

8 March 2024

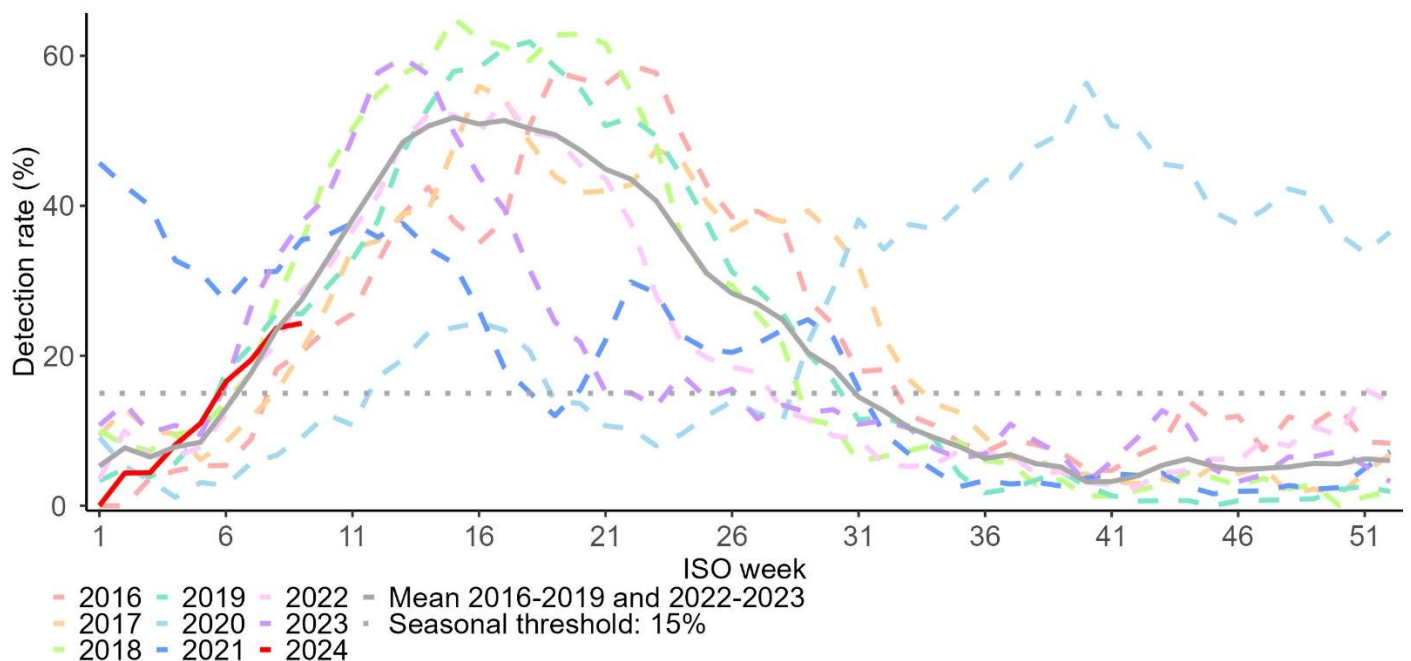
## Alert to clinicians- start of the respiratory syncytial virus (RSV) season

### Background

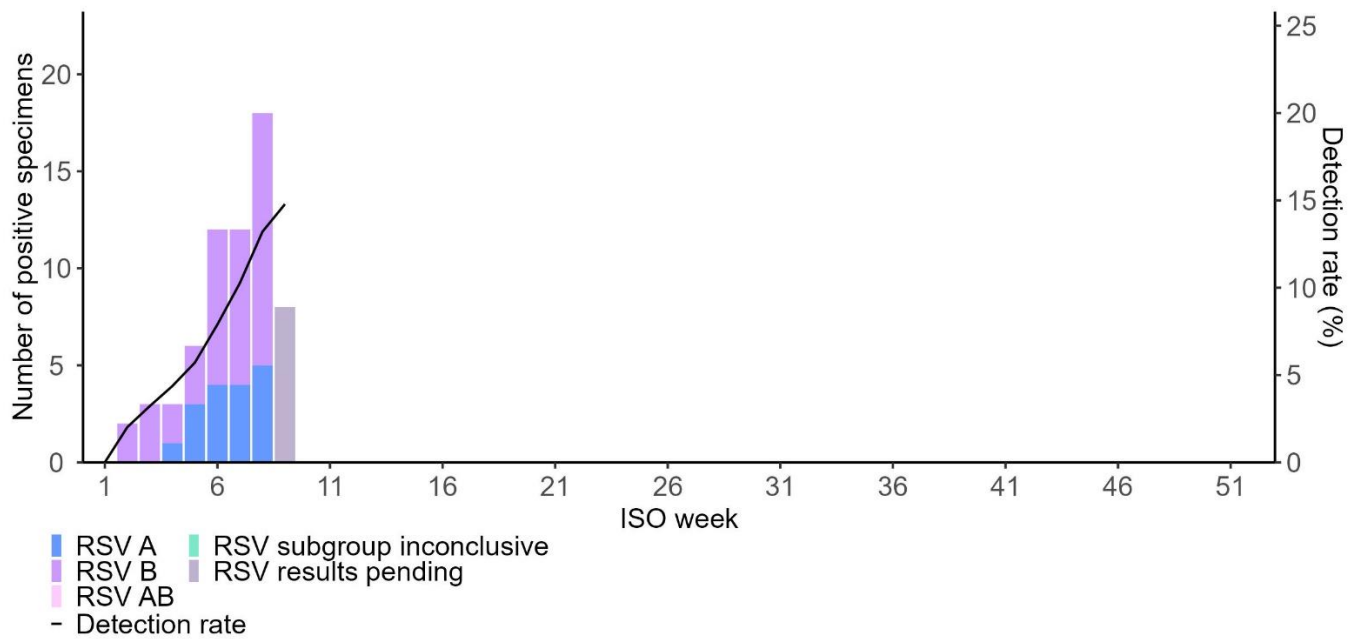
Respiratory syncytial virus (RSV) is the most common cause of bronchiolitis and lower respiratory tract infection (LRTI) among young children and may cause severe illness in young infants. It is highly contagious with transmission mainly by respiratory droplets and re-infections can occur. The RSV season usually precedes the influenza season with the average onset at the end of February (range early February – mid-March) over the past 10 years (excluding 2020 and 2021).

### RSV season update

The RSV season started in week 6 (week starting 5 February 2024) when the three-week moving average of the detection rate in children <5 years from inpatient pneumonia surveillance in public hospitals remained above 15% for two consecutive weeks. With the exception of the COVID-19 pandemic (2020) that disrupted RSV circulation, the detection rate of RSV for 2024 has risen at a similar rate to the mean circulation of RSV between 2016-2019 and 2022-2023 at the start of the RSV season (Figure 1). The RSV-B subtype has accounted for a majority of subtyped viruses in South Africa in 2024 followed by a smaller but increasing proportion of RSV-A lineage viruses (Figure 2). Weekly reports documenting RSV circulation are available on: <https://www.nicd.ac.za/diseases-a-z-index/disease-index-covid-19/surveillance-reports/weekly-respiratory-pathogens-surveillance-report-week/>.



**Figure 1:** Respiratory syncytial virus circulation 2016 to 6 March 2024, children aged <5 years, pneumonia surveillance, South Africa



**Figure 2:** Number of laboratory-confirmed respiratory syncytial virus (RSV) cases and detections rate (3 week moving average) by sub-type in hospitalized **patients of all ages**, pneumonia surveillance, South Africa, 1 January 2024 to 6 March 2024

**Alert to clinicians**

Clinicians and paediatric hospitals/ intensive care units are reminded to anticipate an increase in paediatric admissions during the RSV season. Healthcare providers are encouraged to prepare and allocate adequate resources to respond to the surge in RSV cases.

**Diagnosis of RSV**

Clinicians should consider RSV in the differential diagnosis of severe respiratory illness, especially in young children. The majority of infants with RSV-associated bronchiolitis do not require hospitalisation, but certain children are at risk of severe disease (hospitalisation). Infants aged <6 months may develop severe symptoms (including hypoxia, severe respiratory distress, tachypnea, nasal flaring, lower chest retractions, inability to feed, or apnoea) requiring hospitalisation. In very young infants, irritability, decreased activity, and breathing difficulties may be the only presenting symptoms. Risk factors for severe RSV-associated disease include prematurity, congenital heart disease, chronic lung disease of prematurity, neurological disease, infants <6 months, immunodeficiency, and lack of breast feeding.

**Prevention of RSV**

Prevention measures include isolation of children with influenza-like symptoms (sick children should not go to crèches or schools for a few days), and teaching children (and adults looking after infants) to practice sneeze and cough hygiene. The use of prophylactic antibiotics for children with upper respiratory tract infections is not recommended. The monoclonal antibody, palivizumab, administered monthly throughout the RSV season to infants and children at high risk of severe RSV disease, has been shown to be effective for prevention. However, high costs and the need for monthly intramuscular injections throughout the RSV season limit its use. New maternal vaccines and long-acting monoclonal antibodies for RSV prevention in infants have been licensed in some areas such as the United States of America and Europe since 2023, but these products are not yet available in South Africa.

