

Current level of influenza activity: *Baseline activity*

Trend: *Stable*

Confirmed cases since 2019 week 40: 1,673 (94% influenza A and 6% influenza B. Of the influenza A cases, 17% were A(H1N1)pdm09, 67% were A(H3N2) and 16% 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) increased during week 13 (ending 29/03/2020). During week 13, no cases of influenza were confirmed. Rhinovirus was the most commonly detected non-COVID-19 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 remained stable this week and remains at baseline levels.

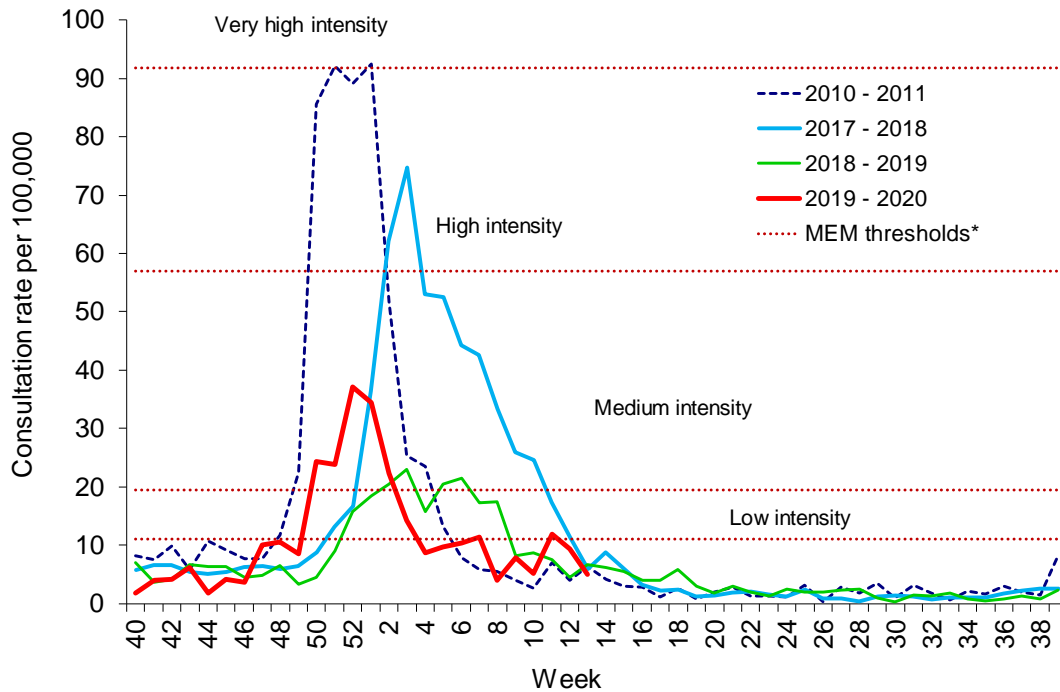
- The Sentinel GP consultation rate for influenza-like illness (ILI) in Wales during week 13 was 4.9 consultations per 100,000 practice population (Table 1).
- The ILI consultation rate decreased compared to week 12 (9.4 per 100,000 practice population) and remains below baseline threshold for activity (11.1 per 100,000 practice population) (Figure 1). The consultation rate was highest in patients aged 15-24 years (8.6 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 13 was 1,627. This represents 21.4% of all 7,616 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 13 decreased to 38.8% (Figure 8).
- Seven surveillance samples from patients with ILI, collected by sentinel GPs during week 13 had been received by Public Health Wales Microbiology as at 01/04/2020. The following numbers of patients tested positive: One SARS-COV2, one for both rhinovirus and enterovirus and five samples were negative for all routinely tested respiratory pathogens.
- During week 13, 303 specimens were tested by Public Health Wales Microbiology from hospitalised and non-sentinel GP patients with ARI. These figures do not include results from COVID-19 tests. The following numbers of patients tested positive: 25 rhinovirus, 14 seasonal coronaviruses, eight human metapneumovirus, eight adenovirus, six parainfluenza, three RSV, three enterovirus and two mycoplasma, (Figure 4). Thirty respiratory specimens were tested from patients in intensive care units (ICU), no specimens were positive for influenza (Figure 5).
- During week 13, 51 ARI outbreaks were reported to the Public Health Wales Health Protection team, 46 were in residential homes, one was in a hospital four were in a community, mixed or other setting.

Coronavirus disease 2019 (COVID-19) – latest WHO situation report

- As at 31/03/2020, WHO reported 750,890 confirmed COVID-19 cases globally, with 36,405 fatal cases reported. WHO report a risk assessment level of 'Very High' at global level. Daily WHO situation updates are available from: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports/>
- As at 31/03/2020, there are 22,145 reported confirmed cases of COVID-19 in the UK. The number of confirmed cases in Wales reported as at 10/04/2020 is 1,837, with 98 deaths reported. Public Health Wales produce a daily statement on COVID-19, available from: <https://covid19-phwstatement.nhs.wales/>
Links to further information and guidance are available from the Public Health Wales website: <https://phw.nhs.wales/topics/latest-information-on-novel-coronavirus-covid-19/>

Influenza activity in Wales

Figure 1. Clinical consultation rate per 100,000 practice population in Welsh sentinel practices (as of 29/03/2020).

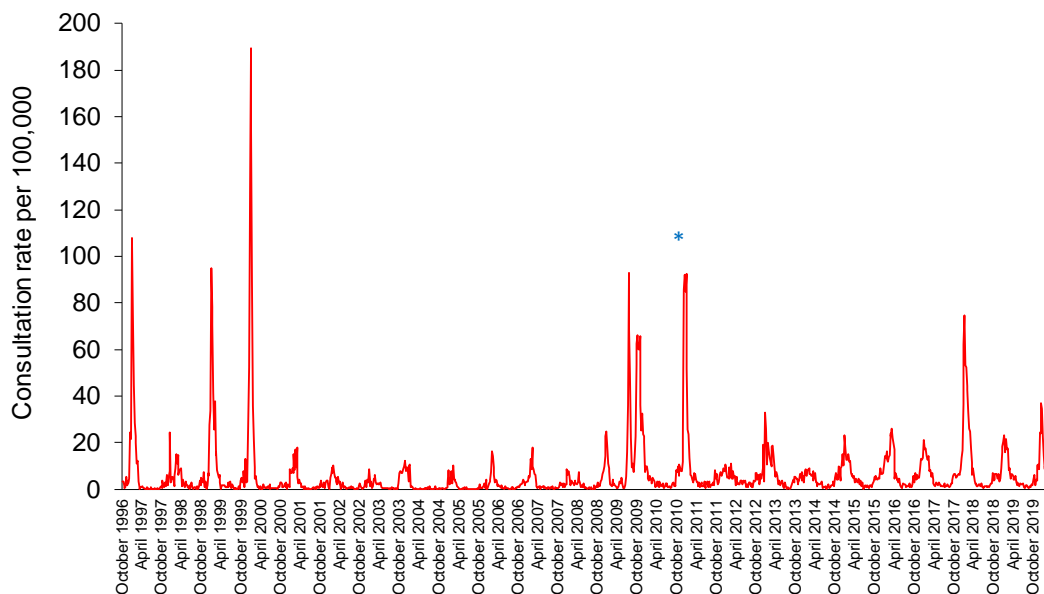


A technical issue affected data submitted from sentinel practices utilising a specific brand of GP software. As a result, between week 47 2019 and week 03 2020, data from affected practices has been excluded from calculations of the weekly ILI consultation rate. Weekly rates from week 47 2019 to week 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 13 2020).

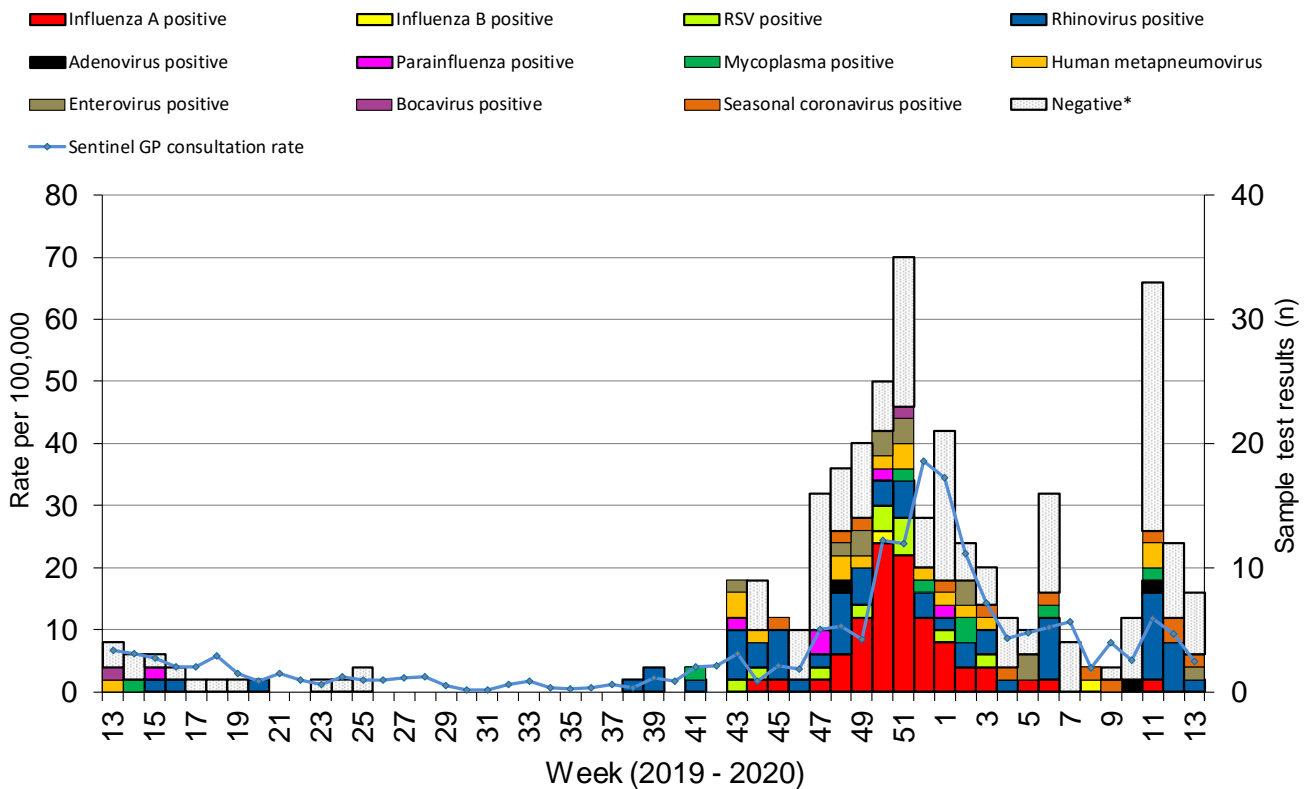


* Reporting changed to Audit+ surveillance system

Table 1. Age-specific consultations (per 100,000) for influenza in Welsh sentinel practices, week 08 – week 13 2020 (as of 29/03/2020).

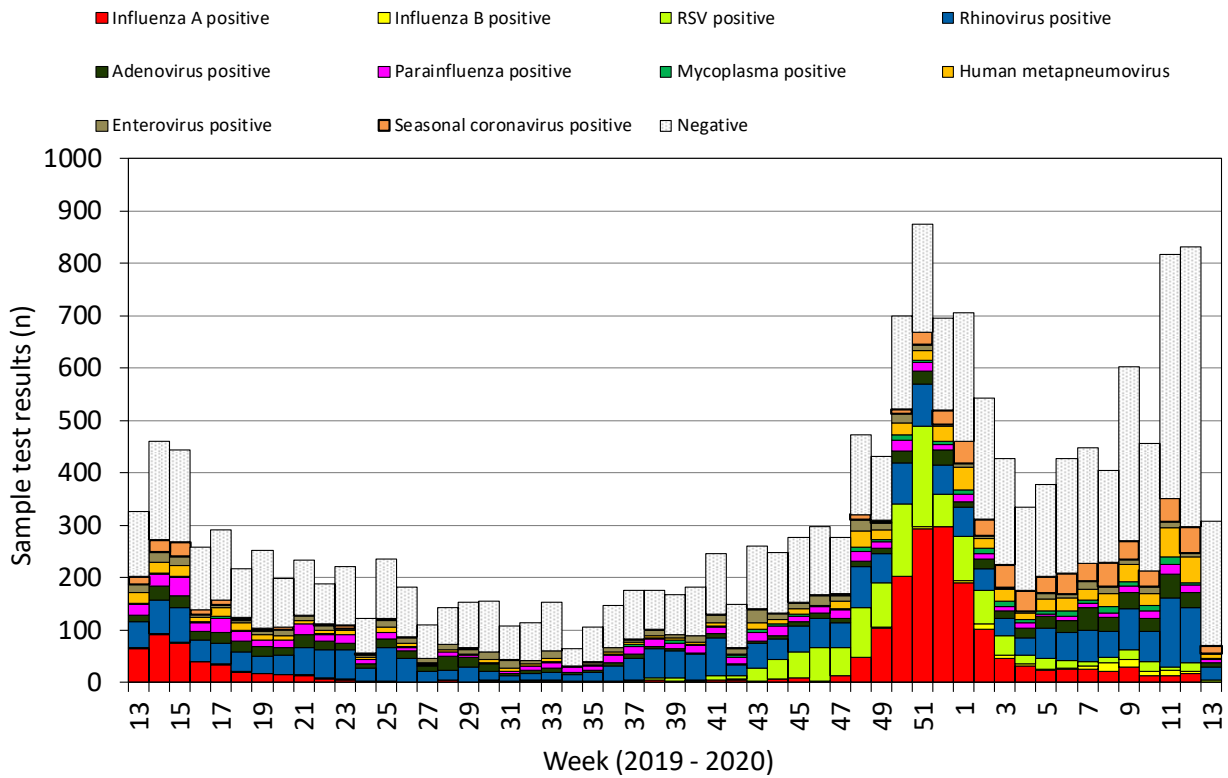
Age group	8	9	10	11	12	13
< 1	0.0	0.0	0.0	0.0	31.4	0.0
1 - 4	6.3	6.3	0.0	6.3	0.0	0.0
5 - 14	0.0	9.1	0.0	4.5	6.8	2.3
15 - 24	6.4	12.9	8.8	4.3	8.6	8.6
25 - 34	7.8	13.7	4.0	23.5	9.8	3.9
35 - 44	6.2	8.2	10.6	8.2	8.2	8.2
45 - 64	3.7	7.4	8.7	17.5	12.9	6.4
65 - 74	2.1	0.0	0.0	10.7	8.6	2.1
75+	0.0	4.9	0.0	7.3	7.3	2.4
Total	3.9	7.9	5.1	11.8	9.4	4.9

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 29/03/2020, by week of sample collection, week 13 2019 - week 13 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 29/03/2020 by week of sample collection, week 13 2019 to week 13 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 13 2019 to week 13 2020.

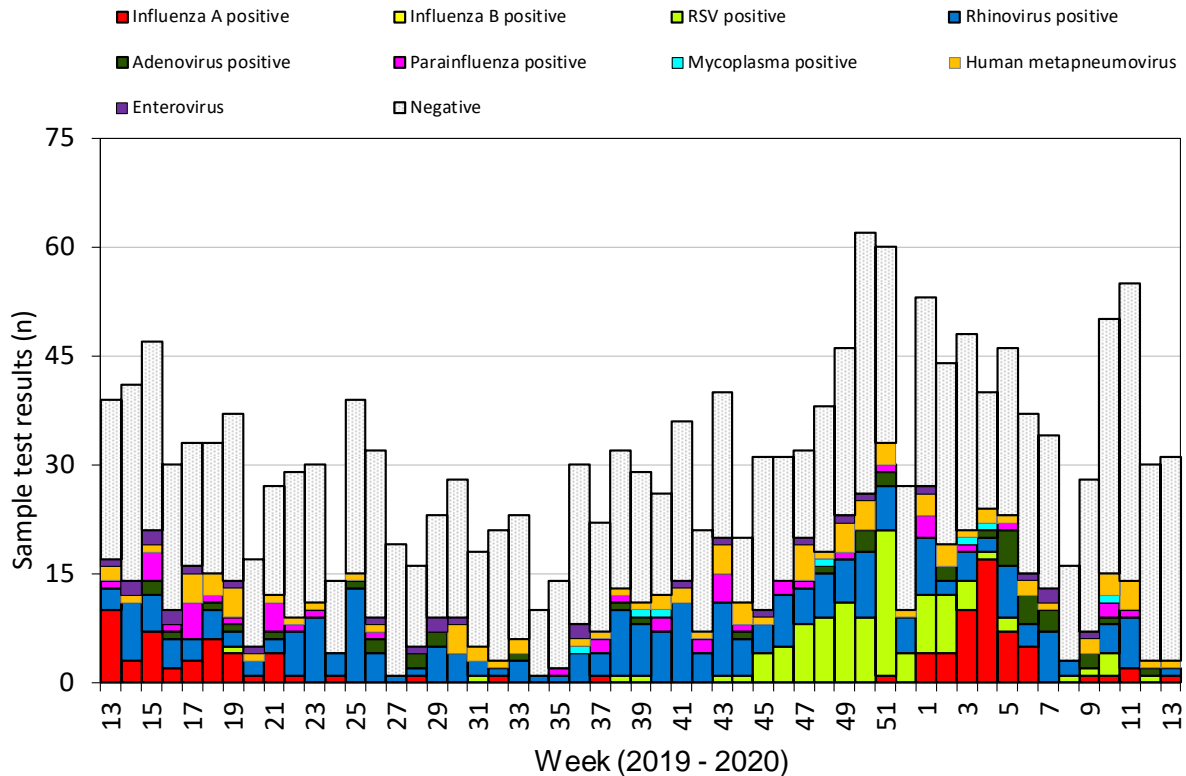
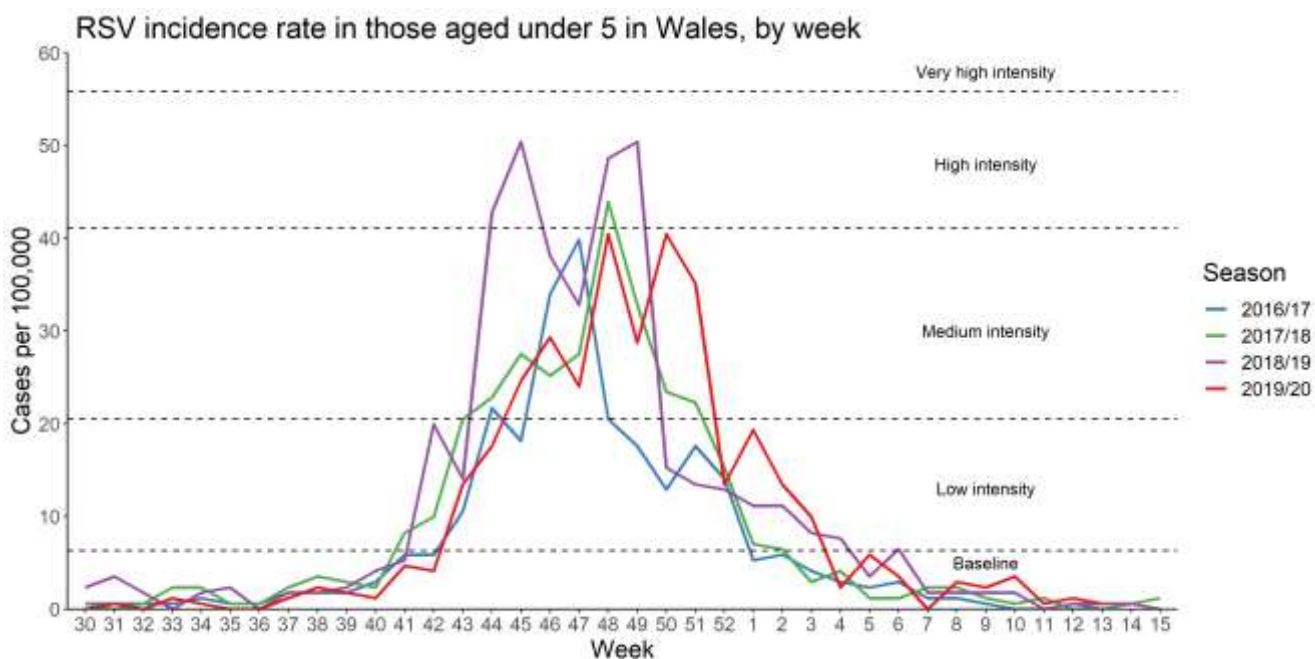


Figure 6. RSV incidence rate per 100,000 population aged under five years, week 30 2016 to week 13 2020.



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 29/03/2020).

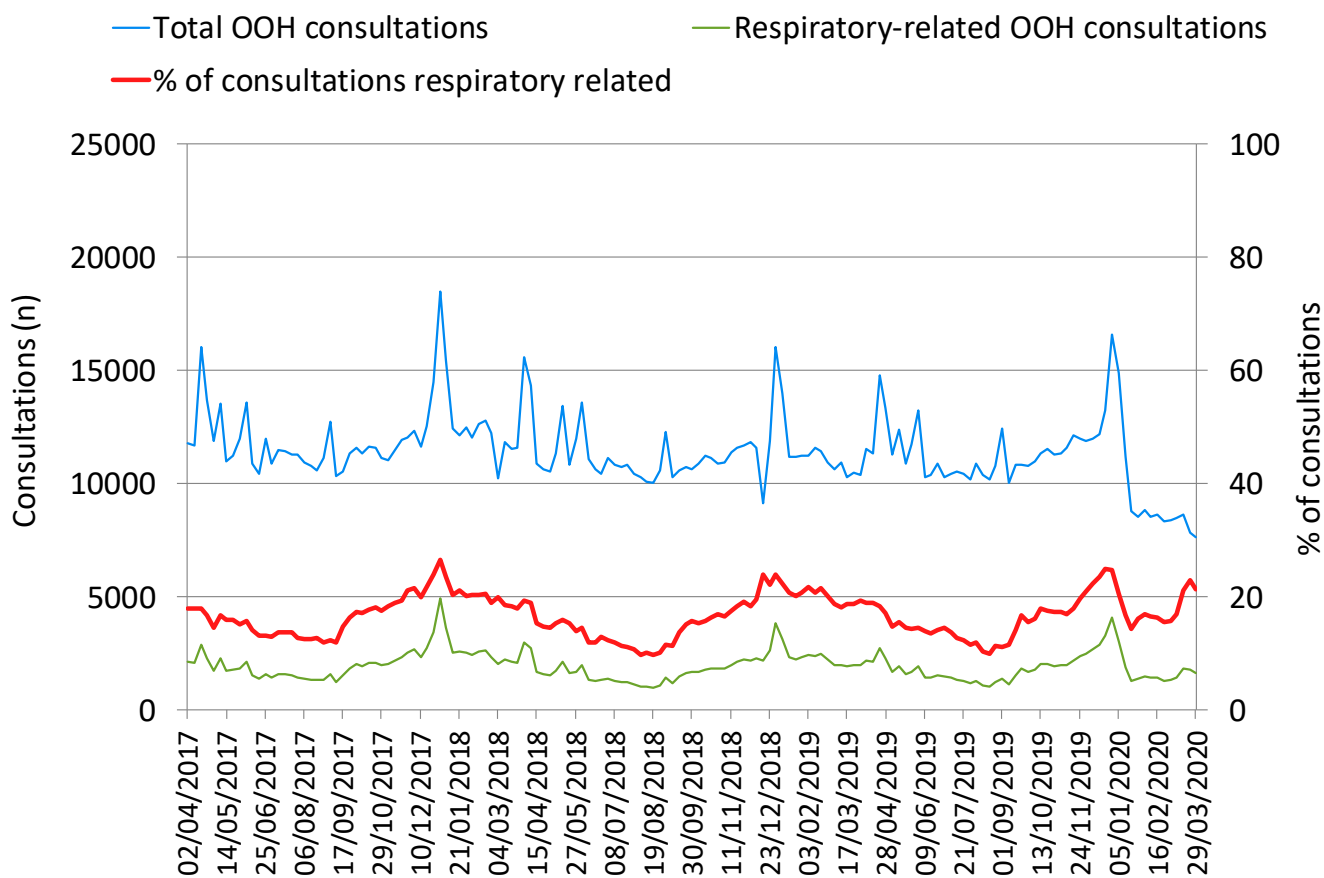
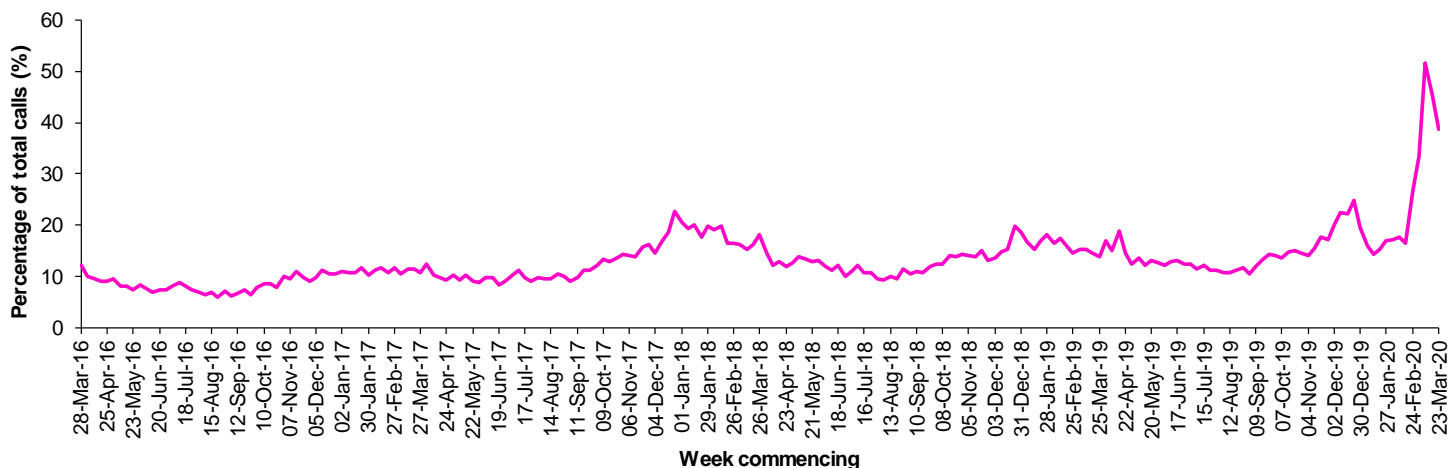


Figure 8. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from week 13 2016 - week 13 2020 (as of 29/03/2020).



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 29/03/2020).

Influenza immunisation uptake in the 2019/20 season	
People aged 65y and older	69.4%
People younger than 65y in a clinical risk group	44.1%
Children aged two & three years	50.7%
Children aged four to ten years*	68.7%
NHS staff	55.8%
NHS staff who have direct patient contact	58.7%

* 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>

Key points – Influenza activity in the UK and Europe

- As of week 11, indicators for influenza have increased in primary care but remain low in other indicators in the UK. GP ILI consultations increased in Northern Ireland to 18.1 per 100,000 and in Scotland to 27.6 per 100,000, and are now in the low intensity threshold in both countries. The weekly ILI GP consultation rate in England reported through the RCGP system increased to 14.6 per 100,000 and is now above the MEM threshold for baseline activity (12.7 per 100,000).
- During week 11, six samples tested positive for influenza (two influenza A(H1N1)pdm09, one influenza A(H3) and three influenza B) through the UK GP sentinel swabbing schemes, an overall positivity of 4.2%. Fifty-nine (3.4%) of the 1,752 respiratory test results reported through Public Health England's DataMart scheme tested positive for influenza (18 influenza A(H1N1)pdm09, one influenza A(H3), 16 influenza A(not subtyped) and 24 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 12, influenza appears to be declining across the WHO European Region. During week 12, a total of 760 sentinel specimens were tested for influenza, 105 of which were positive (24 influenza A(H1N1)pdm09, 13 influenza A(H3N2), 26 influenza A(not typed) and 42 influenza B).
Source: Flu News Europe: <http://www.flunewseurope.org/>

World update

- The WHO reported on 30/03/2020 that in the temperate zones of the northern hemisphere, influenza activity appeared to decrease overall. In North America, influenza activity started to decline but influenza-like-illness (ILI) levels remained elevated. In Europe, influenza activity decreased in most countries, but increased ILI activity was reported in some countries. In Central Asia, influenza activity was low. In Northern Africa, decreasing influenza activity was reported in Tunisia. In Western Asia, influenza activity was low in most reporting countries. In East Asia, ILI and influenza activity returned to baseline levels. Influenza activity was reported in some Caribbean and Central American countries. In tropical South American countries, influenza activity decreased. In tropical Africa, influenza detections were low in most reporting countries. In Southern Asia, increased ILI activity was reported in Bhutan. In South East Asia, influenza activity decreased across reporting countries. In the temperate zone of the southern hemisphere, influenza activity remained at inter-seasonal levels. Worldwide, seasonal influenza A viruses accounted for the majority of detections.
- Based on FluNet reporting (as of 27/03/2020), during the time period from 02/03/2020 – 15/03/2020, National Influenza Centres and other national influenza laboratories from 94 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 213,931 specimens during that time period, 35,618 were positive for influenza viruses, of which 25,675 were typed as influenza A (3,777 influenza A(H1N1)pdm09, 1,082 influenza A(H3N2) and 20,816 influenza A(not subtyped)) and 9,943 influenza B (of the characterised influenza B viruses 14 belonged to the B-Yamagata lineage and 732 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 12 (ending 21/03/2020) laboratory confirmed influenza continued to decrease but influenza-like-illness activity increased. Nationally, 3,581 (6.9%) out of 51,570 specimens have tested positive for influenza in week 12, of these positives 2,748 (76.7%) were influenza A and 833 (23.3%) were influenza B. Further characterisation has been carried out on 2,139 specimens by public health laboratories, and 219 tested positive for influenza, 181 (82.6%) were influenza A (147 influenza A(H1N1)pdm09 (91.9%), 13 influenza A(H3N2) (8.1%), and subtyping was not performed on 21 specimens) and 38 influenza B (17.4%).
Source: CDC Weekly US Influenza Surveillance Report: <http://www.cdc.gov/flu/weekly/>
- The Public Health Agency of Canada reported that during week 12, influenza activity continued to be reported in all regions, however, all indicators decreased compared to the previous week. The percentage of visits to healthcare professionals due to ILI was 1.5%, which is a slight decrease on the previous week and around average for this time of year. The percentage of tests positive for influenza is 7%, a decrease on previous weeks.
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 12/03/2020 WHO reported an additional case of Middle East Respiratory Syndrome coronavirus (MERS-CoV). Globally, 2,521 laboratory confirmed cases of human infection with MERS-CoV, including 866 associated deaths, have officially been reported to WHO since 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 (21/01/2020 to 28/02/2020) 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. WHO Global Alert & Response updates: <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://nww.immunisation.wales.nhs.uk/home>

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

surveillance.requests@wales.nhs.uk