

WORLD HEALTH ORGANIZATION

GISRS

GLOBAL INFLUENZA SURVEILLANCE & RESPONSE SYSTEM



A **system** fostering **global confidence and trust** for 65 years, through effective collaboration and sharing of viruses, data and benefits

based on

*Member States' commitment to a **global public health model***

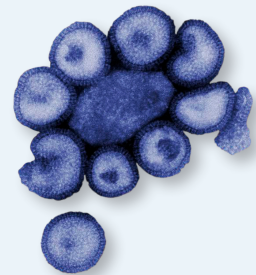
WHY DO WE NEED GISRS?

- **Essence:** influenza viruses, by nature – are constantly evolving in multiple species and many different genetic and antigenic groups.
- **Fact 1:** influenza is, to date, the only known pathogen that will cause a pandemic – a future pandemic is a certainty, but with many uncertainties: when it will happen, where it will originate, which virus will cause it, and how severe it will be (as moderate as pandemic A(H1N1) 2009 or as catastrophic as the 1918 Pandemic or somewhere in between).
- **Fact 2:** To have the best possible public health outcomes, limitations of current knowledge and technology require an efficient and globally coordinated network to detect emerging viruses as quickly as possible.

WHAT IS THE MISSION OF GISRS?

The mission of GISRS is to protect the world from the threat of influenza, by continuously functioning as a:

- **global mechanism** of surveillance, preparedness and response for seasonal, pandemic and zoonotic influenza.
- **global platform for monitoring** influenza epidemiology and disease.
- **global alert** for novel influenza viruses and other respiratory pathogens.

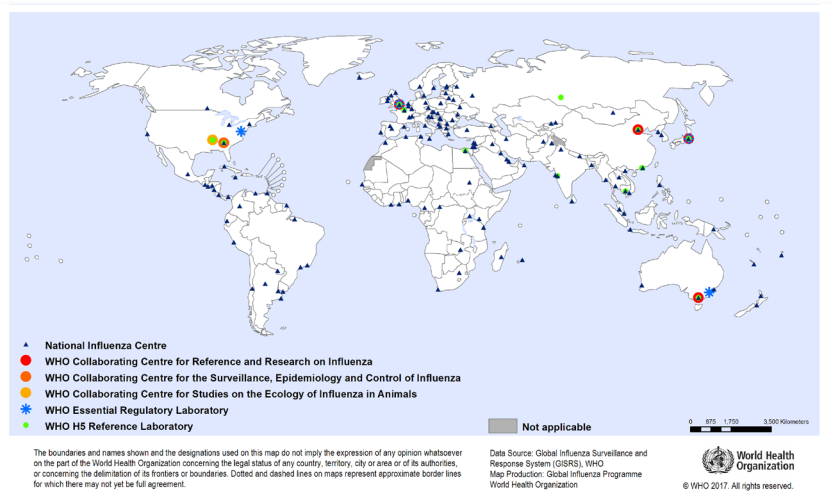


WHO IS GISRS?

GISRS Coordinating body: the WHO Global Influenza Programme (GIP).

To date, **GISRS members** include institutions in 114 WHO Member States:

- **144 National Influenza Centres (NICs)** – designated by Member States, and recognized by WHO on the frontlines of surveillance and monitoring.
- **6 WHO Collaborating Centres for Influenza (CCs)** – international centres of excellence on influenza, designated by WHO.
- **4 WHO Essential Regulatory Laboratories (ERLs)** – at the interface of influenza surveillance and vaccine development, designated by WHO.
- **13 WHO H5 Reference Laboratories (H5RefLabs):** designated by WHO at the human–animal interface to support countries and WHO in early detection and confirmation of novel viruses.



GISRS collaborators include national and regional epidemiological institutions, national and regional regulatory agencies, national and international veterinary institutions, research academia, influenza vaccine manufacturers, donor agencies and other stakeholders.



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■ WHAT DOES GISRS DO?

For over 65 years, GISRS has been an **active global system** of influenza surveillance, preparedness and response, detecting, responding and advancing to meet new challenges.

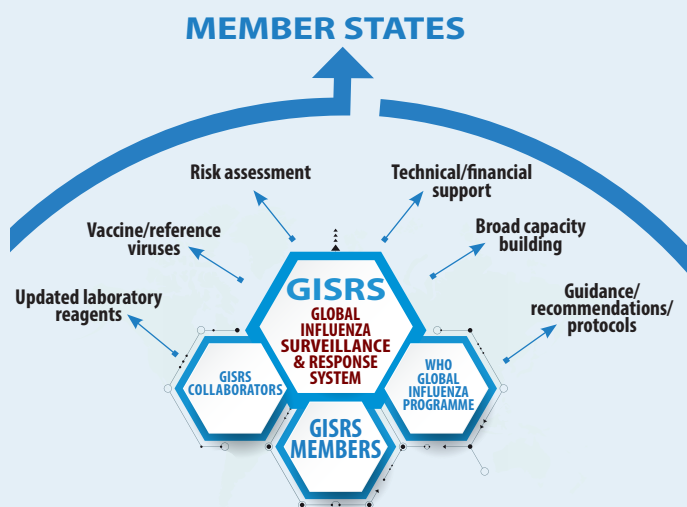
DETECT	RESPOND	ADVANCE
<ul style="list-style-type: none"> Conduct year-round surveillance of seasonal, pandemic and zoonotic influenza, from specimen collection and testing to monitoring virus evolution. Share representative viruses and report weekly surveillance findings. Validate and provide virus detection methodologies and reference materials. Build capacity in countries for influenza and other respiratory viruses. 	<ul style="list-style-type: none"> Assess the risk associated with emerging or circulating viruses: <ul style="list-style-type: none"> develop standardized and consistent approaches; and investigate outbreaks in partnership with GISRS collaborators. recommend appropriate risk management measures, including use of antiviral drugs. In the vaccine production cycle: <ul style="list-style-type: none"> recommend vaccine composition twice a year for seasonal influenza. develop vaccine viruses suitable for vaccine production, and potency reagents. Strengthen the GISRS system for the next pandemic response. 	<ul style="list-style-type: none"> Develop new laboratory diagnostics, assays and tools for virus monitoring and assessment. Advance GISRS through adoption of new technologies and approaches. Guide global research to fill critical gaps. Partner with research and development sectors on next-generation vaccines and other treatments to combat influenza.

■ FEATURES OF GISRS

Coordinated by the WHO Global Influenza Program (GIP); GISRS functions under WHO terms of reference and is:

- ✓ voluntary
- ✓ supported by Member States through an official designation and recognition process
- ✓ quality assured
- ✓ timely
- ✓ year-round

GISRS has grown through the dedication of **generations of scientists** and the support of **national governments** that host GISRS member institutions.



■ FAST FACTS OF GISRS

One of the longest functioning global networks, still going strong after **65 years**.



Selected achievements:

- in 2002, GISRS identified severe acute respiratory syndrome coronavirus (SARS-CoV) for the first time.
- in 2011, the GISRS response to pandemic A(H1N1) 2009 was highly recognized by an International Health Regulations (IHR) review.
- in 2017, the G20 Health Ministers recognize the importance of GISRS.

In 2017 alone:

- ~ 3,500,000 specimens tested.
- ~ 40,000 virus specimens shared with WHO CCs from more than 110 countries.
- ~ 10,000 viruses characterized by WHO CCs.
- ~ 45 candidate vaccine viruses developed for vaccine development and production.
- 138 countries reported surveillance findings to FluNet.
- 145 countries demonstrated high quality capacity of virus detection.