Chapter 2.1: Using epidemiological principles to assess impacts of emergencies and disasters

Authors: Waite TD, Murray V.

Further reading

1. Community Assessment for Public Health Emergency Response (CASPER). Centers for Disease Control and Prevention. 2016. Available at: www.cdc.gov/nceh/hsb/disaster/casper/default.htm (accessed 22 February 2022).

   Summary of this document: Gathering household-level information to inform public health decision-making in disaster or non-disaster settings is important to initiate public health action, identify information gaps, facilitate disaster planning, response, and recovery activities, allocate resources, and assess new or changing needs in the community.

   The United States Center for Disease Control and Prevention (CDC) has created this website to provide information on the Community Assessment for Public Health Emergency Response (CASPER) toolkit in English and Spanish. The CASPER toolkit can be used to help public health leaders and emergency managers to conduct rapid needs assessments. The website provides guidance on how to prepare, execute, and analyze a CASPER study in a community. It also contains detailed information about CASPER, interactive map of CASPERs and resources and training modules to aid in conducting a CASPER.

2. Disaster epidemiology. Centers for Disease Control and Prevention. 2019. Available at www.cdc.gov/nceh/hsb/disaster/epidemiology.htm (accessed 22 February 2022).

   Summary of this document: Decision makers need an adequate description of the impact of a disaster or any other significant health event. Epidemiological research describing the causes and consequences of disasters can help them to understand this and plan for future disasters.

   The United States Center for Disease Control and Prevention (CDC) has created this website to provide information on disaster epidemiology and response during disasters. The website includes links to information on public health surveillance during a disaster, CDC's Community Assessment for Public Health Emergency Response (CASPER) toolkit and epidemiological research. It also includes a short eLearning module that provides an overview of disaster epidemiology.

3. Emergency Handbook. UNHCR. 2019. Available at emergency.unhcr.org/entry/50179/multicluster-sector-initial-rapid-needs-assessment-mira (accessed 22 February 2022).

   Summary of this document: A multi-cluster / sector Initial Rapid Needs Assessment (MIRA) is an inter-agency needs assessment and analysis proces that takes place during the first three days of the onset of a disaster followed within two weeks by a MIRA report. This can be used to inform coordinated planning and response in the aftermath of disasters.

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This website contains a book chapter from the 4ᵗʰ edition of the *UNHCR Emergency Handbook*, which describs the process of conducting a MIRA. The MIRA allows the humanitarian country team to develop a joint strategic plan for emergency response. It includes secondary data review, primary data collection and direct observation. The chapter also outlines the role of the United Nations High Commissioner for Refugees in producing a MIRA, particularly in ensuring that disaster-affected communities are protected from additional risks.

4. Global Outbreak Alert and Response Network (GOARN). WHO. Available at extranet.who.int/goarn (accessed 22 February 2022).

    Summary of this document: International public health resources that provide information to help prevent and control infectious disease outbreaks and to respond to public health emergencies are important.

    The WHO uses this website to introduce the Global Outbreak Alert and Response Network (GOARN), which is an international network of technical institutions and organizations that responds to emerging epidemics. The website provides information on GOARN's composition, recent news stories and media related products, training resources for field response and standards for collaborative public health alert and response networks. Resources from GOARN can help decision-makers in affected countries receive rapid support in managing epidemics. This website also houses GOARN's COVID-19 Knowledge Hub, which offers multidisciplinary information on COVID-19 for a variety of audiences from policy makers to responders, to researchers, to educators, to affected communities and the general public.

5. Sendai Framework for Disaster Risk Reduction 2015-2030. UNISDR. 2017. 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.

    The United Nations Office for Disaster Risk Reduction uses this website to provide information on, and access to the Sendai Framework for Disaster Risk Reduction 2015-2030 (in multiple languages). The Sendai Framework outlines seven clear targets and four priorities for action to prevent new and reduce existing disaster risks. These priorities are (i) understanding disaster risk; (ii) strengthening disaster risk governance to manage disaster risk; (iii) investing in disaster reduction for resilience and (iv) 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.