

Infectious Diseases Crisis in the Gaza Strip

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The occurrence of infectious diseases in war-torn areas produces a grave catastrophe that exacerbates the already serious humanitarian challenges. Infectious illness risk is increased by population displacement, poor access to clean water and sanitation, and the collapse of the healthcare system.

After Israel blocked off Gaza on October 9, there was a severe lack of fuel, food, and drink in the area, which resulted in an acute shortage of fuel for refrigeration and medical facilities. Civilians fled to southern Gaza because of the blockade, but Israel is now extending its military presence there and advising more evacuations. Approximately 1.9 million of Gaza's 2 million residents are internally displaced, with many of them relocating to densely populated areas (1).

Citing the extensive spread of infectious diseases and epidemics, the Euro-Med Human Rights Monitor has announced that a humanitarian crisis is inevitable in the Gaza Strip. Malnutrition, filthy conditions, and overcrowding in shelters are creating an environment for a national health crisis. Over 96% of water resources are unfit for human consumption as a result of the Israeli government's activities, which also include turning off fuel and electricity (2). Over 100,000 cases of diarrhea have been documented since mid-October. The illness is primarily affecting young children under the age of five. Over 150,000 cases of upper respiratory infections – a viral infection that can affect the nose, throat, and sinuses – meningitis, skin rashes, scabies, lice, and chickenpox have been reported in addition to diarrheal illnesses (3).

Pre-existing issues worsen the situation; for example, respiratory illnesses account for a large portion of deaths in Gaza. Additionally, in 2022, there were almost 82,000 COVID-19 cases registered in the area, which led to over 400 deaths. Food shortages, malnutrition, and the impending colder weather, particularly for the over 50,000 pregnant women and around 337,000 children under five, are factors contributing to the increased risk of disease in Gaza (4). Exacerbating the enclave's crisis after over two months of war, individuals falling ill face severely restricted treatment choices, as medical facilities are inundated with patients wounded in airstrikes (5). A further issue fueling the current crisis is that, in Gaza, healthcare workers

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are being arrested as tanks encircle hospitals, there is continuous severe Israeli shelling, and ground operations are still taking place within Palestinian territory (6).

Antimicrobial resistance brings several difficulties in consideration of the ongoing war in Gaza. Gaza suffers from an ongoing influx of wounded with heavily contaminated wounds, mass casualties, and limited resources to care for the killed people, overcrowded hospitals with injured patients lying on floors, and a lack of transmission-based precautions that exacerbate the spread of hospital-acquired infections and community infections (7). Given the shortage of safe water, waterborne diseases such as cholera and typhoid are more concerning after this season's rains and flooding (8).

Addressing infectious disease crises in war-torn areas demands a comprehensive strategy encompassing humanitarian, public health, and diplomatic interventions. Therefore, we recommend prioritizing a ceasefire for delivering aid and medical assistance, ensuring unimpeded access for humanitarian organizations, and rebuilding damaged healthcare infrastructure while training local healthcare workers. In addition, in collaboration with international organizations, mass vaccination campaigns are essential, as are robust disease surveillance systems and improved water and sanitation facilities.

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AUTHOR CONTRIBUTIONS

MAJ the principal author and made a final review before submitting the paper. RAJ, BQ and MAJ participated in the discussions, drafting and critically reviewed the article.

AVAILABILITY OF DATA AND MATERIAL

All data generated or analysed during this study are included in this published article.

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