

Risk communication in mass gatherings: a scoping review

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Abstract

Background Mass gatherings entail unique crowd behavioral, health and safety risks for participants; however, risk perception can vary widely, and factors that influence perception of risk are not completely understood. Mass gathering organizers must take into consideration recognition, mitigation, monitoring, and communication of risk. This scoping review aims to (1) examine key factors affecting public perceptions of risk in mass gatherings and; (2) identify contemporary risk communication strategies specific to these events.

Methods We conducted a scoping review of articles indexed in MEDLINE, Embase, Scopus, CINAHL, and PsycINFO published between 1990 and 2024. Eligible articles included peer-reviewed original research (qualitative and quantitative), case studies, commentaries, reviews, and book chapters that discussed either factors influencing public risk perception of mass gatherings or strategies for mass gathering risk communication. Title and abstract screening, full article review, and data extraction were performed independently by team members. Final article inclusion was determined by team consensus, and findings were analyzed using thematic content analysis.

Results A total of 29 articles were included. Of these, four articles addressed factors shaping public risk perception of mass gatherings, 14 articles addressed risk communication strategies, and 11 articles addressed both. Factors influencing risk perception include mass gathering risk education, nature of the crowd, overcrowding, as well as event and venue specific characteristics. Risk communication strategies for mass gatherings thematically highlighted-communications flow, timing and content of messaging and differing modalities such as digital media, physical media and in-person communication.

Conclusions Understanding factors affecting risk perception of mass gatherings can inform risk communication strategies tailored for different target participants. While a variety of risk communication approaches have been employed in differing contexts, gaps remain in determining effectiveness of the wide range of risk communication strategies used for mass gatherings and suggest future directions for risk communication research.

Keywords Mass gathering, Crowds, Disasters, Crisis response, Risk perception, Risk communication, Public health