



# RESPIRATORY VIRUS STATISTICS

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

Incorporated as National Association of Pathologists

2<sup>nd</sup> Quarter 2022

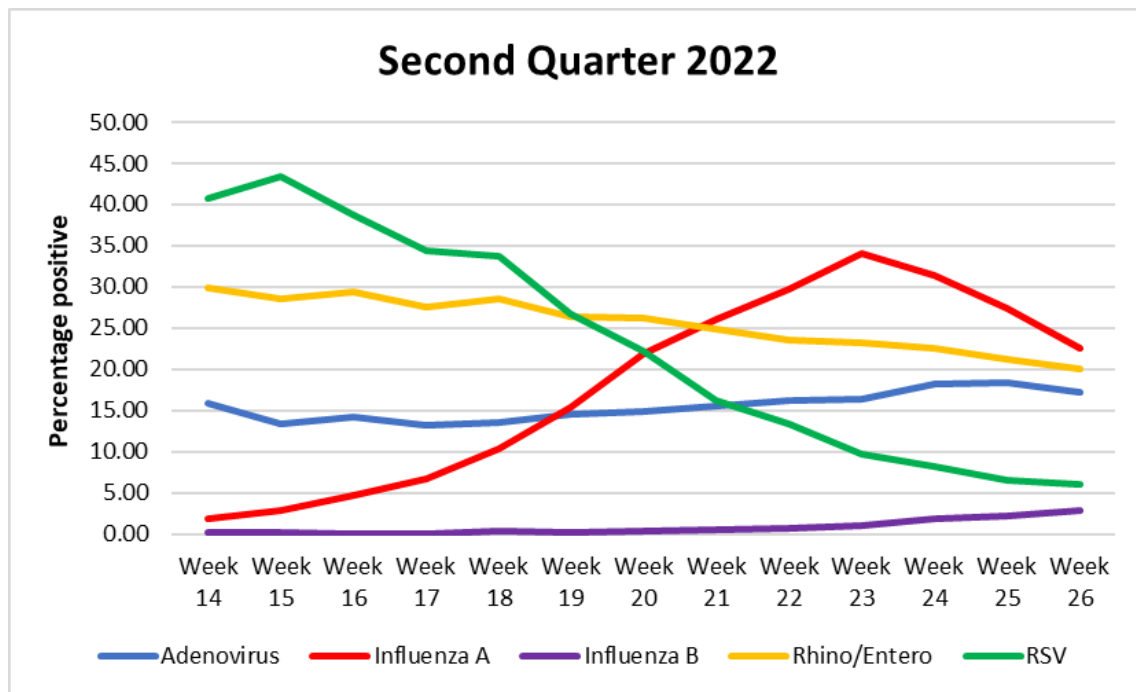
This report summarises respiratory virus PCR panel results for specimens submitted for testing to the private pathology practices that form part of the NPG from April to June 2022.

## Highlights:

- RSV was the most prevalent virus from epidemiological week 14 to 19.
- Influenza A virus was the most prevalent virus from epidemiological week 21 to 26. The influenza season started in epidemiological week 17 and peaked at different times in various South African provinces.

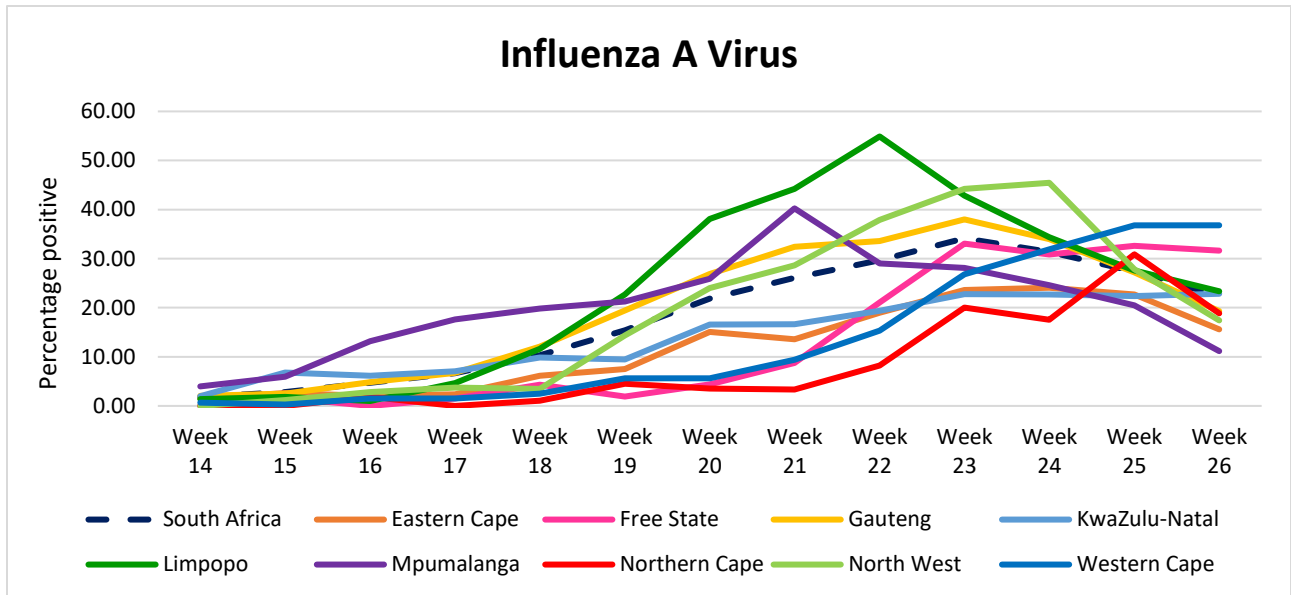
## Respiratory virus PCR panel:

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.

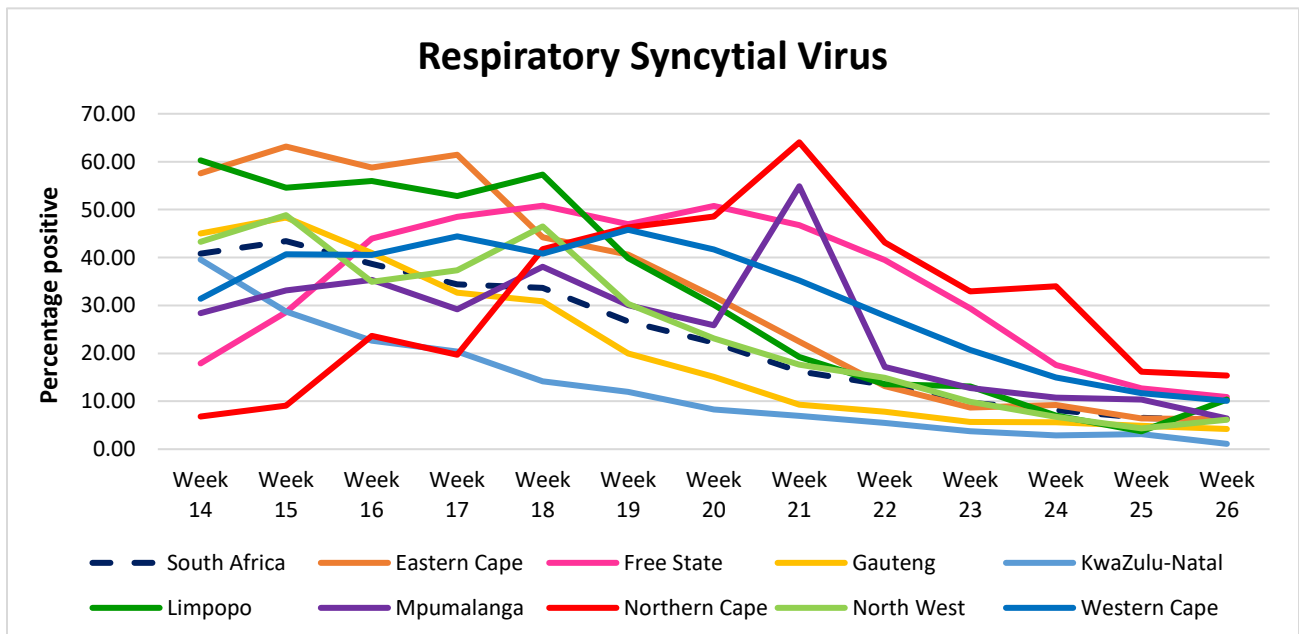


- Although rhino/enterovirus was the most prevalent virus (25.4%) detected during the 2<sup>nd</sup> quarter of 2022, it was the most prevalent virus during epidemiological week 20 only. Influenza A virus was detected in 20.7% of samples, and RSV in 20.4% of samples.
- Influenza B virus was detected in less than 1% of samples submitted for testing.
- No specific seasonality was observed with regards to adenovirus.

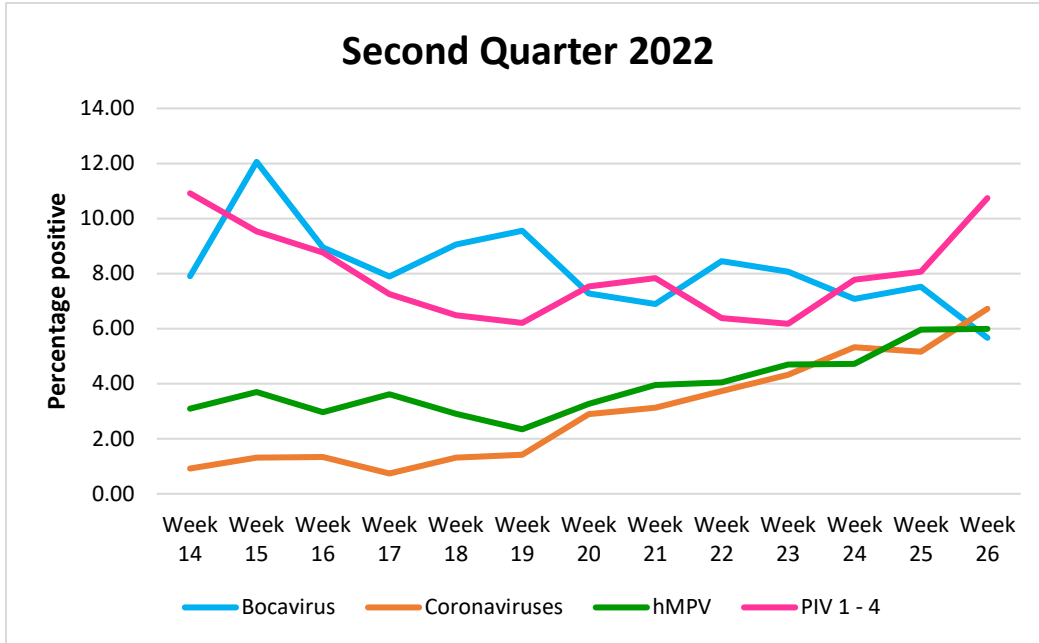
- Influenza A virus was the most prevalent virus detected from epidemiological week 21 to 26. Nationally, the prevalence of influenza A virus started to increase in epidemiological week 17, which concurs with the start of the 2022 influenza season according to the National Institute of Communicable Diseases (NICD). The increase was first noticed in Mpumalanga in epidemiological week 16, followed by Gauteng and Limpopo 2 weeks later, and North West province one week after that. The increase in influenza A virus prevalence only started in week 22 in the Free State and Western Cape, and a week later in the Northern Cape. In most provinces the prevalence of influenza A virus peaked 5 weeks after the increase started. No specific peak in prevalence was noted in KwaZulu-Natal. The majority (82.5%) of samples that were typed, were influenza A/H1N1.



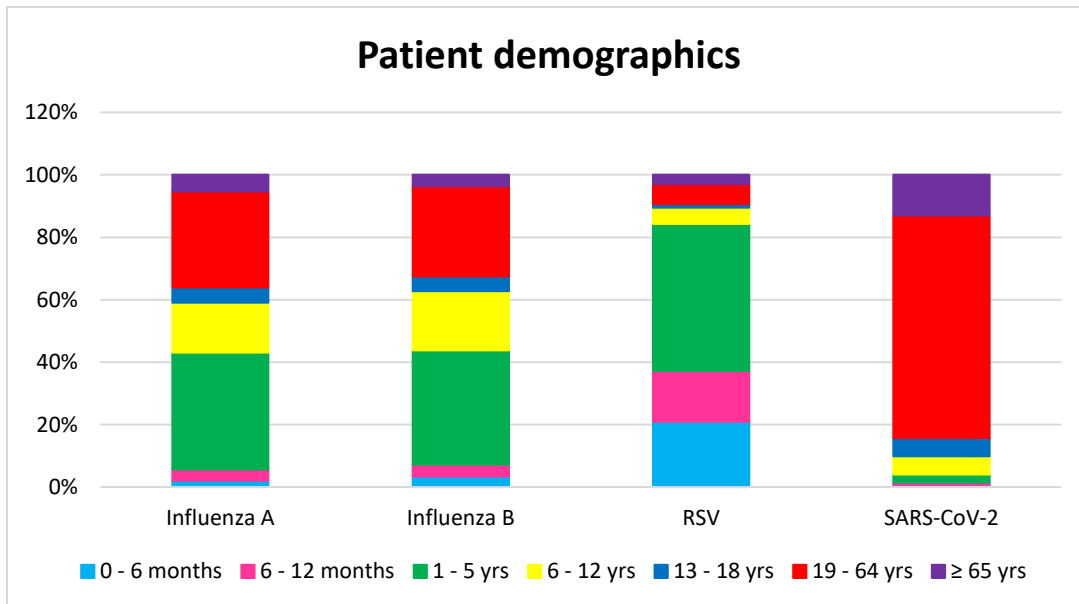
- Nationally, the prevalence of RSV peaked in epidemiological week 15 and it was the most prevalent virus from week 14 until week 19. In the Northern Cape, the prevalence of RSV only peaked in week 21, and an unexpected second peak was observed during the same week in Mpumalanga.



- Bocavirus (8.2%), the seasonal coronaviruses (3.0%), hMPV (4.0%), and PIV 1 – 4 (7.8%) were all detected in less than 10% of specimens submitted for testing.

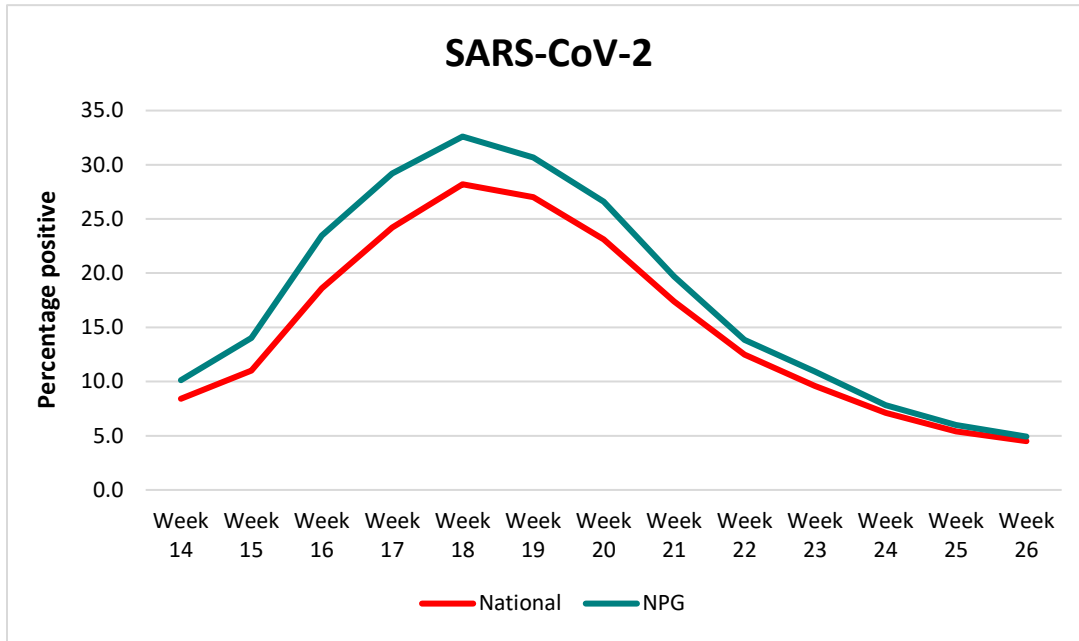


- The majority of patients who tested positive for RSV, influenza A virus or influenza B virus were less than 5 years of age. In contrast, most of the patient who tested positive for SARS-CoV-2 were adults.



**SARS-CoV-2:**

- There was an increase in the number of samples that tested positive for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) at the NPG-affiliated private pathology laboratories from epidemiological week 15 and peaked in week 18. This is consistent with the national data reported by the NICD, which includes results from both the public and private healthcare sectors.



**Bacteria:**

- An increase in the number of samples that tested positive for *Bordetella parapertussis* was noticed during the second quarter of 2022.

