




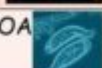

# Biohub initiative by WHO

May 27, 2021

**In news-** The World Health Organization (WHO) and the Swiss Confederation have signed a Memorandum of Understanding (MoU) to launch the first WHO BioHub Facility as part of the WHO BioHub System, which was announced in November 2020.

## **About the initiative-**

- **Based in Spiez, Switzerland**, the facility will serve as a centre for the **safe receipt, sequencing, storage and preparation of biological materials for distribution** to other laboratories, in order to inform risk assessments, and sustain global preparedness against these pathogens.
- Thus it will enhance the **rapid sharing of viruses and other pathogens between laboratories and partners globally** to facilitate a better analysis and preparedness against them.
- **Pathogens are now shared bilaterally** between countries on an ad hoc basis, which can be slow, and leave some countries without access to the benefits and tools.
- The BioHub will enable member states to share biological materials under pre-agreed conditions, including biosafety, biosecurity, and other applicable regulations.
- This will ensure **timeliness and predictability in response activities.**

Type of pathogen	Description	Human diseases caused by this type of pathogen
<b>BACTERIA</b> 	Single celled organisms without a nucleus	tuberculosis, diphtheria, typhoid, cholera, tetanus, dysentery and pneumonia
<b>VIRUSES</b> 	Non-living particles that can only reproduce within a living cell	Common cold, herpes, measles, AIDS, chicken pox, small pox
<b>FUNGI</b> 	Simple organisms including mushrooms and yeasts that grow as single cells or thread like filaments	Ringworm, athletes foot, candidiasis, histoplasmosis
<b>PROTOZOA</b> 	Single celled organisms with a nucleus	Malaria, giardiasis, chagas disease, sleeping sickness, leishmaniasis
<b>MULTI-CELLULAR PARASITES</b> 	Living organism, that can live inside intestinal tract or blood stream	Round worm infections, tape worm infections

- WHO will broaden its BioHub System for the use of biological materials by qualified entities such as **manufacturers** for the development of medical by-products for fair allocation to countries.
- WHO is currently running a pilot phase, using SARS-COV-2 and its variants, to test the feasibility and operational arrangements for sharing such materials with the facilities of the BioHub System.
- Following results from the pilot project, the BioHub will expand from SARS-COV-2 and its variants, to other pathogens and connect partners with other repositories and laboratory networks in 2022.