



MEETING ABSTRACTS

Tonga's National EMT Response to the Hunga-Tonga Hunga-Ha'apai Volcanic Eruption and Tsunami

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Background/Introduction: The Tonga Emergency Medical Assistance Team (TEMAT) responded to the Hunga Tonga-Hunga Ha'apai (HTHH) volcano and tsunami in early 2022. The HTHH volcano erupted violently on January 15, 2022 triggering a tsunami that struck many of Tonga's 169 islands.¹ 84% of the country's population was affected.² Tonga's undersea internet cable was cut, stopping most communication. At the time of the eruption/tsunami, Tonga was COVID-19-free with its borders effectively closed, forcing reliance on national emergency resources, including TEMAT.

Objectives: Describe TEMAT's response to the 2022 HTHH volcano eruption and tsunami.

Method/Description: TEMAT deployed four rotations of clinical and public health teams in response to the eruption/tsunami. Team members included clinicians from the Ministry of

Health, with logistics support from His Majesty's Armed Forces. TEMAT carried out emergency assessments, facilitated medical evacuations, aided in the evacuation of an entire island's population, and provided essential health services.

Results/Outcomes: From January 17 through March 4, 2022, TEMAT cared for 381 patients including patients with non-communicable diseases (>50), psychosocial complaints (39), communicable diseases (27), and traumatic injuries (13). The team supported five referrals to higher level care, conducted patients home visits, aided in health center repairs, and responded to a boat sinking during their deployment.

Conclusion: TEMAT's deployment demonstrates that deployment-ready and self-sufficient national EMTs are essential for response to sudden-onset disasters in vulnerable countries. A trained and well-prepared national EMT can respond independently, quickly, and effectively to emergencies, despite limited resources and high-impact events.

References (optional)

1. Wright CJ, et al. Surface-to-space atmospheric waves from Hunga Tonga-Hunga Ha'apai eruption. *Nature*. 2022;609:741-746.
2. UNOCHA. *Hunga Tonga Hunga Ha'apai Volcanic Eruption Humanitarian Snapshot*. UNOCHA; 2022.

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