

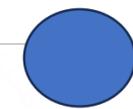
# Pandemic influenza surveillance guidance update

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# Evolution of pandemic influenza surveillance guidance



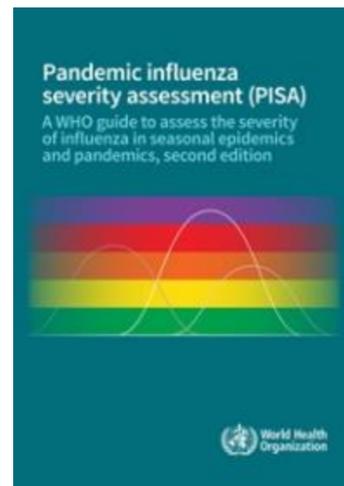
**2005**  
**IHR (2005)**  
Legal reporting established for new influenza subtypes



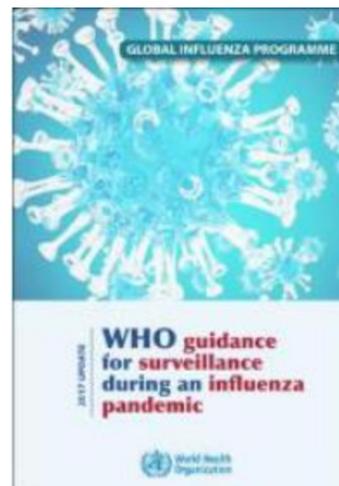
**2013**  
**CONCISE protocols**  
Zoonotic investigation protocols developed



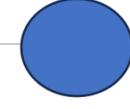
**2017**  
**Surveillance & severity frameworks**  
Previous Pandemic Influenza Surveillance Guidance published  
PISA Framework introduced to measure severity and impact



PISA



Pandemic surveillance 2017



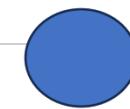
**2020–2023**  
**COVID-19 & UNITY studies**  
Rapid investigation templates  
**MOSAIC Framework**



GISRS Unity



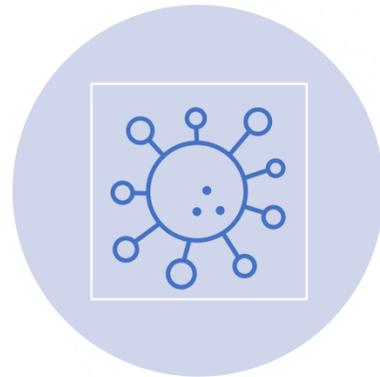
MOSAIC



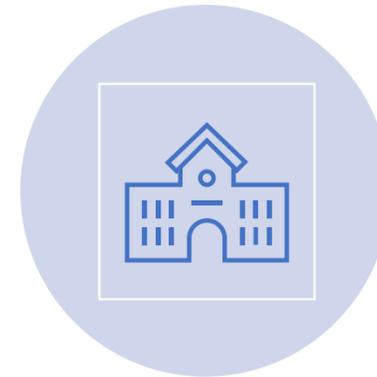
**2024–2026**  
**Current draft guidance**  
COVID-19 lessons integrated with the PRET framework



# Why this guidance?



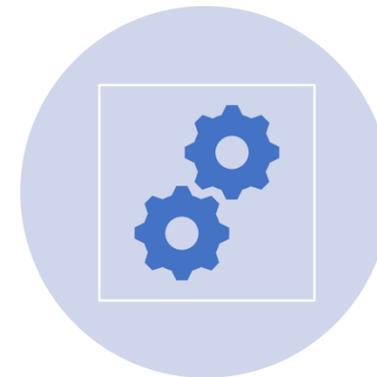
Goal: To provide a standardized approach for surveillance during the transition from seasonal influenza to a pandemic.



Target audience: National/subnational health authorities and GISRS laboratories.



Key shift: Moving from "case counting" to assessing severity, burden and impact.



Core principle: Leverage existing seasonal systems (SARI/ILI) rather than building from scratch.



# Influenza pandemic periods

## Pre-emergence

The influenza virus is circulating in animal reservoirs but not yet infecting humans. Spillover and species jumps lead to the virus in unusual hosts.

Viral evolution, including mutation and reassortment, occurs primarily in animal hosts, creating ongoing potential for adaptation to humans.

*Prevent and prepare*

## Emergence

A new influenza virus is identified **in humans**.

The virus may cause sporadic human cases or clusters of human cases with limited human-to-human transmission. There may be some instances of sustained human-to-human transmission of the virus, but the cases are largely linkable through contact tracing.

*Investigate, control/stop transmission (contain)*

## Community transmission

The new influenza virus is spreading widely in the population with sustained transmission occurring across most geographic areas.

Multiple waves may occur during this period, driven by changes in population susceptibility, viral evolution, or public health and social measures.

*Control/reduce transmission, mitigate impact*

## Stabilized situation

Ongoing but manageable transmission. Population immunity has increased through infection, vaccination, or both. Outbreaks may continue in specific settings or vulnerable groups, and the virus may transition toward more predictable or endemic patterns.

*Recover, scale down and sustain*

**Actions guided by surveillance and risk assessments**

**Built on a foundation of resilient communities, multi-sectoral systems, core capacities for emergencies**

# Surveillance before a pandemic

## Pre-emergence

The influenza virus is circulating in animal reservoirs but not yet infecting humans. Spill-over and species jumps lead to the virus in unusual hosts.

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## Emergence

A new influenza virus is identified **in humans**.

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*Investigate, control/stop transmission (contain)*

**Objective:** Early detection and assessment of a virus with pandemic potential.

### Approaches:

**Investigations** around human cases  
Assessing for sustained **human-to-human transmission** (FFX, rapid severity, etc)

### **Event-Based Surveillance (EBS):**

Monitoring "signals" like unusual clusters of respiratory illness or animal die-offs

**Rapid Risk Assessment:** Conducted within 48–72 hours of a detected signal.



# Surveillance during an influenza pandemic

## Community transmission

The new influenza virus is spreading widely in the population with sustained transmission occurring across most geographic areas.

Multiple waves may occur during this period, driven by changes in population susceptibility, viral evolution, or public health and social measures.

*Control/reduce transmission, mitigate impact*

### Objectives:

- A. Detection and assessment
- B. Monitoring epidemiological, clinical and virological characteristics and healthcare capacity
- C. Informing the use of public health interventions

### For each objective, the guidance describes:

- Priority and complementary surveillance approaches
- Key risk assessment questions
- Data and epidemiologic parameters to support objectives



## What else is in the guidance?

- Sections describing each priority approach during community transmission
  - universal reporting, EBS, investigations and studies, sentinel surveillance, laboratory surveillance, mortality surveillance, healthcare capacity monitoring, etc.
- Monitoring influenza amid changing healthcare demand and delivery
- Risk and severity assessment
- Reporting to WHO

# Key messages

- Surveillance objectives will evolve over time during a pandemic. Countries should be prepared to adapt accordingly.
- No single surveillance approach can address all surveillance objectives during a pandemic. Countries should use, leverage or enhance existing surveillance approaches to meet surveillance needs, and improve sustainability and efficiency.
- Surveillance data should inform risk assessments and public health decisions, creating a continuous feedback loop to refine surveillance objectives and approaches.
- This guidance provides examples of how surveillance approaches may be adjusted during a pandemic, for example, when reporting on all confirmed cases becomes unsustainable, and a transition to monitoring subsets of cases through sentinel systems is more feasible.

# Acknowledgements

**Nicki Boddington**

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**Current and former GIP and regional office colleagues**

**WHO colleagues**

**GISRS network and partners**

**Thank you for your attention**

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