

SEASONAL DISEASES

Influenza and respiratory syncytial virus (RSV) seasons, 2020

There has been no local influenza activity since a single detection made in early June. Globally, influenza activity has also remained lower than expected.

The increase in detections of RSV, which started in mid-July, has continued. While the proportion of detections is higher than is expected for this time of the year, it remains lower than the 10-year mean peak. RSV detections breached the low threshold [using the Moving Epidemic Method (MEM), a sequential analysis using the R Language, to calculate the duration, start and end of the annual epidemic. MEM uses the 40th, 90th and 97.5th percentiles established from available data to calculate threshold of activity defined as below seasonal threshold, low activity, moderate activity, high activity and very high activity] among individuals of all ages at the end of September (epidemiological week 39) (Figure 3). The RSV season usually precedes the influenza season, with the usual average onset at the end of February (range early February – mid-March) over the past 10 years. The increase has mainly been in hospitalised children under the age of five, where detections crossed the seasonal

threshold in early July (epidemiological week 29), and have been above threshold constantly since the last week of July, reaching moderate levels from end September (Figure 4). In children <5 years of age, detections also crossed the peak of the 10-year mean, albeit more than 20 weeks later than usual.

It is unclear whether this increase will be sustained as the timing differs from that of the usual RSV season. The highest number of positive RSV detections in a week this year has been 26, whereas up to 65 positive detections per week were made during the season in previous years. Although this is not a classical timing for RSV season, clinicians are reminded to consider RSV in differential diagnosis for severe respiratory illness, especially in young children.

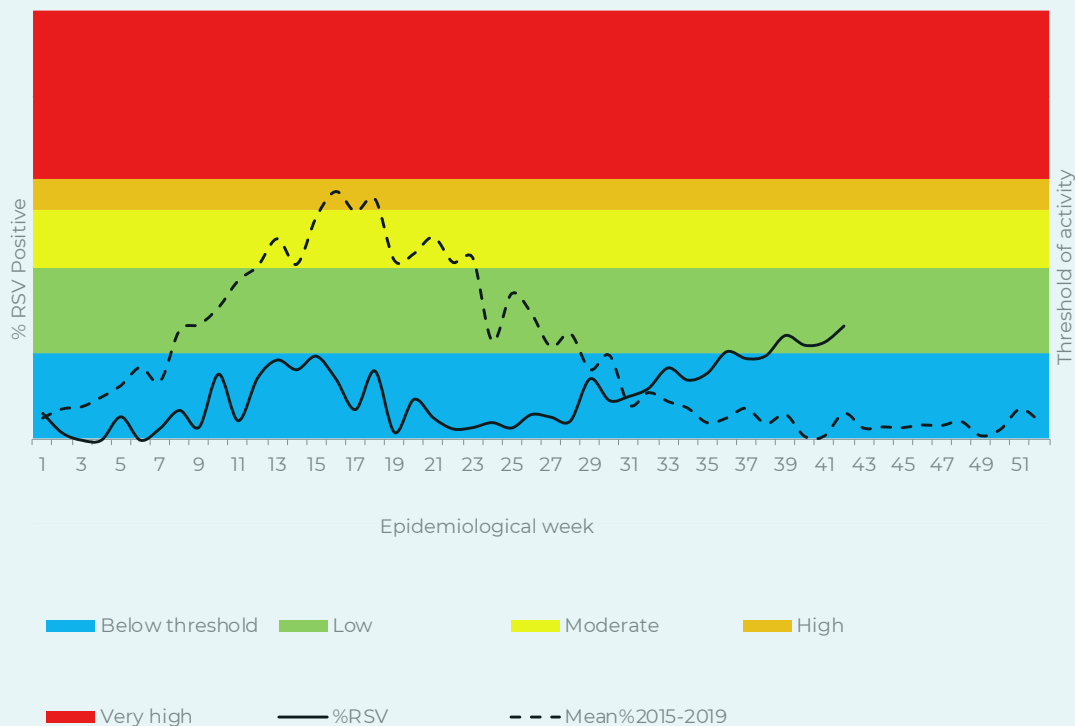


Figure 3. Respiratory syncytial virus detections (percentage positive) and threshold of activity by epidemiological week, all ages, pneumonia surveillance, South Africa, 01-January-2020-18 October 2020

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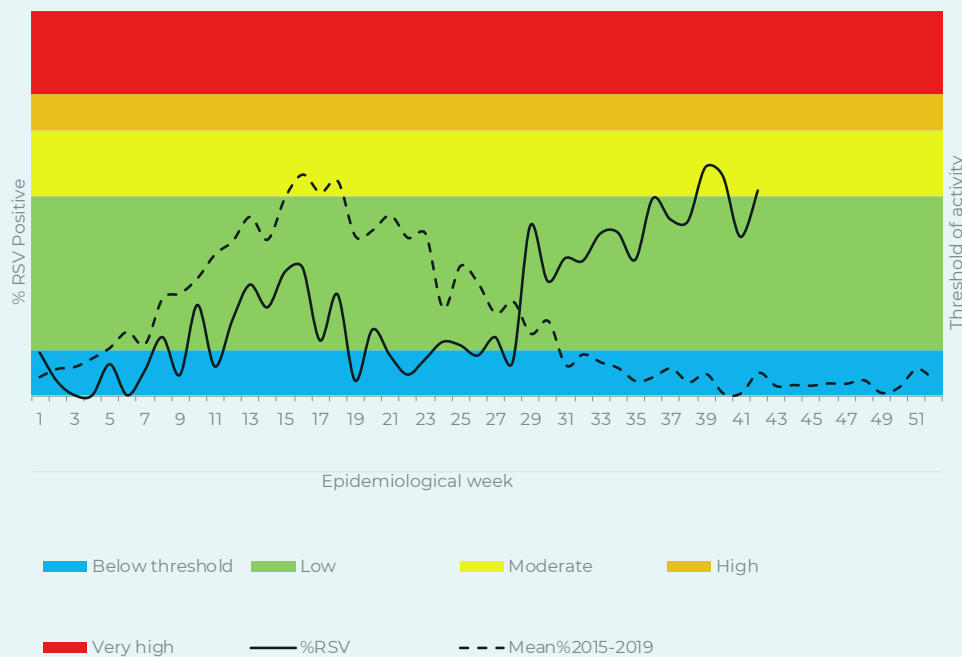


Figure 4. Respiratory syncytial virus detections (percentage positive) and threshold of activity among patients aged <5 years by epidemiological week, pneumonia surveillance, South Africa, 01-January-2020-18 October 2020

Meningococcal disease

Invasive meningococcal disease surveillance update – January to September 2020

In 2020, invasive meningococcal disease (IMD) cases have been occurring infrequently with only 37 laboratory-confirmed cases being reported until end of September 2020 (compared to 82 episodes over the same period in 2019). Marked reductions in cases were seen since March, following implementation of social distancing and other containment measures aimed at reducing SARS-CoV-2 transmission (Figure 5).

Neisseria meningitidis, the causative organism in meningococcal disease, is spread from person-to-person via respiratory droplets of asymptomatic carriers. New acquisition of a virulent strain of meningococcus, followed by invasion of the organism into the bloodstream may lead to sudden onset of severe illness – including septicaemia or meningitis. Therefore, as lockdown measures are relaxed and more contact is made with other individuals, there is potential for an increase in respiratory transmitted infections, including invasive meningococcal disease.

A small increase in sporadic cases of IMD was detected in the Western Cape Province in September 2020. Five of these six cases occurred in children <5 years, and 4 of the 5 available isolates were serogroup B, one was

serogroup W. The Western Cape Province has seen the majority of IMD in 2020 (20/37 cases, 54%), followed by Gauteng (7/37, 19%), Eastern Cape (6/37, 16%), KwaZulu-Natal and Mpumalanga provinces (2 cases each, 5%). Of the isolates available for serogrouping, serogroup B was predominant (16/28, 57%) followed by serogroups W (7/28, 25%), Y (3/28, 11%) and C (2/28, 7%). IMD was most prevalent in young children, with 43% (16/37) of cases occurring in children <5 years.

Clinicians should remain vigilant in suspecting meningococcal disease in persons presenting with sudden onset of fever, neck stiffness or petechial rash, to ensure rapid access to appropriate care and treatment. Meningococcal disease has the potential to cause clusters and outbreaks and thus is a category 1 notifiable medical condition (NMC). Any clinically suspected or laboratory confirmed case of meningococcal disease should be reported immediately to the provincial communicable disease control coordinators (CDCC) to ensure appropriate contact tracing, responsible prescribing of chemoprophylaxis and case counting.