Impact of the 2007 HDD and Fuel Standards on Public Health

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Outline

- **Air Pollution**
  - Extent of the problem
  - Health effects
- **Importance of the rule**
  - Tailpipe emissions
  - Fuel

Air Pollution

Air Pollution: Days With Unhealthy Air

	Ozone	PM_{10}
Los Angeles	115	246
San Joaquin Valley	114	180

Year 2002

Health Impacts of Air Pollution

- **Annual health impacts** (California)
  - 14,000 premature deaths
    - Life shortened by 14 years
  - 7,000 hospital admissions
  - 300,000 asthma attacks
  - 3,000,000 lost work days

} $One billion per year

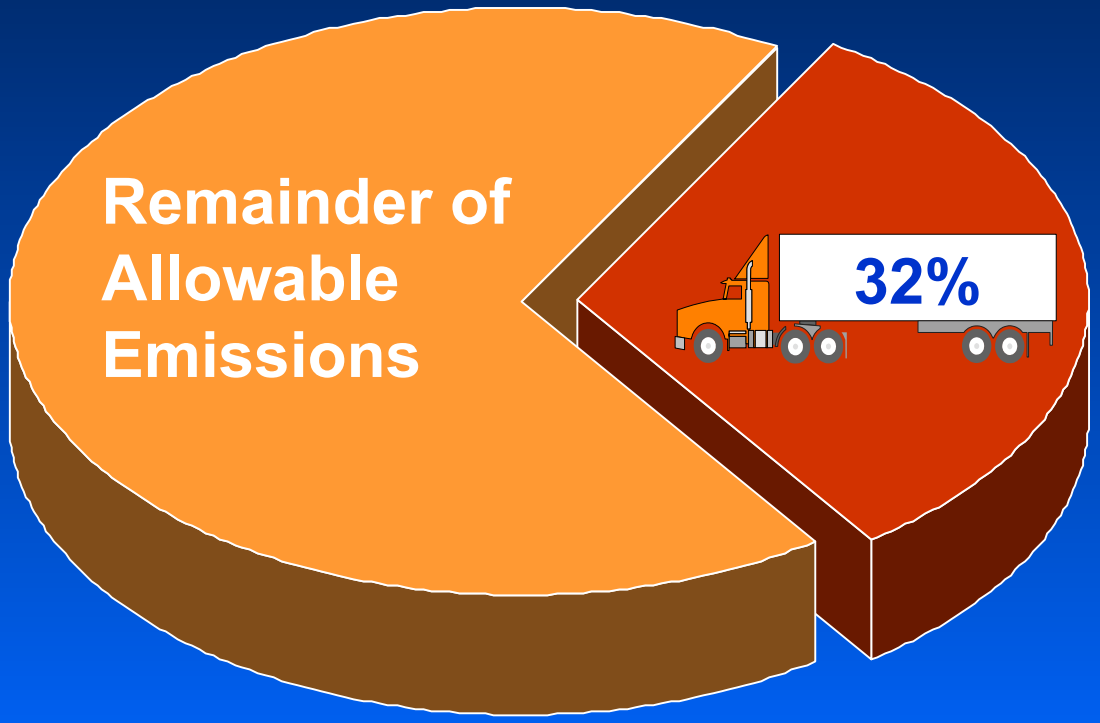
- **By comparison**
  - 3,700 deaths - car accidents
  - 2,000 homicides

Health Impacts[1] of Diesel PM Emissions

Deaths	2,000
Hospital Admissions	2,500
Respiratory Symptoms	170,000
Loss of Day's Work	400,000

[1] Annual; direct emissions only

Maximum Allowable Emissions[1] to Comply with Federal Ozone Standard



[1] Los Angeles - 2010

California Diesel Fuel

- 15 ppm sulfur fuel available now for fleets
- 15 ppm sulfur required - June 2006
  - On-road
  - Off-road too
- Needed to support statewide PM filter retrofit program too
- No opposition from oil industry

Summary

- California has adopted by regulation:
  - 2007 HDD exhaust standards
  - 2006.5 ultra low sulfur diesel fuel
- Emission reductions are large
  - Needed to meet ozone standard (NOx)
  - Needed to meet PM standard (NOx/PM)
- Delays or relaxation inconsistent with meeting clean air standards and protecting public health