https://www.who.int/bangladesh/emergencies/coronavirus-disease-(covid-19)-update/



In this issue of COVID-19 Morbidity and Mortality Weekly Update (MMWU) # 19 (30 June – 06 July 2020):

- √ dashboard with key figures;
- ✓ detailed epidemiological update on COVID-19 pandemic in Bangladesh, week 30 June – 06 July 2020;
- ✓ 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;
- comparison data with selected countries in South East Asia; and
- ✓ geographical distribution of COVID-19 laboratories, number of COVID-19 tests and Attack Rate per division.

Tested	Confirmed	Recovered	Dead	Hotline
		ŤÅ	À	
863,307	165,618	76,149	2,096	14.9 million
Test/1 million	New Cases	Recovery Rate	CFR%	AR/1 million
5,069	3,201	45.9%	1.27%	972.4

Laboratories

PPE Stock

PoE Screening

73 COVID-19 Labs



1,171,950



359,588



115,865 Samples



3,162,783



25,771



62.5%Inside Dhaka
Tests



193,659



7,029



22.4%
Positive Tests



470,227



351,651









1. Highlights

As of 06 July 2020, according to the Institute of Epidemiology, Disease Control and Research (IEDCR), there are 165,618 confirmed COVID-19 cases¹ in Bangladesh, including 2,096 related deaths; Case Fatality Rate (CFR) is 1.27%.

On 30 June 2020, the Ministry of Public Administration issued a notification declaring **Red Zones** in Dhaka South Corporation, which include Tipu Sultan Road; Tipu Sultan Road; Jahangir Road and Dhaka-Sylhet Highway (from Joykali Mandir to Baldha Garden) – Outer Road and -Larmini Road; Hore Road; War Road; Rankin Road and Nawab Road -Inner road. Conditional general holidays in these areas are announced from 4 to 25 July 2020. Full text of the notification: www.mopa.gov.bd

2. Coordination

On 29 June 2020, WHO published a new interim guidance on Infection prevention and control during health care when coronavirus disease (COVID-19) is suspected or confirmed. WHO recommendations for outpatient care include: consideration of alternatives to face-to-face outpatient visits using telemedicine (e.g. telephone consultations or cell phone videoconference) to provide clinical support without direct contact with the patient; screening, early recognition and isolation of patients with suspected COVID-19; emphasis on hand hygiene, respiratory hygiene and medical masks to be used by patients with respiratory symptoms; appropriate use of contact and droplet precautions when performing clinical exam on patients with suspected COVID-19; prioritization of care of symptomatic patients; when symptomatic patients are required to wait, ensuring they have a separate waiting area where patients can sit at least one meter apart and provide them with masks; and education of patients and families about the early recognition of symptoms, basic precautions to be used and which health-care facility they should refer to if any family member shows signs of COVID-19. Full document: https://www.who.int/publications/l/item/WHO-2019-nCoV-IPC-2020.4

On 30 June 2020, WHO published a scientific brief on **Smoking and COVID-19**. The brief concluded that all available evidence suggests that smoking is associated with increased severity of disease and death in hospitalized COVID-19 patients. Although smoking is likely related to severity, there is no evidence to quantify the risk to smokers of hospitalization with COVID-19 or of infection by SARS-CoV-2 was found in the peer-reviewed literature. Populationbased studies are needed to address these questions. WHO recommended that tobacco users stop using tobacco. Proven interventions to help users guit include toll-free guit lines, mobile text-messaging cessation programmes, approved nicotine replacement therapies and other medications. Full document: https://www.who.int/publications/i/item/WHO-2019-nCoV-Sci Brief-Smoking-2020.2

On 30 June 2020, WHO held the 1st **Infodemiology**² **Conference**. The overall aim of this consultation is to take stock of relevant research and effective practices and define public health research needs in order to advance this field with the objectives of understand the multidisciplinary nature of infodemic management; identify current examples and tools to understand, measure and control infodemics; build a public health research agenda to direct focus and investment in this emerging scientific field; and establish a community of practice and research. Experts from the fields of Epidemiology & Public Health; Applied Mathematics & Data Science; Digital Health and Technology Applications; Social & Behavioral Science; Media Studies & Journalism; Marketing, UX & Design; Risk Communication and Community Engagement; Ethics & Governance and UN agencies and Public health authorities participated in the conference. Full document: https://www.who.int/news-room/events/detail/2020/06/30/default-calendar/1st-who-infodemiology-conference

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¹ WHO Bangladesh COVID-19 Situation Reports present official counts of confirmed COVID-19 as announced by the IEDCR and DGHS 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.

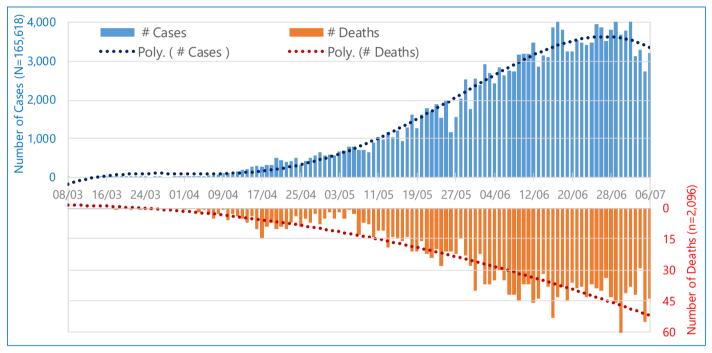
² "infodemiology" is defined as the science of managing infodemics.

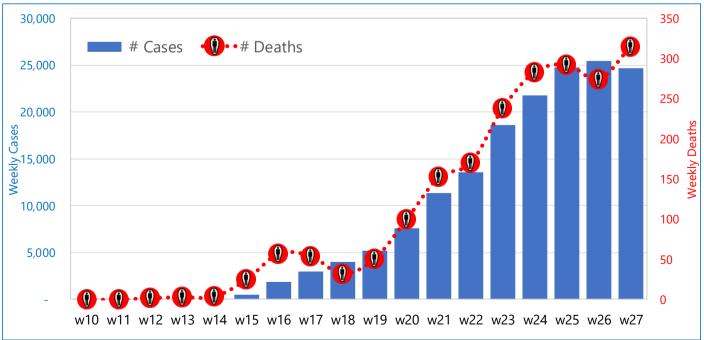
3. Surveillance and Laboratory

Between 9 March and 06 July 2020, according to the Institute of Epidemiology, Disease Control and Research (IEDCR) there were one-hundred-sixty-five thousand-six-hundred-eighteen (**165,618**) COVID-19 confirmed by rt-PCR, including two-thousand nighty-six (**2,096**) related deaths (**CFR 1.27**%).

In the current week (epidemiological week 27), in comparison to the previous epidemiological week, the number of COVID-19 confirmed cases decreased by **3.3%** (24,630 and 25,481) but the number of COVID-19 related deaths increased by 14.9% (315 and 274 respectively), leading the CFR to go up from **1.08%** in epidemiological week 26 to **1.28%** in the current week.

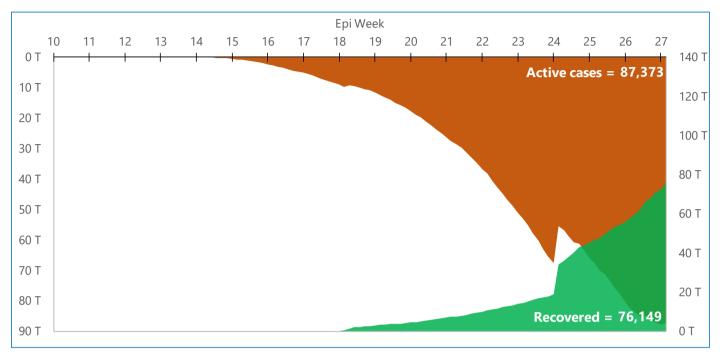
The figures below are showing the daily and weekly distribution of reported confirmed COVID-19 cases and deaths, 08 March – 06 July 2020, Bangladesh.





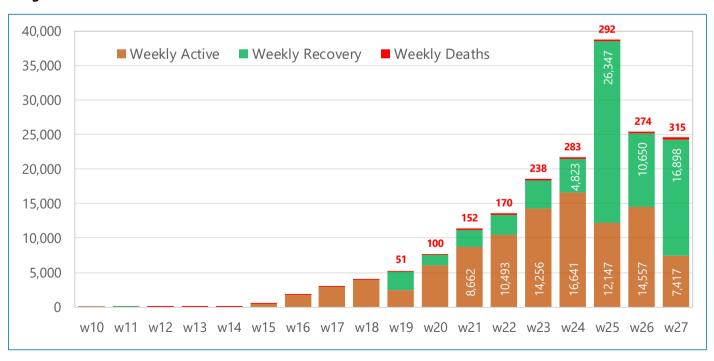
Out of the total **165,618** COVID-19 cases registered as of 06 July 2020, **45.98%** (76,149/165.618) - recovered, **1.27%** (2,096) - **died** and **52.76%** (87,373) are active cases.

The figure below is showing active vs recovered confirmed COVID-19 cases outcome per epidemiological week, 08 March – 06 July 2020, Bangladesh.



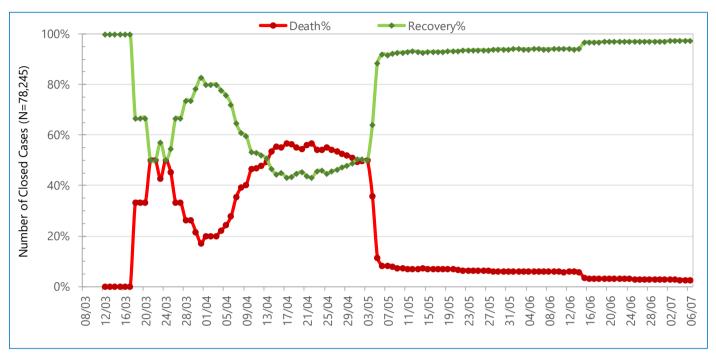
In the current week (epidemiological week 27), the number of COVID-19 active cases decreased by **96.3%**, in comparison to the previous week (**7,417** and **14,557**), the number of recovered COVID-19 cases increased by **58.7%** (**16,898** and **10,650**) and the number of COVID-19 related deaths increased by **14.9%** (**315** and **274** respectively).

The figure below is showing the weekly outcome of reported confirmed COVID-19 cases, 08 March – 06 July 2020, Bangladesh.



As of 06 July 2020, there were **78,245** (47.2%) COVID-19 cases with known outcome (closed cases). Out of all closed cases, **97.3%** (**76,149**/78,245) were cured and **2.7%** (2,096) 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 **8.0%** (**533,621**/6,978,964) global average as of 06 July 2020.

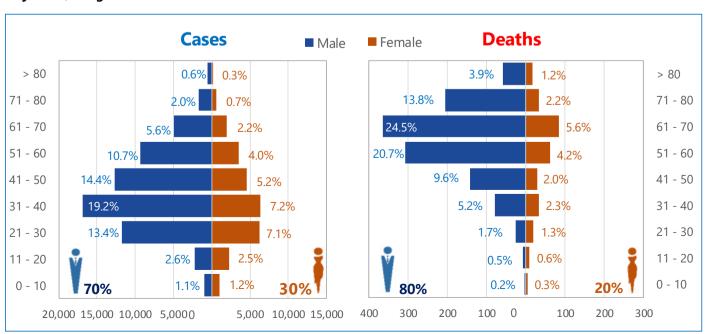
The figure below is showing the death and recovery rates over cumulative closed confirmed COVID-19 cases, 08 March – 06 July 2020, Bangladesh.



According to the available data, **26.4%** cases were confirmed in people between 31 and 40 years old, **20.5%** in the age group of 21 to 30 years, 19.7% in the age group of 41 to 50 years and 14.7% in the age group between 51 and 60 years old.

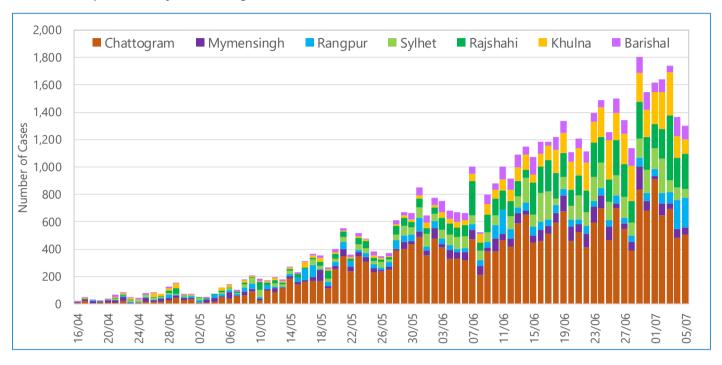
As on 06 July 2020, the highest death rate (**30.1%**) was reported in the age group of 61 to 70 years old, **24.5%** in the age group between 51 and 60 years and **21.2%** in the older age group of 71 and above. Male represented **70%** and **80%** of the of total reported confirmed COVID-19 cases and deaths respectively.

The table below is showing gender and age distribution the reported confirmed COVID-19 cases and deaths 06 July 2020, Bangladesh.



As of 05 July 2020, geographical distribution of confirmed reported COVID-19 cases was available on **98%** of cases (**162,418**/165,618). Of all cases, **14.7%** were reported from **Chattogram** division, **4.2%** - from **Rajshahi** division, **3.3%** - from **Khulna** division, **3.0%** - from **Sylhet** division, **2.1%** - from **Mymensingh** division, **2.1%** - from **Rangpur** division, and **2.0%** - from **Barisal** division.

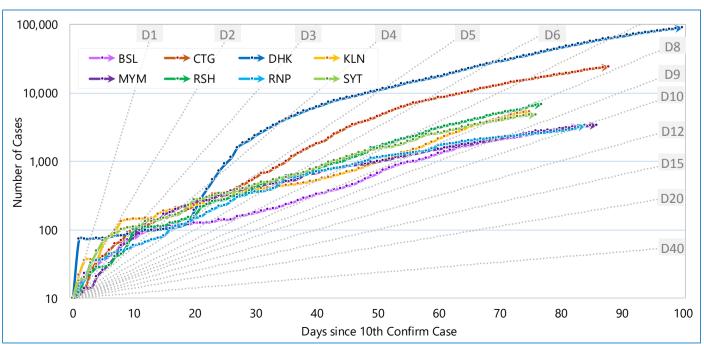
The figure below is showing the daily distribution of reported confirmed COVID-19 cases per division (except Dhaka), 16 April – 05 July 2020, Bangladesh.



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.

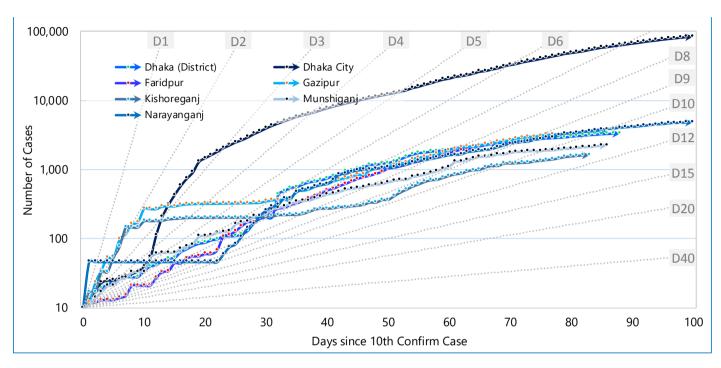
As of 05 July 2020, case doubling time is **7.5** days in **Dhaka** division: **7.9** days in **Chattogram**; in **Khulna**, **Sylhet** and **Rajshahi** divisions – **8.0-8.5** days, in **Rangpur**, **Mymensingh** and **Barisal** divisions – **10.0** days.

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, 06 July 2020, Bangladesh.



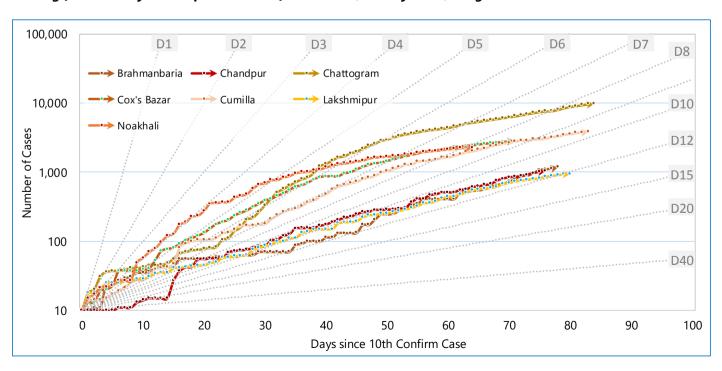
Case doubling time has increased in **Dhaka city** from **7** days in the last week to **7.5** days this week. Case are doubling in **Dhaka** district and **Faridpur** district in **10** Days, **Gazipur**, **Narayanganj**, **Munshiganj** and **Kishoreganj** districts are doubling at **11**-day rate.

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, 06 July 2020, Bangladesh.

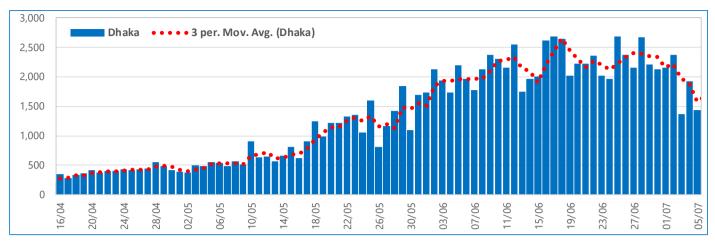


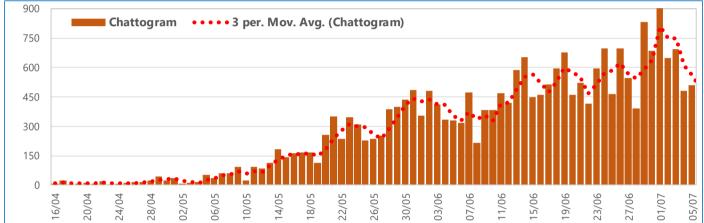
In **Chattogram** division by 06 July 2020 case doubling time has increased in **Chattogram** district from **8** days in the previous week to **8.5** days this week. **Noakhali** district **shows 9 days, Cumilla** and **Cox's Bazar** district – **9.5** days, in **Chandpur, Laxmipur** and **Brahmanbaria** districts the number of cases is doubling in more than **11** days.

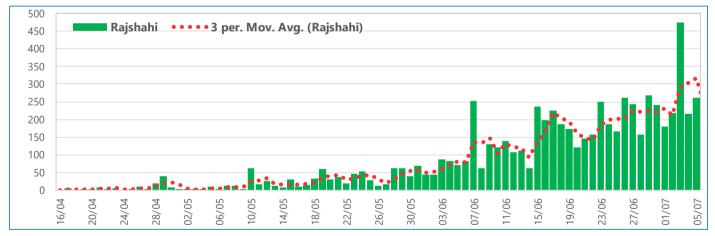
The figure below is showing the growth of COVID-19 confirmed cases in all districts of Chattogram division starting from the day each reported 10 confirmed cases, 06 July 2020, Bangladesh.

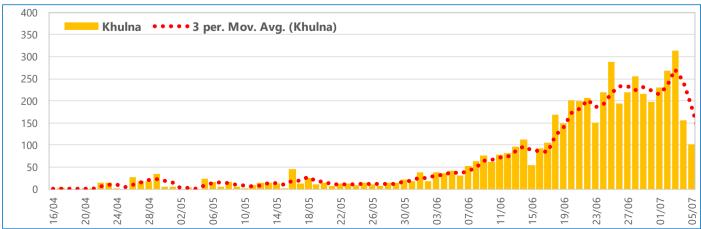


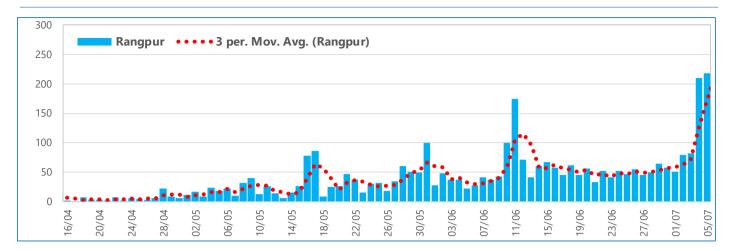
The figures below are showing the daily distribution of reported confirmed COVID-19 cases and rolling three-days average per division, 16 April – 05 July 2020, Bangladesh.

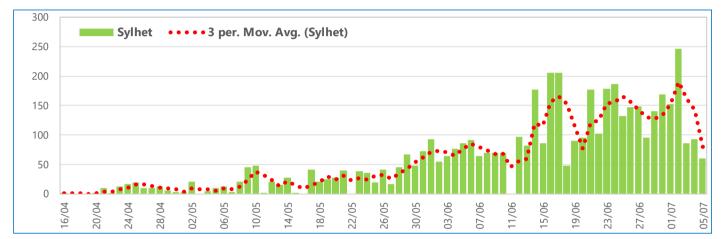


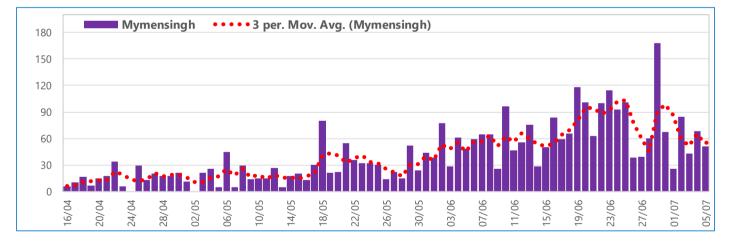


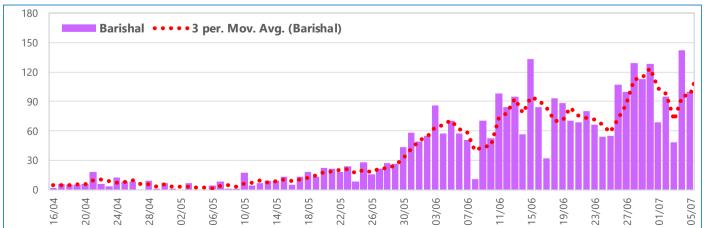




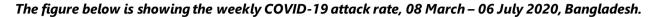


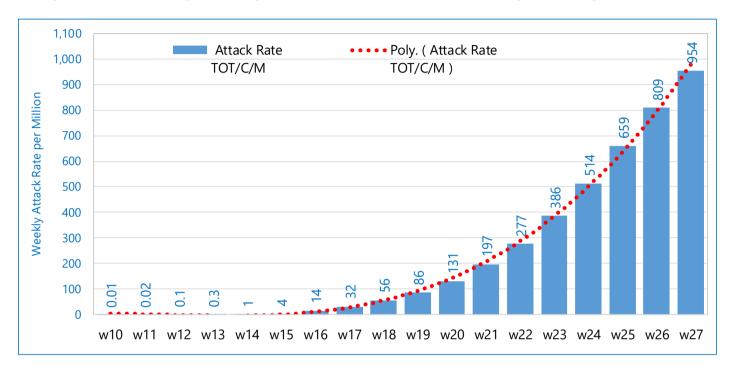






The overall COVID-19 attack rate (the total number of cases divided by the total population) in Bangladesh has been on a steady increase since the first reported confirmed COVID-19 case on 08 March 2020. On 06 July, Bangladesh attack rate (**AR**) is **972.4** per 1 million and **100%** (**64**/64) of districts with the total population of 170,306,468 people have reported confirmed COVID-19 cases. In the current week (epidemiological week 27), COVID-19 weekly AR increased by **17.9%**, in comparison to the previous week (**954** and **659** respectively).





According to the available data, the highest AR continues to be observed in the Dhaka division (**2,586.5**/1,000,000). Within the Dhaka division, **Dhaka city** has the highest AR (**10,467.5**/1,000,000) followed by **Narayanganj** district (1,527.1), **Munshiganj** (1,316.4), **Faridpur** (1,080.6), **Gazipur** (922.6), **Madaripur** (603.5), **Gopalganj** (576.4), Dhaka district (561.9),), **Shariatpur** (488.8), **Kishoreganj** (469.7), **Rajbari** (453.6), **Manikganj** (378.9), and the lowest AR **175.3** was reported from **Tangail** district.

The 2nd highest COVID-19 AR is reported from **Chattogram division** (**711.1**/1,000,000), the AR in all the 11 districts is over 300 per million. Within the division, **Chattogram** district reported the highest AR (1,098.1/1,000,000) followed by **Cox's Bazar** district (1,021.2), **Bandarban** (888.6), **Noakhali** (616.1), **Cumilla** (606.6), **Feni** (531.4), **Rangamati** (515.2), **Lakshmipur** (463.2), **Chandpur** (362.7), and the lowest AR **350.8** was reported from **Brahmanbaria** District.

The 3rd highest AR in the country was reported from **Sylhet division** (**411.5**/1,000,000) with the highest AR in **Sylhet** district (631.2/100,0000) followed by **Sunamganj** (356.1), **Habiganj** (298.0), and **Maulvibazar** (213.3) district.

Barishal division has taken the fourth highest in the overall AR with **336.0**/1,000,000 with the highest AR in **Barishal** district (613.2/1,000,000) followed by **Jhalokathi** (299.8), **Barguna** (286.1), **Patuakhali** (282.5), **Pirojpur** (186.9) and the lowest 151.9 in **Bhola** district.

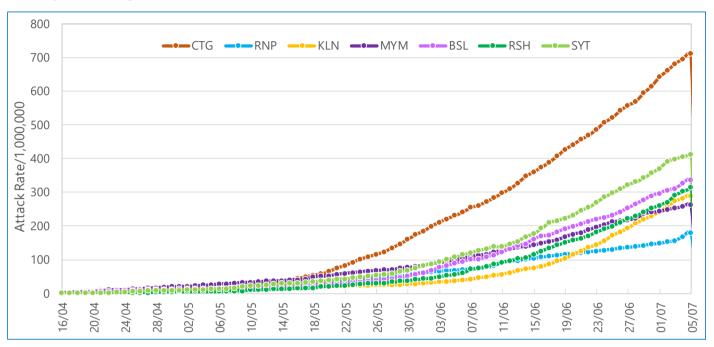
Rajshahi division has overall AR (314.3/1,000,000) with the highest AR in Bogura district (826.7/1000000), followed by Joypurhat (421.2), Rajshahi (352.6), Natore (277.0), Pabna (159.2), and Sirajganj (171.2), Chapainawabganj (125.8); while AR in Naogaon districts is less than 40.0/1,000,000.

In Khulna division the overall AR is **287.9**/1,000,00 while the highest AR district is Khulna district (**691.3**/1000000) followed by **Jhenaidah**, (351.0), **Kushtia** (265.9), **Narail** (249.6), **Chuadanga** (227.5), **Jashore** (210.5), **Satkhira** (140.5), **Bagerhat** (127.8) and the lowest 112.3 in **Meherpur** district.

Although **Mymensingh division** reported an overall AR of **261.7**/1,000,00, **Mymensingh** district reported high AR (**329.7**1000000), followed by **Jamalpur** (232.8), **Netrakona** (205.6) and **Sherpur** (147.0).

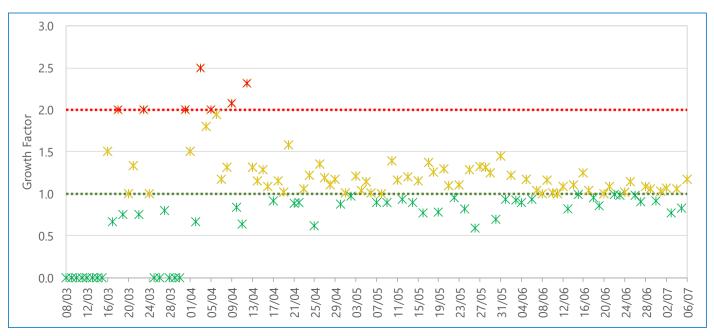
Rangpur division reported the lowest AR in the country (**179.8**/1,000,000). Within the division **Rangpur** district having the highest AR (313.5/1000000) followed by **Dinajpur** (209.0), **Nilphamari** (186.8), **Thakurgaon** (137.5) and **Panchagarh** (126.7), **Lalmonirhat** (104.4) and **Kurigram** (86.2).

The following figure is showing the COVID-19 attack rate per 1,000,000 population in selected divisions, 16 April - 06 July 2020, Bangladesh.



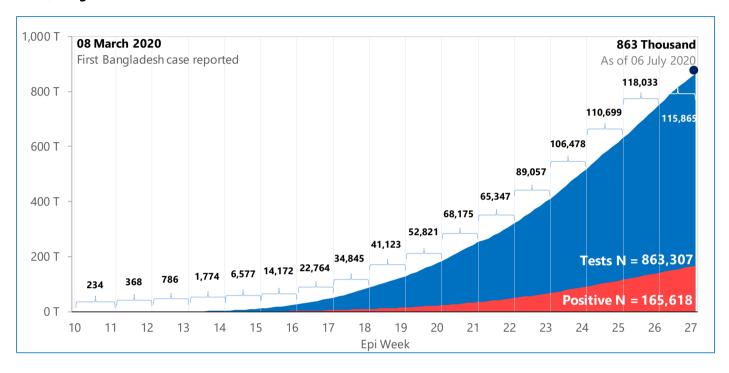
Growth factor (every day's new cases / new cases on the previous day) between 0 and **1** indicates a decline; when it is above 1 it signals an increase, and if is persistently above 1 this could signify exponential growth. On April 3, the Growth factor (GF) for COVID-19 cases in Bangladesh reached the highest of **2.5**, the GF was above 2 on 9 and 12 April. Since the beginning of June 2020, the GF has been within the range of 0.8 – 1.2 and on 06 July 2020, it is **1.17**.

The figure below is showing the Growth Factor of daily confirmed COVID-19 cases, 08 March – 06 July 2020, Bangladesh.



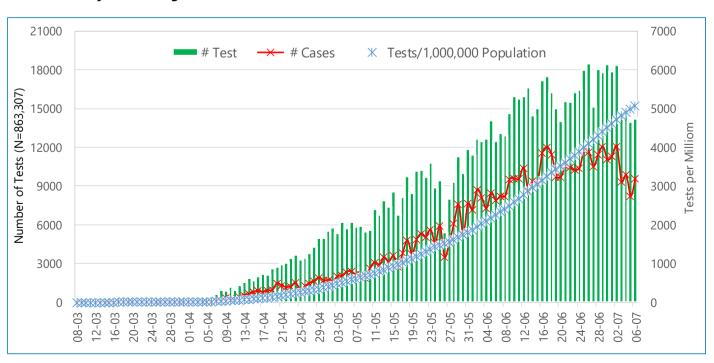
As of 06 July 2020, according to the IEDCR, **863,307** COVID-19 tests with the overall positivity rate of **22.4%** were conducted in Bangladesh by **73** laboratories (**39**) laboratories in Dhaka city and (**34**) laboratories in outside Dhaka. The latest laboratories, which have started the testing: **in Dhaka** - Universal Medical College Hospital Ltd., National Institute of Biotechnology (NIB) and DNA Lab Limited. **Outside Dhaka** - International Medical College & Hospital, Gazipur. **62.5%** (**537,810**/863,307) of all samples were tested by laboratories in the Dhaka city, and **37.5%** (322,497) - outside Dhaka.

The graph below is showing the weekly and cumulative number of COVID-19 conducted tests, 08 March – 06 July 2020, Bangladesh.

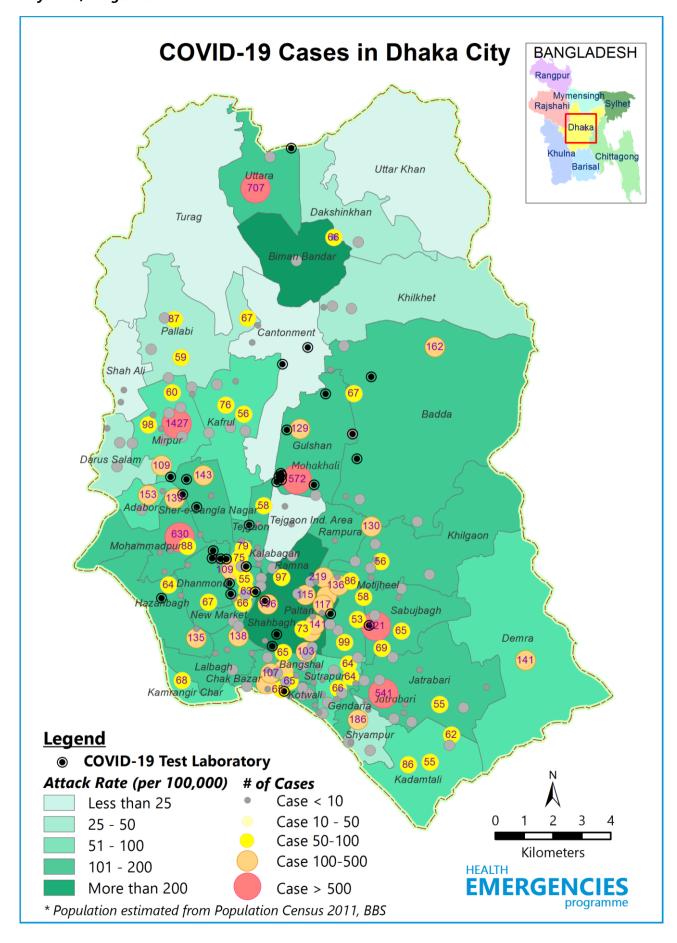


COVID-19 testing coverage has been gradually increasing in Bangladesh, reaching now **5,096**/1,000,000: now almost reached **Sri Lanka** (**5,160**/1,000,000) but is lower than **Thailand** (**8,648**/1,000,000), **India** (**7,093**/1,000,000), **Nepal** (**18,802**/1,000,000), **Malaysia** (**24,647**/1,000,000) and **Maldives** (**99,645**/1,000,000).

The graph below is showing the daily, cumulative number of COVID-19 and tests per 1,000,000 population, 08 March – 06 July 2020, Bangladesh.



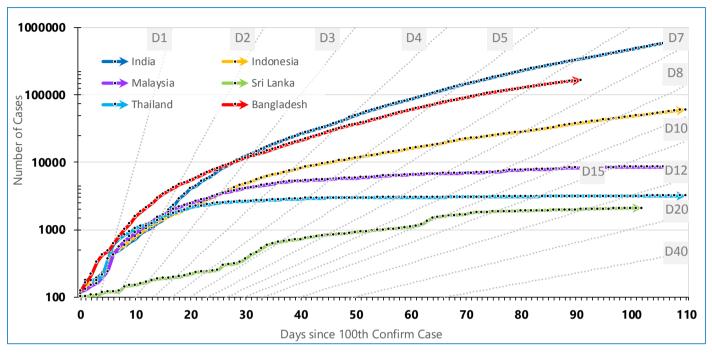
The map below is showing the Dhaka city COVID-19 laboratories, number of cases and attack rate, 06 July 2020, Bangladesh.



As of 06 July 2020, the overall case doubling time in Bangladesh remains six and half (6.5) days.

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.

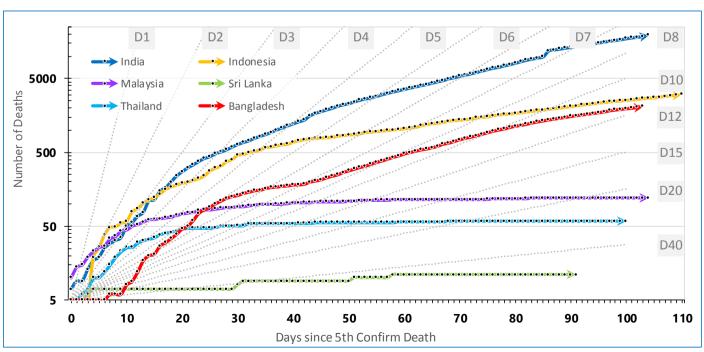
The figure below is showing the growth of COVID-19 confirmed cases in selected South East Asian countries starting from the day they reported 100 confirmed cases, 06 July 2020.



As of 06 July 2020, the death doubling time in Bangladesh is twelve (**12.0**) days as of 06 July 2020, one day more than in the previous update on 29 June 2020.

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, 06 July 2020.

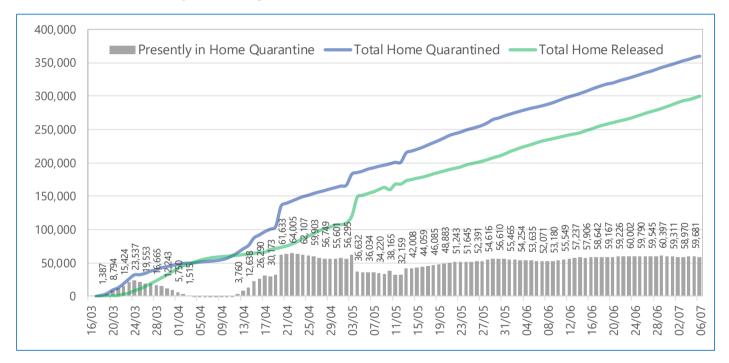


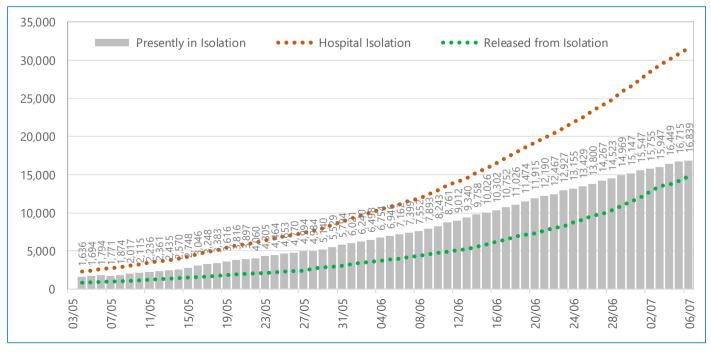
4. Contact Tracing, Points of Entry (PoEs) and Quarantine

According to the DGHS, as of 06 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 **19,912** individuals were placed in quarantine facilities and of them **15,049** (75.6%) have been already released. By 06 July 2020, in total **31,594** individuals were isolated in designated health facilitates all over the country, of them **14,755** (46.7%) have been released, and **16,839** (53.3%) are presently in isolation facilities which is **17.2%** increase than the last week.

The highest number of people (**6,547**) in quarantine facilities was reported on 24 April 2020 while presently, the number reduced to **4,864**. Between 17 March to 06 July 2020, total **359,258** individuals were placed under home quarantine all the over the county and to date **83.6%** (**300,275**/359,258) have been already released. Remaining **16.4%** (58,983 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 – 06 July 2020, Bangladesh.





5. Case Management and Infection Control

On 2 and 6 July DGDA hosted two consultative meetings on minimum testing requirements of fabric masks for community use, in the context of COVID-19. The purpose of the consultative meeting was to discuss the technical aspects related to specifications and quality of fabric masks intended for use by the general public. The discussion was based on a draft list of minimum testing requirements developed by the technical working group supported by USAID and JICA and including technical experts from BUET, icddr,b and Japanese inspection firm K2, and technically led by WHO. Participants included technical experts from laboratories approved by DGDA for quality testing of personal protective equipment (PPE). Setting the specifications and testing requirements of cloth masks has become an urgent priority as worldwide the use of masks is mandated or encouraged in many countries. WHO has also issued technical guidance on the use of masks in the community. The consultative meeting discussed several issues related to the Bangladesh context including types of fabric available, capacity of local testing laboratories, safety levels of chemicals used in treating fabrics, design of masks and labelling information. A visual inspection checklist is also under development by K2 to ensure the adherence of the bulk production with the technical specifications claimed by the manufacturer. A final stakeholder consultation is planned with the manufacturers to capture any input from their side n requirements. **DGDA** aims to publish the requirements early next week. https://apps.who.int/iris/rest/bitstreams/1279750/retrieve.

Technical support continues with local manufacturers of PPE aiming to improve adherence to the WHO requirements, specified in the **WHO disease commodity package for COVID-19**. Since the beginning of the COVID-19 pandemic, local textile and ready-made-garments manufacturers have taken initiative to repurpose their manufacturing lines to produce different PPE items including coveralls, gowns, surgical masks and respirators. Several manufacturers have refined their methods and are now exporting to the US and European markets. This gives a valuable opportunity for ensuring the products locally available are compliant and with international standards.

DGHS has issued further guidance to health facilities on **classification of PPE** according to level of protection approved by DGDA for the PPE products. The exercise involves capacity building of concerned staff at health facilities on the role of PPE as part of the infection prevention and control practices. An important factor is identification of PPE according to its classification. Supply chain solutions are needed to ensure appropriate identification and distribution of PPE at the user-level, as many of the items look similar in design and colour and may not be easily identifiable to the user. This is especially important for health professionals involved in surgical procedures, emergency care or other healthcare activities which involve risk of exposure to body fluids, as the requirement of splash resistance is available in level 3 and 4 PPE. For other health care activities, in the context of COVID-19, the WHO DCP accepts all levels of PPE conforming with the required standards.

WHO published interim guidance on **Biomedical equipment for COVID-19 case management** - inventory tool. Countries can use this tool to collect in-depth facility inventories of biomedical equipment re-allocation, procurement and planning for COVID-19 case management. The survey assesses quantified availability and the causes for non-functioning of different sources of oxygen delivery and supply systems to the patient in order to determine priorities and re-allocation requirements in accordance with needs. Content areas include: oxygen supplies and equipment; respiratory instruments and equipment; suction devices; ventilators; and autoclaves/sterilizers. Target audiences include facility managers; clinical decision-makers; procurement officers; planning officers; biomedical engineers; and infrastructure engineers. Full document: https://apps.who.int/iris/rest/bitstreams/1284105/retrieve.

The Emergency Use Listing (EUL) scope for in vitro diagnostics (IVDs) to detect SARS-CoV-2 has been expanded to include antibody detection enzyme immunoassays. The following IVDs are therefore eligible for EUL submission: Assays for the detection of SARS-CoV-2 nucleic acid; Rapid diagnostic tests for the detection of IgM/IgG to SARS-CoV-2; and Rapid diagnostic tests for the detection of SARS-CoV-2 antigens. To date, 47 expressions of interest for NAT assays, 12 for antibody detection RDTs have been received so far. 13 products have been listed as eligible for WHO procurement based on their compliance with WHO EUL requirements. Six products have been identified as not eligible for procurement following the review. The WHO EUL assessments and support to in-country authorization or listing of IVDs for COVID-19 are at the core of WHO's support to market readiness and come to complement partners' efforts towards equal and adequate access to diagnostic tools. Updated EUL is available online at https://www.who.int/diagnostics laboratory/EUL/en/.

6. Risk Communication and Public Awareness

Risk Communication and Community Engagement (RCCE) supports the DGHS in planning and execution of two media information campaigns for better informing population about COVID-19 and the prevention measures. One of the campaigns regards the use of cloth masks, importance and guidelines for correct use as well as for making masks at home. The second campaign is an overarching communication and information project aimed at informing the individuals and communities about generic prevention measures as well as for preventing stigma and discrimination, emphasizing the role of communities not only individuals in addressing COVID. Basic information regarding personal and community protective measures are already disseminated through RCCE partners social media platforms as well as through community level channels such as mosques, posters distribution or community health workers. Both campaigns are scheduled to be expanded in the upcoming period to further include mainstream media distribution (Radio, TV) which will complement the social media and community channels and will ensure a wider distribution of the information.

7. Useful COVID-19 links:

WHO Bangladesh COVID-19 Situation Reports: https://www.who.int/bangladesh/emergencies/coronavirus-disease-(covid-19)-update/coronavirus-disease-(covid-2019)-bangladesh-situation-reports

COVID-19 Situation in the WHO South-East Asia Region: https://www.who.int/southeastasia/outbreaks-and-emergencies/novel-coronavirus-2019

Latest global WHO Situation Report # **167** as of 05 July 2020: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports

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

EPI-WIN: WHO information network for epidemics: https://www.who.int/teams/risk-communication

COVID-19 updates from the Directorate General of Health Services, Ministry of Health and Family Welfare, Government of The People's Republic of Bangladesh: https://dahs.gov.bd/index.php/en/home/5343-covid-19-update

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