HIGHLIGHTS

- WHO in conjunction with UNICEF has developed the Water Quality Surveillance (WQS) and Water Safety Plan (WSP) roadmap to revise the ongoing WQS and pilot WSP in the settlement.
- The number of diarrhoeal patients have increased in recent days. A total 6,189 diarrhoeal cases reported in Early Warning, Alert and Response System (EWARS) for week 38 whereas a total of 5,430 diarrhoeal cases reported in EWARS for week 36.
- The health sector is developing an academic article reflecting on the coordination efforts through Strategic Advisory Group (SAG) and working groups since the start of the crisis.

SITUATION OVERVIEW

There are an estimated 911,566 Rohingya refugees in Cox’s Bazar, according to the latest ISCG situation report (August 2019). This includes 34,172 refugees from Myanmar who registered before 31st August 2017. All refugees, including new arrivals, face compounding vulnerabilities, including in health. WHO has been responding to this crisis since September 2017. A summary of response actions from epidemiological weeks 37 and 38 of 2019 is presented below by WHO IMS functions.
OPERATIONS SUPPORT AND LOGISTICS

- Operation theatre (OT) equipment have been received for Sadar Hospital, Cox’s Bazar under King Salman Humanitarian and Center (KSRelief) fund. In addition, the renovation of OT room and gas pipeline system of District Sadar Hospital are completed now.
- WASH items (atomic absorption spectrometer and spare parts) have also been received and will be donated to Department of Public Health Engineering (DPHE) at Cox’s Bazar in partnership for the current water quality surveillance system.

INFORMATION MANAGEMENT – EPIDEMIOLOGY

Overview

- A total of 159 health facilities are registered as active Early Warning, Alert and Response System (EWARS) reporting sites. Coverage of EWARS reporting is now 85% (159/187).
- Of these sites, 110 submitted their weekly reports (69%) by 24 September 2019.
- A total of 24 alerts (triggers) were reported and reviewed in the EWARS system in week 38. All alerts were reviewed within 48 hours.
- Acute respiratory infection (ARI), unexplained fever and acute watery diarrhea (AWD) were the conditions with highest proportional morbidity this week. There were no notable changes in other diseases and syndromes. All these conditions are being monitored by WHO Epidemiology team.

Dengue Fever

- A total of two dengue cases were reported in EWARS in last two weeks; one suspected case in week 37 and confirmed dengue case in week 38.
- The total number of reported dengue cases in 2019 is 41 including 33 suspected cases and eight confirmed cases. No death has been reported from refugee population.
- In recent weeks, the number of dengue case reporting is decreasing trend (see below).

Figure 1: Number of reported dengue cases from camps for the period of week 1 to week 38 in 2019, Cox’s Bazar, Bangladesh.

1 Data source: EWARS Weekly report, dengue case report form
Diarrhoeal disease

- A total 6,189 diarrhoeal cases reported in EWARS for Week 38. Among which 4,615 cases reported with acute watery diarrhoea (AWD), 385 cases reported with bloody diarrhoea and 1,189 cases reported with other diarrhoea.
- In the past two weeks hospital admission of diarrhoeal diseases had a relative increase.
- Diarrhoeal diseases are the second highest contributor of proportional morbidity after acute respiratory infection (ARI).

Diphtheria Update

- Total number of diphtheria cases reported to date is 8,769. Out of these, 306 were confirmed, 2,749 were probable and 5,714 were reclassified as suspected.
- No new case was reported in week 38 due to reporting delay in EWARS. A total of 17 cases reported in week 37. Of which 2 were confirmed, 3 probable and 12 suspected.
- In 2019, a total 423 diphtheria cases reported in EWARS. 14 were confirmed, 40 were probable and 369 were suspected.
- A total 45 deaths were reported due to diphtheria since the beginning of the outbreak. No deaths were reported in 2019.
- WHO will hold a meeting with agencies doing contact tracing to ensure timely and effective contact tracing is being conducted.
- From the host community, a total of 223 diphtheria cases were reported. Of which 31 were confirmed, 68 were probable and 124 were suspected. Among all reported cases from host community, 27 cases were reported in 2019, of which two were confirmed, five were probable and 20 were suspected. No death was reported from host community.

![Diphtheria case-patients reported from week 1 to week 37 2019 in EWARS, Cox's Bazar, Bangladesh](image)

Community Based Surveillance (CBS)

- In weeks 37 and 38, a total of 51 deaths were recorded. Of these deaths, 62.7% (n=32) are due to causes classified as “Others” and 21.6% (n=11) were due to neonatal deaths, 7.8% (n=4) were stillbirths, 3.9% (n=2)
was due to injuries and 2.0% (n=1) was due to acute malnutrition and remaining 2.0% (n=1) infectious disease.

- Of these deaths classified as “Others”, 37.5% (n=12) was due to unknown causes or due to insufficient information presented for review. The remaining 62.5% (n=20) deaths were recorded due to causes such as cardio-pulmonary failure, chronic obstructive pulmonary disorder, cancer and geriatric conditions and acute renal failure.

- Currently, a total of 10 partners have reported last week covering a total of 18 camps with one mortality being reported outside the camp.

![Figure 3: Total deaths by place of death, cause of death reported in week 37 and 38, Cox’s Bazar, Bangladesh](image)

HEALTH OPERATIONS and TECHNICAL EXPERTISE

Laboratory

- The laboratory team helped conduct a 3-day training program on quality assurance in medicines with Dr Sophie Laroche, Quality Officer, WHO HQ. This training allowed pharmacists and logisticians to understand the importance and processes of ensuring the quality of drugs that they purchase. In addition, they were trained in risk assessment when procuring drugs and diagnostic reagents from different types of manufacturers.

- The laboratory team also conducted assessment and supportive supervisory visits to health facilities functioning within the Rohingya refugee camps that were not part of the initial phase of assessment. New equipment that was supplied to Sadar hospital was installed including autoclaves. Reagents were supplied to support the functioning of Sadar Hospital laboratory.

Communicable Diseases

- Dr Tereza Kasaeva, Director of the Global Tuberculosis (TB) Programme (WHO), Ms. Hannah Monica DIAS (Technical Officer, WHO-HQ), Dr. Partha Pratim Mandal (MO, TB, SEARO), Dr. Sabera Sultana (NPO, Neglected Tropical Diseases, WHO Country Office), Dr. Vikarunnessa Begum, WCO visited Cox’s Bazar on 11 September 2019 for monitoring the TB program activity. They monitored the new X-ray room renovation
activities in Upazila Health Complex (UHC). The team attended in a meeting with Director of National TB control Program (NTP), UH&FPO in the conference room of Ukhiya UHC. TB coordinator of WHO Cox’s Bazar gave a brief presentation on the TB program activity for Rohingya UHC and the host as well. Other officials from NTP, different INGO and NGO partners, representative of different organizations were also present in the meeting. Both Directors provided insights on strengthening the TB programme in Cox’s Bazar.

- The high-level delegates visited a TB laboratory facility in Lambasia camp to monitor the activities and went to the household of a TB patient to get information regarding TB treatment service.
- Communicable diseases team developed a training plan for snakebite and rabies prevention and control training for healthcare workers from Cox’s Bazar Sadar Hospital, Ukhiya and Teknaf Upazila Health complexes and other NGOs/INGOs health partners. Training is planned to be conducted during the 2nd week of October in Cox’s Bazar district.
- Draft general health card and maternal health card for Rohingyas have been developed for approval by the Strategic Advisory Group (SAG).

Non-Communicable Diseases (Including Mental Health and Psychosocial Support)

- The Noncommunicable Diseases (NCD) core group have completed a ‘NCD Service Availability Assessment Cox’s Bazar 2019’ in all 8 upazilas of Cox’s Bazar district. This 2-month long assessment has covered 7 upazila health complexes, 10 community clinics, 7 union level facilities, 29 health posts, 28 primary health care centres and 10 secondary health facilities with the objective of creating in depth baseline information on NCD related services including general information, status of trained human resources, essential medicines and equipment, referral system and record keeping procedures in Cox’s Bazar district. Data analysis is ongoing and it is expected to be finalized and disseminated in October 2019. For future planning to implement sustainable management and preventive activities to combat NCDs in Cox’s Bazar districts, the situation analysis of this assessment will guide the policymakers along with partners.
- WHO with collaboration of BRAC James P Grant School of Public Health and IOM made an exploratory visit to Ukhiya on 12 September 2019 meeting Rohingyas, community health volunteers and clinicians working in camp settings. The purpose of the visit was to get an overview of NCD services provision as well as assess the perceptions of the community to NCD risk factors including smoking, betel-nut use, salt use and physical inactivity which will guide the development of effective risk communication materials to prevent NCDs. 300 community health volunteer supervisors will be trained on the sensitization of NCD risk factors in 2019 with technical assistance from WHO.
- WHO Cox’s Bazar organized another round of mhGAP training on 15-19 September with 25 participants from UN Organizations, INGOs, NGOs and government participants from Sadar Hospital, Ramu, Moheshkhali and Teknaf UHC.
Water, Sanitation and Hygiene (WASH)

- The round 12 WQS reports have been shared to the WASH sector and interested partners. In this round 1316 unsterile water samples have been analyzed and findings revealed only 48% of water samples are free of E-coli, whereas the remaining 33%, 15% and 4% have been contaminated with 1-10cfu/100ml, 11-100cfu/100ml and >100cfu/100ml respectively. Similarly, 1316 sterile water sources have been examined and results indicated that 47% of the ground water source and spouts are uncontaminated, with 25% of both ground water source and spouts contaminated. The percentage of spout contamination under this round is 28%. Significant pollution of drinking water happens at the household level with only 9% of households drinking safe water in the camps. The recommendations are to disinfect the spout, spot chlorination, remove nearby faecal contaminant hazards, continue hygiene promotion education and use narrow mouthed containers.

- WHO in conjunction with UNICEF has developed the Water Quality Surveillance (WQS) and Water Safety Plan (WSP) roadmap to revise the ongoing WQS and pilot WSP in the settlement. The roadmap has been shared with relevant staff and WASH sector for review and approval. Following the comments from the WASH sector, the final roadmap has been developed and presented to the WASH sector to implement the roadmap until end of December 2019.

- The health-care waste management assessment started this week. Two consultants have conducted the preliminary meetings and visits in Dhaka and Cox’s Bazar district respectively. The consultants held meetings with various ministry departments in Dhaka, i.e. DGHS, DOE, DPHE and a private medical waste management company called Prism. Moreover; meetings have been held with MSF-OCB, Sadar Hospital, BRAC, Cox’s Municipality, UNICEF, and Civil Surgeon office IOM, UNDP, ICRC, WHO-Health Sector team and RRRC representatives in Cox’s Bazar district. The consultants had also visited the MSF-OCB medical waste...
management activities and waste zone in Sadar hospital and presented the highlights of the assessment plan for the health sector partners during the Bi-weekly health sector meeting.

- The consultants visited different health care facilities in the three Upazila (Teknaf, Ukhiya and Chichora) and in the Rohingya camps. In the three days of field visits they visited the Malaysia Field Hospital, Kutupalong community clinic, BRAC primary health center, Balukhali health sub-center, Friendship maternity centre and UNICEF/PHD Health post, Teknaf health complex, ICDDR, B and Sholapur community clinic and Chordia health complex. Further detailed assessments will be conducted in November.
- Supportive supervision has been held in two Primary Health Care Facilities (PHCs) in the MSF-OCB camps (camp-15 and 14). The feedback of improvement has been given to MSF-OCB clinical and WASH staff. The report development is ongoing and will be shared to MSF-OCB upon completion.
- Three supportive supervision feedback reports have been completed. The Malaysian field hospital, Hope Foundation Hospital, and Turkish Field hospital field visit reports are finalized and shared for the sector lead and fields supervisors to share to respective hospital medical directors.
- The WASH Facility Improvement Tool (WASH FIT) lessons learnt assessment and preparatory activities for the on-the-job training and coaching is completed by HEKS/EPER, a Swiss based NGO. The detailed implementation plan and fact-finding assessment checklists and evaluation questionnaires have been completed and the activity is ready to commence on the following week.

Immunization

- A training on Measles and Rubella surveillance has been conducted giving special emphasis on EWARS Reporting and Sample Collection by health facilities working in camps. Two hundred and forty medical and allied health staffs from around 20 organizations participated in the training in four batches. Hospital Superintendent Dr Mohiuddin inaugurated the training and was one of the resource persons. The expected outcome of the training was to increase the number of completed reporting of suspected measles cases and get the sample collected at very first visit in health facilities. As an outcome of the training, lab facilities in camps and coordination between PHCs and HFs were reviewed by assessing sample collection and storage aspects of Measles surveillance in the Rohingya population.
- The quarterly IVD review meeting was held on 15 September 2019 in the presence of the National Programme Manager EPI along with WHO and UNICEF representatives from the national level. Civil Surgeon chaired the meeting. The major agenda of the meeting included finalizing extension of target age group, cold chain extension status, fixed site vaccination trends and consequences, strengthen measles surveillance and resource mobilization. Program Manager EPI also visited field level EPI activities in Rohingya camp and host community before attending the meeting in the morning and provided his critical feedback on current situation.
- A prominent donor of Expanded Program on Immunization (EPI) GoB, The Vaccines Alliance (GAVI) representative visited for the first time Cox’s Bazar since last influx occurred in the district in 2017. Mr Samuel Patrick Muller, Senior Country Manager GAVI started his 2-day mission on 18 September 2019 and visited several outreach immunization activities, health facilities in camps, households, cold chain depot, met CS and both UHFPO in Teknaf and Ukhiya and UNICEF, WHO representatives at CxB level. The mission was accompanied by national level immunization focal points from both organizations. GAVI expressed their gratitude and appreciation to Bangladesh GoB for their prompt response in terms of mass vaccination
campaign to reduce the historical immunity gap and successful containment of diseases (measles, diphtheria) in such a case of quickest large-scale influx. GAVI also praised the coordination effort extended in such a multiple agency involved operation. Civil Surgeon Dr Abdul Matin acknowledged the support ensured by GAVI in the quickest possible time after the influx and the commitment to continue the contribution for the health of refugee population.

Emergency Immunization Activities

**Entry Point Vaccination** Two entry point vaccination posts were established *(November 2017)* at Sabrang, Teknaf and the Transit Camp, Ukha to provide the emergency immunization service to the new arrivals.

<table>
<thead>
<tr>
<th>Date/Month</th>
<th>BCG</th>
<th>Penta (&lt;7yrs)</th>
<th>PCV (&lt;7yrs)</th>
<th>bOPV (&lt;7yrs)</th>
<th>MR (9m-15yrs)</th>
<th>Td (7-15yrs)</th>
<th>Td (PW)</th>
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<tbody>
<tr>
<td>Total</td>
<td>158</td>
<td>1232</td>
<td>1066</td>
<td>3183</td>
<td>3884</td>
<td>1396</td>
<td>82</td>
</tr>
</tbody>
</table>

**Humanitarian Aid Worker Vaccination** Two vaccinations post are providing vaccination to humanitarian aid workers on weekly basis. Since *(March 2018)* opening, 1880 Td dosed were administered.

<table>
<thead>
<tr>
<th>Facility</th>
<th>Location</th>
<th>Time (Weekly)</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sadar Upazila Health Complex, MSF Kutupalong Main Clinic</td>
<td>Cox's Bazar District, Kutupalong, Ukhia, CxB</td>
<td>Saturday 1000-1300</td>
<td>01701202994</td>
</tr>
<tr>
<td>Month</td>
<td>UHC Sadar CxB</td>
<td>MSF Clinic KTP</td>
<td>295</td>
</tr>
<tr>
<td>Total</td>
<td>2079</td>
<td>295</td>
<td></td>
</tr>
</tbody>
</table>

**Risk communication**

- Successful completion of the Innovative interactive communication on raising awareness on uptake of and addressing the barriers to immunization in three camps (2E, 10, 14) which are considered as low performing camps. The event attracted a cross section of community members both male and female in all camps and participants were educated with key messages, entertained across all three camps and a video is being developed to be used as a risk communication and community engagement tool.
- Development of an Intersectoral Guidance Note as a mitigation measure for the reduction of mosquito breeding site in camps. The document outlines the coordination and monitoring mechanisms of ensuring all households, common facilities and camps proactively participate in the reduction of mosquito breeding sites as a community effort towards fighting mosquito borne diseases like dengue.
- Snap shot survey pre-testing survey on the impact of community’s perception of key messages on dengue.
HEALTH SECTOR COORDINATION

- The health sector is developing an academic article reflecting on the coordination efforts through Strategic Advisory Group (SAG) and working groups since the start of the crisis. All working groups are contributing to this piece which will provide lessons learned and critically discuss ongoing challenges across different thematic areas.

- The health sector information management team updated its dashboard of monthly data from EWARS/DHIS2/4Ws and briefed the camp health focal points on how to use this to inform camp-level health meetings.

- Ukhiya and Teknaf Upazilla level health coordination meetings held during the reporting period. Both meetings have been chaired by the Upazilla Health Officer, facilitated by health sector and participated by health sector partners working in respective Upzillas. Camp health focal points and health sector coordination team’s regular bi-weekly meeting held on 19 September. Camp Health Focal Points and Field Coordinators have been oriented on DHIS reporting and basic analysis.

- Health sector field coordinators and camp health focal points continue supporting partners and Camp Management authorities to coordinate health sector activities in camps. Health coordination meetings are being held in camps at least once a month.

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