

- Air pollution may account for five percent of hospital admissions for heart disease. (National Institute of Environmental Health Sciences (NIEHS))
- Toxic air pollutants account for an additional 700 cases of cancer for every million residents. (American Lung Association)
- The World Health Organization reported in 2002 that three million people die each year from the effects of air pollution. (Earth Policy Institute)
- Airborne particulate matter (PM) consists of many different substances suspended in air in the form of particles (solids or liquid droplets) that vary widely in size. Particles less than 10 micrometers in diameter, that include both fine and coarse dust particles, pose the greatest health concern because they can pass through the nose and throat and get into the lungs.
- Overall mortality increases 0.5 percent for every 10 microgram per cubic meter increase in small airborne particles (PM10) measured the day before death. This number is slightly higher for lung and heart-related deaths. (National Morbidity, Mortality and Air Pollution Study)
- Elderly people who live in the most polluted areas in the United States are nearly 20 percent more likely to be admitted to a hospital for a respiratory condition than those who live in cities with the least air pollution. (WebMD article on National Morbidity, Mortality and Air Pollution Study)
- Hospital admissions of non-elderly patients suffering from asthma increase four to five percent one day after an interquartile range change in PM. (Environmental Health Perspectives)
- Carbon monoxide reduces the ability of blood to bring oxygen to body cells and tissues. (National Transportation Library)
- Exposure to vehicle exhaust increases the risk of death from heart and lung disease and lung cancer. (American Cancer Society)
- Diesel exhaust is classified as a probable human carcinogen by many governmental authorities, including the International Agency for Research on Cancer (World Health Organization), the U.S. National Toxicology Program, and the U.S. Environmental Protection Agency. It is classified as a known carcinogen by the state of California. (EHHI)
- Diesel exhaust contains both very small particles and 40 chemicals that are classified as "hazardous air pollutants" under the Clean Air Act. (EHHI)

Children

- Children breathe 50 percent more air per pound than adults. (EPA sheet on school bus idling)
- Asthma is the most common chronic illness in children and the cause of most school absences. (American Lung Association)
- Children's asthma symptoms increase as a result of car exhaust. (Norris; American Lung Association)
- In the United States, well over 425,000 school buses transport 24 million students to school daily. (EHHI)
- For one child, a half-hour ride to school and a half-hour ride home each day amounts to 180 hours per school year-90 full 24-hour days over 12 years of school. Annually, U.S. children spend three billion hours on school buses. Connecticut children spend 50 million hours on buses each year. (EHHI)

Other

- In 1952, death rates increased by five times over four days from air pollution that was trapped by fog in London. (Department of Biostatistics, Johns Hopkins)
- Approximately \$100 million is spent in the United States annually to address the uncertainties in the understanding of the health effects of particulate matter. (Department of Biostatistics, Johns Hopkins)
-



No Idle Zone / Anti-Idling

Idling Reduction Fact Sheet

I Air Quality

- Vehicle exhaust is the leading source of hazardous air pollution. (National Transportation Library)
- In the past ten years, residents have increased the amount they drive by more than 70 percent. (National Transportation Library)
- Diesel exhaust contains microscopic soot, about 200 times smaller than the period at the end of this sentence. (Oregon DEQ)

Vehicle Operation

- One hour of idling burns up to a gallon of fuel. (Fuelmax Fuel Saving Tips)
- An idling engine delivers zero miles to the gallon.
- Drivers who shut off their engines, rather than idling for 30 seconds, benefit from both fuel savings and improved air quality. (average of recommended times from the U.S. EPA, Natural Resources Canada and Programs Europe)
- Frequent restarting has little impact on engine components like battery and starter motor. Wear caused by restarting is estimated to add \$10 per year to the cost of driving, money likely recovered several times over in fuel savings. (Natural Resources Canada)
- Excessive idling can be hard on your engine because it isn't working at peak operating temperature. Fuel doesn't undergo complete combustion, leaving spark plugs dirty and contaminating engine oil. (Oregon's Clean Air Action Day fact sheet)
- Idling isn't an effective way to warm up your vehicle in cold weather. Modern engines need no more than 30 seconds of idling on winter days before starting to drive. (Natural Resources Canada)
- Idling buses tested had higher concentrations of particulates and carbon than moving buses. (Environment and Human Health Inc. (EHHI))
- Queued idling buses had the highest levels of particulates and black carbon measured. Idling buses tend to accumulate diesel exhaust, which may be retained during the ride, depending upon bus ventilation rates. (EHHI)
- A bus idling for one hour a day during the school year adds the equivalent of 1,260 miles of wear on the engine. (Oregon Department of Environmental Quality (DEQ))

Impact on Health

- Each of us take 20,000 breaths each day. (American Lung Association)
- The average American breathes 3,400 gallons of air a day. (American Lung Association)
- Asthma is the third leading cause of hospitalization among children under the age of 15. (American Lung Association)