In this issue of COVID-19 Morbidity and Mortality Weekly Update (MMWU) N° 20 (07-13 July 2020):

- dashboard with key figures;
- detailed epidemiological update on COVID-19 pandemic in Bangladesh;
- daily and weekly distribution of COVID-19 cases and related deaths;
- growth factor of daily COVID-19 cases;
- daily distribution of COVID-19 cases and rolling three-days average per division;
- gender and age distribution of COVID-19 cases and deaths;
- overall attack rate and per division;
- death and recovery rates of closed cases; and
- comparison data with selected countries in South East Asia.

<table>
<thead>
<tr>
<th>Tested</th>
<th>Confirmed</th>
<th>Recovered</th>
<th>Dead</th>
<th>Hotline</th>
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</thead>
<tbody>
<tr>
<td>952,947</td>
<td>186,894</td>
<td>100,708</td>
<td>2,391</td>
<td>16.2 million</td>
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</table>

<table>
<thead>
<tr>
<th>Test/1 million</th>
<th>New Cases</th>
<th>Recovery Rate</th>
<th>CFR%</th>
<th>AR/1 million</th>
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<tbody>
<tr>
<td>5,613</td>
<td>3,099</td>
<td>52.6%</td>
<td>1.28%</td>
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<table>
<thead>
<tr>
<th>Laboratories</th>
<th>PPE Stock</th>
<th>PoE Screening</th>
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<tbody>
<tr>
<td>73 COVID-19 Labs</td>
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<td>366,247</td>
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<table>
<thead>
<tr>
<th>Last 7 days</th>
<th>94,462 Samples</th>
<th>61.8% Inside Dhaka Tests</th>
<th>177,702</th>
<th>7,029</th>
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<tbody>
<tr>
<td>19.6% Positive Tests</td>
<td>592,137</td>
<td>353,641</td>
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</tbody>
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Photo Credit: Social Media, Bangladesh
1. Highlights

As of 13 July 2020, according to the Institute of Epidemiology, Disease Control and Research (IEDCR), there are 186,891 confirmed COVID-19 cases¹ in Bangladesh, including 2,391 related deaths; Case Fatality Rate (CFR) is 1.28%.

On 05 July 2020, the Civil Aviation Authority issued an amendment to the circular No. 30.31.0000.112.42.001.20-2773 (28 June 2020): considering the persistent risk and to avoid further expansion of pandemic COVID-19 throughout the country, with effect from 0001 BST on 07 July 2020 until further notice, all scheduled international commercial flights to/from Bahrain, Bhutan, Hongkong, India, Kuwait, Maldives, Nepal, Oman, KSA, Singapore, Thailand, shall not be allowed to land at any Airport in Bangladesh. Full document: www.caab.gov.bd

2. Coordination

On 09 July 2020, WHO published a scientific brief on the Transmission of SARS-CoV-2: implications for infection prevention precautions. The key points of the brief included: understanding how, when and in what types of settings SARS-CoV-2 spreads between people is critical to develop effective public health and infection prevention measures to break chains of transmission; current evidence suggests that transmission of SARS-CoV-2 occurs primarily between people through direct, indirect, or close contact with infected people through infected secretions such as saliva and respiratory secretions, or through their respiratory droplets, which are expelled when an infected person coughs, sneezes, talks or sings; airborne transmission of the virus can occur in health care settings where specific medical procedures, called aerosol generating procedures, generate very small droplets called aerosols. Some outbreak reports related to indoor crowded spaces have suggested the possibility of aerosol transmission, combined with droplet transmission, for example, during choir practice, in restaurants or in fitness classes; respiratory droplets from infected individuals can also land on objects, creating fomites (contaminated surfaces), as environmental contamination has been documented by many reports, it is likely that people can also be infected by touching these surfaces and touching their eyes, nose or mouth before cleaning their hands; based on what WHO currently know, transmission of COVID-19 is primarily occurring from people when they have symptoms, and can also occur just before they develop symptoms, when they are in close proximity to others for prolonged periods of time. While someone who never develops symptoms can also pass the virus to others, it is still not clear to what extent this occurs, and more research is needed in this area: and urgent high-quality research is needed to elucidate the relative importance of different transmission routes; the role of airborne transmission in the absence of aerosol generating procedures; the dose of virus required for transmission to occur; the settings and risk factors for superspreading events; and the extent of asymptomatic and pre-symptomatic transmission. Full document: https://www.who.int/publications/i/item/modes-of-transmission-of-virus-causing-covid-19-implications-for-ipc-precaution-recommendations

On 10 July 2020, WHO published a new interim guidance on maintaining a safe and adequate blood supply during the coronavirus disease 2019 (COVID-19) pandemic and on the collection of COVID-19 convalescent plasma. In summary, WHO does not specifically endorse any of the statements or protocols regarding plasma therapy. While no universal protocol exists for collection of COVID-19 convalescent plasma, common criteria for acceptance of donors of COVID-19 convalescent plasma include: qualification based on standard criteria for blood or plasma donation; diagnostic evidence of prior infection with SARS-CoV-2: complete resolution of symptoms and cessation of treatments for COVID-19 for at least 14 days prior to the donation; establishment of the minimum neutralizing antibody titre required for plasma to be suitable for use as convalescent plasma: and measurement of the neutralizing antibody titre in the unit of convalescent plasma. Full document: https://www.who.int/publications/i/item/maintaining-a-safe-and-adequate-blood-supply-during-the-pandemic-outbreak-of-coronavirus-disease-(covid-19) It should be read in conjunction with WHO Guidance for National Blood Services on Protecting the Blood Supply During Infectious Disease Outbreaks.

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.
Between 9 March and 13 July 2020, according to the Institute of Epidemiology, Disease Control and Research (IEDCR) there were one-hundred-eighty-six thousand-eight-hundred-nighty-four (186,894) COVID-19 confirmed by rt-PCR, including two-thousand-three-hundred-nighty-one (2,391) related deaths (CFR 1.28%).

In the current week (epidemiological week 28), in comparison to the previous epidemiological week, in the current week (epidemiological week 28) the number of new weekly COVID-19 cases decreased by 10.2% (23,817 and 21,387 respectively) and the number of COVID-19 new weekly deaths decreased by 4.8% (315 and 300).

The figures below are showing the daily and weekly distribution of reported confirmed COVID-19 cases and deaths, 08 March – 13 July 2020, Bangladesh.
Out of the total 186,894 COVID-19 cases registered as of 13 July 2020, 52.61% (98,317/186,894) - recovered, 1.28% (2,391) - died and 46.11% (86,186) are active cases.

The figure below is showing active vs recovered confirmed COVID-19 cases outcome per epidemiological week, 08 March – 13 July 2020, Bangladesh.

In the current week (epidemiological week 28), the number of COVID-19 active cases decreased by 30.7%, in comparison to the previous week (5,135 and 7,417) and the number of recovered COVID-19 cases increased by 19.5% (20,989 and 16,898 respectively).

The figure below is showing the weekly outcome of reported confirmed COVID-19 cases, 08 March – 13 July 2020, Bangladesh.

As of 13 July 2020, there were 100,708 (53.9%) COVID-19 cases with known outcome (closed cases). Out of all closed cases, 97.6% (98,317/100,708) were cured and 2.4% (2,391) died. The recovery rate of 97% in the closed cases didn’t
show any change since 16 June 2020. The death rate on closed cases in Bangladesh is lower than the 7.0% (572,004/67,605,946) global average as of 13 July 2020.

The figure below is showing the death and recovery rates over cumulative closed confirmed COVID-19 cases, 08 March – 13 July 2020, Bangladesh.

According to the available data, 26.8% cases were confirmed in people between 31 and 40 years old, 21.3% - in the age group of 21 to 30, 18.6% - 41 to 50 years and 14.7% in the age group between 51 and 60 years old.

As of 13 July 2020, the highest death rate (29.8%) was reported in the age group of 61 to 70 years old, 24.7% in the age group between 51 and 60 years and 23.5% in the older age group of 71 and above. Male represented 71% and 79% of the of total reported confirmed COVID-19 cases and deaths respectively.

The table below is showing gender and age distribution the reported confirmed COVID-19 cases and deaths 13 July 2020, Bangladesh.
As of 13 July 2020, geographical distribution of confirmed reported COVID-19 cases was available on 100% of cases (186,795/186,795). Of all cases, 14.9% were reported from Chattogram division, 4.6% from Rajshahi division, 3.8% from Khulna division, 3.0% from Sylhet division, 2.2% from Barisal division, 2.2% from Rangpur division, and 2.0% from Mymensingh division.

The figure below is showing the daily distribution of reported confirmed COVID-19 cases per division (except Dhaka), 16 April – 12 July 2020, Bangladesh.

Available data allows us to see how quickly the number of confirmed cases increased in different divisions in Bangladesh by looking at the case doubling time in each division. As of 13 July 2020, case doubling time is 8.3 days in Dhaka division, 9 days in Chattogram division, between 9.5 to 10 days in Khulna, Rajshahi and Sylhet divisions, and between 10 and 11 days in Barisal, Rangpur and Mymensingh divisions.

The figure below is showing the case-doubling time of COVID-19 confirmed cases in all divisions starting from the day each reported 10 confirmed cases, 13 July 2020, Bangladesh.
Case doubling time has increased in **Dhaka city** to **8.2** days in week 28. Cases are doubling in more than 10 but less than 12 days in Faridpur, Dhaka district, Gazipur and Narayanganj districts are doubling at **12** days and Munshiganj and Kishoreganj.

**The figure below is showing the growth of COVID-19 confirmed cases in all districts of Dhaka division starting from the day each reported 10 confirmed cases, 13 July 2020, Bangladesh.**

![Graph showing growth of COVID-19 cases in Dhaka division](image)

In **Chattogram** division by 13 July 2020 case doubling time has increased in Chattogram district from **8.5** days in the previous week to nearly **9** days this week, Noakhali – **9** days, Cox’s Bazar – **9.4** days, Cumilla – **10** days, Chandpur and Brahmanbaria **12** and Laxmipur – **13** days.

**The figure below is showing the growth of COVID-19 confirmed cases in all districts of Chattogram division starting from the day each reported 10 confirmed cases, 13 July 2020, Bangladesh.**

![Graph showing growth of COVID-19 cases in Chattogram division](image)
The figures below are showing the daily distribution of reported confirmed COVID-19 cases and rolling three-days average per division, 16 April – 12 July 2020, Bangladesh.
On 13 July, Bangladesh overall attack rate (AR) is 1,079.4 per 1 million and 100% (64/64) of districts with the total population of 170,306,468 people have reported confirmed COVID-19 cases. In the current week (epidemiological week 28), COVID-19 weekly AR increased by 13.1%, in comparison to the previous week (1,079 and 954 respectively).

The figure below is showing the weekly COVID-19 attack rate, 08 March – 13 July 2020, Bangladesh.

According to the available data, the highest AR continues to be observed in the Dhaka division (2,916.65/1,000,000). Within the Dhaka division, Dhaka city has the highest AR (11,826.9/1,000,000) followed by Narayanganj district (1,604.2/1,000,000), Faridpur (1,475.4), Munshiganj (1,405.9), Gazipur (966.6), Gopalganj (733), Madaripur (689.9), Dhaka (District) (606.8), Narsingdi (592.3), Shariatpur (586.1), Rajbari (585.7), Kishoreganj (505.1), Manikganj (434.8), and the lowest AR 226.4 was reported from Tangail district.

The 2nd highest COVID-19 AR is reported from Chattogram division (827.4/1,000,000), the AR in all the 11 districts is over 400 per million. Within the division, Chattogram district reported the highest AR (1,287.8/1,000,000) followed by Cox’s Bazar (1,111), Bandarban (1,045.4), Cumilla (702.4), Noakhali (691.5), Rangamati (627.3), Feni (605.5), Lakhimpur (532.7), Kathagachhri (483.6), Chandpur (450.2), and the lowest AR 449.3 was reported from Brahmanbaria District.

The 3rd highest AR in the country was reported from Sylhet division (479/1,000,000) with the highest AR in Sylhet district (721.6/100,000) followed by Sunamganj (394.5), Habiganj (359.9), and Maulvibazar (282.9) district.

Barishal division has taken the fourth highest in the overall AR with 421.7/1,000,000 with the highest AR in Barishal district (711.4/1,000,000) followed by Jhalokathi (401.4), Patuakhali (377.2), Barguna (377.1), Pirojpur (306.9) and the lowest 183.3 in Bhoj district.

Rajshahi division has overall AR (395.4/1,000,000) with the highest AR in Bogura district (940.1/1000000), followed by Rajshahi (547.2), Joypurhat (510), Natore (335), Sirajganj (231.8), Pabna (201.1), Chapainawabganj (157.1), Naogaon districts is 65.1/1,000,000.

In Khulna division the overall AR is 386.6/1,000,000 while the highest AR district is Khulna district (733.6/1000000) followed by Jhenaidah (625), Magura (441.1), Meherpur (329.1), Narail (320), Chuadanga (307.1), Jashore (296.5), Kushtia (271.1), Satkhira (233.8), and the lowest 166.7 in Bagerhat district.

Although Mymensingh division reported an overall AR of 288.8/1,000,00, Mymensingh district reported high AR (366.9/1000000), followed by Jamalpur (268.2), Netrakona (210.2), and Sherpur (158.8).
Rangpur division reported the lowest AR in the country (211/1,000,000). Within the division Rangpur district having the highest AR (376.6/1000000) followed by Dinajpur (274.4), Nilphamari (222.7), Gaibandha (168.5), Thakurgaon (156.4), Panchagarh (149), Lalmonirhat (140.1) and Kurigram (113.2).

The following figure is showing the COVID-19 attack rate per 1,000,000 population in selected divisions, 16 April - 12 July 2020, Bangladesh.

Growth factor (every day's new cases / new cases on the previous day) between 0 and 1 indicates a decline; when it is above 1 it signals an increase, and if is persistently above 1 this could signify exponential growth. Since the beginning of June 2020, the GF has been within the range of 0.8 – 1.2 and on 13 July 2020, it is 1.16.

The figure below is showing the Growth Factor of daily confirmed COVID-19 cases, 08 March – 13 July 2020, Bangladesh.

As of 13 July 2020, according to the IEDCR, 952,947 COVID-19 tests with the overall positivity rate of 19.5% were conducted in Bangladesh by 77 laboratories (43) laboratories in Dhaka city and (34) laboratories in outside Dhaka. The
latest laboratories, which have started the testing: in Dhaka - Ahsania Mission Cancer and General Hospital, icddrb Molecular Diagnostic Laboratory, Bangladesh Institute of Health Sciences General Hospital, and Aalok Health Care Ltd. 61.8% (589,120/952,947) of all samples were tested by laboratories in the Dhaka city, and 38.2% (363,827) - outside Dhaka.

The graph below is showing the weekly and cumulative number of COVID-19 conducted tests, 08 March – 13 July 2020, Bangladesh.

COVID-19 testing coverage has been gradually increasing in Bangladesh, reaching 5,613/1,000,000: now almost reached Sri Lanka (5,700/1,000,000) but is lower than Thailand (8,648/1,000,000), India (8,553/1,000,000), Nepal (20,443/1,000,000), Malaysia (26,175/1,000,000) and Maldives (114,311/1,000,000).

The graph below is showing the daily, cumulative number of COVID-19 and tests per 1,000,000 population, 08 March – 13 July 2020, Bangladesh.
As of 13 July 2020, the overall case doubling time in Bangladesh has slowed to 9 days this week.

Available data allows us to see how quickly the number of confirmed cases increased in Bangladesh and some other countries in the WHO South-East Asia region: India, Indonesia, Thailand and Sri Lanka.

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, 13 July 2020.

As of 13 July 2020, the death doubling time in Bangladesh is twelve (12) days.

Available data allows us to see how quickly the number of confirmed deaths increased in Bangladesh and some other countries in the WHO South-East Asia region: India, Indonesia, Thailand and Sri Lanka

The figure below is showing the growth of COVID-19 confirmed deaths in selected South East Asian countries starting from the day they reported 100 confirmed cases, 13 July 2020.
4. Contact Tracing, Points of Entry (PoEs) and Quarantine

According to the Directorate General of Health Services (DGHS), as of 13 July 2020, the current institutional quarantine capacity in the country is represented by 629 centres across 64 districts, which can receive 31,991 persons. A total of 21,578 individuals were placed in quarantine facilities and of them 16,089 (74.6%) have been already released. By 13 July 2020, in total 37,270 individuals were isolated in designated health facilites all over the country, of them 19,899 (53.4%) have been released, and 17,371 (46.6%) are presently in isolation facilities.

The highest number of people (6,547) in quarantine facilities was reported on 24 April 2020 while presently, the number reduced to 5,489. Between 17 March to 06 July 2020, total 374,677 individuals were placed under home quarantine all over the county and to date 84.9% (317,955/374,677) have been already released. Remaining 15.1% (56,722 individuals) are in home quarantine now.

The figures below are showing the number of individuals in home quarantine and individuals in hospital isolation, 16 Mach – 13 July 2020, Bangladesh.
5. Case Management and Infection Control

Two new products have been added to the list of products eligible for procurement in the WHO Emergency Use Listing for SARS-CoV-2 in vitro diagnostic products EUL, to a total of 15 approved products. 25 additional SARS-CoV-2 Nucleic Acid Tests are under review, while six products are listed as not eligible for procurement. For SARS-CoV-2 virus Antibody Tests, 15 expressions of interest were received for listing and are in various stages of assessment. More information on the EUL is available at https://www.who.int/diagnostics_laboratory/EUL/en/.

A national consultative workshop with local manufacturers on non-medical fabric masks for community use was hosted by DGDA on Thursday 9 July. The draft minimum testing requirements were presented by the Technical Working Group on quality control of personal protective equipment, as well as a set of requirements for the masks, including labelling instructions, physical parameters and considerations for design. Manufacturers provided their inputs regarding feasibility of production in adherence to the proposed standards. The document is under update for consideration of DGDA. Once approved, the requirements will be posted to the DGDA website and will serve as the basis for obtaining a no-objection certificate from DGDA for masks claiming to help reduce the spread of COVID-19 among the general public. The purpose of this regulatory intervention is to protect public health by guiding manufacturers, procurers and other stakeholders in the selection of products which have demonstrated effectiveness, according to internationally accepted standards.

6. Risk Communication and Public Awareness

Risk Communication and Community Engagement (RCCE) partners are supporting the Government in rolling out public information campaigns to better inform individuals and communities about protective measures—mask-wearing, physical distancing and safe hygiene practices outside home. Additionally, RCCE organizations are working to encourage symptomatic individuals to report symptoms and to follow the medical advice. Furthermore, the communication and community engagement activities are also aiming to address issues of discrimination and stigma for COVID-19 affected families and individuals, as well as for addressing fears and concerns of frontline health service providers.

The communication and community engagement activities are rolled out through a large variety of platforms, ensuring a mix of online and offline channels, mass information and community engagement. The information is disseminated through websites and social media platforms, national and local TV and Radio stations, helplines, pre-recorded messages from telecom companies, announcements through mosques speakers, billboards, community kiosks, distribution of leaflets and posters.

RCCE partners also collaborate with Community Support Teams (CST), an initiative of humanitarian and development partners rolled out at field level. CSTs conduct community assessments for better identifying suspected cases and refer them for testing while at the same time providing socio-economical support to the vulnerable families.

7. Useful COVID-19 links:


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


Institute of Epidemiology, Disease Control and Research (IEDCR): https://www.iedcr.gov.bd/

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