



'Diesel-powered school buses expose children to as much as 46 times the cancer risk considered significant by the U.S. EPA.'

FAQ's - Health and Emissions

1. What is diesel exhaust?

Diesel exhaust is a combination of toxic gases, carbon particles and chemicals that are attached to carbon particles. Diesel particulate matter contains cancer causing hydrocarbons known as Polycyclic Aromatic Hydrocarbons (PAH's). PAH's can lead to many health risks if exposed over a long period of time. In the past ten years, various studies conducted by organizations focusing on human and animal health problems caused as a direct result of exposure to diesel exhausts have shown significant cause for the need to implement exhaust reducing technologies.

2. What are the harmful effects of diesel exhaust?

Cancer is not the only health concern for diesel exhaust. From the workplace to children on school buses, diesel exhaust can start from something as little as a headache or nausea and can even go so far as to cause cancer. Studies have shown that it can be responsible for respiratory, pulmonary and other cardiovascular diseases and increases the risk of chronic bronchitis and asthma. For little children, it irritates the eyes, nose and throat, causes shortness in breath, and tightness in the throat.

3. How does diesel exhaust affect our children?

Emissions caused by diesel engines which are most commonly found in heavy-duty trucks, ships, locomotives, agricultural and construction equipment, create serious health problems not only for adults, but are extremely harmful to children. Children are more affected by toxic diesel emissions due to still developing respiratory systems and faster breathing rates. In addition, studies have also concluded that this particulate pollution can significantly reduce lung function growth in children due to the particulate matter becoming embedded in the deepest recesses of the lung tissue where it has been shown to disrupt cellular processes.

Exposure to diesel particulate matter has been shown to lead to an increased risk of premature deaths and high numbers of hospital admissions for heart and lung disease. As stated by the California Air Resources Board and American Lung Association, particulate matter from diesel emissions is responsible for **15,000 premature deaths every year**. In addition to this, it has been proven that premature deaths linked to particulate matter from diesel emissions is now at a level with the number of deaths caused by traffic accidents and second-hand smoke in the state of California.



83 Commerce Valley Drive East
Thornhill, Ontario, L3T 7T3

Phone: 905-707-7746 Fax: 905-707-7686

Email: ecs@enginecontrolsystems.com Web: www.enginecontrolsystems.com