

Progress in Saving Lives Aspects of Emergency Management Since the 2014 Mt. Ontake Eruption

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Introduction: Mt. Ontake (3,067m), Japan's second-highest volcano, erupted without warning on September 26, 2014, leaving 58 dead and five people missing. More than 20,000 rescue workers were mobilized from all over the country. The findings on rescue operations and subsequent advances in emergency preparedness and rescuer education are presented.

Method: After the disaster, public data was obtained from the Cabinet Office by conducting interviews. Photographs and videos were collected from the military, the police, and the Fire and Disaster Management Agency sources, as well as from local governments and the Volcano Research Institute.

Results: The volcanic eruption received governmental disaster designation. The leading cause of death and the rescued survivors were traumatic injuries caused by sudden falling rocks. Volcanic tremors and landform upheaval were observed immediately before the eruption, but they were too short-lived to lead to evacuation. The location of the victims at the time of the eruptions seemed to be the most critical determinant of survival. What medical care could do at this point was very limited. No rescuers died, but some suffered acute mountain sickness and hypothermia. In the following year, education for rescue organizations began, and volcano information was released to the public in real-time as raw data, regardless of whether they could be understood. In 2022, shelters were constructed near the summit of Mt. Ontake.

Conclusion: A severe volcanic eruption leaves little time for people to evacuate, and emergency medical care can play only a minor role. In Japan, where there are many volcanoes, measures are underway to support self-help to increase the possibility of saving lives for climbers and rescuers in an eruption that is difficult to predict.

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Climate, Weather Extremes and Health: Latest WHO-WMO Resources and Tools for Health Emergency Managers

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Introduction: As populations worldwide are experiencing more frequent and intense weather and climate extremes, many

professionals of the WADEM community are at the frontline of managing compounding and cascading impacts on physical and mental health. Vulnerable, isolated, and marginalized people are the most affected by climate and weather threats. The elderly and children faced 3.7 billion more life-threatening heatwave days in 2021 than annually in 1986–2005 increasing the need for emergency care on a large scale.

Method: The World Health Organization (WHO) and World Meteorological Organization (WMO), together with partners from health agencies, climate services, academia and other sectors are collaborating to accelerate the use of climate, weather and environmental science and services for better health protection. A selection of key resources and tools will be highlighted that can be used by the WADEM community to better understand, anticipate, and manage health risks from extreme weather and climate.

Results: Participants will learn about the new WHO-WMO ClimaHealth Portal, a global knowledge and action hub with huge potential for facilitating learning and action to better protect health from climate risks. Tools and resources include the Global Heat Health Information Network (GHHIN) Checklist and Technical Brief for improved heatwave preparedness and response in the context of COVID-19, and a new WHO Guidance Document on Measuring the Climate Resilience of Health Systems providing a framework and indicators for assessing and protecting health systems from climate threats.

Conclusion: As extreme weather intensifies, integrated climate-informed services for the health sector including multi-hazard early warning systems and action plans, as well as strengthened partnerships between the health community and hydrometeorological services are indispensable to further restrict adverse health impacts. Accelerating the uptake and upscale of existing tools and resources is urgently needed to meet the increasing health and societal challenges caused by climate change and weather extremes.

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Straddling the Fields of Disaster Preparedness and Disaster Epidemiology: Lessons Learned from Planning a Study for Implementation Within Weeks of an Unpredictable Natural Disaster

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Introduction: Studies on the impact of disasters on communities often occur months to years after the event. Pre- and peri-event details collected from participants may be imprecise or even unobtainable as memory is affected by time. More so, delays in data collection can introduce recall bias when participants with adverse outcomes provide differential responses about exposure. In 2019, the US Centers for Disease Control

