used in trucks, buses, trains, construction and farm equipment, generators, ships, and some cars. The World Health Organization has concluded that diesel pollution causes lung cancer.

Particle pollution is a mixture of tiny bits of solid and liquid in the air we breathe. The particles can be so small that they are invisible, and the smaller they are, the more dangerous they are to breathe. Particle pollution comes from cars and trucks, power plants, and other industrial sources. It causes lung cancer. It has also been linked to cancer of the digestive tract, breast cancer, and overall cancer mortality.

Volatile Organic Compounds (VOCs) are a variety of gases that include benzene, styrene, perchloroethylene, and toluene. Indoors, they come from paint, varnishes, flooring, carpet, pressed wood products, cigarette smoke, and more. Outdoors, they come from gasoline, diesel emissions, wood smoke, and other industrial emissions and oil and gas activity. Some of them (benzene, formaldehyde) are known to cause cancer.

July 2018 Sources: momscleanairforce.org/rx-cancer

For more information, please visit: www.momscleanairforce.org

M O M S
clean air
F O R C E

Community RX
ENVIRONMENTAL HEALTH JUSTICE