Risk of Nonaccidental and Cardiovascular Mortality in Relation to Long-term Exposure to Low Concentrations of Fine Particulate Matter: A Canadian National-Level Cohort Study

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Canadian Census Health and Environment Cohort (CanCHEC)

Hazard Ratio per 10 µg/m³ = 1.10 (1.05-1.15)
van Donkelaar, Martin, Brauer et al., ES&T 2016
Satellite-estimates for other pollutants

2012-2014 Annual Averages
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An opportunity for cross-disciplinary exchange

• Improve the health and exposure community’s understanding of what air pollutant remote sensing from satellites can and can’t do

• Improve the remote sensing community’s understanding of some of the key questions motivating air quality and health research
Some questions to keep in mind

• What opportunities do satellite-based products bring for advancing knowledge on air pollution and health and what are the challenges?

• What is coming in the future from satellite observations and how can they help address these challenges?

• How well do we appreciate the limitations of the satellite products and how they impact our understanding of health impacts and burden estimates?

• How far can we take satellite products?
Strategic areas motivating HEI science

• Accountability
  • Links between air quality actions and health benefits

• Air pollution mixtures
  • Different PM components and sources

• Transport and urban health
  • Other sources and energy choices

• Global health