

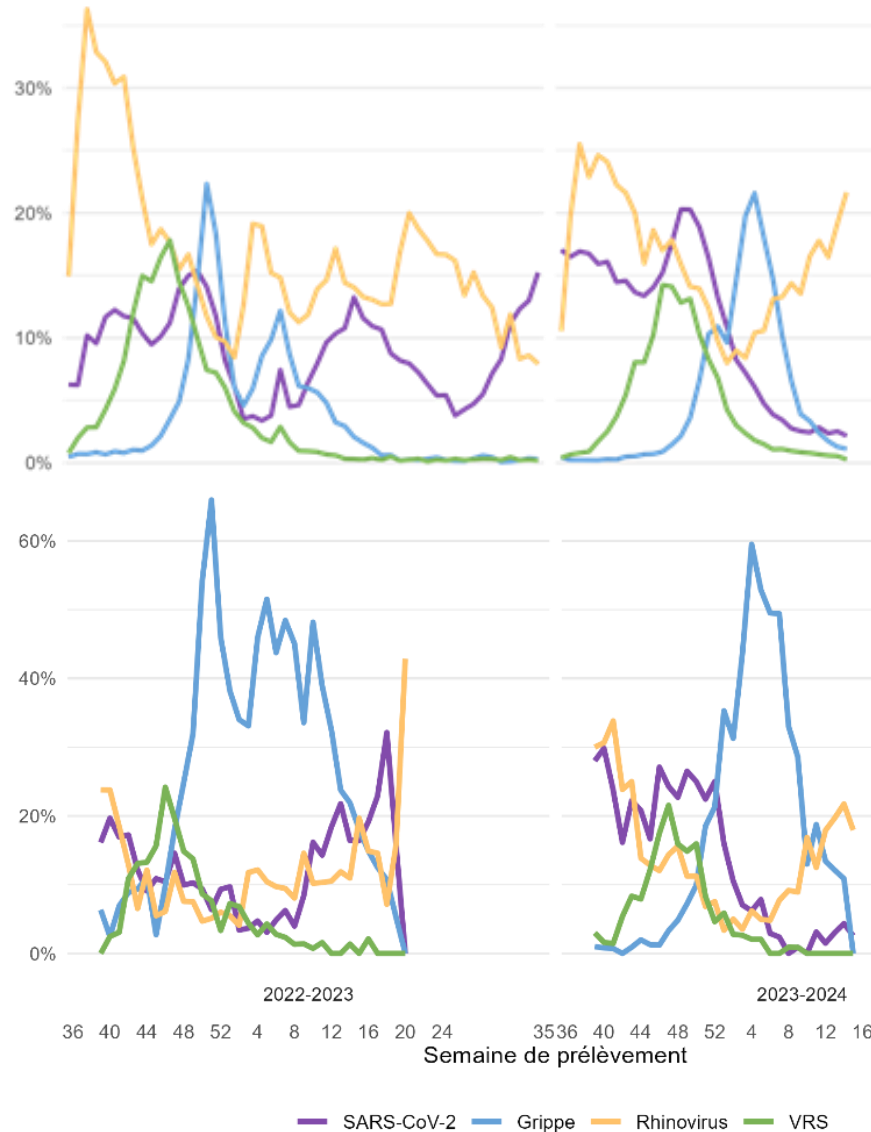
Surveillance of respiratory infections in France 2023-2024

Dr. Anna Maisa

on behalf of the ARI team at Santé publique France, Infectious Diseases Department

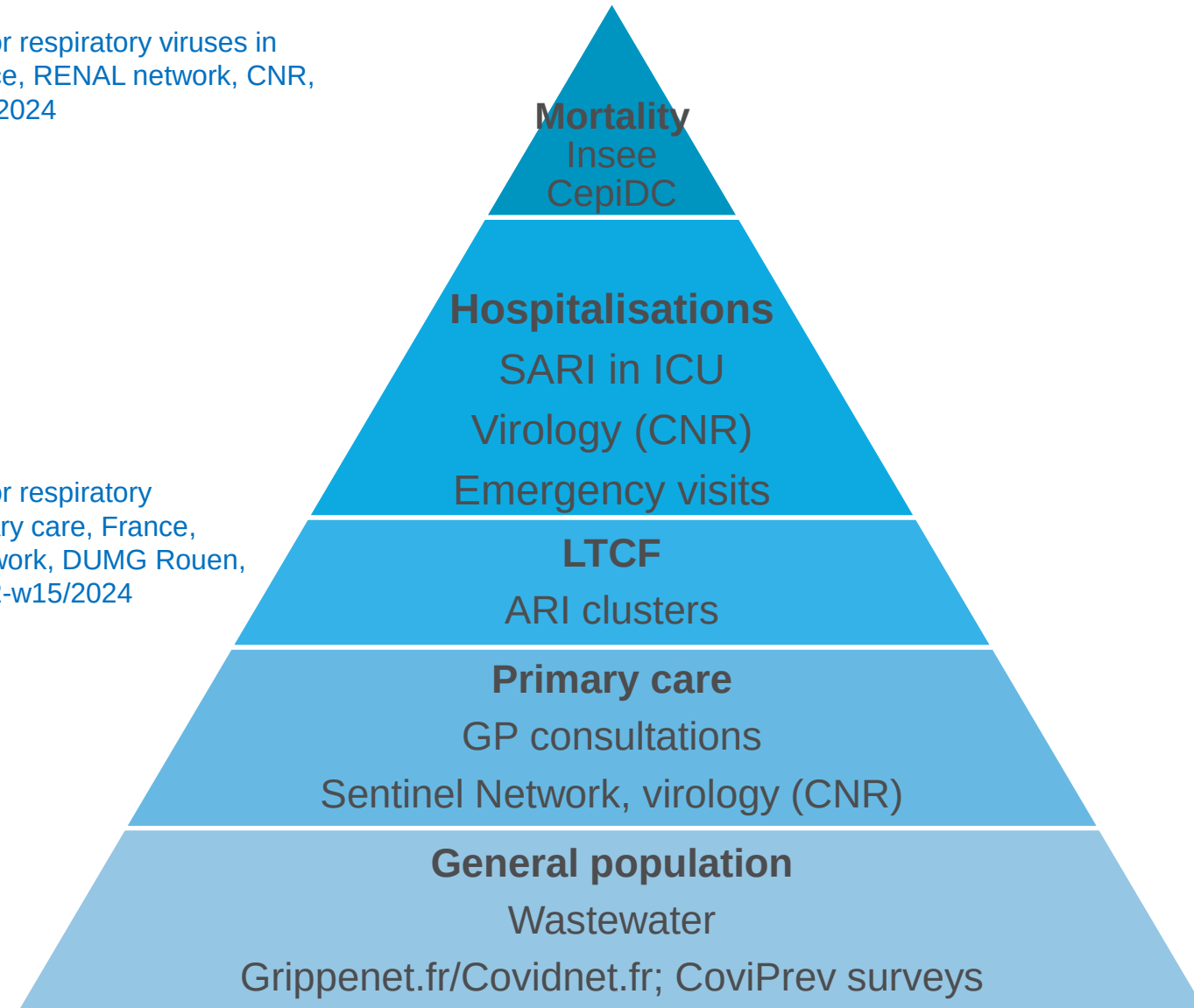
EU/EEA Annual Respiratory Virus network meeting, 12-14 June 2024

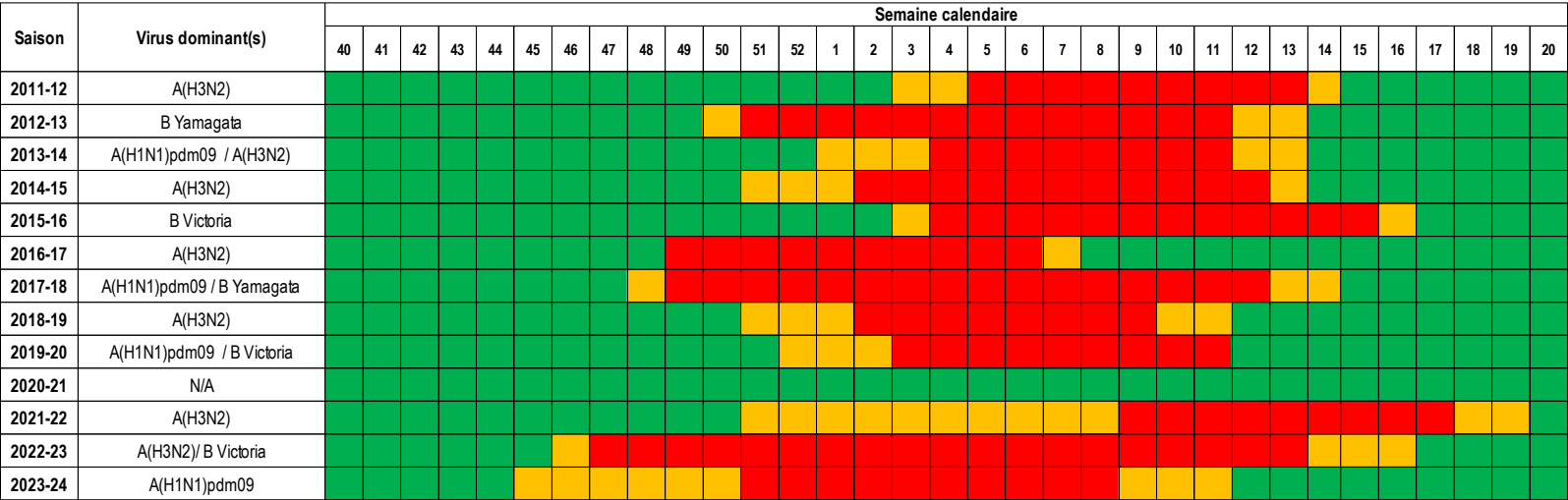
INTEGRATED ARI SURVEILLANCE: SEASON 2023-2024



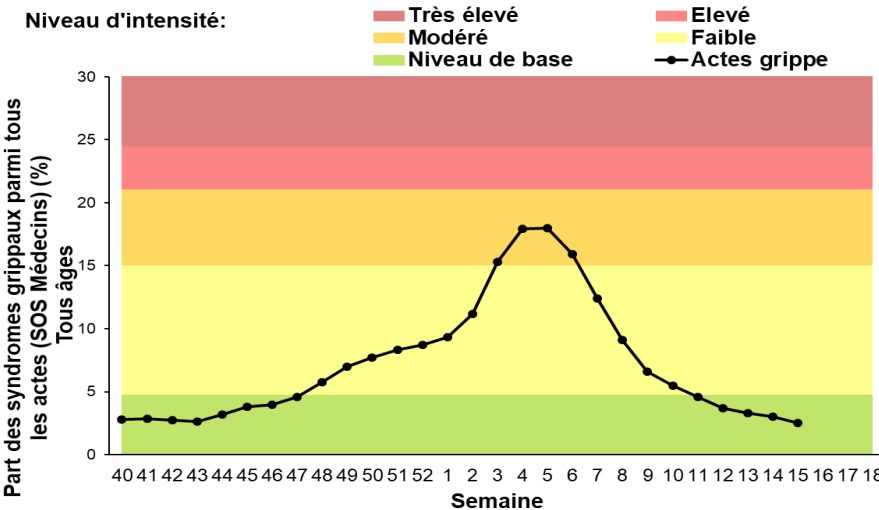
Positivity rate for respiratory viruses in hospitals, France, RENAL network, CNR, w36/2022-w15/2024

Positivity rate for respiratory viruses in primary care, France, Sentinelles network, DUMG Rouen, CNR, w36/2022-w15/2024

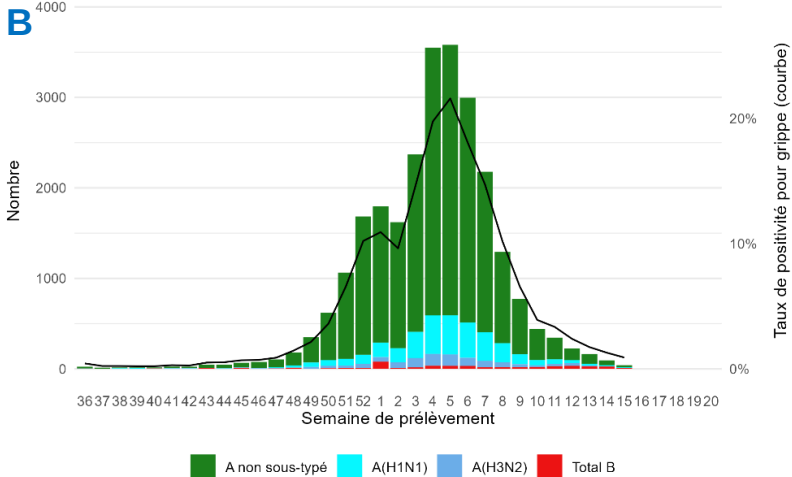
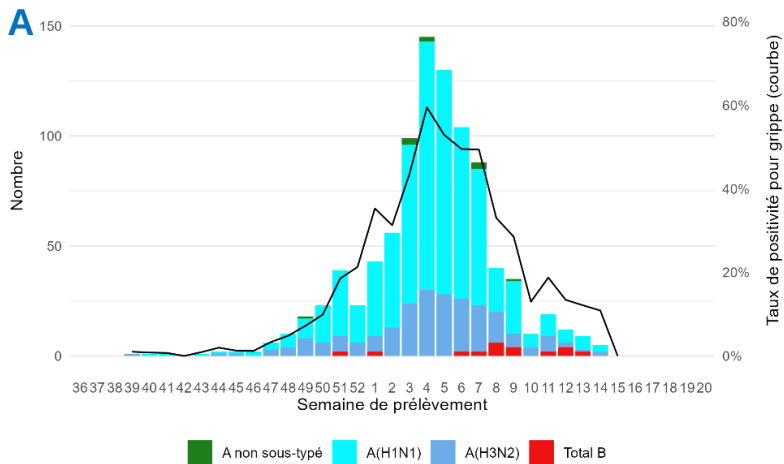




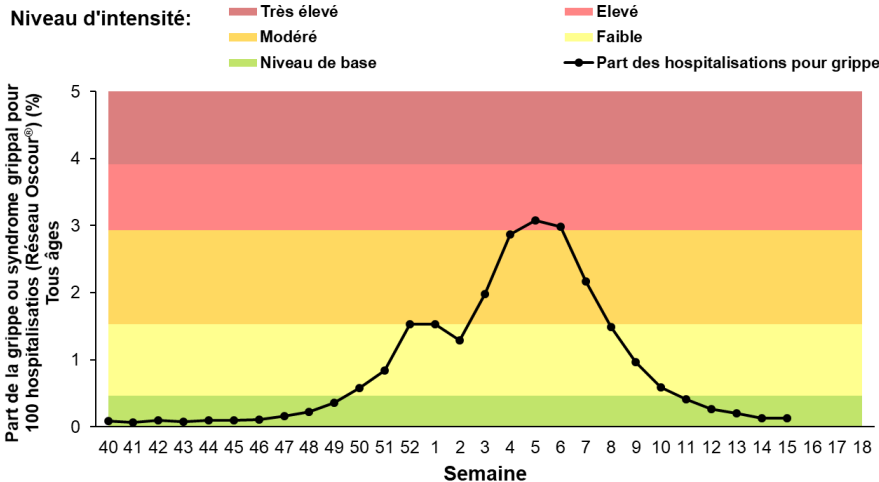
Flu activity in primary care



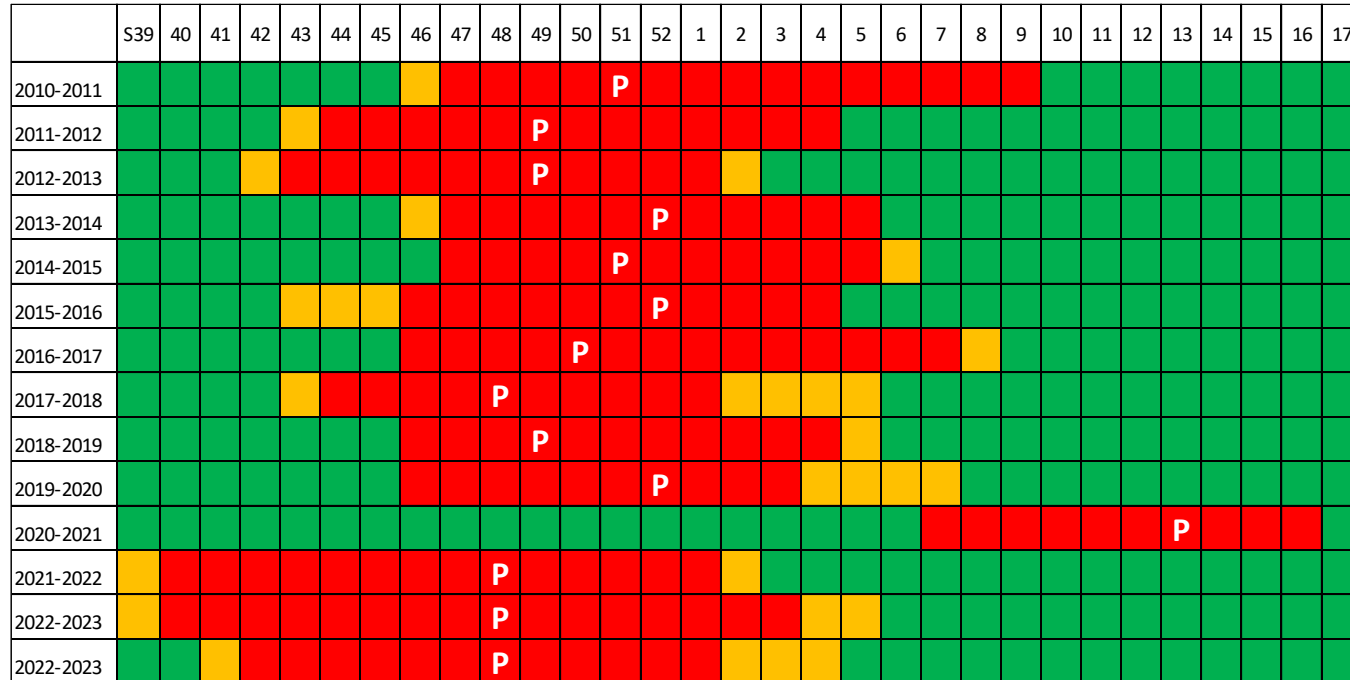
Circulation of Influenza A(H1N1)_{pdm09} in primary care (A) and Influenza A in hospitals (B)



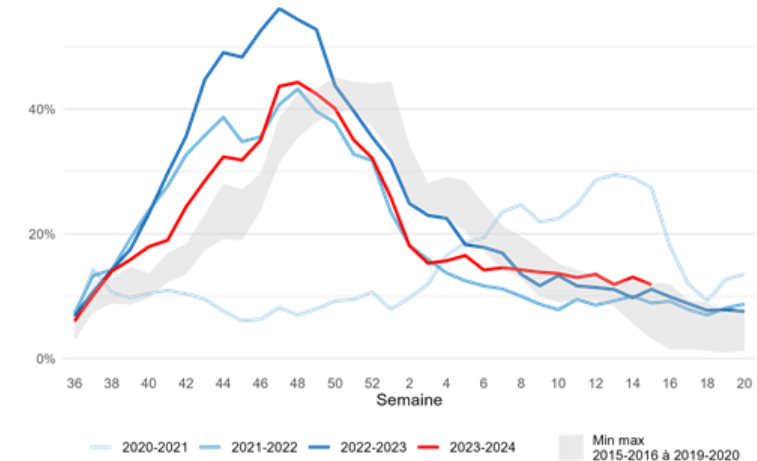
Hospitalisations after emergency visits



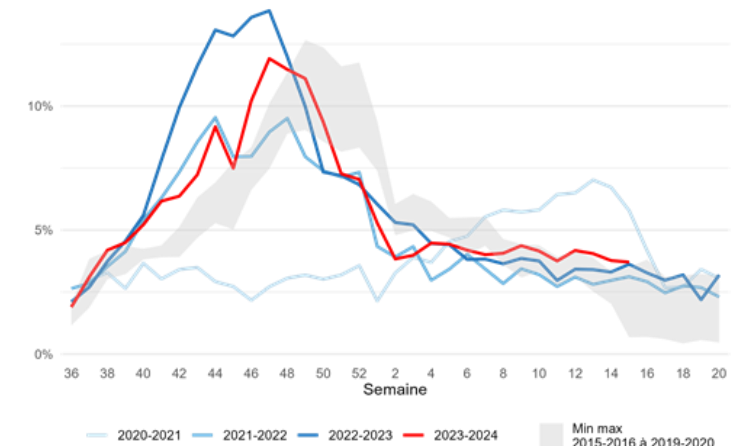
BRONCHIOLITIS



Proportion of hospitalisations for bronchiolitis after emergency visits (OSCOUR®), <2 years of age, France 2015-2024



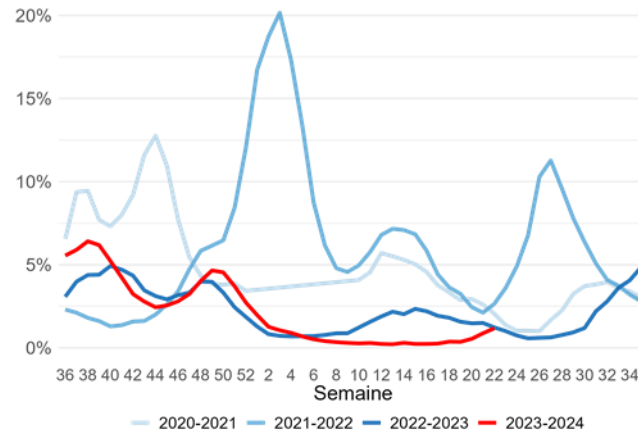
Bronchiolitis activity in primary care (SOS Médecins), <2 years of age, France 2015-2024



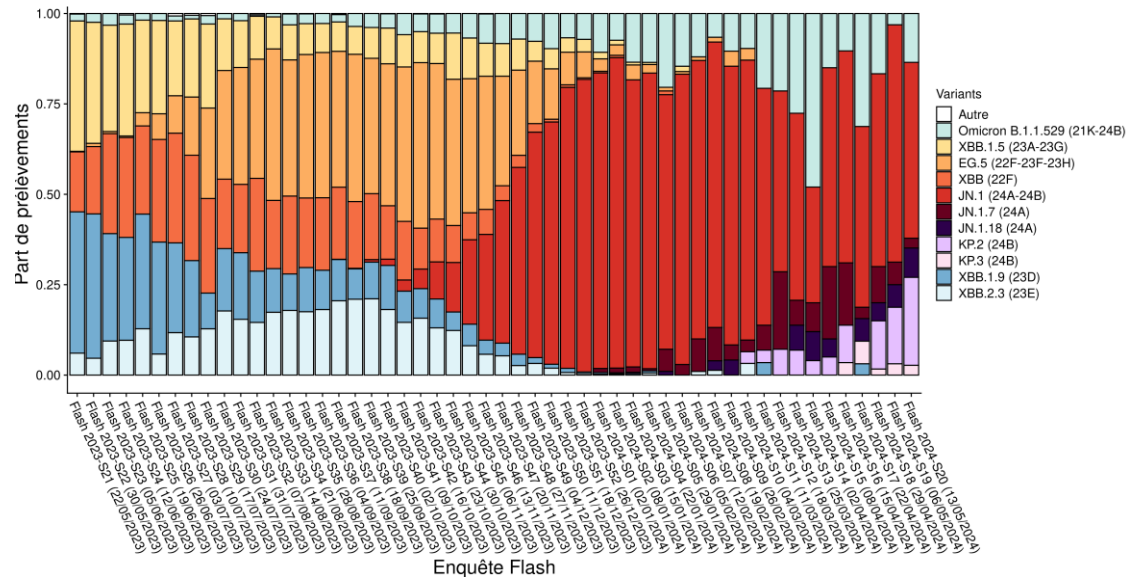
Nirsevimab (Beyfortus®) study, Institut Pasteur and SpF:

- 76-81% treatment effectiveness, preventing ICU admission
- Significant reduction of hospitalisations
- 5,800 hospitalisations for bronchiolitis avoided (between 15 Sep 2023 and 31 Jan 2024)

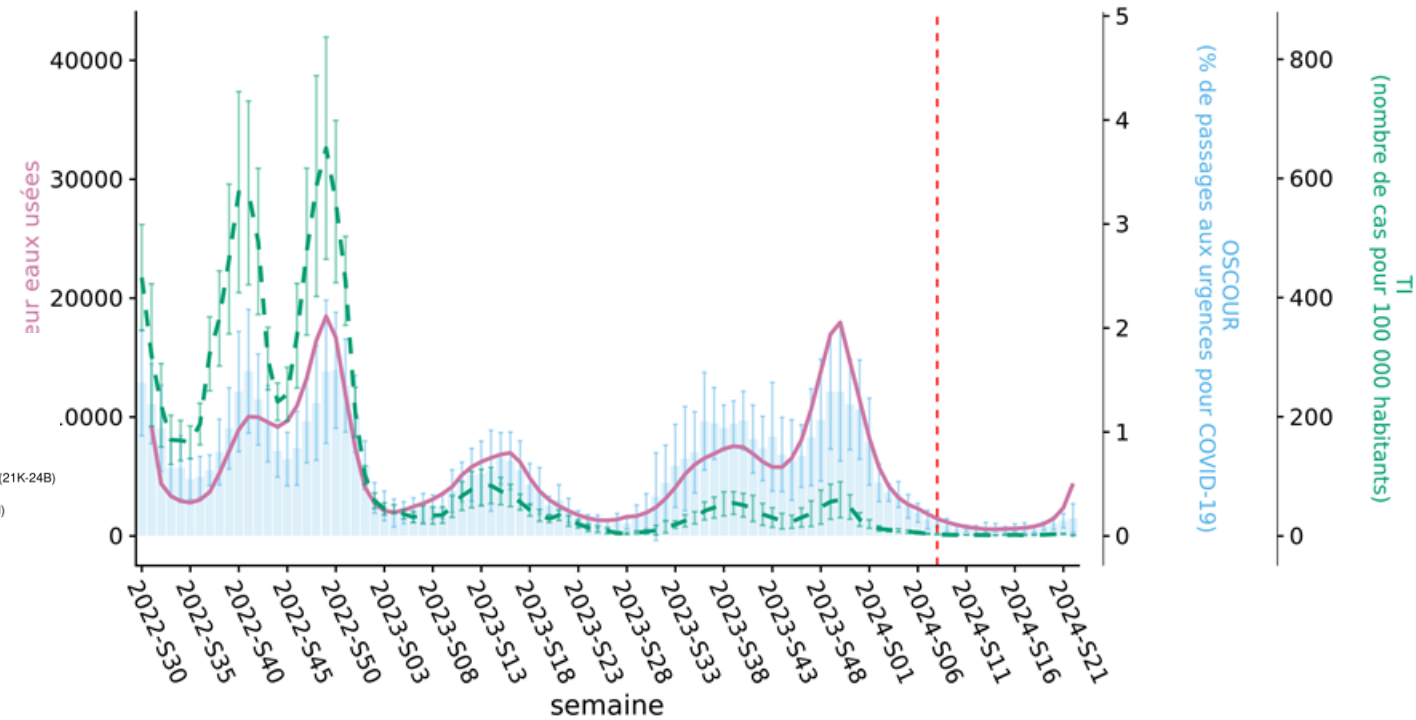
Percentage of suspected COVID-19 cases, SOS Médecins network, France, 2020-2024



Genomic surveillance, France, EMERGEN

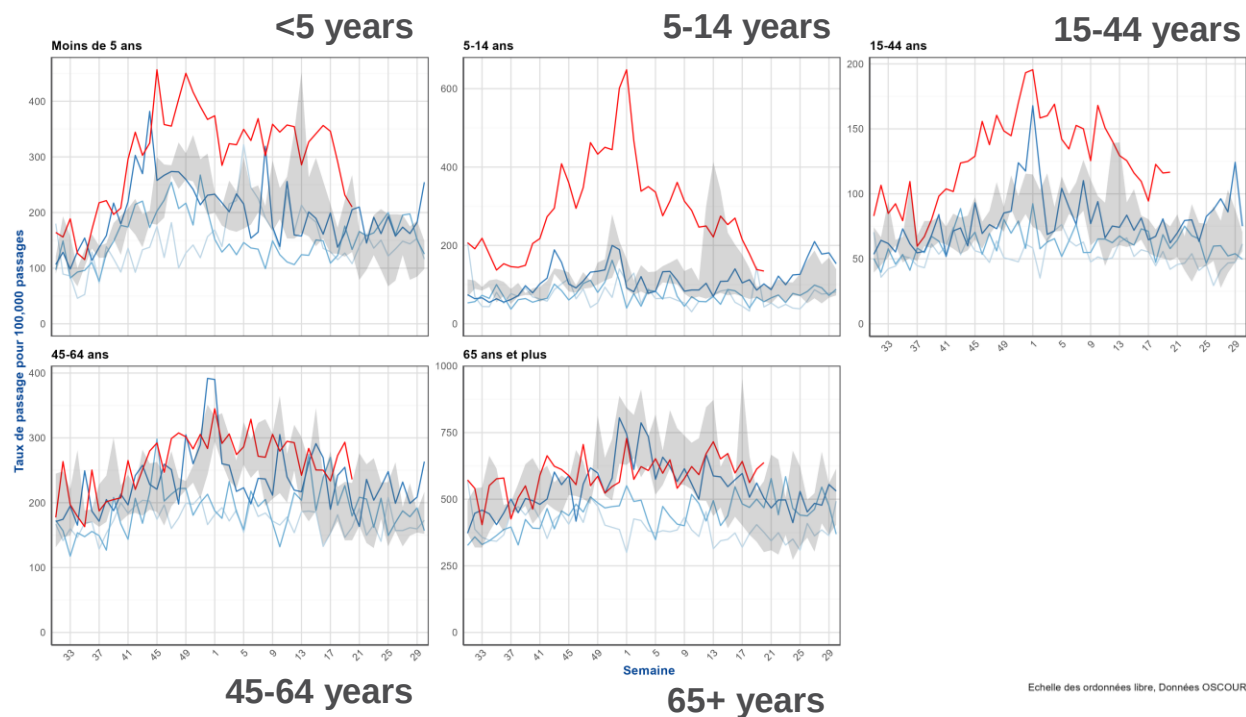


Average of wastewater monitoring indicators weighted by population size, SUM'Eau, vertical dotted line in week 08-2024 reflects change of laboratory in charge of microbiological analyses.

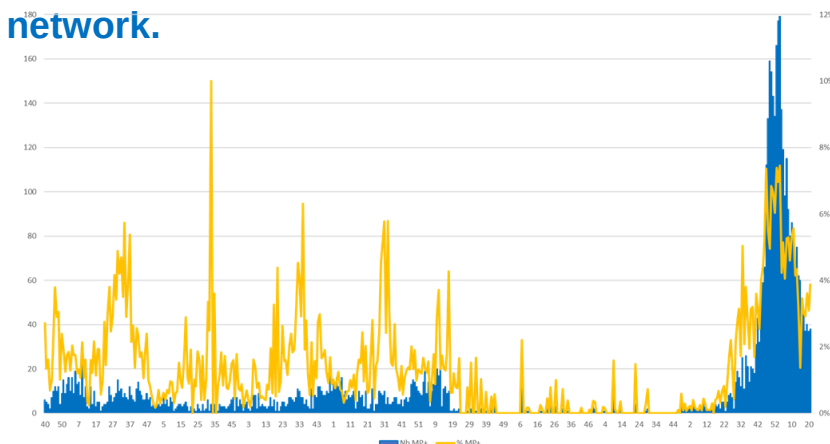


MYCOPLASMA PNEUMONIAE

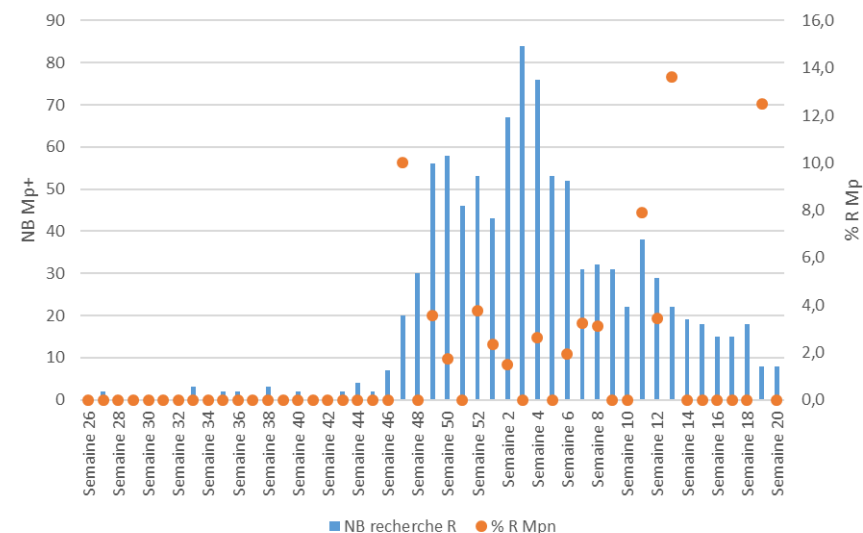
Weekly proportion of admissions for bacterial pneumonia per 100,000 emergency admissions by age group, weeks 26/2015 to S20/2024, OSCOUR® network



Number of and PCR detection rate for *Mycoplasma pneumoniae*, all ages combined, weeks 40/2015 to 20/2024, RENAL hospital laboratory network.

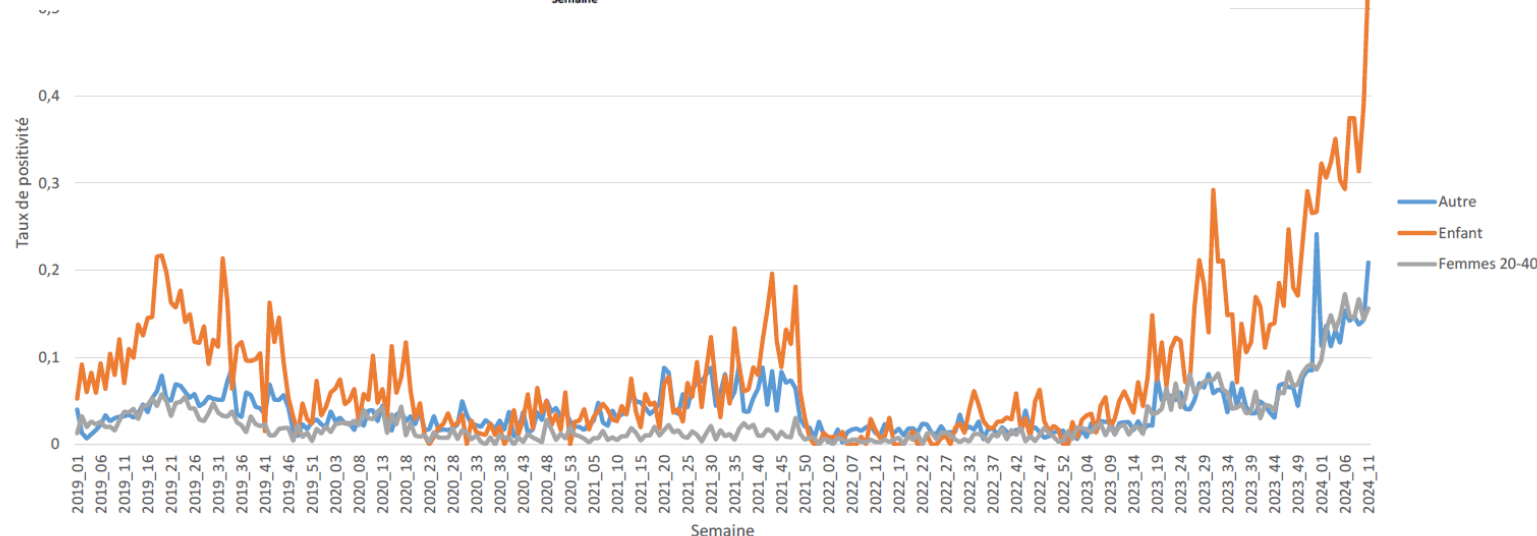
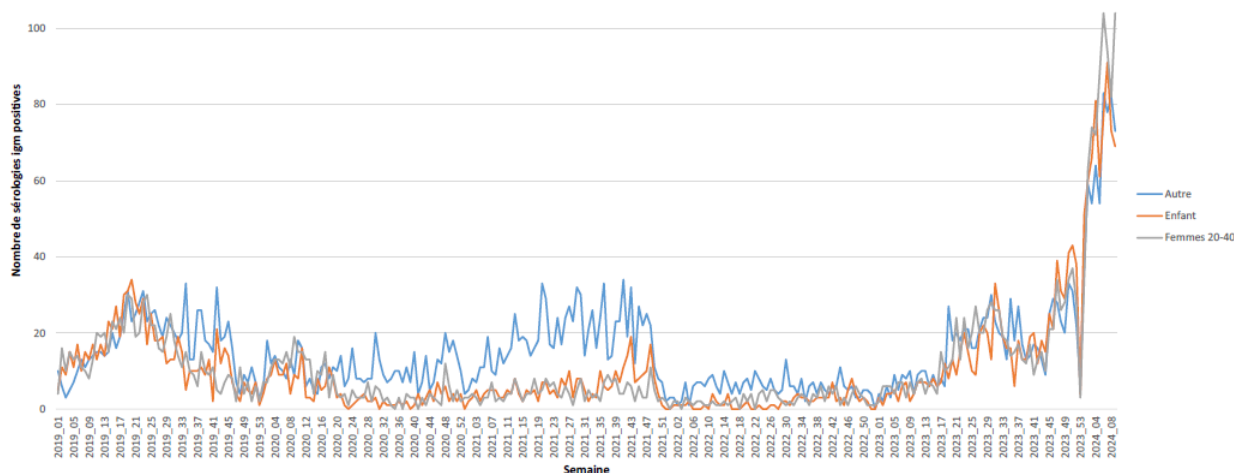


Weekly number and percentage of macrolide-resistant strains of *Mycoplasma pneumoniae*, weeks 27/2023 to 20/2024, France

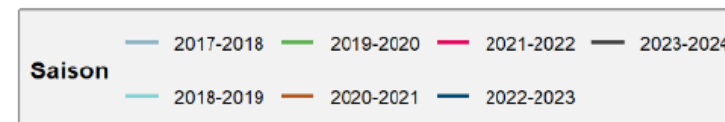
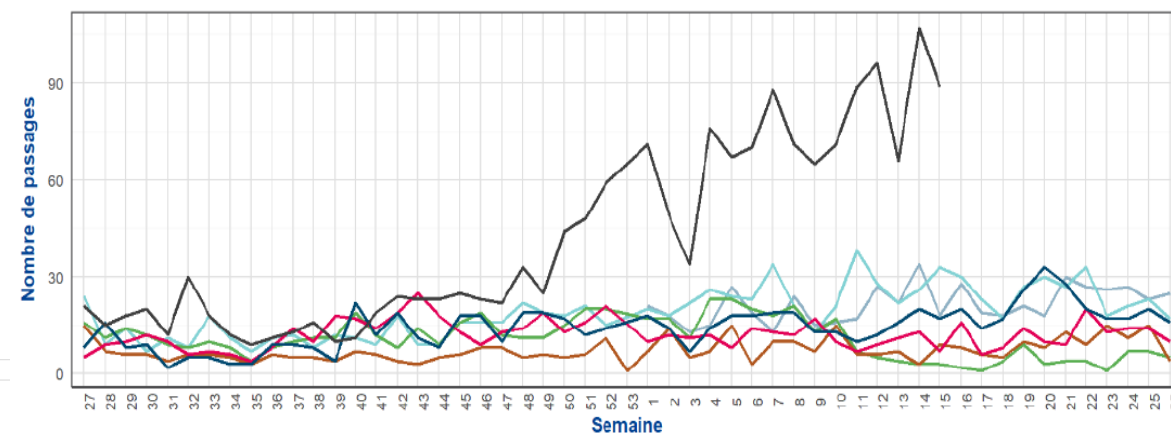


PARVOVIRUS B19

Number of cases (top) and positivity rate (bottom) of Parvovirus B19 infections, 3Labos network, France, Jan 2019 – Mar 2024

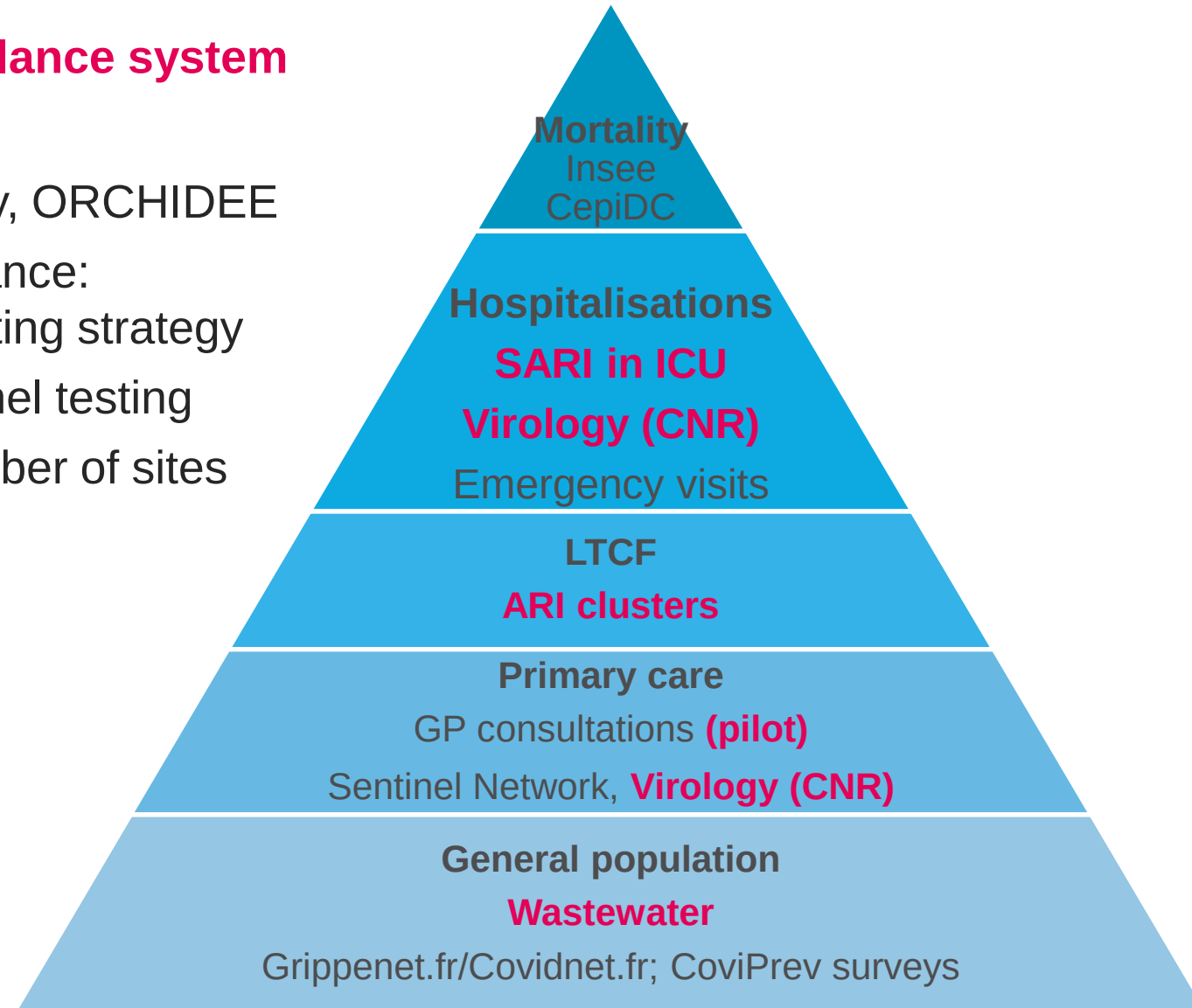


Emergency visits for suspected Parvovirus B19 infections in 0-14 year old children, OSCOUR®, France, 2017-2024



Evolution of the ARI multisource surveillance system

- Secondary care: SARI, Nirsevimab study, ORCHIDEE
- Laboratory testing and genomic surveillance: continuously evolving and change in testing strategy
- Primary care: pilot study to extend sentinel testing
- Wastewater surveillance: change in number of sites and analysing laboratories
- LTCF: surveillance of ARI clusters



Santé publique France relies on a large network of professionals to monitor acute respiratory infections and would like to thank everyone involved:

- Hospital and private practitioners, emergency departments,
- Hospital and outpatient laboratories,
- Scientific associations in infectiology, intensive care and emergency medicine,
- The French national health insurance (CNAM), the national institute for health and medical research (Inserm), the national institute of statistics and economic studies (Insee).

The team would also like to thank the Infectious Diseases, Regional, Data, and Prevention and Health Promotion Departments at Santé publique France for their contributions.

Sources:

<https://www.santepubliquefrance.fr/maladies-et-traumatismes/maladies-et-infections-respiratoires/grippe/documents/bulletin-national/infections-respiratoires-aigues-grippe-bronchiolite-covid-19-.bilan-de-la-saison-2023-2024>

<https://www.santepubliquefrance.fr/docs/epidemie-d-infections-a-parvovirus-b19-en-france-.point-au-22-avril-2024>

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<https://www.santepubliquefrance.fr/presse/2024/bronchiolite-deux-etudes-francaises-demonstrent-l-efficacite-du-beyfortus-R-dans-la-prevention-des-cas-graves-et-la-reduction-des-hospitalisations>

<http://dx.doi.org/10.1111/irv.13311>