# Bangladesh

| First Confirmed Case | Population | Confirmed Cases (as of September 29, 2020) | Recovered Cases (as of September 29, 2020) |
|---|---|---|---|
| March 30, 2020 | 164.7 Million | 362,043 | 273,698 |

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## Adapting localized solutions to address local problems

Bangladesh, a lower-middle income country in South Asia, has a population of 164.7 million. The capital, Dhaka, has 22 million people and is ranked as the fourth-most densely populated city globally. The COVID-19 pandemic is concentrated in urban areas with the majority of cases in Dhaka. The first case was reported on March 30, 2020, and the COVID-19 cases peaked in June 2020 although the curve of new COVID-19 infections refuses to flatten as quickly after peaking, with more than 2,000 new cases daily on average in August 2020. The Ministry of Health and Family Welfare (MoHFW) is leading a multi-sectoral response to COVID-19, which is overseen by the Prime Minister, through a taskforce led by the Minister of Health and Family Welfare with representation of Public Administration, Public Security, Finance Division, Local government, and other sectors.

COVID-19 has brought new challenges and exposed the vulnerabilities of health systems in all geographies. International guidance changes frequently as new evidence is unearthed. As in all countries, Bangladesh has had to develop strategies to address the pandemic by adapting international guidance into their unique country context.

With the reality of their population density, informal economy, and inter-generational families, general lock down measures, isolation and quarantine, were unlikely to work. Rather, the national coordination unit based in the Ministry of Health and Family Welfare has had to innovate to create localized solutions. This short brief aims to spotlight best practices and lessons from Bangladesh's experience.

## Evidence-based design of a contextualized triaged response

Generalized lock down, isolation and quarantine are difficult measures to enforce in low and low-middle income, densely populated countries with large informal economies. Instead, the national coordination unit based in the Ministry of Health and Family Welfare used data to identify clusters for transmission and define criteria to zone parts of the city and target different levels of restrictions and safety precautions depending on new cases, recoveries and deaths. Areas with very high numbers of cases per population are designated as red zones and lockdown measures are instituted, including closing businesses and limiting movement of citizens to 1-2 km from their house. Red zones were declared in urban areas if 60 or more people per 100,000 people were infected in the last 14 days, while in rural areas the threshold was lower at 10 or more infections per 100,000 people. Areas with intermediate case numbers are designated as yellow zones with fewer restrictions on movement, while areas with very low case numbers, or none, are designated as green zones and have no limitations in movement and businesses are open. Urban areas were designated as yellow zones if there were 3 to 59 infections per 100,000 people in the last 14 days. These localized solutions have supported targeted measures, allowing the pandemic response unit to focus resources on areas where the burden is high while reducing restrictions to the general public and allowing for a semblance of normalcy for areas that are less affected.

## Setting up a working triage and referral strategy starting at the primary health care level

In urban areas, primary health care (PHC) is provided through the city corporations and municipalities owned by the local governments. In rural areas, PHC is provided through an extensive network of MoH facilities with community clinics at the lowest level linked to the union centers, which are linked to upazila-level (sub-district) hospitals. While there are referral linkages in rural areas, citizens in urban areas often bypass urban PHC clinics and prefer to go to hospitals. As such, Bangladesh did not have a properly working referral strategy when COVID-19 cases began. This made it difficult to triage and manage

suspected cases appropriately and to maintain other essential services.

To mitigate this, the MoHFW developed the COVID -19 case management plan which outlines health care services at different levels of the health system, referral points, drug and treatment protocols, and testing protocols. The MoHFW was quick to ramp up testing with 45 facilities approved for testing, increase access to Personal Protective Equipment (PPE) to protect health workers, and increase capacity of oxygen generating plants to ensure a steady supply. PHC facilities that did not have access to oxygen were supplied with oxygen cylinders. At almost all facilities, particularly at upazila health complexes, fever clinics were set up to triage and filter COVID and non-COVID cases with suspicious cases sent to isolation wards or COVID-19 designated hospitals.

At the community level, the MoHFW worked with local authorities to collect samples at home. In rural areas, upazila health complexes — through a network of volunteers — collected travel history information and traced contacts of suspected and confirmed cases. There was a special hotline dedicated for citizens to call if they had suspicious symptoms or were in need of an ambulance. Furthermore, COVID-19 prevention and control committees were established in district and upazila levels — comprising the head of the local public hospital, local authority, and police and education officers.

### Private facilities were contracted to provide free COVID-19 services

The private sector has been invaluable in the COVID-19 response with private individuals and enterprises donating to the response and mobilizing domestic resources to supply inputs for testing centers. In terms of service delivery, private facilities have been mobilized to provide treatment services that are reimbursed by the government. The private facilities received inputs such as PPE, test kits, drugs, and equipment to facilitate service delivery.

As there was no contractual agreement to facilitate private sector contracting, a simple agreement was made between COVID-19 designated private facilities and the MoHFW using fee-for-service as the payment modality. The private facilities bill the Director General of Health Services under MoHFW, with itemized claims for patients managed at their facility. This arrangement requires significant trust from both parties as there are no pre-negotiated rates and treatment protocols for high end care are not set; guidelines also change rapidly. However, the arrangement is working for now but will require evaluation in the future.

### Addressing stigma

Fear in accessing services and the stigma related to respiratory symptoms due to COVID-19 has resulted in a drop in facility attendance and suspicious cases hiding in the community. The MoHFW has maintained essential services, by designating COVID and non-COVID facilities in urban areas or COVID-specific units in rural hospitals, where there are shortages of facilities; and has sustained health services in outpatient departments. In addition, Bangladesh has used above-the-line media, such as television, print, mobile phone voice alerts and messages, and a dedicated hotline, to address citizens' concerns. The hotline service has a dedicated tracing application, which is linked to an ambulance service for critically ill cases. In addition, below-the-line channels leverage established community health infrastructure for door-to-door community sensitization, community testing at household levels and contact tracing by community volunteers.

### In conclusion

Each country will have to forge the best path based on its unique context to overcome the pandemic. Despite the challenges of initial shortages of PPE and human resources, Bangladesh has recognized that no one size fits all and has identified local solutions to overcome the pandemic.