

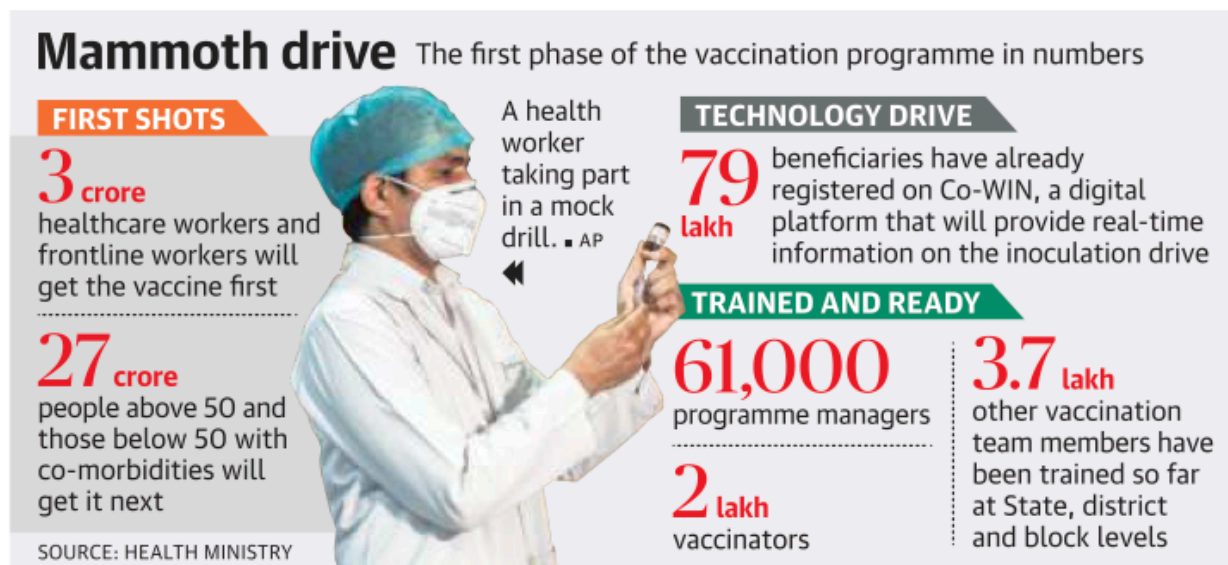
Date: 10th January 2021

Covid Vaccine Drive:

News: Covid vaccination drive in India will start from 16th January.

Details of the Vaccination drive:

- Priority will be given to following set of individuals in same order:
 1. Healthcare workers and front line workers.
 2. Voluntary vaccination of people more than 50 years of age.
 3. People less than 50 years if age who are suffering from Co-morbidities.



Source: the hindu

- Vaccine used will be Covaxin and Covishield as they both have received emergency use authorization by Drug controller General of India.
- Principles involved in the drive includes:
 - **Jan Bhagidari:** Principle of people's participation
 - **Booth strategy:** experience of elections.
 - Universal immunisation programme.

- Co-WIN vaccine delivery Management system will assist the programme managers across various levels through automated session allocation for pre-registered beneficiaries, their verification and for generating a digital certificate upon successful completion of vaccine.

Issues involved: (these are personal views of Mr. Shaheed Jamil, virologist from Ashoka university)

- Covishield has been developed by Serum Institute of India. No data has been published yet on covishield.
- Bharat biotech though has published safety and immunological data but not all important data on efficacy of the vaccine Covaxin.
- The approval given by Director general of drugs on these vaccine is compelled by the newly emerging COVID-19 strain.
- The procedure followed by DCGI was compromised.
- US highlighted the concern with the vaccine and FDA did not approve these vaccines.
- The efficacy of two doses of the Covishield is 62% which is less than threshold.
- Covaxin:
 - It is made up all viral particle protein including NC (nucleocapsid) protein.
 - Antibodies are created against both the protein i.e. S and NC protein.
 - The issue is, to neutralize the virus cells we need S i.e. spike antibodies.
 - Anti-N antibodies are envisaged to improve cell mediated immunity which is better done by live attenuated vaccines, but as Covaxin is a killed vaccine thus it is less likely be effective in improving cell mediated immunity. Anti-N antibodies will have no role to play.

Live attenuated vaccine: It is created by weakened pathogen/causing organism of the disease i.e. by reducing the virulence of the pathogen.

Cell mediated immunity: cell mediated immunity is the immune response which is delivered by various t-lymphocytes.