



ALMOST 2 MILLION PEOPLE AFFECTED



30 HOSPITALS AT RISK



36% DRUGS AT ZERO STOCK*



32% DISPOSABLES AT ZERO STOCK*



53% OF PATIENTS WITHOUT PERMITS

Highlights

- The further reduction in the electricity supply to Gaza has caused a severe impact on the health services, 30 hospitals and 2 health facilities face risk of partial closure as the supply for back-up generators become depleted. An additional 70 primary healthcare facilities are also impacted.
- Out of the 516 medications on the essential drug list, 177 drugs items (34%) were at zero stock levels in May. In June, 184 drug items (36%) were at zero stock in the Ministry of Health's Gaza Central Drug Store (CDS). The decrease in the availability of drugs is placing patient lives at risk.
- Out of the 184 drug items out of stock, 161 items are **completely depleted** in June (31%).
- In May, of the 853 medical disposables on the essential list, 270 (32%) were reported at zero stock levels in the CDS Gaza; in June, 271 (32%) were reported at zero stock.
- WHO has expanded its emergency response by releasing US \$ 360,000 from its internal emergency funds to scale up its response and to support health authorities to prevent the further deterioration and collapse of the health sector in Gaza.

HEALTH SECTOR	
	57 WHO STAFF
	52 HEALTH CLUSTER PARTNERS
FUNDING REQUIREMENTS FOR EMERGENCY RESPONSE	
	\$ 4.5M WHO EMERGENCY
	\$ 7.7M HEALTH CLUSTER
PRIORITY HEALTH FACILITIES AFFECTED	
	30 HOSPITALS
	70 PRIMARY HEALTHCARE CENTRES
	1 CENTRAL BLOOD BANK
	1 REFERRAL ABROAD DEPARTMENT
PATIENTS REFERRED OUTSIDE OF GAZA**	
	2,282 NUMBER OF APPLICATIONS
	47% % APPROVED
	53% % PENDING OR DENIED ACCESS

Situation Update

Impact of fuel shortages on health

- Extended power cuts are severely impacting the health sector, and hospitals face the risk of closure as fuel supplies to run back-up generators become depleted. Gaza's 14 public hospitals and 18 NGO hospitals and health facilities face partial closure, since the start of the sudden increase in power cuts, which began on the 16th April when the Gaza Power Plant closed. In addition, 70 primary healthcare facilities are impacted by the energy shortages.

* Figure presented is for the month of June 2017. This is the latest available figure for drugs at zero stock.
** Figures presented are for the month of May.

- However, the situation has become increasingly serious. On the 21st June 2017, Israel reduced its electricity supply to Gaza. This decision has shortened the daily average of power in Gaza by an additional one hour. Hospitals and health facilities now face up to 18-20 hours of no electricity from the main grid supply.
- Some of the effects on service delivery include:
 - Reduced sterilization, laundry, cleaning and catering services: down to only five hours per day (during the grid electricity only)
 - Access to desalinated water in hospitals has been reduced to a maximum of 5 hours per day. This has a direct impact on infection prevention and control measures
 - Elective surgery waiting lists are increasing by an additional two months
 - Diagnostic services are reduced. MRI, CT scans, X- rays including mammograms are postponed and only take place when there is electricity from the main supply.
 - In Shifa Hospital, Gaza’s major trauma hospital, the MRI scanner has stopped functioning following fluctuations in electricity
 - Over 300 pieces of essential lifesaving medical equipment in public hospitals across Gaza have stopped functioning as a result of the chronic electricity shortages

▪ During black-outs, the hospitals rely on fuel donations for generators to provide essential electricity and sustain critical lifesaving services. However the maintenance of these generators presents an additional constraint. The overuse of hospital generators will lead to a shorter life cycle and the need for spare parts, some of which Israel classifies as ‘dual-use’ items. In addition, the constant use of these generators, often for over 20 hours per day, requires skilled medical engineers on-site, who are often overstretched and under-



A child being examined in the dark at Al Shifa Hospital

resourced. According to the MoH, the capacity of the generators to sustain the services in the hospitals is decreasing. **Furthermore, the currently available and pledged fuel donations to sustain lifesaving services are only sufficient to last until October 2017.**

“Without electricity we have no ventilation of air when we perform surgeries. This leads to increased risk of bacterial infections in our patients”
 Dr Marwan Abu Saada, Head of Surgery in Shifa Hospital

- Without fuel for generators, the situation is immediately life-threatening for 113 new-borns in neonatal intensive care units, 100 patients in intensive care and 658 patients requiring haemodialysis twice or three times a week, including 23 children. Refrigeration for blood and vaccine storage will also be at risk.

Lack of clean water poses a public health risk

- The lack of fuel for electricity also has a grave impact on the supply of safe drinking water and on the treatment and management of sewage. According to a representative from the environmental department of the Gaza municipality, 72 water wells operating in Gaza are electricity dependent to supply safe drinking water as are 10 waste water pump stations. However, without fuel to sustain these services, 100,000 cubic metres of raw sewage is being directly discharged everyday into the sea.
 - Samples from Gaza's beach water were collected on the 7th and 8th May 2017, and revealed high level of bacterial contamination. A potential increase in the burden of waterborne diseases amongst the population will place a further strain on the health system. Access to clean water is becoming increasingly sporadic and the inability to treat raw sewage due to the electricity shortages poses a major public health hazard.
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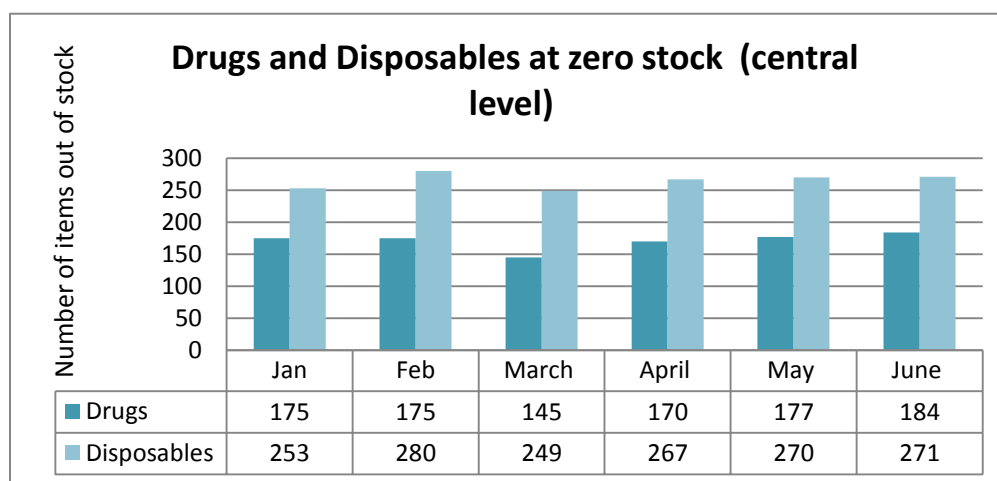
Shortages in drugs and disposables

- There are 516 drugs on the essential drugs list and 853 items on the essential medical disposables list considered by the Palestinian MoH as necessary for the provision of essential health care. Disposables include a wide variety of essential items such as syringes, line tubes, filters for dialysis and dressing materials. "Zero level stock" designates critical supplies that will be totally depleted in less than one month at the Central Drug Store (CDS). The CDS in Gaza supplies all 14 MoH hospitals (2,243 beds) and 51 MoH primary healthcare clinics in Gaza. These health facilities provide 40% of Gaza's primary healthcare covering 600,000 people and 90% of hospital care services.
- The Palestinian Ministry of Health¹ is responsible for providing drugs and medical disposables to MoH facilities in both the West Bank and Gaza and for sending regular shipments, once every two months, according to the requests of the CDS in Gaza. In practice, drug deliveries are made irregularly and often in insufficient quantities; the last bulk supply of medications to reach Gaza arrived in the first week of March, with some ad-hoc deliveries of minor quantities thereafter.
- In May 2017, out of the 516 medications on the essential drug list, 177 drugs items (34%) were at zero stock levels; in June 184 drug items (36%) were at zero stock in the Ministry of Health's Gaza Central Drug Store (CDS).

¹ The Ministry of Health Headquarter is located in Ramallah

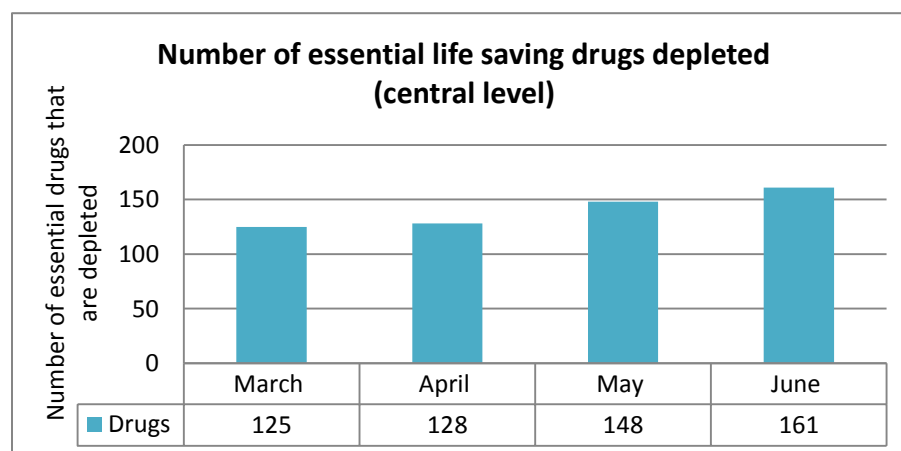
- In May, of the 853 medical disposables on the essential list, 270 (32%) were reported at zero stock levels in the CDS Gaza; in June 271 (32%) were reported at zero stock. According to health authorities in Gaza donations by Ben Baz Charity and the Welfare Association contributed to prevent a further decline. There has also reportedly been direct procurement of selected key items (10 types of disposables). 4,752 items of one medical disposable were delivered from MOH central warehouse in the West Bank in June.

Chart 1 listed below illustrates the persistently high level of essential drugs and disposables at zero stock since the start of 2017 in Gaza



- Out of the 516 medications on the essential drug list, the number of drugs that were **completely depleted** in June has increased to 161 (31%), compared to 148 (29%) in May, 128 (25%) in April and 125 (24%) in March.

Chart 2 listed below illustrates the increasing levels of drugs that are completely depleted since March 2017 at the central drugs store in Gaza



- In June, out of the 161 essential lifesaving drugs that were completely depleted, 53 items were essential for primary healthcare services, 32 items were for chemotherapy and hematology, 25 were essential for surgery and the intensive care units, 25 for genetic diseases, 9 for mental health, 7 for

paediatric care, 4 for eye treatment, 4 for kidney patients and haemodialysis, and 2 drugs for diagnostic services.

Coping mechanisms include:

- **Doctors are left to improvise** and in certain occasions have to use **alternative drugs** which may be less effective, or have increased side effects. For example, according to the MoH, doctors are now prescribing alternative antibiotics to treat certain infections due to the unavailability of recommended treatment regimen, which may increase antibiotic resistance and cause further complications.
- Dextrose 10% (D10) intravenous (IV) solution has run out. It is critical for the treatment of hypoglycaemia in neonates and young infants.
- Surgeons working for the MoH in public hospitals have to **resort to using expired items and reuse single-use disposable items**. For example, surgeons performing vascular surgery in Shifa Hospital have reported that they need to use expired vascular sutures.
- Patients are referred outside of Gaza. Over the past few weeks, the Rantisi Paediatric Haemodialysis Unit ran out of kidney dialysis catheters and paediatric size blood lines. Without these basic disposable supplies they were **unable to treat the patients and** had to request permits for treatment outside of Gaza.
- Patients increasingly buy drugs at their **own expense** from the private market.
- Patients approach non-MoH facilities for drugs they need, including NGO's and UNRWA facilities.



Many neonates need to be transferred outside of the Gaza Strip. The Head of the Neonatal Intensive Care Unit, Dr Alam Abu Hamda states that "every hour is critical, but the resources to treat them locally are not

Vulnerable groups

Cancer Patients

There are shortages of 31 drug items out of 63 for the treatment of cancer, including items for the treatment of breast and colon cancer. The MoH in Gaza refers the majority of patients with cancer to health facilities outside Gaza. However, patients face substantial barriers to accessing adequate care due to delays and denial of permission to exit Gaza. In 2016, around two in every five patients applying for permits to exit Gaza for health reasons were denied or delayed their application.

- **Children suffering from phenylketonuria**

Children in need of special milk formula suffer particularly from the enduring shortages. The MoH currently lacks phenyl-free milk needed by some 300 children who suffer from phenylketonuria (PKU), a metabolic disorder that can lead to mental deterioration if not treated. The cost of one can of phenyl-free milk is around 30 USD and an infant on average needs six cans per month, costing 180 USD per month. In 2014, the average monthly salary in Gaza was \$174.

- **Cystic Fibrosis patients**

The majority of patients with cystic fibrosis (80-90%) require pancreatic enzyme substitution therapy to prevent malnutrition. 321 children suffering from cystic fibrosis are currently unable to obtain this treatment in Gaza. The family association for cystic fibrosis has issued several calls for help and families of patients have reported decreasing the doses for their children to make their current stock last longer.

- **Haemophilia Patients**

136 patients with haemophilia also suffer from shortages of drugs. These patients are dependent on factor VIII or factor IX to prevent life-threatening bleeding. The MoH has reported that there are currently no vials of these drugs left in stock.

- **Patients with kidney failure**

Patients with kidney transplantation face substantial risk due to the shortage in Tacrolimus and Sirolimus, two drugs that are essential to suppress immunity and prevent rejection of the transplanted organ. Any interruption of immunosuppressant therapy can lead to donor organ rejection, which can be devastating for patients and means the patient returns to dependence on hemodialysis – treatment that requires regular and lengthy attendance in hospital. There are 166 patients with kidney transplantation in Gaza who rely on these drugs.



Patients who have had kidney transplantation face the risk of returning back to hemodialysis.

- **Patients with Hepatitis B and C**

There are around 400 patients in Gaza requiring treatment for hepatitis B and C. Medication shortages for antiviral drugs risk faster progression and increased complications from these chronic infections. The current zero stock for *pegylated interferon* also deprives approximately 120 patients with hepatitis C of a potential cure

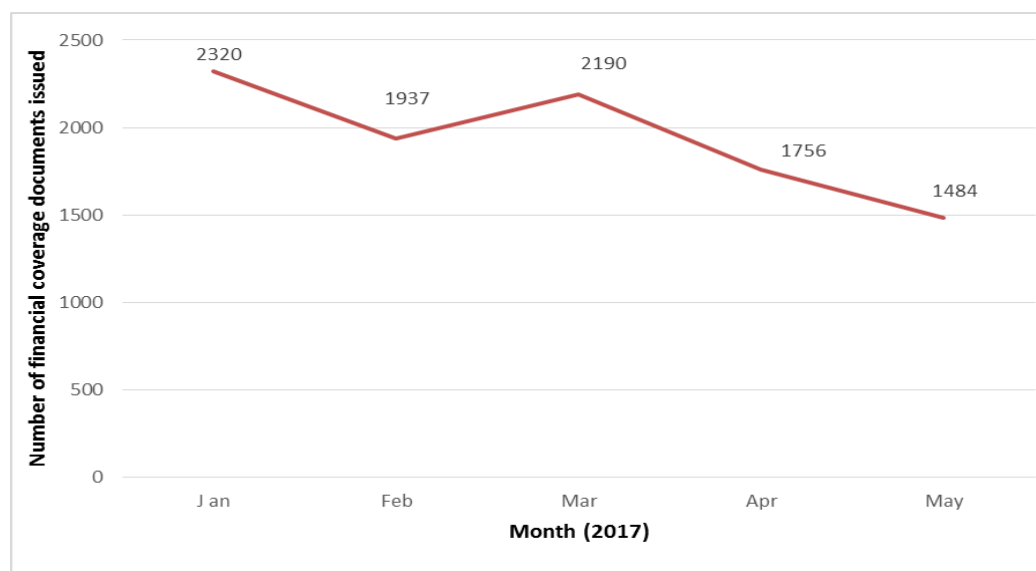
Access to patients referred outside of Gaza

According to the MoH Service Purchasing Unit (SPU), in May 2017, there were 2,282 patient applications for permits to exit Gaza through Erez checkpoint. Of these, more than half (53%) were denied or delayed. 47 applications (2%) were denied outright, while 1,158 applications (51%) did not receive any response and were pending by the time of their hospital appointment, delaying appropriate treatment. 1,077 applications (47%) were approved, which is the same as the approval rate in January 2017.

In May 2017, procedural delays led to a decline in the number of financial coverage for Gaza patients issued by the Service Purchasing Unit. There was a decline by around a quarter (27%) when compared to the average number of financial coverage approvals issued in 2016, see Chart 2. 1,484 financial coverage documents were issued for 1,317 patients, and of these 1,303 were for referrals outside of Gaza.

The Rafah terminal between Gaza and Egypt was closed for the whole month of May 2017.

Chart 3: Number of financial coverage documents issued by the Central Service Purchasing Unit for Gaza patients from January to May 2017



Health needs, priorities and gaps

- To ensure that hospitals and health facilities are equipped with fuel or solar energy system units in order to meet the basic energy requirements.
- Provision of sufficient quantities of lifesaving and essential drugs, disposables and medical equipment for health facilities.
- Provision of primary healthcare services, particularly vaccination services.
- Ensuring access for patients to their referral destination and advocate for the right to health.

WHO Response

- WHO has released US \$ 360,000 from its internal emergency funds to scale up its response and prevent the further deterioration and collapse of the health sector in Gaza. Using these funds, provided by WHO's Contingency Fund for Emergencies, WHO will rapidly scale-up priority response activity to effectively monitor and respond to the health needs by; supplying fuel to critical services in hospitals, and increasing the supply of life saving drugs to reduce avoidable mortality.
- In response to the current situation, WHO has also issued a donor appeal for US\$ 4.5 million. Further information can be accessed [here](#).
- WHO is in the process of establishing an independent health sector monitoring system in Gaza. The designed monitoring tool aims to rapidly and continuously assess, map and monitor health service availability and readiness and the impact on the health status.

Health Cluster Response

- The Health Cluster has helped UNRWA to secure USD \$500,000 for emergency fuel for Gaza's hospitals, through the oPt Humanitarian Pool Fund, led by the Humanitarian Coordinator. The purchase of the emergency fuel is used to maintain the delivery of essential services at hospitals and other emergency medical facilities. This fuel sustains the critical services for up to three months, ending in June.
- UNICEF will procure drugs and disposables worth over US \$ 600,000 for the 6 neonatal intensive care units in Gaza.
- The Health Cluster has contributed to the development of the US \$ 25 million urgent appeal, called for by the Humanitarian Country Team. The funding is needed to help mitigate the effects of deep power cuts and lack of fuel for generators. Out of the total \$ 25 million, the Health Cluster requests USD \$ 8.5 million. Further information can be accessed [here](#).
- The Health Cluster has established a Health Emergency Technical Working Group, comprising of key emergency partners including, WHO as the Health Cluster lead agency, MSF, UNICEF, MAP-UK, IMC, UHWC and the MoH. The objective of the Health Emergency Technical Working Group is to enhance emergency response planning, preparedness, and technical capabilities to respond to the crisis.

Partnerships and coordination

- Health Cluster meetings were held on the 15th June with health partners in Gaza and on July 4th in Ramallah. The objective is to discuss the key priority areas and actions for the Health Cluster. The meeting in Gaza was also attended by the WASH Cluster representative to discuss potential joint initiatives.

- The Health Cluster facilitated a number of meetings with the aim to improve the reporting mechanisms among partners. In addition, the revised version for the 4Ws (who is doing what, where and when) map has been produced and partners have been requested to input their data.
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Activities in July

- On the 12th July, WHO launches the report “Right to health: Crossing barriers to access health in the occupied Palestinian territory, 2016”.
- 51 health cluster partners will be trained on emergency response and preparedness with simulation exercises, in both Gaza and the West Bank.
- WHO, as the cluster lead agency, will undertake a number of key health assessments in Gaza, including a health needs assessment on the restricted access to health for communities living in the Buffer Zone in Gaza, and an assessment on the current energy situation in the health sector in Gaza.
- The established Health Emergency Technical Working Group under the Health Cluster, will work to update the Health Cluster contingency plan in consultation with wider stakeholders.

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