

b Update on increase in pertussis cases in South Africa, November 2018

During 2018 there has been an increase of pertussis cases in South Africa, especially among children who are too young to be fully vaccinated and thus protected by the vaccine. Between October 2017 and February 2018, an increase in pertussis cases was observed, mostly limited to sentinel surveillance sites in the Western Cape Province. From May 2018, an increase in laboratory-confirmed pertussis cases has been detected from all sentinel surveillance sites (Western Cape, Gauteng, Mpumalanga, North West and KwaZulu-Natal provinces) which form part of the syndromic pneumonia surveillance programme (Figure 1). Pertussis cases have also been reported to the Notifiable Medical Conditions (NMC) surveillance system from all provinces of South Africa. This increase is ongoing.

From January to November 2018, 100 of the 5 071 (2%) patients tested for *Bordetella pertussis* as part of sentinel site pneumonia surveillance, tested positive. The detection rate for pertussis was 3% (20/732) for North West, 2% (46/2 130) for Western Cape, 2% (21/1 090) for Gauteng, 2% (5/197) for Mpumalanga and 1% (8/817) for KwaZulu-Natal provinces. The highest number of pertussis cases was observed in July (30) and the lowest was in August (8). The highest detection rate was in children aged <3 months (5%, 53/1 088), with a second peak observed in patients aged from 5-14 (2%, 3/134) and 15-24 (2%, 3/172) years. Of the 100 *B. pertussis* positive patients, half (53%, 53/100) were infants aged <3 months. Among the 95 pertussis-positive cases with data available on outcome, mortality was 3% (3/95), and 4% (2/49) among pertussis-positive infants aged <3 months. Besides the increase in pertussis cases observed from the surveillance sites, outbreaks of pertussis in a school in Mpumalanga Province (October Com-

muniqué Vol.17 (9)), and in the general community in Eastern Cape Province, and a cluster of cases in a family from KwaZulu-Natal Province has been reported to NICD since August 2018.

From January to November 2018, 800 cases of pertussis were reported to the NMC surveillance system, of which 481 (60%) have been reported since August 2018. The highest numbers of cases were reported from Gauteng (223/800, 28%), Western Cape (161/800, 20%) and KwaZulu-Natal (120/800, 15%) provinces. The majority of cases occurred in children <1 year of age (505/800, 63%).

Pertussis, commonly known as 'whooping cough', is a vaccine-preventable disease caused by *Bordetella pertussis* and is a category 1 notifiable medical condition. Clinicians are advised to be vigilant for cases, especially in very young children who may not present with typical symptoms of pertussis (cough and whoop). Clinicians are to conduct diagnostic testing where appropriate, to notify cases and prescribe post-exposure prophylaxis to close and high-risk contacts of suspected or confirmed cases. NICD recommendations for pertussis diagnosis, management and public health response may be found on the NICD web page (<http://www.nicd.ac.za/index.php/pertussis/>). Notification forms can be accessed at <http://www.nicd.ac.za/index.php/nmc/>.

Source: Centre for Respiratory Diseases and Meningitis, NICD-NHLS (cherylc@nicd.ac.za)

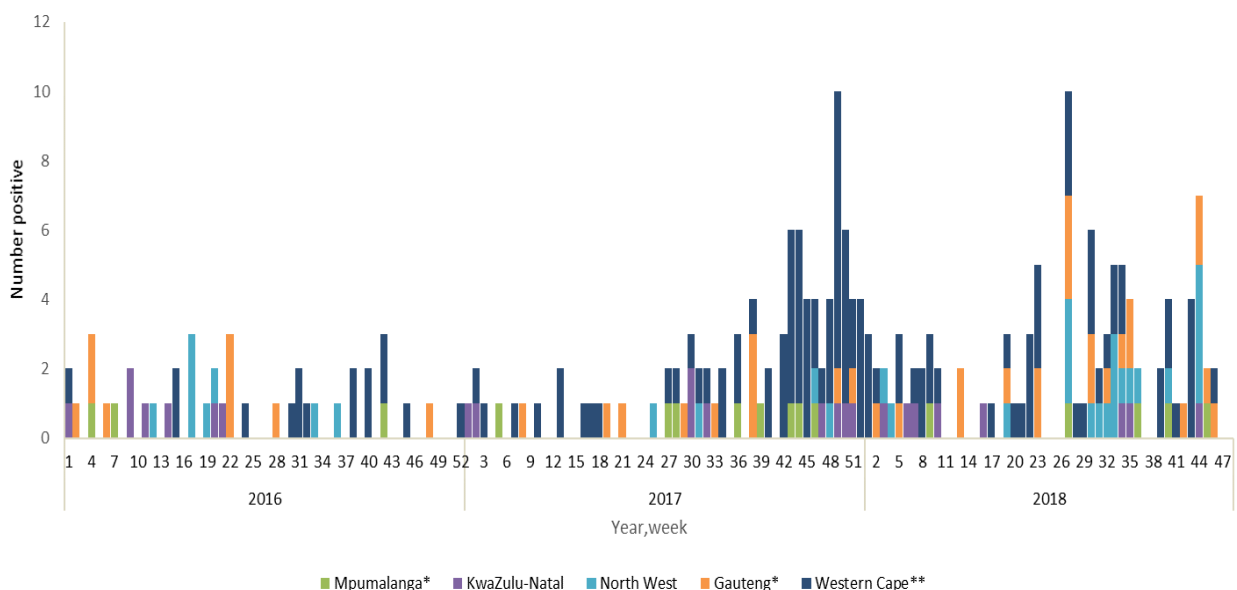


Figure 1. Number of laboratory-confirmed pertussis cases from NICD sentinel site pneumonia surveillance programme by year, week and province, 2016-2018