Influenza surveillance

Since the start of the 2013 influenza season in epidemiologic week 17 (week starting 22 April 2013), influenza A(H1N1)pdm09 has predominated nationally followed by influenza A(H3N2) then influenza B. Influenza activity peaked in epidemiologic week 24 (week ending 16 June 2013), when the detection rate was 64%, with influenza A (H1N1)pdm09 predominating. A slight increase in activity has been observed since the beginning of August 2013 due to increased circulation of influenza A(H3N2) and influenza B, accounting for 52% and 25% of detections respectively during this period (Figure 1). This change in predominant circulating influenza subtype has been noted in both influenza-like illness (ILI) and in severe acute respiratory illness (SARI) patients (Figures 1 and 2).

For the period 1 January 2013 to 1 September 2013, influenza has been detected in 782 (46%) specimens of 1 698 patients presenting with ILI from all nine provinces: influenza A(H1N1)pdm09 in 599/782 (76%) patients; influenza A(H3N2) in 115/782 (15%) patients; and influenza B in 61/782 (8%) patients. There were seven mixed infections: influenza A(H1N1)pdm09 & influenza A(H3N2) in five patients; influenza A(H1N1)pdm09 & influenza B in one patient, and influenza A(H3N2) & influenza B in one patient.

Seventy patients positive for influenza were also positive for another respiratory virus, adenovirus being the most common and accounting for 67% (47/70) of co-infections. Other respiratory viruses were detected in 356 patients negative for influenza, most commonly rhinovirus (49%, 174/356) and adenovirus (24%, 84/356).

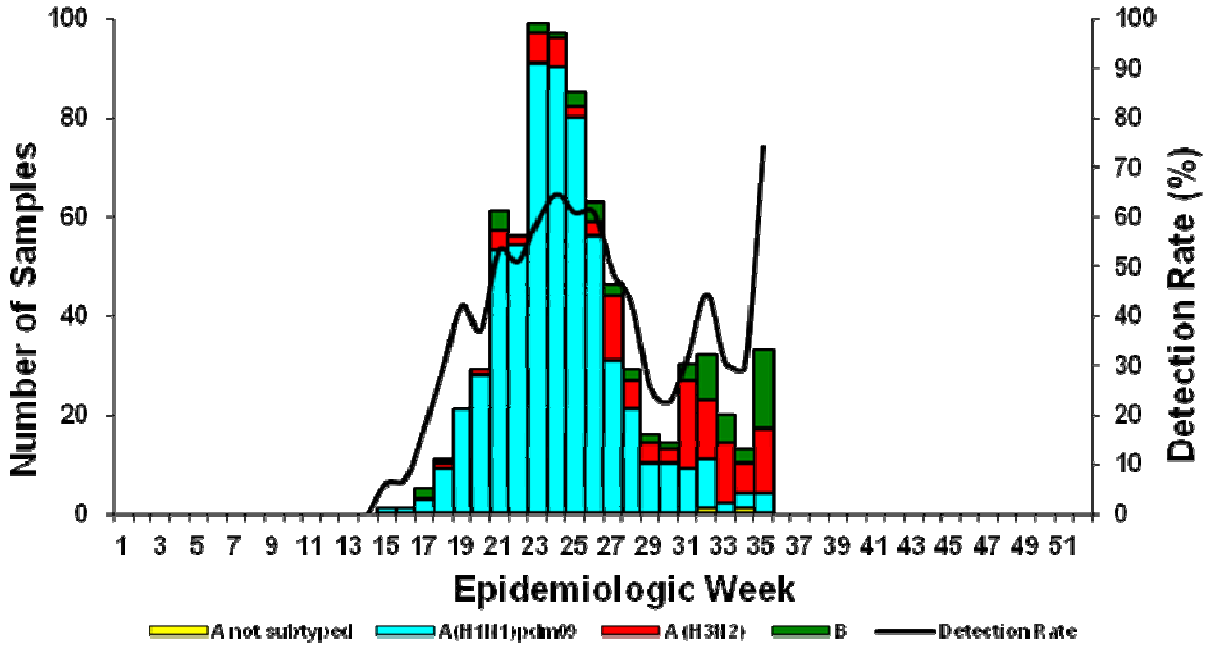

Figure 1: Number of positive samples by influenza types and subtypes and influenza detection rate by week, Viral Watch Programme, South Africa, 2013

For the period 1 January 2013 to 1 September 2013, 2 263 patients admitted with SARI were enrolled at the five sentinel sites. Although influenza detection in this group of patients was much lower than that seen in the patients with a mild presentation (ILI), a similar pattern of influenza circulation was seen, with influenza A(H1N1)pdm09 predominating initially followed by influenza A(H3N2) and influenza B circulation later in the season. Overall, influenza A(H1N1)pdm09 was detected in 4% (92/2 263) of patients, followed by influenza A (H3N2) in 1% (24/2 263)) and influenza B in <1 % (7/2 263). There was one mixed infection of influenza A(H1N1)pdm09 and A(H3N2). There were two cases of influenza A detected that were not subtyped. Other respiratory viruses were detected in samples of 1 787 patients; rhinovirus accounted for 35% (653/1 787) followed by respiratory syncytial virus 24% (420/1 787) and adenovirus 23% (404/1 787).

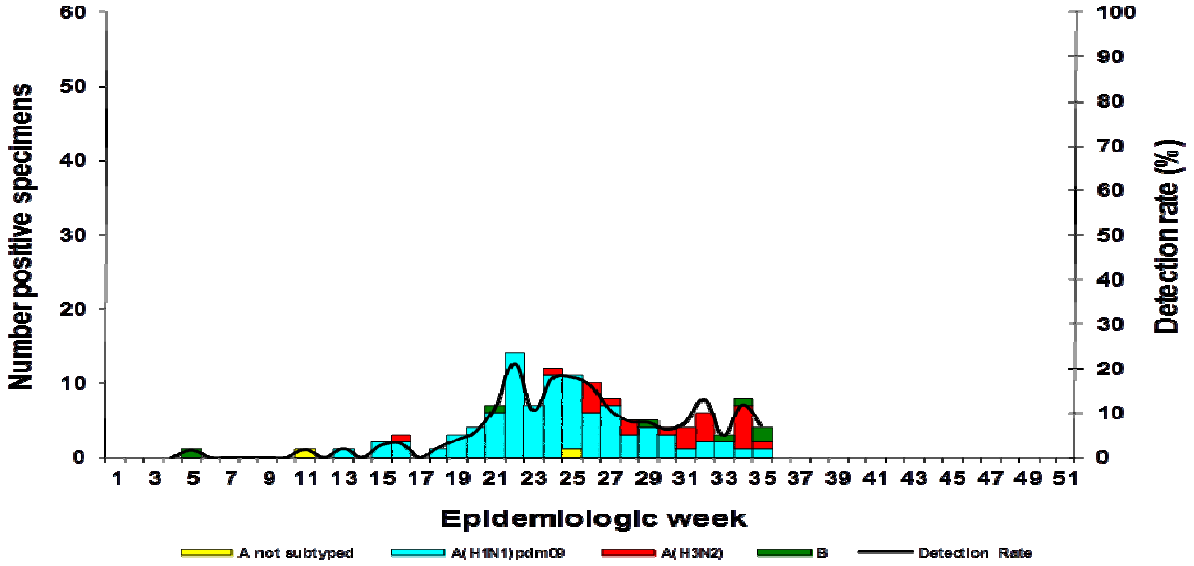

Figure 2: Number of positive samples by influenza types and subtypes and detection rate by week, SARI, South Africa, 2013

Although influenza circulation has started to decrease, influenza cases continue to be detected and clinicians are advised that they should consider influenza in their differential diagnosis for patients presenting with ILI and SARI. Early treatment with influenza antivirals should be considered in patients admitted with SARI who are at increased risk of influenza-associated disease and complications.

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