

TRACK 6: Wildfire Evacuation: Social Resilience and Local Community Response

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“Theme: Embracing the Crisis Management Lifecycle”

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THE TRACK OVERVIEW

Driven by climate change, wildfires are increasing in frequency and intensity globally with far-reaching consequences for local residents, communities, first responders, and emergency managers. For example, in Canada, wildfires have already burned over 15 million hectares in 2023 and the fire season is not over yet. Many regions of the world that previously did not have to deal with wildfires are increasingly facing wildfire-related threats.

Wildfires have costly human, economic, and ecological consequences and outsized impacts on vulnerable populations and underserved communities. Risks to human health and safety include exposure to fire-related threats (e.g., smoke and flames), sometimes hundreds of miles away from the actual fire. In addition, emergency managers and first responders are challenged by the sheer scale and number of fires.

Wildfires generate challenges throughout the Crisis Management Lifecycle:



- The pre-crisis stage encompasses scenarios either before a fire has started but conditions are favorable (e.g., as indicated by the Fire Weather Index¹) or prior to a fire moving into a community (e.g., the Wildland-Urban Interface or WUI). Here, the concern is primarily focused on community preparedness (e.g., evacuation planning and property protection), and management of hazards and exposure (e.g., fuel management).
- During the crisis stage, encroaching fires might threaten a community and require appropriate responses (e.g., community evacuation, firefighting, etc.).
- The post-crisis stage can be the longest-lasting phase and comprises the return of evacuated residents and restoring communities to pre-crisis activities.

TRACK TOPICS²





This track “*Emerging topics in wildfire evacuation*” focuses on societal resilience and will collect interdisciplinary work on all stages of the Crisis Management Lifecycle as they relate to wildfires and how they affect residents, communities, first responders, and emergency managers at the local level (for general aspects at governance level see the partner Track on *Emerging topics in wildfire risk management: Boosting Integrated Wildfire Risk Management*). This track invites contributions from “traditional” ISCRAM topics with the specific application of wildfires. The following topics will be considered as they relate to wildfire, wildfire evacuation, and civil protection throughout the Crisis Management Life Cycle. In addition, relevant contributions beyond the suggestions below will be considered.

- *Best practices and experiences of first responders and emergency planners (e.g., guidance and standards, emergency planning, preparedness, counter- and mitigation measures, minimization and managing threats)*
- *Case studies (e.g., community evacuation, post-disaster recovery)*
- *Computational and simulation tools (e.g., fire and evacuation simulations)*
- *Geospatial technologies, location analytics, and Geographic Information Science (GIS; e.g., use of geospatial data for evacuation analysis)*
- *Empirical research on wildfire evacuation, including community preparedness and response (e.g., community surveys and interviews)*
- *Emerging technologies for research and application (e.g., Virtual/Augmented/Extended Reality, Artificial Intelligence, smart homes/sensors, connected devices)*
- *Training and preparation for emergency responses and management*
- *Emergency communication (e.g., public communications, notifications and warnings, and use of social media in emergency communication)*
- *Impact on vulnerable populations and underserved communities on evacuation (e.g., residents with disabilities, fires in informal settlements)*

¹ The Fire Weather Index (FWI) is a system used in several countries that provides an aggregated rating of wildfire risk based on meteorological and environmental conditions, e.g.: cwfis.cfs.nrcan.gc.ca/background/summary/fwi

² Please note that this Track is complementary with the Track on “Emerging topics in wildfire risk management Boosting Integrated Wildfire Risk Management”

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