O·H·I·O ENVIRONMENTAL COUNCIL

Diesel Emissions

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Dirty diesel engines increase the risk of asthma attacks, lung cancer, and premature death

Diesel engines, while rugged and long-lived pieces of machinery, spew emissions severely compromising air quality. Diesel emissions contribute to failure to meet federal air standards, serious health effects and environmental degradation. Federal standards will begin to address emissions in newly manufactured engines starting in 2007, but existing vehicles will continue to pollute our air for decades.

"Air pollution kills about 70,000 Americans each year. That's more people than die from breast and prostate cancers combined. Air pollution is a huge public health problem."

Source: Joel Schwartz, Associate Professor Harvard School of Public Health

The Nasty Components

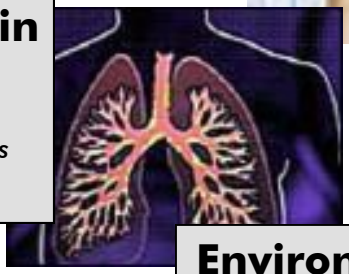
- Air toxics
- Hydrocarbons (HC)
- Nitrogen oxides (NOx)
- Particulate matter (PM)
- Sulfur oxides (SOx)
- Volatile organic compounds (VOC)

Health Impacts

- Aggravated asthma & allergy symptoms
- Chronic bronchitis
- Heart & lung disease
- Cancer
- Premature death

Diesel emissions are the #1 air toxics cancer risk in the U.S.

Source: California Air Resources Board



People Facing the Greatest Risk

- Children
- Asthmatics
- Occupationally exposed workers
- People with existing respiratory problems

Environmental Impacts

- Crop & forest damage
- Acid rain
- Eutrophication of waterways
- Smog
- Premature death

Children are extremely vulnerable…

"Children breathe 50% more air for each pound of body weight than adults and are therefore more vulnerable to air pollutants. In the short run, fine particles can cause an increase in childhood illnesses. In the long run, they can impair the development of healthy lungs."

Source: Clear the Air

"Children's exposure to particulate matter on school buses is as much as 5-15 times higher than background levels"

Source: Environment and Human Health, Inc. (EHHI)

Solutions

1. Reduce idling by turning off engines stopped for more than a few minutes – saving fuel, money and lives.
2. Replace older buses with new low emission buses.
3. Switch to less polluting alternative fuels (biodiesel) and vehicles (compressed natural gas)
4. Retrofit newer buses with emission control technologies such as diesel particulate filters or diesel oxidation catalysts
5. Use low sulfur fuels, including a biodiesel blend, to reduce deadly emissions
6. Combine retrofits and low emission fuels for greater reductions

Retrofits and low-emission fuels: a comprehensive approach

Diesel particulate filters, like the one above, when used with low sulfur fuels typically reduce hydrocarbons, carbon monoxide and particulate matter by 90%!

For further information contact: The Air Team, at 614-487-7506 or *air@theOEC.org*.