







PHOTO: In response to the recent surge of Acute Watery Diarrhea (AWD) cases registered in the refugee camps, WHO is leading a multisectoral response to closely monitor the epidemiological situation and strengthening case management of AWD.

HIGHLIGHTS

- In response to a surge of Acute Watery Diarrhea (AWD), WHO and partners have reinforced the AWD response in line with the Multisectoral AWD Preparedness and Response Plan. Case management for AWD has been strengthened through capacity mapping exercise of Diarrhoea Treatment Centers (DTC). In addition, 254 healthcare workers received training on AWD Case Management.
- The Government of Bangladesh has resumed COVID-19 vaccine registration through national Surokkha portal for Bangladeshi citizens over 35 years-old and other priority groups.
- The Directorate General of Health Services (DGHS) issued an official communication announcing vaccine prioritization for Rohingya refugees over 55 years-old. WHO IVD team initiated the development of an updated microplan based on based on most recent population breakdown.
- WHO continues supporting the Government of Bangladesh through the Civil Surgeon's office to establish COVID-19 Antigen Rapid Diagnostic Testing in Cox's Bazar. 600 COVID-19 Antigen RDT have been provided to 3 facilities and 7 partner-led health facilities were assessed by WHO to establish additional COVID-19 sentinel sites for sample collection.
- **SUBJECT IN FOCUS:** After-Action Review of the Mobile Medical Teams (MMTs) emergency response to the massive fire on 22 March 2021.

	Host Community	Rohingya refugees
 Total confirmed COVID-19 cases in Cox's Bazar	10 612	1 854
 Total cases in isolation in Cox's Bazar	278	257
 Total number of tests conducted	105 179	49 548
 Total deaths due to COVID-19	110	20

WHO, together with the Ministry of Health and Family Welfare (MoHFW) and office of Refugee Relief & Repatriation Commissioner (RRRC) continues to provide leadership, coordination, supportive supervision and collaborative support to all health partners and sectors responding to the COVID-19 response and maintaining essential health services.

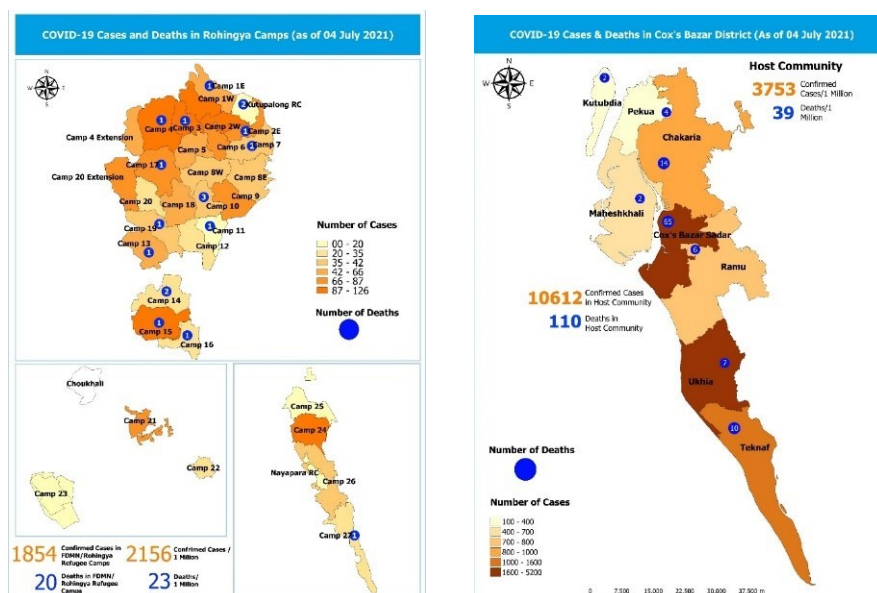
During the past weeks, Health Sector, led by WHO, has been closely monitoring the increase of COVID-19 positive cases in Cox's Bazar. In relation to the current nationwide lockdown situation, movement restrictions continue to be in place in the Rohingya refugee camps as communicated by the RRRC. Selected camps with high rates of COVID-19 are under stricter restrictions with exemption to health services.

Health sector has been supporting the Government of Bangladesh through the Civil Surgeon's office to develop a protocol for COVID-19 Antigen Rapid Diagnostic Tests (RDT). A COVID-19 Antigen- Rapid Diagnostic Test (Ag- RDT) pilot with 487 tests has been completed in the last week. An additional 1000 Ag-RDT kits for COVID-19 have been provided by the Civil Surgeon's Office, Cox's Bazar to roll out in 5 sentinel sites.

In response to the surge of Acute Watery Diarrhea (AWD) cases in Cox's Bazar, daily coordination meetings among representatives from Health Sector, WASH Sector, and Risk Communication and Community Engagement (RCCE) partners are taking place since mid-June to strengthen the AWD response in line with the Multisectoral AWD Preparedness and Response Plan. Case management for AWD has been strengthened. A capacity mapping exercise of Diarrhoea Treatment Centers (DTC) and other AWD isolation capacities has been undertaken, identifying 72 active and 400 standby beds in the camps. During the reporting period, 254 healthcare workers received training on AWD Case Management between 28 and 30 June 2021. In addition, over 1000 Community Healthcare Workers (CHWs) have been trained and are currently undertaking active case finding, key health messages dissemination and distribution of ORS/Zinc in any household reporting symptoms.

The Health Facility Quarterly Monitoring exercise for Q2/2021 has completed the assessment of the health services availability and utilization in all health posts and PHC in camps. Currently, data is being analyzed by the Health Sector team for further dissemination among the partners. Health Sector partners have shared their feedback on the Standard Operating Procedure (SOP) for Referrals and Accountability to Affected Population (AAP) framework. These documents will soon be shared with RRRC & Civil Surgeon's offices for review and endorsement. At the same time, the 'Health Sector Strategic Plan-2019' is being updated to adopt to changing circumstances and propose a common way forward for health in the coming years. Soon the 1st draft will be shared with SAG members for review.

During the reporting weeks, a total of 9 camp-level Health Sector Coordination Meetings were held in FDMN/Rohingya refugee camps, maintaining proper precautions against COVID-19. Key COVID-19 issues requiring support, coordination and collaboration among different partners and working groups were extensively discussed along with monsoon preparedness measures. In addition, Rapid Investigation Response Teams (RIRTs) coordination meetings are ongoing in the camps to strengthen the COVID-19 enhanced surveillance.



SURVEILLANCE, RAPID RESPONSE TEAMS, AND CASE INVESTIGATION

WHO continues to provide epidemiological data to support operational decision making for the COVID-19 response in Cox's Bazar. As of 4 July 2021, a total of 10 612 individuals from the host community in Cox's Bazar district have tested positive for COVID-19: 832 in Chokoria, 120 in Kutubdia, 674 in Moheshkhali, 325 in Pekua, 680 in Ramu, 5 168 in Sadar, 1 133 in Teknaf and 1 680 in Ukhiya.

While the overall positivity of samples tested in the district is 10.1%, an increasing trend in cases among the host community has been observed in recent weeks. In week 26, 431 cases tested positive, with a test positivity rate of 15.4%, in comparison with week 24 when 239 positive cases were registered with a test positivity rate of 9.1%. To date, a total of 110 deaths have been reported in the host community, with a case fatality ratio of 1.0%.

Among the Rohingya refugee population, the number of confirmed COVID-19 cases has slightly increased over the past weeks. In week 26, a total of 123 positive cases were registered in the Rohingya refugee camps with a test positivity rate of 10.0%, in comparison to the 113 confirmed cases in week 24, with a test positivity rate 9.3%. As of 4 July 2021, a total of 1 854 COVID-19 cases have been reported among Rohingya.

With a total of 126 cases, Camp 2W has the highest number of cases to date further ahead from Camp 3 with 117; Camp 15 with 115; Camp 24 with 112; and Camp 4 with 110. To date, 89 cases have been reported from Camp 1W, 85 cases have been reported from Camp 17 and 84 from Camp 20 Ext. in Camp 21, 76 cases have been registered and 71 in Camp 9. Camp 2E has 69 cases, Camp 5 has 65 cases and Camp 1E has registered 61 cases. Camps 4 Ext, 7, 8E, 8W, 10, 11, 12, 13, 14, 16, 18, 19, 20 Nayapara RC, 22, 23, 25, 26 and 27, have so far had less than 60 cases. 5 cases have been registered from Zero Point and 3 are from new arrivals.

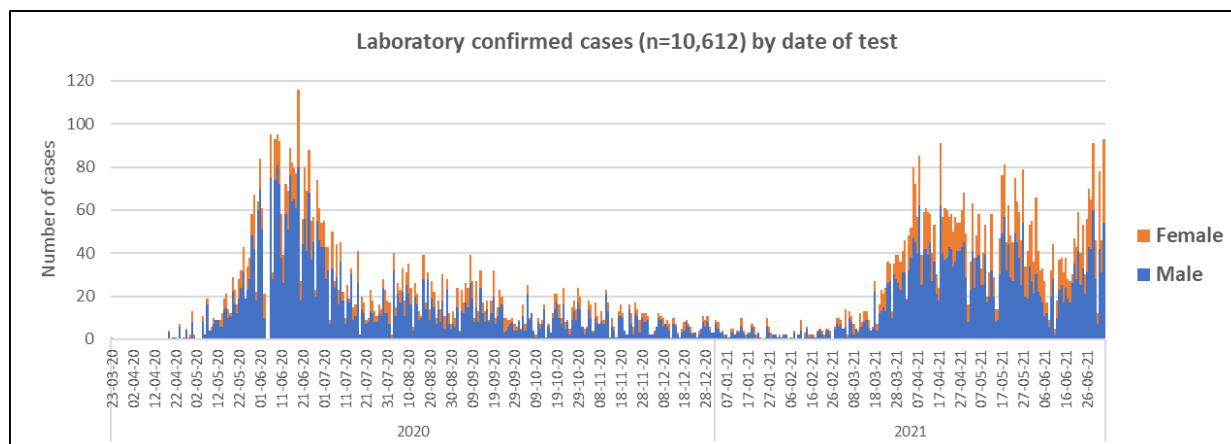


Figure 1: COVID-19 positive cases in among host population in Cox's Bazar District

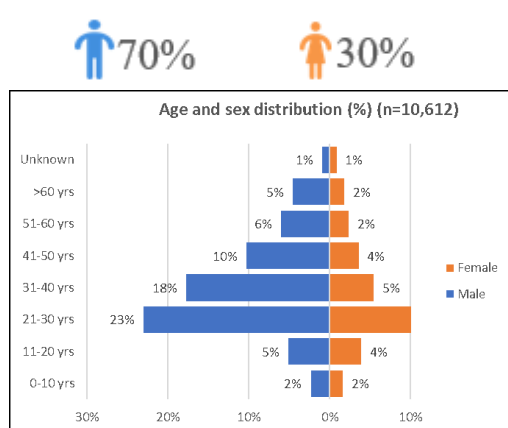


Figure 2: COVID-19 positive cases by age and sex among host population in Cox's Bazar District

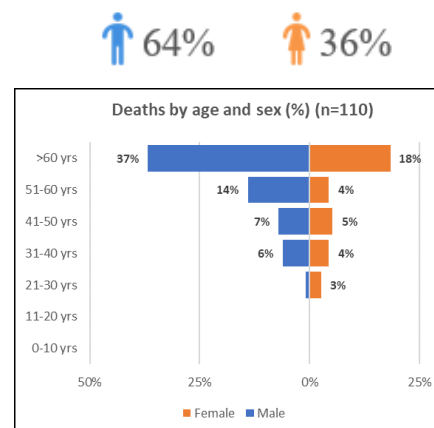


Figure 3: Age and sex distribution of COVID-19 positive cases among host population in Cox's Bazar District

To enhance SARI ITC preparedness and respond to the upward trend of cases, the Civil Surgeon office in Cox's Bazar issued a directive to activate the SARI ITC stand-by beds. Currently, 572 general isolation beds are functional in 12 Severe Acute Respiratory Infection (SARI) Isolation and Treatment Centers (ITCs) with provision of oxygen to assist both the Rohingya refugee population and the nearby host communities of Cox's Bazar. The bed occupancy of these SARI ITCs is 60% at the end of the reporting period. Moreover, the capacity of general isolation beds in the district is 376. The Intensive Care Unit/High Dependency Unit (ICU/HDU) at the Cox's Bazar Sadar Hospital has a capacity of 38 beds for severe and critical patients. During the past weeks, an increase in the bed occupancy has been observed, indicating the increased demand of hospitalization due to severe disease presentation at admission.

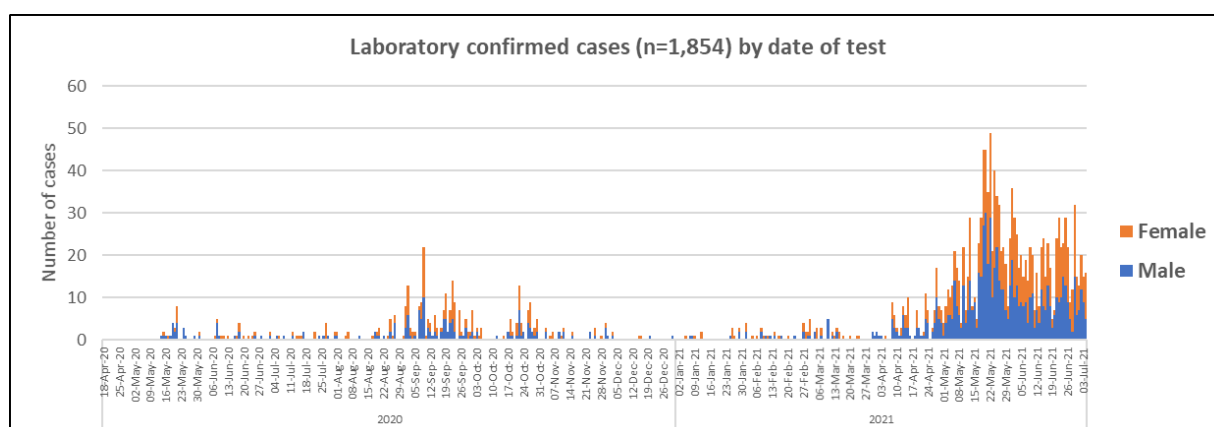


Figure 4: COVID-19 positive cases among Rohingya refugees/FDMN in Cox's Bazar

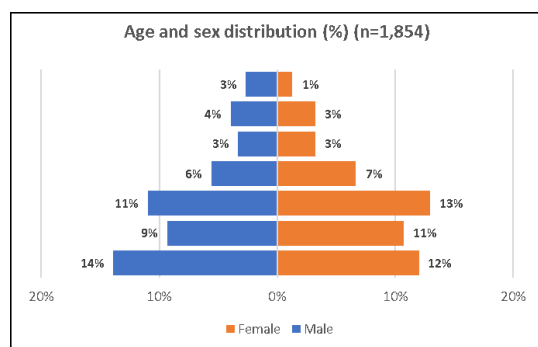


Figure 5: Age and sex distribution of COVID-19 positive cases among Rohingya refugees/FDMN in Cox's Bazar

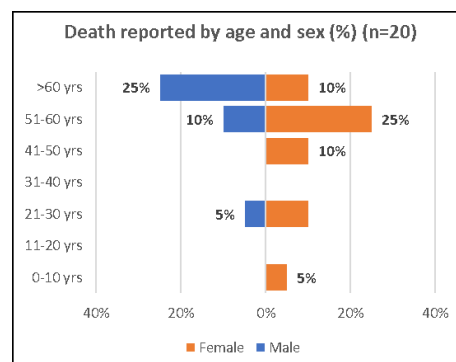


Figure 6: Age and sex distribution of COVID-19 deaths among Rohingya refugees/FDMN in Cox's Bazar

Between weeks 25-26, 219 new confirmed cases were detected from 2169 samples tested, the test positivity was therefore 9.3%. As of 20 June 2021, the cumulative incidence is 157.5 per 100 000 people. The overall positivity of samples tested is 3.3%. Among the cases, 2.5% showed severe symptoms at the time of admission while 5.4% reported at least one co-morbidity. The median age of tested and confirmed cases was 11 (0-120) & 22 (0-100) years, respectively and ratio of females among tested and confirmed cases was 54% and 49%, respectively. Though the median age of tested samples remained below 11 years, a significant proportion has been tested among 50+ years: 638 per 10 000 population, following that of 0-9 years with 790 tests per 10 000 population as highest number. The test positivity was highest 5.5% in 30-39 years age cohort and the age specific mortality 1.9 per 10 000 population observed among 50+ years during the period. In total, and since the outbreak began, 20 deaths due to confirmed COVID-19 have been reported in the camps with a case fatality ratio of 1.3%.

A camp wise dedicated Contact Tracing (CT) network (34 supervisors and 311 volunteers) has been embedded in the Rapid Investigation and Response Teams (RIRTs) for COVID-19. A total of 1 515 confirmed cases (out of 1 854 to date) have been investigated by RIRTs by 4 July 2021, with contact tracing activities being conducted and captured through Go.data, including 3 609 contacts. Out of these, 2 251 (62%) contacts have seen their follow up visits completed and were released from quarantine. 151 (6.7%) tested positive cases during the follow up period. WHO is closely supporting contact tracing through the Camp Health and Disease Surveillance Officers (CHDSOs).

A total of 17 Rapid Diagnostic Test (RDT) positive cases for Acute Watery Diarrhea (AWD) were reported in the reporting period (week 25-26). The total number of cases reported so far is 84 in 2021: 63 from the refugee camps and 21 from host communities. Out of these, 27 were culture confirmed, 46 tested negative by culture and the remaining 11 culture results are awaited. In line with the Multisectoral AWD response plan, for each case a joint Health and WASH investigation takes place and implements household level measures. Areas of focused intervention have been identified based on at least one culture confirmed case in camp in last 30 days and/or 2 or more RDT positive cases from same sub-block in last 14 days, where WASH, Health and Community Engagement activities are undertaken/intensified at sub block/camp level as appropriate.

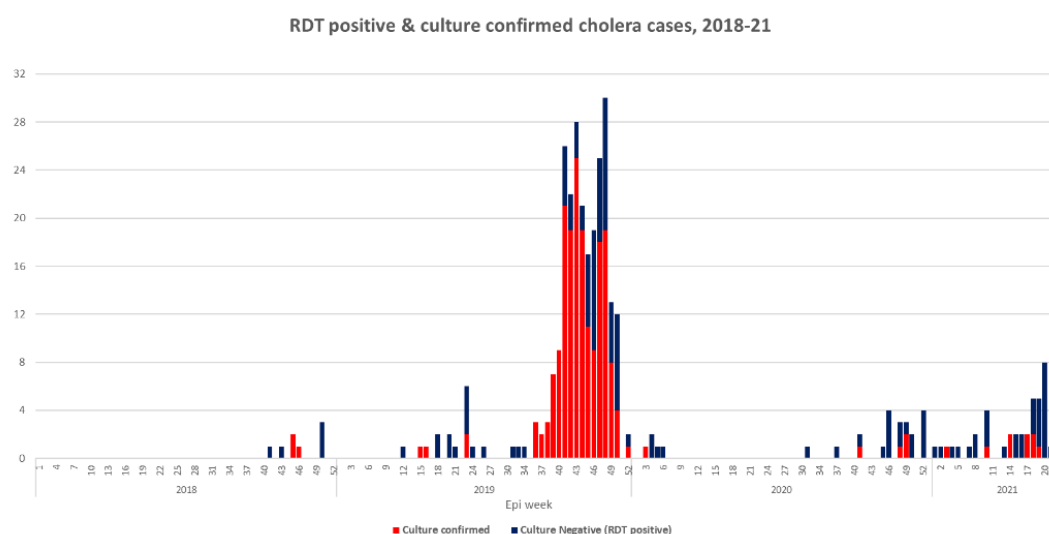


Figure 7: RDT positive and culture confirmed for Cholera cases in 2019-21.

In response to the surge of Acute Watery Diarrhea (AWD) cases in Cox's Bazar, a rapid mapping conducted by WHO and partners in line with the Multisectoral Acute Watery Diarrhea Response Plan (August 2020) has identified approximately 50 isolation beds for AWD, with additional 200 on standby that could be activated on short notice. Further to this, an additional number of 160 beds that are currently

established as standby capacity for COVID-19 patients in the SARI ITCs can be repurposed for AWD if the evolving epidemiological situation requires. Diarrhea Treatment Centers (DTC) in Leda remain open for strengthened case management of AWD patients and are ready to expand the capacity.

So far, a total of 571 cases has been admitted in Leda Diarrheal Treatment Center (DTC) and other health facilities with AWD isolation capacity. Out of the cases, 20% were severely dehydrated, 26% with some dehydration and 53% showed no sign of dehydration at the time of admission. To date, there were 2 AWD deaths reported in 2021.

The situation continues to be closely monitored by WHO epidemiology staff in order to respond accordingly. During the reporting period, WHO has conducted AWD clinical management training for healthcare workers in the camps. In addition, over 1000 Community Healthcare Workers (CHWs) have been trained and are currently undertaking active case finding, key health messages dissemination and distribution of ORS/Zinc in any household reporting symptoms.

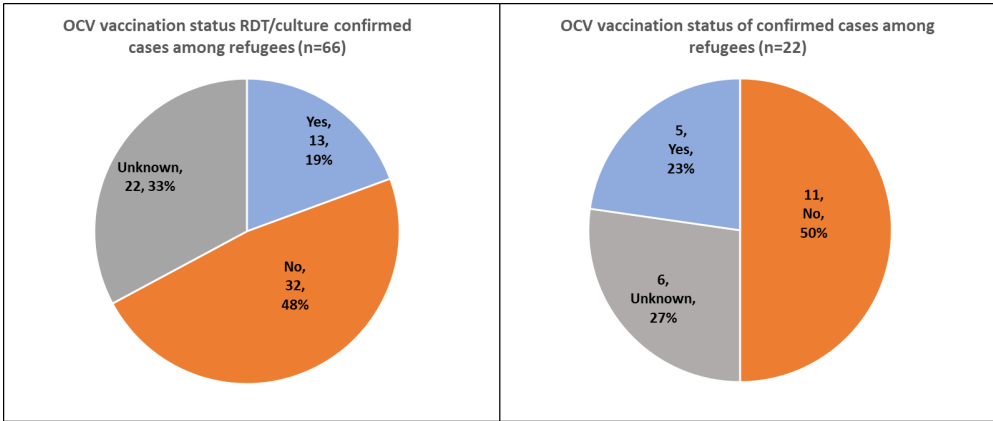


Figure 8: OCV vaccination status among RDT Positive and Culture Confirmed Cases among refugees

In 2021, 14 camps have reported at least one AWD confirmed case: camp 1W, 2E, 2W, 3, 7, 8W, 9, 10, 13, 17, 19, 20, 24 and Kutupalong Registered Camp. Two or more RDT positive cases have been identified in subblocks from camp 17 (7 cases from sub-block H109), camp 10 (3 cases from sub-block F39), camp 19 (2 cases from sub-block) and camp 20 Extension (2 cases from sub-block S2B4).

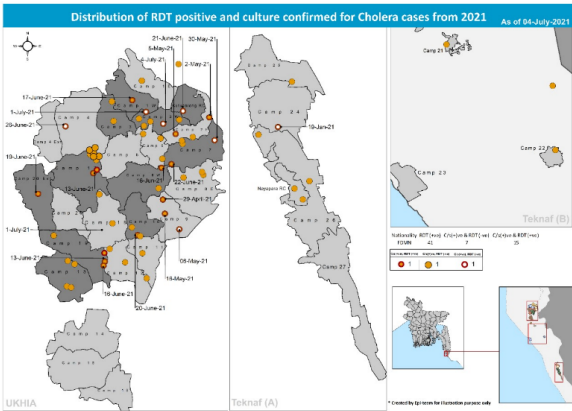


Figure 9: Geographic distribution of all RDT Positive and Culture Confirmed Cholera Cases in 2021

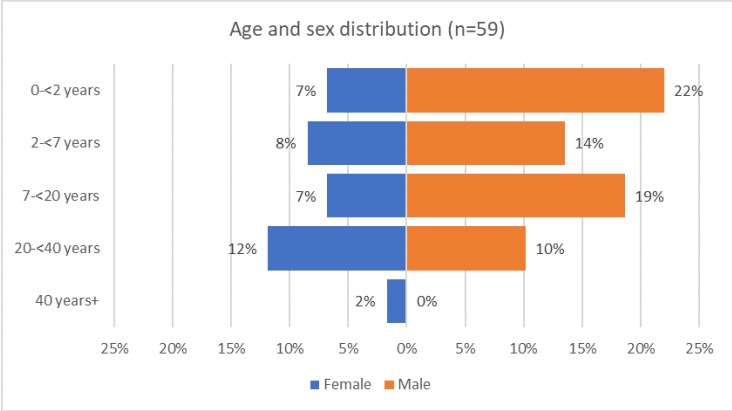


Figure 10: Age group distribution of RDT Positive and Culture Confirmed Cholera Cases among refugees from May to 7 July 2021

In 2020, a total of 28 RDT positive cases for Cholera were detected through sentinel testing, 5 of which were confirmed by culture – 2 from Ukhiya host community, 1 from Teknaf host community and 2 from the refugee camps. It is important to note that a Cholera outbreak occurred in late 2019 with a reported number of 239 RDT/culture positive cases and in response a mass Oral Cholera Vaccine (OCV) vaccination campaign was conducted with over 160 000 children of 1-<5 years being vaccinated with a 2- doses regimen.

Since the onset of the outbreak in 2017, Diphtheria surveillance is ongoing in the camps. The total number of diphtheria cases reported is 9 281 to date (3016 in 2017; 5330 in 2018; 614 in 2019; 226 in 2020 and 95 as of week 26, 2021). In total, 9 036 cases were reported in the camps and 245 from the host community, with 47 deaths registered in the refugee camps and none in the host community. While the first Diphtheria case was detected on 10 November 2017, the first death occurred on 29 December 2017 and the last death on 25 October 2019.

In weeks 25-26, 5 suspected Severe Acute Respiratory Infection (SARI) deaths were reported. In total 52 deaths have been reported in 2021. All deaths have been investigated by RIRT as a part of COVID-19 response and 9 were considered as death due to probable COVID-19 . In 2020, a total 49 suspected SARI deaths were reported through community-based mortality surveillance. Of these, all were verified and 2 considered death due to probable COVID-19.

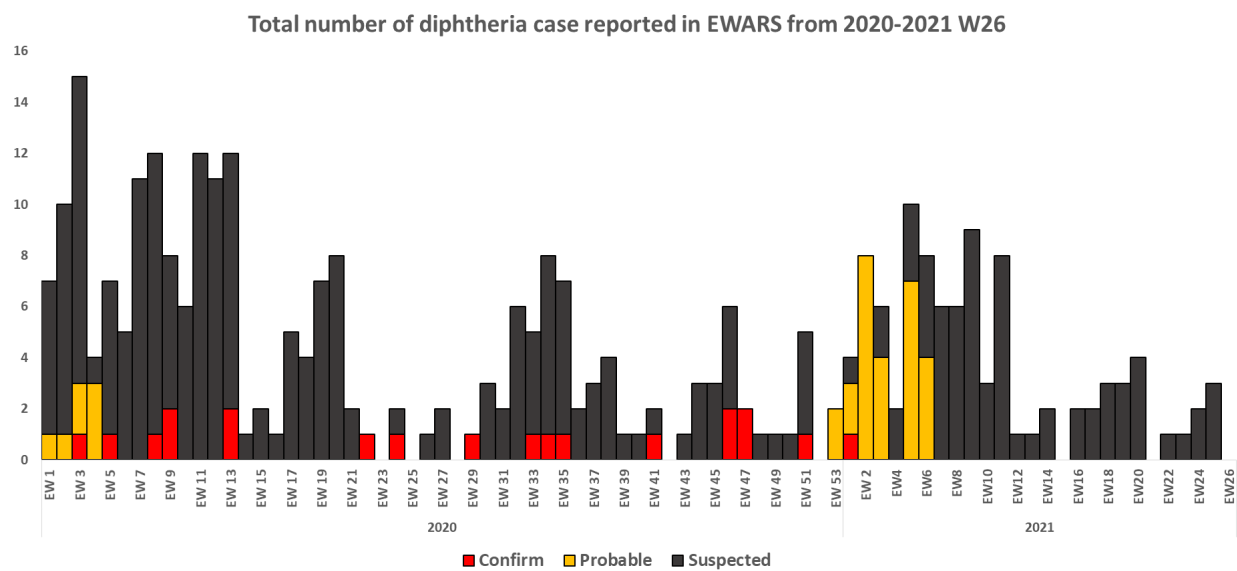


Figure 11: Total number of diphtheria case reported in EWARS from 2020-2021 W24

During the reporting period, 7 new probable maternal death have been reported. In total 65 probable maternal/deaths of women of reproductive age (WRA, 12-49 years) have been reported in 2021, of which 17 deaths have been reported from facilities and directly undergone review by Maternal and Perinatal Mortality Surveillance and Response (MPMSR).

Investigation of mortality due to suspected potential infectious causes i.e. SARI, Measles, Cholera, Diphtheria etc. is ongoing in the camps along with death due to maternal causes as high priority. So far in 2021, 2 suspected deaths were investigated under this task and considered as death due to suspected cholera.

RISK COMMUNICATION AND COMMUNITY ENGAGEMENT

WHO is engaging communities, health partners and other key stakeholders to develop, implement and monitor an action plan to effectively help prepare populations and protect them from COVID-19. Through its involvement in the Communications with Communities Working Group (CwC WG) and the Risk Communication and Community Engagement Working Group (RCCE WG), WHO continues to coordinate with agencies across the response to ensure that all information around COVID-19 and health issues are of high quality, technically correct and easily understandable by communities. Mixed-media messages include general information on COVID-19, hand washing, physical distancing and mask wearing, risks and vulnerabilities, safe and dignified burials, quarantine, isolation, and treatment centres, among others.

WHO and UNICEF continue providing English and Bangla versions of the weekly radio script on COVID-19 confirmed cases and number of tests conducted among refugee and host communities. These messages were shared with partners to be widely disseminated among the Rohingya community through radio broadcasting.

RRRC and Civil Surgeon's Office in Cox's Bazar endorsed the RCCE Strategy for critical operational modality for mounting appropriate RCCE interventions in the camps and host communities for COVID-19 and other health emergencies.

During the reporting period, Community Health Workers (CHWs) conducted 21 key informant interviews and 21 focus group discussions in the camps as part of data collection for the study on "Knowledge, Attitude and Practice on Minimum Invasive Procedure in the Non-Healthcare Settings among Rohingya Refugees in Cox's Bazar", that is jointly undertaken by WHO, UNHCR and the Community Health Working Group. The research aims to better understand community practices such as piercing, circumcising and tattooing in the formal and informal sector within the camps to tailor appropriate interventions to contain the surge infection rate with primary focus on Infection Prevention and Control.

Following reports of increased number of Acute Watery Diarrhoea (AWD) in some camps, WHO and partners as member of the RCCE WG supported the Health and WASH Sectors to revisit public health messages on AWD.

During the reporting period CHWs conducted 263 881 household visits in which 4666 patients were identified with mild respiratory symptoms (fever, sore throat, cough) and 73 patients with moderate/severe symptoms. The cumulative number of patients with mild symptoms is 155 295, and 887 patients with moderate/ severe symptoms. To date, 82 015 persons with COVID-19 like symptoms have been referred to health facilities, 3312 of which during the reporting period. Through coordination by the CHWG, COVID-19 messages reached 507 747 persons between weeks 25 and 26. Since the beginning of the response, CHWs have conducted more than 8.5 million household visits and had a cumulative number of more than 21.4 million contacts with adult household members. Through the CwC WG, 75 779 people were engaged in 30 363 small group sessions.

WHO continues its support to the Institute of Epidemiology, Disease Control and Research (IEDCR) Field Laboratory at the Cox's Bazar Medical College comprising human resources, equipment, supplies/consumables and technical and operational expertise.

Between early April 2020 and 4 July 2021, a total of 173 999 tests for COVID-19 have been conducted, of which 154 727 are from Cox's Bazar district and the remainder from Bandarban and Chittagong districts. An increase in the number of tests conducted among the Rohingya refugees was observed in weeks 25-26 as compared to weeks 23-24, from 2 263 to 2451 tests. Among the host community a decreased number was tested: from 4813 tests in weeks 23-24 to 5 391 tests in week 25-26. Currently, 35 sample collection sites are operating for suspected COVID-19 patients.

WHO continues supporting the Government of Bangladesh through the Civil Surgeon's office to develop a protocol for COVID-19 Antigen Rapid Diagnostic Test (RDT) pilot testing in the Cox's Bazar district. During the reporting period, WHO has provided 600 COVID-19 Antigen RDT to 3 facilities: IOM SARI ITC in Camp 20 Ext, HOPE SARI ITC in Camp 4 and IOM PHC in Camp 2W. Additionally, following expression of interest by Gonoshasthya Kendra (GK), International Rescue Committee (IRC) and IOM, WHO has assessed 7 partner-led health facilities in Camps 1W, 2W, 2E, 6, 8E, 11, and 23 to establish additional COVID-19 sentinel sites for sample collection and enhance technical support through monitoring visits. In weeks 25 and 26 WHO and the Civil Surgeon's office completed the COVID-19 Antigen pilot testing of 487 samples.

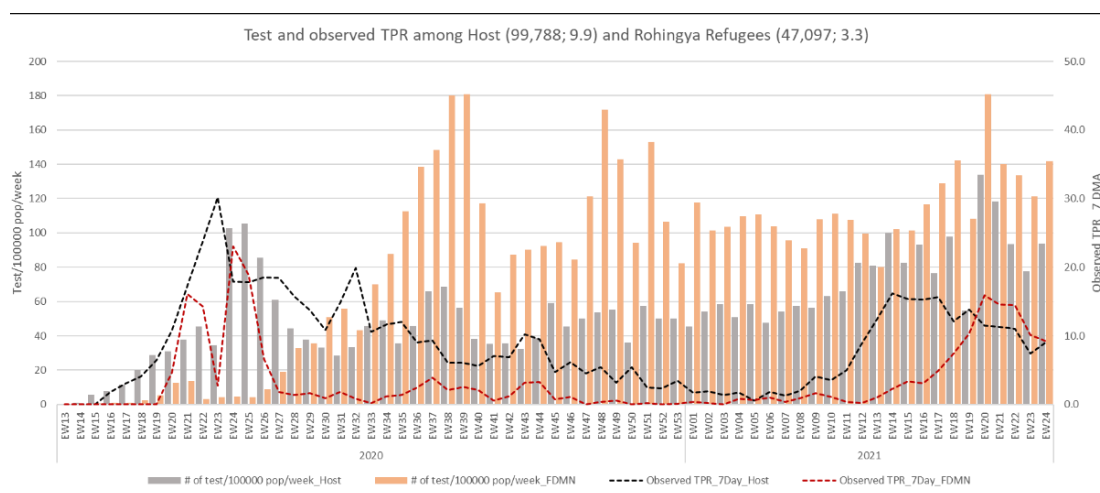


Figure 12: Number of tests conducted per million among the host population and the Rohingya refugees/FDMN

*The Government of Bangladesh refers to Rohingya as "Forcibly Displaced Myanmar Nationals". The UN system refers to this population as Rohingya refugees, in line with the applicable international framework. In this document both terms are used, as appropriate, to refer to the same population.

INFECTION PREVENTION AND CONTROL

To enhance preparedness for COVID-19 in Cox's Bazar, WHO has been training healthcare workers on Infection Prevention and Control (IPC) from Severe Acute Respiratory Infection (SARI) ITC partners and Government facilities. To date, training for Infection Prevention and Control (IPC) has been provided to 3600 humanitarian health care workers and government staff from healthcare facilities and Severe Acute Respiratory Infection Isolation and Treatment Centers (SARI ITCs) in Cox's Bazar.

During the reporting period, WHO and some partners from the IPC Technical Working Group (IPC TWG) – Food for the Hungry (FH) and Save the Children International (SCI)– completed a two-week hands-on mentorship on the use of the recently developed kobo reporting tool for monthly IPC scorecard. In total 17 IPC dedicated staff from 9 healthcare facilities (8 SARI ITCs and 1 ICU/HDU) in Cox's Bazar were mentored with the aim to improve IPC data management and data sharing.

In addition, envisioning the safety of healthcare workers and patients during this COVID-19 pandemic, WHO and IPC TWG are jointly conducting supportive supervision visits to specialized services facilities (SRH, dental, disability, eye care, etc.) in the Rohingya refugee camps. So far, 13 facilities have been covered in this activity that is anticipated to last for at least one month.

CLINICAL CASE MANAGEMENT

Since the onset of the outbreak, WHO is coordinating regular weekly Operational, Clinical and Critical care online forums; each with a multidisciplinary panel of health care providers with experience in the clinical management of patients with COVID-19 and other viral infections to foster peer to peer support and knowledge exchange. With the guidance provided by WHO experts, the initiative is serving as a foundation for optimized clinical care to ensure the best possible outcome for patients in Cox's Bazar.

During the reporting period, 2 working group meetings along with 2 case conferences for SARI ITCs and 2 case conferences for ICU were conducted. As of 4 July 2021, there are 12 operational SARI ITCs in the camps with a total of 572 functional beds and 323 on stand by. The

SARI ITC bed occupancy is currently 60%. At the 250 Bed District Sadar Hospital, the Intensive Care Unit (ICU) has 10 beds while the High Dependency Unit (HDU) has 15 beds and the Severe Care Unit (SCU) 13 functional beds. As of 4 July 2021, 30 beds are occupied with COVID-19 positive patients.

ESSENTIAL HEALTH SERVICES

Ensuring the provision of essential health services remains a priority in Cox's Bazar. Under the coordination of WHO and the Civil Surgeon, Cox's Bazar, the Health Sector is providing health care to nearly 890 000 Rohingya refugees and 472 000 Bangladeshi living in the surrounding areas of the refugee camps. The health facilities run by Health Sector partners to provide services to the population include 38 primary health care centers (PHCs), 97 Health Posts (HPs), 23 special facilities and three field hospitals.

WHO and Health Sector partners continue supporting the Government of Bangladesh (GoB) in the preparation of the COVID-19 vaccination campaign for the Rohingya community. During the reporting period, the Directorate General of Health Services (DGHS) issued an official communication announcing vaccine prioritization for Rohingya refugees over 55 years-old. To that end, WHO Immunization and Vaccine Development (IVD) team initiated the development of an updated microplan based on most recent population breakdown.

Bangladesh has received 2.5 million vaccine doses of Moderna COVID-19 vaccine through COVAX, a global initiative aimed at equitable procurement and distribution of COVID-19 vaccines led by WHO, Gavi, the Vaccine Alliance, and the Coalition for Epidemic Preparedness Innovations. In addition, 2 million vaccine doses of Sinopharm COVID-19 vaccine have arrived in Bangladesh through a bilateral procurement agreement with China. In this regard, the Government of Bangladesh has resumed COVID-19 vaccine registration through the national Surokkha portal for Bangladeshi citizens over 35 years-old and other priority groups.

Despite the lockdown situation in Cox's Bazar, routine immunization (RI) sessions continue, both fixed and outreach, with WHO's guidance on the operation and sustaining of immunization programs during the COVID-19 pandemic, and a revised strategy and microplan having been reviewed by the Government with technical assistance from WHO and other partners, based on data collected in 2020. Currently, 59 health facilities are working as immunization fixed sites and another 75 vaccination teams are conducting outreach sessions both in community and healthcare facilities. Vaccination sites and surveillance health facilities will be reassessed by Government authorities with the technical support of Surveillance and Immunization Medical Officers (SIMOs) based on data from 2020 and first six months of 2021. An immunization microplan for the upcoming six months is currently under review by the Upazila Health Complexes (UHC) in Teknaf and Ukhiya with the technical assistance from WHO and health partners. Additionally, the IVD team is completing the preparatory work and planning to conduct basic routine immunization training for vaccinators and supervisors. During the reporting period, the IVD team continues monitoring and following up with children who missed their vaccines at the healthcare facilities. Assessment of the vaccination list is currently ongoing through the work of WHO Health Field Monitors. WHO is continuously monitoring Acute Flaccid Paralysis (AFP) and vaccine-preventable diseases (VPDs) despite the lockdown.



Photo: WHO Camp Health and Disease Surveillance Officers (CHDSOs) undertake AWD case investigation in collaboration with Community Health Workers (CHWs).



Photo: WHO IVD team conducts Acute Flaccid Palaysis (AFP) and Vaccine Preventable Diseases (VPDs) surveillance in the camps on a regular basis.

As part of the Non-communicable Diseases (NCDs) program, WHO is supporting the Government to enhance the accessibility to reliable information on NCDs and quality of care for people diagnosed with any Non-communicable Diseases, such as hypertension or diabetes. During the reporting period, a total of 10 757 patients from the Rohingya refugee camps and adjacent host communities of Ukhiya and Teknaf Upazila seek medical care for NCDs and were reported through DHIS-2. Out of the total patients, Diabetes Mellitus was reported with highest percentage of 35% followed by 34% for Hypertension among all NCD patients.

Regarding communicable diseases, following the recent increase of Cholera RDT/culture confirmed cases in several camps over the last weeks, WHO in collaboration with icddr,b has conducted a half day online training on management of Acute Watery Diarrhea (AWD) for healthcare workers. A total of 254 healthcare workers joined the training on 28-30 June 2021.

The Health Sector, with respective working groups and partners regularly updates its contingency plan for cyclone (March-June) and monsoon (September-November) seasons. Information related to health facility functionality, contingency supplies and locations, mobile medical teams (MMT), ambulance network systems to respond to emergencies, and the list of camp health focal points is maintained and updated regularly.

During the reporting period, WHO and IOM, as chair and co-chair of the Emergency Preparedness and Response Technical Committee completed an After-Action Review (AAR) of the emergency response provided by Mobile Medical Teams (MMTs) to the fire incident on 22 March 2021. This process will help the standardization of future response interventions and it serves to remap the MMTs' intervention areas, so that interested new partners can join for better coverage and response. Post completion of the AAR, the facilitators are currently working on the finalization of the report that will capture lessons learnt, gaps and strengths. In addition to the report, preparations are ongoing to review the lessons learnt and address them gradually on priority basis to enable MMTs to improve their skills and competencies for better response to public health events in the future.

OPERATIONAL SUPPORT AND LOGISTICS

WHO continues to ensure timely provision of quality and adequate supplies, equipment and consumables for the health emergency operations in Cox's Bazar. To reinforce the public health response to COVID-19, WHO supported partners in Cox's Bazar, including Hope Foundation with the delivery of 2053 Personal Protective Equipment (PPE) items, including isolation gowns, gloves, boots and face shields.

During the reporting period, a total of 2.29 MT total volume 9.53 Cubic meters of medicines and supplies were deployed to Cox's Bazar including medicines, PPE and sample collection kits for the diagnosis of COVID-19. WHO continues its logistics support to the IEDCR Field Laboratory with two vehicles providing transportation of COVID-19 sample collection in the camps. WHO has also completed the refurbishment work for the skills lab in the Cox's Bazar Medical College.

SUBJECT IN FOCUS: After-Action Review of the Mobile Medical Teams (MMTs) emergency response to the massive fire on 22 March 2021

Three months after the massive fire that killed eleven people and left over 45 000 refugees homeless in the Rohingya refugee camps in Cox's Bazar, the Emergency Preparedness and Response Technical Committee chaired by WHO and co-chaired by IOM, and the Mobile Medical Team Technical Working Group led by IOM has conducted an After-Action Review of the Mobile Medical Teams' (MMTs) emergency response to the fire. This critical process enabled to capitalize on best practices, identify areas and actions for improvement, and promote individual and collective learning to standardize future interventions while strengthening the emergency preparedness and response readiness capacity of several partners.

Context

On 22 March 2021 a massive fire spread through camps 8E, 8W and 9 in the Rohingya refugee camp in Cox's Bazar, resulting in eleven deaths confirmed by government authorities, a significant number of injured and more than 45 000 people displaced. The vast majority were mild injuries including superficial burns, but a few severe cases were referred to and managed at the 250 Bed District Sadar Hospital in Cox's Bazar, which has Intensive Care Unit (ICU) bed capacity, and to other sub district facilities.

During the incident, six health facilities were damaged or destroyed by the fire, including a secondary health center (Turkish Field Hospital) and the IOM Balukhali Makeshift Primary Healthcare Center which played key roles as a referral facility in the camps, were destroyed. The incident also damaged the WHO Emergency Preparedness and Response (EPR) stockpiling container located at the Turkish Field Hospital, causing the loss of emergency health logistics and medical supplies that would have served for primary health care needs and emergency and trauma care of more than 25 000 people.

WHO emergency response to the fire incident

As part of the Emergency Preparedness and Response Plan, WHO coordinated the Health Sector emergency response in close coordination with health sector and non-health sector partners and under



Photo: In the aftermath of the fire incident, WHO conducted an initial on-site rapid assessment to document the impact of the fire in health services and help guiding the Health Sector's response.

the guidance of Government authorities to support the continuation of life saving and primary health care services in the refugee camps, while strengthening the capacity of healthcare workers in Cox's Bazar to manage burn injured patients and improve patient outcomes.

WHO's response focused around three pillars: (1) Coordination and information management to ensure timely and effective response to the emergency; (2) Strengthened medical assistance and capacity building with support from working groups under the health sector, strengthening surveillance mechanisms and risk communication to enhance the provision of primary health services in the refugee camps affected after the fire incident; and (3) Restoration of essential health services with the provision of tents, medical supplies and equipment to those facilities damaged by the fire.

Mobile Medical Teams (MMTs)

In the evening of 22 March onwards, a total of 6 Mobile Medical Teams (MMTs) from Health Sector partners –namely IOM (3), Hope Foundation (1), Relief International (1) and Save the Children International (1)– were deployed in the affected areas of the camps to immediately respond to the emergency. The intervention of these MMTs was part of the IOM chaired Mobile Medical Team Technical Working Group established under the umbrella of the Health Sector, which is responsible for planning, implementation and coordination of emergency preparedness and response (EPR) health interventions in Cox's Bazar for public health events.

According to the Emergency Medical Teams Operational Plan developed by IOM, the primary objective of these MMTs is to deliver immediate life-saving health services and facilitate emergency referrals in the event of an emergency. In addition, MMTs may also ensure the continuation of critical health services for affected populations in emergency situations that have resulted in destruction, in the case of closure of static health facilities within their designated catchment area. As such, the MMTs act as mobile emergency medical service providers to fill in the gaps for the comprehensive health response.

MMTs are either stand-alone emergency medical response team unaffiliated with a particular health center or attached to a certain health facility who has been trained on a range of life-saving health interventions to initiate rapid, timely and effective response to any hazard. Training includes specific issues on incident command system, MMT operation, preparedness and response system, management of mass casualties, management of burns, basic first aid and wound care, psychological first aid, safety and security, Mental Health and Psychosocial Support (MHPSS) and protection mainstreaming.

MMTs deploy as soon as possible after the onset of a public health event in coordination with the Health Sector led by WHO and will remain deployed until health actors have the capacity to fully take over the situation or for at least the first 72 hours following the event. They also have an obligation to coordinate with and link to other sectors to promote multi-sectoral service delivery for crisis affected populations, and refer the patients that require better care from higher level health facilities in coordination with the Dispatch and Referral Unit (DRU).



Photo: Mobile Medical Teams (MMTs) deployed by health partners were instrumental for the reestablishment of essential health services in the camps affected by the fire.

"After Action Review": an important management tool for continuous performance improvement and learning

The activation and deployment of these MMTs in the aftermath of the fire incident on 22 March 2021 played an instrumental role for the reestablishment of primary health care capacity in the refugee camps.

Following the emergency response, WHO as the chair of the Emergency Preparedness and Response Technical Committee and IOM as the chair of the Mobile Medical Team Technical Working Group conducted an After-Action Review (AAR) involving the MMT partners who were directly or indirectly involved in the fire response aiming to document the best practices, lessons learnt and what could be done better in similar future response in terms of planning, coordination, incidence command, health emergency logistics, capacity building,

reporting, and integration of Sexual and Reproductive Health (SRH), protection and MHPSS.

Following the methodology suggested by WHO's Guidance for After Action Reviews (WHO, 2019), the AAR for the MMTs response to the fire incident on 22 March 2021 involved a structured facilitated discussion and experience sharing among responders to critically and systematically review what was in place before, during and after the response. The AAR is an important management tool for continuous performance improvement and learning which helps review actions undertaken at each phase of managing a public health event, to identify what worked well, what worked less well and why; Demonstrate the functionality of national capacities in preparing for, detecting and responding to a public health event; Identify the corrective actions needed to institutionalize any lessons emerging from the management of public health events; and address the challenges.

Findings of the AAR

Incident Command System

While Mobile Medical Teams were instrumental in responding timely and effectively to the emergency, the AAR identified three MMTs that deployed outside of the MMT working group. These teams faced several difficulties in terms of response coordination and alignment with the incident command system in the absence of previous orientation on response mechanisms.

Coordination

Camp Health Focal Persons (CHFP) were instrumental for the coordination and linking of the MMTs with relevant camp-based actors to ensure coherent interventions. Poor cellular network hampered proper communication between teams during the early response. According to the MMTs procedures, there should always be an alternate channel of communication if the primary one fails. Some agencies used VHF phones installed in the vehicles or official use for communication during the early response, when cellular communication was severely interrupted. The operational guidance provided by MMT TWG was helpful for calibrated response by MMT partners.

Reporting Mechanism

The existing EWARS based reporting system was readily available for the MMTs coordinated through the MMT-TWG. The other MMTs reported daily through their internal channel. The health sector continued to track event and indicator based epidemiological alerts for Acute Water Diarrhea (AWD) and other priority communicable diseases in the affected areas. Moreover, community-based and sentinel site-based monitoring were also in place. However, the effectiveness of EWARS as recording/reporting in the immediate aftermath of emergency needs to be reviewed. The agency focal points should be regularly trained on enhanced surveillance esp. in the immediate aftermath of emergency.

Mass Casualty Incident Management

All coordinated MMTs carried a standard package of supplies including International Emergency Health Kits (IEHK), Emergency Trauma Backpack and Personal Deployment Kit provided by the partners. However, the AAR identified a lack of standard provisions among the uncoordinated MMTs. This can be harnessed with predesigned emergency health logistics and medical supplies for all MMTs and universal usage of START triage protocol in the early phase of MMT response for systematic identification of casualties. It was also recommended to strengthen coordination with the Community Health Workers Working Group (CHW WG), especially for field-based triage and support for stabilization of the casualties in the field. Regular refresher orientation of MMTs on mass casualty incident management was agreed, including field-based triage as per the agreed protocol to streamline the response across MMTs.



Photo: The Emergency Preparedness and Response Technical Committee chaired by WHO and the Mobile Medical Team Technical Working Group led by IOM ensured the coordinated intervention of all the humanitarian partners involved in the MMTs emergency response.

Health Emergency Logistics and Medical Supplies

During the response, the Site Management and Site Development (SMSD) sector assisted the teams in assessing the location identified as deemed important by the MMT and providing guidance for installation of the tents and temporary shelters for continuing the emergency health services. The emergency logistics and medical supplies used by the MMTs were not standardized among the coordinated and un-coordinated MMTs. All the MMTs should be equipped with standard kits for response to health emergencies and other public health events and with sufficient supplies to cater health services for at least two weeks in the field without additional refill. The AAR identified the need for revisiting the emergency health kits to contextualize it for local scenario and common hazards.

Risk Communication and Community Engagement (RCCE)

The Risk Communication and Community Engagement sector immediately developed and widely disseminated public health messages on fire hazards approved by the Civil Surgeon's Office on its prevention and wound care of burn casualties including health hazards during site clean-up. Moreover, engagement of CHWs in basic first aid in a wide-scale emergency was very helpful for providing immediate health support to the victims. A recommendation was made to map the common hazards in the community anticipating them in advance to develop necessary public health messages including the action plan for its dissemination.

Mental Health and Psychosocial Support (MHPSS)

The MMT Technical Working Group collaborated with the IOM Mental Health and Psychosocial Support (MHPSS) unit to deploy MHPSS staff together with the MMTs, who assisted in reducing the initial trauma of the affected populations for managing their basic needs by referrals from the affected areas. Closer coordination is required with the MHPSS Working Group to replicate the successful collaboration with the MMTs in similar emergencies. MMTs and CHWs need to be trained on simple protocols for early identification of patients who need MHPSS support.

Protection

The participants emphasized the need for coordination with Protection Working Group members for safe identification, referral and care of vulnerable children (e.g. lost, unaccompanied), and referral assistance for other identified vulnerable persons in need of targeted protection assistance, such as elderly persons at-risk, persons with disabilities, single women-headed households, etc. It is recommended to integrate protection sector personnel in the MMTs for early identification, initial and referral support to persons with protection concerns.

Sexual and Reproductive Health (SRH)

The participants reported that most teams had a midwife to help with antenatal check-ups, post-natal check-ups and delivery of family planning services. Participants from uncoordinated MMTs also agreed with the recommendation from the health sector to include a midwife in their team for continuation of SRH services. Maintenance of privacy and confidentiality of SRH services in such a setting is considered extremely challenging. Moreover, identification and record of pregnant women and immediate referral of labour cases needs to be maintained by CHWs for uneventful delivery of the baby and safety of the mother.

Additional Note

As the response was affected by the public health and social measures in place for the containment of COVID-19; the teams faced challenges in maintaining physical distancing and strict adherence to infection prevention and control measures in the aftermath of the incident. A technical guidance note will be developed for MMTs on implementation of IPC measures while responding to natural disasters or public health emergencies.

NATIONAL LEVEL HIGHLIGHTS, 8 July 2021 (BANGLADESH)

	Last 24 hours	Total
COVID-19 tests conducted	36 850	6 866 682
COVID-19 positive cases	11 651	989 219
Number of people released/recovered	5844	856 346
COVID-19 deaths	199	15 792

WHO global situation report: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports>

WHO interim guideline on Preparedness, prevention and control of coronavirus disease (COVID-19) for refugees and migrants in non-camp settings:
[https://www.who.int/publications-detail/preparedness-prevention-and-control-of-coronavirus-disease-\(covid-19\)-for-refugees-and-migrants-in-non-camp-settings](https://www.who.int/publications-detail/preparedness-prevention-and-control-of-coronavirus-disease-(covid-19)-for-refugees-and-migrants-in-non-camp-settings)

Institute of Epidemiology, Disease Control and Research (IEDCR) for COVID-19 updates in Bangladesh : <https://www.iedcr.gov.bd/>

COVID-19 Bangladesh situation reports: [https://www.who.int/bangladesh/emergencies/coronavirus-disease-\(covid-19\)-update/coronavirus-disease-\(covid-2019\)-bangladesh-situation-reports](https://www.who.int/bangladesh/emergencies/coronavirus-disease-(covid-19)-update/coronavirus-disease-(covid-2019)-bangladesh-situation-reports)

WHO Bangladesh awareness and risk communication materials in Bengali:
[https://www.who.int/bangladesh/emergencies/coronavirus-disease-\(covid-19\)-update](https://www.who.int/bangladesh/emergencies/coronavirus-disease-(covid-19)-update)

Previous issues of this Situation Report:
<https://www.who.int/bangladesh/emergencies/Rohingyacrisis/bulletin-and-reports>

COVID-19 Dashboard under WHO Cox's Bazar Data Hub can be accessed here: <https://cxb-epi.netlify.app/>

Write to coord_cxb@who.int to receive COVID-19 updates and situation reports from Cox's Bazar with the subject "Add me to the situation reports and updates mailing list"



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