



# RESPIRATORY PATHOGEN STATISTICS

n a t i o n a l · p a t h o l o g y · g r o u p

SPECIAL INTEREST GROUP OF THE SOUTH AFRICAN MEDICAL ASSOCIATION

1<sup>st</sup> Quarter 2025

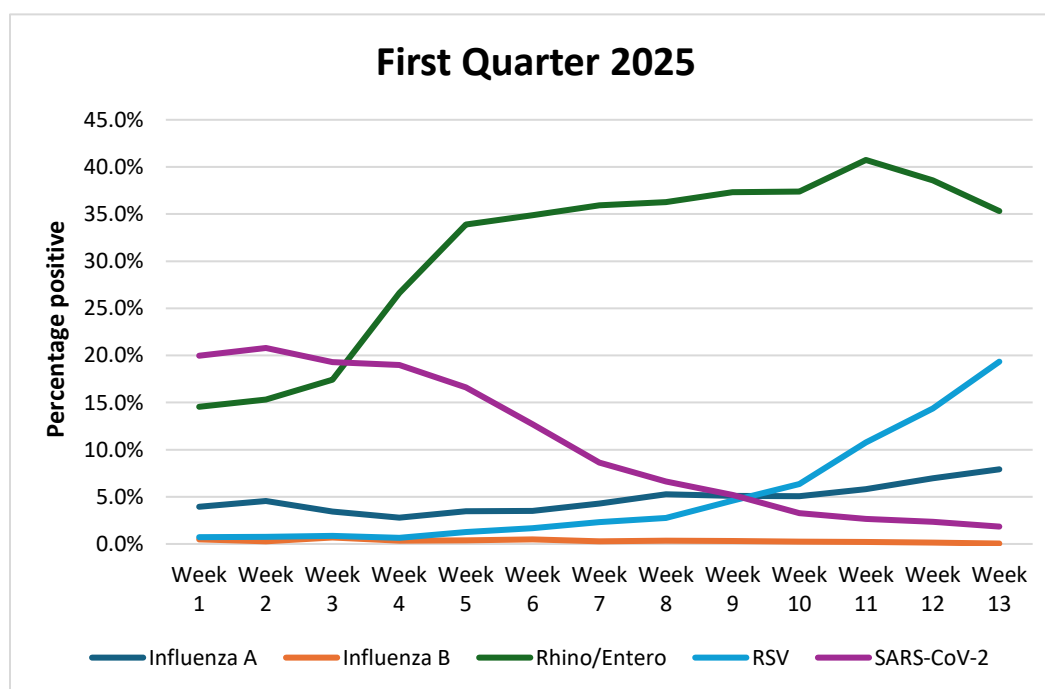
This report summarises respiratory pathogen PCR panel results for specimens submitted for testing to the private pathology practices that are members of the NPG from January to March 2025.

## Highlights

- Rhino/Enterovirus (32.4%) was the most prevalent virus during the first quarter.
- SARS-CoV-2 was the most prevalent virus in the first three epidemiological weeks of 2025.
- Respiratory syncytial virus (RSV) prevalence increased to above 10% from week 11 onwards.
- More cases of *Chlamydomphila pneumoniae* were detected in the first quarter than cases of *Mycoplasma pneumoniae*.

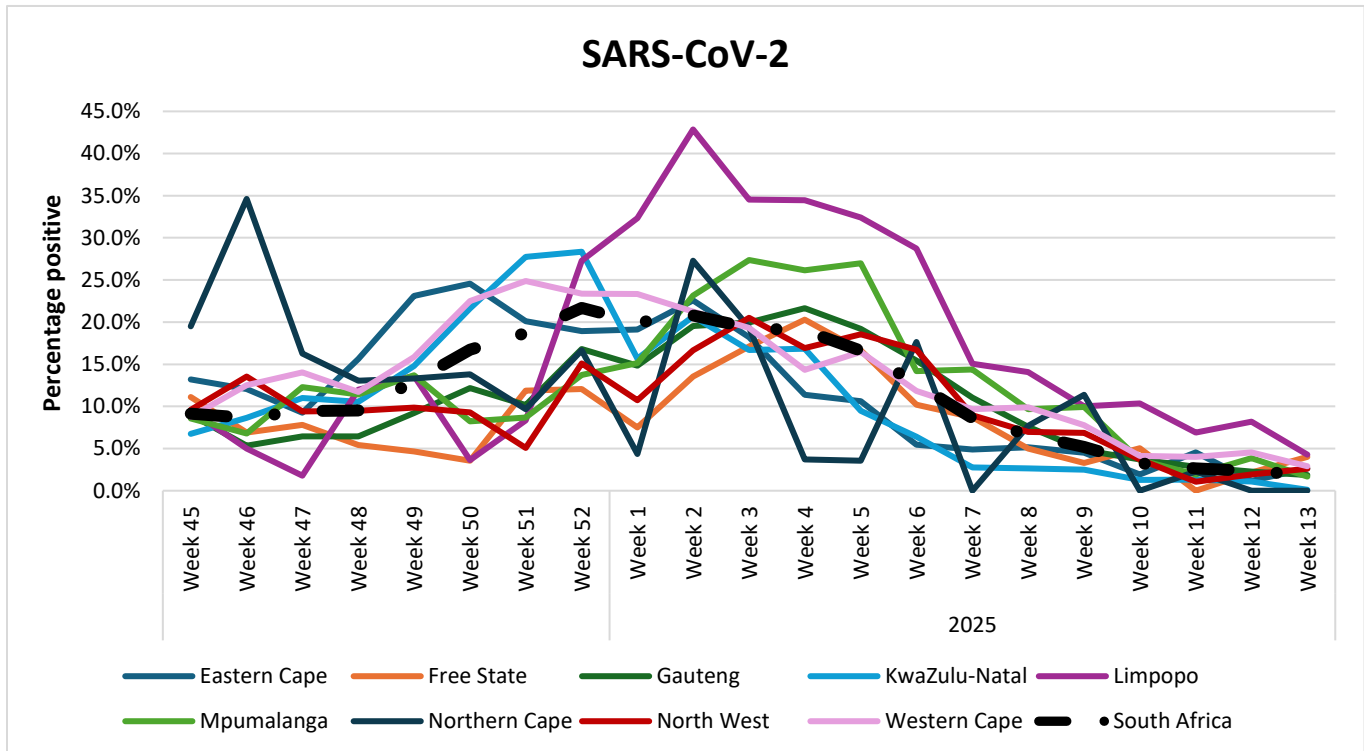
## Respiratory virus PCR panel

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.

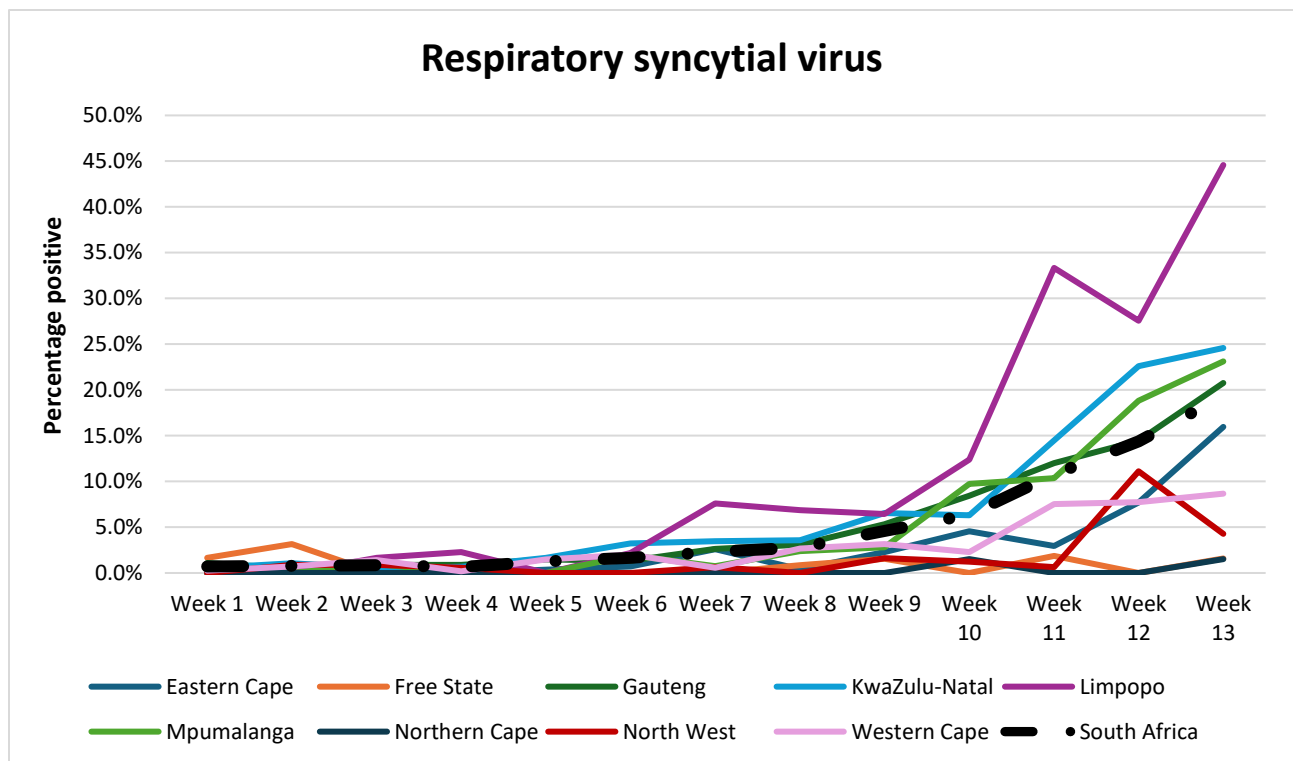


- Rhino/Enterovirus was the most prevalent virus (32.4%) detected in the first quarter of 2025, followed by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2; 10.3%) and the parainfluenza viruses (7.6%).
- The prevalence of influenza A virus (4.9%) and influenza B virus (0.3%) was below 10% for the entire quarter. The majority of influenza A positive samples that were typed were influenza A/H3 (79.7%). No influenza B viruses were isolated by the NICD during the first quarter of 2025.

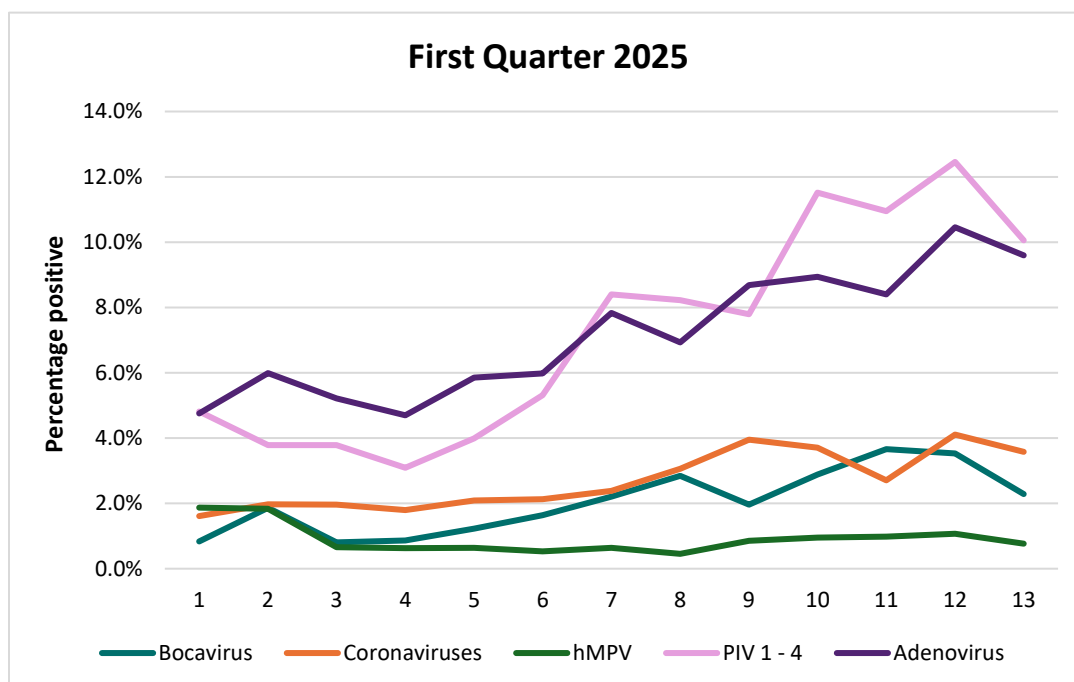
- Respiratory syncytial virus (RSV) prevalence increased to above 5% in epidemiological week 10, and to above 10% a week later.
- Rhino/Enterovirus prevalence fell below 20% during the first 3 weeks of the year only.
- SARS-CoV-2 prevalence peaked in epidemiological week 52 of 2024 (21.7%) and fell below 10% from week 7 of 2025 onwards, and it was the most common virus detected in epidemiological week 1 (20.0%), week 2 (20.8%) and week 3 (19.3%).



- In the first quarter of 2025, SARS-CoV-2 prevalence first fell below 10% in KwaZulu-Natal in epidemiological week 5, a week later in the Eastern Cape, another week later in North West and Western Cape provinces, and only in epidemiological week 8 in Gauteng.
- SARS-CoV-2 prevalence only increased to above 10% in epidemiological week 52 of 2024 in Limpopo province, peaked in week 2 of 2025 at 42.9%, and fell below 10% in epidemiological week 11.
- SARS-CoV-2 prevalence did not remain above 10% for more than two consecutive weeks in the first quarter of 2025 in the Northern Cape.
- RSV prevalence increased to above 10% in epidemiological week 10 in Limpopo (12.4%) first, and the following week in Gauteng (12.0%), KwaZulu-Natal (14.5%) and Mpumalanga (10.4%) provinces.
- RSV prevalence crossed the 10% threshold in week 12 in North West province (11.1%), and in week 13 only the Eastern Cape.
- RSV prevalence never rose to above 10% in the Free State, Northern and Western Cape provinces during the first quarter of 2025.

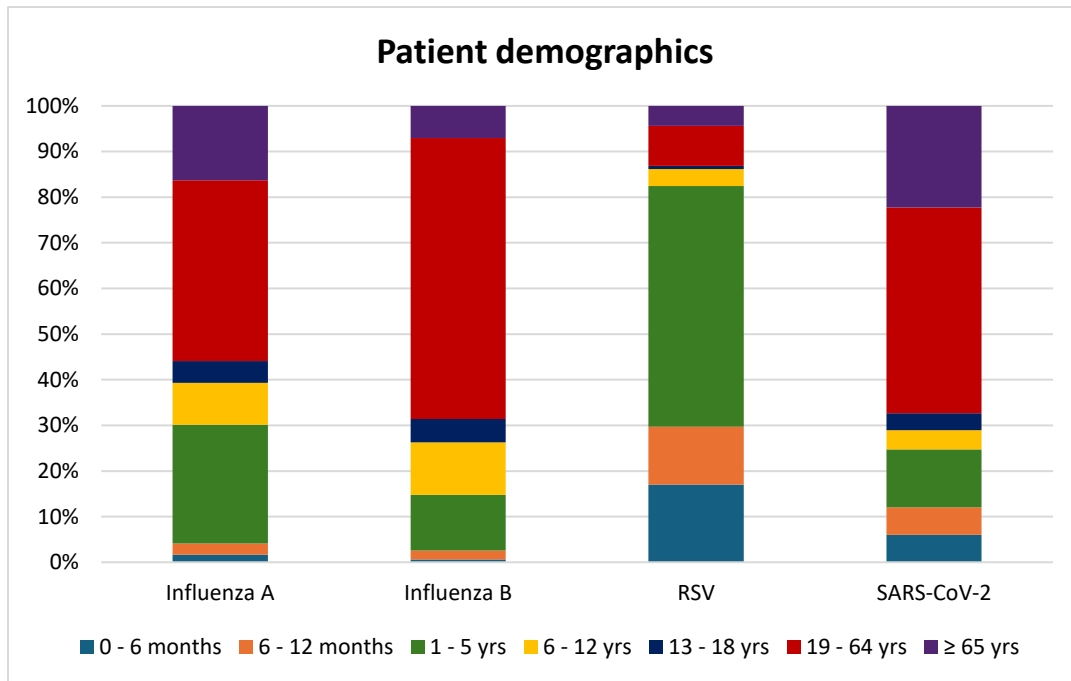


- The seasonal coronaviruses were detected in 2.8% of samples, and bocavirus in 2.2% of samples submitted for testing during the first quarter of 2025.
- During this period, adenovirus was detected in between 4.7% (epidemiological week 4) and 10.5% (week 12) of samples submitted for testing.
- The parainfluenza viruses were detected in 7.6% of samples submitted for testing during the first quarter. Prevalence increased to above 10% from epidemiological week 10 onwards. The increased prevalence appears to be due to an increase in the detection of PIV-1 and PIV-4.
- Human metapneumovirus (hMPV) was detected in only 0.9% of samples submitted for testing during the first quarter of 2025.

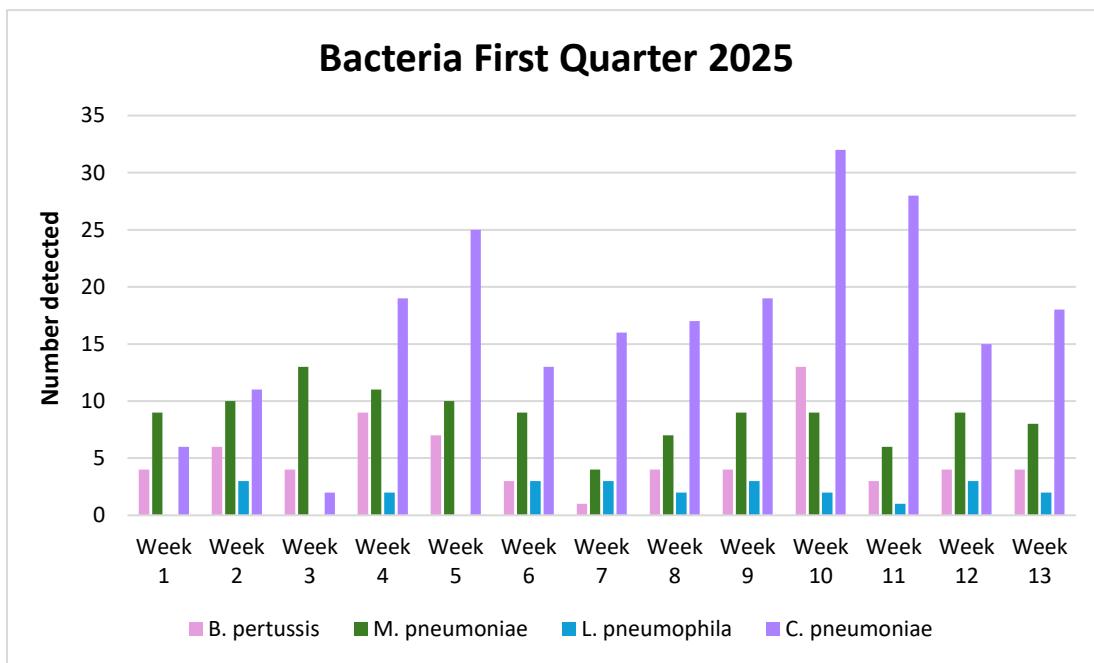


## Patient demographics

- More than half of patients who tested positive for either influenza A virus (55.9%) or influenza B virus (68.6%) were older than 18 years of age.
- The majority of patients who tested positive for RSV were less than 6 years of age (82.4%).
- In contrast, more than two-thirds of the patients who tested positive for SARS-CoV-2 were adults older than 18 years of age (67.3%).



## Bacteria



- Similar to what was observed in the second half of 2024, more cases of *Chlamydomphila pneumoniae* (221 cases) were detected in the first quarter of 2025 than cases of *Mycoplasma pneumoniae* (114 cases).
- Sixty-six samples tested positive for *Bordetella pertussis* and twenty-four for *Legionella pneumophila* in the first quarter.
- Only four cases of *B. paraptussis* were reported during the entire quarter (not represented graphically).