

# Transmit

## Health protection service bulletin

March 2018: Issue 1

### Foreword

The first article describes the epidemiology of influenza during the current flu season based on information from several enhanced systems. We are now at half way through the current flu season and activity is decreasing. At the onset of the flu season, Influenza A (H3) was the predominant circulating strain, followed by a substantial proportion of influenza B later in the season.

The next article has guidance about the treatment of Gonorrhoea. The PHA and GUM strongly advise that any diagnoses of gonorrhoea made outside the GUM service are referred to GUM for a specimen to be taken for culture, and for appropriate treatment and follow up of the case and their contacts. The article highlights the problem of antibiotic resistant gonorrhoea.

The final article in this edition provides an update on Scarlet fever including local incidence so far in 2018 and key information about this common childhood infection caused by *Streptococcus pyogenes* (also known as group A Streptococcus).

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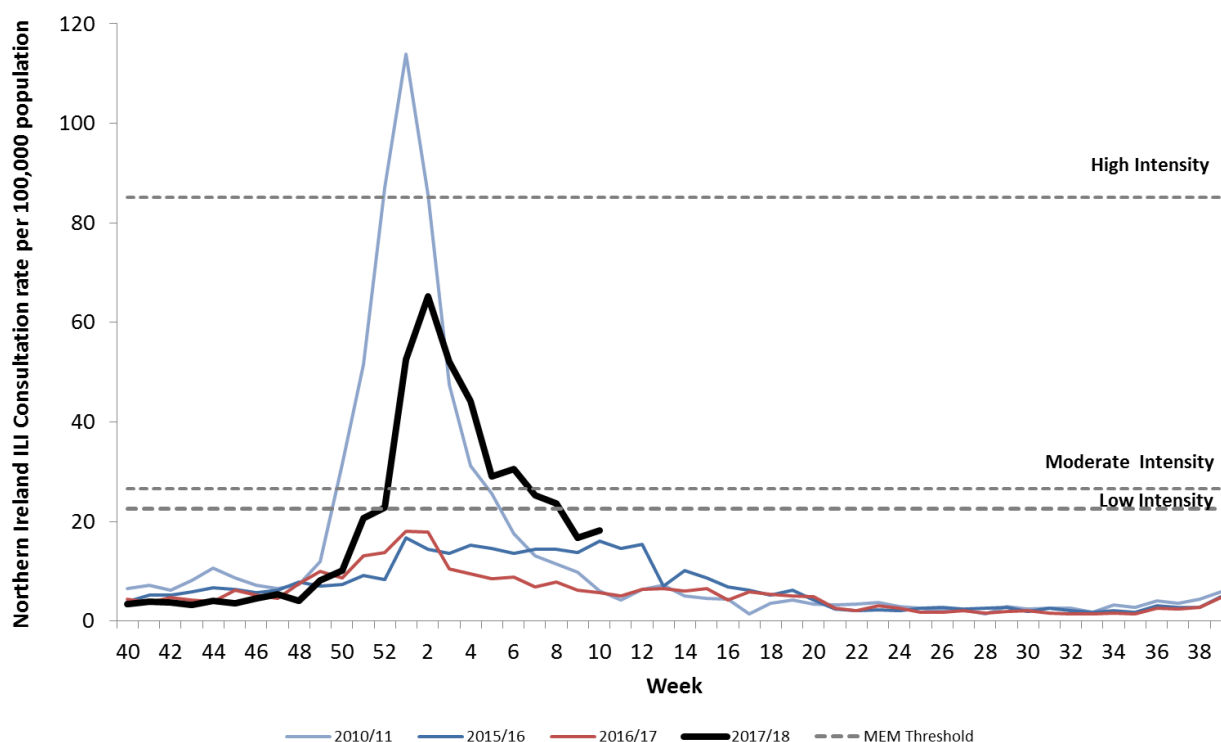
## Influenza mid-season 2017/18

Influenza activity in Northern Ireland (NI) is monitored throughout the influenza season to inform public health action and to prevent spread of the infection. The season typically runs from week 40 to week 20, with this year's season commencing on 2<sup>nd</sup> October 2017.

Several enhanced surveillance systems are used to monitor influenza activity in NI, all contributing to the measurement extent and severity of influenza activity in the community and its impact on population and health and social care.

We are now approximately half way through this season (week 10) and although influenza activity is decreasing, this season was marked by elevated activity levels not seen over the last few seasons.

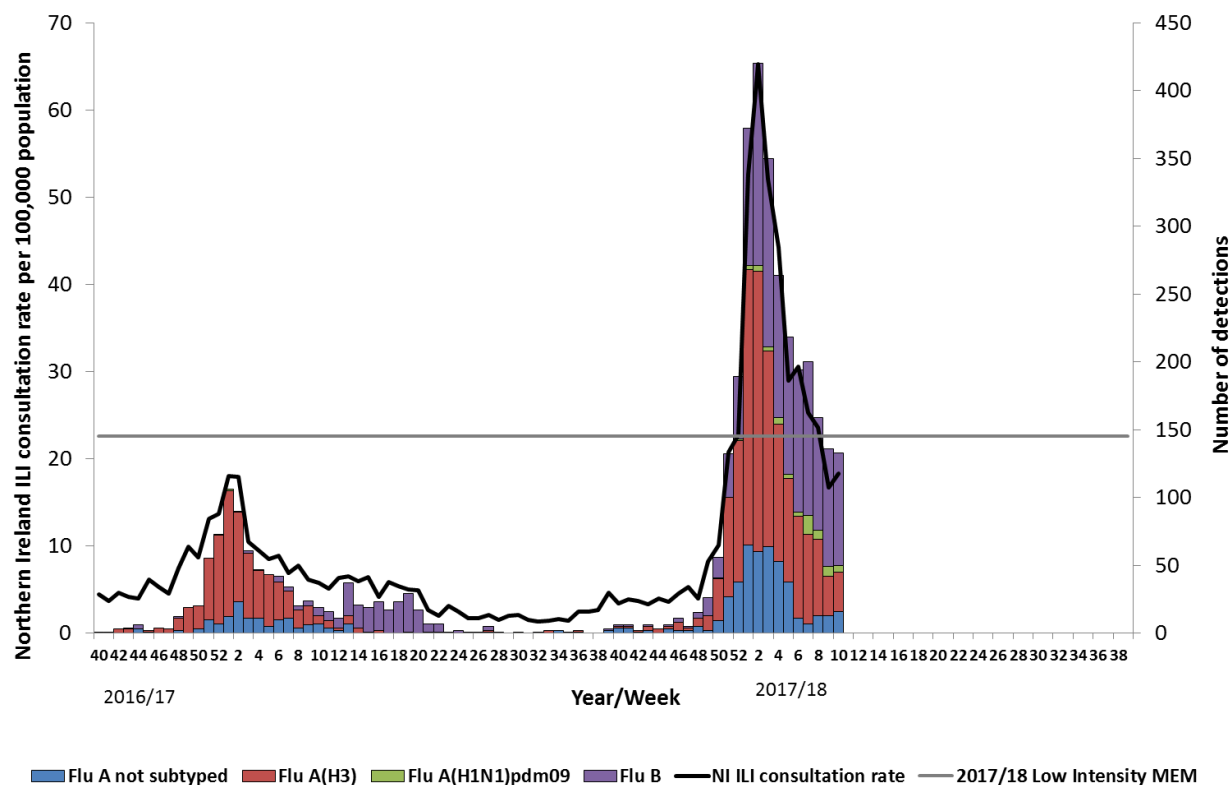
**Figure 1. Northern Ireland GP consultation rates for flu/FLI, 2015/16 - 2017/18**



Primary care activity started to increase in late December (week 51, 2017) with influenza like illness (ILI) consultation rates peaking in mid-January (week 2, 2018) at 65.2 per 100,000 population. The peak ILI consultation rates in previous seasons were 18.1 per 100,000 (2016/17) and 16.7 per 100,000 (2015/16). Rates remained above the baseline Moving Epidemic Method (MEM) threshold for Northern Ireland this season (22.58 per 100,000), indicating normal seasonal activity, for nine consecutive weeks. However, rates remained below the peak rate of 113.9 per 100,000 in 2010/11 when the A(H1N1) strain was circulating (Figure 1).

ILI consultation rates were most predominantly seen in those aged 45-64 years, with the highest level of influenza activity also seen in this age group, peaking at 89.9 per 100,000 in week 2, 2018.

**Figure 2. Northern Ireland GP consultation rates for flu/ILI and number of virology 'flu' detections from week 40, 2016**



Influenza A (H3) was the predominant circulating strain earlier in the season, followed by a substantial proportion of influenza B later in the season (Figure 2). Up to week 10, the number of positive influenza laboratory detections was 2909, compared to 689 during the same period in the 2016/17 season. Influenza A (H3) and influenza B accounted for 42% and 41% of this total respectively, compared to 77% and 4% respectively during the same period in the 2016/17 season. This may change as overall detections of influenza A continues to decrease.

The number of admissions to Intensive Care Units/High Dependency Units (ICU/HDU) with laboratory confirmed influenza was higher at this point in the season (week 10, 2017/18) than in the previous two seasons at 104 cases compared to 39 and 81 cases respectively. Up to week 10, there have been 18 deaths in ICU in which a diagnosis of influenza was confirmed compared to seven and nine deaths respectively in the previous two seasons during the same period.

Up to week 10, 2018 there have been a total of 38 confirmed influenza outbreaks in care homes. This compares with 2016/17 and 2015/16 season when there was 11 and five confirmed influenza outbreaks respectively.

Overall, influenza activity this season appears to have peaked with indicators continuing to show a decline in intensity. Surveillance reporting will continue for the remainder of the season up to week 20.

The weekly/fortnightly 'flu bulletin' and the annual influenza report for Northern Ireland is the main source of information in relation to seasonal influenza and can be accessed through the following web link:

<http://www.publichealth.hscni.net/directorate-public-health/health-protection/seasonal-influenza>

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### **Management of Gonorrhoea**

PHA and the GUM service strongly advise that any diagnoses of gonorrhoea made outside the GUM service are referred to GUM for further management.

This is now particularly important as a small number of cases of high level azithromycin resistant gonorrhoea have been diagnosed in Northern Ireland. Also, recently, a case of multi-drug resistant gonorrhoea has been diagnosed in a person living in England.

Cases of gonorrhoea require culture to determine antibiotic susceptibility, treatment with a combination of antibiotics, and should have a repeat test around two weeks after treatment to confirm treatment success. GUM services are also best placed to trace the case's sexual contacts within the three months prior to the case diagnosis and offer them testing and treatment.

GUM service contact details are available at:

<https://sexualhealthni.info/gum-clinics-northern-ireland>

Current clinical guidelines for the detailed management of gonorrhoea can be found at:

<https://www.bashhguidelines.org/current-guidelines/urethritis-and-cervicitis/gonorrhoea-2011/>

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## Scarlet fever update

Scarlet fever is a common childhood infection caused by *Streptococcus pyogenes* (also known as group A Streptococcus [GAS]). These bacteria may be found on the skin, throat and other sites where they can live without causing problems. Under some circumstances GAS can cause non-invasive infections such as pharyngitis, impetigo and scarlet fever. On rare occasions they can cause severe disease, including streptococcal toxic shock syndrome, necrotising fasciitis, and septicaemia.

Scarlet fever was once a very common and dangerous disease in the UK, but antibiotic treatment means it is now much less serious.

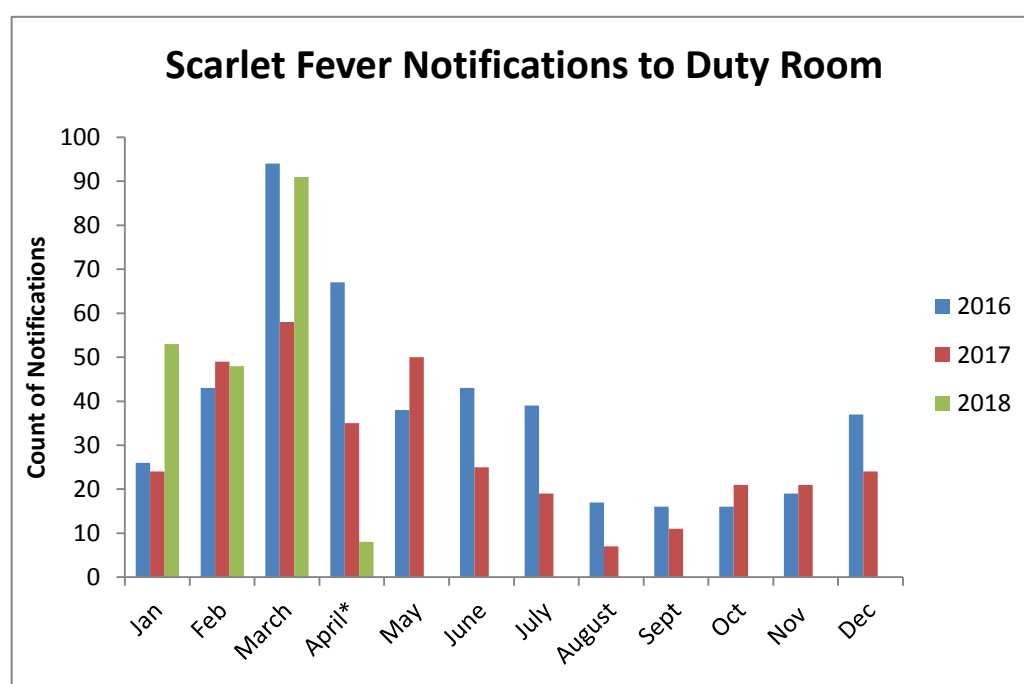
The local incidence of based on statutory notifications to the Public Health Agency is shown in Table 1 and Figure 1.

### Scarlet Fever Notifications to Duty Room by Month

	Jan	Feb	Mar	Apr*	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
<b>2016</b>	26	43	94	67	38	43	39	17	16	16	19	37
<b>2017</b>	24	49	58	35	50	25	19	7	11	21	21	24
<b>2018</b>	53	48	91	8								

\*April 2018 is not a complete month. Correct 04/04/2018

**Figure 1: Scarlet Fever Notifications to the Duty Room**



\*April 2018 is not a complete month. Correct 04/04/2018

## **Key information about Scarlet fever**

The symptoms of scarlet fever are non-specific in early illness and may include sore throat, headache, fever, nausea and vomiting. After 12 to 48 hours the characteristic red, generalised pinhead rash develops, typically first appearing on the chest and stomach, rapidly spreading to other parts of the body, giving the skin a sandpaper-like texture. On more darkly-pigmented skin, the scarlet rash may be harder to spot, although the “sandpaper” feel should be present. Patients typically have flushed cheeks and pallor around the mouth. This may be accompanied by a ‘strawberry tongue’. During convalescence peeling of the skin may occur at the tips of fingers and toes and less often over wide areas of the trunk and limbs.

Although scarlet fever is usually a mild illness, some patients may require hospital admission to manage symptoms or complications. These include ear infection, throat abscess (quinsy), pneumonia, sinusitis or meningitis. Whilst such complications arise in the early stages, sequelae including acute glomerulonephritis and acute rheumatic fever can arise at a later stage. Prompt treatment with appropriate antibiotics significantly reduces the risk of complications. Clinicians should advise patients, or their parents/guardians, to keep an eye out for any symptoms which might suggest these complications and to seek medical help immediately if concerned.

Medical Practitioners should notify cases of Scarlet fever to the Public Health Agency to allow identification of clusters or outbreaks and enable any further public health action.

(Adapted from: *Guidelines for the public health management of scarlet fever outbreaks in schools, nurseries and other childcare settings*. Public Health England October 2017)

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## PHA Web Links to Surveillance Data

Surveillance data on the main topics of Public Health interest are available through the following web links:

### **Notifications of Infectious Diseases:**

<http://www.publichealth.hscni.net/directorate-public-health/health-protection/notifications-infectious-diseases>

### **Group B Streptococcus:**

<http://www.publichealth.hscni.net/directorate-public-health/health-protection/group-b-streptococcus>

### **Vaccination coverage:**

<http://www.publichealthagency.org/directorate-public-health/health-protection/vaccination-coverage>

### **Avian Influenza:**

<http://www.publichealthagency.org/directorate-public-health/health-protection/avian-influenza>

### **Brucellosis:**

<http://www.publichealthagency.org/directorate-public-health/health-protection/brucellosis-human>

### **Gastrointestinal infections:**

<http://www.publichealthagency.org/directorate-public-health/health-protection/gastrointestinal-infections>

### **Hepatitis:**

<http://www.publichealthagency.org/directorate-public-health/hepatitis>

### **Healthcare Associated Infections:**

<http://www.publichealthagency.org/directorate-public-health/health-protection/healthcare-associated-infections>

### **Meningococcal disease:**

<http://www.publichealthagency.org/directorate-public-health/health-protection/meningococcal-disease>

### **Respiratory infections:**

<http://www.publichealthagency.org/directorate-public-health/health-protection/respiratory-infections>

### **Sexually transmitted infections:**

<http://www.publichealthagency.org/directorate-public-health/health-protection/sexually-transmitted-infections>

### **Tuberculosis:**

<http://www.publichealthagency.org/directorate-public-health/health-protection/tuberculosis>

## Department of Health Web Links

CMO Letters and Urgent Communications relevant to Health Protection, and issued in the three months preceding publication of this edition of Transmit, are accessible through the following web links:

### **Carbon Monoxide Poisoning**

25 October 2017

<https://www.health-ni.gov.uk/sites/default/files/publications/health/hss-md-24-2017.pdf>

### **Hepatitis B**

Health Clearance and Management

16 November 2017

<https://www.health-ni.gov.uk/sites/default/files/publications/health/hss-md-28-2017.pdf>

### **Pneumococcal Polysaccharide Vaccine**

25 October 2017

<https://www.health-ni.gov.uk/sites/default/files/publications/health/hss-md-23-2017.pdf>

### **Safe Transfusion Practice**

13 November 2017

<https://www.health-ni.gov.uk/sites/default/files/publications/health/hss-md-27-2017.pdf>

### **Seasonal Flu**

Flu Vaccination for Front Line Care Home Staff

2 November 2017

<https://www.health-ni.gov.uk/sites/default/files/publications/health/hss-md-25-2017.pdf>

We welcome your feedback on the content of Transmit.  
Please feel free to contact [emma.walker@hscni.net](mailto:emma.walker@hscni.net) with your suggestions  
or articles that you would like to see included.