

2 SEASONAL DISEASES

a Influenza

The influenza season, which started in week 21 (week ending 25 May), continues. The influenza season is considered to have started when the detection rate of Viral Watch specimens tested at the NICD has risen above 10% and remains there for ≥ 2 weeks. The influenza detection rate rose to 15.8% in week 21 and peaked at 80.4% in week 27 (week ending 06 July). Over the past 30 years, the mean duration of the influenza season has been 12 weeks (range 7 to 25 weeks).

As at 03 August 2014, of the 399 influenza-positive

cases detected through the Viral Watch surveillance programme, 78% (311/399) have been influenza A (H3N2). Influenza A(H1N1)pdm09 has been detected in 53 patients, influenza B in 32 patients, and unsubtype influenza A in three patients.

In addition, 33 specimens collected from ill passengers at a point of entry into South Africa were submitted for testing. Influenza A(H1N1)pdm09 was detected in two patients, influenza A (H3N2) in six patients, and influenza B in eight of these patients.

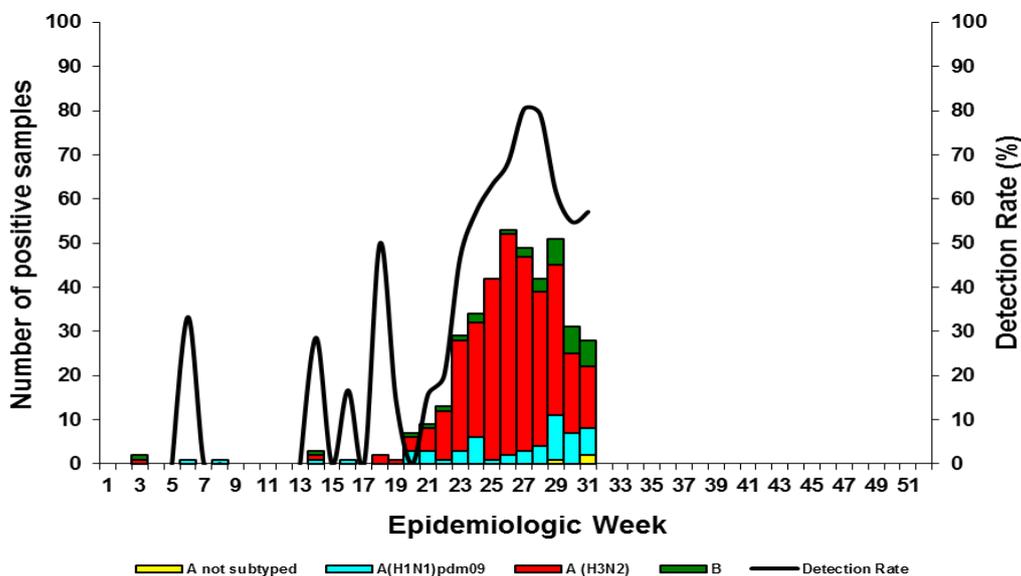


Figure 1. Influenza detections by type and subtype: Viral Watch surveillance programme 2014

For the same time period, 989 patients hospitalised with severe acute respiratory illness were tested for respiratory viruses at the five sentinel sites. Of these, 24 patients tested positive for influenza. Influenza A(H3N2) was detected in 20, influenza A (H1N1)pdm09 and influenza A (unsubtyped) in one patient each, and influenza B in two patients. In addition, 26% (258/989), 20% (197/989) and 9% (85/989) of patients were positive for rhinovirus, respiratory syncytial virus and adenovirus, respectively.

Unlike the 2013 influenza season, where influenza A (H1N1)pdm09 predominated, the predominant circulating virus this season so far has been influenza A(H3N2). Throughout the 2013-2014 northern hemisphere season, the majority of viruses that were characterised antigenically matched the recommended candidate viruses for the 2013-2014 vaccine. However, there was limited antigenic drift

detected for the circulating viruses, compared to the vaccine viruses (<http://www.who.int/wer/2014/wer8923.pdf>, http://www.who.int/influenza/vaccines/virus/recommendations/2014_15_north/en/). Given the close antigenic similarity of viruses tested compared to those contained in the trivalent vaccine, the vaccine viruses recommended by the World Health Organization (WHO) for the 2014-15 northern hemisphere influenza season are the same as those for the northern hemisphere 2013-14 influenza season and 2014 southern hemisphere season (http://www.who.int/influenza/vaccines/virus/recommendations/2014_15_north/en/).

It remains to be seen how well our circulating 2014 season viruses match the current recommended vaccine.

Source: Centre for Respiratory Diseases and Meningitis, NICD-NHLS

b Meningococcal disease

In South Africa, meningococcal disease is endemic and cases occur year-round, but with seasonal peaks in winter and early spring. In addition, there is a natural cyclical pattern of meningococcal disease with peaks of disease occurring every 5 to 10 years. Current rates of meningococcal disease in South Africa are at a nadir and we are expecting an increase in rates, based on known periodicity.

A small increase in reported numbers of meningococcal disease cases was noted over the last few weeks. Overall reported numbers, however, remain lower than in 2013. There are inherent delays in laboratory-based reporting, which lags behind clinical reports; in addition, because our laboratory-based surveillance system excludes disease diagnosed clinically without laboratory confirmation, reported rates represent a minimum estimate of the true burden of disease.

By the end of epidemiological week 31 (week ending 31 July 2014), a total of 80 laboratory-confirmed cases was reported to the Centre for Respiratory Diseases and Meningitis (CRDM), NICD-NHLS (Table 2). The highest burden of disease is among the <1 year age group, where 12 (15%) cases have been reported so far. This is lower than the number of cases reported for the equivalent time period and age group in 2013 (n=26, 21%).

The reported cases were caused by diverse serogroups, which is in keeping with sporadic endemic disease in the country. Serogroup data were available for 38/80 (48%) cases. Serogroups B, C and W* have been identified most commonly this year (11/38, 29% serogroup B; 9/38, 24% serogroup C and 11/38, 29% serogroup W*). There were also 6 cases of serogroup Y and 1 case of serogroup X disease.

Healthcare workers should have a high index of suspicion for meningococcal disease in patients who present with an acute febrile illness and nonspecific early signs and symptoms. Disease typically has a rapid progression and should be managed as a medical emergency in order to reduce morbidity and mortality. All cases of suspected and/or confirmed meningococcal disease (meningitis and sepsis) should be notified telephonically to the Department of Health.

Table 2: Number of laboratory-confirmed meningococcal disease cases reported until end of week 31, 2013 and 2014, by province

Province	Year	
	2013	2014
Eastern Cape	25	18
Free State	10	3
Gauteng	28	22
KwaZulu-Natal	22	5
Limpopo	0	0
Mpumalanga	2	1
Northern Cape	1	0
North West	4	0
Western Cape	29	31
	121	80

*Previously known as serogroup W135. Harrison OB, EID 2013: 19(4) 566-573

Source: Centre for Respiratory Diseases and Meningitis, NICD-NHLS