

Chapter 7.7

Doing Research in Health EDRM

Juan Pablo Sarmiento

Learning objectives

To understand key factors to consider when doing research in health emergency and disaster risk management (Health EDRM) and be able to:

- Outline the main purpose of doing research in Health EDRM.
- Explain various aspects that influence the choice of the topic to investigate, and the characteristics that this topic must have.
- Discuss the contrasts between the approaches of systemic disaster risk with those of the environmental approach to health associated with biological risks.
- Explain the importance of the theory of change and an evidence-based research strategy, and why they can be complementary to research in Health EDRM.

Introduction

The main purpose of **Health EDRM research** is to generate high quality evidence that can be used to promote, restore and maintain the health status and health equity of individuals and communities exposed to disaster risk, or during and after disasters and other emergencies.



The research topic - what to investigate?

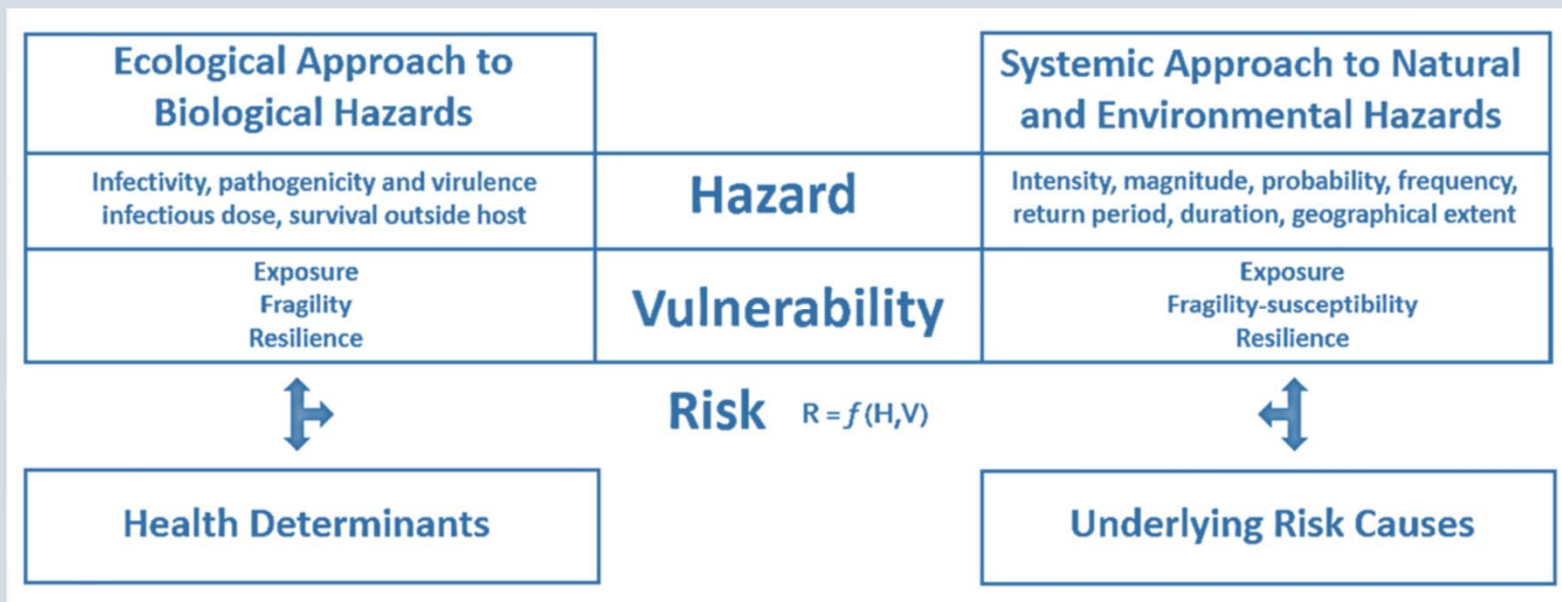


Figure 7.7.1.
Ecological approach
to biological hazards.

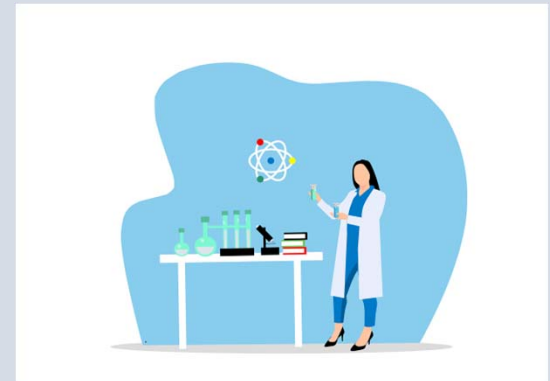
How to plan Health EDRM research (1)

Theory of change

Approach aimed at planning and evaluating interventions. It allows problems to be associated with goals; the identification of trajectories, domains of change, and the fundamental elements to define what should be evaluated, with a focus on key information, and the prioritization of what needs to be known and why.

Evidence-based research strategy

Systematic use of previous research to inform a new study so that it answers key questions about effectiveness, efficiency, accessibility and sustainability.



How to plan Health EDRM research (2)

Case study is a research strategy and an empirical inquiry that investigates a phenomenon within its real-life context.

Lessons learned or identified are knowledge or understanding gained through experience or reflection on a process.

Good practices are practices that have been validated through extensive use, obtaining positive and efficient outcomes to solve/tackle a problem in various contexts, which are confirmed by evaluations.



Where to do Health EDRM research



The **theory of territory** and health are intrinsically linked.

The spatial context affects the configuration of environmental risks as well as influencing other health effects.

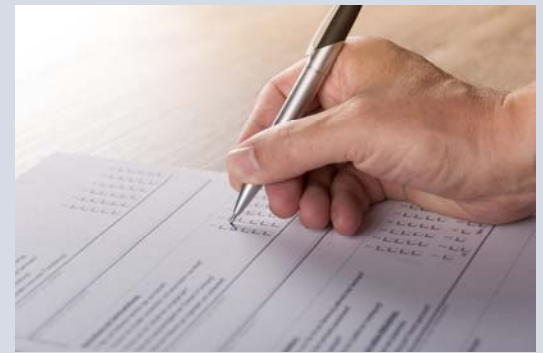
Social, built, and natural environments all affect health and well-being.

Types of Health EDRM research

Different study designs offer insight into a population's health based on the **time of data collection**. Two common study designs are:

- Cross-sectional studies, at a single point in time.
- Longitudinal or cohort studies, following participants over a period of time.

Studies might also focus on different stages of an emergency or a stage within the disaster management cycle.



Who to involve in Health EDRM research



It is important to determine the **relevant stakeholders** for the research project. These include

- Target audience of participants and those who will use the findings.
- Research team to conduct the research study.
- Partners to help deliver the research study.

Key messages (1)

- Health EDRM research requires an interdisciplinary vision
- An ecological approach to the relationship between health and disasters allows a broad space for this research.
- A theory of change and evidence-based research strategy complement each other, particularly when multiple interventions need to be assessed for their effectiveness, efficiency and sustainability.

Key messages (2)

- The main purpose of Health EDRM research should be to generate high quality evidence that can be used to promote, restore and maintain the health status and health equity of individuals and communities exposed to disaster risk, or during and after disasters and other emergencies.

Key messages (2)

- The main purpose of Health EDRM research should be to generate high quality evidence that can be used to promote, restore and maintain the health status and health equity of individuals and communities exposed to disaster risk, or during and after disasters and other emergencies.

Further readings

Reeve M, Wizemann TM, Altevogt BM, editors. Enabling rapid and sustainable public health research during disasters: Summary of a joint workshop by the Institute of Medicine and the US Department of Health and Human Services. Washington DC: National Academies Press. 2015.

www.nap.edu/catalog.php?record_id=18967

This is a report of a workshop convened by the Institute of Medicine and US Department of Health and Human Services on public health research in the disaster context.

Sethi N. Research and Global Health Emergencies: On the Essential Role of Best Practice. *Public Health Ethics*. 2018; 11(3): 237–50.

The author discusses the importance of best practices in global health emergency research.

United Nations Office for Disaster Risk Reduction. *Global Assessment Report on Disaster Risk Reduction*. 2019. Chapter 3, pp. 82-157. https://gar.unisdr.org/sites/default/files/reports/2019-05/full_gar_report.pdf.

This longform report summarizes the United Nations' approach to disaster risk reduction.

References

This chapter: Sarmiento JP. Chapter 7.7: Doing research in Health EDRM.

A Practical Guide for Health Researchers: Eastern Mediterranean Series 30. Cairo: WHO. 2004.

The Ebola Case & the New Disaster Risk Perspectives. Presented at the UK-US Social Responses to Emergencies: University of Miami Press. Coral Gables, FL: University of Miami. 2015.

Contact information

Name and title

Juan Pablo Sarmiento
Florida International University
11200 S. W. 8th Street
AHC5 - 250, Miami, FL 33199

Email

jsarmien@fiu.edu

