

Current level of influenza activity: *Baseline activity*

Trend: *Decreasing*

Confirmed cases since 2019 week 40: 1,439 (98% influenza A and 2% influenza B. Of the influenza A cases, 13% were A(H1N1)pdm09, 72% were A(H3N2) and 15% were A(not typed).

Key points – Wales

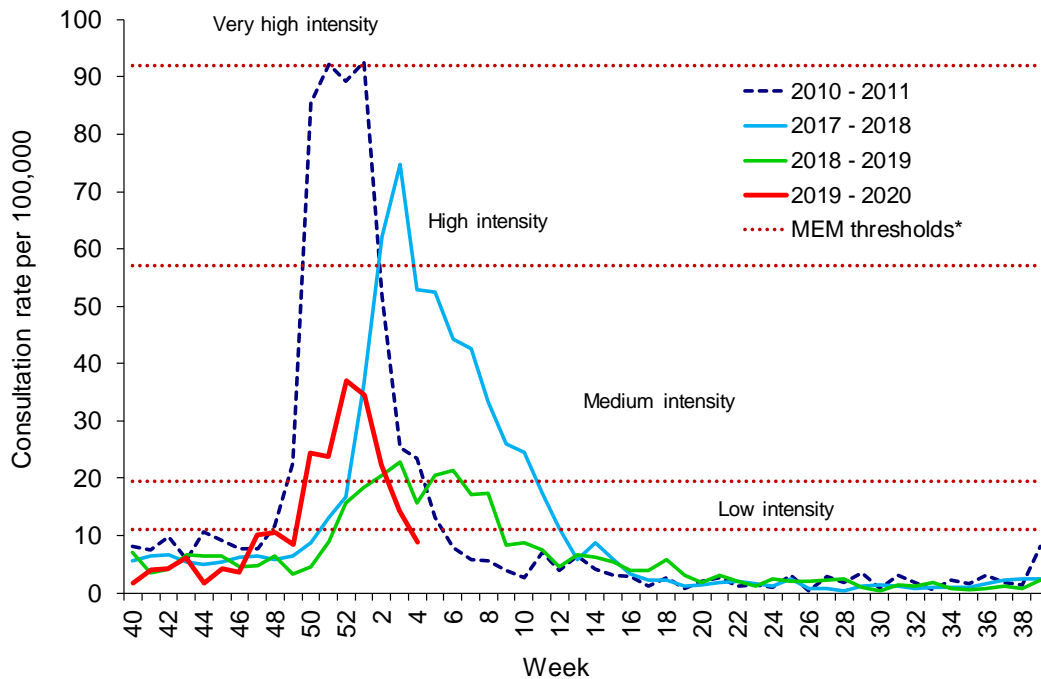
Surveillance indicators suggest that influenza is circulating in Wales.

The sentinel GP consultation rate for influenza-like illness (ILI) decreased during week 04 (ending 26/01/2020) and is now at baseline levels. During week 04, 36 cases of influenza were confirmed. Influenza was the most commonly detected cause of Acute Respiratory Infection (ARI) but other causes of ARI continue to be detected. Respiratory Syncytial Virus (RSV) activity in children under five years of age continued to decrease this week is at baseline levels.

- The Sentinel GP consultation rate for influenza-like illness (ILI) in Wales during week 04 was 8.8 consultations per 100,000 practice population (Table 1).
- The ILI consultation rate decreased compared to week 03 (14.3 per 100,000 practice population) and is now at baseline levels (Figure 1). The consultation rate was highest in patients aged 45-64 years (14.1 per 100,000 practice population) (Table 1).
- The total number of respiratory-related consultations with Out of Hours (OOH) doctors in Wales reported to Public Health Wales during week 02 (**latest data available**) was 1,875. This represents 16.8% of all 11,163 reported consultations with OOH doctors and is a decrease in the number and the proportion reported last week (Figure 7). The percentage of calls to NHS Direct Wales which were 'influenza-related' (cold/flu, cough, fever, headache and sore throat) during week 04 increased to 15.2% (Figure 8).
- Five surveillance samples from patients with ILI, collected by sentinel GPs during week 04, had been received by Public Health Wales Microbiology as at 29/01/2020. One sample tested positive for rhinovirus and the other four samples were negative for all routinely tested pathogens.
- During week 04, 318 specimens were tested by Public Health Wales Microbiology from hospitalised and non-sentinel GP patients with ARI. These figures do not include local influenza 'point of care test' results. The following numbers of patients tested positive: eight influenza A(H1N1)pdm09, 17 influenza A(H3N2), seven influenza A(not subtyped), four influenza B, 34 rhinovirus, 18 adenovirus, 15 RSV, 13 human metapneumovirus, 11 parainfluenza, seven mycoplasma and three enterovirus (Figure 4). The proportion of samples from hospital patients positive for influenza was 11%. Thirty-seven respiratory specimens were tested from patients in intensive care units (ICU), no specimens were positive for influenza A (Figure 5).
- RSV seasonal activity decreased to baseline levels during week 04. Four (7%) of 59 samples from children younger than five years with ARI tested positive for RSV during week 04 and there were 2.3 confirmed cases per 100,000 in this age-group (Figure 6). The average duration of seasonal activity is 11-13 weeks and the current season lasted 12 weeks.
- During week 04, no ARI outbreaks were reported to the Public Health Wales Health Protection team.
- At the end of 2020 week 04, uptake of influenza vaccine was: 68.4% in those aged 65 years and older, 42.2% in patients aged six months to 64 years at clinical risk, and 47.3% in children aged two and three years old. In the 1,268 primary schools visited thus far as part of the universal childhood influenza programme, uptake was 68.3%.

Influenza activity in Wales

Figure 1. Clinical consultation rate per 100,000 practice population in Welsh sentinel practices (as of 26/01/2020).

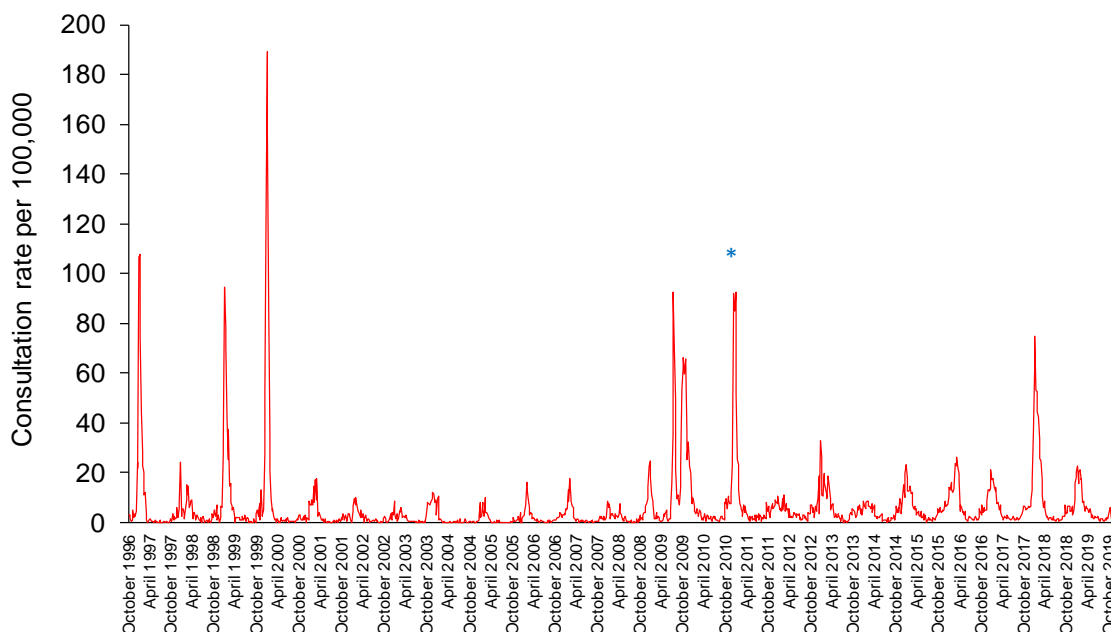


A technical issue is currently affecting data submitted from sentinel practices utilising a specific brand of GP software. As a result, since week 47, data from affected practices has been excluded from calculations of the weekly ILI consultation rate. Weekly rates from week 47 2019 to week 03 2020 are based on data from approximately 20 practices.

Week 52 and week 01 consultation rates adjusted for the reduced general practice opening hours.

* The Moving Epidemic Method (MEM) threshold calculated for Wales ILI consultation rates is 11.1 per 100,000. MEM thresholds used in this chart are based on influenza from 2010-11 to 2018-19 seasons.

Figure 2. Clinical consultation rate per 100,000 practice population in Welsh sentinel practices (week 48 1996 – week 04 2020).



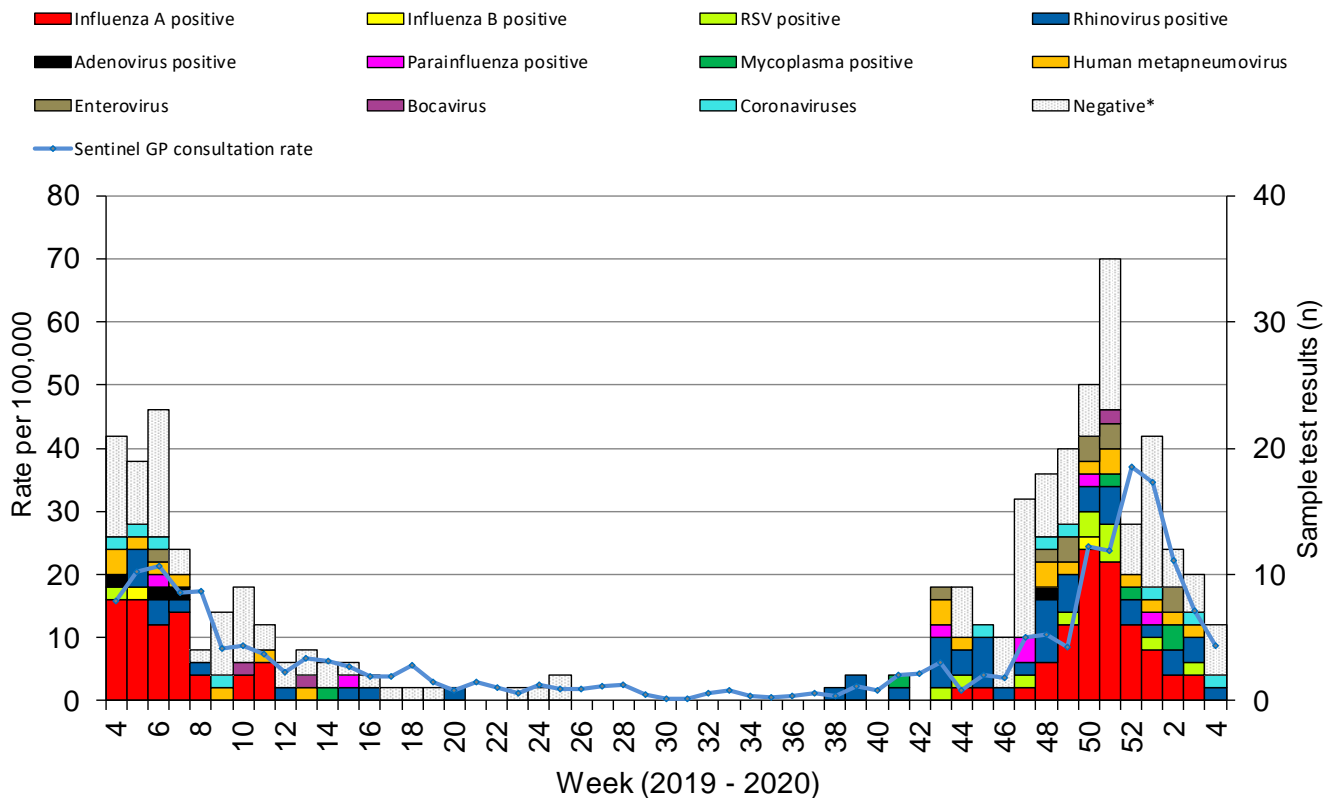
* Reporting changed to Audit+ surveillance system

Table 1. Age-specific consultations (per 100,000) for influenza in Welsh sentinel practices, week 51 2019 – week 04 2020 (as of 26/01/2020).

Age group	51	52	1	2	3	4
< 1	-	-	-	-	-	0.0
1 - 4	-	-	-	-	-	0.0
5 - 14	-	-	-	-	-	6.9
15 - 24	-	-	-	-	-	6.5
25 - 34	-	-	-	-	-	14.0
35 - 44	-	-	-	-	-	6.3
45 - 64	-	-	-	-	-	14.1
65 - 74	-	-	-	-	-	4.4
75+	-	-	-	-	-	5.0
Total	23.8	37.1	34.5	22.3	14.3	8.8

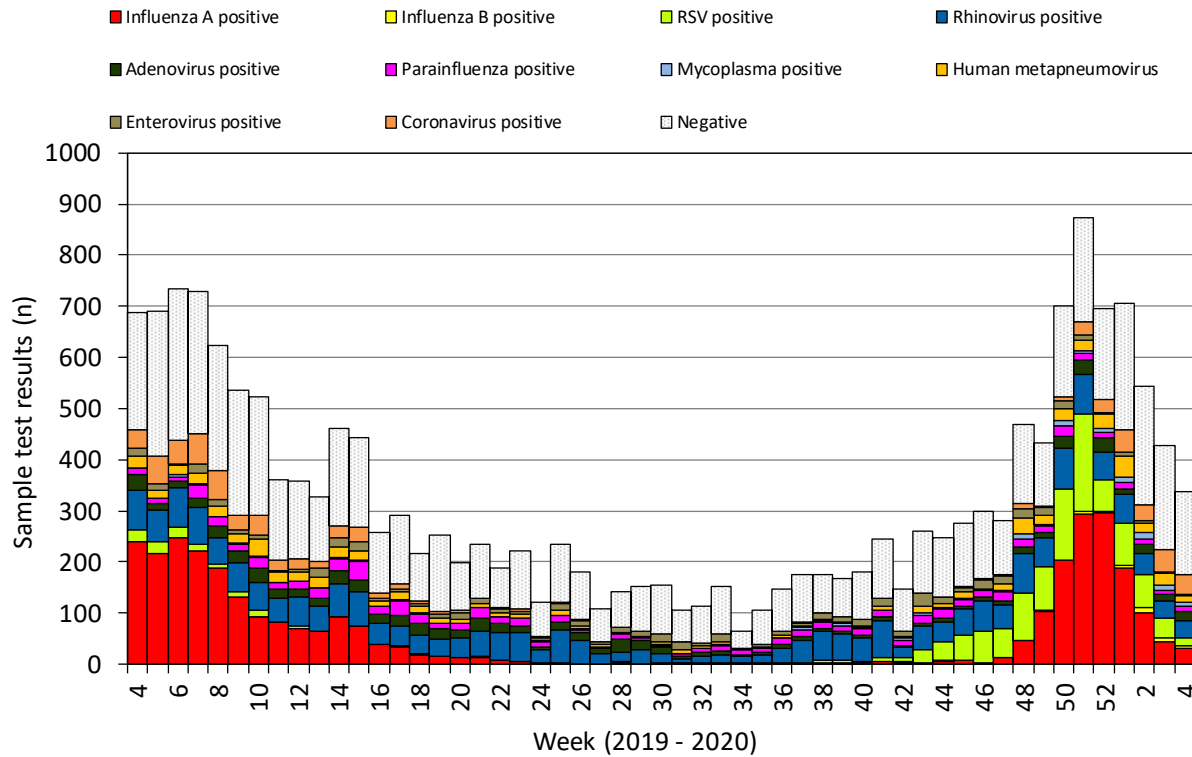
Due to the technical issue currently affecting data submitted from sentinel practices utilising a specific brand of GP software, no age breakdown is available for weeks 51 to 03.

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 26/01/2020, by week of sample collection, week 04 2019 - week 04 2020.



* Tested negative for influenza, adenovirus, rhinovirus, RSV, parainfluenza, mycoplasma, human metapneumovirus, enterovirus, bocavirus and coronaviruses.

Figure 4. Specimens submitted for virological testing for hospital patients and non-sentinel GPs as of 26/01/2020 by week of sample collection, week 04 2019 to week 04 2020.



Combined data for tests carried out in Public Health Wales Microbiology: Cardiff laboratory, provided by Public Health Wales Microbiology Cardiff Specialist Virology Centre. This chart summarises individual test results, patients who are positive for multiple infections within a given week will appear multiple times.

Figure 5. Specimens submitted for virological testing for ICU patients, by week of sample collection, week 04 2019 to week 04 2020.

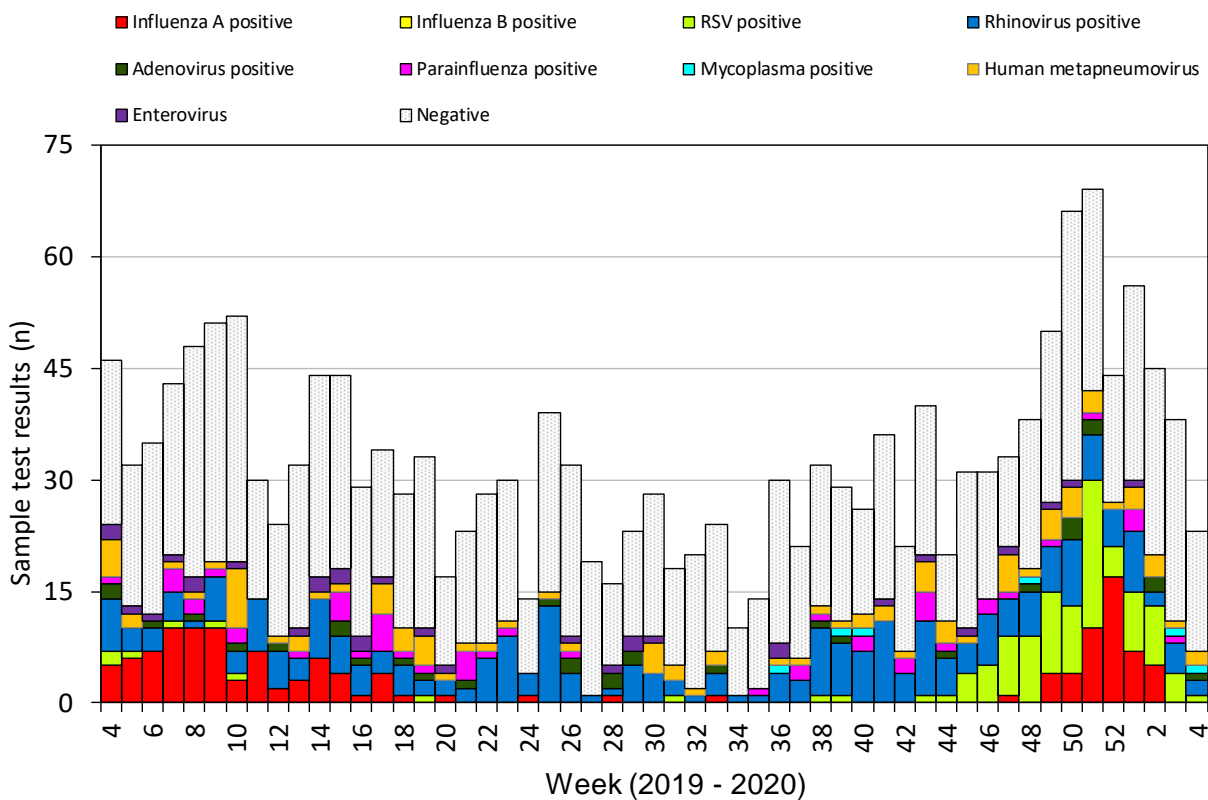
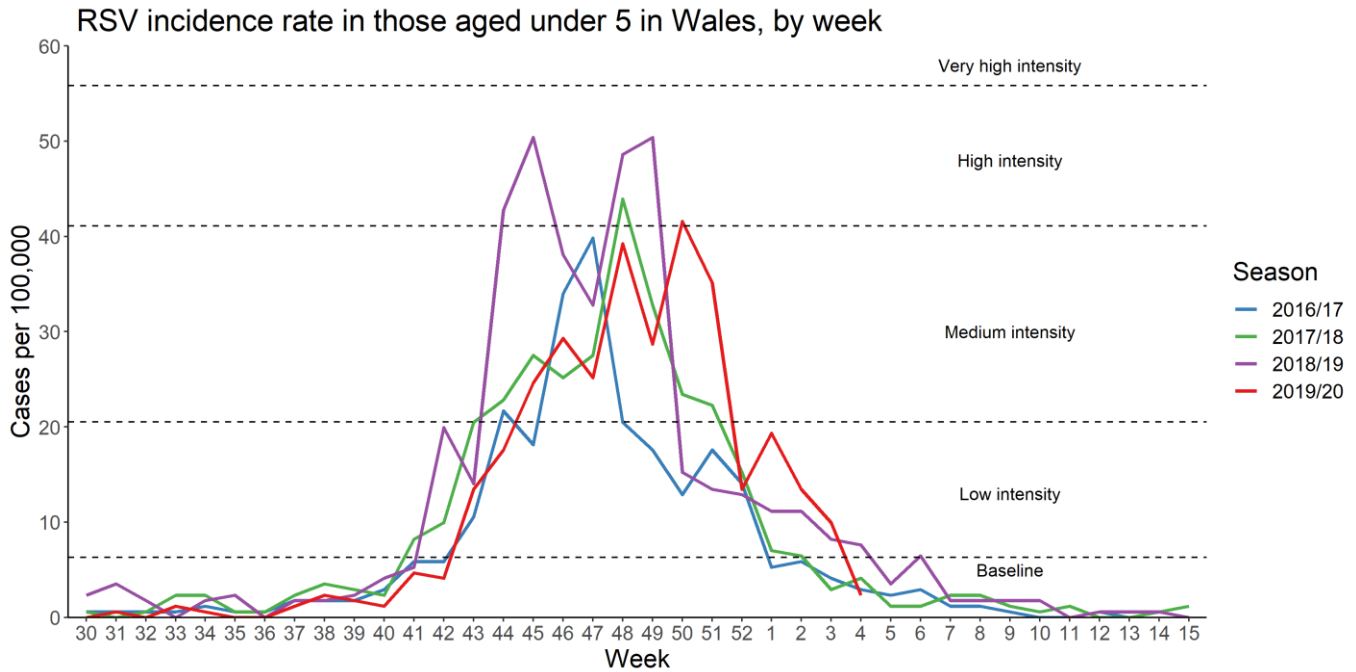


Figure 6. RSV incidence rate per 100,000 population aged under five years, week 30 2016 to week 04 2020.



Out of Hours consultations and calls to NHS Direct Wales

Figure 7. Weekly total consultations to Out of Hours services in Wales and numbers of respiratory-related diagnoses (as of 12/01/2020) (latest data available).

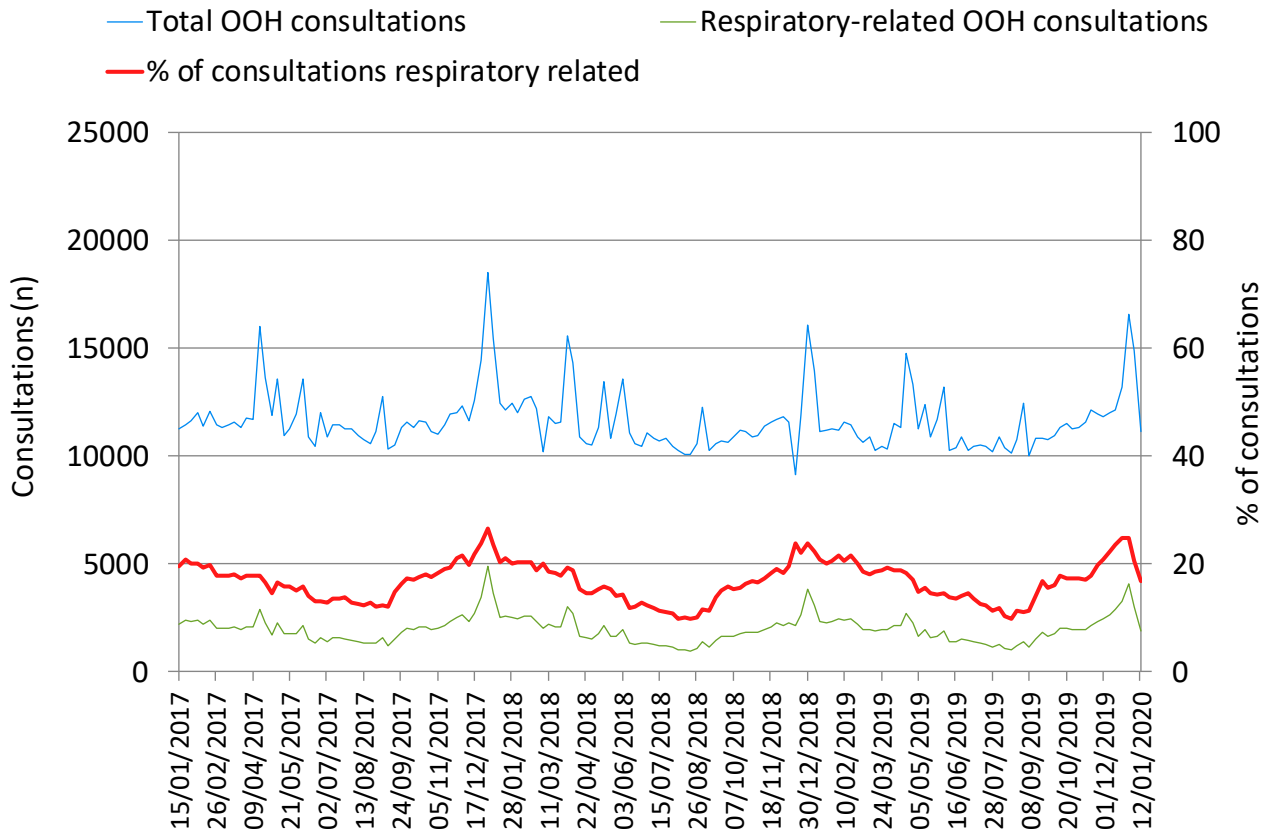
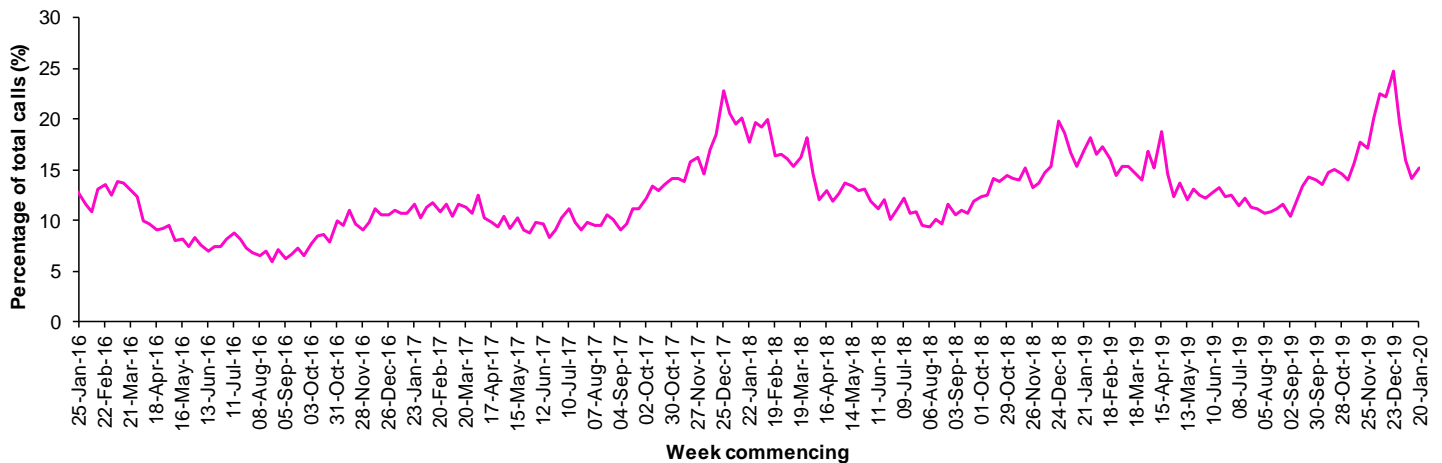


Figure 8. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from week 04 2016 - week 04 2020 (as of 26/01/2020).



¹ Data supplied by Health Statistics and Analysis Unit, Welsh Government.

Flu related calls are the sum of calls recorded as 'cold/flu', 'cough', 'headache', 'fever' and 'sore throat'.

Following changes to the NHS Direct calls system, including the start of the 111 pilot, there has been a change in the way in which denominator data are calculated for this chart, NHS Direct Wales now count the total number of nurse triaged calls (ie calls which could have symptom data recorded against them), note that 111 includes out-of-hours calls.

Influenza Vaccine Uptake in Wales

Table 2. Uptake of influenza immunisations in GP Practice patients, school children and NHS staff in Wales 2019/20 (as of 26/01/2020).

Influenza immunisation uptake in the 2019/20 season	
People aged 65y and older	68.4%
People younger than 65y in a clinical risk group	42.2%
Children aged two & three years	47.3%
Children aged four to ten years*	68.3%
NHS staff	52.9%
NHS staff who have direct patient contact	55.4%

* In school sessions carried out so far.

The end of season report Influenza in Wales 2018/19 is available to download and contains a full breakdown of vaccination uptake amongst eligible groups.

Link to report: <http://www.wales.nhs.uk/sites3/page.cfm?orgid=457&pid=55714>

- As of week 03, influenza activity continues to decrease with several indicators now below baseline levels in the UK. GP ILI consultations decreased in Northern Ireland to 13.4 per 100,000 and decreased in Scotland to 12.1 per 100,000, and remains below baseline activity in both countries. The weekly ILI GP consultation rate in England reported through the RCGP system decreased to 10.3 per 100,000 and is now below the MEM threshold for baseline activity (12.7 per 100,000). The syndromic surveillance indicator for influenza reported through the GP In Hours Syndromic Surveillance system was 9.6 per 100,000 in week 03.
- During week 03, 20 samples tested positive for influenza (seven influenza A(H1N1)pdm09, eight influenza A(H3), two influenza A(unknown subtype) and three influenza B) through the UK GP sentinel swabbing schemes, an overall positivity of 16.8%. Two hundred and twenty-seven (9.0%) of the 2,515 respiratory test results reported through Public Health England's DataMart scheme tested positive for influenza (41 influenza A(H1N1)pdm09, 90 influenza A(H3), 75 influenza A(not subtyped) and 21 influenza B). UK summary data are available from the [Public Health England National Influenza Report](#).
- The WHO and the European Centre for Disease Prevention and Control (ECDC) reported that as of week 03, activity continued to increase, with widespread influenza activity reported by the majority of countries across the WHO European Region. During week 03, a total of 2,066 sentinel specimens were tested for influenza, 921 of which were positive (427 influenza A(H1N1)pdm09, 135 influenza A(H3N2), 99 influenza A(not typed) and 260 influenza B).
Source: Flu News Europe: <http://www.flunewseurope.org/>

World update

- The WHO reported on 20/01/2020 that in the temperate zones of the northern hemisphere, respiratory illness indicators and influenza activity continued to increase in most countries. In North America, influenza activity further increased with all seasonal influenza subtypes co-circulating. In Europe, influenza activity continued to increase across the region. In Central Asia, influenza activity increased with influenza B viruses predominant. In Northern Africa, influenza activity was low overall. In Western Asia, influenza activity remained elevated overall. In East Asia, influenza-like illness (ILI) and influenza activity continued to increase overall. Activity was low overall in most Caribbean and Central American countries. In tropical South American countries, increased influenza activity was reported from Ecuador and Colombia in recent weeks. In tropical Africa, influenza activity was low across reporting countries of Eastern and Western Africa. In Southern Asia influenza activity was low across most reporting countries. In South East Asia, influenza activity continued to be reported in Lao PDR and Malaysia, and increased in Singapore. In the temperate zone of the southern hemisphere, influenza activity returned to inter-seasonal levels. Worldwide, seasonal influenza A viruses accounted for the majority of detections.
- Based on FluNet reporting (as of 17/01/2020), during the time period from 23/12/2019 – 05/01/2020, National Influenza Centres and other national influenza laboratories from 104 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 174,604 specimens during that time period, 44,847 were positive for influenza viruses, of which 27,946 were typed as influenza A (5,081 influenza A(H1N1)pdm09, 11,005 influenza A(H3N2) and 11,860 influenza A(not subtyped)) and 16,091 influenza B (of the characterised influenza B viruses 23 belonged to the B-Yamagata lineage and 3,753 to the B-Victoria lineage).

Source: WHO influenza update:

http://www.who.int/influenza/surveillance_monitoring/updates/en/

Update on influenza activity in North America

- The USA Centers for Disease Control and Prevention (CDC) report that during week 03 (ending 18/01/2020) influenza activity increased slightly and remains high. Nationally, 11,890 (25.6%) out of 46,427 specimens have tested positive for influenza in week 03, of these positives 5,629 (47.3%) were influenza A and 6,261 (52.7%) were influenza B. Further characterisation has been carried out on 1,262 specimens by public health laboratories, and 756 tested positive for influenza, 364 (48.1%) were influenza A (306 influenza A(H1N1)pdm09 (94.4%), 18 influenza A(H3N2) (5.6%), and subtyping was not performed on 40 specimens) and 392 influenza B (51.9%).
- The Public Health Agency of Canada reported that during week 03, influenza activity either decreased or remained similar across multiple indicators, but activity remains elevated. The percentage of visits to healthcare professionals due to ILI was 2.1%, which is the average for this time of year. The percentage of tests positive for influenza is 26%, which is higher than the average for this time of year.

Source: Public Health Agency of Canada

<https://www.canada.ca/en/public-health/services/diseases/flu-influenza/influenza-surveillance/weekly-influenza-reports.html>

Middle East respiratory syndrome coronavirus (MERS-CoV) – latest update from WHO and ECDC

- On 08/01/20 WHO reported an additional case of Middle East Respiratory Syndrome coronavirus (MERS-CoV). Globally, 2,494 laboratory confirmed cases of human infection with MERS-CoV, including 858 associated deaths, have officially been reported to WHO since September 2012.
Source: WHO Global Alert and Response website: <http://www.who.int/csr/don/archive/year/2020/en/>
- The majority of the MERS cases continue to be reported from the Middle East, and specifically from Saudi Arabia. Rapid risk assessments of the situation from ECDC, which contain epidemiological updates and advice for travellers and healthcare workers, are available from: <https://ecdc.europa.eu/en/middle-east-respiratory-syndrome-coronavirus>
- Further updates and advice for healthcare workers and travellers are available from WHO: <http://www.who.int/emergencies/mers-cov/en/> and from NaTHNaC: <https://travelhealthpro.org.uk/news/237/mers-cov-update-travelhealthpro-country-pages>

Human infection with avian influenza A(H7N9), China – latest update from WHO

- The latest WHO Influenza at Human-Animal Interface summary (26/11/2019 to 20/01/2020) reports that no new cases of avian influenza A(H7N9) were reported. Since February 2013, a total of 1,568 laboratory-confirmed cases of human infection with avian influenza A(H7N9), including at least 616 deaths, have been reported: http://www.who.int/influenza/human_animal_interface/HAI_Risk_Assessment/en/
http://www.fao.org/ag/againfo/programmes/en/empres/H7N9/Situation_update.html
- The risk of international spread of avian influenza A(H7N9) is considered to be low at present. However, it is important that clinicians are aware of the possibility of human infection with animal influenza, in persons presenting with severe acute respiratory disease, while travelling or soon after returning from an area where avian influenza is a concern. Updates are available from the WHO Global Alert and Response website: <http://www.who.int/csr/don/en/>

Links:

Public Health Wales influenza surveillance webpage:

<http://www.publichealthwales.org/flu-activity>

GP Sentinel Surveillance of Infections Scheme:

<http://www.wales.nhs.uk/sites3/page.cfm?orgid=457&pid=27918>

NICE influenza antiviral usage guidance:

<http://www.nice.org.uk/Guidance/TA158>

Wales influenza information:

<http://www.wales.nhs.uk/sitesplus/888/page/43745>

England influenza surveillance:

<https://www.gov.uk/government/statistics/weekly-national-flu-reports-2019-to-2020-season>

Scotland influenza surveillance:

<https://www.hps.scot.nhs.uk/a-to-z-of-topics/influenza/#data>

Northern Ireland influenza surveillance:

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

European Centre for Communicable Disease:

<http://ecdc.europa.eu/>

European influenza information:

<http://flunewseurope.org/>

Advice on influenza immunisation (for NHS Wales users)

<http://www.immunisation.wales.nhs.uk/home>

For further information on this report, please email Public Health Wales using:

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