

SEASONAL DISEASES

Influenza

Influenza has not been detected in any of the three sentinel surveillance programmes during this past month. Since the localised outbreak of influenza A(H1N1)pdm09 and influenza B Victoria in the Western Cape Province in the beginning of the year, there has only been one detection of influenza A(H1N1)pdm09 in Gauteng Province from a Viral Watch surveillance site in the week ending 14 June. Over the past 36 years, the influenza season has started in week

28 (week ending 12 July). This year, the various hygiene and physical distancing measures being implemented to reduce SARS-CoV2 virus transmission has likely played a role in interrupting influenza virus transmission. Globally, influenza activity has been at lower levels than expected and to date, none of the southern hemisphere countries have reported any influenza activity.

Article source: Centre for Respiratory Diseases and Meningitis, NICD-NHLS; cherylc@nicd.ac.za

Meningococcal disease: Invasive meningococcal disease surveillance update – January to June 2020

Twenty-three laboratory-confirmed episodes of invasive meningococcal disease (IMD) have been reported through the GERMS-SA surveillance network from 1 January to 30 June 2020. This is less than half the reported episodes from equivalent time periods in 2018 and 2019 (n=55 in each year). There has been an unusual drop in IMD since the lockdown movement restrictions were implemented in South Africa in March 2020, with an absence of the usual autumn increase in cases seen in previous years (Figure 1). This reduction may be related to reduced transmission of *Neisseria meningitidis* through respiratory droplets due to mask-wearing, physical distancing, and school/university/workplace closures. Due to the severity of meningococcal presentation, it is unlikely that reduced health-seeking behaviour during this time has impacted much on the reduction of IMD.

The IMD cases are sporadic and have been detected from four provinces, namely, Western Cape Province (n=11), Gauteng Province (n=6), Eastern Cape Province (n=4) and KwaZulu-Natal Province (n=2). Of the 16 isolates available

for serogrouping, serogroup B (n=6) and W (n=6) were the most predominant, followed by serogroup Y (n=3) and serogroup C (n=1). Thirty-nine per cent (9/23) of IMD episodes occurred in children <5 years of age, with the highest proportion occurring in infants (5/23, 22%).

Meningococcal disease onset is swift and even with appropriate treatment, patients can deteriorate rapidly. Clinicians are urged to consider IMD in patients presenting with acute onset of severe illness and to look specifically for the characteristic non-blanching petechial rash associated with meningococcaemia. Appropriate antibiotic treatment should be started in suspected cases whilst awaiting laboratory confirmation of disease.

Meningococcal disease is a category 1 notifiable medical condition (NMC) and any clinically suspected or laboratory-confirmed case should be reported immediately to the provincial Communicable Disease Control Coordinators to ensure appropriate contact tracing, responsible prescribing of chemoprophylaxis and case counting.

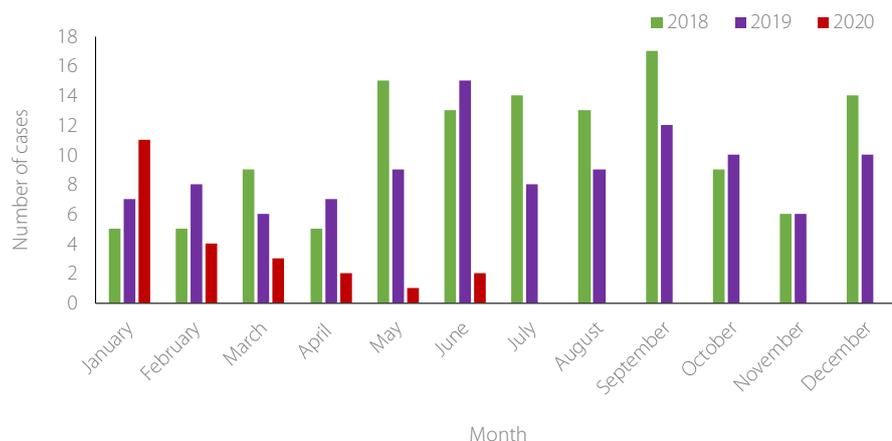


Figure 1. Number of invasive meningococcal disease cases reported to GERMS-SA surveillance programme by month and year, January 2018 through June 2020, N=255

Article source: Centre for Respiratory Diseases and Meningitis, NICD-NHLS; cherylc@nicd.ac.za

BEYOND OUR BORDERS

The 'Beyond our Borders' column focuses on selected and current international diseases that may affect South Africans travelling abroad. Numbers correspond to Figure 2 on page 7.

1. *Haemophilus influenzae* disease: Alaska, USA

Invasive *Haemophilus influenzae*, serotype a, is increasing in the United States overall, with the greatest burden occurring in American Indian and Alaska Native children, according to findings published in Clinical Infectious Diseases.

A study in 2018 found that *H. influenzae*, serotype a (Hia), incidence has increased by an average of 13% annually from 2002 to 2015.

From 2008 to 2017, an estimated average of 306 invasive Hia disease cases occurred annually in the USA, with the incidence increasing by an average of 11.1% each year. Overall, 42.7% of cases occurred in children aged less than 5 years (incidence 0.64/100 000), with the greatest incidence among children aged less than one year (incidence, 1.60/100 000). The researchers also found that 7.8% of all patients with Hia infection died; 15.1% of adults aged 65 years and older died, representing the highest case fatality rate.

American Indian and Alaska Native children aged younger than 5 years experienced the highest Hia disease burden. These children experienced 8 times more disease than children of all other races combined.

In Alaska, people of all ages experienced an Hia disease incidence nearly 6 times higher than in the rest of the USA overall, and children aged younger than one year experienced a disease incidence nearly 14 times higher than children in the USA overall. The case fatality rate in Alaska was 10.2%, with the vast majority of cases (93.9%) occurring among American Indians and Alaska Natives. In the context of increasing Hia incidence and clinical severity similar to *H. influenzae*, serotype b, new prevention strategies, including the development of an Hia vaccine, could prevent morbidity and mortality among these vulnerable populations.

2. Japanese encephalitis: Taiwan

The Taiwan Centers for Disease Control (CDC) reported on 14 July 2020 that four new cases of Japanese encephalitis had been confirmed last week, including in a three-month-old baby, the youngest case ever reported in Taiwan. The total number of cases on 7 July 2020 was 9, bringing the national total for 2020 to 13. The cases all lived or worked near rice paddy fields, ponds, pig pens or pigeon farms, which are ideal breeding sites for mosquitoes.

Of the four new reported cases, in addition to the three-month-old baby in Taiwan's Changhua County, the other