World Health Organization

occupied Palestinian territory

ESTIMATING TRAUMA REHABILITATION NEEDS IN GAZA

SEPTEMBER 2025 UPDATE

World Health Organization

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CONTENTS

EXECUTIVE SUMMARY

This technical note is an update to the 2024 Gaza injury estimate[1] published by the World Health Organization one year ago. It was developed using the same methodology while drawing on additional data sources to triangulate findings. The report has been expanded to describe the status of rehabilitation services in Gaza, and the challenges in meeting the needs of those injured.

The quantification of injuries in Gaza remains exceptionally challenging due to the ongoing conflict. The report uses multiple data sources to provide insights into the number and distributions of conflict-related injuries by type, including data from Emergency Medical Teams, the retrospective registration of people with key injuries, WHO supported medical evacuations and key rehabilitation data shared by service providers. No one data source is without limitations, but taken together they can increase our understanding of the situation on the ground. This is crucial to help meet the current urgent demand for trauma and rehabilitation-related services and anticipate future needs, enabling effective allocation of resources, timely response, and comprehensive care, as well as helping plan for the long-term needs of the population. By utilizing estimates of conflict-related injuries, stakeholders can better address the immediate and ongoing physical, psychological, and social needs of survivors.

The findings of the report are striking, and support the original 2024 report. A quarter of all injuries are potentially life-changing, with an estimated 41,844 people, or 1.9% of the population of Gaza now affected. Up to a quarter of those are children. At the same time, rehabilitation services, like all health services in Gaza, are under enormous strain, with no service fully operational, and a total loss of two thirds of pre-existing services. Remaining services are now augmented by Emergency Medical Teams and partners, but even with this surge support, supplies are constrained, and overall rehabilitation capacity in Gaza remains well below pre-conflict levels.

This report was drafted in August and September 2025 during a period of severe escalation in Gaza, particularly a military offensive on Gaza City, and in a context of famine, forced displacement, killings at aid distribution points and destruction and disruption of health services. The health situation continues to deteriorate on a daily basis, and services available one day may not be available the next, with several critical rehabilitation services facing imminent closure in Gaza City. There is an urgent need to expand trauma services, including rehabilitation and mental health and psychosocial support, to effectively treat those injured and support their full recovery. WHO continues to call for improved and sustained humanitarian access and protection of health care, and above all, for a ceasefire.

1. WHO (2024) Estimating Trauma Rehabilitation Needs in Gaza using Injury Data from Emergency Medical Teams

KEY FINDINGS

- At least one quarter of all injured people in Gaza. This supports the findings of the initial injury estimate released by WHO in September 2024.
- The estimated number of people requiring long-term rehabilitation due to injuries has almost doubled from 22 500 in July 2024 to at least 41 844 by 24 September 2025. This is equivalent to 1.9% of the pre-conflict population.
- Data indicates that around 25% of those with potentially life-changing injuries are children, although age disaggregation remains limited.
- Blast injury remains the most common mechanism of injury.
- Major extremity injuries continue to form the largest group of traumatic injuries requiring rehabilitation. Other major injuries include amputations, burns, spinal cord injuries and traumatic brain injuries.
- Severe maxillofacial and ocular injuries are one of the most prevalent conditions among patients listed for medical evacuation. These injuries often cause significant impairment and disfigurement, and were not reflected in the previous report due to the limitations of earlier available data.
- Peripheral nerve injuries, often occurring alongside major extremity trauma, are an under-reported cause of long-term impairment.
- Lack of access to reconstructive surgery and rehabilitation, coupled with famine, unsanitary living conditions, disease outbreaks, and severe ongoing stress, continues to have a detrimental impact on people with injuries, as well as disproportionately affecting the most vulnerable.
- Though not examined in detail in the report, the mental health and psychosocial support needs of those with injuries and their families are significant.
- Rehabilitation needs in Gaza extend beyond injuries. There is an urgent need to maintain essential rehabilitation services for people with chronic health conditions and disabilities, who live in exceptionally challenging circumstances. The recent rise in Guillain-Barre Syndrome cases highlights that trauma is not the only driver of increased rehabilitation needs. Medium- to long-term consequences of famine, disease, displacement, and disruption of wider health services also need to be considered.
- Despite improvement, strengthening of the collection of data on injuries and rehabilitation needs is urgently needed – both now in Gaza, and in future emergencies.
- Notwithstanding the significant inclusion of rehabilitation in Emergency Medical Teams and attempts to scale up by key pre-existing service providers, the availability of rehabilitation services has reduced since the onset of the crisis due to attacks, insecurity and displacement. Thus, there is an urgent need to scale up rehabilitation services, with an immediate focus on integrating rehabilitation into remaining health services including primary health care and creating greater inpatient rehabilitation bed capacity.
- As part of scale up, access to supplies must be improved, including addressing the rules and procedures that constrain the importation and delivery of assistive products.

KEY FACTS

167 376
Total number of people injured since October 2023
(As of 24 September 2025)

41 844 (25%)
Estimated total number of people with life-changing injuries

1.9%
Overall percentage of pre-conflict population of Gaza with life-changing injuries

25% Of all life-changing injuries are among children

Types of major injuries	% Of overall injuries	Range (depending on rate of polytrauma)
Spinal cord injury	1.2	2009 - 2611
Major traumatic brain injury	0.8	1339 - 1741
Major extremity injury	13	21 759 - 28 287
Limb amputation	3	5021 - 6528
Major burn	2	3348 - 4352
Other major injury	5	8369 - 10 879

62%
Decrease in rehabilitation facilities since the conflict, due to direct damage, destruction, and supply shortage

42+
Rehabilitation professionals killed

0
Rehabilitation services fully operational in Gaza

32
Service providers directly contributing data to the report

ACRONYMS

AP	Assistive Products
EMT	Emergency Medical Team
EMTCC	Emergency Medical Team Coordination Cell
GBS	Guillain-Barré Syndrome
HI	Humanity and Inclusion
IPC	Infection Prevention and Control
MDS	Minimum Data Set
MHPSS	Mental Health and Psychosocial Support
MoH	Ministry of Health
MOI	Mechanism of Injury
MSF	Médecins Sans Frontières (Doctors Without Borders)
NGO	Non-governmental Organisation
oPt	occupied Palestinian territory
PHC	Primary Health Care
PNI	Peripheral Nerve Injury
RTF	Rehabilitation Task Force
SCI	Spinal Cord Injury
TBI	Traumatic Brain Injury
UN	United Nations
UNRWA	United Nations Relief and Works Agency
WASH	Water, Sanitation, Hygiene
WHO	World Health Organization

BACKGROUND

The conflict in Gaza has caused an enormous surge in traumatic injuries requiring immediate and long-term rehabilitation while severely disrupting available rehabilitation services. The health system is overwhelmed due to damage and destruction of health facilities, repeated forced displacement of the population and frequent mass casualty events. As a result, injury surveillance remains limited and there are ongoing challenges in collating accurate data on injuries and rehabilitation needs.

To fill this critical information gap, WHO first published an injury estimate in September 2024[2] using data extracted from Emergency Medical Team (EMT) daily reports and cumulative injury figures from the Ministry of Health (MoH). The analysis estimated that around 25% of injured people were likely to have acute and ongoing rehabilitation needs, including patients with extremity injuries, amputations, head and spinal cord injuries, and burns.

Except for a brief pause in hostilities in early 2025, the overall situation in Gaza continues to deteriorate. The blockade of aid has exacerbated severe shortages of medical and surgical supplies and equipment, including those needed for rehabilitation, while evacuation orders and attacks on health care have further disrupted health services including rehabilitation services. Increasing malnutrition and lack of access to clean water further jeopardise the recovery of injured people, with famine confirmed in parts of Gaza in August 2025[3]. Amid this crisis, organizations including WHO and partners continue to support essential health and rehabilitation services to ensure that those injured (and others in need) have the best possible health outcomes.

Despite the deteriorating situation, since the publication of WHO's 2024 injury estimate, important steps have been taken to strengthen available information on rehabilitation needs and capacities. The MoH have undertaken an exercise to identify and assess patients with some of the most severe injuries, while the Rehabilitation Task Force (RTF), working under the Health Cluster and in close collaboration with the EMT Coordination Cell, continues to coordinate the rehabilitation response. This report updates the previous estimate of rehabilitation needs and provides a summary of available services and critical gaps to support strategic planning.

2. WHO (2024) Estimating Trauma Rehabilitation Needs in Gaza Using Data from Emergency Medical Teams
3. WHO News (2025) https://www.who.int/news/item/22-08-2025-famine-confirmed-for-first-time-in-gaza

METHODOLOGY

Part 1 of the injury estimate draws on data from four sources:

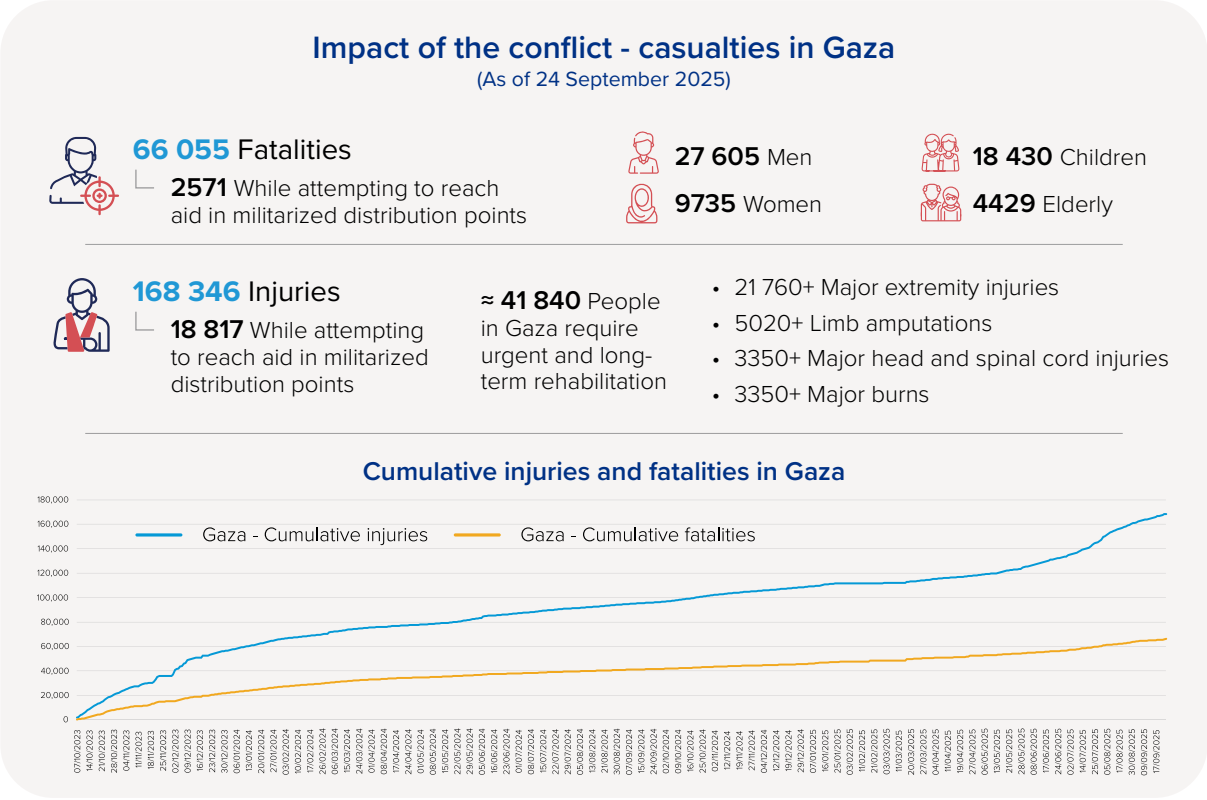
- The EMT "Red" Minimum Data Set[4].
- The MoH retrospective injury survey.
- A centralised list of trauma patients who have been medically evacuated.
- Data either shared with WHO or published by rehabilitation actors in Gaza.

Part 2 on service availability is drawn from information collated by the Rehabilitation Task Force and bilateral updates from service providers. Additional qualitative data comes from semi-structured key informant interviews conducted with five participants from MoH supported facilities, UN agencies, and international NGOs providing direct patient care. Interviews were conducted between 3 – 7 August 2025, and recorded, transcribed, and in one instance translated from Arabic to English. Thematic analysis was conducted, and illustrative quotes are presented alongside quantitative data.

PART 1: INJURIES NEEDING REHABILITATION

Overall injury figures

The MoH reported that the total number of people injured from 7 October 2023 until 24 September 2025 was 167 376, an increase from the 90 257 published the previous report. Disaggregated injury data by age, gender, injury type or severity is not publicly available, though MoH reported to the trauma working group (3rd September 2025) that at least 42 011 (equivalent to 25%) of the injured are children. Published research[5] has found that MoH data is reliable and likely underestimates rather than overestimates mortality, specifically mortality due to trauma. Similarly, although there has not been any independent analysis of the completeness of injury data, MoH injury figures are considered credible and are likely to underestimate the total number of injured people due to challenges in communication and reporting.



4. EMT MDS Gateway for oPt: Available at https://www.mdsgateway.net/opt
5. Jammaludine et al (2025) Traumatic injury mortality in the Gaza Strip from 7 Oct 2023, to 30 June 2024: a capture–recapture analysis. Lancet vol 405, Issue 10477 p469-477

Data source 1: The EMT minimum data set

The EMT Minimum Data Set (MDS) remains the main source of trauma related data in Gaza, and comprises two reporting systems to compensate for challenges in reporting in Gaza:

- The “Ultra” MDS consists of 10 simple reporting categories and was introduced in Gaza as an abbreviated system in response to major reporting challenges related to disrupted communication and overwhelmed health facilities. As of 30 June 2025 this included over 30 million consultations by EMTs. It was not designed to provide injury disaggregation.
- The “Red” (conflict) MDS is more detailed and includes an additional 107 categories and allows for basic injury disaggregation. The original 2024 injury estimate utilised Red MDS data from 8878 trauma related health events reported between January and June 2024. The new estimate draws on 178 781 documented trauma health events in the Red MDS, as reported by 25 contributing organizations between January 2024 and June 2025.

Analysis of the Red MDS data for injury prevalence engaged the same methodology as the first injury estimate report. EMT data is used as a representative sample of the distribution of injuries, and are presented below prior to any adjustment. Methodological weaknesses are unchanged since the first report. Amputation (reported as a procedure performed rather than a health event) continues to be included, despite the limitations acknowledged below.

Key findings

The analysis of EMT MDS data was consistent with the results obtained in 2024. Major trauma health events (those requiring hospitalisation and/or general anaesthesia) constituted 22.2% of all trauma health events. The overall proportion of major abdominal/pelvic injuries increased slightly, with a small decrease in the proportion of major extremity injuries. The largest proportional change was in the number of amputations performed by EMTs, which decreased from 1.6% to 0.7% of the total.

Table 1: Distribution of trauma health events in Red MDS reporting

Injury	Total # seen by EMTs	% Of injuries June 2025	Previous % of injuries (June 2024)	Change
Major head/neck/spine	6029	3.3	3.2	0.10%
Major thorax	4261	2.4	2.1	-0.30%
Major abdomen/pelvic	9466	5.3	3.1	2.20%
Major extremity	19 895	11.0	12.1	-1.10%
Limb amputation (performed)*	1350	0.7	1.6	-0.90%
Minor injury	139 299	77.3	77.9	-0.60%
Total	177 781			

*Recorded as a procedure not a health event. May not include primary traumatic amputations.

Blast/fragment injuries are the most commonly documented mechanism of injury (MOI) in the MDS, followed by burns. Burns were recorded as the MOI in 7.8% of patient contacts (27 061 out of 347 200 where MOI was documented). Reporting burns as a mechanism of injury leads to over-counting when compared to reporting of the major health events, which are more clearly defined. Therefore, burns is not included in the table above.

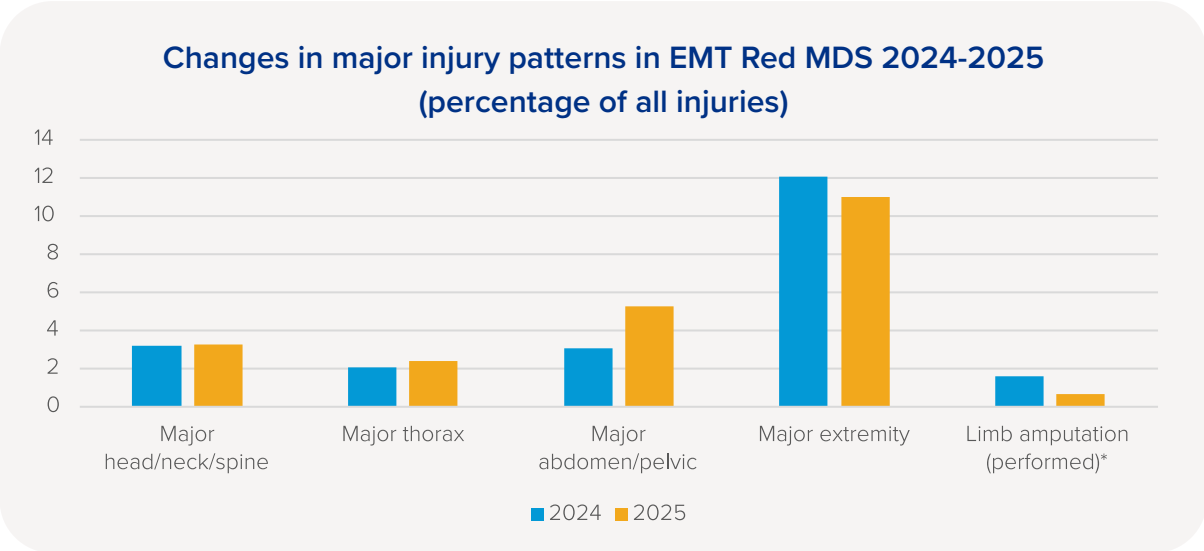
Although comprehensive age disaggregation was not available, data could be separated into two groups: children under five years of age and those aged five years and above. Of all trauma health events documented by EMTs, 6.7% (11 291 events) occurred in children under five. Across nearly all injury types, except extremity injuries, children under five were more likely to sustain major injuries compared to older children. This is consistent with expected injury patterns according to anatomical differences in this age group (smaller extremities relative to head and body side). When looking specifically at amputations, children under five (152) represented 11% of the total number of amputations performed by EMTs (1350).

Table 2: Distribution of trauma health events in the Red MDS by age

Injury	# <5	%<5	# 5 and over	% 5 and over
Major head/neck/spine	706	6.2%	4604	2.9%
Major thorax injury	506	4.5%	3590	2.3%
Major abdomen/pelvic	580	5.1%	6132	3.9%
Major extremity injury	933	8.3%	15 180	9.6%
Minor injury	8566	75.9%	127 793	81.2%

Interpretation

The number of trauma health events reported by EMTs has remained broadly consistent since the first analysis, with the exception of a proportional decrease in amputations and an increase in abdominal and pelvic injuries. While amputations have declined proportionally, the 1350 procedures performed between January 2024 and June 2025 remains staggering, particularly given that EMTs reporting through the Red MDS represent only a selected sample of surgical providers in Gaza.



The consistency observed between the 2024 and 2025 analyses suggests that initial estimates of injury distributions using this methodology remain stable.

Limitations of the EMT Red MDS

- The Red MDS was not designed to provide detailed injury surveillance but to support live operational decision making. As such, it uses aggregated data to identify critical trends, gaps and needs.
- The MDS definition of major trauma health event (one requiring hospitalisation and/or anaesthesia) is not in itself a direct indication of rehabilitation need but is used as a proxy. It is accepted that some major injuries will not result in lasting impairment, while some 'minor' injuries that are not captured will (such as peripheral nerve or tendon lesions).
- The total trauma health events reporting by EMTs exceeds the total injuries reported by MoH. Reporting of trauma health events by EMTs includes potential double counting of returning patients or patients presenting to a new facility for follow up. This could mean that certain injuries that are more likely to be followed up by EMTs are overrepresented and explains why amputations (as a procedure performed not a health event) have decreased as a percentage of the overall total, while the average weekly number of amputations reported being performed by EMTs is actually higher in 2025 than in 2024.
- Amputations may also be undercounted as the definition excludes traumatic amputations which occur at the time of injury, outside of the health facility. Conversely, some major extremity injuries may progress to being surgical amputations, and therefore be counted as both an extremity injury and an amputation performed.
- 'Major head/neck/spine injury' is a broad category which includes a range of injuries.
- Burns are reported as a MOI rather than a health event, meaning we cannot distinguish between minor and major burns, and the same burn patient may be counted multiple times as they re-present for dressing changes. Therefore, the percentage of burns MOI in the MDS cannot be directly compared to the percentage of other injuries that are defined as trauma health events.
- The data reflects only those EMTs reporting through the Red MDS. These teams operate in various modalities, ranging from small units embedded within existing hospitals to fully equipped surgical field hospitals and outpatient facilities. As such, the data provides only a snapshot of the overall situation in Gaza, and it not known whether it is representative of the activity of the wider health system.
- Currently, EMT health event data cannot be disaggregated by gender, and age data is only available for children under five.

Data source 2: MoH retrospective data

In late 2024, MoH, together with key rehabilitation providers, initiated a major project to retrospectively identify and assess new patients with amputations, spinal cord injuries and severe traumatic brain injuries. Messages were disseminated via social media inviting patients with these injuries to register their details in an online portal. Registered patients were subsequently invited to attend in-person assessments at locations in Gaza City, Middle Area and Khan Younis.

Key findings

A total of 3,664 patients were registered on the portal between September 2024 and June 2025. Of these, 57% were adult males and 13% were adult females; 22% were children, and 8% were adults over the age of 60. Where the mechanism of injury was reported, nearly 90% of cases were attributed to airstrikes or shelling (i.e., blast injuries). The predominance of blast injuries as the leading cause of major trauma is consistent with other reports[6] and with EMT MDS data.

Amputations

2218 Total number of people with amputations registered

1258 Total assessed

Of the assessed patients, 160 (12%) had more than one amputation, resulting in a total of 1425 documented amputations. Three-quarters (75%) of these were lower-limb amputations. The most common level was transfemoral (above-knee), followed by transtibial (below-knee). The three to one ratio of lower- to upper-limb amputations is consistent with patterns observed in other conflicts, although transtibial amputations typically outnumber transfemoral procedures. In addition to the patients recorded on the dashboard, the MoH estimated that a further 1500 patients with amputations were evacuated from Gaza between October 2023 and May 2024. Since May 2024, WHO has taken a leading role in coordinating evacuations, with 193 evacuees having amputations (23%), most of them children. For further details, please refer to Section 3 on medical evacuations.

6. El-Taji et al (2025) Patterns of war related trauma in Gaza during armed conflict: survey study of international health care workers. BMJ2025;390:e087524

Spinal cord and traumatic brain injuries

1446 Total registered

456 Total assessed

Spinal cord injuries

266 spinal cord injury (SCI) patients were assessed using the International Standards for Neurological Classification of Spinal Cord Injury (ISNCSCI) Assessment (also known as the ASIA assessment) - a standardized clinical examination used to classify spinal cord injuries (SCI) by determining the level and severity of a patient's neurological impairment. Of these, 32% were classified as ASIA A, 31% ASIA B, 16% ASIA C, 15% ASIA D and 5% ASIA E, meaning around two thirds of patients were assessed as having complete motor impairment below the level of injury. Level of injury itself was not disaggregated, and it is not known from the reporting if a full ASIA examination was performed.

Traumatic brain injury

190 Total assessed

It was not possible to use the MoH data to disaggregate by traumatic brain injury (TBI) severity or impairment type, although it is understood that all patients had severe TBI with motor impairment.

Interpretation

Table 3: Comparison of WHO estimates with MoH retrospective data

	WHO 2024 injury estimate (people injured)	WHO 2024 estimate applied to 2025 injury totals	MoH data to June 2025 (people registered + evacuated)
Amputation	2700	3968	2218 + 1500 = 3718
SCI and TBI	1800	2645	1446 (number evacuated unknown)

Efforts to retrospectively identify and assess those with some of the most severe injuries are significant and commendable. However, it must be recognised that these numbers only represent a proportion of patients with amputations, spinal cord injuries and traumatic brain injuries, and not a definitive total.

It was anticipated that the numbers identified would be lower than the WHO estimate. This can be explained by:

- Limited internet and phone connectivity reducing the number of people aware of the injury registration initiative.
- Security concerns limiting willingness to register in an online database.
- Low incentive to register when available treatment options are limited.
- Patients already accessing treatment (or evacuated or listed for evacuation) may not have an incentive to register.
- Potential higher mortality of patients with major injuries.

Of registered patients, 61% (2218) had amputations, and the remaining 39% (1446) had either traumatic brain injury or spinal cord injury.

Of the patients who were assessed, 1258 (73%) had amputations, 266 (16%) had spinal cord injuries, and 190 (11%) had traumatic brain injuries. Among registered patients, 57% of amputees were assessed, compared with only 32% of those with spinal cord or traumatic brain injuries. The lower proportion of SCI and TBI patients assessed is likely due to difficulties in patients accessing assessment sites. This highlights the significant challenges faced by patients with major impairments in accessing ongoing care and underscores the importance of both dedicated inpatient services and mobile community-level rehabilitation in Gaza.

The ratio of amputations to spinal cord and brain injuries registered (61% to 39%) is very close to EMT MDS data, which estimated a 3:2 ratio of amputations to spinal cord and brain injuries. While in 2024 SCI and TBI were grouped together, MoH data indicates they are not distributed equally, with SCI accounting for 58% of those assessed, and TBI 42%.

Limitations

- The data only captures patients who registered with MoH and represents demand for rehabilitation for three specific injuries rather than injury surveillance.
- Patients with severe injuries may have since died or been unable to register and therefore were not captured.
- WHO had access to cumulative data on the MoH dashboard, not to the original data set.
- Dashboard data on spinal cord and brain injury was often consolidated, meaning it was not possible to disaggregate between the two conditions for some analyses.

Data Source 3: Medical evacuations

Since May 2024, WHO has maintained a record of all patients listed by MoH for medical evacuation. Detailed analysis was undertaken of evacuated patients listed as ‘trauma’ on this list up to 30 June 2025. Open text descriptions of injuries were coded to align with injury categories used in the 2024 injury estimate.

Key findings

A total of 749 patients were listed as evacuated trauma cases, 51% of whom were children. Fifty-seven cases were excluded due to unclear injury descriptions (most commonly described simply as “injury due to blast” or “polytrauma”). In addition, eight cases not clearly involving traumatic injuries were removed, resulting in a final sample of 683 individuals with 858 documented injuries. Of these, 154 individuals (23%) had more than one documented injury. However, this is likely an underestimation of the true incidence of polytrauma in this group, as cases described only as “polytrauma” or “blast injury” without further detail were excluded.

Data was recoded to align with the 2024 injury estimate:

Table 4: Comparison of injury distribution in medevac population with 2024 major injury estimate

Injury	Number	Percentage	Original 2024 estimated percentage*
Burn	31	4	8
Major extremity injury	432	50	52
Limb amputation	193	22	12
SCI	52	6	4
TBI	40	5	4
Other	110	13	20
Total	**858**		

**once minor injuries excluded*

A further analysis of injuries coded as "other" was undertaken. The most common of these in the evacuation list was maxillofacial injury, which is classified as a major head/neck/spine injury in the EMT Red MDS. In total, there were 36 facial injuries (5%) and 17 eye injuries (2%). These were followed by 23 abdominal injuries (2.7%) and 20 pelvic injuries (2.3%).

For amputations, where level of amputation was documented, further analysis showed that 79% are lower limb injuries and 21% upper limb injuries. This distribution is consistent with data from the MoH dashboard, as well as data from MSF rehabilitation teams (72% lower limb, 28% upper limb).

Interpretation

The distribution of injuries in the evacuation list is strikingly consistent with the original 2024 WHO injury estimate. The main differences are a higher proportion of amputations among those evacuated and a lower proportion of burn cases. As with the MoH retrospective data, SCI cases outnumber TBI. The high incidence of facial and ocular injuries underscores the limitations of the EMT Red MDS coding under the category of "major head/neck/spine injury" and highlights the need for more detailed injury classifications in future estimates.

Limitations

- The list of patients in need of medical evacuation is compiled and prioritized by MoH health workers. It is not possible to determine whether the evacuation list is representative of the overall distribution of major injuries, or if certain injuries have been prioritized.
- As 51% of those evacuated are children, the list is likely to be more representative of paediatric than adult trauma.
- Polytrauma may be underestimated as only the primary reason for evacuation may have been listed, and injuries with unclear descriptions such as "blast injury" or "multiple injury" were excluded.
- Descriptions of spinal injury sometimes did not include neurological status. True numbers of injuries involving the spinal cord (with neurology) may be lower.

Data source 4: Key rehabilitation providers

The Rehabilitation Task Force, a technical coordination mechanism under the WHO-led Health Cluster, requested injury data from member organizations providing rehabilitation services to inform this report. Several key rehabilitation providers and facilities shared cumulative data on the patients they managed. However, variability in data coding (e.g., differing injury codes, age

ranges) and sample biases (for example, one partner focused primarily on burns patients, while others reported only on rehabilitation patients or on all patients seen) meant that these data could not be used to directly quantify overall injury trends. Instead, this data were used to enrich the report and to explore injury areas with less available information, specifically burns, neurological injuries, polytrauma, and age- and gender-disaggregation.

Burns

The number of burns cases requiring rehabilitation has been difficult to estimate, with burns identified in EMT data as a significant mechanism, rather than type, of injury. Additional data sources were therefore sought to support the burns estimate.

Where possible, burns cases are directed towards centres with expertise in their management. MSF is a key provider of burns care in Gaza. They reported that between May 2024 and April 2025 their teams had conducted over 1000 surgical operations for burn patients, "*70 percent of whom have been children, and most under five years old. Many of these children were burned by bomb blasts; others by boiling water or fuel used for cooking or heating in makeshift shelters*." Several burn mass casualty events due to strikes on shelters or camps have also been documented.

In the July 2025 Lancet correspondence, MSF Belgium reported burns as the mechanism of injury for 3.8% of their wound care consultations. Humanity and Inclusion (HI), a leading rehabilitation NGO providing providing both community level and prosthetic services, found that burns constituted 3.2% of their trauma rehabilitation cases. UK-Med, an EMT providing injury care via an EMT Type 1 and Type 2, reported burns cases only constituted 0.8% of all injuries presenting for rehabilitation to their facilities. MSF France, who provide rehabilitation services including a specialized burns rehabilitation service in Gaza, shared their rehabilitation data and reported seeing 1397 individual burns rehabilitation patients between May 2024 and June 2025, of whom 827 (59%) were under five years old. A study in the BMJ using a novel methodology identified burns as being one of the most significant causes of injury, with health care workers reporting involvement in the management of 4348 burns cases, of which around 32.2% were described as partial thickness, 27% full thickness and 10.6% extended into muscle or bone. The implication is that over two thirds of burn injuries seen had the potential to cause lasting impairment – al-

though as the majority of respondents were surgeons or emergency medicine specialists, they were more likely to see the most severe cases. This wide variation in figures is likely explained by burns patients being directed to specialized services where accessible, and not presenting to general rehabilitation services.

The incidence of major burn injuries remains difficult to quantify. Reporting, though variable, is consistent with burns being a significant burden of major injury due to direct and indirect consequences of the conflict and is supportive of the overall estimate. Children are clearly disproportionately affected.

Traumatic brain injury and spinal cord injury

Service provider data confirms that SCI and TBI are significant life-changing injuries in Gaza, though exact distributions remain unclear. Disaggregating the numbers of SCI and major TBI patients proved challenging as the two were often combined in available data sets, and the EMT MDS code of "major head, neck and spine injury" includes other types of head injuries, such as maxillofacial injuries. Similarly, UNRWA uses the code "Central Nervous System Lesion" to report TBI and SCI, with the combined total equalling 5% of all trauma cases seen for rehabilitation. These issues are compounded by the fact that no clear definition of "traumatic brain injury" is in use in the response. The only other published research on injuries in Gaza[9] included reports of 2303 head injuries, with diffuse (17.4%) penetrating (15.9%) and focal (11%) head trauma being the most common presentations. The same research included reporting of penetrating neck injury (348) but did not mention SCI.

An analysis of patients on the waiting list for one of two functioning inpatient rehabilitation facilities specialising in spinal cord and major traumatic brain injury in June 2025 indicated that 75% of patients on the waiting list had spinal cord injury and 25% had traumatic brain injury. This is consistent with the overall trend of spinal cord injury numbers outnumbering major traumatic brain injury numbers, although the exact distribution is unclear. Rehabilitation service reporting and waiting lists (as well as MoH registration and evacuation lists) represent demand rather than need, it is therefore possible that spinal cord injury patients are more likely to be listed for rehabilitation (or medical evacuation) than people with traumatic brain injury. Some reports also contradict this. For example, data from HI indicated that SCI comprised 2.2% of their trauma rehabilitation caseload and TBI 2.1%, whereas data from UK-Med showed that SCI represented 1.2% of all injuries seen for rehabilitation, with TBI accounting for 1.3%.

Taken alongside MoH ratios and medevac data, a 3:2 ratio of SCI to TBI would appear to be appropriate though this remains uncertain, and it is also possible that methodological weaknesses mean we overestimate numbers of SCI and major TBI. Regardless of exact numbers, both SCI and TBI require appropriate post-acute nursing, with skin, pressure, bladder, and bowel care essential to preventing complications. Pressure injuries require intensive management and considerable resources and are a major driver of morbidity and mortality in people with motor and sensory impairment. They are also aggravated by malnutrition. In June 2025, the Rehabilitation Task Force Q2 sitrep reported that "*30% of inpatient beds in Gaza's one remaining specialist rehabilitation hospital were occupied by individuals suffering from advanced pressure sores.*"

Peripheral nerve injuries (PNI)

PNI are typically a component of major extremity injuries, but little is known about their prevalence in Gaza. Isolated nerve injuries (i.e. those not requiring inpatient admission) may not be classed as "major extremity injuries" based on MDS definitions and so would not be captured in this estimate. Nerve injuries are potentially one of the silent injuries of conflicts. They are not life threatening, are difficult to surgically manage in conflict and low resource settings and often result in lasting functioning impairment. UNRWA data from their primary health care clinics showed that 10% of all injuries seen for rehabilitation had PNI. HI data indicated that PNI made up 5.4% of their trauma rehabilitation caseload. For UK-Med, PNI represented 3.3% of all injuries seen for rehabilitation.

Hearing and vision impairment

According to a Global Disability Fund report published in August 2025, *"Data on visual and hearing impairments resulting from hostilities is currently non-existent; however, organizations working with persons with sensorial impairments report a substantial rise in the number of people who have reached out to report hearing and visual difficulties/loss over the past 18 months."*

Trauma data from partners contained limited data on hearing and vision impairment resulting from the conflict. Medevac data suggests ocular injury is a likely contributor to a surge in vision loss in Gaza. Atfaluna Society for Deaf Children (ASDC) have conducted hearing assessments of 32 753 people between December 2024 and August 2025, concluding that 2500 children and adults have new hearing impairment as a direct consequence of the conflict.

With blast injury predominating and limited availability of specialized acute management, new permanent hearing and vision loss should be anticipated in the affected population and requires consideration as part of future service development.

Polytrauma

The previous injury report drew on evidence from other recent conflicts around polytrauma rates when explosive weapons are used in populated areas. Little is known about the incidence of polytrauma in Gaza, though it is clear that blast injury remains the dominant cause of major trauma and that polytrauma is a significant issue. Newly published research in the BMJ identified "*an injury phenotype of pervasive polytrauma*" in Gaza and identified that polytrauma constituted 12.5% of explosive related injuries. This is lower than the 23% polytrauma figure across all injuries in the medevac cohort. There remains a high degree of uncertainty about the overall polytrauma rate in Gaza.

Age disaggregation

Different age range and injury coding and referral criteria in service provider data meant it was difficult to use this to establish detailed age distribution for injuries.

- Approximately 40% of MSF rehabilitation patients were under 18 years, with 17% being under the age of five. This is in part explained by the high numbers of paediatric burns cases received.
- For UK-Med, in total, 21.46% of rehabilitation cases were under 18 years, with 5.22% being under five years.
- For UNRWA, 21% of rehabilitation cases were under 16 years, including 4.5% under the age of five. The inclusion of 16-17 year olds in this total would likely have raised the percentage significantly.
- HI have estimated that at least 25% of all children injured have ongoing rehabilitation needs.

When considered alongside data from the EMT MDS and the MoH dashboard, as well as MoH totals on injured children, a relatively consistent picture emerges: around 25% of major life-changing injuries occur in children, including 5% of all injuries in those under five. This aligns with MoH mortality data, which indicates that 30% of deaths are among individuals under 18 years of age, with nearly one-third of these (equivalent to 10% of all deaths) occurring in children under five. The higher mortality rates in children are expected, given the anatomical differences referenced previously.

Gender disaggregation

Gender disaggregation is relatively consistent between all partners, with a 2:1 ratio (male: female), although there are variations seen between age ranges. This is broadly consistent with MoH mortality data.

Disability disaggregation

Meaningful disaggregation of disability data from acute medical care in conflict is challenging, and no partner data allowed for disaggregation of injuries by people with pre-existing disability. It is known, however, that people with disability typically have higher morbidity and mortality during emergencies, and may be more vulnerable to injury in conflict, for example as a result of facing environmental barriers to evacuate.

Mental health and psychosocial support (MHPSS)

Several rehabilitation actors integrate MHPSS into their teams, and a dedicated MHPSS working group also operates in Gaza. While this report cannot quantify the mental health needs of the injured, it is clear that many will require significant psychosocial support. Being injured in conflict can have a profound impact on mental health: survivors must come to terms with their injuries in a context where follow-up services are often unavailable, while also coping with the loss of family and friends. Like most of the population in Gaza, the majority of the injured are displaced and face daily struggles to secure food and basic survival. Although robust data linking injuries with mental health and psychosocial support needs is lacking, there is a need to better integrate these services and to scale up available support for injured individuals.

Guillain-Barre Syndrome (GBS)

In addition to traumatic injuries, an emerging spike in cases of GBS has put increasing pressure on the few remaining acute and complex neuro-rehabilitation beds in Gaza. This highlights just one example of how the non-trauma related consequences of the conflict, such as collapse of WASH (water, sanitation, hygiene) infrastructure, displacement, overcrowding and environmental barriers in shelters, malnutrition, compromised immunity, restricted access to health care, and loss of assistive devices are driving a secondary increase in rehabilitation needs in Gaza.

Limitations

As with MoH data, information from rehabilitation service providers only reflects patients who were able to access and be accepted into services. It therefore does not capture the full scope of rehabilitation needs, as those unable to reach services or who did not meet emergency prioritization criteria are excluded. While this limits its use in estimating the overall injury burden in Gaza, the data remains an important contribution to the report and helps inform the final injury estimate.

Note: Gaza Humanitarian Foundation (GHF)

The Gaza Humanitarian Foundation began operations while this report was in its inception. There were intially almost daily reports of mass casualty incidents at or near food distribution points. Reports indicate a shift in predominant injury patterns at receiving hospitals from blast injury to gunshot wounds. For example, MSF reported[13] that 20% of casualties arriving to their facilities from GHF food distribution sites had gunshot wounds, while other injuries included barbed wire lacerations and crush injuries from stampedes. Further analysis is required to detail the injuries resulting from these incidents and determine whether this will impact overall injury distributions.

Final estimate

There remains no definitive data on injury type, severity or distribution in Gaza. All data sources in this analysis have limitations. In the WHO 2024 injury estimate, assumptions about limitations of the EMT MDS led to some modifications to the overall injury estimate. Methodological constraints mean that despite adding additional data points, there continues to be low confidence in some ranges, in particular for burns, spinal cord injury and traumatic brain injury. Accepting the ongoing limitations of this methodology, and after considering the additional data sources, the original estimated injury distributions continues to be supported. A distinction between SCI and TBI has now been added and the category "major head neck and spine injury" removed. Using the injury totals reported by MoH up to 24 September 2025, these distributions are set out below. As with the 2024 estimate, since MoH data is based on injured people, and a significant number of people will have more than one major injury, polytrauma rates of 15-30% are used to estimate the total number of injuries.

Table 4: Final estimate including polytrauma

	% Of overall injuries	% Of rehab need	Total	If 15% polytrauma	If 30% polytrauma
Spinal cord injury	1.2	4.8	2009	2310	2611
Major trauma brain injury	0.8	3.2	1339	1540	1741
Major extremity injury	13	52	21 759	25 023	28 287
Limb amputation	3	12	5021	5774	6528
Major burn	2	8	3348	3850	4352
Other major injury*	5	20	8369	9624	10 879
TOTAL	25%	100%	41 844	48 121	54 397

**examples include pelvic, thoracic and abdominal injuries as well as maxillofacial injuries.*

These numbers were shared with key contributing rehabilitation providers on the ground ahead of publication, with a request to identify any areas of disagreement. Responding providers were supportive of the estimate, and no negative feedback was received.

Major injuries requiring ongoing rehabilitation are likely to constitute 25% of the total number of injuries. Based on available data, it is estimated that at the reporting cutoff of 24 September 2025 **at least 41,844 people had major, potentially life-changing injuries requiring ongoing rehabilitation – with the true number likely to be higher.**

Blast injury, with a high incidence of polytrauma is currently the leading cause of major injury. Reporting constraints continue to pose significant challenges to estimating polytrauma rates. The limited available evidence indicates that a polytrauma rate of 15-30% is deemed most likely. The upper (50%) polytrauma estimate from WHO's range, used in 2024, has therefore been removed.

As before, major extremity injuries were the most common major injury, constituting around 50% of the rehabilitation burden, followed by amputations, burns, spinal cord injuries and traumatic brain injuries. Peripheral nerve injuries (a component of major extremity injury) and maxillofacial injuries (captured under major head/neck/spine) were identified as other significant potentially life-changing injuries in need of long-term rehabilitation.

Amputations constitute around 12% of the rehabilitation burden. Indications are that a 3:1 ratio of lower limb to upper limb amputation is appropriate. A statement from Hamad Hospital Director Ahmed Naim reported on 7 August 2025 that there were a total of 4500 new amputations due to the conflict. WHO's estimate, up until 24 September, is slightly higher than this.

There is low confidence in the total number of **major burn injuries**. Considering one organization alone has seen 1397 burn rehabilitation cases in 13 months, and with burns identified as a major mechanism of injury, it remains possible that WHO's 2% injury estimate (or 8% of the rehabilitation burden) is conservative. However, in the absence of definitive data, the estimate has not been adjusted.

Many data sources including the Red MDS do no disaggregate between **spinal cord and traumatic brain injuries**. Where disaggregated by rehabilitation providers, ratios of SCI to (severe) TBI are approximately 3:2, though the data is sometimes contradictory. Evidence from medevac list shows that the "major head, neck and spine" injury group of patients is likely to include several other major conditions affecting these anatomical areas, in particular maxillo-facial injury, though this was already taken into consideration in the 2024 estimate. WHO continues to estimate that SCI and severe TBI constitute around 2% of the total injuries, with SCI representing around 1.2% (2000-2600 cases) and TBI 0.8% (1300-1700 cases), though as with major burns we have low confidence in this figure. Unlike for burns, some data suggests that numbers of SCI and major TBI may in fact be slightly lower than projected.

Although age disaggregation is limited, available data indicates that approximately 25% of all major injuries requiring rehabilitation occur in children. This estimate aligns with current MoH mortality data, which shows that 30% of deaths are among children. The higher proportion of child deaths compared with survival with injuries is consistent with the elevated mortality risk for children sustaining blast injuries. Those under five years account for around 5% of major injuries and appear to be disproportionately affected by certain types, particularly burns, major head/neck/spine injuries, and amputations.

Ongoing challenges in estimating injuries underscore the importance of simple, standardized data collection in emergencies. There remains a need for standardized minimum injury coding, age and gender disaggregation, and improved referral systems and monitoring of functioning outcomes, both in Gaza and in future emergencies.

PART 2: REHABILITATION SERVICES

> *"All medical departments and medical fields in Gaza don't work as before - they're worse. All of the patients [and...] all of the medical team can see and can feel the gap in Gaza. There is nothing in Gaza."*
>
> ***Physiotherapist, Specialist Rehabilitation Hospital***

Rehabilitation is defined by WHO as "a set of interventions designed to optimize functioning and reduce disability in individuals with health conditions in interaction with their environments". In emergencies, rehabilitation is critical to preventing complications, supporting recovery, and optimizing outcomes. It also helps ensure that injured patients can leave hospital care and continue accessing essential services.

Beginning in acute hospital care, rehabilitation services are delivered across a variety of settings including hospitals, specialist inpatient rehabilitation centres, primary health care centres or in the community.

In Gaza, rehabilitation services are overwhelmed because of a staggering increase in need, accompanied by the destruction and disruption of components of the health system, including staff, facilities, and supply lines. The enormous surge in conflict-related injuries outlined in the previous section is superimposed on the accumulating burden of non-injury related needs, and the blockade has affected rehabilitation equipment and consumable availability. The wider context of the conflict has obstructed physical access and information sharing.

This section outlines the status of rehabilitation across Gaza, categorised under services, workforce, supplies, and systems. The severity of the conflict and frequency of evacuation orders has resulted in an extremely fluid scenario for service availability. The availability rehabilitation services fluctuates regularly, and reporting lags arise from displacement of hospital staff and disruptions to communication channels. Every effort has been made to ensure all figures presented here are accurate as of the timeframe in which they are presented. Throughout, qualitative data from interviews with rehabilitation professionals working in Gaza are used to illustrate the reality of the challenges facing rehabilitation services.

Services

Rehabilitation services in Gaza are in a constant state of flux due to evacuation orders, insecurity, attacks on health care and disruption of supplies. A live map of rehabilitation services is available via the Rehabilitation Task Force of the Health Cluster. The table below shows services as of mid-September, noting that the increasing escalation in Gaza City after this date will have a devastating impact, with a significant number of the critical services below being located in the city, including both pre-existing prosthetic centres and one of only two inpatient rehabilitation units (with 67 beds).

Table 5: Status of rehabilitation services

Services that include rehabilitation	Prior to 7 Oct 2023	Status of these services mid-Sep 2025 (all partially operational)	Mid-Sep 2025 additional EMT/Surge	Total Mid-Sep 2025*
Primary health care facilities*	21	8	11	19
Secondary and tertiary hospitals	17	5	7	12
Inpatient rehabilitation units	3 (165 beds)	1	0	2 (107 beds)
Prosthetic and orthotic centres	2	2	2	4

**21 community-based outreach teams currently augment facility level services, although of these 9 are currently unable to operate. In addition to these centres, there were 22 private outpatient clinics operating in Gaza prior to the conflict, mostly specialising in rehabilitation for children with cerebral palsy. As of September 2025, prior to major Gaza city escalation only 3 were still operating – creating an additional gap in services for children.*

As can be seen, pre-existing services have been decimated by the conflict. No service can be considered as fully operational due to lack of equipment, supplies, and staff, damage to infrastructure, and limited acceptability.

Rehabilitation as part of primary care

Pre-conflict, efforts had been made to integrate and expand rehabilitation into primary health care, and these services were previously provided by UNRWA, MoH and partners. While pre-existing services have declined by 62%, the integration of rehabilitation into EMTs and in new centres has helped sustain overall numbers, but a major expansion is needed to meet the increasing needs.

> *"[here] is the only one of our physio centers that escaped from full destruction of the Gaza Strip. There were 11. All were destroyed except our department."*
>
> ***Physiotherapy Supervisor, International Organization***

Displacement orders have forced the population and health service points into an increasingly restricted and overcrowded geographic area. Previously uninhabited areas such as the Al-Mawasi coastal zone have become densely populated. These areas lack essential infrastructure such as paved roads and sewage systems. The terrain is sandy and unsuitable for wheelchair use, creating extreme challenges for patients with mobility limitations to access services.

Rehabilitation in secondary and tertiary hospitals

Acute and early post-acute services in secondary and tertiary hospitals have been decimated, with 70% of pre-existing services not being available. Even with the support of EMTs, overall service availability is still 30% lower than pre-conflict levels. With the remaining hospitals overwhelmed by casualties, opportunities for rehabilitation are limited.

> *"During the period of calm or truce, there was a noticeable decrease in the severity of injuries, and admissions were limited... However, in recent days, injuries have been severe and numerous. Adults are injured due to rescuing the wounded or moving around while searching for food and water."*
>
> ***Senior Physiotherapist, Specialist Rehabilitation Hospital***

In key hospitals receiving acute trauma patients, mass casualty incidents are a daily occurrence. Despite expansion, bed capacity is limited. The rapid patient turnover and need to free up inpatient beds means that those in need of rehabilitation are often discharged prematurely.

> *"We are forced to discharge them... we have no choice. We need more space for more newly injured people. This is the horrible fact about the conflict."*
>
> ***Physiotherapist, INGO-run Rehabilitation Service***

Inpatient rehabilitation units

Inpatient rehabilitation units play a critical role in delivering effective rehabilitation for patients with complex conditions while also decompressing acute hospitals by providing a post-acute space where patients can safely receive the care they need. Current bed capacity is at 64% of pre-conflict levels, and if the 67 beds of Al-Wafaa in Gaza City are lost, there will be only 40 inpatient rehabilitation beds in Gaza. Even if the current services can be maintained with minimum levels of care, waiting times for of current patients registered are estimated to exceed 11 months.

> "*To continue our work, we need space, to increase the number of beds – the number of beds is not enough. We need more rehabilitation centres."*
>
> ***Physiotherapist, Inpatient Department***

With 92%[7] of Gaza housing stock destroyed, persons discharged to tents and other temporary shelters in the community are subsequently exposed to unsanitary conditions, inaccessible environments and a lack of follow-up rehabilitation care, which severely compromises recovery.

> *"The difficult decision for us is when to discharge the patient to home. The patient says to us 'where can I go? There is no home.' There is no good environment."*
>
> ***Physiotherapist, Specialist Rehabilitation Hospital***

7. UNRWA (Aug 2025) Situation Report 182: https://www.unrwa.org/resources/reports/unrwa-situation-report-182-situation-gaza-strip-and-west-bank-including-east-jerusalem

The impact of the disruption of follow up and delayed access to rehabilitation care is often under-appreciated in the quantitative data collected during emergencies, but horrifying sequalae were emphasised in qualitative interviews.

> *"Sometimes we open the patient wound and we find worms inside the wound. That means the patient hasn't done a dressing in a long time.... It's a very, very bad smell"*
>
> ***Physiotherapist, INGO-run Rehabilitation Service***

Prosthetic and orthotic services

As of mid-September 2025, the two existing prosthetic providers in Gaza City (ALPC and Hamad Hospital) had resumed limited service provision. Their location however renders both services vulnerable to evacuation orders for Gaza City. Outside of Gaza City, two new services have been established, one by HI and one in collaboration between PRCS and ICRC. The HI centre recently re-opened following suspension of services due to the conflict, underscoring the fragmented and contingent nature of service provision. Due to constraint-based prioritization, upper limb prosthetic services are completely absent.

Damaged and destroyed physical infrastructure is another critical barrier to accessing rehabilitation in Gaza. Temporary facilities are urgently needed, while permanent facilities must be rebuilt, repaired, or expanded. Existing rehabilitation facilities often lack basic accessibility features such as ramps, adaptive toilets, and paved entryways, making it difficult for persons with disabilities to reach services. The growing number of people with disabilities in Gaza underscores the need for all health services to be fully accessible and responsive to the entire population.

It must also be recognized that the scale of destruction of Gaza's physical infrastructure has left much of it largely inaccessible to persons with disabilities. Addressing facility-level physical barriers remains important, but it does little to overcome the wider systemic barriers to accessibility and inclusion faced by persons with disabilities.

Limited rehabilitation workforce

The rehabilitation workforce is inadequate to meet current and future needs in Gaza. Pre-conflict there were an estimated 1300 physiotherapists and 400 occupational therapists in Gaza, of whom approximately 130 worked for MoH. By September 2024, at least 42 physiotherapists and occupational therapists had been killed in the conflict.[8] The current number is unknown but likely

8. Health careworkerswatch (2024) Killing of Health care Workers by Israeli Occupation Forces in Palestine since 7 Oct 2023. Sep 2024 update. https://health careworkerswatch.org/wp-content/uploads/2024/09/3.-HWW-Update-on-killed-HCWs-in-Palestine-September-20-2024.pdf

higher. An unknown number of rehabilitation workers have left Gaza. The incongruence between the need for prosthetic care and the availability of such professionals is a stark illustration of this workforce gap. Despite UNICEF reporting that Gaza has the highest per capita rate of childhood amputation in the world, there are only eight trained prosthetists working in Gaza.

Not captured in the numerical data is the broader working context for rehabilitation and other health care workers, most of whom have themselves been displaced and personally affected by the conflict.

> *"I have some staff who have lost their children. Some staff lost their fathers, mothers, or close relative to them. So being able to work when you have this loss is very difficult... To find food is very difficult, so, staff are coming to work and then they have to cover the needs of their house... now, many are reaching a point to collapse."*
>
> ***Physiotherapist, INGO-run Rehabilitation Service***

Despite the extreme challenges faced by the rehabilitation workforce, there remains a strong commitment to serve those in need of services, with WHO fielding regular requests for additional training and capacity support.

> *"We need continued training from out of Gaza for our team, more learning."*
>
> ***Physiotherapist, Inpatient Department***

Specialist and multi-disciplinary services are scarce, with only two hospitals providing integrated physiotherapy, occupational therapy, and psychosocial support. All other rehabilitation services offer physiotherapy only.

The rehabilitation workforce must be supported and augmented as the conflict continues. The required skills can be developed through a combination of approaches, including training existing staff, providing financial support to expand the workforce from the available pool, and ensuring the continuous, sustainable deployment of Emergency Medical Teams with rehabilitation capacity for both direct service delivery and on-the-job training. Looking ahead, while the number of physiotherapists in Gaza appears sufficient, there is an urgent need to dramatically increase recruitment, re-orient staff, and provide training, salaries, and equipment. The numbers of occupational therapists are lower, and the shortage of speech and language therapists and prosthetists is likely to pose significant barriers to effective service delivery. With the destruction of universities that trained rehabilitation specialists, long-term strategies must also focus on rebuilding education and training systems to support future workforce development.

Lack of rehabilitation supplies and equipment

In addition to an adequate workforce, rehabilitation supplies are required to deliver rehabilitation services. Due to the ongoing blockade, and long-standing restrictions imposed by Israel on importing a wide variety of medical devices, including a range of assistive products (AP), rehabilitation services face significant supply constraints that affect quality and completeness of care.

> *"Supply was the major, major issue in rehabilitation I think in the current period. Could you imagine that all Gaza Strip now is out of stock of wheelchairs?"*
>
> ***Physiotherapist, INGO-run Rehabilitation Service***

Assistive products (APs) are a basic requirement for most rehabilitation services, yet maintaining an adequate supply in Gaza has faced multiple barriers. NGOs have reported being denied entry permission for truckloads of APs to the RTF, leaving stock levels across Gaza consistently depleted or critically low, despite supplies waiting at the border. Some organizations have developed innovative stopgap solutions, such as hiring carpenters to produce crutches from local materials. However, such ad hoc measures are insufficient to meet the scale of need for APs and basic rehabilitation equipment, and they are often unsuitable for long-term use, putting patients at risk of complications.

> *"We created wooden axillary crutches to solve the lack of the crutches, but nowadays even there's no wood, so we aren't able even to manufacture it locally. So, this is a very big difficulty."*
>
> ***Physiotherapist, INGO-run Rehabilitation Service***

One field hospital with a 200 bed capacity reported to the RTF having only one wheelchair available for the entire facility. There are severe shortages of raw materials for the fabrication of prosthetic limbs, and during WHO field visits, 90% of operational PHCs reported critical shortages in rehabilitation equipment.

> *"The health center doesn't have a wheelchair to transfer the patient from the entrance. This is a big barrier. How does a health center not have a wheelchair?"*
>
> ***Physiotherapy Supervisor, International Organization***

On 20 July 2025, WHO's main warehouse in Gaza was destroyed in an attack[9] when Israel launched a military ground operation in Deir El Balah, eliminating the totality of WHO's rehabilitation stock intended for distribution to rehabilitation services. The lack of other consumables such as gauze and continence care products elevates the risk of preventable secondary complications including infections and pressure ulcers, which in turn increase morbidity and mortality. WHO field monitoring visits conducted across all levels of rehabilitation facilities between March and June 2025, found infection prevention and control (IPC) materials were largely unavailable, and over 50% of hospitals lacked privacy screens. The lack of this basic equipment affects the safety and dignity of patients, particularly women seeking rehabilitation care.

> *"I saw a patient a few days ago, he has a quadriplegia spinal injury... His father was carrying him. He needs splinting, he needs a wheelchair. He is in need for rehabilitation, but he's left on his own. Nobody is taking care of it. So even if this guy lived, he will live all of his life with deformities and contractions."*
>
> ***Physiotherapist, INGO-run Rehabilitation Service***

Fuel was denied entry to Gaza for 130 days in 2025, resulting in critical shortages[10]. Lifesaving services were prioritizsed, limiting the fuel supply available for rehabilitation providers. This particularly affects outreach services, with one community-based rehabilitation provider reporting to WHO that it had to curtail services, and an INGO reporting that its outreach services had to operate on foot, limiting coverage to a 700 meter radius from its fixed point locations.

> *"Sometimes they [patients] are living away from the health care centre and they have to walk for long, long distances. This delays the rehabilitation process and the wound care."*
>
> ***Physiotherapist, INGO-run Rehabilitation Service***

Food is not routinely considered a supply component of the rehabilitation system. However, the very severe levels of hunger across Gaza and the direct relationship between malnutrition, wound, and injury healing mean it warrants attention. Famine was confirmed in Gaza governorate on 15 August 2025[11]. However, for months prior, malnutrition was already on a dangerous trajectory and impacting people with injuries. During interviews, respondents highlighted the devastating impact of hunger on both rehabilitation staff and patients.

> *"The secondary complications are obvious. We can see it with every case. A fracture in the normal life needs 6 weeks to heal. Due to poor nutrition, I saw many patients with more than 6 months without healing of the bone. Why? He doesn't [eat] egg, fish, meat – no food! Indeed, in Gaza there is no food."*
>
> ***Senior Physiotherapist, Specialist Rehabilitation Hospital***

Supply chain challenges and restrictions must be urgently addressed. A key priority is ensuring unhindered access to rehabilitation equipment and supplies, including lifting restrictions on the importation of assistive products (APs). Adequate fuel must also be allowed into Gaza to enable the resumption and scale-up of rehabilitation services, particularly outreach. Reliable fuel allocations and safe transport routes are essential to sustain and expand these lifeline services.

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9. WHO News Release 25 July 2025: https://www.who.int/news/item/21-07-2025-who-operations-compromised-following-attacks-on-warehouse-and-facility-sheltering-staff-and-families-in-deir-al-balah
10. WHO Joint UN statement 12 July 2025: https://www.who.int/news/item/12-07-2025-joint-statement-by-ocha--undp--unfpa--unops--unrwa--wfp-and-who-on-fuel-shortage-in-gaza
11. IPC (2025) Famine Review Committee: Gaza Strip, August 2025. https://www.ipcinfo.org/fileadmin/user_upload/ipcinfo/docs/IPC_Famine_Review_Committee_Report_Gaza_Aug2025.pdf

Heath information systems (HIS)

At the systems level, the health information systems (HIS) that existed prior to the conflict have been partially destroyed, including both paper-based tools and servers for electronic records. Many of the injured require long-term rehabilitation that should be coordinated across facilities; however, ongoing displacement and the absence of effective, centralized patient databases and record-keeping hinder both quality of care and service planning. Within individual facilities and organizations, clinicians have resumed keeping patient records, but referrals between facilities remain challenging.

> *"With the referral, it's much [more] difficult. Before we were using a systematic reference system, we have the time to call the partners, we have the time to fill a rehabilitation form. And then send to the partners and keep track and follow up, and the system was really well done. But nowadays, with the number of patients referral is based mainly on phone calls."*
>
> ***Physiotherapist, INGO-run Rehabilitation Service***

Facility-level data collection is often overwhelmed during mass-casualty incidents, hindered by power outages, resource shortages, and barriers that prevent patients from accessing care or reporting injuries. Rehabilitation workers have also noted that psychological injuries are likely under-reported. Together, these factors contribute to ongoing uncertainty around injury data and rehabilitation needs. What seems certain is that available evidence is likely to underestimate totals.

> *"Difficulty communicating between departments, hospitals, and other health centers due to the continuous power outages which hinders the use of electronic systems and medical records... undocumented injuries in the field due to intense bombing or siege, which makes it difficult to access bombed areas..."*
>
> ***Senior Physiotherapist, Specialist Rehabilitation Hospital***

Accessing rehabilitation first requires being able to reach a health facility, which is severely constrained by the wider context. The injury data presented in this report, particularly from rehabilitation partners, only reflects patients who were able to access services. For both patients and providers in Gaza, reaching health facilities is extremely risky. While quantitative data on these access challenges is not routinely collected, they were a recurring theme across the qualitative data.

> *"It is also difficult for the patient to go from inpatient to outpatient, there is no transport, no good road – they risk another injury just to come here."*
>
> ***Senior Physiotherapist, North Gaza.***

A secure and coordinated health information system is needed to track both patients with long-term needs - such as children with limb amputations - and the distribution of items such as wheelchairs, to prevent duplication. The implementation of a planned Rehabilitation Minimum Data Set across all rehabilitation service providers would significantly improve data consistency, accuracy, and comparability, thereby strengthening monitoring and supporting evidence-based planning.

CONCLUSION

An estimated 25% of those injured in Gaza - up to a quarter of them children - have potentially life-changing injuries requiring immediate and ongoing rehabilitation. As of 24 September 2025, this equated to 41,844 people. The most common life-changing injuries are major extremity injuries, followed by amputations, burns, spinal cord injuries, and traumatic brain injuries. Other injuries, including peripheral nerve and maxillofacial trauma, are also significant.

This estimate reflects only trauma-related injuries. It does not account for the substantial rehabilitation needs arising from other conditions, many of which have been exacerbated by the broader impacts of the conflict. Displacement, malnutrition, disease, and lack of access to basic assistive products further jeopardize outcomes for both survivors of injuries and those with pre-existing conditions. Consequently, the overall rehabilitation burden in Gaza is considerably greater than the figures presented here.

Despite the enormous rise in needs, rehabilitation capacity in Gaza, like all other essential health services, remains far below pre-conflict levels, and the situation continues to deteriorate. Not a single rehabilitation service in Gaza is currently fully operational. The analysis reveals a system under immense strain, with needs that will persist well into the future. If the gap in rehabilitation services is not addressed, the consequences for individuals, families, and Gazan society as a whole will be devastating.

A major scale-up and integration of rehabilitation services is urgently required across the health system. This must include strengthening acute inpatient rehabilitation as well as long-term community-level services, in line with the minimum package of services proposed by WHO and the Rehabilitation Task Force[12].

An immediate priority is to scale up inpatient sub-acute rehabilitation capacity. This includes increasing bed availability and establishing dedicated step-down rehabilitation units for patients with complex conditions such as amputations, burns, spinal cord injuries, brain injuries, and Guillain-Barré Syndrome. These services are critical for patients who remain medically vulnerable and require intensive rehabilitation to support recovery, while also easing pressure on acute inpatient

12. Rehabilitation Task Force (2025) Minimum Rehabilitation Service Package for Gaza. https://reliefweb.int/report/occupied-palestinian-territory/minimum-rehabilitation-service-package-gaza-opt-based-who-standards

facilities. In parallel, further integration of rehabilitation into primary health care and the expansion of community-based and outreach services would improve access, reduce strain on other health services, and ensure continuity of care.

Through the Health Cluster and EMT coordination mechanisms, WHO has already taken steps to improve information sharing. These include publishing interactive maps of available services and referral focal points, strengthening the tracking of incoming rehabilitation equipment and APs, and developing an online rehabilitation donation tracker to minimize duplication of AP provision by different service providers. Establishing a secure, centralized rehabilitation database would further reduce coordination costs and enable more efficient planning of future services.

The findings of this report underscore the urgent need for long-term, rights-based investment in strengthening Gaza's rehabilitation system. A system fit for purpose must respond to population-level needs unique to the context: the widespread trauma experienced by the Gazan population necessitates strong integration with mental health services, while the unprecedented rise in long-term impairments demands a disability-inclusive approach. This requires developing a sufficiently large and appropriately skilled multidisciplinary rehabilitation workforce, expanding rehabilitation services, and ensuring access to services for sensory impairments, including visual and hearing loss. Strengthening the system must also prioritize local organizations rooted in the community and reinforce the continuum of care from hospital to home.

Gaza's fragile rehabilitation system was already inadequate to meet population needs before the current escalation. An additional 1.9% of the population now lives with a potentially life-changing injury, and this number continues to rise. While an end to the conflict is urgently needed, without immediate and substantial investment across the system, thousands will remain without the care required to recover, reintegrate, and rebuild their lives.

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