NATIONAL INSTITUTE FOR COMMUNICABLE DISEASES

Division of the National Health Laboratory Service

SOUTH AFRICAN RUBELLA OUTBREAK

Increase in rubella (German Measles) cases in the Western Cape Province (10 October 2023)

Issued by the National Institute for Communicable Diseases based on laboratory testing data

An increase in rubella cases has been noted in the Western Cape Province since the second week of September 2023 (epidemiological week 38) (Figure 1). Whilst sporadic cases have been noted across the country (Figure 2), a week-on-week increase in laboratory-confirmed cases has been noted in Khayelitsha sub-district of the City of Cape Town since week 36. To date, 19 cases have been identified through serological testing, and all are in the 5-9 year age group. Anecdotal reports of increased numbers of clinically suspected cases without laboratory confirmation in the Khayelitsha sub-district of the City of Cape Town have been received by the NICD. Before 2020, seasonal rubella outbreaks occurred from week 35 onwards, usually the first week of September.

Fever rash surveillance usually identified at least 800-1000 cases of rubella annually. During the years 2020-2023, fewer than 50 cases of rubella were identified across the entire country, as the non-pharmaceutical interventions that were implemented for the COVID-19 pandemic interrupted rubella transmission (Figure 3). As the country has not experienced the usual seasonal rubella outbreaks, we are likely to see a large number of cases in 2023.

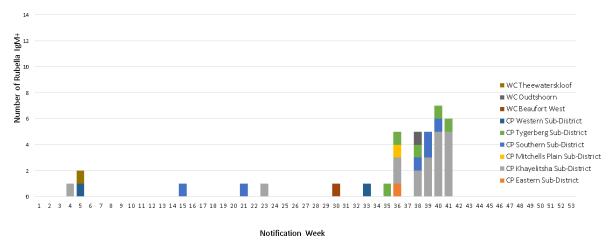


Figure 1. Cases of laboratory-confirmed rubella infection in the Western Cape Province by epidemiological week of 2023

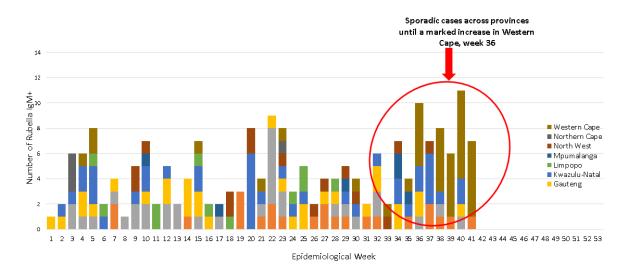
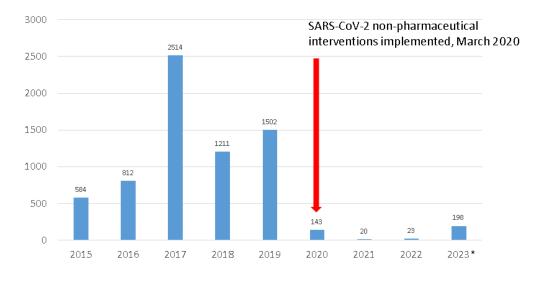


Figure 2. Cases of laboratory-confirmed rubella infection in South Africa by province, by epidemiological week of 2023



*Cases from January 1-October 14, 2023

Figure 3. Cases of laboratory-confirmed rubella infection in South Africa from 2015 until October 14, 2023, indicating the timing of implementation of COVID-19 public health interventions.

Rubella is a mild illness in children and adults but can have severe consequences in pregnant women, particularly those infected in the first trimester of pregnancy. Rubella virus may infect the foetus, leading to congenital rubella syndrome (CRS). In children and adults, rubella infection presents with rash, low-grade fever (<39°C), nausea, sore throat, mild conjunctivitis (red eyes), headache, cough, runny nose and swollen lymph nodes in the neck. The rash usually starts on the face and neck before spreading to the rest of the body. The rash lasts for about 5 days. Congenital rubella

syndrome may lead to foetal death, or congenital anomalies including congenital heart disease, cataracts and deafness.

Whilst rubella is preventable through vaccination, this vaccine is not currently provided in the national expanded programme of immunisation (EPI). The National Department of Health plans to implement rubella vaccination in 2024 to support the WHO global measles-rubella eradication 2030 target. The rubella vaccine will be administered with the measles vaccine at 6 and 12 months. The current measles-only vaccine (MeasBio®) will be replaced with a single vaccine containing measles and rubella vaccines. Presently, rubella vaccine is available in the private sector as the measles, mumps and rubella (MMR) vaccine.

Rubella is a Category 1 notifiable medical condition. Clinicians should notify the Department of Health immediately on clinical suspicion. As measles and rubella present with similar signs and symptoms (fever, a maculopapular rash with any conjunctivitis, cough or runny nose), clinicians may notify the case as either measles or rubella. Once confirmatory laboratory testing is done, the case will be classified correctly by the NICD Centre for Vaccines and Immunology together with the Notifiable Medical Conditions Surveillance Officers. Cases should be notified through the notifiable medical conditions surveillance system (NMC-SS). The notification can either be done electronically through the NMC app or by completing a paper-based form. A blood sample (in a red or yellow-top tube) and a throat swab should be submitted for confirmatory serological testing and PCR genomic testing along with a completed measles-rubella case investigation form (https://www.nicd.ac.za/diseases-a-z-index/rubella/).

Healthcare workers are advised to be vigilant for symptoms of rubella and notify and report cases. Presently no public health action is required following identification of cases as rubella, as no vaccine is available in the public sector. However, should measles be suspected, ring vaccination with measles vaccine should be conducted on all contacts under 5 years of age. Once the rubella vaccine is available, ring vaccination according to the updated vaccinators manual, should be implemented on clinical suspicion of both measles and rubella to contain the infection in line with the global measles-rubella eradication agenda. Importantly, pregnant women with suspected rubella infection should undergo serological testing and referred for specialised gynaecological assessment. Ideally health care workers should be tested for rubella and vaccinated if they are seronegative.

Kind Regards, **Dr Nishi Prabdial-Sing** Head of Centre Centre for Vaccines and Immunology National Institute for Communicable Diseases 1 Modderfontein Road, Sandringham nameS@nicd.ac.za | www.nicd.ac.za