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The EMPHNET Emergency Bulletin

The Next Big Shift for Synergy in Crisis Management: Emergency Medical Teams (EMT) and Public Health Rapid Response Teams (RRT) as a Unified Front for Greater Impact

Emergencies resulting from disease outbreaks, conflicts, and natural disasters are becoming more frequent and complex. They demand a faster and more coordinated health response. This issue explores how the synergy between Emergency Medical Teams (EMTs) and Public Health Rapid Response Teams (RRTs) is forming a unified front in crisis management. Together, they represent a powerful shift toward greater efficiency and impact in emergency response efforts.



“By highlighting the aforementioned experiences, EMPHNET seeks to drive progress toward building synergistic approaches that enhance response efficiency, reduce morbidity and mortality, and support the resilience of health systems in the face of evolving health threats”

Dr. Mohannad Al Nsour
Executive Director, EMPHNET

Redefining Emergency Response: The Power of Unified Emergency Medical Teams (EMT) and Public Health Rapid Response Teams (RRT)

The unpredictable nature of events that may escalate into crises, whether at personal, community, national, or international levels, highlights the critical need for the effective coordination of various response sectors. Timely, tailored, and well-organized response efforts are essential to mitigate their impact, ensuring optimal allocation and use of available resources. Such swift interventions include addressing both immediate clinical needs and broader public health threats.

Within this contexts, EMTs play a critical role in delivering rapid, life-saving medical care during disasters and health emergencies, while Public Health RRTs focus on disease surveillance, outbreak management and control, as well as the implementation of preventive health measures. Although the functions of EMTs and RRTs are distinct, the events of recent years have highlighted their interdependence as a fundamental means for mitigating the impact of emergencies and ensuring an effective health system response.

While both play crucial roles in saving lives, gaps in integration can lead to inefficiencies, miscommunication, and adverse outcomes. This article highlights the benefits of EMT-RRT integration, examines successful and failed cases, and outlines key scientific considerations for establishing a unified response framework.

Scientific Considerations for Integration

The successful integration of EMTs and RRTs requires careful planning and adherence to scientific best practices. Several key factors must be considered:

Protocol Development:

Standardized protocols help ensure consistency in decision-making and improve coordination across teams (World Health Organization “WHO”, 2022).

Continuous Quality Improvement: Ongoing monitoring helps identify gaps and areas for improvement (Prehospital and Disaster Medicine, 2021).

Evidence-Based Practices:

Integrating data-driven decision-making into response protocols strengthens the effectiveness of EMT and RRT interventions and minimizes variability in care and improves patient outcomes (WHO, 2020).

Training and Capacity Building:

Ensuring all responders are well-prepared and skilled is a cornerstone of integration through comprehensive training (WHO, 2021).

Resource Allocation:

Sufficient personnel, equipment, and logistical support are critical for maintaining an effective response. Without proper resources, even the best-designed response systems will falter (Global Consultation on EMTs and RRTs, 2023).

Organizational Culture:

Leadership commitment and a culture of teamwork improve response efficiency and professional relationships (WHO, 2021).

Unifying Response Language:

Harmonizing communication is essential to prevent misinterpretations during emergencies. Standardized language, definitions, and communication protocols must be initiated as a first step (Global Health Emergency Response Literature, 2023).

Global and Regional Integration Initiatives

Recognizing the importance of integration to mitigate the effects of both manmade and natural emergencies on health systems, the following integration initiatives have been launched:

- **Global Health Emergency Corps (GHEC)** (WHO, 2023) is building a coordinated global health emergency workforce to strengthen preparedness and response.
- **European Union Civil Protection Mechanism (UCPM)** facilitates cross-border emergency support, deploying medical teams and resources, including EMTs and RRTs, in response to complex emergencies.
- **African Volunteers Health Corps – Surge (AVoHC-SURGE)** supports African countries by training and deploying health professionals for national and international emergency response.

In conclusion, collaboration between these two critical operational structures requires further exploration to identify the most effective approach for integration. Given the limited literature addressing the how and why of this process, it is essential to engage subject matter experts (SMEs) from relevant fields to refine and tailor the specifications of each proposed mechanism. Such collaborative efforts will help ensure that the approach is both contextually appropriate and operationally viable. – By **Ms. Asma Qannas, Senior Technical Officer, EMPHNET**



Source: Nairobi/Geneva, 25 February 2025, IFRC

Integrating RRTs and EMTs in the Eastern Mediterranean Region (EMR)

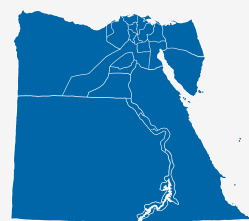
The EMR faces unique challenges in health emergency response. This is due to its diverse geopolitical landscape and frequent humanitarian crises. The integration of RRTs and EMTs in this region is not just a matter of operational efficiency but also a critical necessity for effectively addressing complex health emergencies.

The approach adopted in the EMR to RRT-EMT integration is shaped by the region's specific needs and experiences. Countries like Egypt and Yemen are at the forefront of this effort, adapting global best practices to their local contexts. This regional adaptation is crucial, as it considers factors such as limited resources, ongoing conflicts, and the need for culturally appropriate responses. One key aspect of the EMR's integration strategy is the focus on strengthening national and sub-national capacities. This approach recognizes that while international surge support is valuable, the primary and most critical building blocks of an effective response involve ensuring strong national rapid response capacities. By investing in local preparedness and operational readiness, the EMR countries aim to ensure timely, high-quality, and contextually appropriate first-line responses to emergencies. Another significant aspect of the EMR's integration strategy is to focus on efficiency and sustainability. By exploring areas of possible integration between RRTs and EMTs, countries in the region aim to streamline health operations, share resources, and create more sustainable financing models. This approach not only enhances the effectiveness of emergency response but it also makes better use of limited resources in a region often strained by multiple concurrent crises.

The foundation for integrating RRTs and EMTs in the EMR is built on the outcomes of a global consultative meeting held in Lyon, France, in December 2023. The meeting was jointly held by WHO Emergency Medical Teams Secretariat and US Centers for Disease Control and Prevention (CDC). This pivotal gathering brought together over 60 national representatives from 18 countries across all six WHO regions. During the meeting, a strong consensus emerged on the need to explore the integration of these programs at both the national and sub-national levels. This global initiative laid the groundwork for subsequent country-specific adaptations in the EMR, driving efforts in countries like Egypt and Yemen to enhance their emergency response capabilities.

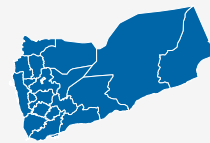
The Initiatives in Detail

Egypt's Integration Initiative



Egypt has emerged as one of the pioneering countries in the EMR to pursue RRT-EMT integration. Following the global consultative meeting that took place in December 2023, Egypt requested the adaptation of this approach nationally, thus leading to a consultative meeting held in Cairo in October 2024. The meeting brought together national representatives involved in managing RRT and EMT programs, representatives who are responsible for the Monitoring and Evaluation (M&E) of these programs, WHO staff, as well as partner organization representatives. Furthermore, the meeting expanded beyond merely examining RRT and EMT functions by incorporating the One Health approach into their rapid response capacities for comprehensive health emergency responses.

Yemen's Integration Journey



Yemen has also demonstrated a commitment to strengthening rapid response capacities through RRT and EMT integration. In December 2024, a consultative meeting was held in Aden, bringing together national representatives from the Ministry of Health and Population (MoHP) and the WHO Country Office, who are involved in managing RRT and EMT programs. The representatives thoroughly explored the functions of RRTs and their relationship with national EMTs, using their operational cycle as a framework for discussion. During the meeting, participants identified and prioritized key tasks across ten areas of integration, illustrated in the figure below, to strengthen both RRT and EMT operations. For each area, specific tasks were identified as priorities, forming the foundation of a comprehensive work plan for the integration process.

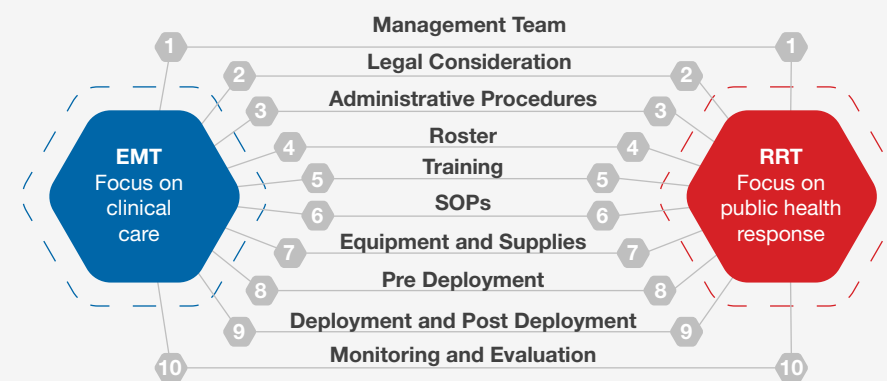


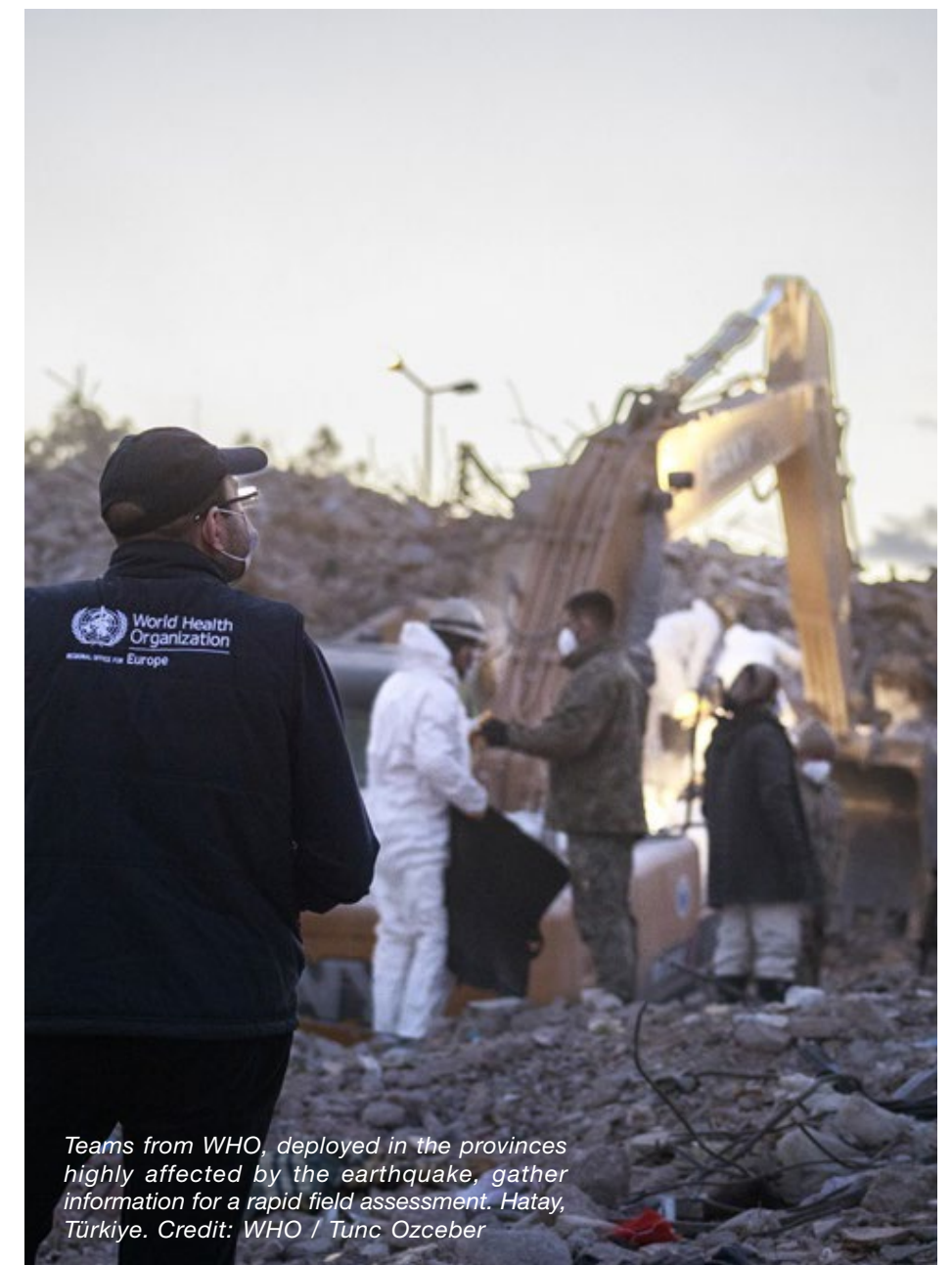
Figure 1: Diagram showing full integration of EMT and RRT programs. All steps in the management cycle are integrated (WHO, 2024)

Integration Models and Implementation Framework

Integration models consider various operational aspects, including management, legal frameworks, administration, staffing, standard operating procedures (SOPs), equipment, training, and deployment processes. This tailored strategy recognizes that different operational areas may require varying levels of integration based on specific functions and requirements according to the country's context. The work plans developed in Egypt and Yemen provide a practical framework for implementation, detailing activities, benchmarks, resources, responsibilities, timelines, and anticipated challenges. This structured approach ensures systematic progression toward integration while acknowledging potential obstacles during implementation.

Future Directions

By sharing experiences and lessons learned across countries like Egypt and Yemen, the region is developing a collective knowledge base that can inform future integration efforts. WHO's continued support through regional and country offices will be crucial in facilitating this knowledge exchange and providing technical assistance for implementation. As these integration efforts mature, they are expected to yield tangible improvements in response efficiency, resource utilization, and health outcomes during emergencies. The experience in the EMR may also offer valuable insights for other regions pursuing similar integration strategies, contributing to global advancements in health emergency management. – By **Dr. Sherif Shamseldein, WHO Consultant**



Teams from WHO, deployed in the provinces highly affected by the earthquake, gather information for a rapid field assessment. Hatay, Türkiye. Credit: WHO / Tunc Ozceber

Enhancing the Integration of EMT and RRT: The Kingdom of Saudi Arabia's Experience in Strengthening Unified Health Emergency Response

The International Health Regulations (IHR 2005) require all countries to develop the essential capacities needed to detect and respond to any unusual event that may become a Public Health Emergency of International Concern (PHEIC). This includes the establishment of RRTs and EMTs. Building, managing, training these teams, and ensuring the integration of their operations are key components in enhancing effective health emergency response. These efforts also support the broader framework for Public Health Emergency Management (PHEM) and contribute to meeting the requirements of the IHR while also strengthening global health security. Through an interdisciplinary approach, RRTs and EMTs provide diverse expertise and field capabilities, making them essential assets in the public health emergency response system, usable at all stages of investigation and response.

The Importance of Investing in National and Local Response Capacities

Health emergency responses begin at the local level, requiring investment in national capacities to ensure rapid and effective response. RRT and EMT are vital components of the emergency health workforce, enabling the deployment of multidisciplinary teams for rapid crisis response. Despite the supporting role of international organizations, developing highly efficient national teams remains a priority for countries to ensure a response that is aligned with the local context, community-centered, and time-effective.

Health crises, such as the COVID-19 pandemic, highlighted the need to strengthen operational capacities for faster and more effective responses. Research and studies emphasize the importance of identifying gaps throughout the response cycle to enhance the workforce and optimize overall performance. A notable initiative in this context is the 7-1-7 initiative, which evaluates the performance of health systems at each stage of an event, including detection, reporting, and response.

Integration Between RRT and EMT

A global project conducted by WHO and the Centers for Disease Control and Prevention (CDC) highlighted the potential benefits of integrating RRTs and EMTs. Although each operates independently, there is considerable overlap in their functions throughout the emergency response cycle. The integration between them improves coordination at national levels, enhancing the efficiency of resource and expertise utilization, and most importantly, ensuring a timely and effective response.¹

Several countries have started integrating these programs, demonstrating a rising trend toward collaboration, even with challenge of varying administrative structures. Nonetheless, there is a growing agreement on the advantages of integration, especially in streamlining leadership, securing sustainable funding, and enhancing the overall public health response.²

¹Strengthening capacities through Rapid Response Teams and Emergency Medical Teams: global consultation report, Lyon, France, 12-15 December 2023. Geneva: World Health Organization; 2024. License: CC BY-NC-SA 3.0 IGO. (<https://iris.who.int/bitstream/handle/10665/380585/9789240102125-eng.pdf?sequence=1&isAllowed=y>)

²Shamout M, Relan P, Fitzgerald B, Correa A, Salio F, Greiner A. Integrating Management and Operations of Rapid Response Teams and Emergency Medical Teams Programs Globally. *Prehospital Disaster Med.* 2023 May;38(S1):s36-s36.

Saudi Arabia's Efforts in Enhancing Integration Between the Two Teams

Saudi Arabia is at the forefront of crowd management and field epidemiology. The country has an accredited national program for Disaster Medical Assistance Teams (DMAT) and has officially launched the RRT program. The kingdom is also working toward establishing an integrated and efficient program that combines RRT and DMAT to improve rapid response to health crises, minimize coordination challenges, and reduce morbidity and mortality rates.

In alignment with the Kingdom's health-centered transformation goals, which are designed to achieve health security and enhance flexibility in emergency response, Saudi Arabia is prioritizing the improvement of health governance systems and preparedness to tackle health threats.

These efforts have led to the implementation of several key initiatives, most notably the development of a clear framework for crisis and disaster management, along with a comprehensive national plan shared with health authorities across various regions of the country. This plan focuses on strengthening prevention, preparedness, response, and recovery efforts in addressing health risks, emergencies, and disasters, such as disease outbreaks, epidemics, natural disasters, as well as chemical, biological, and radiological incidents.

Furthermore, Saudi Arabia has initiated several activities between DMAT and RRT, with a strategic vision aimed at achieving full coordination. Below is an overview of part of the executive plan for integrating the two programs, developed in collaboration with CDC, the Civilian Research and Development Foundation (CRDF), and EMPHNET. The executive plan includes:

- 1. Readiness Assessment:** Workshop to evaluate RRT and DMAT preparedness and to identify priorities using CDC's CAT.
- 2. Capacity Building:** Training RRT managers, Integrate RRT operating procedures with DMAT procedures, and create a unified guide for response plans and protocols.
- 3. Coordination Improvement:** Stakeholder meetings to enhance coordination RRTs and DMAT and clarify roles for faster emergency response.

Saudi Arabia's DMAT Achieves WHO Type 2 EMT Classification – First Country in the EMR!

The World Health Organization has accredited and classified the Saudi DMAT as the first Type 2 global EMT in the EMR and the 14th globally in this category. This achievement reaffirms Saudi Arabia's commitment to enhancing its healthcare system, in line with the objectives of the Saudi Vision 2030 and the Health Sector Transformation Program.

[Read more](#)

Workshop Outcomes

The workshop provided a platform for stakeholders and managers of DMAT and RRT to acquire the knowledge and tools necessary for establishing, managing, and deploying rapid response teams. The workshop featured ten training modules that utilized case studies and breakout sessions to address seven key elements of program development and management, including:

1. Workforce identification and recruitment
2. Management and governance
3. Training and professional development
4. Activation mechanisms and pre-deployment phase
5. Deployment procedures and field response
6. Post-deployment evaluation and lessons learned
7. Coordination and integration with other health systems

Finally, RRTs and EMTs are vital components in responding to public health emergencies, and the Kingdom of Saudi Arabia stands as a leading example in working toward the development of an integrated model that combines these teams to enhance the effectiveness and efficiency of responses to health crises. The Kingdom aims to finalize this integration soon and establish a model that can be followed in promoting coordination among different health teams without disrupting their routine and daily operations. Through these efforts, Saudi Arabia contributes to supporting regional and global health security. – By **Dr. Abdu Adawi, Director of the National RRT Program, Ministry of Health, Saudi Arabia.**



RRT SOP Development and Management Training Workshop, KSA

Building EMT Readiness for Integrated Emergency Response

EMTs are specialized groups of healthcare professionals, including doctors, nurses, paramedics, and support staff, who provide rapid medical assistance during emergencies and disasters. These teams can be nationally or internationally deployed and they play a crucial role in reinforcing healthcare systems when local capacities are overwhelmed. EMTs respond to a range of emergencies, including natural disasters, disease outbreaks, and conflict situations, ensuring access to life-saving medical care, stabilizing patients, and supporting overwhelmed health infrastructure. Their work also extends beyond direct patient care to include public health interventions, capacity-building, and coordination with other emergency response units.

While EMTs are often discussed in the context of WHO classification, their function and impact extend beyond these categories. In many countries, EMTs are integrated into national disaster response frameworks, supporting both routine healthcare and emergency preparedness efforts. They enhance resilience by participating in simulation exercises, training local responders, and ensuring that healthcare systems can rapidly scale up in times of crisis. In collaboration with Public Health RRTs, EMTs contribute to comprehensive emergency management by addressing both immediate clinical needs and broader public health threats.

According to WHO, EMTs can be classified based on their capabilities and the level of care they provide into four types:

Type 1 focuses on outpatient care, offering basic services, such as first aid and primary healthcare, either in mobile or fixed settings.

Type 2 provides inpatient surgical emergency care, with the capacity for surgical procedures and inpatient treatment.

Type 3 delivers advanced inpatient referral care, including intensive care and complex surgeries

Type 4 offers specialized care in areas such as cholera treatment, rehabilitation, or mental health.

Public Health RRTs, on the other hand, are interdisciplinary teams of trained professionals ready to deploy in public health emergencies to identify and control health events, contributing to the goals outlined by the Global Health Security Agenda (GHSA) as part of a broader public health emergency infrastructure (Greiner et al., 2020).

Bridging Global Benchmarks with Local Expertise: Lessons from the Jordan Paramedic Society's (JPS) Experience

Drawing from the global consultation that emphasizes the need for synchronized EMTs and RRTs, the experience of the Jordan Paramedic Society (JPS) offers practical insights, and underscores the critical importance of translating global best practices into context-specific solutions.

The JPS EMT showcases the efficacy of a well-coordinated volunteer network. Comprising of 150 highly trained doctors, nurses, and paramedics, this team demonstrated its critical role during the COVID-19 pandemic by:

- **Augmenting National Capacity:** When the formal health system was overwhelmed, the JPS EMT provided crucial support to the Ministry of Health (MoH), the National Center for Security and Crisis Management, and Civil Defense.
- **Pioneering Regional Expertise:** Recognized as a regional leader, the JPS EMT also deploys volunteers trained to rigorous standards by the JPS Training Center and is formally acknowledged by the MoH as a key support entity.

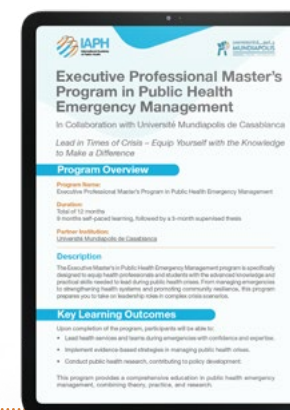
In addition to its core functions, JPS EMT played a crucial role in Jordan's comprehensive pandemic response during COVID-19. Key contributions included the COVID-19 Hotline 111 for public inquiries, the establishment of a dedicated Disaster Management team within the MoH, and the deployment of mobile clinics during lockdowns. Additionally, epidemiological investigation teams were formed to conduct contact tracing and outbreak assessments, while the Corona Bed Management initiative optimized hospital capacity. JPS EMT also supported Jordan's Vaccination Program, administering 40,000 vaccines in Marka, Amman, and launched the Hafez data entry initiative across five governorates to improve data management.

Lastly, the integration of EMTs and Public Health RRTs is a vital step towards more effective crisis management that can create an emergency response system capable of providing timely, high-quality, and life-saving interventions, aligning with both global and local needs. – By **Dr. Yanal Al Ajlouny, President of Jordan Paramedic Society (JPS)**



UNRWA school visit during the JPS medical deployment to Gaza, 2014

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In Numbers

In our turbulent world, crises have become a constant reality for communities across the EMR and beyond. These crises, ranging from natural disasters to man-made emergencies driven by war and conflict, take a significant toll on healthcare systems and the health of populations. More critically, they contribute to the collapse of health infrastructure, with climate change exacerbating the situation further. This section provides an overview of alarming statistics.

Gaza

On **March 18, 2025**, new Israeli attacks and bombardments were reported across the Gaza Strip, ending the ceasefire and resulting in civilian casualties, displacement, and widespread destruction of property. Additionally, Juzoor's Al Rafi Health Center, a vital facility in Jabalia that served over 1,000 patients daily, was severely damaged in the airstrikes, significantly impacting the ability to provide essential healthcare services.

50,523
people have been killed as of April 3, 2025

114,776
people have been injured as of April 3, 2025

670
health attacks have been reported as of March 17, 2025

>170
ambulances have been affected as of March 17, 2025

122
health facilities have been affected, including 33 hospitals that have been damaged since October 7, 2023

78/155
primary health care centers remain functional, with 5 fully functional and 77 partially operational

12
health facilities have been supported in establishing EWARS to enhance disease surveillance as of March 1, 2025

19
EMTs are currently operating

409
aid workers have been killed as of April 3, 2025.

15
medics and emergency responders were killed in southern Gaza and buried in a mass grave on March 30, 2025

52
Palestinian doctors and surgeons from the second national EMT have been deployed in various hospitals as of February 2025

Sudan

>150,000
people were killed as of April 2023

12.7 million
forcibly displaced people as of April 2023

124
health workers were killed and 94 injured among the 559 attacks

2,375
confirmed cholera cases and 72 deaths reported in White Nile state as of the last week of February 2023

559
attacks have been reported on Sudan's healthcare system as of April 2023

>70%
of health facilities in conflict areas are not operational as of March 2025

Lebanon

4000
people were killed, as of March 20, 2025

17,000
were injured as of March 20, 2025

96,037
remain displaced people as of March 20, 2025

162
health attacks have been reported against health care resulting in 296 injuries and 241 deaths since 8 October 2023 as of March 10, 2025

>192
emergency and health workers were killed during the escalation

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