Emerging Pathogens Solidarity System

A global system for sharing biological materials with epidemic or pandemic potential
WHO Emerging Pathogens Solidarity System: Overall concept

COUNTRIES

Voluntary donation of biological materials

WHO BioHub

Sharing

Allocation

RECIPENTS

Non-commercial use

Commercial use

World Health Organization
Two streams of work

Stream 1
Operationalization of the BioHub

- **PHASE 1**
  - Time limited: December 2021
  - For SARS CoV-2
  - Laboratory Spiez BSL4
  - Agreement with Swiss authorities (Memorandum of Understanding)
  - SMTAs testing
- **PHASE 2**
  - Expansion to other laboratories
  - Definition of criteria for sharing

Stream 2
Development of the global system

- Engaging with MS, commercial entities, partners, philanthropies, academia and CSO
- Definition of principles
- Definition of package of benefits
- Global goods (medical countermeasures)
WHO EPSS: Sharing

Focus

• Operationalization of sharing of dangerous biological substances

• Coalition of the willing - linkages with Nagoya protocol

• Limited to dangerous pathogens (priority of the R&D blueprint including disease X)

Voluntary donation of biological materials

COUNTRIES
WHO EPSS: A broad global system

Focus

• The BioHub: a neutral, reliable, safe and secure repository (ies) for biological materials with epidemic or pandemic potential

• Development of system to allow for sustainable sharing

• Including Access and Benefit Sharing

• Aiming at faster development of global goods to make the world safer
WHO EPSS: Allocation

Focus

- Operationalization of sharing of dangerous biological substances
- Defining the various recipients/users
- Defining their interaction with the system, in particular their contribution
A phased approach

**UNTIL END DECEMBER 2021**

- **Stream 1:** Operationalization of the BioHub
  - SARS-CoV2 (variants)
  - From one laboratory to a network of laboratories to add the discovery function

- **Stream 2:** Discussion with MS and other stakeholders to define system
  (March to December)

**AFTER DECEMBER 2021**

- **Stream 1:**
  - Initial network of laboratory defined with ToRs, SMTA and letter of agreements
  - Sustainable structure and funding

- **Stream 2:**
  - Package of benefit defined
  - Formalization of the system
    - Agreement with MS
    - Agreement with other stakeholders, industry, CSO
Two scenarios

**SCENARIO 1**

- **Sharing of known pathogen**
- **Role of the BioHub**
  - Further characterisation,
  - storage,
  - sequencing and
  - sharing with other laboratories

**SCENARIO 2**

- **Sharing of unknown pathogen** at the start of an epidemic event
- **Discovery of new pathogens** requires sophisticated methods and high level security in the laboratory
Understanding potential public health benefits

Information and Risk Assessment
- Public health information and tools, (including regular reports, risk assessments and related tools, guidelines and lab protocols)
- Rapid access to GSD through relevant publicly accessible databases

Development of Global Public Health Goods
- Development of countermeasures (vaccine, therapeutics, diagnostics and so on)
- Timely updated and evidence-based recommendations on countermeasures

Capacity Building
- Eg: Training, mentoring and capacity strengthening

Research
- Fostering international scientific projects with enhanced participation of scientists, from developing countries included proper acknowledgement in presentations and publications

WHO Emerging Pathogens Solidarity System
Thank you