World's first Phase II Nipah virus vaccine trial launch

Nipah virus | Partner news | Research news | Vaccines, treatments, diagnostics & trials

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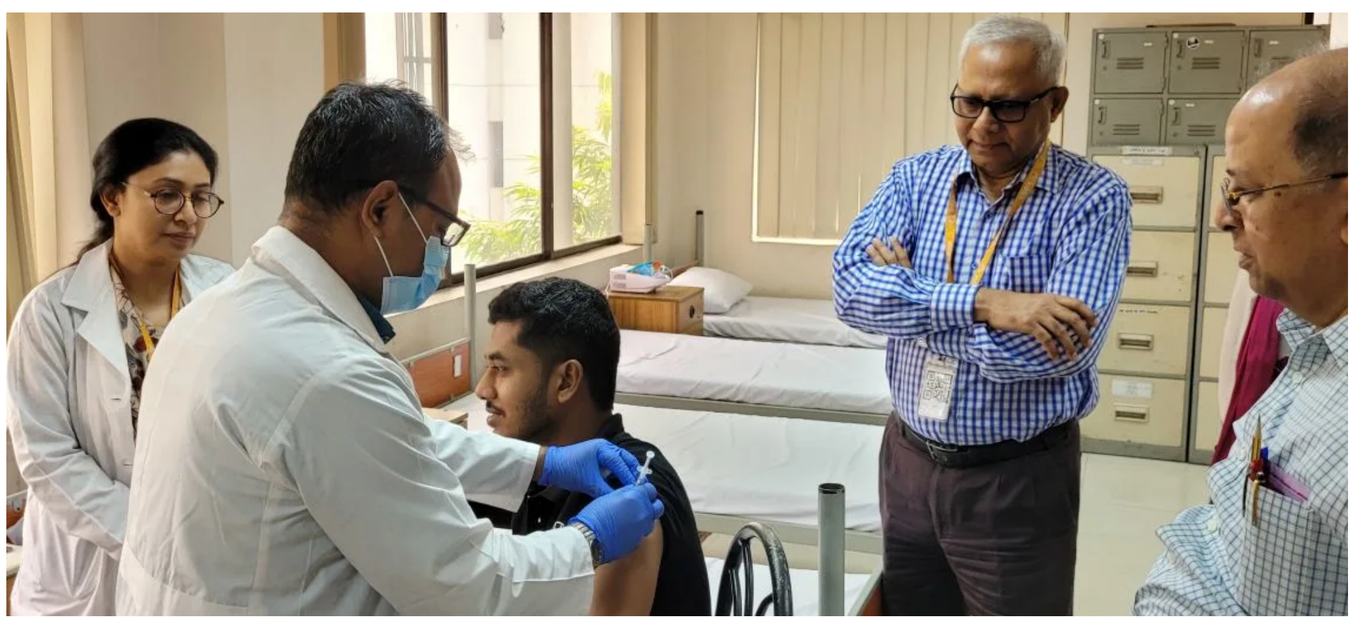
The trial will assess the safety and immune response of the ChAdOx1 NipahB vaccine, developed by PSI scientists, in a region where the virus causes recurrent outbreaks.



The University of Oxford has launched the world's first Phase II clinical trial of a Nipah virus vaccine candidate.

The trial, conducted in Bangladesh in partnership with the I**nternational Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b)**, and funded by the **Coalition for Epidemic Preparedness Innovations (CEPI)**, will assess the safety and immune response of the ChAdOx1 NipahB vaccine in a region where the virus causes recurrent outbreaks.

The trial started earlier this month, and will enrol 306 healthy participants aged 18 to 55.

Nipah virus is a deadly disease from the same viral family as measles, the paramyxoviruses, and is recognised by the World Health Organization as a research priority due to its pandemic potential.

A vaccine is urgently needed as the disease can be fatal in up to 75% of cases.

First identified after an outbreak in Malaysia, Nipah virus causes small outbreaks in Bangladesh almost every year, and occasionally in India. Of the 750 cases recorded since 1998, there have been 415 deaths.

The zoonotic virus is carried by fruit bats and its main route of transmission is through drinking contaminated date palm sap. Humans may also be infected via an intermediate animal host, or by person-to-person spread including healthcare workers.

Initial symptoms include fever, headaches, muscle pain, vomiting and sore throat. These can quickly progress to acute encephalitis, pneumonia and severe respiratory problems.

Developed by scientists at the University of Oxford's Pandemic Sciences Institute, the **first-in-human trials** of the **ChAdOx1** NipahB vaccine started in January 2024 in Oxford, led by the Oxford Vaccine Group. Fifty-one people aged 18 to 55 have safely completed one year of follow-up in the Oxford trial with results expected in the coming months.

The vaccine is made using the same viral vector platform as the Oxford/AstraZeneca COVID-19 vaccine, which is estimated to have **saved 6 million lives** in its first year alone.

In recognition of the urgent need for a Nipah virus vaccine and the compelling early data, the European Medicines Agency granted the ChAdOx1 NipahB vaccine **PRIME (PRIority MEdicines) designation** in June 2025. This designation aims to expedite the development and regulatory review processes for medicines that address unmet medical needs.

Commenting on the launch of the trial in Bangladesh, the vaccine's developer **Professor Dame Sarah Gilbert**, Professor of Vaccinology at PSI, said: "This new trial in Bangladesh marks an important step forward in our work to develop a vaccine against Nipah virus, a deadly health threat that currently has no approved vaccine or treatment.

"The progress we've made so far – with the support of our collaborators and funders – is testament to the value of international collaboration and long-term investment in pandemic preparedness."

Professor Brian Angus, Professor of Medical Practice at the Nuffield Department of Medicine, University of Oxford and Chief Investigator of the trial at the Oxford Vaccine Group, said: "Starting a Phase II trial in a country affected by regular Nipah outbreaks is a critical step in making sure this vaccine is both effective and relevant to the people who need it most. It's an essential part of ensuring equitable access to protection against emerging infectious diseases."

Dr Kent Kester, CEPI's Executive Director of Vaccine Research and Development, said:"Oxford's Nipah virus vaccine candidate is the most advanced vaccine against this highly lethal virus. The start of this phase II trial is a first of its kind and represents the culmination of years of cutting-edge research and global scientific collaboration.

"The results from this study will hopefully bring us a step closer towards protecting vulnerable populations against future deadly Nipah outbreaks and will help inform the development of other Paramyxovirus countermeasures."

Dr K Zaman, Senior Scientist at icddr,b and the Principal Investigator of the trial in Bangladesh, said: "icddr,b has been at the forefront of Nipah virus research for over two decades, operating the world's longest-running surveillance system and following the largest cohort of Nipah survivors.

"The launch of this world's first Phase II trial in Bangladesh is therefore not only historic but also a natural progression of our long-standing scientific commitment. By leading this critical study in a country that bears the brunt of Nipah outbreaks, we aim to generate the evidence needed to protect lives from Nipah diseases in Bangladesh and globally."

The ChAdOx NipahB vaccine was manufactured for this clinical trial by **the Serum Institute of India Pvt. Ltd. (SIIPL),** part of **Cyrus Poonawalla Group**, the world's largest vaccine manufacturer, in collaboration with the Coalition for Epidemic Preparedness Innovations (CEPI).

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