

Heat and air quality related cause-based elderly mortalities and emergency visits

Mohamed Dardir, Jeffrey Wilson and Umberto Berardi. "Heat and air quality related cause-based elderly mortalities and emergency visits."
CRDCN research-policy snapshots. Volume 2, July 2023

Context

The study assesses the impact of the short-term variations of environmental variables (air pollutants and ambient conditions) on specific community health responses (mortalities and emergency department visits) on a municipality-based scale. The study focuses on the health records of the elderly population and people diagnosed with cardiorespiratory causes.

Key finding(s) from the research

Vulnerable populations, especially elderly people with cardiorespiratory diseases, are at the greatest health risk of poor environmental conditions.

Population(s) studied: Population in the municipalities of Mississauga and Brampton, Peel Region, ON, CA, with focus on individuals >65 years old

Research dataset(s) used: Canadian Census Health and Environment Cohort (CanCHEC) linked to the National Ambulatory Care Reporting System (NACRS)

Policy implications for this research

The impact of extreme heat conditions and poor air quality levels was confirmed on community health records; the correlation was most potent with elderly cause-based populations. The research results support decision-making processes associated with implementing heat and air quality mitigation strategies, for example, increasing urban greenery cover.

Policy area(s) this research can inform: Environment; Health; Population and demography; Society and community

Read the full article

Dardir, M., Wilson, J., & Berardi, U. (2023). "Heat and Air Quality related Cause-based Elderly Mortalities and Emergency Visits." *Environmental Research*, 216 (3), 114640. DOI:10.1016/j.envres.2022.114640