COVID-19

World Health Organization — Bangladesh

10 August 2020
Morbidity and Mortality
Weekly Update (MMWU) N°24

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

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In this issue of COVID-19 Morbidity and Mortality Weekly Update (MMWU) N° 23 (04-10 August 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 deaths by division:
- ✓ overall and cumulative weekly attack rate and per division;
- ✓ death and recovery rates of closed cases;
- ✓ number of COVID-19 testing laboratories and number of daily tested per 1,000,000;
- ✓ Geographical distribution cases and deaths; and
- ✓ comparison data with selected countries in South East Asia.

Tested	Confirmed	Recovered	Dead	Hotline
1,273,168	260,507	150,437	3,438	18.5 million

Test/1 million	New Cases	Recovery Rate	IFR%	AR/1 million
7,475	2,907	57.7%	1.32%	1,529

Laboratories	PPE Stock	PoE Screening
3.7% — 85 COVID-19 Labs	1,045,621	413,314
8.2% — Last 7 days — 71,024 Samples	3,302,560	31,746
60.0% Inside Dhaka Tests	136,707	7,029
20.5% Positive Tests	1,093,291	360,140

1. Highlights

As of 10 August 2020, according to the Institute of Epidemiology, Disease Control and Research (IEDCR), there are 260,507 confirmed COVID-19 cases[1] in Bangladesh, including 3,438 related deaths; Infection Fatality Ratio (IFR) is 1.32%.

On 03 August 2020, the Cabinet Division Field Administration issued a circular No. 04.00.0000.514.16.002.20.140 regarding the **extension of the period of restrictions on overall activities/movement until 31 August 2020 to prevent the spread of Coronavirus disease COVID-19**: the Government has decided to impose control on the overall activities of the country and the movement of public, subject to the following conditions: while outside of home, wearing facemask, keeping social distancing and maintaining health guidelines must be ensured, the violators will face legal actions; the restriction will continue from 4 to 31 August 2020, including weekly holidays; highly infected areas should be controlled as per the "COVID-19 Infection Risk Zone Based Control System Implementation Strategy/Guide" prepared by the Health Services Division; and District and Upazila administrations including Local Government Division, Ministry of Information, Ministry of Religious Affairs, Health Service Division will implement massive campaign and public awareness activities to prevent the spread of COVID-19. Full document is available on: *www.cabinet.gov.bd.*

2. Coordination

On 04 August 2020, WHO published a scientific brief on **Estimating mortality of COVID-19**. An important characteristic of an infectious disease, particularly one caused by a novel pathogen like SARS-CoV-2, is its severity, the ultimate measure of which is its ability to cause death. Fatality rates help us understand the severity of a disease, identify at-risk populations, and evaluate quality of healthcare. The brief identified two measures to be used to assess the proportion of infected individuals with fatal outcomes: the first is **Infection Fatality Ratio** (**IFR**), which estimates this proportion of deaths among all infected individuals and the second is **Case Fatality Ratio** (**CFR**), which estimates this proportion of deaths among identified confirmed cases. Differences in mortality between groups of people and countries are important proxy indicators of relative risk of death that guide policy decisions regarding scarce medical resource allocation during the ongoing COVID-19 pandemic. This brief is intended to help countries estimate CFR and, if possible, IFR, as appropriately and accurately as possible, while accounting for possible biases in their estimation. Full document: *https://www.who.int/publications/i/item/WHO-2019-nCoV-Sci-Brief-Mortality-2020.1*.

On 06 August 2020, WHO published information on the **COVAX facility global procurement for COVID-19 vaccines**. The Facility will have access to doses of vaccine candidates through agreements that Gavi will conclude with vaccine manufacturers on behalf of the Facility. The Facility aims to procure 2 billion doses by the end of 202**.** Gavi on behalf of the COVAX Facility will: Provide manufacturer-specific contingent volume guarantees to procure vaccines that meet WHO's Target Product Profile to de-risk and incentivise timely investment in expansion of manufacturing capacity and Offer a market-wide demand guarantee, which could provide continued incentives and assurances to manufacturers to expand production capacity and to bring products to market faster and at greater quantities. Full document: *https://www.who.int/publications/m/item/the-covax-facility*.

On 07 August 2020, WHO published interim guidance on **Public health surveillance for COVID-19**. This document summarizes current WHO guidance for public health surveillance of coronavirus disease 2019 (COVID-19) in humans caused by infection with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The guidance includes: revision of suspected and probable case definitions to integrate increased knowledge on the clinical spectrum of COVID-19 signs and symptoms and consider situations where testing is not available to all; updated approaches to surveillance including environmental and serological surveillance for SARS-CoV-2; revision of variables included in weekly surveillance to fit with new case definition and objectives of surveillance (that is, inclusion of probable cases, health care workers cases and updated age groups for reporting cases and deaths); information on the importance of the collection of metadata for the analysis and interpretation of surveillance data; and recommendations for ending case-based reporting for global surveillance and replacing it with aggregate reporting. Full document: *https://www.who.int/publications/i/item/who-2019-nCoV-surveillanceguidance-2020.7*.

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[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.

3. Surveillance and Laboratory

Between 8 March and 10 August 2020, according to the Institute of Epidemiology, Disease Control and Research (IEDCR) there were two-hundred-sixty-thousand-five hundred-seven (**260,507**) COVID-19 confirmed by rt-PCR, including three-thousand-four-hundred-thirty-eight (**3,438**): Infection Fatality Ratio (**IFR[2] 1.32**%).

In the reported week (epidemiological week 32), in comparison to the previous epidemiological week, the number of new weekly COVID-19 cases decreased by **2.5%** (**16,854** and **17,293** respectively) while the number of COVID-19 new weekly deaths increased by **8.4%** (**245** in week 32 vs and **226** in the previous week).

The figures below are showing the daily and weekly distribution of reported confirmed COVID-19 cases and deaths, 08 March – 10 August 2020, Bangladesh.

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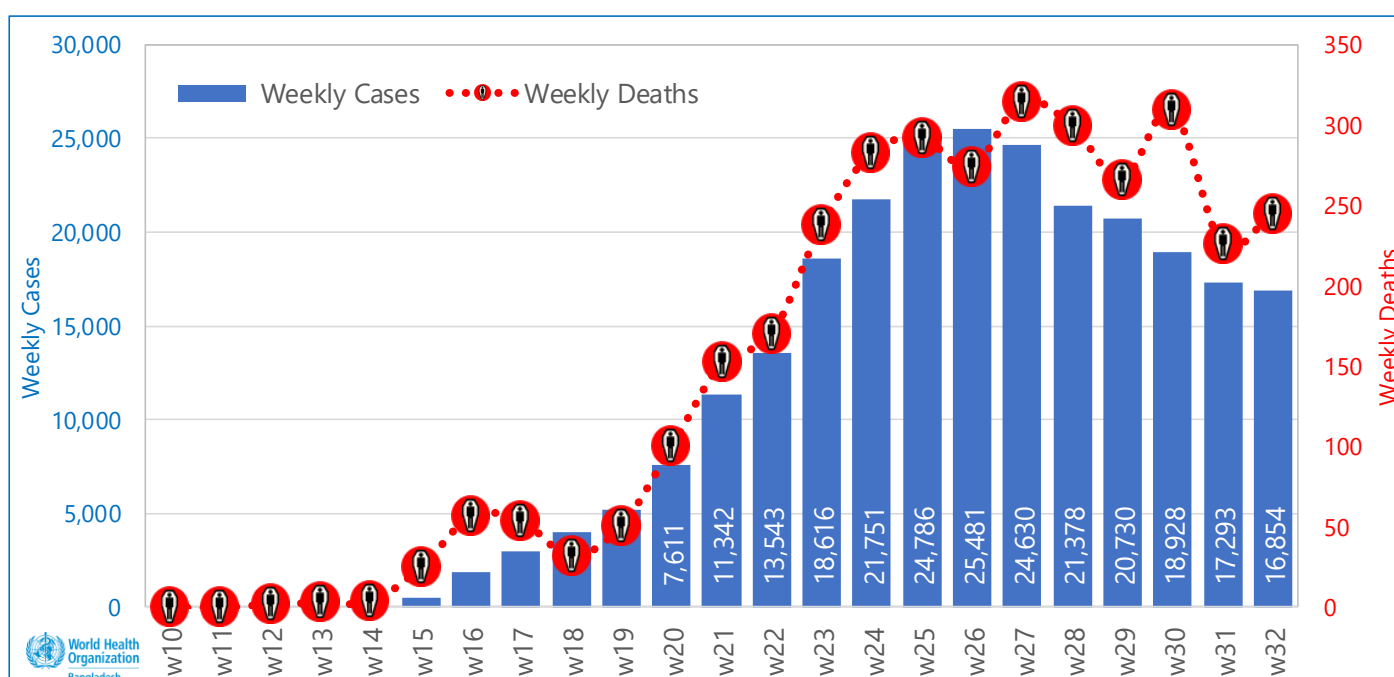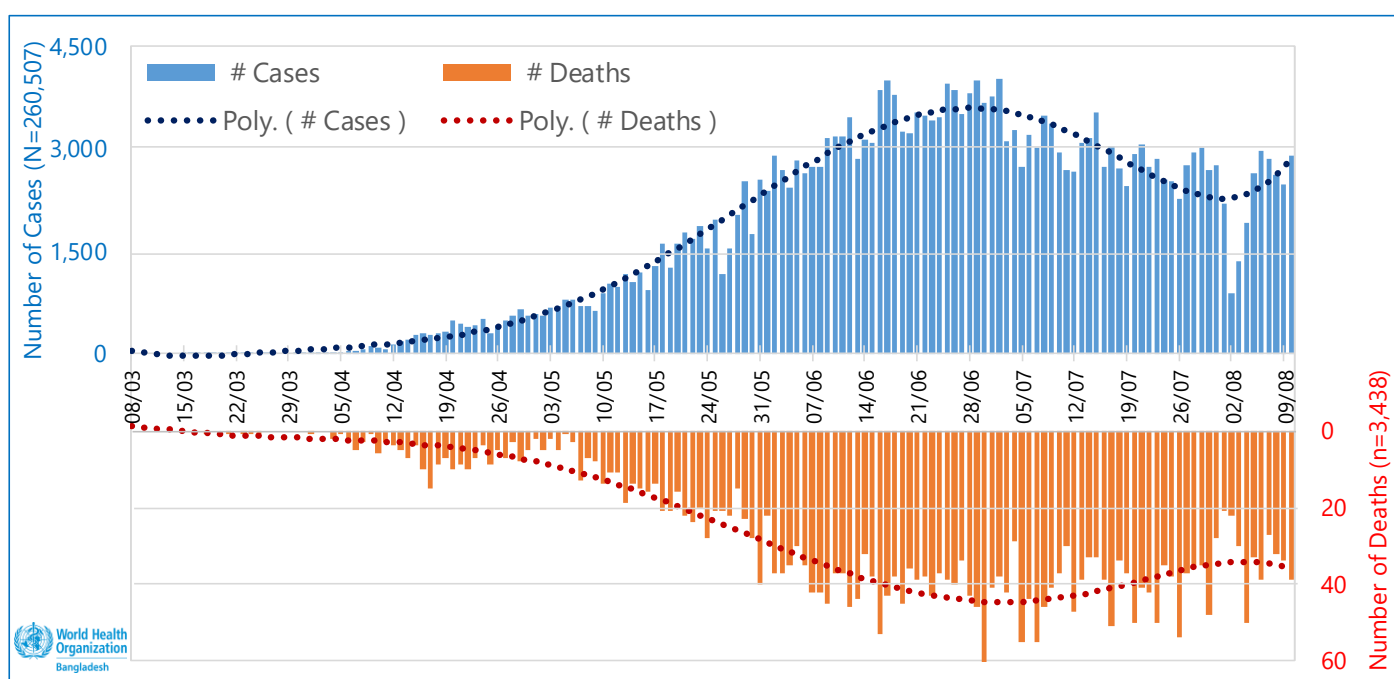
[2] Infection fatality ratio (IFR) is the proportion of individuals diagnosed with a disease who die from that disease and is therefore a measure of severity among detected cases, Estimating mortality from COVID-19, WHO scientific brief, 4 August 2020. *https://www.who.int/publications/i/item/WHO-2019-nCoV-Sci-Brief-Mortality-2020.*

The map below is showing the geographical distribution of reported confirmed COVID-19 cases, number of COVID-19 tests and Attack Rate (AR), 08 March – 10 August 2020, Bangladesh.
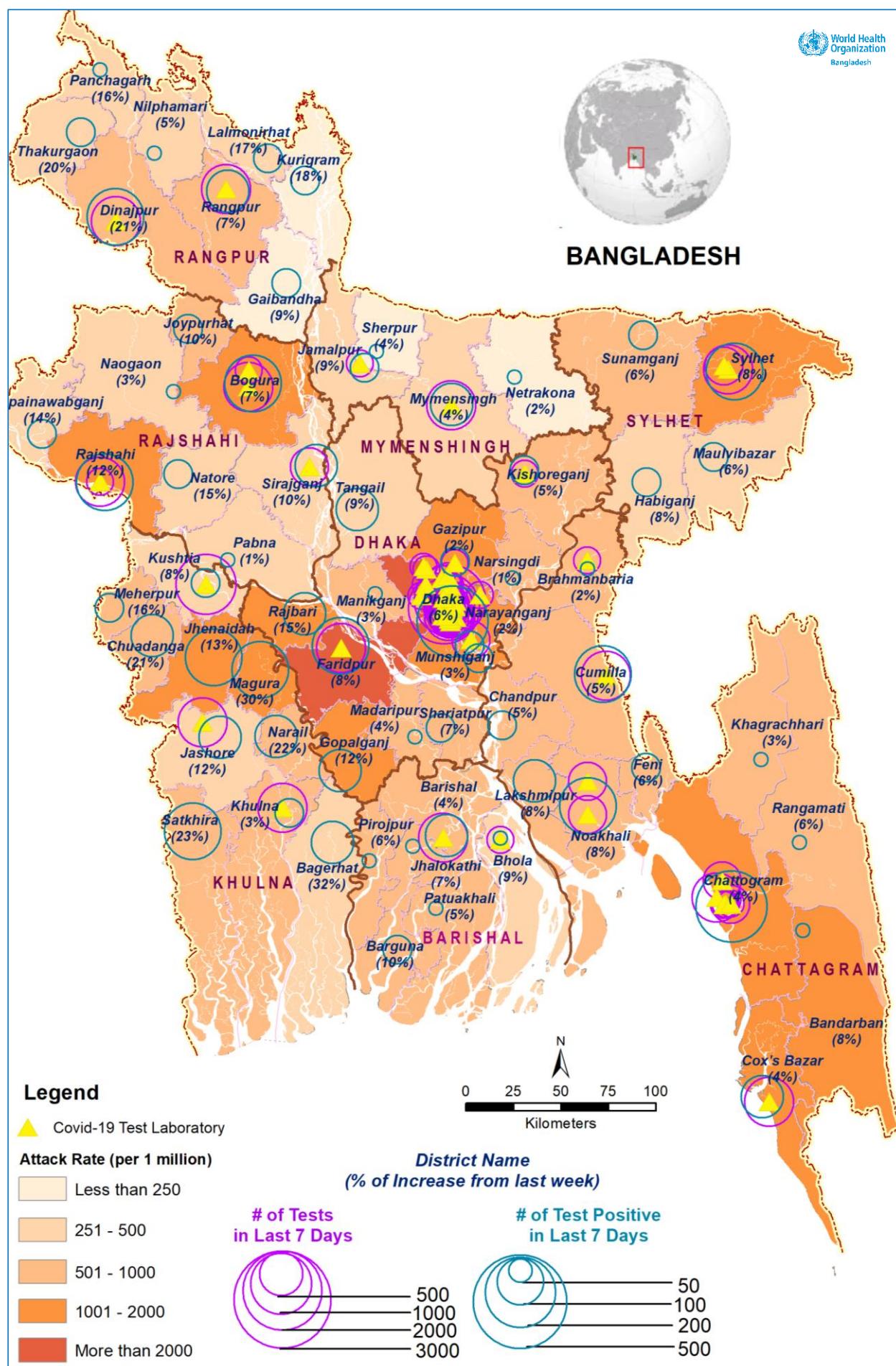
Out of the total **260,507** COVID-19 cases registered as of 10 August 2020, **57.75%** (150,437) - recovered, **1.32**% (3,438) - **died** and **40.93**% (106,632) are active cases.

The figure below is showing active vs recovered confirmed COVID-19 cases outcomes per epidemiological week, 08 March – 10 August, Bangladesh.
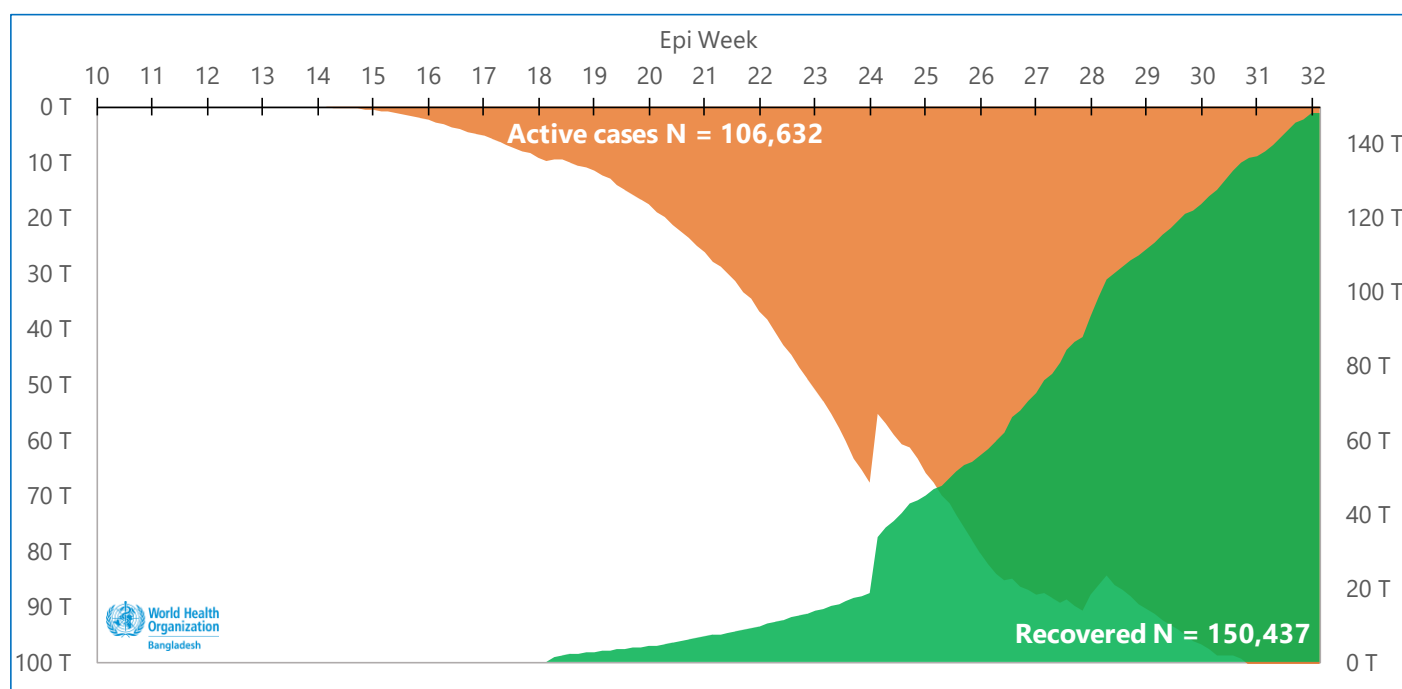
In the epidemiological week 32, the number of COVID-19 **active cases** increased by **3.7%**, in comparison to the previous week (**102,954** and **99,243**) and at the same time, the number of **recovered** COVID-19 cases decreased by **11.0%** (**11,531** and **12,240** respectively).

The figure below is showing the weekly outcomes of the reported confirmed COVID-19 cases, 08 March – 10 August 2020, Bangladesh.

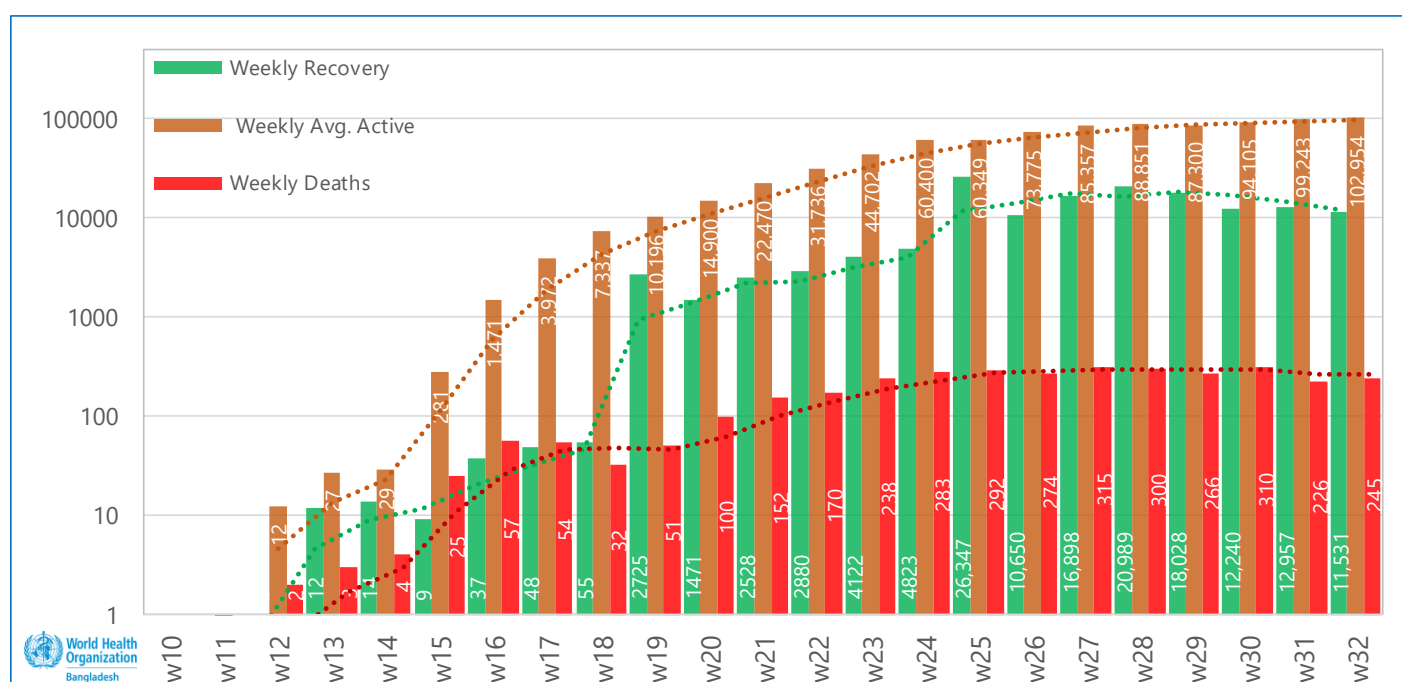As of 10 August 2020, there were **153,875** (59.1%) COVID-19 cases with known outcome (i.e. **closed cases**). Out of all closed cases, **97.8%** (**150,437**/153,875) were cured and **2.20%** (3,438) died. The **recovery rate** of about **97%** in the

closed cases as not shown change since 16 June 2020. The **Case Fatality Rate** (**CFR**)[3] in the closed cases in Bangladesh is lower than the **5.38%** (**734,490**/13,648,785) global average as of 10 August 2020.

The figure below is showing the death and recovery rates over cumulative closed confirmed COVID-19 cases, 08 March – 10 August 2020, Bangladesh.
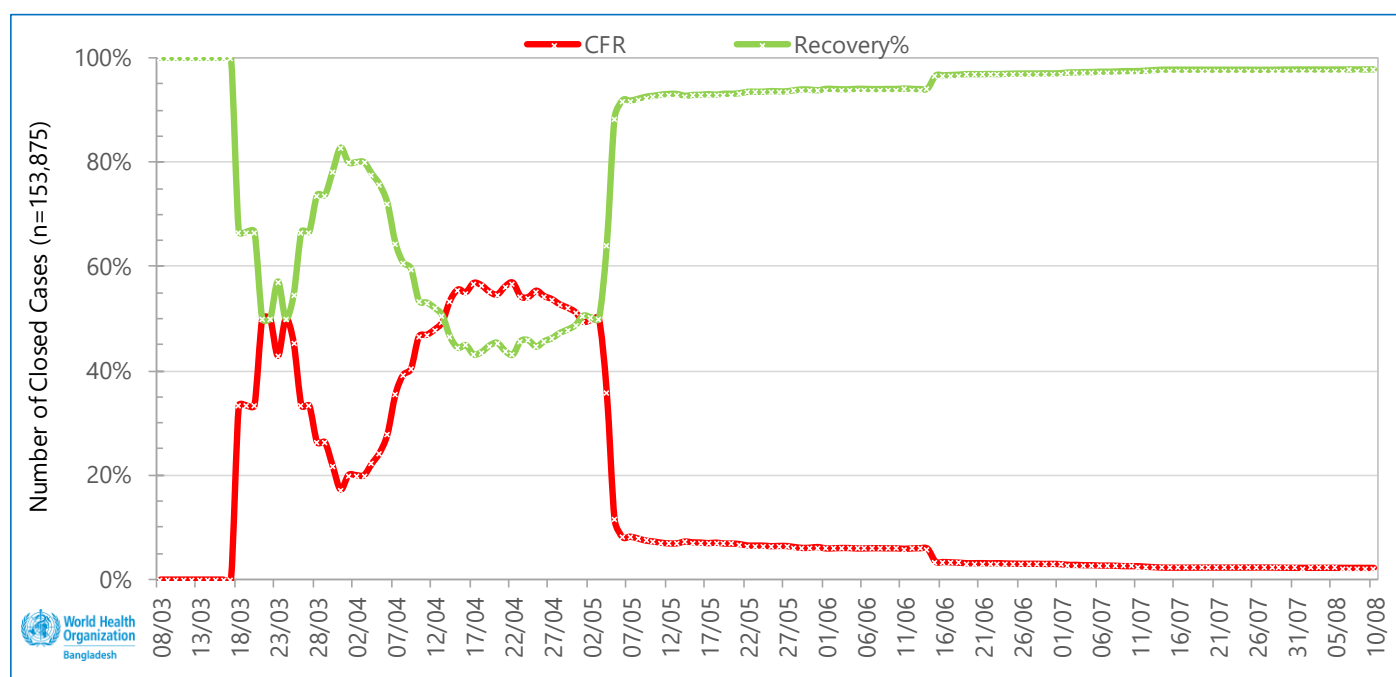
As of 10 August 2020, **26.9%** cases were confirmed in people between 31 and 40 years old, **20.7%** - in the age group of 21 to 30, **18.8%** - 41 to 50 years and **15.0%** in the age group between 51 and 60 years old. The highest death rate (**30.7%**) was reported in the age group of 61 to 70 years old, **25.6%** in the older age group of 71 and above and **24.2%** - in the age group between 51 and 60 years. Male represented **72%** and **79%** of the of total reported confirmed COVID-19 cases and deaths respectively.

***The figure below is showing geographical and age-sex distribution of the reported confirmed COVID-19 deaths, 10 August 2020, Bangladesh.***

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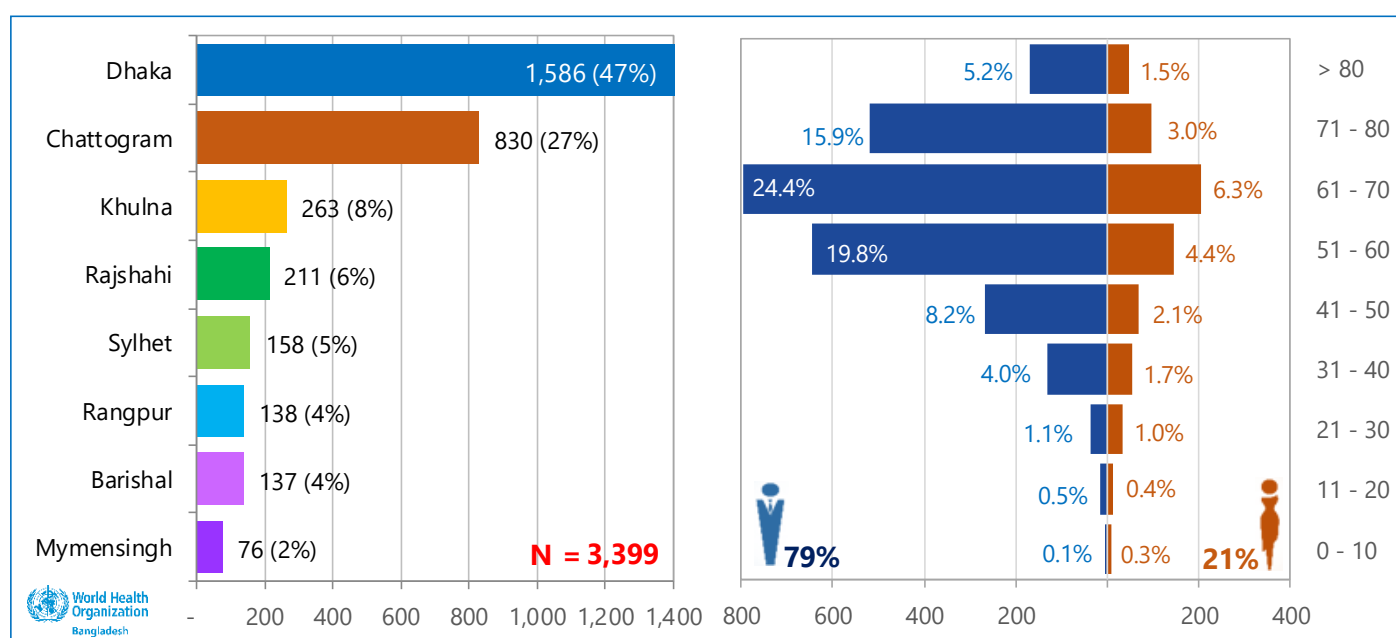
[3] Number of deaths from disease/ (number of deaths from the disease + number of recovered from the disease X100: Estimating mortality from COVID-19, WHO scientific brief, 4 August 2020. *https://www.who.int/publications/i/item/WHO-2019-nCoV-Sci-Brief-Mortality-2020.WHO.*

As of 10 August 2020, geographical distribution of confirmed reported COVID-19 cases was available on **100**% of cases (**242,102/**242,102). Of all cases, **64.7%** reported from **Dhaka** division, **14.4%** from **Chattogram**, **5.5**% - from **Rajshahi**, **5.1**% - from **Khulna**, **3.2**% - from **Sylhet**, **2.7**% - from **Rangpur**, **2.5**% from **Barishal** and the lowest **1.9**% from - **Mymensingh** division.

The figure below is showing the daily distribution of reported confirmed COVID-19 cases per division, 12 April – 10 August 2020.
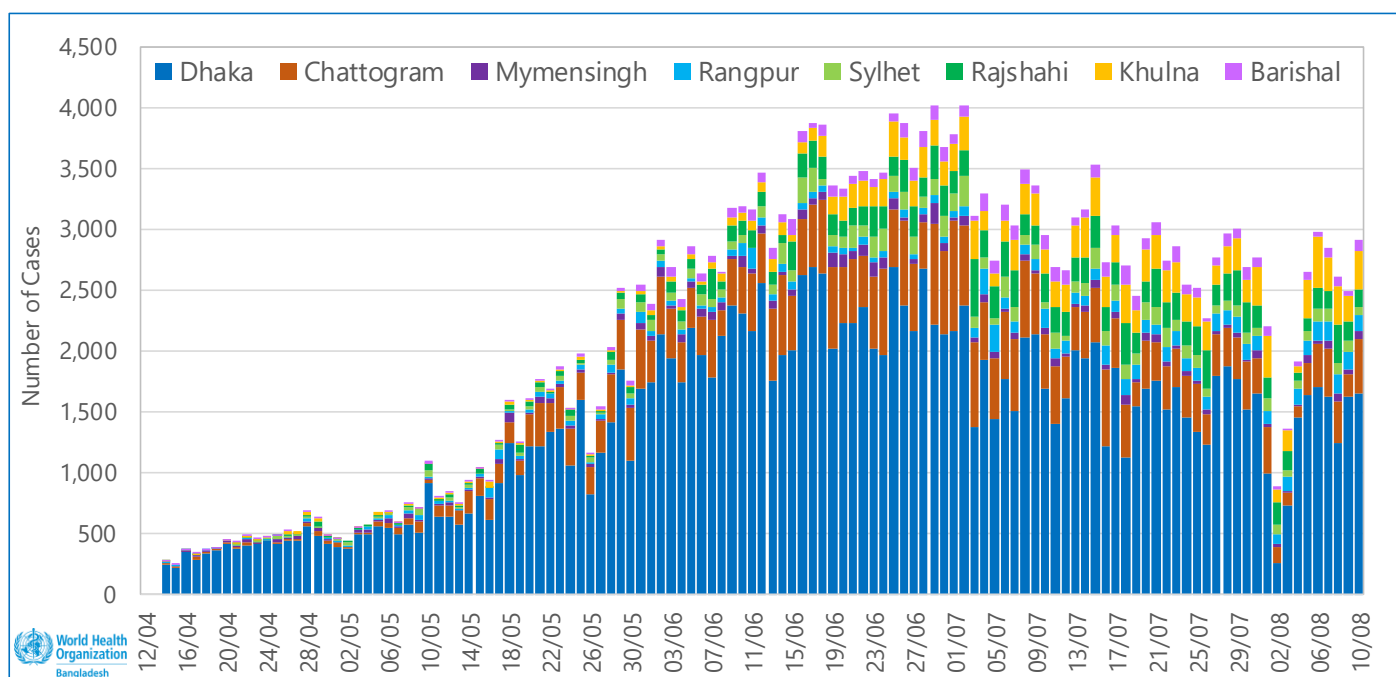

Available data allows to see how quickly the number of confirmed cases increased in different divisions in Bangladesh by looking at the case doubling time in each division. As of 10 August 2020, case doubling time is **12.5** days in **Dhaka division, 15** days in **Chattogram** and **Khulna,** between **16 to 20 days in Rajshahi**, **Sylhet** and **Barisal** divisions and more than **20** days in for **Mymensingh** and **Rangpur** divisions.

The figure below is showing the case-doubling time of COVID-19 confirmed cases in all divisions starting from the day each reported 500th confirmed cases, 10 August 2020, Bangladesh.
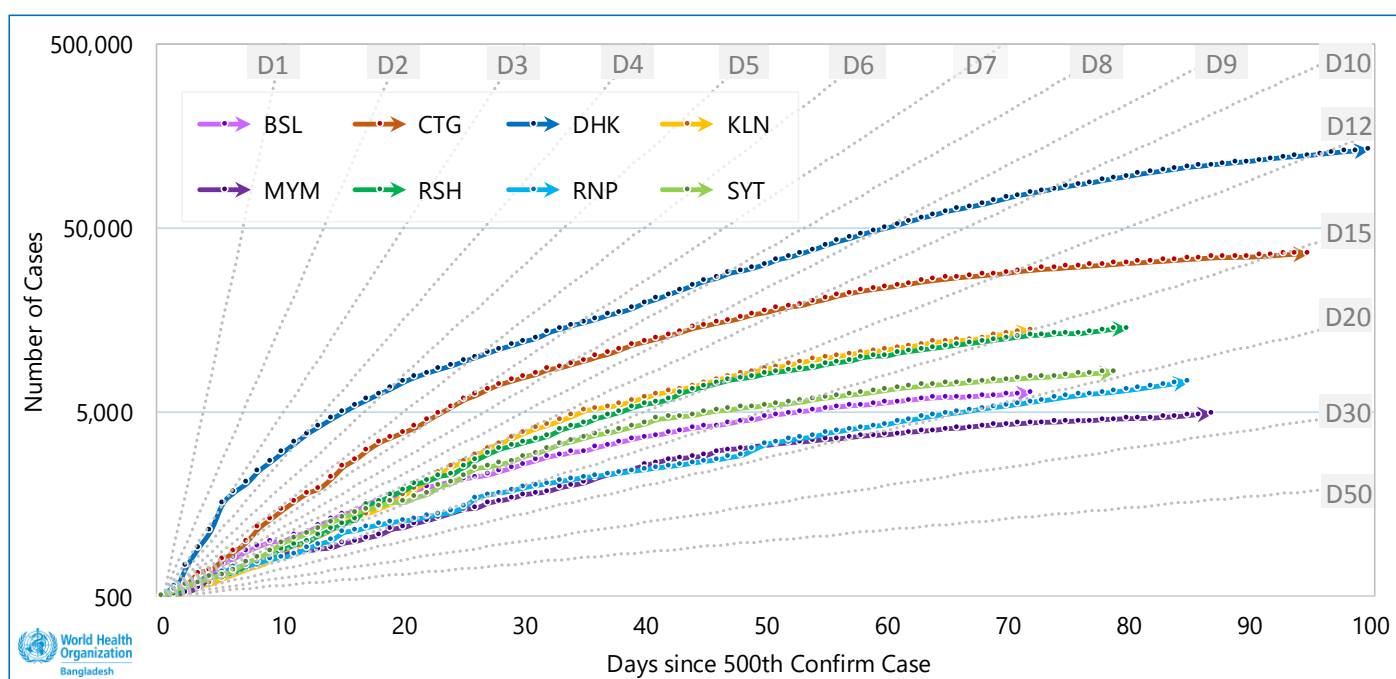
Case doubling time is **13.5** days in **Dhaka city**, **18.5** days in **Faridpur** district, between **20-30** days in**, Narayanganj**, **Gazipur** and **Dhaka** districts and more that **30** days in **Munshiganj** and **Kishoreganj** districts.

The figure below is showing the growth of COVID-19 confirmed cases in all districts of Dhaka division starting from the day each reported 500ᵗʰ confirmed cases, 10 August 2020, Bangladesh.
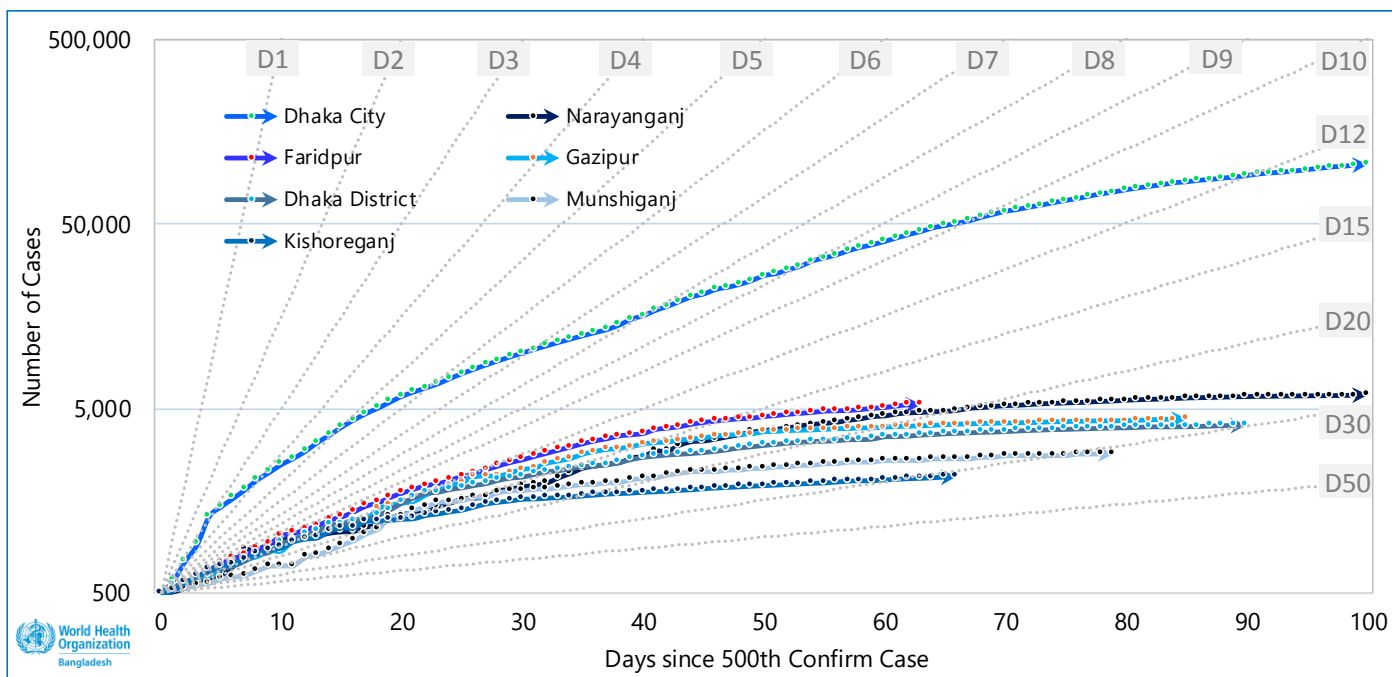
In the epidemiological week 32, case doubling time **Chattogram** district is **18.0** days (2.0 days less than in comparison with the previous epidemiological week 31); between **20-30** days in **Cumilla**, **Noakhali**, **Cox's Bazar, Feni** and **Rangamati** districts and **Lakshmipur** districts it is more than **30** 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 100ᵗʰ confirmed cases, 10 August 2020, Bangladesh.
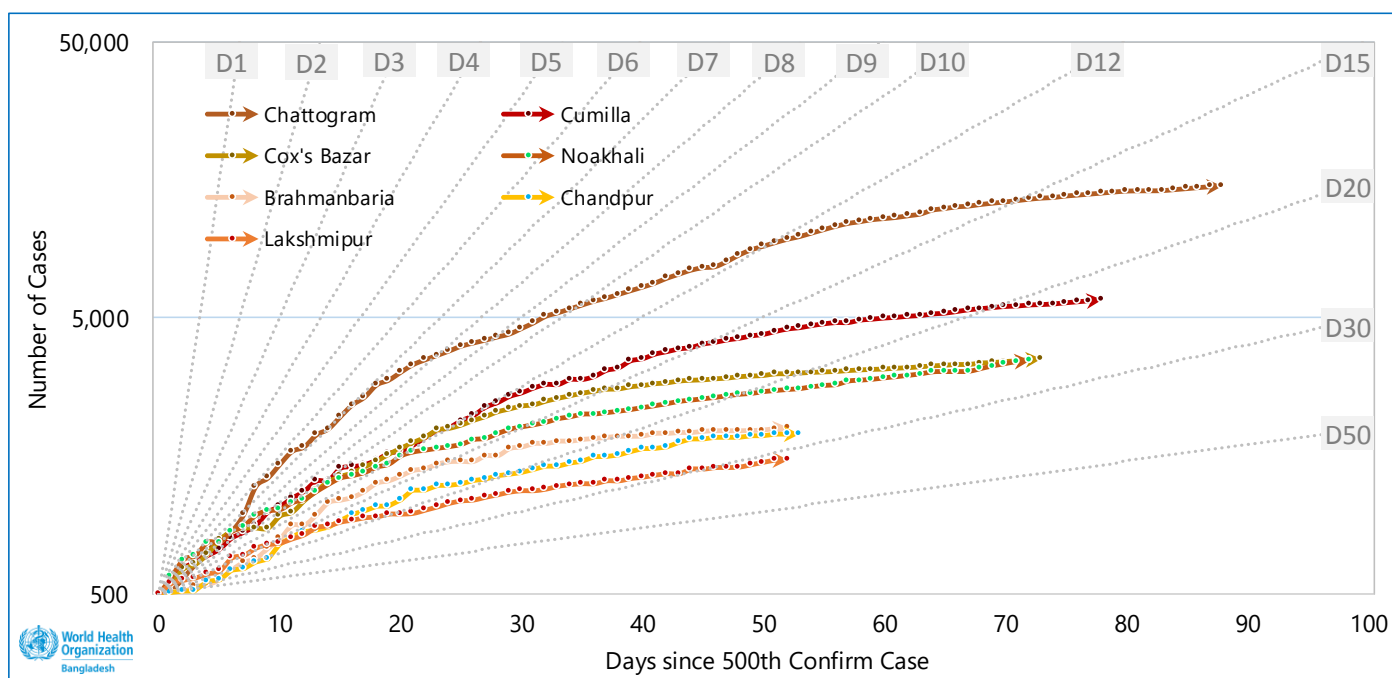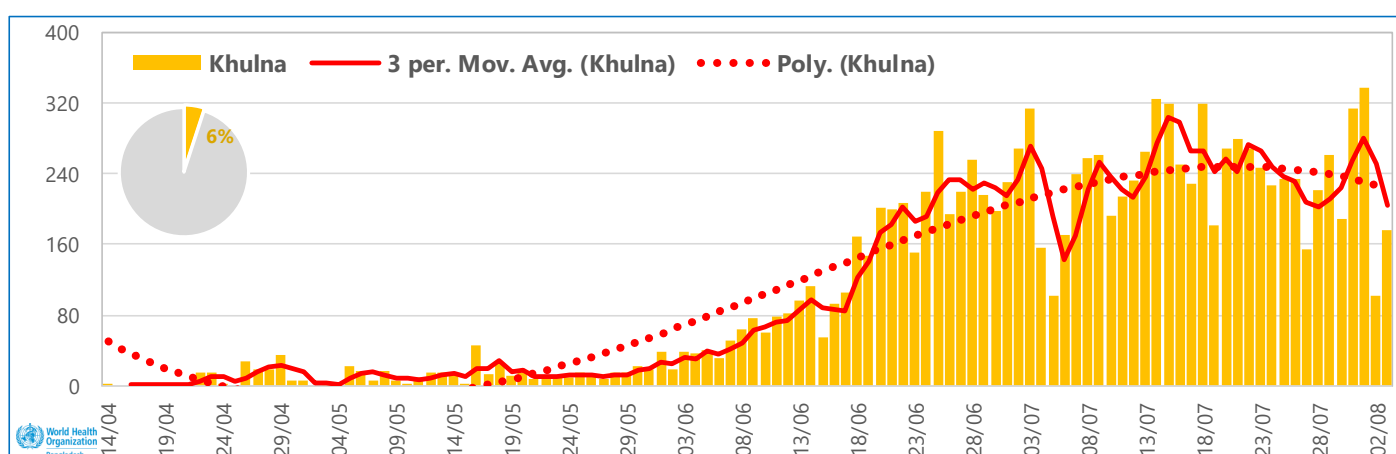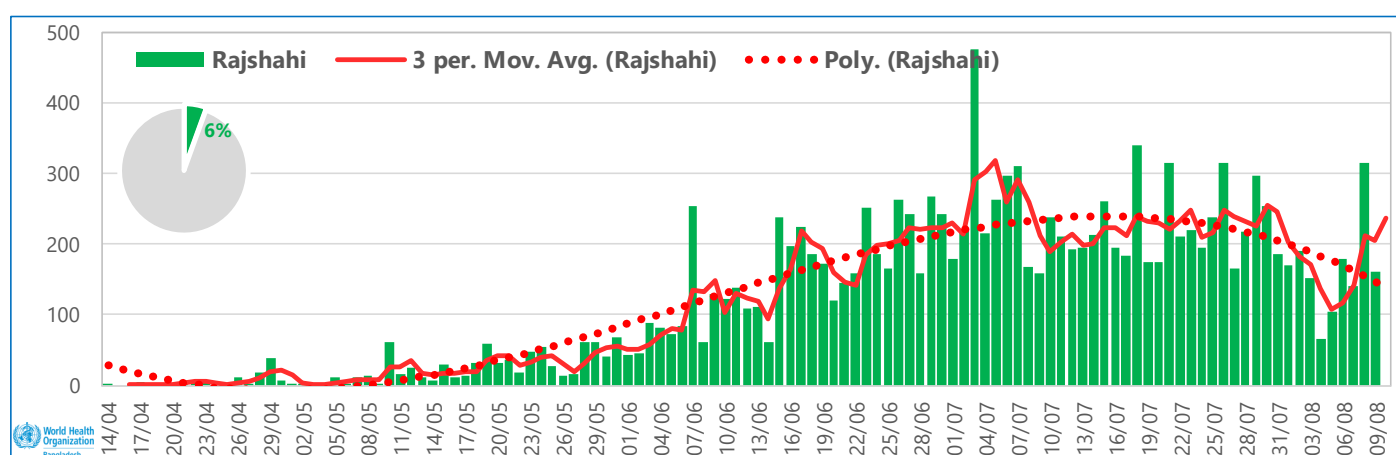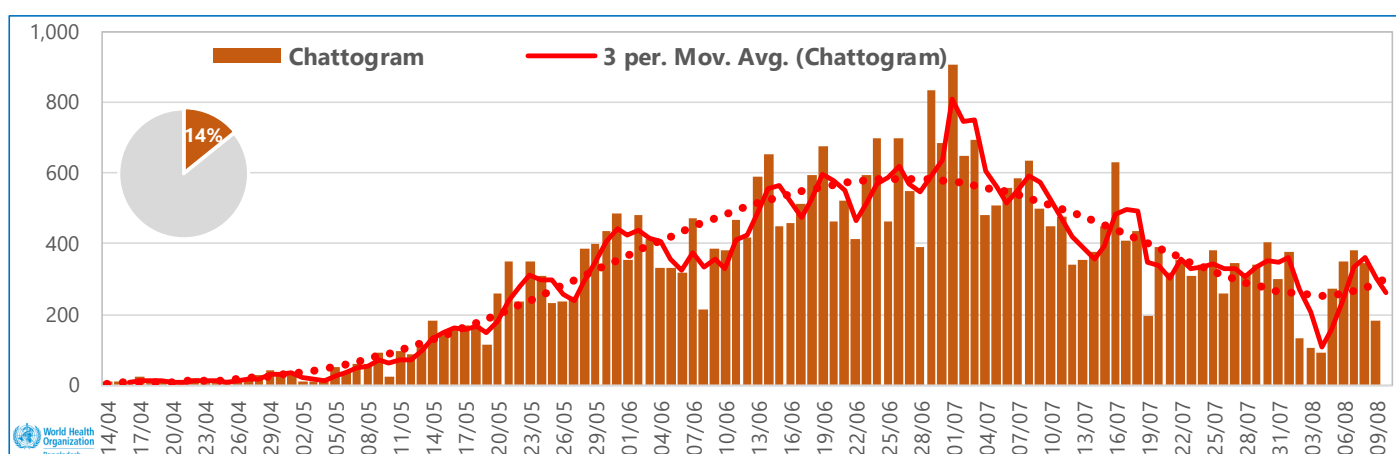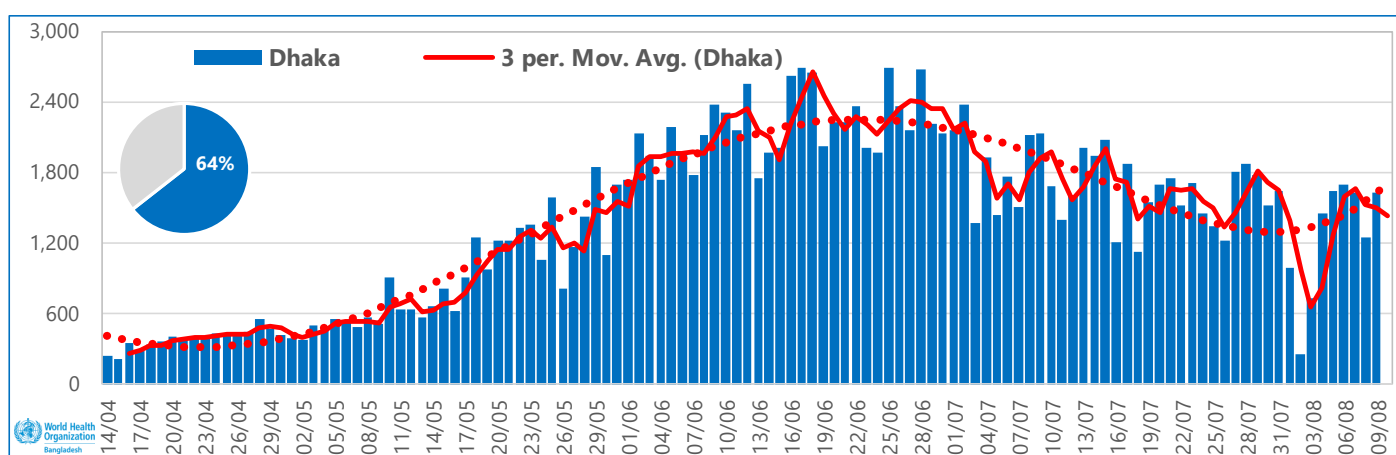
The figures below are showing the daily distribution of reported confirmed COVID-19 cases and rolling three-days average per division, 14 April – 10 August July 2020, Bangladesh.
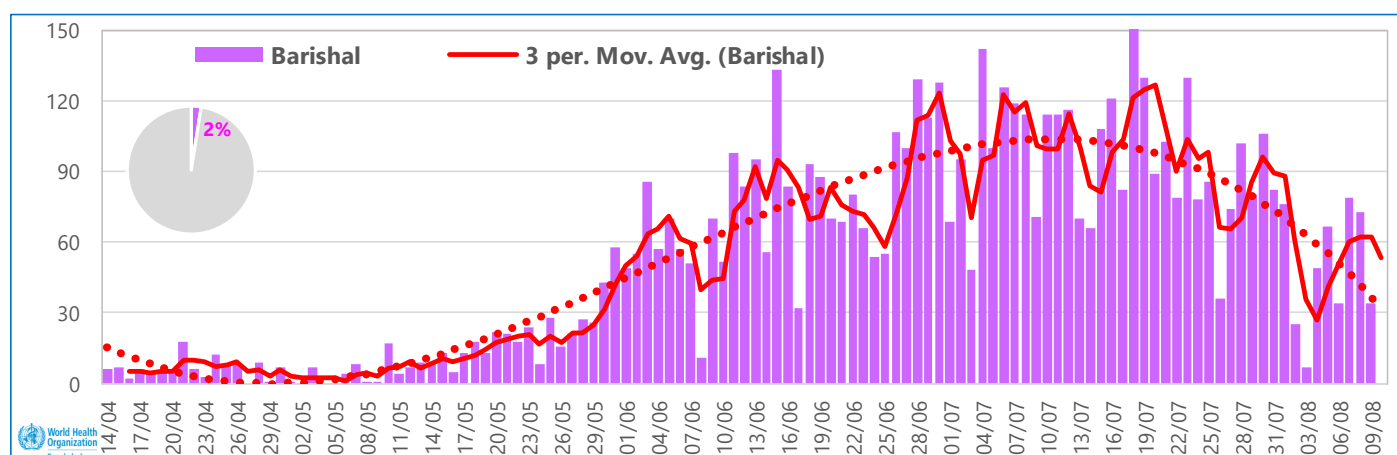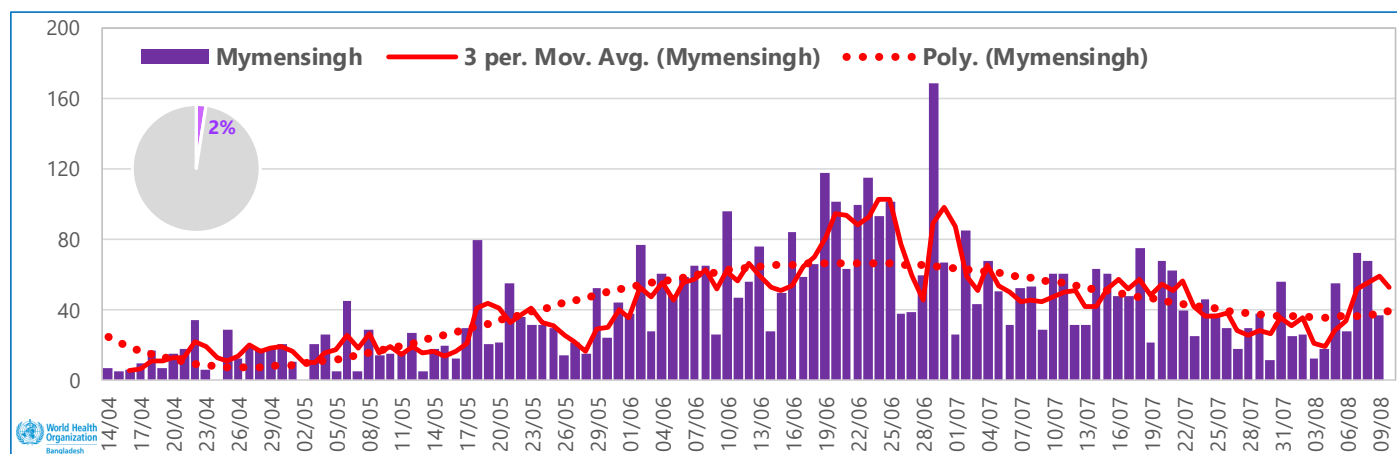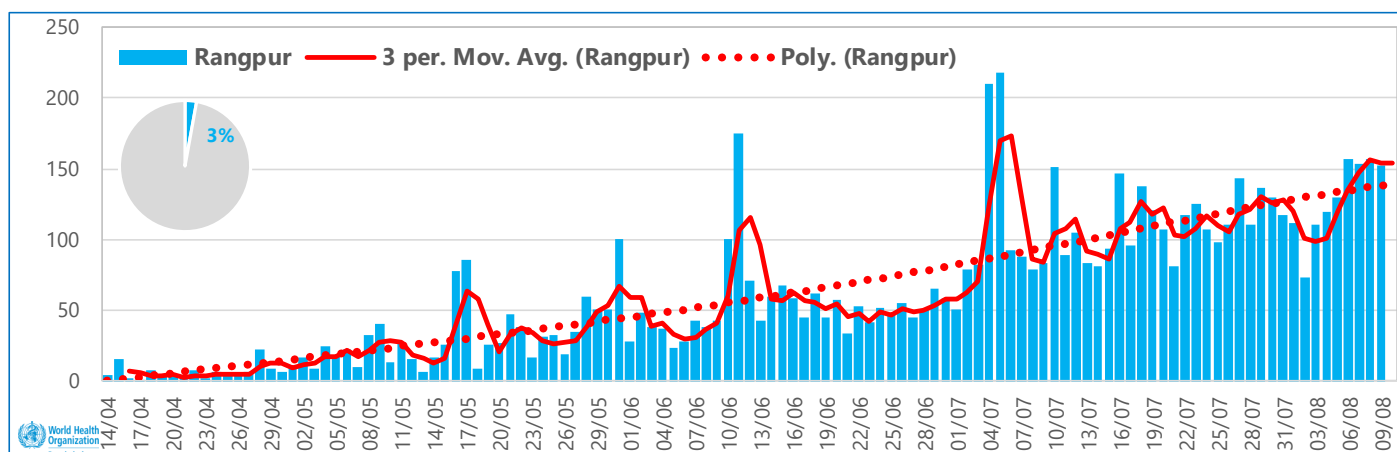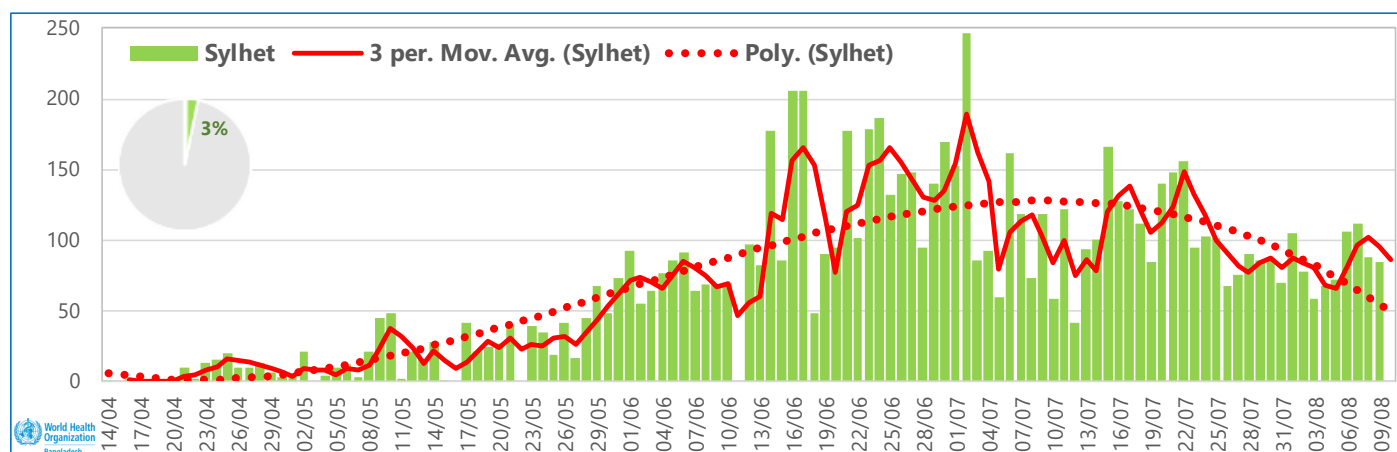
On 10 Augusts 2020, Bangladesh overall attack rate (**AR**) is **1,529.6** per 1 million and **100% (64**/64) of districts with the total population of 170,306,468 people have reported confirmed COVID-19 cases. In the reported week (epidemiological week 32), COVID-19 weekly **AR** increased by **7.0%** in comparison to the previous week (**1,513** and **1,414** respectively).

The figure below is showing the weekly COVID-19 attack rate (AR) per 1,000,000, 08 March – 10 August 2020, Bangladesh.

According to the available data as on 10 August 2020, the highest AR continues to be observed in the **Dhaka** division (**3,891.2**/1,000,000). Within the Dhaka division, **Dhaka city** has the highest AR (**15,9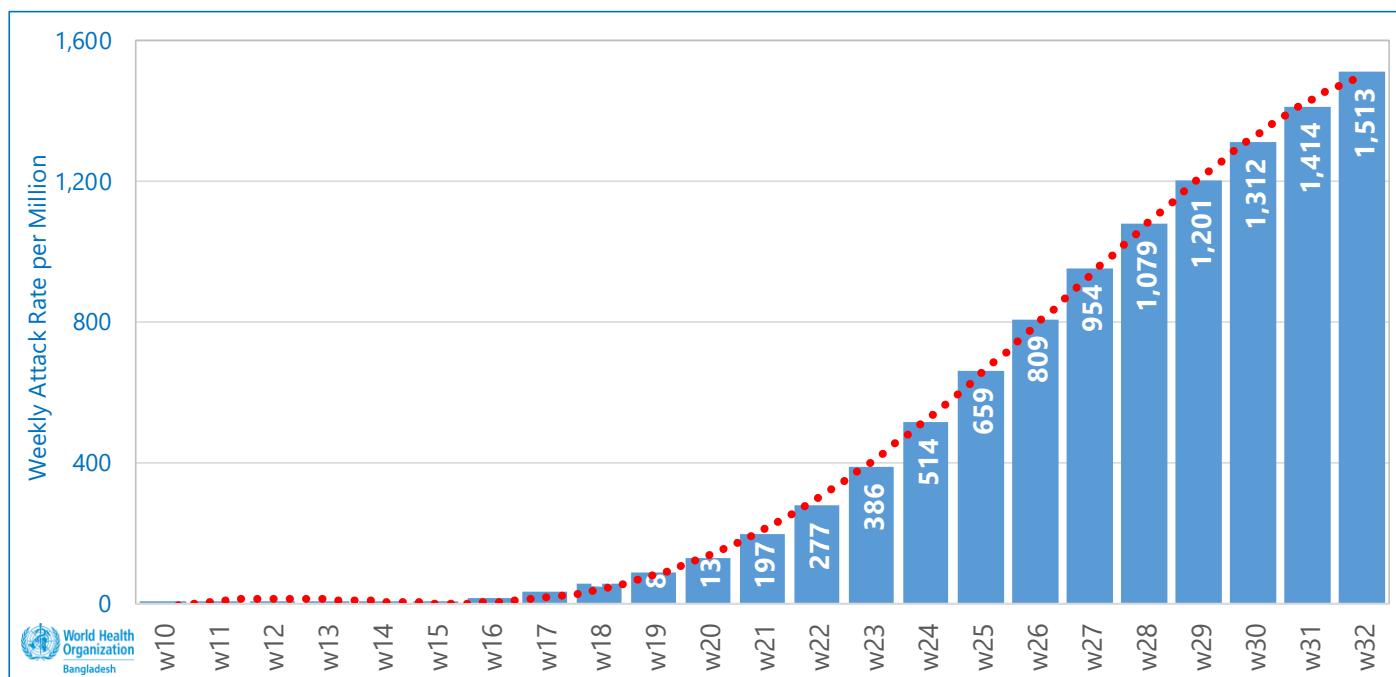04.7**/1,000,000) followed by **Faridpur** (2,365), **Narayanganj** (1,730.5), **Munshiganj** (1,668.6), **Gopalganj** (1,332.4), **Rajbari** (1,286.7), **Gazipur** (1,088.1), **Shariatpur** (916.9), **Madaripur** (897.3), **Dhaka** District (690.2), **Narsingdi** (685.4), **Kishoreganj** (624.5), **Manikganj** (550.2) and the lowest AR **438.7** was reported from **Tangail** district.

The 2nd highest COVID-19 AR is reported from **Chattogram** division (**1,102.4**/1,000,000), the AR in all the 11 districts is over 600 per million. Within the division, **Chattogram** district reported the highest AR (**1,690.6**/1,000,000) followed by **Cox's Bazar** (1,322.6), **Bandarban** (1,304.6), **Rangamati** (982.1), **Noakhali** (973.1), **Cumilla** (921.1), **Feni** (839.1), **Khagrachhari** (772.9), **Lakshmipur** (769.4), **Chandpur** (674.2) and the lowest AR **602.4** was reported from **Brahmanbaria** district.

The 3rd highest AR in the country was reported from **Khulna** division **766.9**/1,000,00 while the highest AR district is **Magura** (1,432) followed by **Jhenaidah** (1,409.6/1,000,000), **Meherpur** (882.7), **Khulna** (870), **Narail** (761.8), **Satkhira** (750), **Chuadanga** (710.9), **Jashore** (503.6), **Bagerhat** (484.2) and the lowest **346.3** in **Kushtia** district.

Sylhet division has taken the fourth highest in the overall AR with (**715.4**/1,000,000) with the highest AR in **Sylhet** district (**1,101.4**/100,0000) followed by **Sunamganj** (543.2), **Habiganj** (504.5) and **475.5** in **Maulvibazar** district. **Rajshahi** division has overall AR **659.9**/1,000,000 with the highest AR in **Bogura** district (**1,322.8**/1000000), followed by **Rajshahi** (1,184.3), **Joypurhat** (756.2), **Sirajganj** (436.6), **Naogaon** (325), **Chapainawabganj** (322.9), **Pabna** (293.6) and **Natore** district is 272.1/1,000,000.

In **Barishal** division the overall AR is **649.3**/1,000,000 with the highest AR in **Barishal** district (983.2/1,000,000), while, **Barguna** (677.4), **Jhalokathi** (644.3), **Patuakhali** (609.6), **Pirojpur** (594.1) and the lowest **269.0** in **Bhola** district.

Although **Rangpur** division reported an overall AR of **400.9**/1,000,00, **Dinajpur** district reported high AR (**606.2**/1000000), followed by **Rangpur** (556.6), **Panchagarh** (337.4), **Lalmonirhat** (327.9), **Nilphamari** (326.9), **Thakurgaon** (318.2), **Gaibandha** (263.1) and **242** in **Kurigram** district.

The lowest AR is reported from **Mymensingh** division (**379.9**/1,000,000). **Mymensingh** district having the highest AR of **486.3**/1,000,000 followed by **Jamalpur** (380.7), **Netrakona** (245.8) and the lowest **198.6** in **Sherpur** district.

The following figure is showing the COVID-19 attack rate per 1,000,000 population in selected divisions, 15 April – 10 August 2020, Bangladesh.
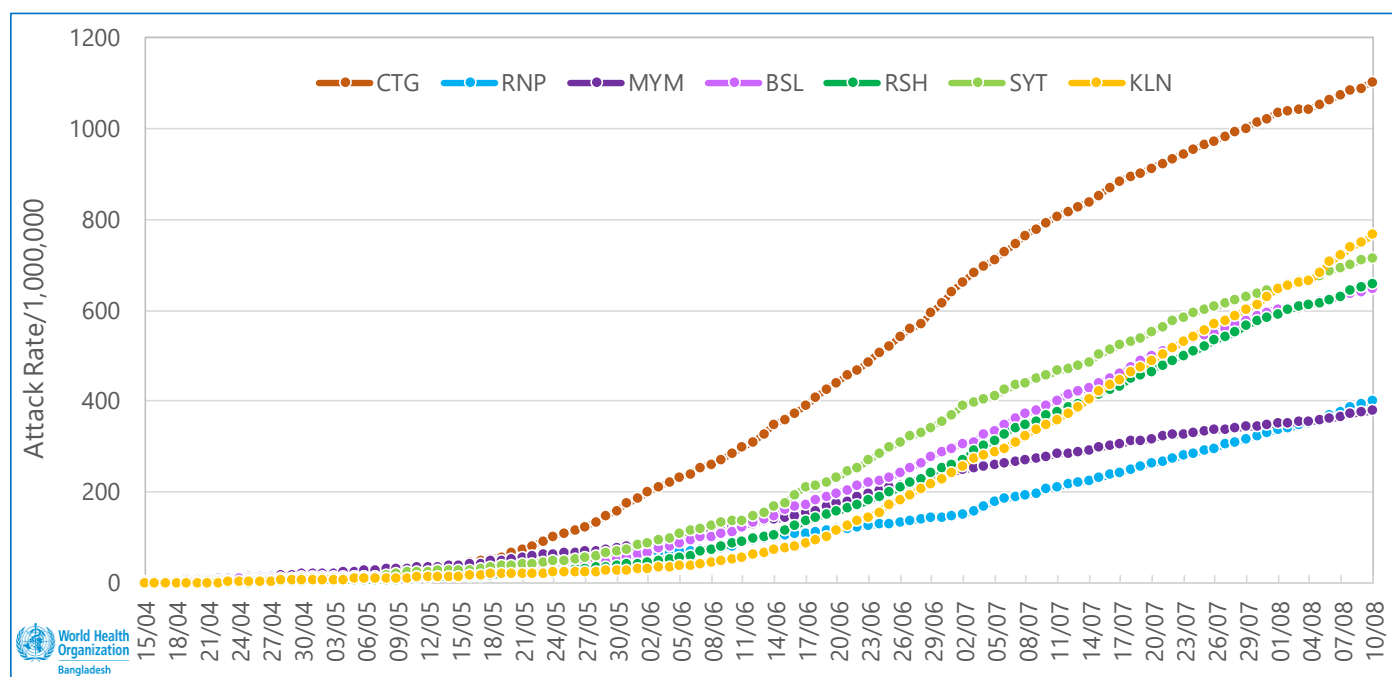
Growth factor (every day's new cases / new cases on the previous day) between **0** and **1** indicates a decline; when it is above 1 it signals an increase, and if is persistently above 1 this could signify exponential growth. Since the beginning of June 2020, the GF has been within the range of 0.8 – 1.2, and on 10 August 2020, it is **1.17**.

The figure below is showing the Growth Factor of daily confirmed COVID-19 cases, 09 March – 10 August 2020, Bangladesh.
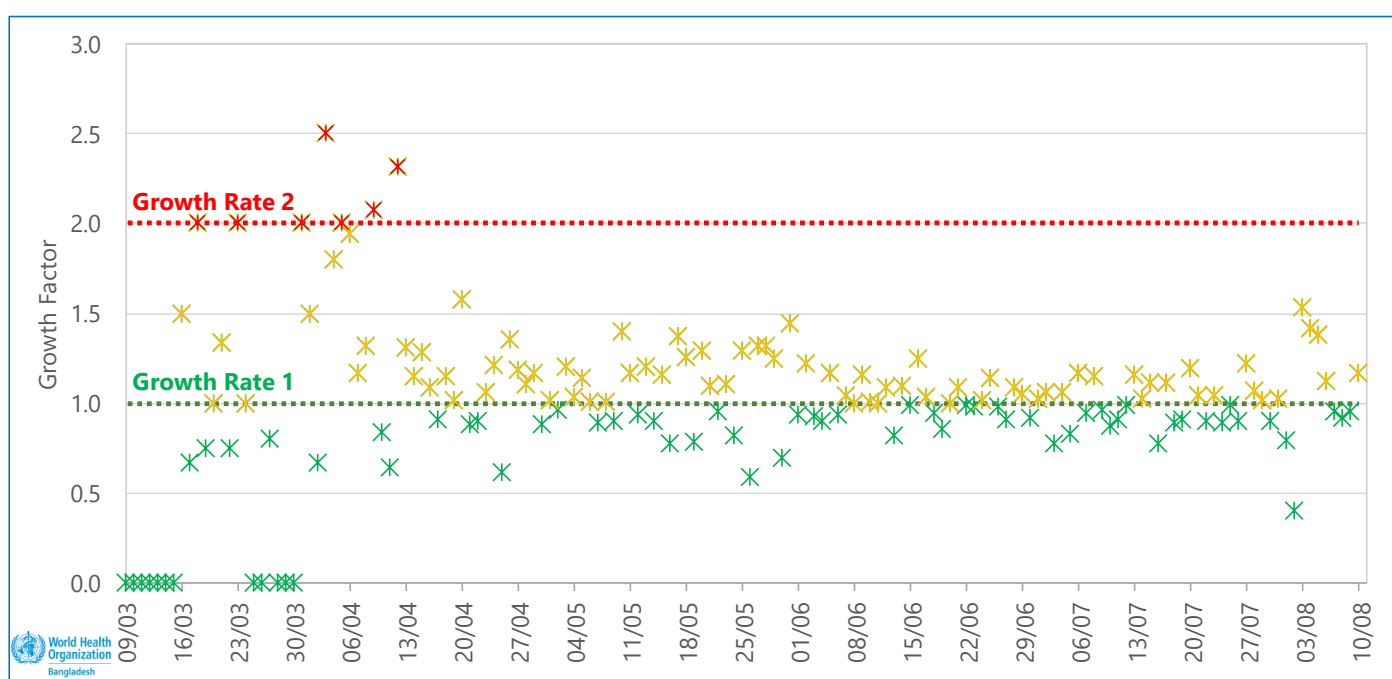
As of 10 August 2020, according to the IEDCR, **1,273,168** COVID-19 tests with the overall positivity rate of **20.46%** were conducted in Bangladesh by **85** laboratories: **49** laboratories **(57.6%)** in Dhaka city and **36** laboratories (**42.4%**) outside Dhaka. The latest laboratories, which have started the testing: **inside Dhaka** Bangladesh Specialized Hospital, Shyamoli,

Famous Specialized Hospital, Meradia and Novas Clinical Research Services Limited. **60%** (**764,310**/1,273,168) of all samples were tested by laboratories in the Dhaka city.

The graph below is showing the weekly and cumulative numbers of COVID-19 conducted tests and daily number of samples tested and number of daily confirmed COVID-19 cases, 08 March – 10 August 2020, Bangladesh.
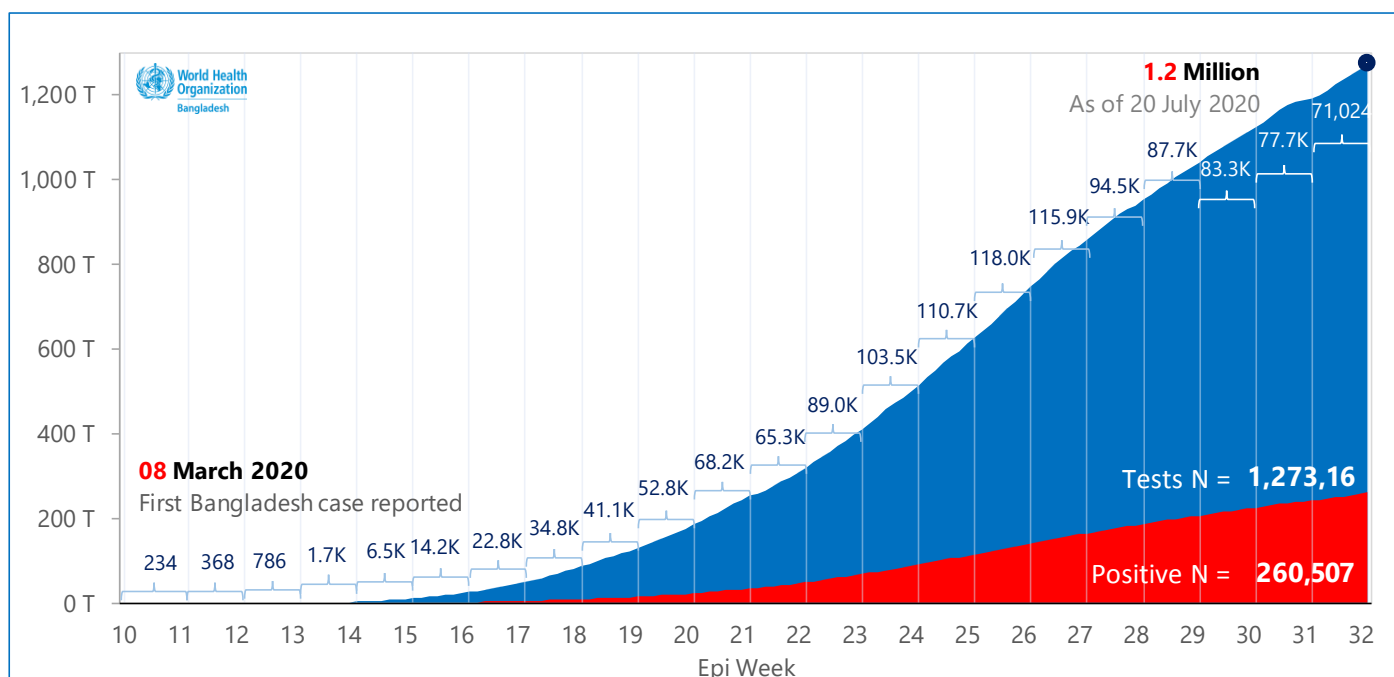

COVID-19 testing coverage notably decreased on 2 and 3 August 2020 (most likely due to **EID** vacation) but recovered on 7 August to the level of 32 July 2020. The number of confirmed cases per conducted tests decreased to **1** confirmed case for every **4.89** samples tested, which is **0.05** less the in epidemiological week 31.

***The graph below is showing the daily number of COVID-19 conducted tests and daily number of cases per sample tested, 03 May – 10 August 2020, Bangladesh.***
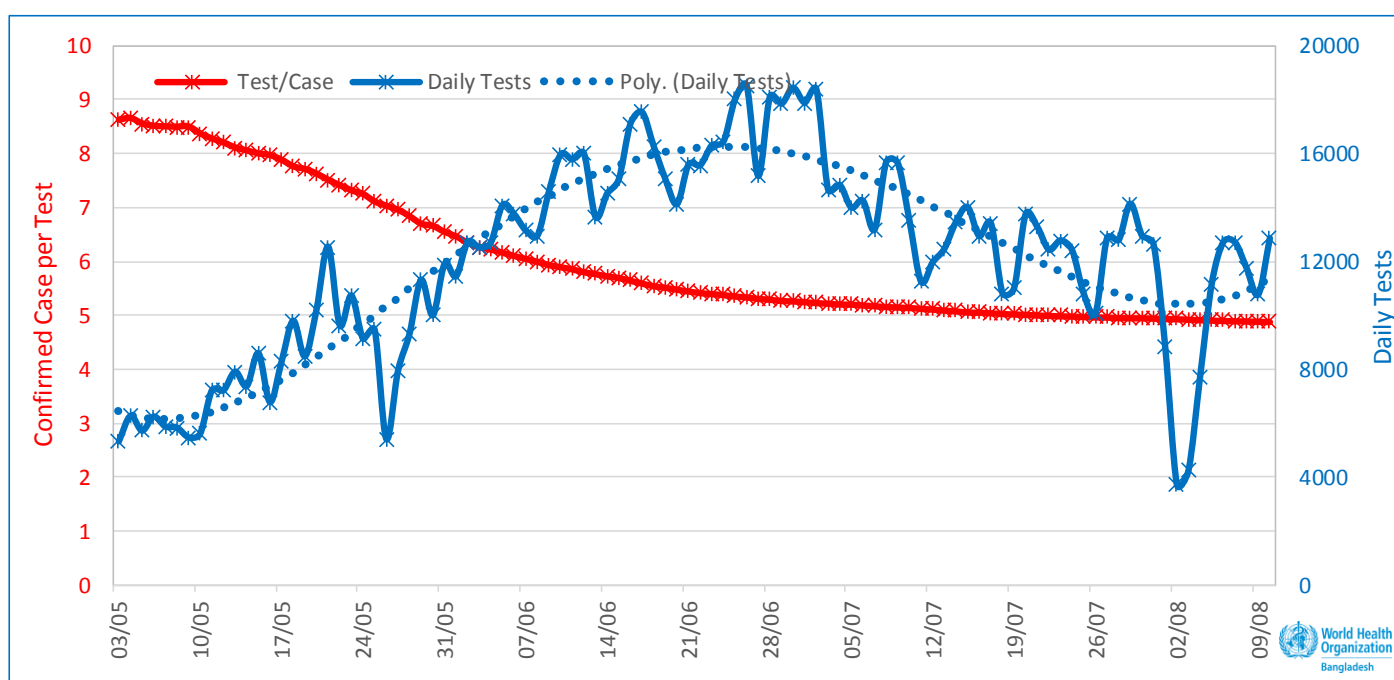
Despite the steady increase of the number of laboratories, a lower number of samples have been tested daily since 02 July 2020. However, COVID-19 testing coverage has been gradually increasing in Bangladesh, reaching **7,485**/1,000,000.

Bangladesh COVID-19 Tests per 1,000,000 now almost reached **Sri Lanka** (**7,783**/1,000,000) but is lower than **Thailand** (**10,731**/1,000,000), **India** (**17,795**/1,000,000), **Nepal** (**25,906**/1,000,000), **Malaysia** (**31,976**/1,000,000) and **Maldives** (**163,228**/1,000,000).

The graph below is showing the number of COVID-19 testing laboratories and daily number of COVID-19 tests, 03 May – 10 August 2020, Bangladesh.
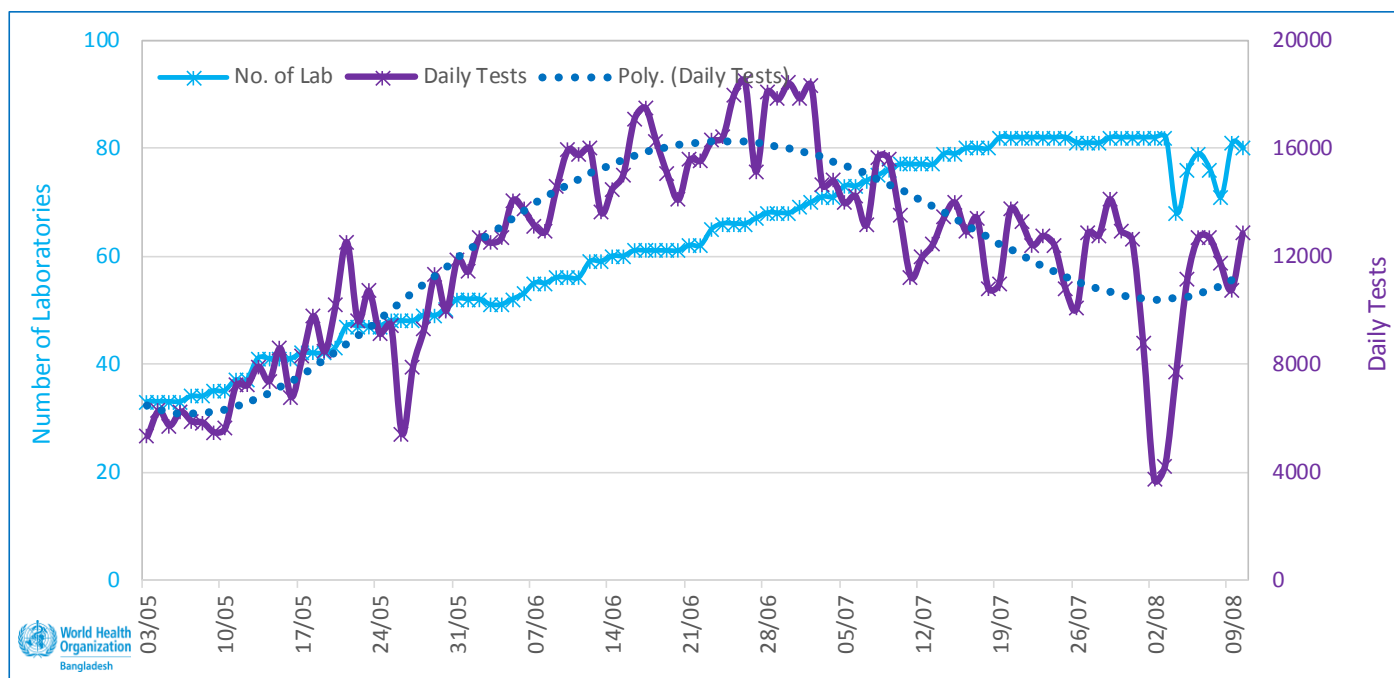
The correlation coefficient (**R**) is a statistical measure of the strength of the relationship between the relative movements of two variables. A correlation of 1.0 shows a perfect positive correlation. The analysis of data on the two variables in Bangladesh showed **R** between the two variables as **0.9** (**positive correlation**).

The graphs below are showing the daily number of COVID-19 conducted tests and daily number of confirmed cases, 08 March – 10 August 2020, Bangladesh.
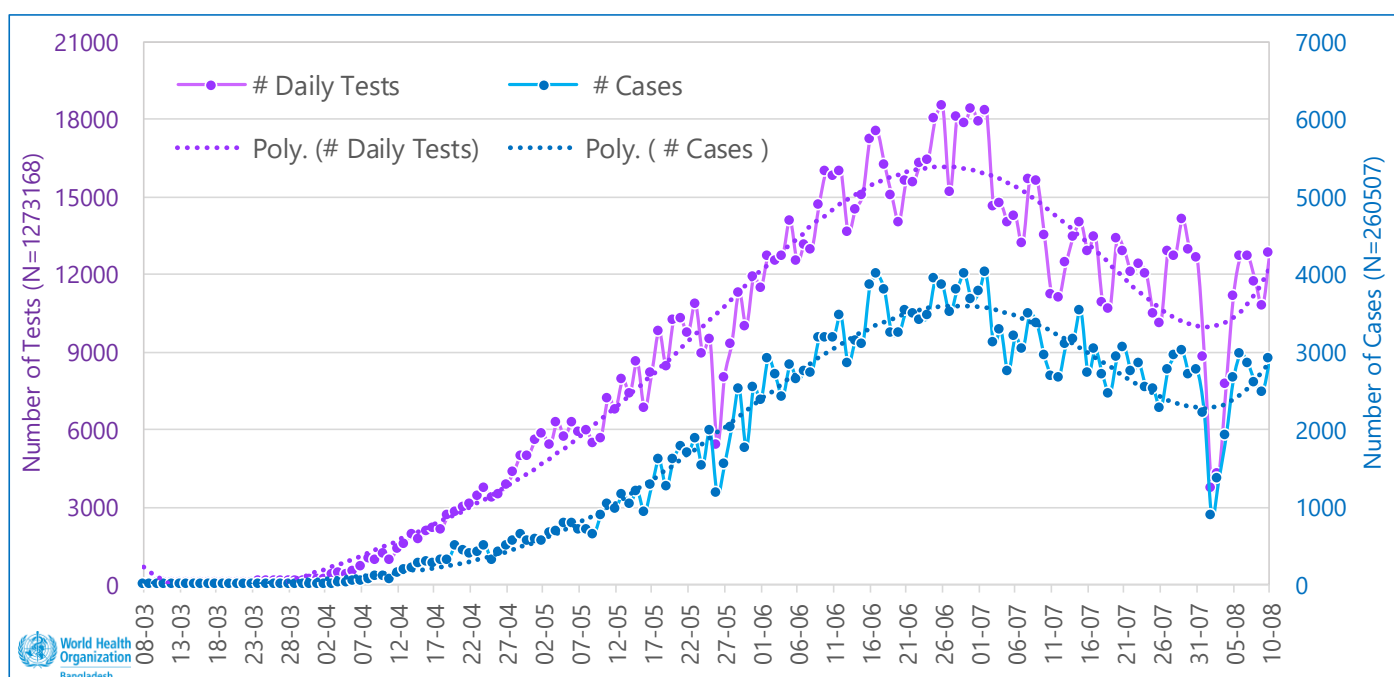
Available data allows us to see how quickly the number of confirmed cases increased in Bangladesh and some other countries in the WHO South-East Asia region: India, Indonesia, Thailand and Sri Lanka. As of 10 August 2020, the overall

case doubling time in Bangladesh has slowed to **13.5** days this week (**1.0** days more in comparison with the epidemiological week 31).

The figure below is showing the growth of COVID-19 confirmed cases in selected South East Asian countries starting from the day they reported 500th confirmed cases, 10 August 2020.
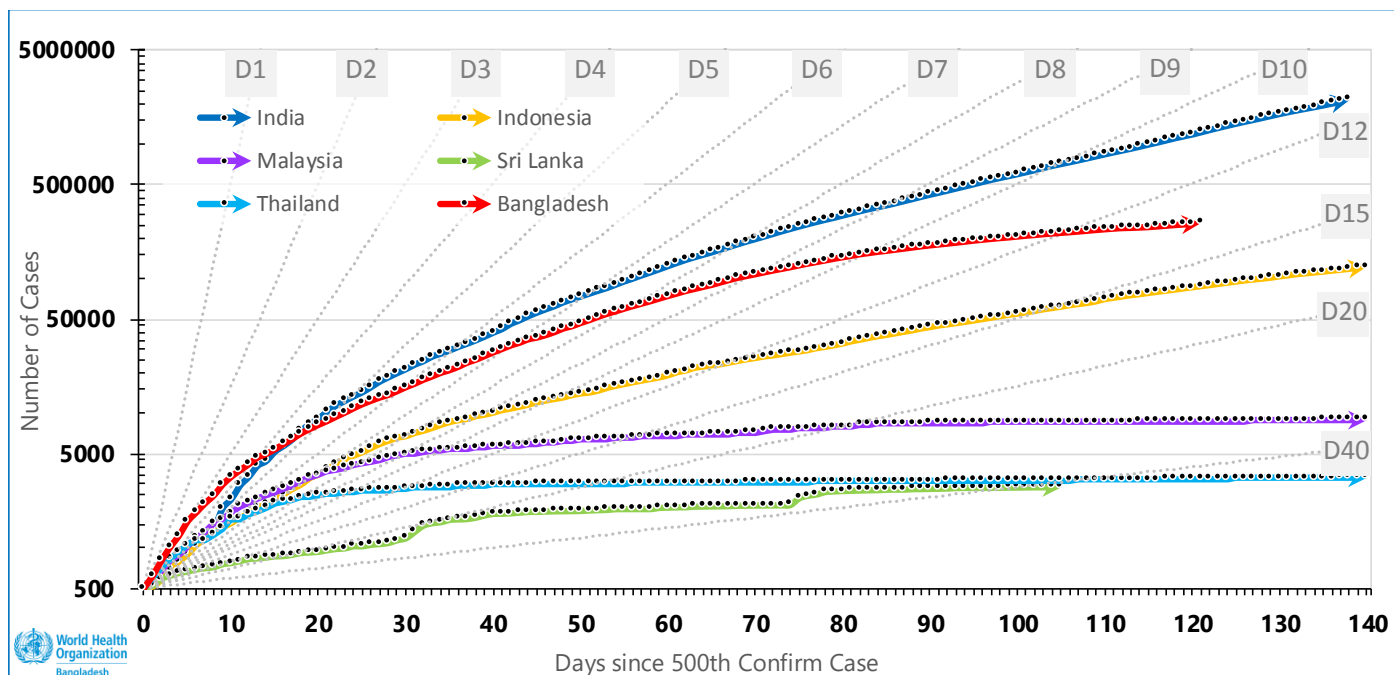
The death doubling time in Bangladesh as of 10 August 2020 is **19** days (**1.0** day more in comparison with the previous epidemiological week). It is **1.0** day more than in Indonesia. India had the shortest among other countries death doubling time of **12.8** days.

The figure below is showing the growth of COVID-19 confirmed deaths in selected South East Asian countries starting from the day they reported 50th confirmed cases, 10 August 2020.
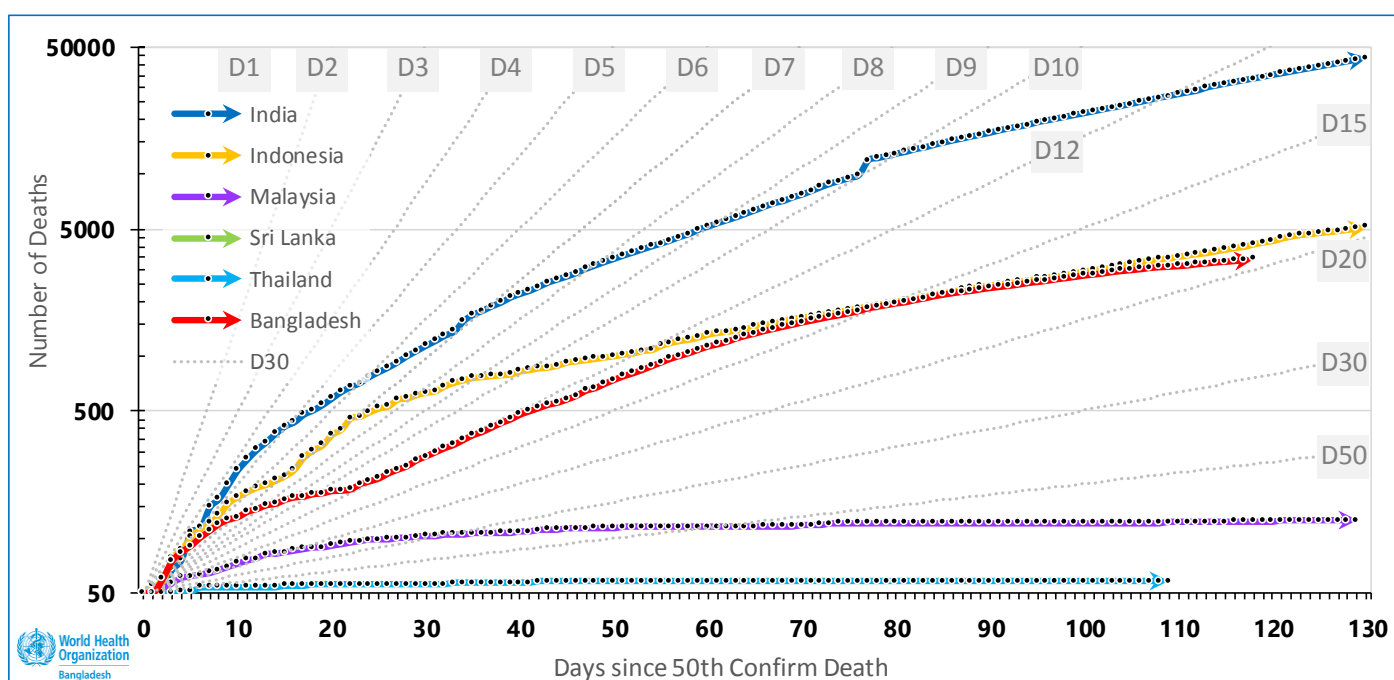
## 4. Contact Tracing, Points of Entry (PoEs) and Quarantine

According to DGHS, as of 10 August 2020, the current institutional quarantine capacity in the country is represented by **629** centres across the 64 districts, which can receive **31,991** persons. A total of **26,542** individuals were placed in quarantine facilities and of them **21,557** (81.3%) have been already released. Over the same period, total of **57,482** individuals were isolated in designated health facilitates and of them **38,501** (**67%**) have been released.

The figure below is showing the number of individuals in hospital isolation and released, 06 May – 10 August 2020, Bangladesh.
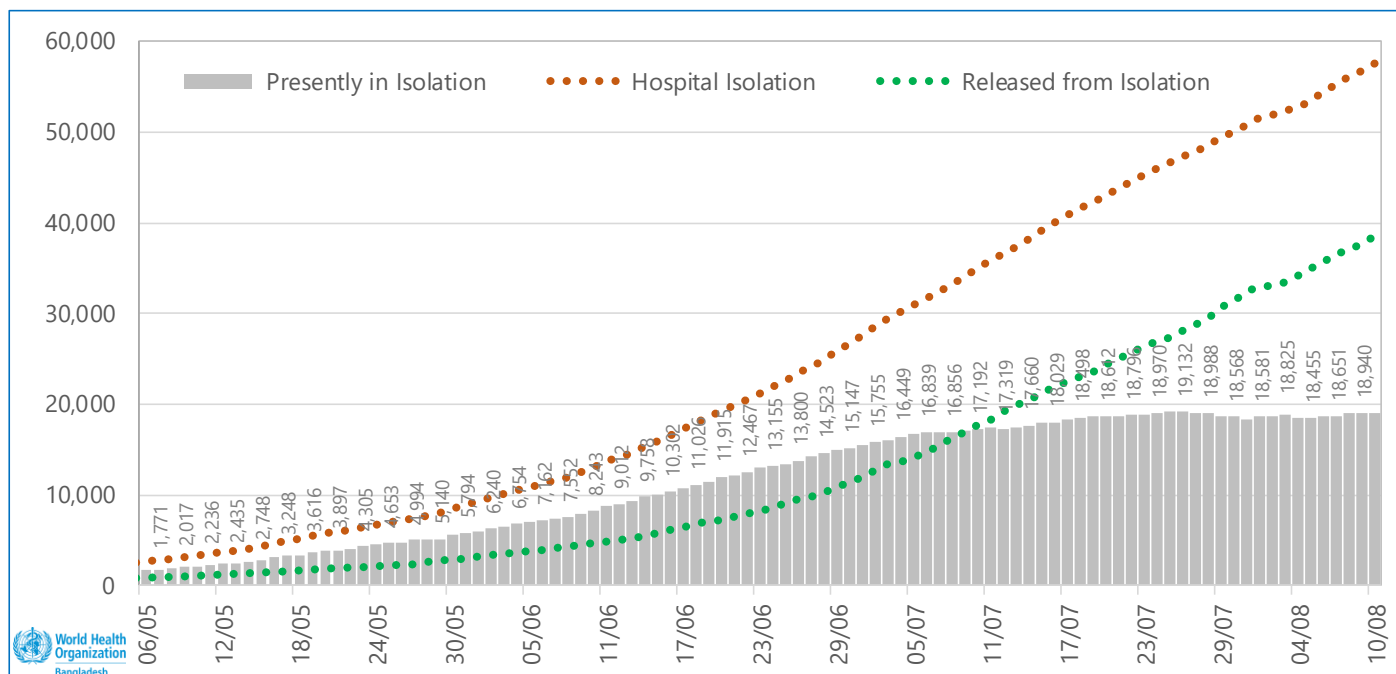
In the reported week (epidemiological week 32), the number of international flights has decreased by **30.8%**, in comparison to the previous week (**45** and **64** respectively) leading to decrease the number of passengers by **39.4%** (**8,233** and **13,593**).

The figure below is showing the weekly incoming international flights and number arrived of passengers through PoEs, 27 April – 10 August 2020, Bangladesh.
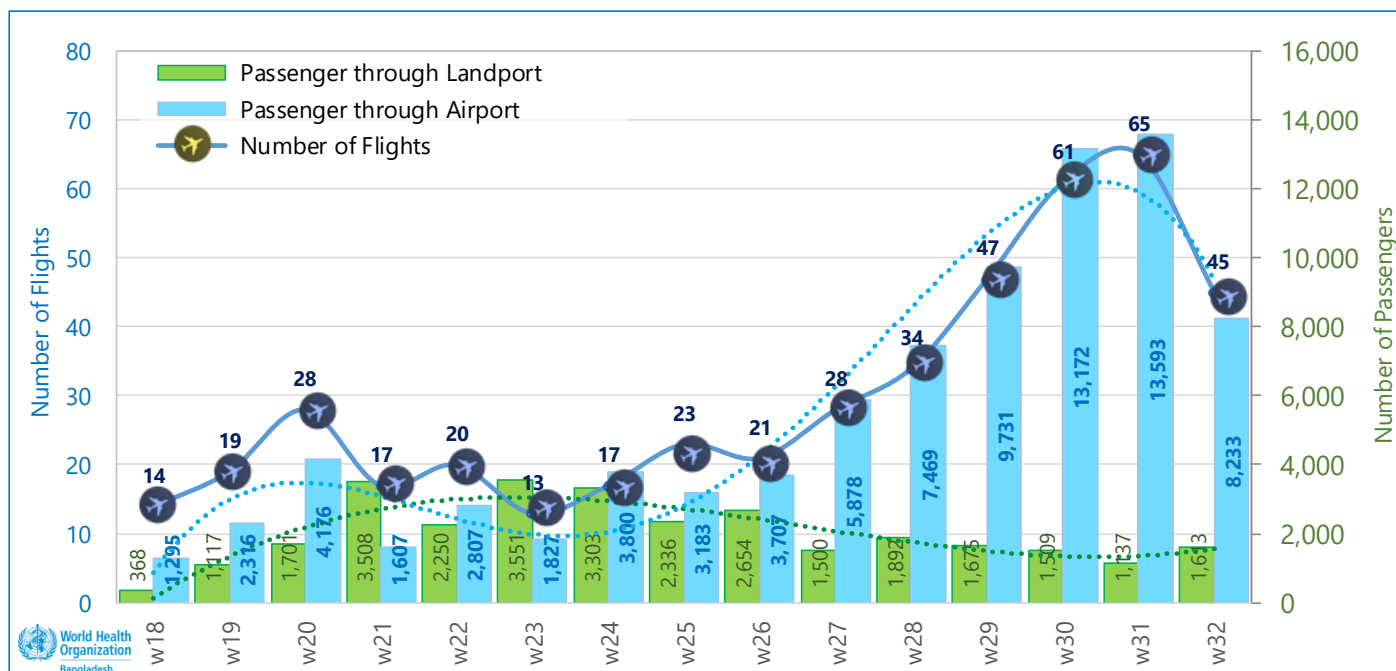
5.   Case Management and Infection Control

The Directorate General of Drug Administration (DGDA) has issued specifications and testing parameters regarding non-medical fabric masks for community use, following four consultative workshops with stakeholders including manufacturers, testing laboratories and development partners. In the revised guideline, DGDA specified that the non-medical fabric mask is not intended for use by health workers; the guidance is non-binding and not a regulatory requirement from the DGDA; concerned manufacturers may use the guidelines to seek confirmation that their product complies with the requirements in the guideline. This action comes as an important attempt to ensure market access to different types of fabric masks, while providing a basis for manufacturers and buyers to ensure optimal effectiveness of the available commercially produced masks for protection against COVID transmission in general public. The document is available on the DGDA website at *http://www.dgda.gov.bd/index.php/news/item/58*.

6.   Risk Communication and Public Awareness

Risk Communication and Community Engagement (RCCE) partners continue to roll out public information campaigns and community engagement activities for strengthening protection measures, especially mask wearing together with observation of hands hygiene and physical distance. Over 500 000 posters and leaflets have been produced by UNICEF and distributed countrywide through Civil Surgeons' offices and partner NGOs. Additional information materials have been also produced and disseminated through social media, radio and TV stations, including public service announcements. Moreover, WHO has launched the global challenge #WearAMask that has been translated and is being rolled out in Bangladesh through social media. Furthermore, Interpersonal Communication training tools have been developed and field staff and volunteers are trained for advancing on engaging with communities in dialogue, not only offering information but also gathering feedback.

RCCE partners also collaborate with Community Support Teams (CST), a field-level initiative partners aiming to slow COVID-19 spread in the community by ensuring quarantine/isolation of confirmed cases and persons with symptoms as well as to reduce burden on the healthcare system by supporting home-based treatment and management of mild to moderate cases through telemedicine and medication support of low-income households. CSTs activities are currently being implemented with preponderance in Dhaka North City Corporation, with the prospect of further expanding the services in other areas.

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/docs/default-source/coronaviruse/situation-reports/20200727-covid-19-sitrep-189.pdf?sfvrsn=b93a6913_2.*

Latest global WHO Situation Report # **102** as of 9 August 2020: *https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200809-covid-19-sitrep-202.pdf?sfvrsn=2c7459f6_2.*

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

WHO COVID-19 Online *Training: https://openwho.org/channels/covid-19*.

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://dghs.gov.bd/index.php/en/home/5343-covid-19-update.*

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