



COVID-19

Situation Report No. **#9 27 April 2020**











Total Tests 50,401 Confirmed 5,913 Cured 131 Dead 152 Isolation 1,220



1. Highlights

As of 27 April 2020, according to the Institute of Epidemiology, Disease Control and Research (IEDCR), there are 5,913 confirmed COVID-19 cases in Bangladesh, including 131 patients who have recovered and 152 related deaths; Case Fatality Rate (CFR) is 2.57%.

On 27 April 2020, the Civil Aviation Authority of Bangladesh announced that previously enforced suspension of scheduled international flights to and from Bangladesh and the suspension of all domestic commercial passenger flights are being extended through 7 May 2020.

On 24 April 2020, the Ministry of Religious Affairs announced that to maintain physical distancing during Ramadan amid the COVID-19 outbreak the number of people in mosques for evening prayers is restricted to twelve (12) and which includes senior clerics and other mosque officials; individuals or institutions are not allowed to arrange or participate in any gathering over lftar meals at dusk during the coronavirus outbreak.

On 24 April 2020, the Ministry of Public Administration issued a notification of further extension of the general holidays from 26 till 5 May 2020. The notification specified that the holidays will not be effective for:

- vehicles and workers employed in various emergency services, including electricity, water, gas, energy, fire services, activities of ports (land, river and sea), cleaning services, telephone and internet, and postal services;
- those engaged in processing of agricultural products, fertilizer, pesticide, foods, industrial goods, products/equipment of government projects, kitchen markets, food shop, pharmacies, hospitals and emergency services:
- physicians, health workers, vehicles for transporting medicine and other medical equipment;









- mass media (electronic and print) personnel;
- factories related to medicine and export-oriented industries, maintaining proper safety and hygiene of the workers;
- all goods-laden vehicles and cargo vessels.
- Other industries, agriculture, and services related to production & distribution will be resumed in a phased manner with consideration of the evolving situation. Educational institutions will remain close as before.

Coordination

On 19 April 2020, the Health Services Department of the Ministry of Health and Family Welfare issued a notification on the formation of a national technical advisory committee to advise the government on curbing the spread of COVID-19 and on improving the quality of medical services at the hospitals. President of Bangladesh Medical and Dental Council will lead the 17 member-committee and the Director of the IEDCR has been appointed as a member-secretary. The terms of reference of the technical committee include advice to the government to control the COVID-19, advice to the government on the development of standards for hospitals; on strengthening the capacity of the physicians involved in providing health care; advice on what can be done to encourage the physician involved in health care; and advice on the COVID-19 vaccine development and research.

Over the past week, the Case Management and Infection Prevention Control (IPC) pillar of the CPRP held two partner meetings, including one facilitated by the DP health consortium. These meetings focused on reviewing facility readiness tools in order to develop a consolidated tool to avoid duplication while also ensuring alignment with the DHIS2 platform. The assessment tool is currently being finalized. Other topics covered during the Case Management and IPC pillar meetings include reviewing IPC training materials, agreeing on training priorities, developing harmonized training modules, and streamlining operational-level logistics data.

The Surveillance, Contact Tracing, and Laboratory Support pillar of the CPRP along with DP health consortium members met on 25 April 2020. Key action points from this meeting include obtaining approval from DGHS regarding the assessment of 21 laboratories as well as the requirement for back-up HR to support sample collection and testing. Subject to DGHS endorsement, the health development partners will carry out an evaluation of support required to test up to maximum capacity. The meeting also covered coordination with the Logistics and Procurement team on required supplies to support sample collection and testing.

Meetings of the CPRP Pillar 5 group discussed ways to expedite procurement of urgent PPE items, in light of the global shortages and challenges in ensuring the quality and authenticity of the supplies. Progress has been made in PPE availability through both imported and some locally produced products, including goggles and face masks. A technical working group has been formed with experts from engineering, virology and quality assurance backgrounds to identify the local capacity for testing PPE and identifying solutions where testing capacity is not available in-country.

2. Surveillance and Laboratory

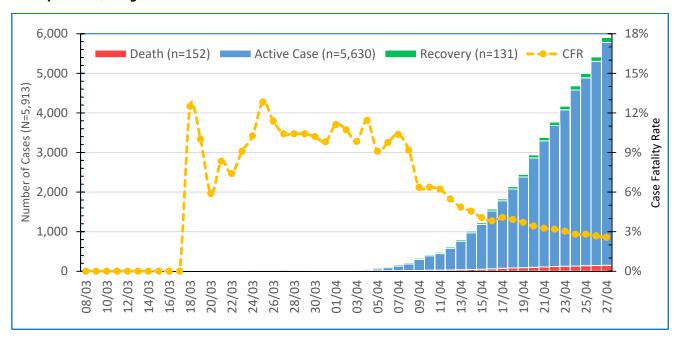
Between 8 March and 27 April 2020, according to the Institute of Epidemiology, Disease Control and Research (IEDCR) there were five-thousand-nine-hundred-thirteen (**5,913**) COVID-19¹ confirmed by rt-PCR, including one-hundred-fifty-two (**152**) related death cases (**CFR 2.57**%). Sixty-eight (**68%**) of all confirmed cases were males.

Case Fatality Rate (**CFR**) represents the number of deaths divided by the number of confirmed cases. CFR does not tell us the true risk of death, which is much harder to estimate. In Bangladesh, starting from 9 April till 27 April the CFR showed a marked decline (**10%** and **2.57%** respectively). For comparison, the case fatality rates for other disease

¹ WHO Bangladesh COVID-19 Situation Reports present official counts of confirmed COVID-19 as announced by the IEDCR on the indicated date. Difference in data between the WHO reports and other sources can result from using different cutoff times for the aggregation and reporting of the total number of new cases in the country.

outbreaks²: CFR of SARS-CoV and MERS-CoV were much higher: **10%** and **34%** respectively, and the US seasonal flu with a case fatality rate of approximately **0.1%** is much lower than the current CFR for COVID-19.

The figure below is showing the daily distribution of reported confirmed COVID-19 cases and outcomes, 08 March – 27 April 2020, Bangladesh.



According to the age data available for 2,640 confirmed COVID-19 cases, including 87 related deaths, **21.1%** (556/2,640) of those cases were confirmed in people between 25 and 34 years old, 19.9% (556) in the age group of 15 and 24 years old, **18.6%** (492) in the age group of 35 and 44 years old, **15.8%** (417) in the age group 45 and 54 years old. The highest CFR was reported for the age groups 65 and 74 years old and above >= 85 years old, **15.5**% and **13.3%** respectively.

The table below is showing the reported confirmed COVID-19 cases³ age distribution and age specific Case Fatality Rates, 27 April 2020, Bangladesh

Age Group in Years	# Cases	% Total	# Death	CFR
0 to 4	17	0.6%	2	11.80%
5 to 14	134	5.1%	0	0.00%
15 to 24	526	19.9%	1	0.20%
25 to 34	556	21.1%	2	0.40%
35 to 44	492	18.6%	8	1.60%
45 to 54	417	15.8%	18	4.30%
55 to 64	283	10.7%	30	10.60%
65 to 74	116	4.4%	18	15.50%
75 to 84	69	2.6%	4	5.80%
>= 85	30	1.1%	4	13.30%
TOTAL	2,640	100%	87	3.30%

² Munster et al., 2020: https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370(20)30033-X/fulltext

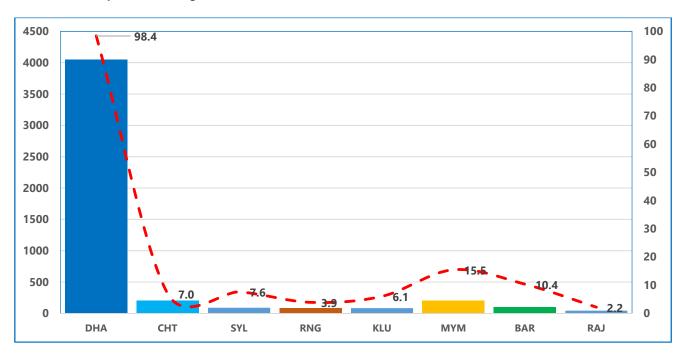
³ Age data was available on 2,640 cases form the total of 5,913

The overall COVID-19 attack rate (i.e. the total number of new cases divided by the total population) in Bangladesh⁴ has been showing a steady increase since 5 April 2020 to date. On 27 April, the attack rate (AR) per 1 million was **34.7**. The highest AR was observed in **Dhaka** division (**98.3**/1,000,000). Within Dhaka division, **Dhaka city** has the highest AR (**326.7**/1,000,000), **Narayangan** (**200.5**/1,000,000) and **Gazipur** (**147**/1,000,000).

To date, **95%** (**61**/64) of districts and cities with the total population of **159,571,977** people have confirmed COVID-19 cases, the only remaining districts Rangamati Khagrachhari (Chattogram division) and Satkhira (Khulna division).

The second highest COVID-19 Attack Rate was reported from **Mymensingh division (15.5/1,000,000):** followed by Barishal (**10.4**), Sylhet (**7.6**), and Chattogram division (**7.0**). Between 20 -27 April, five (5) additional districts reported their first cases of confirmed COVID-19: Magura, Meherpur, Jhenaidah and Kushtia (Khulna division) and Bhola district (Barishal division.)

The figure is showing the attack rate per 1,000,000 population of reported confirmed COVID-19 cases by division, 08 March - 27 April 2020, Bangladesh.



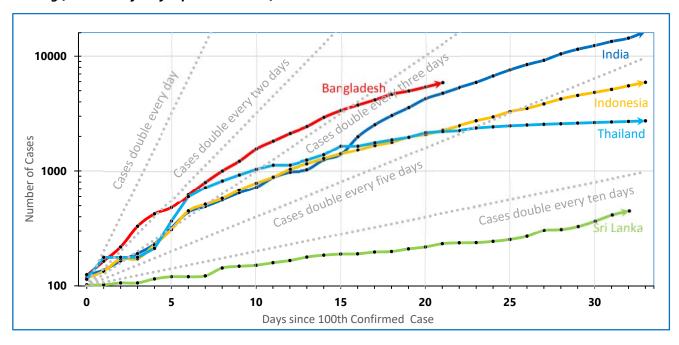
Bangladesh reported its first confirmed COVID-19 case on 08 March 2020, it reached 100 cases on 9 April, and exceeded 200 cases within the next two (2) days (case doubling time). The case doubling of new cases continued for 14 days, and then on the 15th day after reaching 100 cases, the case doubling changed to three (3) day time and has continued till 27 April 2020. Available data allows us to see how quickly the number of confirmed cases increased in Bangladesh compared with some other countries in the WHO South-East Asia region: India, Indonesia, Thailand and Sri Lanka.

The grey lines in the background in the graph below show the trajectories for doubling times of 1, 2, 3, 5, and 10 days. If the slope that a country is on is steeper than a particular grey line, then the doubling time of confirmed cases in that country is faster than that. For example, for Bangladesh the slope was steeper than the "every 3 days' line, which means the case count doubled faster than every three days.

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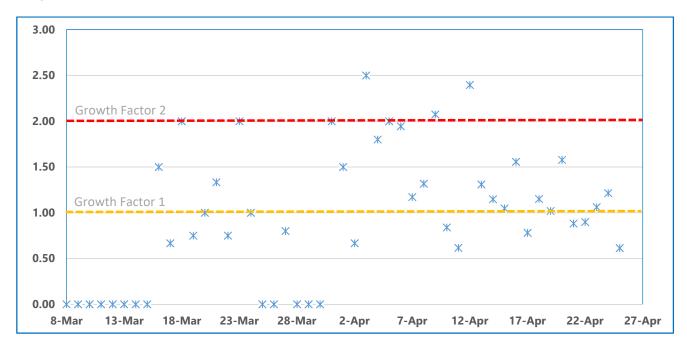
⁴ Source: Population projection from 2011 Census, Bangladesh Bureau of Statistics

The figure below is showing the growth of COVID-19 confirmed cases in selected South East Asian countries starting from the day they reported 100 confirmed cases.



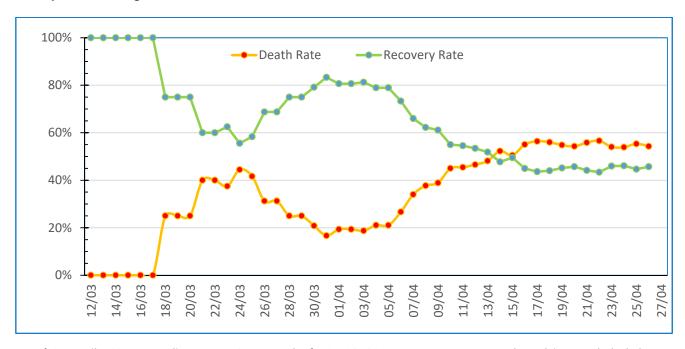
Growth factor is the factor by which a quantity multiplies itself over time. A growth factor between 0 and 1 indicates a decline, when it is > 1 it signals an increase, and if is persistently above 1 this could signify exponential growth. The daily new cases growth factor in Bangladesh on 02 April was the highest since 08 March (first registered case).

The figure below is showing the Growth Factor of reported confirmed COVID-19 cases, 08 March – 27 April 2020, Bangladesh



As of 27 April 2020, among the **283** COVID-19 cases with known outcome (closed cases) **46%** (131) of which were cured and **54%** (152) died. The death rate on closed cases in Bangladesh has been higher than the **19.9%** global and much higher in comparison with Thailand and India, **2%** and **13%** respectively.

The figure below is showing the death and recovery rates on closed reported confirmed COVID-19 cases, 08 March – 27 April 2020, Bangladesh.



As of 27 April 2020, according to IEDCR, a total of **50,401** COVID-19 tests were conducted in Bangladesh by **24** laboratories, of them **19.7**% (9,936/50401) in the IEDCR lab and **80.3**% (40,465) in other **23** laboratories in the country. Four (**4**) new laboratories have started testing for COVID-19 since the last update on 20 April - Shohid Ziaur Rahman Medical College, Bogura, Aril Kushtia Medical College, Kushtia, Dinajpur Medical College, Dinajpur and Bangladesh Livestock and Research Institute, Savar, Dhaka.

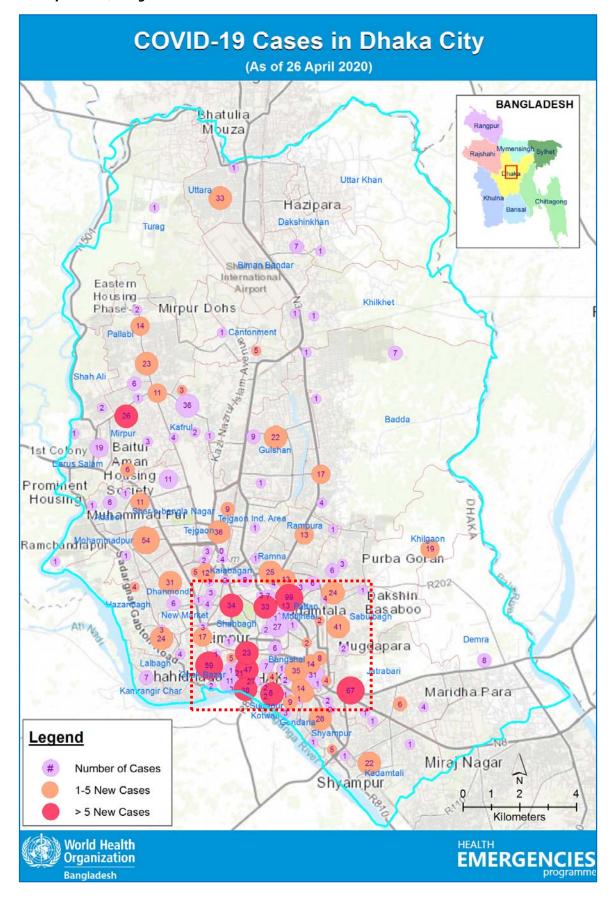
Of the total **50,401** COVID-19 tests conducted between 08 March to 27 April, **5,913** were positive; overall positivity rate **11.7%** (5,913/50,401). The higher positivity rate was observed in the beginning of the outbreak and testing which was most probably due to less sample load and the use of a more specific case definition. On 16 April, positivity rate reached the peak with **16%** but there was another decrease to **13%** observed on 27 April.

The current testing coverage is still modest (**295.9/**1,000,000) comparing with other countries in the region. It is important to note also that the number of reported tests does not equal the number of people tested, as some people may be tested several times, but more testing gives more reliable data on confirmed cases.

The table below is showing a comparison between total number of reported confirmed COVID-19 cases, total COVID-19 tests conducted, COVID-19 tests and COVID cases per 1,000,000 in select South-East Asia countries, 2 April 2020.

Country	Population	Total Cases	Total Tests	Test/1M (T)	Case/1M (C)
Malaysia	32,291,095	5,820	144,686	4,480.7	180.2
Thailand	69,768,727	2,931	178,083	2,552.5	42.0
Sri Lanka	21,397,197	588	15,240	712.2	27.5
India	1,377,756,222	29,451	665,819	483.3	21.4
Indonesia	273,002,455	9,096	75,157	275.3	33.3
Bangladesh	170,306,468	5,913	50,401	295.9	34.7

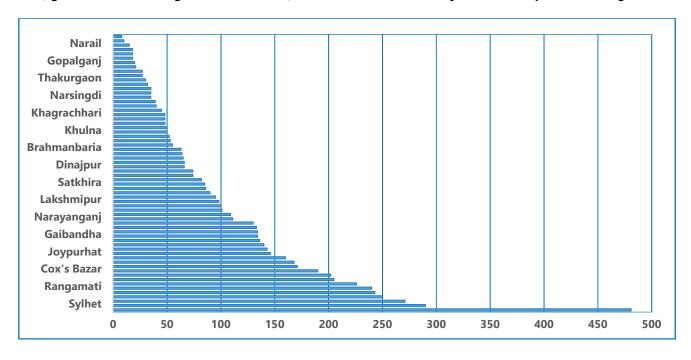
The map below is showing the geographical distribution of reported confirmed COVID-19 cases in Dhaka city, 8 March – 27 April 2020, Bangladesh



3. Contact Tracing, Points of Entry (PoEs) and Quarantine

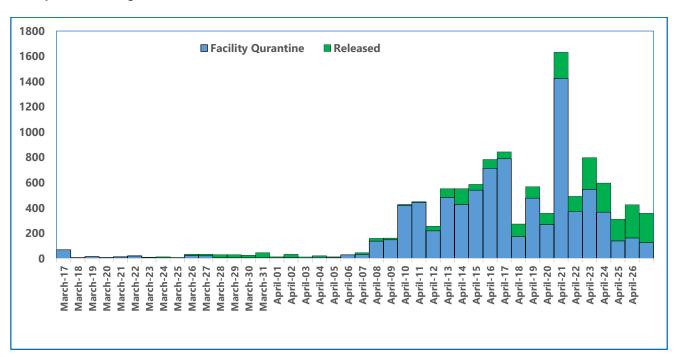
According to DGHS, as of 27 April, there are **6,498** COVID-19 isolation beds in Bangladesh, of them **18%** are in Chattogram division, **18%** in Dhaka, **15%** in Khulna, **14%** in Sylhet, **12%** in Rajshahi and **7%** in Mymensingh.

The figure below is showing the distribution of COVID-19 isolation beds by district, 27 April 2020, Bangladesh.



The institutional quarantine capacity in the country is represented by **601** centres across 64 districts, which can receive **30,635** people. Between 17 March to 27 April 2020, **179,401** individuals were placed under quarantine all over the county, out of them **57%** (101,722) have been already released.

The figure below is showing the number of individuals in facility quarantine and individuals released, 17 Mach - 27 April 2020, Bangladesh



Screening of passengers in all Points of Entry is going on, the table below is showing the number of screened passengers in different Points of Entry (PoEs) in the country on 27 April 2020.

Airport/Seaport/Land port and rail station	Last 24 hours	Total till 27 April 2020
International Airport	138	324,720
Land ports	63	328,330
Seaport	140	15,202
Cantonment Rail Station	00	7,029
Total number of screened passengers	341	675,281

4. Case Management and infection Control

As of 27 April, 60 health facilities were trained online on IPC, triage, early detection and IPC management. Online orientation sessions on COVID-19 case management are now conducted on daily basis to upazila-level hospitals. According to the MOHFW, additional 2,000 doctors and 6,000 nurses will be engaged for COVID-19 response.

Case management and IPC pillar is finalizing the National Health Facility Readiness Tool encompassing the following components: coordination, HR, training of HR, triage, case management, essential health services, WASH and waste management. The tool will work in alinement with DHIS2 platform of DGHS to store all the data in order to avoid duplications and to save resources and time. The HF Readiness Tool will not include information on IPC, Lab and equipment/ commodities, which have already been collected/ being updated through other pillars.

Despite existing assessments that volumes of oxygen that might be required for likely increasing cases that need oxygen therapy is beyond the current capacity of most health facilities especially considering cylinders refilling time and transportation capacity, the DGHS in its 25 April press-briefing informed that there was no oxygen supply shortage in the COVID-19 dedicated hospital and isolation centers in Bangladesh. They specified that there are 10,394 oxygen cylinders in all upazila. Every upazila has been instructed to return back the remaining cylinders to district hospitals keeping the essential ones. It has been arranged to purchase 3500 more cylinders for COVID-19 purpose. Arrangement has been made to make the quickest refilling of the empty cylinders. Excepting medical colleges in 8 divisions and specialized hospitals there are 13,745 oxygen cylinders. Many of the medical college hospitals and specialized hospital has the central oxygen supply.

According to the Central Medical Store (CMSD), all its supplies of PPE and other materials are being tested by the technical committee. Around 70% of the supplied PPEs were made in Bangladesh following the standards of WHO and Directorate General of Drug Administration (DGDA) and the remaining 30 % were imported from China following the rules of importation. These PPEs were distributed to the all levels of hospitals related to COVID-19 treatment and other hospitals, COVID-19 testing laboratories and health workers at the field level. The CMDS informed that there were some donated PPEs by different associations, which did not meet the set standards and requested to share information/complaints regarding such cases with CMSD.

Discussions with national authorities have started to identify appropriate technologies for decontamination of PPE at facility level as temporary measures in the context of severe PPE shortage with reference to the revised (6 April 2020) WHO interim guidance on rational use of PPE.

DGHS expanded the membership of the committee assigned to oversee quality of PPE used in public health facilities to ensure that the PPE procured by government adheres to the WHO standards. The new members include DGDA, CMSD and WHO.

5. Risk Communication and Public Awareness

WHO has been working on producing risk communication materials aimed at better preparing individuals, communities and health workers in facing COVID-19 challenges, avert risks and maintain healthy habits. In this regard, WHO has produced materials addressed to faith leaders (imams) for reducing the risks of infection among worshippers, risk communication posters on keeping a good mental health among health workers and information materials for averting the risks of noncommunicable diseases. WHO has also produced information materials addressed to healthcare workers depicting the PPE items necessary in various healthcare activities, including collecting samples or transporting patients, for an appropriate protection of the frontline health workers and to ensure a rational use of the personal protection equipment.

Furthermore, WHO works together with Risk communication and community engagement working group offering technical guidance and collaborating with various organizations to produce accurate and timely information materials for general public. These information materials are in line with the key messages for promoting social distance, avoid stigma and discrimination, especially towards health workers, as well as strengthening coping mechanisms considering the current lockdown which poses increased risks to noncommunicable diseases due to lack of physical activities or altered nutrition habits.

Useful COVID-19 links:

WHO Bangladesh COVID-19 Situation Reports: https://www.who.int/bangladesh/emergencies/coronavirus-disease-(covid-19)-bangladesh-situation-reports

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

WHO Interim guidance (17 April 2020) 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

WHO, Solidarity core protocol for therapeutics: https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200426-sitrep-97-covid-19.pdf?sfvrsn=d1c3e800.6

Basic protective measures against the new coronavirus: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public

The latest global WHO Situation Report # 97 as of 26 April 2020:

https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200426-sitrep-97-covid-19.pdf?sfvrsn=d1c3e800_6

For timely, accurate, and easy-to-understand advice and information on COVID-19 for different types of audiences (e.g. individuals and communities, health sector, employers and workers, faith-based organizations and faith leaders, etc): https://www.who.int/teams/risk-communication

For the information from the IEDCR: https://www.iedcr.gov.bd/index.php/component/content/article/73-ncov-2019

Directorate General of Health services, Ministry of Health and Family Welfare, Government of The People's Republic of Bangladesh: https://dghs.gov.bd/index.php/en/home/5343-covid-19-update