



HEALTH CLUSTER BULLETIN # 2 (15th June till 25th July 2015)






Yemen Humanitarian Crisis

 21.1 MILLION AFFECTED	 1,219,762 DISPLACED	 15 M COVERAGE	 19,347** INJURED	3,984** DEATHS
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HIGHLIGHTS

- Upsurges in cases of measles and dengue have been reported in Al-Mukalla, Hadramout governorate during the reporting period.
- Since March 2015, 5697 cases of suspected dengue fever and severe dengue fever cases have been reported. These include 3 000 suspected cases reported from Aden from public and private functioning hospitals through eDEWS and routine surveillance system.
- Due to the disrupted health system and collapsed water and sanitation facilities a consistent increase in diarrhoeal diseases has been recorded among the affected population.
- Estimates show that 2.6 million children under 15 years of age in Yemen are at risk of measles; 2.5 million under 5 are at risk of diarrhoeal disease and another 1.3 at risk of acute respiratory infections.
- More than 500, 000 liters of fuel have been distributed to hospitals to ensure continuity and functionality of main hospitals, vaccine stores, ambulances, national laboratories, kidney and oncology centers, and health centers in 13 governorates.

HEALTH SECTOR

	22	HEALTH CLUSTER PARTNERS
	15 M	COVERAGE POPULATION
Medicines stock available		
	32	TRAUMA KITS (ALL TYPES)
	29+53	EHKS/IEHKS (WHO, UNICEF)
	52+40	DIARRHOEAL DISEASE KITS (WHO+UNICEF)
	4 173	TOTAL HEALTH FACILITIES
	124***	HEALTH FACILITIES AFFECTED
diseases		
	46,598	CONSULTATIONS
	16	DENGUE FEVER ALERTS
	12	MEASLES ALERTS
	21	BLOODY DIARRHOEA ALERTS
edews		
	402	SENTINEL SITES (CURRENT)
	279	REPORTING
funding \$US		
	9.95 M	FUNDED
	125 M	YHRP

**reported by health facilities

***subject to field verification

Public health situation and risks

Access to health care in many affected governorates in Yemen remains extremely challenging due to insecurity and closure of health facilities. Since the start of the conflict (March, 2015) until 14 June 2015, 150 health facilities reported been either completely or partially damaged. Of these, 32 are hospitals; 27 of them fully damaged. Aden governorate has reported the most number of damaged health facilities and ambulances. Fourteen health workers have also been injured and 5 killed.

Shortage of fuel across governorates is hampering health facility operations. Electricity supply to Sana'a City and most neighbouring governorates continues to be disrupted which has serious impact on the health service delivery including running of ambulance services.

Lack of medical supplies and a disrupted surveillance system has impeded monitoring and response to the increasing suspected disease outbreaks like dengue and cholera, and essential health services such as immunization, nutrition and Integrated Management of Childhood Illness (IMCI) .

Following its shut down in June 2015 due to damages, the Ministry of Public Health Operations Room in Sana'a, recently reopened and is currently functioning normally. The facility manages emergency operations for the entire country and plays a critical role in emergency health response throughout Yemen.

Communicable diseases:

46,598 consultations were reported (week 28, reporting period) in 16 governorates as compared to 45,492 in week-27. Acute respiratory tract infections (ARI), acute diarrhoea (AD) and suspected malaria (S. Mal) were the leading causes of morbidity this week.

A total of 98 alerts were generated by eDEWS system in week 28, 2015; Of these 96 alerts were verified as true for further investigations with appropriate response. Altogether 21 alerts for Bloody diarrhoea, 16 each for Dengue Fever and Measles, 11 Pertussis, 10 Cut. Leishmaniasis, 7 AVH, 6 Meningitis, 4 Acute Flaccid Paralysis, 2 Schistosomiasis, 1 each for Viral haemorrhagic fever, Neonatal Tetanus, Pneumonia were received and responded in system generated. URTI (10.6%), suspected malaria (2.2%), OAD (12.4%) and Pneumonia (4.7%) remain the leading causes of morbidity representing a total of 29.9%. Acute viral hepatitis, acute watery diarrhoea and Schistosomiasis represented less than 1% of total morbidity in reporting period. Bloody diarrhoea represented 0.5% of this morbidity. All diarrheal disease comprised 12.9% and Pneumonia 4.7% of total morbidity in Pilot Governorates this week.

Online disease surveillance and response system was launched in 4 governorates (Aden, Abyan, Lahj and Taiz) in March 2013 and the expansion phase has started in 6 Governorates (Sana'a City, Hodaidah, Hajjah, Ibb, Al-Mukalla and Sa'da) in November 2013. The next expansion phase has 6 Governorates (Amran, Shabwah, Al-Mahrah, Sana'a Gov., Hadramout Al-wady and Dhamar) in April Ongoing on site trainings to improve weekly reporting and immediate notification are underway in all governorates.

Cholera Preparedness and Response Plan

According to surveillance data (i.e. weekly Yemen eDEWS epidemiological bulletins), disease trends of the past three months have shown a consistent increase in diarrhoeal diseases among the affected population due to deteriorating water and sanitation conditions. The joint Health and WASH Cluster

Preparedness plan is now operational addressing the water and sanitation issues to control and prevent the outbreaks of cholera and other diarrhoeal disease.

Cholera and dysentery cause the most severe form of the diarrhoeal diseases outbreaks. Cholera is caused by ingestion of the *Vibrio cholera* bacterium. The pathogen can stay in faeces for one to two weeks and is shed back into the environment, potentially infecting other individuals. Cholera affects both children and adults. Unlike other diarrheal diseases, it can kill healthy adults within hours. Individuals with lower immunity, such as malnourished children or people living with other chronic conditions, are at greater risk of death if infected by cholera.

Prevention and control of cholera outbreaks requires:

a) Adequate preparedness

- Risk estimation based on characteristics of the affected population and prevailing risk factors;
- Risk mapping among populations affected by the crisis including number of the affected population at risk of cholera outbreak;
- Implementation of effective surveillance systems ;
- Needs estimation (i.e. including size of cholera vaccine stock available in the WHO stockpile and in the global market in case of need), and preposition of supplies;
- Capacity building;
- Assessment of need for preventive cholera vaccination of the affected population.

b) Effective response

- A multi-sectorial coordination mechanism;
- Intensified disease surveillance and laboratory support for timely detection of cases;
- Reduce mortality by ensuring prompt access to treatment and proper case management;
- Provision of clean water and proper sanitation for populations potentially affected;
- Health education and good food hygiene, in particular, systematic hand washing should be taught;
- Assessment for need for reactive oral cholera vaccination to complement outbreak control measures.

Functionality of health facilities

Limited access to health care services and a breakdown in safe water supply and sanitation services have contributed to the spread of endemic diseases such as malaria and dengue fever, as well as acute diarrhoeal diseases. There has been an upsurge in cases of dengue with an outbreak announced in Al-Mukalla, Hadramout governorate during the reporting period.

According to different sources more than 150 health facilities have been reported completely or partially damaged, since the beginning of the conflict. Of this number, 30 are hospitals; 25 of which have been fully damaged. To date, Aden governorate has reported the most number of damaged health facilities and ambulances. 13 health workers have been injured and 5 killed. In Hajjah Governorate, the Harad Germany Private Hospital was targeted and damaged. Four patients and one Russian nurse were injured during the attack. The Basic Emergency Obstetric Care Centre department in Al-Luhai District Hospital in Hodeidah governorate was damaged. Electricity outages have compromised day-to-day health facility operations and cold-chain vaccine storage and severe shortages of fuel have hampered health facility and ambulance operations.

To support cold room functionality, UNICEF provided 15 000 litres of fuel to cold rooms. Unlike governorate cold rooms, district cold rooms have been difficult to maintain amidst the chaos, conflict and fuel constraints. Of the 333 district cold rooms, 246 remain functional (74%). Vaccines from the remaining non-functional cold rooms were moved to the nearest district or governorate cold rooms. Based on field reports, approximately 900 of the 3 652 health facilities (25%) with fixed EPI sites are no longer conducting daily vaccination. Most facilities in this category are in districts that have

suffered heavily from airstrikes and ground conflict and in which population displacement has been significant.

Dengue updates:

Yemen has experienced a significant surge in suspected dengue fever and severe dengue disease. Since March 2015, a total of 5697 cases have been reported. These include 3000 suspected cases reported from Aden in public and private functioning hospitals through eDEWS and routine surveillance system. Suspected cases were investigated; 31 of these cases had haemorrhagic manifestations and 15 died. Other governorates that have reported significant increases in suspected dengue fever cases include: Hodeidah, Taiz, Aden, Lahj, Shabwa and Hadramount.

Dengue fever is endemic in Yemen, with the disease following a seasonal pattern and high numbers of cases occurring between April and August annually. Storing of water in open containers in households due to water shortages and insecurity was identified as a contributing factor to this increase.

Response initiated so far:

- Supported the Ministry of Health and health authority governorates in epidemiological field investigations and entomological survey focusing on the dengue mosquito vector and breeding sites in Hodeidah, Hadramout and Aden governorates. WHO standard case definitions have been adopted in Yemen to identify symptoms consistent with dengue fever among suspected cases.
- Coordinated the response efforts; a 24/7 hours operation room has been activated in the Ministry of Public Health in Sana'a to monitor the situation.
- Enhanced epidemiological surveillance in all affected governorates and delivered rapid diagnostic test for malaria testing in affected areas.
- Printed and distributed case management guidelines for haemorrhagic fevers and provided more than 100 000 units of IV fluids and other supplies for supportive treatment; these have been delivered to health centers and hospitals in affected governorates with the exception of Aden and Taiz due to access challenges.
- Supported MoPH to conduct awareness campaigns and distributed 10 000 leaflets, guidelines and posters on haemorrhagic fever control to different segments of the community and health facilities.
- Supported MoPH with vector control by conducting indoor and outdoor spraying in Hadramout governorate. Similar interventions are planned to take place in Hodeidah Governorate in the coming weeks.
- Deployed international and national experts to assess, validate, advise and apply control measures, working with MoPH and partners in Aden. The team developed a report highlighting the magnitude of the issue, constraints, and best control measures to be adopted, including vector control.

Health supplies to Aden (by WHO as part of UN Convey)

The World Health Organization has delivered urgently needed health supplies to Aden governorate, where the humanitarian and health situation has been deteriorating as a result of the insecurity and limited access.

WHO delivered five trucks of life-saving health supplies, worth 46.4 tons of medicines, medical supplies, and water and sanitation supplies for 64,300 beneficiaries in eight districts of Aden governorate. WHO is also providing antimalarial drugs and intravenous fluids, rapid testing kits for malaria and dengue fever, and insecticidal bed nets. These have been delivered to the health office and functioning health facility in each district

To date, close to 130 tons of medicines and medical supplies, reaching a total of more than 4.7 million people, including 700,000 internally displaced persons and 140,000 children under the age of five have been delivered. And more than 500 000 liters of fuel to maintain the functionality of main hospitals, vaccine stores, ambulances, national laboratories, kidney and oncology centers, and health centers in 13 governorates.

Mother and Child Health updates: (UNICEF)

UNICEF has supported 28 mobile teams in 10 governorates (Al Baida, Amran, Marieb, Al Mahweet, Raymah, Hajjah, Al Hodeidah, Saada, Al Jawf, Shabwa) in 26 districts through Governorate Health offices, ACF, HAD, EDF and FMF. immunization, treatment of childhood illnesses, antenatal and postnatal care to mothers, Vitamin A supplementation have been provided through the mobile teams. The beneficiaries of the interventions over the last two weeks include:

- Over 2,250 children under 1 provided routine vaccination
- Over 1,200 children under 5 vaccinated with OPV & measles
- Over 5,200 children screened for childhood illnesses and provided treatment as indicated
- Over 2,200 women provided reproductive health care including 2,000 provided antenatal care and 200 provided postnatal care

UNICEF also continued to support service provision by the community mid-wives; 54 women had been provided with skilled birth attendance at birth.

WHO and UNICEF supported outreach for vaccination services in 2 governorates of Al Mahweet and Raymah and underway in Sana'a, Hajjah and Hodeidah targeting **267,600 under 1 children are being targeted**. Results will be shared in the next health bulletin.

Outbreak prevention and response activities:

- UNICEF and other health cluster partners are supporting both prevention activities and repositioning supplies should an outbreak occur. As part of this preparedness:
 - o community health volunteers are disseminating disease prevention messages on dengue, malaria, measles, diarrhoeal diseases and others
 - o The Department of Endowment is involving mosque imams for dissemination of the same messages
 - o Over 8 local radio channels are involved in dissemination of these messages
 - o Over 60 diarrhoeal disease sets have been prepositioned in 12 governorates
 - o Health and WASH teams are working closely for dengue outbreak response and planning for diarrhoeal disease outbreaks.

Reproductive Health: (UNFPA)

- UNFPA delivered 10,000 amboles of oxytocin to the Ministry of Public Health and Population (MoPHP).
- UNFPA and its partners have planned to send seven trucks containing: 104 assorted reproductive health kits to cover all districts in Aden, 8,000 dignity kits and two comprehensive emergency obstetric and neonatal care (CEmONC) sets for Alwehdda and AlShaab referral hospitals.

WHO response updates:

Medicines and medical supplies

In its response to the Ministry of Public Health's requests to fill the critical gaps in essential medical supplies, during the reporting period WHO provided:

- 19 tons of Health kits, IV fluids and other essential medicines and supplies to health facilities in four governorates (Shabwah, Hadramout, Hodeidah, Sana'a city) to respond to the health needs of affected communities. Supplies are sufficient to treat 438 300 people for a period of three months.
- Psychotropic medicines to Al-Salam Hospital in Hodeidah governorate for the treatment of mental health illnesses.
- 1 000 IV fluid packs to the haemodialysis center in Bajel district, Hodeidah governorate
- 100 oxygen cylinders to Al-Thawra Hospital, Hodeidah governorate
- 10 oxygen cylinders to Al-Jumhoori Hospital, Sana'a governorate

WHO also:

- Supplied 120 000 litres of water to Harad Hospital in Hajjah Governorate.
- Supplied 200 000 litres of water and 6 000 litres of fuel to the haemodialysis center in Harad District-Hajjah Governorate.
- Provided the following interventions in Hodeidah governorate
 - 24 000 litres of water for IDP communities in Al-Hali district
 - 1 200 litres of fuel for cold-chain in Al-Hali District
 - 20 000 litres of fuel for haemodialysis centers in Bajel, Zabeed and Al- Meena districts
- Provided training for health workers in Hadramout Al-Sahel on eDEWS disease surveillance and early warning system.
- Supported the provision of complete package of primary health care services in Hajjah, Saada, Amran, Sana'a, Hodeidah, and Aden governorates through fixed and mobile medical teams, and community mobilization activities.
- Supported mass casualty management services through deployment of surgical teams in Aden (Al-Buraiqa Dist.), Sa'ada (Sa'ada Dist.), Abyan (Modiah Dist.) and Hajjah (Harad Dist.) governorates.
- Supported the delivery of Reproductive Health in Humanitarian Emergencies package of services in Al-Jawf, Hajjah Amran and Sa'ada governorates.
- Strengthened health referral system through supporting the central health emergency operation room and inter-hospital transfer room.

IOM response updates:

In Aden, 3 mobile clinics continued working in three most IDP centred areas of Almansoorah districts, alshekh Othman districts and Inma City. 4922 including 1287 men, 1745 women, 846 boys and 1044 girls were treated in June. 188 under five children were treated for malnutrition including 91 of severe acute malnutrition (SAM) and 97 suffering of Moderate acute malnutrition (MAM).

IOM staff continued to work at 22 May hospital to cover a main gap of medical staffing in Aden health facilities and thus to provide the most needed health care to casualties as well other medical cases in currently the main operating referral hospital in Aden. 701 including 220 casualties and 481 other medical cases were treated during IOMs support.

In Abyan, IOM health team assisted 531 cases during June 2015, including 30 casualties, 25 deliveries and 506 other medical cases. Additionally, 20 casualties were assisted in Alkaber hospital that is supported by IOM. On the other hand, in Shabwah, 1414 medical cases were provided with health care through IOM's mobile clinic including 296 men, 424 women, 304 boys and 390 girls.

In Sana'a, two mobile clinics providing both primary health care and mental health and psychosocial support continued to operate in the schools hosting IDPs in amanat Al-Asemah and Bani alhareth. During June, 1222 medical cases were treated through these mobile clinics including 258 men, 406 women, 250 boys and 308 girls.

Additionally, reproductive health care was provided to 64 women during the same period. Mental health and psychosocial support was provided to IDPs through the mobile clinics, including individual sessions (provided to 82 cases), group counselling (provided to 48 cases), psycho education (provided to 186 IDPs), group discussion (15 cases). Moreover, recreational activities, targeting mainly children, were conducted in most of the schools hosting IDPs.

Editorial

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Inputs

Inputs are provided by the partners, members and observers directly to dubeal@who.int and shafiqm@who.int by Tuesday of every week.