

Building Resilience Against Outbreaks & Pandemics

Research to identify
sustainable solutions

The 3rd Global Research and Innovation
Forum



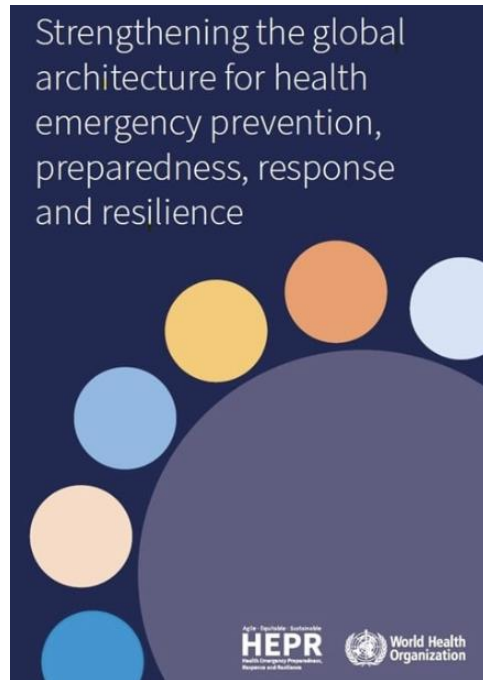
Collaborative Studies are possible: the Unity Studies

Key research achievements / Progress update

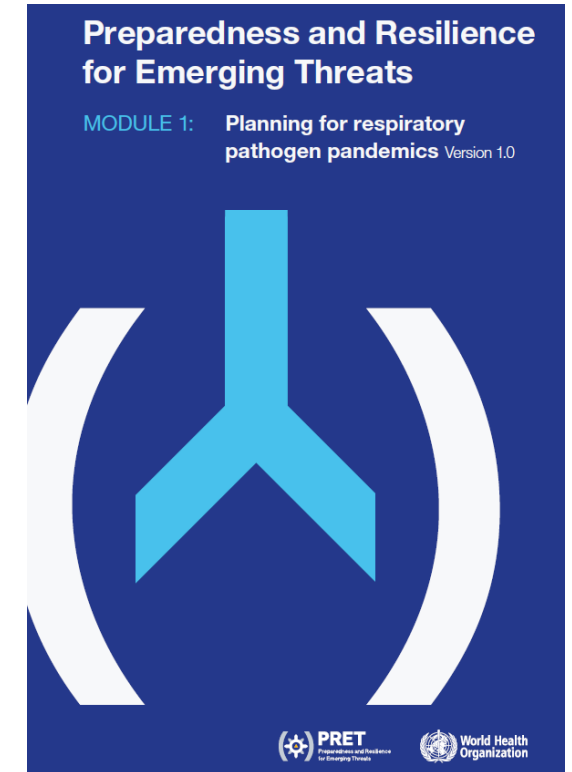
Professor Jodie McVernon
Director of Epidemiology, Doherty Institute



Global architecture: HEPR and PRET

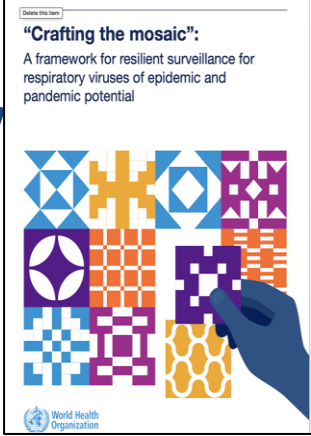


<https://www.who.int/publications/m/item/strengthening-the-global-architecture-for-health-emergency-prevention--preparedness--response-and-resilience>

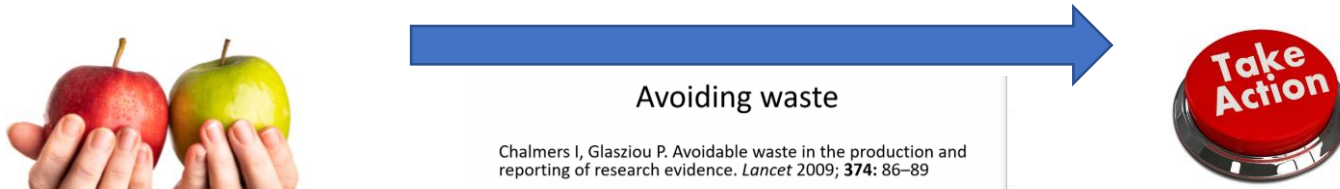


<https://www.who.int/initiatives/preparedness-and-resilience-for-emerging-threats>

Definitions and scope: Investigations & Studies (Unity Studies)



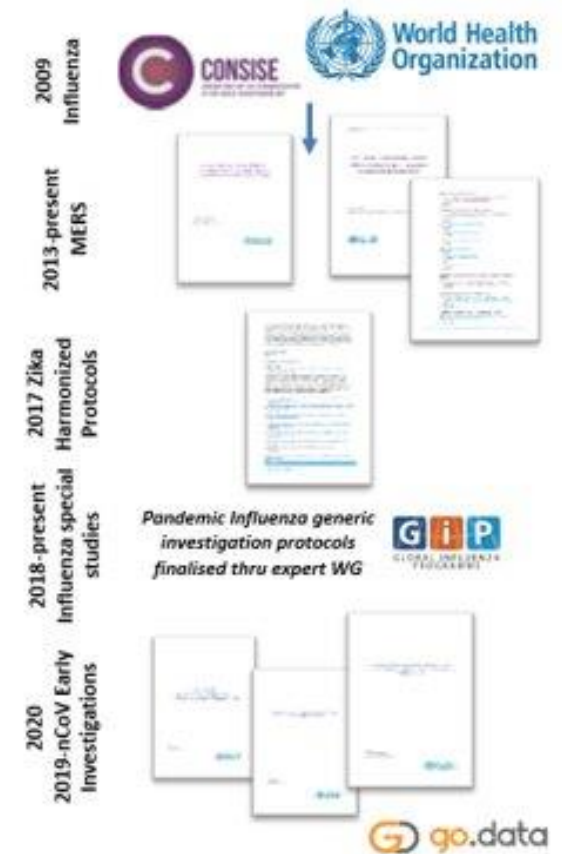
- A needed “mosaic” of respiratory viruses’ surveillance approaches
- Discrete studies and early investigations **meet those objectives not efficiently met by existing surveillance systems**
 - E.g., Transmissibility, pop. susceptibility (sero-surveillance), severity (infection severity), vaccine effectiveness, etc.
 - Enhanced surveillance and operational research
- Why “Unity” studies?
 - Unified (standardized) global **collaborative** approach for evidence-based action



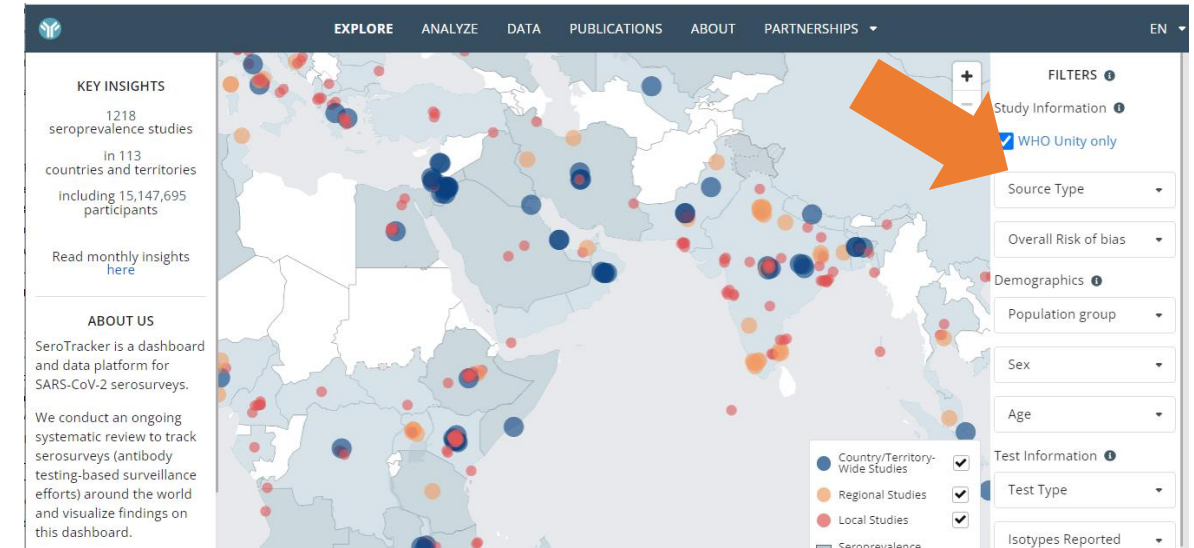
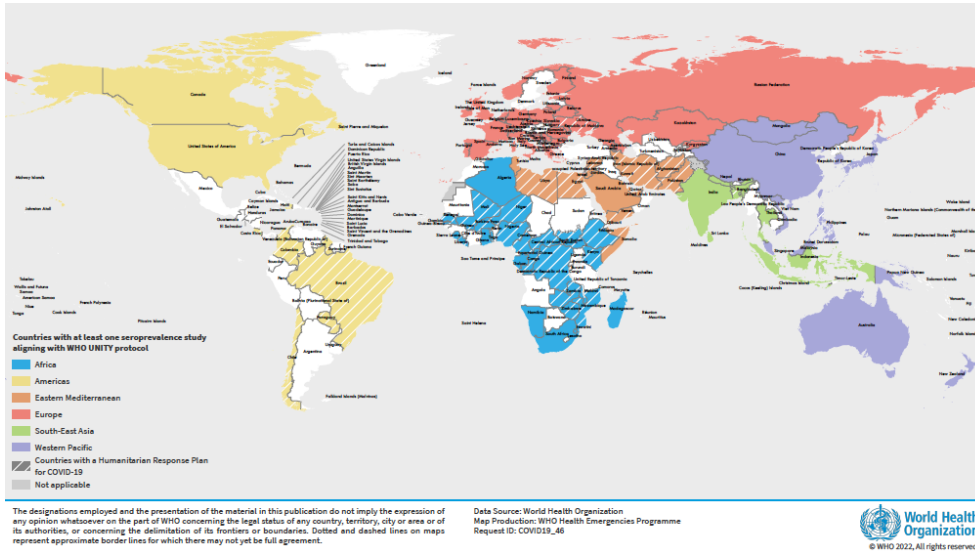
- Overarching aim: **epidemic/pandemic preparedness and effective response**

History: building preparedness

- **Built on more than 10 years of preparedness efforts**
 - pandemic influenza, MERS-CoV, Zika, etc.
- Work began after 2009 influenza pandemic with WHO and CONWISE
- WHO adapted influenza and MERS standardized protocols for COVID-19
- Standardized protocols and questionnaires/forms designed to ensure:
 - that data can be rapidly and systematically collected and shared
 - a format that facilitates analysis across different settings globally.



COVID-19 global implementation: Key achievements & lessons learned



<https://serotracker.com>

- As of 31 December 2021 (2 years into the pandemic):
 - **103 member states** (103/194=53%) had started implementing at least one sero-epi investigation aligned WHO Unity studies master protocols (**UNITY**)
 - **63% (65/103) were LMIC** (**EQUITY**)
 - Implemented in 38/64 (59%) Humanitarian settings countries (HRP)

- Publicly accessible dashboard and data platform for SARS-CoV-2 seroprevalence
- As “real time” as seroprevalence, and results sharing or publication, can “afford “
- Co-branded and developed

COVID-19 global implementation: Key achievements & lessons learned



- Several global and regional meta-analyses published*
- WHO Special Collection in ISIRV journal for LMIC
 - Facilitating publication of Unity studies conducted globally
- External independent evaluation performed.
<https://health-policy-systems.biomedcentral.com/articles/10.1186/s12961-023-00973-Z>
- Lancet commentary: “operational protocol repository”
[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(23\)00964-9/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(23)00964-9/fulltext)

*Meta-analyses: [link 1](#), [link 2](#), [link 3](#), [link 4](#)



Access revised protocols: pan respiratory approach and disease specificities

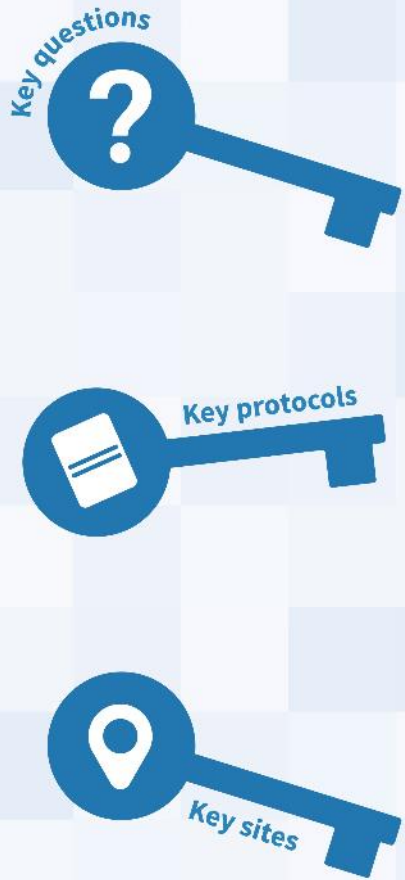


- Influenza viruses template protocols
(<https://www.who.int/teams/global-influenza-programme/surveillance-and-monitoring/influenza-investigations-studies-unity>)
- SARS-CoV-2 template protocols
(<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/early-investigations>)
- MERS-CoV protocols
(<https://www.who.int/emergencies/outbreak-toolkit/disease-outbreak-toolboxes/mers-outbreak-toolbox>)
- Respiratory or pathogen “X” template protocols
(<https://www.who.int/initiatives/respiratory-pathogens-investigations-and-studies-unity-studies>)
- More in development
e.g., FFX “light”, immunity/seroprevalence, vaccine effectiveness, health workers, rapidly assessing severity, mode of transmission

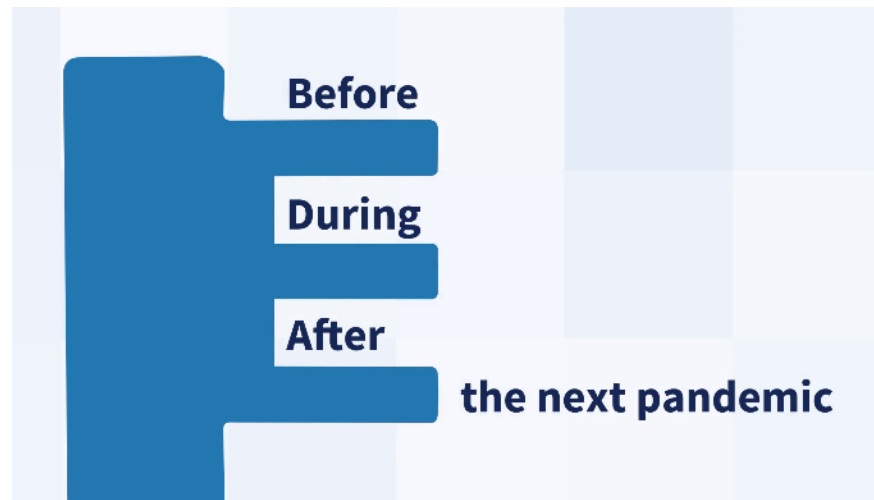
Future research priorities



Unity Studies “2.0”: Future directions and operationalization



Headline: 3 **K**ey



Watch: <https://www.youtube.com/playlist?list=PL4653C266780FC21E>

Web: <https://www.who.int/initiatives/respiratory-pathogens-investigations-and-studies-unity-studies>

A global operational network of sites

Global operational network

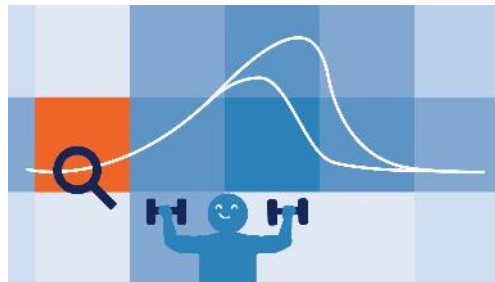


- **Primed** to conduct country-specific standardized, pre-planned and pre-approved investigations
- **Exercised** through “peace time”
 - during seasonal influenza epidemics, MERS-CoV cluster, etc.
- **Composed** of representative settings
 - with the available capacity, or
 - through public health/research collaborations to develop local capacity

Governance:

- Unity Studies Network Sites will be governed by a terms of reference which provides:
 - description of duties;
 - the benefits of participating, and;
 - criteria for site selection.

[Terms of Reference \(ToR\) for Unity Studies network sites](#)



Acknowledgements

- **Informed individuals participating in investigations**
- **National government partners and researchers conducting investigations.**
- WHO HQ, Regional Offices, and Country Offices staff
- Partners in ECDC, SeroTracker, Calgary University, US CDC, Institutes Pasteur, BMGF, RKI, Africa CDC, Melbourne University, GLOPID-R, Epiconcept
- Funders : PIP PC (Pandemic Influenza Prep), US CDC, German Federal Ministry of Health, WHO COVID-19 Solidarity Response Fund, Bill and Melinda Gates Foundation BMGF, RKI (Robert Koch Institute), and many more

Contact generic global email available: unity@who.int

Web 1 (pan resp): <https://www.who.int/initiatives/respiratory-pathogens-investigations-and-studies-unity-studies>

Web 2 (influenza): <https://www.who.int/teams/global-influenza-programme/surveillance-and-monitoring/influenza-investigations-studies-unity>

Web 3 (MERS): <https://www.who.int/emergencies/outbreak-toolkit/disease-outbreak-toolboxes/mers-outbreak-toolbox>

Web 4 (COVID-19): <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/early-investigations>