## National Institute for Occupational Safety and Health







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The findings and conclusions in this presentation are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health.

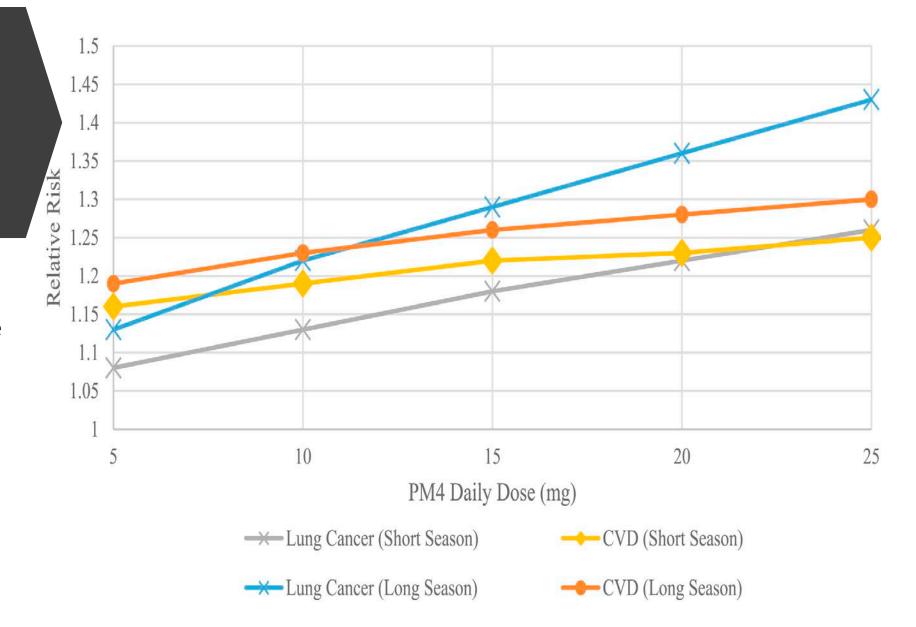




Long-Term Health Risk for Wildland Firefighters Navarro et al. 2019

Estimate lifetime risk of lung cancer and cardiovascular disease (CVD) from exposure to particulate matter from smoke.

- Exposure-response relationships
- Field Measurements
  - PM<sub>4</sub>
  - Heart Rate



## Respiratory Protection Barriers

- Arduous physically demanding work
- Dynamic environment with variable exposures
- Training on inhalation hazards
- Lack of administrative controls