



DIESEL EXHAUST

What is DIESEL EXHAUST?

Vehicles that use diesel fuel release exhaust that is composed of a variety of compounds harmful to human health and the environment. Vehicles that use diesel fuel include trucks, commercial buses, school buses and construction equipment. Gases released in diesel exhaust can include benzene, formaldehyde and other compounds that can contribute to cancer and other health problems. In addition to the gases, diesel particulate matter (DPM) is released as solid particles of many sizes and compositions.

How can people be exposed to diesel exhaust?

Diesel engines are everywhere in the world, so most people are exposed to diesel exhaust on a nearly daily basis. The most common exposure is by breathing air that contains its gases or its particulates. Exposure to diesel exhaust is not likely to occur through eating, drinking or skin contact. Diesel exhaust travels through the atmosphere and affect areas without obvious exhaust sources.

How can diesel exhaust affect my health?

Diesel exhaust is considered likely to cause cancer in humans. While the gaseous chemicals in diesel exhaust are a health concern and may cause cancer, there is significant concern about exposure to diesel particulate matter, especially the fine and ultra-fine particles. Exposure to diesel exhaust may irritate the eyes, nose, throat and lungs, and cause lightheadedness. Exposure to high concentrations can also cause problems for people with respiratory conditions, such as asthma. Chronic exposure can damage the lungs and affect immune system functions.

What should I do if exposed to diesel exhaust?

Breathing - Exposure to diesel exhaust becomes a concern only under certain conditions. Persons diagnosed with respiratory problems such as asthma may be more susceptible and should therefore maintain regular contact with their doctors. Such persons should pay attention to local air quality forecasts to avoid outside time on days when diesel particulate matter and other air contaminants are unacceptably high.

Persons working near diesel equipment and vehicles need to be aware that they may face higher risks of heart and lung problems, including cancer. Truck drivers, construction workers and others who work near diesel-powered equipment should ensure that vehicles and equipment are well maintained to reduce emissions. They can further lessen the health risk from emissions by using bio-diesel and other environmentally friendly alternatives.

Is there a medical test to show whether I've been exposed to diesel exhaust?

There are no tests that measure exposure to diesel exhaust directly. Regular visits and communication with your doctor can detect problems and provide assistance.

Technical information for diesel exhaust

CAS Number: not applicable

Chemical Formula: not applicable

Carcinogenicity (EPA): *likely to be carcinogenic to humans* by inhalation from environmental exposures.

MCL (Drinking Water): none

OSHA Standards: none

NIOSH Standards: lowest feasible concentration.

References and Sources

United State Environmental Protection Agency - <http://epa.gov/ne/eco/airtox/diesel.html> (Accessed 10/28/09)

California Air Resources Board - http://www.arb.ca.gov/research/diesel/dpm_draft_3-01-06.pdf (Accessed 10/28/09)

U.S. EPA, IRIS, Diesel engine exhaust. <http://www.epa.gov/iris/subst/0642.htm#carc> (Accessed 9/5/13)

24/7 Emergency Contact Number: 1-888-295-5156

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