



Responding to Polio Outbreak in Gaza: Challenges and Innovative Approaches

Policy Brief

August, 2024

Current Polio Outbreak in Gaza

The detection of circulating vaccine derived poliovirus type 2 (cVDPV2) in six environmental samples from Deir al-Balah and Khan Younis in Gaza on 16th July 2024 solicited the worldwide call for immediate inter-agency action amid a complex humanitarian emergency. On August 17th, 2024, Palestinian health officials have reported the first case of polio in an unvaccinated 10-month-old child in the Gazan city of Deir al-Balah. The rapid transmission of cVDPV2, coupled with declining immunization coverage, significantly raises the risk of a widespread outbreak, crossing borders to neighboring countries.

Although Gaza has been sieged for over a decade, the current polio outbreak poses a serious threat to the region and beyond. Amidst a constantly exacerbating humanitarian crisis in Gaza, there is a crucial need to strengthen and harmonize inter-sectoral coordination from global to grassroots levels, focusing on community-centered innovative approaches in each of the response pillars.

No polio cases have been reported in Gaza during the past 25 years. Prior to October 2023, the routine immunization rates in the Occupied Palestinian Territories (oPt) were optimal. In 2022, polio vaccination coverage (POL3) was estimated at 99%. According to the latest WHO-UNICEF routine immunization estimates (WUENIC), this coverage has declined to 89% in 2023¹. These rates are expected to decline further with insecurity and population displacement, shortage of medical supplies and the reduced number of partially operational primary healthcare facilities¹.

On the other hand, surveillance of Acute Flaccid Paralysis (AFP) was already facing several challenges, as reflected by the sub-optimal reporting and performance indicators. With the weakened indicator-based surveillance and the disrupted hospitals and health facilities, detection of AFP/Polio cases – in its current situation - cannot solely respond to the current Polio outbreak in Gaza.



Inter-agency Response to the Current Polio Outbreak



Following the detection of cVDPV2 the Palestinian Ministry of Health (MoH), in collaboration with the World Health Organization (WHO), the United Nations Children's Fund (UNICEF), the United Nations Relief and Works Agency for Palestine Refugees (UNRWA) and others are joining efforts focusing on three main areas of response: implementing two vaccination campaigns, strengthening routine immunization and strengthening surveillance for poliovirus.

The release of 1.6 million doses of novel Oral Polio Vaccine type 2 (nOPV2) has been approved by the WHO for use in Gaza. nOPV2 is the vaccine of choice when responding to poliovirus type 2 outbreaks. It is a modified version of the existing OPV2 and provides comparable protection against poliovirus type 2 while being more genetically stable.

Two rounds of vaccination campaigns are expected to launch by the end of August, targeting over 640,500 children under eight years of age, these campaigns will be expanded at a later stage to reach children under ten. Each vaccination round requires at least 95% vaccination coverage to prevent polio spread and reduce its emergence.

EMPHNET is actively involved in this intervention by providing technical support during the implementation period for the development of the microplanning and field response activities.

A "Polio Surveillance Recovery and Strengthening" Plan, drafted jointly by WHO, partners and the MOH, is expected to be finalized soon. The plan aims to strengthen AFP surveillance by bolstering environmental sampling and field-level assessment are also planned.

On August 4th, a training of trainers targeting health officials and health staff was conducted, aiming to sensitize them on the detection and immediate reporting of suspected AFP cases. Cascade training will be implemented in relevant health facilities across Gaza.

A Risk Communication and Community Engagement (RCCE) committee, including UNICEF, WHO, MOH and UNRWA, developed a comprehensive plan aiming to engage communities before and during the upcoming campaign. The plan will be finalized and rolled out soon. Risk communication and social mobilization efforts are being implemented by partners on the ground, including EMPHNET community mobilizers in all of Gaza to raise awareness about the risks of polio and promote polio vaccine demand and uptake during the two rounds of the campaign.

Challenging Response in Devastating Humanitarian Crisis

The devastating humanitarian crisis in Gaza poses multiple and rapidly exacerbating challenges for the implementation of the polio response in Gaza. The health infrastructure, already severely compromised, has reached a critical point. Moreover, the ongoing war on Gaza has resulted in significant morbidity and mortality beyond the polio threat. According to Palestinian health authorities, over 40,000 individuals have lost their lives due to Israeli airstrikes and other hostilities since the escalation of the conflict in October 2023. This context amplifies the complexities of delivering effective health interventions in an environment characterized by high levels of insecurity and psychological distress.

Key Challenges

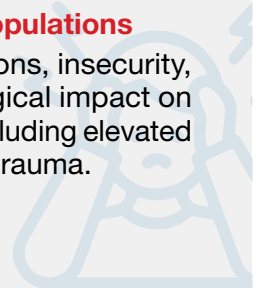
Security Risks

Associated with accessing healthcare, particularly for teams providing vaccination during the campaign.



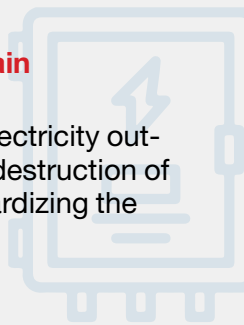
Psychological Impact on Populations

The heightened social tensions, insecurity, and the profound psychological impact on the displaced populations, including elevated levels of stress, anxiety, and trauma.



Vaccine Safety and Cold Chain Disruption

The compounded impact of electricity outages, fuel shortages, and the destruction of infrastructure is severely jeopardizing the integrity of the cold chain.



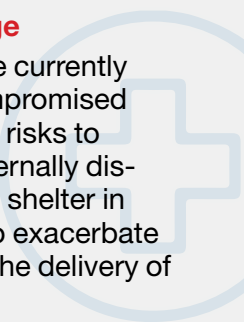
Environmental Health Deterioration

Damage to sanitation and sewage systems and over-crowded living conditions worsening the overall situation.



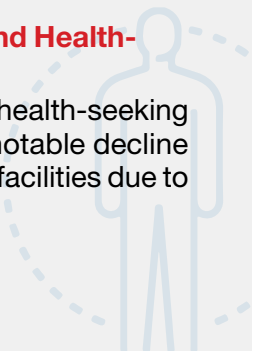
Health Infrastructure Damage

Operational health facilities are currently overwhelmed, resulting in compromised quality of care and heightened risks to patient safety. The influx of internally displaced persons (IDPs) seeking shelter in these facilities is anticipated to exacerbate crowding and further impede the delivery of essential health services.



Population Displacement and Health-Seeking Behavior

Additionally, the population's health-seeking behavior has shifted, with a notable decline in the utilization of healthcare facilities due to prevailing security concerns.



EMPHNET's Call for Innovative Community-centered Approaches

The response to the polio outbreak in such complex humanitarian crises necessitate innovative approaches that place the communities at the heart of every intervention for each of the three response pillars.

Implementing supplementary immunization activities requires the development of flexible microplanning capable of accommodating the constant and rapid displacement of populations. **Engaging** the network of local NGOs can ensure the geographic expansion of supplementary and routine immunization activities across the various sectors of the Gaza Strip particularly in the north. **Deploying and sensitizing** volunteers will enable them to cascade the response activities to the polio outbreak, hence supporting the already exhausted and drained healthcare workers. Additionally, as healthcare workers from different disciplines are all required to **deploy joint efforts** to overcome the shortage and gaps in healthcare, sensitization sessions, and mental and emotional support are needed along mental and emotional support to help them overcome the challenges they face.

On the other hand, the disrupted indicator-based surveillance requires **resuming the functionality of AFP surveillance and expanding the reporting network through community-based surveillance** can strengthen the detection and reporting of suspected AFP cases as well as other communicable diseases, particularly in overcrowded settings lacking access to basic

healthcare services. This can be achieved through engaging and training deployed volunteers who would act as a link between local communities and local health authorities.

Financial support is an essential asset in responding to such humanitarian crises; this requires serious commitment from global and regional stakeholders to mobilize and deploy funds to national health authorities, irrespective of political considerations. **Creating safe zones for supporting the mobilization of human resources** inside Gaza can also help overcome the shortage in healthcare and humanitarian action.

Last, in the absence of a ceasefire in Gaza, any humanitarian action would fail from preventing the spread of Polio and other vaccine preventable diseases. **Assuring humanitarian safety** is essential for the deployment of healthcare and humanitarian workers. Again, as the UN Secretary-General António Guterres declared, **“The ultimate vaccine for polio is peace”**.

The current situation necessitates immediate and targeted interventions to address the security and infrastructural challenges that are undermining the Polio response and broader public health efforts in Gaza. Without such interventions, there is a substantial risk of further deterioration in health outcomes, including potential outbreaks of vaccine-preventable diseases and a significant increase in preventable morbidity and mortality.



Immediate Action

The immediate establishment of a ceasefire is critical to ensuring the safety of health workers and the effectiveness of the polio response. Resource mobilization from stakeholders, coupled with intensified community engagement and surveillance, is essential to contain the outbreak.



Long-term Action

To prevent future outbreaks, sustained immunization coverage must be prioritized, alongside the rebuilding of Gaza's health infrastructure, and strengthen surveillance systems, particularly AFP surveillance to improve resilience against ongoing public health and environmental threats.

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EMPHNET Awareness Session on Polio Virus Prevention, Gaza, 2024

GHD|EMPHNET: Working Together for Better Health

The Eastern Mediterranean Public Health Network (EMPHNET) is a regional network that focuses on strengthening public health systems in the Eastern Mediterranean Region (EMR) and beyond. EMPHNET works in partnership with ministries of health, non-government organizations, international agencies, private sector, and relevant institutions from the region and the globe to promote public health and applied epidemiology. To advance the work of EMPHNET, Global Health Development (GHD) was initiated to build coordination mechanisms with partners and collaborators. Together, GHD|EMPHNET is dedicated to serving the region by supporting efforts to promote public health policies, strategic planning, sustainable financing, resource mobilization, public health programs, and other related areas.

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