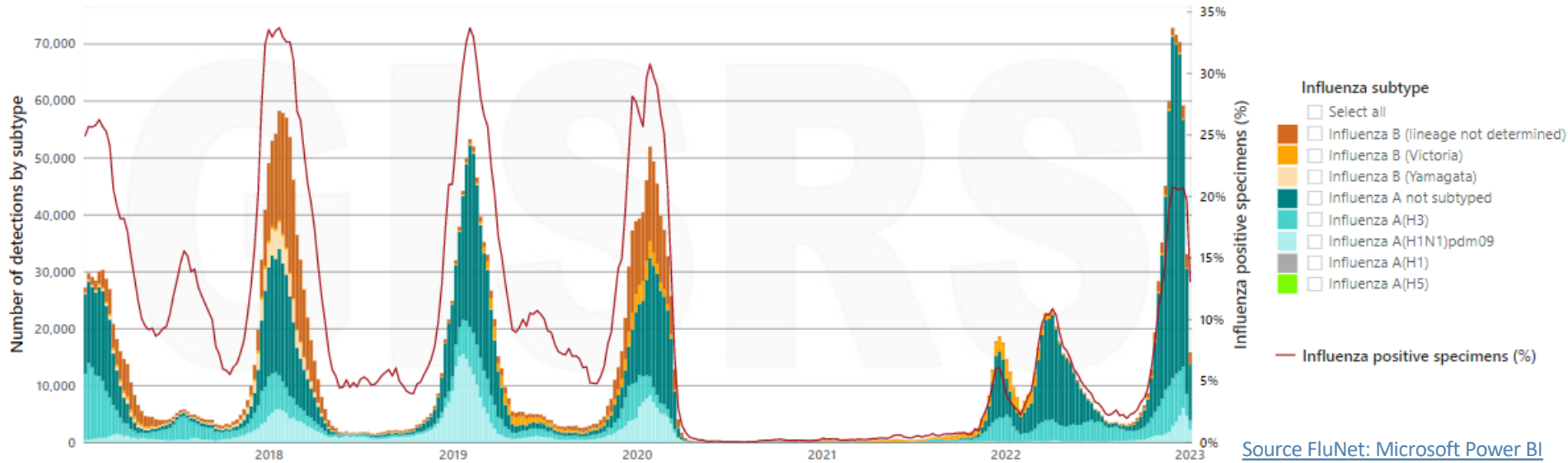


# **Overview of the current influenza situation and how it is being managed for now and next influenza pandemic**

**Dr Wenqing Zhang, Global Influenza Programme, WHO**

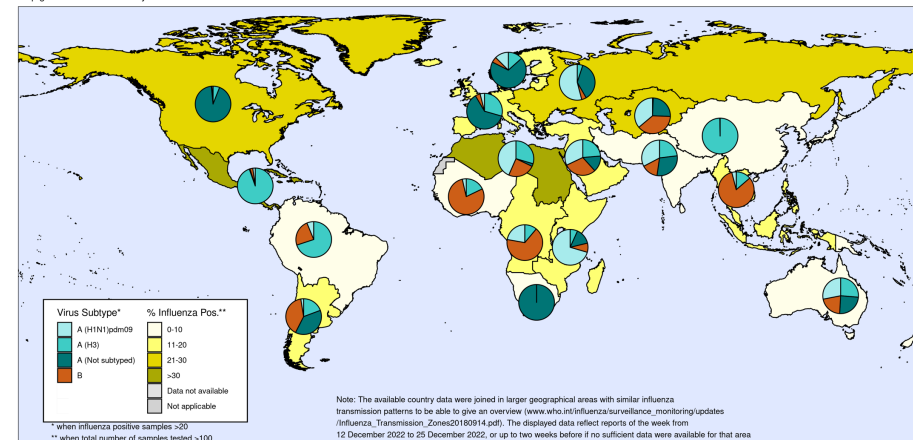
**Wednesday, 18 January 2023**

# Influenza situation



- Influenza activity resumed since mid-2021 gradually back to levels pre-COVID-19 pandemic
  - Seasonality appeared; timing drifted
  - In many countries back to similar or higher levels than pre-COVID
- Currently in northern hemisphere countries, influenza activity elevated
  - Low influenza circulation in China
- Need close monitoring of influenza activity in the coming weeks/months

Percentage of respiratory specimens that tested positive for influenza  
By influenza transmission zone  
Map generated on 06 January 2023

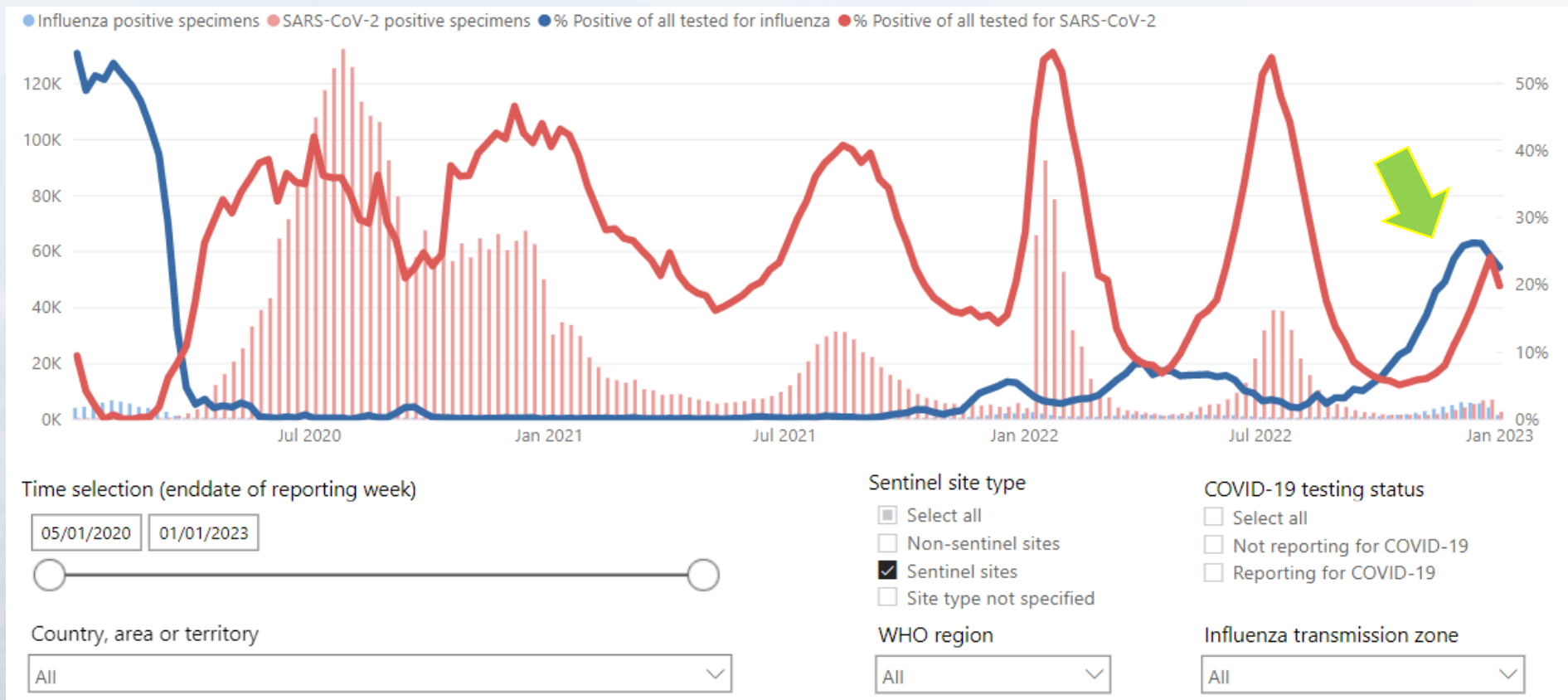


The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data source: Global Influenza Surveillance and Response System (GISRS), FluNet (www.who.int/flu/net)  
Copyright WHO 2023. All rights reserved.

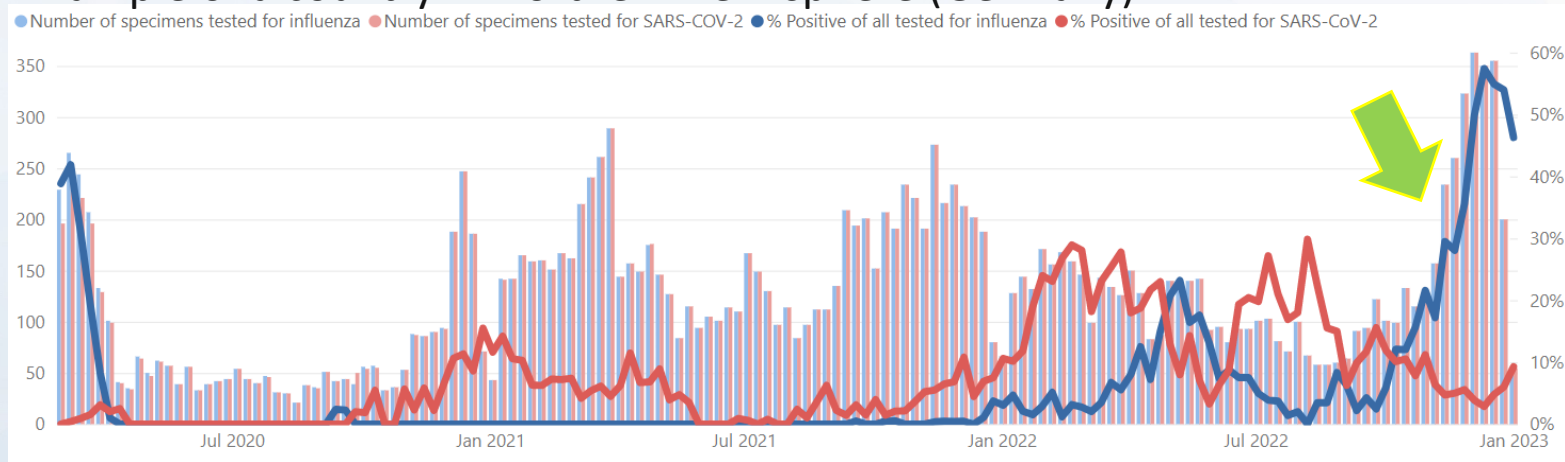
# Co-circulation of influenza and SARS-CoV-2

- Influenza virus circulation is higher than COVID-19 virus in community in some countries in northern hemisphere

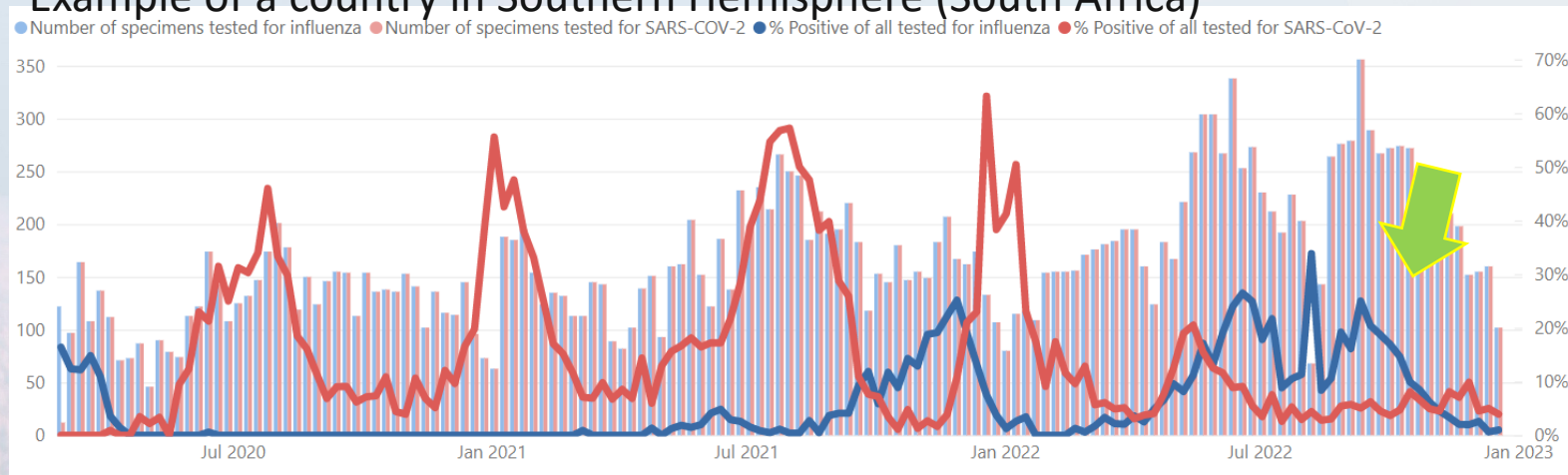


# Co-circulation of influenza and SARS-CoV-2

## Example of a country in Northern hemisphere (Germany)



## Example of a country in Southern Hemisphere (South Africa)



EPIDEMIC  
& PANDEMIC



# 3 types of Influenza re public health

- Seasonal influenza



- Zoonotic influenza



<https://www.oregonlive.com/news/2022/11/bird-flu-outbreak-hits-oregon-wildlife-officials-say-its-definitely-serious.html>

- Pandemic influenza

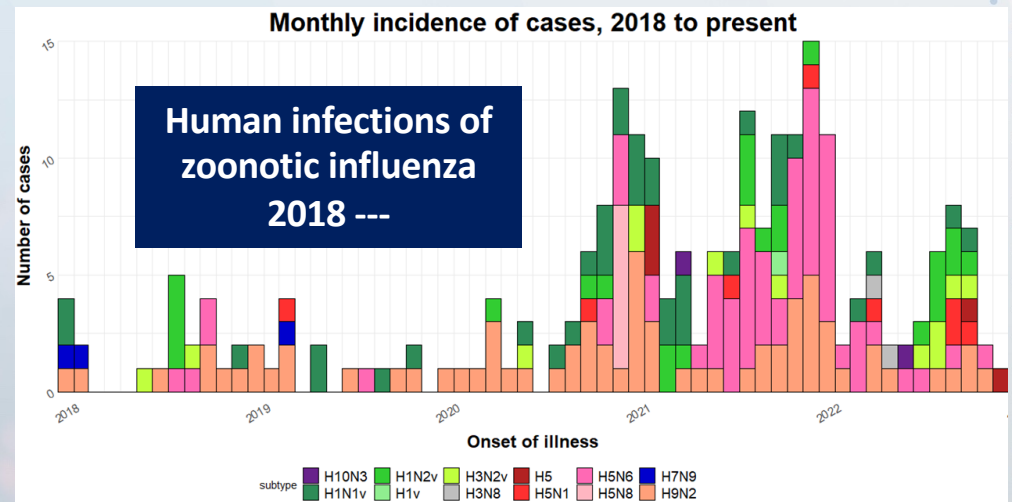
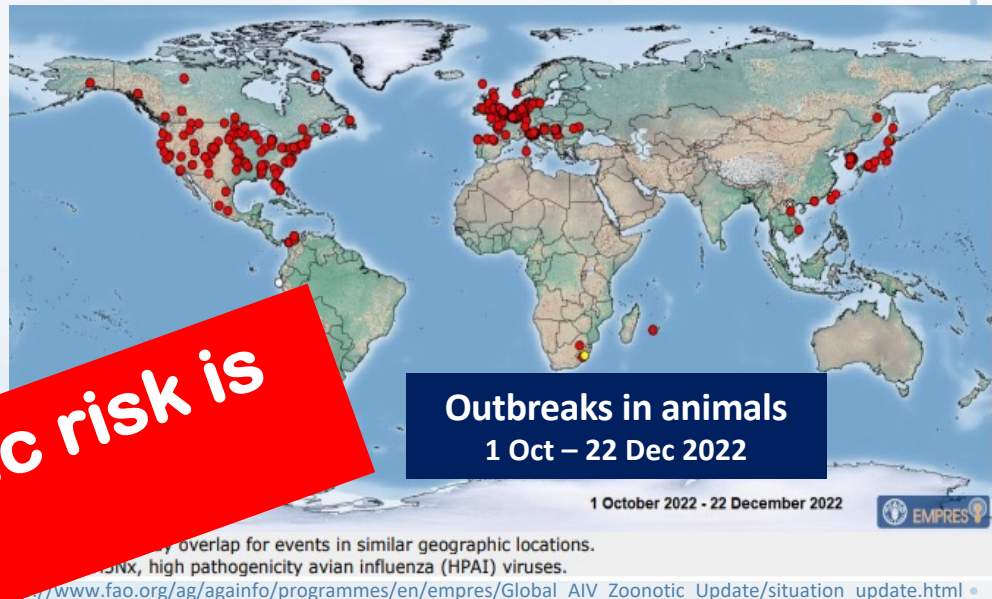


# Avian influenza outbreaks

- **Rapidly increasing** number of outbreaks in animals
- **Un-precedented** genetic diversities of avian influenza viruses
- **Signals** of the threat of an **influenza pandemic** persisting throughout the COVID-19 pandemic

**! Influenza pandemic risk is alarming !**

- China, **first** human infection with A(H5N1)
- Russia, **first** human infections with A(H5N8)
- UK and USA, human infections of A(H5N1) subtype reported for the **first-time**
- Ecuador, the **first case** of human infection with A(H5N1) reported from South America.

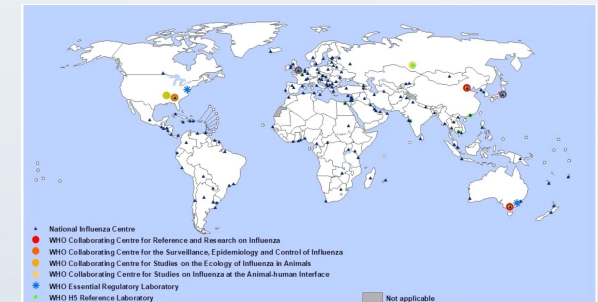


# How Influenza is being managed?

## Global Influenza Surveillance and Response System (GISRS)

- The global foundation for influenza surveillance, preparedness and response

- Since 1952 – it is a global **public health model** for **70 years**
  - Currently 158 institutions in 124 Member States  
<https://www.who.int/initiatives/global-influenza-surveillance-and-response-system> (GISRS)
- **Institutionalized & functioning** capacity in countries
  - **Laboratory & disease** surveillance integrated
  - **Response mechanisms** exercised very season in epidemics
  - **Enormous commitment** from countries and international agencies and partners





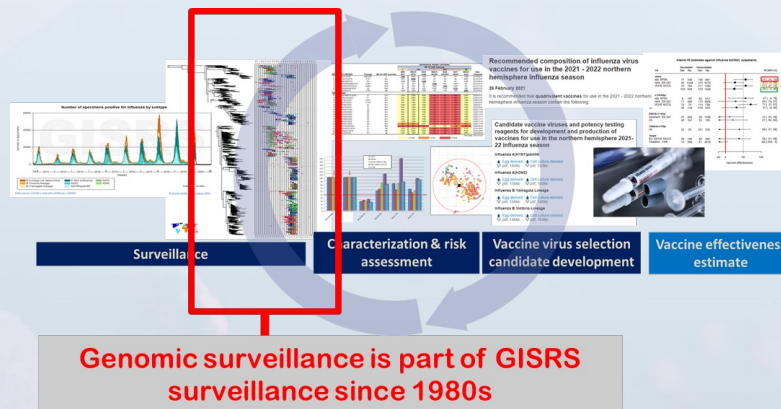
# How Influenza is being managed?

## Seasonal influenza

- Year-round (routine surveillance)
- Cycles from specimens to public health products

## Zoonotic/pandemic influenza

Collaborative surveillance: complementary continuous operations of various surveillance systems and partners



### • Detection of signals

- Event-based early warning surveillance
- Rumors, intelligence
- Occupational surveillance
- Clinical doctor's awareness
- **Influenza sentinel surveillance systems**

• **Confirmation**  
**GISRS laboratories**

### • Response

- Joint response at human-animal interface

### • Risk assessment

- **GISRS**, OFFLU, WHO/FAO/OIE, experts, affected countries

**Year-round operation**  
**Collective globally**  
**Timeliness & Representativeness**



# Getting ready for next influenza pandemic

## Outbreak responses

- **Pre-pandemic:** seasonal epidemics/zoonotic outbreaks
  - ▶ Strengthening surveillance nationally and globally
  - ▶ Products – including new vaccines: development, regulatory process and use
  - ▶ Update of preparedness plans/guidance and exercise
  - ▶ Rapid response capacity in countries
  - ▶ .....
- **During pandemic of influenza:**
  - ▶ Various special studies
  - ▶ Pandemic vaccines, novel products
  - ▶ Whole of government/society engagement
  - ▶ Resilience needed for situations beyond anticipation
  - ▶ .....

## COVID-19 experience

## New technologies

# From influenza to beyond influenza

## - from GISRS to GISRS Plus

- Since 1952: seasonal influenza
- Since 1997: + avian influenza, variant/swine influenza, pandemic influenza
- Since 2015: ++ RSV
- Since 2020: +++ SARS-CoV-2
- From now – the whole GISRS are on board:
  - Using, strengthening & expanding GISRS (visible: **infrastructure and workforce**; invisible: **trust and confidence**)
  - Collaborative surveillance: complementary with other surveillance systems in different stages of specific public health objectives



# Acknowledgement

- WHO Global Influenza Programme (GIP)
- GISRS - Global Influenza Surveillance and Response System
  - ▶ Vanessa Cozza
  - ▶ Aspen Hammond
  - ▶ Maja Lievre
  - ▶ Bikram Maharjan
  - ▶ Magdi Samaan
  - ▶ Kaat Vandemaele

*Thank You*



World Health  
Organization