# Public Health Wales CDSC Weekly Influenza & Acute Respiratory Infection Surveillance Report



Wednesday 20th July 2022 (covering week 28 2022)

Current level of influenza activity: Low

Influenza activity trend: Stable

Confirmed influenza cases since 2021 week 40: 837 (405 influenza A(H3N2), 54 influenza A(H1N1)pdm09, 319

influenza A(not subtyped) and 59 influenza B)

## **Key points - Wales**

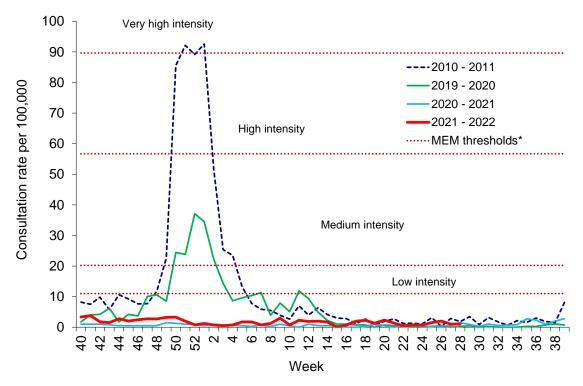
Confirmed influenza cases continue to be seen at low levels, while RSV confirmed cases continue to increase. This is unusually early start to the RSV season in Wales.

During Week 28 (ending 17/07/2022) there were 9 cases of influenza, with a further two cases reported late from samples in preceding weeks. COVID-19 cases continue to be detected in symptomatic patients in hospital and in the community. RSV incidence in children under 5 years of age is currently at levels that would indicate very high levels of activity (compared to the 10 seasons leading up to 2020). Rhinovirus, RSV and adenovirus are the most commonly detected cause of non-COVID-19 Acute Respiratory Infection (ARI), with increasing confirmed cases in recent weeks.

- The Sentinel GP consultation rate for influenza-like illness (ILI) in Wales during week 28 was 1.1 consultations per 100,000 practice population (Table 1). This increased compared to the previous week (1.0 consultations per 100,000) but remains well below baseline threshold for seasonal influenza activity (11.0 per 100,000 practice population) (Figure 1). Caution should be used when comparing consultation rates from March 2020 onwards to previous periods due to the changes in health-seeking behaviours brought about by the COVID-19 pandemic.
- The Sentinel GP consultation rate for Acute Respitatory Infections (ARI) was 165.5 per 100,000 practice
  population during Week 28, this is a decrease compared to the previous week (173.5 per 100,000) (Table 2).
  Weekly consultations increaseds lightly for Lower Respiratory Tract Infections and decreased for Upper
  Respiratory Tract Infections compared to the previous week.
- The percentage of calls to **NHS Direct Wales** which were 'influenza-related' (cold/flu, cough, fever, headache and sore throat) during Week 28 decreased to 22.2% (Figure 8).
- During Week 28, 1,127 specimens received multiplex respiratory panel testing mainly from patients attending hospitals. These results do not include samples tested solely for SARS-CoV2. There were four influenza (2 A(H1N1) and 2 A(not typed)), 129 RSV, 238 SARS-CoV2, 151 rhinoviruses, 52 parainfluenza, 122 adenoviruses, and 17 enteroviruses detected in Week 28 (Figure 4). Additionally, 2,075 samples from patients were tested for influenza, RSV and SARS-CoV2 only, many of these tests may be associated with screening activities rather than diagnostic testing for patients presenting with ARI symptoms. Of these 2,075 samples, five were positive for influenza A, 26 were positive for RSV and 298 were positive for SARS-CoV2 (Figure 5). 22 respiratory specimens were tested from patients in intensive care units (ICU) and none were positive for influenza (Figure 6). For the latest COVID-19/ SARS-CoV2 surveillance data please see the PHW daily dashboard
- There was one surveillance sample from a patient with ILI collected by **sentinel GPs** during Week 28 (as at 20/07/2022), the sample tested positive for rhinovirus (Figure 3).
- Confirmed RSV case incidence in children aged under 5 has increased and remains at very high-intensity levels. Although there has been a genuinely early start to the RSV season this year, it is possible that higher numbers of cases are being detected this season, in part, due to increased testing activities. In week 28 there were 69.1 confirmed cases per 100,000 in this age group (Figure 7). The provisional MEM threshold in Wales which predicts the start of the annual RSV season in children younger than five years is 6.3 confirmed cases per 100,000.
- During Week 28, 56 ARI outbreaks were reported to the Public Health Wales Health Protection team, all of them were reported as COVID-19. Fifty-three outbreaks were in residential homes and three were in community, mixed or other settings.
- According to <u>EuroMoMo</u> analysis, all-cause deaths in Wales were not significantly in excess during week 27.

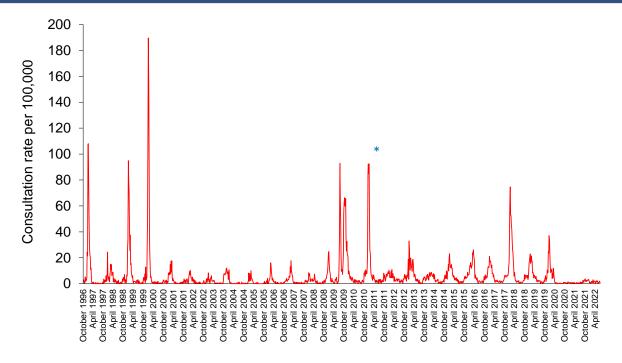
# Respiratory infection activity in Wales

Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 17/07/2022).



<sup>\*</sup> 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. Caution should be used when comparing consultation rates from March 2020 onwards to previous periods due to the changes in health-seeking behaviours brought about by the COVID-19 pandemic.

Figure 2. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (week 48 1996 – week 28 2022).



<sup>\*</sup> Reporting changed to Audit+ surveillance system

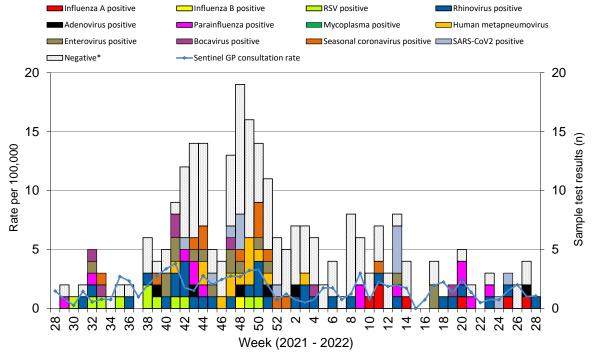
Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, week 23 – week 28 2022 (as of 17/07/2022).

Age						
group	23	24	25	26	27	28
< 1	0.0	0.0	0.0	0.0	0.0	0.0
1 - 4	0.0	0.0	0.0	0.0	0.0	0.0
5 - 14	0.0	0.0	0.0	0.0	0.0	0.0
15 - 24	0.0	0.0	2.3	0.0	0.0	4.8
25 - 34	2.0	4.0	2.0	2.0	0.0	2.1
35 - 44	2.0	0.0	0.0	2.0	0.0	0.0
45 - 64	1.0	1.0	1.9	4.7	2.9	1.0
65 - 74	0.0	0.0	4.5	2.3	0.0	0.0
75+	0.0	0.0	0.0	0.0	2.3	0.0
Total	0.7	0.7	1.5	2.0	1.0	1.1

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, week 23 – week 28 2022 (as of 17/07/2022).

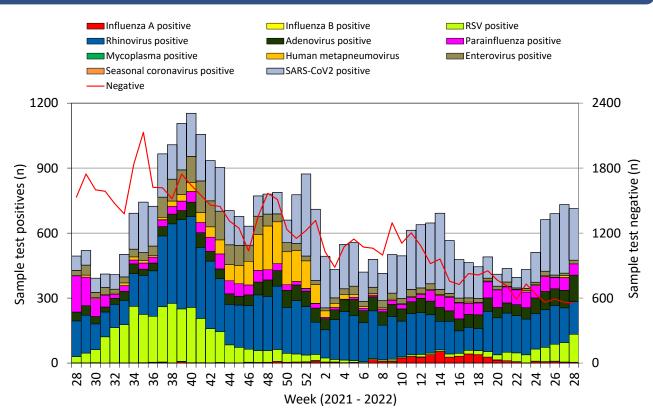
Age						
group	23	24	25	26	27	28
< 1	810.4	960.0	1020.1	1041.3	1184.0	1329.2
1 - 4	584.8	533.3	762.3	755.5	767.1	861.8
5 - 14	137.4	198.9	180.1	213.1	217.5	231.5
15 - 24	116.1	134.1	105.0	113.3	146.7	139.2
25 - 34	153.9	119.1	128.0	138.9	127.8	117.7
35 - 44	133.1	126.4	129.3	114.0	104.8	108.2
45 - 64	113.8	100.9	117.6	127.1	135.4	103.7
65 - 74	138.7	142.0	131.8	117.1	129.9	127.5
75+	86.6	123.5	135.1	136.6	156.4	123.0
Total	146.4	150.3	159.8	164.8	173.5	165.5

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 17/07/2022, by week of sample collection, week 28 2021 to week 28 2022.



<sup>\*</sup> Tested negative for influenza, adenovirus, rhinovirus, RSV, parainfluenza, mycoplasma, human metapneumovirus, enterovirus, bocavirus and coronaviruses. Samples which test positive for more than on pathogen will appear more than once in the chart.

Figure 4. Specimens submitted for virological testing for hospital patients and non-sentinel GPs as of 17/07/2022 by week of sample collection, week 28 2021 to week 28 2022.



This chart summarises respiratory panel test data and does not include data for patients tested SOLEY for SARS-CoV2. 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. Samples which test positive for more than on pathogen will appear more than once in the chart.

Figure 5. Specimens from hospital patients submitted for RSV, Influenza and SARS-CoV2 testing only, as of 17/07/2022 by week of sample collection, week 28 2021 to week 28 2022.

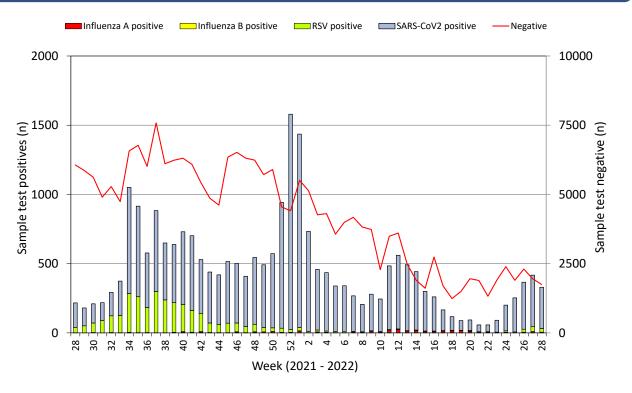
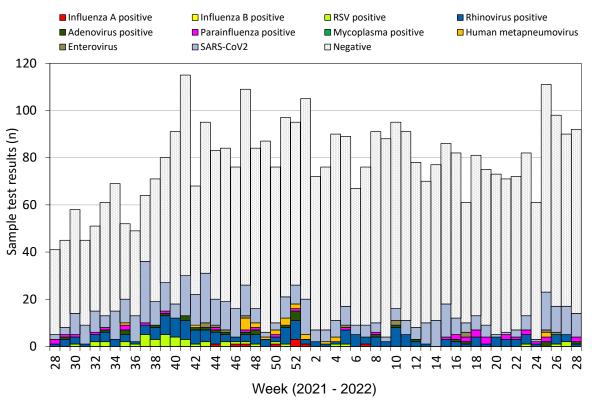
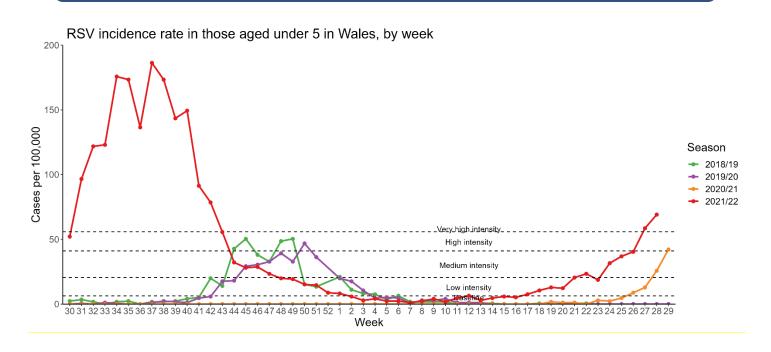


Figure 6. Specimens submitted for virological testing for ICU patients, by week of sample collection, week 28 2021 to Week 28 2022.



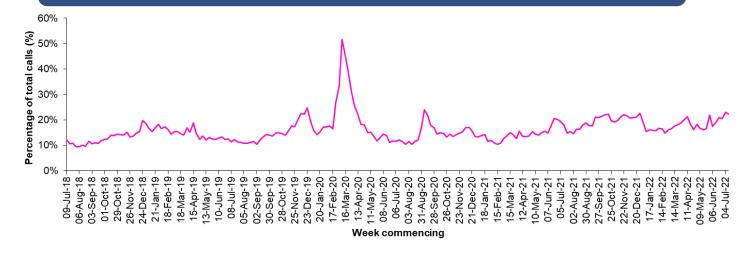
This chart summarises respiratory panel test data and does not include data for patients tested SOLEY for SARS-CoV2. Samples which test positive for more than on pathogen will appear more than once in the chart.

Figure 7. RSV incidence rate per 100,000 population aged under five years, week 30 2017 to Week 28 2022.



#### **Calls to NHS Direct Wales**

Figure 8. Influenza related calls to NHS Direct Wales<sup>1</sup> (as a percentage of total calls) from week 28 2018 - Week 28 2022 (as of 17/07/2022).



<sup>&</sup>lt;sup>1</sup> 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 3. Uptake of influenza immunisations in GP Practice patients, school children and NHS staff in Wales 2021/22 (as of 26/04/2022).

Influenza immunisation uptake in the 2021/22 season				
People aged 65y and older	78.0%			
People younger than 65y in a clinical risk group	48.2%			
Children aged two & three years	47.6%			
Children aged four to ten years*	68.7%			
Children aged 11 to 15 years*	58.2%			
NHS staff	56.0%			
NHS staff who have direct patient contact	57.2%			

<sup>\*</sup> In school sessions carried out so far.

The end of season report Influenza in Wales 2019/20 is available to download and contains a full breakdown of vaccination uptake amongst eligible groups.

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

#### Influenza activity – UK and international summary

- As of week 26, community and syndromic influenza indicators remain low in the UK. GP ILI consultations
  decreased in Scotland to 0.7 per 100,000 and increased in Northern Irealnd to 1.0 per 100,000 well below the
  baseline intensity thresholds. The weekly ILI GP consultation rate in England reported through the RCGP system
  increased to 1.3 per 100,000, well below the MEM threshold for baseline activity (12.2 per 100,000).
- During week 26, 28 samples tested positive for influenza (including 3 influenza A(H3N2), 20 influenza A(not subtyped) and 5 influenza B). UK summary data are available from the <a href="UKHSA Influenza and COVID-19">UKHSA Influenza and COVID-19</a> Surveillance Report.
- The WHO and the European Centre for Disease Prevention and Control (ECDC) have entered a monthly reporting cycle for influenza and reported that activity across Europe remained at interseasonal levels during weeks 21-25. During week 25, a total of 1,002 sentinel specimens were tested for influenza, 28 of which were positive, all influenza A (23 influenza A(H3), two influenza A(H1)pdm09 and three influenza A(not subtyped)).
   Source: Flu News Europe: <a href="http://www.flunewseurope.org/">http://www.flunewseurope.org/</a>
- The WHO reported on 27/06/2022 that globally, influenza activity continued to decrease, following a peak in March 2022. In the temperate zones of the southern hemisphere, overall influenza activity, predominately A, appeared to plateau after an increase the previous weeks. Respiratory syncytial virus (RSV) detections have now decreased in New Zealand. Influenza like illness has increased in the Pacific Islands, ILI activity increased in Kiribati, the Commonwealth of the Northern Mariana Islands, the Republic of the Marshall Islands and the Cook Islands. Influenza detections continued to increase in South Africa, predominately influenza A and few influenza B/Victoria lineage. RSV activity has decreased and remains at low levels.
- In temperate South America, influenza activity of predominately influenza A(H3N2) decreased and is below baseline, with the exemption of Chile, where the positivity rate has increased and is almsost at moderate levels. The RSV detection rate increased in the sub-region.
- In the Caribbean and Central American countries, low influenza activity was reported with influenza A(H3N2) predominant. An increase of RSV activity was observed in Central America. In tropical South America, low influenza activity was reported with influenza A(H3N2) predominant. In tropical Africa, influenza activity remained low, apart from Bolivia. In Southern Asia, influenza virus detections were at low levels overall, while detections increased in South East Asia. In North America, influenza activity continued to decrease, and is at levels typically observed at this time of the year. In Canada, paediatric influenza associated hospitalisations were above expected levels. In Europe, influenza activity remained at low levels, with influenza A(H3N2) predominant. In Northern Africa and Central Asia no influenza detections were reported. In Western Asia, there were few detections of influenza reported by Oman, and United Arab Emirates.
- Based on FluNet reporting (as of 08/07/2022), during the time period from 13/06//2022 26/06/2022, National Influenza Centres and other national influenza laboratories from 91 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 163,505 specimens during that time period, 9,741 were positive for influenza viruses, of which 9,582 were typed as influenza A (of the subtyped influenza A viruses, 211 were influenza A(H1N1)pdm09 and 5,640 were influenza A(H3N2)) and 159 influenza B (of the characterised influenza B viruses 46 belonged to the B-Victoria lineage).

**Source:** WHO influenza update: <a href="https://www.who.int/teams/global-influenza-programme/surveillance-and-monitoring/influenza-updates/current-influenza-update">https://www.who.int/teams/global-influenza-programme/surveillance-and-monitoring/influenza-updates/current-influenza-update</a>

## **Australia and New Zealand update**

- In New Zealand, during the week ending 08/07/2022, community influenza-like illness activity (ILI) remains elevated, and activity remains higher than historical rates for this time of year. Through seasonal sentinel community influenza surveillance, 6 influenza cases were identified at sentinel practices during the week ending 10/07/2022. RSV in those aged aged under 5 are at similar level to historical levels.
  - **Source:** Institute of Environmental Science & Research, New Zealand <a href="https://www.esr.cri.nz/our-services/consultancy/flu-surveillance-and-research">https://www.esr.cri.nz/our-services/consultancy/flu-surveillance-and-research</a>
- In Australia, according to the latest available update (fortnight ending 03/07/2021), influenza-like illness (ILI) activity in the community this year peaked in May and June. The weekly number of laboratory confirmed influenza cases has surpassed the 5 year average. To date, the majority of nationally reported laboratory-confirmed influenza cases were influenza A (82.8%). Although numbers of confirmed cases are elevated compared to previous seasons, the impact as reported by FluCAN sentinel hospitals is described as minimal. **Source:** Australian Influenza Surveillance Report and Activity Updates.

https://www1.health.gov.au/internet/main/publishing.nsf/Content/cda-surveil-ozflu-flucurr.htm#current

### Respiratory syncytial virus (RSV) in North America

• The USA CDC reported an out of season increase in RSV activity, beginning in February 2022. This follows outof-season activity also reported during 2021.

Source: CDC RSV national trends: <a href="https://www.cdc.gov/surveillance/nrevss/rsv/natl-trend.html">https://www.cdc.gov/surveillance/nrevss/rsv/natl-trend.html</a>

#### COVID-19 – UK and international summary

- As of 14/07/2022, the new positive PCR episodes for the most recent 7-day reporting period were 47 per 100,000 population. There were 25 suspected COVID-19 deaths with a date of death in the most recent 7-day reporting period reported to Public Health Wales. There were 20 COVID-19 death registrations in the last reporting period provided by ONS. Latest COVID-19 data from Public Health Wales is available from: <a href="https://phw.nhs.wales/topics/latest-information-on-novel-coronavirus-covid-19/">https://phw.nhs.wales/topics/latest-information-on-novel-coronavirus-covid-19/</a>
- The latest UKHSA COVID-19 data summary is available from: <a href="https://coronavirus.data.gov.uk/">https://coronavirus.data.gov.uk/</a>
- WHO situation updates on COVID-19 are available from: <a href="https://covid19.who.int/">https://covid19.who.int/</a>

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

- On 28/04/2022 WHO reported an additional case of Middle East Respiratory Syndrome coronavirus (MERS-CoV).
   Globally, 2,591 laboratory confirmed cases of human infection with MERS-CoV, including 894 associated deaths, have officially been reported to WHO since 2012.
  - Source: WHO Global Alert and Response website: <a href="https://www.who.int/emergencies/disease-outbreak-news">https://www.who.int/emergencies/disease-outbreak-news</a>
- 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: <a href="https://ecdc.europa.eu/en/middle-east-respiratory-syndrome-coronavirus">https://ecdc.europa.eu/en/middle-east-respiratory-syndrome-coronavirus</a>
- Further updates and advice for healthcare workers and travellers are available from WHO: <a href="http://www.who.int/emergencies/mers-cov/en/">http://www.who.int/emergencies/mers-cov/en/</a> and from NaTHNaC: <a href="https://travelhealthpro.org.uk/news/237/mers-cov-update-travelhealthpro-country-pages">https://travelhealthpro.org.uk/news/237/mers-cov-update-travelhealthpro-country-pages</a>

### Human infection with avian influenza A(H7N9), China

- The latest WHO Influenza at Human-Animal Interface summary (14/05/2022 27/06/2022) reports that there have been no publicly available reports from China or other countries on influenza A(H7N9) in recent months. 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:
  - https://www.who.int/teams/global-influenza-programme/avian-influenza/monthly-risk-assessment-summary
- 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: https://www.who.int/emergencies/disease-outbreak-news

Links:

Public Health Wales influenza surveillance webpage:

http://www.wales.nhs.uk/sites3/page.cfm?orgid=457&pid=25480

Public Health Wales COVID-19 data dashboard:

https://public.tableau.com/profile/public.health.wales.health.protection#!/vizhome/RapidCOVID-19virology-

**Public/Headlinesummary** 

**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:

https://phw.nhs.wales/topics/flu/

England influenza and COVID-19 surveillance:

https://www.gov.uk/government/statistics/national-flu-and-covid-19-surveillance-reports

Scotland seasonal respiratory surveillance:

https://beta.isdscotland.org/find-publications-and-data/population-health/covid-19/weekly-national-seasonal-

respiratory-report/

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