



RESPIRATORY PATHOGEN STATISTICS

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SPECIAL INTEREST GROUP OF THE SOUTH AFRICAN MEDICAL ASSOCIATION

3rd Quarter 2024

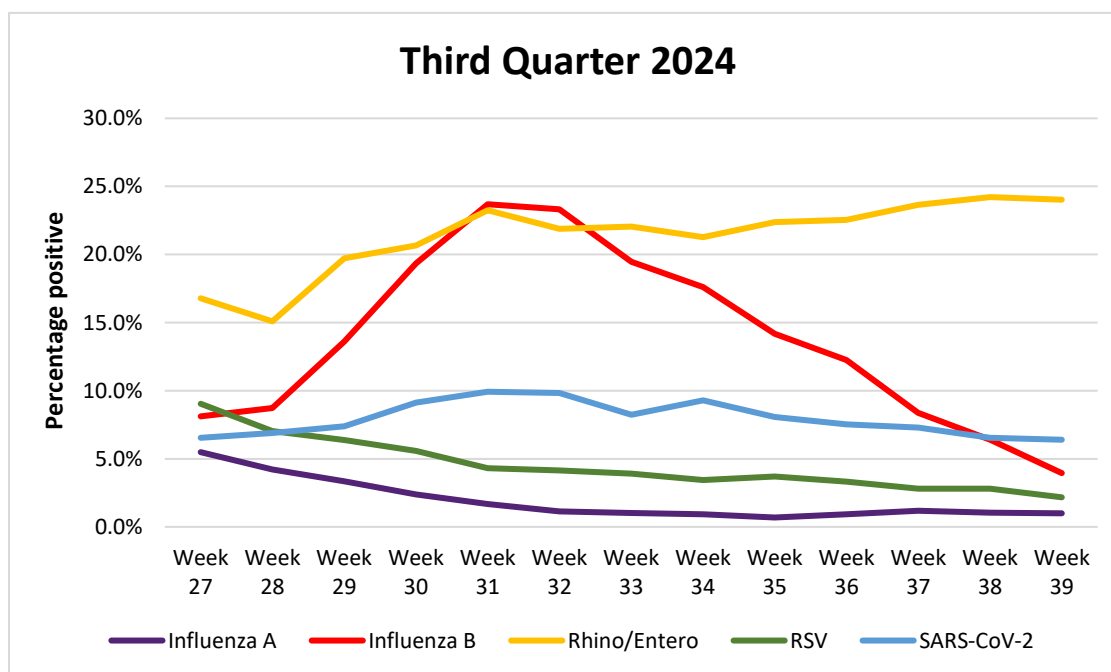
This report summarises respiratory pathogen PCR panel results for specimens submitted for testing to the private pathology practices that are members of the NPG from July to September 2024.

Highlights

- Rhino/Enterovirus was the most prevalent virus (21.5%) during the third quarter of 2024.
- Influenza B virus prevalence peaked in epidemiological week 31 at 23.7% and fell below 10% in week 36.
- Human metapneumovirus prevalence increased to above 10% from epidemiological week 36 onwards.
- More cases of *Chlamydomphila pneumoniae* were detected in the third quarter than cases of *Mycoplasma pneumoniae*.

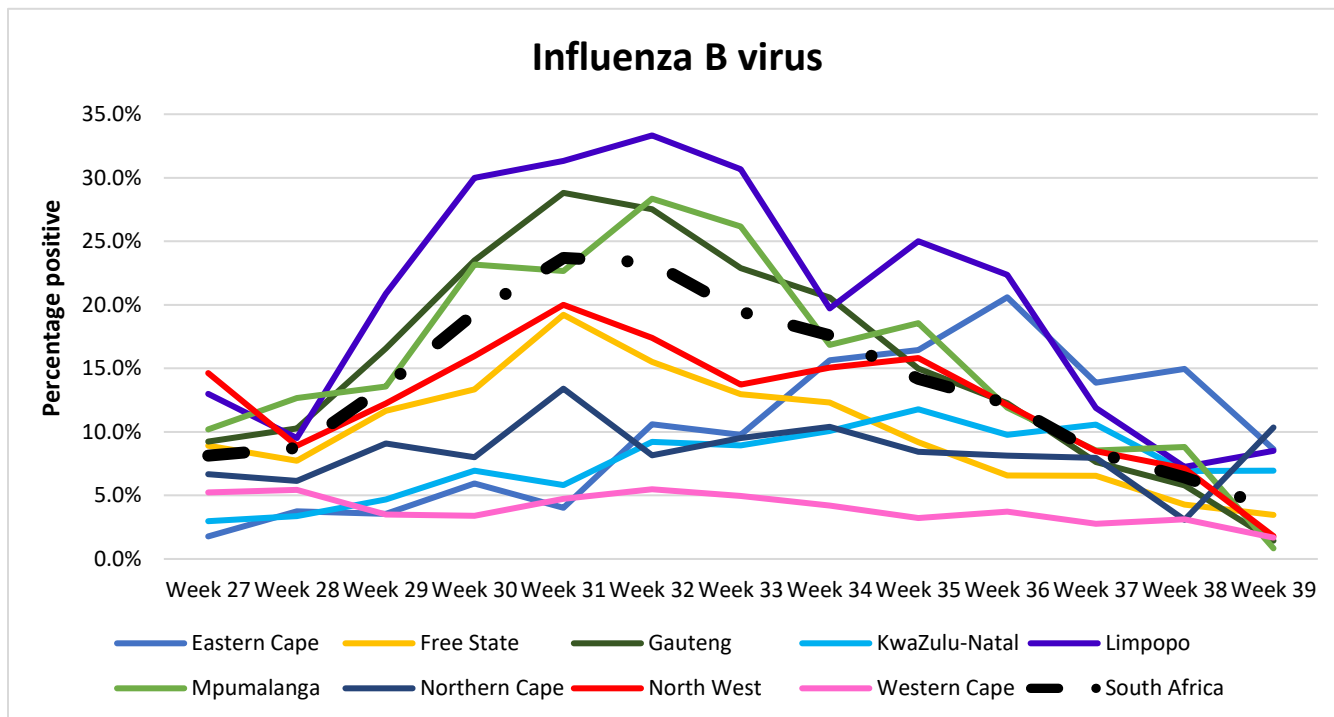
Respiratory virus PCR panel

A variety of multiplex PCR panels are used across NPG-associated practices. For data analysis, all parainfluenza virus types (PIV 1 – 4), all seasonal human coronaviruses (hCoV-OC43, hCoV-HKU1, hCoV-229E, and hCoV-NL63), and rhinovirus, parechovirus and enterovirus were combined. The graphs below represent the viruses detected as the percentage positive per epidemiological week, while bacteria are visually represented as the number detected per epidemiological week.

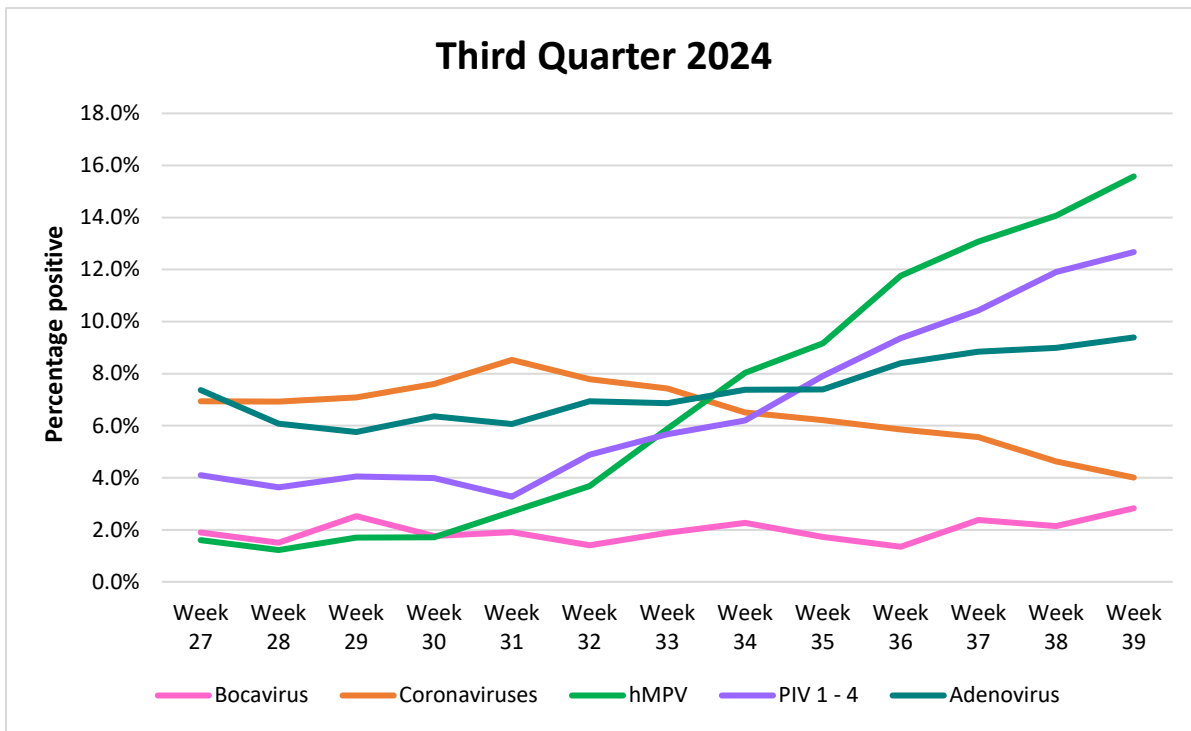


- Rhino/Enterovirus was the most prevalent virus (21.5%) detected in the third quarter of 2024, followed by influenza B virus (14.8%) and severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2; 8.1%).
- The prevalence of influenza A virus fell below 5% from epidemiological week 28 (7 – 13 July) onwards. The majority of samples (69.9%) that were typed were influenza A/H1.
- The prevalence of influenza B virus rose above 10% from epidemiological week 29 (14 – 20 July) to week 36 (1 – 7 September). Prevalence peaked in week 31 (28 July – 3 August) at 23.7%, and it was the most prevalent virus detected in that and the following week. According to the NICD, all samples that were successfully typed belonged to the influenza B/Victoria lineage.¹

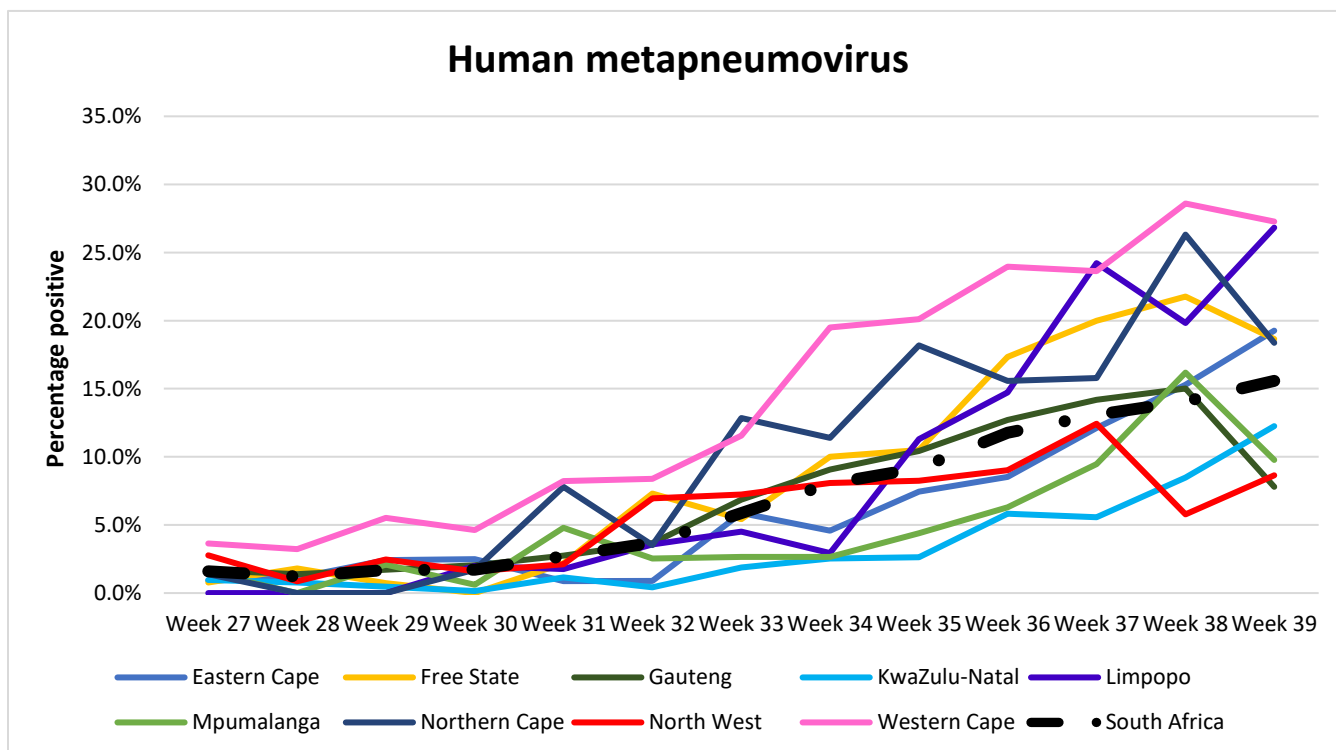
- Rhino/Enterovirus prevalence fell below 20% from epidemiological week 27 to 29, increasing again to above 20% thereafter.
- SARS-CoV-2 was not detected in more than 10% of submitted samples during the third quarter of 2024, with the highest prevalence (9.9%) recorded in week 31.
- RSV prevalence also remained below 10% for the entire quarter, with the highest prevalence (9.0%) in week 27.



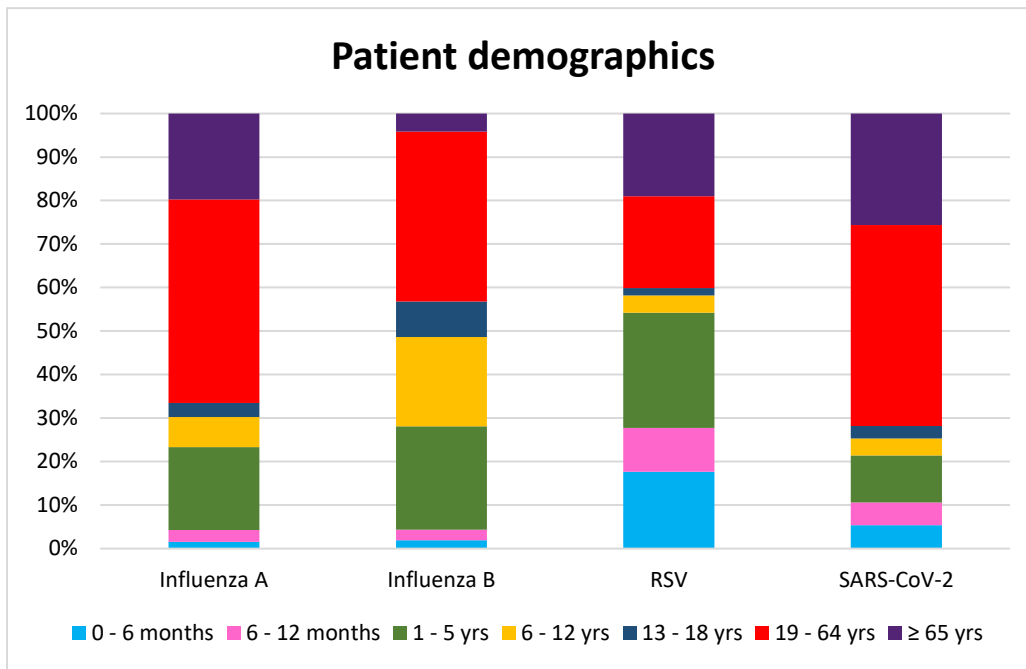
- In the third quarter, influenza B virus prevalence rose above 10% from epidemiological week 27 to week 36 in Mpumalanga, with the highest prevalence in week 32 at 28.4%. In North West during the same period, influenza B virus prevalence fell below 10% in week 28 only, and was highest in week 31 at 20.0%.
- Influenza B virus prevalence was the highest in Limpopo province, rising above 30% from week 30 to 33, peaked in epidemiological week 32 (33.3%), and only fell below 10% in week 38.
- In both Kwa-Zulu Natal and the Northern Cape, influenza B virus prevalence only rose above 10% during three individual weeks, and never exceeded this threshold in the Western Cape in the third quarter.
- In Gauteng province, influenza B virus prevalence was above 10% from week 28 to week 36, with the peak in week 31 at 28.8%.
- The seasonal coronaviruses were detected in 6.6% of samples submitted for testing during the third quarter of 2024. The increase in the prevalence first noted at the end of the second quarter continued until epidemiological week 38, when it finally fell below 5%.
- The prevalence of bocavirus (1.9%) never increased above 3% during the third quarter of 2024. The highest prevalence was recorded in epidemiological week 39 (2.8%) and the lowest in week 36 (1.3%).
- During the third quarter of 2024, adenovirus was detected in between 5.8% (epidemiological week 29) and 9.4% (week 39) of samples submitted for testing.
- The prevalence of the parainfluenza viruses increased to above 10% from week 36 onwards and appears to be due to an increase in the detection of PIV-3.
- Human metapneumovirus (hMPV) was detected in 6.8% of samples submitted for testing during the third quarter. hMPV prevalence increased each week in comparison to the previous week and rose above 10% from epidemiological week 36 onwards.



- The prevalence of hMPV first increased to above 10% in epidemiological week 33 in the Western and Northern Cape provinces, peaking in week 38 in both provinces (28.6% in the Western Cape and 26.3% in the Northern Cape).
- hMPV prevalence first rose above 10% in epidemiological week 34 in the Free State, one week later in Gauteng, and two weeks after that in the Eastern Cape.
- The prevalence of hMPV was above 10% in only epidemiological week 37 in the North West (12.4%) and week 39 in Kwa-Zulu Natal (12.3%).

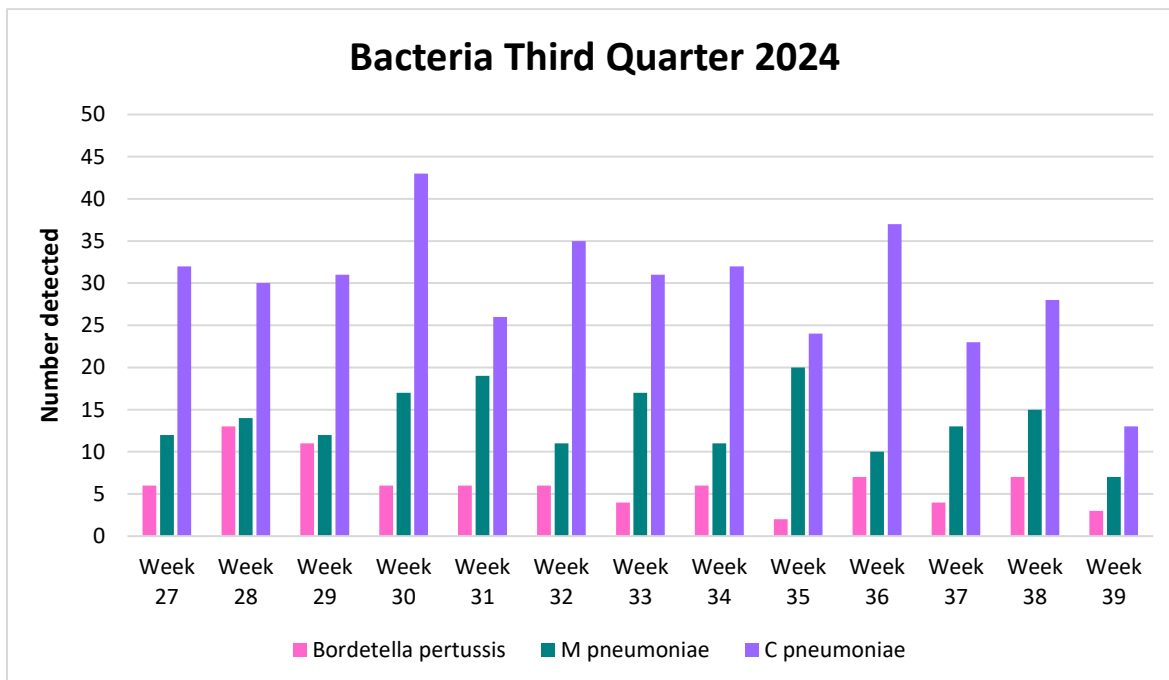


Patient demographics



- More than half of patients who tested positive for influenza A virus were older than 18 years of age (66.5%), while most patients who tested positive for influenza B virus were younger than 19 years of age (56.8%).
- The majority of patients who tested positive for RSV were less than 6 years of age (54.2%).
- In contrast, most of the patients who tested positive for SARS-CoV-2 were adults older than 18 years of age (71.9%).

Bacteria



- Similar to what was observed in the second quarter, more cases of *Chlamydomphila pneumoniae* (385 cases) were detected in the third quarter than cases of *Mycoplasma pneumoniae* (178 cases).
- Only 13 samples tested positive for *Bordetella pertussis* in the entire quarter.

Reference

1. Centre for Respiratory Diseases and Meningitis, National Institute of Communicable Diseases. Sentinel Surveillance in South Africa. Respiratory Pathogens Report, week 43 of 2024.