

Influenza; Reflection on 2017/18 season and planning for 2018/19

SUMMARY

- 1.1 Levels of influenza like illness are unpredictable and vary annually, resulting in varying levels of associated morbidity and mortality.
- 1.2 Most cases in the UK tend to occur during an eight- to ten-week period during the winter, however the timing and extent and severity of the 'season' can vary.
- 1.3 In the 2017 to 2018 season, moderate levels of influenza activity were observed in the UK with co-circulation of influenza B and influenza A (H3).
- 1.4 Very high levels of hospital and Intensive Care Unit (ICU) admissions were experienced during 2017/18. The highest number of cases were observed in those aged 65 years and over.
- 1.5 The UK reported that the majority of circulating influenza strains were genetically similar to the vaccine strains in the trivalent and quadrivalent vaccines respectively.
- 1.6 Changes to the recommended vaccines for 2018/19 aim to support improved protection for at risk groups.

RECOMMENDATION

- 2.1 To note the reflection on

The Health and Wellbeing Board support the prioritisation of influenza vaccination where possible, including;

- Ensuring high coverage of flu vaccination amongst front line employees within health and social care.
- Ensuring high coverage of flu vaccination amongst at risk groups.
- Support national flu vaccination communications and proactive media engagement.

REASONS FOR RECOMMENDATION

- 3.1 To ensure that the Health and Wellbeing Board supports efforts to reduce the impact

of influenza on the population and its associated health and social care services.

SUPPORTING INFORMATION

4.1 Background

Influenza is an acute viral infection of the respiratory tract, with three types of virus A, B and C. Influenza A and influenza B are responsible for most clinical illness. Influenza is highly infectious and the risk of serious illness from influenza is higher amongst children under six months of age, older people and those with underlying health conditions such as respiratory or cardiac disease, chronic neurological conditions, or immunosuppression and pregnant women.

Those at the highest risk of complications due to influenza include individuals with liver disease, immunosuppression, neurological disease and renal disease. Influenza during pregnancy may also be associated with perinatal mortality, prematurity, smaller neonatal size and lower birth weight.

Influenza vaccination

Seasonal influenza vaccine is modified annually to match predicted strains of influenza for the coming season. The programme aims to protect those who are most at risk of morbidity and mortality associated with influenza. The programme is offered to;

- Those aged 2-64 years with long term conditions
- Pregnant women
- Individuals over 65 years
- Children aged 2 years to school year 5 as part of a childhood vaccination programme.

The childhood vaccination programme offers vaccination to all children aged 2 years to school year 5, using a live attenuated vaccine. The programme aims to provide protection to children and reduce influenza spread within the community. Evidence from the childhood influenza programme showed reductions in GP consultations for influenza like illness of 94% in the school age group and 59% amongst the wider adult population, and reductions in A&E attendance for respiratory illness of 74%.

Seasonal flu vaccination is delivered collaboratively by GP practices, Pharmacies, maternity providers, School immunisation teams and Social Care providers.

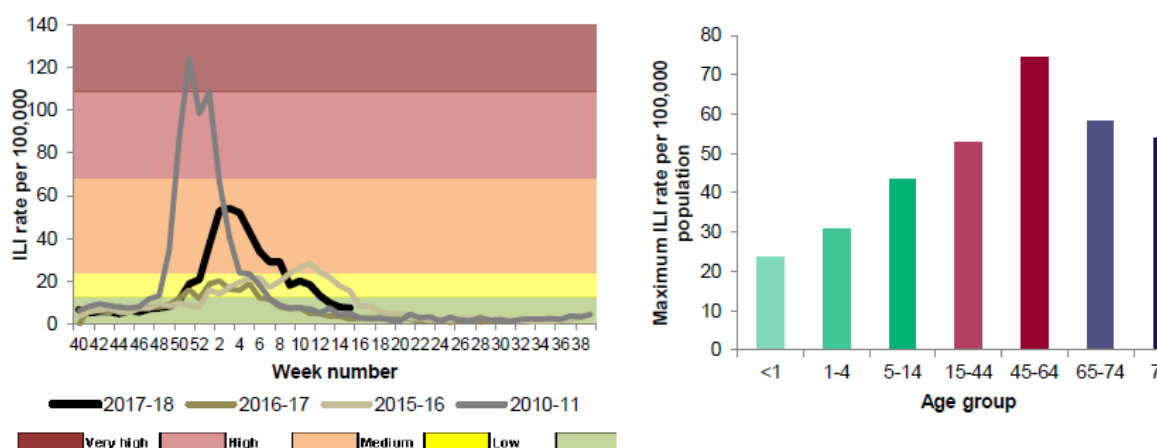
Seasonal flu vaccination is a statutory requirement for employers of health and social care employees identified as at potential risk of influenza, and provides employee health and business continuity benefits as well as protecting vulnerable service users. Health and social care workers may transmit the illness to patients even if they are mildly or sub-clinically infected.

4.2 Influenza trends 2017/18

Moderate levels of influenza activity were seen in the community in the UK in 2017 to 2018, with influenza B and influenza A(H3N2) being the predominant viruses circulating throughout the season, together with some influenza A(H1N1) circulation. The UK reported that the majority of circulating influenza strains were genetically similar to vaccine strains in the trivalent and quadrivalent vaccines respectively.

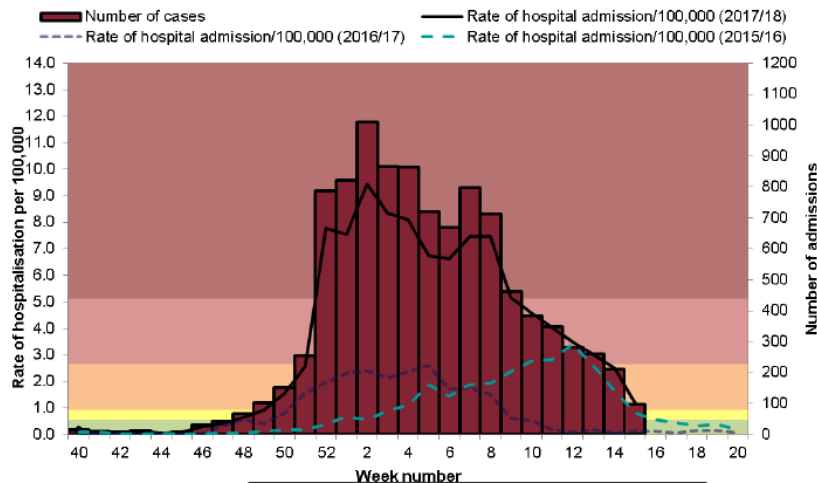
Figure 1 shows weekly GP influenza like illness rates, which increased around week 51 (2017), peaking in week 03 (2018) at 54.1 per 100,000 (medium). This was the highest peak rate seen since the 2010 to 2011 season. The highest rates were seen amongst those aged 45-64 years, differing to the 2016/17 season where the highest rates were seen amongst those aged under 1 year and over 75 years (Figure 1).

Figure 1; Weekly all age GP influenza-like illness rates for 2017 to 2018 and past seasons, and peak rates by age group in 2017 to 2018, England (RCGP)



ICU/HDU case numbers and admission rates peaked in week 02 2018, which fell above the very high impact threshold (Figure 2). 3,454 ICU/HDU admissions in the UK were reported, the majority were due to influenza A (1,806; 52.3%), with the remainder due to influenza B (1,648; 47.7%). ICU/HDU admissions occurred in all age groups, however those aged 65+ years made up 42.0% of all cases and a further 32.0% in those age 45-64 year olds.

Figure 2; Weekly number of influenza confirmed admissions to hospital through the USSS sentinel scheme in England, with crude hospitalisation rate, week 40 2017 to week 15 2018



Moderate levels of circulating flu in the community, with health impacts seen predominantly in older adults resulted in an increased number of care home outbreaks. Such outbreaks can result in closures of beds and associated impacts on Acute Trust discharges, as well as implications for the health service resulting from illness within effected residents.

Increases in influenza vaccination uptake were observed across Derby City for 17/18, with uptake across all cohorts being higher than the national average.

Southern Derbyshire CCG saw increased uptake in the over 65s, at risk, pregnant women and 2 and 3 year old cohorts. Uptake of the school aged childhood vaccination programme also saw an increase in 2017/18. Influenza uptake figures for 2017/18 can be found in Appendix 2.

4.3 ***Changes to 2018/19 programme***

There is considerable evidence that immune responses to vaccination decline substantially with age. The Joint Committee on Vaccination and Immunisation (JCVI) have recommended the use of the adjuvanted trivalent vaccine for those over 65 years for the 2018/19 season. An adjuvant is a substance that is added to a vaccine to increase the body's immune response to the vaccine.

In light of an independent cost-effectiveness study, quadrivalent vaccination (providing protection against four strains) has been recommended for those aged 18-65 years in an at risk group for the 2018/19 season.

CCGS have been working with NHS England to ensure primary care services have adequate supplies of the recommended vaccines available for the 2018/19 season.

OTHER OPTIONS CONSIDERED

5.1 Not Applicable

This report has been approved by the following officers:

| | |
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| Legal officer Financial officer Human Resources officer Estates/Property officer Service Director(s) Other(s) | Dr Cate Edwynn, Director of Public Health Dr Robyn Dewis, Consultant in Public Health Medicine |
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| For more information contact: Background papers: List of appendices: | Jane Careless 07814141624 jane.careless@derby.gov.uk None Appendix 1 - Implications |
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Appendix 1

IMPLICATIONS

Financial and Value for Money

1.1 None

Legal

2.1 None

Personnel

3.1 None

IT

4.1 None

Equalities Impact

5.1 None

Health and Safety

6.1 None

Environmental Sustainability

7.1 None

Property and Asset Management

8.1 None

Risk Management

9.1 None

Corporate objectives and priorities for change

10.1 Support strategies to reduce morbidity and mortality and address inequalities.

Appendix 2

Southern Derbyshire CCG Influenza uptake

| Cohort | Uptake |
|---------------------------|---------------|
| Over 65yrs | 75% |
| Pregnant Women | 51.1% |
| 2 year olds | 50% |
| 3 year olds | 49.1% |
| Under 65yrs at risk group | 52.5% |