



Global Influenza  
Hospital Surveillance  
Network

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# GIHSN ANNUAL MEETING 17-19 JUNE 2026

18 June 2026 AM



Foundation for  
Influenza  
Epidemiology

Sous l'égide de

Fondation  
de  
France

Coordination

**AW** IMPACT  
Healthcare



Welcome!



**Global Influenza  
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# **OPENING OF THE MEETING GIHSN STRATEGY & PERSPECTIVES**

Cédric MAHE, President, Foundation for Influenza Epidemiology (FIE)

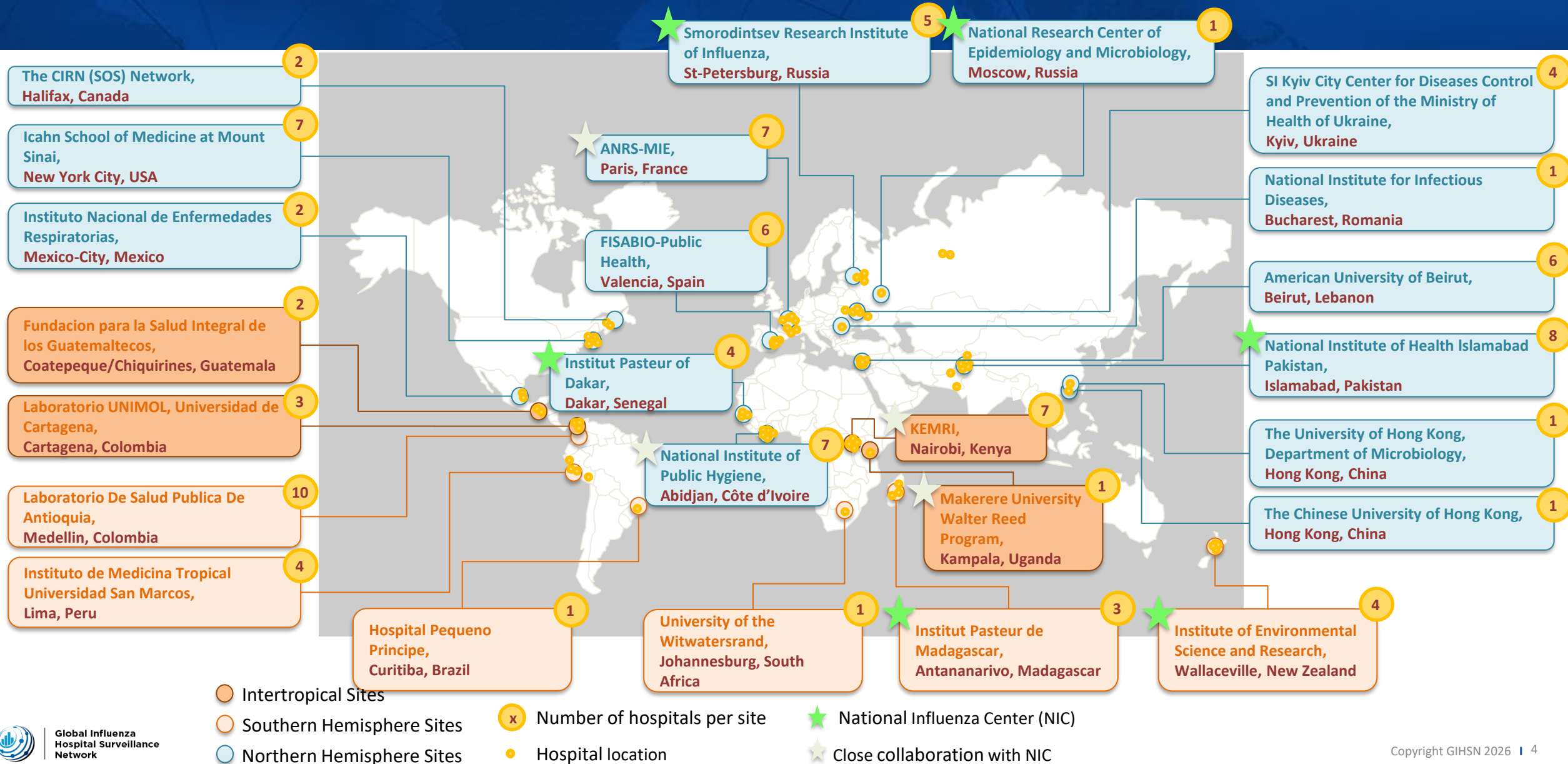


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de  
France**

# 25 SITES IN 22 COUNTRIES IN THE GIHSN IN 2025-2026



# GIHSN KEY FEATURES

**Use of a standardized protocol and questionnaire (year-round surveillance)**

**Strong links between clinical sites and laboratories**

**Use of existing infrastructures combined with capacity building through the network and catalytic funding by a Foundation**

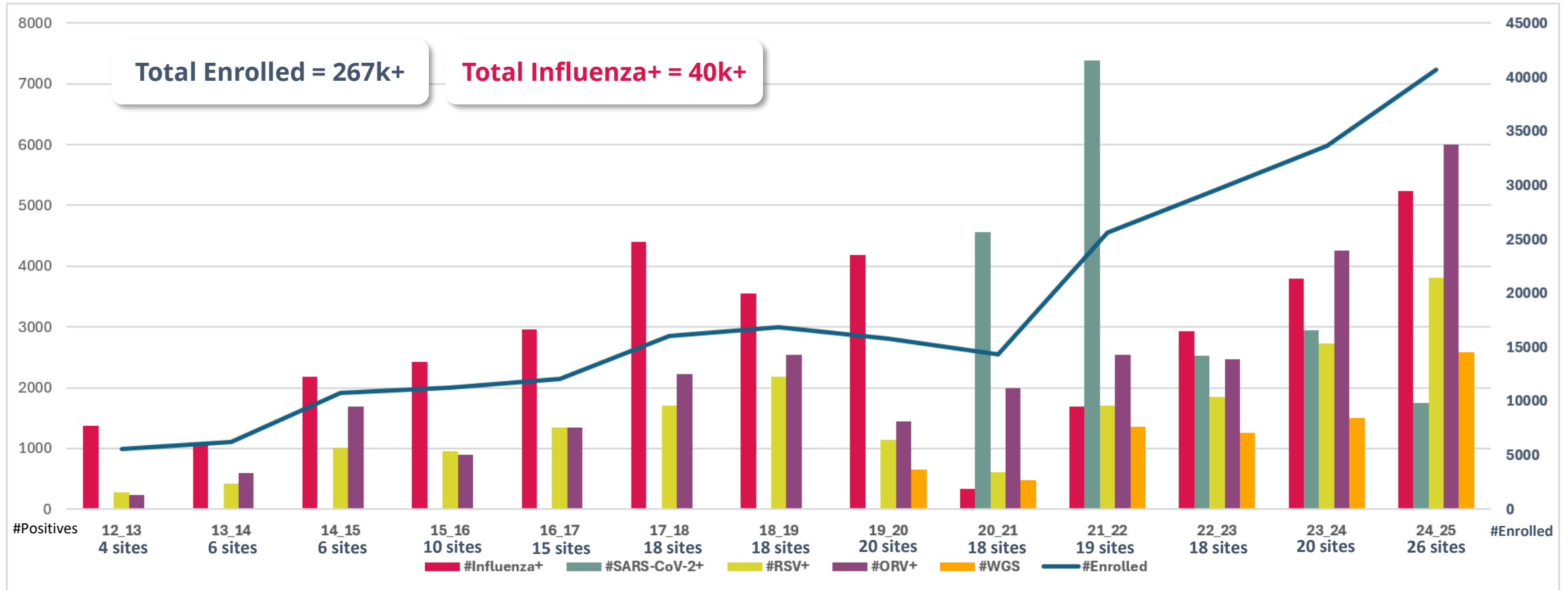
**Interface with WHO and local authorities (MoU with WHO in 2023)**

**Sites own their data. Consolidated data warehouse for research purpose**



# GISHN SCALE UP OVER THE SEASONS

Progressive scale-up over the last 10 years with limited disruption during the pandemic



Virus genome sequencing

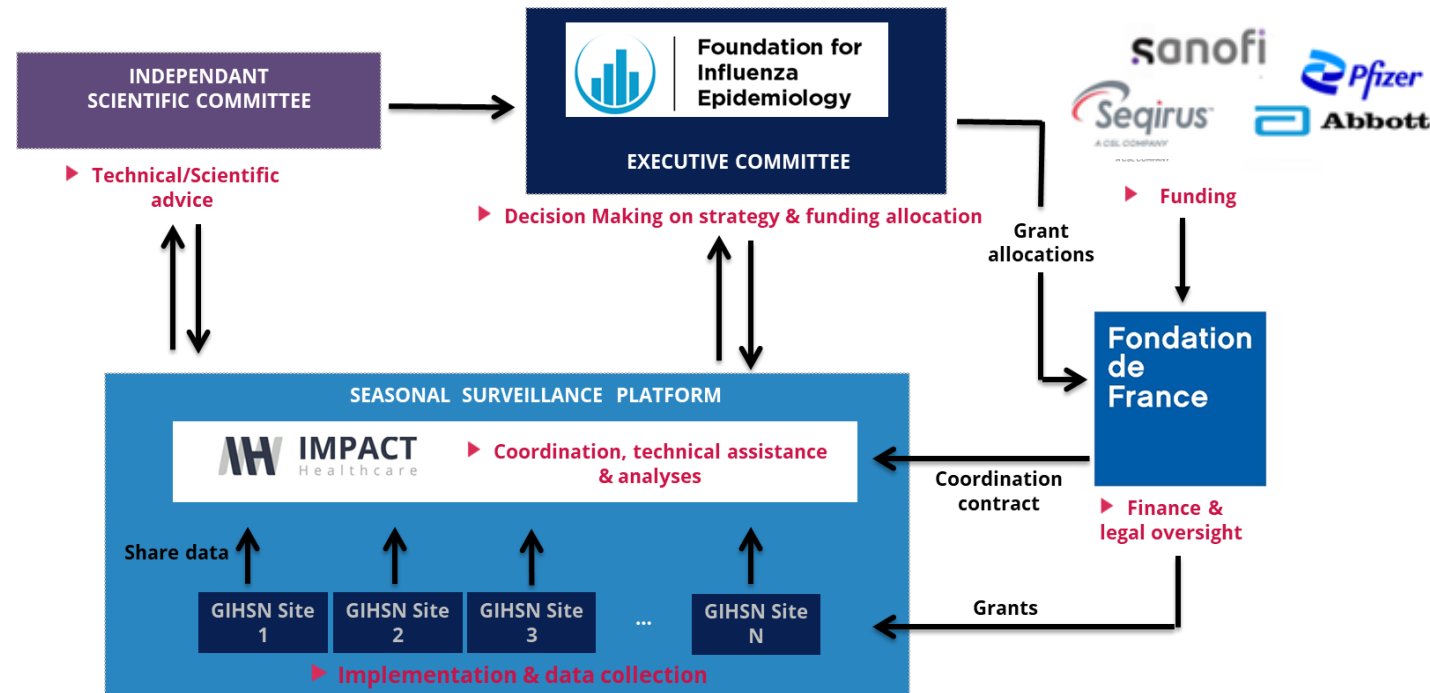
SARS-CoV-2 circulation

Year-round surveillance



# GIHSN GOVERNANCE

- A dedicated fund under the aegis of Fondation de France: the Foundation for Influenza Epidemiology (FIE). **This funding only represents 1/3 of the actual implementation cost**
- **A transparent governance system**, with an Executive Committee and an Independent Scientific Committee
- **Coordination of the network**, operational implementation and data management are supported by an independent organization (Impact Healthcare) funded by the FIE



# AREAS OF STRATEGIC FOCUS

- Speed : towards « real time » (from research to outbreak detection)
- Optimisation of WGS data reporting for VCM
- Leveraging AI to predict epidemiologic evolution
- Drivers of vaccine protection (European pilot)
- Raising more private sector funding to fill surveillance gaps and seek synergies
- Continuous quality improvement

Thursday 18 June

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**9:00: Opening of the Meeting. GIHSN Strategy & Perspectives** - Cedric Mahé (Foundation for Influenza Epidemiology) + Q/A 20'

**9:20: Roundtable – Current Surveillance Ecosystem**: Wenqing Zhang (WHO), Joseph Bresee (US Task Force for Global Health), Nicola Lewis (Crick WHO CC), Rick Bright (Bright Global Health), Marc Rondy (PAHO), Peter Bogner (GISAID) - 30' + 10'

**10:00: GIHSN Data report 2025-26: Presentation & Discussion** - Catherine Commaillé-Chapus (Impact Healthcare) - 20' + 10'

**10:30 COFFEE BREAK 20'**

**10:50: GIHSN Sites Achievements & Challenges** - Moderated by Laurence Torcel-Pagnon (Foundation for Influenza Epidemiology) & Catherine Commaillé-Chapus - 90'  
- 3-5' per site standing up / 1 slide (2 sentences and 1-2 pictures per site)

**12:20: GIHSN Sites interface with national systems**: presentation of the survey - Catherine Commaillé-Chapus + Q/A 10' + 20'

**13:00: LUNCH BREAK 90'**



## 14:30: GIHSN European Pilot: monitoring the drivers of vaccine protection –

Presentation - Mendel Haag (Seqirus) 15'

*Roundtable*: Marco Cavaleri (EMA) (remote), Marc-Alain Widdowson (WHO Euro), Bruno Lina (Lyon University and NIC), Jonathan Ewbank, (ERINHA and Be READY), Laurane De Mot (Sciensano and BE READY) 30' + 10'

## 15:25: Leveraging AI to better predict Influenza Epidemiology Evolution

Presentation - Joël Belafa (Biolevate) 10'

*Roundtable*: John McCauley (Foundation ISC), Bruno Lina, Wenqing Zhang, Sebastian Maurer-Stroh (GISAID) 30' + 10'

## 16:15 COFFEE BREAK 20'

## 16:35: WORKSHOP 1: Combination of virus genome sequencing & clinical data

Breakout groups (split the attendance in 3 pre-defined groups - 40'), then sharing in Plenary (30') *Moderators of groups*: Laurence Josset (NIC Lyon), Aspen Hammond (WHO), Sebastian Maurer-Stroh

## 17:45: Closing Day 1

Free time

Drinks & Diner 7pm



Friday 19 June - AM

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## PLENARY SESSION

9:00: **Building shared urgency and unity in the fight against influenza and beyond** - Wenqing Zhang - 20'

9:20: **Vision of Respiratory Surveillance in the Post-pandemic era** – Rick Bright 30'+10'

10:00: **WORKSHOP 2: Guiding principles for sites genome sequencing sampling/ Implementation & timelines.** Breakout groups (split the attendance in 3 pre-defined groups – 40'), then sharing in Plenary (30') - *Moderators of groups*: Dmitriy Pereyaslov (WHO), Marta Nunes (CERP), John McCauley

10:40: **COFFEE BREAK** 20'

11:00: **Sharing in Plenary** - 30'

11:30: **Research projects leveraging the GIHSN platform** - Marta Nunes (CERP), Sandra Chaves (Foundation for Influenza Epidemiology), Aspen Hammond, Miranda Delahoy (US CDC) - 60'

12:30: **Preparation of next season & pilot milestones** - Laurence Torcel-Pagnon - 15'

12:45: **Closing of the Meeting** - Cedric Mahe & Wenqing Zhang - 5'

13:00: **LUNCH BREAK**

**End of the meeting**





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## **ROUNDTABLE – CURRENT SURVEILLANCE ECOSYSTEM**

*Moderator: Cédric MAHE*



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# ROUNDTABLE – CURRENT SURVEILLANCE ECOSYSTEM

- ❖ **Wenqing Zhang**, WHO, Geneva, Switzerland
- ❖ **Joseph Bresee**, US Task Force for Global Health, Atlanta, USA
- ❖ **Nicola Lewis**, The Francis Crick Institute, WHO CC, London, UK
- ❖ **Rick Bright**, Bright Global Health, Washington DC, USA
- ❖ **Marc Rondy**, Pan American Health Organization (PAHO), USA
- ❖ **Sebastian Maurer-Stroh**, GISAID





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GIHSN ANNUAL MEETING, 17-19 JUNE 2026

## GIHSN DATA REPORT 2025-26 (TO DATE)

Catherine COMMAILLE-CHAPUS, GIHSN Coordination & Data Management



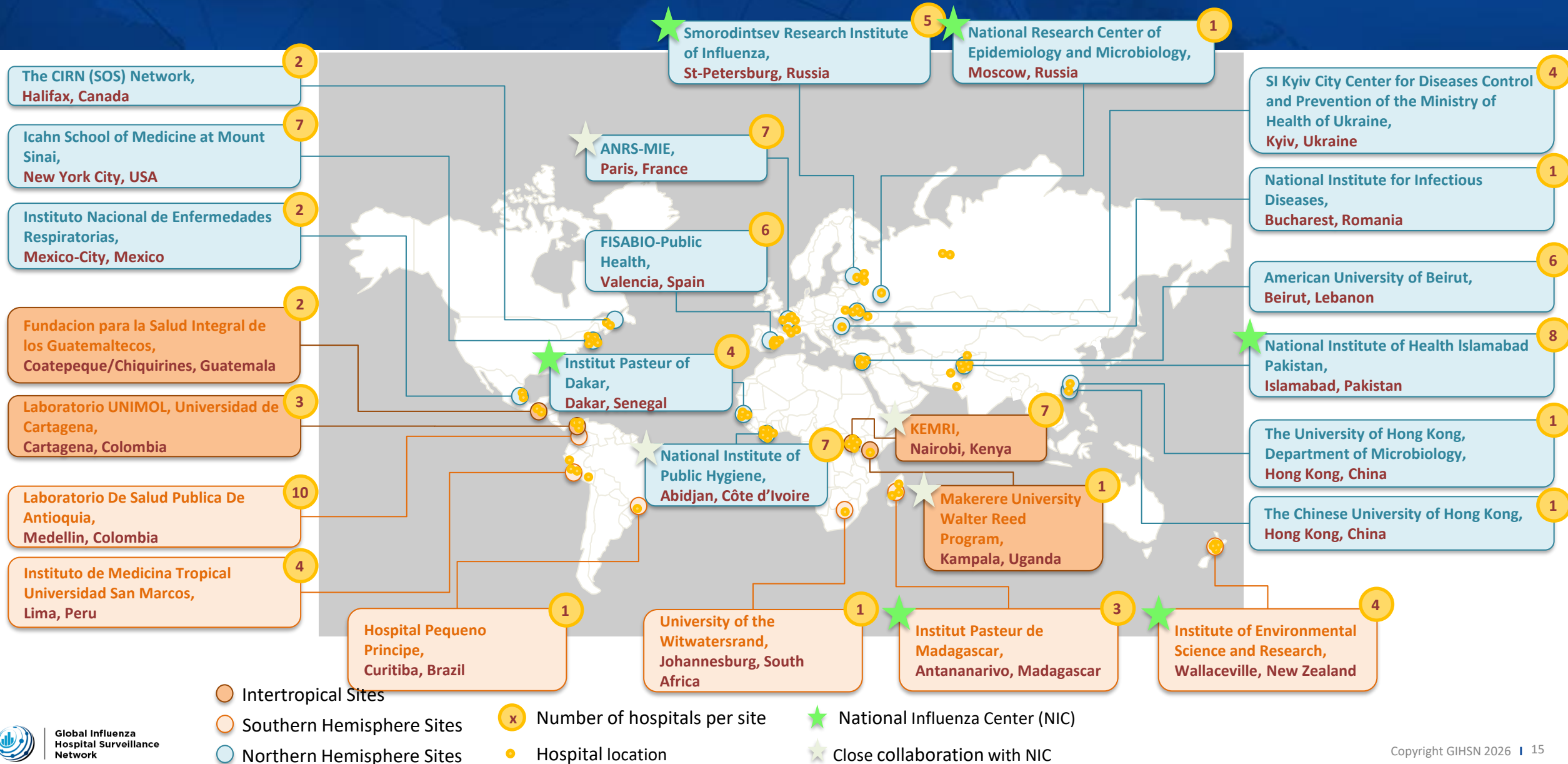
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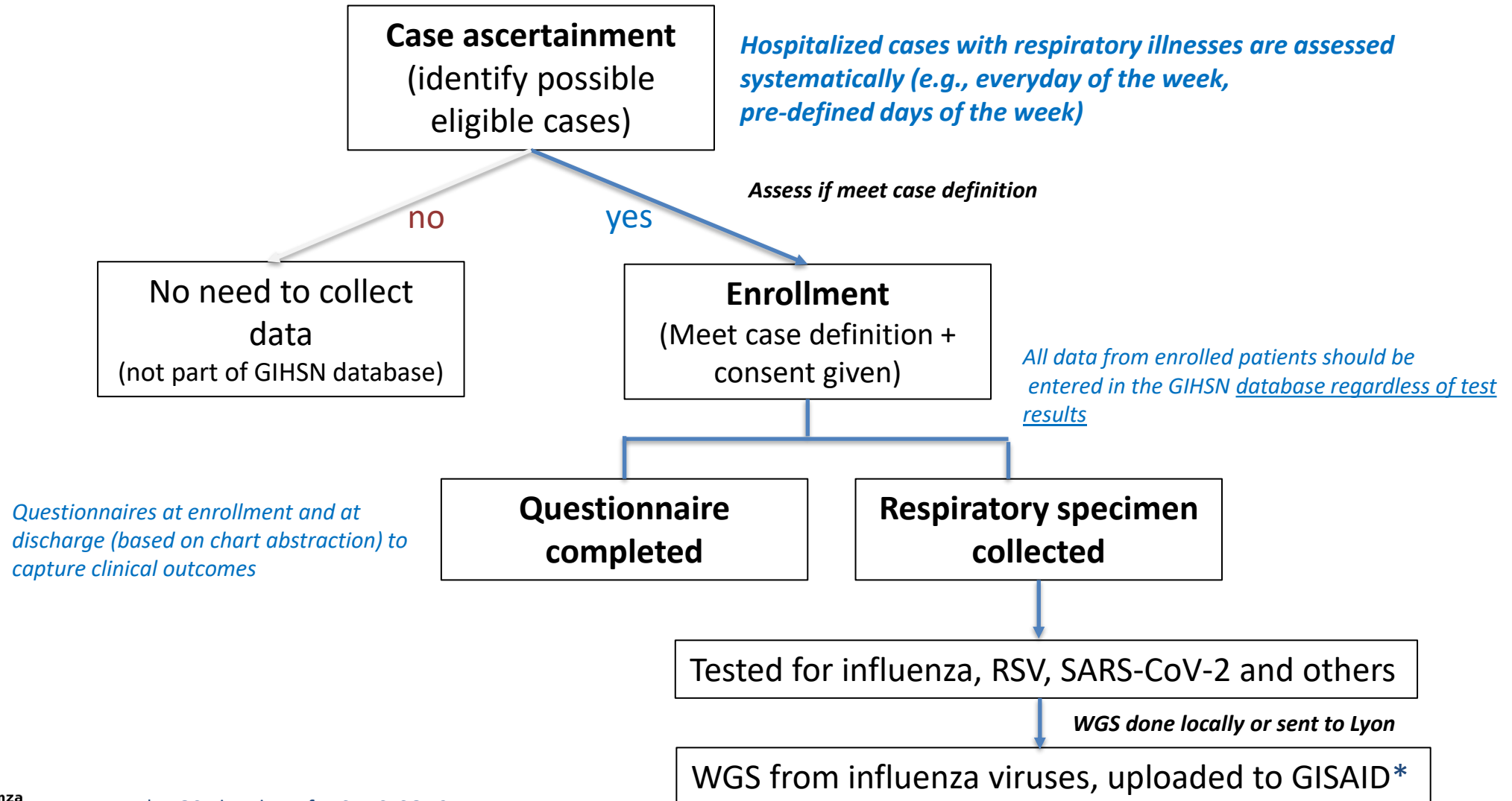
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France



# 25 SITES IN 22 COUNTRIES IN THE GIHSN IN 2025-2026



# PROCESS FOR IDENTIFICATION OF CASES AND DATA COLLECTION - GIHSN



# SCOPE OF VIRUSES TESTED BY SITE 2025-26 (1/2)

## (AS OF JUNE 5TH, 2026)

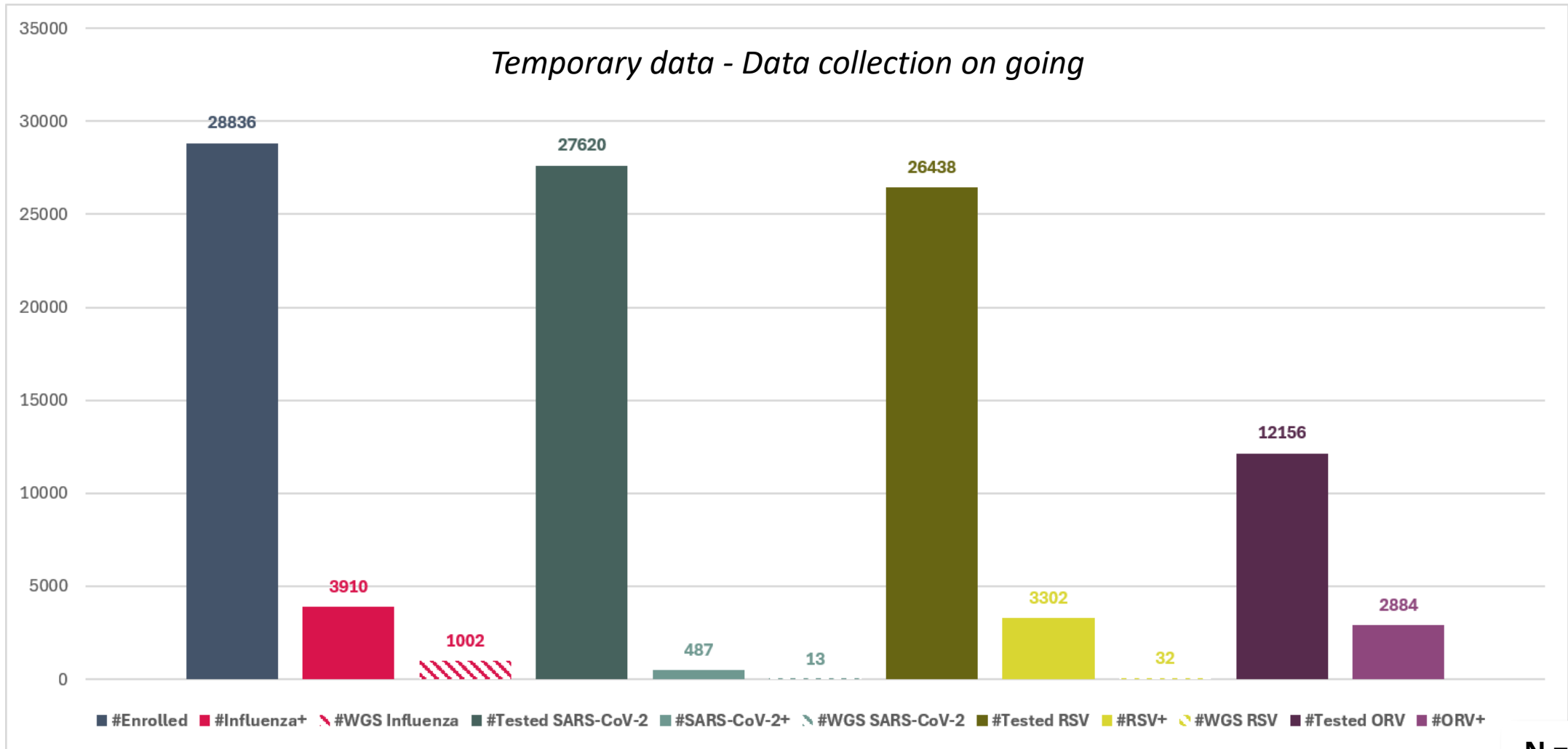
Country	Site/Institution	Influenza	SARS-CoV-2*	RSV*	AdV*	HBoV*	HCoV*	EV*	EV-D68*	MERS-CoV*	HMPV*	HPIV*	RhV*	EV/RhV*	SARS-CoV*	ORV*
<b>Africa</b>																
Côte d'Ivoire	Institut National d'Hygiène Publique (INHP), Abidjan	█	█		█						█				█	
Kenya	Kenya Medical Research Institute (KEMRI), Nairobi	█	█	█												
Madagascar	Institut Pasteur de Madagascar, Antananarivo	█	█	█							█		█			
Senegal	Institut Pasteur of Dakar (IPD), Dakar	█	█	█	█	█	█	█	█		█	█	█	█		
South Africa	University of the Witwatersrand, Johannesburg	█	█	█	█						█	█	█	█		
Uganda	University of the Witwatersrand, Johannesburg	█	█	█												
<b>Asia/Pacific</b>																
Hong Kong - CUHK	The Chinese University of Hong Kong	█	█	█	█		█	█		█	█	█	█	█		
Hong Kong - HKU	The University of Hong Kong, Department of Microbiology, Hong Kong	█	█	█	█			█			█	█	█	█		█
New Zealand	Institute of Environmental Science and Research, Wallaceville	█	█	█	█			█			█	█	█			
Pakistan	National institute of health Islamabad Pakistan	█	█	█	█	█	█	█		█	█	█	█		█	
<b>Middle East</b>																
Lebanon	American University of Beirut, Beirut	█	█	█	█	█	█	█		█	█	█	█	█		

# SCOPE OF VIRUSES TESTED BY SITE 2025-26 (2/2)

## (AS OF JUNE 5TH, 2026)

Country	Site/Institution	Influenza	SARS-CoV-2*	RSV*	AdV*	HBoV*	HCoV*	EV*	EV-D68*	MERS-CoV*	HMPV*	HPIV*	RhV*	EV/RhV*	SARS-CoV*	ORV*
<b>Eurasia</b>																
France	ANRS-MIE, Paris	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Romania	National Institute for Infectious Diseases "Prof. Dr. Matei Bals", Bucharest	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Russia - Moscow	FSBI "N.F. Gamaleya NRCEM" Ministry of Health, Moscow	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Russia - St. Petersburg	Smorodintsev Research Institute of Influenza, St Petersburg, Russia	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Spain	FISABIO, Valencia	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Ukraine	SI Kyiv City Center for Diseases Control and Prevention of the Ministry of Health of Ukraine, Kyiv	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
<b>North America</b>																
Canada	The CIRN Serious Outcomes Surveillance (SOS) Network, Halifax	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
USA	Icahn School of Medicine at Mount Sinai, NYC	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
<b>South America</b>																
Brazil	Hospital Pequeno Principe, Curitiba	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Colombia - Antioquia	Laboratorio de Salud Publica de Antioquia, Medellin	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Colombia - Cartagena	Laboratorio UNIMOL, Universidad de Cartagena, Cartagena de Indias	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Guatemala	Fundacion para la Salud Integral de los Guatemaltecos, Coatepeque/Chiquirines	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Mexico	Instituto Nacional de Enfermedades Respiratorias, Mexico City	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Peru	Instituto de Medicina Tropical, Lima	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█

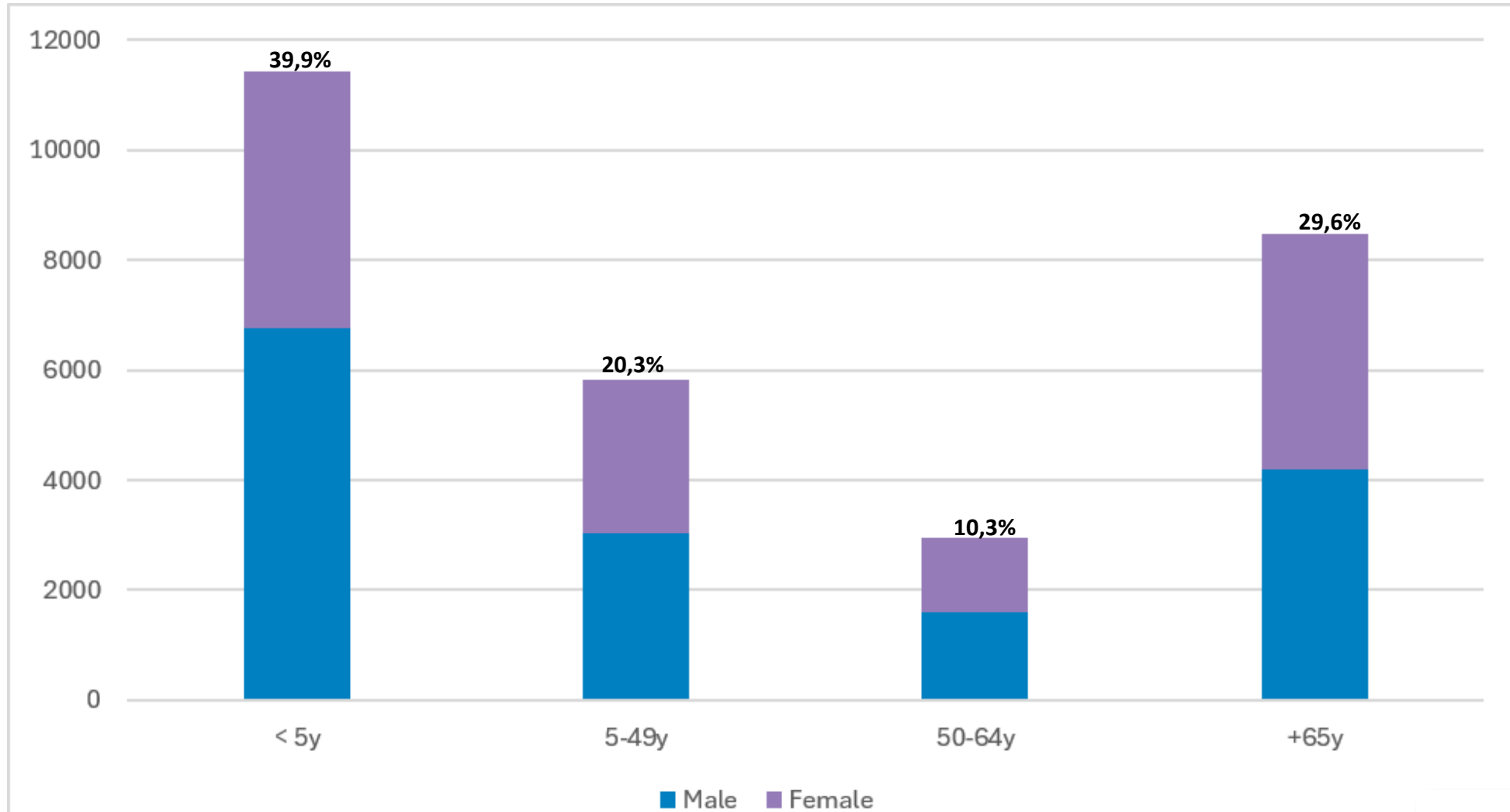
# OVERALL NB OF PATIENTS ENROLLED AND POSITIVE CASES OF INFLUENZA, SARS-COV-2, RSV AND ORV (2025-26) (#) (AS OF JUNE 5TH, 2026)



**N = 28.836**



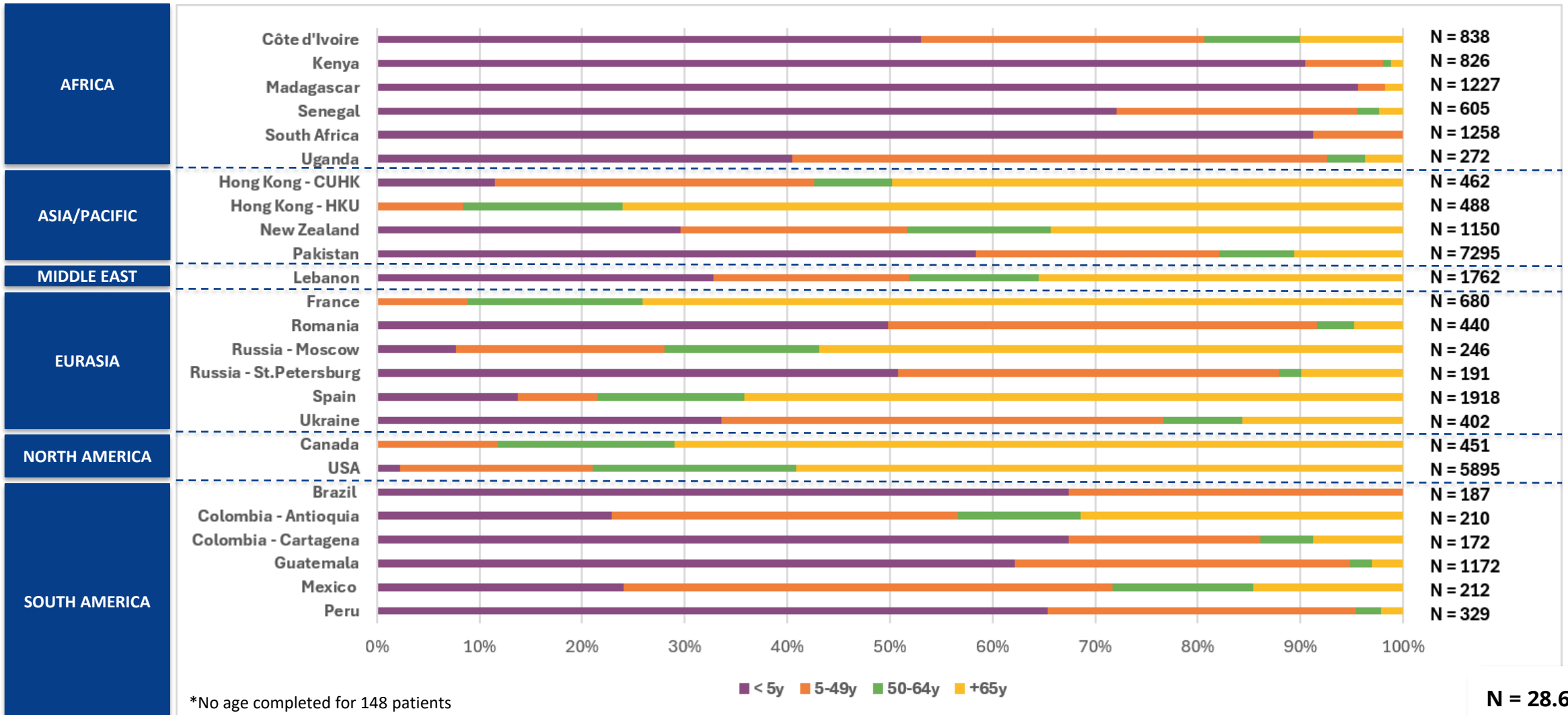
# DISTRIBUTION OF PATIENTS ENROLLED BY AGE GROUP AND SEX – ALL SITES (2025-26) (#) (AS OF JUNE 5TH, 2026)



\*No age and sex completed for 167 patients

**N = 28.669\***

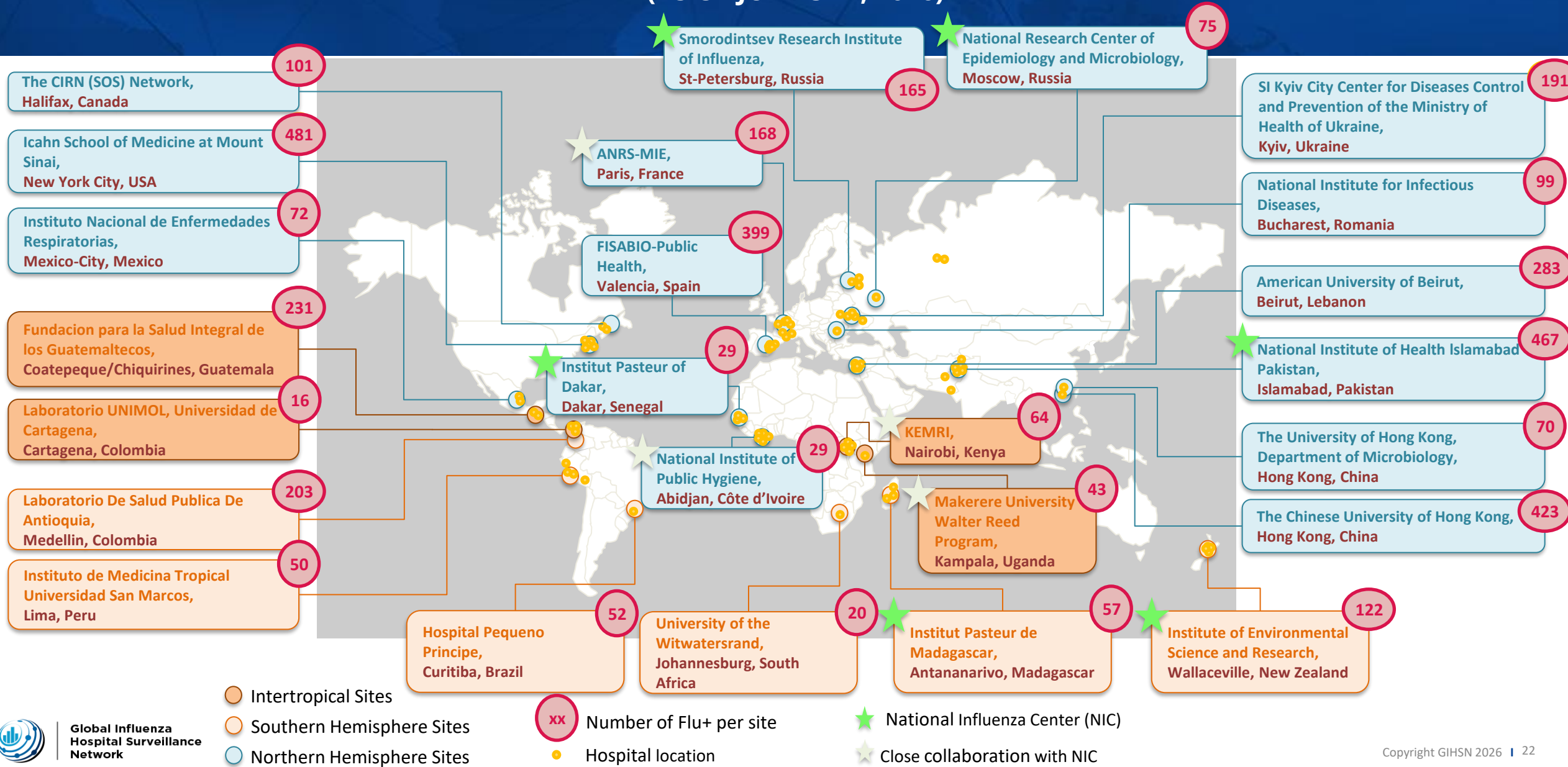
# DISTRIBUTION OF PATIENTS ENROLLED BY AGE GROUP – BY SITE (2025-26) (#) (AS OF JUNE 5TH, 2026)



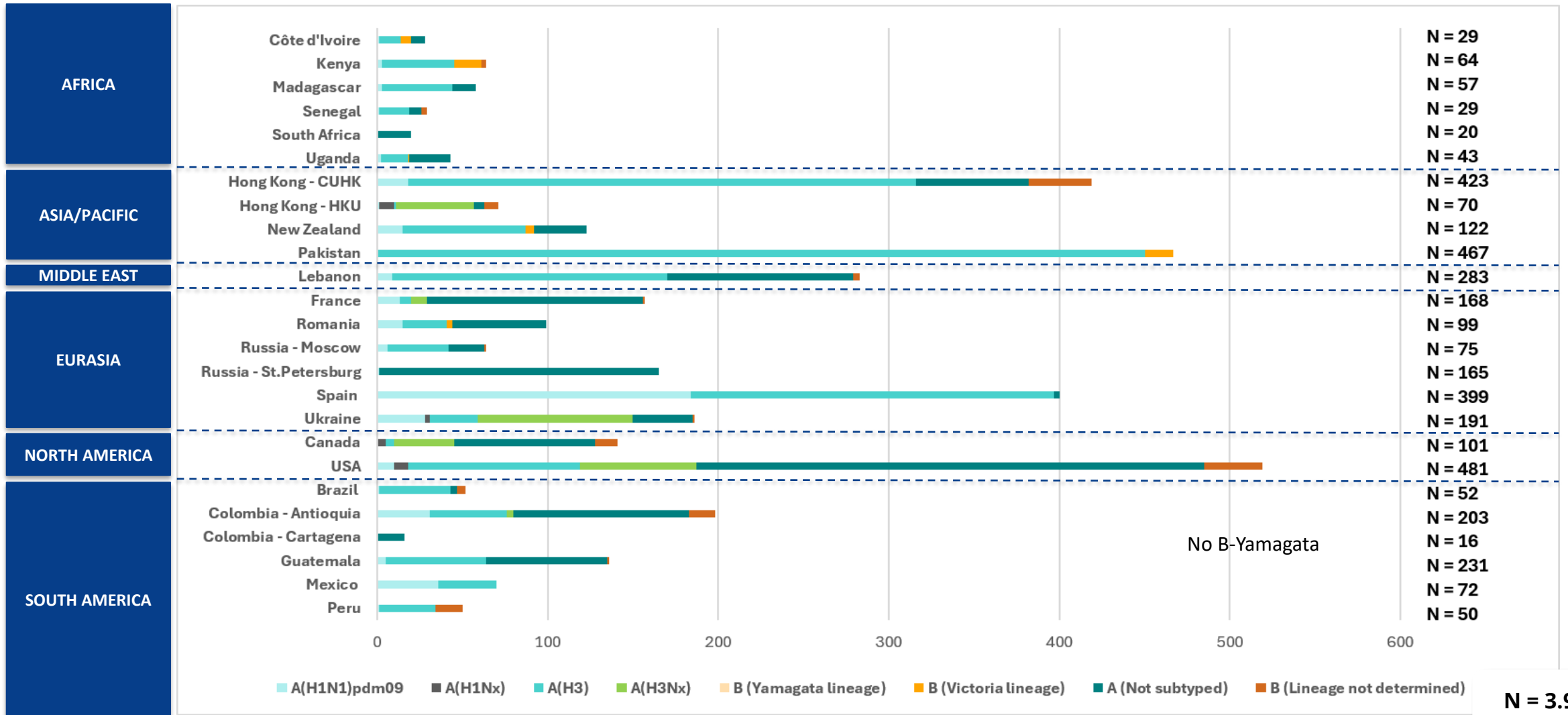
\*No age completed for 148 patients

**N = 28.688\***

# 3.910 FLU POSITIVE CASES COLLECTED IN 2025-2026 (AS OF JUNE 5TH, 2026)



# DISTRIBUTION OF LAB CONFIRMED INFLUENZA CASES BY VIRUS SUBTYPE AND LINEAGE – BY SITE (2025-26) (#) (AS OF JUNE 5TH, 2026)

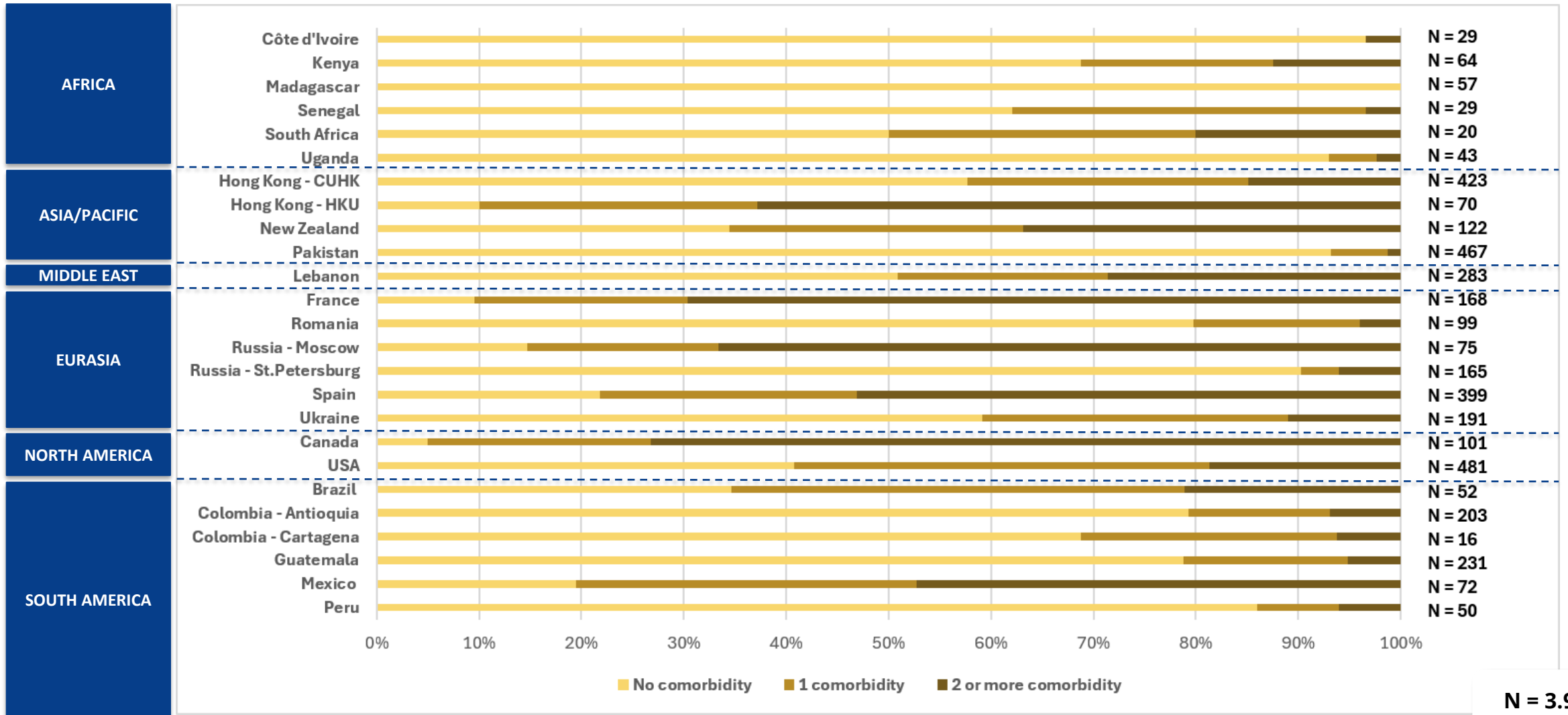


**N = 3.910**



# PRESENCE OF COMORBIDITIES AMONG LAB CONFIRMED INFLUENZA CASES - BY SITE (2025-26) (%)

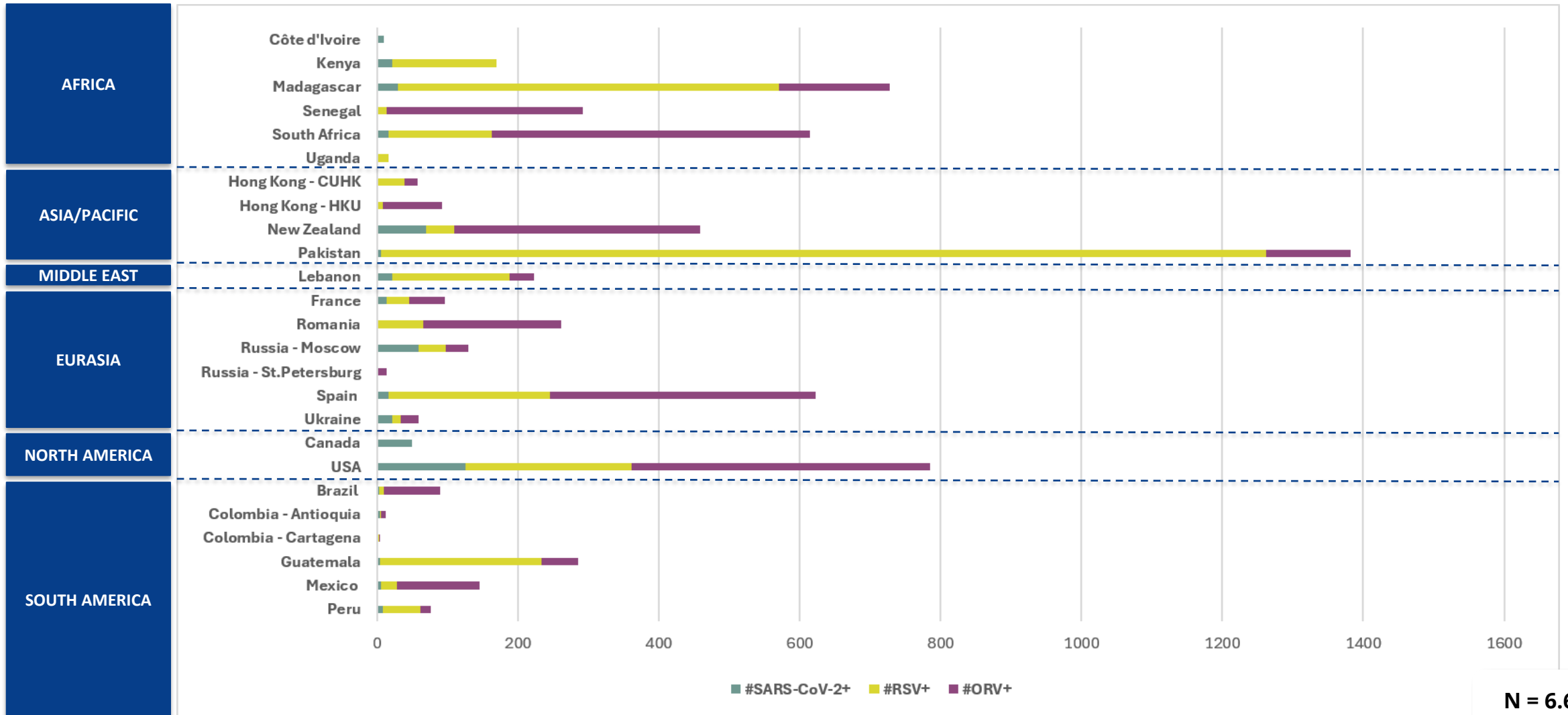
## (AS OF JUNE 5TH, 2026)



**N = 3.910**



# DISTRIBUTION OF OTHER RESPIRATORY VIRUSES – BY SITE (2025-26) (#) (AS OF JUNE 5TH, 2026)

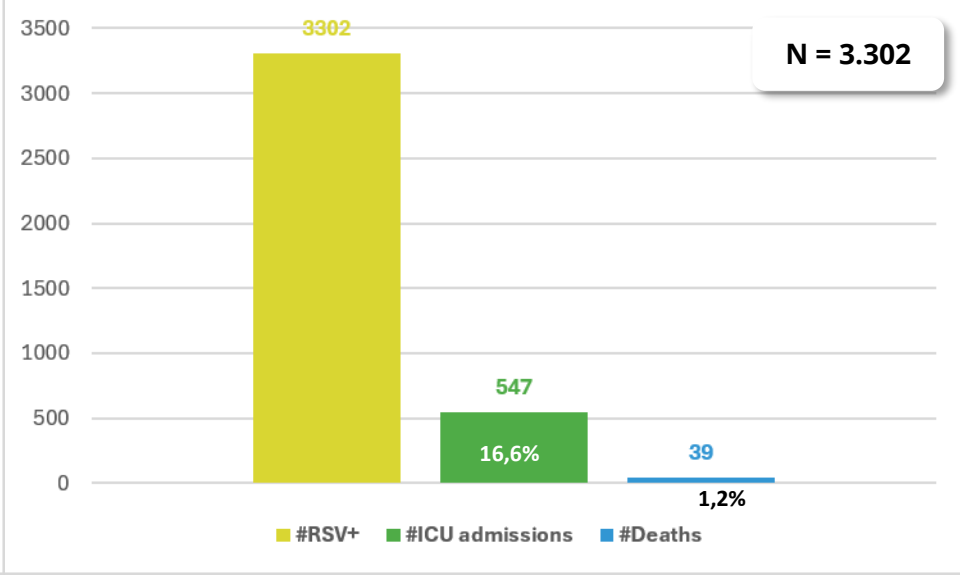
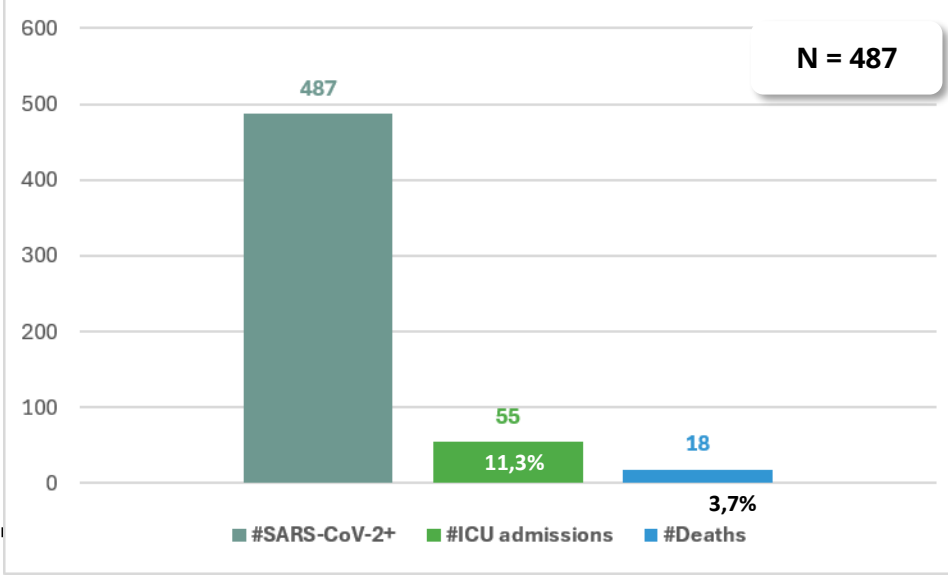
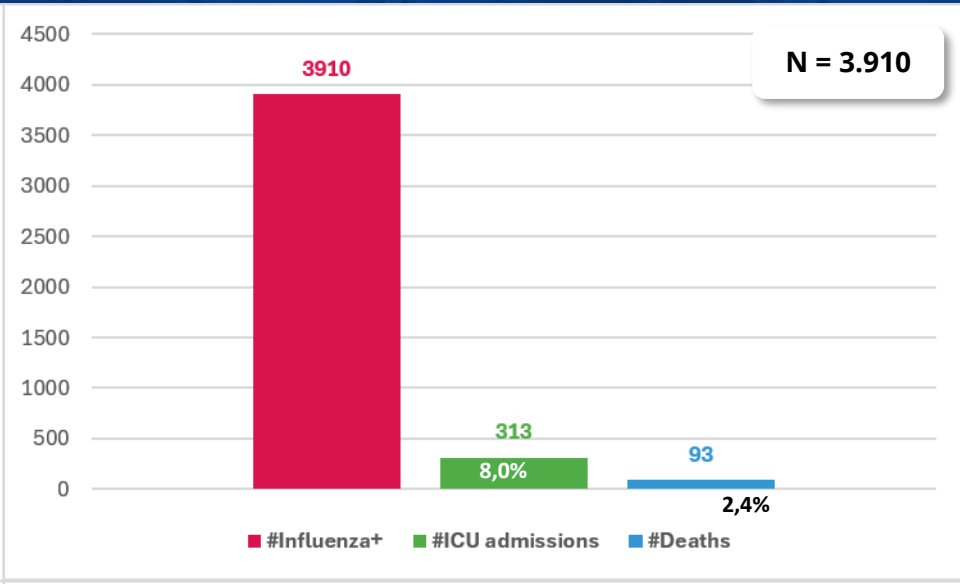
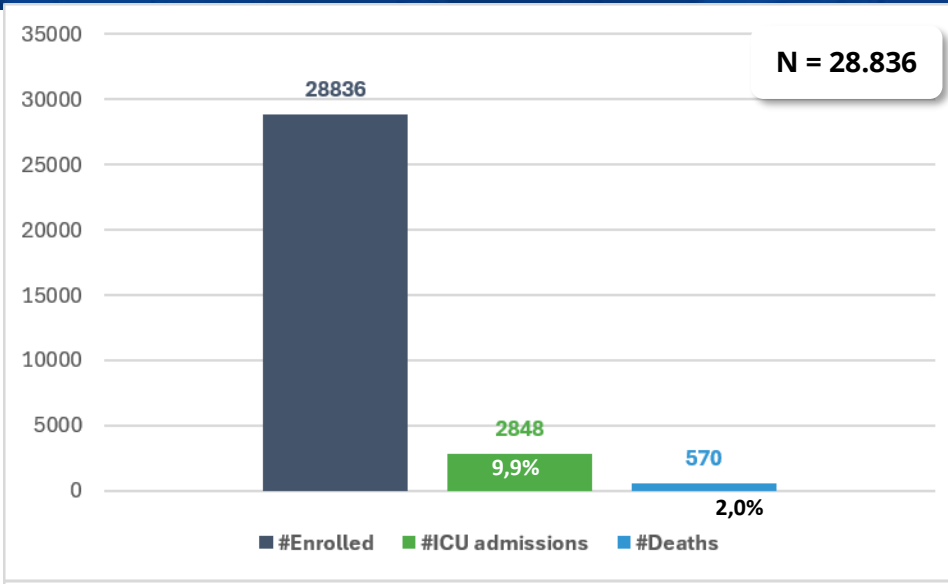


**N = 6.673**



# SEVERITY – ALL SITES (2025-26) (#)

## (AS OF JUNE 5TH, 2026)



# WGS SCALE-UP: 1.000+ WGS INFLUENZA REPORTED TO DATE (25% OF FLU+ WERE SEQUENCED SO FAR)



- Intertropical Sites
- Southern Hemisphere Sites
- Northern Hemisphere Sites
- xx Number of WGS Flu per site
- Hospital location
- ★ National Influenza Center (NIC)
- ★ Close collaboration with NIC

# GIHSN ACTIVITY REPORT SHARED EARLY FEBRUARY 2026 WITH WHO PRIOR TO THE VACCINE COMPOSITION MEETING (1013 SEQUENCES)



GIHSN report of activity prior to the WHO Consultation on the Composition of Influenza Virus Vaccines for use in the 2026-27 Northern Hemisphere Influenza Season.

Report prepared the 4<sup>th</sup> of February 2026

## 1 - Description of the network

GIHSN is collecting clinical and virological information from hospitalized cases through a network of sites located in different regions of the world (Fig.1). This combined clinical and virological surveillance allows the identification of viruses responsible for severe influenza. This severity is assessed by the oxygen requirement of cases registered by the sites. In this report, viruses detected and sequenced from cases requiring oxygen supplementation are identified in the phylogenetic trees provided, to determine if specific lineages or clades are associated with more frequent severe presentation.

This report collates the sequencing data of hospitalized patients from 21 sites in 19 countries reporting **1,013 sequences** passing quality filters and available in the GISAID database on 2026-02-03: Brazil (1), Canada (7), Colombia (40), Cote d'Ivoire (44), Guatemala (25), Hong Kong (65), Kenya (17), Lebanon (77), Madagascar (21), Mexico (34), New Zealand (2), Pakistan (67), Peru (10), Romania (38), Russian Federation (353), Senegal (11), Spain (107), Ukraine (26), United States (68).

Samples were collected between 2025-09-01 and 2026-01-19. During this period, A/H3N2 virus dominated (n=843), followed by A/H1N1 viruses (n=157) and rare detections of B viruses (n=13). Note that one A/H5N2 virus was detected in Mexico City in September 2025 but is not described in this report.

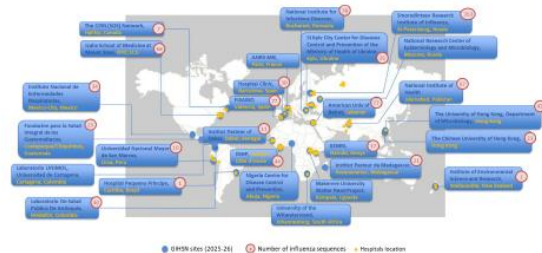
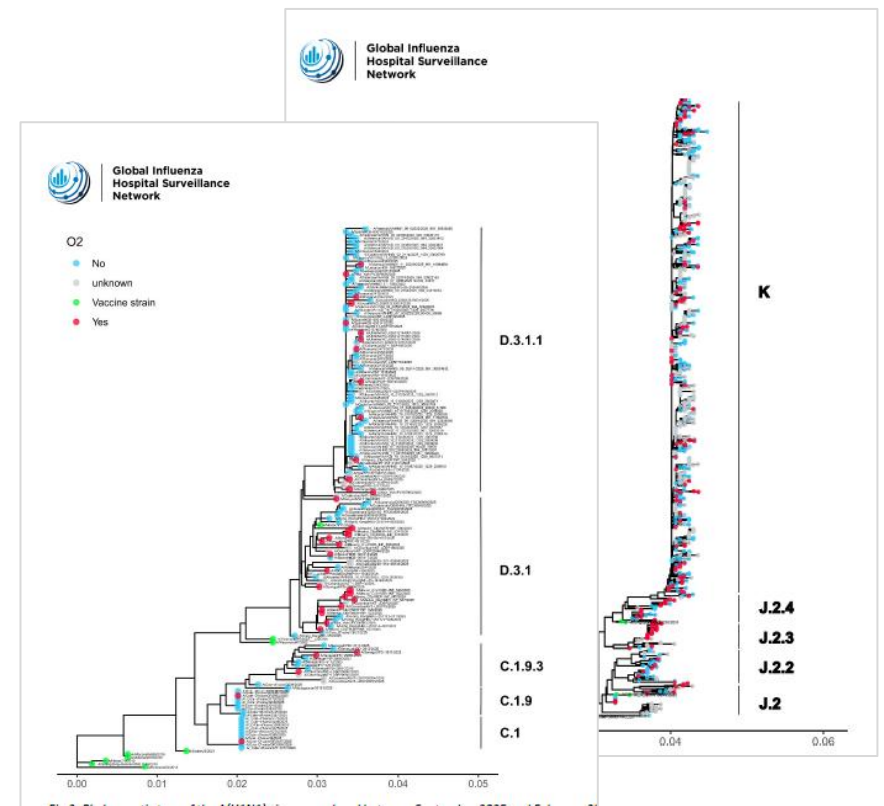


Fig. 1 Map showing the repartition of the participating countries, between September 2025 and February 2026, with the number of influenza sequences shared by sites.

During the period 2025-09-01 to 2026-01-19, A/H3N2 virus dominated (n=843), followed by A/H1N1 viruses (n=157) and rare detections of B viruses (n=13).

Sequencing data of hospitalized patients from 21 sites in 19 countries reporting 1,013 sequences passing quality filters and available in the GISAID database on 2026-02-03



Phylogenetic tree of the A(H1N1) and A(H3N2) viruses analyzed between September 2025 and February 2026; Tips (samples) colors correspond to Oxygen supplementation (yes: red; no:blue) with vaccine reference strains displayed in green.

# VIRUS CIRCULATION OVER THE WEEKS – BY SITES

## ❖ Weekly reporting active:

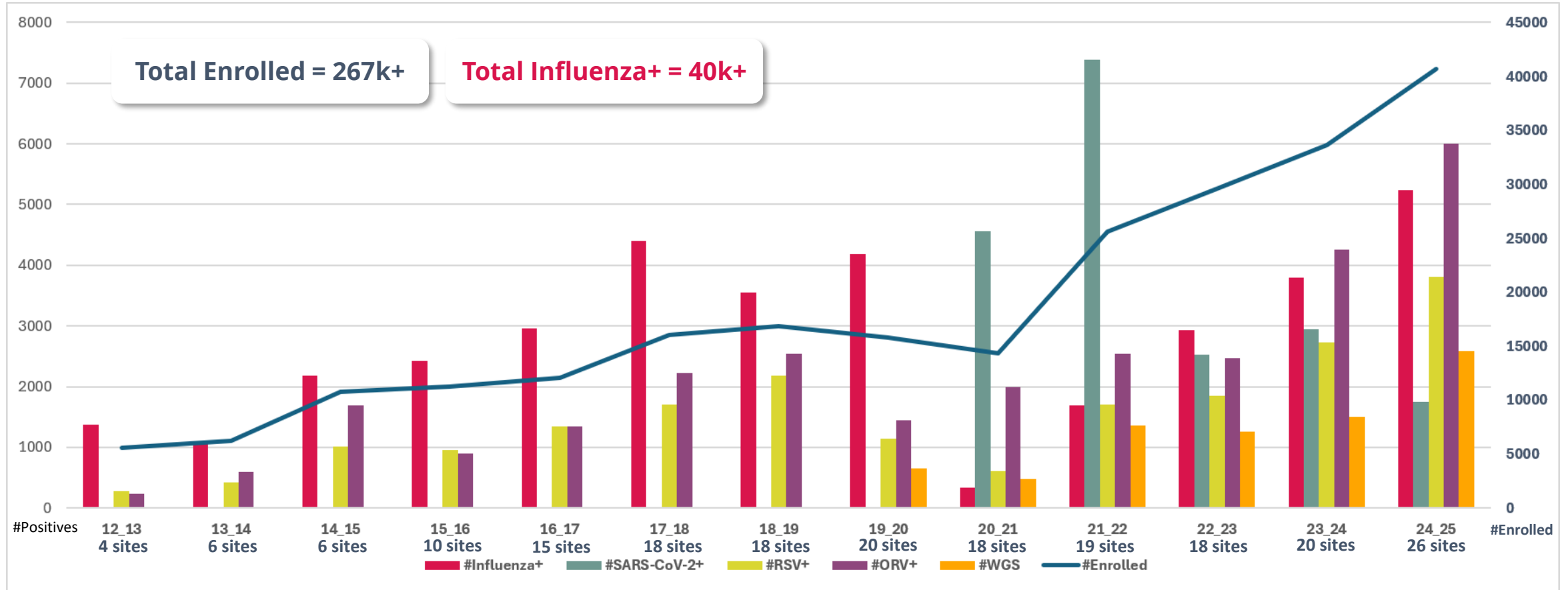
❖ [https://data.gihsn.org/dashboard\\_wr/](https://data.gihsn.org/dashboard_wr/)



# THE GIHSN OVER THE SEASONS PATIENT DISTRIBUTION BY SEASON

(AS OF JUNE 5TH, 2026)

Progressive scale-up over the last 10 years with limited disruption during the pandemic



Virus genome sequencing

SARS-CoV-2 circulation

Year-round surveillance



# CONTINUOUS IMPROVEMENT IN DATA QUALITY, DATA COMPLETENESS AND REPORTING TIMELINESS

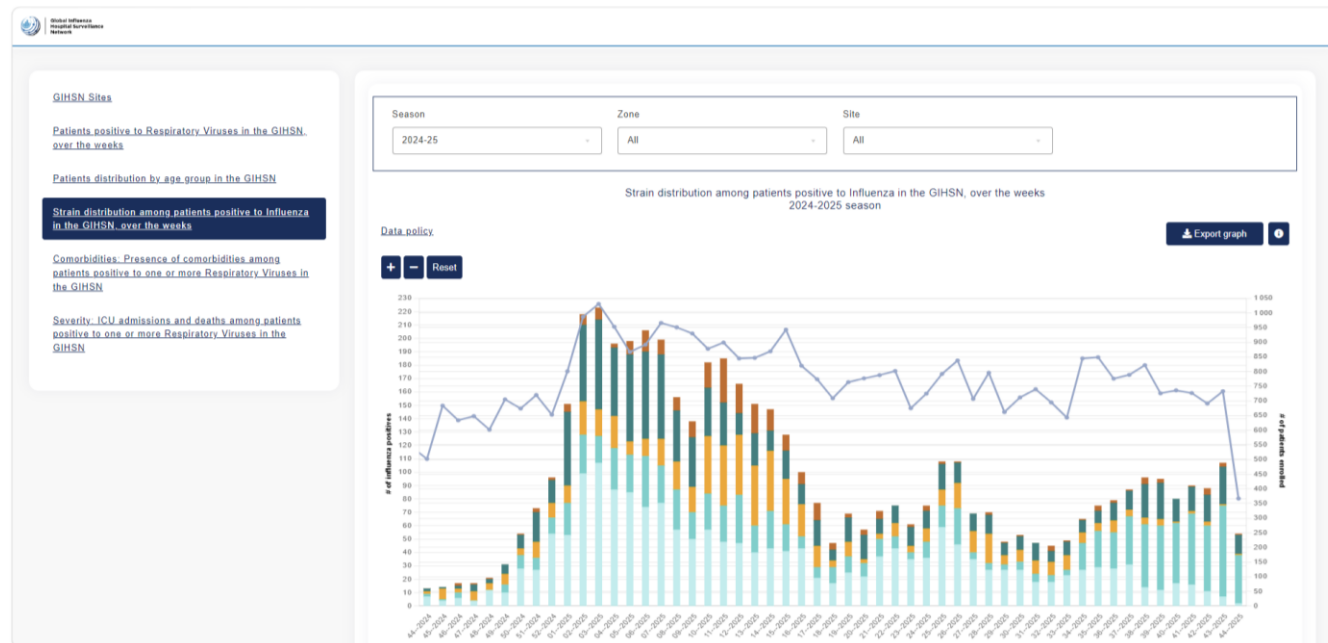
- Number of cases reported
- Number of WGS reported
- Data quality (systematic controls at data submission, action plans with sites)
- Data completeness (systematic monitoring by variables, action plans with sites)
- Timeliness of data reporting: eCRF or monthly reporting by batches
- Interactive dashboards available on the GIHSN website



# MORE INFORMATION

## ❖ GIHSN Annual Report 2024-2025 & Dashboard

❖ <https://gihsn.org/annual-report-2024-2025/>



## GIHSN Annual report Year 2025

### Foreword

“

At a time when multilateralism is under intense pressure and global respiratory surveillance is more fragmented than ever, directly affecting pandemic preparedness and timely vaccine strain update, the GIHSN stands out as a robust, agile, and indispensable global asset. It shows that, even amid political uncertainty, an empowered civil society (public and private) can close critical institutional gaps.

In just 13 years, the GIHSN community has grown into the world's largest hospital-based respiratory surveillance network. What began with influenza surveillance has evolved into a comprehensive, year-round monitoring system covering a wide range of respiratory viruses. Its distinguishing strength lies in the consistent use of a harmonized core protocol across all sites, enabling the systematic collection of linked demographics, clinical, virological, and sequencing data.

This year, the expansion of virus sequencing capacity allowed the GIHSN to provide more data than ever to the WHO vaccine composition consultations. At the same time, we are exploring the use of artificial intelligence to unlock the full value of this rich dataset. Understanding the determinants of vaccine performance (across host, vaccine, and viral factors) is also emerging as a key area of innovation for the network.

Looking ahead, the challenges are significant, but so are the opportunities. Strengthening this community, sustaining innovation, and continuing to broaden the network's reach will be essential to support global preparedness in an increasingly complex and unpredictable environment.

The GIHSN remains committed to contributing high-quality evidence to inform public health action. Together, we can continue to build on this solid foundation and ensure that respiratory surveillance remains a global public good, built on collaboration, scientific rigor, and shared purpose.

”



# COFFEE BREAK





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GIHSN ANNUAL MEETING, 17-19 JUIN 2026

## GIHSN SITES – ACHIEVEMENTS & CHALLENGES

*Moderators:* Laurence TORCEL-PAGNON (FIE) & Catherine COMMAILLE-CHAPUS



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Epidemiology**

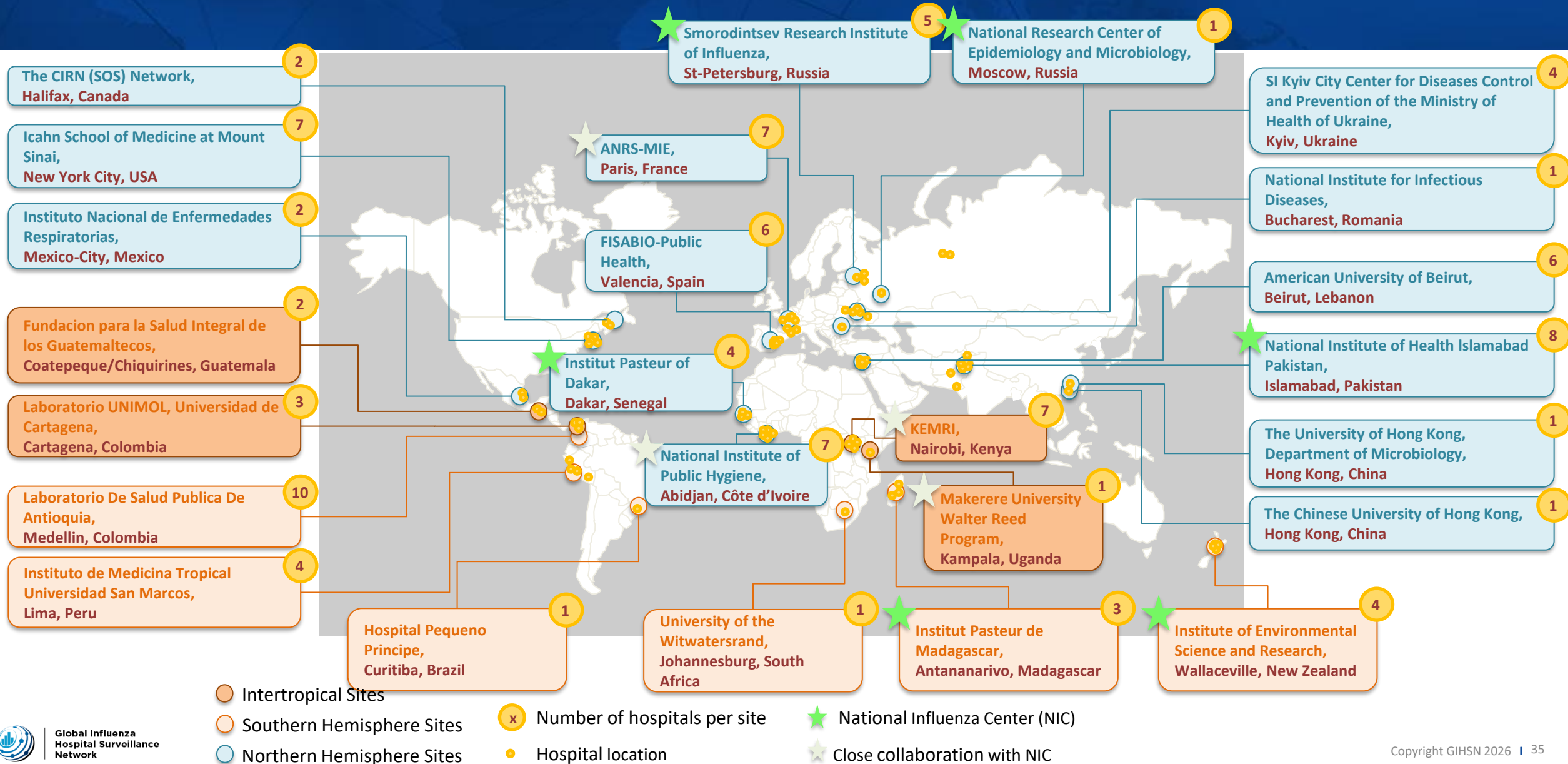
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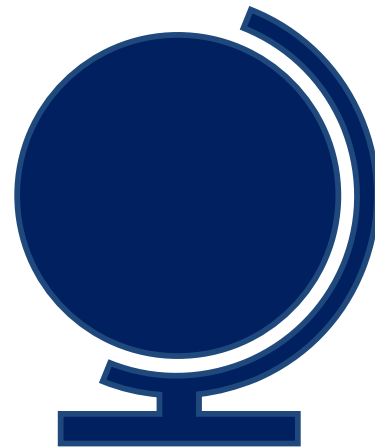
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# 25 SITES IN 22 COUNTRIES IN THE GIHSN IN 2025-2026



# GIHSN SITES ACHIEVEMENTS & CHALLENGES

❖ **Around the room presentation (*3-5' each per site, standing up*)**



# AFRICA

- ❖ South Africa
- ❖ Madagascar (*remote*)
- ❖ Uganda (*remote*)
- ❖ Kenya
- ❖ Côte d'Ivoire
- ❖ Senegal

# Soweto, South Africa

## Paediatric (<14y) Surveillance



**WITS VIDA**

UNIVERSITY OF THE WITWATERSRAND  
VACCINES & INFECTIOUS DISEASES ANALYTICS



**2026 season: 50% fewer paediatric respiratory admissions, but an earlier and more intense influenza season**

### SITE AT A GLANCE

#### CHBAH, Soweto

3,400-bed public tertiary hospital

#### Catchment

~1.9M people; ~190k children <5y; maternal HIV 28–33%

#### Immunoprophylaxis-naïve cohort

No paediatric flu vaccine, no RSV maternal vaccine, no nirsevimab (cost)

### KEY MESSAGES

#### INFLUENZA

- Early & steep rise from epi week 21
- June positivity ~31% (≈ 2× June average)
- National data: H3N2 subclade K

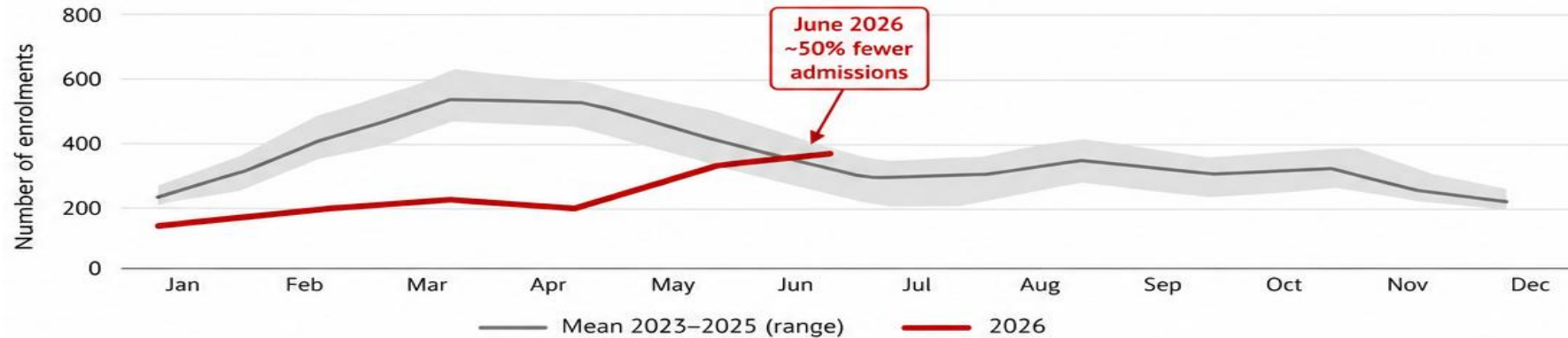
#### RSV

- Muted season; peak below 2024/25
- RSV-B dominant again
- Signal not confounded by vaccine/monoclonal

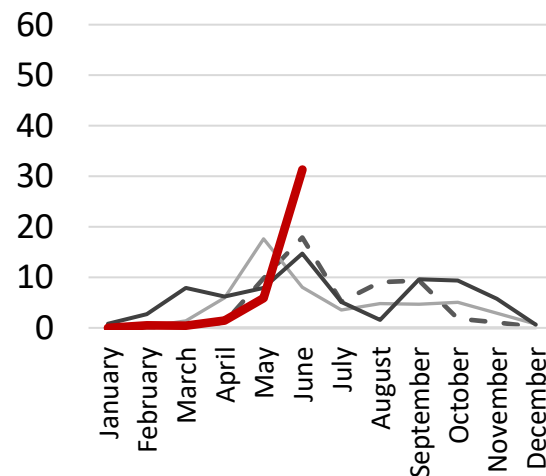
#### SURVEILLANCE

- Criteria, consent & team unchanged
- Fewer admissions reflect lower burden

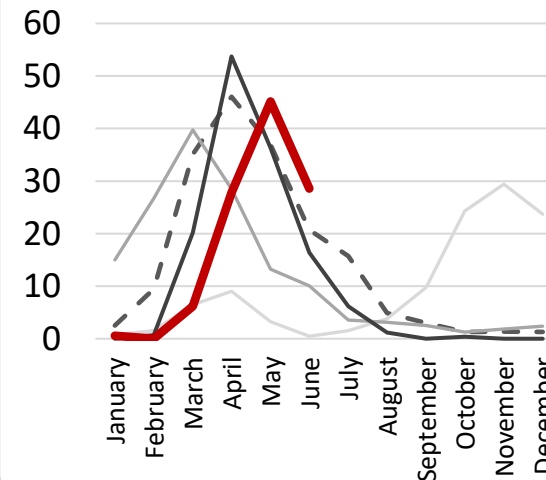
PAEDIATRIC RESPIRATORY ENROLMENTS BY MONTH (<14y)



INFLUENZA PREVALENCE (%)



RSV PREVALENCE (%)



### SUMMARY

#### Influenza

Season started earlier and is more intense than the pre-pandemic baseline; June admissions ticking up.

#### RSV

Activity muted vs 2024/25, tracking near pre-pandemic levels; B-dominant cycling, not programmatic.

#### Surveillance

Enrolment criteria, consent and team unchanged - signal is a real reduction in disease, not a methods artefact.

— — Pre-pandemic avg — 2020 — 2021–2024 avg — 2025 — 2026



- **Short Site description / surveillance settings**

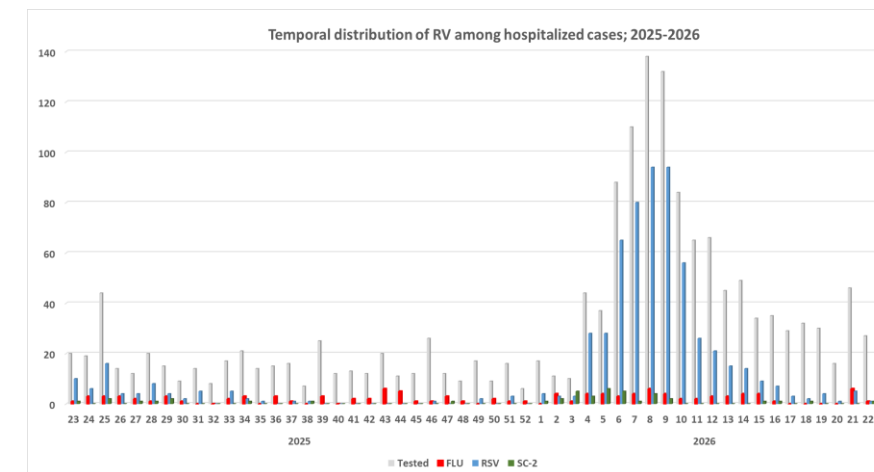
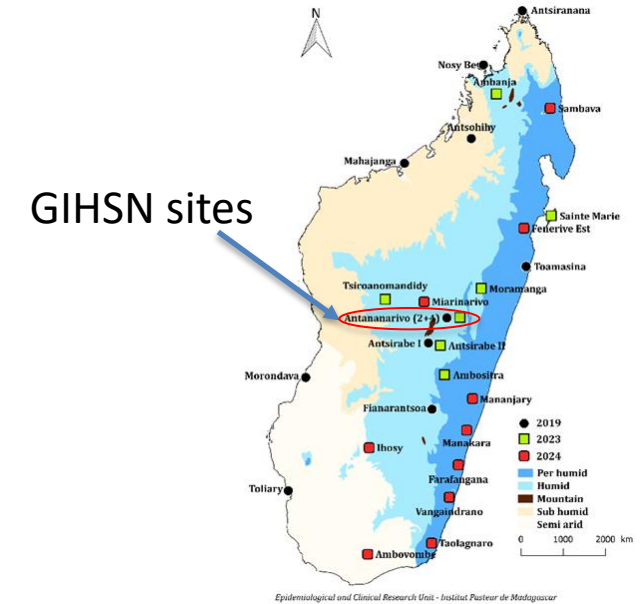
- Three hospitals in Antananarivo / 4 millions inhabitants
- National Influenza Centre
- 15 staffs involved (scientists, lab tech, clinical doctors, nurse, data manager)

- **Respiratory viruses' circulation 2025-2026**

- Overall positivity rate=47% (758/1610 samples tested)
- Among positive specimen, RSV (84%) was predominant; with an epidemic in the first half of 2026 and a peak in February
- Low detection rates of Influenza (15%) and SARS-CoV-2 (6%) among hospital cases
  - Overall, these viruses circulated year-round, with increased activity from December 2025 to early February 2026)

- **Main take-home messages**

- Hospital surveillance provides timely information on severe RV circulation
- Integrated surveillance: epidemiological, virological and genomic data shared through monthly bulletin and data-sharing platforms (GIHSN, GISAID)



# Makerere University Walter Reed Program - UGANDA



## • Short Site description / surveillance settings

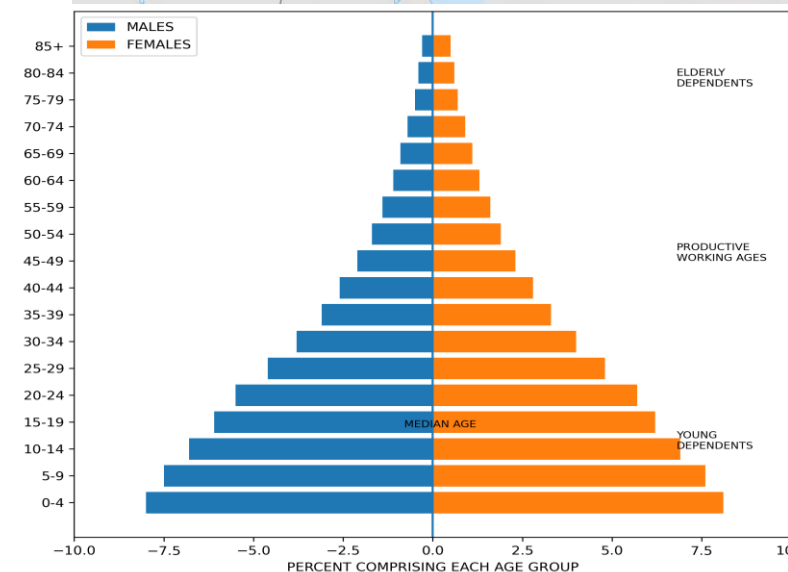
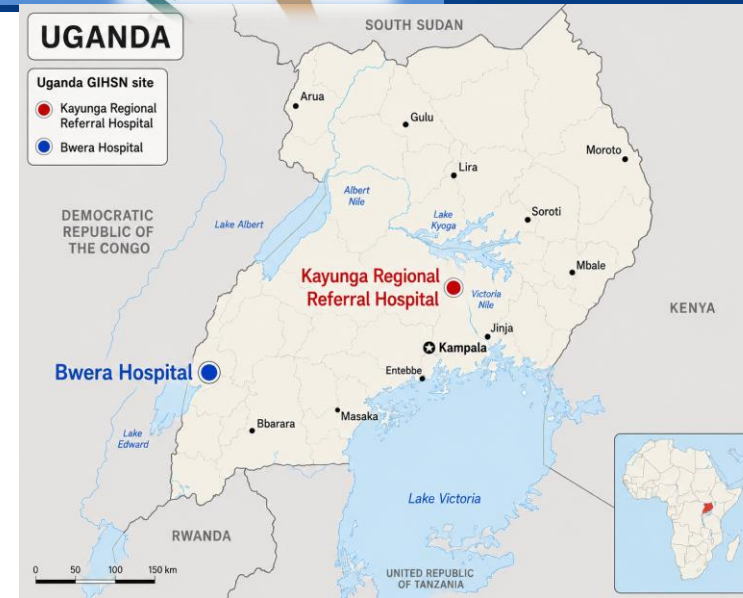
- *Uganda has two tertiary hospitals participating in 2025-26 season: Bwera district hospital and Kayunga Regional Referral Hospital covering approximately 4 million people*
- *Geographic diversity, with Bwera Hospital representing a border setting with cross-border population movement from the Democratic Republic of Congo, and Kayunga Regional Referral Hospital representing a central Uganda referral setting.*
- *The works complements the NIC and other respiratory surveillance networks in Uganda*

## • Respiratory viruses' circulation 2025-2026

- Influenza A : 17% (47/283); Influenza B : 1/283
- SARS-CoV-2: 1/283
- RSV: 7% (19/283 )

### • Main take-home message

Influenza A (17%) and RSV (7%) are key contributors to severe respiratory disease.





- **Description of site/surveillance settings**
- Seven (7) sites in diverse geographical locations (Figure 1).
  - Coast General Teaching and Referral Hospital, Kenyatta National Hospital, Nyeri, Nakuru, Kakamega, Siaya, and Marsabit County Referral Hospitals
  - Total of 4,100 bed capacity for adults and pediatrics
  - Bed occupancy vary by site, range between 20-120%
- Testing of nasopharyngeal & oropharyngeal swabs done at the NIC
- Enrolment of patients of all ages with Severe Acute Respiratory Illness

## • Respiratory viruses' circulation 2025-2026

- Positivity; Influenza A/B (8%), RSV (41%), SARS-CoV-2 (3%)
  - A/H3N2 dominant with detection in 32/64 Flu positives
  - K subclade detected as early as June 2025 (Figure 2.)
  - B/Victoria in 16/64 Flu positives – recent detections
  - Increased RSV activity from February 2026

## • Priorities

- Better integration with the MoH for sustainability
- Improved utility of findings for decision making



Figure 1: Location of GIHSN sites in Kenya for 2025-2026 season.

Table 1: Summary of patients enrolled, specimens tested and sequenced in Kenya for 2025-2026

#included	#LCI	#tested for RSV	#RSV+	#tested for SCV-2	SCV-2+	#WGS LCI	#WGS RSV
826	64	358	148	826	21	20	13

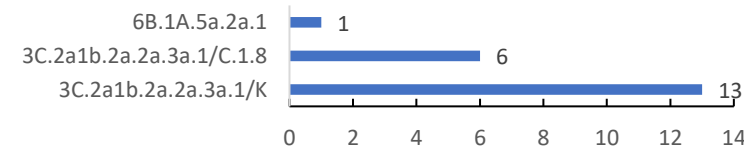
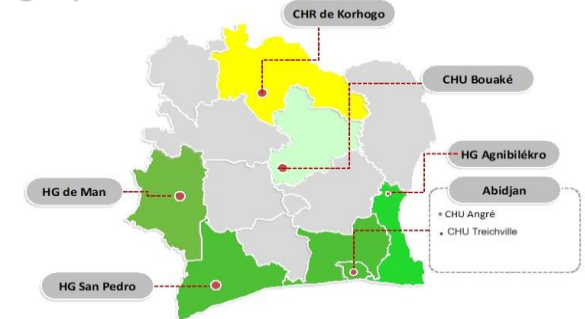


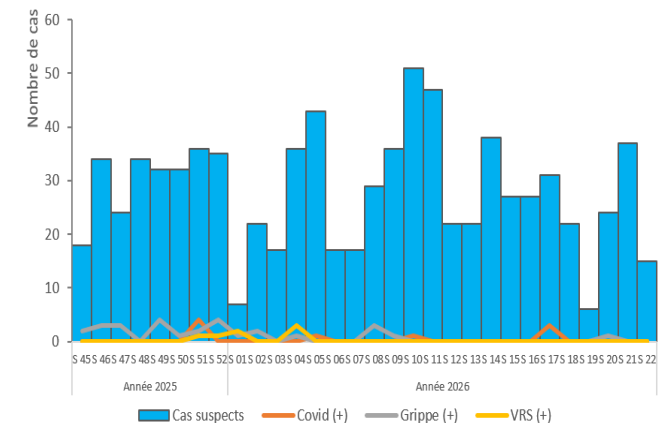
Figure 2: K subclade detected

- **Short Site description / surveillance settings**
  - 7 hospitals / Catchment area: Pop > 1,500,000
  - 2 pediatric sites, 5 sites for all ages. Year around surveillance
  - **All SARI cases that meet the case definition are recruited and sampled: e-CRF, Nasopharyngeal swab**
  - Relation with a NIC: Pasteur Institute of Côte d'Ivoire
- **Respiratory viruses' circulation 2025-2026**
  - **A(H3N2), B Victoria, RSV, SARS-CoV-2**
- **Main take-home messages**
  - Continuous co-circulation of influenza viruses and SARS-CoV-2 results in hospitalizations
  - **Sequencing done at site level: Influenza A, SARS-CoV-2, RSV and other respiratory viruses**

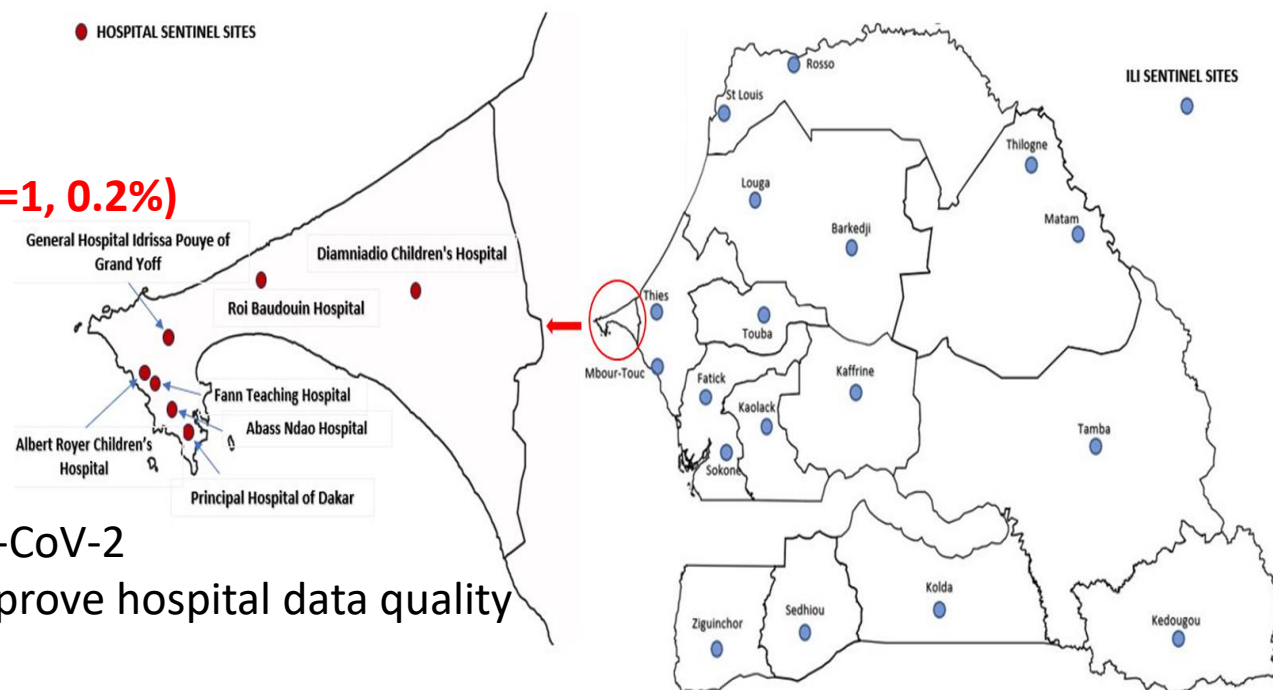
## Geographical distribution of sentinel sites



Evolution hebdomadaire des cas de grippe, Covid-19, VRS, Nov. 2025 à mai 2026, Côte d'Ivoire



- All year-round surveillance, screening and inclusion of hospitalized patients with respiratory illness meeting protocol case definition, (**November 2025 to October 2026**)
- Collection of epidemiologic and clinical data for all participating patients (i.e., those who meet case definition and consent to participate), with a **standardized questionnaire administered at enrolment** and a **chart abstraction at patient discharge/death**
- **Diagnostic: Flu, RSV, SARS-CoV-2 and other respiratory virus**
- A total of **605** cases from **November 2025 to May 2026**
- Children **under 1 year old**, largest group
- **314 (51.9%)** were positive for at least one respiratory virus
- Influenza (**n=29, 4.8%**), RSV (**n=13, 2.1%**) and SARS-CoV-2 (**n=1, 0.2%**)
- **RV (n=129, 21.3%); PIV (n=51, 10.1%), HMPV (n=48, 9.5%)**
- Most frequently reported symptom: cough (497 cases),
- Shortness of breath (491 cases)
- Asthma was the most associated comorbidity (112 cases)
- **333 (55.0%)** of patients required supplemental oxygen
- Systematic whole genome sequencing for Flu, RSV and SARS-CoV-2
- **Challenges:** Extension of SARI surveillance beyond Dakar, improve hospital data quality

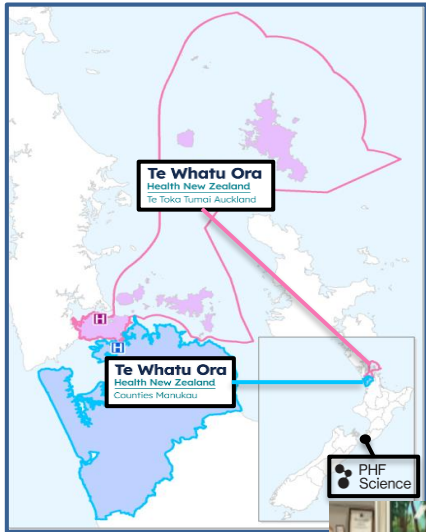


# ASIA PACIFIC + MIDDLE EAST

- ❖ New Zealand
- ❖ Hong-Kong CUHK
- ❖ Hong-Kong HKU
- ❖ Pakistan
  
- ❖ Lebanon

## Site description / surveillance settings

- Auckland: 2 hospitals (~2161 beds) for ~1M popn (European, Māori/Pacific, Asians)
- SARI and non-SARI sampling (3543)
- Hospital labs & NIC: PCR (825), WGS (193)
- PCR vs RAT testing in one hospital

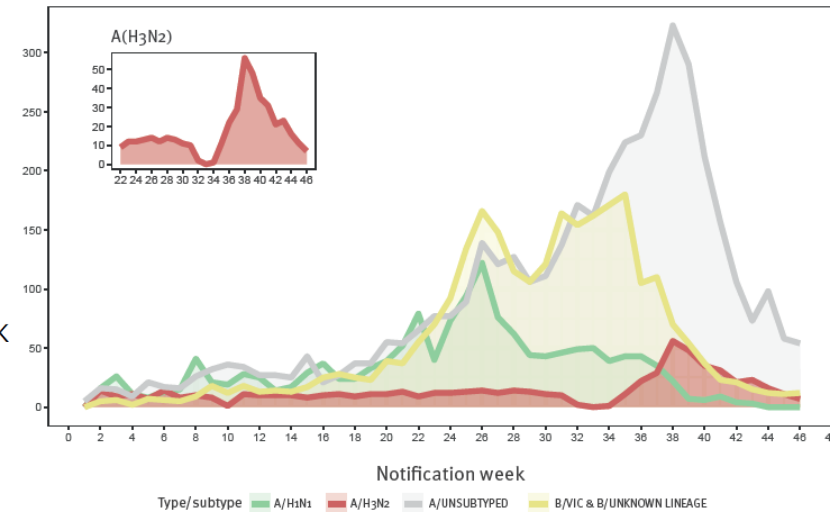
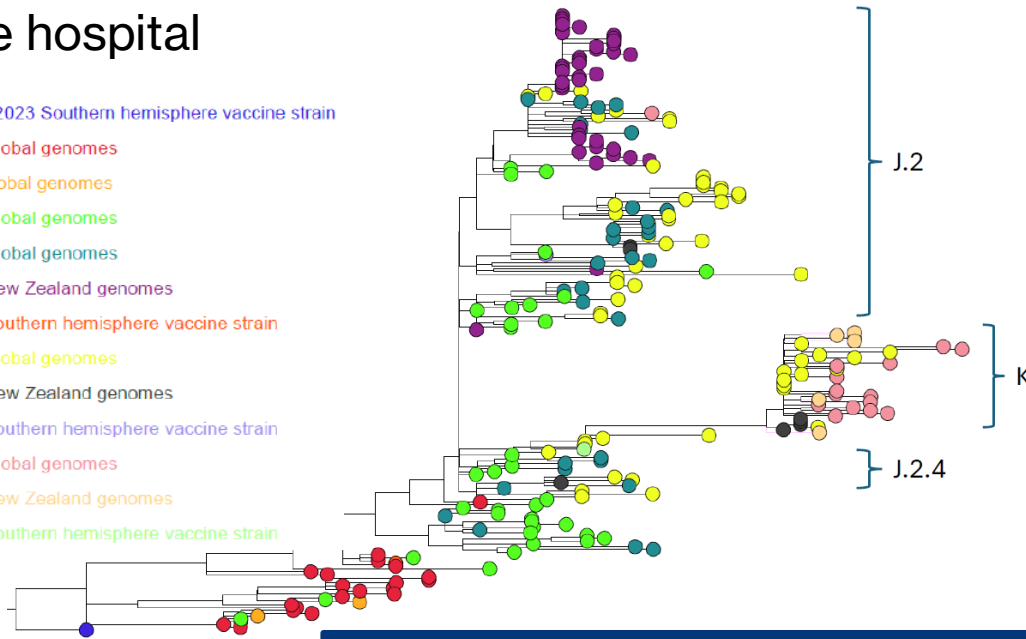


- 2022 - 2023 Southern hemisphere vaccine strain
- 2022 Global genomes
- 2022 Global genomes
- 2023 Global genomes
- 2024 Global genomes
- 2024 New Zealand genomes
- 2024 Southern hemisphere vaccine strain
- 2025 Global genomes
- 2025 New Zealand genomes
- 2025 Southern hemisphere vaccine strain
- 2026 Global genomes
- 2026 New Zealand genomes
- 2026 Southern hemisphere vaccine strain



## Respiratory viruses' circulation 2025-2026

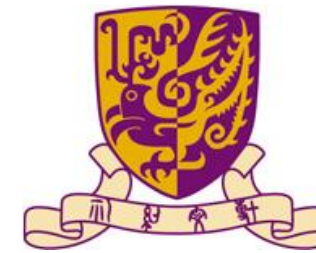
- WGS: More timely - Illumina → Nanopore platform
- Unusually long flu season - Mar-Oct 2025
- Euro Surveill. 2025;30(49):pii=2500894



## Main take-home message

SH site: sentinel site = early warning for NH countries

# The Chinese University of Hong Kong, Hong Kong SAR, China



## • Short Site description / surveillance settings

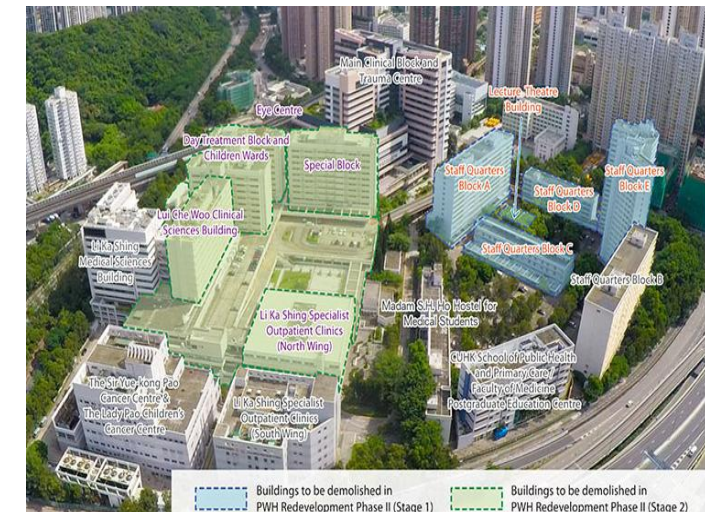
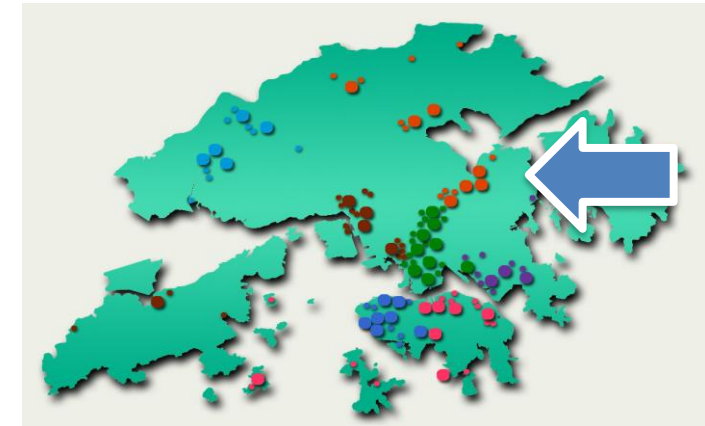
- Prince of Wales Hospital, opened in 1982, (catchment population 1.3 – 1.8m)
- 1800 + beds
- Tertiary teaching acute care hospital with almost all specialty services
- No relation with a NIC

## • Respiratory viruses' circulation 2025-2026

- Influenza A(H3N2) – Predominant subtype, early peak from January through March, and a second smaller peak from October to December
- Influenza B – Occasional detections, detected throughout the year at lower levels.
- Co-circulation of other respiratory viruses: SARS-CoV-2, RSV, rhinovirus, enterovirus is common

## • Main take-home messages, Challenges & Priorities

- Challenges: assemble team (research & clinical), harmonizing with different research teams
- CDARS (Clinical Data Analysis and Reporting System) improves data collection speed and quality.
- Standardization of specimen panel would enhance comparability and allow better assessment of co-circulating viruses.



Aerial view of Prince of Wales Hospital taken in 2015.

Source: [https://www3.ha.org.hk/pwh/pwhredevelop2/background\\_e.htm](https://www3.ha.org.hk/pwh/pwhredevelop2/background_e.htm)



## • Short Site description / surveillance settings

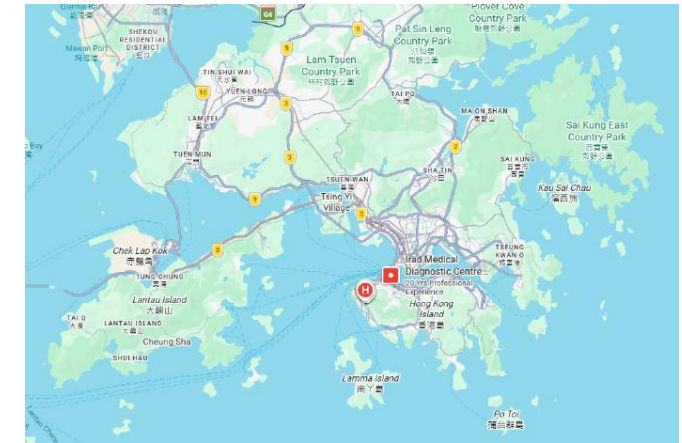
- Queen Mary Hospital / 1,700 beds
- Patient recruitment: Initially 3x/ week; now Monday-Friday
- Hospitalized; aged  $\geq 18$  years; suspected acute respiratory infection; specimens submitted for respiratory virus testing

## • Respiratory viruses' circulation 2025-2026

- 2025/1/1 to 2026/5/30:
  - Total 1052 cases; Respiratory viruses detected: 33.9%
  - Influenza: 13% (H1: 3.8%; H3: 6.8%; B: 1.4%; unknown: 1%)
  - SARS-CoV-2: 6.6%; EV/RV: 6.1%; hMPV: 3.4%; RSV: 2.2%; PIV: 2.5%; AdV: 0.2%)

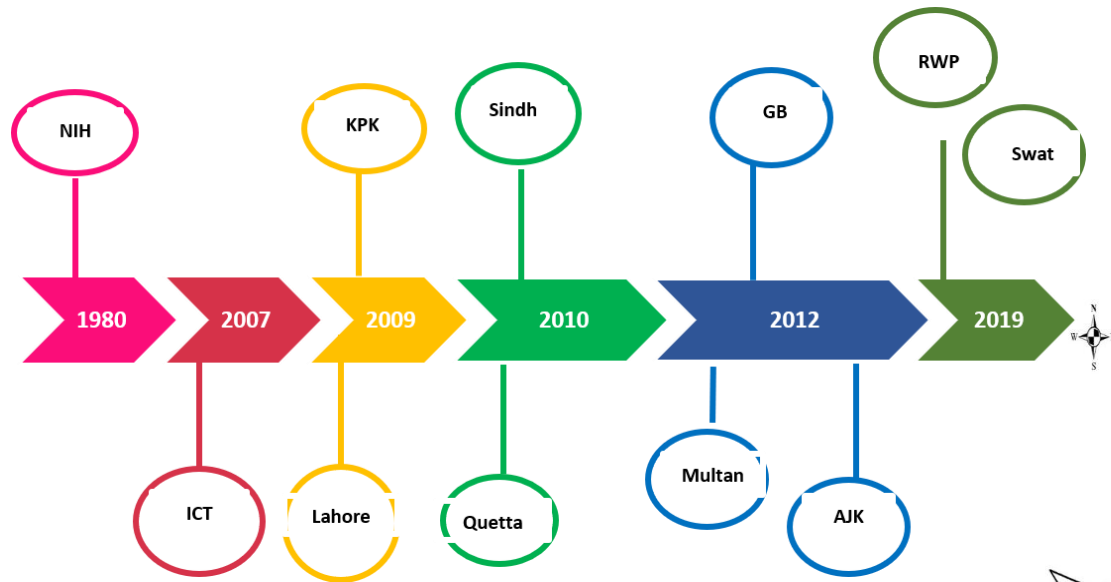
## • Main take-home messages

- Influenza is the most frequently detected respiratory virus, and mostly H3

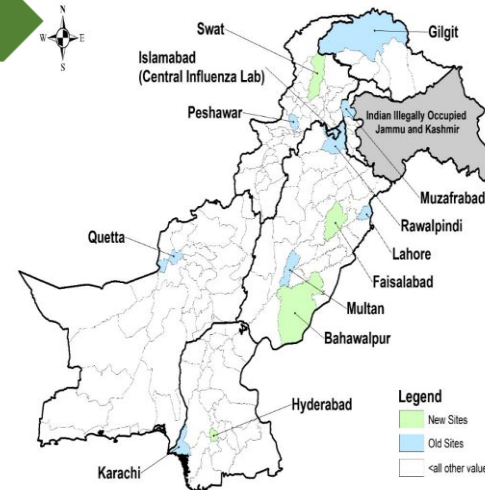




## Profile: Influenza Sentinel Surveillance



- NIH designated NIC since 1980
- ARI reporting mainly through DEWS/ DHIS
- No mechanism for influenza surveillance to report seasonal trends & pick novel outbreaks till 2004-05
- Regional influenza database used for reference purposes
- Pilot project for influenza surveillance NIH - NAMRU-3 (2004-05) based on WHO protocols (Surveillance/ Lab)



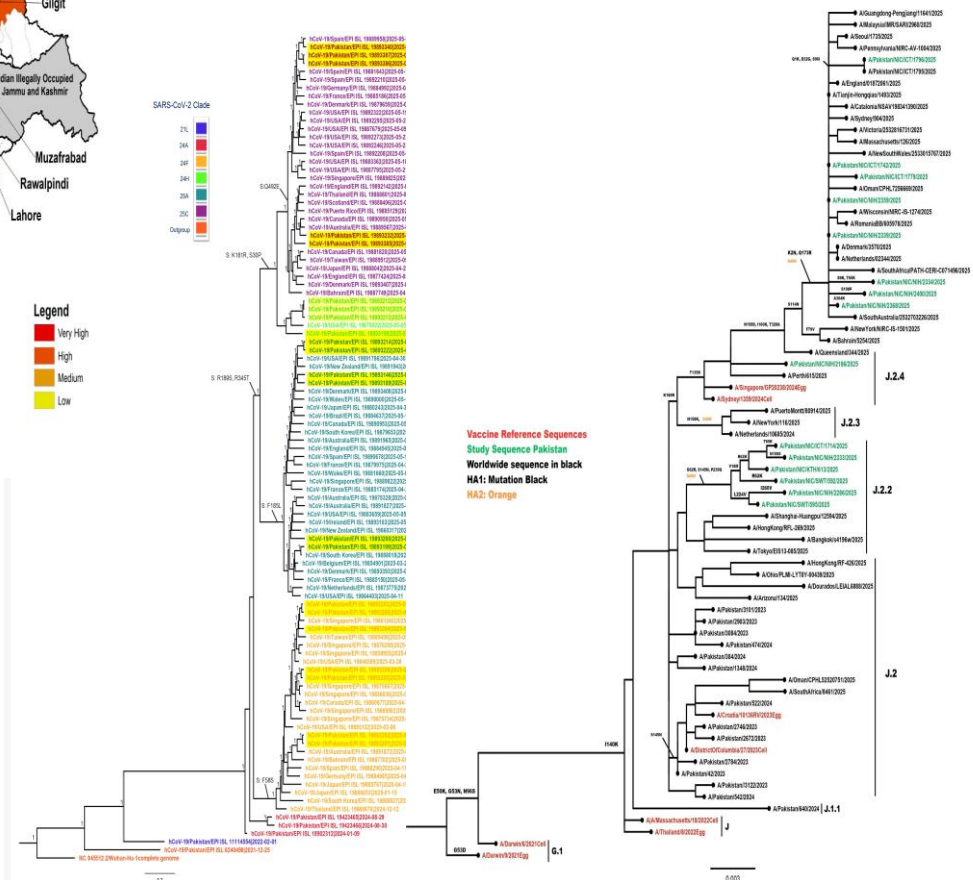
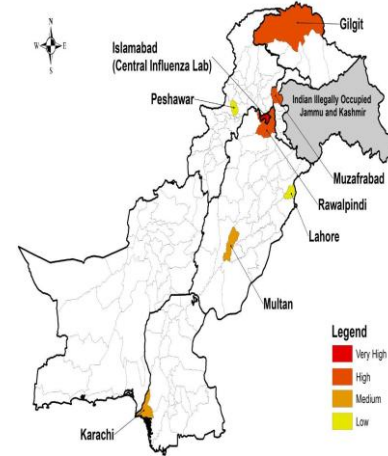
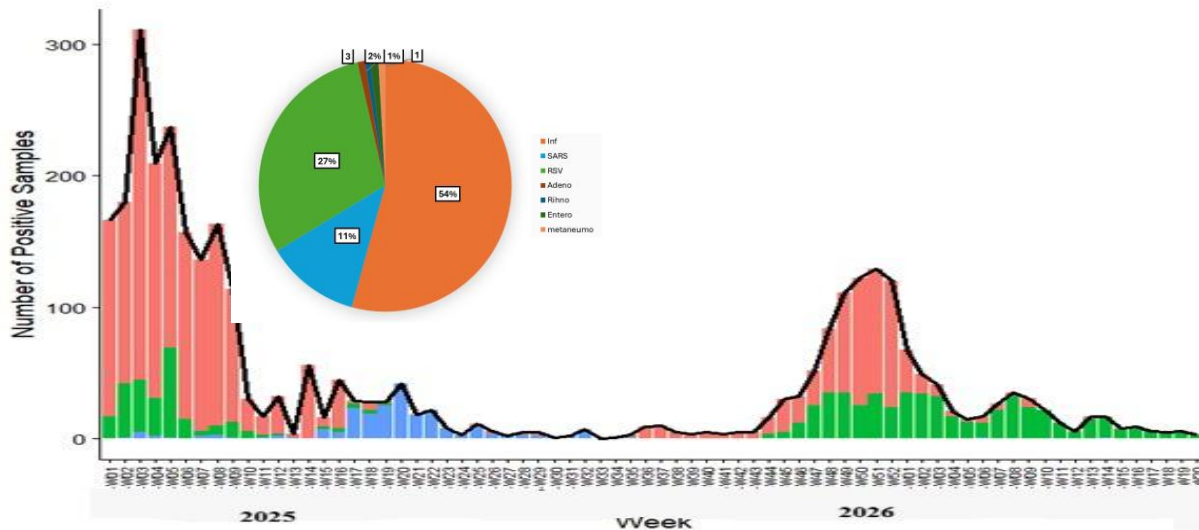
	DHQ Gilgit	AIMS AJK	FGSH Islamabad	KTH KPK	SSH Swat, KPK	CH Lahore	CH Karachi Sindh	JH Lahore	NMC Multan Punjab
Catchment Population (Millions)	1.5	-	0.1 million	-	-	-	17 million	-	4.5
Bedded Capacity	200	350	1100	1600	1100	1350	1900	1500	1800



# Genomic surveillance of Influenza & SARS-CoV-2 in Pakistan

National Influenza Centre (NIC), NIH sequencing achievements, May 2025 – June 2026

- Total Real Time PCR test performed 14152. Conducted genomic surveillance of Influenza and SARS-CoV-2.
- Total 147 samples sequence in which, 95 Influenza A(H3N2), 8 Influenza B and 52 SARS-CoV-2 genomes to the GISAID platform.
- Sequence samples are from Islamabad, Peshawar, Multan, Swat, Lahore, Gilgit and Karachi
- Findings published as two Letters in the Journal of Medical Virology (2025–2026).



# Respiratory Data highlights & Take Home Message



LETTER TO THE EDITOR  
**Genomic Epidemiology  
2026 Season Analysis**  
Nazish Badar ✉, Muhammad Salman  
First published: 27 March 2026 |  
Accessibility issue? Request access

The NIC-GIHSN site provides a standardized surveillance platform in Pakistan that generates robust epidemiological evidence on Severe Acute Respiratory Infections through integrated surveillance to monitor the evolution and spread of influenza viruses and SARS-CoV-2, which helps to mitigate the public health threats and strengthen the pandemic preparedness

**viruses** MDPI

Article  
**Tracking Respiratory Viruses in Pakistan (2022–2025): Genomic and Epidemiologic Insights from Sentinel Surveillance of Influenza, SARS-CoV-2, and RSV**

Nazish Badar<sup>1,\*,</sup> Abdul Ahad<sup>1,</sup> Hamza Ahmed Mirza<sup>1,</sup> Fazal Hanan<sup>2,</sup> Asghar Javaid<sup>3,</sup> Aamir Amanat<sup>1,</sup> Nazira Saghir<sup>1</sup> and Muhammad Salman<sup>4</sup>

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<sup>2</sup> Teaching Hospital, Pathology Department, Saidu Medical College, Swat 19200, Pakistan; ul.com  
<sup>3</sup> Department, Nishtar Medical University, Multan 66000, Pakistan; asgharmirco@hotmail.com  
<sup>4</sup> National Institute of Health, Chak Shuhzad, Park Road, Islamabad 45000, Pakistan; salmanr4n@gmail.com  
\* n.badar@nih.org.pk; Tel: +92-300-6637608

Other respiratory viruses pose significant public health threats among SARI. Comprehensive surveillance data remain limited in Pakistan. This prospective study characterized the burden, distribution, and molecular evolution of viruses among hospitalized SARI patients across seven tertiary hospitals from 2 to June 2025. Specimens were tested using RT-PCR for influenza, SARS-CoV-2, with 375 samples sequenced via Oxford Nanopore Technology. Among 2818 (24.6%) tested positive: RSV (1648, 14.4%), influenza (855, 7.5%; 45% H3N2, 20% influenza B), and SARS-CoV-2 (315, 2.8%). RSV predominated in children under 2 years (63%), while influenza and SARS-CoV-2 primarily affected 15–40 years. Male predominance (65–79%) reflected healthcare access; winter seasonality (December–February) was observed for influenza and SARS-CoV-2. Infection rates were 17% for influenza, 16% for RSV, and 4% for SARS-CoV-2. Death was associated with influenza (OR = 1.62) and RSV (OR = 1.27), while myalgia (OR = 3.87) was associated with SARS-CoV-2. Phylogenetically revealed vaccine-matched influenza clades and rapid SARS-CoV-2 variant (months). RSV is the primary SARI pathogen in young children, necessitating accurate and nurse-implementable. Sustained genomic surveillance is essential for pandemic preparedness.

**Keywords:** respiratory viruses; sentinel surveillance; Pakistan

**1. Introduction**  
Severe acute respiratory infections (SARIs) caused by influenza and other respiratory viruses (ORVs) remain a significant global public health concern, contributing to high morbidity and mortality [1]. Lower respiratory infections continue to rank among the leading causes of death worldwide and are the second-highest cause of mortality in lower-middle-income countries [2]. To address this burden, many countries have adopted sentinel surveillance systems to generate evidence on the epidemiology of influenza and ORVs. However, data gaps remain, particularly in low- and middle-income countries [3].

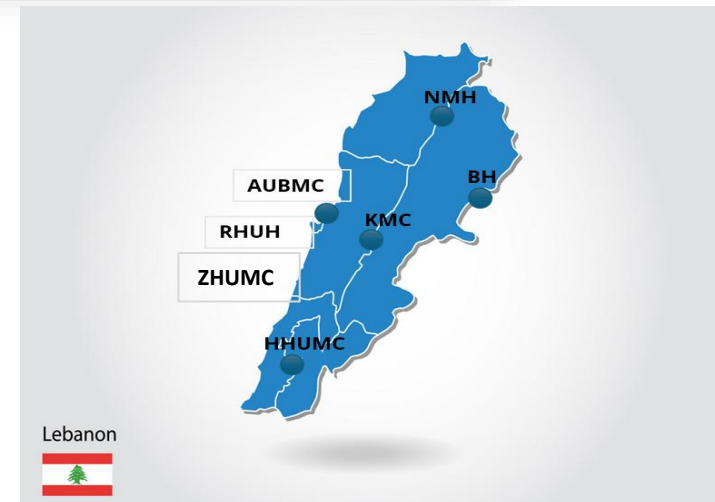
Check for updates  
Academic Editors: Elménack Costagno and Irene Raffaldi  
Received: 24 November 2025  
Revised: 19 December 2025  
Accepted: 19 December 2025  
Published: 23 December 2025  
Copyright: © 2025 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license.  
Viruses 2026, 18, 26  
<https://doi.org/10.3390/v1801026>

# American University of Beirut/ Lebanon



## • Short Site description / surveillance settings

Hospital name	Hospital characteristics	Population/catchment area
American University of Beirut Medical Center (AUBMC)	Urban Academic/Tertiary 373 patient-beds	All age groups/2.4 million
Rafic Hariri University Hospital (RHUH)	Urban Academic/General 430 patient-beds	All age groups/2.4 million
Keserwan Medical Center (KMC)	Urban Non-Academic/General 65 patient-beds	All age groups/100,000
Bekaa Hospital (BH)	Rural Academic/General 154 patient-beds	All age groups/200,000
New Mazloum Hospital (NMH)	Urban Non-Academic/General 100 patient-beds	All age groups/500,000
Hammoud Hospital University Medical Center (HHUMC)	Urban Academic/Tertiary 325 patient-beds	All age groups/250,000
Al Zahraa Hospital University Medical Center (ZHUMC)	Urban Academic/Tertiary 300 patient-beds	All age groups

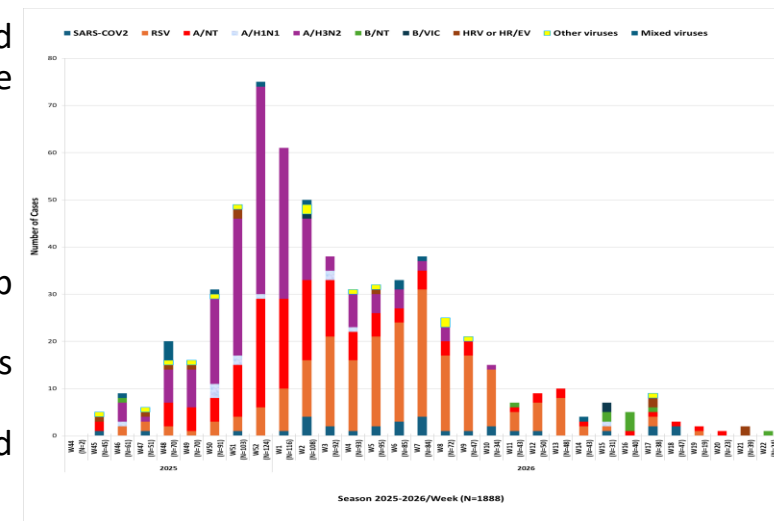


## • Respiratory viruses' circulation 2025-2026

- A total of 1,888 samples tested across the full 2025–2026 season up to W22-2026.
- Season peaked at W52, 2025 (N=124) with 75 cases, driven predominantly by Influenza A/H3N2; sustained high transmission over W52–W2 (75, 61, and 50 cases respectively). All AH3N2 genomes were assigned to the **2a.3a.1 HA clade, subclade K**, and were genetically divergent from the 2025–2026 vaccine strains.

## • Main take-home messages

- Influenza A/H3N2 had the highest weekly count of the season.
- RSV dominated late-season circulation (January–March 2026), following a classic epidemic curve with a sharp winter peak and gradual spring resolution.
- SARS-CoV-2 circulation remained negligible throughout the 2025–2026 season compared to the previous seasons.
- Due to funding constraints, **only 50% of samples/week** are being processed starting May 2026; unscreened samples preserved at  $-80^{\circ}$  C for future testing.



# EURASIA

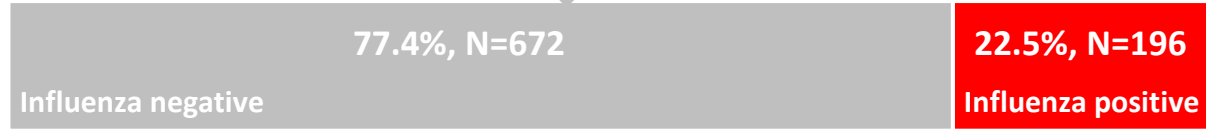
- ❖ Romania
- ❖ Ukraine
- ❖ France
- ❖ Spain
- ❖ Russia

1 Nov 2025 – 1 June 2026



- » The main infectious diseases hospital (690 beds) in Romania
- » Large catchment population: 5,937,382 inhabitants from Bucharest and South-Eastern Romania
- » On-site molecular genetics with sequencing capacity
- » Prospective epidemiological active surveillance study
- » Year-round surveillance (Nov 2025-Oct 2026)
- » Case definition and inclusion/exclusion criteria according to the GIHSN study protocol

**868 patients enrolled and tested for influenza and other respiratory viruses**



- 12% positive for RSV
- 1% positive for SARS-CoV-2
- 47 (23.9%) viral co-detections identified in influenza-positive patients

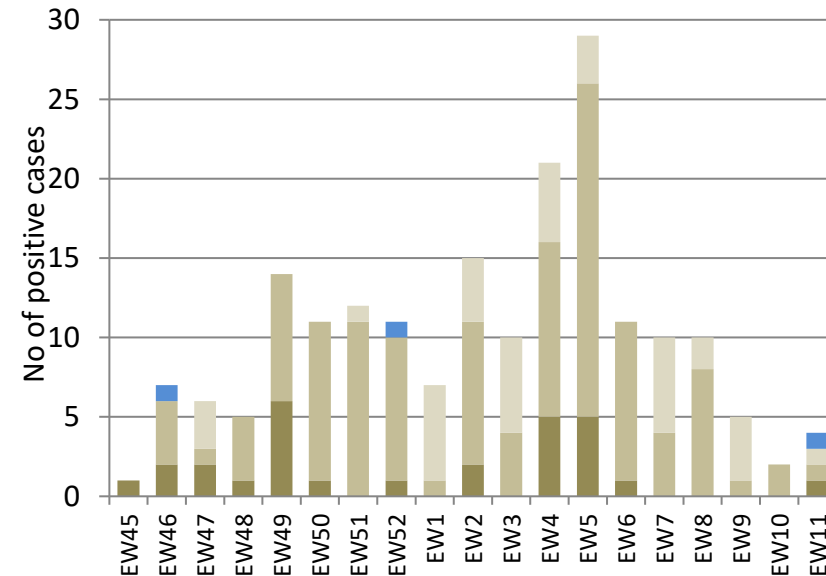
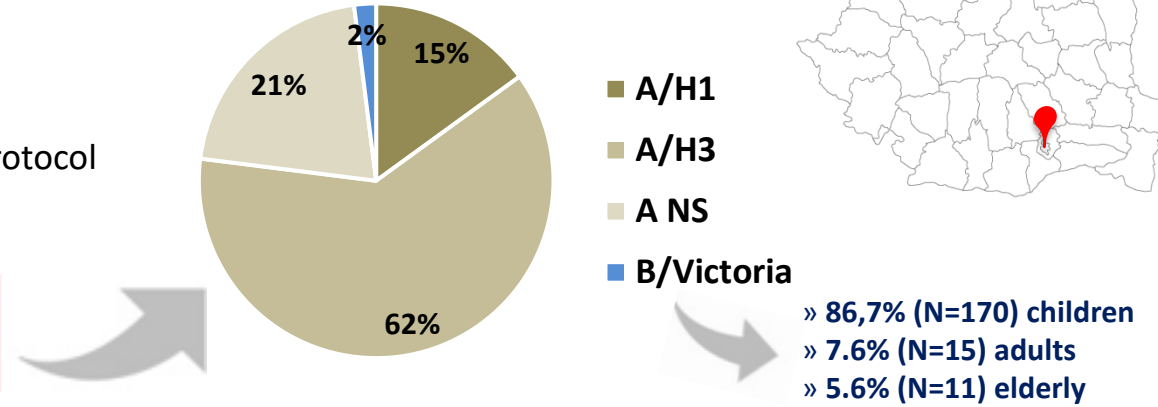
» A/H3 was the predominant circulating subtype (62%), Nearly one quarter of influenza-positive patients had viral co-detections (Rhinovirus, RSV, Bocavirus).

### Challenges:

- ❖ Limited personnel resources
- ❖ Viral circulation patterns
- ❖ Age-related differences in patient presentation

### Priorities:

- ❖ Increasing patient enrollment
- ❖ Training healthcare personnel
- ❖ Expanding sequencing activities
- ❖ Enhancing the visibility of the project



**89**  
WGS samples of influenza

- B/Victoria
- A NS
- A/H3
- A/H1

NS – no subtype  
EW – epidemiological week  
Copyright GIHSN 2026 153

# SI «Kyiv City Center for Diseases Control and Prevention of the Ministry of Health of Ukraine»



## • Short Site description / surveillance settings

- 3 hospitals; population of 1 446 000
- We collaborate with NIC in some fields, both our organization and NIC subordinate to the Ministry of Health of Ukraine

## • Respiratory viruses' circulation 2025-2026

- 47% Influenza positive samples
- Among all positive influenza viruses 67% - H3, 13% - H1, 20% - A unsubtype and only 1 - laboratory confirmed influenza B virus

## Challenges:

- The main challenge is the war
- There was no stable power supply during this autumn-winter season

## Priorities:

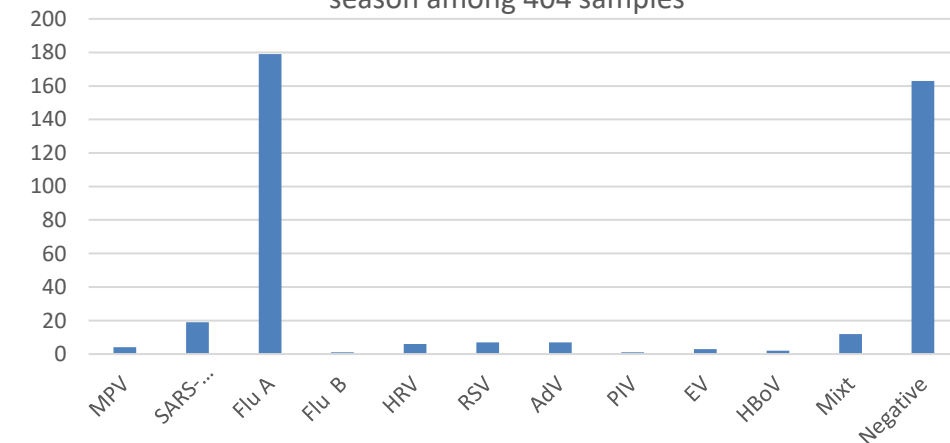
- To involve one more child hospital
- To increase the number of collected samples

## • Main take-home messages

- Quality samples collection, storage and transportation
- High quality clinic diagnostics



Number of laboratory confirmed cases in 2025-2026 season among 404 samples

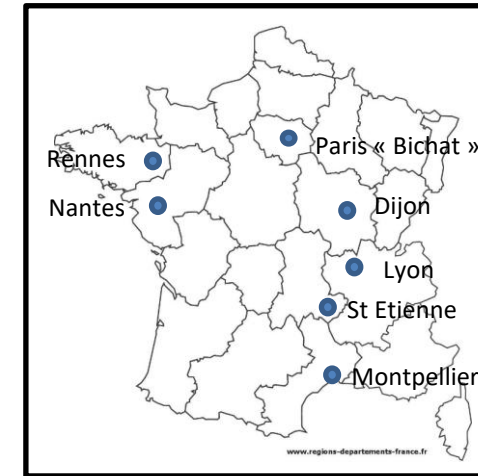


## • Short Site description / surveillance settings

- **RESPIVAC:** prospective, multicentric, observational test negative design study on adults hospitalized for SARI, regardless of their vaccination status
- Active surveillance (daily screening), year around

## • Respiratory viruses' circulation 2025-2026 (Study period: November 01,2025 to June 03,2026)

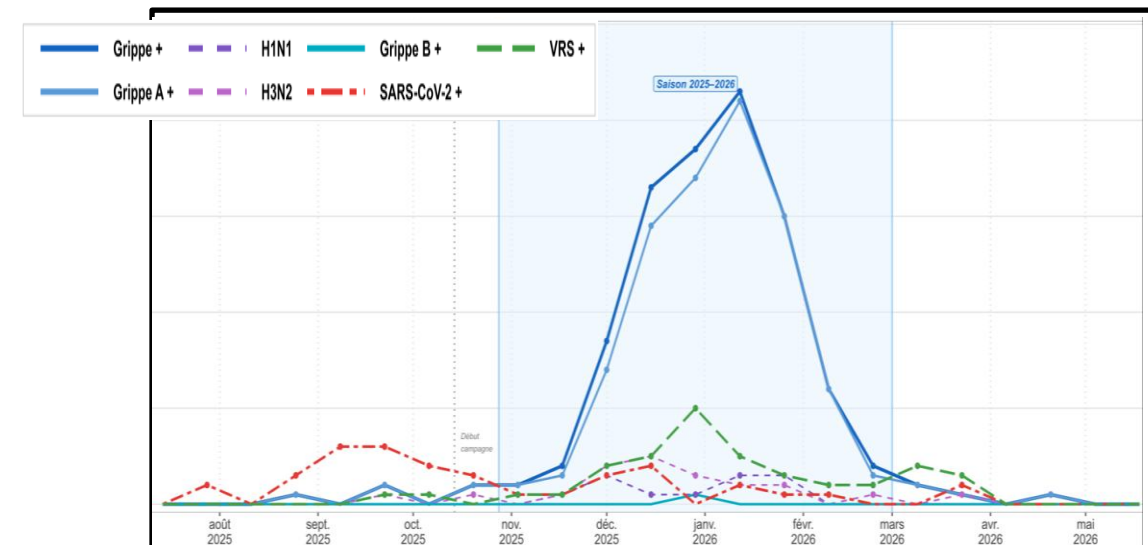
<b>Participants</b>	<b>1415</b>
Influenza positive/influenza tested	333/1339 <b>(25%)</b>
SARS-COV2 positive/ SARS-COV2 tested	61/1350 <b>(4,5%)</b>
RSV positive/ RSV tested	71/994 <b>(7%)</b>
ORV positive/ ORV tested	61/219 <b>(28%)</b>



Collaboration with National Reference Center (NRC) for Respiratory viruses of Lyon – Pr Bruno Lina

## • Main take-home messages

- Influenza and SARS-CoV2 well tested ; RSV and ORV testing could be increased
- Sequencing of 70% respiratory viruses identified by the sites (Influenza, SARS-COV2, RSV, EV/RV) according to the availability and quality of the sample (>300 sequences)
- Data collected (socio-demographic, clinic and epidemiologic)



# FISABIO / SPAIN



GENERALITAT  
VALENCIANA



Fundació  
Fisabio

- **Short site description / surveillance settings**

- VAHNSI: 5 hospitals / 1.468.666 catchment area

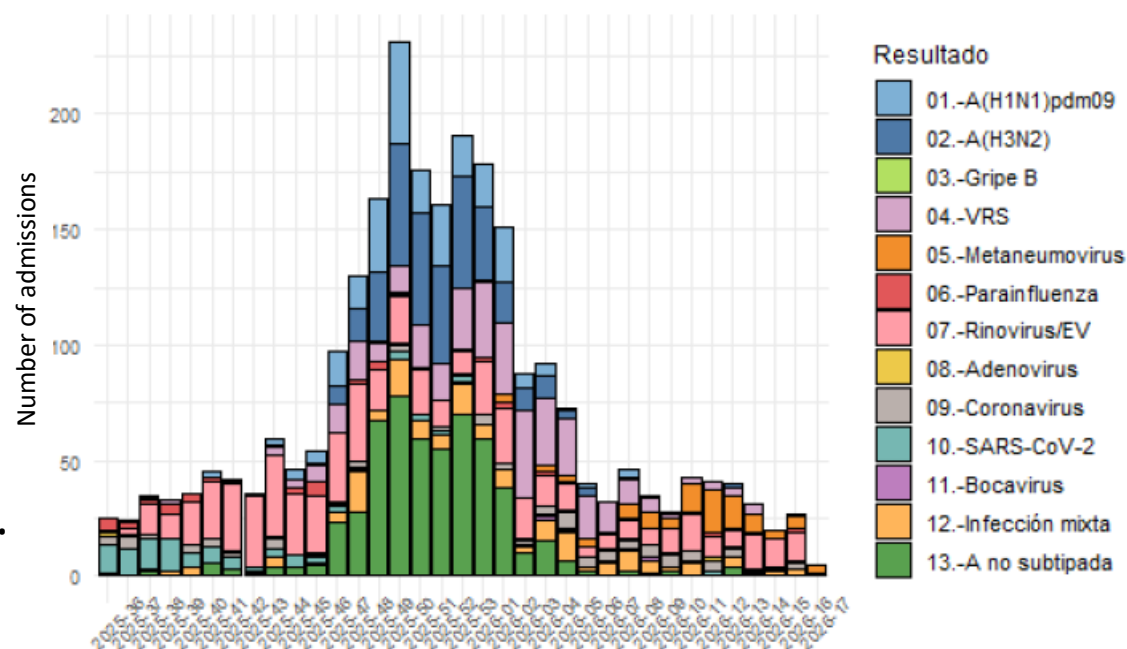
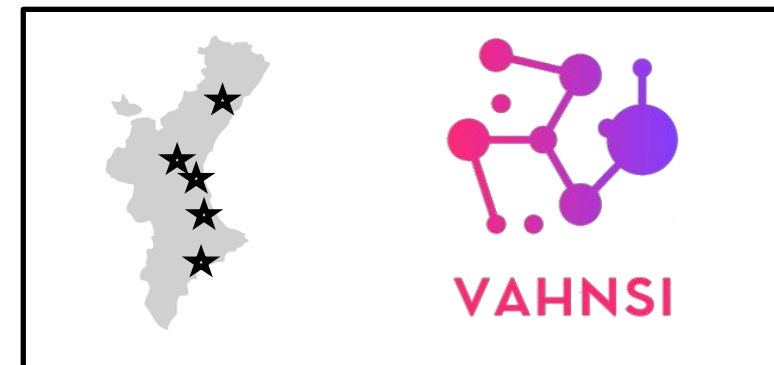
- **Respiratory viruses' circulation 2025-2026**

From 1<sup>st</sup> September to 31<sup>th</sup> May:

- 2,972 ILI patients
- 2,517 Tests performed
- 412 (16.37%) Flu positives
- 7.70% A(H1N1)pdm09 – 8.54% A(H3N2) – 0.16% NS
- 59 (2.34%) SARS-CoV-2 positives
- 256 (10.17%) RSV positives

- **Main take-home messages**

- Influenza season earlier than usual. H3N2 Clade K.
- RSV positivity half that of influenza, overlap in time.
- Low SARS-CoV-2 circulation in winter-spring months.

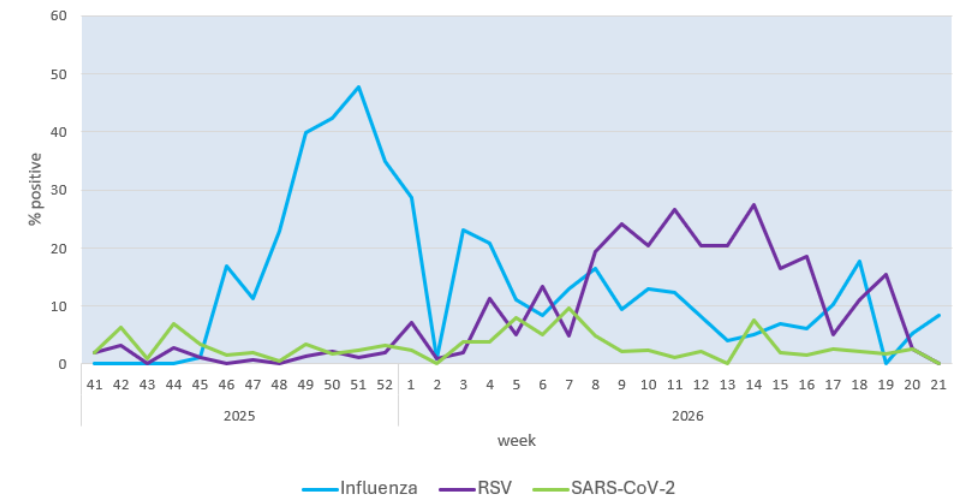
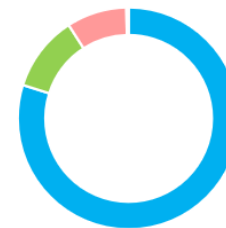
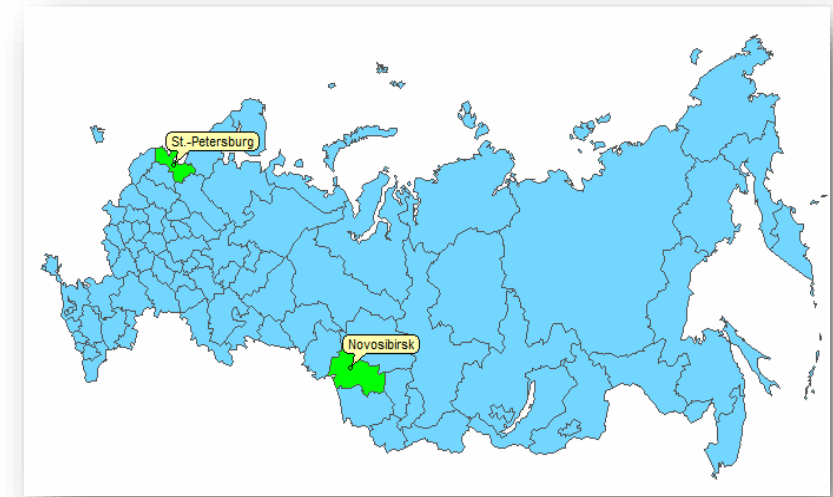


## • Short Site description / surveillance settings

- 5 Infectious Hospitals for adults and children in 2 parts: European (Saint Petersburg) and Asian (Novosibirsk) representing ~1000 acute care beds. Population of two cities - 7,1 mln. people
- National Influenza Centre, active collaboration with GISRS, member of the WHO RSV Pilot, full score the last EQAP (influenza, SARS-CoV-2)
- Member of GIHSN since 2012
- Year-round surveillance, PCR testing for influenza, SARS-CoV-2, RSV and 6 other respiratory pathogens

## • Respiratory viruses' circulation 2025-2026

- Population enrolled: **4339** patients, including 1029 adults and 3310 children. 55,3% - positive for respiratory viruses:
  - Influenza – 36,9% - mostly, influenza A(H3N2)
  - SARS-CoV-2 – 5,6% (XFG)
  - RSV – 19,4%
  - MPV – 7,4%
- ICU – 30 patients (10 – influenza A, 7 – RSV)
- **Sequencing: 615 influenza viruses sequenced, deposited in GISAID with GISHN tag**



## • Main take-home messages

Influenza and RSV activity were high along with MPV  
SARS-CoV-2 activity was stable and low

# Moscow site: D.I. Ivanovsky Institute of Virology FSBI “ National Centre for Epidemiology and Microbiology named after academician N.F. Gamaleya” , Mo PH, Russia, Moscow

## • Short Site description / surveillance settings

The population of Moscow has reached **13.3 million people in 2025**

### Hospital:

**One collaborated hospital** in Moscow, **the profile is infectious; the bed fund - 1074**; monitoring was made in 7 branches: **adults** (384 beds), including **pregnant** and **children** (178 beds); the screening was conducted for **3 days per week (Tue, Wed, Thu): nasal swabs and Questionnaires**

### Laboratory:

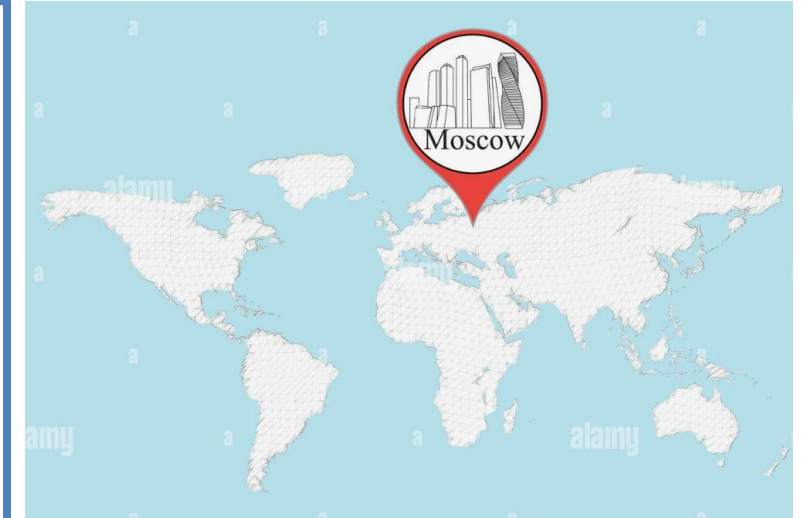
- Laboratory has status NIC WHO
- Testing of samples is done as soon as swabs received; all collection is saved at -70C during 2-3 years

## • Respiratory viruses' circulation 2025-2026

- Influenza A(H3N2), Rhinoviruses and SARS-CoV-2 dominated...

## • Main take-home messages

- Serology studies (antigenic properties of strains and immunity)



# SOUTH AMERICA

- ❖ Brazil
- ❖ Peru
- ❖ Colombia Medellin
- ❖ Colombia Cartagena
- ❖ Guatemala

# Pequeno Príncipe Hospital Brazil



Weknow Assistenciais > SECIH > NVEH > Vigilância de Vírus Respiratórios

Pesquisar

Unidade / Setor	Faixa Etária Coleta	Sexo	Grupo	Exame	Campo Exame	Resultado	Semana Epidemio
Todos	Todos	Todos	Todos	Todos	Todos	DETECTÁVEL	Todos



## Vigilância de Vírus Respiratórios

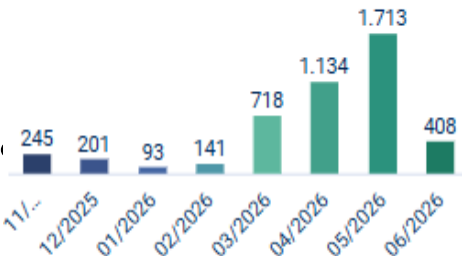
Última Atualização

10/06/2026 07:13

by DTI®

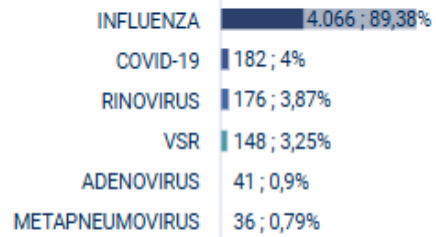
Pacientes Distintos por Mês

Total: 4.653



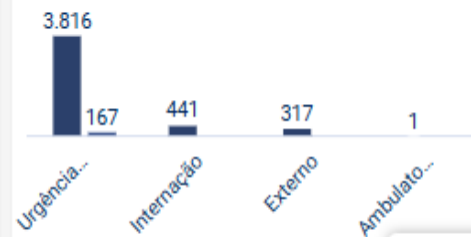
Pacientes Distintos por Grupo

Total: 4.663



Pacientes Distintos por Tipo de Atendimento

Pacientes distintos: 4.575  
Pacientes interados 7 dias após exame: 167



Pacientes Distintos por Unidade/Setor

Total: 4.620



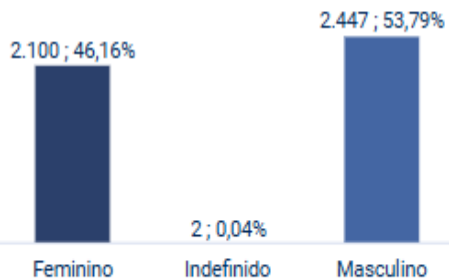
Pacientes Distintos por Faixa Etária Coleta

Total: 4.563



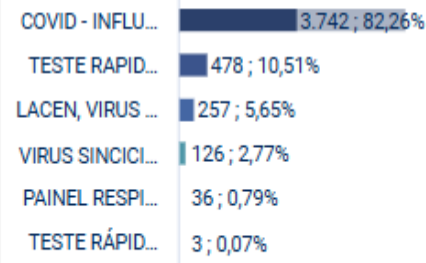
Pacientes Distintos por Sexo

Total: 4.549



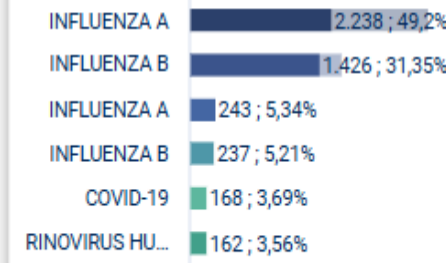
Pacientes Distintos por Exame

Total: 4.642



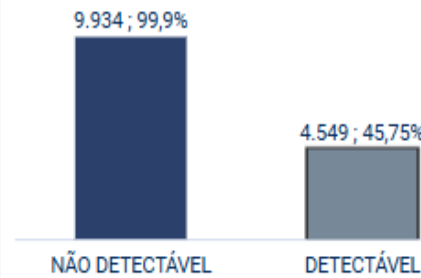
Pacientes Distintos por Campo do Exame

Total: 4.752



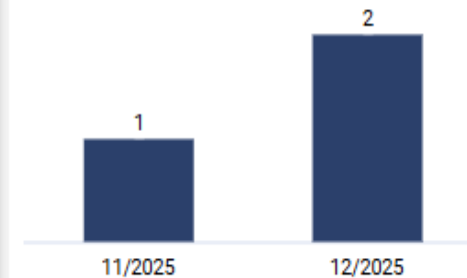
Pacientes Distintos por Resultado do Exame

Total: 14.483



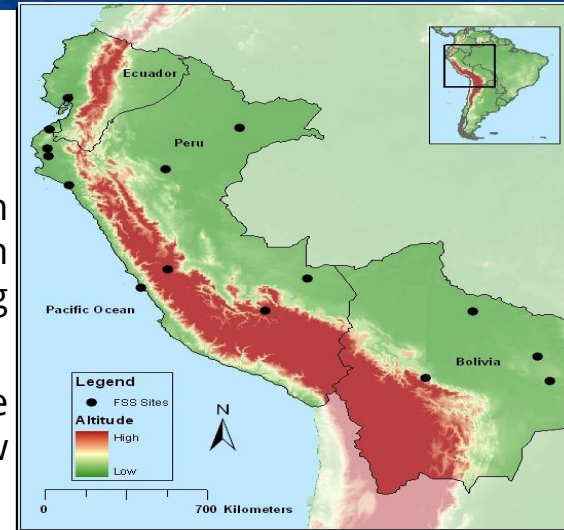
Pacientes que evoluíram ao óbito em até 30 dias

Total: 3



## Short Site description / surveillance settings

- People of all age groups from two Peruvian hospitals: at Lima, Callao, looking for geographical representativeness of the network for the GIHSN mission.
- **Seasonality:** In Perú, surveillance system has shown that in the country's northern coastal area (Piura), influenza virus can be isolated throughout the whole year. In Lima and southern highland cities, influenza cases occur more often during wintertime (April- August).
- **Catchment area.** Clinica Internacional covers the whole city of Lima. Patients are covered by insurance companies; since 2023 San Juan, Callao is a MoH attending low income people and mainly children.



Lima (capital city)  
Callao (main port)

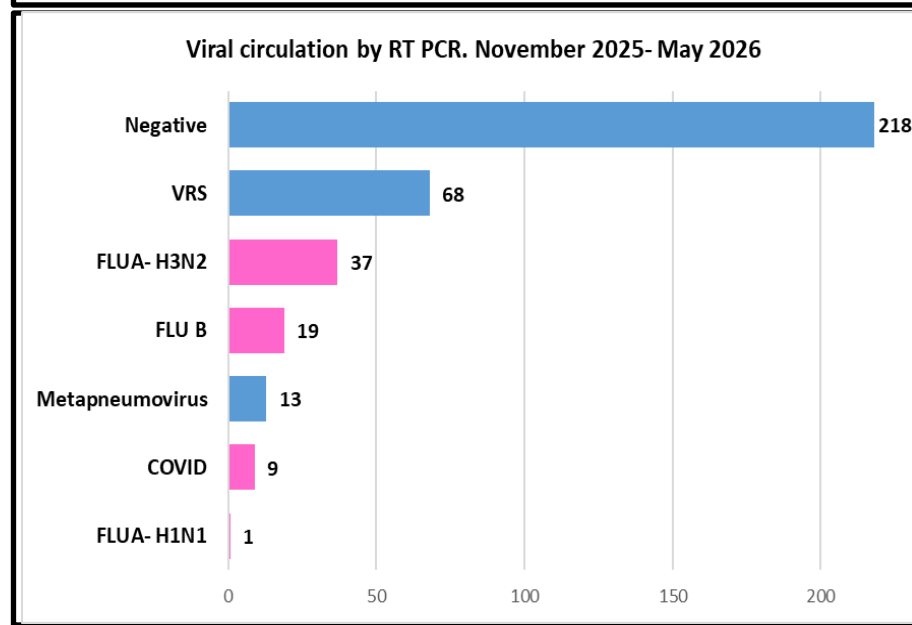
Lima it is the main city of the country with 8.5 million people.

## NIC or relation with a NIC

- We are related to NIC : Instituto Nacional de Salud Ministry of Health Perú .

## Respiratory viruses' circulation 2025-2026

- In 2025 we enrolled 568 participants. Along this season (Nov-May) we have enrolled 354 participants
- In the current season we already got 56 influenza positive samples, of those we genotyped 26.
- Participants under 5 years of age represents 61% of our enrolled population and VRS is the most frequent virus detected.



## Main take-home messages

In 2024-25 we improved our capabilities to genotype and we are no longer sending



- **Short Site description / surveillance settings**

- 14 hospitals / 5 regions in Antioquia
- Epidemiological Surveillance Network

- **Respiratory viruses' circulation 2025-2026**

- 1793 samples processed.
- 6.5% Detected and 93.5% Not Detected.
- 440 influenza samples.
- 320 samples selected for sequencing.
- 128 samples identified by clade and sequencing.

- **Main take-home messages**

- Genomic sequencing allows us to map specific lineages and clades of Influenza A (such as H1N1 and H3N2) and Influenza B in real time, both locally and globally. This data directly informs WHO recommendations for updating vaccine composition.

14 clinics and hospitals that make up the  
"Respiratory Virus Surveillance Network"



- **Short Site description / surveillance settings**

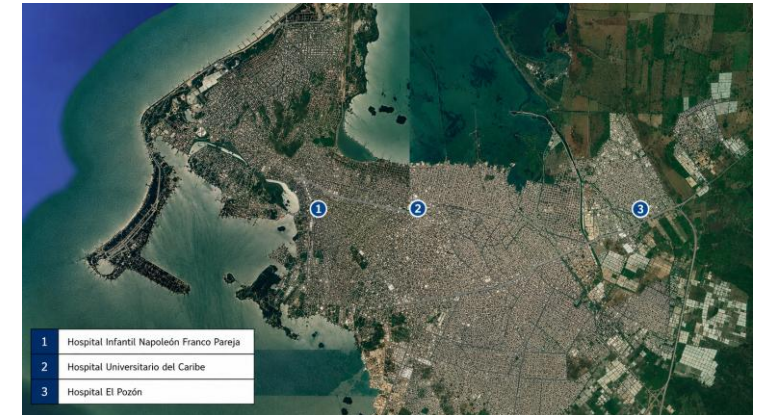
- The UNIMOL Laboratory focuses on biomedical sciences, addressing health issues relevant to the Caribbean region and the country as a whole, with a particular emphasis on the diagnosis of infectious diseases.
- The GIHSN surveillance strategy is carried out at three sentinel hospitals, including tertiary care hospitals and pediatric referral centers.

- **Respiratory viruses' circulation 2025-2026**

- Influenza A has been the predominant respiratory virus detected during the 2025-2026 season, while RSV/HMPV also contributed substantially to the burden of respiratory infections.

- **Main take-home messages**

- We successfully implemented hospital surveillance at the participating institutions; of 374 samples, 43.6% tested positive for one of the respiratory viruses tested, indicating the predominant circulation of Influenza A, RSV and HMPV. The UNIMOL laboratory's genomic sequencing capacity was strengthened, yielding 18 complete influenza genomes.



*Geographic Distribution of Hospitals*



*The UNIMOL Laboratory Team*

- **Short Site description / surveillance settings**

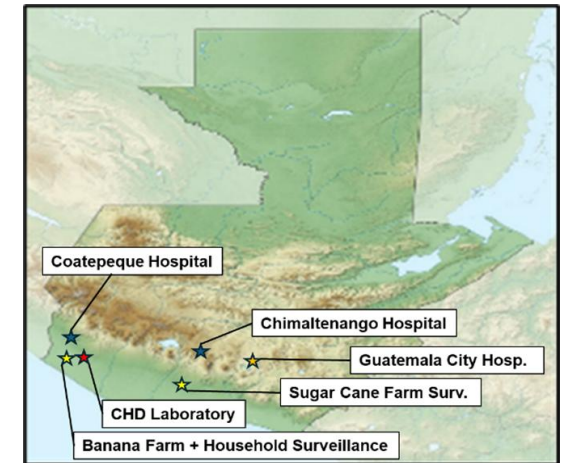
- Two hospitals / central highlands and southwest lowlands
- Sharing of information with Guatemala's NIC "Laboratorio Nacional de Salud (LNS)"
- Collaboration with CDC on farm + household resp. virus surv.

- **Respiratory viruses' circulation 2025-2026**

- Detection of influenza A H3N2 subclade K since February 2026
- Active RSV circulation since august 2025
- Low levels of SARS-CoV-2 and influenza B on hospitalized patients

- **Main take-home messages**

- Influenza A and RSV have been the main pathogens detected in hospitalized patients
- Active circulation of both pathogens all 2025-2026 season



# NORTH AMERICA

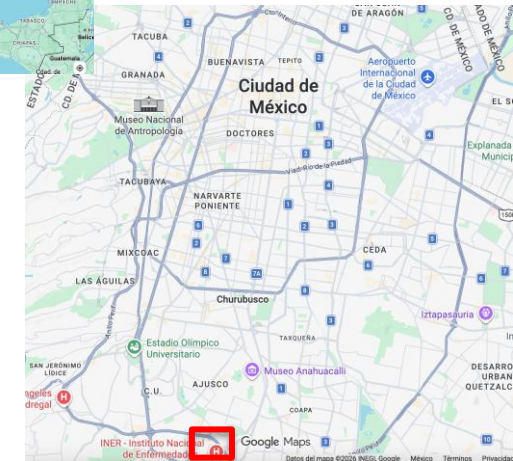
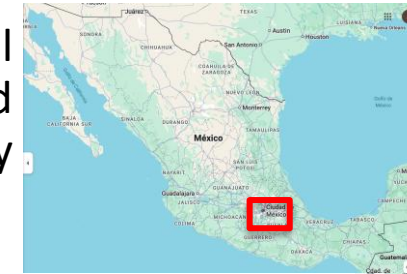
❖ Mexico

❖ Canada

❖ USA



- National Institute of Respiratory Diseases (INER) in Mexico City, is a referral center for respiratory diseases, which primarily provides services for uninsured individuals. Attends preferentially severe cases of acute and chronic respiratory diseases.
  - It is one of the most important research institute in respiratory infectious diseases, including tuberculosis, human influenza and COVID-19. Annually attend to around 1500 patients with viral respiratory diseases.
  - Closed relationship to InDRE (NIC), reporting SARS-CoV-2 variants and avian influenza virus detection.
- **Respiratory viruses' circulation 2025-2026**
  - Main respiratory viruses were Entero/Rhino: 28.5%, Influenza:16.3%, Coinfections: 15.1%, RSV: 10.9%, hMPV: 8.2%, SARS-CoV-2: 1%, Other:20%
  - We detected novel reassorted avian influenza virus (H5N2) and the H3N2 subclade K in Mexico.
- **Main take-home messages**
  - INER is the main Institute in Mexico with the capacity to detect and characterize the respiratory viruses in hospitalized patients.



CANADA



- 2 adult hospital sites representing approximately ~950 acute care beds
- Data provided to provincial public health who share nationally
- Systematic enrolment 3 days per week; 2/3 are aged 65+
- Vaccination: Current season Influenza 43.1%, ever RSV 3.5%
- 75 influenza samples underwent WGS

Table 1: Outcomes of influenza positive cases (influenza A, influenza B, RSV)

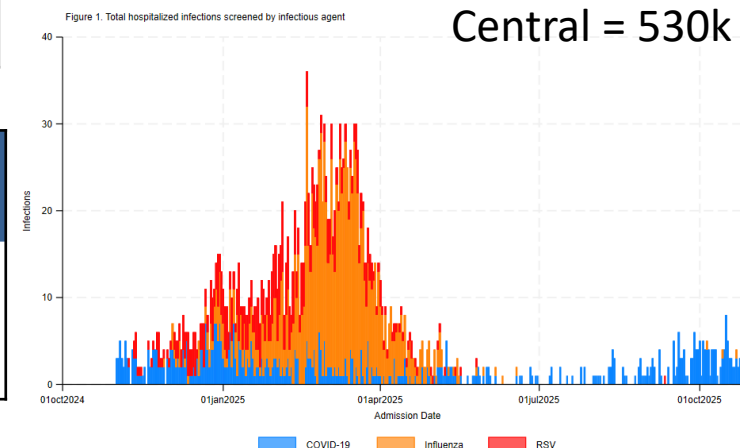
Outcome	Flu+ (n=143)	COVID+ (n = 64)	RSV+ (n = 32)	Negative (N=446)	p value
ICU	19 (13.3%)	6 (9.4%)	2 (6.3%)	50 (11.2%)	$p = 0.18$
Mech Vent	15 (10.5%)	4 (6.3%)	4 (12.5%)	32 (7.2%)	$p = 0.33$
Death	10 (7.0%)	6 (9.4%)	1 (3.1%)	58 (13.0%)*	$p < 0.05$

Table 2: Outcomes by frailty

Outcome	Non-Frail (N= 162)	Mild-Mod (N = 428)	Severe Frailty (N = 75)	p value
ICU	25 (15.4%)	41 (9.6%)	10 (13.3%)	$p < 0.001$
Mech Vent	18 (11.1%)	29 (6.8%)	7 (9.3%)	$p < 0.001$
Death	6 (3.7%)	46 (10.8%)	23 (30.7%)	$p < 0.001$



NS pop. = 1.1M  
Central = 530k





## • Surveillance settings

- Seven hospitals and 400 outpatient practices in the New York City area
- 6.2+ million patient visits annually
- Enrollment through Mount Sinai Pathogen Surveillance Program, no relation to NIC

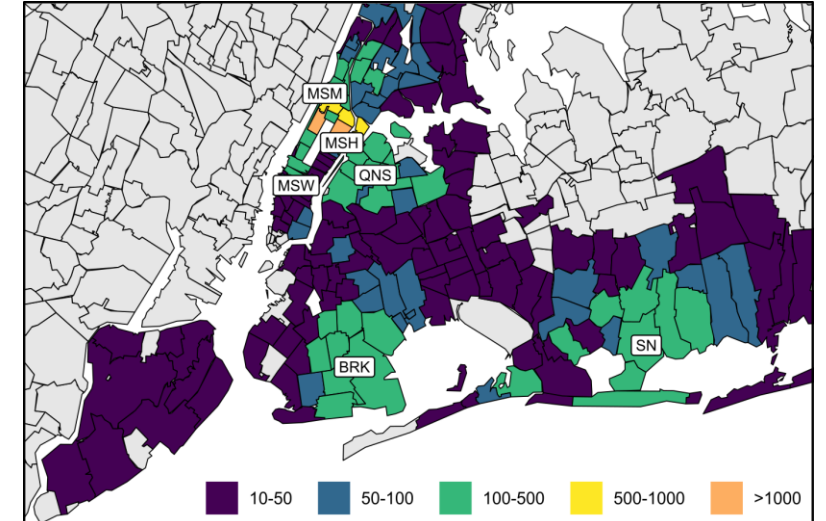
## • Respiratory virus circulation 2025-2026

- Enrolled >6,500 patients in GIHSN cohort
- Provided weekly surveillance statistics
- Generated complete influenza A viral genomes from 121 NP swabs

## • Main take-home messages

- Historical comparison revealed that the 2025–26 "K-clade" season was more severe than previous years.

### GIHSN-eligible patient visits



### Increased hospitalizations in '25-26 season

Characteristic	OR	95% CI	p-value
Season			
2025-26	—	—	
2022-23	0.88	0.77, 1.01	0.075
2023-24	0.84	0.74, 0.95	0.007 **
2024-25	0.88	0.78, 0.99	0.031 *



**Global Influenza  
Hospital Surveillance  
Network**

[www.gihsn.org](http://www.gihsn.org)



**THANK YOU!**  
**LUNCH BREAK**



**Foundation for  
Influenza  
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Sous l'égide de

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