

NATIONAL EMERGENCY MEDICAL SERVICES RESPONSE TO MASS CASUALTY INCIDENTS SECONDARY TO BALLISTIC MISSILE ATTACKS ON A CIVILIAN POPULATION

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Introduction: Prolonged ballistic missile campaigns against civilian populations represent an emerging mass casualty threat that differs fundamentally from conventional mass casualty incidents (MCIs). While prehospital Emergency Medical Services (EMS) responses to terrorism and localized disasters are well described, empirical data on EMS performance during sustained ballistic missile attacks remain scarce.

Methods: We conducted a retrospective cohort study of all missile-related MCIs managed by Magen David Adom (MDA), Israel’s national EMS and medical incident command authority, during a twelve-day ballistic missile campaign (June 13–24, 2025). Data were extracted from MDA’s command-and-control database and included incident characteristics, casualty severity, resource deployment, triage decisions, transport patterns, and concurrent routine EMS activity.

Results: During 39 missile alerts, 13 resulted in MCIs with a total of 455 casualties attended to by MDA. Multiple incidents occurred simultaneously across geographically distinct urban centers. A rapid surge in operational capacity was achieved through mobilization of volunteer-staffed ambulances, which increased available evacuation resources more than fourfold. On-scene triage and selective non-evacuation of minor and anxiety-related casualties limited unnecessary hospital transport and prevented emergency department overload, even during concurrent MCIs. Routine EMS operations were maintained during peak MCI response periods, without inter-district resource reinforcement.

Conclusions: Prolonged ballistic missile campaigns impose unique operational challenges characterized by simultaneity, geographic dispersion, and sustained uncertainty. A nationally centralized EMS structure with integrated volunteer surge capacity and system-level triage strategies can effectively manage simultaneous missile-related MCIs while preserving routine emergency services. These findings provide scalable insights for civilian EMS preparedness in regions facing missile threats from long-range ballistic missiles.

KEY CHALLENGE IS NOT A SINGLE MASS-CASUALTY EVENT — IT IS THE ABILITY TO RESPOND TO THE NEXT ONE WITHOUT LOSING THE CAPACITY TO RESPOND TO EVERYDAY EMERGENCIES.

Scalable surge capacity + distributed resources + on-scene triage + centralized command

Date	Time	Location	Deaths	Injuries
June 13, 2025	21:10	Ramat Gan, Tel Aviv	1 death on scene	2 severe 3 moderate 38 minor and anxiety
June 14, 2025	05:10	Tamra	4 deaths on scene	27 minor and anxiety
June 14, 2025	05:10	Rishon LeTzion	1 death on scene	2 severe 1 moderate 32 minor and anxiety
June 14, 2025	01:07	Tel Aviv		1 moderate 4 minor and anxiety
June 15, 2025	02:30	Bat Yam & Rehovot	4 deaths on scene	8 severe 24 moderate 121 minor and anxiety
June 16, 2025	04:10	Haifa	3 deaths on scene	5 minor and anxiety
June 16, 2025	04:10	Petah Tikva	4 deaths on scene	1 severe 1 moderate 46 minor and anxiety
June 16, 2025	04:10	Bnei Brak	1 death on scene	4 intermediates 38 minor and anxiety
June 16, 2025	04:10	Tel Aviv		1 intermediate 4 minor and anxiety
June 19, 2025	07:10	Be'er Sheva		Refused evacuation
June 19, 2025	07:10	Ramat Gan		32 minor and anxiety
June 19, 2025	00:07	Holon		3 severe 2 moderate 10 minor and anxiety
June 20, 2025	15:37	Haifa		3 severe 2 moderate 30 minor and anxiety
June 24, 2025	05:12	Be'er Sheva	4 death on scene	2 moderate 8 minor and anxiety

