XXIV Jornada Vacunes i Profilaxi. De la teoria a la pràctica, tots sumen en vacunació.

Dinàmiques virals postpandèmiques

Nemesio Moreno

ICS & CAMFiC

Barcelona, 26 d'octubre de 2026

Interferència viral

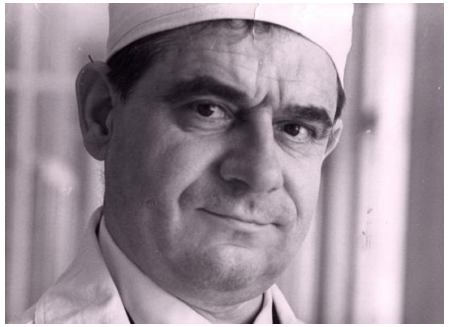


1960-70

Vacuna de virus vius atenuats d'enterovirus no patogènics per evitar altres infeccions víriques

Utilització durant la tardor-hivern per prevenció inespecífica de la grip i altres virus respiratoris

PUB: 1992

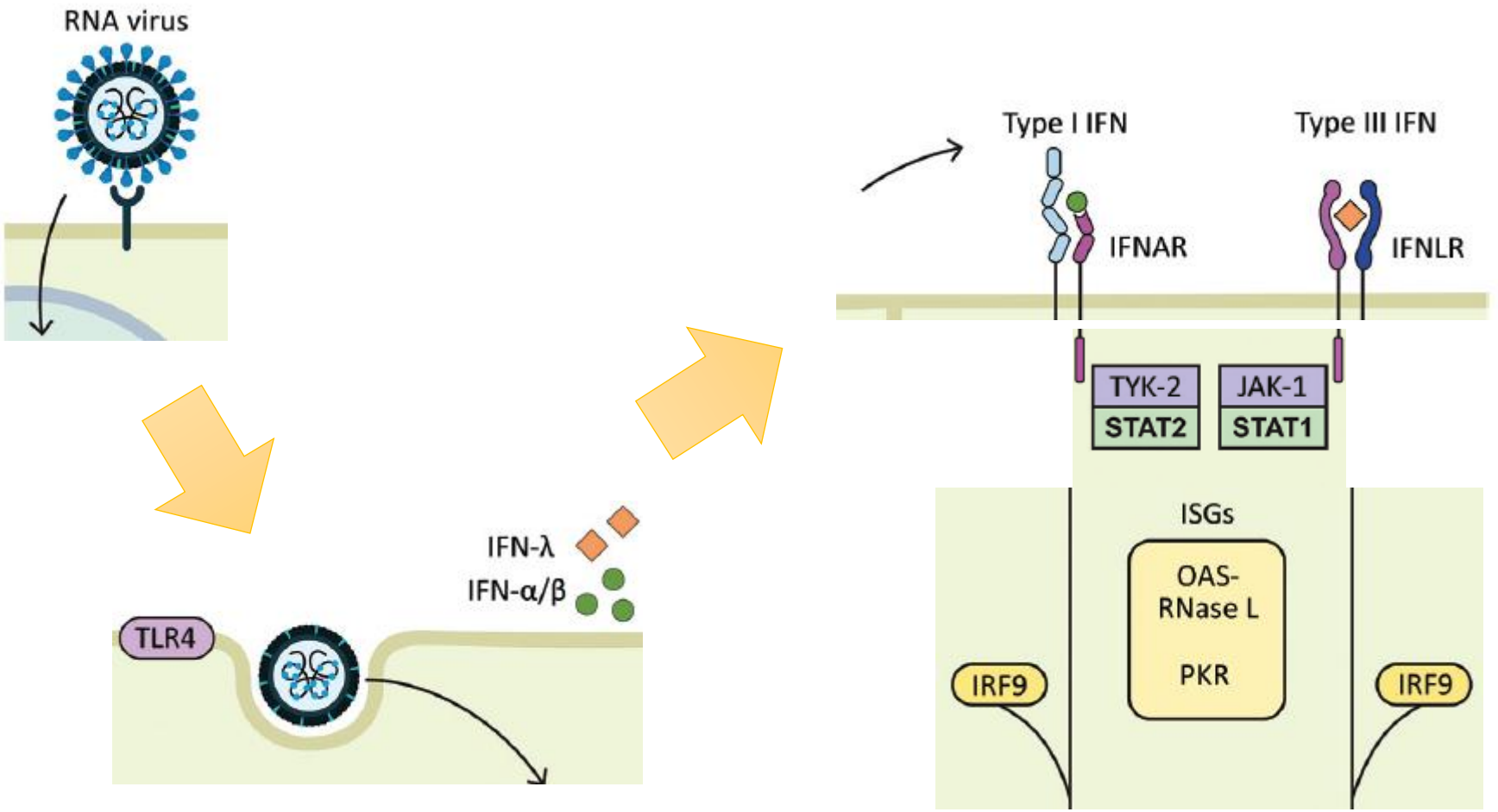


2-3 administracions en 7-10 dies

↓3,2 vegades la morbiditat (150.000 vacunats)

Voroshilova MK. Potential use of nonpathogenic enteroviruses for control of human disease. Prog Med Virol. 1989;36:191-202. PMID: 2555836.
Chumakov MP, Voroshilova MK, Antsupova AS et al. Live enteroviral vaccines for the emergency nonspecific prevention of mass respiratory diseases during fall-winter epidemics of influenza and acute respiratory diseases. Zh Mikrobiol Epidemiol Immunobiol. 1992;(11-12):37-40. Russian. PMID: 1338742.

Interferència viral i immunitat innata



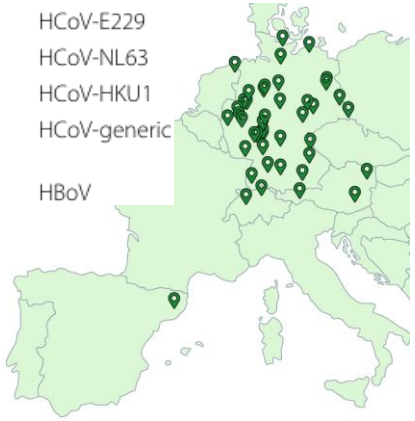
Piret J, Boivin G. Viral interference between respiratory viruses. EID. 2022;28(2)

Interaccions en base a coinfeccions (dades 2010-19)



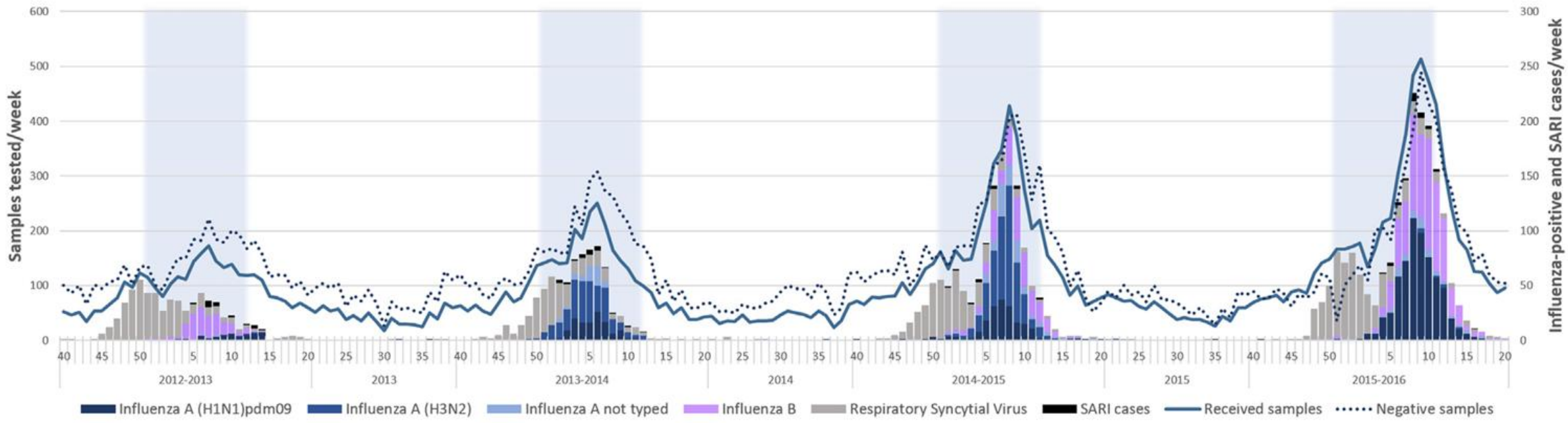
Influenza A (H3N2)	FLUA(H3N2)
Influenza A (H1N1)	FLUA(H1N1)
Non-differentiated Influenza A (H1N1 and H3N2)	FLUA-generic
Influenza B	FLUB
Parainfluenza 1	HPIV-1
Parainfluenza 2	HPIV-2
Parainfluenza 3	HPIV-3
Parainfluenza 4	HPIV-4
Non-differentiated Parainfluenza (1,2,3, and 4)	HPIV-generic
Metapneumovirus	HMPV
Respiratory Syncytial Virus	HRSV
Rhinovirus	RV
Enterovirus	EV
Non-differentiated Picornaviruses (Rhinovirus and Enterovirus)	RV/EV
Adenovirus	HAdV
Coronavirus OC43	HCoV-OC43
Coronavirus E229	HCoV-E229
Coronavirus NL63	HCoV-NL63
Coronavirus HKU1	HCoV-HKU1
Non-differentiated Coronaviruses (OC43, E229, NL63 and HKU1)	HCoV-generic
Bocavirus	HBoV

Fig. 4 Interaction strength between the 17 virus pairs regarding coinfection. The figure shows the 17 studied viruses linked by lines. Orange lines indicate an exclusion interaction while green lines an affinity interaction. The thickness of the lines indicates the strength of the interaction



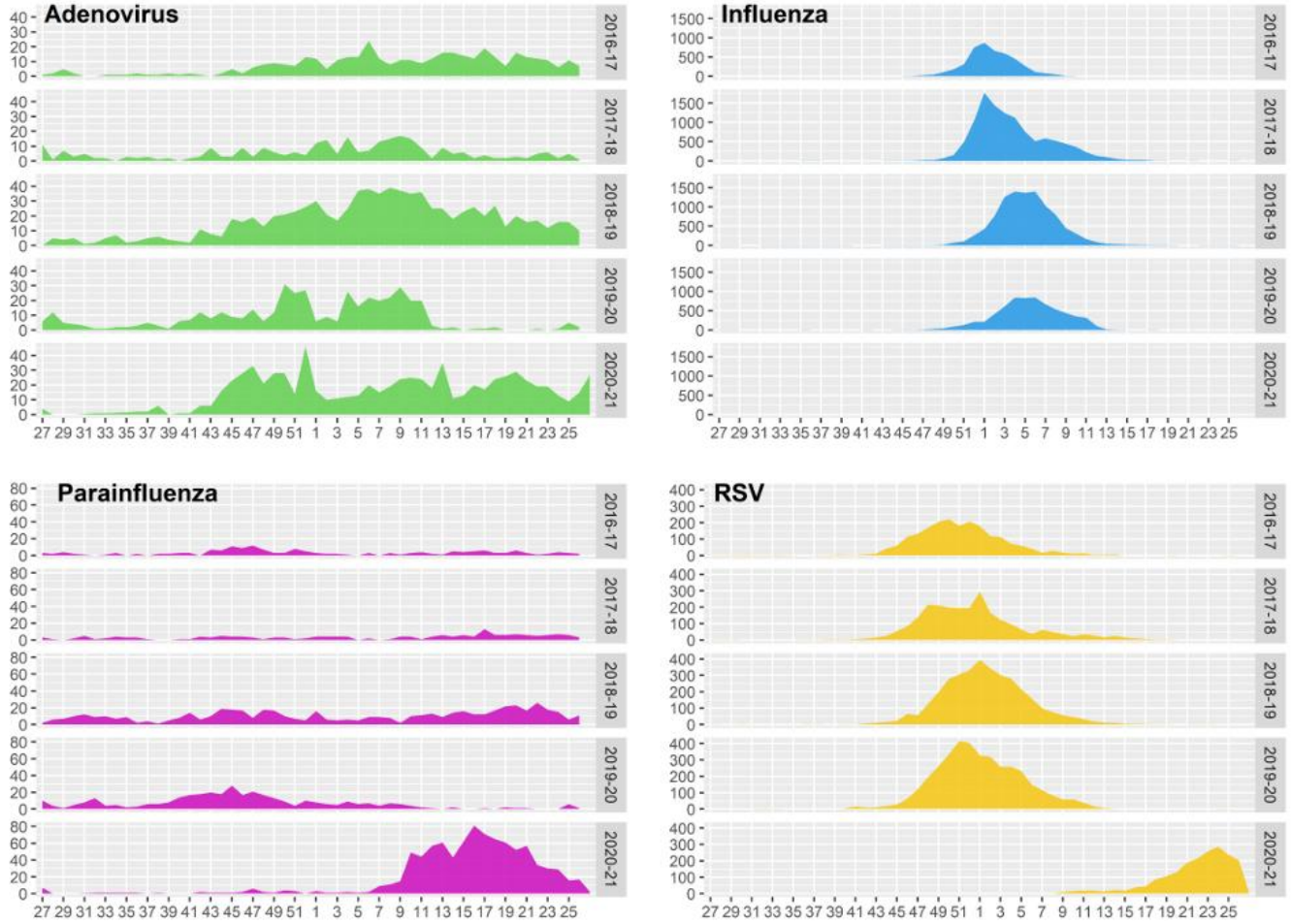
Horemheb-Rubio et al. BMC Public Health (2022) 22:1167

Dinàmiques 2012-2016



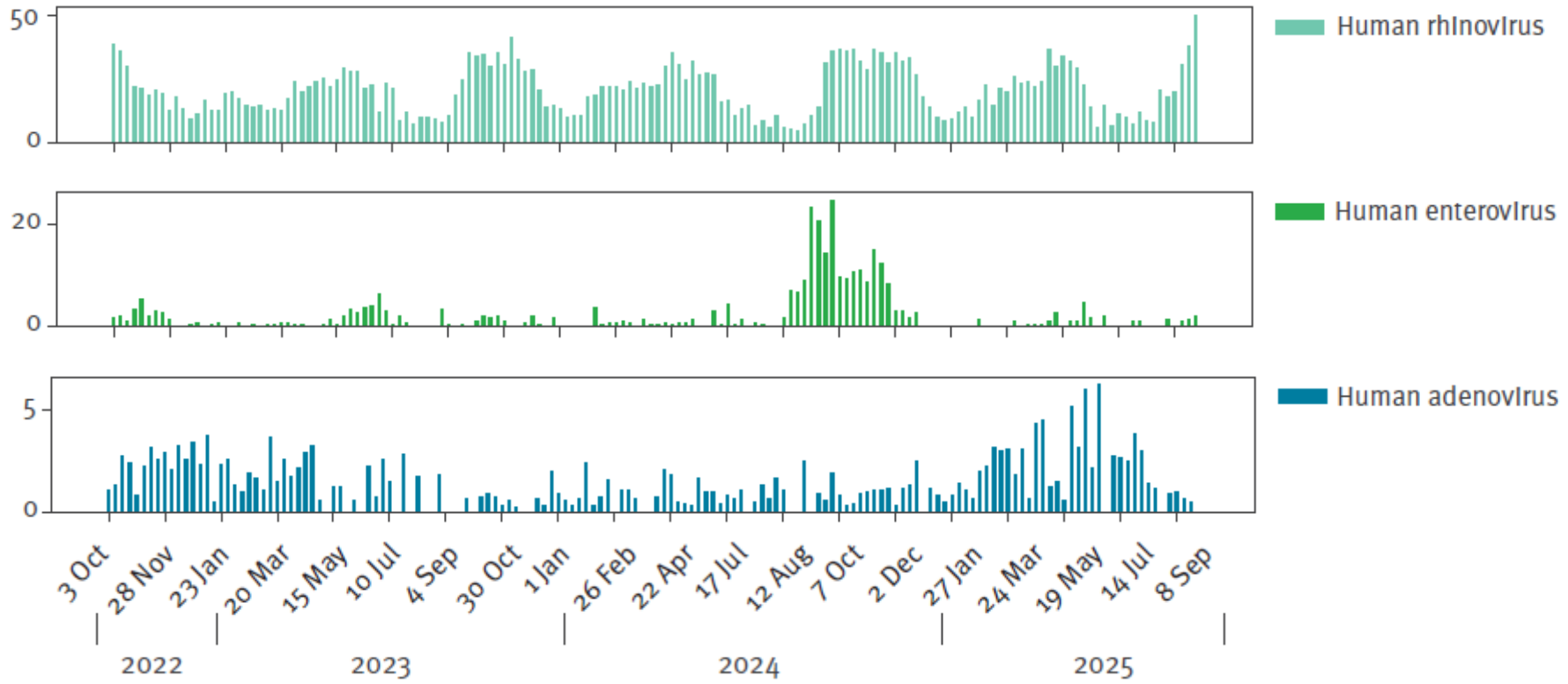
Andrés C, Peremiquel P, Gimferrer L et al. Molecular influenza surveillance at a tertiary university hospital during four consecutive seasons (2012-2016) in Catalonia, Spain. Vaccine. 2019 Apr 24;37(18):2470-2476. doi: 10.1016/j.vaccine.2019.03.046. Epub 2019 Mar 27.

Dinàmiques 2016-2021 (casos positius)



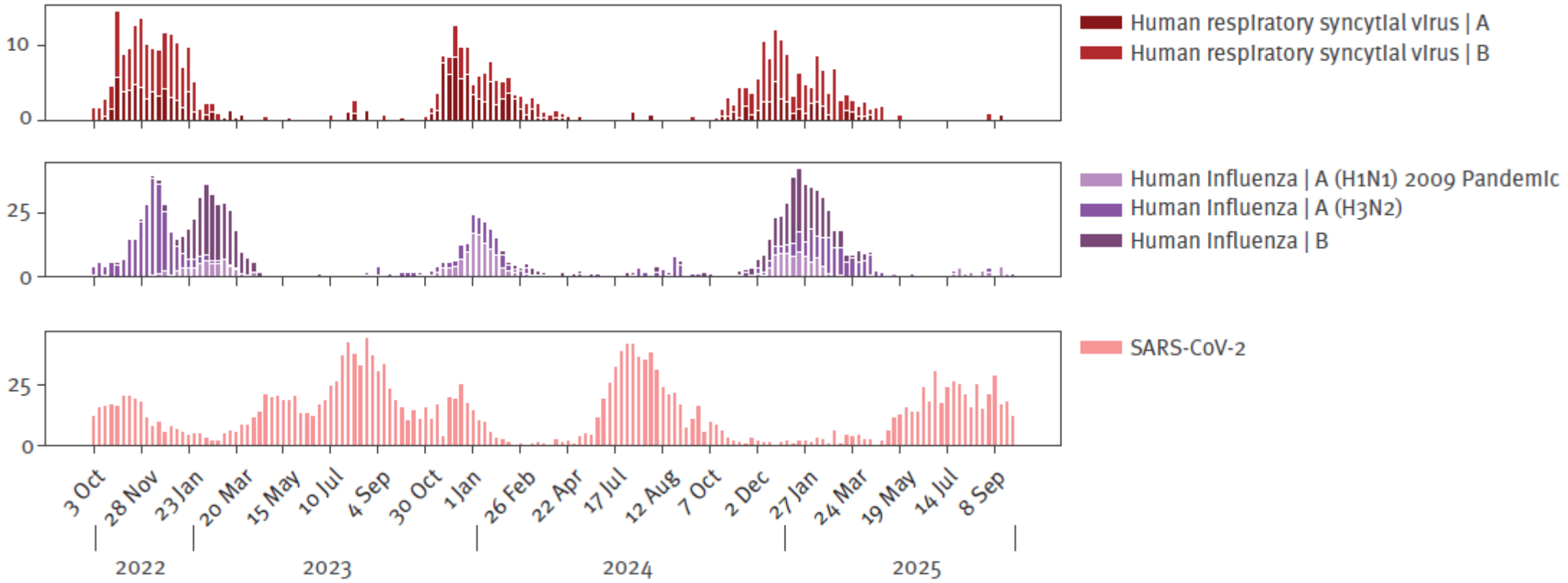
Guadalupe V, Martínez E, Sabrià A et al. Epidemiological Surveillance Network of Catalonia. Investigating epidemiological distribution (temporality and intensity) of respiratory pathogens following COVID-19 de-escalation process in Catalonia, September 2016-June 2021: Analysis of regional surveillance data. PLoS One. 2024 Feb 9;19(2):e0285892. doi: 10.1371/journal.pone.0285892.

Dinàmiques 2022-2025 (positivitat PCR)



Perramon A, Coma E, Mendez L. SIVIC Network Steering Group. Patterns in the dynamics of respiratory viruses after the COVID-19 pandemic: an observational, retrospective study using sentinel surveillance network data, Catalonia, 2022 to 2025. Euro Surveill. 2026;31(38):pii=2600065. https://doi.org/10.2807/1560-7917.ES.2026.31.38.2600065.

Dinàmiques 2022-2025 (positivitat PCR)

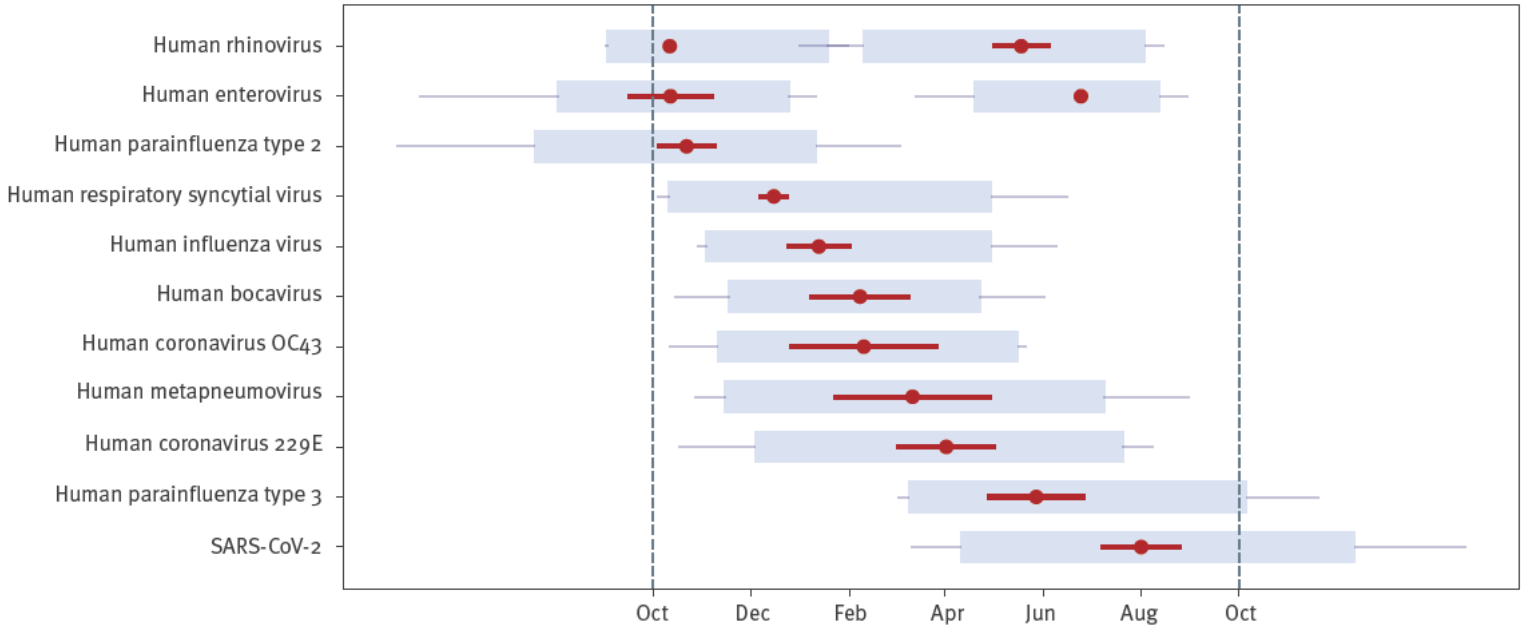


Perramon A, Coma E, Mendez L. SIVIC Network Steering Group. Patterns in the dynamics of respiratory viruses after the COVID-19 pandemic: an observational, retrospective study using sentinel surveillance network data, Catalonia, 2022 to 2025. Euro Surveill. 2026;31(38):pii=2600065. https://doi.org/10.2807/1560-7917.ES.2026.31.38.2600065.

Pic epidèmic 2022-2025 (positivitat PCR)

FIGURE 2

Viruses' chronological occurrence, by week of first average epidemic peak since the start of the epidemiological year in October, aggregated data, Catalonia, Spain, 2023/24–2024/25 (n = 32,782)



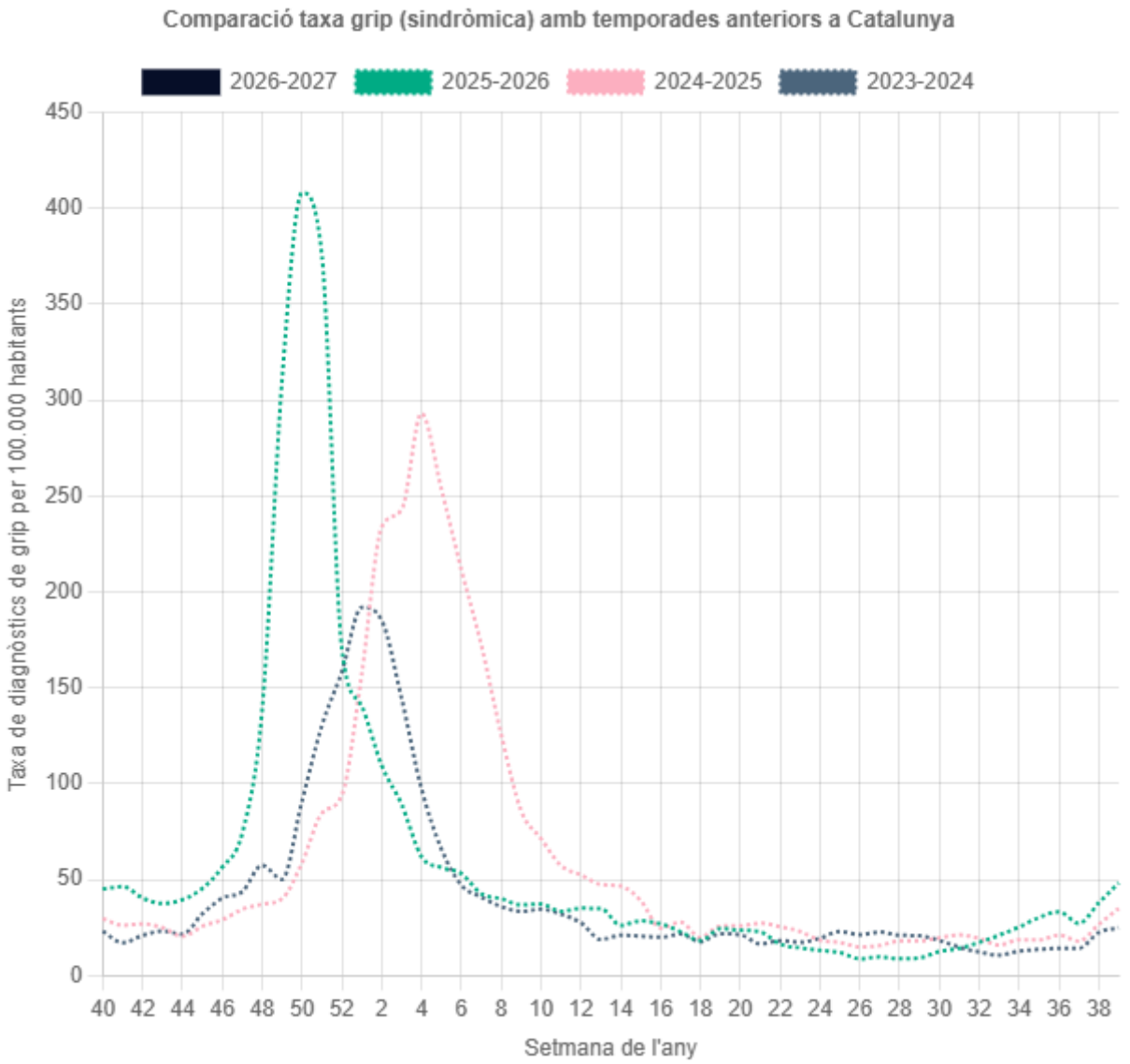
Perramon A, Coma E, Mendez L. SIVIC Network Steering Group. Patterns in the dynamics of respiratory viruses after the COVID-19 pandemic: an observational, retrospective study using sentinel surveillance network data, Catalonia, 2022 to 2025. Euro Surveill. 2026;31(38):pii=2600065. https://doi.org/10.2807/1560-7917.ES.2026.31.38.2600065.

Eines a l'Atenció Primària

- SIVIC
  - Vigilància sindròmica (poc específica)
  - Vigilància microbiològica (laboratori)
- Prova antigènica
- Tractaments (habitualment hospitalaris)
  - Paxlovid
  - Tamiflu
- Vacunació
  - Grip
  - COVID
  - Pneumococ
  - VRS

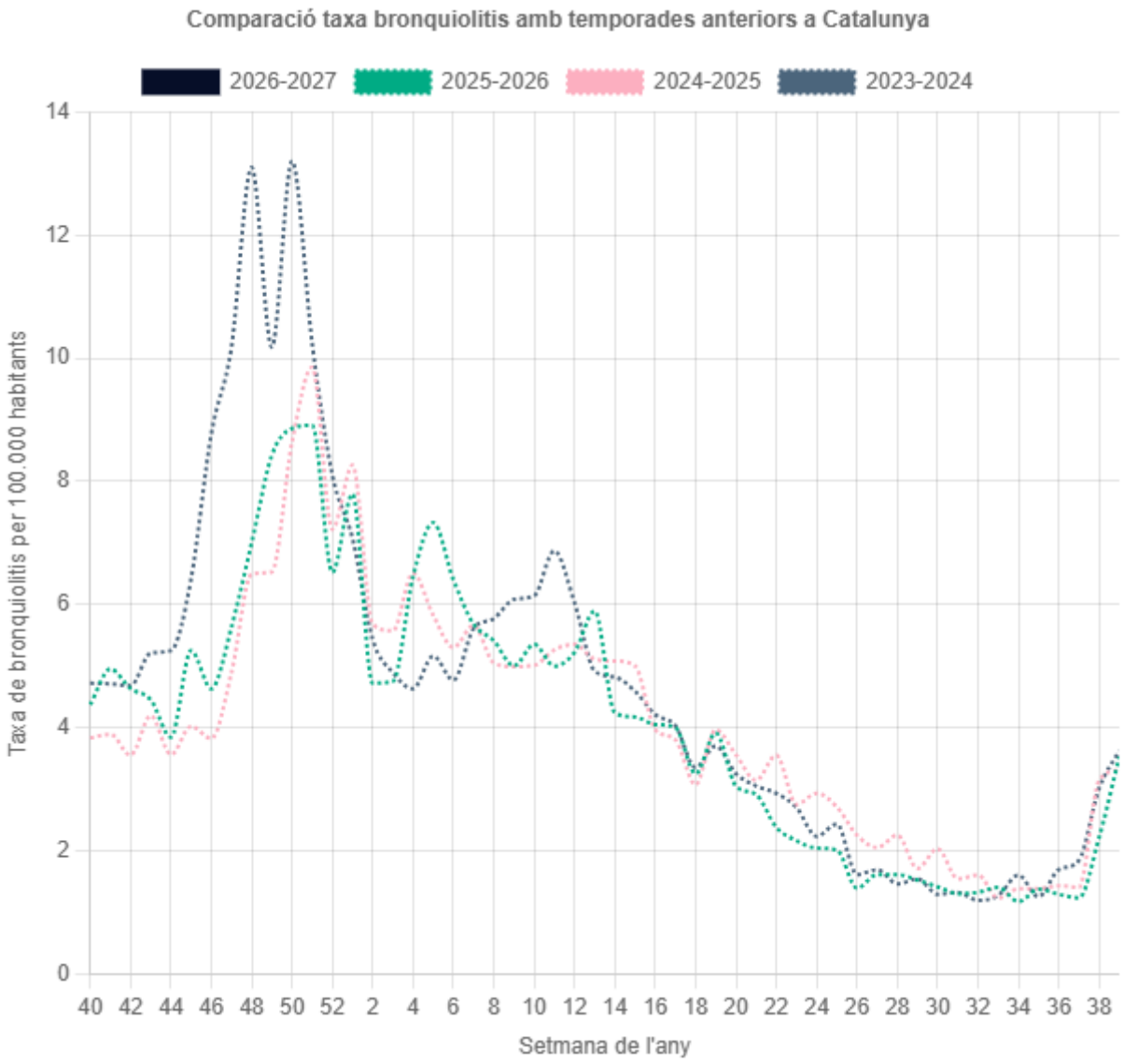


SIVIC: grip



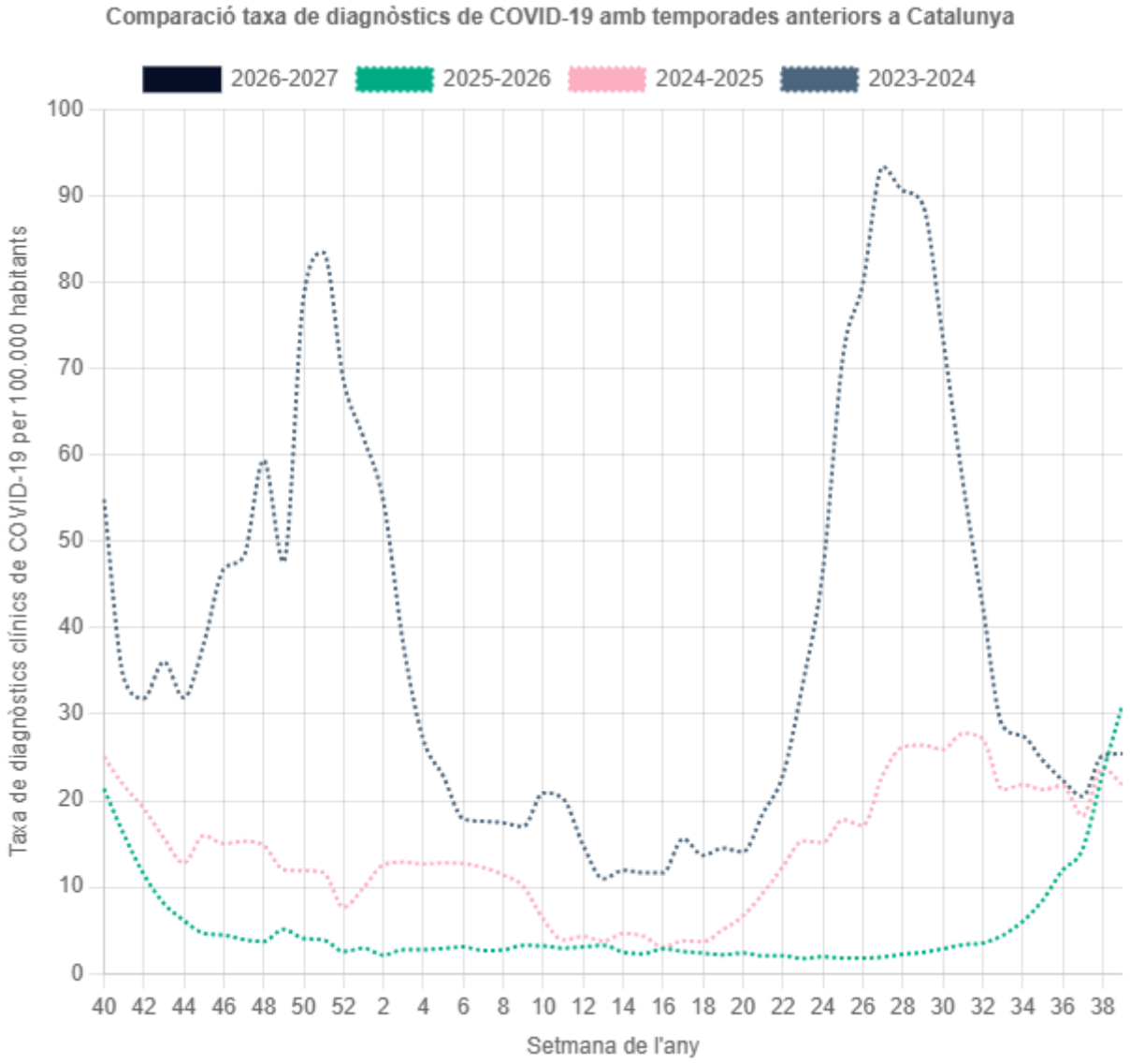
Generalitat de Catalunya (GENCAT). Sistema d'Informacio per a la Vigilancia d'Infeccions a Catalunya (SIVIC). Barcelona: GENCAT. [Accessed: 10 Oct 2026]. Available from: https://sivic.salut.gencat.cat

SIVIC: VRS



Generalitat de Catalunya (GENCAT). Sistema d'Informacio per a la Vigilancia d'Infeccions a Catalunya (SIVIC). Barcelona: GENCAT. [Accessed: 10 Oct 2026]. Available from: https://sivic.salut.gencat.cat

SIVIC: COVID

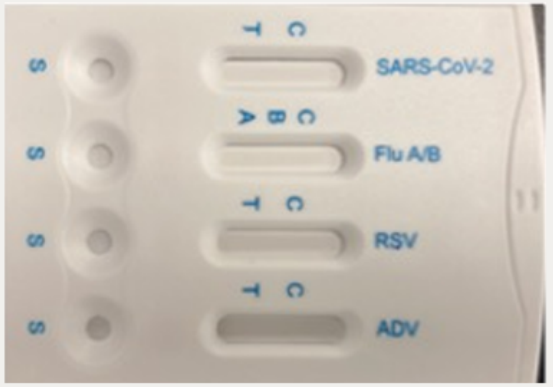


Generalitat de Catalunya (GENCAT). Sistema d'Informacio per a la Vigilancia d'Infeccions a Catalunya (SIVIC). Barcelona: GENCAT. [Accessed: 10 Oct 2026]. Available from: https://sivic.salut.gencat.cat

Eines a l'Atenció Primària

Prova antigènica de virus respiratoris

Prova antigènica de virus respiratoris FLOWFLEX



Descripció

- Prova ràpida de diagnòstic per a la detecció dels antígens de SARS-CoV-2, grip A/B, virus sincicial respiratori (VRS) i adenovirus, en una mostra nasofaríngia o nasal, en persones que compleixen criteris clínics o epidemiològics d'infecció vírica respiratòria.

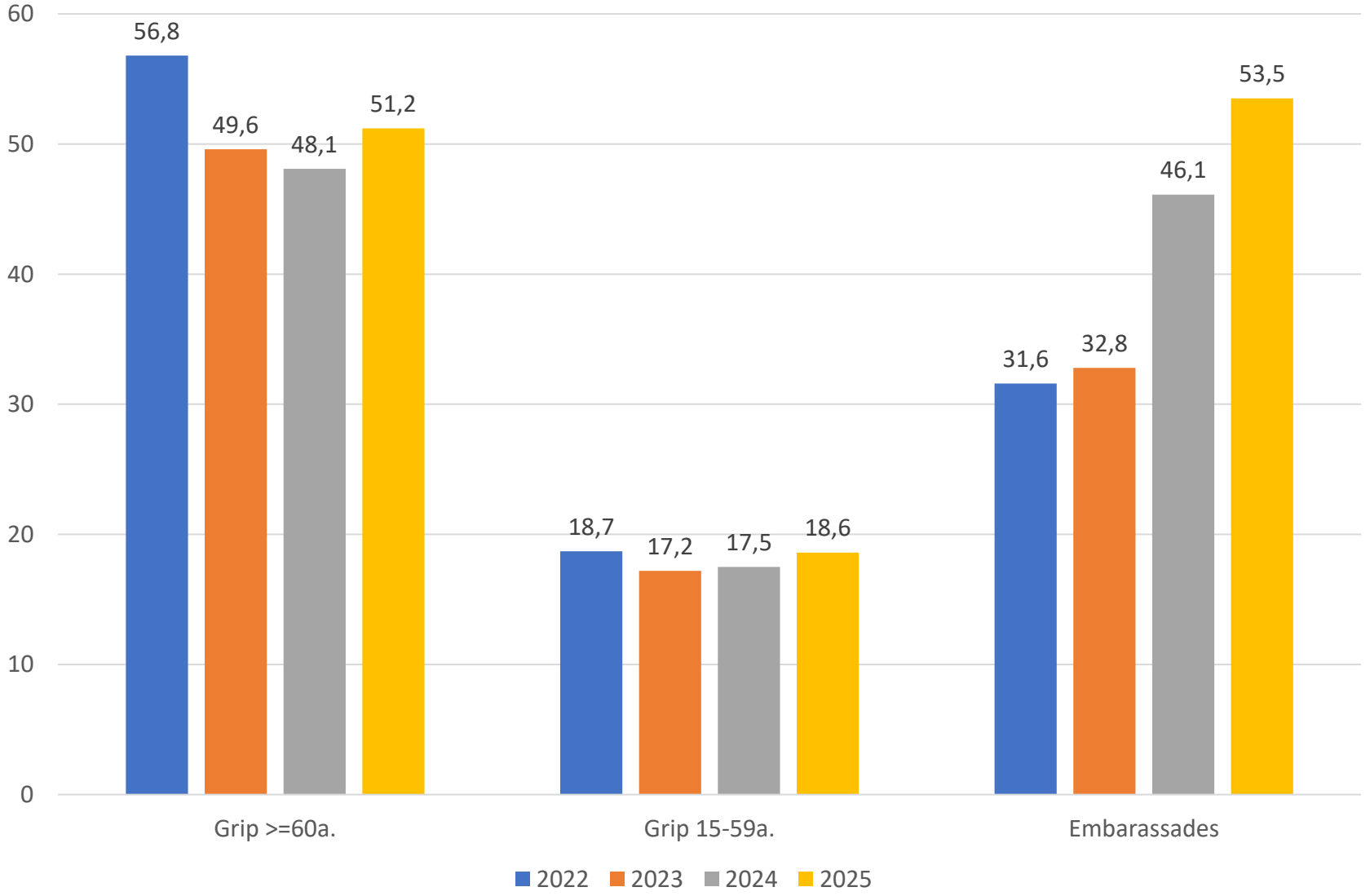
https://ics.gencat.cat/web/.content/Documents/assistencia/procediments-infermeria/Prova-rapida-comb-antigensSARSCoV2-grip-A_B-VRS-i-adenovirus/03022023Prova-rapida-grip-covid.pdf

Tractaments antivirals



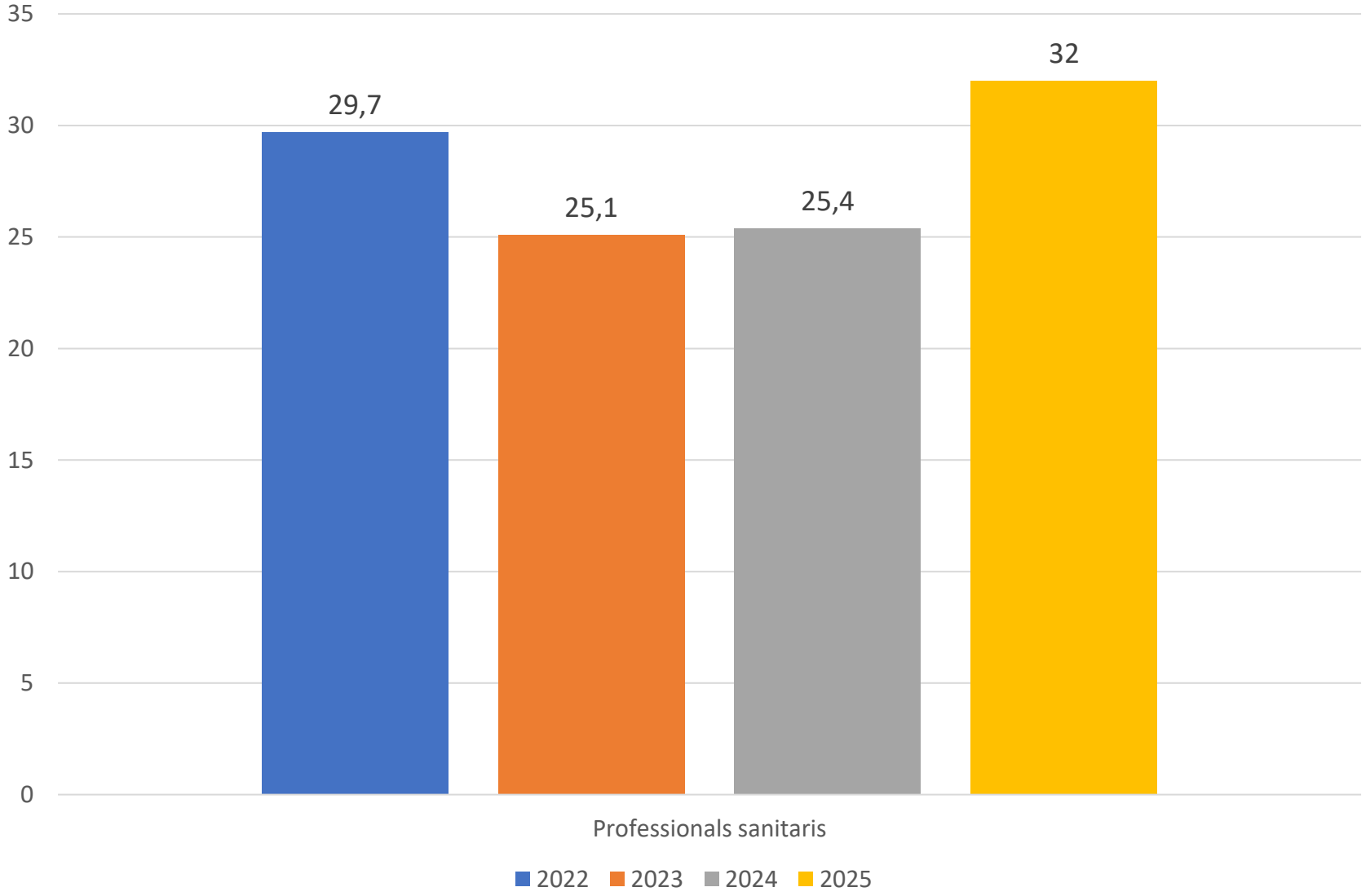


Cobertures vacunals grip 2022-25



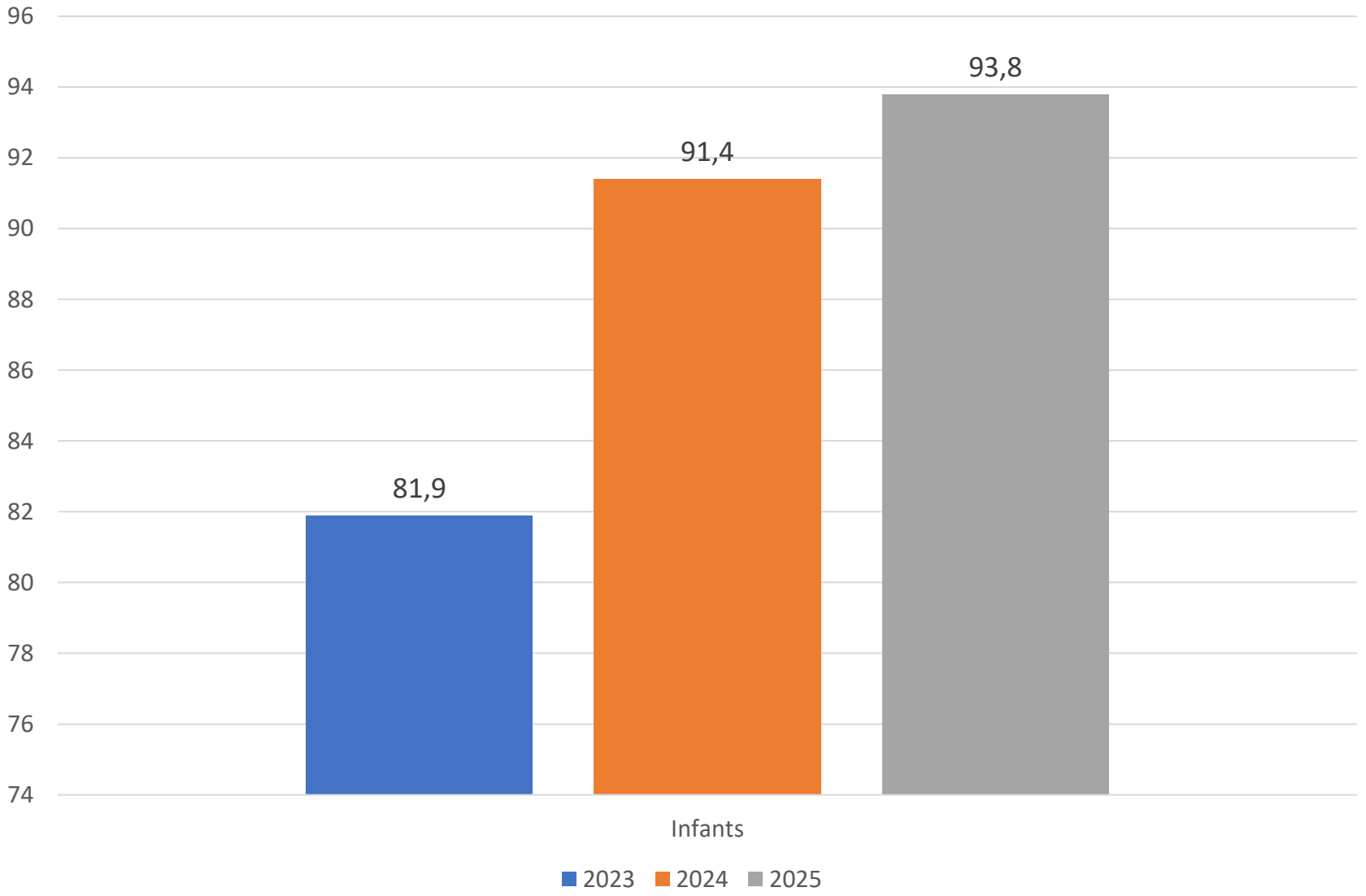
SISAP ICS. Dades internes

Cobertures vacunals grip professionals 2022-25



SIVAMIN. Ministerio de Sanidad

Cobertures vacunals VRS 2023-25

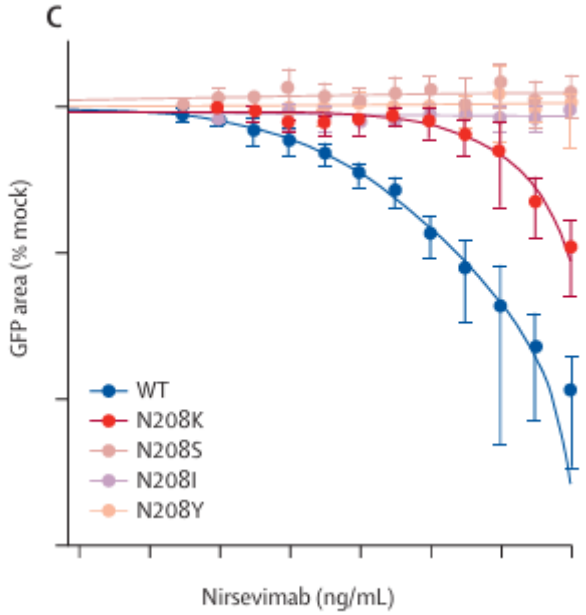


SISAP ICS. Dades internes

Nous desafiaments

França[1]

12% infeccions en immunitzats resistents a VRS (llinatge B) Proteïna F



Baixa susceptibilitat a nirsevimab en substitucions de la proteïna F respecte el tipus salvatge (WT)

Espanya[2]

3 casos en immunitzats resistents a VRS (llinatge B) Proteïna N:F201T

Afecta al lloc antigènic diana de nirsevimab. Anàlisi genòmica: casos esporàdics

2 casos amb ingrés i 1 amb 2 dies d'ingrés a UCI

1. Fourati S, Reslan A, Bourret J et al. Real-world emergence of nirsevimab resistance in breakthrough infections with respiratory syncytial virus-B: a multicentre observational study in France. LancetMicrobe2026; 7: 101353
2. Iglesias M, Infantes JA, Campoy A et al. Detection of nirsevimab-resistant RSV-B variants in children carrying the F:N201T substitution through genomic surveillance, Spain, 2025/26 season. Euro Surveill. 2026 Sep;31(35):2600690. doi: 10.2807/1560-7917.ES.2026.31.35.2600690.


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