

The Benefits of Reducing Diesel Emissions:

What are they?

In Oregon, a preliminary assessment of risk from air toxics in the outdoor air indicates diesel exhaust to be number one, with a health risk almost 30 times greater than the next nearest air pollutant.

Why is Diesel Exhaust a Concern?

Several national and international public health agencies have concluded that diesel exhaust is a probable human carcinogen. Study results, along with data from monitoring sites, indicate that even after reducing emissions from industrial sources, diesel exhaust, like other air toxics, still poses significant health problems.

What are the Health Risks from Diesel Exhaust?

Diesel exhaust contains tiny particles known as “fine particulate matter.” These “fine” particles are so small that several thousand of them could fit in the period at the end of this sentence.

Diesel exhaust also contains ozone-forming nitrogen oxides. Fine particle and ozone exposure both pose serious public health problems. Exposure can cause lung damage and aggravate existing respiratory diseases such as asthma. EPA estimates that nationwide, particulate matter – especially the fine particles found in diesel exhaust – causes 15,000 premature deaths every year.

Who is Most at Risk?

People with existing heart or lung disease, asthma, or other respiratory problems are



most sensitive to the adverse health effects of fine particles. Children and the elderly are particularly sensitive. Children breathe about 50 percent more air per pound of body weight than adults, which makes them especially at risk from air pollution in general.

Reducing diesel emissions will reduce the incidence and severity of asthma attacks and chronic bronchitis. It will decrease the number of lost school days for children and work days for parents and adult asthmatics.

Are Diesel Emissions Regulated by Government?

The federal government establishes engine emission standards for new vehicles. Most recently, in 2004, EPA finalized new engine standards for all diesel vehicles over 8,500

pounds which dramatically lowered nitrogen oxide emissions. Additional diesel standards and test procedures will take effect in 2007, making diesel engines sold in this country the cleanest in the world. By 2030, it is expected that diesel trucks will be more than 40 percent cleaner than today's models.

Although the federal government's regulations provide a phased approach to reduced diesel emissions, the Oregon Clean Diesel Initiative is an effort to realize air quality benefits now by encouraging the use of cleaner fuels and retrofitting existing vehicles with advanced pollution controls.

The fine particles in diesel exhaust contribute to haze, which restricts visibility. Also, diesel exhaust contributes to ozone formation (ozone is a component of smog), acid rain and global climate change. Reducing diesel emissions is good for public health, and the environment.

[How Can I Get More Information?](#)

For more information about diesel emissions, visit the EPA website at www.epa.gov.