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The Resource For Environmental Health Risks Affecting Your Children


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U.S. EPA's Scientific Review Shows Diesel Exhaust Poses Health Risks, Especially to Children

Children's Health Environmental Coalition

Inhalation of diesel exhaust is likely to cause lung and other cancers in humans, according to a new health assessment released by the U.S. Environmental Protection Agency (EPA) in early September. The agency also called diesel exhaust a "chronic respiratory hazard to humans," and concluded that it triggers asthma and other respiratory effects. Children living in high traffic areas and those riding diesel school buses may be regularly exposed to diesel exhaust, according to experts.

Diesel exhaust contains a mixture of very small particles and several gases, including carbon monoxide, nitrogen oxides, sulfur compounds, [benzene](#), [formaldehyde](#) and polycyclic aromatic hydrocarbons (PAHs). Many of the particles in diesel exhaust are known to mutate cells and cause cancer. Short-term exposure to diesel exhaust can irritate the eyes, throat and airways, and cause lightheadedness, nausea and coughing.

Released after more than a decade of scientific review, [the EPA health assessment for diesel engine exhaust](#) is the first comprehensive governmental investigation of the health impacts of diesel emissions. The assessment also recognized the role that diesel emissions play in the formation of smog, or ozone, by contributing nitrogen oxides into outdoor air. Several studies have linked smog to the development and triggering of asthma and heart disease.

In the assessment, EPA noted that children and people with pre-existing respiratory conditions could be more vulnerable to the effects of diesel exhaust and called for more study in this area. Children have a higher rate of respiration, breathing more air, pound for pound, than adults. When inhaled, very small particles in diesel exhaust can travel far down into children's lungs and remain there, causing long-term damage.

Some environmental groups feel that EPA's standards for diesel are not strict enough. Though EPA issued landmark standards in 2001 to reduce emission from diesel trucks and buses by more than 90 percent, the Bush administration is currently considering an emissions-trading program, which would enable manufacturers of "nonroad" vehicles with diesel engines, such as construction and farm equipment, to avoid the tough emission reductions required for trucks and buses. Nonroad diesel engines tend to be older and [one new study](#) shows that they emit more fine-particle pollutants than all the nation's diesel-powered cars, trucks and buses combined.

See also:

[Smog in America: Rising Ozone Levels May Harm Children](#)

[Poor Air Quality Especially Dangerous to Children, says the American Lung Association in New Report](#)

[Study Links Air Pollution and Asthma in Children](#)

[Off-Road Diesel Trucks Contribute to Serious Air Pollution](#)
[New Study Warns of Dangers of Diesel Exhaust to Children](#)
[School Bus Pollution Ranked State by State](#)
[Breathing Space: What You Can Do to Stop the Rise of Asthma](#)
[Toxic Chemical Releases by Industry Drop, but Air Pollution Increases Cancer Risk, Two EPA Reports Say](#)
[Traffic Congestion: The Chemicals in Your Car](#)

Other Resources:

[Diesel Exhaust and Air Pollution](#), American Lung Association

[No Breathing in the Aisles: Diesel Exhaust Inside School Buses](#), Natural Resources Defense Council

Look for safer product alternatives in [CHEC's Safer Products Store](#).

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