



### A42 Anthropology and Mass Fatality Management in Wildfire Disasters

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**Learning Overview:** After attending this presentation, attendees will better understand the roles anthropologists play in managing both recovery and identification of victims from wildfire events. Wildfires are a type of mass disaster that requires the coordination of resources across numerous agencies to address fatality management.

**Impact on the Forensic Science Community:** This presentation will impact the forensic science community by providing an overview of mass fatality policy development in response to lessons learned from mass disasters. The continued development of mass fatality policies affects both training and agency responses to future events.

The 2018 wildfire season in California was the deadliest and most destructive season in California Department of Forestry and Fire Protection (CAL FIRE) history. With a total of 310 incidents, California recorded 93 fatalities and more than 23,000 structures destroyed. The deadliest single incident of both the season and California wildfire history was the Camp Fire in Butte County, CA. The Camp Fire alone recorded 85 fatalities to date and more than 18,793 structures destroyed. Moving through the communities of Pulga, Concow, Paradise, and Magalia, the wildfire's speed and size also required the largest deployment of resources to a single mass fatality event in California history.

Mass fatality incidents are defined as any incident in which the number of dead immediately overwhelms local resources. In California, the local agency maintains operational control but can request assistance from both state and federal agencies in the event of a disaster, as well as other jurisdictions through a mutual aid system. Assistance can include subject matter experts, funding, and resources. Forensic anthropologists are often called to assist in both the recovery and identification process of victims in mass fatality incidents, along with medical examiners, coroners, odontologists, X-ray technicians, and other mortuary personnel. Traditionally, forensic anthropologists play a larger role during mass fatality disasters in the mortuary identification process than in field recovery operations. However, the 2018 Camp Fire utilized more anthropologists in field operations than in mortuary operations, inverting the more typical use of anthropologists. This resulted in the recovery of 85 victims across a 153,336-acre search area in under three weeks with no false positive cases sent to the mortuary.

Terrorism events, aviation disasters, pandemics, earthquakes, and hurricanes are usually the focus of mass fatality planning, whereas wildfires have not received the same amount of attention. However, the fatalities associated with wildfires present unique challenges to both the recovery and identification processes. Lessons from the 2018 fire season highlight the need to include anthropologists in operational planning in both pre-planning and incident response. This includes organization of victim search efforts, distinguishing between human/non-human/non-osseous materials, assistance in mortuary operations, field gear acquisition, field training for all search personnel, data logistics, and multi-agency coordination.

This study recommends an increased role for anthropologists in the pre-planning stage to increase the training sources available to law enforcement, search and rescue, CAL FIRE personnel, and medical examiner/coroner teams. In addition, involvement in planning would help with preparatory field gear acquisition for more rapid deployment during wildfire events. Also recommended is the inclusion of anthropology personnel in the active search for victims of wildfires, given the condition of remains in these instances. This recommendation reduces the number of false positive numbers in the field and increases the percentage of remains recovered, which in turn improves the speed and accuracy of positive identifications in the event.

#### Camp Fire, Disaster Planning, Wildfire Responses