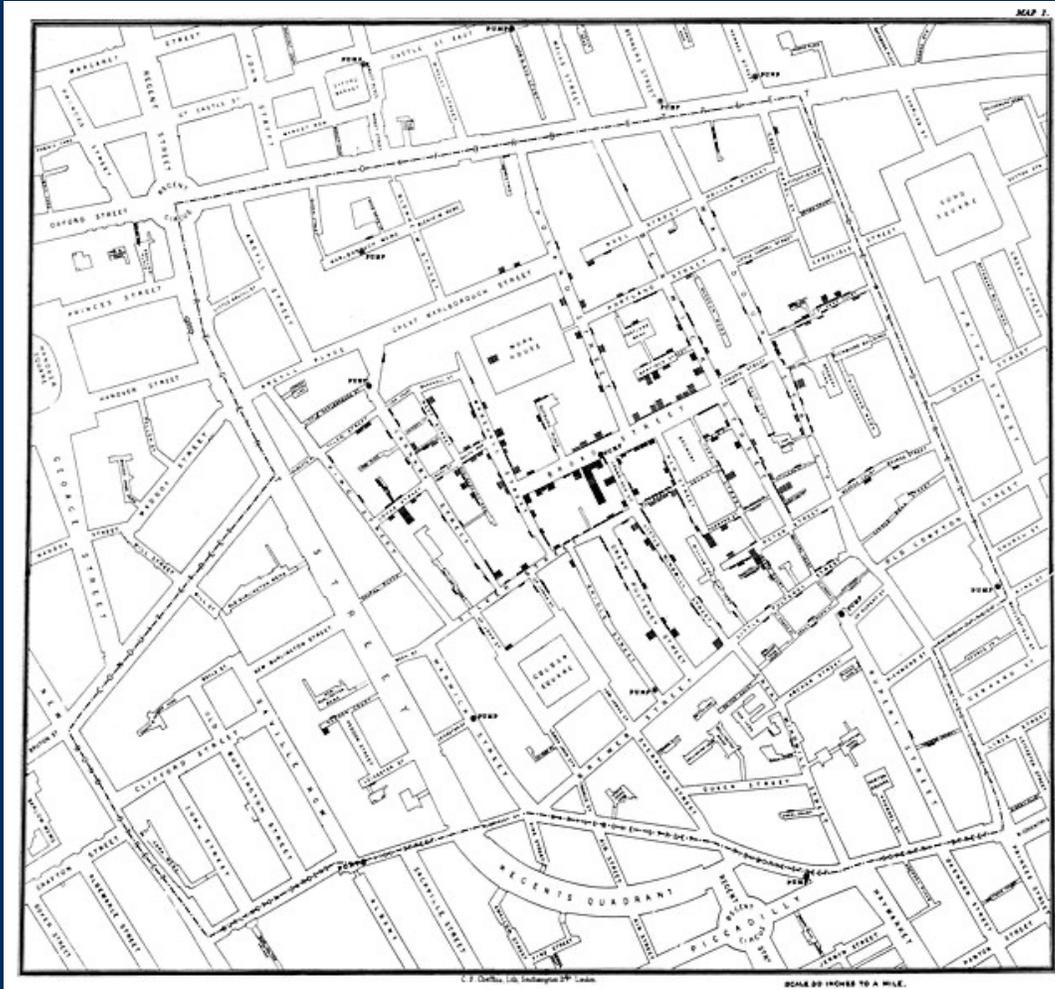


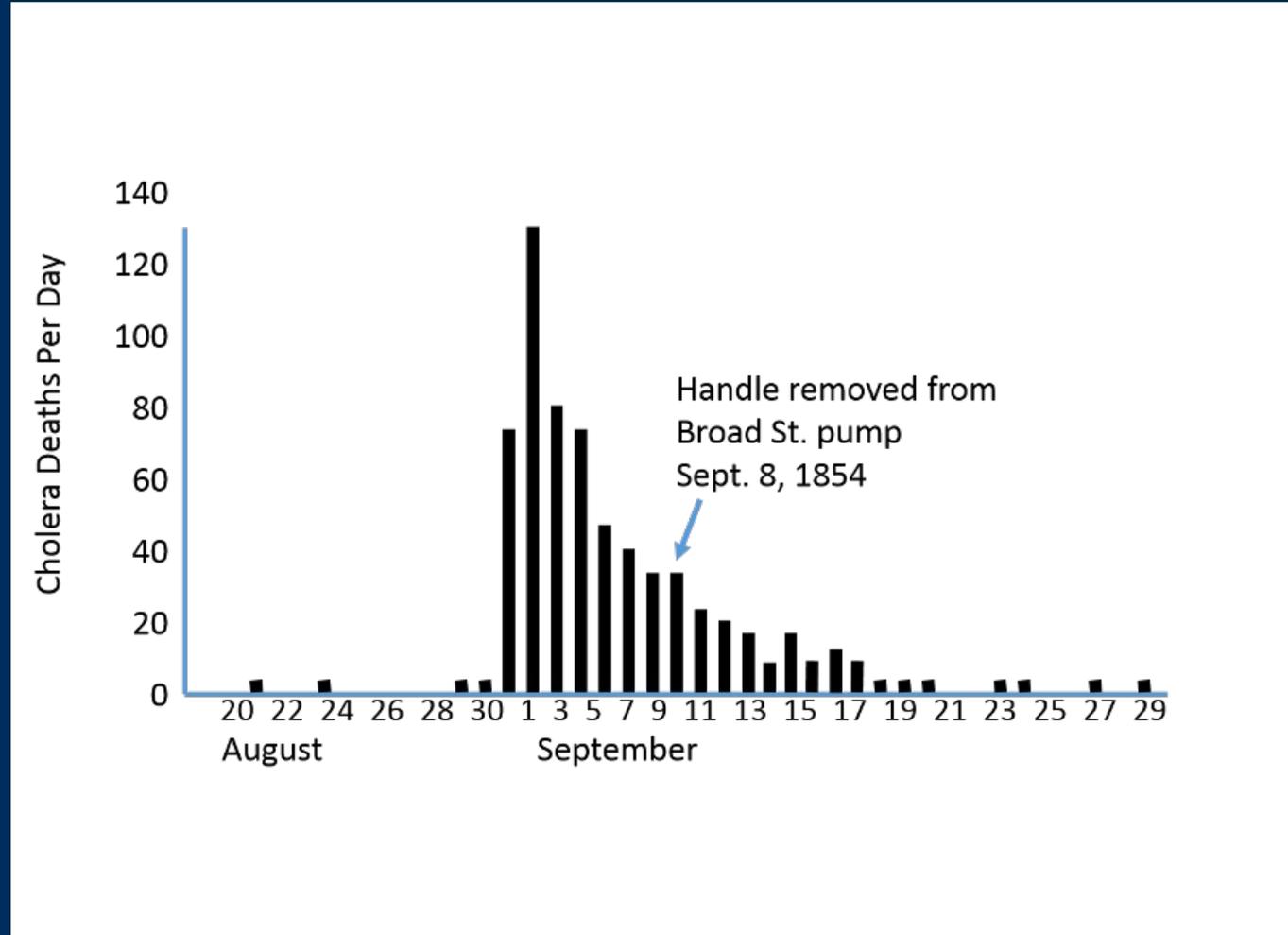
Integrated Surveillance

Dr. Oliver Morgan
IANPHI Webinar
7 June 2022

The beginning – John Snow 1854

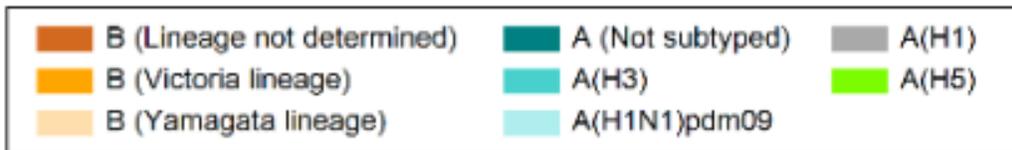
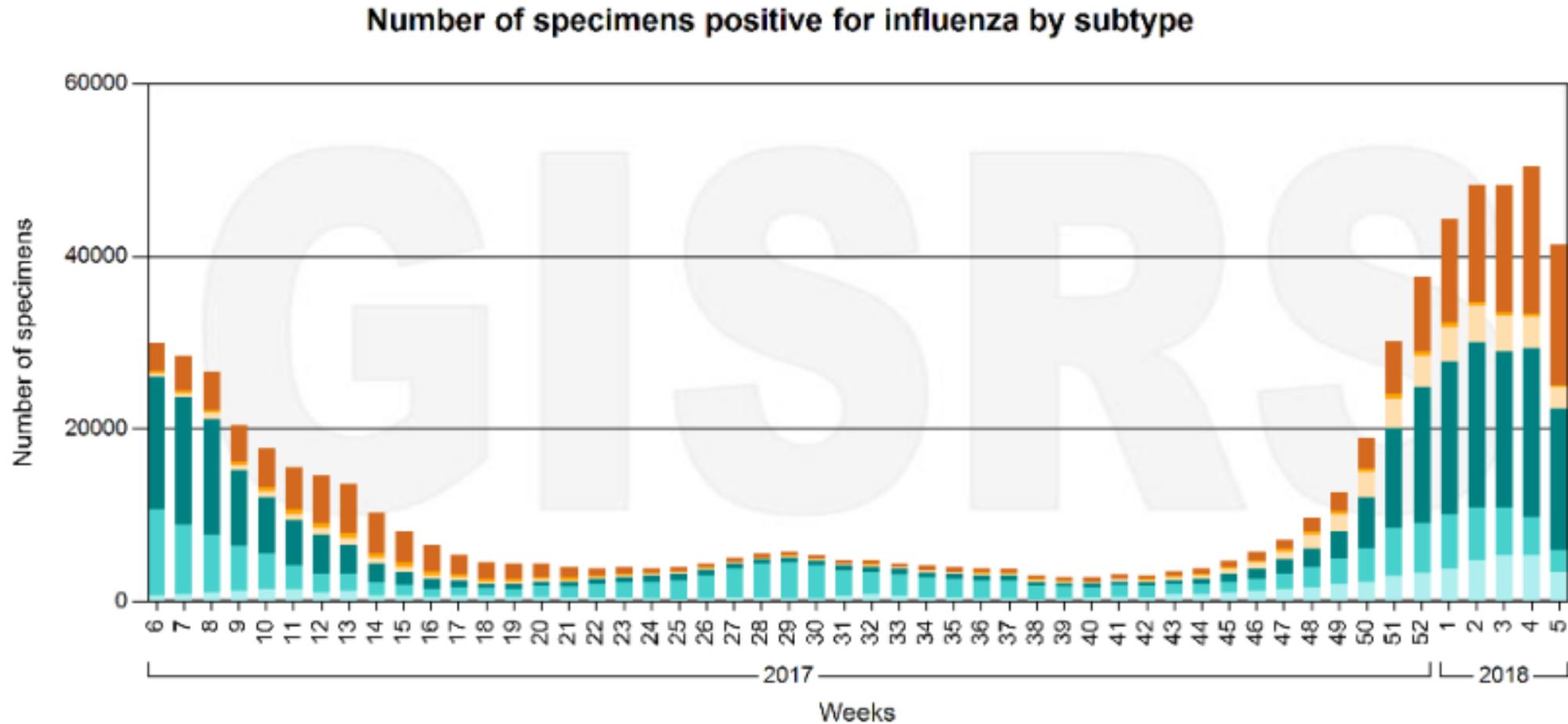


<https://www.ph.ucla.edu/epi/snow/highressnowmap.html>

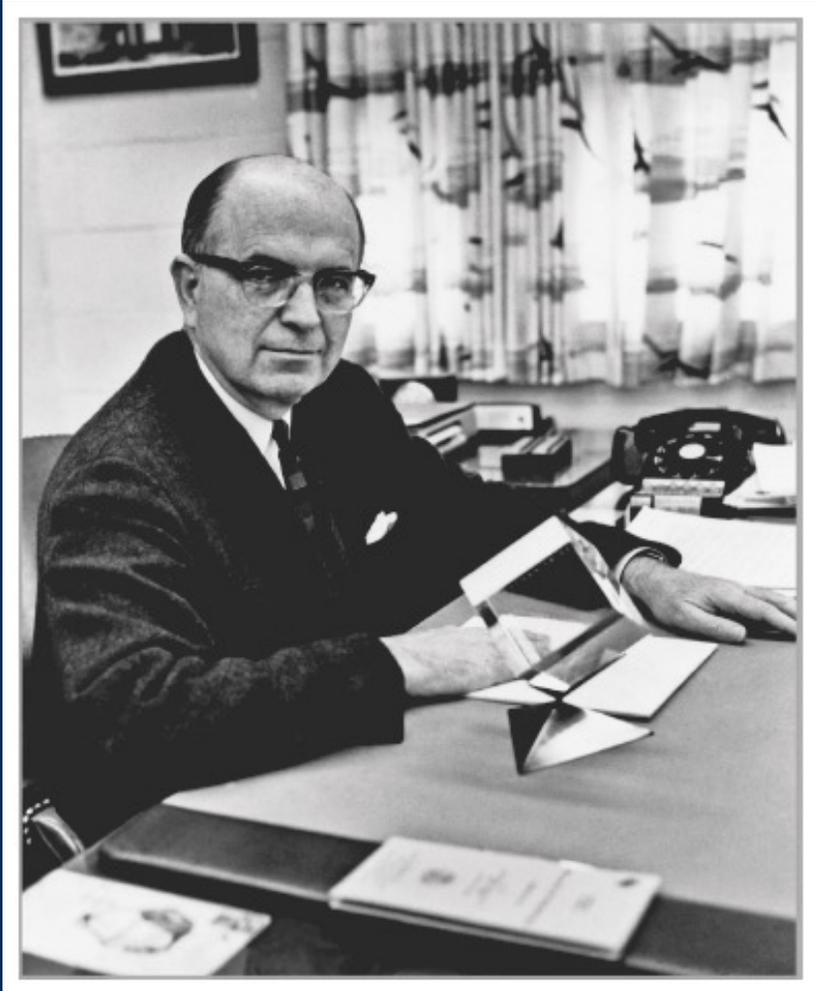


https://sphweb.bumc.bu.edu/otlt/mph-modules/ep/ep713_history/ep713_history6.html

Foundation of Surveillance is Case Identification



The Origins of Integrated Surveillance



Malaria Control in War Areas (MCWA), The precursor to establishing CDC in 1946

Source: CDC (Public Health Image Library ID #8148)

A Revolution in Public Health Surveillance – ProMED, 1994



- Stephen Morse
- Jack Woodall
- Barbara Hatch Rosenberg

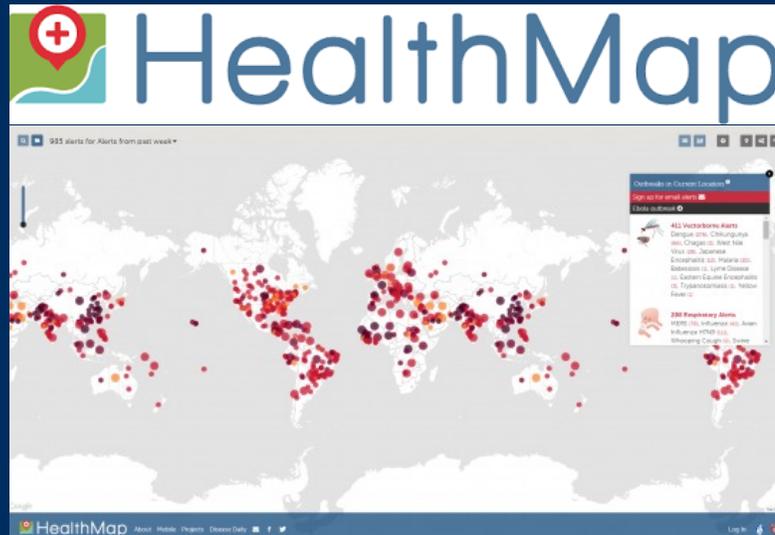
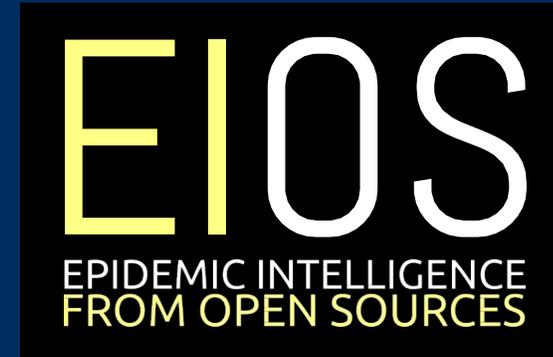
WHO's Disease Intelligence Unit Established, 1994



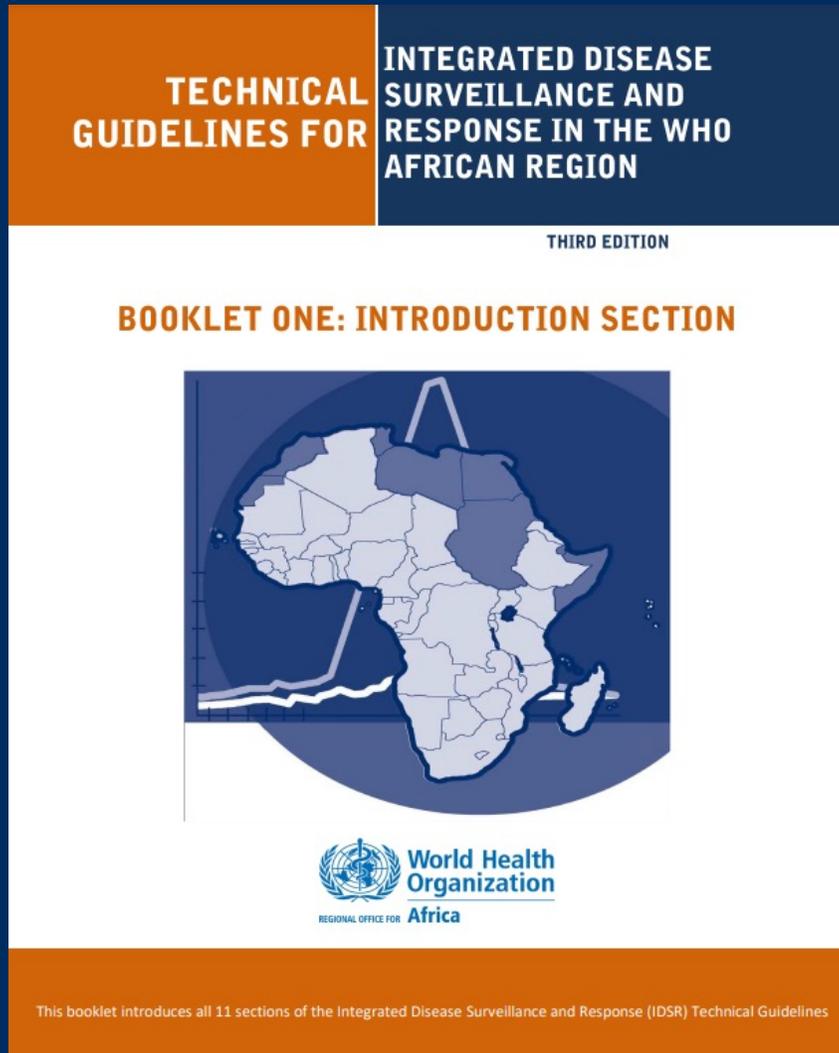
Plague in Surat, India, 1994

Source: Council on Foreign Relations <https://www.cfr.org/blog/surat-yumen-plagued-paranoia>

Growth of Event-based Surveillance 1997-2022



Integrated Disease Surveillance and Response



- Surveillance Systems
- Information Systems
- Laboratory Resources
- Response
- Management and Coordination

[Page 9, IDSR Technical Guidelines]

Building Future Surveillance Systems

THE LANCET Log in 🔍 ☰

COMMENT | [VOLUME 397, ISSUE 10292, P2317-2319, JUNE 19, 2021](#)

Disease surveillance for the COVID-19 era: time for bold changes

[Oliver W Morgan](#) ✉ • [Ximena Aguilera](#) • [Andrea Ammon](#) • [John Amuasi](#) • [Ibrahima Socé Fall](#) • [Tom Frieden](#) • [David Heymann](#) • [Chikwe Ihekweazu](#) • [Eun-kyeong Jeong](#) • [Gabriel M Leung](#) • [Barbara Mahon](#) • [Naz Qamar](#) • [Anne Schuchat](#) • [Lothar H Wieler](#) • [Scott F Dowell](#) • [Show less](#)

DOI: [https://doi.org/10.1016/S0140-6736\(21\)01096-5](https://doi.org/10.1016/S0140-6736(21)01096-5) Check for updates

PlumX Metrics

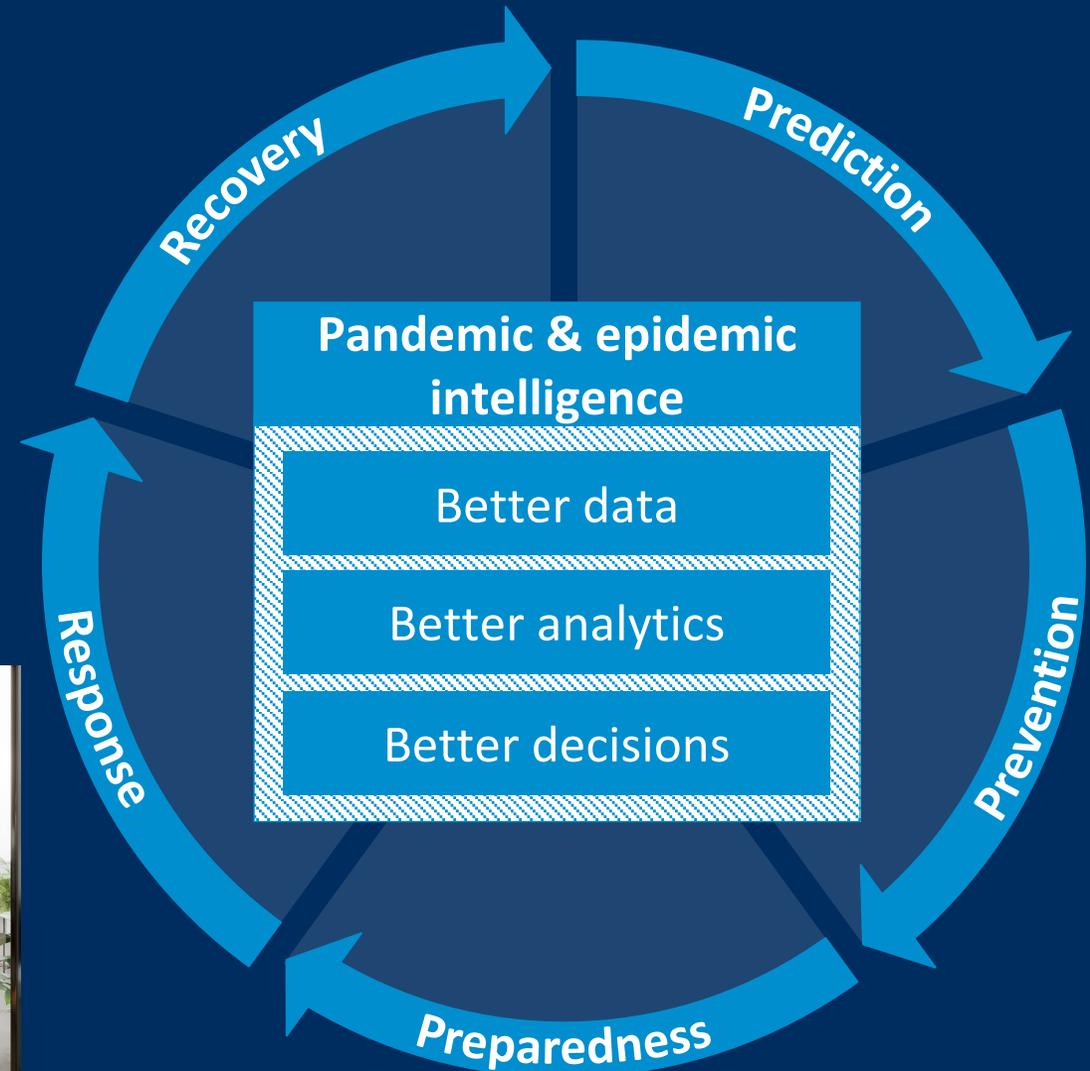
	Benefits	Implementation requirement
Population-based	Denominators for mortality rates and disease burden	CRVS or sample registration system
Laboratory confirmation	Cases accurately tracked	Capacity to scale testing and sequence pathogens
Digital data	Systems interconnected and privacy protected	Unique health identifiers, standard metadata, web accessible
Data transparency	Visibility of all national threats by NPHIs and by WHO for transnational threats	Automated reporting to NPHI with a subset to WHO and regional bodies
Adequate financing	Sustainable country-owned systems	Invest US\$1–4 per capita annually

CRVS=civil registration and vital statistics. NPHI=national public health institute.

Table: Core principles for integrated disease surveillance

Lancet (2021) 397; 2317-2319

WHO Hub for Pandemic and Epidemic Intelligence



<https://pandemichub.who.int/>

Thank you.



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