




















Tested	Confirmed	Recovered	Dead	Isolated
 87,641	 10,143	 1,209	 182	 1,636
Test/1 million	AR/1 million	Recovery Rate	CFR%	Isolation Beds
513	59.6	11.9%	1.79%	6,909
Laboratories	Gender	PPE Stock	PoEs Screening	
33 Labs Samples 37,210 Days	 68% 32%	 1,108,335	 326,788	
 15.3% IEDCR Positive %		 2,147,650	 16,222	
 11.0% Other laboratories Positive %		 609,753	 7,029	
 11.6% Over all Positive Test %		 232,302	 328,814	

1. Highlights

As of 4 May 2020, according to the Institute of Epidemiology, Disease Control and Research (IEDCR), there are **10,143** confirmed COVID-19 cases in Bangladesh, including **182** related deaths; Case Fatality Rate (CFR) is **1.79%**.

The World Health Organization has outlined six criteria that each country should meet before lifting restrictions. These are criteria that any country should use to keep transmission of COVID-19 low and at manageable levels. These steps can help countries gradually lift restrictions in phases, will allow some resumption of economic and social life, while minimizing the risk of disease:

1. Transmission of coronavirus is under control;
2. The health system is able to detect, test, isolate and treat every case and trace every contact;
3. The risk of outbreak hotspots is minimized in vulnerable settings like health facilities;
4. Workplaces, schools, and other essential places have preventive measures in place;
5. Measures are in place to manage the risk of importing new cases; and
6. Communities are fully educated, engaged and empowered to adjust to the new norms.

WHY ARE THEY IMPORTANT? The six criteria outline what should be in place before transitioning away from these measures currently in place, such as physical distancing and “shutdowns”. This “slow and strategic” response is necessary because the virus spreads rapidly and outbreaks can occur quickly. There are no new vaccines or medicines to prevent or treat COVID-19. Physical distancing measures and movement restrictions are effective in slowing the spread of the virus by limiting contact between people. If these measures are lifted too early or too quickly it is likely to lead to a sharp increase in COVID-19 cases.

WHAT THEY ARE NOT? These six steps do not guarantee that COVID-19 will not re-emerge or increase. Without vaccines or medicines, our societies must balance the need and hardship of physical distancing measures to control COVID-19 and the need to resume important activities in our lives. As these six criteria are applied, decisions about when and where to move away from restrictions should be based on real time assessments of disease activity. Measures should be lifted in a phased, step-by-step manner.

On 4 May 2020, the Ministry of Public Administration issued a notification further extending the general holidays till 14 May, followed by a weekend on 15-16 May. General public and concerned authorities are reminded to strictly follow the health advisories. Educational institutions will remain closed. The general holidays will not be effective for the following categories and industries: 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; and 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.

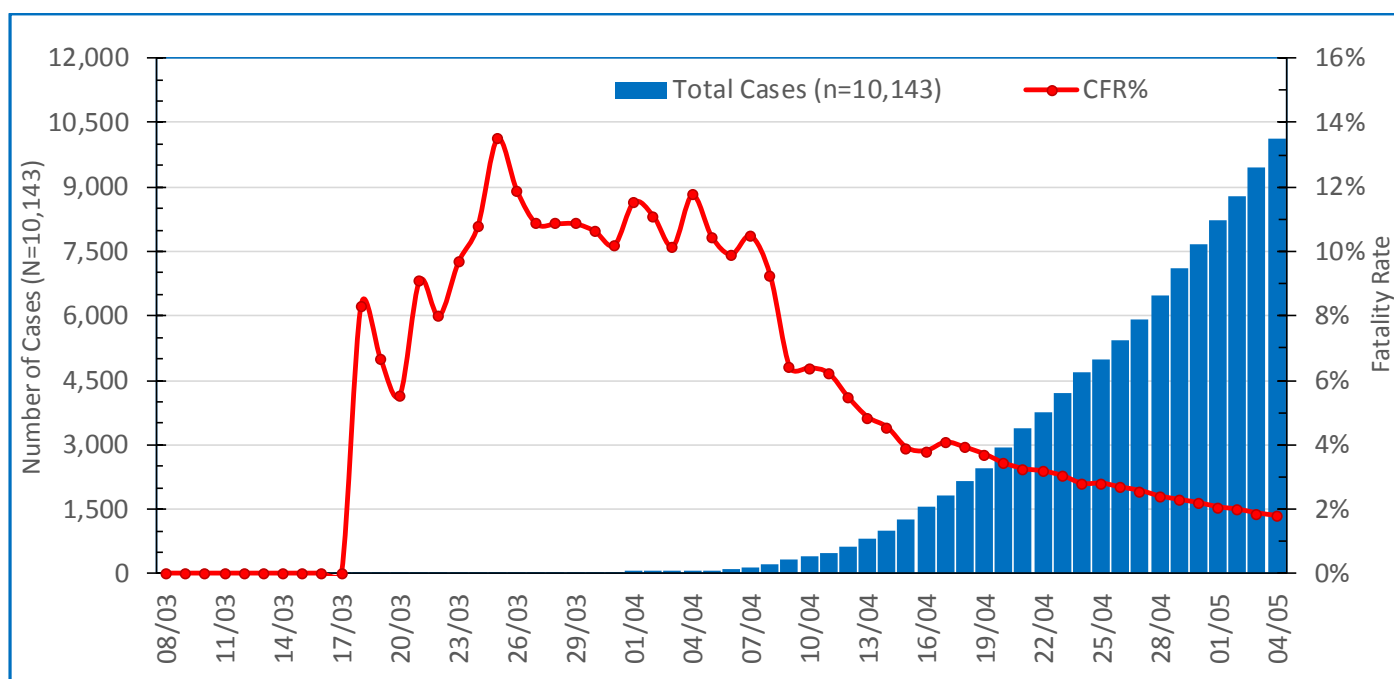
2. Coordination

Discussions are progressing with development partners and government on forecasting and quantification of the essential supplies needs for COVID-19 management. Two tools are available for use from WHO and USAID/MTAPS. The WHO tools offer a comprehensive system for forecasting based on epidemiological data and the application of different scenarios for progression of the disease. It captures information on the available health workers and health facilities, involved in the response to COVID-19. The MTAPS tool offers added value in linking the estimated quantities with existing stocks of items maintained through working closely with CMSD/DGHS. The Infection and Prevention Control (IPC) group is considering ways to capture the benefits of both tools for the most accurate and dynamic forecasting for supplies in Bangladesh.

3. Surveillance and Laboratory

Between 8 March and 04 May 2020, according to the Institute of Epidemiology, Disease Control and Research (IEDCR) there were ten-thousand-one-hundred-forty-three (**10,143**) COVID-19¹ confirmed by rt-PCR, including one-hundred-eighty-two (**182**) related death cases (**CFR 1.79%**). Sixty-eight (**68%**) of all confirmed cases were males.

The figure below is showing the daily distribution of reported confirmed COVID-19 cases, deaths and CFR, 08 March – 04 May 2020, Bangladesh.



The overall COVID-19 attack rate (the total number of new cases divided by the total population) in Bangladesh² has been showing a steady increase since 4 April 2020 to date. On 04 May, Bangladesh overall attack rate (**AR**) is **59.6** per 1 million.

The highest AR was observed in **Dhaka** division (**168.5/1,000,000**). Within Dhaka division, **Dhaka city** has the highest AR (**574.8/1,000,000**) followed by **Narayanganj** (**292.9/1,000,000**) and **Gazipur** (**151.7/1,000,000**).

The second highest COVID-19 Attack Rate was reported from **Mymensingh division** (**24.3/1,000,000**). Within Mymensingh division, **Mymensingh city** has the highest AR (**27.4/1,000,000**), followed by Jamalpur (**26.9/1,000,000**), Netrokona district (**19.3/1,000,000**) and Sherpur District (**16.1/1,000,000**).

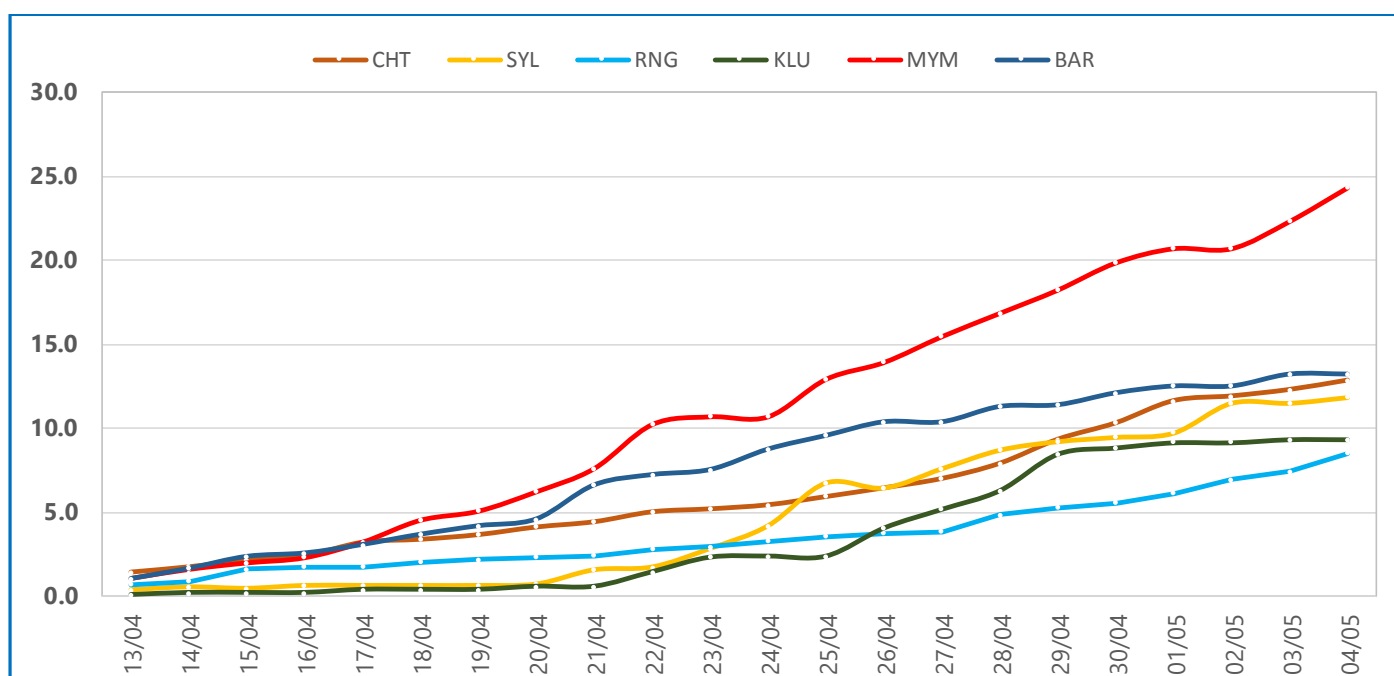
Although Attack Rate for **Khulna** division is low at **09.3/1,000,000**, the AR for **Jessor** district is as high as **80.3/1,000,000**.

To date, **95% (62/64)** of districts and cities with the total population of 159,571,977 people have confirmed COVID-19 cases, the only remaining districts are Rangamati and Khagrachhari in Chattogram division. The latest district reporting its first COVID-19 cases was Satkhira in Khulna division on 29 April 2020.

The following figure is showing the attack rate per 1,000,000 population of reported confirmed COVID-19 cases in selected divisions, 08 March - 04 May 2020, Bangladesh.

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.

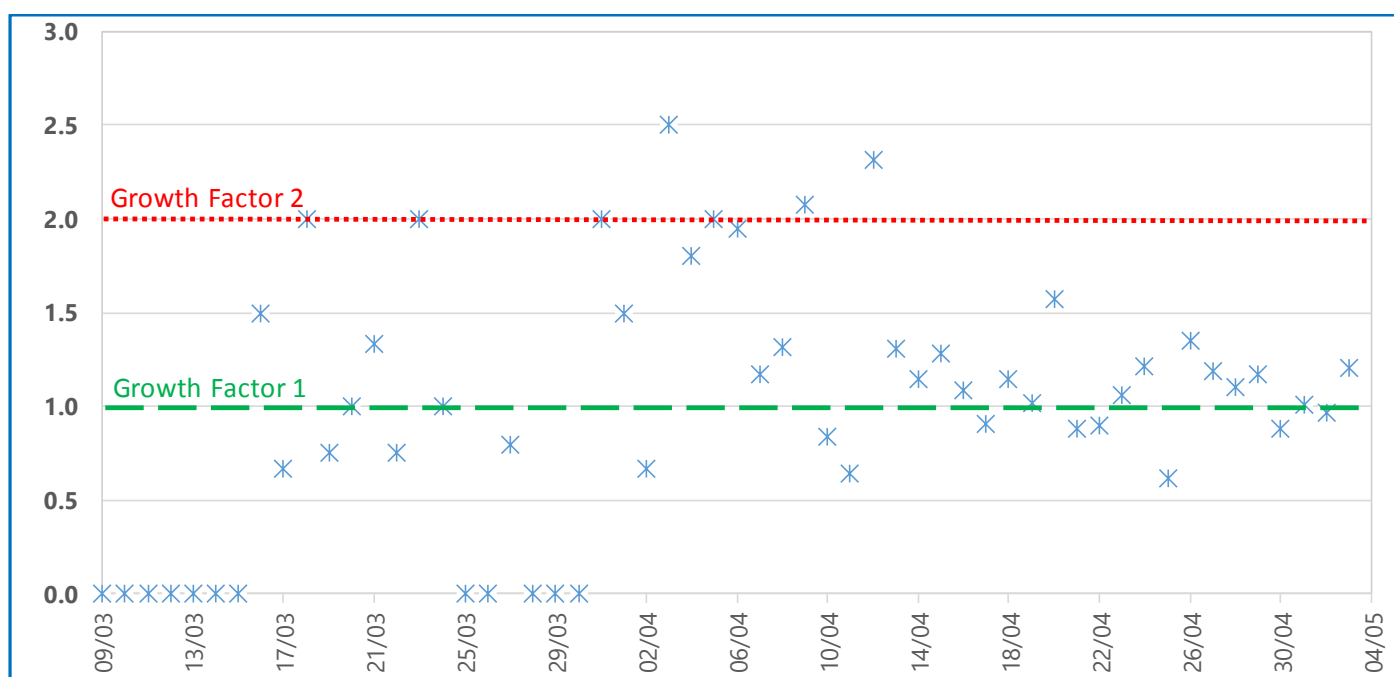
² Source: Population projection from 2011 Census, Bangladesh Bureau of Statistics



Growth factor (GF) between 0 and 1 indicates a decline, when it is above 1 it signals an increase, and if it is persistently above 1 this could signify exponential growth.

On April 3, GF for COVID-19 cases reached the highest of **2.5**, on 12 April it was **2.3**, on 20 April - 1.6, and since then to date the Growth Factor has been less than **1.5** and occasionally below **1**.

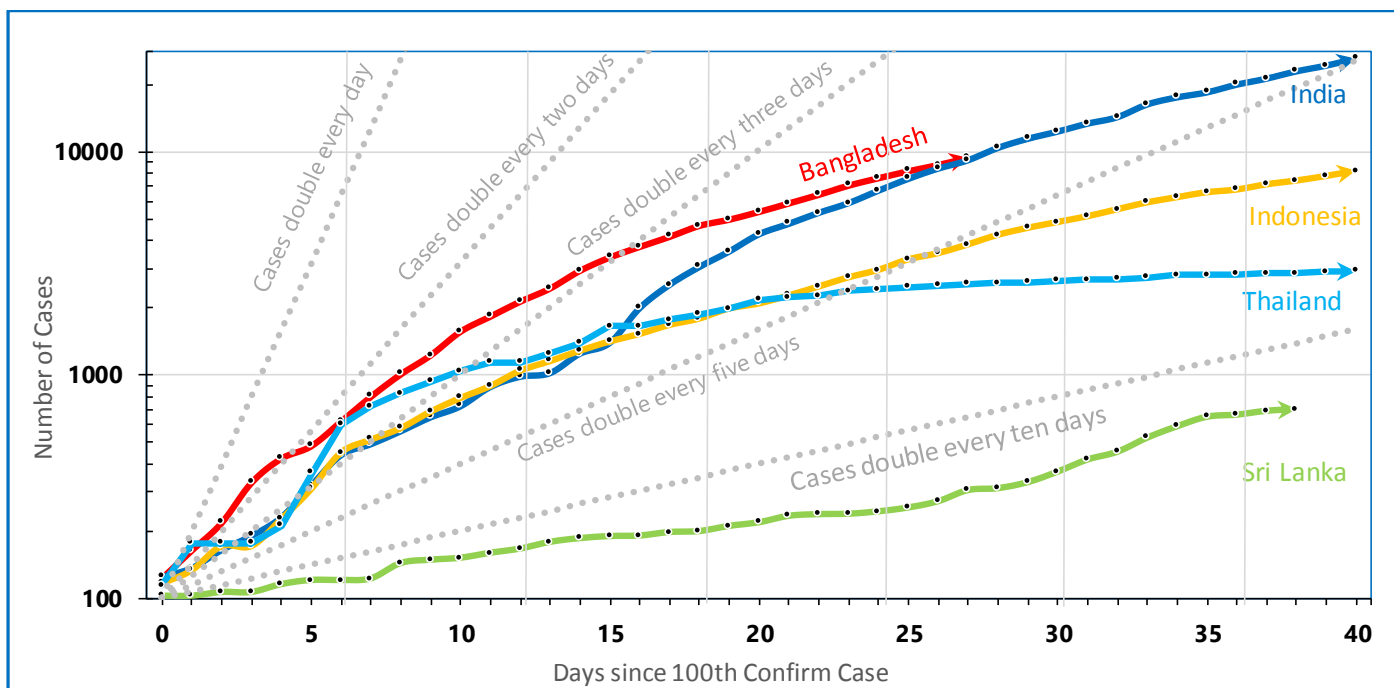
The figure below is showing the Growth Factor of reported confirmed COVID-19 cases, 08 March – 04 May 2020, Bangladesh



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 04 May 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 grey line, then the doubling time of confirmed cases in that country is faster than that

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.



Bangladesh reported its first confirmed COVID-19 death on 18 March 2020 (10 days after reporting the first COVID-19 confirmed case).

Between 08 March and 4 May 2020, according to the Institute of Epidemiology, Disease Control and Research (IEDCR) there were one-hundred-eighty-two (182) COVID-19 death cases registered in Bangladesh, **42%** (76) of those deaths were reported in people above 60 years old, **27%** (49) in the age group of 51-60 years old, **19%** (35) in the age group of 41-50 years, **7%** (13) in 31- 40 years old, **3%** (5) in the age group of 21-30 years and **2%** (4) of the total number of deaths were reported among children younger than 10 years. Seventy-three (**73%**: 133/182) of the 182 reported COVID-19 related-deaths were in males

Dhaka division reported **84%** (153/182) of total COVID-19 death cases, and out of them **64%** (98/153) were reported were reported form Dhaka city. Chattogram Division reported **5%** (10) of total death load, out of which **40%** (4) were reported from Cumilla district.

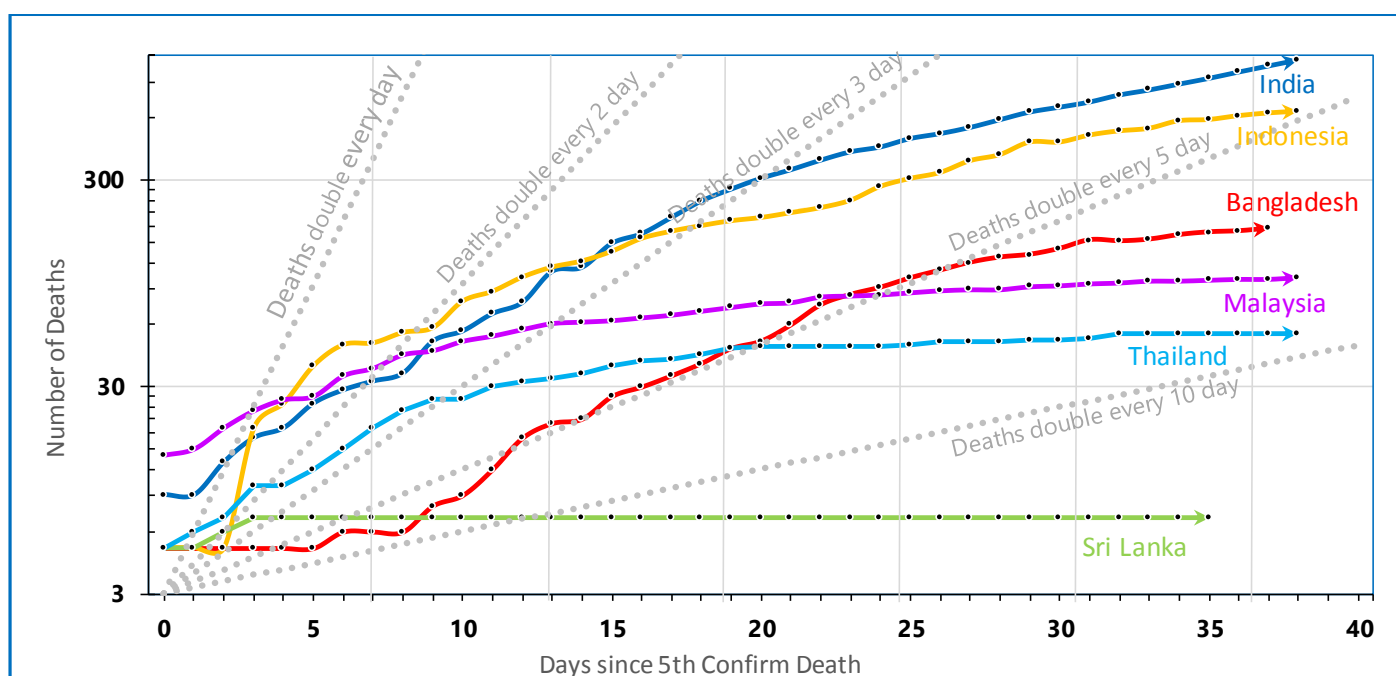
Due to death reporting protocols and possible delays, the reported death figure on a given date does not necessarily show the number of new deaths on that day.

COVID-19 Case Fatality Rate (the number of deaths divided by the number of confirmed cases) in Bangladesh, starting from 9 April till 04 May, the CFR showed a decline from **10%** down to **1.79%**.

Because the outbreak of COVID-19 did not begin at the same time in all countries, the graph below as a starting point in time takes the day when a country had 5 confirmed deaths.

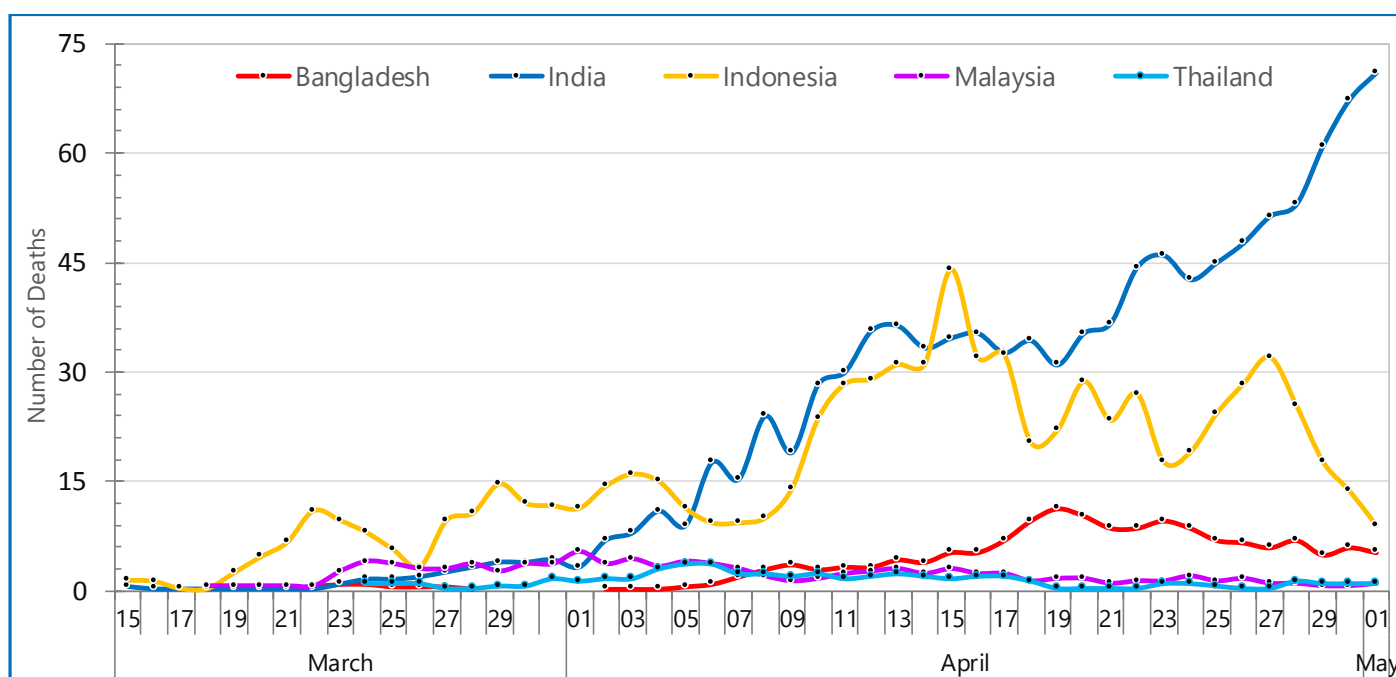
As of 04 April 2020, available data shows that in India and Indonesia, the death count doubled faster (every 3 days) comparing to five days in Malaysia, Thailand and Bangladesh and every 10 days in Sri Lanka

The figure below is showing the growth of COVID-19 confirmed deaths in selected South East Asian countries starting from the day they reported the 5th confirmed death.



Due to death reporting protocols and possible delays, the reported death figure on a given date does not necessarily represent the number of new deaths on that day. And since daily reporting can vary, it is also helpful to see the three-day rolling average of the daily figures. The trends in Bangladesh and especially in Malaysia and Thailand are showing steady pattern comparing to Indonesia where it has been rather unstable, and India, which is demonstrating an upward tendency

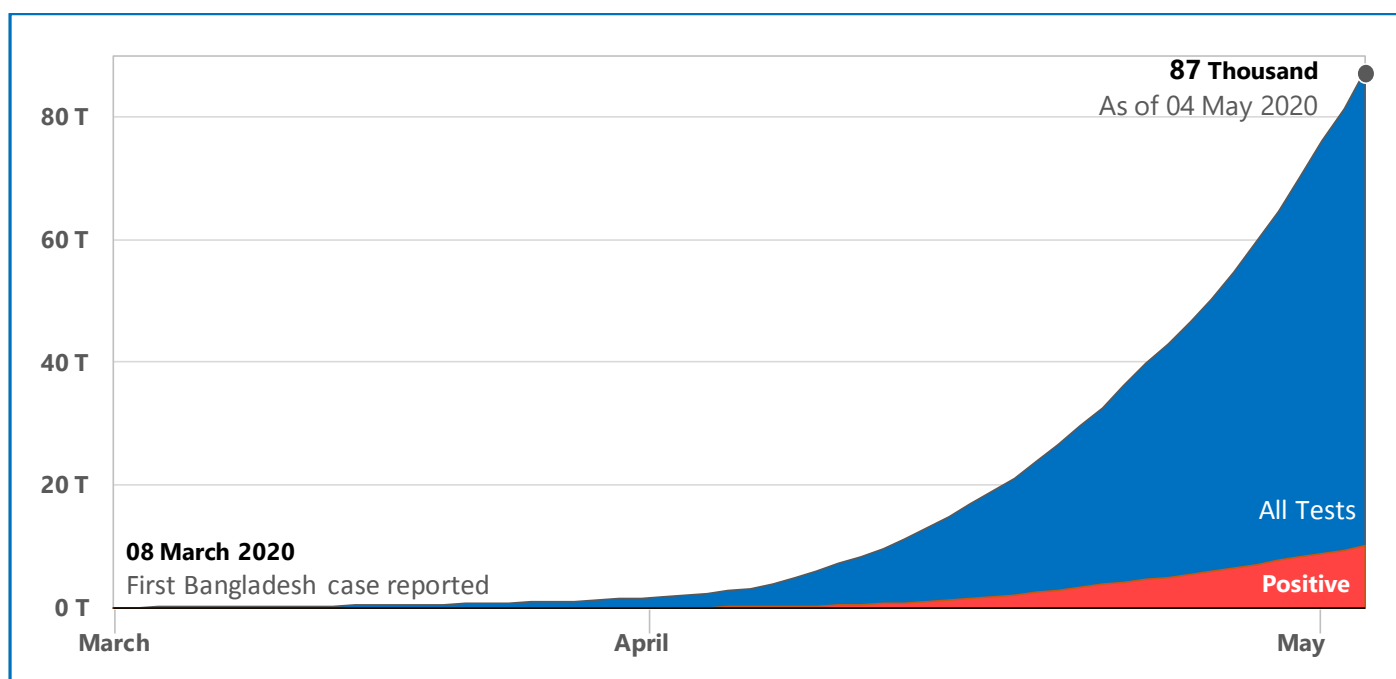
The figure below is showing daily confirmed COVID-19 deaths, rolling 3 days average in selected South East Asian countries, 4 May 2020.



As of 27 April 2020, according to IEDCR, a total of **87,694** COVID-19 tests were conducted in Bangladesh (by 33 laboratories, of them **68%** (59,711/87,694) in **17** laboratories in Dhaka and **32%** (27,983) in other **16** laboratories in the country.

Of the total 87,494 COVID-19 tests conducted between 08 March to 04 May, 10,143 were positive for COVID-19; overall positivity rate of the conducted tests now is **11.6%** (10,143/87,694). Within Dhaka laboratories IEDCR laboratory conducted **33%** (13,927/59,694) with positivity rate **15.3%** (highest positivity rate among all laboratories). **The graph**

below is showing the accumulative number of COVID-19 testing and the positivity rate, 08 March – 04 April 2020, Bangladesh



The table below is showing the geographical distribution of the COVID-19 laboratories, date of start testing, and total number of samples tested by each laboratory, 08 March – 04 April 2020, Bangladesh

COVID-19 Testing Laboratories in Dhaka				COVID-19 Testing Laboratories in Outside Dhaka			
Sl.	Lab	Date of Start	Total Tests	Sl.	Lab	Date of Start	Total Tests
1	IEDCR	28 Jan	13,927	18	BITID	25 Mar	3,515
2	iDeshi	21 Mar	2,938	19	MMC	01 Apr	4,612
3	AFIP	25 Mar	2,401	20	IEDCR CXB	02 Apr	1,605
4	IPH	25 Mar	8,866	21	RMCH	02 Apr	2,129
5	CHRF	29 Mar	5,193	22	RpMC	02 Apr	3,639
6	icddr,b	30 Mar	5,404	23	SOMC	07 Apr	2,710
7	NILRC	31 Mar	7,562	24	KMC	07 Apr	2,278
8	BSMMU	01 Apr	5,397	25	SBMC	09 Apr	1,588
9	DMC	02 Apr	3,317	26	JUST	17 Apr	783
10	MUMC	09 Apr	1,887	27	SZMC	20 Apr	1,566
11	KGH	26 Apr	211	28	FMC	20 Apr	1,121
12	BLRI	26 Apr	719	29	CVASU	25 Apr	705
13	Police Hosp	27 Apr	1,202	30	KuMC	25 Apr	533
14	Square	27 Apr	245	31	DJMC	26 Apr	784
15	Ever Care	29 Apr	245	32	Gazi Lab	28 Apr	172
16	NIPSOM	30 Apr	167	33	COMC	29 Apr	243
17	SSMC	30 Apr	30				
Total Laboratory (17)		Total Tests	59,711	Total Laboratory (16)		Total Tests	27,983

Abbreviation: AFIP: Armed Forces Institute of Pathology; BITID: Bangladesh Institute of Tropical and Infectious Disease; BLRI: Bangladesh Livestock Research Institute; BSMMU: Bangabandhu Sheikh Mujib Medical University; CHRF: Child Health Research Foundation & Dhaka Shishu Hospital; COMC: Cumilla Medical College; CVASU: Chattogram Veterinary and Anima Science University; DJMC: M Abdur Rahim Medical College, Dinajpur; DMC: Dhaka Medical College; Ever Care: Ever Care Hospital; FMC: Faridpur Medical College; Gazi Lab: Gazi COVID-19 PCR Lab, Narayanganj; icddr,b: International Centre for Diarrhoeal Disease Research; iDeshi: Institute for Developing Science and Health Initiatives; IEDCR CXB: IEDCR Field Laboratory at Cox's Bazar Medical College; IEDCR: Institute of Epidemiology, Disease Control and Research; IPH: Institute of Public Health (IPH), Mohakhali, Dhaka; JUST: Jashore Science and Technology University; KGH: Kurmitola General Hospital; KMC: Khulna Medical College; KuMC: Kustia Medical College; MMC: Mymensingh Medical College; MUMC: Mugda Medical College; NILRC: National Institute of Laboratory Medicine & Referral Centre; NIPSOM: National Institute of Preventive and Social Medicine; Police Hosp: Central Police Hospital, Dhaka; RMCH: Rajshahi Medical College; RpMC: Rangpur Medical College; SBMC: Sher E Bangla Medical College, Barishal; SOMC: Sylhet MAG Osmani Medical College; Square: Square Hospital Limited Dhaka; SSMC: Sir Salimullah Medical College; SZMC: Shaheed Ziaur Rahman Medical College, Bogura

The current testing coverage is still modest (**513/1,000,000**) comparing with other countries in the region. The COVID-19 test per 1000,000 showed steady increase since April 2020 to date due to expanding COVID-19 testing capacity all over the country.

It is important to note also that the number of reported tests does not equal the number of people tested

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

According to the DGHS, as of 4 May there are 6,909 COVID-19 isolation beds in Bangladesh, out of them **19%** are in Chattogram division, **17%** in Dhaka, 14% in Sylhet, 13% in Khulna, **12%** in Rajshahi and **10%** in Barishal, **8%** in Rangpur and **6%** in Mymensingh. Up to 4 May, total of **9,673** individuals were isolated in designated health facilities all over the country, and **4,089** have been released.

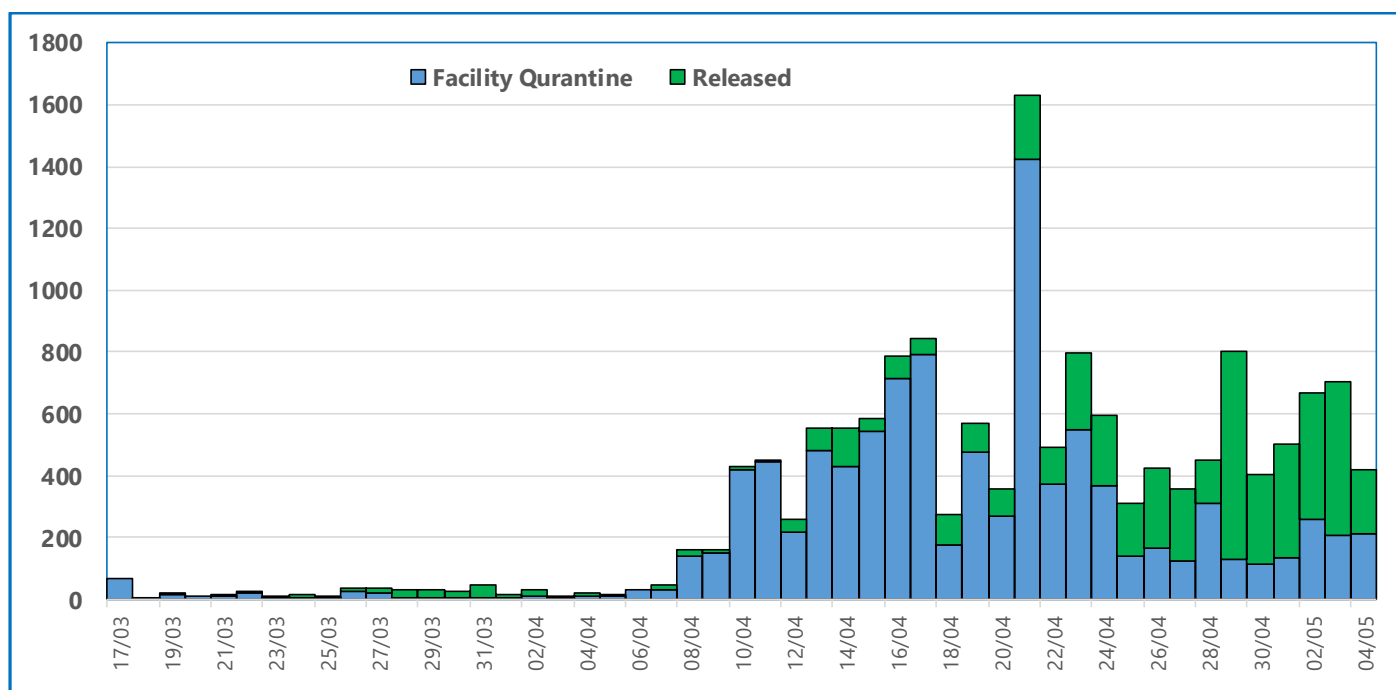
Between 17 March to 3 May 2020, total of **185,246** individuals were placed under home quarantine across the country and to-date 80% (**148,614**) have been already released from the quarantine.

The current institutional quarantine capacity in the country is represented by **615** centres across **64** districts, which can receive **30,955** people.

Quarantined **379** passengers from the Hazrat Shahjalal International Airport (the only designated airport receiving flights) are accommodated at the BRAC Learning Centre (**369**) and Ashkona Haji Camp (**10**).

766 travellers, who have crossed through the Benapole land port are in quarantine in two centres: Gazir Darga Madrasa (**583**) and Benapole Community Centre (**183**) in Jashore.

The figure below is showing the number of individuals in facility quarantine and individuals released, 17 March – 04 May 2020, Bangladesh



5. Case Management and infection Control

On 26 April, a preparatory meeting took place with members of technical working group on PPE quality control (TWG on PPE QC) and development partners, at WHO office. The discussions aimed at finalizing the proposed minimum requirements for PPE testing in Bangladesh, in line with the in-country laboratory capacity. The meeting preceded a scheduled workshop at Directorate General of Drug Administration to finalize the testing requirements. Outcomes of the meeting included the final draft of minimum testing requirements (prepared by BUET – supported by USAID) and a consensus on content of the visual inspection checklist (prepared by Japanese consulting firm – supported by JICA). United States Pharmacopeial Convention – Bangladesh office, USAID and JICA attended the meeting.

The meeting held at DGDA on 28 April was a milestone meeting, involving the TWG on PPQ QC and local laboratories accredited for testing textiles for the garments industries. The TWG expert from BUET presented the proposed minimum testing requirements and explained equivalent methods to measure the required parameters. In-depth discussions were held on the minimum testing requirements for measuring compliance with the WHO standards for PPE, mainly gowns, masks and respirators. Five major testing laboratories attended the meeting and presented a summary of their testing capacity for each of the required parameters. The minimum acceptable tests were agreed by DGDA and laboratories requested to submit their expressions of interest to DGDA. In the meeting, the Japanese consulting firm K2 presented a proposal for a visual inspection system for industries, procurement agencies and regulators to conduct a further quality control exercise on the finished product.

Next steps include the development of SOPs for minimum quality assurance measures for imported and locally produced PPE, in light of the WHO interim guidance, initiating testing at local laboratories, validating the minimum testing requirements by redundant testing samples of PPE at accredited laboratories overseas and finalization of the visual inspection checklist.

On 27 and 29 April, discussions were held with global and local manufacturers of PPE to explore partnership agreements for transfer of technology on manufacture of PPE. The meetings were facilitated by ILO's Better Works Bangladesh project and WFP. The discussions mainly focused on the WHO standards for PPE and possible ways to support local industries in achieving the required standards. Following the meeting, information on the WHO standards were circulated including a list of major global manufacturers engaged in PPE production, prepared in consultation with WHO Regional Office and HQ.

On 29 April and 3 May, preparatory meetings were facilitated by IFC to prepare for a planned Webinar on 4 May, targeting local manufacturers interested in production of PPE. The meeting included the CEOs and senior officials from two major global companies, Gerber Technologies and Ahlstrom-Munksjo, senior officials from ILO, WFP and IFC. The aim of the webinar was to provide guidance to local industries on producing PPE for local and international markets, in compliance with the WHO specifications.

On 30 April, DGDA issued an important circular specifying approved local laboratories available for testing PPE, according to the DGDA-approved minimum testing criteria, which were established with support of the WHO-led TWG on PPE QC. This is an important achievement as previously no testing was performed on PPE, and reliance on certifications was conducted with limited due diligence. The introduction of this testing system provides a basis for government and development partners to assure quality of PPE before making procurement decisions.

On 30 April, the weekly meeting of the logistics and procurement pillar was conducted, facilitated by WFP. Main items discussed were the updated forecasting of supplies requirements submitted by government, the supplies management system and dashboard now available on DGHS website for updated information on available stocks, the PPE testing system announced by DGDA, and access to supplies from the global stockpile, in light of the recently issued WHO/WFP guidance. The implications of the DGDA circular were discussed and working modalities clarified.

6. Risk Communication and Public Awareness

WHO has been working for producing communication materials for second and third phase of the Pandemic to guide individuals and communities in managing mental health of vulnerable population, caring for elderly people as well as for fighting rumors and misinformation.

With regard to the latter, WHO has been further updating materials on various rumors such as using improper substances or eating various aliments for protecting against infection or as a cure.

WHO has also produced information materials for caretakers to help them address mental health concerns of children or senior people during the COVID pandemic and the lockdown. Another set of information material is looking at supporting elderly people who are living alone or with caretakers, and also at enhancing protection of senior people that are having underlying medical conditions as they are the most vulnerable to severe complications if infected with the novel coronavirus.

Under the Risk Communication and Community Engagement pillar, WHO is also working with national authority's fact checking organizations, social media platforms and other partners to address fake news and rumors, providing technical accurate information in support of the organizations and platform that are identifying and address misinformation. This is especially important as different medicines are advertised online as having positive impact in preventing or curing COVID while there is no evidence to support these beneficial effects while misuse of the medicines can cause severe side effects.

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](https://www.who.int/bangladesh/emergencies/coronavirus-disease-(covid-19)-update/coronavirus-disease-(covid-2019)-bangladesh-situation-reports)

The latest global WHO Situation Report # 104 as of 3 May 2020:

https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200503-covid-19-sitrep-104.pdf?sfvrsn=53328f46_4

WHO Bangladesh awareness and risk communication materials in Bengali:

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

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>

Strengthening Preparedness for COVID-19 in Cities and Urban Settings: <https://www.who.int/publications-detail/strengthening-preparedness-for-covid-19-in-cities-and-urban-settings>