

Chapter 3.2 Disaster risk factors – hazard exposure and vulnerability

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Further reading

1. Aschengrau A, Seage GR, editors. Essentials of Epidemiology in Public Health (3rd edition). Sudbury, Mass: Jones and Bartlett Publishers. 2008.

Summary of this document: This textbook provides information on the principles of measuring, assessing, analyzing and reporting risk factors and outcomes in public health.

In this textbook, the authors introduce basic epidemiological concepts and research methods intended for public health students. It provides an overview of basic concepts in epidemiological theory, study design and the qualitative and quantitative interpretation of epidemiological research. The book includes case studies and practice questions at the end of each chapter.

2. Kelman I. Lost for words amongst disaster risk science vocabulary? International Journal of Disaster Risk Science. 2018; 9(3): 281-91.

Summary of this document: This article discusses the terminology of vulnerability, exposure and hazards. It should help readers to better understand the strengths and limitations of data and research relating to these topics in Health EDRM.

In this journal article, the author investigates core disaster risk science vocabulary that has not received extensive attention. They examine the meanings, interpretations and connections based on key United Nations glossaries. They cover hazards, vulnerability, disaster risk, and the linked concepts of disaster risk reduction and disaster risk management. The article examines the common connotations and underlying assumptions behind these phrases and critiques their misuse in Health EDRM literature. It concludes that simplifying Health EDRM should involve adopting a more general, risk-based vocabulary rather than one that specifically emphasizes disasters.

3. Sendai Framework for Disaster Risk Reduction 2015-2030. Geneva, Switzerland: UN International Strategy for Disaster Reduction (UNISDR). 2015. Available at <https://www.unisdr.org/we/inform/publications/43291> (accessed 22 February 2022).

Summary of this document: The Sendai Framework is a comprehensive document which provides concrete actions that would protect development gains from disasters.

This website provides information from the United Nations Office for Disaster Risk Reduction on the Sendai Framework for Disaster Risk Reduction 2015-2030, including version of the Framework document in multiple languages. The Sendai Framework outlines seven clear targets and four priorities for action to reduce existing and prevent new disaster risks. These priorities are (1) understanding disaster risk, (2) strengthening disaster risk governance to manage disaster risk, (3) investing in disaster reduction for resilience and (4) enhancing disaster preparedness for effective response, and to “Build Back Better” in recovery, rehabilitation and reconstruction. The Framework

contains key action priorities, guiding principles for accomplishing these priorities and targets and indicators.

4. Vandembroucke JP, von Elm E, Altman DG, Gøtzsche PC, Mulrow CD, Pocock SJ, et al. Strengthening the Reporting of Observational Studies in Epidemiology (STROBE): explanation and elaboration. *PLoS Medicine*. 2007; 4(10): e297.

Summary of this document: The STROBE statement provides guidance to authors of reports of observational studies in epidemiology to improve the ability of readers to understand the strengths and limitations of their data and research.

In this journal article, the authors expand on the STROBE Statement, which is a 22-item checklist intended to help authors to improve the reporting of observational research in epidemiology. The checklist items relate to the article's title, abstract, introduction, methods, results and discussion. In this explanation and elaboration document, the authors provide examples from published articles of what they consider to be good reporting. They conclude that reporting checklists such as STROBE can help researchers and other users to better appraise and interpret the results of observational studies.