

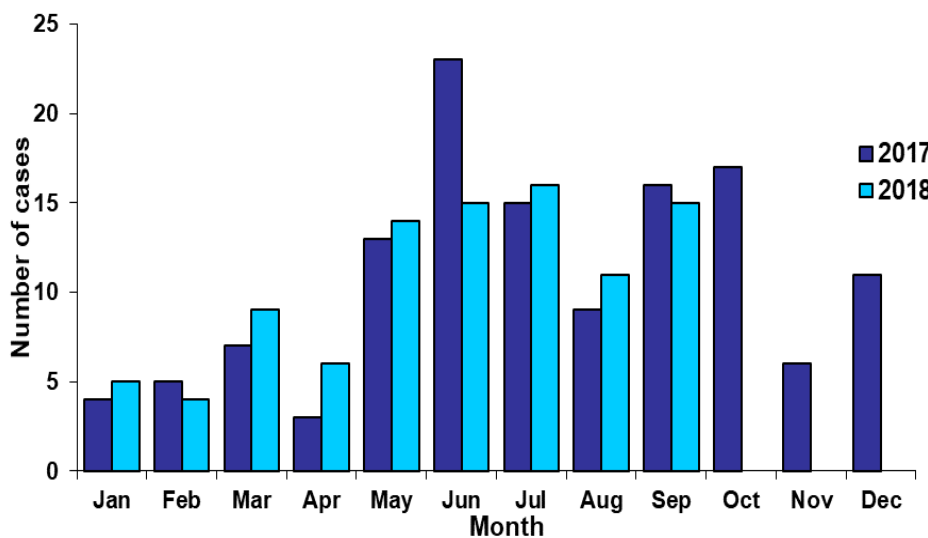
**b Invasive meningococcal disease surveillance: January to September 2018**

Meningococcal disease occurs throughout the year in South Africa, appearing most frequently in the winter and spring months (Figure 4). Patients presenting with symptoms suggestive of meningitis/bacteraemia, with or without a petechial rash, should receive prompt antibiotic therapy targeting meningococcal disease. Clinically suspected cases should be notified immediately for urgent public health action.

Up until week 39 of 2018, 92 cases have been reported to the GERMS-SA network, 72% (66/92) of which had isolates available for serogrouping. Serogroup B caused 44% (29/66) of disease, followed by W (24%, 16), Y (20%, 13) and C (12%, 8). The majority of cases occurred in Gauteng Province (33%, 30/92), followed by Eastern Cape (22%, 20/92) and Western Cape provinces (29%, 27/92). Of patients with known age, 52% (43/83) were less than 10 years old, 20 of which were infants.

Microbiology laboratories (both NHLS and private laboratories) are encouraged to submit ALL meningococcal isolates as soon as possible to the NICD for confirmation and serogrouping of the isolates; or to submit the actual CSF, blood and/or blood culture (for culture negative, but latex antigen positive and Gram-negative cocci seen on Gram stain) for PCR confirmation. Meningococcal disease is a category 1 notifiable medical condition (NMC) and any clinically suspected case should be reported immediately to the provincial Communicable Disease Control Coordinators to ensure appropriate contact tracing, responsible prescribing of chemoprophylaxis and case counting.

**Source:** Centre for Respiratory Diseases and Meningitis, NICD-NHLS; annev@nicd.ac.za



**Figure 4.** Number of *Neisseria meningitidis* cases reported to GERMS-SA by month, South Africa, 2017 and 2018 (until end week 39).

**c Malaria seasonal advisory**

Southern Africa is experiencing its annual malaria season and it is anticipated that there will be an increase in transmission due to increases in ambient temperature, rainfall and humidity. With the approach of the holiday season in December, it is important for travellers visiting any of the malaria areas within southern Africa or elsewhere to take appropriate precautions and maintain a high index of suspicion for symptoms of malaria on their return.

As shown in the revised malaria risk map in the September Communiqué (Vol. 17(9): 7-8) [<http://www.nicd.ac.za/wp-content/uploads/2018/09/Malaria.pdf>], the major areas of transmission of malaria in South Africa are the north-eastern parts of Limpopo Province (along the borders with Mozambique and Zimbabwe), the lowveld areas of Mpumalanga Province (including the Kruger National Park but excluding Nelspruit/Mbombela, White River,

Sabie, and their immediate surrounds) and the far northern parts of KwaZulu-Natal Province. Personal protection against mosquito bites should be the focus of malaria prevention, together with use of chemoprophylaxis (preventive medication) in the indicated higher-risk areas. Chemoprophylaxis is now available in pharmacies without prescription. Regardless of antimalarial measures used, the occurrence of an acute fever and 'flu-like illness in the month after return from transmission areas must prompt an urgent malaria blood test and follow-up of results.

Regarding neighbouring countries:

1. Mozambique and Zambia have high malaria transmission throughout the country. The majority of malaria cases treated in South Africa have a history of travel to Mozambique.

2. Zimbabwe, including the Victoria Falls, is a high transmission area except for Bulawayo, Harare and Gweru and their immediate surrounds.
3. Malawi and the area around Lake Malawi are high transmission areas.
4. Botswana has transmission in the central and northwest districts, including the Chobe National Park and the Okavango Delta, but there is no malaria transmission in Gaborone.
5. In Namibia, malaria is present in the northern regions (Kavango East and West, Kunene, Oshana, Oshikoto, Otjozondjupa, and Zambezi), and there is no malaria transmission in Windhoek.

6. Malaria control in Swaziland has resulted in a major decrease in local cases and there are limited areas of malaria transmission in the lowveld area in the east of the country bordering Mozambique.

Guidelines on prevention and treatment of malaria, as well as FAQs, are available on the NICD website: [www.nicd.ac.za](http://www.nicd.ac.za)

**Source:** Centre for Emerging Zoonotic and Parasitic Diseases, NICD-NHLS; [johnf@nicd.ac.za](mailto:johnf@nicd.ac.za)

## d Rubella

Rubella, or German measles, is a viral infection that circulates widely in South Africa. It is spread through direct or droplet contact with the respiratory secretions of an infected person. A maculopapular rash occurs 14 to 17 days after exposure, first appearing on the face and progressing from head to foot lasting about 3 days. Complications of rubella are rare and generally occur more often in adults than in children. The most serious complication of rubella infection is congenital rubella syndrome (CRS), which occurs when the rubella virus infects a developing foetus. CRS in the first trimester of pregnancy is teratogenic and can lead to miscarriage or serious birth defects such as deafness, eye defects, heart defects, and mental retardation in as many as 85% of infected infants.

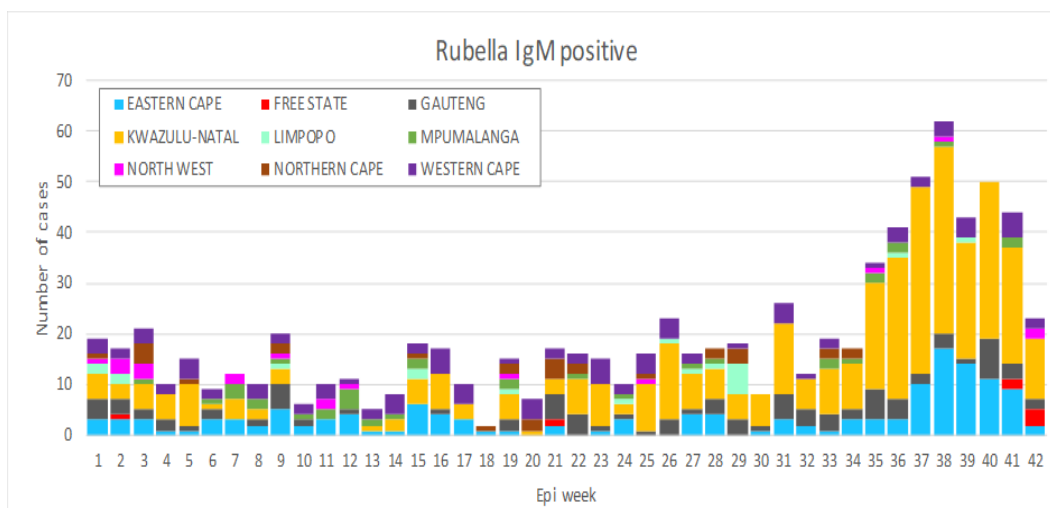
Rubella vaccination is not part of the current South African expanded programme on immunization (EPI), although it is available in the private sector as measles mumps and rubella (MMR). Historically, the omission of rubella vaccine from EPI was based on the understanding that natural rubella infection in childhood should render most women of childbearing age immune and therefore prevent CRS. In addition, under conditions of imperfect vaccine coverage, the addition of a rubella-containing vaccine (RCV) could increase the susceptibility of adult women by slowing, but not interrupting, rubella transmission. This may theoretically increase the age of primary rubella infection and

therefore increase the number of CRS cases. For this reason, the introduction of a RCV into the EPI should be carefully considered and meticulously implemented to avoid increasing the risk of CRS.

From 1 January to 19 October 2018, 821 NICD laboratory-confirmed rubella cases have been detected in South Africa from blood specimens submitted for measles testing (Figure 5). Rubella cases have been detected in all nine provinces, of which KwaZulu-Natal (n=378), Eastern Cape (n=143) and Western Cape (n=98) provinces have the highest number of cases. The epidemiological curve shows persistent circulation with a peak in spring (week 35 to 40). Rubella was similarly distributed amongst males and females (51% and 49%, respectively) and was predominant in the 0-4 and the 5-9 year-old age groups (Figure 6). Importantly, 14 NICD laboratory confirmed rubella cases were detected amongst females aged 15 to 44 years old, indicating an immunity gap in women of childbearing age.

Rubella cannot be clinically distinguished from measles. All febrile rash cases should be reported. A serum sample should be submitted for laboratory testing for measles and rubella.

**Source:** Centre for Vaccines and Immunology, NICD-NHLS; Division of Public Health Surveillance and Response, NICD-NHLS; ([heatherh@nicd.ac.za](mailto:heatherh@nicd.ac.za))



**Figure 5.** NICD laboratory-confirmed rubella cases in South Africa by province, 1 January – 19 October 2018 (n=821).