

Governance | Individual communication

IC - (21190) - DO YOU KNOW WHAT TO DO AFTER RECEIVING A FLOOD WARNING? ANALYSING EMERGENCY RESPONSE WITH AN ONLINE SURVEY OF LOCAL RESIDENTS FOLLOWING THE JULY 2021 FLOOD EVENT IN WESTERN GERMANY

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Background and objectives

In July 2021 an intense and rapid onset rainfall event resulted in severe flooding for several watersheds in Western regions of Germany as well as Belgium, the Netherlands, and Luxembourg. In the two German federal states of North Rhine-Westphalia (NRW) and Rhineland-Palatinate (RLP) the impacts of flooding were severe, with damage to buildings and infrastructure as well as more than 180 fatalities. This event was highly publicized in the German and international media with a focus on the performance of the early warning system.

Process and methods (for empirical research)

We analyse the warning situation for this flood event based on the results of an online survey with responses from 1348 participants from affected areas in the two federal states. Following the severe flood event in the middle of July 2021 the online survey for local residents was prepared and made available online for 8 weeks starting at the end of August. Among other topics, the survey addressed whether residents received a warning or not, when they received a warning, and whether they knew what to do.

Main results (or main arguments in the case of critical reviews)

Results show that 35% of the survey respondents in NRW did not receive any warning, while the same was true for 29% of respondents in RLP. Of those that did receive a flood warning 85% did not expect it to be severe and 46% did not know what to do. In addition, many respondents reported on personal loss, shared life-threatening experiences, and problems with the warnings. Multiple regression analyses show factors that are linked to higher levels of knowing what to do in the flood event, e.g. demographics, warning elements, personal experience and risk perception.

Implications for research and practice/policy | Importance and originality of the contribution

This presentation will discuss these results and potential conclusions to improve risk management for this type of flood event.

Palavras-chave : Risk Communication, Natural Hazard, Flooding, Risk Perception, Climate Change Adaptation