Summary of the 2018-19 influenza season in Wales

This web page provides an epidemiological summary of the 2018-19 influenza season in Wales and the 2018-19 influenza vaccination campaign in Wales. To access the full surveillance report upon which this information is based, please visit:
https://www.wales.nhs.uk/sites3/page.cfm?orgid=457&pid=55714

If you require a Welsh language translation of any specific aspect of the full surveillance report, please contact: surveillance.requests@wales.nhs.uk

The season

The 2018/19 influenza season in Wales was less severe than the 2017/18 season, although it still presented a significant burden of disease. There were fewer cases diagnosed in general practices, confirmed in hospitals or confirmed in Intensive Care Units than in 2017/18. The intensity of the season, according to at least some surveillance indicators, appeared similar to the 2015/16 and 2016/17 seasons. However, the numbers of cases diagnosed in the community and confirmed in hospitals, were higher than all seasons after 2010/11 and prior to 2017/18. There were fewer outbreaks of influenza reported to Public Health Wales this season, compared to last. The proportion of outbreaks which were in care homes decreased from 2017/18, whereas the proportion reported in hospitals increased.

Surveillance indicators of circulation in the community began to increase from mid-December and by Christmas week had exceeded the threshold to indicate seasonally expected levels of influenza circulation. The weekly sentinel GP consultation rate for patients with influenza-like illness (ILI) symptoms peaked three weeks later at medium intensity levels. In total, the sentinel GP ILI consultation rate was above the threshold for seasonal activity for nine weeks, including four weeks at medium intensity. Surveillance indicators of influenza in hospital patients first exceeded the baseline threshold and peeked at a similar time and intensity level to surveillance indicators in the community. However, there was an extended tail to the season in hospitals, with the proportion of patients testing positive for influenza not returning to baseline levels for an additional 10 additional weeks. There was a change in testing patterns in hospitals this season, with the roll-out of rapid testing services for influenza. The subsequent increase in the number of tests being carried out will have contributed to the overall number of patients confirmed in hospitals this season and care should be taken when making comparisons to previous seasons. Due to this change in testing patterns, there was a higher proportion of influenza A viruses detected in patients attending hospitals that were not further subtyped this season.

Overall, influenza A(H1N1)pdm09 was the dominant influenza type for the 2018/19 season, however the proportion of cases which were accounted for by A(H3N2) increased throughout February and it was the dominant influenza virus detected for the latter weeks of the season. Only small numbers of sporadic cases of influenza B were confirmed in Wales this season.

Genetic characterisation of influenza viruses from confirmed cases suggested that A(H1N1)pdm09 viruses were similar to the 2018/19 Northern hemisphere vaccine strain. There was evidence of some genetic diversity within influenza A(H3N2) viruses. The majority of influenza A(H3N2) characterised belonged to the 3C.2a1b clade, however, there was smaller numbers of 3C.2a2 and 3C.3a viruses seen. The 2018/19 Northern hemisphere influenza A(H3N2) vaccine strain was a 3C.2a virus and the recommended influenza A(H3N2) vaccine strain for the 2019/20 Northern hemisphere influenza vaccine is a 3C.3a virus.

Vaccination uptake

Again, influenza vaccination was received by more individuals in at-risk and recommended groups last season than ever before. An estimated 868,668 people were vaccinated, representing 28% of

the population of Wales. In those aged 65 years and older, 68.3% were vaccinated (457,200 individuals), a small decrease from last season which saw the highest ever uptake in this group. Uptake for clinical risk groups also decreased slightly to 44.1% (192,352 individuals) this season.

The childhood influenza vaccination programme this season was fully extended to all children aged two to 10 years, 209,066 of whom received vaccination. Uptake in two and three year olds was 49% and in four to 10 year olds increased to 70%. Coverage of influenza vaccination in pregnant women was stable at 74%, estimated in an annual point of delivery (post-natal) survey. In front-line NHS staff uptake decreased to 56%, after a long-term positive trend up to 2017/18.

Vaccine effectiveness

The provisional end of season estimate for effectiveness of 2018/19 seasonal influenza vaccine in the UK was 44.3% (95% CI 26.8% to 57.7%) against all laboratory-confirmed influenza. Against influenza A(H1N1)pdm09 specifically, effectiveness was 45.7% (95% CI 26.0% to 60.1%) against influenza A(H3N2) it was 35.1% (95% CI
-3.7% to 59.3%).

This is the first season that an adjuvanted inactivated trivalent influenza vaccine was available in the United Kingdom and recommended for patients aged 65y and older and vaccine effectiveness within this group was estimated to be 62.0% (95% CI: 3.4%, 85.0%) against any influenza type. Effectiveness of the Live Attenuated Intranasal Vaccine spray was estimated to be 48.6% (95% CI: -4.4%, 74.7%) in two to 17 year olds.