The data in this document are drawn from the Early Warning and Response System (EWARS), daily data received from the Ministry of Health and Family Welfare, and information gathered by WHO from health service providers in Forcibly Displaced Myanmar Nationals (FDMMN) settlements and health care facilities in Cox’s Bazar. Although the information is incomplete, it represents a first attempt to give health agencies in the field a reasonably accurate picture of morbidity and mortality in the refugee population. We thank all partners who are contributing to the EWARS.

The EWARS itself and the reports generated therefrom remain a work in progress. We welcome all comments and feedback to help us improve both the system and our joint understanding of the prevailing epidemiological situation, the ultimate aim being to prevent the spread of diseases and thereby help ensure better health outcomes for the population affected by this crisis.

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Photo Credit: WHO Bangladesh, Catalin Bercaru
1. Overview of the Early Warning and Response System (EWARS)

The World Health Organization (WHO) in collaboration with the Ministry of Health and Family Welfare (MOHWF) established a disease early warning and response system (EWARS) in Cox’s Bazar district, Chittagong division in Bangladesh as a response to the influx of Forcibly Displaced Myanmar Nationals (FDMN) in early September 2017.

The overall goal of EWARS is to minimize mortality and morbidity due to communicable diseases. EWARS’ objective is to detect potential outbreaks. Disease reporting through EWARS began in October 2017. EWARS is composed of five components, goal setting, information collection, data analysis, information distribution, and early warning response. Standardized case definitions and reporting forms were developed and distributed (in consultation with all health partners to maximize acceptance and widely distributed in paper form and electronically).

District and national surveillance staff members were oriented trained on the case definitions of events under EWARS, filling the reporting forms, flow of data and reporting mechanisms. Fixed health facilities and mobile clinics throughout Cox’s Bazar are requested to report case counts of 18 conditions considered to be either epidemic-prone or of public health importance. Information is compiled daily at the civil surgeon’s control room and the Morbidity and Mortality Weekly Bulletin (MMWB) is issued on a weekly basis. EWARS includes an immediate disease alert and response component to meet its primary objective. Most diseases in EWARS have a defined alert threshold that triggers action.

So EWARS investigates several alerts including measles, tetanus, diphtheria, and acute jaundice syndrome through field investigation teams, depending on the suspected agents, clinical review of the cases, contact tracing, active case finding and sampling for laboratory investigation. As part of the investigation, limited containment interventions might take place including health education and distribution of water purification tablets.

Daily reporting began on 2 October 2017. The average number of reporting forms fluctuated between 1 and 4 daily reports in the first 4 weeks. By September 2017, the average reached more than 55 reports per day. By now, EWARS is covering all 11 FDMNs settlements’ and the host population in Cox’s Bazar district.

During its rapid implementation, EWARS faced several challenges. Firstly, various non-standard reporting forms were used by different health partners and acceptance of the standardized reporting forms was limited. The latter was due to the fact that some diseases that were considered important by health authority were not included in the EWARS forms (skin diseases and eye infections). To avoid multiple nonstandard forms, these events were included in the EWARS form.

Second, lack of reliable information on functioning health facilities and their catchment populations such as mobile clinics. Third, reporting sites fluctuated daily and late or missing reports were difficult to track. A spreadsheet was developed and daily contact with health partners was established to follow up missing forms.

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¹ Acute watery diarrhoea, bloody diarrhoea, acute respiratory infection, suspected measles/rubella, acute flaccid paralysis, suspected meningitis, acute jaundice syndrome, suspected haemorrhagic fever, neonatal tetanus, adult tetanus, suspected and confirmed malaria, unexplained fever, severe malnutrition, skin diseases, eye infections, injuries and all other conditions.
2. Population under Surveillance and Reporting Units

During epidemiological week 47 (19-25 November 2017), there was a 0.4% increase in the population\(^2\) under EWARS compared to the previous epidemiological week (826,278 and 823,084 respectively). The Kutupalong makeshift camp population decreased by 0.07% (441,623 vs 441,300), mainly due to the ongoing relocation of FDMNs from other camps and settlements. The remaining camp population remained more or less stable.

The population of the settlements fluctuates daily due to movements between camps and new arrivals. For this reason, it was difficult to estimate the actual catchment population covered by the medical mobile teams working in camps and settlement areas.

EWARS reports were received from partner agencies active in the field in all the FDMNs Makeshift settlements and new spontaneous camps namely: Kutupalong Expansion, Kutupalong registered camp, Leda registered camp, Nyapara registered camp, Shamlapur, Hakimpara, Thangkhali, Unchiprang, Jamtoli, and Moynarghona. In addition, EWARS data forms were collected from different departments (admission, emergency, surgery, paediatrics, gynaecology and internal medicine) of Cox’s Bazar Sadar hospital and Teknaf and Ukhia Health Complexes (population of 100,400).

During epidemiological week 47, the number of daily reports per camp/settlement in Cox’s Bazar decreased by 6% compared with the previous week (from 419 to 440 reports). Table 1 below shows the population per camp and the daily number of EWARS reporting forms submitted from each of them.

Table 1: Number of EWARS reports by camp/settlement, Cox’s Bazar, Bangladesh, 19-25 November 2017.

<table>
<thead>
<tr>
<th>Camp/Settlement</th>
<th>W46 Population</th>
<th>Epidemiological Week 47</th>
<th>TOT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>19/11</td>
<td>20/11</td>
<td>21/11</td>
</tr>
<tr>
<td>Makeshift Settlements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kutupalong Expansion*</td>
<td>441,300</td>
<td>27</td>
<td>28</td>
</tr>
<tr>
<td>Kutupalong RC</td>
<td>25,800</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Leda MS</td>
<td>24,300</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Nayapara RC</td>
<td>34,600</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Shamlapur</td>
<td>26,700</td>
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<td>2</td>
</tr>
<tr>
<td>Sub-total</td>
<td>552,700</td>
<td>33</td>
<td>34</td>
</tr>
<tr>
<td>New Spontaneous Settlements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hakimpara</td>
<td>55,300</td>
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<tr>
<td>Thangkhali</td>
<td>30,000</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Unchiprang</td>
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<td>Jamtoli</td>
<td>33,600</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Moynarghona</td>
<td>21,500</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Sub-total</td>
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<tr>
<td>MOHFW</td>
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</tr>
<tr>
<td>Host Community</td>
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<td>11</td>
</tr>
<tr>
<td>Mobile Unit</td>
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<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Sub-total</td>
<td>102,778</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>TOTAL</td>
<td>826,278</td>
<td>58</td>
<td>62</td>
</tr>
</tbody>
</table>

\(^2\) Situation Report: Rohingya Refugee Crisis Cox’s Bazar | 26 November 2017

https://reliefweb.int/sites/reliefweb.int/files/resources/171126_weekly_iscg_sitrep_final.pdf
The total number of consultations reported through EWARS decreased by 2% compared to the previous week (90,419 vs 91,999). The weekly number of reporting and the number of consultations are shown in figure 1.

### Reporting Units and Number of Consultations

**EWARS, Cox’s Bazar, Bangladesh, 25 August - 25 November 2017**

- Reports (N=2,603)
- Consultations (N=516,097)

**Figure 1:** Number of EWARS reports and consultations, Cox’s Bazar, Bangladesh, 25 August-25 November 2017.

3. **Proportion of Primary Causes of Cases and Deaths**

During the period 25 August to 25 November 2017, a total of 516,097 consultations were reported through EWARS. Of these, 50% (259,634/516,097) were events under surveillance; 49% (131,659) were females. Fevers of unexplained origin accounted for 30%, (77,334/259,634), followed by acute respiratory infections (25%, 66,063), acute watery diarrhoea (21%, 55,419), skin diseases (10%, 25,056), injuries (3%, 6,849), eye infections (3%, 6,214) and malaria (2%, 5,969). The remaining 6% (16,730) were due to other causes including bloody diarrhoea, acute jaundice syndrome (AJS), meningitis like diseases and severe malnutrition.

For the under-5 age group, a total of 100,296 events under surveillance were reported through EWARS, constituting 39% of the events under surveillance; 51% (40,375) of them were males. A total of 32% (31,715/100,296) of these cases were attributed to ARIs, while 26% (26,556) were due to fevers of unexplained origin, 23% (22,903) to acute watery diarrhoea (AWD), 6% (18,899) skin diseases, 2% (1,605) eye infections, 1% (1,080) injuries, 1% (731) malaria and the remaining 9% (9,549) were due to other cases including bloody diarrhoea, neonatal diseases, acute jaundice syndrome and severe malnutrition.

For the over-5 age group, a total number of 159,338 events under surveillance were reported through EWARS, constituting 61% of the events under surveillance; 52% (82,635) of them were females. A total of 32% (50,778) of these cases were attributed to fevers of unexplained origin, while 22% (34,348) were due to ARIs, 20% (32,516) AWD, 12% (18,899) skin diseases, 4% (5,769) injuries, 3% (5,238) malaria, 3% (4,609) eye infections and the remaining 4% (7,181) were due to other cases including bloody diarrhoea and acute jaundice syndrome. The proportion of primary causes of reported cases for both age groups is shown in figure 2.
During the same period, there were 231 reported deaths. Of these, 27% (62) were due to ARIs, followed by INJ (11%, 26), cardiovascular disease (8%, 18), neonatal diseases (7%, 16), AWD (5%, 12), severe malnutrition (5%, 11), meningitis like diseases (4%, 10), and unknown causes (10%, 23). The remaining 23% (63) were due to other causes including acute jaundice syndrome, malaria, TB and measles.

There were 87 reported deaths in the under-5 age group, representing 38% of total deaths. Of these, 37% (32) were ARI-related, followed by neonatal diseases (18%, 16), AWD (9%, 8), severe malnutrition (7%, 6), meningitis (6%, 5), INJ (4%, 3) and UNK (8%, 7). The remaining 7% (6) were due to other causes including measles (2) and neonatal tetanus (1). On 25 November 2017, there was one suspected diphtheria-related death (10-year-old male) from Balukhali makeshift settlement.

There were 144 reported deaths in the over-5 age group, representing 62% of total deaths. Of these, 21% (30) were ARI-related, followed by INJ (16%, 23), cardiovascular disease (13%, 18), meningitis (3%, 5), AWD (3%, 4), and UNK (11%, 16). The remaining 33% (48) were due to other causes including, acute jaundice syndrome, TB and malaria. The weekly distribution of reported deaths is shown in figure 3.

ARI, UNFEV and AWD continue to contribute significantly to overall consultations in all reporting camps and settlements. The attack rates per 1000 population of the 3 diseases showed slight decreases compared to last week. The weekly attack rates of ARI, UNFEV and AWD are shown in figure 4.

Figure 3: Weekly distribution of reported deaths, Cox’s Bazar, Bangladesh, 25 August-25 November 2017.

Figure 4: Weekly attack rates for ARI, AWD, and UNFEV reported cases, FDMN settlements, Cox’s Bazar, Bangladesh, 25 August-25 November 2017.
4. Acute Respiratory Infection

Between 25 August and 25 November 2017 (epidemiological weeks 34-47), a total of 66,063 ARI cases were reported. Of these, 48% (31,715/66,063) occurred in the under-5 age group. There were 62 ARI related deaths (CFR 0.09%). The weekly distribution of ARI cases is shown in figure 5.

![Weekly distribution of ARI cases by age group](image)

Figure 5: Weekly distribution of reported ARI cases by age group, Cox’s Bazar, Bangladesh, 25 August-25 November 2017.

Ukhia upazila reported 82% (54,478/66,063) of total ARI cases followed by Teknaf upazila with 17% (11,470) and Cox's Bazar (1%, 106). The weekly distribution of ARI cases by upazila is shown in figure 6.

![Weekly distribution of ARI cases by upazila](image)

Figure 6: Weekly distribution of reported ARI cases by upazila, Cox’s Bazar, Bangladesh, 25 August-25 November 2017.
The highest ARI attack rate (AR) was reported from Moynarghna with 146/1,000 population followed by Kutupalong Registered camp (112/1,000), Thangkhali (111/1,000), and Jamtoli settlement (99/1000). The ARI attack rate in selected camps is shown in figure 7.

Over the last 4 epidemiological weeks (44-47), the attack rate for ARI increased in Moynarghna but decreased Thangkhali and Jamtoli, Kutapalong registered camp and. The weekly ARI attack rate in selected camps is shown in figure 8.
5. Acute Watery Diarrhoea

Between 25 August and 25 November 2017 (epidemiological weeks 34-47), a total of **55,419** AWD cases were reported including **12** related deaths (**CFR 0.02%**). Of these, **59%** (18,931) were in the above-5 age group. While the trend of the number of reported cases was increasing over the last 3 epidemiological weeks (44-46), it is decreasing in the current week (47) for all age groups. The weekly distribution of AWD cases by age group is shown in figure 9.

![Reported AWD Cases in FDMNs' Settlements by Age Group](image1)

Figure 9: Weekly distribution of reported AWD cases by age group, Cox’s Bazar, Bangladesh, 25 August-25 November 2017.

Ukhia upazila reported **87%** (48,044/55,419) of all AWD cases, followed by Teknaf with **12%** (7,269) and Cox’s Bazar with **1%** (128). The weekly distribution of AWD cases by upazila is shown in Figure 10.

![Reported AWD Cases in FDMNs' Settlements by Upazila](image2)

Figure 10: Weekly distribution of reported AWD cases by upazila, Cox’s Bazar, Bangladesh, 25 August-25 November 2017.
The highest attack rate for AWD was reported from Moynarghna with 115/1,000 population followed by Thangkhali (90/1,000), Jamtoli (90, 1,000), Unchiprang (86/1,000) and Hakimpara (43/1,000). The AWD attack rate in selected camps is shown in figure 11.

![Image of Reported AWD Cases in selected FDMNs' Settlements]

**Figure 11:** AWD attack rate per 1,000 population in selected camps, Cox’s Bazar, Bangladesh, 1–25 November 2017.

Over the last 4 epidemiological weeks (44-47), the attack rate of AWD cases increased in Moynarghna, Unchiprang Registered camp and Jamtoli but decreased in Thangkhali and Hakimpara. The weekly AWD attack rate in selected camps is shown in figure 12.

![Image of Attack Rate of AWD Cases in selected FDMNs' Settlements]

**Figure 12:** Weekly AWD attack rate per 1,000 population in selected camps, Cox’s Bazar, Bangladesh, 1-25 November 2017.
5.1 Drinking Water Testing Results

Since the start of FDMNs influx in August 2017, the WASH sector has reported the installation of 5,321 tube-wells out of which 3,548 are currently functional (67%). Sanitation response includes installation of 33,211 temporary emergency latrines out of which 20,185 are functional (61%). In addition, 102,911 hygiene kits/NFIs have been distributed in FDMNs settlements and camps.

Between 18 September and 25 November 2017, a total of 3,399 water samples were collected by WHO and Department of Public Health Engineering (DPHE) teams from households (2,266) and from water sources (1,133) in FDMN settlements. The water quality testing using membrane filtration method revealed that 91% (2,055/2,066) of household and 60% (676/1,133) of source samples are positive for faecal contamination with Escherichia coli (E. coli) as per the Bangladesh Standard and WHO guideline values. The remaining 20% (668/3,399) of the samples were found negative for E.coli (0 cfu/100ml). Of the positive household samples, 50% (1024) had very high (>100 cfu/100ml), 32% (669) had high (>10 and <100 cfu/100ml) and the remaining 18% (362) had intermediate level of contamination (<10 cfu/100ml) as shown in figure 13.

Among household samples (2,266), 91% (2,055) were found to be positive for E. coli contamination, of which 50% (1024) were highly contaminated (>100 cfu/100ml). The testing results showed 50% of household water samples collected from taps were highly contaminated with E. coli, followed by 45% (2,166) collected from shallow tube-wells, 44% (18) and 42% (26) from water tanker and deep tube-wells, respectively. The water testing results by water source are shown in figure 14.

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The second round of water quality checking started on 11 November 2017 and only shows significant improvement in the household water quality in some settlements when compared to the first round. The very high level of contamination has been reduced to 45%, 27% and 21% from 66%, 45% and 53% in Balukhali, Hakimpara and Jamtoli respectively. The water testing results by settlement in both rounds is shown in figure 15.
6. Acute Jaundice Syndrome

Between 25 August and 25 November 2017 (epidemiological weeks 34-47), a total of 243 cases of acute jaundice syndrome (AJS) were reported through EWARS; of these, 86% (209) were in the over-5 age group. The first case was reported on 6 September 2017, and the number of reported cases has increased since early October 2017. The possible infective cases of acute jaundice syndrome include Hepatitis, Leptospirosis and Coxiella burnetii. The daily and weekly distribution of the acute Jaundice syndrome cases are shown in figures 16 and 17.

![Figure 16: Daily distribution of reported AJS cases, Cox’s Bazar, Bangladesh, 25 August-25 November 2017.](image16)

![Figure 17: Weekly distribution of reported acute jaundice syndrome cases by age group, Cox’s Bazar, Bangladesh, 25 August-25 November 2017.](image17)
The highest attack rate for AJS was reported from Hakimpara with 0.58/1,000 population followed by Leda (0.46/1,000), Jamtoli (0.36, 1,000), Unchiprang (0.26/1,000). The acute Jaundice syndrome attack rate in selected camps is shown in figure 18.

Over the last 4 epidemiological weeks (44-47), the attack rate of AJS cases increased in Kutupalong Extension but decreased in Hakimpara, Jamtoli, Unchiprang and Leda makeshift. The weekly acute Jaundice syndrome attack rate in selected camps is shown in figure 19.
7. Unexplained Fever

Between 25 August and 18 November 2017 (epidemiological weeks 34-47), a total of 77,334 cases of unexplained fever (UNFEV) were reported through EWARS; of these, 64% (50,778) were in the above-5 age group. The number had continuously increased since epidemiological week 44 but shows a slight decrease in week 47. The weekly distribution of UNFEV cases by age group is shown in figure 20.

![Unexplained Fever Cases in FDMNs' Settlements by Age Group](image)

Figure 20: Weekly reported UNFEV cases by age, Cox’s Bazar, Bangladesh, 25 August-25 November 2017.

Ukhia upazila reported 87% (67,459/77,334) of all UNFEV cases, followed by Teknaf with 12% (9,815) and Cox’s Bazar with less than 1% (60). The weekly distribution of UNFEV cases by upazila is shown in figure 21.

![Reported Fever Cases in FDMNs' Settlements by Upazila](image)

Figure 21: Weekly distribution of reported UNFEV cases by upazila, Cox’s Bazar, Bangladesh, 25 August-25 November 2017.
The highest attack rate for UNFEV was reported from Jamtoli with 161/1,000 population followed by Moynarghna (152/1,000), Thangkhali (138/1,000) and Unchiprang (131/1,000). The lowest attack rate was observed in Hakimpara with 59. The UNFEV attack rate in selected camps is shown in figure 22.

Over the last 4 epidemiological weeks (44-47, the attack rate of UNFEV cases increased in Jamtoli, Unchiprang Hakimpara and Moynarghna, and but decreased in Thangkhali. The weekly UNFEV attack rate in selected camps is shown in figure 23.
8. Measles Outbreak

Between 6 September and 18 November 2017, a total of 1,714 suspected cases of measles, including two related deaths (CFR 0.12 %), were reported from FDMN settlements. The first case was reported on 6 September 2017 from Kutupalong settlement through the daily line listing reports received from different MSF clinics and the emergency hospital by Norwegian-Finnish Red Cross. The median age of the patients was 2.0 years, ranging from 36 days to 44 years. The under-5 age group represented 83% (1,423/1,714) of total cases. Males represented 54% of the cases. According to the investigation report, 72% (1,240) had no history of measles vaccination, 17% (283) received at least 1 dose of MR (data was not validated due to the absence of evidence or vaccination card), and the vaccination status of 11% (191) was unknown. The distribution of reported cases by age groups and vaccination status is shown in figures 24 and 25.

![Figure 24: Reported suspected measles cases by age, Cox’s Bazar, Bangladesh, 6 September-25 November 2017.](image1)

![Figure 25: Reported Measles cases vaccination status, Cox’s Bazar, Bangladesh, 6 September-25 November 2017.](image2)
A total of 96% (1,652) of the cases were from Ukhia, followed by 4% (62) from Teknaf. The daily distribution of suspected measles by vaccination status is shown in figure 26.

At the beginning of the outbreak, blood samples were collected for laboratory confirmation (n=89). Of these, 84% (75/89) were positive for measles-specific IgM, 15% (13) were negative, and 1% (1) was positive for rubella-specific IgM. Virtually all cases (99% 1,696/1,714) were from FDMNs and the remaining 1% (18) occurred in the host community population. The distribution of cases by laboratory results and vaccination status are shown in figure 27.
8.1 Enhancing measles vaccination in response to the ongoing outbreak

Efforts to respond to the ongoing measles outbreak are continuing. The main immediate measure is the ongoing MR vaccination campaign through fixed and outreach sites to FDMNs. Mass “catch-up” measles immunization campaigns are recommended by the World Health Organization (WHO) as one of the main strategies to control or eliminate measles. The improvement of routine immunization will be the main medium- to long-term public health intervention to prevent further outbreaks of vaccine-preventable diseases.

The supplementary immunization campaign is targeting 349,603, between 6 months and 15 years. Between 18 and 25 November 2017, a total 283,460 children were vaccinated, achieving 63% coverage.

Activities included vaccination using a combination of fixed posts and outreach immunization teams, the use of checklists to monitor vaccination sessions, social mobilization activities, and surveillance for adverse events following immunization.

The Civil Surgeon’s Office in Cox’s Bazar in collaboration with health partners (WHO, UNICEF, IOM, MSF, IFCR and Save the Children) were responsible for planning, monitoring, coordinating and implementing the campaign activities. The role of the staff in the Control Room was to monitor preparedness on a day-to-day basis, especially mobilization of human and other resources like transport, inter-sectoral coordination and full utilization of resources. In addition, the Control Room staff were providing regular updates on progress and obstacles in implementing the campaign to the central level.

No AEFIs associated with MR vaccination were reported during the campaign. Measles vaccination coverage per FDMN settlements’ is shown in figure 28.

Figure 28: Measles vaccination campaign coverage by FDMN Settlements’, Cox’s Bazar, Bangladesh, 18-25 November 2017.
9. Suspected Diphtheria Cases

On 25 November 2017, the IFRC clinic reported a suspected case of diphtheria (an 18-year-old male from Balukhali makeshift settlement). The patient presented with a history of three days fever, sore throat, difficulty in swallowing, and a swollen neck. On examination, the patient presented with normal blood pressure, pulse 90 bpm, respiratory rate 24/min with clear chest and soft abdomen without any obvious neurological signs. He was admitted to the isolation ward and received IV fluids and IM Penicillin. On 26 November, WHO sent an investigation team to the Balukhali makeshift settlement to locate the patient and his contacts (one sister and 2 brothers), no more cases were found among his close contacts or in the surrounding households.

So far 3 suspected Diphtheria cases were reported from Cox’s Bazar. The last suspected diphtheria case was reported by the MFS clinic on 19 November 2017. The patient was a 10-year-old FDMN in Balukhali makeshift settlement. He developed sore throat, neck swelling and inability to swallow. He was admitted to the isolation ward and received IV fluids and azithromycin. He passed away on 25 November 2017.

In order to establish the diagnosis of diphtheria, the isolation of Corynebacterium diphtheriae in culture media is required. Diagnostic testing to isolate the bacterium requires obtaining cultures from the nose and throat of individuals suspected to suffer from diphtheria. Swabs were taken from 3 suspected cases and sent to Dhaka for confirmation; however, laboratory results are still pending. Swabs taken from the suspected case’s nose or throat and should be submitted to IEDCR, Dhaka for culture of Corynebacterium diphtheriae.

The management of a patient with suspected diphtheria includes: administration of Diphtheria Antitoxin (DAT) as soon as possible, early administration of DAT is critical for survival; establishing the diagnosis through appropriate bacterial cultures; administration of antibiotics; and appropriate supportive care including special attention to maintaining an adequate airway in the presence of laryngeal or extensive pharyngeal membranes and to careful monitoring for cardiac rhythm disturbances or other manifestations of myocarditis. Currently Diphtheria antitoxin is not available in Cox’s Bazar, accordingly on 26 November 2017, WHO Bangladesh requested the Regional Office to send the antitoxin as soon as possible.

On 11 November, the Expanded Immunization Programm (EPI) issued a Governmental Order (GO) on the strategy to implement routine immunization activities for the registered and unregistered Rohingyas, indicating that after registering all children through catch-up programmes, routine vaccine will be given and completed in time. All doses of routine EPI vaccines (bOPV, BCG, IPV, PCV, Pentavalent and MR) will be given to all children under 2 years. In addition, one dose of bOPV (all children under 5 years) and one dose of MR (6-15 months) will be given at the entry or transit points (FDMNs) entering Bangladesh by crossing the Naf river through different border points at Lambaibeel, Kharaingaghona, and Ulubunia in Teknaf upazila, and Anjuman Para and Thaingkhali Rahmaterbeel in Ukhia upazila).

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