



Assessing the health impact of extreme weather events using administrative data

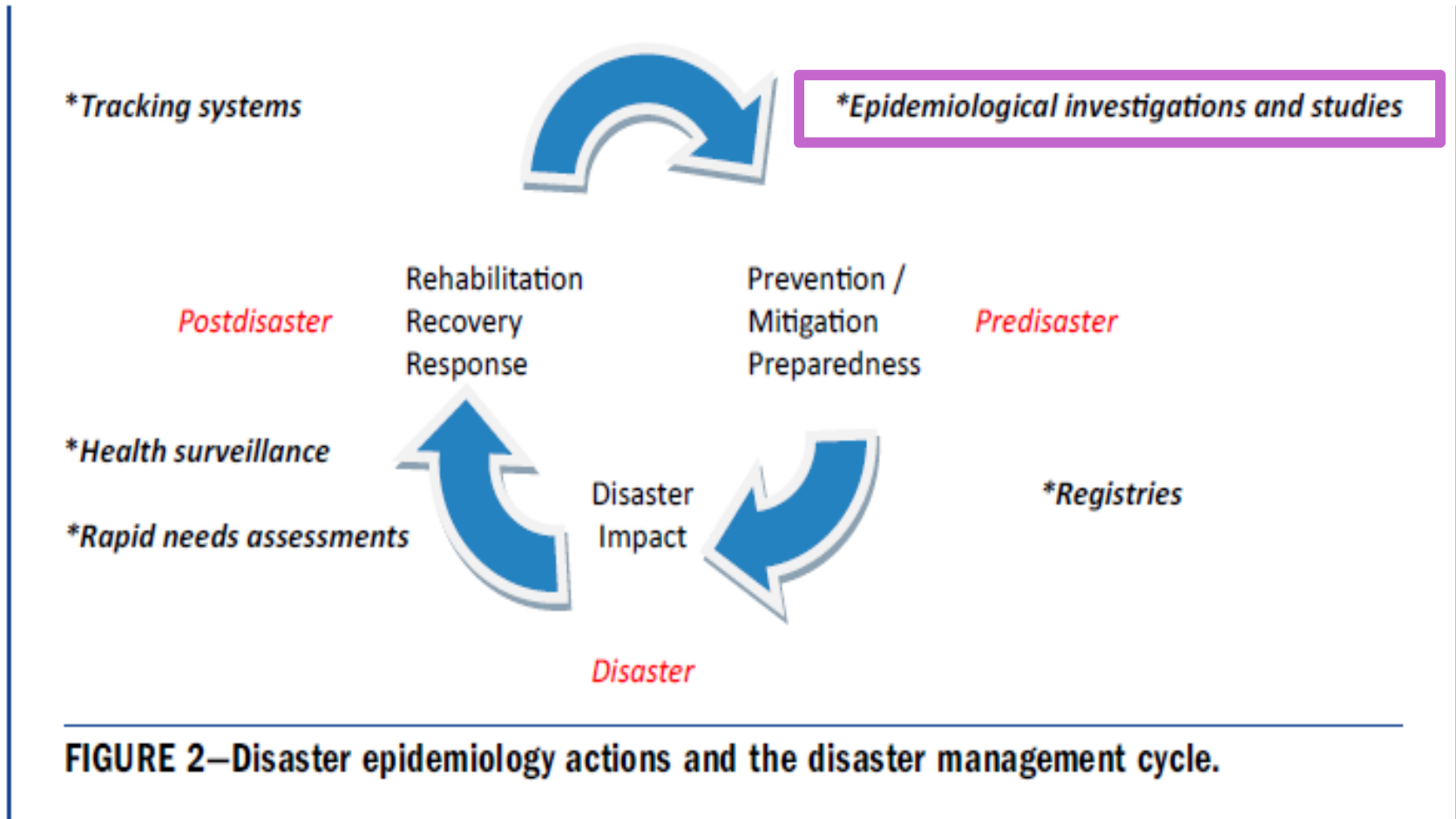
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Assessing the health impact of extreme weather events using administrative data

- Extreme weather is expected to increase in frequency
- The evidence base documenting the health impacts of extreme weather is largely descriptive
- In response to the 2013 ice storm and power outages, we wished to investigate the health impact at a population level
- At PHO, National Ambulatory Care Reporting System, Discharge Abstract Database, vital statistics and the Ontario Marginalization Index had previously been used to describe impacts of extreme weather



Malilay J, Heumann M, Perrotta D, Wolkin AF, Schnall AH, Podgornik MN, et al. The role of applied epidemiology methods in the disaster management cycle. Am J Public Health. 2014;104(11):2092-102.

Approach

- Emergency department (ED) visits used to investigate health impacts
- Analysis of NACRS data was conducted for comparison time periods and with a comparison jurisdiction
- Total ED visits and condition-specific visits were determined
- Challenges encountered included:
 - Initial interest in capturing health impacts broader than ED visits but accessibility of other sources of data a challenge
 - Critical infrastructure data

Emerging questions

- What are strategies to enhance the application and use of administrative data for use in response to emerging public health incidents?
- What is a realistic timeline for analyzing population level data in response to emerging PH incidents?
- What are the opportunities to link administrative data with other sources of data to enable more rich information?
- What are the opportunities for using population level data to assess the impacts on high-risk populations?

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