

COVID -19 Outlook in India

6 May 2021



Current lookout of the COVID-19 situation in India

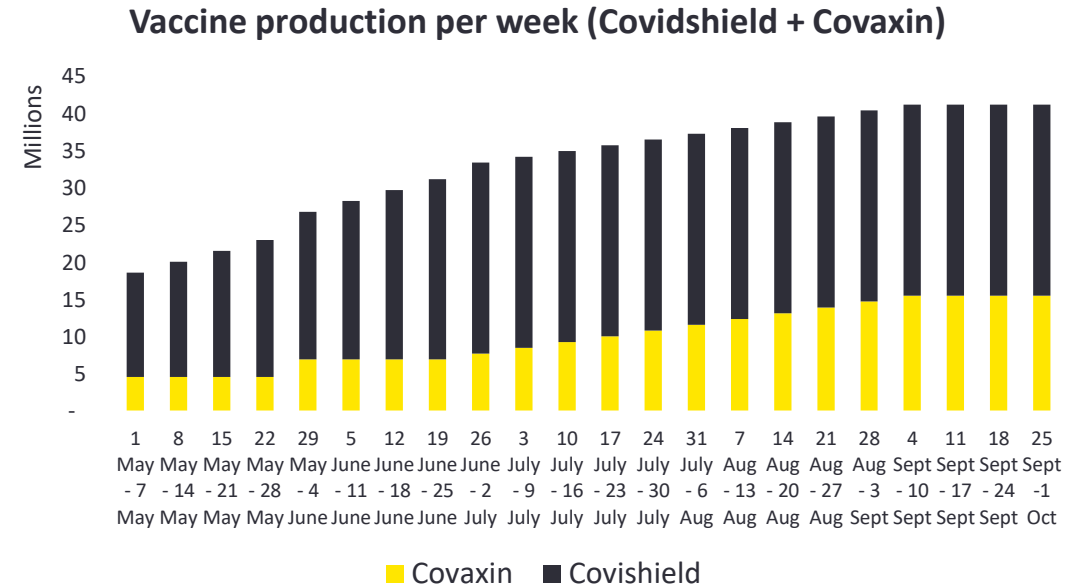
- ▶ What explains the current surge?
 - ▶ Human behaviour (planning vacations, no masks) – cannot fully explain as these have been true for months
 - ▶ Possibly consequence of new variants and natural reduction in antibodies from previous waves
- ▶ Projections by NITI Aayog (in the recent meeting of the PM with the CMs) and other epidemiologists -- by mid-May, India could experience 500,000 cases daily. At these levels of cases, epidemiologists are estimating the risk of 25,000 hospitalizations and 3,000 deaths every day.
- ▶ Mathematical models predicting the spread of COVID have gone wrong in the past. Looking at trajectory in Maharashtra, current wave could last for 2-3 months at a national level (**However, the wave will vary by State**).
- ▶ Only solution to break the cycle of COVID outbreaks is to immunise large parts of population.

Evidence across world shows that vaccines work

- ▶ **United States:** Vaccination (at least one dose to 41%) markedly reduced adverse outcomes, with non-ICU hospitalizations, ICU hospitalizations, and deaths decreasing by 63.5%, 65.6%, and 69.3% respectively (*Moghadas et al, Clinical Infectious Diseases*)
- ▶ **United Kingdom:** Single dose (50% of population) of Astrazeneca/Pfizer vaccine reduces symptomatic infections by 74% and a drop in infections with no reported symptoms by 57%. (University of *Oxford*)
- ▶ **Israel:** Countries like Israel with high level of immunisation have now opened their country
 - ▶ With 85% of individuals older than 60 years already vaccinated with two doses (24 February 2021), there was an approximately 77% drop in cases, a 45% drop in positive test percentage, a 68% drop in hospitalizations and a 67% drop in severe hospitalizations compared to peak values (*Nature*)

India: Current vaccine status

- ▶ Total 142.4 Million doses administered which include 119.8 Million first dose shots and 22.6 Million second dose shots
- ▶ **More than 1/3rd population that is 60+ age has been given at least one dose**
- ▶ **Overall 930 Million population above 18+, which means approximately ~1,860 Million doses required (Just over 1 Billion doses administered globally till date)**
- ▶ Production is being ramped up for both current vaccine, Covidshield (from 70 million to 110 million per month) and Covaxin (from 20 million to 60-70 million per month)

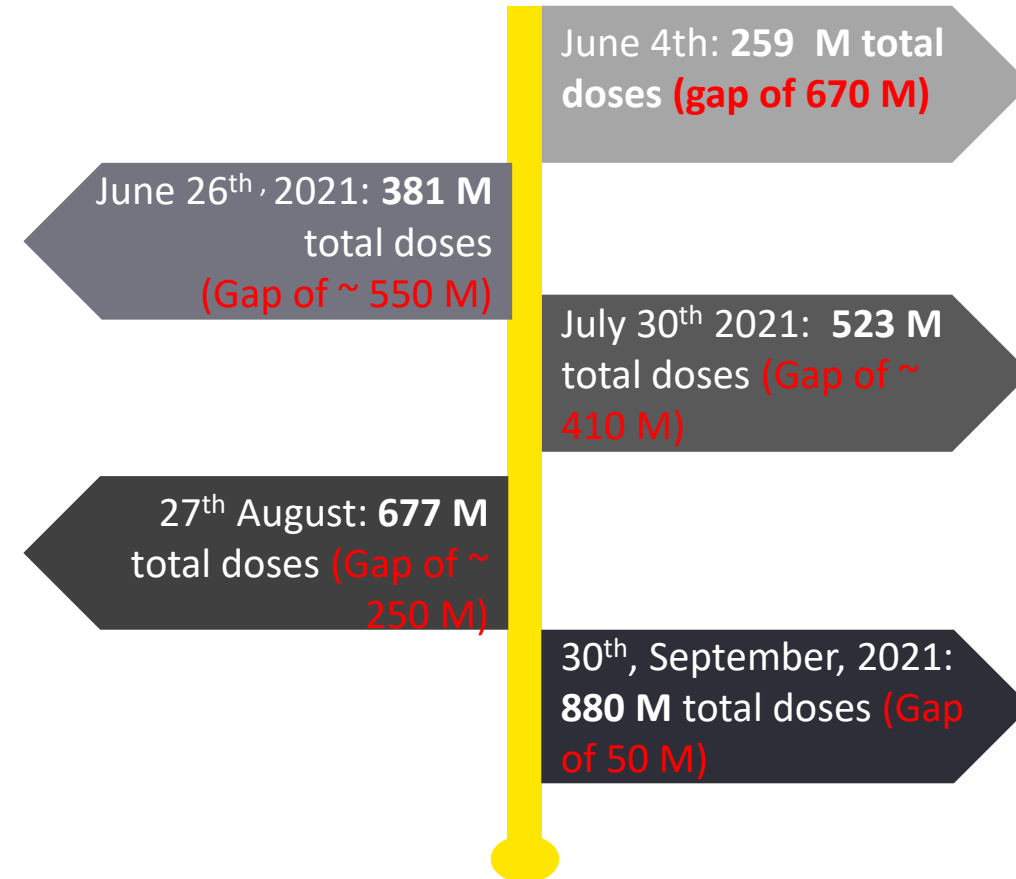


Age	People Vaccinated (as on 26 th April 2021) in millions*	Population (2021 estimate) in millions	Share
18-25	2.0	176.1	1%
25-40	9.3	328.6	3%
40-60	57.4	296.1	19%
Above 60	51.1	137.9	37%
Total	119.8	938.7	12%

Vaccine projections for India based on supply

- ▶ During the month October 2021, 50% of dose requirement to be met. This would be close to current vaccination levels in US which has seen significant drop in cases
- ▶ By June/ July 2021, a significant proportion of eligible population in urban areas (approximately 30% of India's population lives in urban areas) is likely to have been received at least a single dose. This means several economic centres can start to open up
- ▶ Significantly lower risk of the impact of a third wave, if the above immunisation levels are met
- ▶ No additional supplies from Sputnik or imports are assumed (Current proposal is to manufacture 100 million vaccines per year, start date is unclear)

Estimated Cumulative Vaccines (doses) Administered and gap to reach 50% levels *



- Estimates based on production numbers announced by the two companies
- No exports assumed
- No wastage / logistical issues in administration foreseen

Communication Strategy

- ▶ A public document outlining the national vaccination strategy i.e., vaccination targets, details of the expert committee overseeing the implementation, supply projections, etc can be prepared and disseminated for effective communication and reduce public uncertainty

Vaccine Availability

- ▶ We are blessed with intellectual capability, with the IP rights for Covaxin shared with ICMR
- ▶ Government may explore the possibility of compulsory licenses for Covaxin to vaccine providers under Patent Act to boost its production
- ▶ Govt financing through (soft long term loans) to ensure that resources are immediately available for immediate ramp up of production

Procurement

- ▶ Centre purchases vaccines on behalf of States also at an uniform price
- ▶ Private players can buy at a negotiated price. Government can consider keeping a certain percentage for private procurement

Distribution

- ▶ Develop and publish a state-wise distribution plan
- ▶ Maximal number of places where vaccination can be provided to minimise queues including large corporate blocks

Increasing Coverage

- ▶ Several national and international studies argue that a 12-week 2nd dose regimen can be followed without compromise on antibody protection. If implemented (based on expert advise), it will help enable nearly 9-10 crore additional people to get vaccinated.