

SEASONAL DISEASES

Rotavirus season in the time of SARS-CoV-2

Rotavirus is a common childhood infection with a seasonal pattern, peaking during the cooler, drier months of the year. Since the rotavirus vaccine was introduced into the expanded programme of immunisation in August 2009, the annual rotavirus season in South Africa typically occurs from late June to mid-August. However, data from surveillance programmes shows that the 2020 rotavirus season has not yet started (Figure 2); only one stool specimen, collected in March, has tested positive for rotavirus this year to date.

There were concerns that the apparent delay or absence of the 2020 rotavirus season as suggested by the surveillance data, could be due to surveillance programme interruptions as a result of SARS-CoV-2. We engaged with colleagues at the major private pathology laboratories across South Africa, enquiring as to whether there had been an increase in the number of stools submitted for rotavirus testing and/or an increase in rotavirus detection in recent months. All colleagues reported the

same trends: reduced numbers of stools submitted for screening compared to last year and very few rotavirus-positive cases detected this year to date. The current hypothesis is that the non-pharmaceutical interventions implemented to reduce transmission of SARS-CoV-2, including social distancing, closing of universities, schools, crèches and workplaces, and constant messaging around hand hygiene, has contributed to decreased rotavirus transmission and an absence of the usual winter rotavirus season this year. The transition to level 2 lockdown regulations (with increased social interactions, and the opening of schools and crèches) as well as hand hygiene fatigue, may result in a delayed rotavirus season in 2020, or perhaps a higher-incidence rotavirus season in 2021. We will continue to monitor the situation closely, and take this opportunity to remind healthcare workers that children should receive rotavirus vaccine at 6 and 10 weeks of age, and that children who have missed rotavirus vaccination can be vaccinated until 8 months of age.

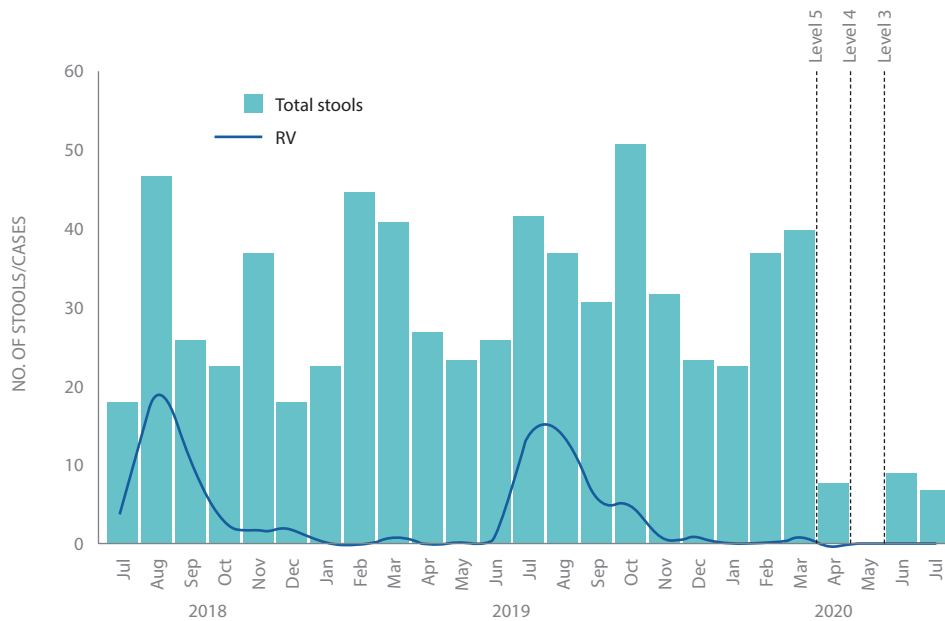


Figure 2. Rotavirus detection in diarrhoea cases recruited at three hospitals in South Africa between July 2018 and July 2020. Abbreviations: RV – Rotavirus detection