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## **UNRWA AT THE FRONTLINES: MANAGING HEALTH CARE IN GAZA DURING CATASTROPHE**

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The humanitarian situation in the Gaza Strip is untenable. An estimated 1.7 million people—over 75% of the population—have been displaced across Gaza as of Jan 30, 2024,<sup>1</sup> often multiple times. Families have been forced to move multiple times in search of safety. According to local authorities, as of Jan 7, 2024, at least 26 901 Palestinians have been killed, 65 949 have been injured, and 7780 are missing, mostly under the rubble.<sup>1</sup> Access to life-saving health services has been severely affected. Electricity, fuel, water, and medicines are either in very short supply or non-existent.<sup>2</sup>

Throughout this war—and before it, amid years of blockade—the UN Relief and Works Agency (UNRWA) has been a lifeline for people in Gaza. As of Jan 31, 2024,<sup>2</sup> nearly 1.7 million displaced people are now sheltering in emergency shelters (both UNRWA and public shelters), informal sites, or in close vicinity to UNRWA shelters and distribution sites within host communities.

Before Oct 7, 2023, UNRWA operated 22 primary health centres, staffed by approximately 1000 health-care workers and serving 1.3 million Palestine refugees. The remainder of Gazans who were not registered Palestine refugees, relied on the Ministry of Health and private entities for medical services. The number of operational UNRWA health centres dwindled to

eight in December, 2023, and further still, to six by early January, 2024, due to the intensifying bombardments. These static health centres provide crucial primary health-care services, including the continued treatment of non-communicable diseases and provision of critical outpatient treatment. There are currently approximately 650 UNRWA health-care workers still working in Gaza. Many of the 1000 original UNRWA health-care workers working in Gaza before Oct 7, 2023, moved from the north to the south and are working in the static health centres and health points. Others are not able to work due to the difficult situation in Gaza and a few have left Gaza. Some health centres have adopted double-shift operations to manage the high influx of patients. Referrals to UNRWA-contracted hospitals have become increasingly complex due to the facilities' compromised functioning, shortage of electricity, and depletion of supplies.

In the three southern governorates of Gaza (the Middle, Khan Younis, and Rafah Governorates), UNRWA administers 93 shelters as of Jan 7, 2024. These shelters were primarily repurposed from UNRWA schools or other buildings to accommodate and provide health services to internally displaced people. The scale of the displacement has far exceeded the agency's pre-crisis emergency response plan to provide shelter for 150 000 internally displaced people in approximately 75 shelters (roughly 2000 people per shelter). Instead, there is an average of 18 000 registered internally displaced people per shelter, stretching resources and health and sanitary conditions beyond their limits. There are few data available in the two northern governorates of Gaza due to poor access. Health-care provision in this area is minimal and most shelters do not have health points as they do in the southern governorates.

UNRWA established health points in shelters to allow health-care workers, both doctors and nurses, to provide a reduced range of health services. These health points also reduce pressure on the health centres that are still operational. The reduced services include treatment for communicable diseases, non-communicable diseases, and injuries; maternity care; and psychosocial support. The provision of these services is challenging, as the health-care workers are themselves displaced and in need of shelter, food, and water.

Before the war, UNRWA's health centres managed approximately 15 000 consultations per day. This figure has increased by approximately 50% to over 23 000 daily consultations across those health centres and health points in shelters that remain operational, with 7% of these consultations catering to Gazans who are not registered Palestine refugees. Although UNRWA's mandate centres on registered refugees, the agency has taken further responsibility to provide health care to all people in need in Gaza amid the war. Figure 1 shows the increase in consultations by area in Gaza over time. Health centres have focused on the provision of crucial primary

health-care services, such as treatment for patients with non-communicable diseases (eg, diabetes and hypertension) and critical outpatient care. Depending on the overall situation of hostilities and access, health centres also provide vaccinations to children along with the national immunisation programme. Health points in shelters provide only outpatient care.

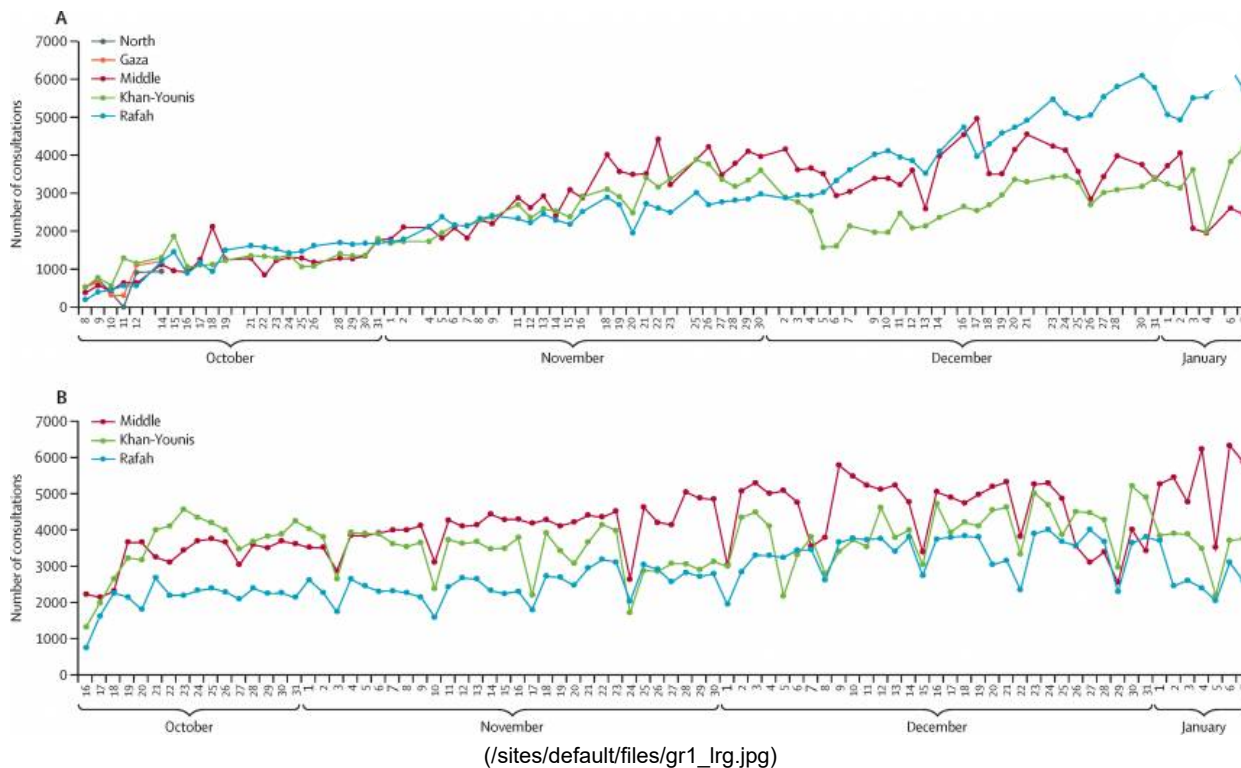
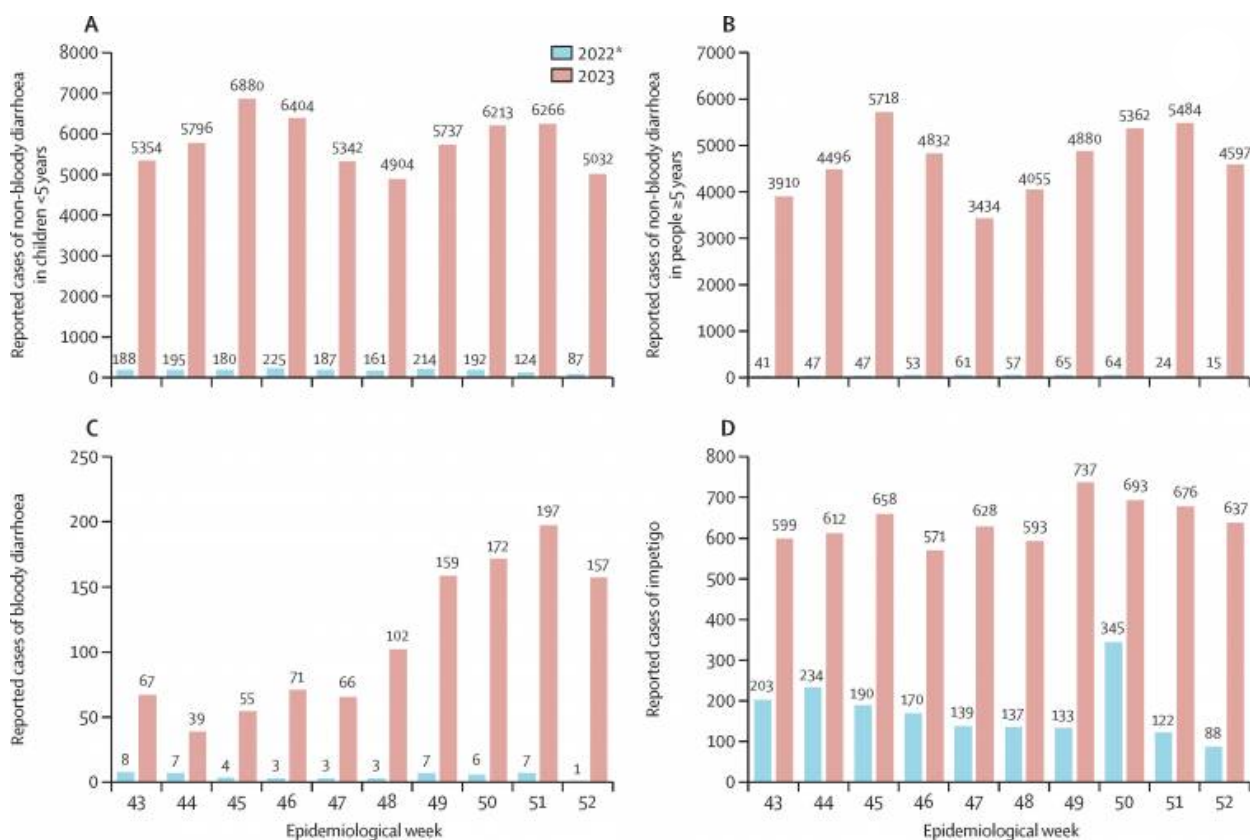


Figure 1 Consultations per day per governorate in (A) UNRWA health centres in the Gaza Strip between Oct 8, 2023, and Jan 7, 2024, and (B) health points in UNRWA shelters in the Gaza Strip between Oct 16, 2023, and Jan 7, 2024

The overwhelming patient load per health-care worker is a serious concern. Before the war, the system was already overstretched, with each health-care worker handling an average of 55 patients per day. This number has now almost doubled to an average of 113 patients (range 83–171) per health-care worker per day in health centres and 107 patients (37–212) in shelters' health points, substantially surpassing the Sphere emergency standards,<sup>3</sup> which recommend a maximum of 50 patients per health-care worker per day. The crisis is further exacerbated by the acute shortage of medical and non-medical supplies in hospitals, health centres, and health points. Deliveries of medicines have been hampered by the siege of the Gaza Strip and restricted access for aid supplies. This situation raises serious concerns about the sustainability and quality of care under such strained conditions.

In the face of the ongoing war, the water, sanitation, and hygiene situation has reached a critical state.<sup>3</sup> Although data collection is fraught with difficulties, UNRWA's estimates of water availability in shelters paint a stark picture: on average, individuals in shelters in the southern governorates

have access to a mere 8.8 L of water per person per day, 1.6 L for drinking and 7.2 L for domestic use. Sphere guidelines stipulate that a person needs a minimum of 7.5 L of water per day (including 2.5–3 L of drinking water) for survival, and recommend 15 L per person per day as the minimum emergency Sphere standard.<sup>4</sup> Consequently, internally displaced people in UNRWA's shelters have access to roughly half the daily minimum amount of drinking water required for survival. Most people are now resorting to unsafe water sources, leading to a surge in water-borne diseases (figure 2).



(/sites/default/files/gr2\_lrg.jpg)

Figure 2 Comparison of the reported number of cases of diarrhoeal disease and impetigo pre-crisis (in 2022) and during the crisis (in 2023) in Gaza for epidemiological weeks 43 to 52

As of Jan 7, 2024, UNRWA's data showed that an average of 504 people (range 222–818) were sharing one toilet and an average of 2568 people (1674–3437) were sharing a shower. These numbers are far below the Sphere emergency standards, which cap the numbers at 20 people per toilet<sup>4</sup> and 20 people per shower.<sup>5</sup> Before Oct 7, 2023, families were living in decent apartments or homes with at least one toilet and shower per family. This major deficiency in basic sanitation combined with the critical water situation, poses a serious health risk that further exacerbates the spread of disease among an already vulnerable population.

Since Oct 16, 2023, UNRWA has been monitoring 14 diseases with epidemic potential within its shelters. Acute hepatitis alerts have been issued, and there has been a large increase in the number of disease cases compared

with the previous year. Although the population sizes (ie, the denominators for the data) are different between the two years, with the 2022 data representing the whole population and the 2023 data excluding people in the northern region, the data do show a large increase in cases in 2023, and highlight the seriousness of the situation. For instance, in the period between epidemiological weeks 43 and 52 (ie, Oct 23 and Dec 31, 2023), the incidence of non-bloody diarrhoea increased by 33 times among children younger than 5 years and by 99 times among individuals aged five years and older compared with the same period in 2022. Bloody diarrhoea and impetigo have seen dangerous increases over the same period (22 times and four times, respectively), underscoring the gravity of the health emergency within shelters (figure 2).

The assault on health facilities and health-care workers in Gaza, including those managed by the Ministry of Health, non-governmental organisations (NGOs), the private health sector, and UNRWA, is unprecedented in both its scale and immediacy. By Jan 30, 2024, there had been 342 attacks on all types of health facilities in Gaza, resulting in the deaths of 627 individuals and injuries to another 783 people.<sup>1</sup> In all, 95 individual health facilities had been affected, including 27 hospitals.<sup>1</sup> Consequently, the situation of Gaza's 36 hospitals is bleak, with 15 only partially functioning. The war has also exacted an unprecedented toll on UNRWA, with 146 staff killed since Oct 7, 2023.<sup>1</sup> Of these, four people were health-care workers. The catastrophic health situation in the Gaza Strip underscores the dire need for a humanitarian ceasefire that will allow for the delivery of sufficient essential health supplies (such as medicines) and commodities that underpin health (including food, water, and fuel) into Gaza.

UNRWA, already the main public primary health-care provider in Gaza both before and during the war, has also started responding to emerging needs, such as care for wounded people, by providing step-down (or intermediate) levels of care. The agency is supporting shelters near hospitals for patients who have been discharged early, thereby freeing up hospital beds. UNRWA has also started providing medical points outside of its existing shelters in open areas where internally displaced people have had no choice but to congregate, as the shelters are already overflowing. This is in addition to the 96 health points inside the 93 shelters. The agency will continue to work with health sector partners, such as the Ministry of Health, WHO, the Palestinian Red Crescent, and other national and international NGOs, to provide services in Gaza.

A major influx of support from international humanitarian organisations is needed in Gaza now. Gaza has a huge pool of health-care workers, and they should be prioritised as a health-care workforce over international health-care workers entering Gaza (together with any existing health infrastructure that has not been destroyed); parallel services that replace (as opposed to

reinforce) existing services should be avoided when possible. A focus on wound care and rehabilitation among trauma patients and substantial mental health and psychosocial support is also critical.

The health and welfare of over 2 million people hang in the balance. The concerted efforts of agencies such as UNRWA and the broader global community are essential for navigating through this catastrophic emergency.

All authors had full access to all the data in this Correspondence and had final responsibility for the decision to submit for publication. Data reported in this Correspondence are from UNRWA; some data are publicly available and can be found at /resources/report (/resources/report) . We declare no competing interests.

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## References

### 1. WHO

#### **oPt emergency situation update issue 22.**

World Health Organization, 2024

[https://www.emro.who.int/images/stories/Sitrep\\_-\\_issue\\_22.pdf](https://www.emro.who.int/images/stories/Sitrep_-_issue_22.pdf)  
([https://www.emro.who.int/images/stories/Sitrep\\_-\\_issue\\_22.pdf](https://www.emro.who.int/images/stories/Sitrep_-_issue_22.pdf))

Date accessed: February 8, 2024

### 2. UN Relief and Works Agency

#### **UNRWA situation report #72 on the situation in the Gaza Strip and the West Bank, including East Jerusalem.**

UN Relief and Works Agency, Feb 2, 2024

[https://reliefweb.int/attachments/9dba2d09-635f-49f6-8142-911454d7d2b2/unrwa\\_gaza\\_sitrep\\_72\\_2feb\\_2024\\_eng.pdf](https://reliefweb.int/attachments/9dba2d09-635f-49f6-8142-911454d7d2b2/unrwa_gaza_sitrep_72_2feb_2024_eng.pdf)  
([https://reliefweb.int/attachments/9dba2d09-635f-49f6-8142-911454d7d2b2/unrwa\\_gaza\\_sitrep\\_72\\_2feb\\_2024\\_eng.pdf](https://reliefweb.int/attachments/9dba2d09-635f-49f6-8142-911454d7d2b2/unrwa_gaza_sitrep_72_2feb_2024_eng.pdf))

Date accessed: February 8, 2024

### 3. The Sphere Project

#### **Humanitarian charter and minimum standards chapter 5: minimum standards in health services.**

[http://www.disaster-info.net/watermitigation/i/publications/Sphere/hdbk\\_c5.pdf](http://www.disaster-info.net/watermitigation/i/publications/Sphere/hdbk_c5.pdf)  
([http://www.disaster-info.net/watermitigation/i/publications/Sphere/hdbk\\_c5.pdf](http://www.disaster-info.net/watermitigation/i/publications/Sphere/hdbk_c5.pdf))

Date: 2004

Date accessed: January 17, 2024

#### 4. The Sphere Project

##### **The Sphere handbook.**

<https://handbook.spherestandards.org/en/sphere>  
(<https://handbook.spherestandards.org/en/sphere>)

Date: 2018

Date accessed: January 17, 2024

#### 5. UN International Organisation of Migration

##### **Standards of assistance and minimum requirements.**

<https://migrantcentres.iom.int/en/toolkit/management-migrant-centres/standards-assistance-and-minimum-requirements>  
(<https://migrantcentres.iom.int/en/toolkit/management-migrant-centres/standards-assistance-and-minimum-requirements>)

Date accessed: January 17, 2024

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## **Background Information:**

UNRWA (<https://eur02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.unrwa.org%2F&data=05%7C01%7CHQ-PIO%40UNRWA.ORG%7C7edfcbc8399c400e4a6c08dafba2254d%7C262f6a4120e941408d3efdf>) the United Nations Relief and Works Agency for Palestine Refugees in the Near East. The United Nations General Assembly established UNRWA in 1949 with a mandate to provide humanitarian assistance and protection to registered Palestine refugees in the Agency's area of operations pending a just and lasting solution to their plight.

UNRWA operates in the West Bank, including East Jerusalem, The Gaza Strip, Jordan, Lebanon and Syria.

Tens of thousands of Palestine refugees who lost their homes and livelihoods due to the 1948 conflict continue to be displaced and in need of support, nearly 75 years on.

UNRWA helps Palestine Refugees achieve their full potential in human development through quality services it provides in education, health care, relief and social services, protection, camp infrastructure and improvement, microfinance, and emergency assistance. UNRWA is funded almost entirely by voluntary contributions.

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