

MAGEN DAVID ADOM EXECUTIVE SUMMARY – OCTOBER 2023

Multi-faceted in its mission and distinguished in its impact, **Magen David Adom (MDA)** is an Israeli non-governmental, non-profit organization that serves the population of Israel in more ways than one. As the national provider of pre-hospital emergency medical care, and administrator of blood banking services, MDA also responds to man-made catastrophes and natural disasters. As Israel's official Red Cross affiliate, it delivers humanitarian relief and rescue initiatives internationally. MDA is a strategic asset to national security and foundational to the health and safety of all Israelis.

MDA's origins date back to 1930, when doctors in Tel Aviv recognized the inadequacy of existing emergency field medicine in the aftermath of Arab riots in British Mandate Palestine. Over time, MDA evolved and expanded, and played a decisive role in the War of Independence, ultimately receiving its official mandate by the Israeli Government. Despite the divisive political and cultural climate in the region, MDA is a shining example of humanitarianism above all else. The composition of MDA's staff and volunteers mirrors the diverse tapestry of Israeli society, and exemplifying coexistence and inclusivity, it represents a people unified by one shared mission – saving lives.

MDA is the country's *largest* volunteer organization, with a critical contingent of 33,000 paramedics and EMTs, and first responders, 30,000 of which are volunteers. Israelis dial 101 in an emergency, and MDA answers within seconds. With its primary dispatch center based in Kiryat Ono, it coordinates across Israel's nine regions and 200 stations and outposts. In a typical year, 3,000,000 calls are fielded—equivalent to one every 10.8 seconds; and 1,000,000 patients are treated and transported to Israeli hospitals. Response times remain low because of its fleet of 2,200 vehicles, including 1,400 ambulances, that grows each year.

The significance of blood banking became evident in the years leading up to the establishment of Israel, laying the foundation for how it is positioned within today's healthcare infrastructure. Through years of experiencing external threats of terrorism, cyberwarfare, and natural disasters affecting the nation's blood supply, the Marcus National Blood Services Center – the world's first shielded blood bank – opened its doors in 2022.

Israel's climate of vulnerability has driven MDA's solutions-oriented approach, turning every crisis into an opportunity. Its position as an industry pioneer in pre-hospital EMS technology, is leveraged by Artificial Intelligence for rapid diagnostics and improved patient outcomes. Up until the 2006 Lebanon war, the computer aided dispatch system had been outsourced, but it reached its limitations in one decisive moment of attack. Forced to pivot, software coding was moved in-house, leading to the design of a novel platform that could only be achieved in response to real-life scenarios. Precise geolocation guides vehicles to unconventional locations in unpredictable circumstances. Ambulances are equipped for remote visual monitoring of patients, and smart defibrillators transmit ECG results directly to the ER. Additionally, internal data can be mined for predictive learning, which enables the allocation of resources to where and when specific types of incidences frequently occur.

MDA is a strategic asset to national security. Situated in a region with hostile neighbors, MDA is accustomed to expecting the unexpected and adapting. After decades of war, repeat terrorist attacks, and mass casualty incidents, it is aptly defined by its culture of emergency preparedness – not for *if*, but *when* the next incident occurs. Fully integrated within the nationwide security alert system, when safety is threatened, it activates as the auxiliary to the Israel Defense Forces.

MDA not only employs paramedics and EMTs, but also trains them. Paramedics are able to administer immediate intervention, stabilization, and diagnostics. While other organizations in Israel train EMTs and paramedics, MDA is the *sole* organization to certify them. Beyond emergency response, it fosters supportive communities by offering public health and safety classes at local stations, including first aid and CPR, defibrillator access, and preparedness for terrorist attacks. This assures that virtually anywhere in Israel, there is someone who can save a life.