1. Situation overview

Since 25 August 2017, an estimated 500,000 Rohingya fleeing violence in Myanmar’s Rakhine State have crossed the border into Cox’s Bazar in neighbouring Bangladesh. Taking account of the Myanmar nationals who had previously fled to Bangladesh, the total number of Rohingya in Cox’s Bazar is now around 1.2 million.

Although the number of people arriving each day is decreasing, there are unverified reports that large numbers of people are waiting to cross the border. The influx is not expected to stop in the near future; accordingly, humanitarian agencies are planning for a caseload of between 1.0 and 1.2 million displaced in the mid-term, including 300,000 people in host communities.

The humanitarian community is supporting the Government of Bangladesh’s efforts to meet the growing needs of both new and existing Rohingyas in Cox’s Bazar. The key concerns include the lack of shelter for new arrivals during the monsoon rains. Most refugees are subsisting on only one meal a day, and have no source of income. Access to drinking water and sanitation facilities are limited and people are reportedly drinking from paddy fields and other unsafe water sources and defecating in the open.
Key public health concerns include communicable diseases, gunshot wounds and burns, and maternal and mental health care. The overcrowding and lack of basic amenities have resulted in increased risks of outbreaks of vaccine-preventable diseases as well as cholera and other water- and vector-borne diseases. There have been a substantial number of reports of gender-based violence.

**Main public health concerns and risks**

**Communicable diseases**

There are very few camps in Cox’s Bazar, and they are becoming more overcrowded by the day. Many people are squatting on the roadside where they are exposed to the elements. After their long journey, many refugees arrive in a weakened state, and are thus more susceptible to disease. Diseases such as measles, rubella and tuberculosis, which are transmitted via droplets, are a major public health risk in these conditions.

Skin, eye and ear infections, as well as the increased risk of infected wounds that could lead to tetanus, are further public health concerns. Disease reporting and surveillance should be tackled as a priority through the establishment of a disease early warning and response system (EWARS).

Between 16 and 28 September 2017, WHO and UNICEF vaccination teams have vaccinated 119,879 children between 6 months and 15 years of age against measles and rubella, and 64,273 under-fives received poliomyelitis vaccination (bOPV). A total of 64,826 children received Vitamin A. WHO and UNICEF aim to reach a total of 150,000 newly arrived children.

WHO has set up EWARS to gather information about outbreak-prone diseases such as diarrhoea, acute respiratory infections, measles, rubella, meningitis, tetanus, malaria, AFP, severe malnutrition, and skin and eye infections. The first cases of suspected measles are already being reported through the new EWARS.
Water- and vector-borne diseases

Water-, vector- and foodborne diseases are of concern. First and foremost is the high risk of a cholera outbreak due to the overcrowding, lack of water and sanitation, and rudimentary living conditions, compounded by flooding due to the continuing heavy rains. The recent cholera risk assessment is recommending a cholera vaccination campaign to prevent an outbreak among the population.

Malaria is endemic in the south of Bangladesh. While data on the incidence of dengue fever outside the capital are patchy, the vector is abundant in the area, and people have no means of protecting themselves.

WHO has deployed an environmental health team to Cox’s Bazar to assess and monitor the quality of drinking water and initiate cholera prevention measures. WHO has supplied 2 million chlorine tablets to disinfect drinking water, as well as enough supplies to treat 20 000 cases of diarrhoeal diseases.

Access to essential health services

The situation on the ground is fluid and the displaced population is constantly on the move. Humanitarian partners are providing health services through mobile and outreach teams, and plan to establish fixed health care facilities at the new 2000-acre site the government has earmarked for Rohingya refugees. For health services in new settlements, the recommended strategy is to establish multi-service health posts offering outpatient services such as reproductive, maternal, newborn, child and adolescent health care (including family planning), nutrition, mental health and psychosocial support, treatment for victims of sexual and gender-based violence, and disability support. Initially these will be temporary (e.g. mobile teams and tented clinics). Once the population is less mobile, these services can be hosted in more permanent facilities. The Directorate General of Health Services (DGHS) has indicated that one health post should aim to cover 20 000 people.

Government medical teams are providing primary health care and vaccination services at one of the main border crossing points from Myanmar. The main ailments reported include acute respiratory infections, diarrhoea, malnutrition, injuries and wound infections. Wounded refugees are being referred to Ukhia Upazila Health Complex, Cox’s Bazar Sadar Hospital and Chittagong Medical College Hospital, but services are overstretched. An additional 12 fixed health centres are planned in the 12 main settlement areas. WHO is working to standardize the staffing of mobile health teams and the services covered. The Organization is procuring basic hospital supplies including infection prevention materials.
Coordination of the humanitarian health response

The Office of the Civil Surgeon is coordinating the health sector response, with technical and operational support from WHO. WHO has equipped the office with an emergency operations centre (EOC), which was opened on 20 September. The EOC will support the gathering and analysing of health data to inform decision-making at local level as well as long-term planning at national level. The data gathered will allow the national authorities to identify epidemic-prone diseases such as cholera and implement necessary actions accordingly.

Humanitarian health partners are being tracked through GPS; this will help to identify gaps in health service provision, in response to which the Civil Surgeon will be able to mobilize or shift medical teams.

More national and international health partners are arriving on the ground every day. As of 20 September, there were 27 partners (ACF, AID, BDRCs, BGIS, BRAC, CAPANAMUR, German Emergency Doctors, GK, HI, ICRC, IFRC, IOM, MDM, Medair, Mercy Malaysia, MOAS, MSF, MTI, MUKTI, NONGOR, RI, RTMI, SCI, UNFPA, UNHCR, UNICEF, and WHO).

3 WHO’s planned response

Communicable disease prevention, detection and control

Outcome:
Mortality and morbidity from communicable disease outbreaks among the affected population prevented

Outputs:
1. Early warning, alert and response system for the early detection, prevention and control of potential epidemic prone diseases established
   • Develop/identify early warning alert reporting forms including case definitions
   • Develop/identify reporting and analysis mechanisms for the early warning system
   • Train and equip field teams to collect daily data from different sites
   • Support the Civil Surgeon’s Office to collate, disambiguate and interpret the data
   • Prepare and share daily reports
2. Identification of the risk of different types of outbreak-prone diseases
   • Review existing public health information for the affected area and identify the risk of communicable disease outbreaks
   • Identify health protocols in place including case definitions and treatment protocols
   • Identify essential medicine list and public health facilities in the area

3. Affected population adequately vaccinated against main vaccine-preventable diseases
   • Carry out an oral cholera vaccination campaign, targeting 1.1 M persons >1 year in the first round
   • Gather information on key vaccine-preventable diseases and vaccine coverage rate of the affected population
   • Support immunization campaigns, including training of EPI staff
   • Support local health services with a view to including the affected population in the routine immunization system
   • Train surveillance focal points on surveillance protocols and sample collection and shipment procedures
   • Provide drugs, supplies, sample collection kits and other equipment as necessary to support vaccination activities
   • Monitor vaccination coverage rates on a regularly basis

4. Prevention of and preparedness for water and vector borne disease outbreaks
   • Coordinate closely with WASH partners to ensure optimal cholera prevention measures are in place
   • Ensure the availability of adequate water facilities in static and mobile medical teams
   • Ensure safe health-care waste management
   • Procure supplies for the management of cholera to prepare for a potential cholera outbreak
   • Conduct vector control activities, including bed net distribution and other protection measures as necessary

5. Proper water sanitation and hygiene in place to prevent communicable disease outbreaks, particularly cholera
   • Carry out water quality surveillance
   • Conduct community health and hygiene promotion activities
   • Develop and utilize IEC material (posters, leaflets banners)
   • Develop and disseminate key messages through media outlets like TV, radio, newspaper and text messaging
   • Distribute hygiene items to the most vulnerable households
   • Train community volunteers in health and hygiene promotion activities
   • Ensure availability of water filters
Leadership and coordination for an effective health response

Outcome:
Health sector coordination and information strengthened to improve the health response

Outputs:
1. Leadership in place to support the Civil Surgeon’s Office to coordinate health response
   • Convene regular meetings with humanitarian health partners to share information, plan and discuss the emergency
   • WHO’s response coordinated through the incident management system
   • Conduct response planning, including prioritizing public health areas to be addressed
   • Lead or provide support in mobilizing additional resources
   • Coordination of mobile medical teams

2. Health information assessed, analysed and disseminated to support response mechanisms
   • Provide technical support and advice to the Ministry of Health on conducting assessments and identifying public health areas of concern
   • Analyse assessment information and distribute the results to all partners
   • Map health service availability to identify and fill gaps in service provision
   • Produce regular situation reports, 4W matrices, and other public health information products
To provide access to essential health services

Outcome:
Mortality and morbidity among the affected population reduced

Outputs:
1. Primary health care services established and maintained that are able to delivery essential services
   • Provide temporary/fixed mobile health units to reach affected populations
   • Assess the existing health workforce and coordinate the needs and plans for (re-) deployment
   • Provide emergency health kits, reagents and supplies to equip health facilities and mobile clinics
   • Establish supply chain and cold chain mechanisms as and where needed
   • Establish and maintain a monitoring system for medical supply needs
   • Identify and strengthen referral mechanisms

2. Secondary and specialized health care services established and maintained, including rehabilitation services
   • Identify partners and facilities that can act as secondary and tertiary referral locations
   • Provide support to provision of trauma care (including wound, burn & fracture management, anaesthesia and life support, tetanus vaccination)
   • Mobilize additional health human resources to provide adequate treatment and care
   • Establish a referral system including a monitoring mechanism for movement of patients
   • Identify routes and means of transportation of patients between referral sites and for release
   • Identify physiotherapy and rehabilitation facilities

3. Access to noncommunicable disease (NCD) services provided
   • Identify and collect, where possible, information on the disease profile of the types of NCDs of major concern (hypertension, diabetes etc.)
   • Equip and train field teams to collect data on patients with identified NCDs from medical facilities
   • Train health workers on the early diagnosis and basic targeted treatment of NCD cases
   • Integrate NCD care into mobile clinics
   • Identify the availability of essential drugs and supplies for screening and treatment of NCDs
   • Provide the necessary drugs and supplies where needed
   • Establish referral mechanism
4. Access to mental health and psychosocial support (MHPSS) services strengthened
   • Conduct assessments to guide planning of interventions for MHPSS
   • Provide training and supervision to service providers to identify, treat, and (if necessary) refer people with mood and anxiety disorders and mental health problems (including post-traumatic stress disorders)
   • Identify and if needed establish referral medical centres with in-patient facilities for providing advanced treatment where needed

5. Access to reproductive, maternal, newborn and child health services
   • Establish or extend basic emergency obstetric care (EmOC) services in selected health facilities
   • Establish a referral system to access comprehensive EmOC services (e.g. communication and transport) for complicated cases
   • Provide training to health workers on EmOC where needed
   • Provide equipment and supplies for basic EmOC
   • Identify hospitals that are able to act as the main providers of comprehensive obstetric care
   • Identify and ensure the availability of trained medical staff that are able to deliver comprehensive EMOC care and newborn care
   • Provide equipment and supplies for comprehensive EmOC
## Initial Financial Requirements

<table>
<thead>
<tr>
<th>INTERVENTION AREA</th>
<th>6 MONTHS COSTS US$</th>
<th>1 YEAR COSTS US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicable disease prevention, detection and control</td>
<td>3,595,000</td>
<td>5,395,000</td>
</tr>
<tr>
<td>Health sector coordination and information</td>
<td>650,000</td>
<td>950,000</td>
</tr>
<tr>
<td>Access to essential health services to UMNs and the host community population</td>
<td>2,620,000</td>
<td>3,920,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>6,865,000</strong></td>
<td><strong>10,265,000</strong></td>
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For more information

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WHO/Michael Vurens van Es,  
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