Public Health England

Protecting and improving the nation's health

Weekly national Influenza and COVID-19 surveillance report

Week 45 report (up to week 44 data)
5 November 2020

Executive summary

This report summarises the information from the surveillance systems which are used to monitor Coronavirus Disease 2019 (COVID-19), influenza, and other seasonal respiratory viruses in England. References to COVID-19 represent the disease name and SARS-CoV-2 represent the virus name. The report is based on data from week 44 (between 26 October and 1 November 2020) and for some indicators daily data up to 3 November 2020.

Surveillance indicators suggest that COVID-19 activity at a national level has increased or remained high during week 44. There is currently limited testing for other respiratory viruses, however, laboratory indicators suggest that influenza activity is low.

Detections of COVID-19 cases in England remained high in week 44. Case detections decreased slightly compared to last week though this is likely to be driven by reduced testing over the half term period as well as a lag in results for the most recent days. Overall positivity rates continued to increase. Incidence and positivity rates remain highest in the North of England though there are some indications that positivity is starting to decline in the North East and North West. By age group, cases rates were highest in the 20 to 29 year olds with decreases continuing to be noted in the 10 to 19 year olds. Positivity rates were highest in the 80+ year olds tested through both Pillar 1 (NHS and PHE testing) and in the 10 to 19 year olds tested through Pillar 2 (community testing).

Through Respiratory Datamart, there was one influenza positive sample (1 influenza B) detected in week 44. Rhinovirus activity remains high and has increased slightly in week 44.

The overall number of acute respiratory infection incidents reported to PHE Health Protection Teams have decreased from 1312 in the previous week to 1110 in week 44 in England. Though it is important to note that an increasing number of outbreaks are being managed through other routes. In the majority of reported incidents SARS-CoV-2 has been detected.

The majority of community and syndromic indicators decreased or remained stable during week 44. General practice (GP) influenza-like illness (ILI) consultations remained low in all UK schemes.

Through the UK GP swabbing scheme, SARS-CoV-2 positivity among patients contacting their GP with influenza like illness or lower respiratory tract infection symptoms decreased from 25.3% in week 43 to 14.0% in week 44.

The overall COVID-19 confirmed hospital and ICU/HDU admission rates continued to increase further whilst the influenza confirmed hospital and ICU/HDU admission rates remained low.

Emergency department attendances for COVID-19 like diagnosis have increased further in week 44 whilst those for acute respiratory infections remained stable.

The number of COVID-19 confirmed deaths increased further. Overall excess all-cause mortality was observed in week 43; by age group in the 75 to 64 year olds and 85+ year olds and subnationally in the North West and Yorkshire and Humber.

Overall estimated national seroprevalence based on blood donor samples was 5.7% with the highest seroprevalence by region seen in London and by age group in young adults.

Influenza vaccine uptake is the highest it has ever been at this point in the season for those aged 65+ and in 2 and 3 year olds. For those in at-risk groups and pregnant women uptake is higher than last season and comparable to the season before that.

Contents

Laboratory surveillance

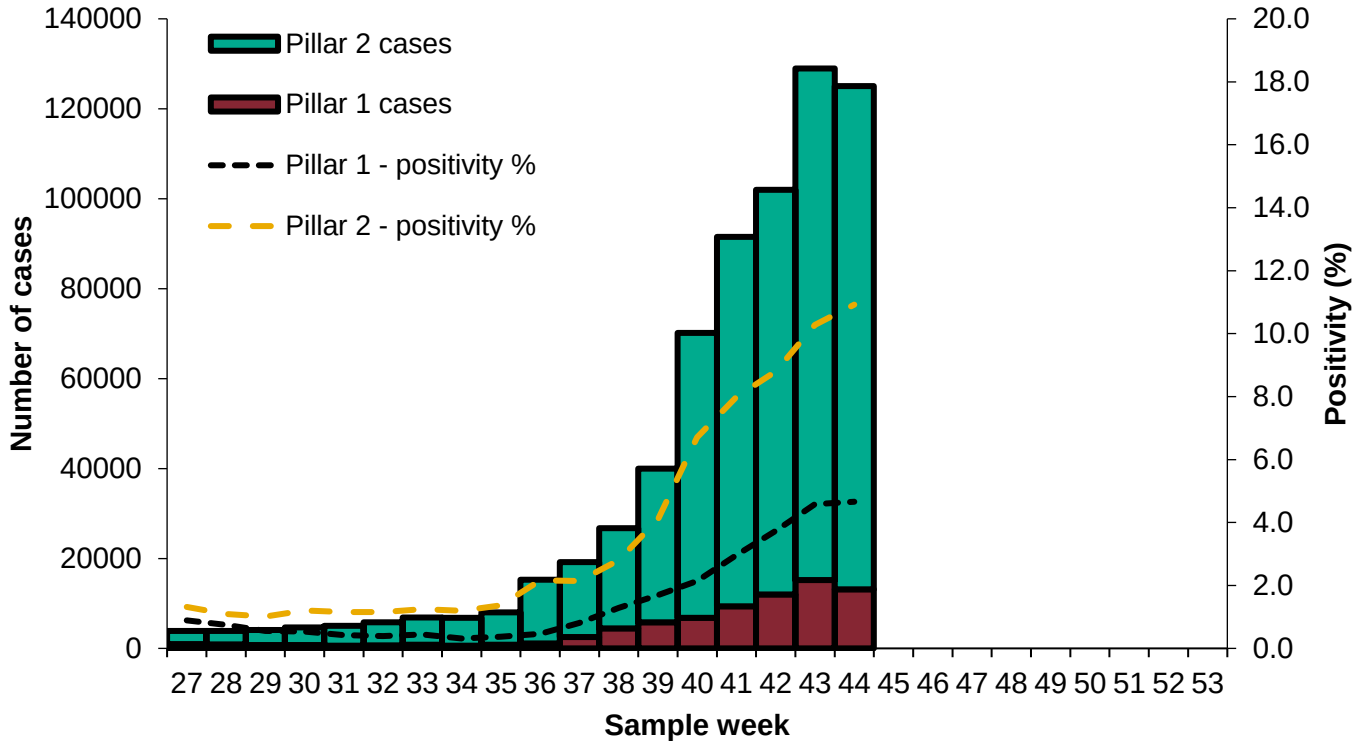
Confirmed COVID-19 cases (England)

As of 09:00 on 03 November 2020, a total of 912,236 have been confirmed positive for COVID-19 in England under Pillar 1 and 2.

Overall case numbers and positivity remained high in both Pillar 1 and 2, in week 44, with the majority of cases reported from Pillar 2. The highest case rates were seen in the 20 to 29 year olds in Pillar 1 and 2. A continuing decline in case rates is noted in the 10 to 19 year olds. The highest positivity rates were noted in the 80+ year olds in Pillar 1 and in the 10 to 19 year olds in Pillar 2. Cases rates and positivity continue to be highest in the North of England.

From the week 42 report onwards, case rates in Figures 3,4,7 and 9 have been calculated using mid-2019 ONS population estimates

Figure 1: Laboratory confirmed COVID-19 cases tested under Pillar 1 and Pillar 2, based on sample week with overall weekly positivity for Pillar 1 and 2 (%)



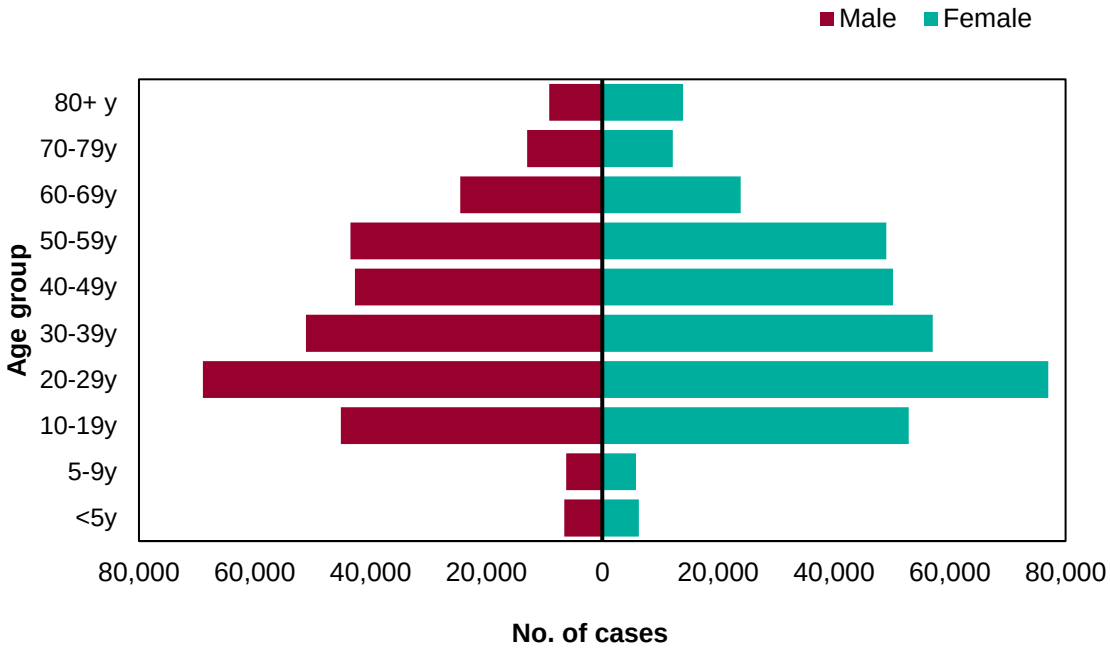
*The data are shown by the week the specimen was taken from the person being tested. This gives the most accurate analysis of this time progression, however, for the most recent week results for more samples are expected therefore this should be interpreted with caution.

*Positivity data was previously deduplicated across the course of the pandemic to prevent persistent infections being counted as new cases. Since week 40, positivity is calculated as the number of individuals testing positive during the week divided by the number of individuals tested during the week. This approach accounts for the increasing number of individuals who will have been tested multiple times as the pandemic progresses.

Age and sex

Figure 2: Age/sex pyramids for laboratory confirmed COVID-19 cases tested under Pillar 1 and 2 (a) cumulative number since week 27 (n=659,348), and (b) in weeks 43 and 44 (n=250,074)

(a)



(b)

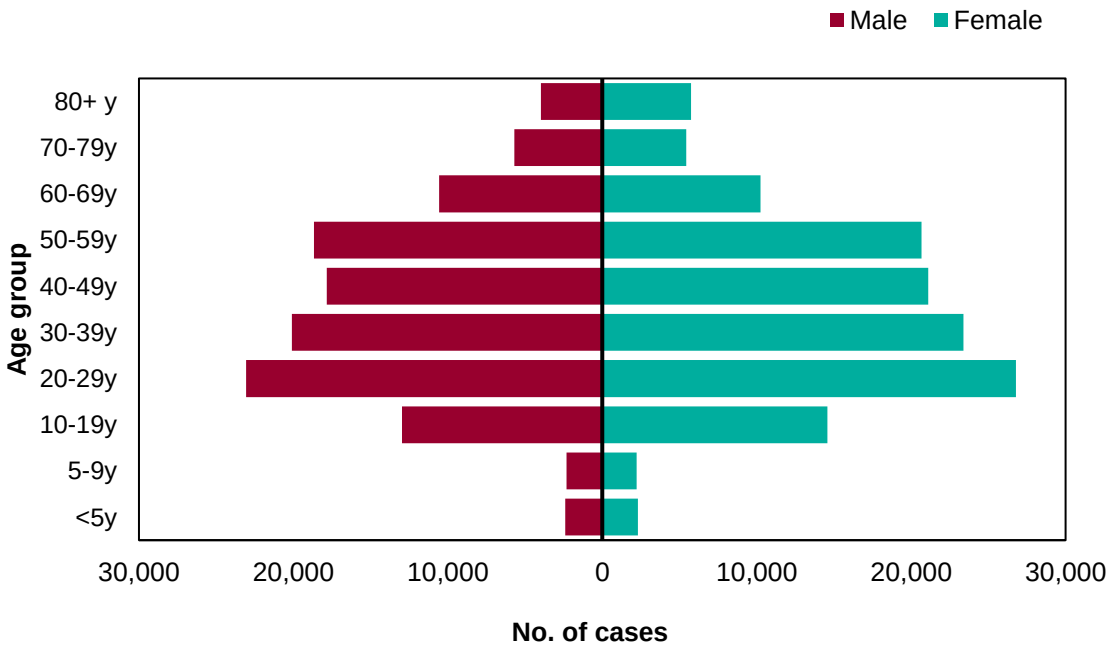


Figure 3: Weekly laboratory confirmed COVID-19 case rates per 100,000, tested under Pillar 1 and Pillar 2, by sex

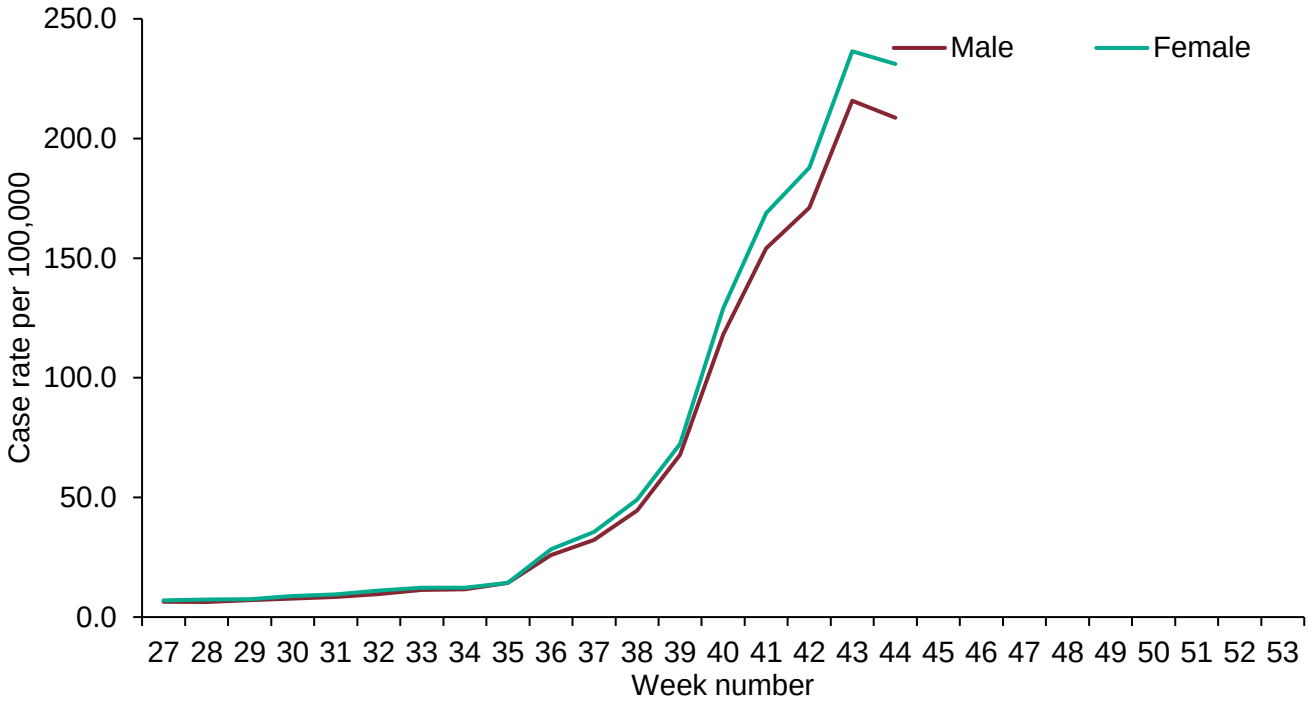


Figure 4: Weekly laboratory confirmed COVID-19 case rates per 100,000, tested under Pillar 1 and Pillar 2 , by age group

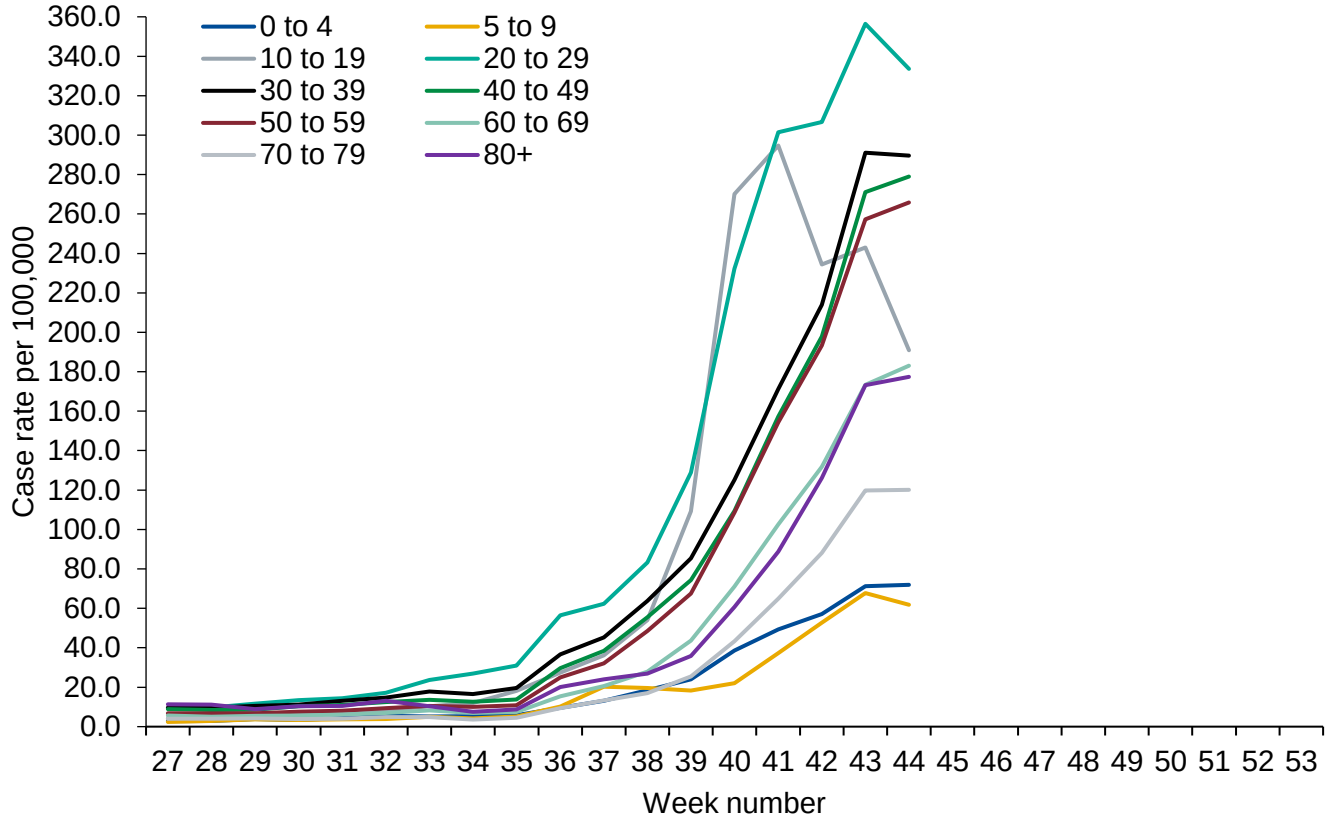
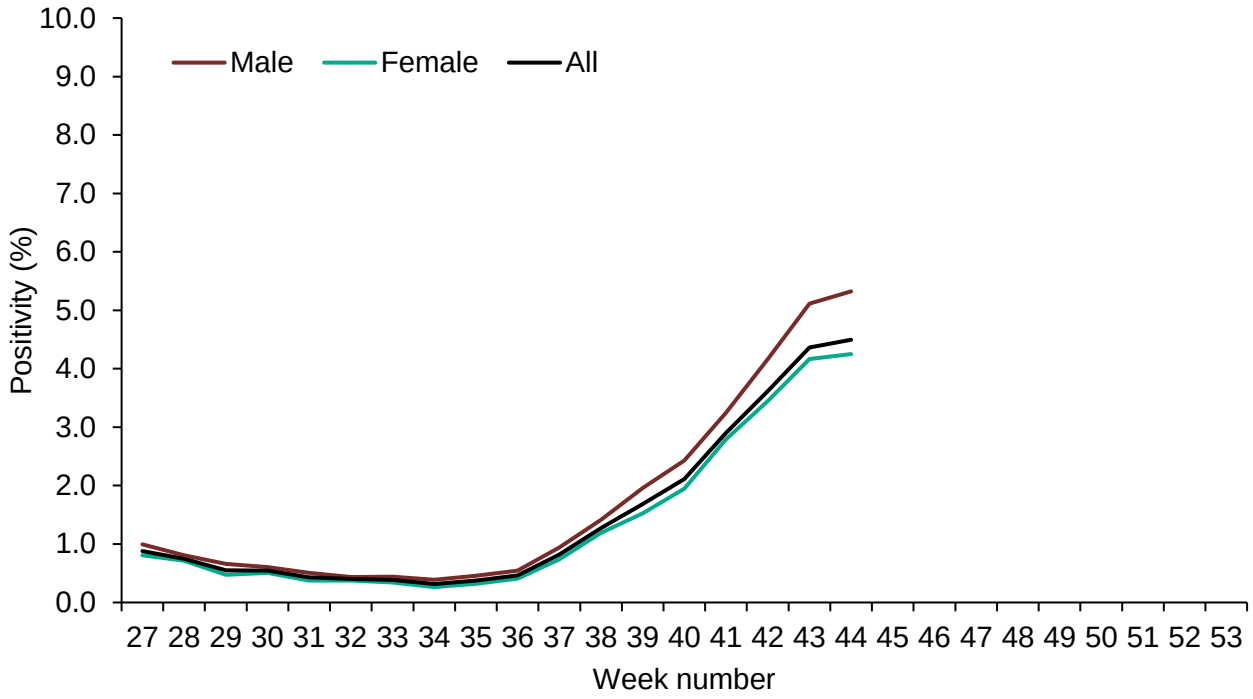


Figure 5: Weekly positivity (%) of laboratory confirmed COVID-19 cases tested overall and by sex under (a) Pillar 1 and (b) Pillar 2, (SGSS and Respiratory DataMart)

(a)



(b)

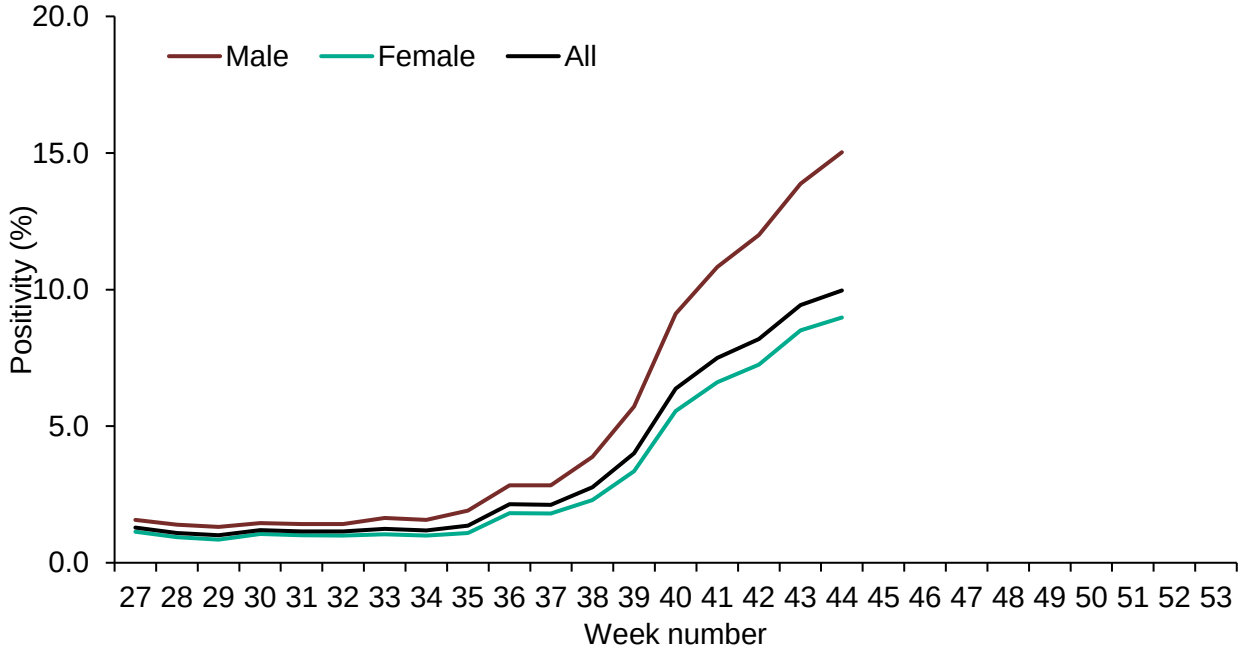
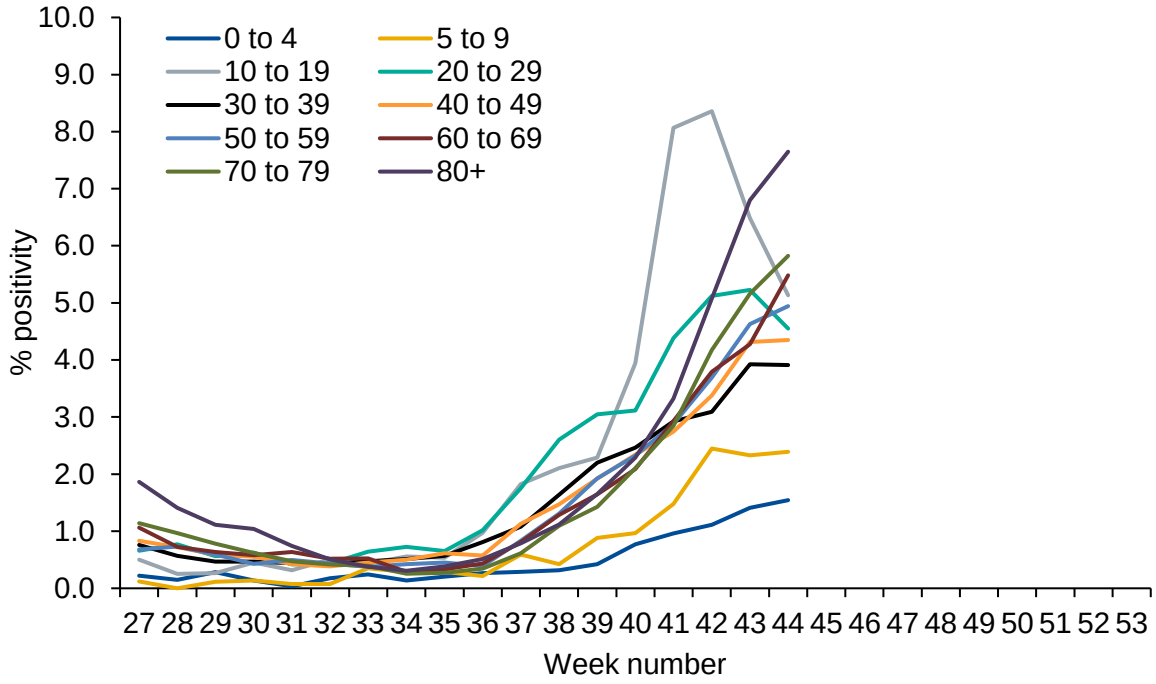
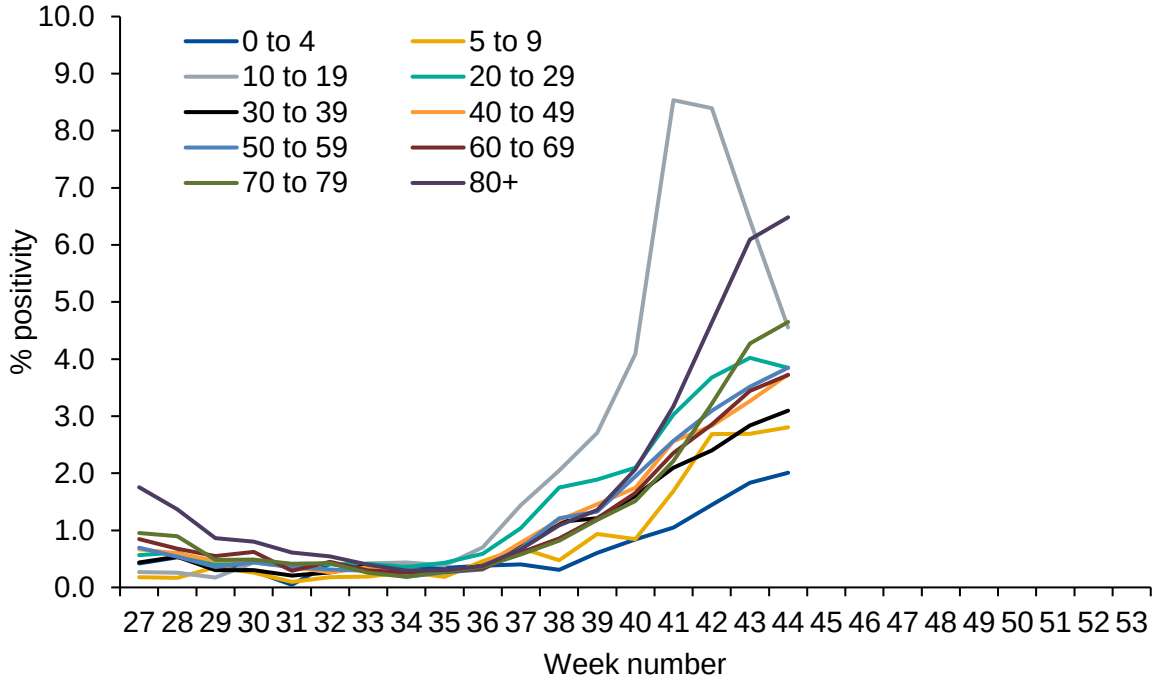


Figure 6: Weekly positivity (%) of laboratory confirmed COVID-19 cases tested under Pillar 1, (a) by male and age group and (b) by female and age group and; under Pillar 2, (c) by male and age group and (d) by female and age group, (SGSS and Respiratory DataMart)

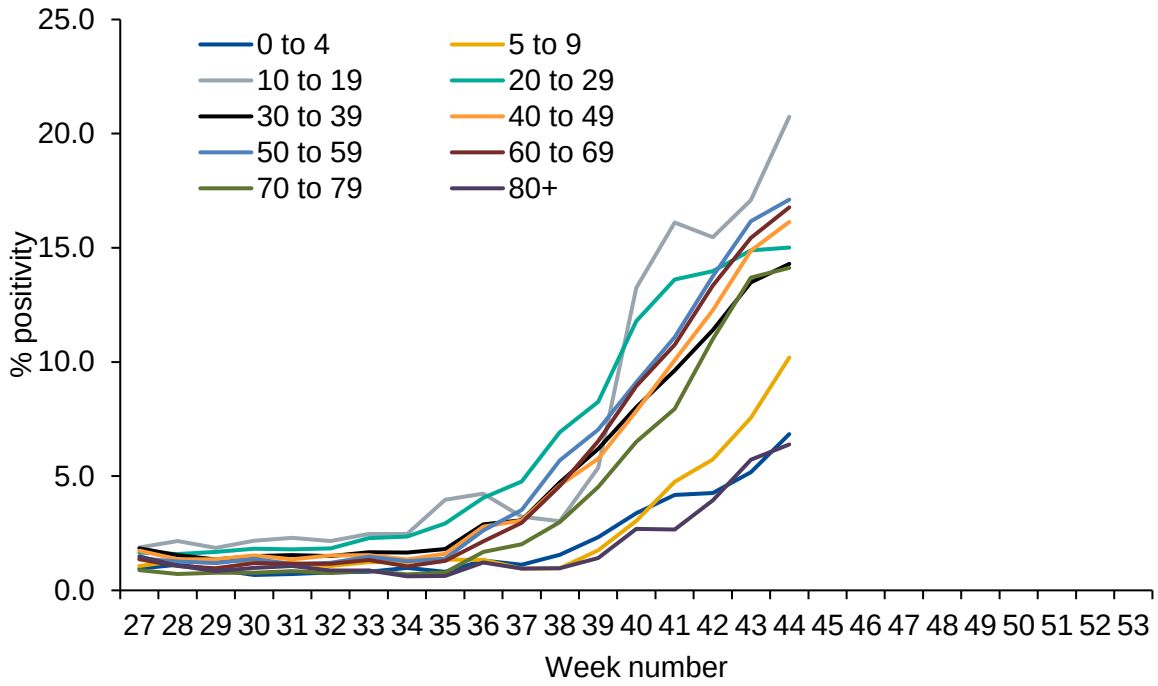
(a) Pillar 1 - Male



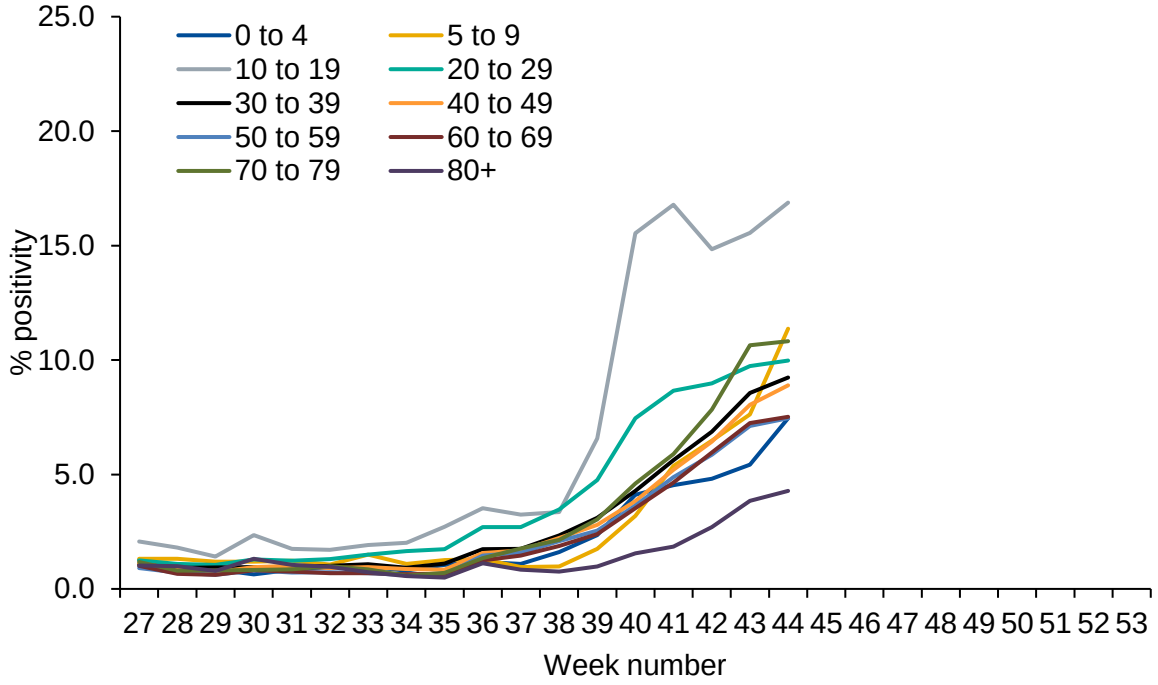
(b) Pillar 1 - Female



(c) Pillar 2 - Male



(d) Pillar 2 - Female



Geography

Table 1: Cumulative number of cases under Pillar 1 and 2 (n=896,262) and cumulative number of cases since week 27 under Pillar 1 and 2 (n=661,323)

PHE Centres	Cumulative Pillar 1 + 2 cases	Cumulative since week 27, Pillar 1 + 2 cases
North East	64,399	49,360
North West	226,023	183,785
Yorkshire and Humber	139,060	110,362
West Midlands	96,012	70,868
East Midlands	85,691	65,045
East of England	58,519	34,389
London	102,800	69,152
South East	78,073	45,355
South West	45,685	33,007

Figure 7: Weekly laboratory confirmed COVID-19 case rates per 100,000 population tested under Pillar 1 and Pillar 2, by PHE Centres and sample week

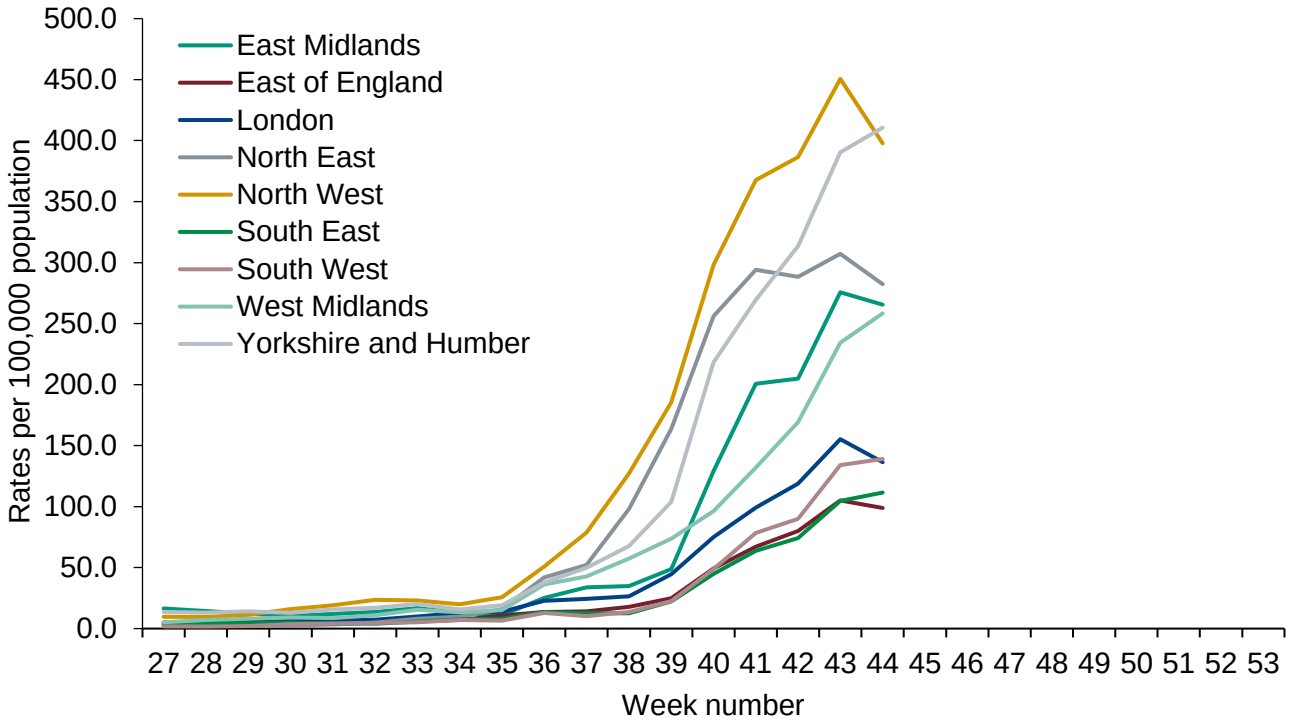
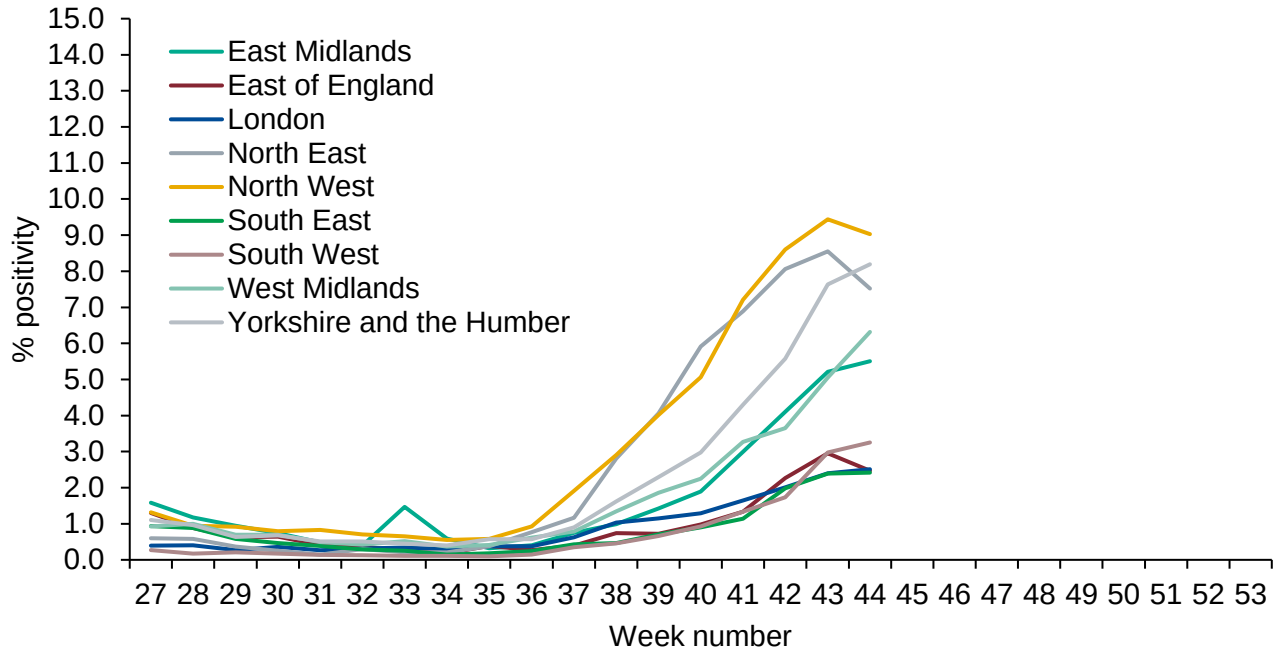


Figure 8: Weekly positivity of laboratory confirmed COVID-19 cases tested under (a) Pillar 1 (%) and (b) Pillar 2 (%), by PHE Centres and sample week, (SGSS and Respiratory DataMart)

(a)



(b)

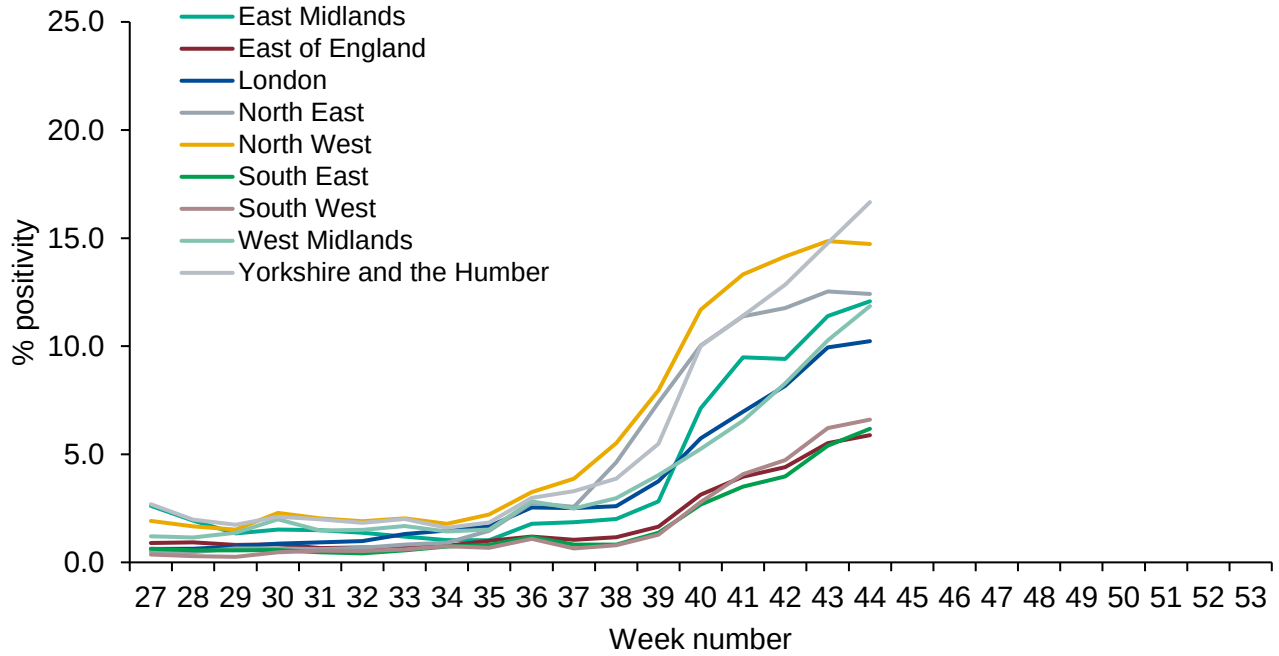
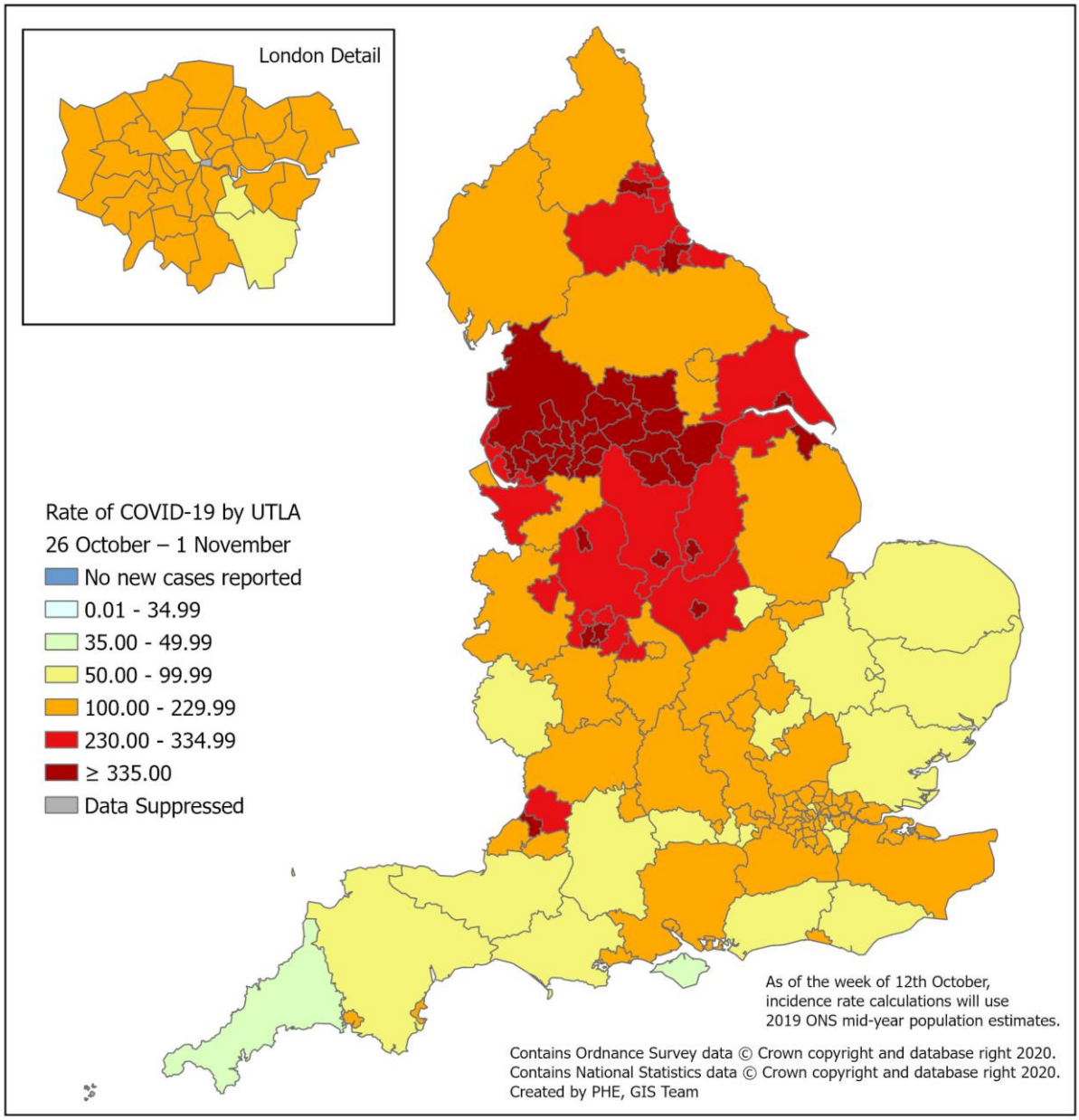
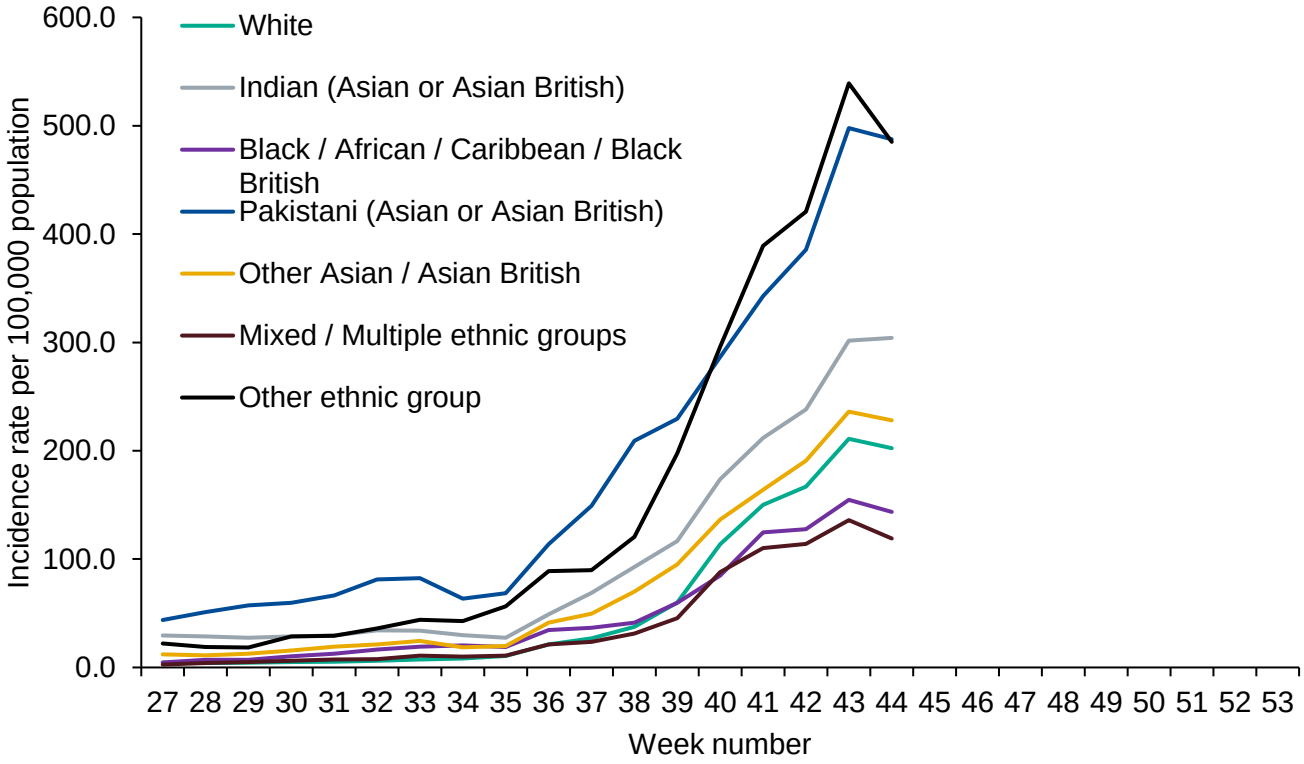


Figure 9: Weekly rate of COVID-19 cases per 100,000 population tested under Pillar 1 and 2, by upper-tier local authority, England (box shows enlarged map of London area)



Ethnicity

Figure 10: Weekly incidence per 100,000 population by ethnicity, England



*the incidence rates on Figure 10 have been calculated using the mid-2018 ONS population estimates

Respiratory DataMart system (England)

The Respiratory Datamart system was initiated during the 2009 influenza pandemic to collate all laboratory testing information in England. It is now used as a sentinel laboratory surveillance tool, monitoring all major respiratory viruses in England.16 laboratories in England will be reporting data for this season. As this is based on a sample of labs - SARS-CoV-2 positivity figures quoted here will differ from those quoted in the Confirmed COVID-19 cases section, however, they are included to facilitate comparison with data on other respiratory viruses.

In week 44 2020, out of the 90,460 respiratory specimens reported through the Respiratory DataMart System (based on data received from 13 out of 16 laboratories), 4,675 samples were positive for SARS-CoV-2 with an overall positivity of 5.2%. The highest positivity was noted in the 65+ year olds at 6.2% in week 44. The overall influenza positivity was low at 0.1% in week 44, with one sample (1 influenza B) testing positive (out of 864 tested) (Figure 11).

Rhinovirus positivity increased slightly at 16.7% in week 44 compared to 18.1% in the previous week (Figure 12). The highest positivity by age group for rhinovirus was noted in the less than 5 year olds in week 44 (Figure 13). Respiratory syncytial virus (RSV), adenovirus, parainfluenza and human metapneumovirus (hMPV) positivity all remained low at 0.1%, 1.6%, 0.0% and 0.3% respectively in week 44 (Figure 12).

Figure 11: DataMart samples positive for influenza and weekly positivity (%) for influenza and SARS-CoV-2, England

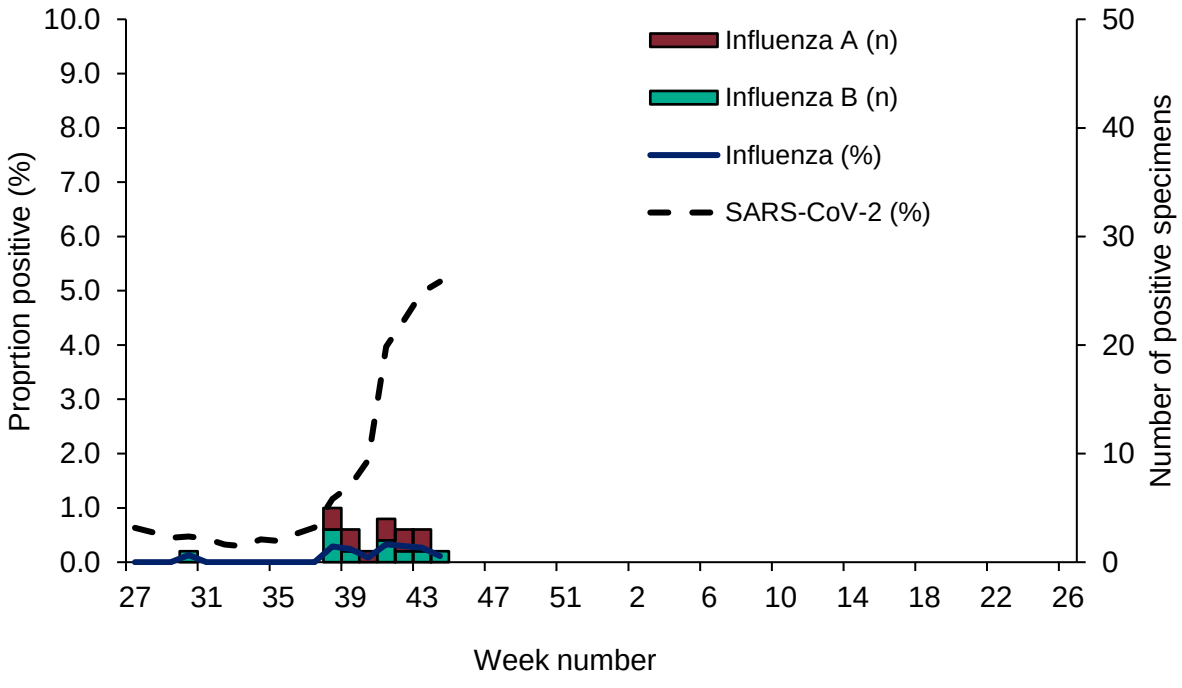


Figure 12: DataMart weekly positivity (%) for other respiratory viruses, England

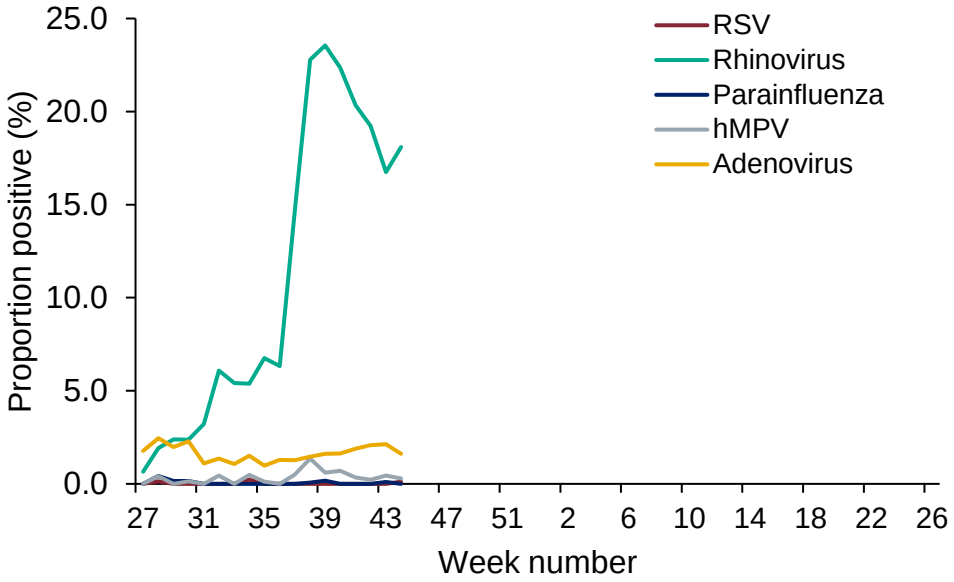
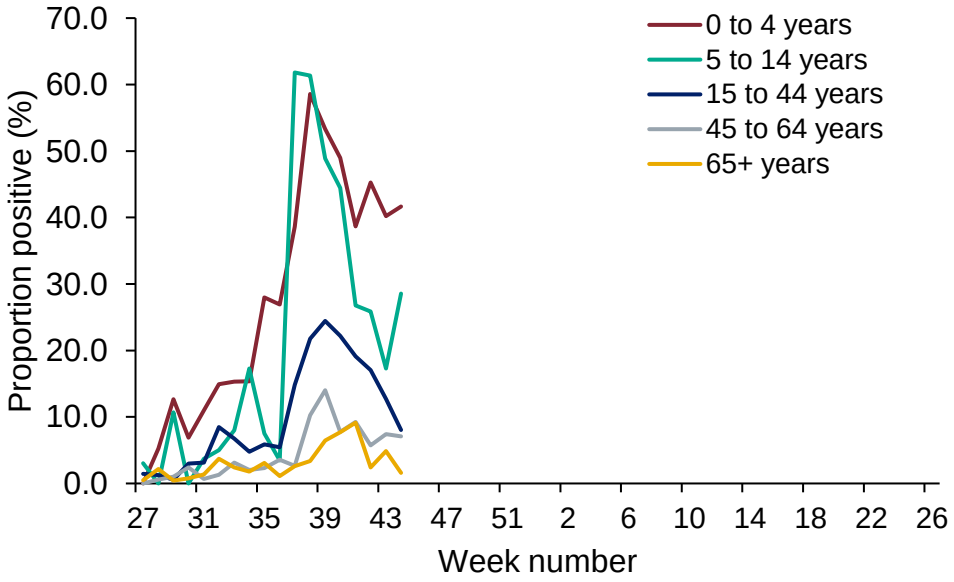


Figure 13: DataMart weekly positivity (%) for rhinovirus by age, England



Community surveillance

Acute respiratory infection incidents

Information on acute respiratory infection (ARI) incidents is based on situations reported to PHE Health Protection Teams (HPTs). These include:

- confirmed outbreaks of acute respiratory infections ie two or more laboratory confirmed cases (SARS-CoV-2, influenza or other respiratory pathogens) linked to a particular setting
- setting situations where an outbreak is suspected

All suspected outbreaks are further investigated by the HPT in liaison with local partners and a significant proportion do not meet the criteria of a confirmed outbreak. For example if suspected cases test negative for COVID19 or other respiratory pathogens, or cases are subsequently found not to have direct links to the setting. Since Pillar 2 testing became open to everyone during week 21 more incidents of mild disease have been detected in settings with healthy young populations.

Processes for reporting ARI incidents vary between PHE Centres.

The situations captured on HPZone represent a subset of all ongoing clusters and outbreaks in England rather than an exhaustive listing. A variety of arrangements are in place with local authorities and other stakeholders supporting HPTs, however data are not routinely documented on HPZone. As a result, the number of outbreaks reported for some of the regions are underestimates.

The denominator (the overall number of settings in each category) will differ by the setting category, for example there are fewer hospitals than workplaces, as will the propensity to report incidents to PHE. Therefore these data are more useful for monitoring trends over time than making comparisons across setting categories.

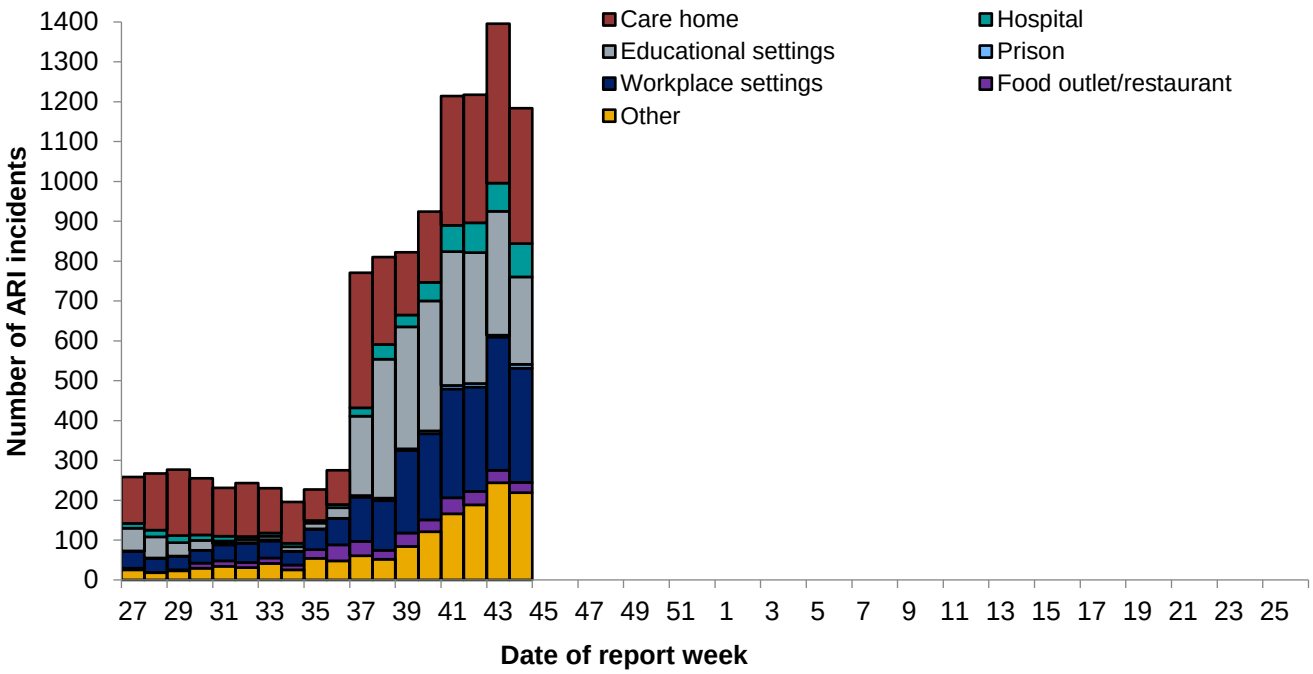
The number of incidents in each setting with at least one laboratory confirmed case of COVID19 are reported below. A national school helpline started operating on 17 September 2020 and a Universities helpline started operating on 7 October. This is likely to have had an impact on the number of situations/outbreaks being reported to HPTs in these settings

1184 new ARI incidents have been reported in week 44 in the UK (Figure 14):

- 340 incidents were from care homes where 238 had at least one linked case that tested positive for SARS-CoV-2

- 84 incidents were from hospitals where 67 had at least one linked case that tested positive for SARS-CoV-2
- 219 incidents were from educational settings where 155 had at least one linked case that tested positive for SARS-CoV-2
- 10 incidents were from prisons where 4 had at least one linked case that tested positive for SARS-CoV-2
- 286 incidents were from workplace settings where 204 had at least one linked case that tested positive for SARS-CoV-2
- 26 incidents were from food outlet/restaurant settings where 22 had at least one linked case that tested positive for SARS-CoV-2
- 219 incidents were from the other settings category where 134 had at least one linked case that tested positive for SARS-CoV-2

Figure 14: Number of acute respiratory infection (ARI) incidents by institution, UK



*excludes data from Wales

Figure 15: Number of acute respiratory infection (ARI) incidents by institution, England

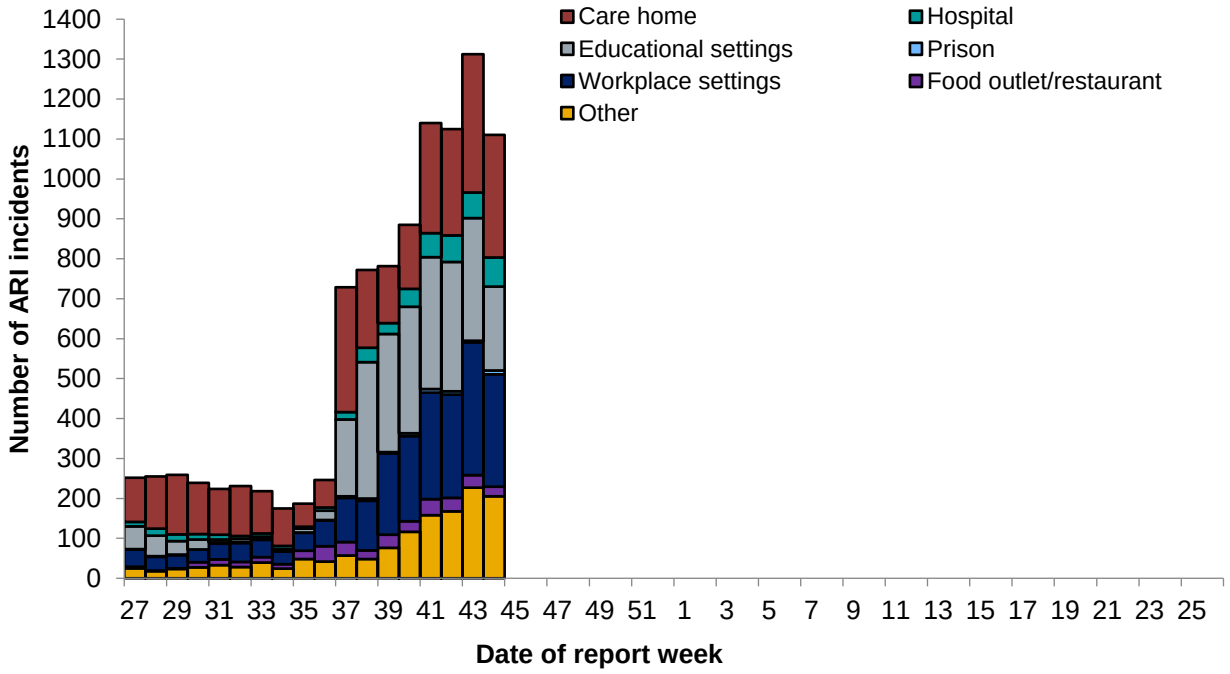


Figure 16: Number of acute respiratory infection (ARI) incidents in care homes by virus type from week 27, England

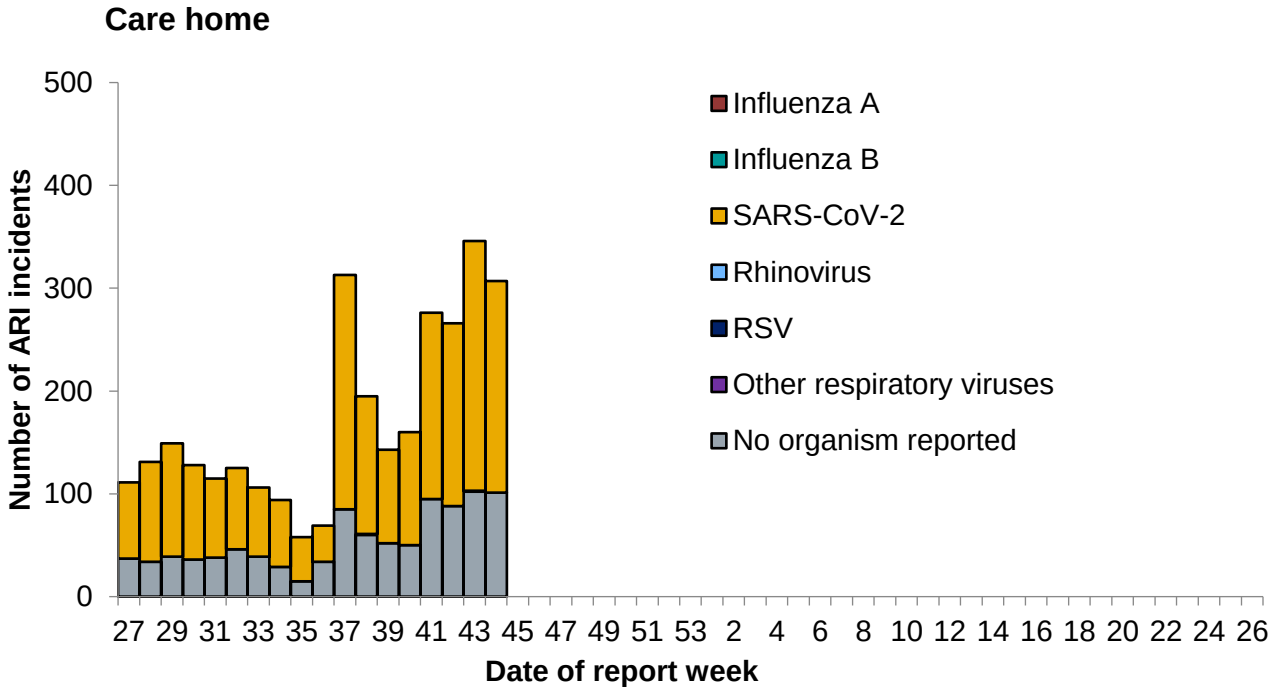


Figure 17: Number of acute respiratory infection (ARI) incidents in hospitals by virus type from week 27, England

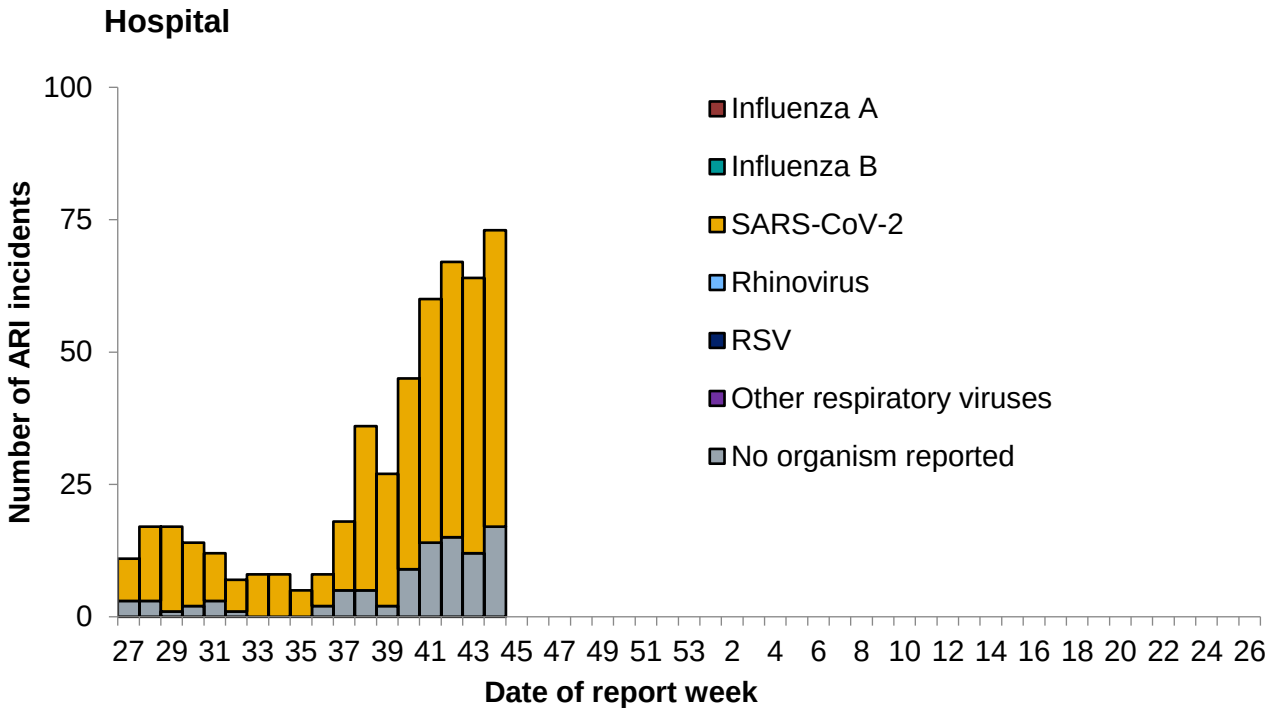


Figure 18: Number of acute respiratory infection (ARI) incidents in educational settings by virus type from week 27, England

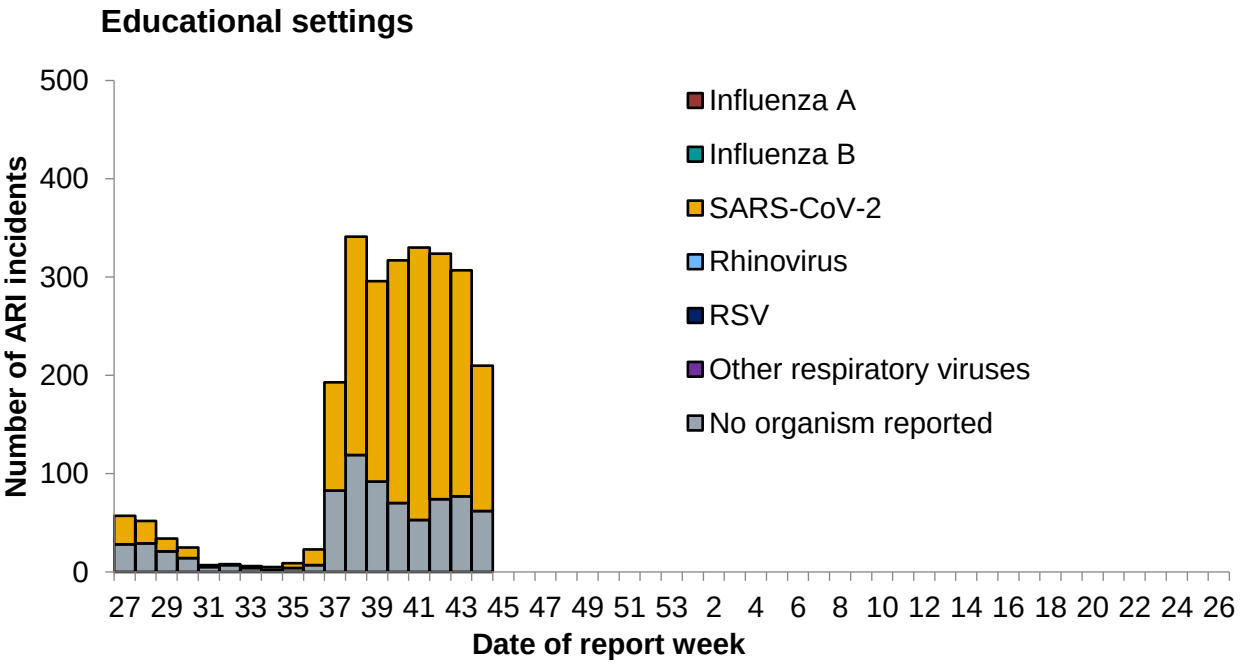


Figure 19: Number of acute respiratory infection (ARI) incidents in prisons by virus type from week 27, England

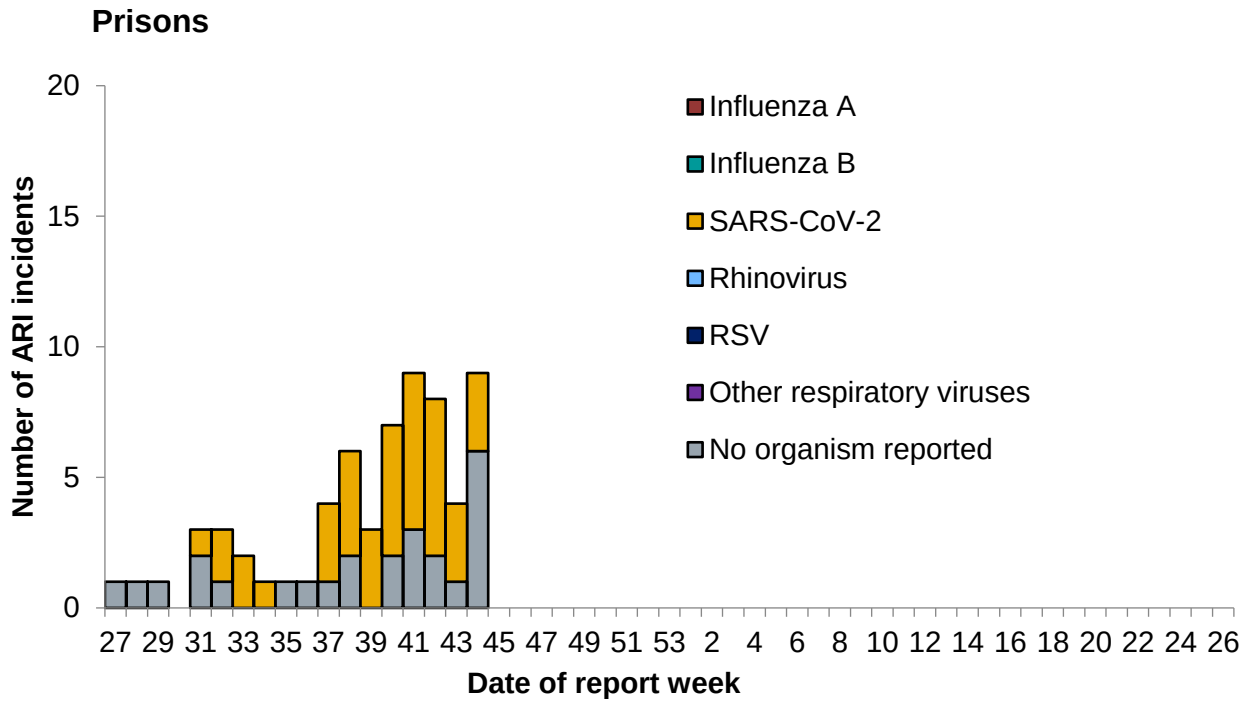


Figure 20: Number of acute respiratory infection (ARI) incidents in workplace settings by virus type from week 27, England

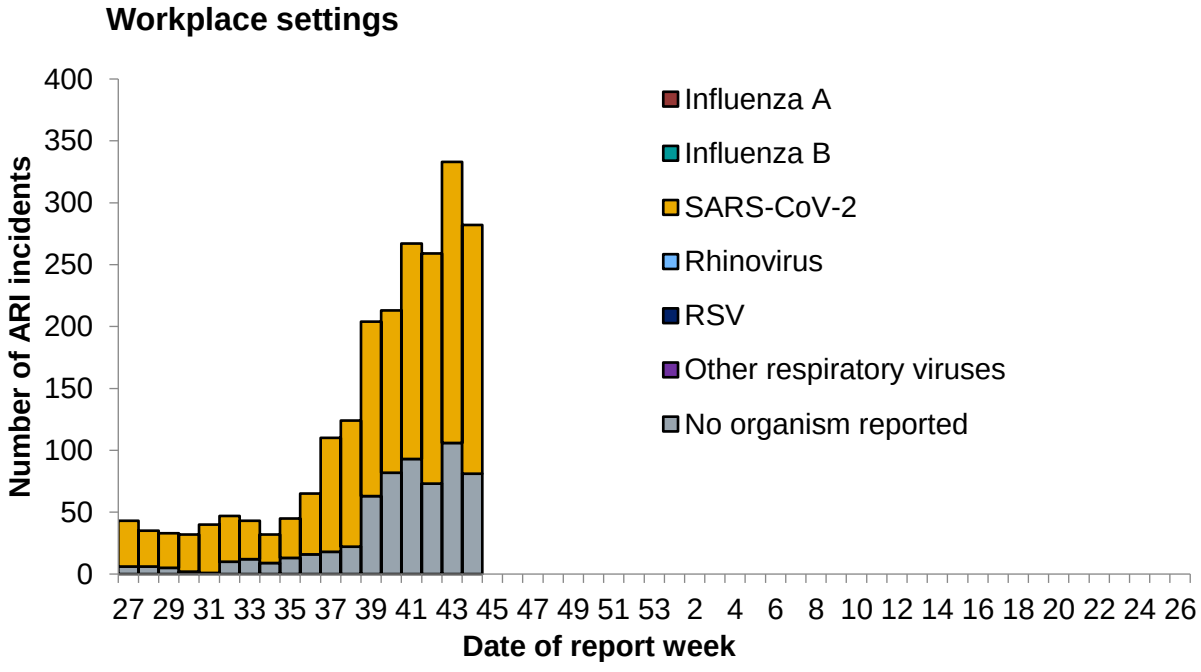


Figure 21: Number of acute respiratory infection (ARI) incidents in food outlet/restaurants settings by virus type from week 27, England

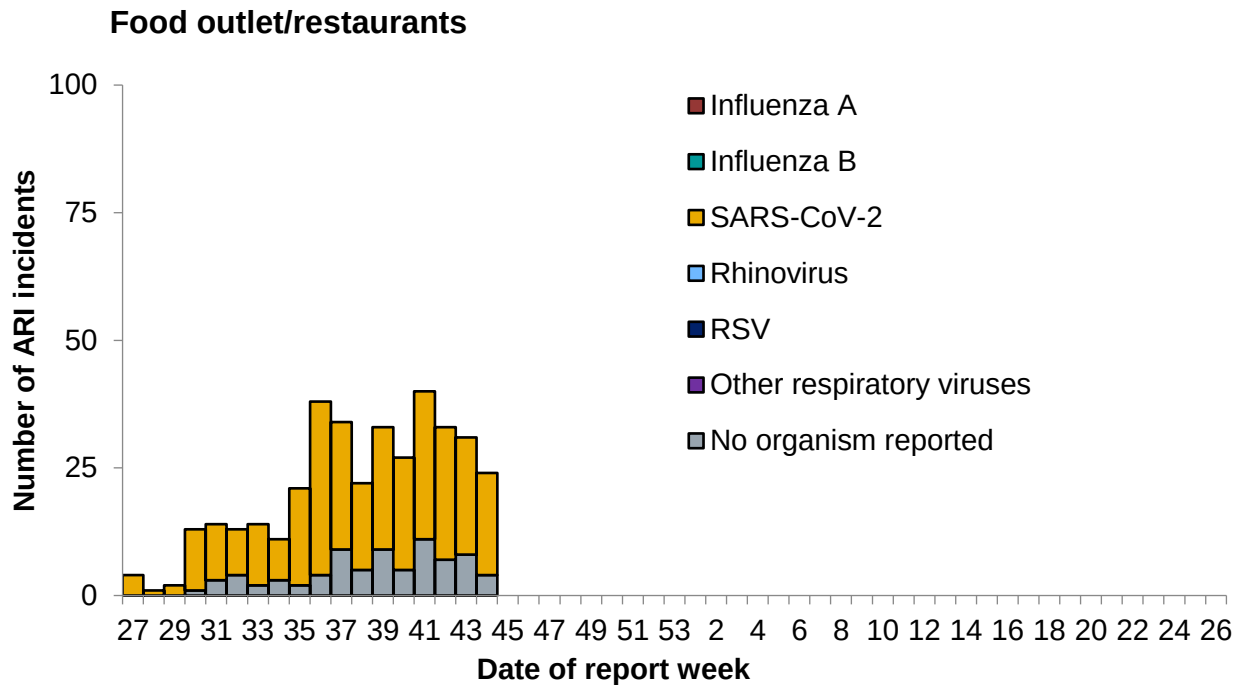


Figure 22: Number of acute respiratory infection (ARI) incidents in other settings settings by virus type from week 27, England

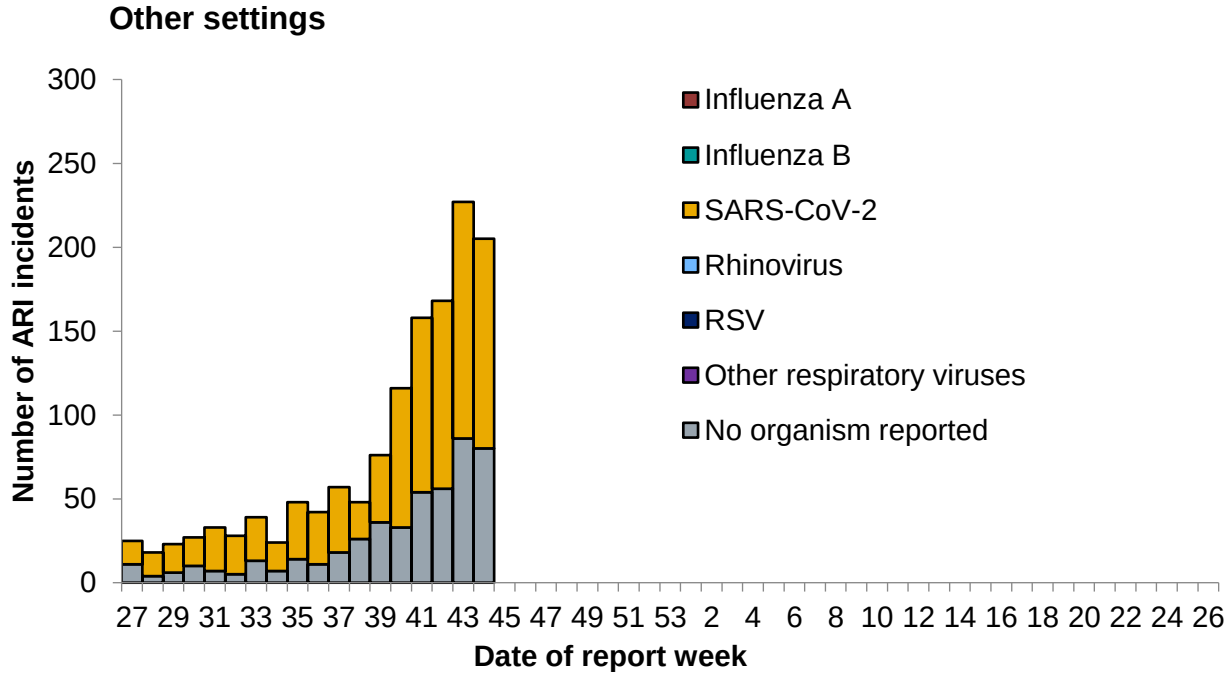


Table 2: Total number of situations/incidents by institution and PHE Centres over the past four weeks with the total number in the last week in brackets

PHE Centres	Care home	Hospital	Educational settings	Prisons	Workplace settings	Food outlet/restaurant settings	Other settings	Total
East of England	134(18)	16(8)	28(3)	2(0)	46(9)	3(0)	24(8)	253(46)
East Midlands	110(35)	50(17)	160(39)	3(1)	101(19)	17(0)	46(14)	487(125)
London	75(12)	46(11)	229(36)	8(5)	203(59)	23(7)	40(13)	624(143)
North East	77(11)	2(2)	19(1)	1(0)	28(5)	1(0)	51(13)	179(32)
North West	231(60)	37(3)	90(0)	2(2)	134(15)	11(2)	209(43)	714(125)
South East	144(38)	29()3	223(66)	6(0)	119(48)	21(8)	66(25)	608(198)
South West	142(45)	9(0)	120(20)	3(1)	97(32)	19(3)	52(19)	442(120)
West Midlands	124(30)	64(17)	168(32)	3(0)	253(59)	20(3)	119(40)	751(181)
Yorkshire and Humber	158(58)	11(2)	134(13)	2(0)	160(36)	13(1)	151(30)	629(140)
Total	1195(307)	264(73)	1171(210)	30(9)	1141(282)	128(24)	758(205)	4687(1110)

COVID-19 cases by type of residence

Table 3 shows the proportion of confirmed COVID-19 cases according to their type of residence. Property classifications are derived from Ordnance Survey AddressBase and are matched to address details within the laboratory data. Properties are identified by unique property reference number (UPRN) and basic land property unit (BLPU). Cases with poor or no address data which failed the address matching and are classed as 'undetermined'. No fixed abode and overseas addresses identified by recording in the laboratory data.

In week 44, the highest percentage of confirmed COVID-19 cases by type of residence was seen in residential dwelling (Table 3).

Table 3: Type of residence of confirmed COVID-19 cases by percentage of total weekly cases

Type of residence	week 39	week 40	week 41	week 42	week 43	week 44
Residential dwelling (including houses, flats, sheltered accommodation)	79.3	78.1	79.5	81.3	81.4	85.8
Undetermined	16.2	15.2	14.4	13.3	14.2	10.0
Care/Nursing home	1.4	1.5	1.4	1.7	1.8	2.1
Residential institution (including residential education)	1.1	2.4	2.3	1.6	0.9	0.6
House in multiple occupancy (HMO)	1.0	1.6	0.9	0.8	0.6	0.6
Medical facilities (including hospitals and hospices, and mental health)	0.3	0.3	0.3	0.3	0.2	0.2
Other property classifications	0.5	0.7	0.9	0.8	0.7	0.6
Prisons, detention centres, secure units	0.2	0.2	0.1	0.1	0.2	0.2
No fixed abode	0.0	0.0	0.0	0.0	0.0	0.0
Overseas address	0.0	0.0	0.0	0.0	0.0	0.0

Medical Officers of Schools Association (MOSA) & PHE surveillance scheme

Boarding schools in England within the MOSA network are recruited each season to report various respiratory related illnesses including influenza like illnesses (ILI).

Data will be reported from week 45.

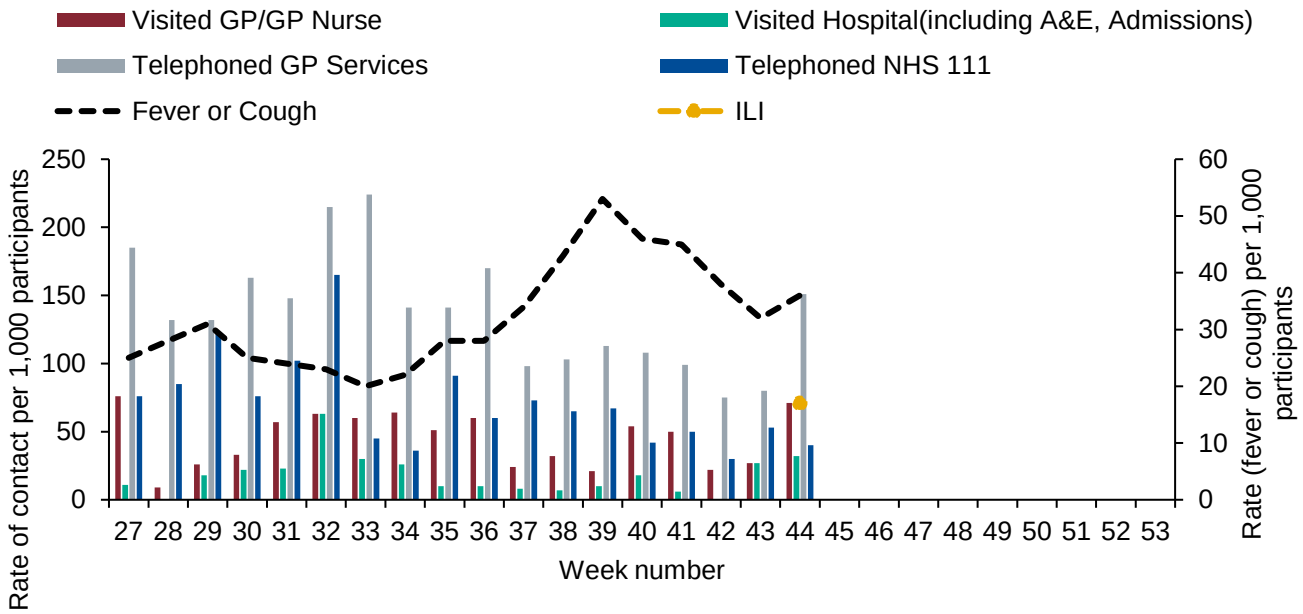
If you are a MOSA school and would like to participate in this scheme, please email mosa@phe.gov.uk for more information.

FluSurvey

An internet based surveillance system has been developed based on FluSurvey. FluSurvey is a web tool survey designed to monitor trends of influenza like illness (ILI) in the community using self-reported respiratory symptoms from registered participants. The platform has been adapted to capture respiratory symptoms, exposure risk and healthcare seeking behaviours among registered participants to contribute to national surveillance of COVID-19 activity as well as influenza activity since week 44.

A total of 3,499 participants completed the weekly COVID-19 surveillance survey in week 44, of which 126 (3.6%) reported fever or cough and 60 (1.7%) reporting ILI. The most commonly reported method of access to healthcare services continue to be through telephoning a GP practice in week 44 (Figure 23).

Figure 23: Rate of contact with different healthcare services among FluSurvey participants reporting fever or cough symptoms, England

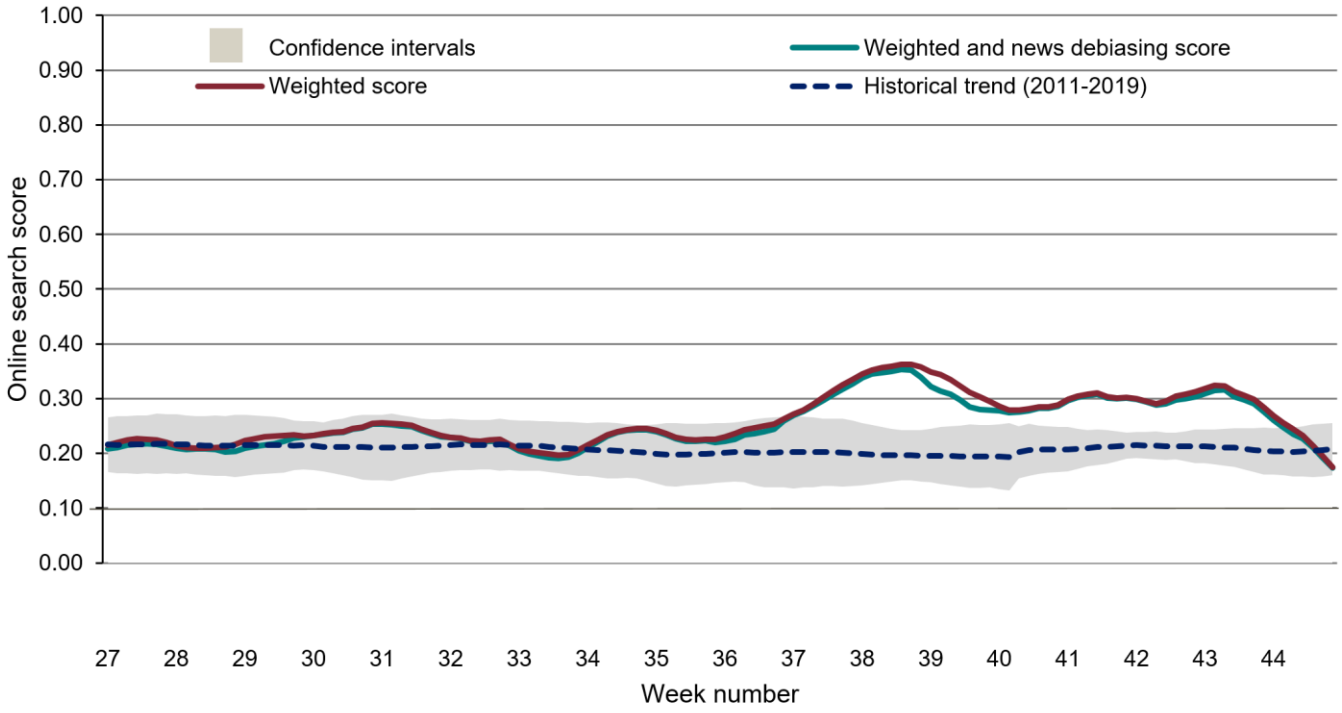


Google search queries

This is a web-based syndromic surveillance system which uses daily search query frequency statistics obtained from the Google Health Trends API [1]. This model focuses on search queries about COVID-19 symptoms as well as generic queries about "coronavirus" (e.g. "covid-19"). The search query frequency time series has been weighted based on symptom frequency as reported in other data sources. Frequency of searches for symptoms is compared with a baseline calculated from historical daily data.

During week 44, the overall and media-debiasing weighted Google search scores decreased further (Figure 24).

Figure 24: Normalised Google search score for COVID-19 symptoms, with weighted score for media-debiasing and historical trend, England



NHS 111

The NHS 111 service monitors daily trends in phone calls made to the service in England, to capture trends in infectious diseases such as influenza and norovirus.

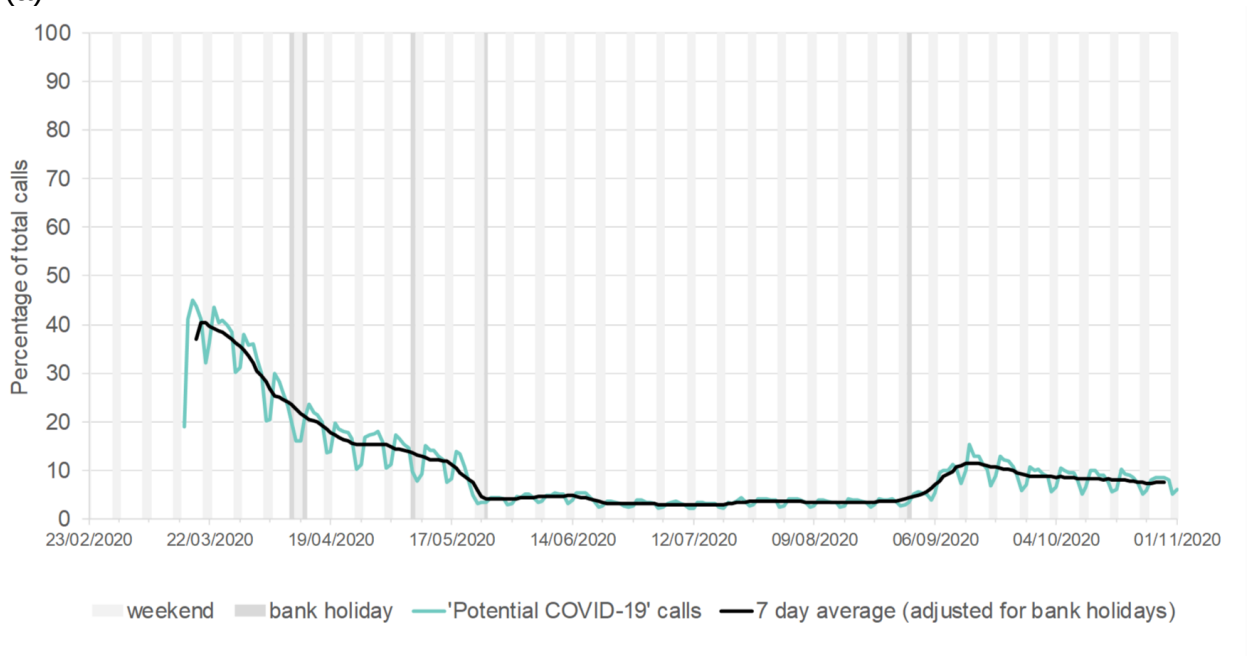
Up to 1 November 2020, the daily percentage of NHS 111 ‘potential COVID-19-like’ calls (as a percentage of total NHS 111 calls) remained stable whereas the number of online assessments are decreased slightly. The daily percentage of cold/flu calls (as a percentage of total NHS 111 calls) and cold/flu completed online assessments decreased (Figure 25 and 26). The daily percentage of loss of taste or smell calls and online assessments decreased slightly.

Please note that NHS 111 callers (from 11 May 2020) and NHS 111 online users (from 11 June 2020), who are assessed as having probable COVID-19 symptoms are now triaged using symptom specific pathways e.g. cold/flu, which are included in routine syndromic indicators.

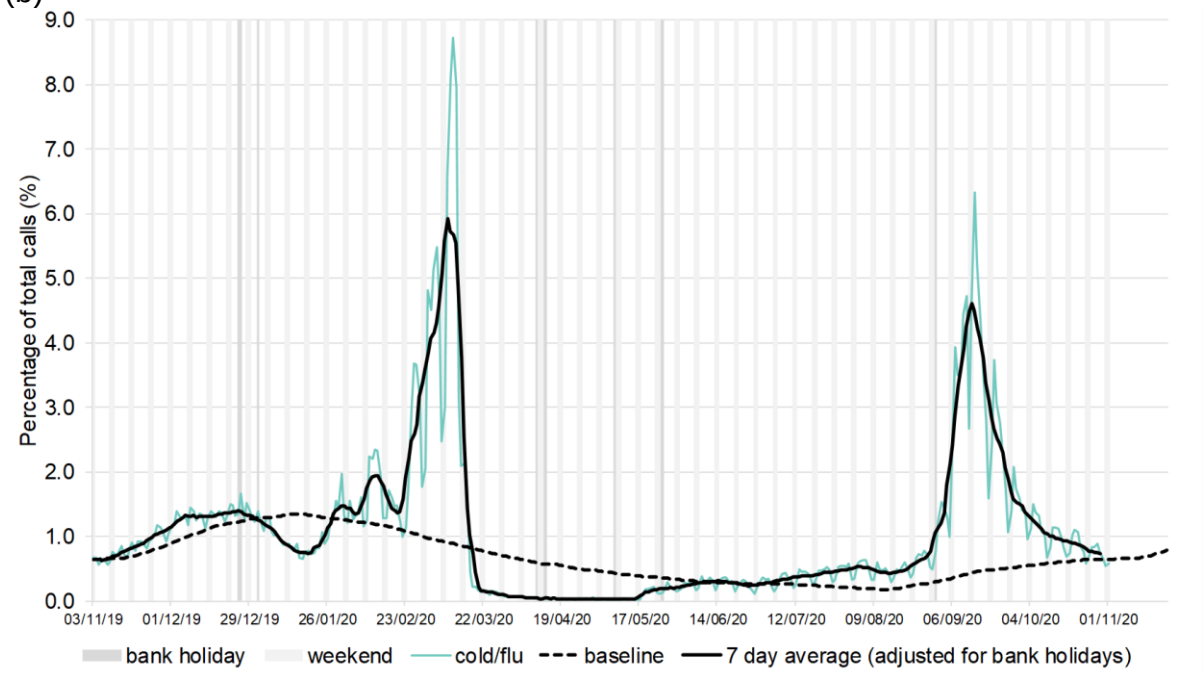
Further information about these caveats is available from the PHE Remote Health Advice Syndromic Surveillance bulletin.

Figure 25: NHS 111 telephony indicators (and 7-day moving average) for (a) daily potential COVID-19 calls, (b) daily cold/flu calls and (c) daily loss of taste or smell calls, as a percentage of total calls for all ages, England

(a)



(b)


9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
Percentage of total calls (%)
03/11/19
01/12/19
29/12/19
26/01/20
23/02/20
22/03/20
19/04/20
17/05/20
14/06/20
12/07/20
09/08/20
06/09/20
04/10/20
01/11/20
bank holiday
weekend
cold/flu
baseline
7 day average (adjusted for bank holidays)

(c)

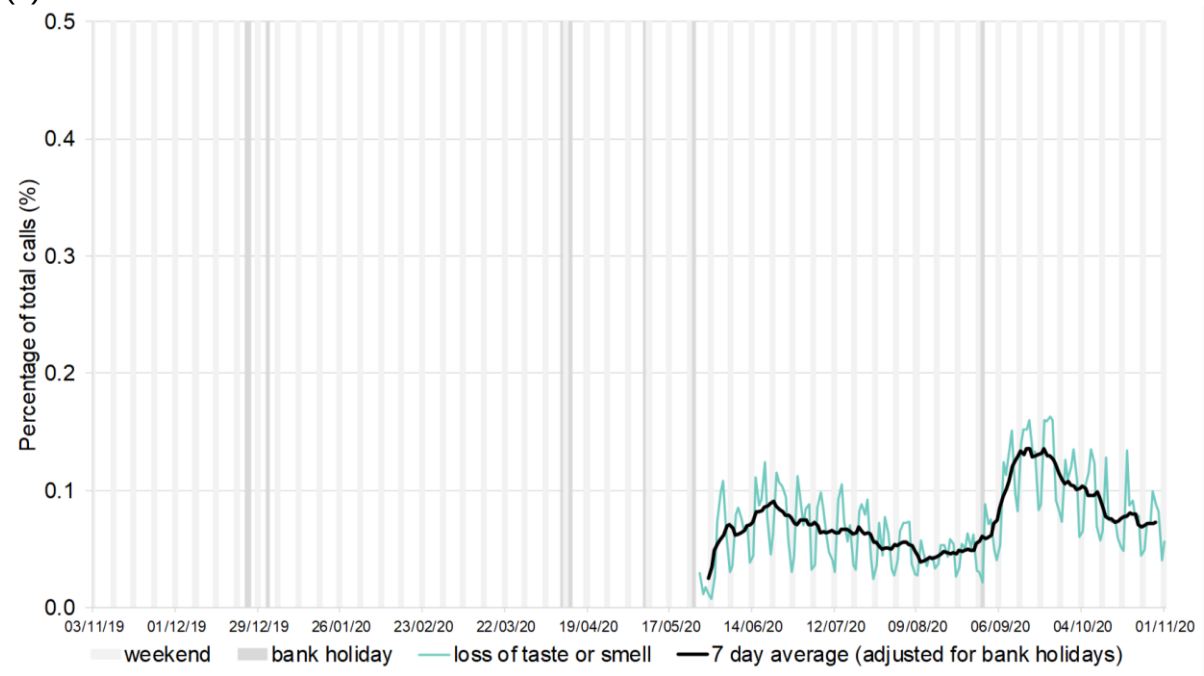
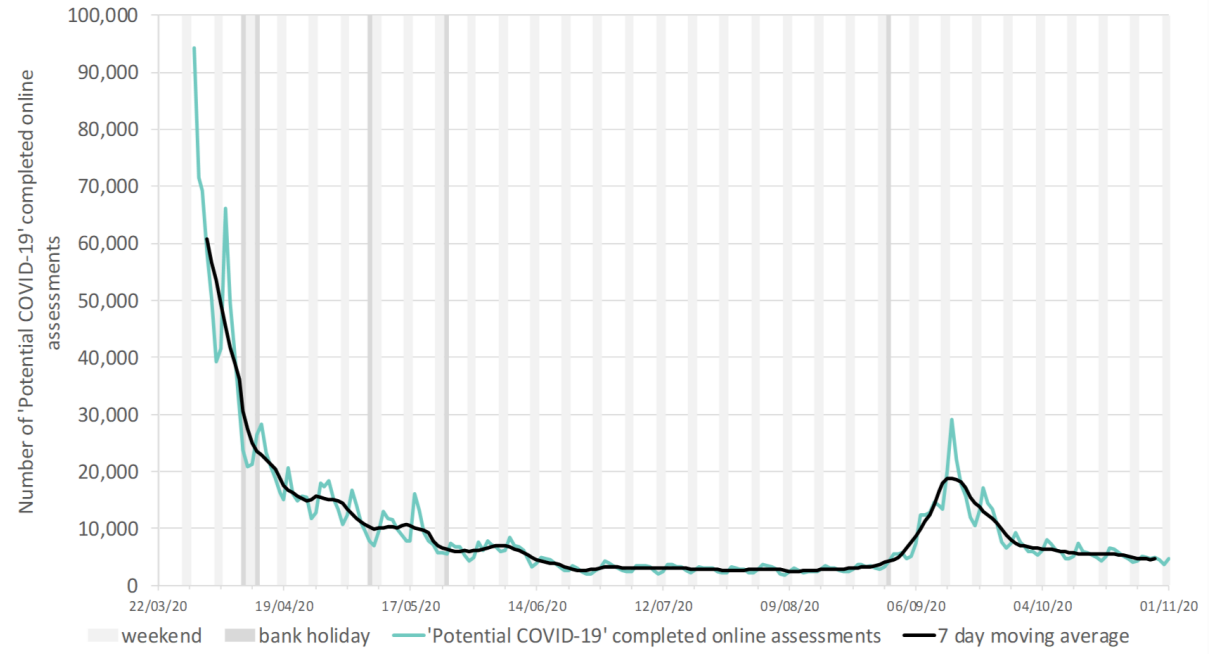
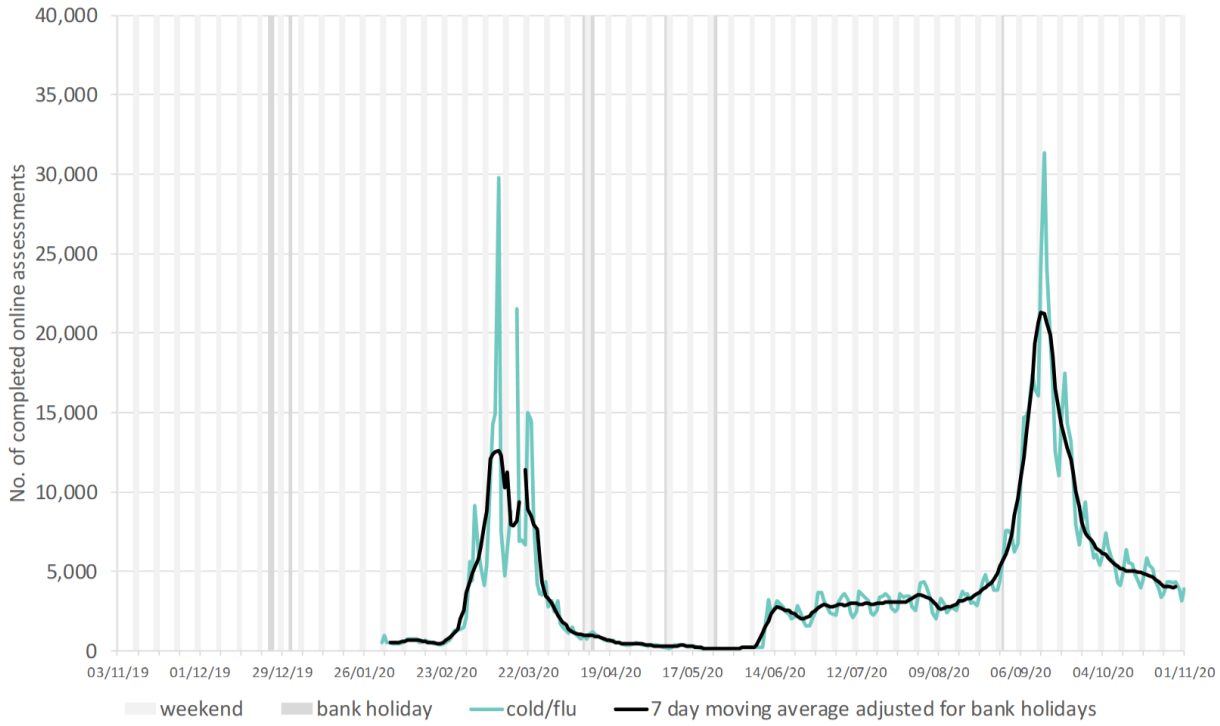

0.5
0.4
0.3
0.2
0.1
0.0
Percentage of total calls (%)
03/11/19
01/12/19
29/12/19
26/01/20
23/02/20
22/03/20
19/04/20
17/05/20
14/06/20
12/07/20
09/08/20
06/09/20
04/10/20
01/11/20
weekend
bank holiday
loss of taste or smell
7 day average (adjusted for bank holidays)

Figure 26: NHS 111 completed online assessments (and 7-day moving average) for (a) daily potential COVID-19 online assessments, (b) daily cold/flu online assessments and (c) daily loss of taste or smell online assessments, as the number of completed online assessments for all ages, England

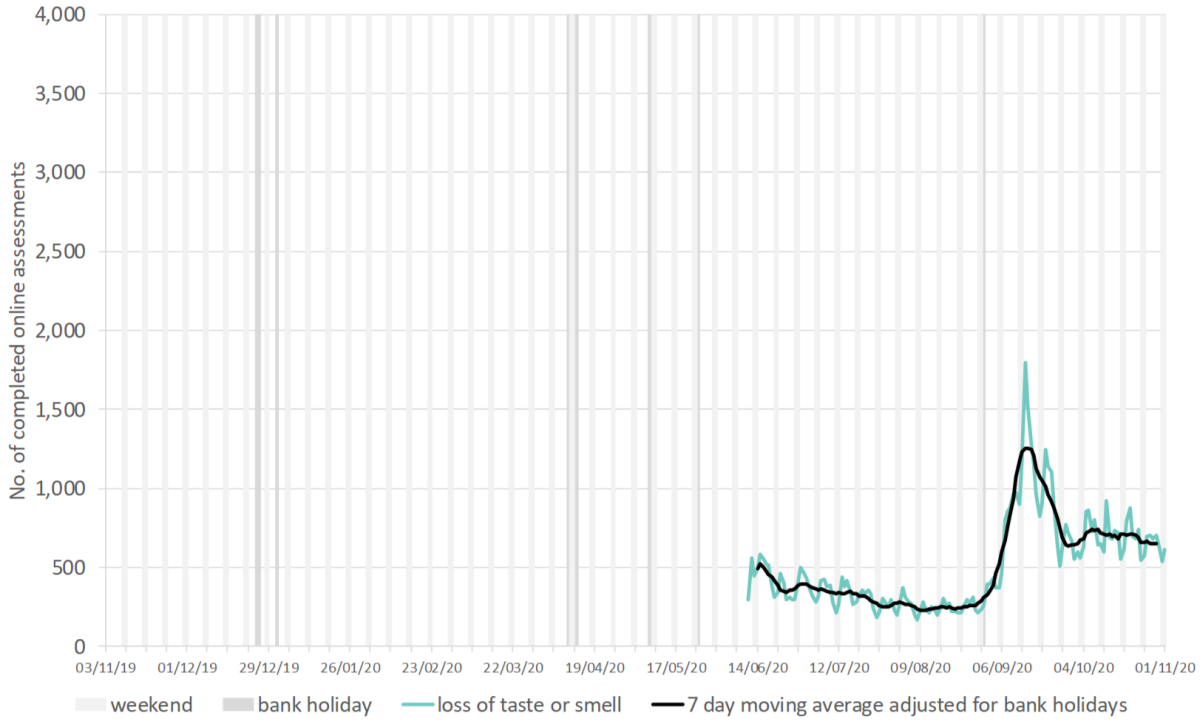
(a)



(b)



(c)


4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
No. of completed online assessments
03/11/19
01/12/19
29/12/19
26/01/20
23/02/20
22/03/20
19/04/20
17/05/20
14/06/20
12/07/20
09/08/20
06/09/20
04/10/20
01/11/20
weekend
bank holiday
loss of taste or smell
7 day moving average adjusted for bank holidays

Primary care surveillance

RCGP (England)

The weekly ILI consultation rate through the RCGP surveillance was 1.4 per 100,000 registered population in participating GP practices in week 44 compared to the 1.6 per 100,000 in the previous week. This is below the baseline threshold (12.2 per 100,000) (Figure 27). By age group, the highest rates were seen in the under 1 year olds (2.7 per 100,000) and in the 75+ year olds (2.6 per 100,000). The Lower Respiratory Tract Infections (LRTI) consultation rate was at 19.6 per 100,000 in week 44, which was a slight decrease from the rate of 22.2 per 100,000 from the previous week. The COVID-19-like indicator consultation rate increased at 101.5 per 100,000 in week 44 compared to 51.9 per 100,000 in the previous week (Figure 28).

Figure 27: RCGP ILI consultation rates, all ages, England

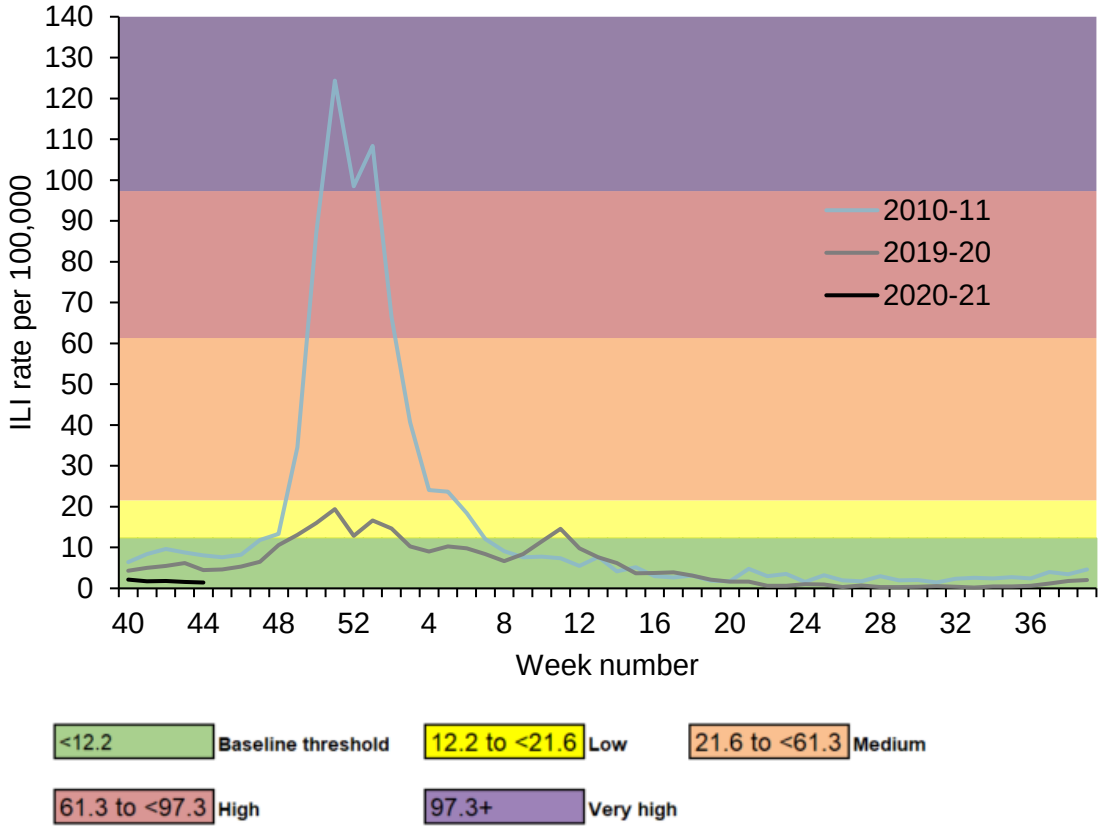
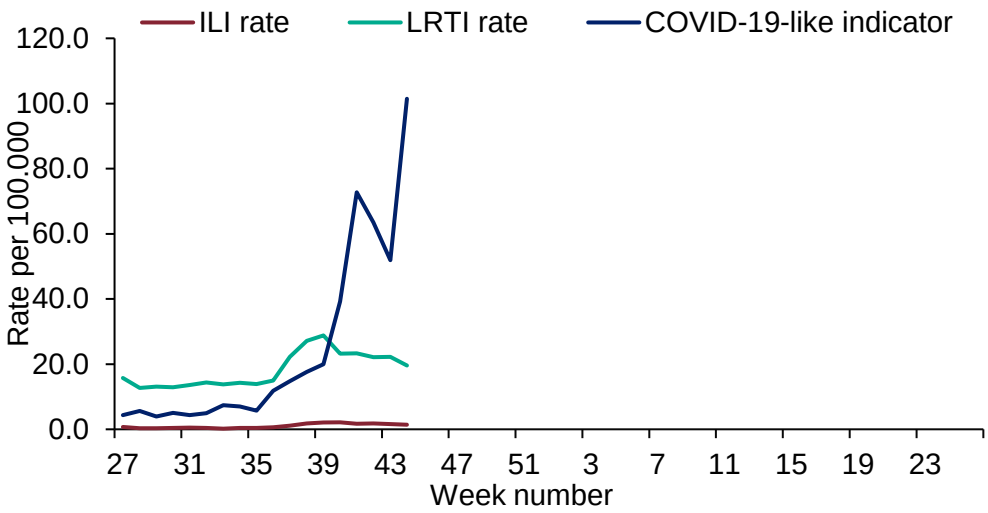


Figure 28: RCGP ILI, LRTI and COVID-19-like indicator consultation rates, England



UK

Overall, weekly ILI consultations rates were below baseline levels in all UK schemes (Table 4).

By age group, the highest rates were seen in the 45 to 64 year olds in Scotland (1.6 per 100,000), in the 45 to 64 year olds in Wales (1.9 per 100,000) and in the 1 to 4 year olds in Northern Ireland (2.4 per 100,000).

Table 4: GP ILI consultations in the UK for all ages with MEM thresholds applied

GP ILI consultation rates (all ages)	Week number																
	40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4
England (RCGP)	2.1	1.7	1.8	1.6	1.4												
Wales	1.0	1.0	1.0	0.8	0.5												
Scotland	0.5	0.7	0.5	0.5	0.8												
Northern Ireland	1.3	1.5	2.2	1.4	1.6												

The Moving Epidemic Method (MEM) has been adopted by the European Centre for Disease Prevention and Control to calculate thresholds for GP ILI consultations for the start of influenza activity (based on 10 seasons excluding 2009/10), in a standardised approach across Europe. For MEM threshold values for each country, please visit: https://www.gov.uk/guidance/sources-of-uk-flu-data-influenza-surveillance-in-the-uk#clinical-surveillance-through-primary-care

GP In Hours, Syndromic Surveillance

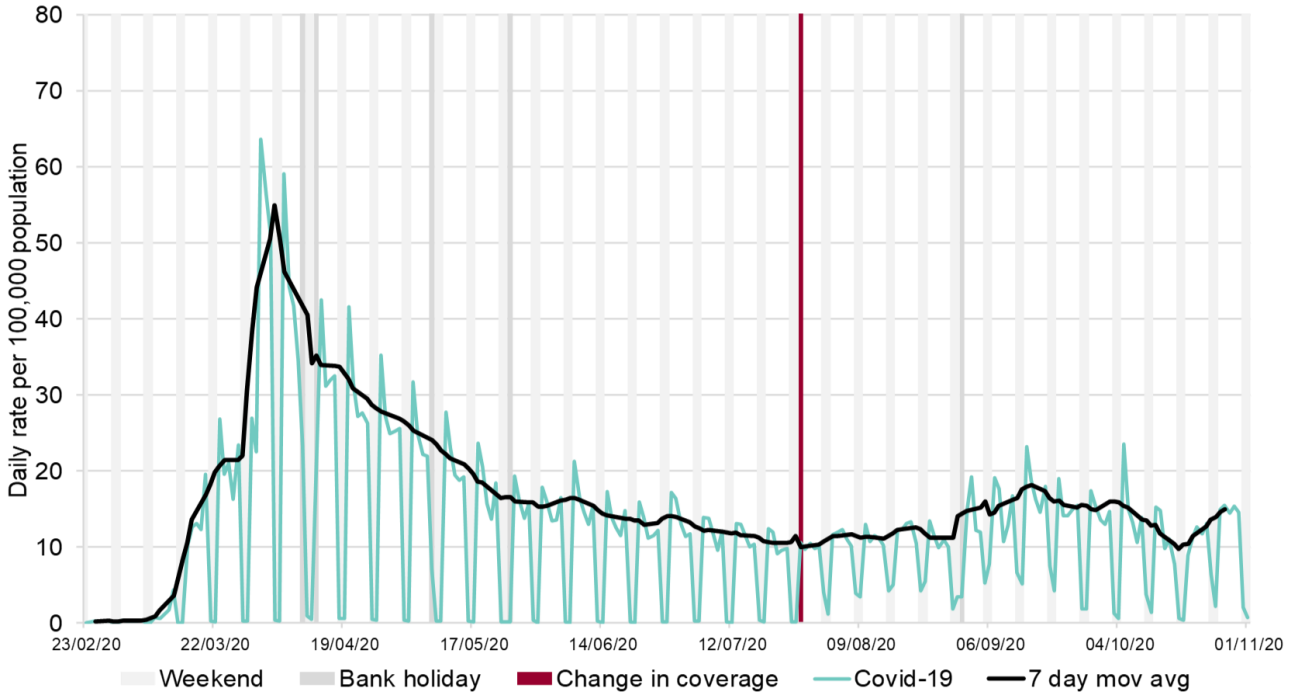
The GP In Hours (GPIH) syndromic surveillance system monitors the number of GP visits during regular hours of known clinical indicators.

Up to 1 November 2020, GPIH consultations for potential COVID-19-like consultations and ILI consultations remained stable (Figure 29). Please note that the GPIH COVID-19-like indicator presented in this report is derived from a reduced denominator population, compared to ILI.

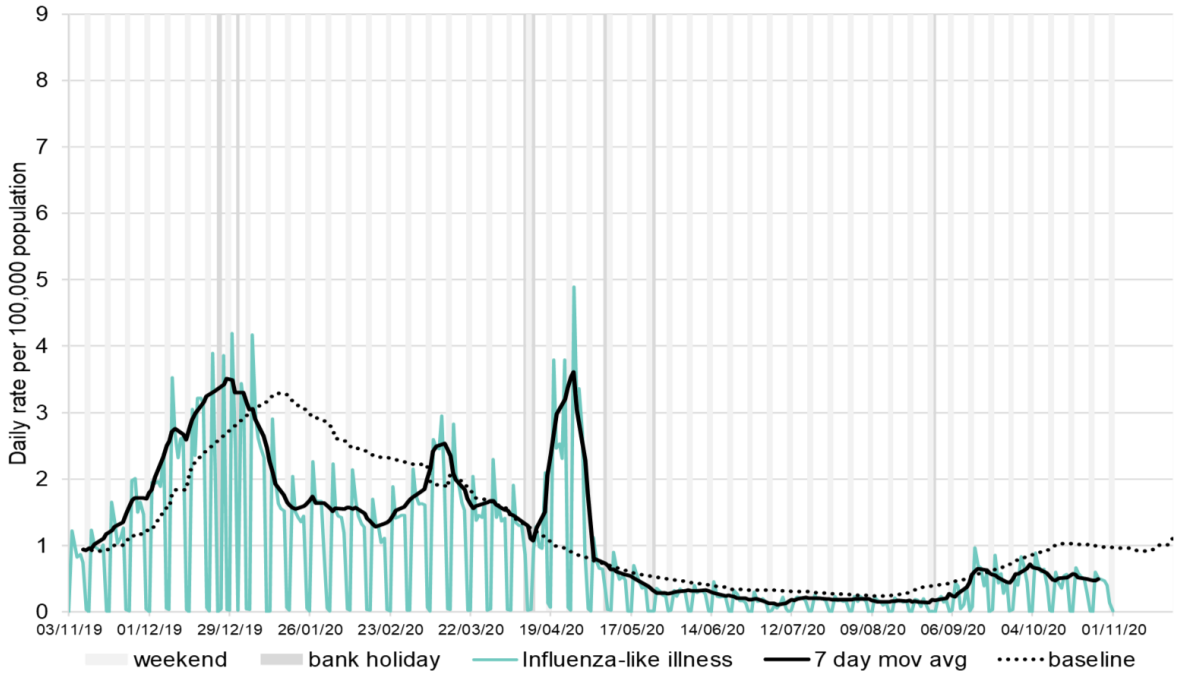
Please note GP data should be interpreted with caution due to changes in advice regarding accessing GP surgeries due to COVID-19. Further information about these caveats is available from the PHE GP In Hours Syndromic Surveillance bulletin.

Figure 29: GPIH clinical indicators for (a) potential COVID-19 GP consultations and (b) influenza-like illness GP consultations, England

(a)



(b)


Daily rate per 100,000 population
0
1
2
3
4
5
6
7
8
9
03/11/19
01/12/19
29/12/19
26/01/20
23/02/20
22/03/20
19/04/20
17/05/20
14/06/20
12/07/20
09/08/20
06/09/20
04/10/20
01/11/20
weekend
bank holiday
Influenza-like illness
7 day mov avg
baseline

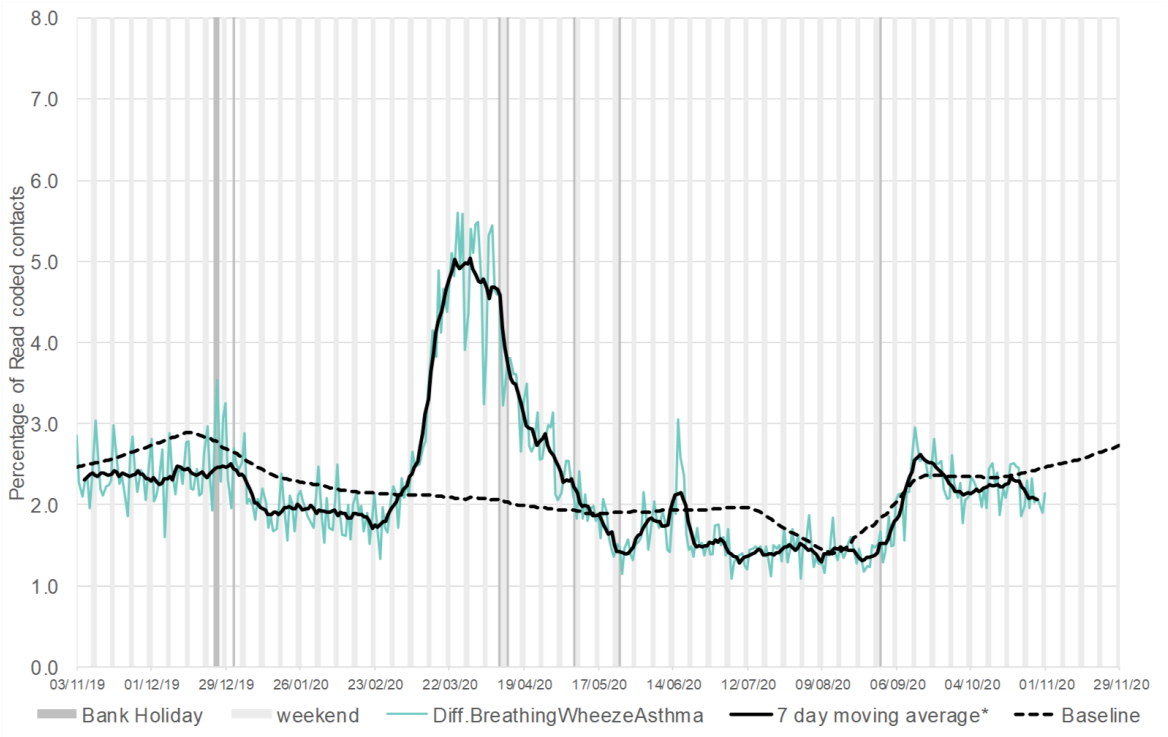
GP Out of Hours, Syndromic Surveillance

The GP Out of Hours (GPOOH) syndromic surveillance system monitors the numbers of daily unscheduled visits and calls to GPs during evenings, overnight, on weekends and on public holidays. Both systems cover around 55% of England's population.

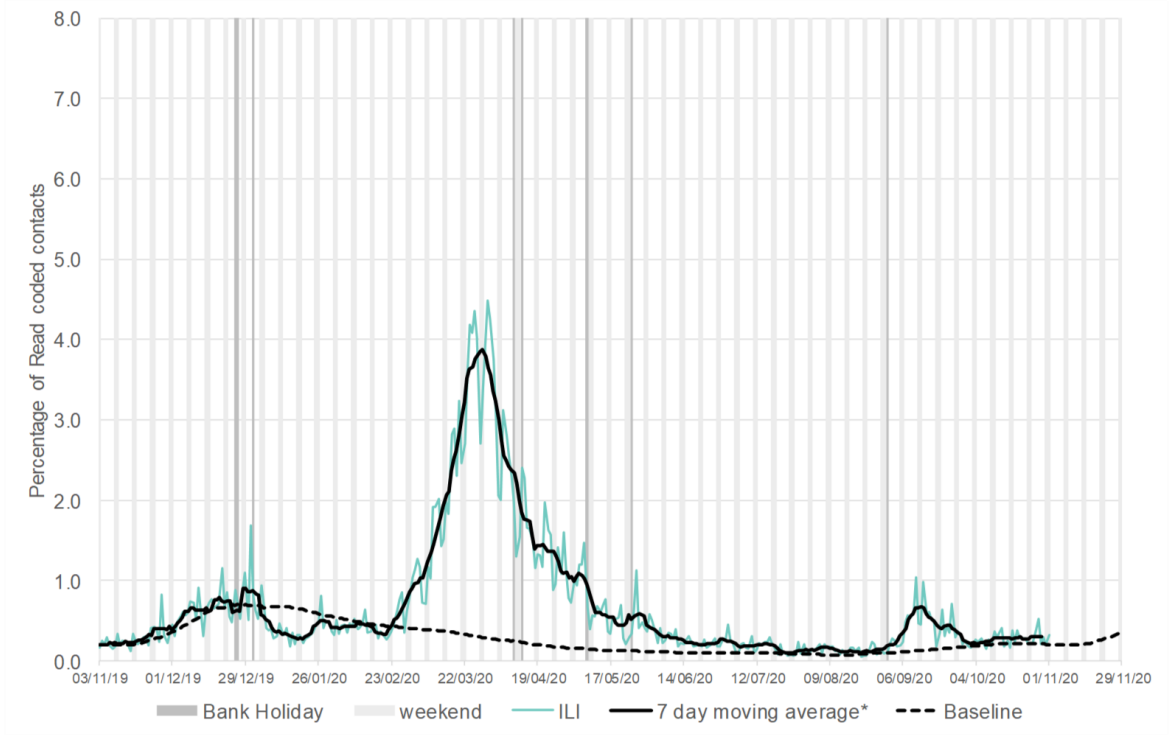
Up to 1 November 2020, GP out-of-hours and unscheduled care consultations for acute respiratory infections and influenza-like illness remained stable while difficulty breathing/asthma/wheeze decreased (Figure 30).

Figure 30: GPOOH daily contacts (%) for (a) difficulty breathing/wheeze/asthma, (b) influenza-like illness and (c) acute respiratory infections, England

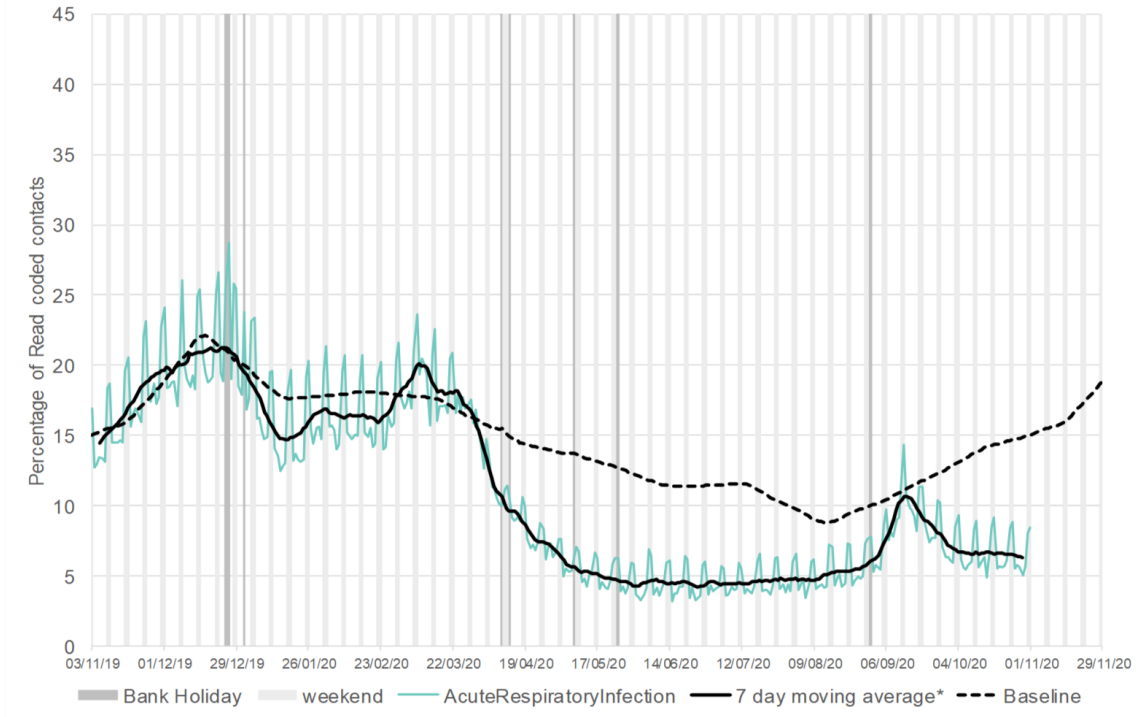
(a)



(b)


Percentage of Read coded contacts
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
03/11/19
01/12/19
29/12/19
26/01/20
23/02/20
22/03/20
19/04/20
17/05/20
14/06/20
12/07/20
09/08/20
06/09/20
04/10/20
01/11/20
29/11/20
Bank Holiday
weekend
ILI
7 day moving average*
Baseline

(c)

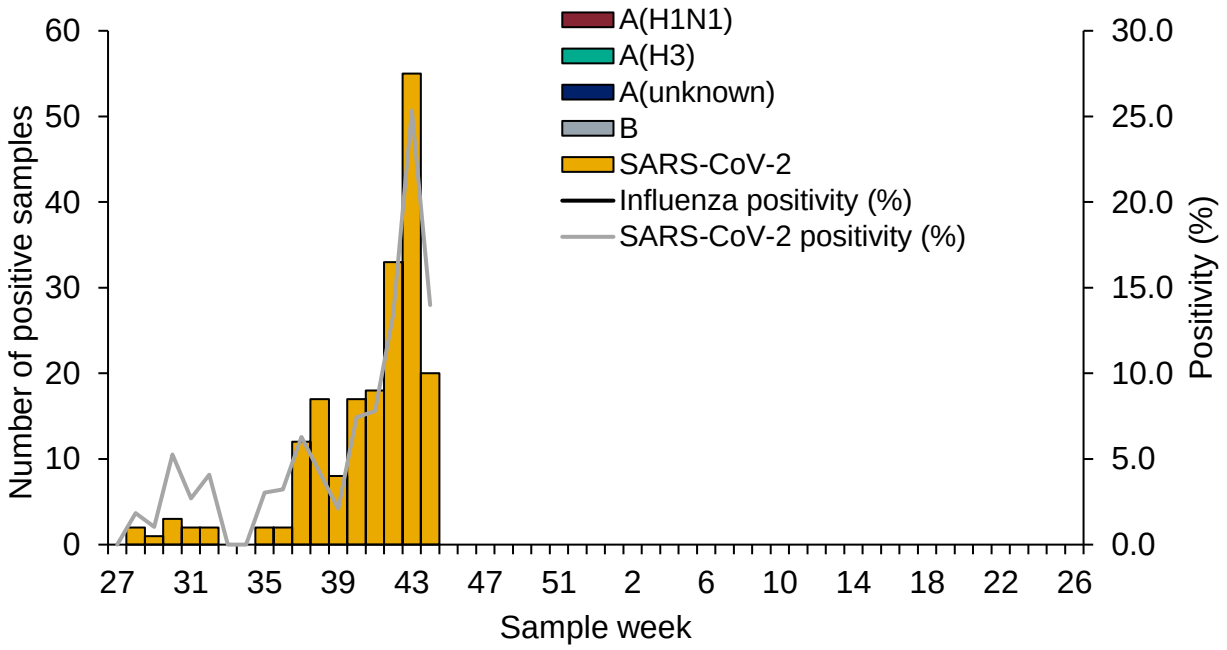

Percentage of Read coded contacts
45
40
35
30
25
20
15
10
5
0
03/11/19
01/12/19
29/12/19
26/01/20
23/02/20
22/03/20
19/04/20
17/05/20
14/06/20
12/07/20
09/08/20
06/09/20
04/10/20
01/11/20
29/11/20
Bank Holiday
weekend
AcuteRespiratoryInfection
7 day moving average*
Baseline

Sentinel swabbing scheme in England and the Devolved Administrations

In week 44 2020, 20 samples tested positive for SARS-CoV-2 with an overall positivity of 14.0% (20/143) compared to 25.3% (55/217) in the previous week, through the UK GP sentinel swabbing schemes (Figure 31).

Samples up to week 41 were only tested for SARS-CoV-2.

Figure 31: Number of influenza and COVID-19 positive samples and weekly positivity (%), UK GP sentinel swabbing scheme



*For the most recent week, more samples are expected to be tested therefore the graph in Figure 31 should be interpreted with caution
*Positivity (%) is not calculated when the total number tested is less than 10

Secondary care surveillance

SARI Watch

The Severe Acute Respiratory Infection (SARI) Watch surveillance system was established in 2020 to report the number of laboratory confirmed influenza and COVID-19 cases admitted to hospital and critical care units (ICU/HDU) in NHS acute trusts across England. This has replaced the USISS Mandatory and Sentinel data collections for influenza surveillance used in previous seasons, and the COVID-19 hospitalisations in England surveillance system (CHESS) collections for COVID-19 surveillance.

The weekly rate of new admissions of COVID-19 and influenza cases is based on the trust catchment population of those NHS Trusts who made a new return. This may differ from other published figures such as the total number of people currently in hospital with COVID-19.

Trends in hospital and critical care admission rates need to be interpreted in the context of testing recommendations.

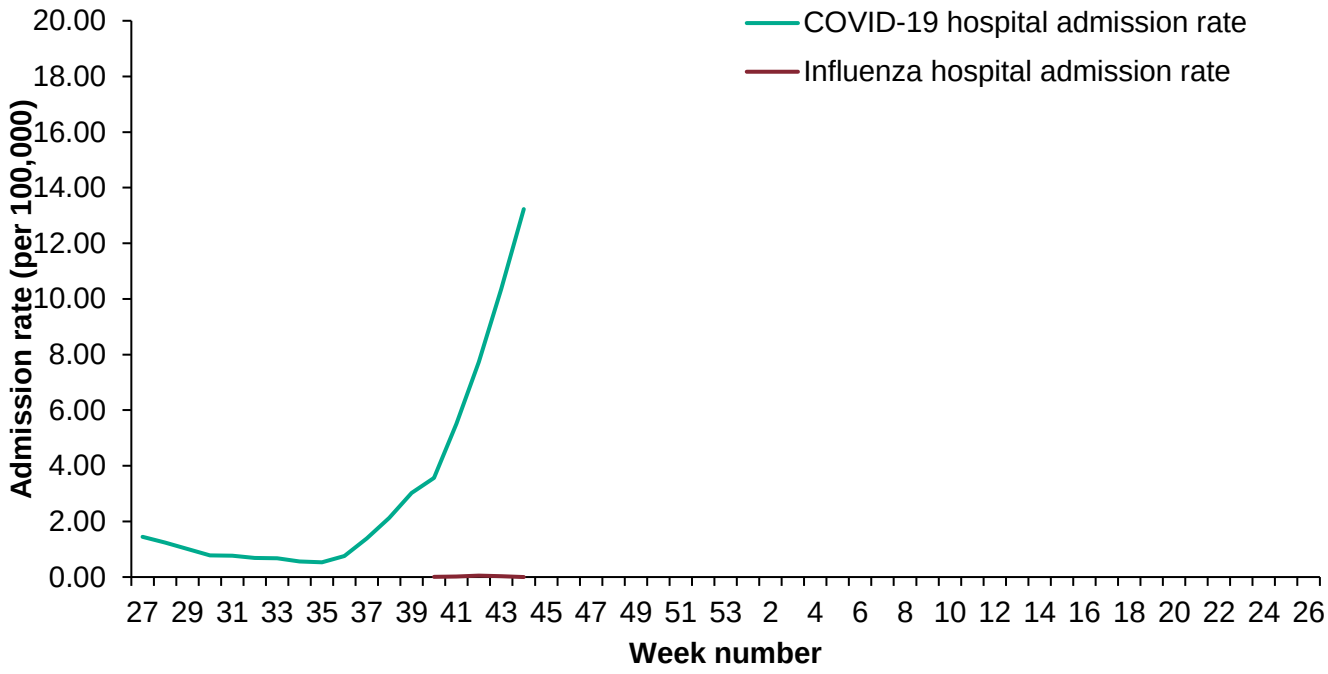
Hospitalisations, SARI Watch

In week 44, the weekly hospital admission rate for COVID-19 increased further whilst the hospital admission rate remained low for influenza.

The hospitalisation rate for COVID-19 was at 13.23 per 100,000 in week 44 compared to 10.36 per 100,000 in the previous week. The hospitalisation rate for influenza was at 0.00 per 100,000 in week 44 compared to 0.03 per 100,000 in the previous week; and there were no new confirmed influenza hospital admissions reported.

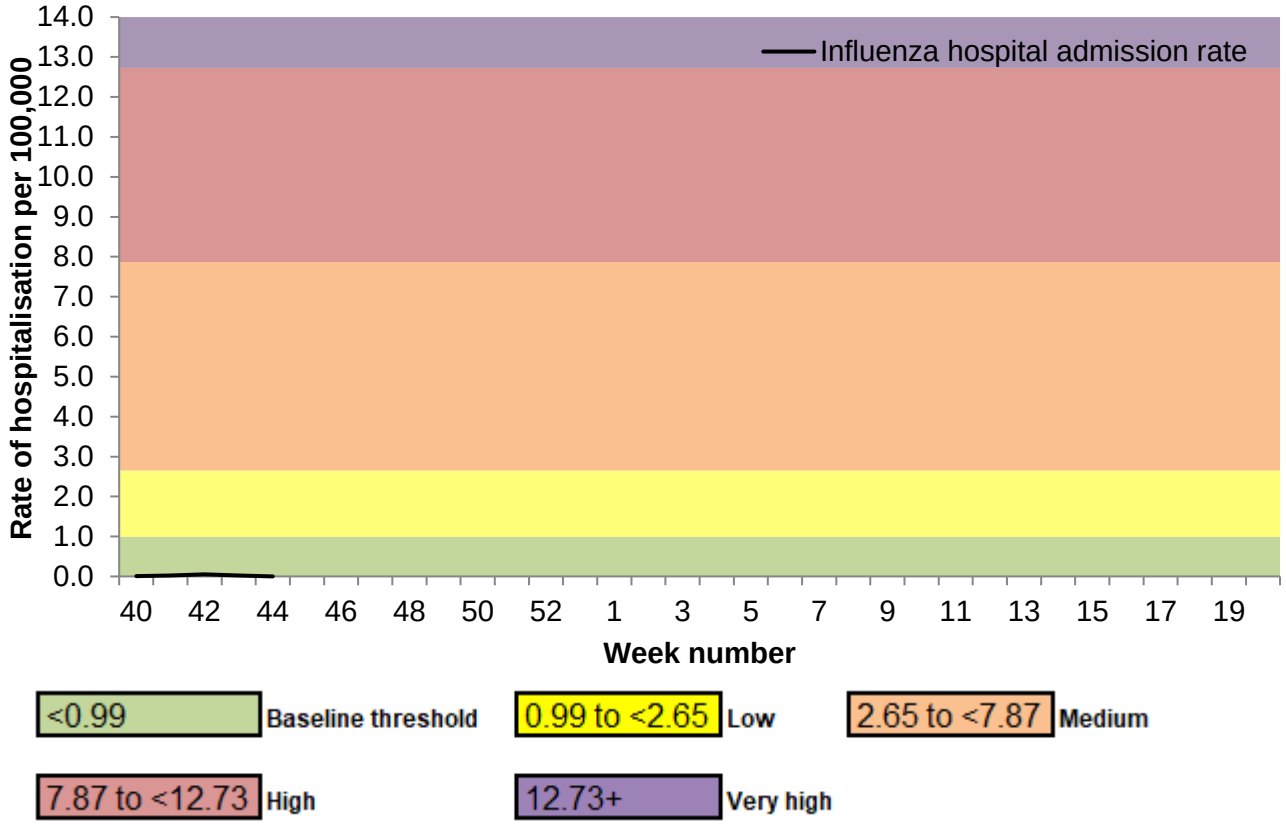
By NHS regions, the highest hospital admission rate for COVID-19 continued to be observed in the North West. By age groups, the highest hospital admission rate for confirmed COVID-19 was in the 85+ year olds.

Figure 32: Weekly overall hospital admission rates per 100,000 of new COVID-19 and influenza positive cases reported through SARI Watch, England



* influenza hospital admission rate is reported from week 40 2020 onwards
* influenza hospital admission rate based on 29 sentinel NHS trusts for week 44
* COVID-19 hospital admission rate based on 118 NHS trusts for week 44

Figure 33: Weekly overall influenza hospital admission rates per 100,000 trust catchment population with MEM thresholds, SARI Watch, England



* the MEM thresholds used are those from the 2019/20 season due to the pandemic

Figure 34: Weekly influenza hospital admissions by influenza type, SARI Watch, England

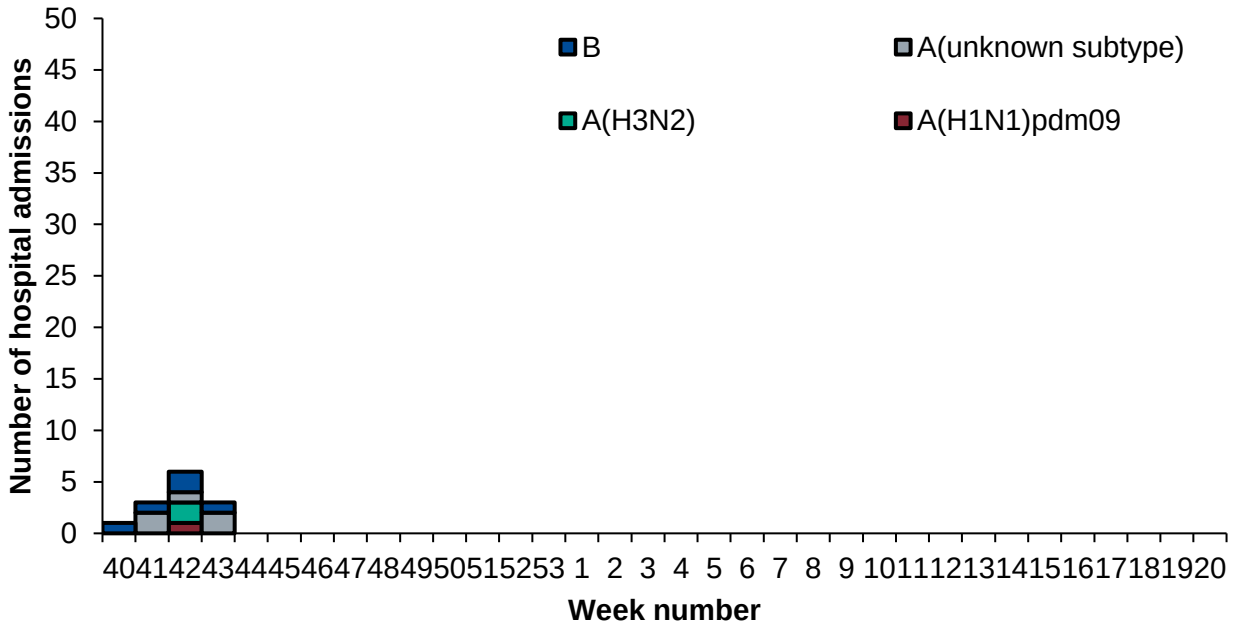
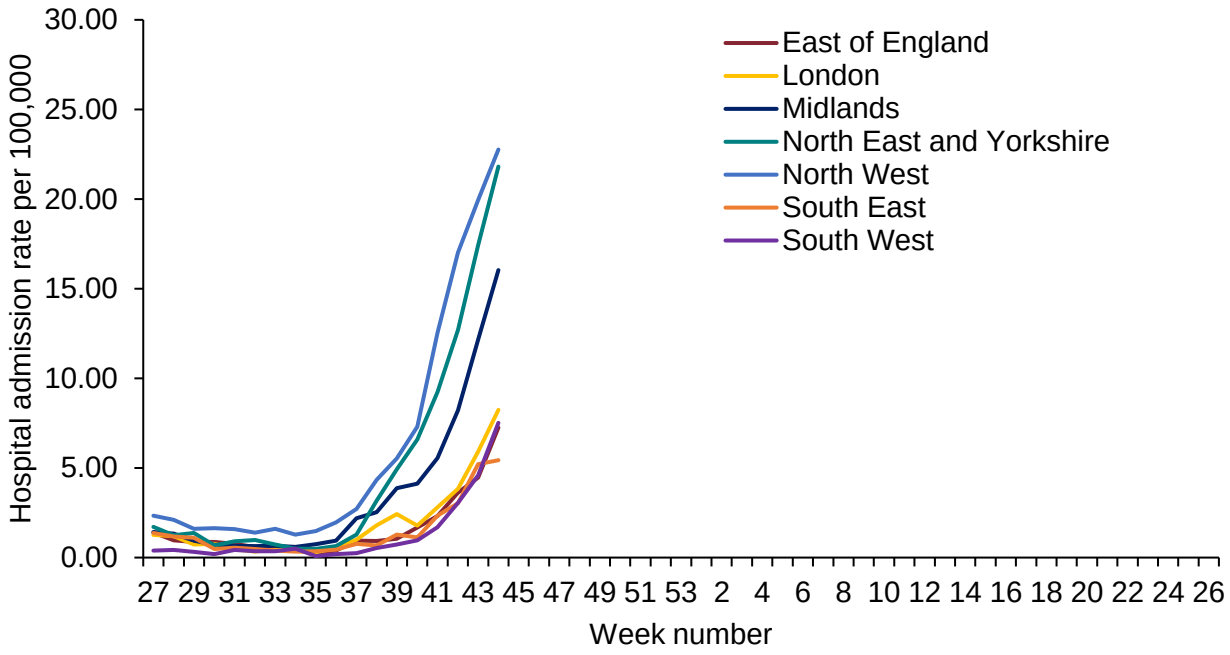


Figure 35: Weekly hospital admission rate by NHS region for new (a) COVID-19 positive cases and (b) influenza reported through SARI Watch

(a)



(b)

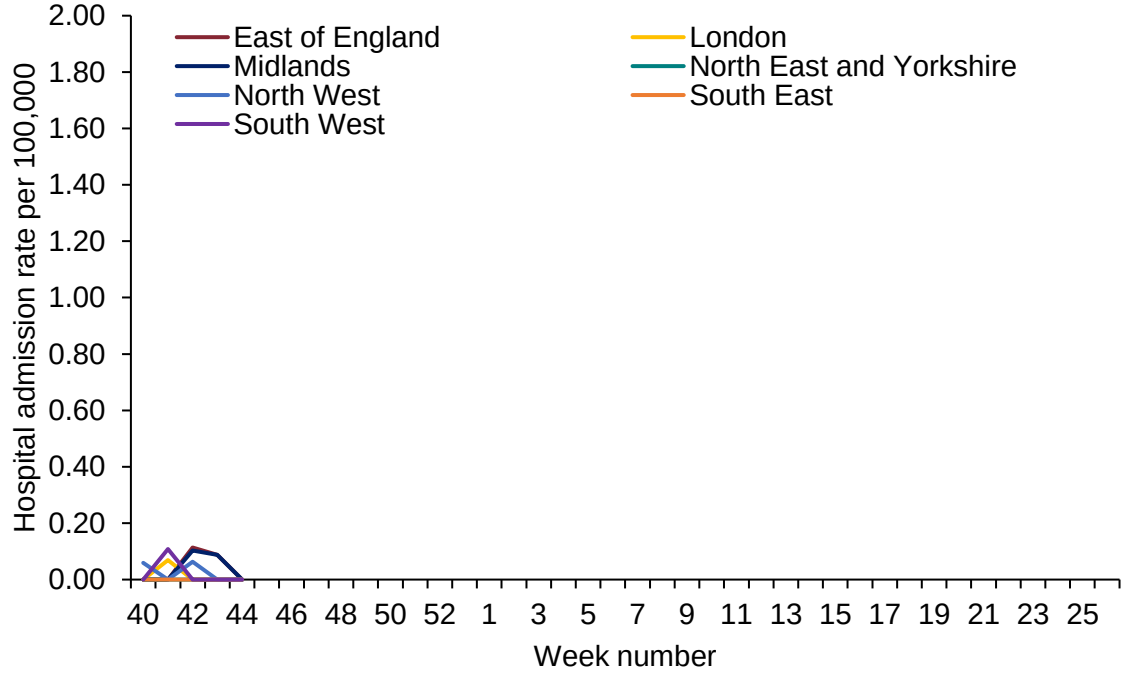
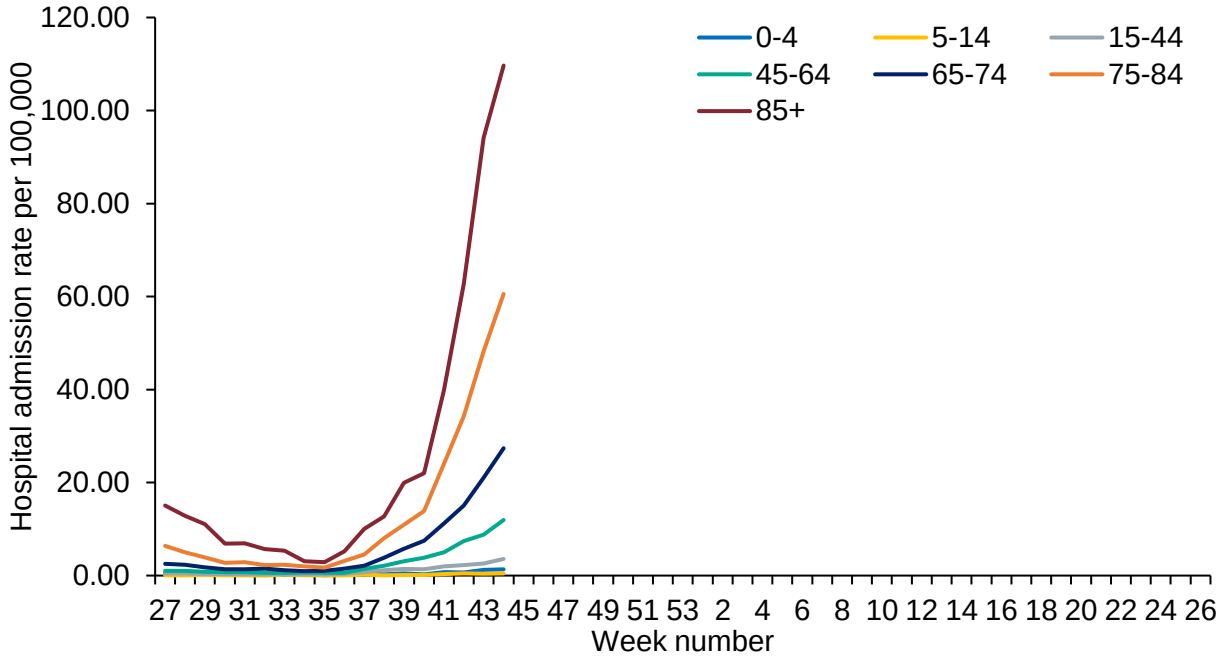
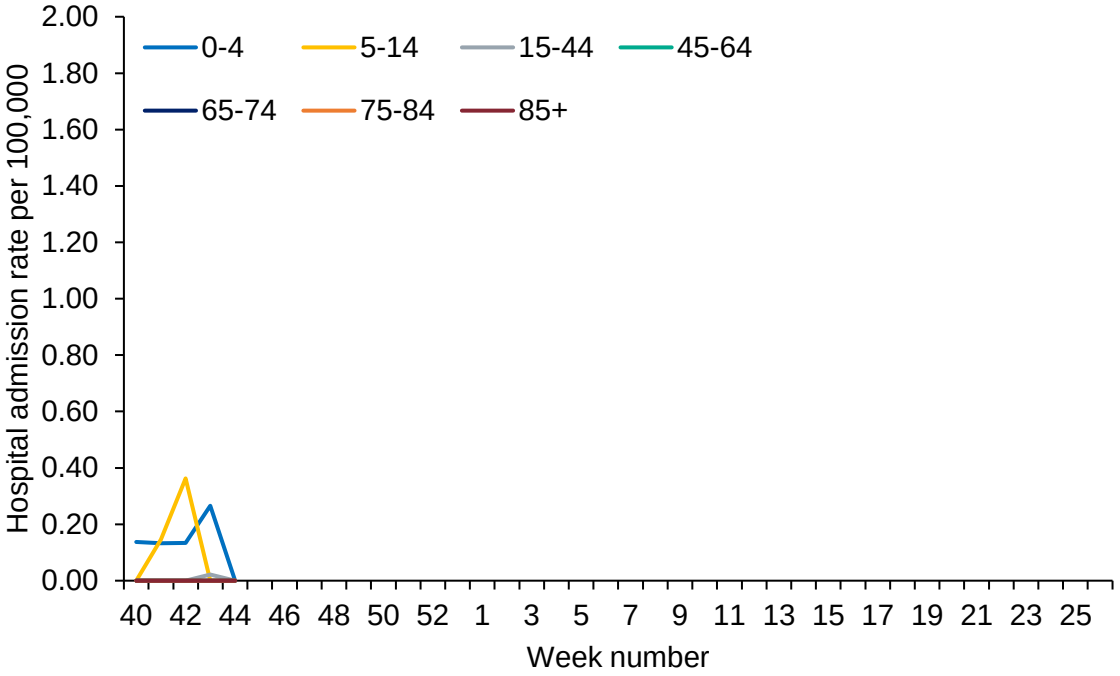


Figure 36: Weekly hospital admission rate by age group for new (a) COVID-19 positive cases and (b) influenza reported through SARI Watch

(a)



(b)



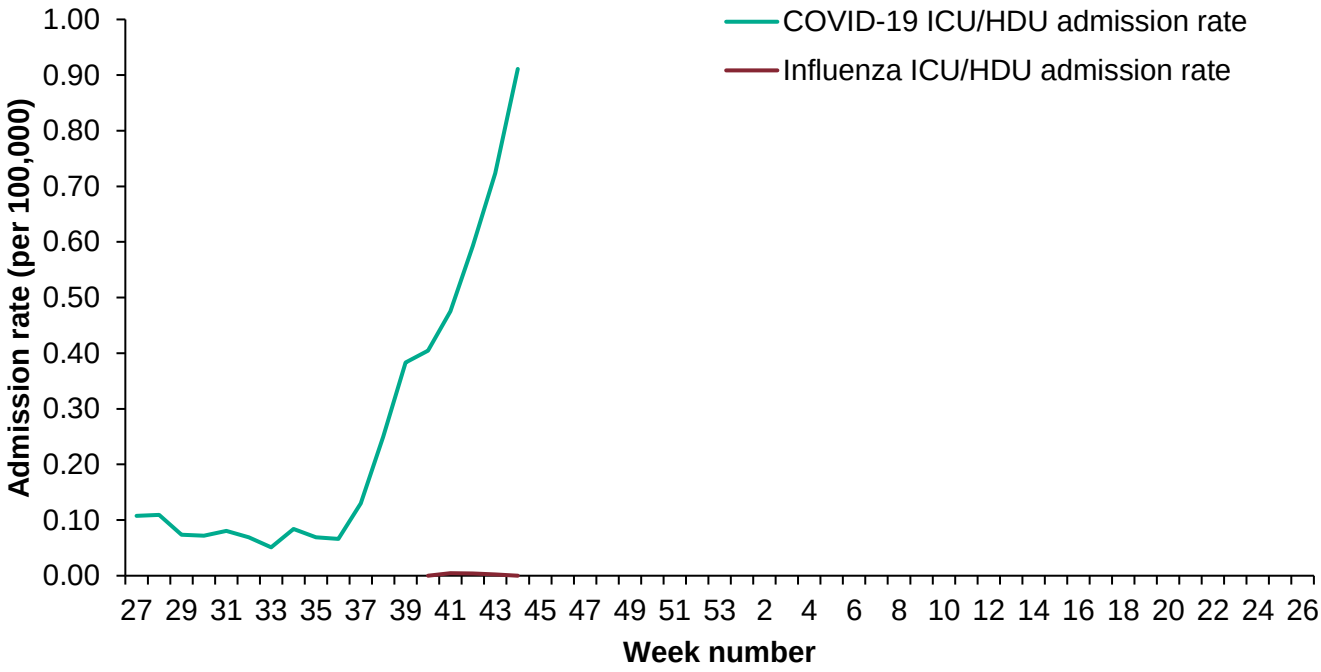
ICU/HDU admissions, SARI Watch

In week 44, the weekly ICU/HDU admission rates for COVID-19 increased whilst the ICU/HDU admission rate remained low for influenza.

The ICU/HDU rate for COVID-19 was at 0.91 per 100,000 in week 44 (based on data reported from 118 NHS Trusts) compared to 0.72 per 100,000 in the previous week. The ICU/HDU rate for influenza was at 0.00 per 100,000 in week 44 compared to the same rate in the previous week. There was no new influenza confirmed ICU/HDU admissions.

By NHS regions, the highest ICU/HDU admission rates for COVID-19 were observed in the Midlands. By age groups, the highest ICU/HDU admission rates for COVID-19 were observed in the 65 to 74 year olds.

Figure 37: Weekly overall ICU/HDU admission rates per 100,000 of new COVID-19 and influenza positive cases reported through SARI Watch, England



* influenza ICU/HDU admission rate is reported from week 40 2020 onwards
* influenza ICU/HDU admission rate based on 109 NHS trusts for week 44
* COVID-19 ICU/HDU admission rate based on 118 NHS trusts for week 44

Figure 38: Weekly overall influenza ICU/HDU admission rates per 100,000 trust catchment population with MEM thresholds, SARI Watch, England

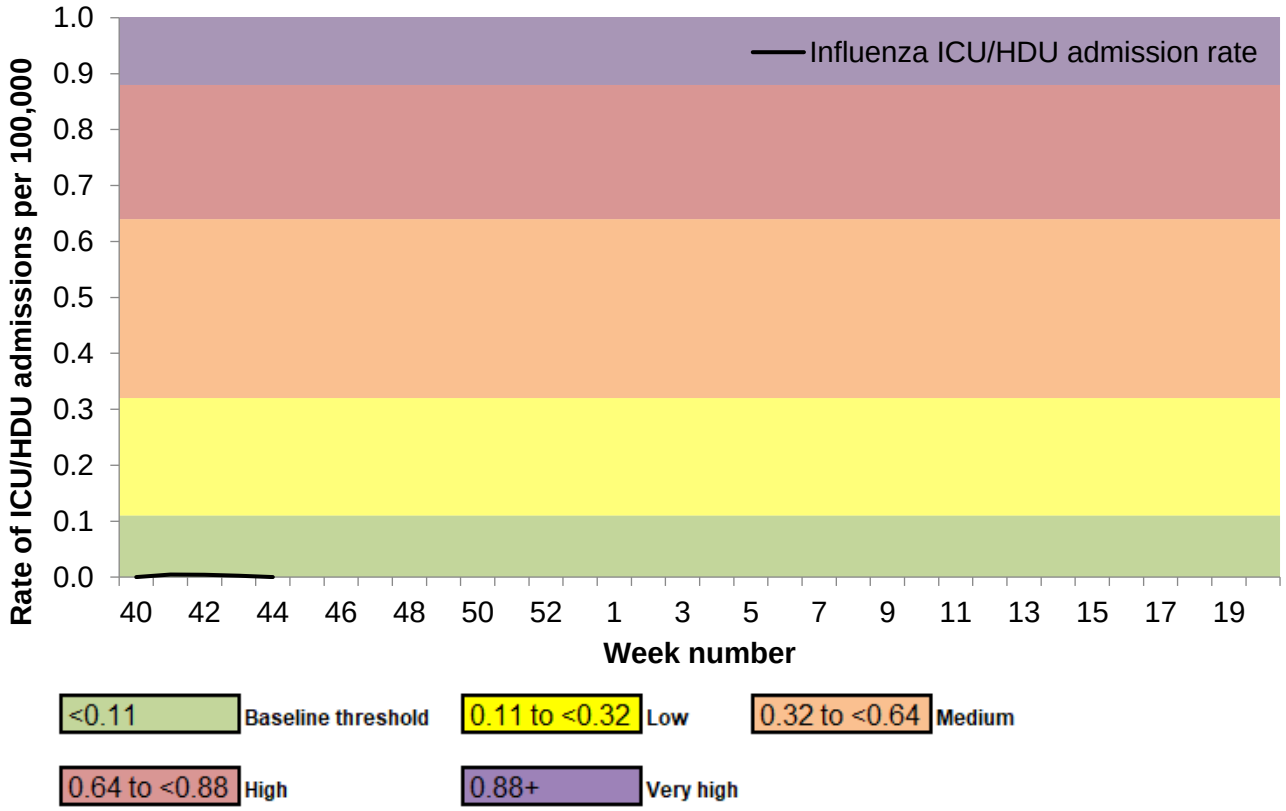


Figure 39: Weekly influenza ICU/HDU admissions by influenza type, SARI Watch, England

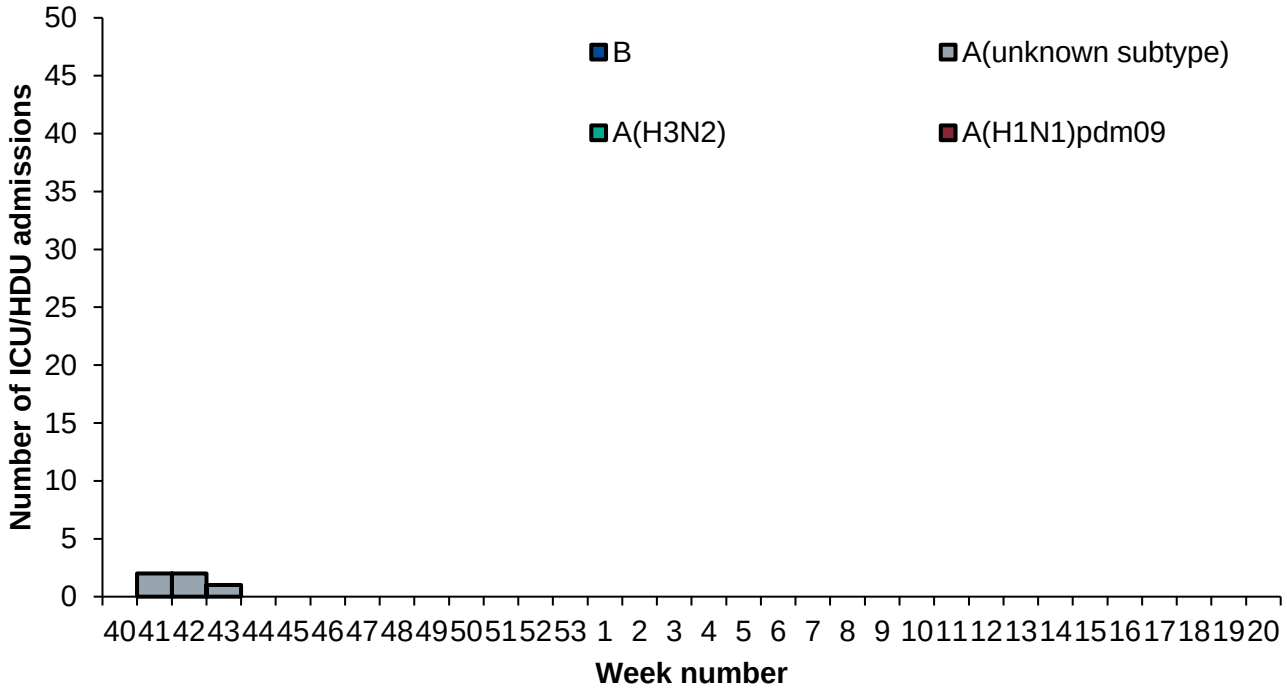
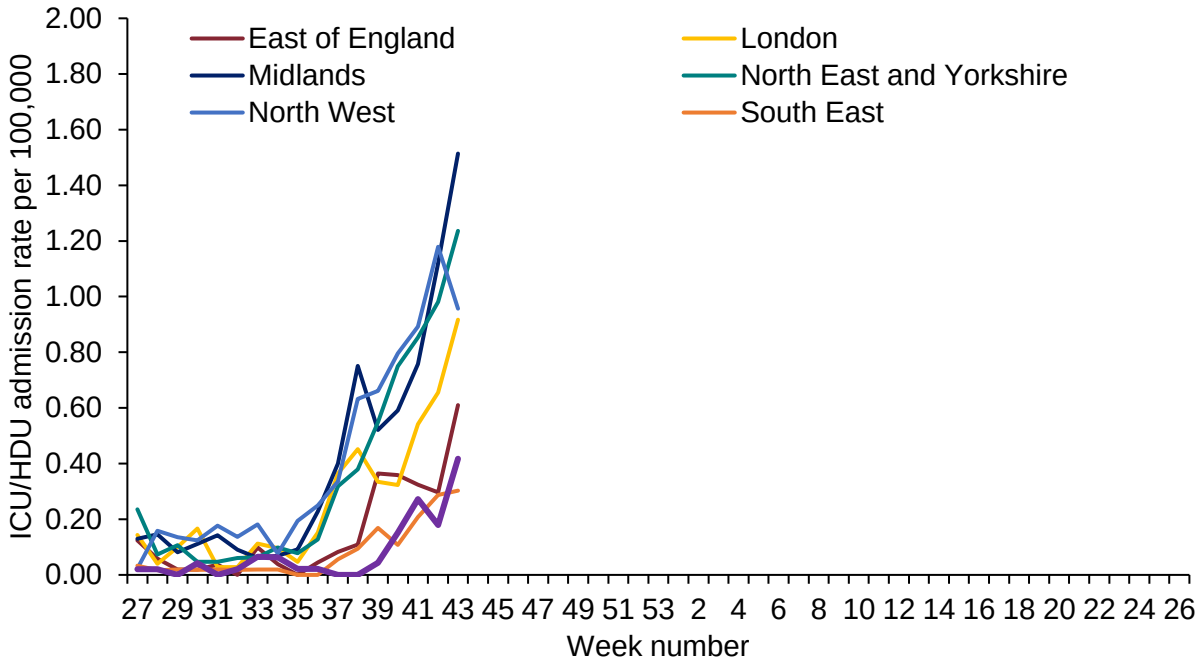


Figure 40: Weekly ICU/HDU admission rate by NHS region for new (a) COVID-19 positive cases and (b) influenza reported through SARI Watch

(a)



(b)

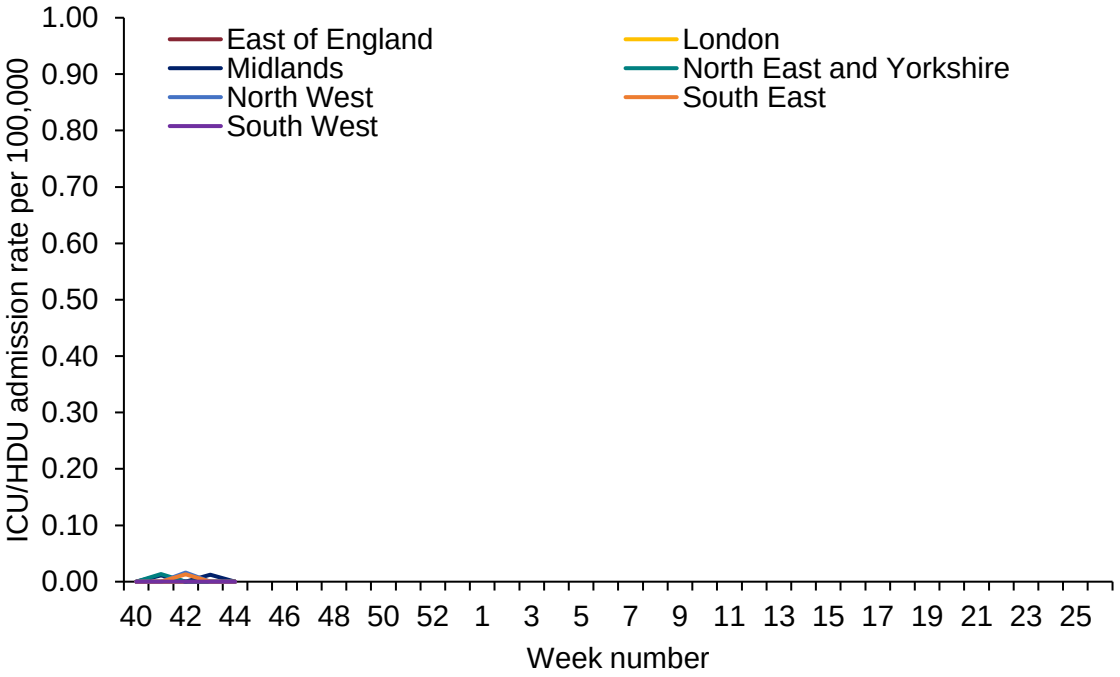
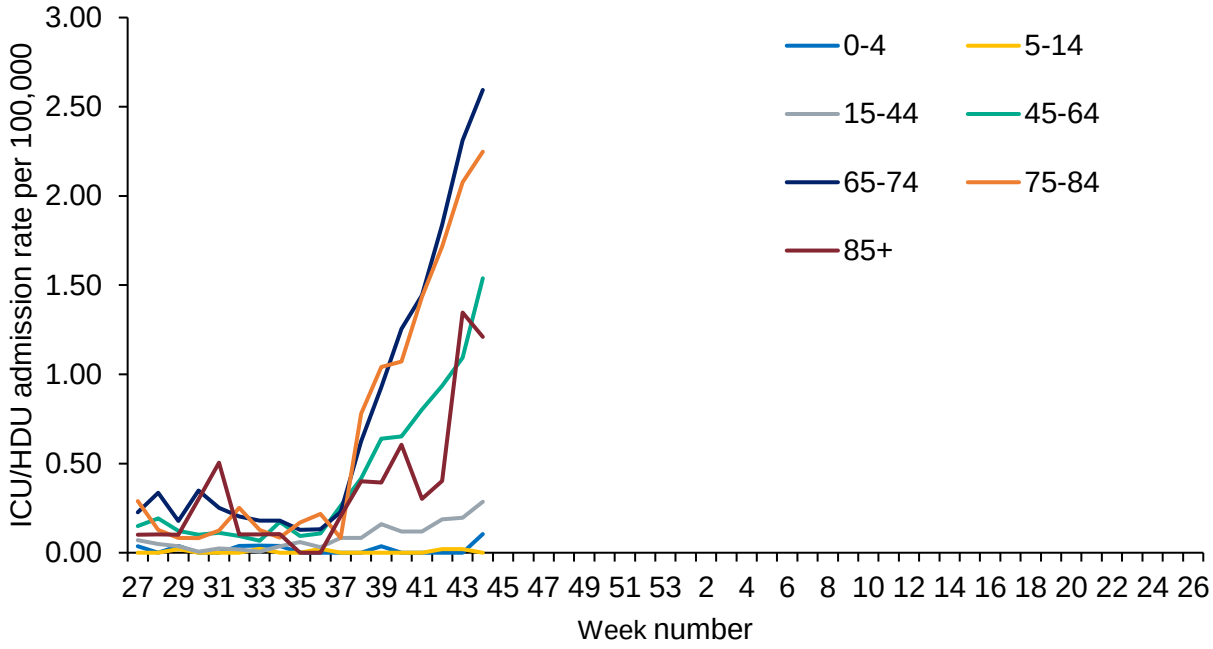
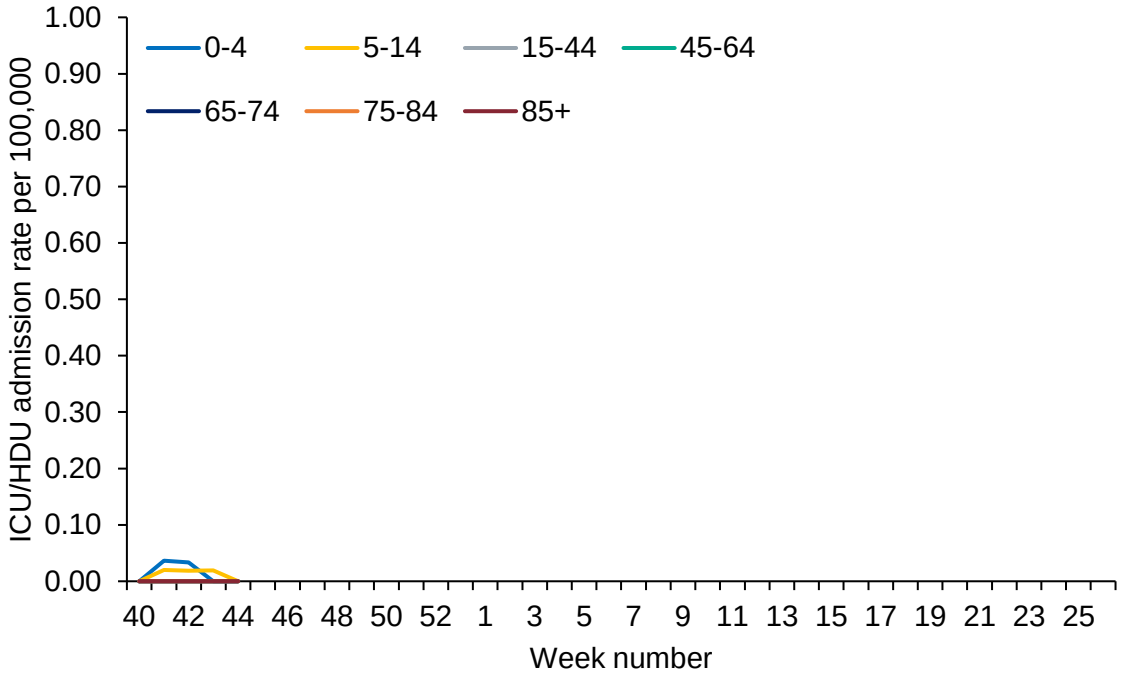


Figure 41: Weekly ICU/HDU admission rate by age group for new (a) COVID-19 positive cases and (b) influenza reported through SARI Watch

(a)



(b)

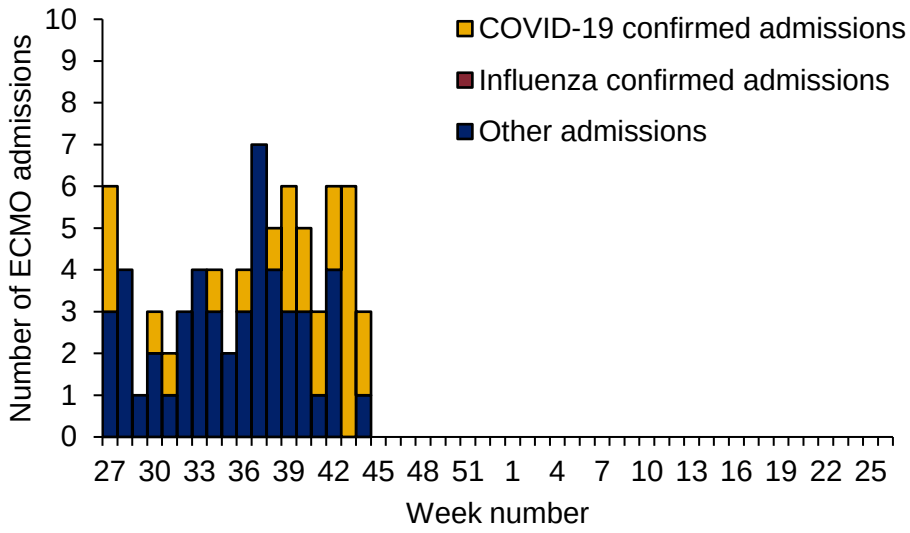


ECMO, SARI Watch

From week 27 2020, a total of 25 laboratory confirmed COVID-19 admissions have been reported from the 6 Severe Respiratory Failure (SRF) centres in the UK.

There were two new laboratory confirmed COVID-19 admissions reported in week 44 (Figure 42).

Figure 42: Laboratory confirmed ECMO admissions (COVID-19, influenza and non-COVID-19 confirmed) to Severe Respiratory Failure centres in the UK



*From the week 45 report (this report), data on ECMO admissions is being presented for the UK (including retrospective data from week 27 onwards).

Emergency Department attendances, Syndromic surveillance

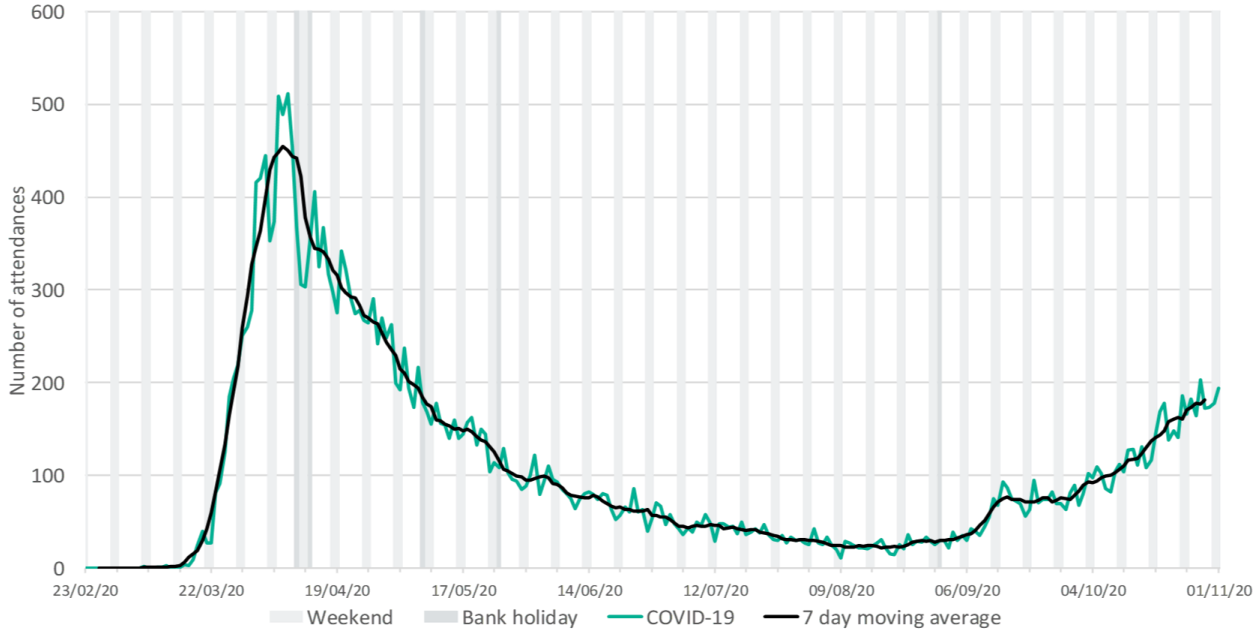
The Emergency Department Syndromic Surveillance System (EDSSS) monitors the daily visits in a network of emergency departments across England.

Up to 1 November 2020, the daily number of ED attendances for all ages as reported by 74 EDs, for COVID-19-like attendances increased while attendances for acute respiratory infections remained stable (Figure 43).

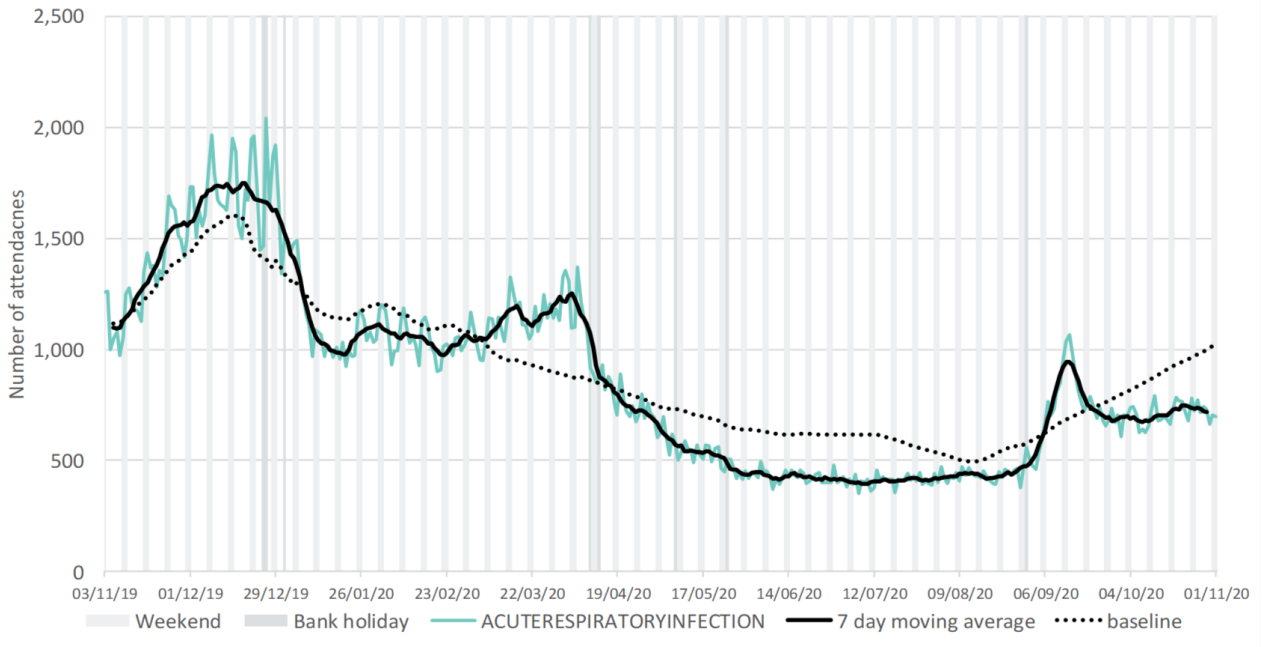
Please note: the COVID-19-like ED indicator is an underestimation of the number of COVID-19 attendances as it only includes attendances with a COVID-19-like diagnosis as their primary diagnosis. The EDSSS COVID-19-like indicator should therefore be used to monitor trends in ED attendances and not to estimate actual numbers of COVID-19 ED attendances. Further information about these caveats is available from the PHE Emergency Department Syndromic Surveillance bulletin.

Figure 43: Daily ED attendances for (a) COVID-19-like and (b) acute respiratory infections, all ages, England

(a)



(b)


2,500
2,000
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Number of attendacnes
03/11/19
01/12/19
29/12/19
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19/04/20
17/05/20
14/06/20
12/07/20
09/08/20
06/09/20
04/10/20
01/11/20
Weekend
Bank holiday
ACUTERESPIRATORYINFECTION
7 day moving average
baseline

Mortality surveillance

Cumulative COVID-19 deaths

Changes to the definitions of COVID-19 related deaths in England are described in more detail in an accompanying PHE technical summary.

The current definitions used for mortality surveillance of COVID-19 in England are:

(a) 28 day definition: A death in a person with a laboratory-confirmed positive COVID-19 test and died within (equal to or less than) 28 days of the first positive specimen date
(b) 60 day definition: A death in a person with a laboratory-confirmed positive COVID-19 test and either: died within 60 days of the first specimen date OR died more than 60 days after the first specimen date only if COVID-19 is mentioned on the death certificate

The introduction of these definitions will affect the numbers which have been presented in past reports and therefore Figure 44 represents these differences by definition.

Figure 44: Number of deaths since week 27 by week of death and time since laboratory confirmation of COVID-19, England

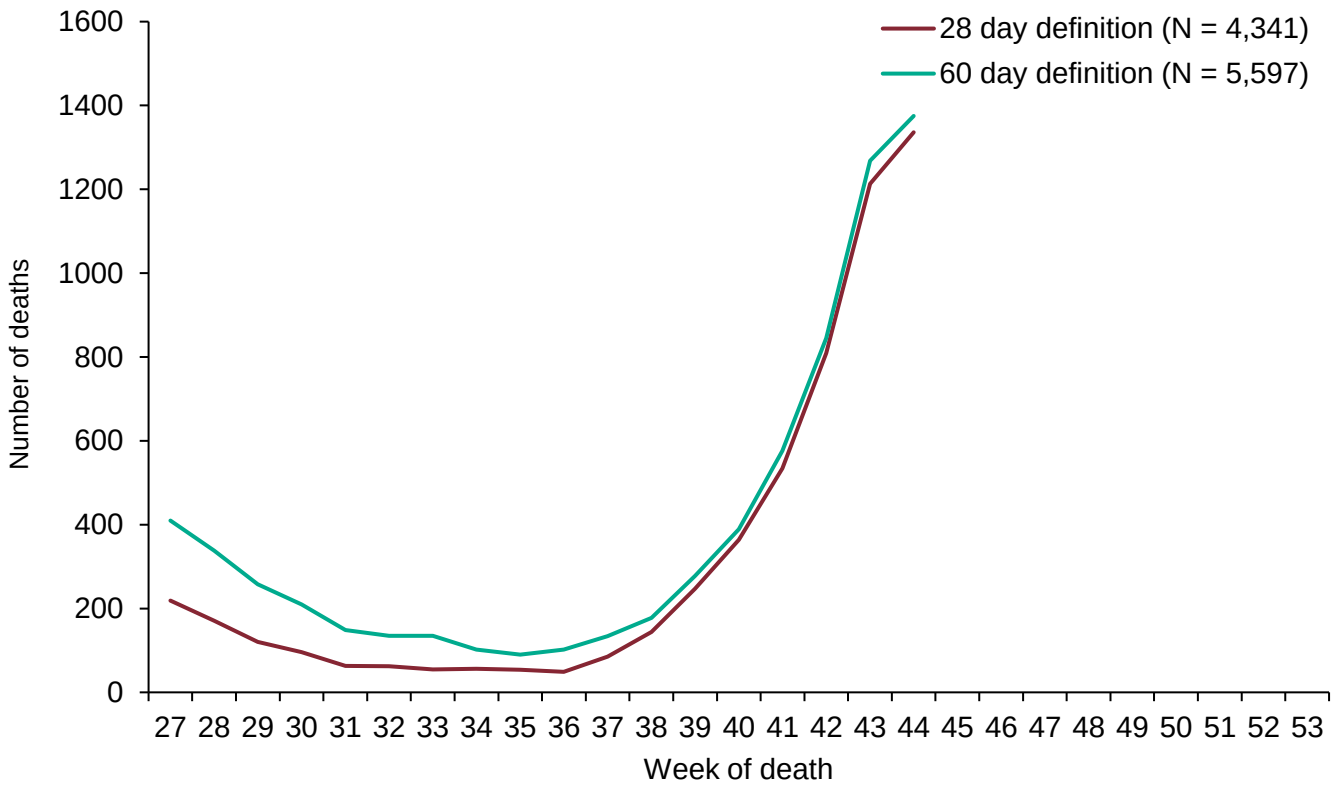


Figure 45: Age/sex pyramid of laboratory confirmed COVID-19 deaths, since week 27

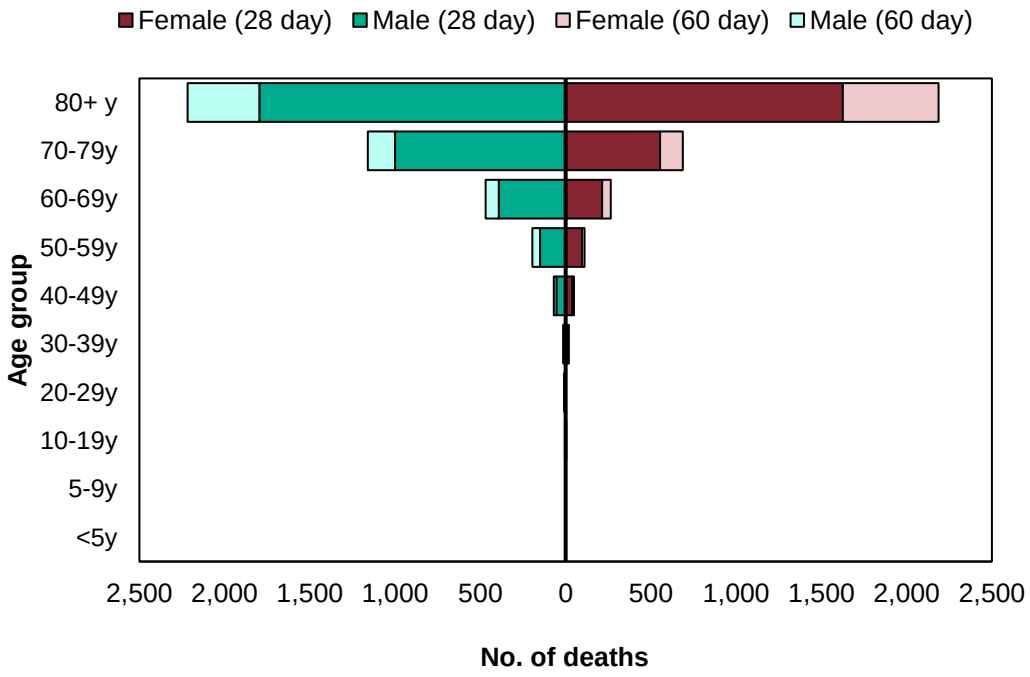


Table 5: Ethnic group (%) of COVID-19 deaths and time since laboratory confirmation of COVID-19, England

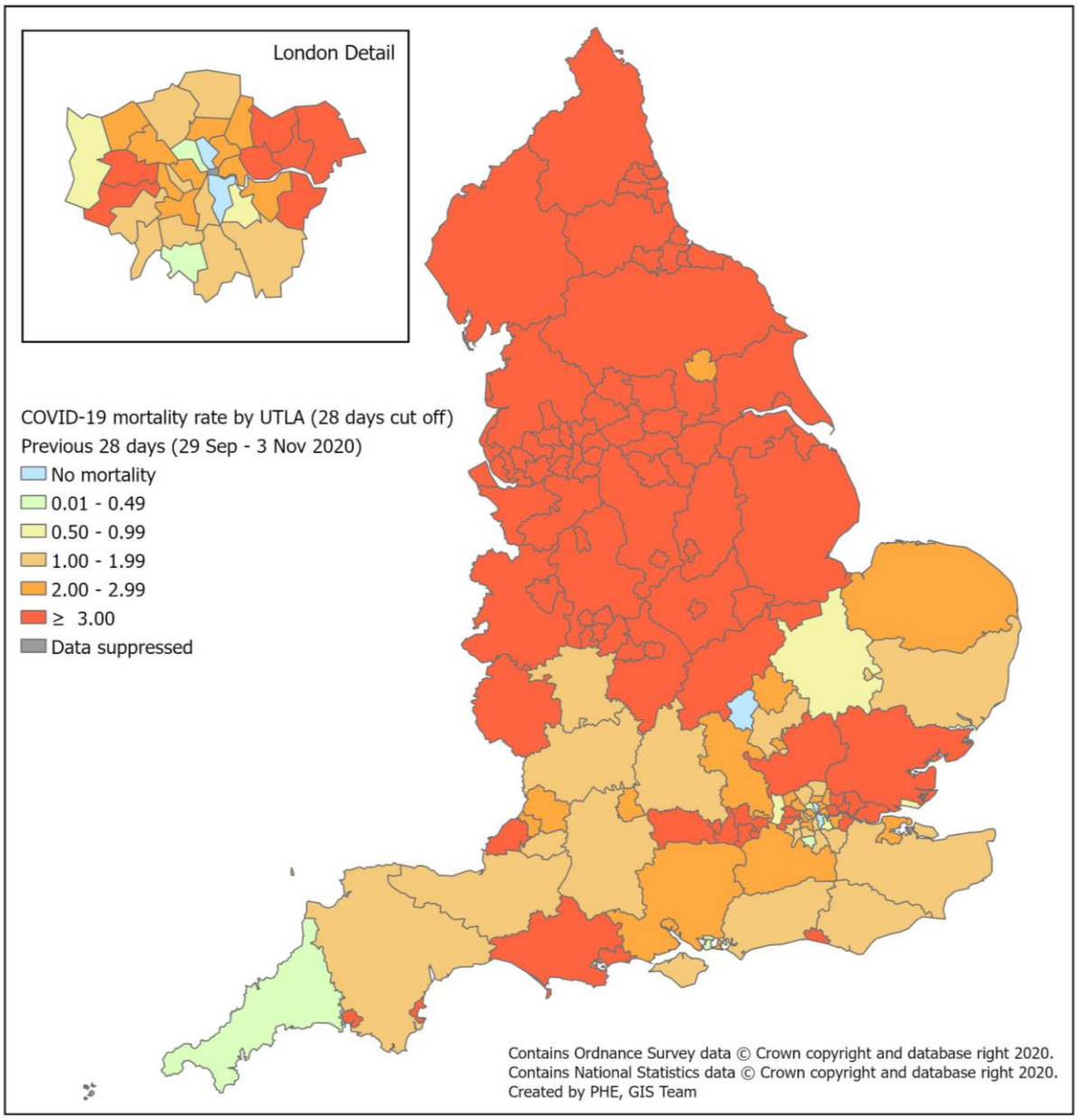
Ethnicity	28 day definition	60 day definition
White	87.6	88.5
Asian / Asian British	9.0	8.0
Black / African / Caribbean / Black British	1.9	1.8
Mixed / Multiple ethnic groups	0.3	0.3
Other ethnic group	1.3	1.3

Table 6: Cumulative number of COVID-19 deaths since week 27 and time since laboratory confirmation of COVID-19 by PHE Centres

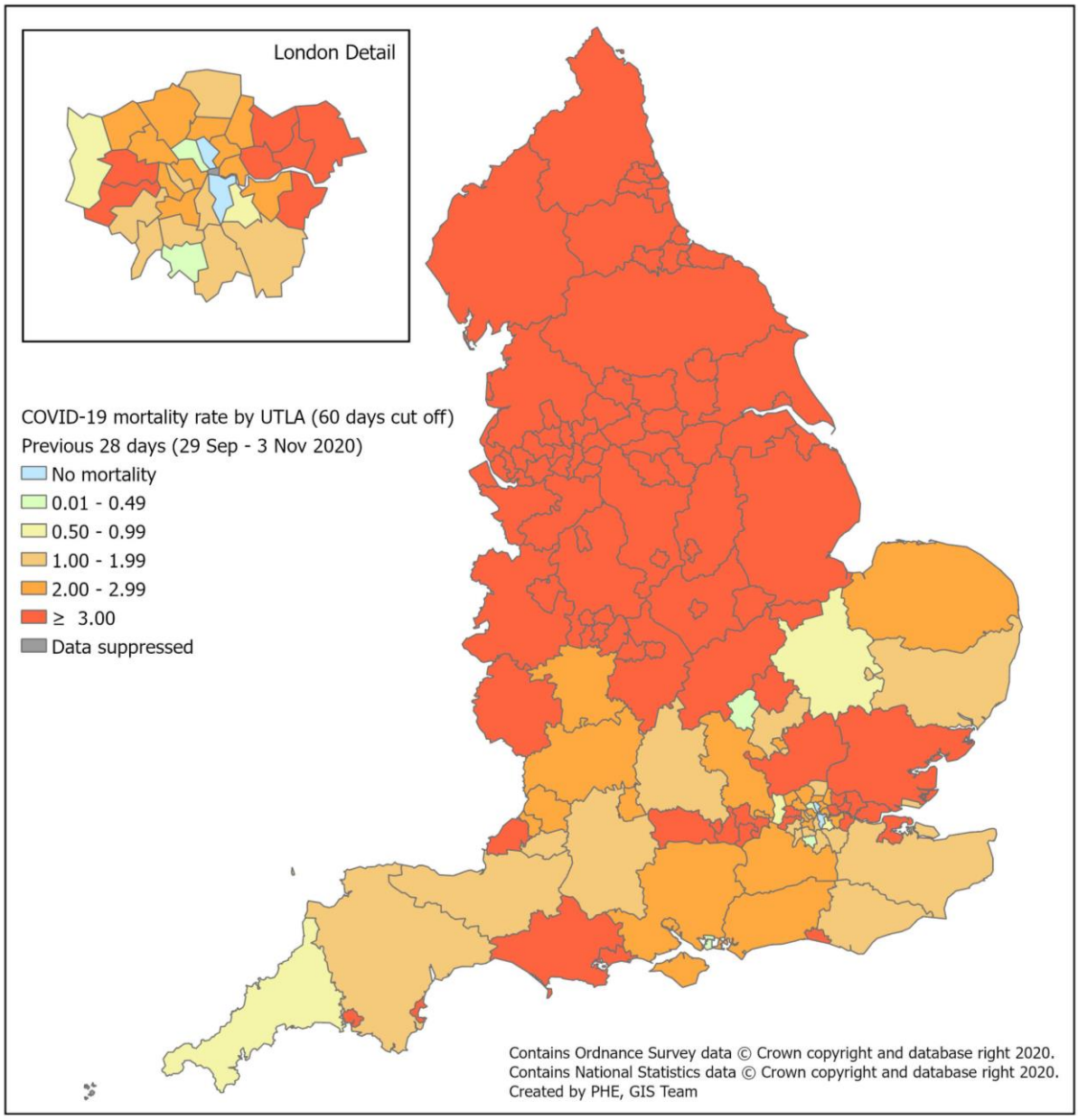
PHE Centres	28 day definition	60 day definition
North East	562	649
North West	1,900	2,219
Yorkshire & Humber	846	1,035
West Midlands	585	749
East Midlands	554	696
East of England	392	573
London	370	483
South East	458	704
South West	184	244

Figure 46: Cumulative mortality rate of COVID-19 cases per 100,000 population tested under Pillar 1 and 2 for the past four weeks by (a) 28 day definition and (b) 60 day definition

(a)



(b)



* Figure 46 has been calculated using mid-2019 ONS population estimates

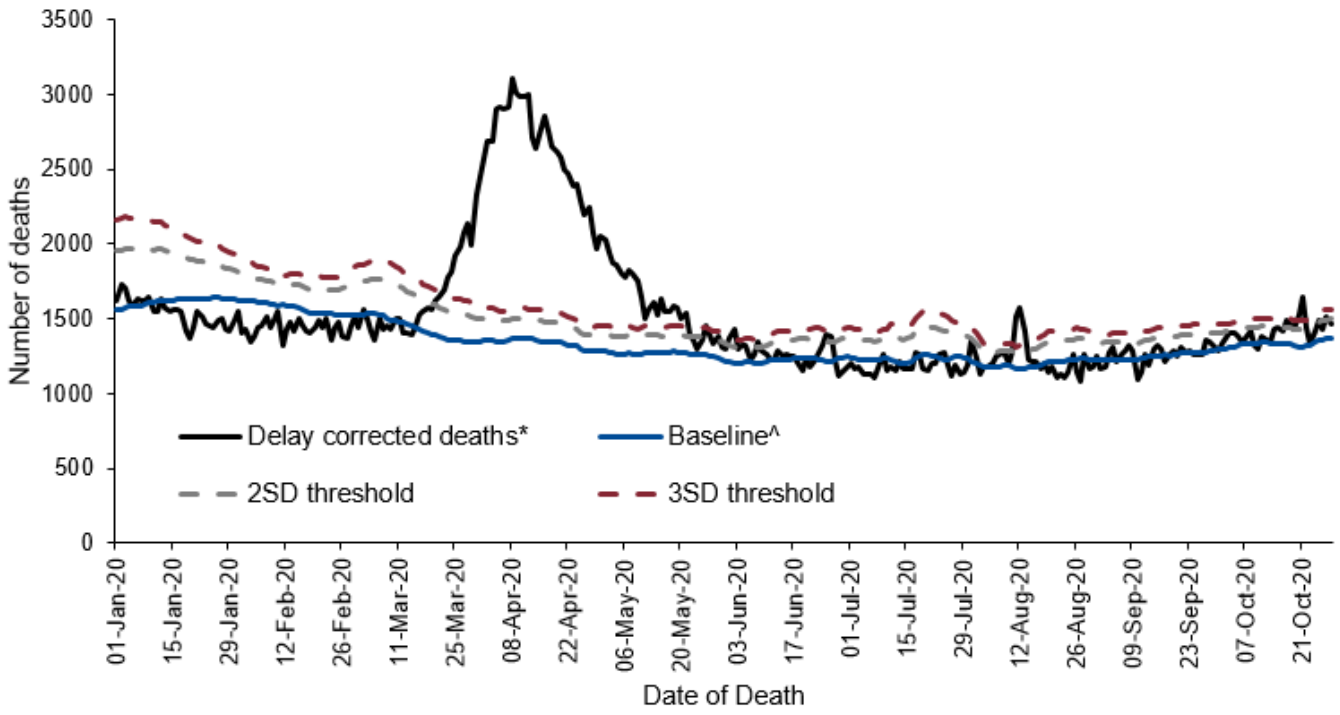
Daily excess all-cause mortality (England)

Deaths occurring from 1 January to 28 October 2020 were assessed to calculate the daily excess above a baseline using age-group and region specific all cause deaths as provided daily by the General Register Office (GRO). The deaths were corrected to allow for delay to registration based on past data on these delays and the baseline was from the same day of the year in the previous 5 years +/- 7 days with an extrapolated time trend, and with 2 and 3 standard deviation (SD) limits shown (Figure 47).

Weeks in which at least 2 days exceeded the 3SD threshold are shown in Table 7 and the daily difference from the baseline by age and region is given in Figure 47. Note that as these data are by date of death with delay corrections, numbers are subject to change each week, particularly for more recent days.

Significant excess all-cause mortality was observed in week 43 overall, by age group in the 75 to 84 year olds and 85+ year olds and subnationally in the North West and Yorkshire and Humber. The excess noted in week 33 coincides with a heat wave (Figure 47, 48 and Table 7).

Figure 47: Daily excess all-cause deaths in all ages, England, 1 January 2020 to 28 October 2020



^ based on same day in previous 5 years +/- 1 week with a linear trend projected
* corrected for delay to registration from death

Table 7: Excess all-cause deaths by (a) age group and (b) PHE centres , England

(a)

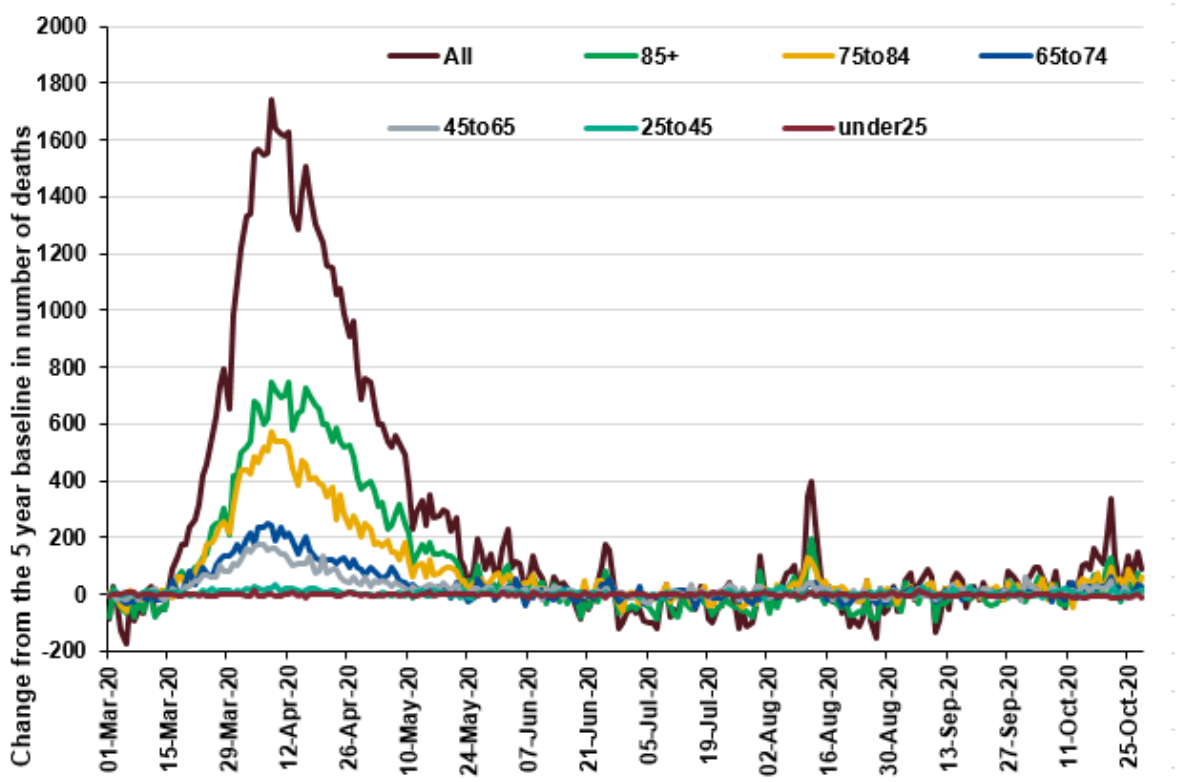
Age Group	Excess detected in week 43 2020?	Weeks in excess since week 10 2020
All	✓	13 to 21, 23, 33,43
under 25	x	None
25 to 44	x	14 to 16, 32,38
45 to 64	x	12 to 19
65 to 74	x	13 to 19
75 to 84	✓	13 to 21, 33,43
85+	✓	13 to 21, 33,43

(b)

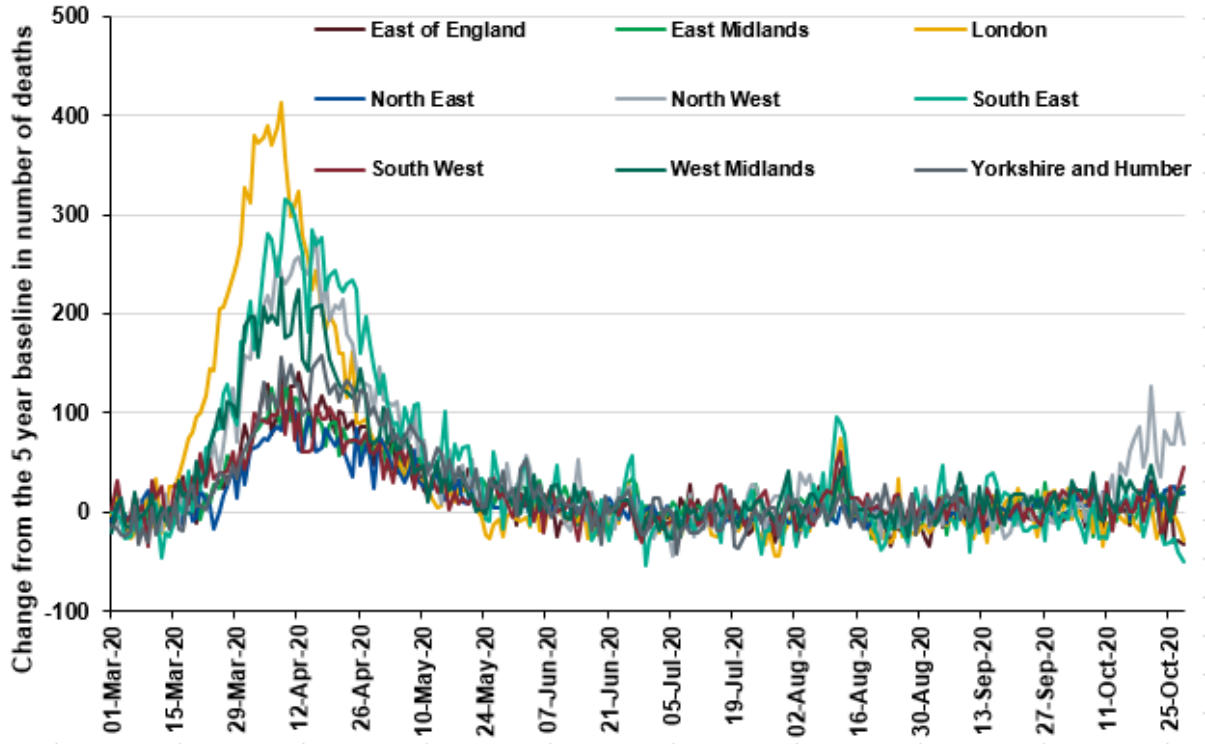
PHE Centres	Excess detected in week 43 2020?	Weeks in excess since week 10 2020
East of England	x	14 to 19
East Midlands	x	13 to 19
London	x	12 to 19,33
North East	x	14 to 21
North West	✓	13 to 20, 33,42,43
South East	x	13 to 21, 33
South West	x	14 to 19, 33
West Midlands	x	13 to 20
Yorkshire and Humber	✓	14 to 21, 23,43

Figure 48: Daily excess all-cause deaths by (a) age group and (b) PHE centres , England, 1 March 2020 to 28 October 2020

(a)



(b)



Microbiological surveillance

Virus characterisation

PHE characterises the properties of influenza viruses through one or more tests, including genome sequencing (genetic analysis) and haemagglutination inhibition (HI) assays (antigenic analysis). These data are used to compare how similar the currently circulating influenza viruses are to the strains included in seasonal influenza vaccines, and to monitor for changes in circulating influenza viruses. The interpretation of genetic and antigenic data sources is complex due to a number of factors, for example, not all viruses can be cultivated in sufficient quantity for antigenic characterisation, so that viruses with sequence information may not be able to be antigenically characterised as well. Occasionally, this can lead to a biased view of the properties of circulating viruses, as the viruses which can be recovered and analysed antigenically, may not be fully representative of majority variants, and genetic characterisation data does not always predict the antigenic characterisation

In week 44, no influenza viruses were characterised by PHE Respiratory Virus Unit (RVU).

Antiviral susceptibility

Influenza positive samples are screened for mutations in the virus neuraminidase gene known to confer oseltamivir and/or zanamivir resistance. Additionally, testing of influenza A(H1N1)pdm09, A(H3N2), and influenza B virus isolates for neuraminidase inhibitor susceptibility (oseltamivir and zanamivir) is performed at PHE-RVU using a functional assay. The data summarized below combine the results of both testing methods. The samples tested are routinely obtained for surveillance purposes, but diagnostic testing of patients suspected to be infected with neuraminidase inhibitor-resistant virus is also performed.

In week 44, no influenza viruses were tested for antiviral susceptibility.

Antimicrobial susceptibility

Table 8 shows in the 12 weeks up to week 44 2020, the proportion of all lower respiratory tract isolates of Streptococcus pneumoniae, Haemophilus influenza, Staphylococcus aureus, MRSA and MSSA tested and susceptible to antibiotics. These organisms are the key causes of community-acquired pneumonia (CAP) and the choice of antibiotics reflects the British Thoracic Society empirical guidelines for management of CAP in adults.

Table 8: Antimicrobial susceptibility surveillance in lower respiratory tract

Organism	Antibiotic	Specimens tested (N)	Specimens susceptible (%)
S. pneumoniae	Penicillin	737	86
	Macrolides	795	77
	Tetracycline	789	78
H. influenzae	Amoxicillin/ampicillin	3,673	62
	Co-amoxiclav	3,985	73
	Macrolides	772	5
	Tetracycline	4,101	97
S. aureus	Methicillin	2,742	94
	Macrolides	2,965	70
MRSA	Clindamycin	107	37
	Tetracycline	135	73
MSSA	Clindamycin	1,848	75
	Tetracycline	2,483	93

* Macrolides = erythromycin, azithromycin and clarithromycin

Data source: PHE's SGSS CDR module. Please note that this is different to the data source used during the 2019/20 influenza season when the SGSS AMR module was used, and so the results are not directly comparable.
There has been a reduction in the total number of bacterial positive lower respiratory tract clinical samples reported to PHE since mid-March 2020

COVID-19 sero-prevalence surveillance

In this week's report the results from testing samples provided by healthy adult blood donors aged 17 years and older, supplied by the NHS Blood and Transplant (NHS BT collection) between weeks 17-43 are summarised. Donor samples from two different geographic regions (approximately 1000 samples per region) in England are tested each week. Since week 26, an exclusion of donors aged 70 years and older donating throughout lockdown was lifted, and therefore data since then include donors in this older age group.

Department of Health and Social Care funding for the NHSBT seroprevalence programme ended at the end of October 2020.

Seroprevalence in Adults aged 17 years and older (Blood Donors)

The results presented here are based on testing using the Euroimmun assay for blood donor samples collected between weeks 17-43. This week's report includes the results of testing the 15th set of samples from London (week 43) and the 8th set of data from the North West (week 43).

This report presents seropositivity estimates using a 4-week rolling prevalence for national and regional estimates. Seroprevalence estimates reported are based on seropositivity which are unadjusted for the sensitivity and specificity of the assays used. This is because assay sensitivity will change according to the time since infection in these cohorts due to waning of antibodies.

National Prevalence

Overall population weighted (by age group, sex and NHS region) antibody prevalence using the Euroimmun assay among blood donors aged 17 years and older in England was 5.7% (95% CI 5.2% - 6.3%) for the period 28th September– 23rd October (weeks 40-43). Estimates are based on 8311 samples, of which 521 were positive. This compares with 5.6% (95% CI 5.1% - 6.2%) for the period of 23rd September – 18th October (weeks 39-42). Changes in prevalence over time need to take into account demographic changes in the donor population, with later data including donors aged 70 years and older who were previously excluded from donating during lockdown. Waning immunity is also likely to be a contributing factor.

Regional Prevalence over Time

Seropositivity (weighted by age group and sex) vary across the country and over time. Figure 49 shows the overall 4-weekly rolling proportion seropositive in each region over time. Seropositivity estimates are plotted on the mid-point of the 4-weekly period.

In London where estimates have consistently been highest, the 4-weekly rolling seropositivity increased from 11.9% (week 16-19) to 13.7% (weeks 20-23). From week 24 seropositivity declined and plateaued with estimates at 7.8% in weeks 30-33. This was then followed by a rise in seropositivity to 10.4% (95% CI 9.1% - 12%) in weeks 34-37 and has plateaued to 8.6% (95% CI 7.5% - 9.8%) in weeks 40-43. Contributory factors to this fluctuation are likely to include variability in the precise locations of sampling within London and changes in exposure of donors. Increases in seropositivity observed in weeks 34-37 in part may reflect samples being tested from donors who were likely to be returning to donate having donated in earlier parts of the epidemic when incidence was high.

Data from the North West show that seropositivity increased from 5.3% (95% CI 4.1 - 6.9%) in weeks 39-42 to 6.4% (95% CI 5.1% - 8.1%) in weeks 40-43.

In the East of England seropositivity was 4.2% (95% CI 3.1% - 5.6%) in the most recent data (weeks 40-43) fluctuating between 4.1% (95% Cl 3.0% - 5.7%) in weeks 32-35 and 5.9% (95% CI 4.6% - 7.6%) in weeks 35-38.

Seropositivity in the South East region was 3.7% (95% CI 2.7% - 5.0%) in the latest data (weeks 40-43) lower than the 5.1% (95% CI 3.3% - 7.7%) observed in weeks 33-36. Seropositivity in the South West region was 3.5% (95% CI 2.5 – 4.8%) in (weeks 40-43) lower than the 4.1% (95% CI 2.9% - 5.8%) observed in the previous survey in weeks 37-40.

In the North East and Yorkshire NHS region the seropositivity has increased to 5.6% (95% CI 4.3%-7.3%) in weeks 40-43 compared with 3.7% (95% CI 2.7% - 5.0%) in week 36-39.

Data from the Midlands also show a higher proportion seropositive at 6.9% (95% CI 5.3% - 8.8%) in weeks 40-43. This compares to 5.5% (95% CI 4.3% - 7.0%) in weeks 36-39.

The change in proportion seropositive observed in some regions is likely to be driven by changes in the precise locations of sample collection. However, the most recent increases observed in the Midlands, North West and North East regions cannot be fully explained by this and are likely to reflect increased transmission, consistent with other surveillance data. Increases in seropositivity reflect transmission occurring at least two to three weeks previously given the time taken to generate an antibody response following infection.

Declines in prevalence observed during the summer months can be partially explained by demographic differences in the donor population as lockdown measures were relaxed. Examples include a reduction in attendance of regular donors in August and

that donors aged 70 years and above were not allowed to donate during lockdown, but this exclusion was lifted from week 26. Waning immunity will also be a contributing factor to the lower prevalence.

Prevalence by age group

Population weighted antibody prevalence (unadjusted) estimates have generally remained highest in donors aged 17-29 and decline with age, with lowest prevalence in donors aged 70-84. Donors aged 70-84 years are only included from week 26 onward as this age group, who were advised to shield during lockdown, have been able to return to donor clinics since then (Figure 50).

The largest variation over time are observed in those aged 17-29, prevalence has decreased from 10.8% (95% CI 9.0% - 12.9%) in weeks 19-22 to 8.2% (95% CI 6.7% - 9.9%) in weeks 40-43. Recently there has been a notable increase in prevalence in donors aged 50-59 from 5.2% (95% CI 4.2% - 6.3%) in week 35-38 to 7.7% (95% CI 6.6% - 9.1%) in week 40-43.

Figure 49: 4-weekly rolling SARS-CoV-2 antibody seroprevalence (% seropositive) in blood donors by region, using Euroimmun test; error bars show 95% confidence intervals

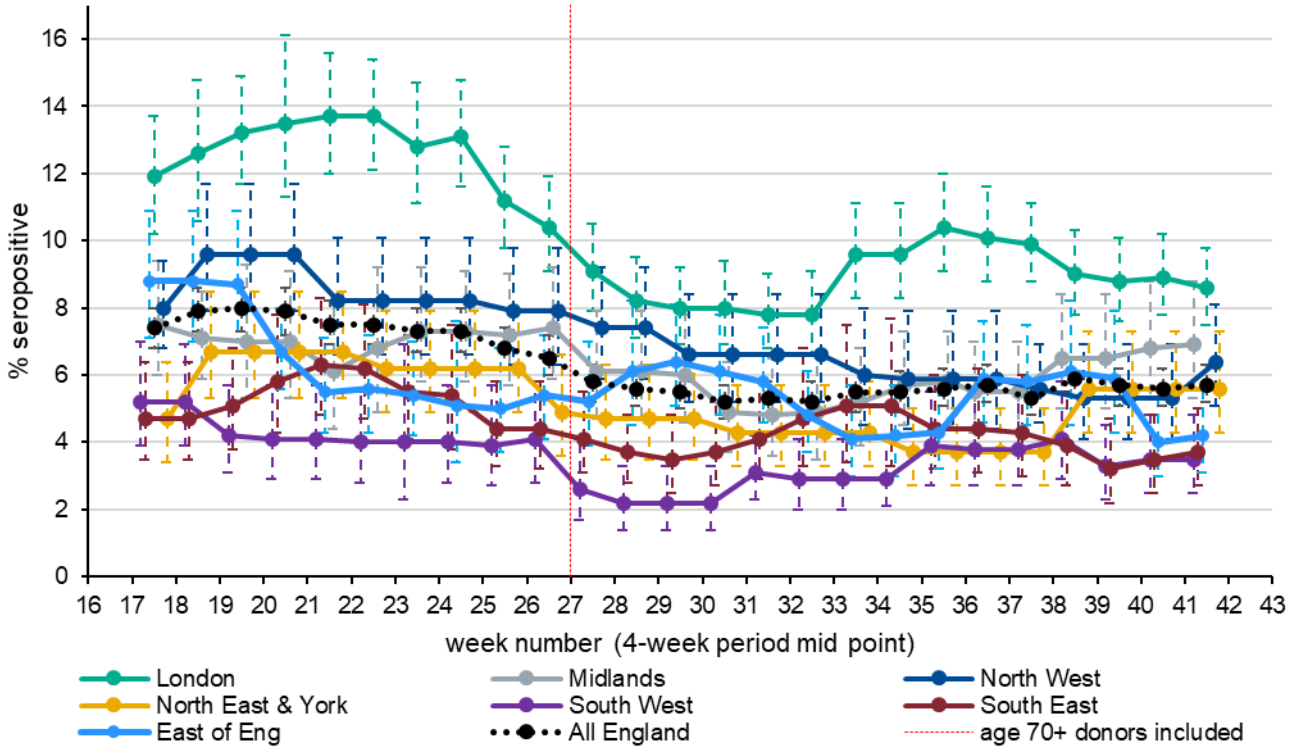
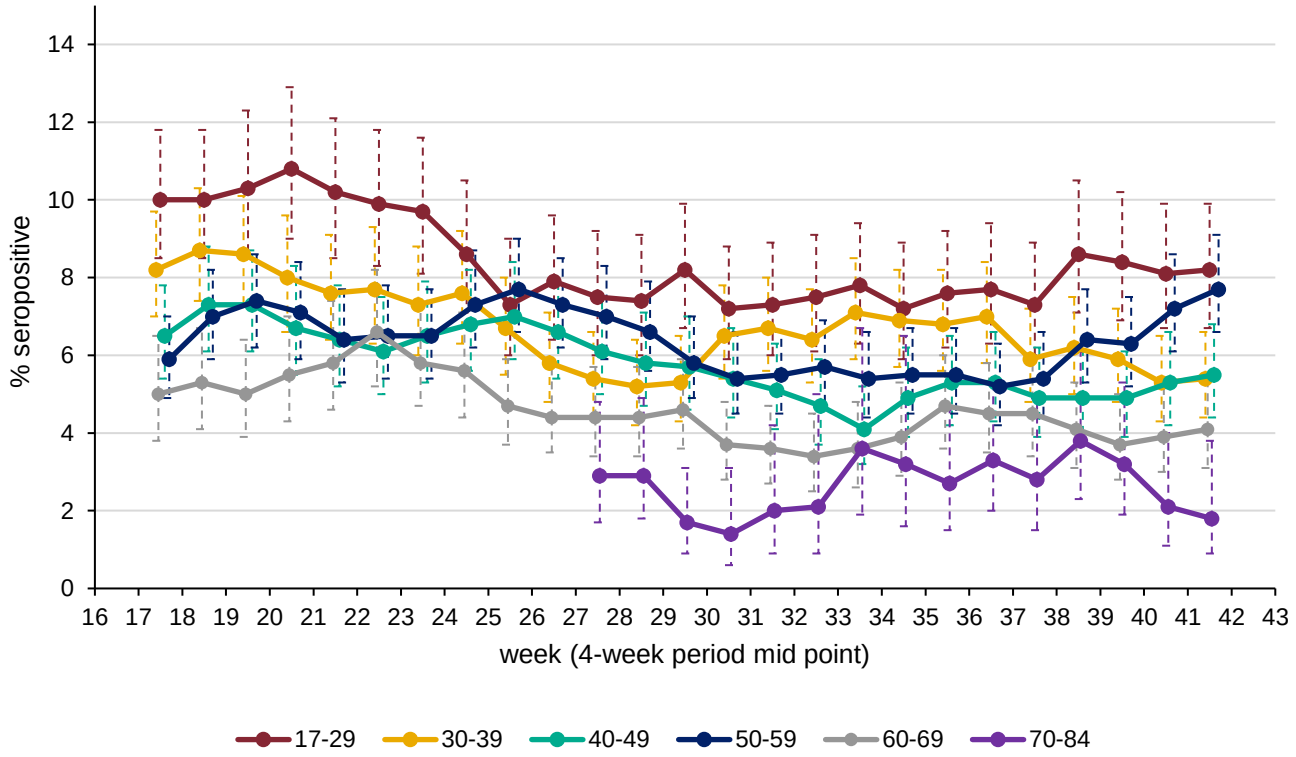


Figure 50: Population weighted 4-weekly rolling SARS-CoV-2 antibody seroprevalence (% seropositive) in blood donors by age group, using Euroimmun test; error bars show 95% confidence intervals.



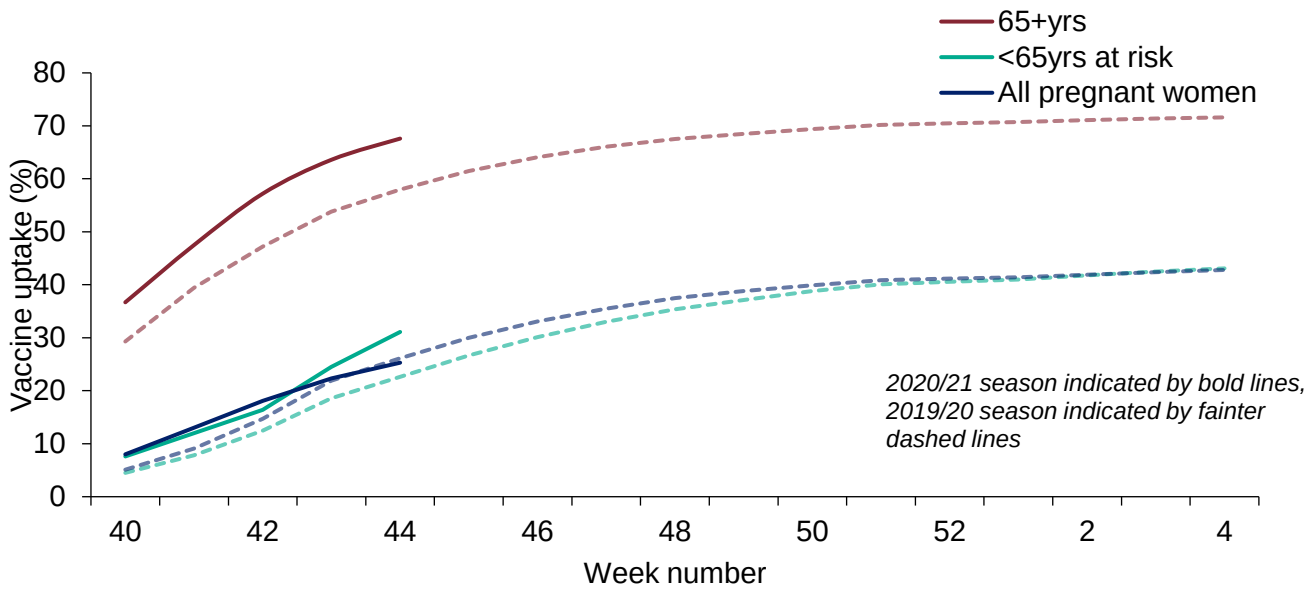
Influenza vaccination

Influenza vaccine uptake in GP patients

Up to week 44 2020 in 87.6% of GP practices reporting weekly to Immform for the main collection, the provisional proportion of people in England who had received the 2020/21 influenza vaccine in targeted groups was as follows (Figure 51):

- 31.1% in under 65 years in a clinical risk group
- 25.3% in pregnant women
- 67.6% in 65+ year olds

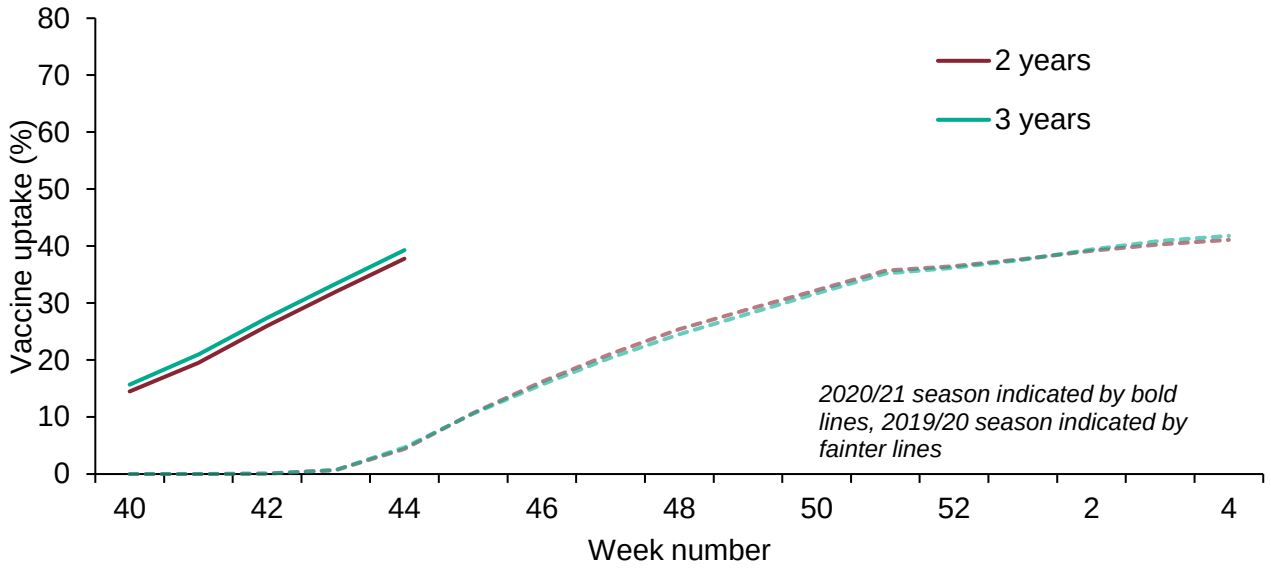
Figure 51: Cumulative weekly influenza vaccine uptake by target group in England



In 2020/21, all 2 and 3 year olds continue to be eligible for influenza vaccination through their GPs. Up to week 43 2020, in 97.1% of GP practices reporting weekly to Immform for the childhood collection, the provisional proportion of children in England who had received the 2020/21 influenza vaccine in targeted groups was as follows (Figure 52):

- 37.8% in 2 year olds
- 39.3% in 3 year olds

Figure 52: Cumulative weekly influenza vaccine uptake in 2 and 3 year olds, in England



Influenza vaccine uptake in school age children

The first report on influenza vaccine uptake in school age children (Year Reception to Year 7) will be published in November 2020.

Influenza vaccine uptake in healthcare workers

The first report on influenza vaccine uptake in healthcare workers will be published in November 2020.

International update

Global COVID-19 update

Globally, up to 3 November 2020, a total of 47,188,887 cases of COVID-19 infection have been reported worldwide, including 1,208,847 COVID-19 related deaths.

For further information on the global COVID-19 situation please see the WHO COVID-19 situation reports.

Figure 53: Global map of cumulative COVID-19 cases

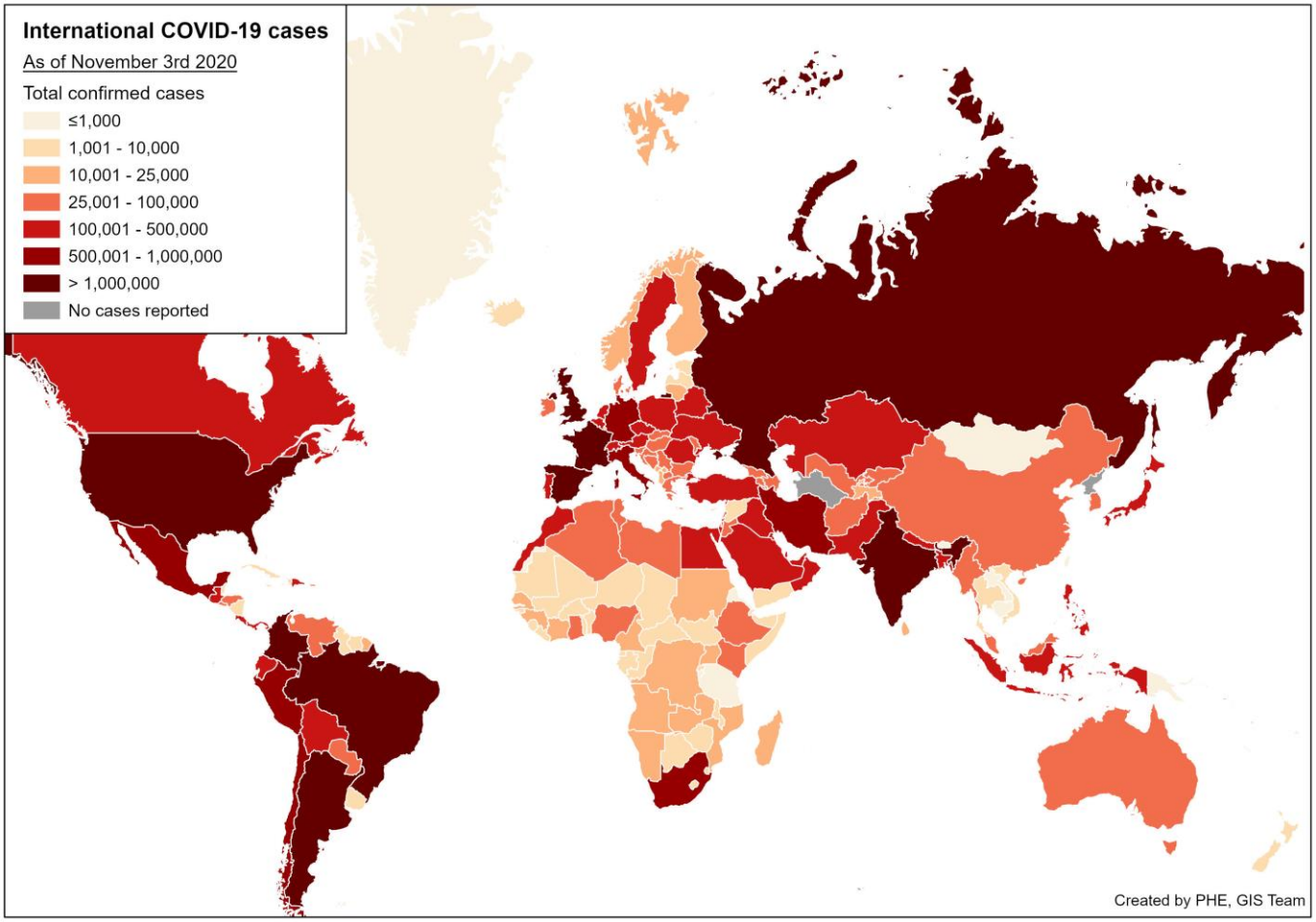
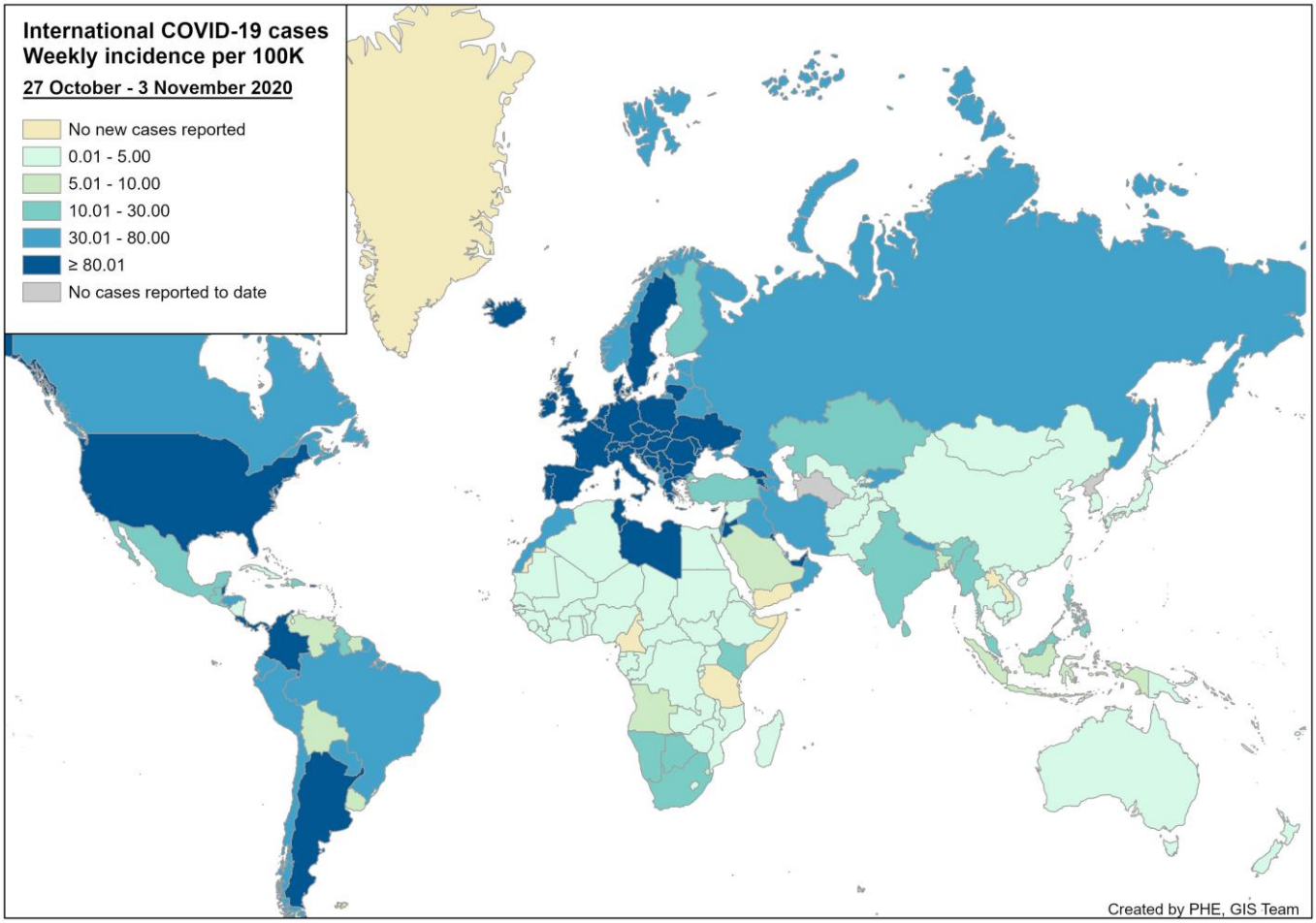


Figure 54: Global map of weekly COVID-19 case incidence rate per 100,000, week 44 2020



Global influenza update

Updated on 28 October 2020 (based on data up to 11 October 2020) (WHO website)

In the temperate zone of the northern hemisphere, influenza activity remained below inter-seasonal levels. In the temperate zones of the southern hemisphere, the influenza season remained low or below baseline overall. Worldwide, of the very low numbers of detections reported, seasonal influenza A(H3N2) viruses accounted for the majority of detections.

In the countries of North America, influenza activity indicators, including the percent of tests positive for influenza, were at very low levels.

In Europe, influenza activity remained at inter-seasonal levels though sporadic detections were reported across reporting countries.

In Central Asia and Northern Africa, there were no influenza updates for this reporting period.

In Western Asia, there were no or sporadic influenza detections across reporting countries.

In East Asia, influenza illness indicators and influenza activity remained at inter-seasonal levels in most reporting countries

In the Caribbean and Central American countries, there were no influenza detections reported.

In tropical South America, there were no influenza detections across reporting countries.

In tropical Africa, influenza activity was reported in Côte d'Ivoire and Mali.

In Southern Asia there were sporadic influenza detections across reporting countries.

In South East Asia, increased influenza detections were reported in Cambodia and Lao People's Democratic Republic (PDR).

In Oceania, ILI and other influenza activity indicators remained below usual levels for this time of year in general.

The WHO GISRS laboratories tested more than 81257 specimens between 28 September 2020 and 11 October 2020. 172 were positive for influenza viruses, of which 108 (62.8%) were typed as influenza A and 64 (37.2%) as influenza B. Of the sub-typed

influenza A viruses, 4 (6.1%) were influenza A(H1N1pdm09) and 62 (93.9%) were influenza A (H3N2). Of the characterized B viruses, 2 (8%) belonged to the B-Yamagata lineage and 23 (92%) to the B-Victoria lineage.

Influenza in Europe

Updated on 2 November 2020 (Joint ECDC-WHO Europe Influenza weekly update)

For week 43 2020, influenza activity remained at interseasonal levels throughout Europe.

Of 27 countries and areas that reported on the intensity indicator, 24 reported activity at baseline levels, and 3 reported low intensity (Azerbaijan, Belgium and Slovakia) for week 43 2020. Of 27 countries and areas that reported on geographic spread 22 reported no activity, 4 reported sporadic spread (Azerbaijan, Portugal, United Kingdom (Scotland) and Slovakia) and 1 (Belgium) reported widespread activity for week 43 2020.

For week 43 2020, of 236 sentinel specimens tested for influenza viruses, 2 were positive.

There were no hospitalized laboratory-confirmed influenza cases in ICUs for week 43 2020 and since the start of the season.

There were no laboratory-confirmed influenza cases in wards outside ICUs for week 43 2020 and since the start of the season.

Influenza in the Northern Hemisphere

Influenza activity remains low in the United States of America and in Canada.

For further information on influenza in the United States of America please see the Centre for Disease Control weekly influenza surveillance report.

For further information on influenza in Canada please see the Public Health Agency weekly influenza report.

Other respiratory viruses

Avian influenza

Latest update on 10 July 2020 (WHO website)

Influenza A(H5) viruses:
According to reports received by the World Organisation for Animal Health (OIE), various influenza A(H5) subtypes continue to be detected in birds in Africa, Europe and Asia.

Influenza A(H7N9) viruses:
There have been no publicly available reports from animal health authorities in China or other countries on influenza A(H7N9) virus detections in animals in recent months.

Influenza A(H9N2) viruses:
Between 9 May and 10 July 2020 two new laboratory-confirmed human cases of influenza A(H9N2) virus infections were reported from China.

Middle East respiratory syndrome coronavirus (MERS-CoV)

Latest update on 3 November 2020 (WHO website)

Up to 3 November 2020, a total of five cases of Middle East respiratory syndrome coronavirus, MERS-CoV, (three imported and two linked cases) have been confirmed in the UK. On-going surveillance has identified 1,816 suspected cases in the UK since September 2012 that have been investigated for MERS-CoV and tested negative.

From 1 April to 31 May 2020, the National IHR Focal Point of Saudi Arabia reported 9 new cases of MERS-CoV infection, including five deaths.

Globally, since September 2012, WHO has been notified of 2,562 laboratory-confirmed cases of infection with MERS-CoV, including 881 related deaths. Further information on management and guidance of possible cases is available online. The latest ECDC MERS-CoV risk assessment can be found here, where it is highlighted that risk of widespread transmission of MERS-CoV remains very low.

Related links

Previous national COVID-19 reports

Previous weekly influenza reports

Annual influenza reports

Sources of influenza surveillance data

Sources of COVID-19 surveillance data

PHE has delegated authority, on behalf of the Secretary of State, to process Patient Confidential Data under Regulation 3 The Health Service (Control of Patient Information) Regulations 2002 http://www.legislation.gov.uk/uksi/2002/1438/regulation/3/made. Regulation 3 makes provision for the processing of patient information for the recognition, control and prevention of communicable disease and other risks to public health.

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