Institute of Epidemiology, Disease Control and Research (IEDCR)

Experience in COVID-19 vaccination

Professor Dr. Tahmina Shirin Director





National COVID-19 surveillance

- National COVID-19 database maintained by MIS with support from IEDCR
- Case investigation and contact tracing by IEDCR
- Strengthen contact tracing by Outbreak Investigation Officers, FETPB fellows and other staff
- Investigation of clusters and active case search
- Regular policy advice including guidance to local health managers and administration
- IEDCR works as Reference Laboratory for COVID-19 in Bangladesh

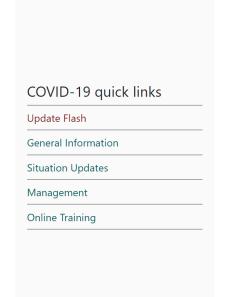




www.iedcr.gov.bd



Bangladesh Coronavirus (COVID-19) Update All info here →





Timeline: Bangladesh's COVID-19 response

Explore the interactive timeline showcasing Statistics, Daily Trends, Scenarios, Demographic Distributions of Bangladesh's COVID-19 situation.



Old Website Link

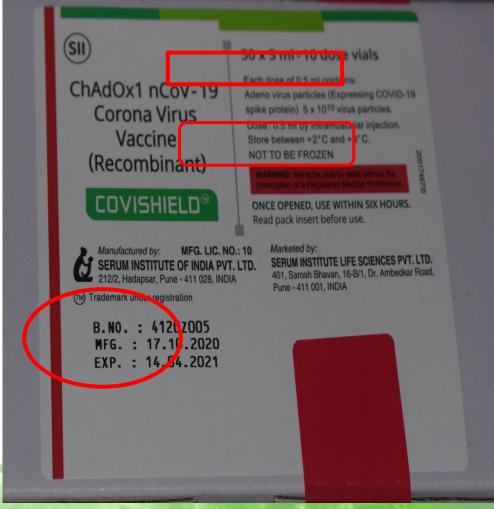
Covid-19 Vaccination: Bangladesh timeline

- December 2020 The Core committee developed National Deployment and Vaccination Plan (NDVP) with support from IEDCR specially for identification of priority group utilizing the surveillance data
- 7 January 2021 DGDA gave EUAL to COVISHIELD (Oxford AstraZeneca) vaccine
- 27 January 2021 Vaccination program launched in Bangladesh
- 7 February 2021 Countrywide mass vaccination started
- 8 April Administration of 2nd dose vaccine started



COVISHIELD Vaccine (SII) Vial & Box







Institute of Epidemiology, Disease Control & Research & National Influenza Centre (NIC), Bangladesh রোগতত্ত্ব, রোগ নিয়ন্ত্রন ও গবেষণা ইনস্টিটিউট (আইইডিসিআর) ও ন্যাশনাল ইনফুয়েঞ্জা সেন্টার (এনআইসি), বাংলাদেশ

Government of the People's Republic of Bangladesh

COVID-19 Vaccination Status in Bangladesh up to 11 April 2021

Vaccine Target (40+ & Frontline Worker)	Total Registration	% Registered against Target	1 st Dose administered (Male%, Female%)	% of 1 st Dose against registration	2 nd Dose administered (Male%, Female%)	% of 2 nd Dose against registration	Total AEFI Cases
39,500,000	7,039,673	17.8%	5,627,107 (M: 62%, F: 38%)	79.9%	383,717 (M: 70.7%, F: 29.3%)	5.5%	948

□ <u>Data Source</u>: COVID-19 Vaccination Dashboard & Press Release, MIS, DGHS



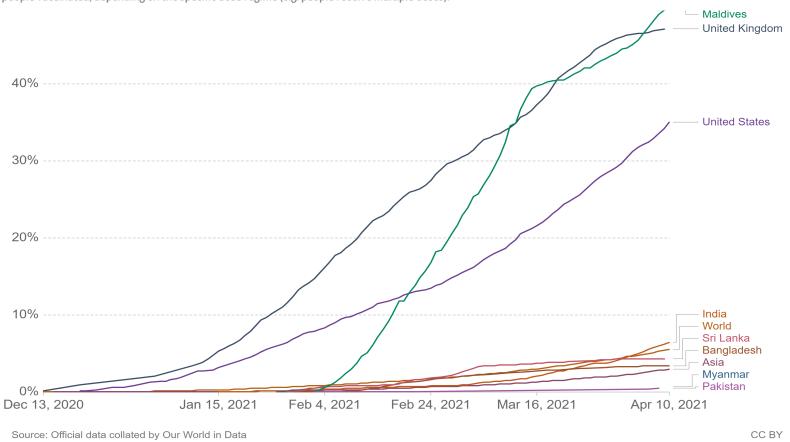


COVID-19 VACCINE ADMINISTRATION WORLD vs BANGLADESH

COVID-19 vaccine doses administered per 100 people







April 10, 2021

UK **47.15**

USA **35.03**

India **6.44**

World **5.53**

Bangladesh 3.40

Asia **2.97**









AEFI & AESI surveillance

- Active AEFI & AESI surveillance IEDCR
- Passive surveillance Directorate General of Drug Administration (DGDA)





Active surveillance of AEFI

 Placement & Conduction of Active surveillance for all AEFIs of Covid-19 vaccination in a defined population at randomly selected vaccination sites of Bangladesh

 To properly identify all AEFIs & supplement the ongoing nationwide passive surveillance system

 IEDCR coordinate and report active surveillance of AEFI to DGDA & EPI



IEDCR COVID-19 Hotline (10655) for COVID-19 FAQs, testing support and AEFI surveillance

- Support for COVID-19 testing, disease FAQs and vaccine FAQs
- A Source of AEFI passive surveillance
- Received by trained & skilled physicians
- Received special training on AEFI of Covid-19 vaccine
- AEFI reporting monitored daily by IEDCR



Surveillance on development of SARS-CoV-2 specific antibodies in the Bangladeshi population following COVID-19 vaccination

Conducted by IEDCR in collaboration with icddr,b

- To estimate the covid-19 vaccine response and development of SARS-CoV-2 specific antibodies by ELISA
- To detect the level of neutralizing antibody in COVID-19 vaccine recipients
- In a selected population, determine the cellular responses (T cell, B cell, cytokine responses)



Genomic Surveillance for COVID-19

- Whole-genome sequencing
- Phylogenetic analysis
- By a consortium between several Government and non-government institutions with lead from IEDCR



Challenges

- Global supply shortfall of COVID-19 vaccine
- Concern over effectiveness of vaccines against evolving variants
- Circulation of B.1.351 (South Africa) variant in Bangladesh and effectiveness/efficacy of Oxford AstraZeneca against circulating variants
- Recent upsurge of cases in Bangladesh



People's Republic of Bangladesh

Implementation Challenges

- Resource limitation
- Coordination among different organizations and sectors for vaccination and surveillance
- Vaccine hesitancy: fear of AEFIs and rumours



Next steps

- Government is exploring for different vaccine sources and vaccine types
- Initiated 2nd dose of vaccine, continuing 1st dose for the target population
- Vaccine effectiveness and efficacy studies are expected to give further insight
- Strengthening of genomic surveillance platform will give additional understanding for circulating strains





