



DIESEL AND SOCIAL JUSTICE

A 2011 study of Portland air toxics, using models and data from five air monitors placed in 2005, found that the entire Portland metro area experiences diesel pollution above the state's health benchmark.²⁸

But the study also found that **the ten lowest income and ten highest minority census block groups experience more exposure to all sources of air toxics** than the average block group.²⁹

In Multnomah County, census tracts with higher than average Black/African American, Asian/Pacific Islander and/or Latino residents have **two to three times more exposure to diesel particulate matter** than census tracts with 90% or more non-Latino white populations.³⁰

In communities everywhere, people of color and low-income communities are often located at the margins of urban areas: near busy roads and highways, rail lines and ports, business and industrial facilities.

HOT SPOTS AT HOME

High social stress, inadequate housing and less access to fresh food and health care makes people more vulnerable to harm from pollutants like diesel. Some research suggests that simply living in a low-income community is enough to raise risk of health harm.

Studies in Sweden³¹ and the U.S. found higher incidence of heart disease among people in low-income neighborhoods, regardless of the education, occupation or personal income of those individuals.³²

Communities of color experience unique health disparities. African Americans have the highest prevalence of asthma, heart disease and lung cancer. American Indians/Alaskan Natives have a higher prevalence of asthma than do non-Latino whites. Incidence of asthma and heart disease are high among Pacific Islanders.³³

Greater vulnerability—with greater exposure to pollutants—may lead to higher rates of disease in low-income populations that is associated with diesel pollution. In Oregon, both asthma and heart disease are more prevalent in low-income households.³⁴ Nationwide, cancer rates and cancer deaths are higher among low-income individuals.³⁵

HOT SPOTS ON THE JOB

Workers are particularly at risk for health impacts from diesel engine exhaust. For example, **a study of truckers with 35 years on the job found that they were 89% more likely than the general public to contract lung cancer.**³⁶ More than 30 epidemiological studies of those who work on railroads, docks, and construction sites, in trucks or buses, or as diesel mechanics found that **people who are routinely exposed to diesel exhaust have a greater risk of lung cancer.**³⁷ In Oregon, that accounts for 29,000 people in the work force.³⁸

HOT SPOTS ON THE ROAD

The highway network is also a moving “hot spot” for those who spend significant time commuting or traveling on busy roadways. A 2007 study by the Clean Air Task Force found **diesel particle levels four to eight times higher inside cars, buses and trains** than in the ambient outdoor air.³⁹