



Diesel & Health Research

This page last reviewed June 21, 2011

Background on Diesel Health Effects

Diesel engines emit a complex mixture of air pollutants, composed of gaseous and solid material. The visible emissions in diesel exhaust are known as particulate matter or PM. In 1998, California identified diesel exhaust particulate matter (PM) as a [toxic air contaminant](#) based on its potential to cause cancer, premature death, and other health problems. Diesel engines also contribute to California's fine particulate matter (PM_{2.5}) air quality problems. Those most vulnerable are children whose lungs are still developing and the elderly who may have other serious health problems. Based on year 2006-2008 emissions in California, diesel PM contributes each year to approximately 2,000 premature deaths, with an uncertainty range of 1,500 to 2,400. In addition, diesel soot causes visibility reduction and is a potent global warmer.



Diesel Research Projects

View all of the latest reports and ongoing contracts in our [Research Projects Database Diesel Results](#) page.

Over 50 research projects funded by ARB have been grouped into the following categories (the below PDF files were created August 2006):

- [Exposure](#) (PDF - 90 KB)
- [Health Effects](#) (PDF - 99 KB)
- [General PM Exposure and Health Effects](#) (PDF - 85 KB)
- [Source Testing Methods Development](#) (PDF - 100 KB)
- [Emissions Inventory](#) (PDF - 83 KB)
- [Source Apportionment and Receptor Modeling](#) (PDF-94 KB)
- [Tunnel Studies](#) (PDF - 76 KB)
- [Other](#) (PDF - 85 KB)

The ARB has been leading several multi-agency research programs to characterize vehicle emissions. Find out more by visiting ARB's [Vehicle Emissions Research](#) web page.

Diesel Related Information and Fact Sheets

- [ARB's Truck Stop web site](#)
- [Diesel Fact Sheets](#)
- [Toxic Air Contaminant Emissions from Diesel-fueled Engines](#)

For more information about Diesel Related Research, please contact [Dr. Linda Smith](#) at (916) 327-8225.