Ind-CEPI Mission

The Department of Biotechnology, Ministry of Science & Technology, Government of India, is supporting the implementation of the Ind-CEPI Mission, aligned with the global initiative of the Coalition for Epidemic Preparedness Innovations (CEPI). CEPI is a pioneering global collaboration between public, private, philanthropic, and civil society organizations founded in Davos, by the Governments of India and Norway, the Bill & Melinda Gates Foundation, the Wellcome Trust, and the World Economic Forum.

India is founding member of CEPI. India’s engagement with CEPI is important to ensure self-sufficiency in relation to vaccine development; warrant biological security; maintain global competitiveness of Indian vaccine industry; facilitate access to vaccines and technology through CEPI even if not developed in India.

The Mission titled ‘India Centric Epidemic Preparedness through Rapid Vaccine Development: Supporting Indian Vaccine Development Aligned with the Global Initiative of the Coalition for Epidemic Preparedness Innovations (CEPI)’ is a recent initiative of the Department of Biotechnology to support vaccine development, approved for implementation on March 27, 2019, for a period of five years.

Mandate: The Mission aims at strengthening development of vaccines against emerging infectious diseases, up to Phase II testing and enhance inter-ministerial co-ordination for accelerating vaccine development. The Ind-CEPI targets are selected in alignment with R&D Blueprint of the World Health Organisation (WHO), whereby, priority pathogens are selected based on public health impact, risk of outbreak and feasibility of development.

Overall objectives: The Mission is focused on strengthening infrastructure for vaccine development through academia-industry interface, enabling skill development and capacity building activities and supporting development of surveillance frameworks for use of new vaccines. The major objectives are enlisted below:
Current status: The Ind-CEPI Mission is being implemented by Biotechnology Industry Research Assistance Council (BIRAC), a Public-Sector Undertaking (PSU) of DBT. The Program Management Unit (PMU) at BIRAC is responsible for issuing RFPs (Request for Proposals) for development of early stage vaccine & platform technologies and bring on capacity building with LMICs. The infrastructure coordinating unit at THSTI is entrusted with the creation of Infrastructure for early stage vaccine development. A tripartite engagement strategy document has been signed between CEPI, DBT and BIRAC. The Department, through the Ind-CEPI mission, provides support to the India specific component of the meritorious joint projects received against various calls for proposals. The activities under the Mission over the past one year since its implementation are depicted below:

- Financial support for ‘Global Chikungunya Vaccine Clinical Development Program’ (GCCDP), a collaboration between Bharat Biotech International Limited (BBIL) and the International Vaccine Institute (IVI) to advance the development of a novel candidate Chikungunya virus (CHIKV) vaccine, BBV87; Currently Phase II trials are being undertaken.

- Financial support for Gennova’s mRNA-based COVID-19 vaccine candidate HGCO19; Phase I Clinical trial for HGCO19 nearing completion.

- Under CEPI’s call on ‘Centralized laboratory for measurement of immune responses elicited by SARS-CoV-2 vaccine candidates’ the NABL accredited bioassay lab at Translational Health Science and Technology Institute (THSTI), Faridabad, has been recognized as one of the seven laboratories, globally, for centralized assessment of COVID 19 Vaccines. THSTI will, therefore, use the same reagents and follow a common set of protocols to measure the immune response of multiple vaccine candidates under development and trial.

- The PACT (Partnerships for Accelerating Clinical Trials) initiative was undertaken by Biotechnology Industry Research Assistance Council (BIRAC) and Clinical Development Services Agency (CDSA), under the aegis of the Ind-CEPI Mission of DBT, to support researchers and investigator teams of neighboring countries to enhance and strengthen their clinical trial capabilities. 2 training series of 4 E-Courses between Sep-Dec 2020 and Feb-Apr 2021, were successfully conducted for >2400 participants across 14 countries.
Efforts are underway for development of novel vaccine technologies for rapid response towards emerging infectious diseases.

Activities Supported Under the Ind-CEPI Mission

- **Discovery and Validation of Vaccine Candidates**
  - Support for Vaccine Candidates: COVID-19 Vaccine (mRNA), Chikungunya (Inactivated Vaccine)
  - Accelerate Clinical Trials: Due diligence for Phase III trial of Bio E.

- **Shared Infrastructure and Facilities**
  - Bioassay Laboratory at THSTI

- **Training & Capacity Building**
  - Trainings for India’s Neighbouring and Friendly Countries: PACT, 2 e-course series with 10 sessions each on GCP, GCLP, Ethics and Vaccine field trials held; >2000 trainees from around 10 countries participated

- **Recognized as a part of the CEPI Centralized Lab Network**
**Way forward:** The Department is dedicated and focused in its efforts to advance preparedness and response towards epidemics and generate sustainable solutions for emerging public health outbreaks, through the Ind-CEPI Mission.