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
The website is under construction

Institute of Epidemiology, Disease Control and Research

Emergency

Bangladesh Coronavirus (COVID-19) Update

All info here →

COVID-19 quick links
- Update Flash
- General Information
- Situation Updates
- Management
- Online Training

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

ChAdOx1 nCoV-19
Corona Virus
Vaccine
(Recombinant)

Manufactured by:
SERUM INSTITUTE OF INDIA PVT. LTD.
1, Kaushal Dham, Pune - 411 008, INDIA

Marketed by:
SERUM INSTITUTE LIFE SCIENCES PVT. LTD.
401, Savitri Bhawan, 16-B, Dr. Ambedkar Road, Pune - 411 001, INDIA

B. NO.: 412/0205
MFG.: 17.11.2020
EXP.: 14.04.2021

Not to be used after the prescribed period of storage.
## COVID-19 Vaccination Status in Bangladesh up to 11 April 2021

<table>
<thead>
<tr>
<th>Vaccine Target (40+ &amp; Frontline Worker)</th>
<th>Total Registration</th>
<th>% Registered against Target</th>
<th>1&lt;sup&gt;st&lt;/sup&gt; Dose administered (Male%, Female%)</th>
<th>% of 1&lt;sup&gt;st&lt;/sup&gt; Dose against registration</th>
<th>2&lt;sup&gt;nd&lt;/sup&gt; Dose administered (Male%, Female%)</th>
<th>% of 2&lt;sup&gt;nd&lt;/sup&gt; Dose against registration</th>
<th>Total AEFI Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>39,500,000</td>
<td>7,039,673</td>
<td>17.8%</td>
<td>5,627,107 (M: 62%, F: 38%)</td>
<td>79.9%</td>
<td>383,717 (M: 70.7%, F: 29.3%)</td>
<td>5.5%</td>
<td>948</td>
</tr>
</tbody>
</table>

- Data Source: COVID-19 Vaccination Dashboard & Press Release, MIS, DGHS
COVID-19 VACCINE ADMINISTRATION WORLD vs BANGLADESH

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
Implementation Challenges

• Resource limitation
• Coordination among different organizations and sectors for vaccination and surveillance
• Vaccine hesitancy: fear of AEFIIs and rumours
Next steps

• Government is exploring for different vaccine sources and vaccine types

• Initiated 2\textsuperscript{nd} dose of vaccine, continuing 1\textsuperscript{st} 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