WHO Hub for Pandemic and Epidemic Intelligence

Background presentation | 03.05.2021
Global need for stronger pandemic & epidemic intelligence

» Detect new events with pandemic potential

» Monitor disease control measures for pandemic risk management

» Leverage innovations in data science for public health surveillance

Source: WHO
"... we need more meaningful cooperation during and in-between health emergencies; more transparency, more regular detailed exchange of real-time data and experiences at all levels, more reliability of interaction ..."

Review Committee on the Functioning of the IHR, Executive Board Jan 2021
Managing pandemic risk

Pandemic & epidemic intelligence

- Better data
- Better analytics
- Better decisions

Recovery
Prediction
Prevention
Response
Preparedness
What the Hub will do

- Increase availability & linkage of diverse data
- Develop tools & predictive models for risk analysis
- Monitor disease control measures & infodemics

Source: WHO
How the Hub will work

- Increase availability & linkage of diverse data
- Develop tools & predictive models for risk analysis
- Monitor disease control measures & infodemics

As part of WHE work with Member States and partners

- Accelerate existing initiatives and attract innovations

- Strengthen technology foundations and data frameworks

- Create new global collaborative environment
Work with Member States and partners

Increase availability & linkage of diverse data

Develop tools & predictive models for risk analysis

Monitor disease control measures & infodemics

World Health Organization

EIOS

GOARN

Global Outbreak Alert and Response Network

Data Source: World Health Organization, Map Production: WHO Health Emergencies Programme

*Data are located at the centroid of the country, area or territory

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Accelerate existing initiatives & attract innovations

**Accelerate**

- Epidemic Intelligence from Open Sources (EIOS)
- Infodemic Management
- Infectious Disease Modelling Network
- Support One Health Intelligence efforts

**Innovate**

» Bringing data together
  - Data source-landscaping & taxonomy
  - Linking health and non-health data

» Working together globally
  - 100 global professorships
  - International & multidisciplinary collaborations
Strengthen technology foundations & data frameworks

Increase availability & linkage of diverse data
Develop tools & predictive models for risk analysis
Monitor disease control measures & infodemics

Data
Develop federated data models and taxonomy

Analytics
Innovation in forecasting & modelling

Decisions
Timely insights for action
Create new global collaborative environment

- Magnet for the brightest minds
- Working across disciplines
- Building on the best technology
- Nurturing communities of practice
- Demand-driven innovation
- Linking global and local initiatives

Increase availability & linkage of diverse data
Develop tools & predictive models for risk analysis
Monitor disease control measures & infodemics

Magnet - Connector - Engine
Establishing the WHO Hub in Berlin

» Accelerate WHE activities in pandemic and epidemic intelligence

» Create an agile innovation environment

» Working with Member States

» Attract new global partnerships and arrangements
Parameters of the WHO Hub

• As part of WHE supporting all aspects of emergency preparedness and response

• Demand-driven by the needs of Member States & WHO at all levels

• Attracts global expertise to add value to existing and new programmes of work

• Uses flexible ways to structure capacity & expertise including staff, consultants, fellows, secondments, in Berlin and globally

• Can rely on predictable core funding by Germany: 30 million EUR annually

• Aspirational resources: 150+ million EUR for the work of the Hub and its ecosystem
Thank you