



RESPIRATORY PATHOGEN STATISTICS

national · pathology · group

SPECIAL INTEREST GROUP OF THE SOUTH AFRICAN MEDICAL ASSOCIATION

3rd Quarter 2023

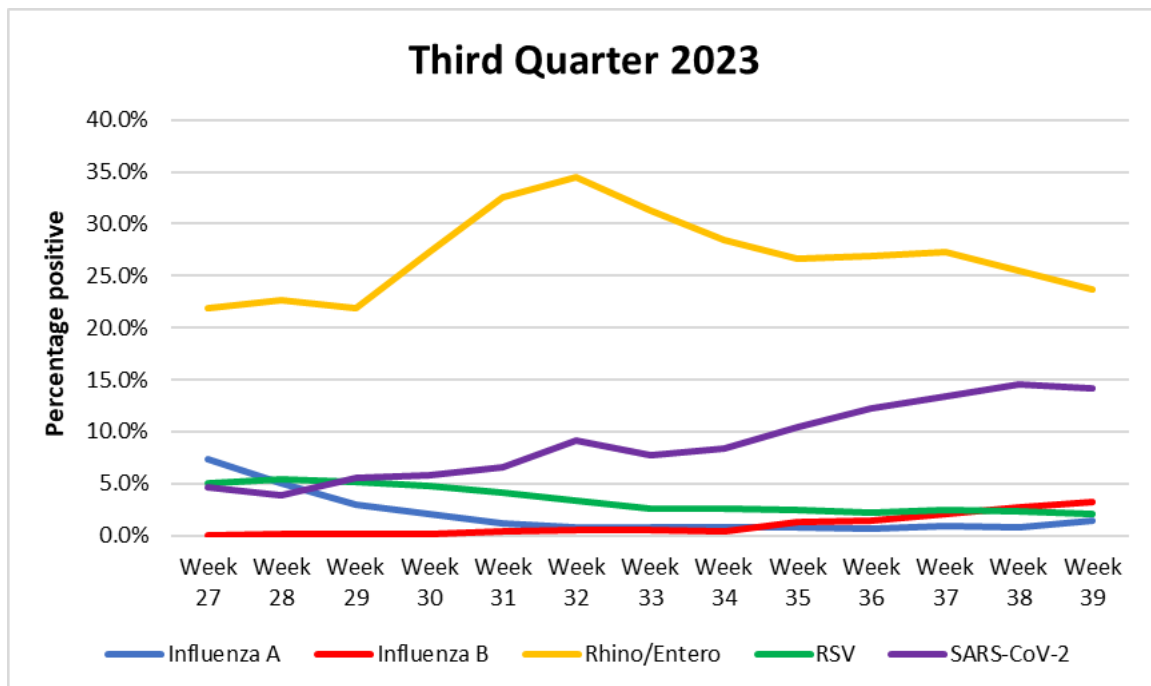
This report summarises respiratory pathogen PCR panel results for specimens submitted for testing to the private pathology practices that are members of the NPG from July to September 2023.

Highlights

- Rhino/enterovirus was the most prevalent virus (27.0%) during the third quarter of 2023.
- The prevalence of SARS-CoV-2 increased to above 10% from epidemiological week 35 onwards.
- In week 35, the prevalence of influenza B virus also started to increase but has not reached the seasonal threshold.
- The increase in the prevalence of *Mycoplasma pneumoniae* appears to have peaked at the end of the second quarter.

Respiratory virus PCR panel

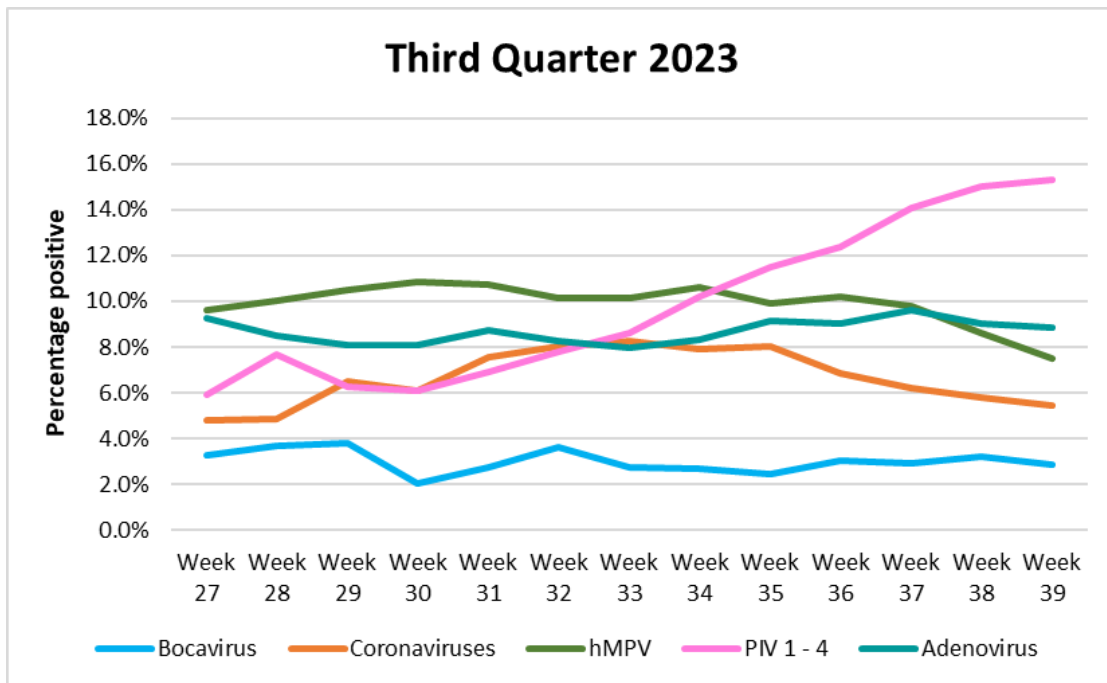
A variety of multiplex PCR panels are used across NPG-associated practices. For data analysis, all parainfluenza virus types (PIV 1 – 4), all seasonal human coronaviruses (hCoV-OC43, hCoV-HKU1, hCoV-229E, and hCoV-NL63), and rhinovirus, parechovirus and enterovirus were combined. The graphs below represent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



- Rhino/enterovirus was the most prevalent virus (27.0%) detected in the third quarter of 2023, never falling below 20% in any week.
- Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was detected in more than 10% of samples from epidemiological week 35 (27 August – 2 September) onwards. The NICD stopped publishing weekly testing data in

epidemiological week 12 (19 – 25 March). Thereafter, trends are followed using their syndromic surveillance programmes. According to this data, the number of COVID-19 cases detected have increased since epidemiological week 31 (30 July – 5 August), but levels remain below prior peak levels.¹

- The prevalence of influenza A virus fell below 5% from week 29 (16 – 22 July) onwards. During the third quarter, 78.2% of positive samples that were typed were influenza A/H3.
- The prevalence of influenza B virus increased to above 1% from week 35 onwards. The NICD has also noted increased detection of influenza B virus in recent weeks, but below the seasonal threshold. All of the samples that have been typed by the NICD were influenza B/Victoria.¹
- The prevalence of respiratory syncytial virus (RSV) remained unchanged or fell each week in comparison with the previous week in the third quarter of 2023.

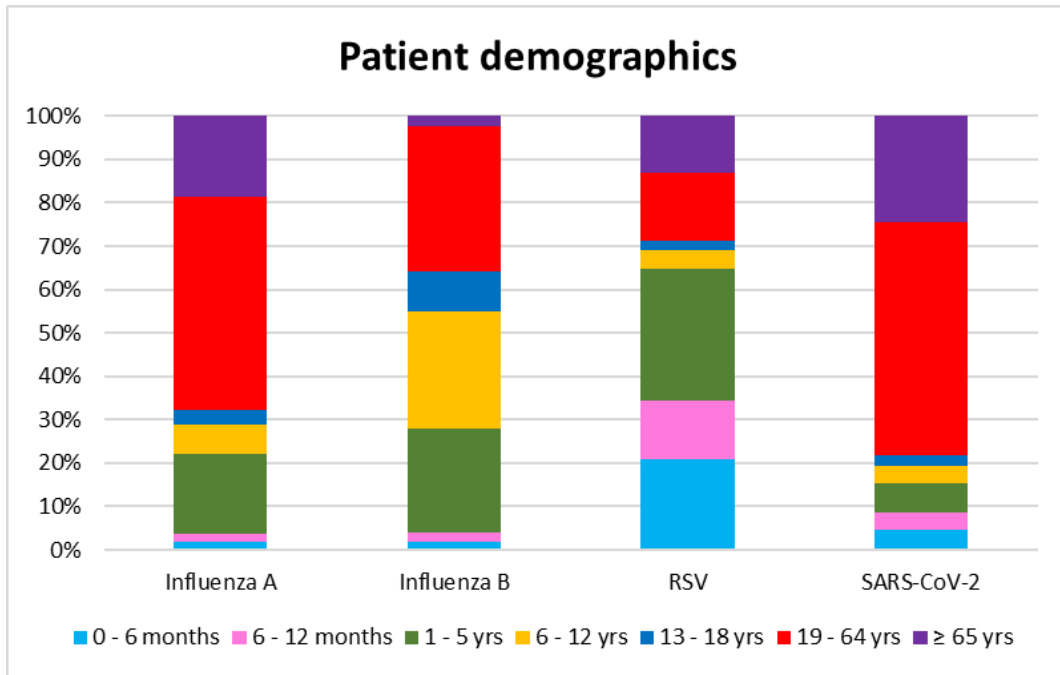


- Human metapneumovirus (hMPV) was detected in 9.9% of samples, and the prevalence only started to fall during the last two weeks of the quarter – 8.6% in epidemiological week 38 (17 – 23 September) and 7.5% in week 39 (24 – 30 September).
- During the third quarter of 2023, adenovirus was detected in between 7.9% (epidemiological week 33) and 9.6% (week 37) of samples submitted for testing.
- The prevalence of the parainfluenza viruses increased to above 10% of samples from epidemiological week 34 (20 – 26 August) onwards. This increase appears to be mainly due to an increase in the prevalence of PIV-3.
- The seasonal coronaviruses were detected in 6.6% and bocavirus in 3.0% of samples submitted for testing during the third quarter of 2023.

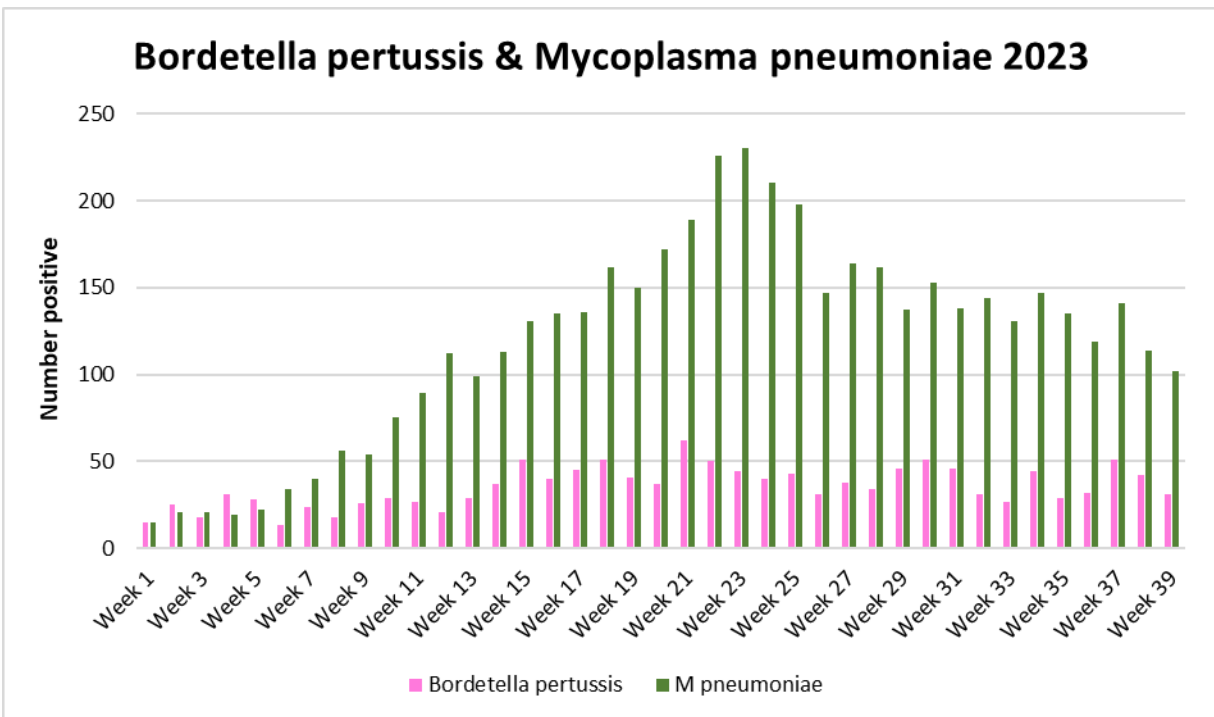
Patient demographics

- Two-thirds of patients who tested positive for influenza A virus were older than 18 years of age (67.7%), while only a third of patients who tested positive for influenza B virus were older than 18 years of age (36.0%).
- The majority of patients who tested positive for RSV were less than 6 years of age (64.8%).

- In contrast, most of the patients who tested positive for SARS-CoV-2 were adults older than 18 years of age (78.2%).



Bacteria



- The increase in the prevalence of *Mycoplasma pneumoniae* appears to have peaked at the end of the second quarter but remained at more than 100 cases detected each week in the third quarter.
- Three times as many samples tested positive for *Mycoplasma pneumoniae* than *Bordetella pertussis* during the third quarter of 2023.

Reference

1. National Institute of Communicable Diseases. Weekly respiratory pathogen report, week 41 of 2023.