

## IMPORTANT POINTS ON THE HEALTH EFFECTS OF DIESEL EXHAUST

Michigan Department of Environmental Quality, Air Quality Division

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- Diesel Exhaust (DE) is a complex mixture of gases and particles.
- Irritation of the airways is a common health effect. Irritation of the eyes is also common. Nausea and lightheadedness can also occur. These can occur from short-term exposure. Longer-term exposure can reduce lung function. DE can make allergies (like ragweed) worse and could make people more susceptible to respiratory infections. Adverse effects on the heart are also possible. Exposure to other chemicals that are irritants or carcinogens could make diesel more toxic.
- There is general agreement that exposure to diesel exhaust has the potential to cause lung cancer. However, there is no consensus on what levels pose lung cancer risks.
- The Detroit Air Toxics Initiative by the DEQ (with EPA funding) provided a risk assessment, roughly estimating the risk from diesel exhaust in the Detroit area. Risk from the non-cancer health effects are not expected to be significant. Risks of cancer could exceed a 100 in a million chance of getting cancer, depending on the estimates used.
- People with existing heart or lung disease, asthma or other respiratory problems are most sensitive to the health effects of fine particles. Children are especially vulnerable to adverse health effects from diesel, especially children with asthma.
- DE contributes to air pollution, adding to increased fine particulate matter and ozone formation.
- For further, more detailed information, see the EPA (2002) report, "Health Assessment Document for Diesel Engine Exhaust" (<http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=29060>).
- For additional questions on health effects of diesel, you can contact Robert Sills, Toxics Unit Supervisor, MDEQ, Air Quality Division; 517-335-6973.