



UK Health
Security
Agency

Weekly national Influenza and COVID-19 surveillance report

Week 23 report (up to week 22 data)

9 June 2022

Contents

Executive summary	4
Laboratory surveillance	5
Confirmed COVID-19 cases (England)	5
Possible SARS-CoV-2 reinfection in England	12
Respiratory DataMart system (England)	13
Community surveillance	17
Acute respiratory infection incidents	17
FluSurvey	24
FluDetector	27
Google search queries	29
NHS 111	31
Primary care surveillance	34
RCGP (England)	34
Sentinel swabbing scheme in the UK	37
GP In Hours, Syndromic Surveillance	39
GP Out of Hours, Syndromic Surveillance	41
Secondary care surveillance	43
SARI Watch	43
Hospitalisations, SARI Watch	44
ICU or HDU admissions, SARI Watch	48
ECMO, SARI Watch	52
RSV admissions, SARI Watch	53
Emergency Department attendances, Syndromic surveillance	55
Mortality surveillance	59
COVID-19 deaths	59
Daily excess all-cause mortality (England)	61
Microbiological surveillance	65
Virus characterisation	65
Antiviral susceptibility	65

SARS-CoV-2 variants	65
Antimicrobial susceptibility	66
COVID-19 sero-prevalence surveillance	67
Influenza vaccination	68
Influenza vaccine uptake in GP patients.....	68
COVID-19 vaccination	71
COVID-19 vaccine uptake in England.....	71
International update.....	79
Global COVID-19 update.....	83
Global influenza update	86
Other respiratory viruses	88
Related links	90
About the UK Health Security Agency	91

For additional information including regional data on COVID-19 and other respiratory viruses, COVID-19 in educational settings, co- and secondary infections with COVID-19 and other data supplementary to this report, please refer to the [accompanying graph pack](#).

Executive summary

This report summarises the information from the surveillance systems which are used to monitor coronavirus (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 21 (between 30 May 2022 and 5 June 2022) and for some indicators daily data up to 07 June 2022.

Data in this week's report (week 22 data) may be subject to delays due to the Jubilee Bank Holiday and should be interpreted with caution.

Since 1 April 2022, free universal symptomatic and asymptomatic testing for the general public in England is no longer available, as outlined in the plan for [living with COVID-19](#). Data in this report should be interpreted in the context of this change to testing. [Public health guidance](#) remains in place for cases and those with symptoms of a respiratory infection.

Surveillance indicators suggest that at a national level in week 22 of 2022, COVID-19 activity remained similar to the previous week, while rates of severe disease continued to decrease. Surveillance indicators suggest influenza activity continued to remain low in week 22 through most indicators. Indicators suggest there has been a slight increase in respiratory syncytial virus (RSV) activity in recent weeks.

COVID-19 case rates through Pillar 1 in week 22 remained similar to the previous week. Case rates remained similar to the previous week in all age groups, all regions and ethnic groups, with the highest case rates still notable in those aged over 80. The overall number of reported acute respiratory incidents remained similar to the previous week. SARS-CoV-2 was identified in the majority of these. COVID-19 hospitalisations increased slightly in week 22. Deaths with COVID-19 decreased in the most recent week.

COVID-19 vaccine coverage for all ages was 70.1% for dose 1 and 65.9% for dose 2 at the end of week 21. COVID-19 vaccine coverage for all ages for dose 3 was at 51.8% at the end of week 21, reaching over 80% in all cohorts over the age of 60.

Through Respiratory Datamart influenza positivity remained low at 0.6% in week 22. Other indicators for influenza such as hospital admissions and GP influenza-like illness consultation rates remain low. RSV positivity continued to increase to 4.5% overall and 15.2% in the under 5 year olds in week 22. Rhinovirus, adenovirus and parainfluenza positivity also increased to 13.8%, 4.1% and 4.8% respectively in week 22. Human metapneumovirus (hMPV) positivity remained low at 0.5% in week 22.

Laboratory surveillance

Confirmed COVID-19 cases (England)

From 1 April 2022, the Government ended provision of free universal symptomatic and asymptomatic testing for the general public in England, as outlined in the plan for [living with COVID-19](#). From week 15 2022, confirmed COVID-19 episodes and positivity through Pillar 1 are presented in this report, with Pillar 2 data available in the accompanying graph pack.

As of 9am on 7 June 2022, a total of 1,652,341 episodes have been confirmed for COVID-19 in England under Pillar 1, and 17,150,024 episodes have been confirmed for COVID-19 in England under Pillar 2, since the beginning of the pandemic.

COVID-19 case rates through Pillar 1 in week 22 remained similar to the previous week. Case rates remained similar to the previous week in all age groups, all regions and ethnic groups, with the highest case rates still notable in those aged over 80.

* Changes to testing policies over time may affect positivity rates and incidence rates, and should be interpreted accordingly.

* From 31 January 2022, UK Health Security Agency (UKHSA) moved all COVID-19 case reporting in England to use a new episode-based definition which includes possible reinfections. Each infection episode is counted separately if there are at least 91 days between positive test results (polymerase chain reaction (PCR) or lateral flow device (LFD)). Each infection episode begins with the earliest positive specimen date. Further information can be found on the [UK COVID-19 dashboard](#).

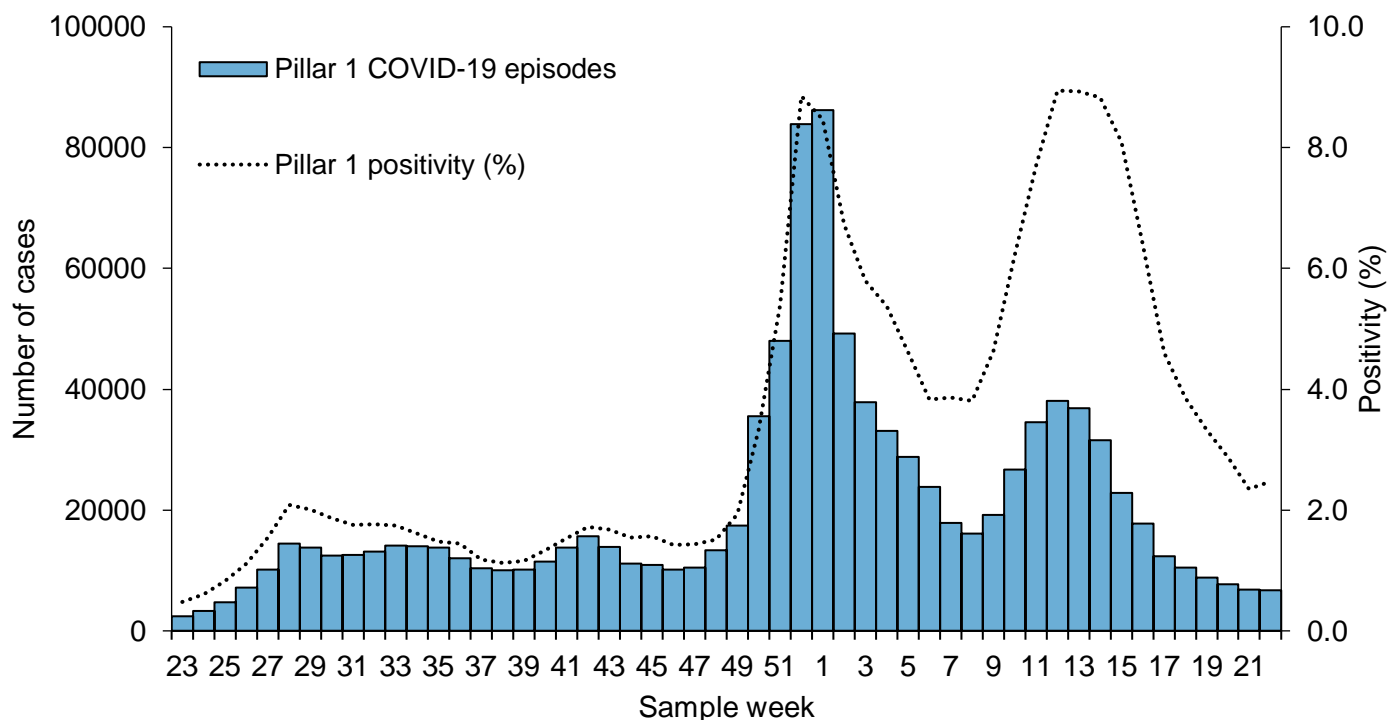
* From the week 32 2021 report onwards, case rates have been updated to use the latest Office for National Statistics (ONS) population estimates for mid-2020. Previously case rates were calculated using the mid-2019 population estimates. Rates by ethnicity and Indices of Multiple Deprivation (IMD) quantile will continue to be presented using the mid-2019 estimates, until the mid-2020 estimates become available.

* Please note that positivity is presented as positivity by PCR testing only. Positivity is calculated as the number of individuals testing positive during the week divided by the number of individuals tested during the week through PCR testing

* Data is 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

* Data source: Second Generation Surveillance System (SGSS)

Figure 1: Confirmed COVID-19 episodes tested under Pillar 1, based on sample week with overall weekly PCR positivity for Pillar 1 (%)



Age and sex

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

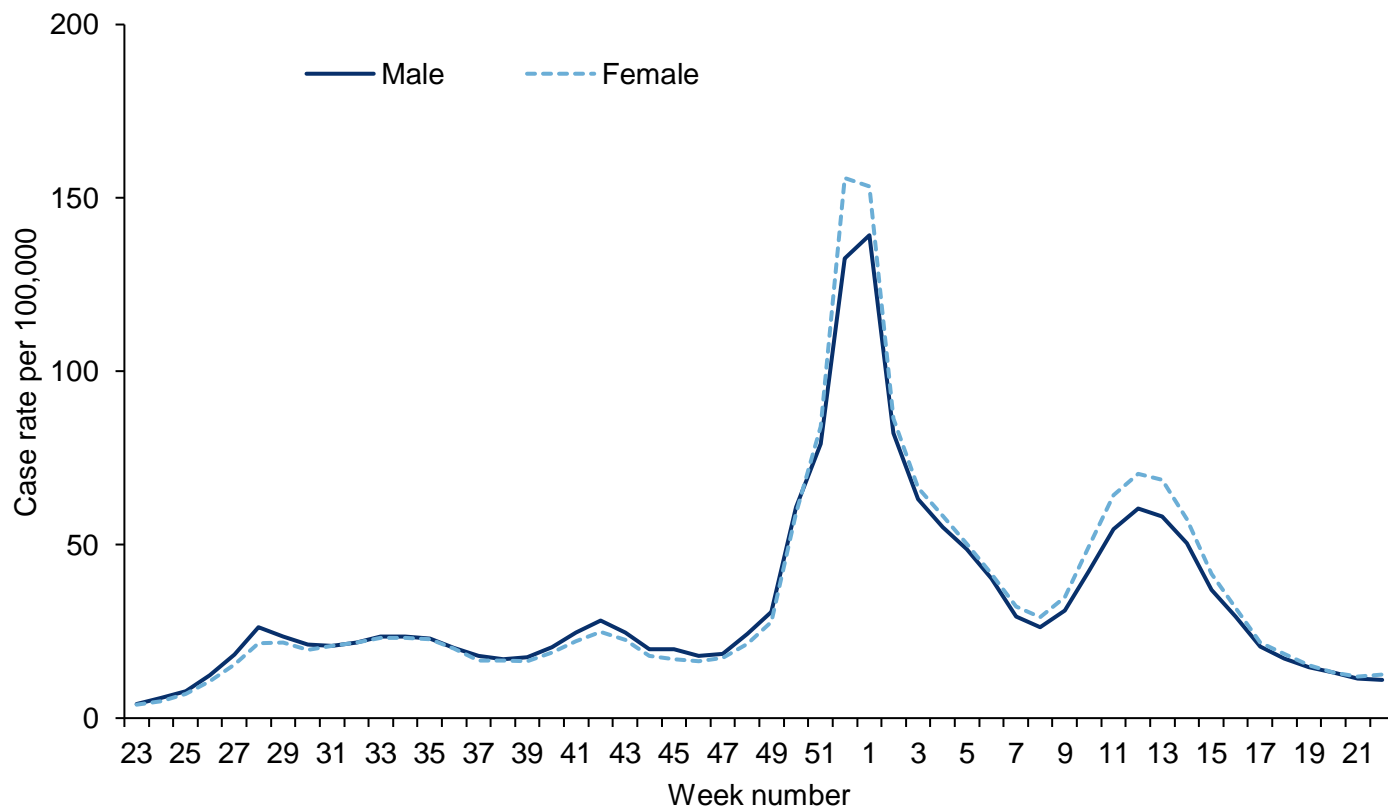


Figure 3: Weekly confirmed COVID-19 case rates per 100,000, by episode, tested under Pillar 1, by age group

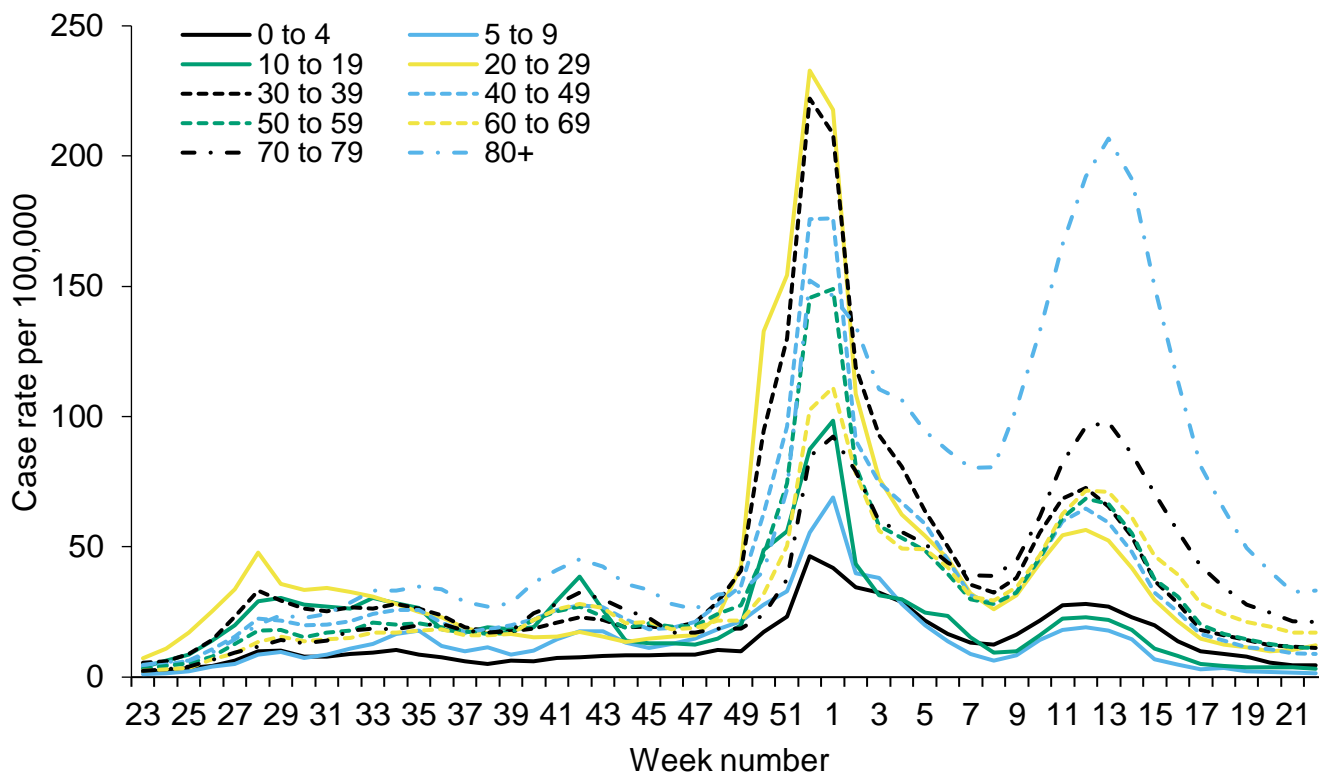


Figure 4: Weekly PCR positivity (%) of confirmed COVID-19 cases tested overall and by sex under Pillar 1

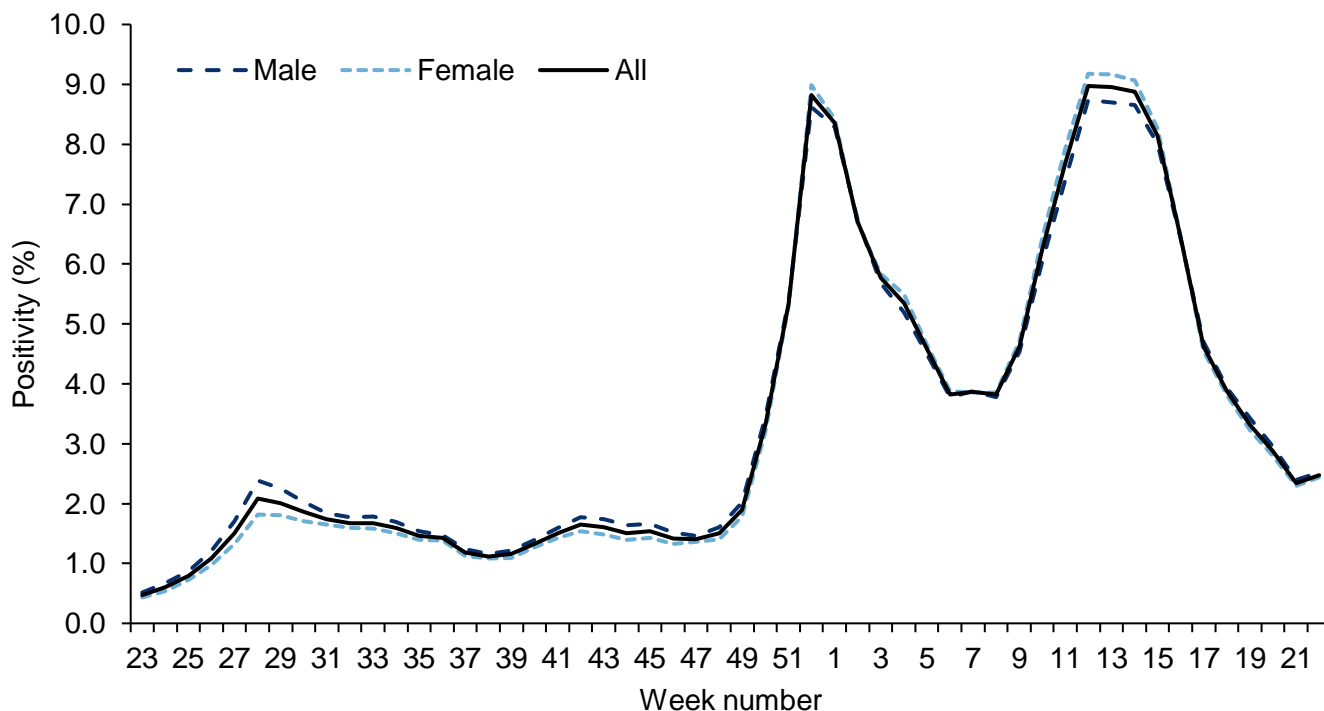
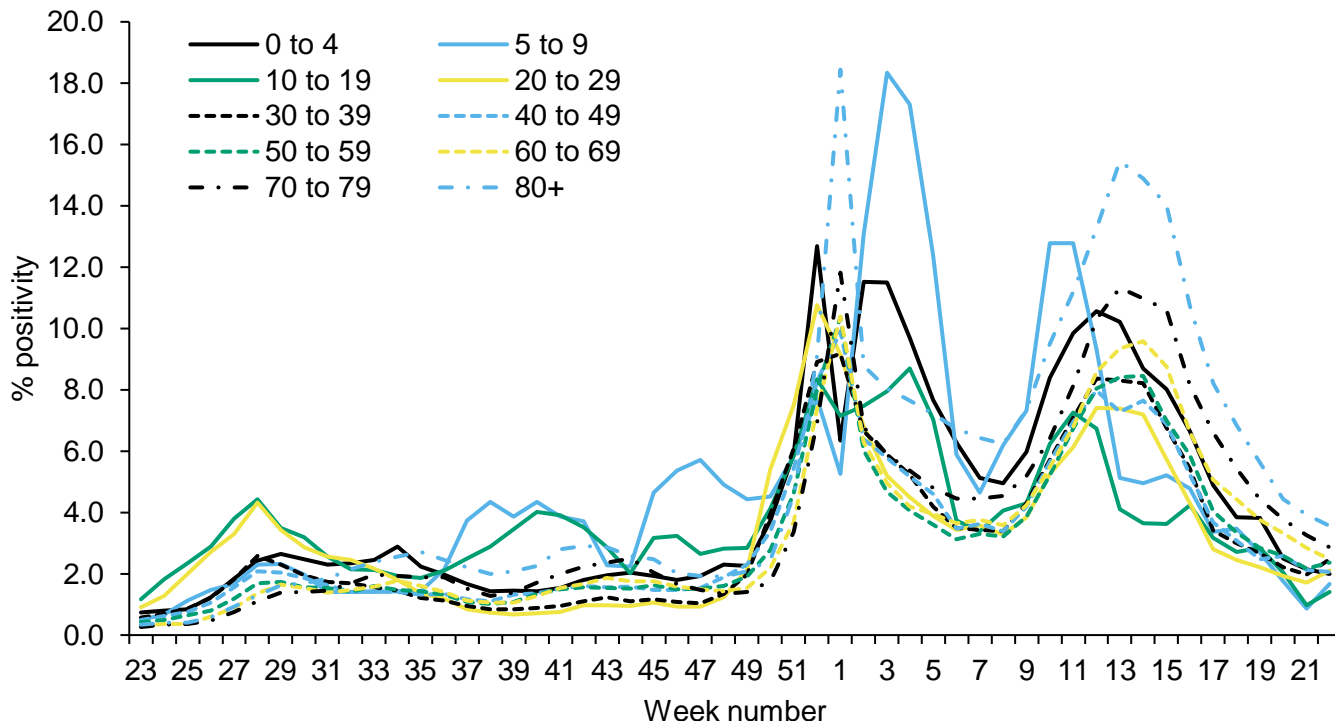
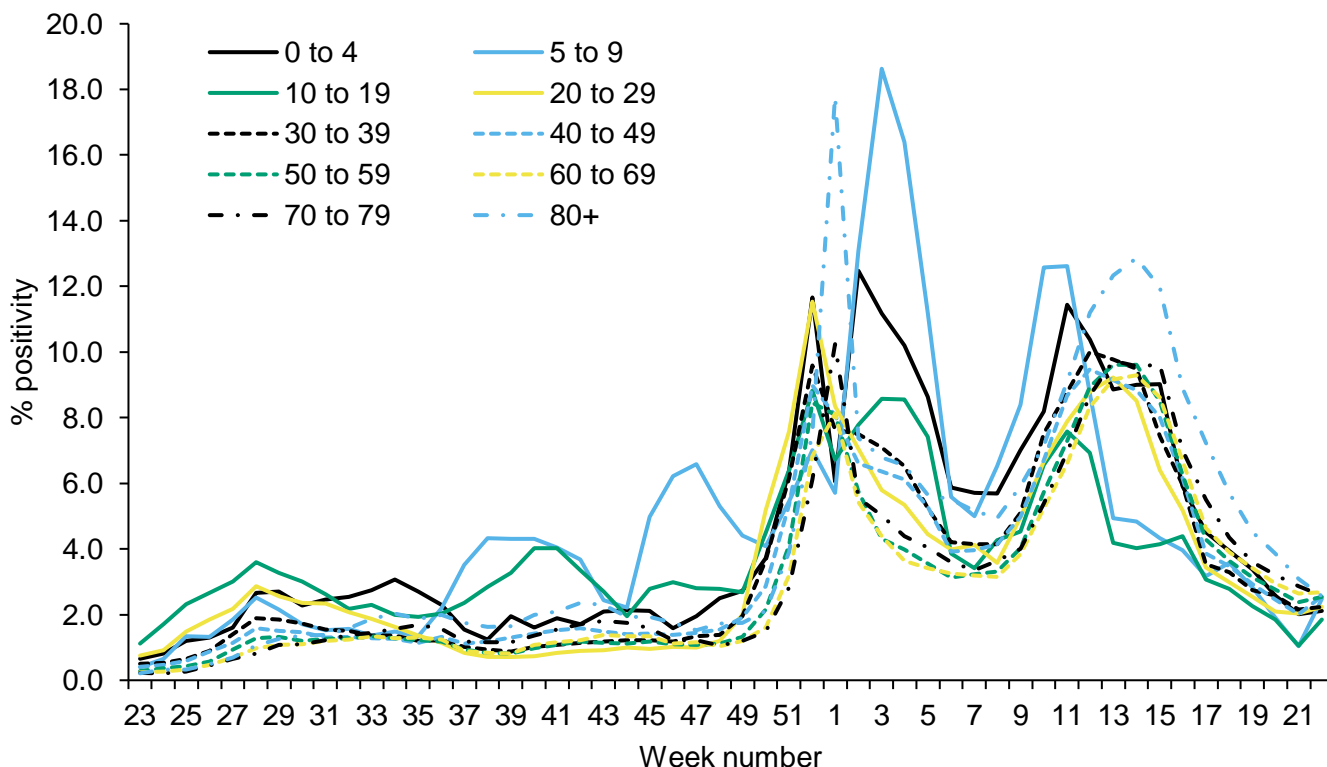


Figure 5: Weekly PCR positivity (%) of confirmed COVID-19 cases tested under Pillar 1, (a) by male and age group and (b) by female and age group

(a) Pillar 1 - Male



(b) Pillar 1 - Female



Geography

Figure 6: Weekly confirmed COVID-19 case rates by episode, per 100,000 population (Pillar 1), by UKHSA Centres and sample week

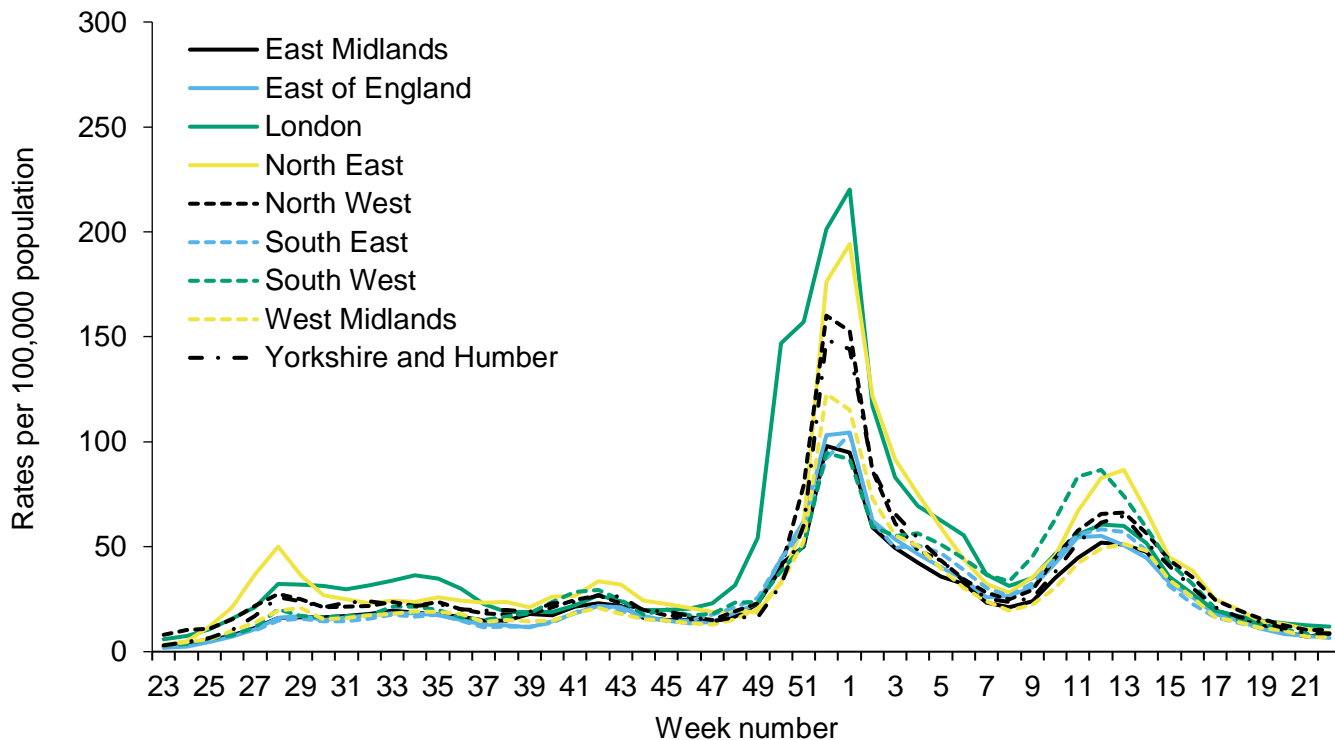


Figure 7: Weekly PCR positivity of confirmed COVID-19 cases tested under Pillar 1 (%) by UKHSA Centres and sample week

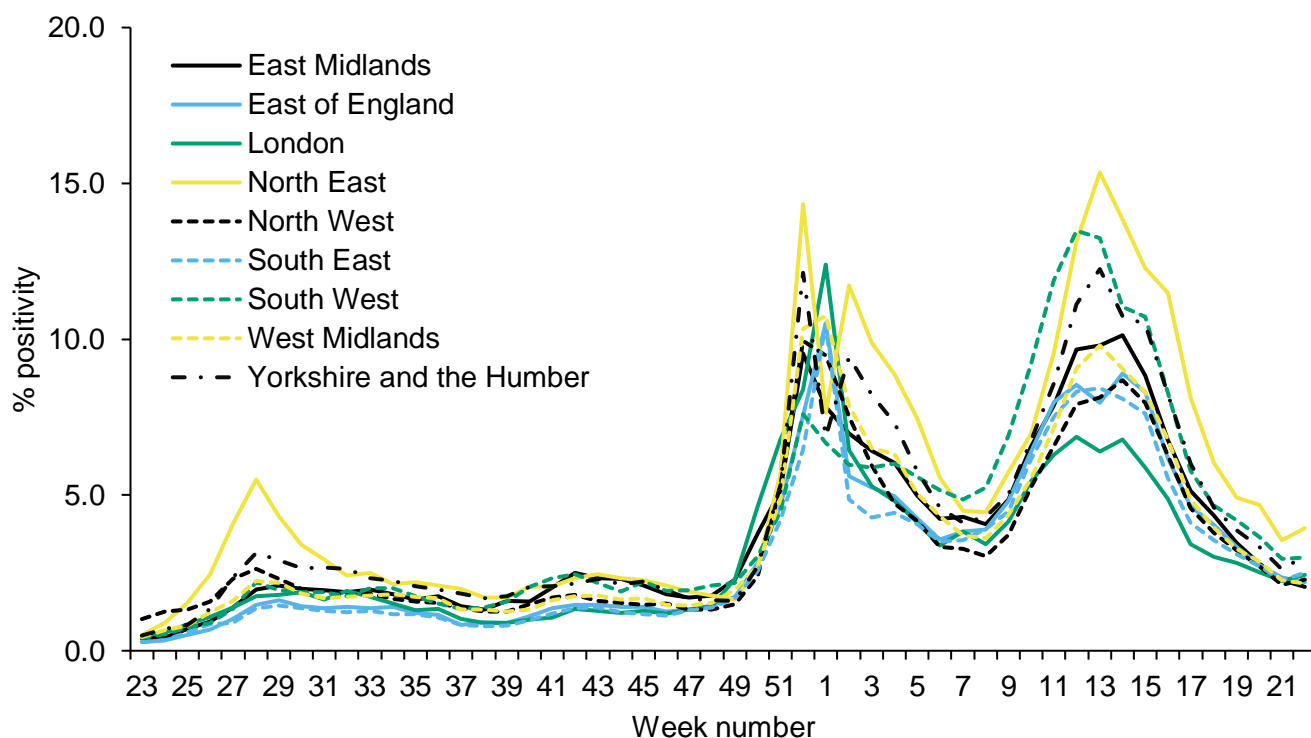
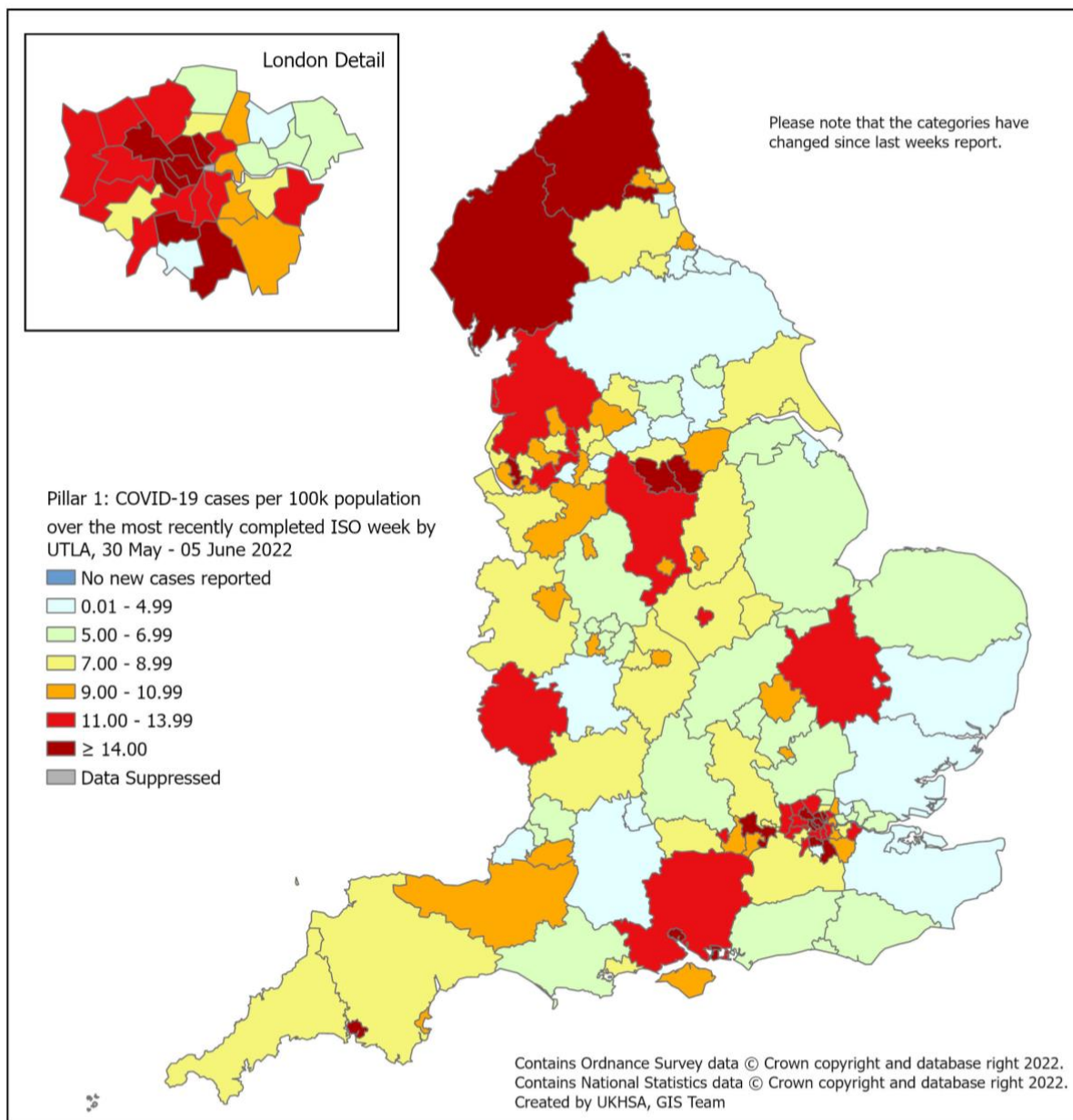
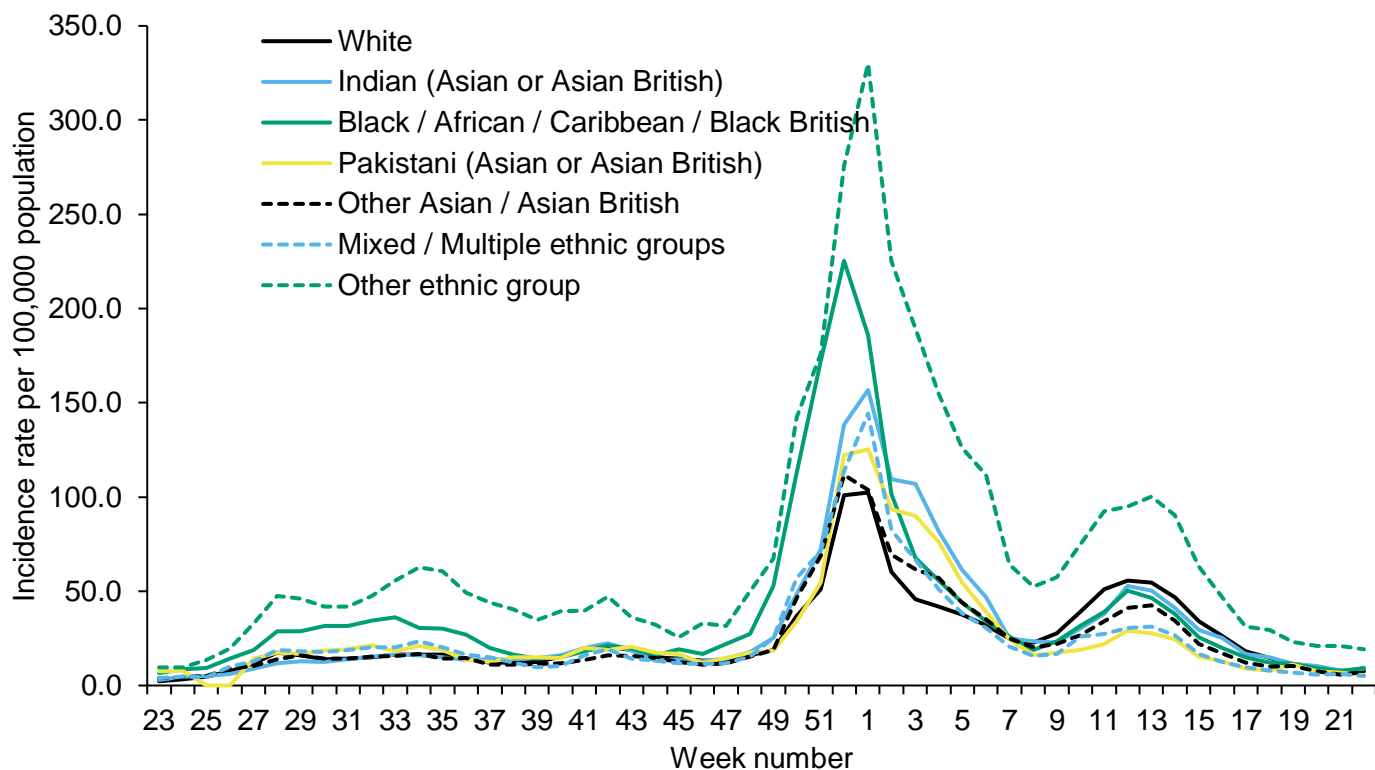


Figure 8: Weekly rate of COVID-19 episodes per 100,000 population (Pillar 1), by upper-tier local authority, England (box shows enlarged map of London area)



Ethnicity

Figure 9: Weekly incidence per 100,000 population by ethnicity (Pillar 1), England



*the incidence rates on Figure 9 have been calculated using the mid-2019 ONS population estimates

Possible SARS-CoV-2 reinfection in England

SARS-CoV-2 reinfections data is not currently being published. For previous updates please see previous editions of this report.

Respiratory DataMart system (England)

The Respiratory Datamart system began 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. Seventeen 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 allow comparison with data on other respiratory viruses.

In week 22 of 2022, out of the 42,189 respiratory specimens reported through the Respiratory DataMart System (based on data received from 15 out of 17 laboratories), 949 samples were positive for SARS-CoV-2 with an overall positivity of 2.2%. The highest positivity was noted in the 15-44 and 65 year olds and over at 2.3% respectively in week 22.

The overall influenza positivity remained very low at 0.6% in week 22, with 41 samples testing positive for influenza (including 6 influenza A(H3N2), 1 fluA(H1N1)pdm09, 30 influenza A(not subtyped) and 4 influenza B).

Respiratory syncytial virus (RSV) positivity continued to increase and was at 4.5% in week 22, with the highest positivity in the under 5 year olds at 15.2%. Adenovirus positivity increased slightly to 4.1% overall with the highest positivity in under 5 year olds at 8.5%. Rhinovirus positivity also increased and was at 13.8% overall. Parainfluenza positivity increased slightly to 4.8%, whilst human metapneumovirus (hMPV) positivity remained low at 0.5% in week 22 (Figure 15).

Figure 13: Respiratory DataMart samples positive for influenza and weekly positivity (%) for influenza, England

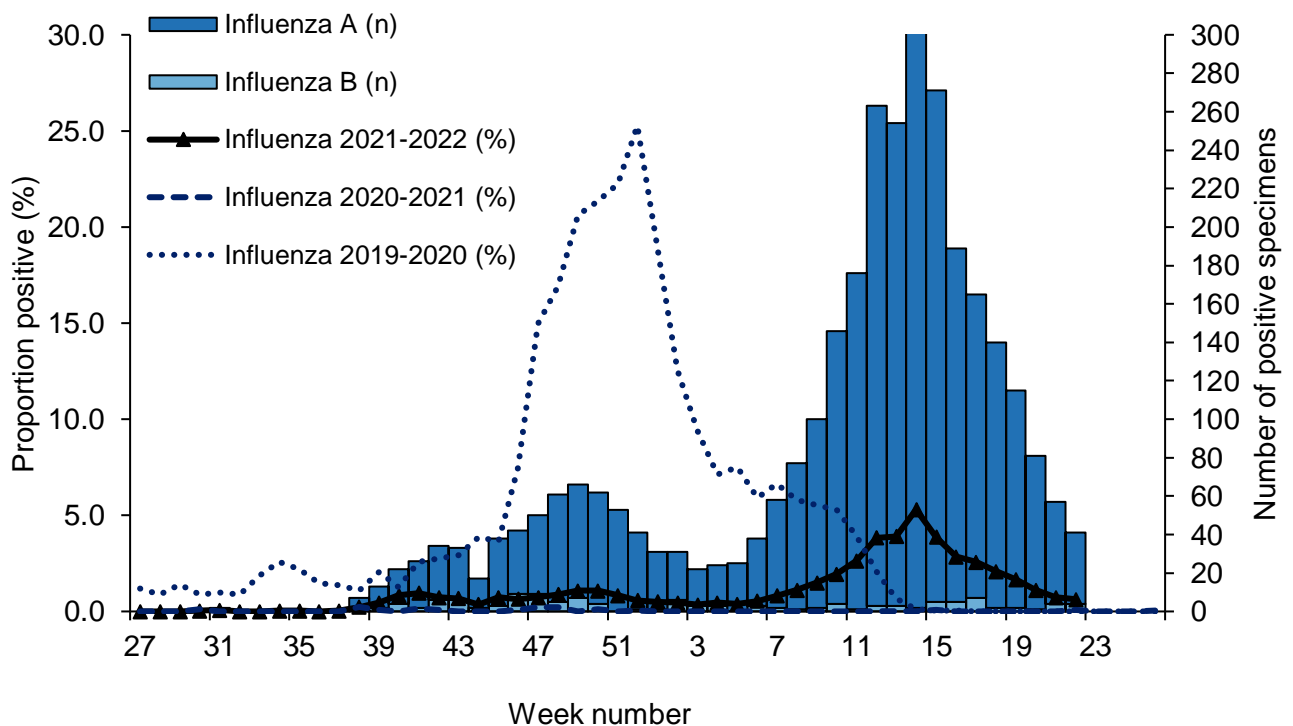


Figure 14: Respiratory DataMart weekly positivity (%) for SARS-CoV-2, England

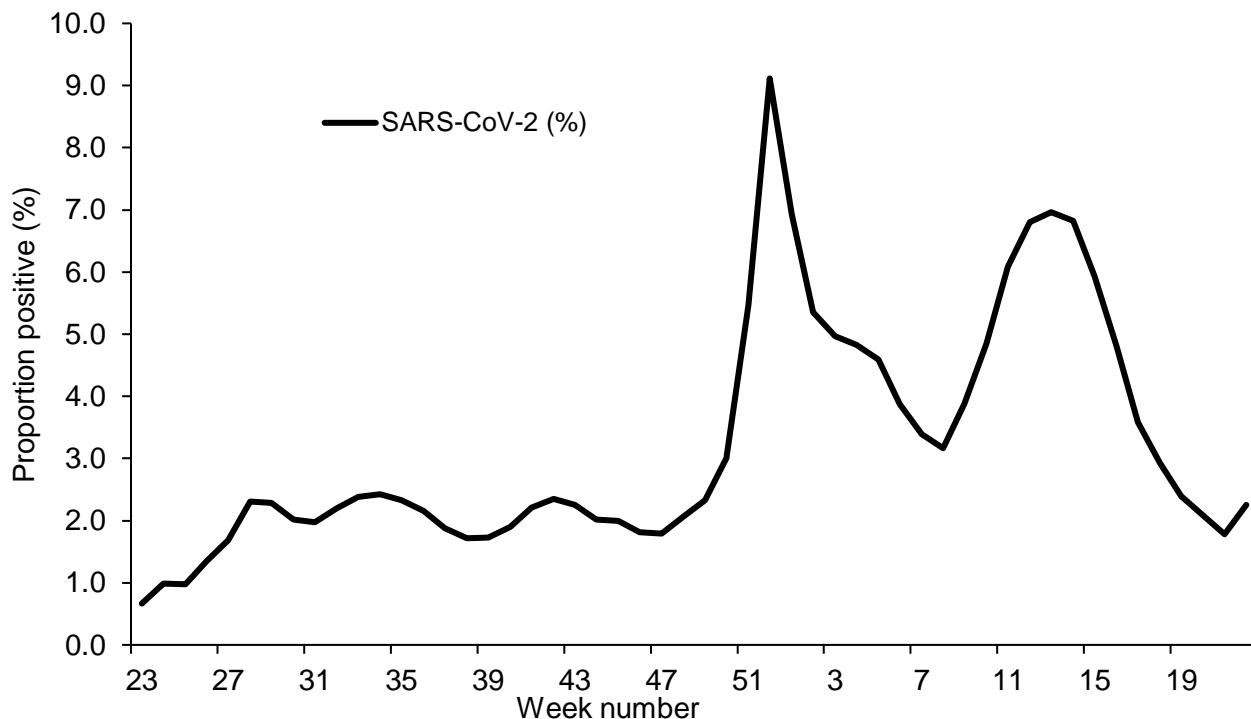


Figure 15: Respiratory DataMart weekly positivity (%) for other respiratory viruses, England

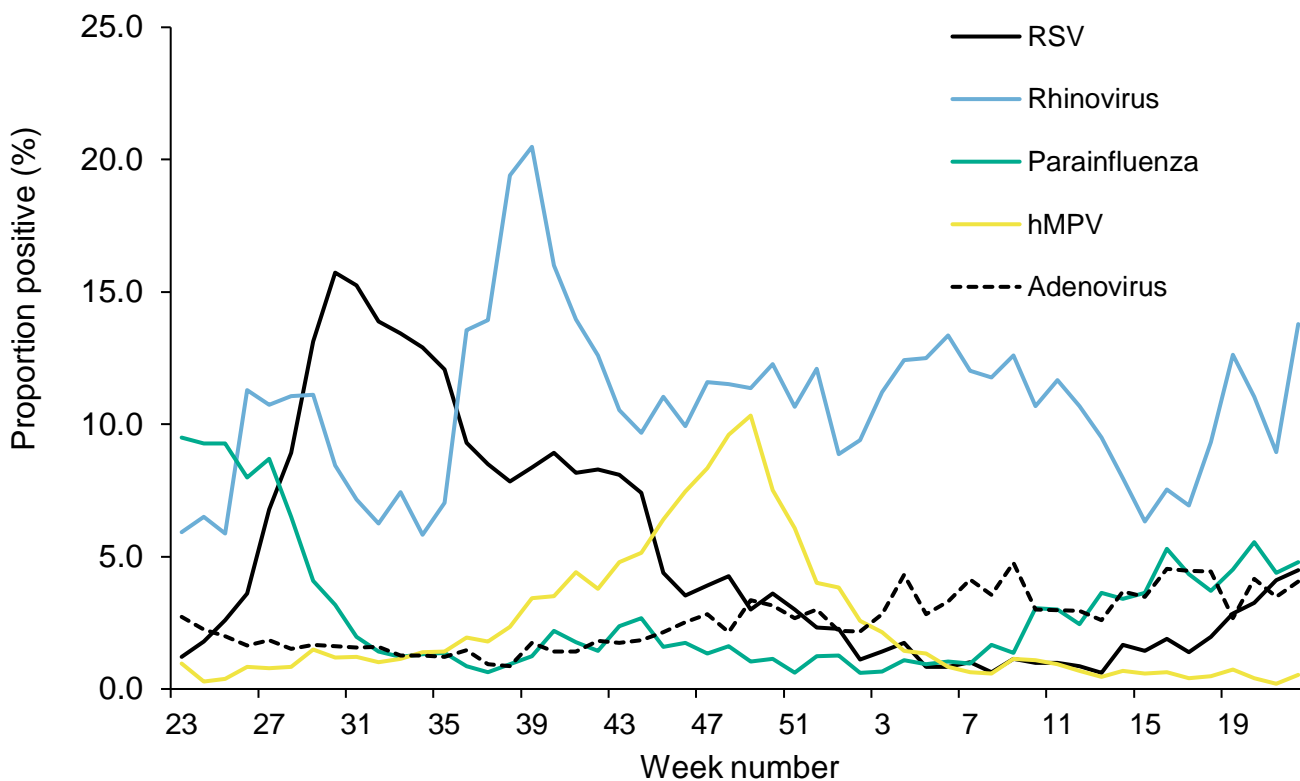


Figure 16: Respiratory DataMart weekly positivity (%) for adenovirus by age, England

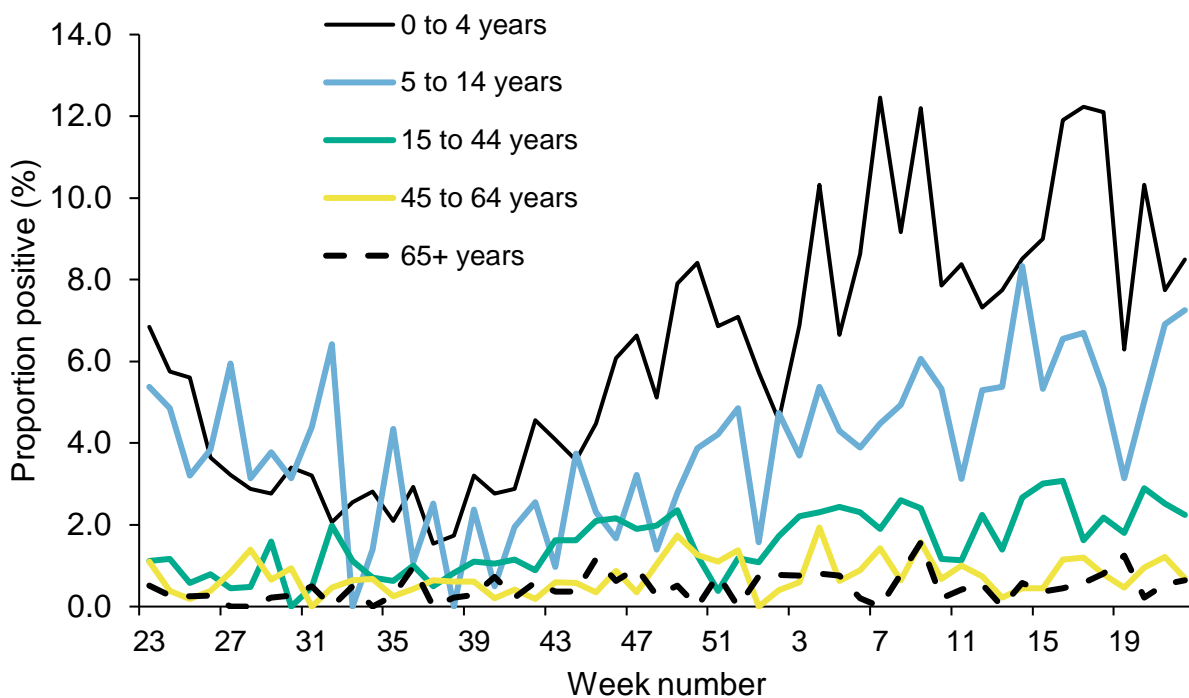


Figure 17: Respiratory DataMart weekly positivity (%) for rhinovirus by age, England

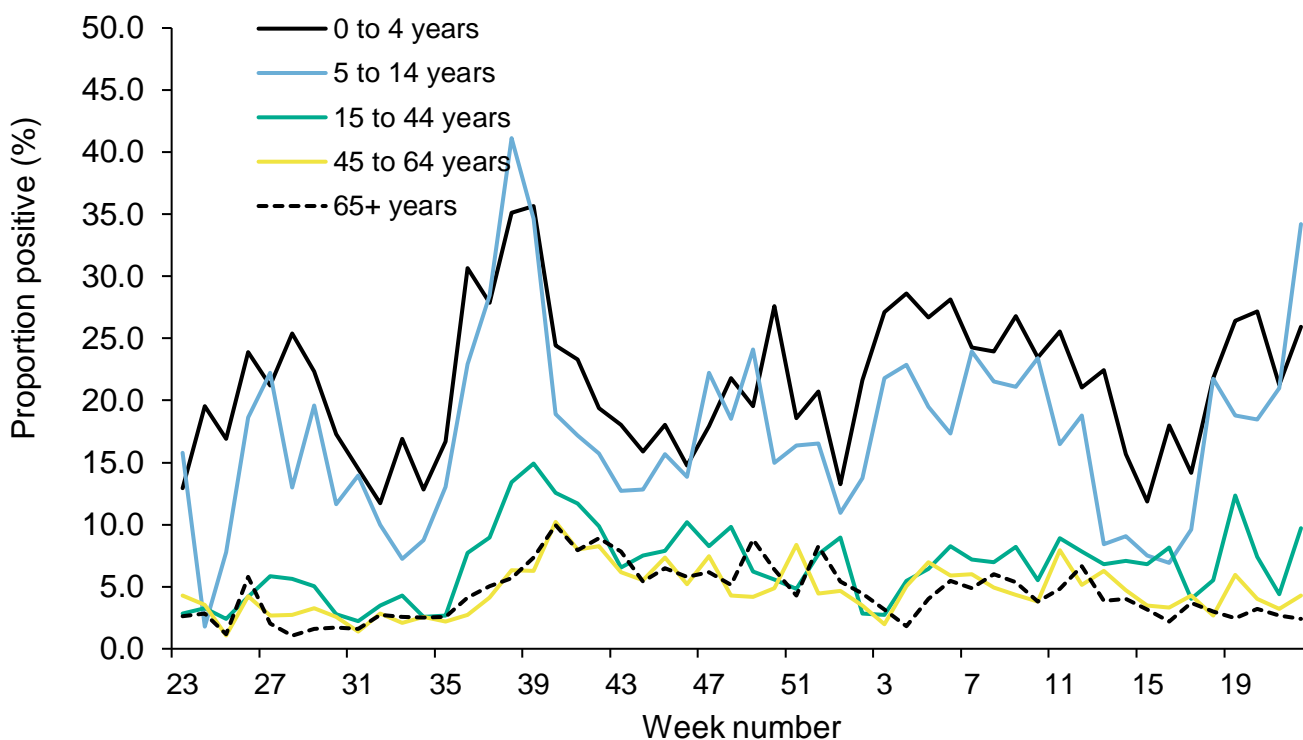
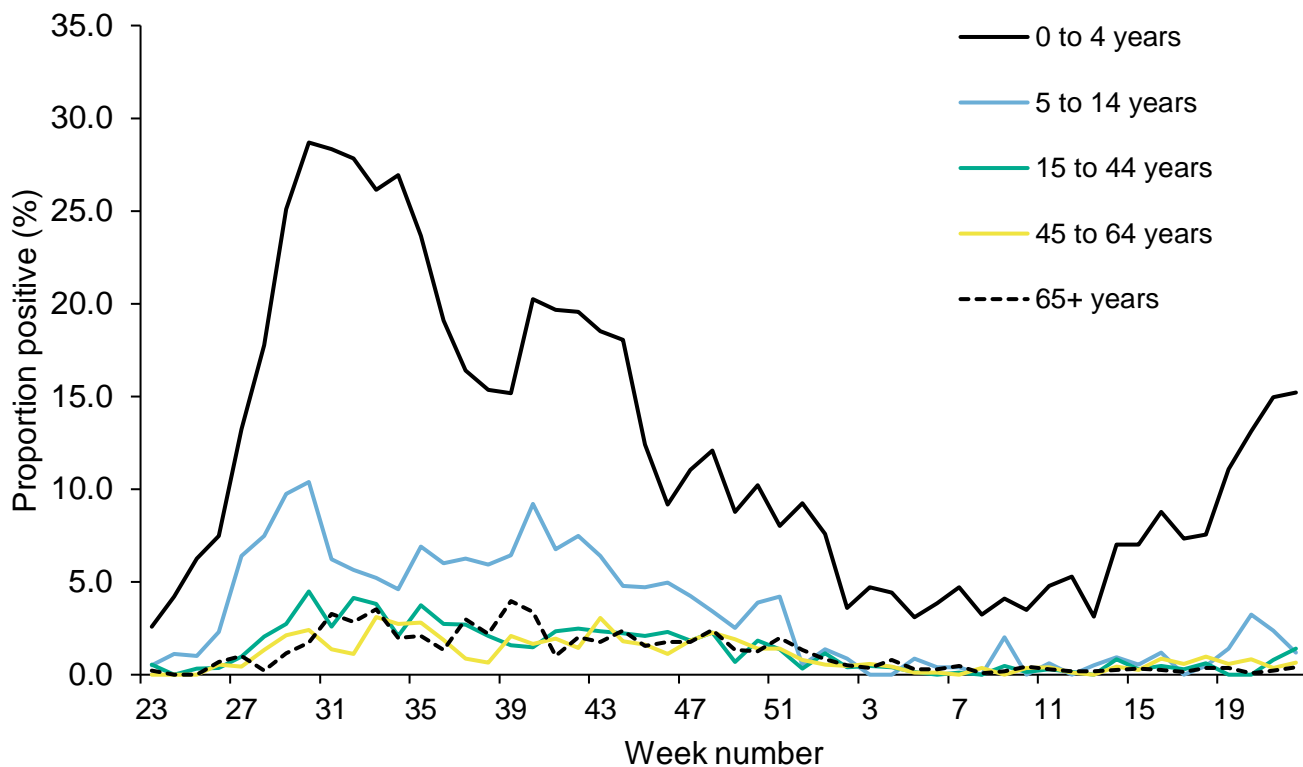


Figure 18: Respiratory DataMart weekly positivity (%) for RSV by age, England



Community surveillance

Acute respiratory infection incidents

Here we present data on acute respiratory infection (ARI) incidents in different settings that are reported to UKHSA Health Protection Teams (HPTs) and entered onto an online web-based platform called HPZone. Incidents are suspected outbreaks of acute respiratory infections linked to a particular setting. All suspected outbreaks are further investigated by the HPT in liaison with local partners.

Data for England, Scotland and Northern Ireland are included in the UK figures.

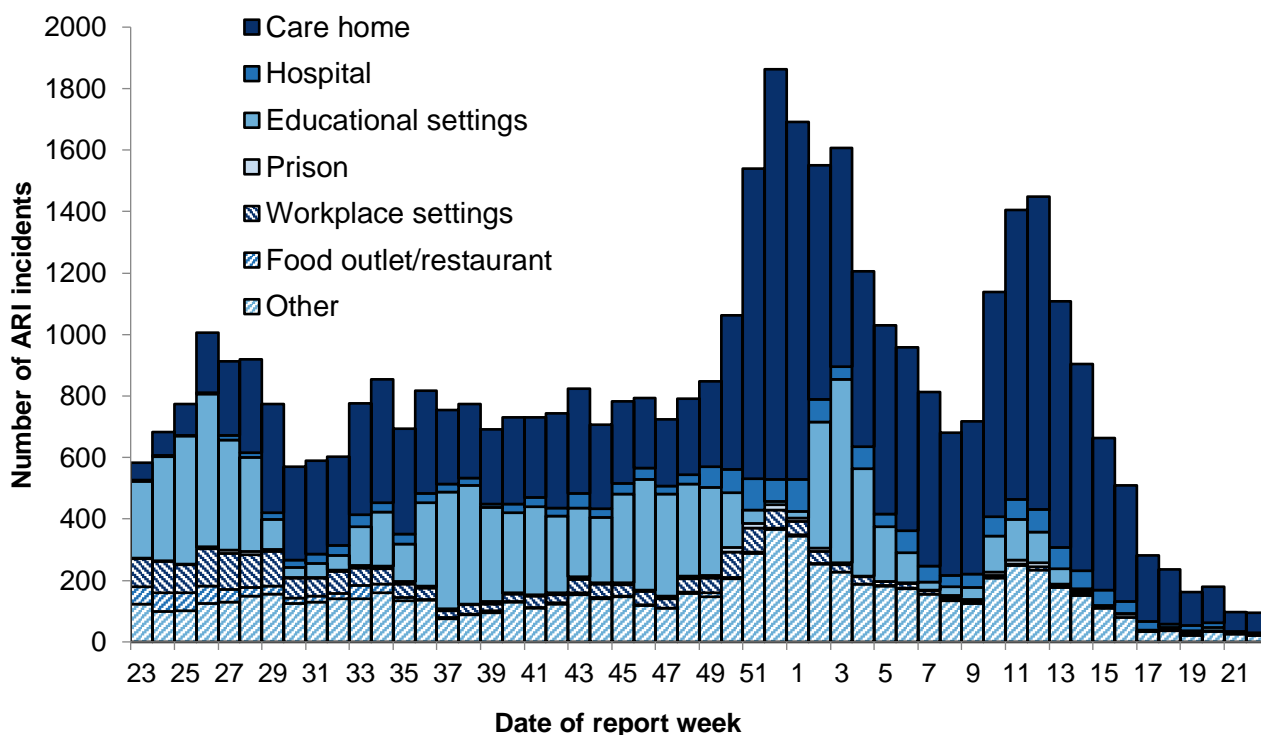
Data caveats:

1. The incidents captured on HPZone represent a subset of all ongoing ARI clusters and outbreaks in England rather than an exhaustive listing. A variety of arrangements are in place across UKHSA Centres, with local authorities and other stakeholders supporting HPTs in outbreak investigation in some areas without HPZone reporting. As a result, the number of outbreaks reported for some of the regions are underestimates.
2. It should be noted that the denominator for the different settings will vary significantly. For example, there are fewer hospitals than workplaces. In addition, the propensity to report incidents to UKHSA also varies significantly by setting. This needs to be considered when interpreting the weekly number of reported incidents by setting and caution should be used when making comparisons between settings.
3. Considering the above, comparisons between regions and settings are not advised as they may be misleading.

95 new ARI incidents have been reported in week 22 in the UK (Figure 19):

- 66 incidents were from care homes where 46 had at least one linked case that tested positive for SARS-CoV-2, 1 tested positive for parainfluenza
- No incidents were from educational settings
- 6 incidents were from hospitals, where 1 tested positive for SARS-CoV-2
- No incidents were from workplace settings
- 3 incidents were from prisons where 1 tested positive for SARS-CoV-2
- No incidents were from a food outlet or restaurant setting
- 20 incidents were from other settings where 10 had at least one linked case that tested positive for SARS-CoV-2

Figure 19: Number of acute respiratory infection (ARI) incidents by setting, UK



*Excludes data from Wales

Figure 20: Number of acute respiratory infection (ARI) incidents by setting, England

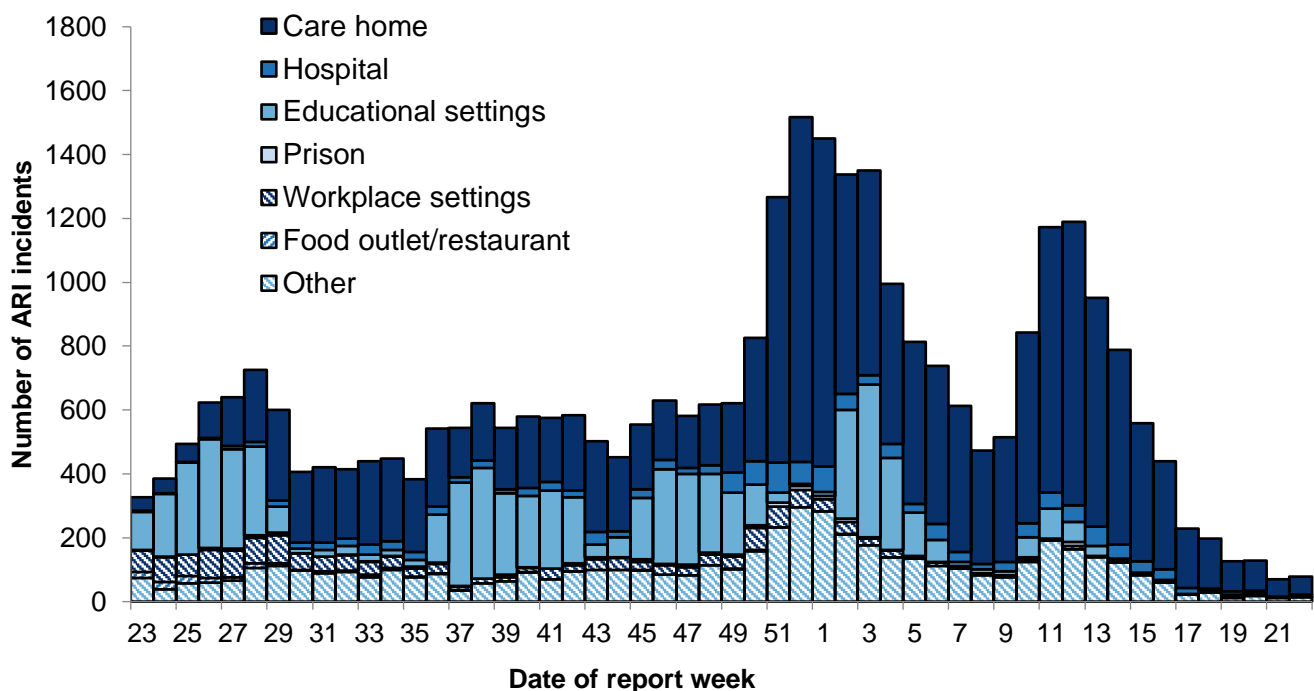


Figure 21: Number of acute respiratory infection (ARI) incidents in care homes by virus type, England

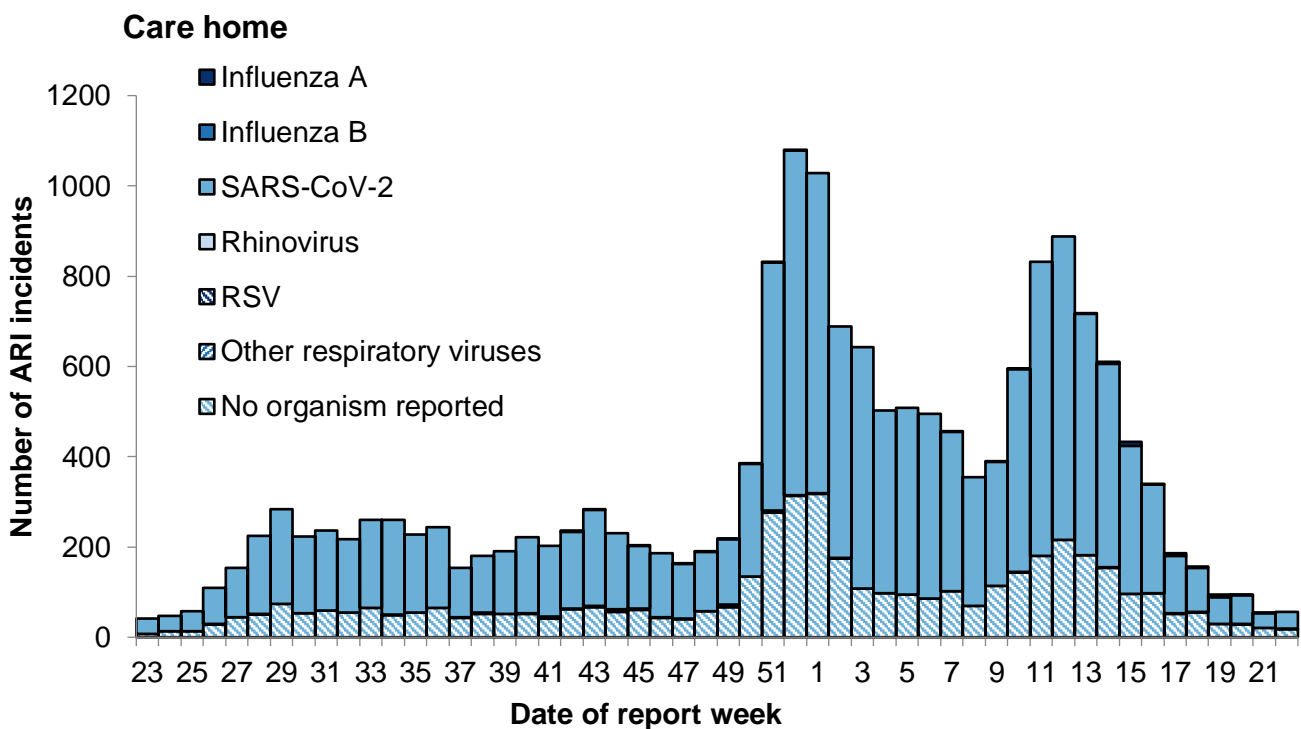


Figure 22: Number of acute respiratory infection (ARI) incidents in hospitals by virus type, England

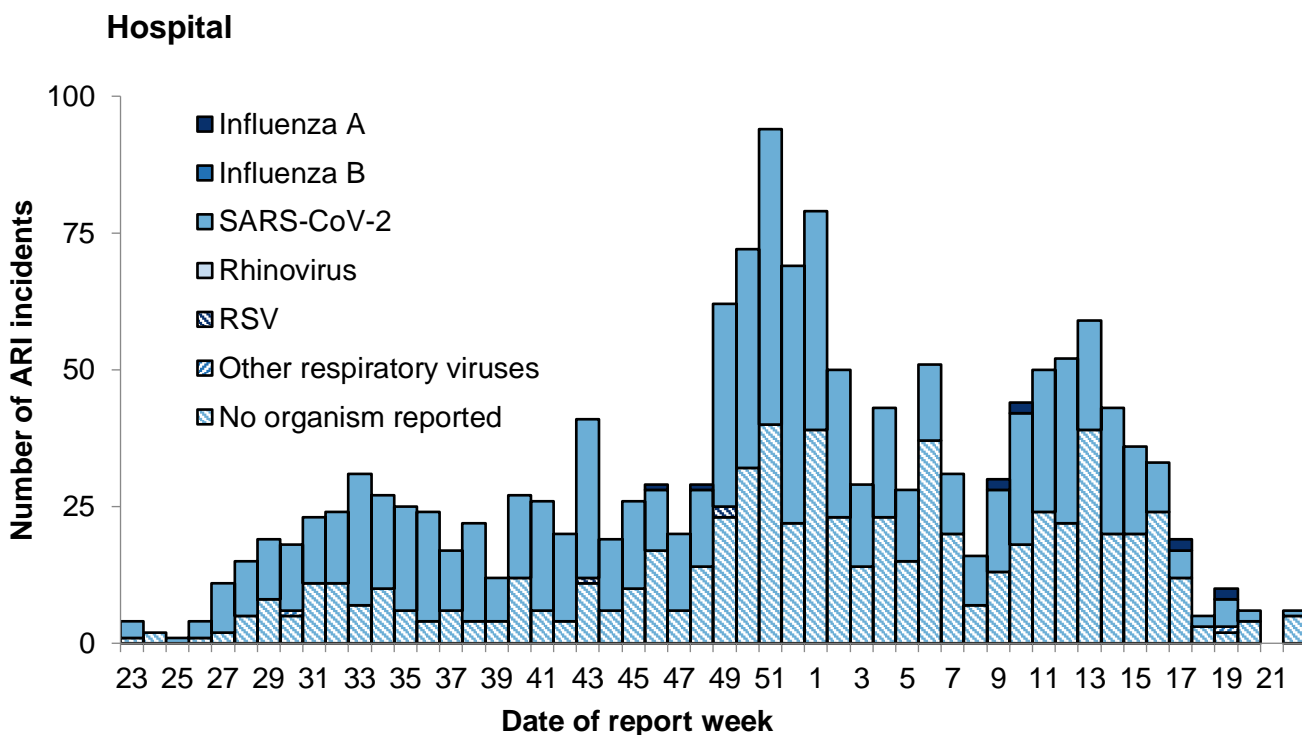


Figure 23: Number of acute respiratory infection (ARI) incidents in educational settings by virus type, England

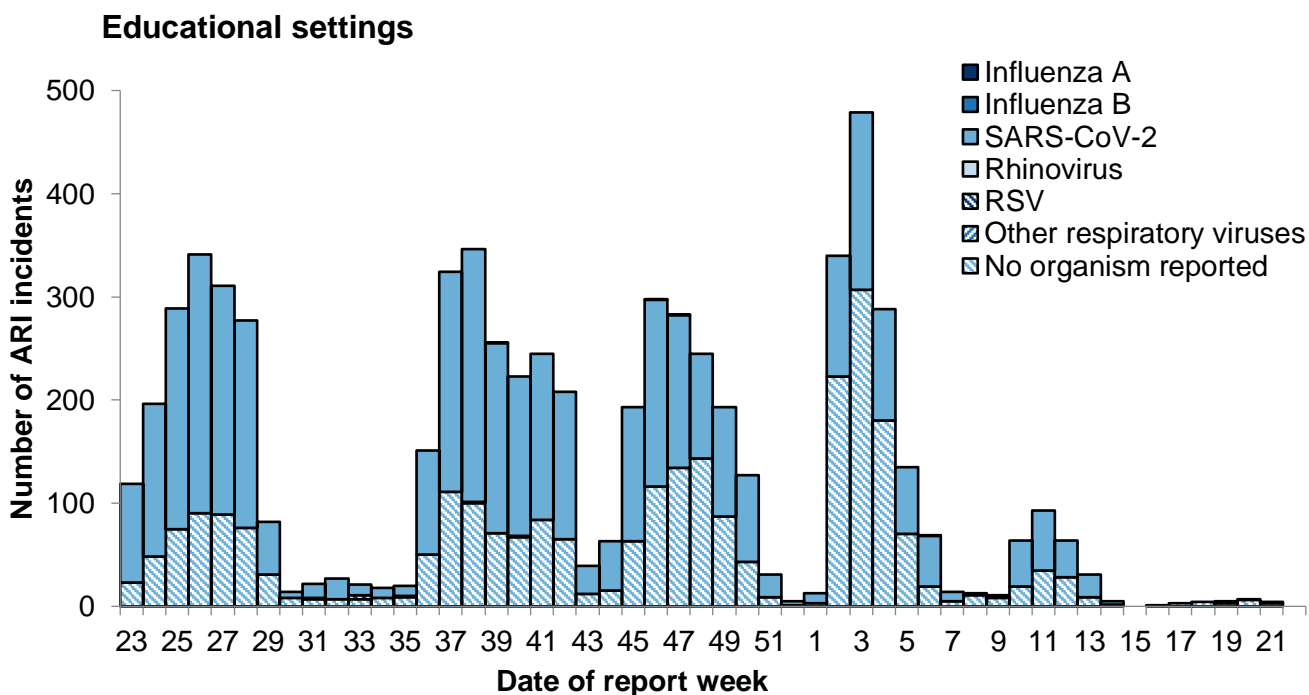


Figure 24: Number of acute respiratory infection (ARI) incidents in prisons by virus type, England

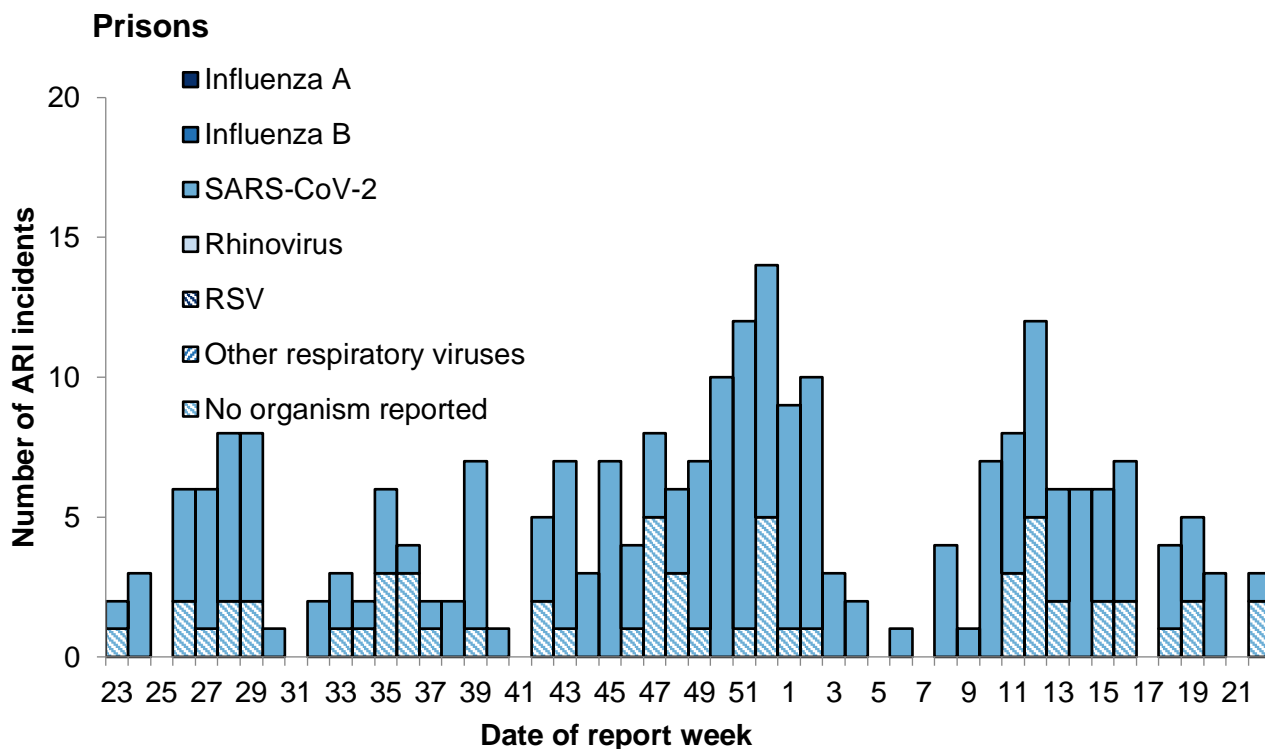


Figure 25: Number of acute respiratory infection (ARI) incidents in workplace settings by virus type, England

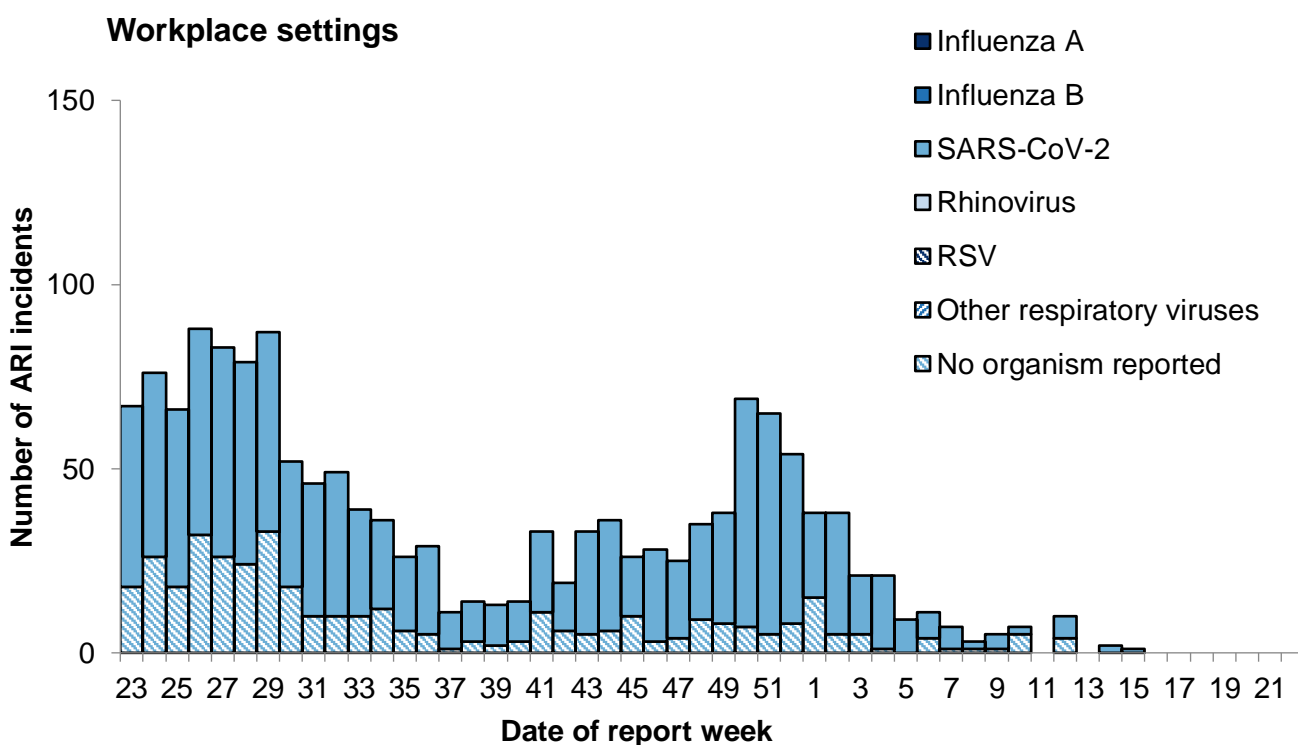


Figure 26: Number of acute respiratory infection (ARI) incidents in food outlet or restaurant settings by virus type, England

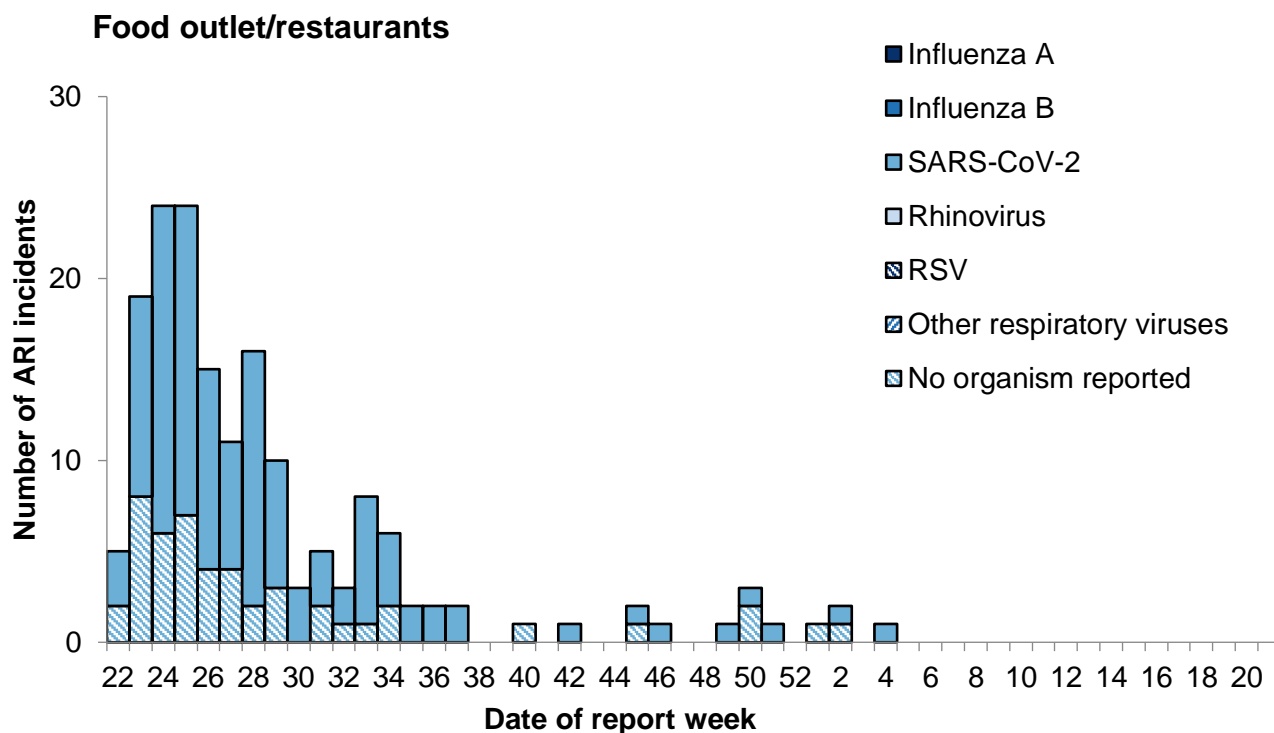


Figure 27: Number of acute respiratory infection (ARI) incidents in other settings by virus type from, England

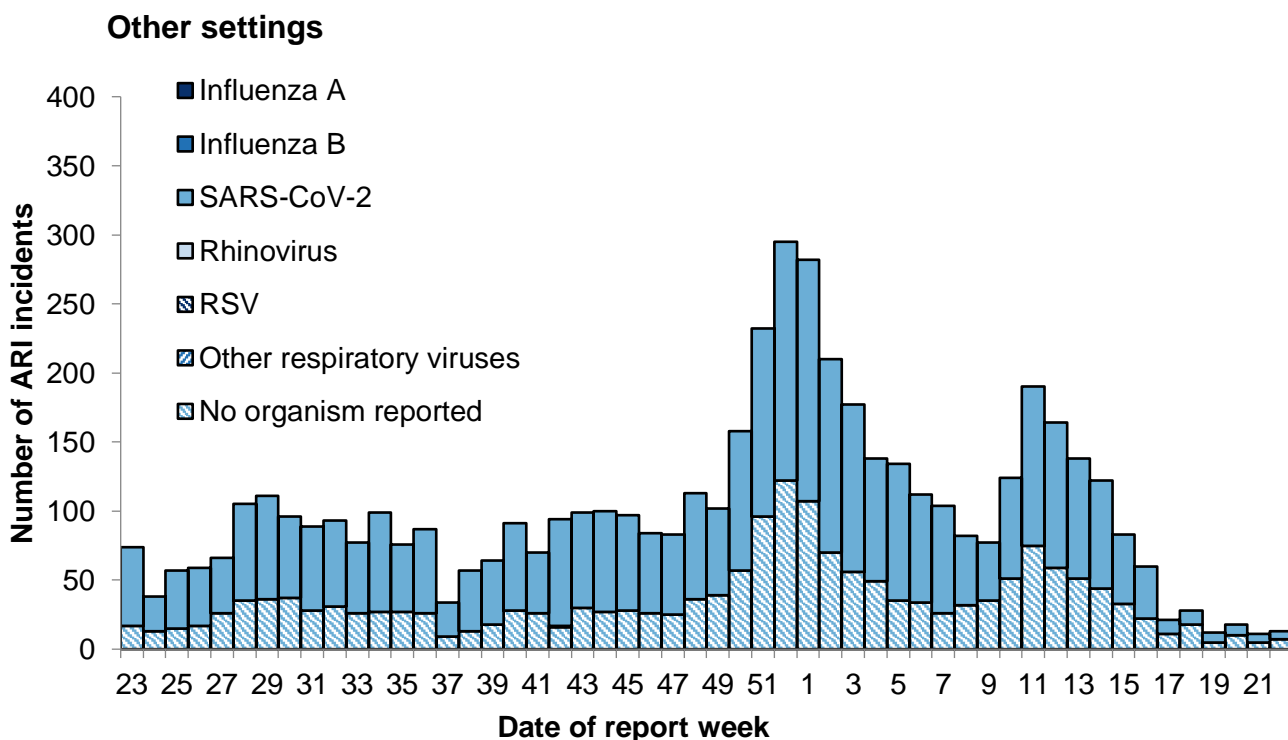


Table 2: Total number of situations and incidents by institution and UKHSA Centres over the past 4 weeks with the total number in the last week in brackets

UKHSA Centres	Care home	Hospital	Educational settings	Prisons	Workplace settings	Food outlet/ restaurant settings	Other settings	Total
East of England	28(7)	1(0)	0(0)	1(0)	0(0)	0(0)	19(4)	49(11)
East Midlands	46(9)	0(0)	1(0)	1(0)	0(0)	0(0)	8(1)	56(10)
London	28(6)	13(6)	5(0)	1(0)	0(0)	0(0)	6(3)	53(15)
North East	23(4)	0(0)	0(0)	1(0)	0(0)	0(0)	1(0)	25(4)
North West	17(3)	0(0)	3(0)	0(0)	0(0)	0(0)	9(1)	29(4)
South East	31(2)	3(0)	4(0)	5(3)	0(0)	0(0)	0(0)	43(5)
South West	92(18)	1(0)	3(0)	0(0)	0(0)	0(0)	2(1)	98(19)
West Midlands	11(4)	2(0)	0(0)	1(0)	0(0)	0(0)	2(2)	16(6)
Yorkshire and Humber	24(3)	2(0)	0(0)	1(0)	0(0)	0(0)	7(1)	34(4)
Total	300(56)	22(6)	16(0)	11(3)	0(0)	0(0)	54(13)	403(78)

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 2020.

Note: ILI is defined as sudden onset of symptoms with at least one of fever (chills); malaise; headache; muscle pain and at least one of cough; sore throat; shortness of breath.

A total of 1,654 participants completed the weekly surveillance survey in week 22, of which 82 (5.0%) reported fever or cough and 25 (1.5%) reported ILI. The most commonly used healthcare services reported by respondents remains telephoning GP services (Figure 28).

Self-reported daily social contact patterns are also reported. A contact is defined as a person outside the household who is approached at a distance of less than one metre, on the day prior to survey completion.

Figure 28: FluSurvey participants self-reporting fever or cough and ILI symptoms, and trends in healthcare seeking behaviour among these participants, England

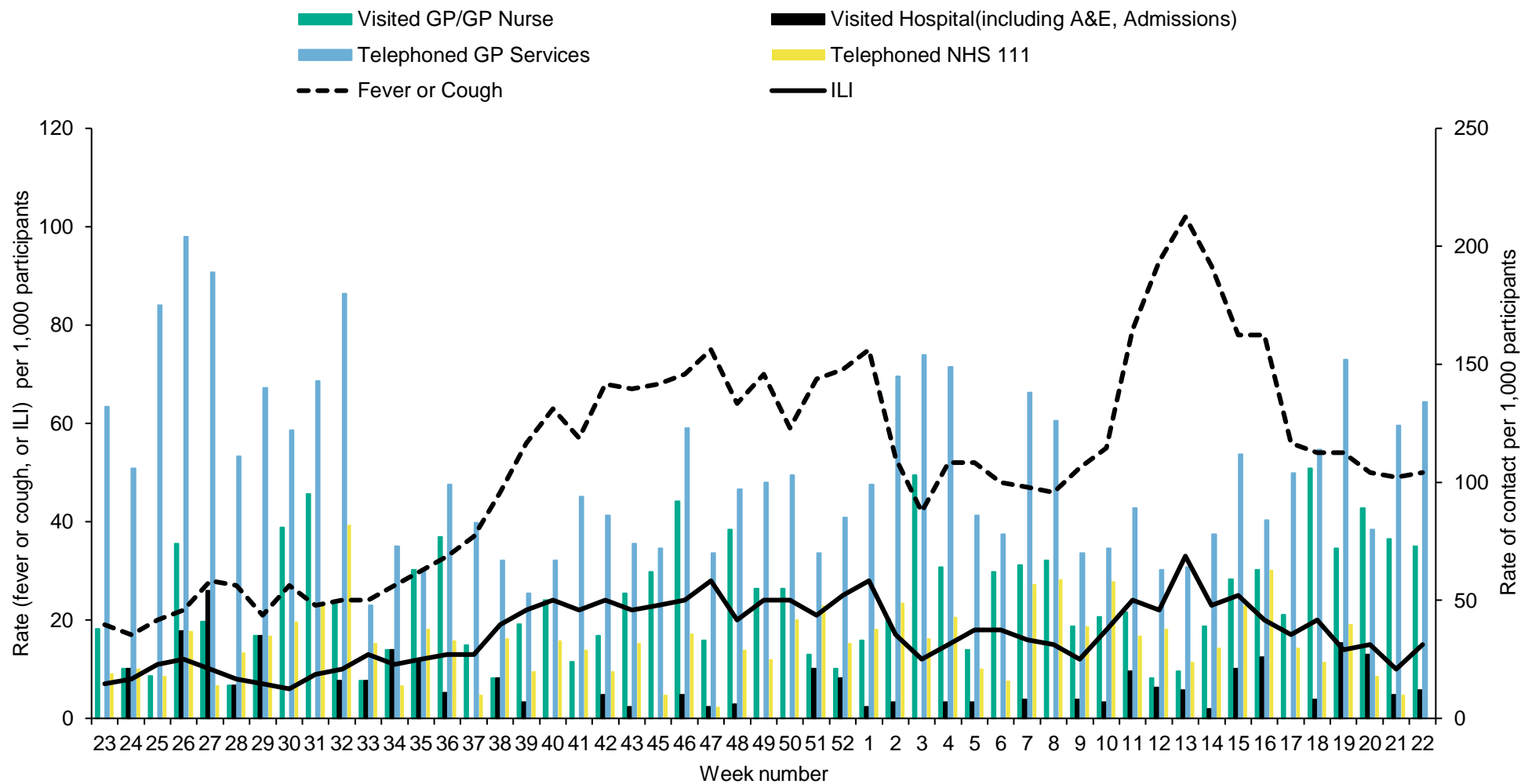
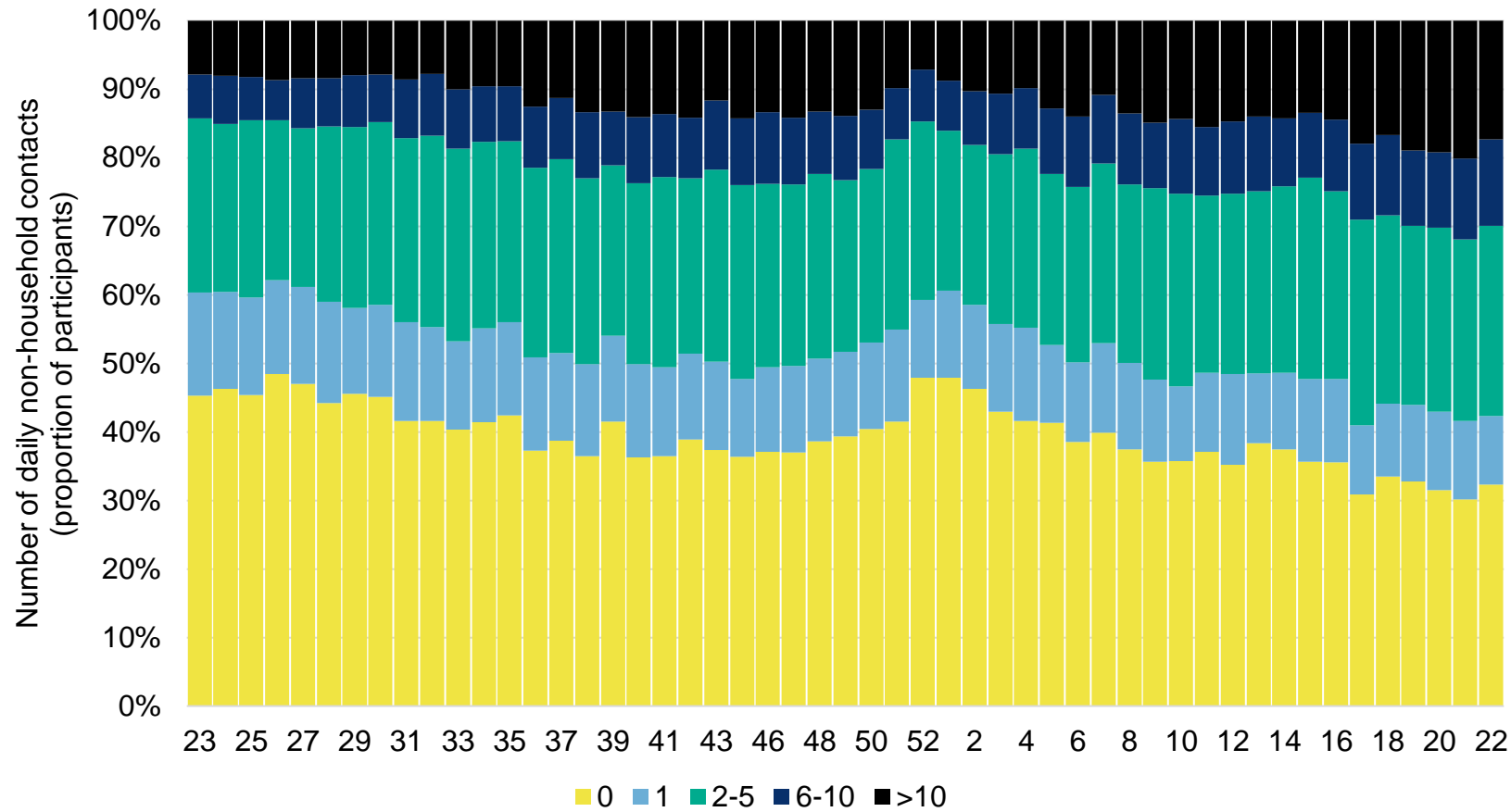


Figure 29: FluSurvey participants' self-reported number of social contacts outside the household



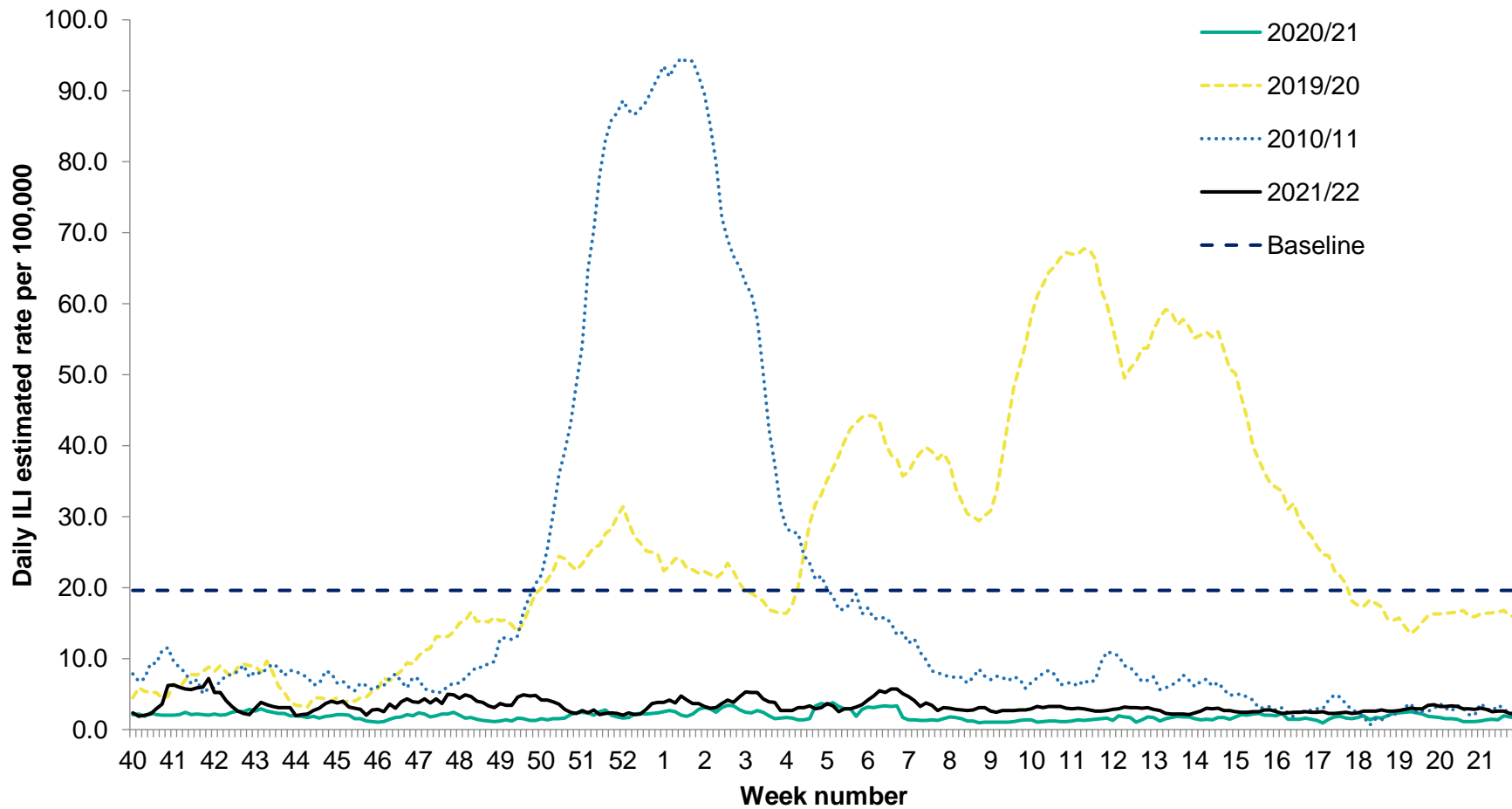
FluDetector

FluDetector is a web-based model which assesses internet-based search queries for ILI in the general population.

Daily ILI rate estimates are based on uniformly averaged search query frequencies for a week-long period (including the current day and the 6 days before it).

For week 22, the daily ILI rate remained low and below the baseline threshold of 19.6 per 100,000 for the 2021 to 2022 season (Figure 30).

Figure 30: Daily estimated ILI Google search query rates per 100,000 population, England

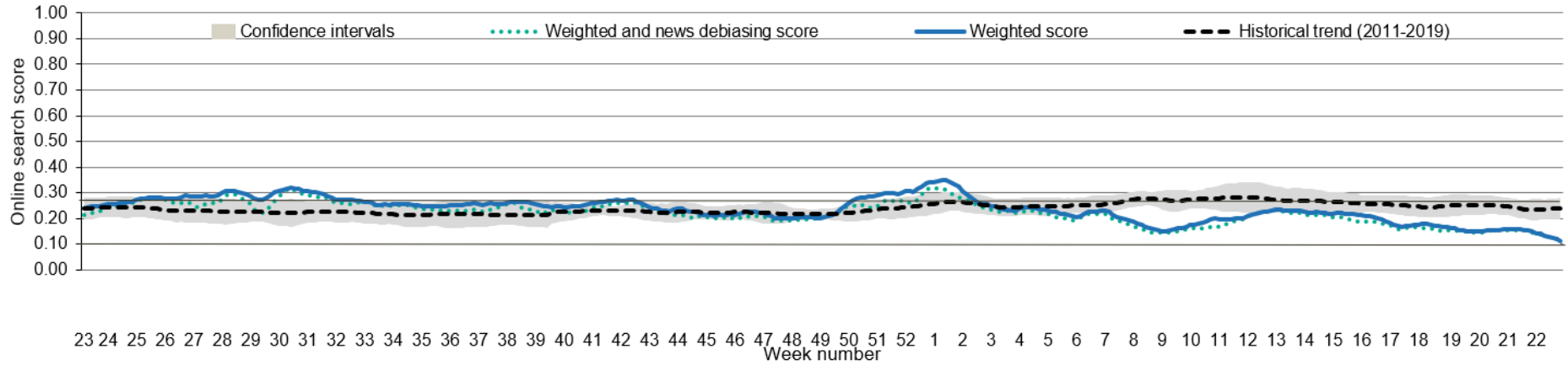


Google search queries

This is a web-based syndromic surveillance system which uses daily search query frequency statistics obtained from the Google Health Trends API. This model focuses on search queries about COVID-19 symptoms as well as generic queries about 'coronavirus' (for example 'COVID-19'). The search query frequency time series is 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. Further information on this model is available [online](#).

During week 22, the overall and media-debiasing weighted Google search scores decreased compared to the previous week (Figure 31).

Figure 31: Normalised Google search score for COVID-19 symptoms, with weighted score for media-debiasing and historical trend, England



NHS 111

Please note that different syndromic surveillance indicators (NHS 111, GP in hours, GP out of hours and emergency department attendances) are presented here than have been included in previous versions of this report. All indicators previously presented will continue to be published in the [Syndromic Surveillance bulletins](#).

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.

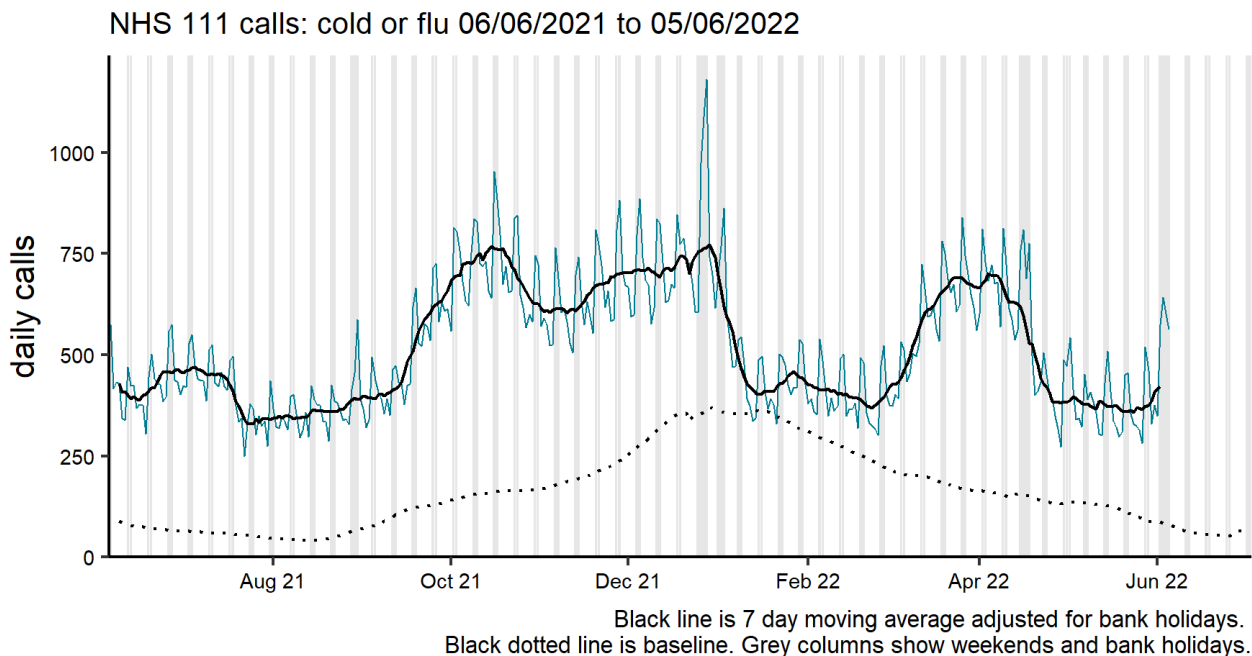
Up to 5 June, NHS 111 calls for cold or flu and cough increased (Figure 32 and 33).

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

Further information about these caveats is available from the [Remote Health Advice Syndromic Surveillance bulletin](#).

Figure 32: NHS 111 telephony indicators (and 7-day moving average) for number of daily cold or flu calls, England (a) nationally and (b) by age group

(a)



(b)

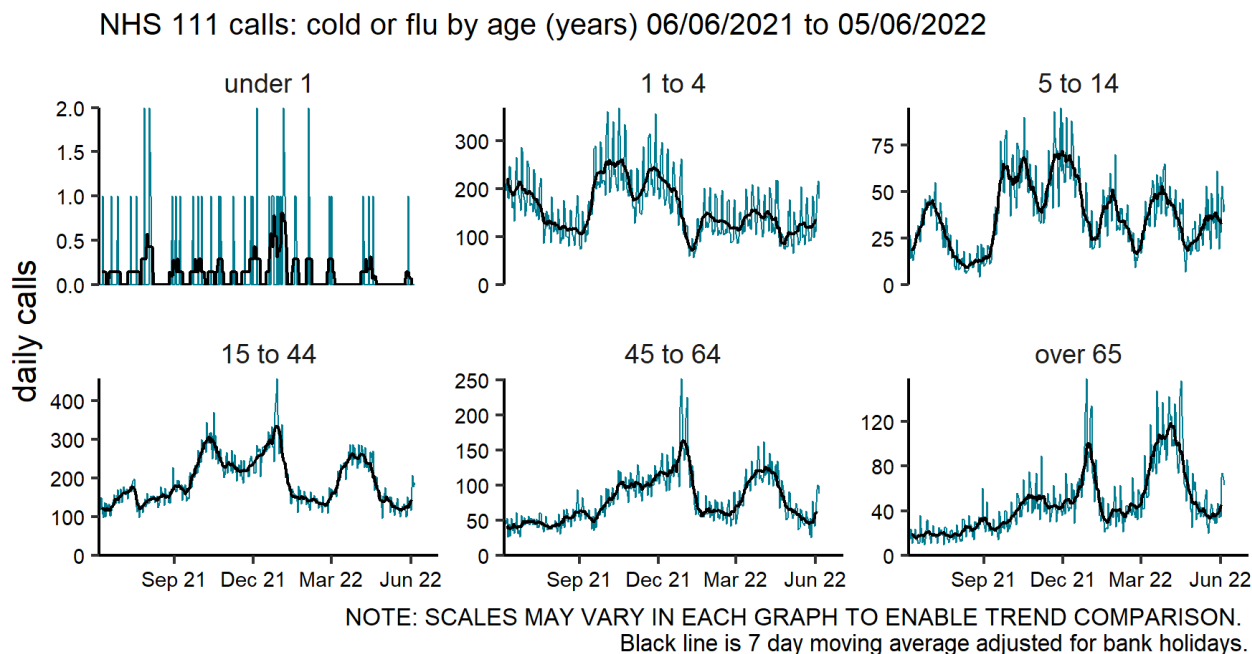
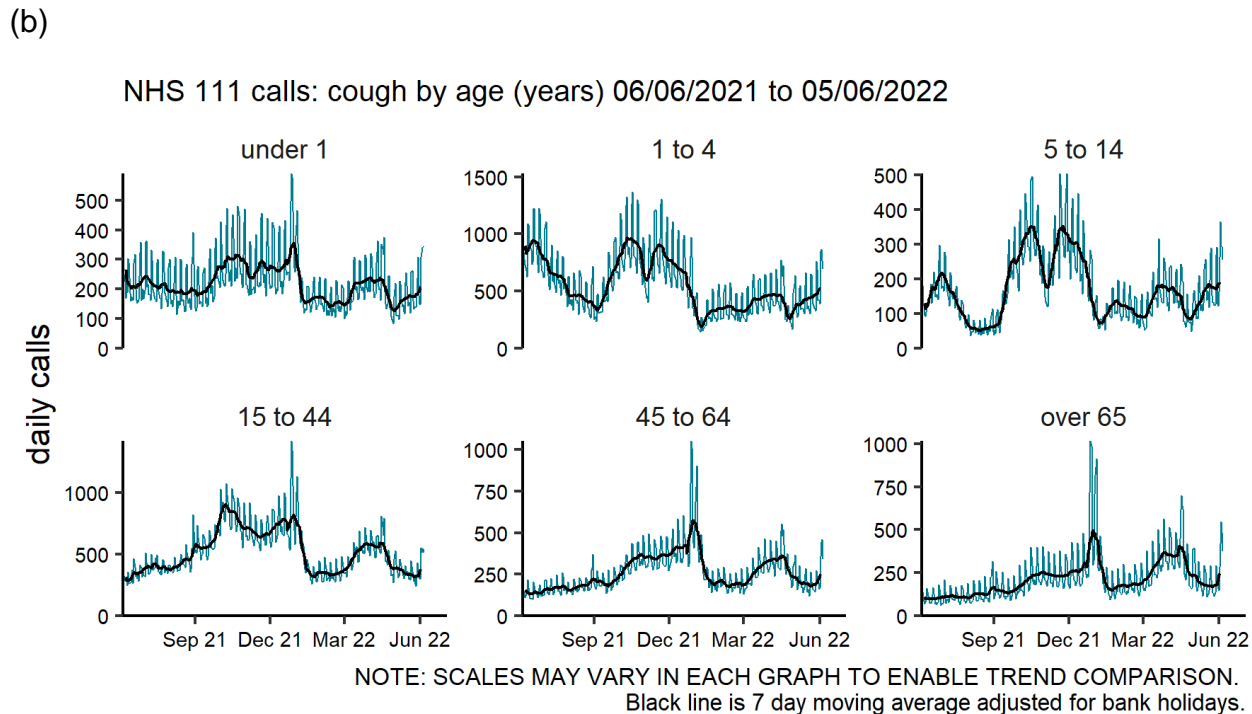
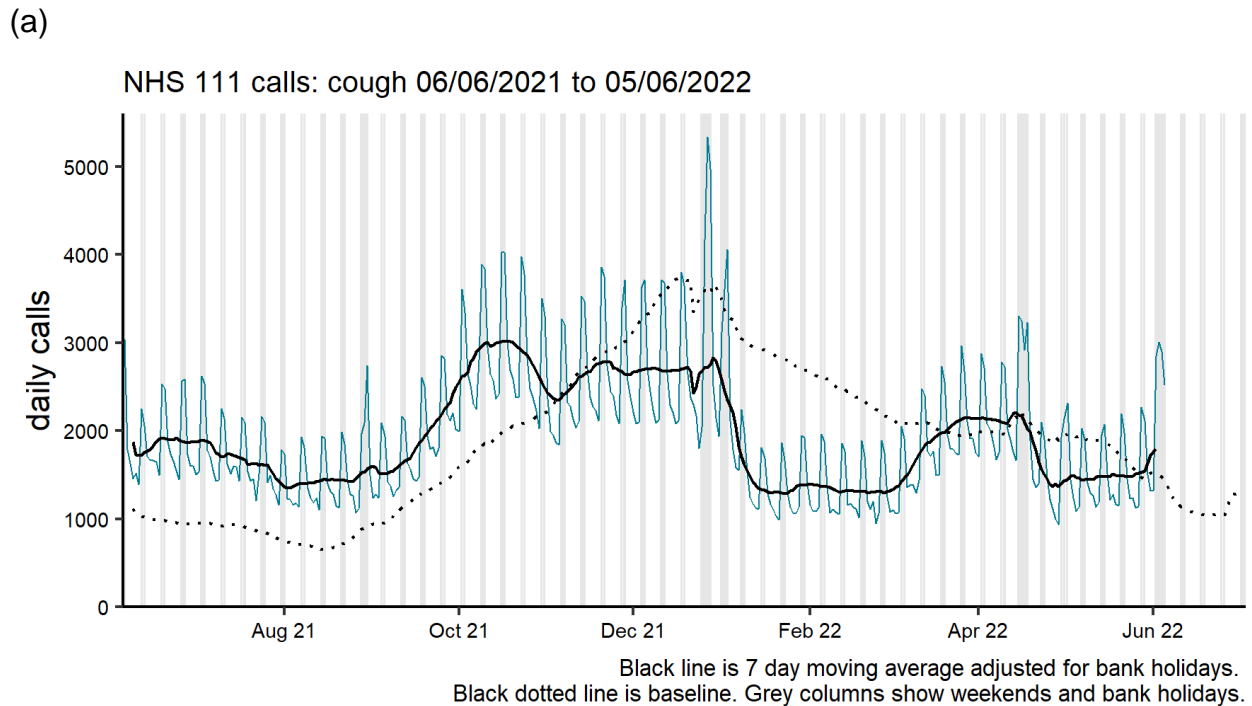


Figure 33: NHS 111 telephony indicators (and 7-day moving average) for number of daily cough calls, England (a) nationally and (b) by age group



Primary care surveillance

RCGP (England)

The weekly ILI consultation rate through the RCGP surveillance was 0.6 per 100,000 registered population in participating GP practices in week 22 compared to 1.2 per 100,000 registered population in the previous week. This is below the baseline threshold (12.2 per 100,000) (Figure 34). By age group, the highest rates were seen in the under 1 year olds (2.0 per 100,000). The Lower Respiratory Tract Infections (LRTI) consultation rate was at 32.9 per 100,000 in week 22, compared to the rate of 45.3 per 100,000 in the previous week. The COVID-19 indicator rate was at 47.3 per 100,000 in week 22 compared to a rate of 43.1 per 100,000 in the previous week (Figure 35).

Figure 34: RCGP ILI consultation rates, all ages, England

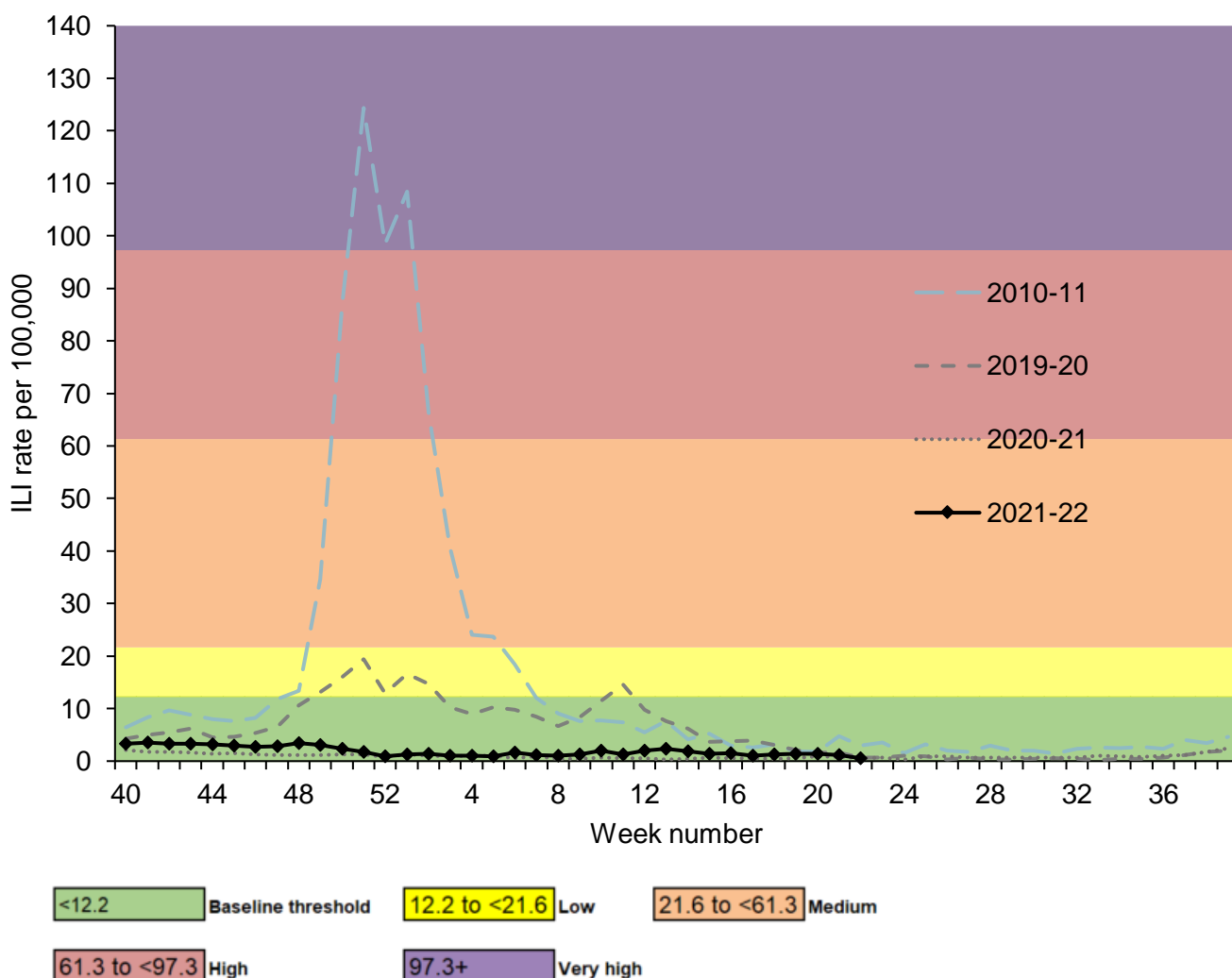
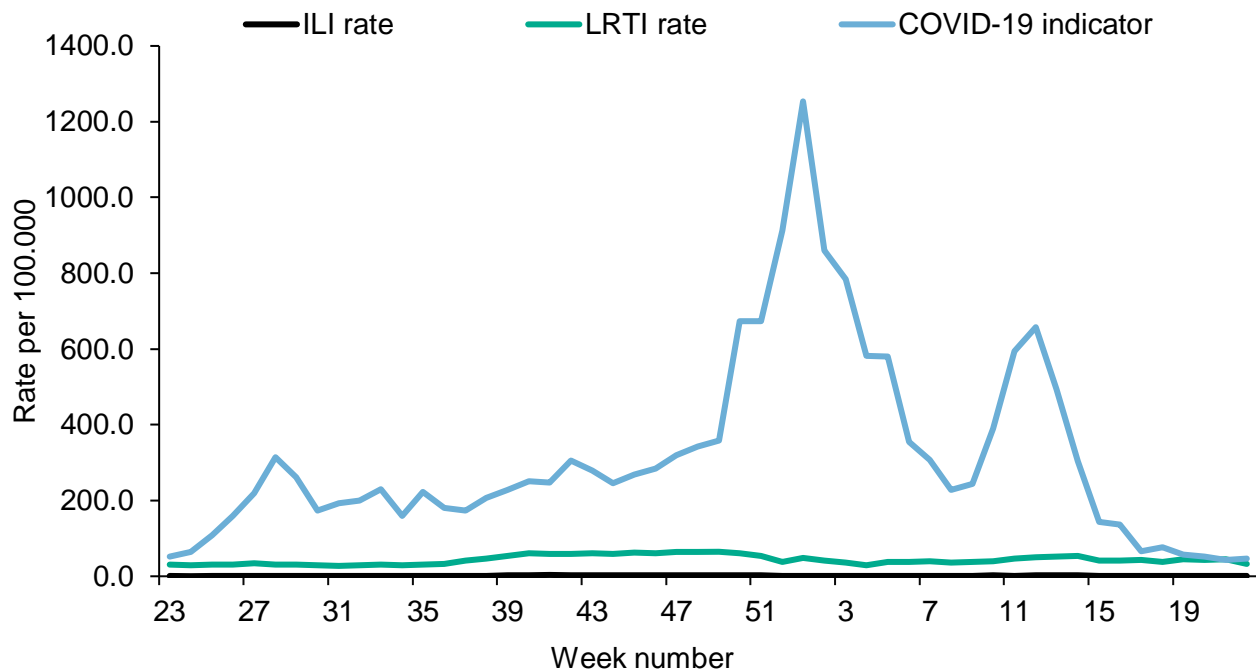


Figure 35: RCGP ILI, LRTI and COVID-19 indicator rates, England



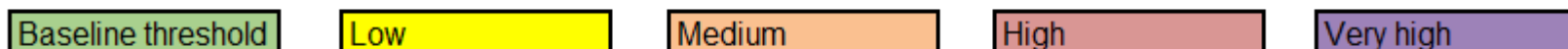
UK

Overall, weekly ILI consultations rates were below baseline levels in all UK schemes (Table 3).

By age group, the highest rates in Scotland were seen in the 65 to 74 year olds (1.3 per 100,000), the 45 to 64 year olds in Wales (2.0 per 100,000) and the 45-64 year olds in Northern Ireland (0.4 per 100,000).

Table 3: GP ILI consultations in the UK for all ages with MEM thresholds applied

GP ILI consultation rates (all ages)	Week number												
	10	11	12	13	14	15	16	17	18	19	20	21	22
England (RCGP)	2.0	1.2	2.0	2.4	1.8	1.4	1.5	1.0	1.2	1.4	1.4	1.2	0.6
Wales	0.7	2.3	1.9	2.0	1.7	0.0	0.7	2.0	2.2	1.3	2.3	1.4	0.5
Scotland	2.6	3.3	1.4	2.8	4.1	0.8	0.8	2.4	0.7	0.6	0.5	0.7	0.5
Northern Ireland	1.0	0.7	1.3	1.4	0.7	0.9	0.5	0.5	1.0	0.3	0.9	1.0	0.2



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 to 2010), in a standardised approach across Europe. For MEM threshold values for each country, please visit the webpage [Sources of UK flu data: influenza surveillance in the UK](#).

Sentinel swabbing scheme in the UK

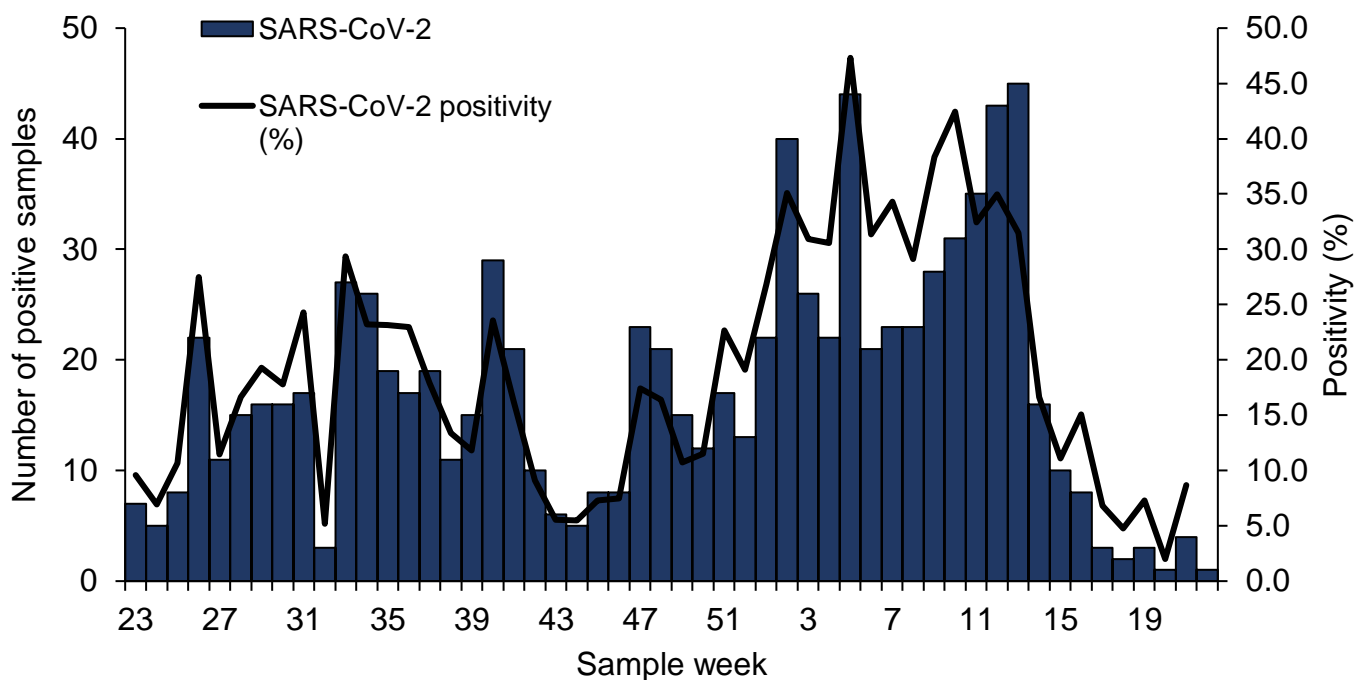
In week 22 2022, 1 sample tested positive for SARS-CoV-2 through the UK GP sentinel swabbing schemes (Figure 36).

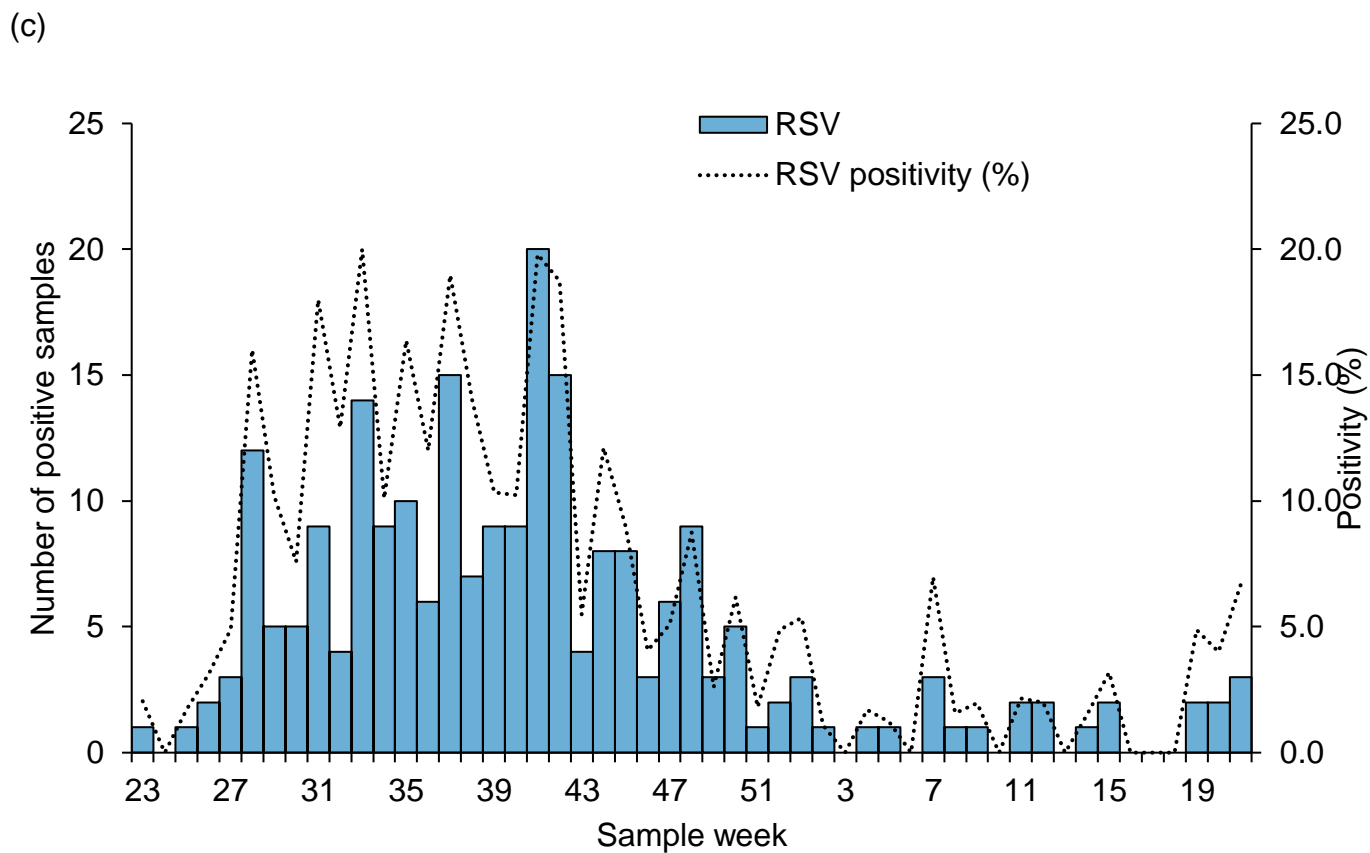
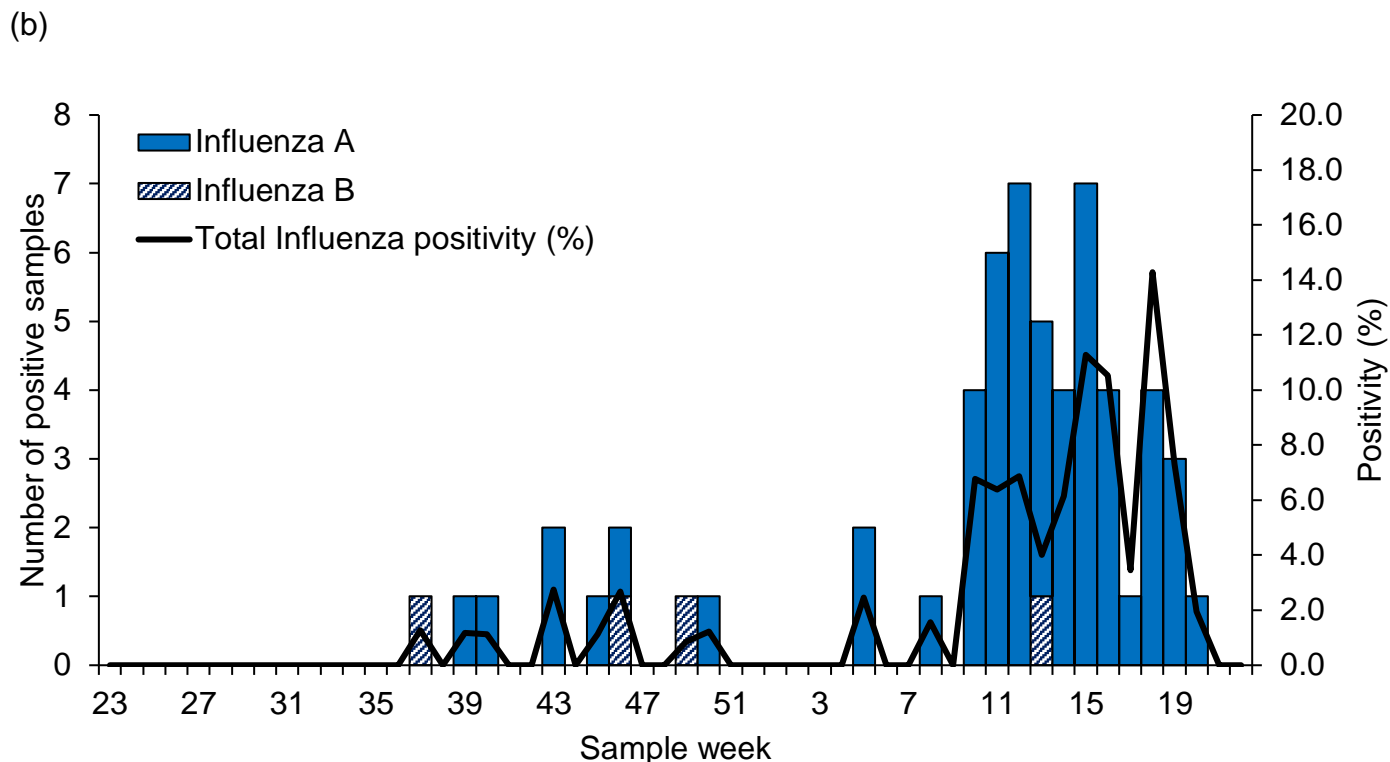
In week 22, no samples tested positive for influenza and RSV in England through the GP sentinel swabbing scheme.

* Please note that due to low sample numbers data from week 14 of 2022 onwards should be interpreted with caution.

Figure 36: Number of positive samples and weekly positivity (%) for (a) COVID-19 and (b) Influenza and (c) RSV, GP sentinel swabbing scheme

(a)





*For the most recent week, more samples are expected to be tested therefore the graphs in Figure 36 should be interpreted with caution

*Positivity (%) is not calculated when the total number tested is less than 10

GP In Hours, Syndromic Surveillance

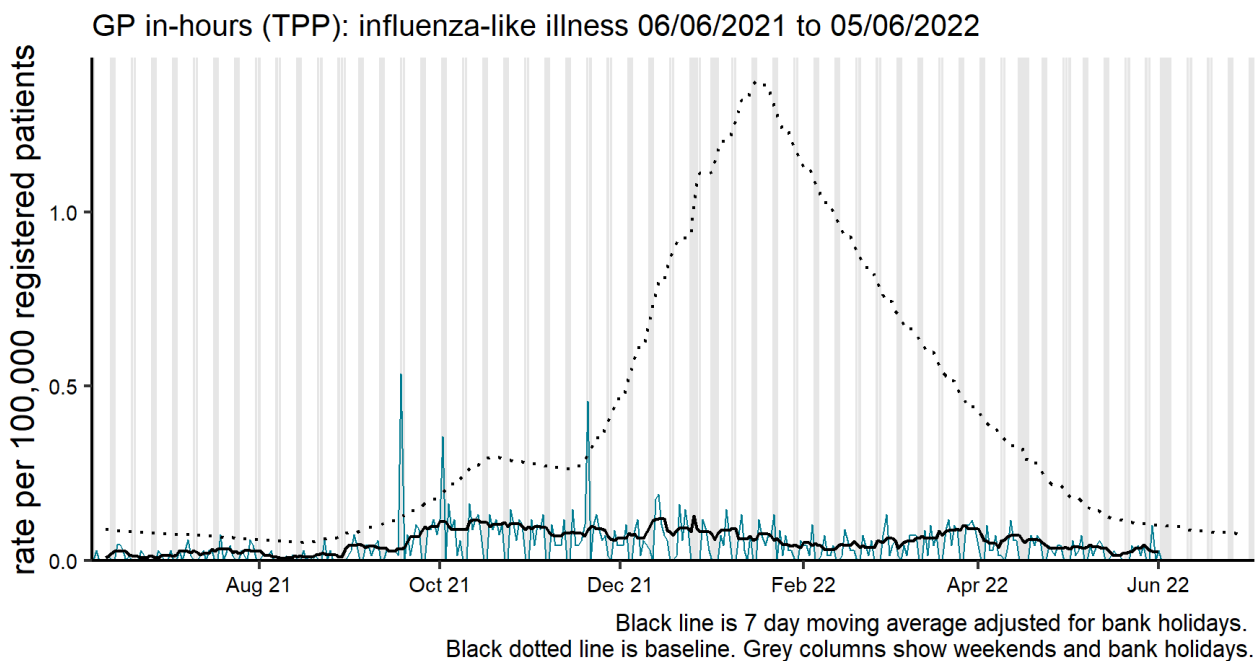
The GP In Hours (GPIH) syndromic surveillance system monitors the number of GP visits during regular hours of known clinical indicators.

Up to 5 June, GP in-hours consultations for influenza-like illness remained stable nationally (Figure 37).

Further indicators and information about caveats are available from the [GP In Hours Syndromic Surveillance bulletin](#).

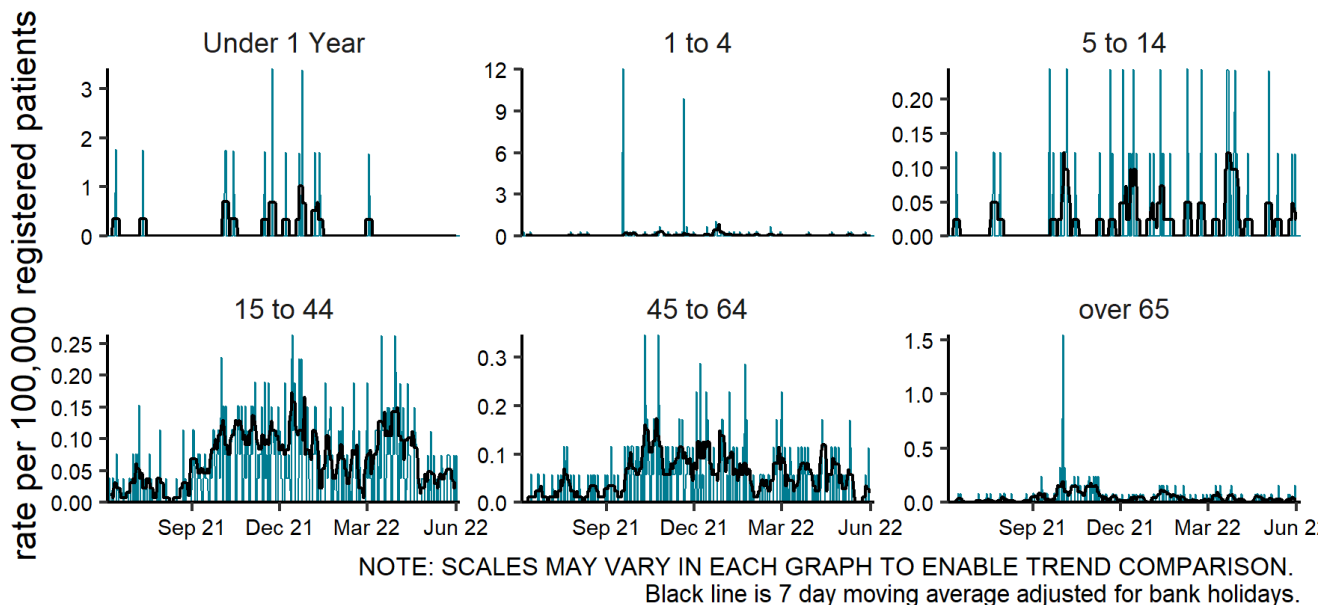
Figure 37: GPIH clinical indicators for influenza-like illness GP consultations, England (a) nationally, (b) by age group and (c) by UKHSA Centre

(a)



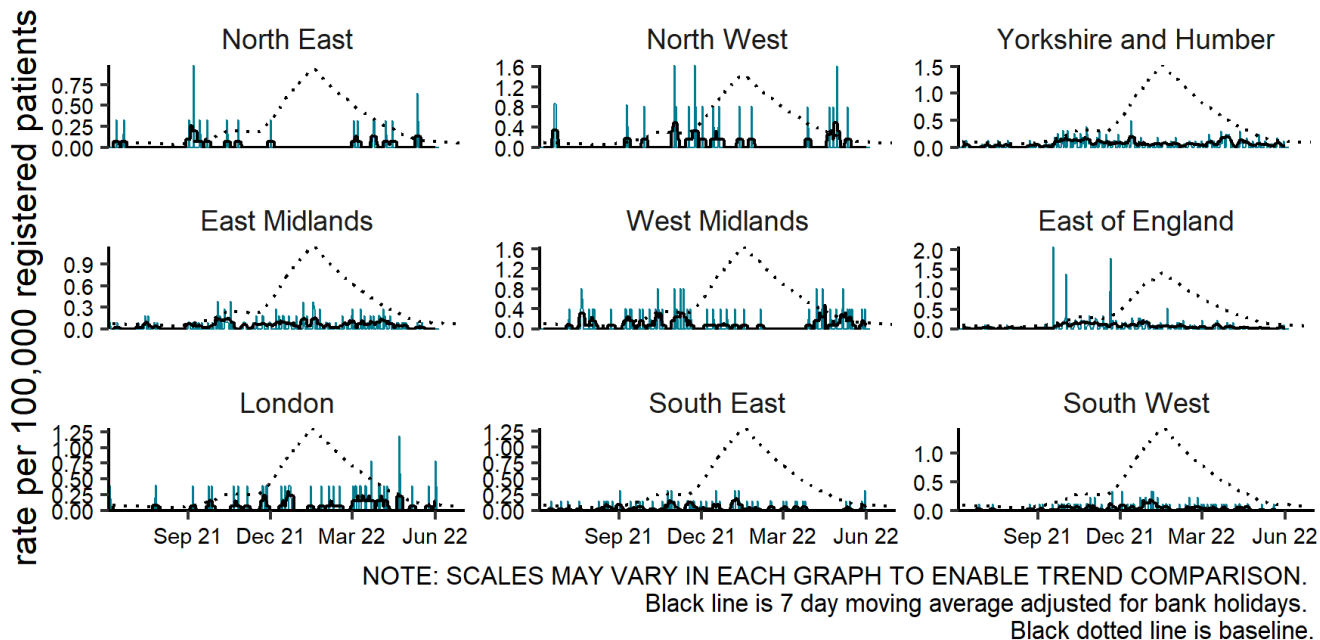
(b)

GP in-hours (TPP): influenza-like illness by age (years) 06/06/2021 to 05/06/2022



(c)

GP in-hours (TPP): influenza-like illness by region 06/06/2021 to 05/06/2022



GPIH Baselines are modelled from historical data to give current seasonally expected levels. GP consultations rates decreased during 2020 due to changes in guidance on accessing health care, therefore separate modelled estimates are provided to show seasonally expected levels pre-COVID-19.

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. This system covers around 55% of England’s out of hour activity.

Up to 5 June, GP out-of-hours contacts for acute respiratory infection increased and influenza-like illness contacts decreased (Figures 38 and 39).

Figure 38: GPOOH number of daily contacts for all ages for influenza-like illness, England

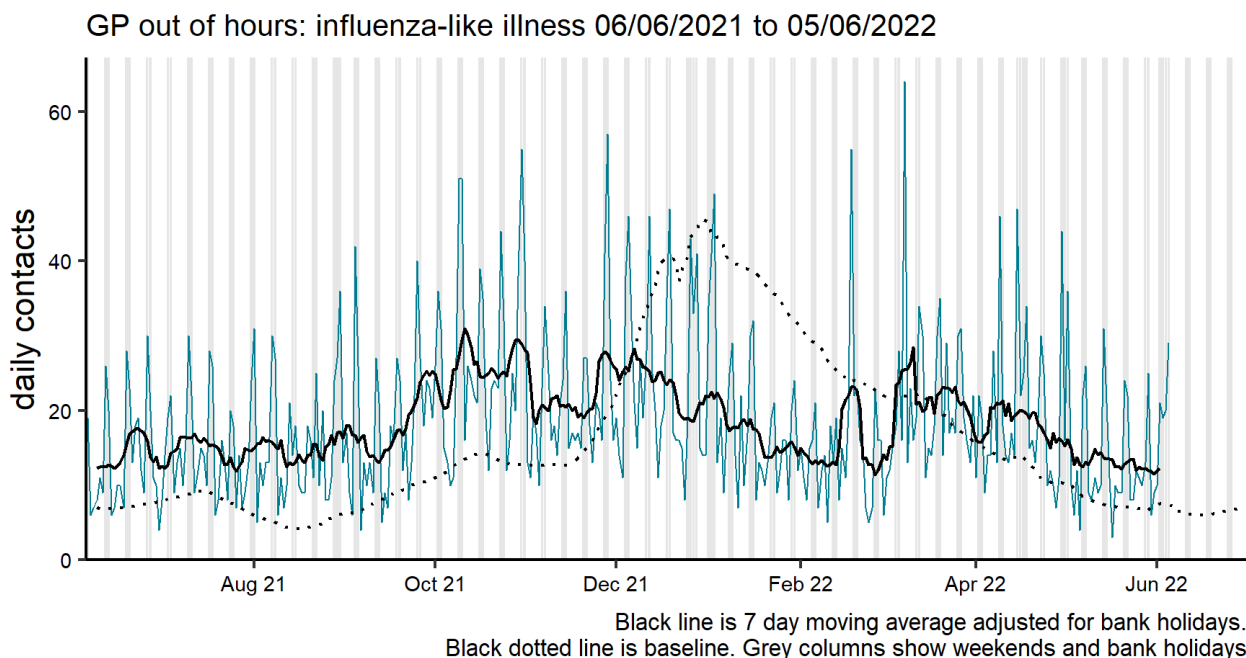
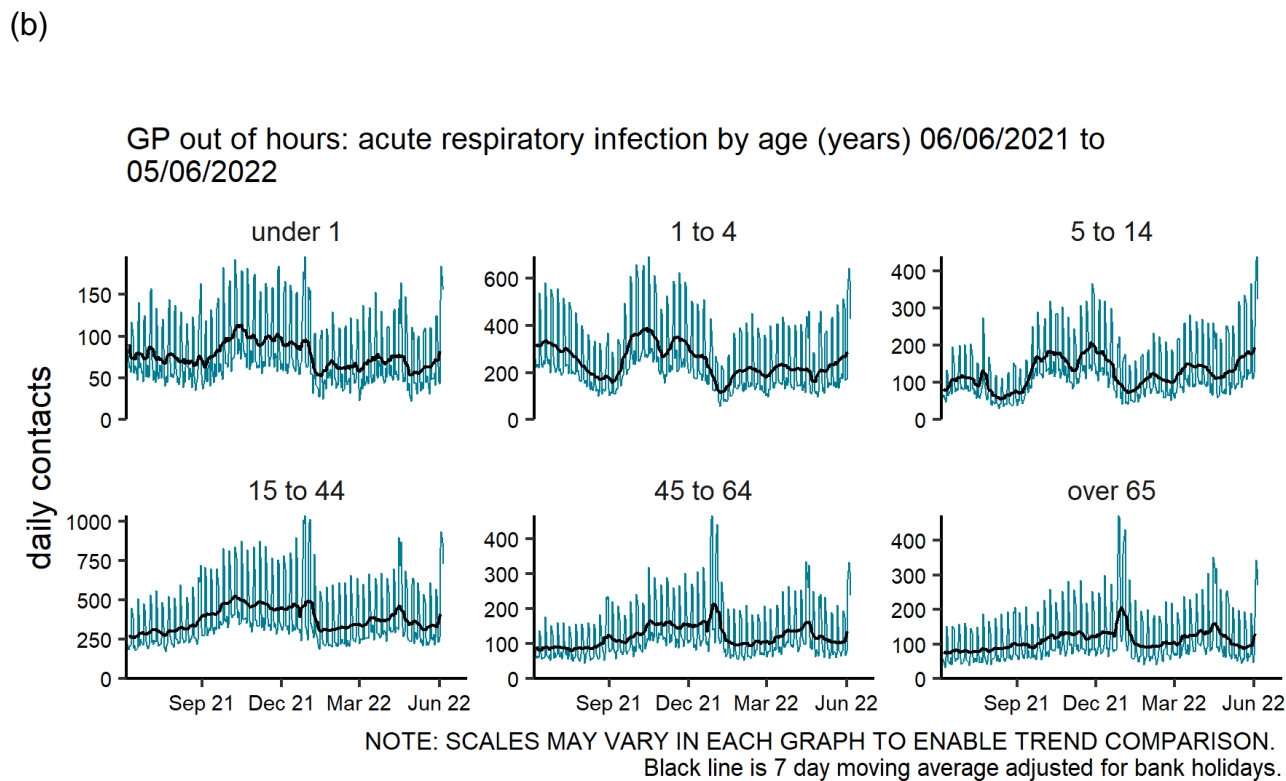
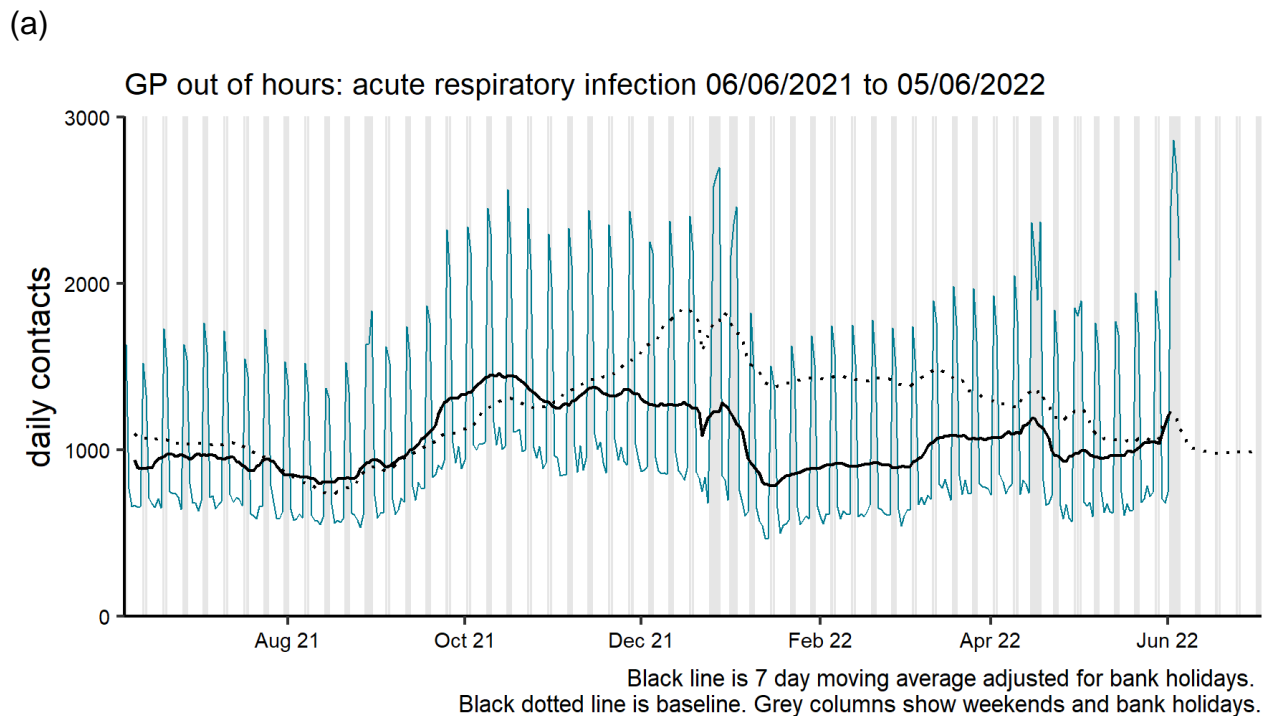


Figure 39: GPOOH number of daily contacts for acute respiratory infections, England (a) nationally and (b) by age group



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 and HDU) in NHS acute trusts across England. This has replaced the UK Severe Influenza Surveillance Schemes (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, influenza and RSV 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.

The Moving Epidemic Method (MEM) thresholds for influenza hospital and ICU or HDU admissions are calculated based on the 2014 to 2015 to the 2018 to 2019 seasons (data from 2019 to 2020 was excluded due to the COVID-19 pandemic). These thresholds have been applied to data from the 2019 to 2020 season onwards.

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

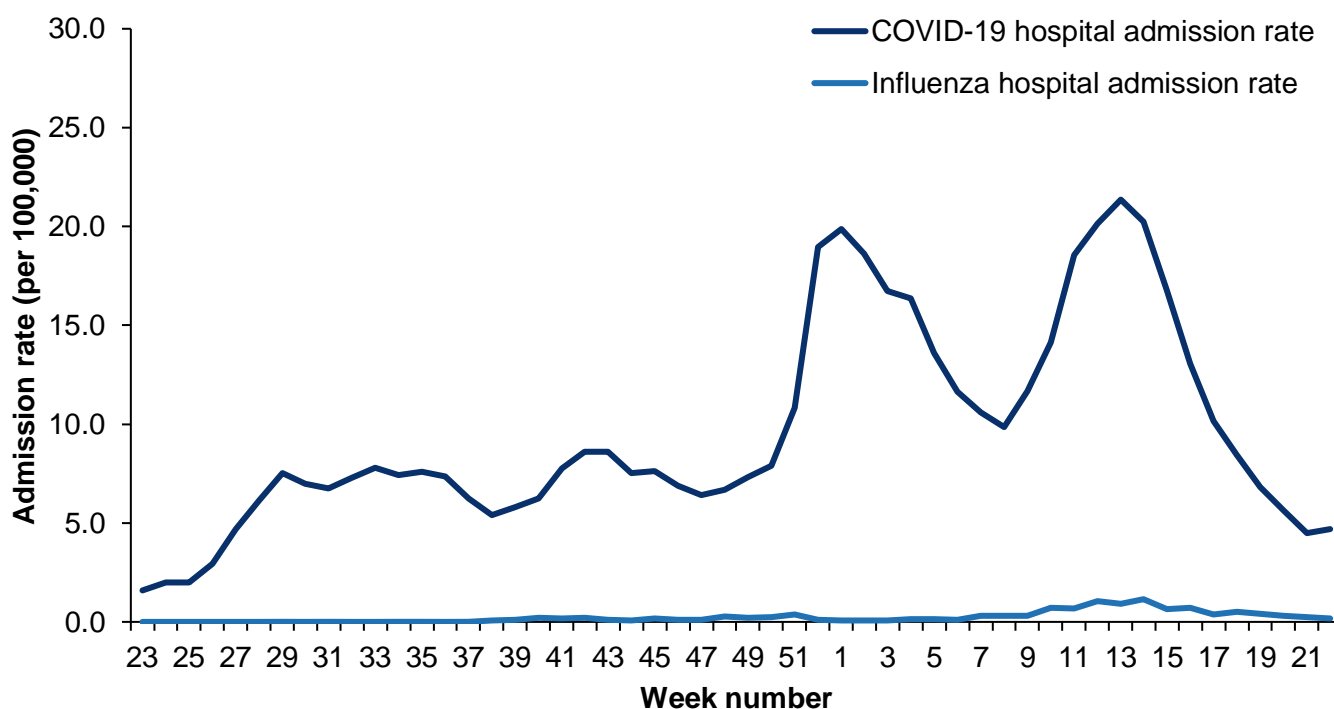
Hospitalisations, SARI Watch

In week 22, the overall weekly hospital admission rate for COVID-19 increased slightly. The hospitalisation rate for COVID-19 was at 4.69 per 100,000 in week 22 compared to 4.50 per 100,000 in the previous week.

By UKHSA centre, the highest hospital admission rate for COVID-19 continued to be observed in the North East. By age group, the highest hospital admission rate for confirmed COVID-19 was in the 85 year olds and over.

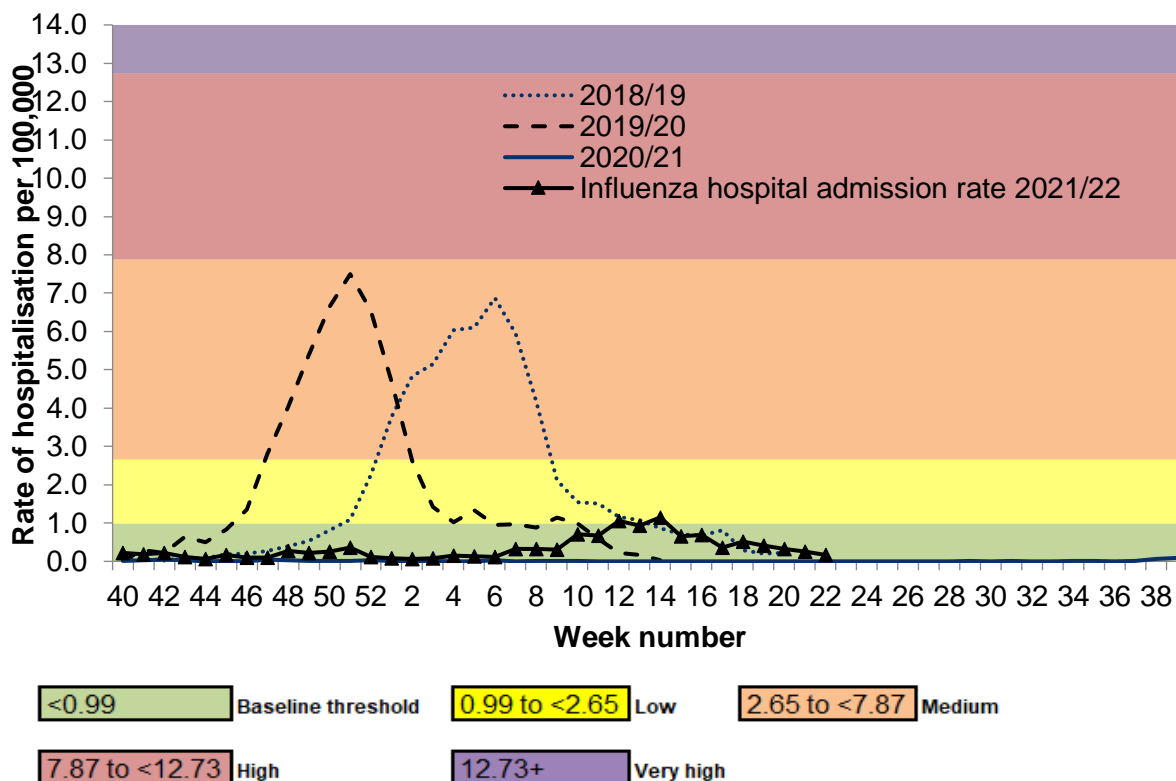
The hospitalisation rate for influenza was at 0.17 per 100,000 in week 22 compared to 0.25 per 100,000 in the previous week. There were 20 new hospital admissions to sentinel Trusts for influenza (1 influenza A(H3N2), 2 influenza A(H1N1)pdm09, 16 influenza A(not subtyped) and 1 influenza B) in week 22.

Figure 40: Weekly overall hospital admission rates of new COVID-19 and influenza positive cases per 100,000 population reported through SARI Watch, England



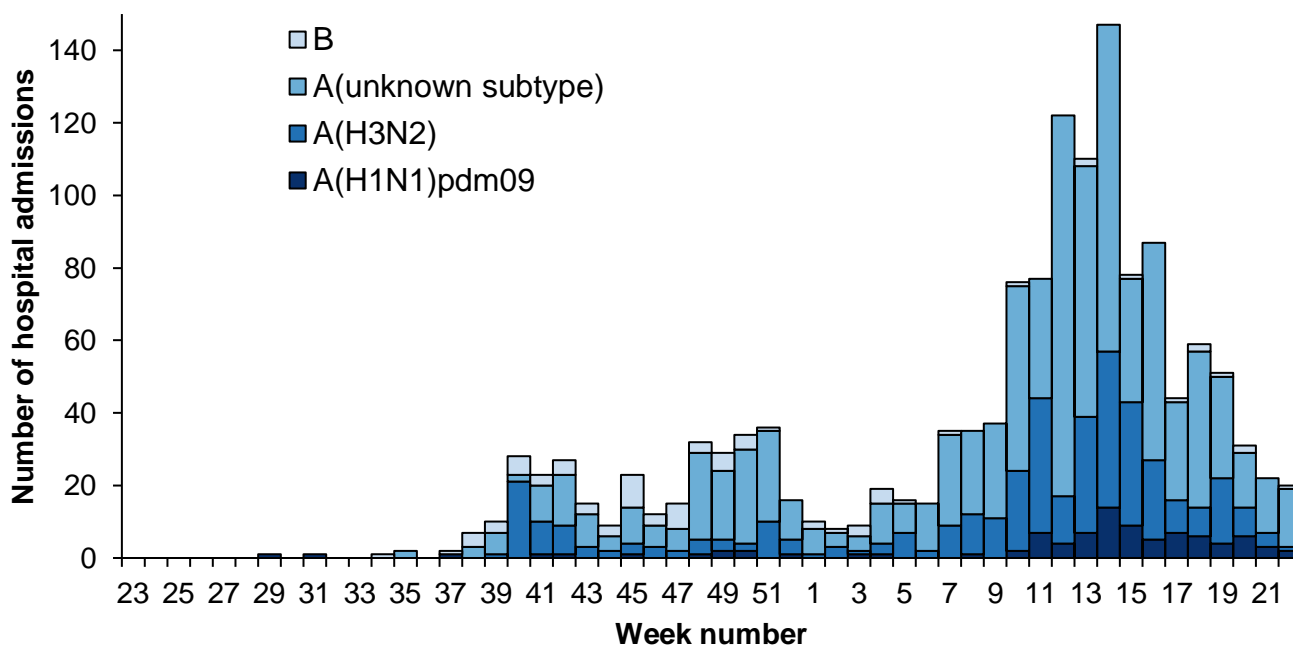
- * influenza hospital admission rate is reported from week 22 2021 onwards
- * influenza hospital admission rate based on 26 sentinel NHS trusts for week 22
- * COVID-19 hospital admission rate based on 92 NHS trusts for week 22
- * SARI Watch data is provisional

Figure 41: Weekly overall influenza hospital admission rates per 100,000 trust catchment population with MEM thresholds, SARI Watch, England



* MEM thresholds are based on data from the 2014 to 2015 to the 2018 to 2019 seasons (data from 2019 to 2020 was excluded due to the COVID-19 pandemic).

Figure 42: Weekly influenza hospital admissions by influenza type, SARI Watch, England



*number of influenza hospital admissions based on sentinel NHS trusts

Figure 43: Weekly hospital admission rate by UKHSA Centre for new (a) COVID-19 positive cases and (b) influenza reported through SARI Watch

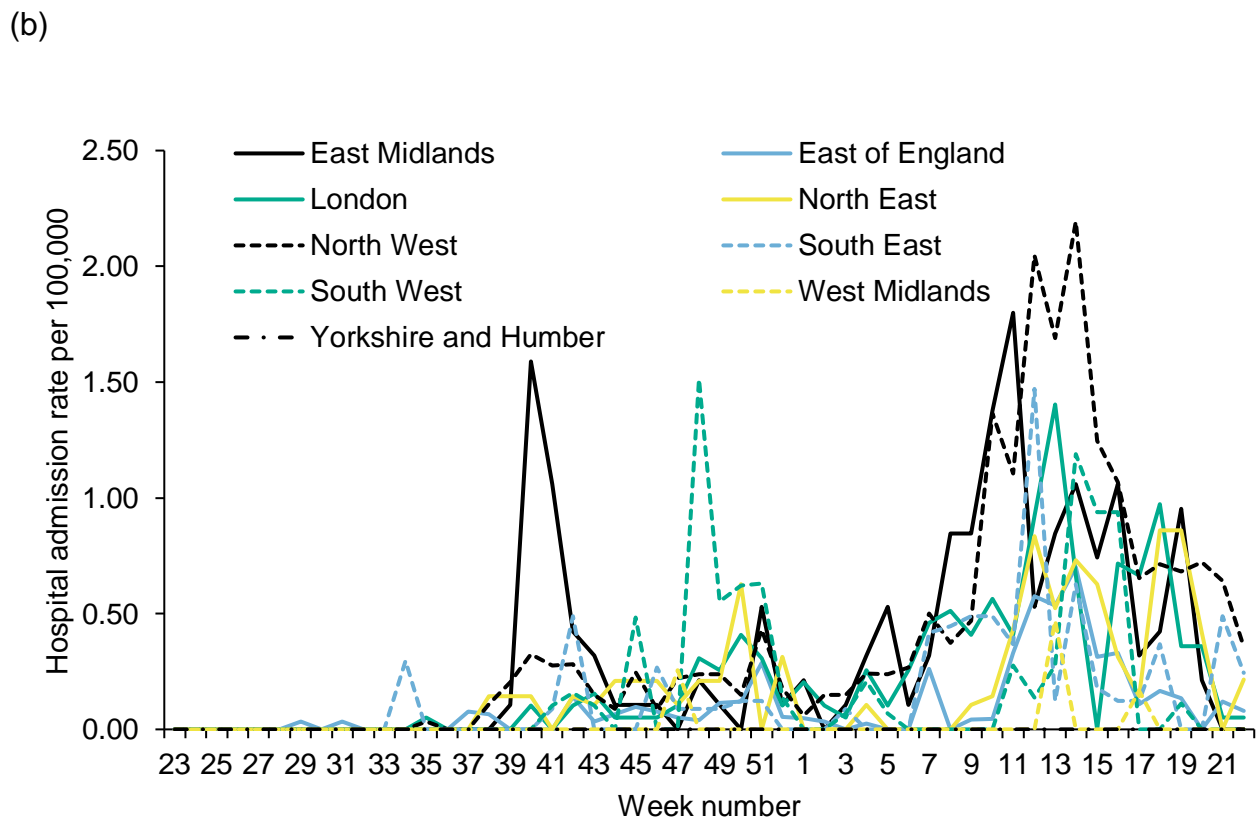
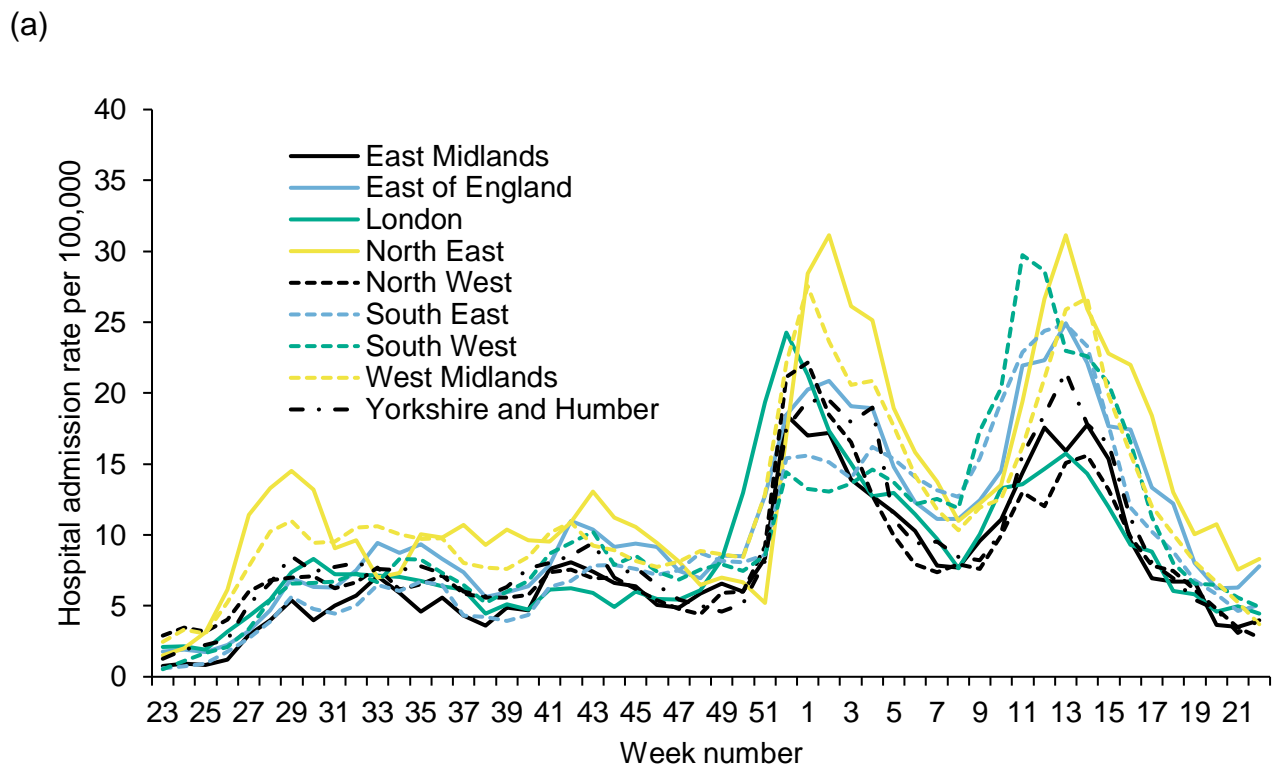
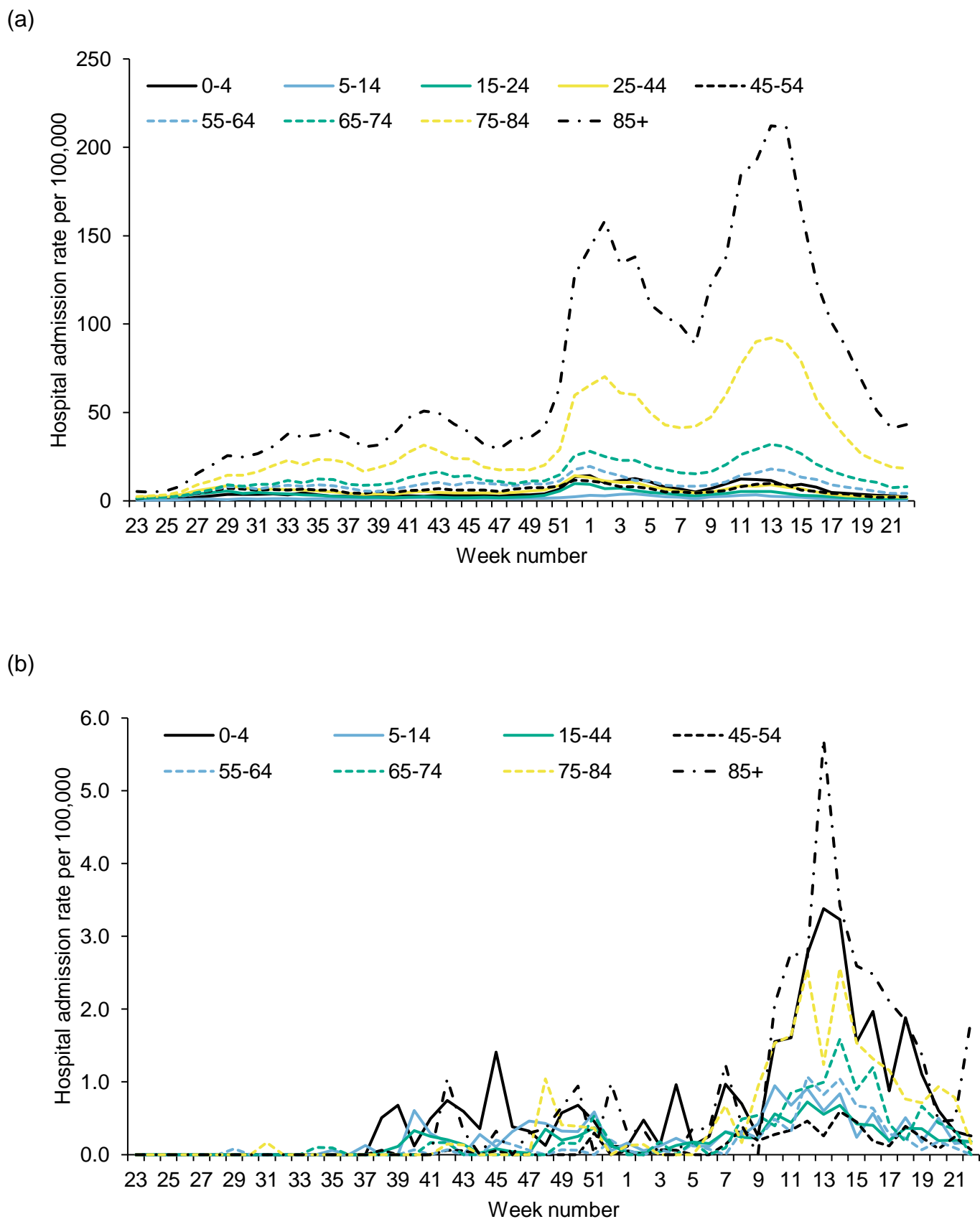


Figure 44: Weekly hospital admission rate by age group for new (a) COVID-19 positive cases and (b) influenza reported through SARI Watch



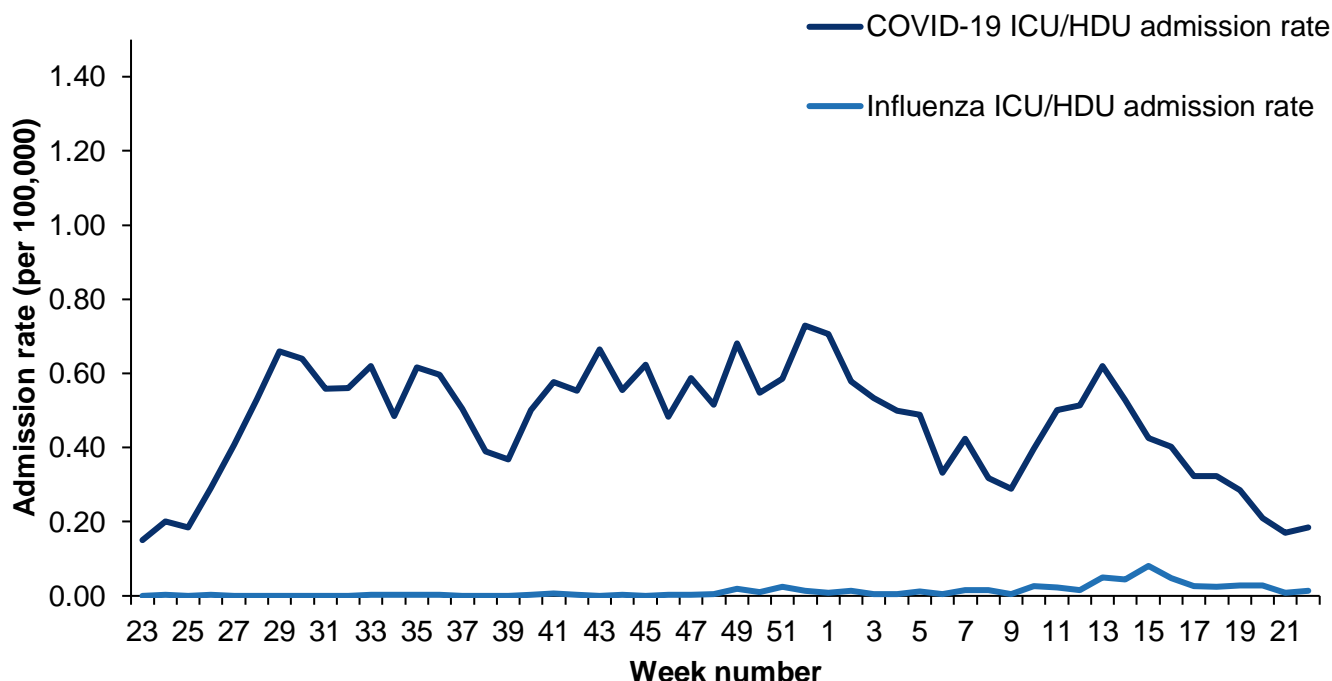
ICU or HDU admissions, SARI Watch

In week 22, the overall weekly ICU or HDU admission rates for COVID-19 remained stable. The ICU or HDU rate for COVID-19 was at 0.19 per 100,000 in week 22 compared to 0.18 per 100,000 in the previous week.

By UKHSA Centre, the highest ICU or HDU admission rates for COVID-19 continued to be observed in London. By age groups, the highest ICU or HDU admission rates for COVID-19 were observed in the 75 to 84 year olds.

The ICU or HDU rate for influenza was at 0.01 per 100,000 in week 22 compared to the same rate in the previous week. There were 5 new case reports of ICU or HDU admissions for influenza (4 influenza A(not subtyped) and 1 influenza B) in week 22.

Figure 45: Weekly overall ICU or HDU admission rates of new COVID-19 and influenza positive cases per 100,000 population reported through SARI Watch, England



- * influenza ICU or HDU admission rate is reported from week 22 2021 onwards
- * influenza ICU or HDU admission rate based on 89 NHS trusts for week 22
- * COVID-19 ICU or HDU admission rate based on 81 NHS trusts for week 22
- * SARI Watch data is provisional

Figure 46: Weekly overall influenza ICU or HDU admission rates per 100,000 trust catchment population with MEM thresholds, SARI Watch, England

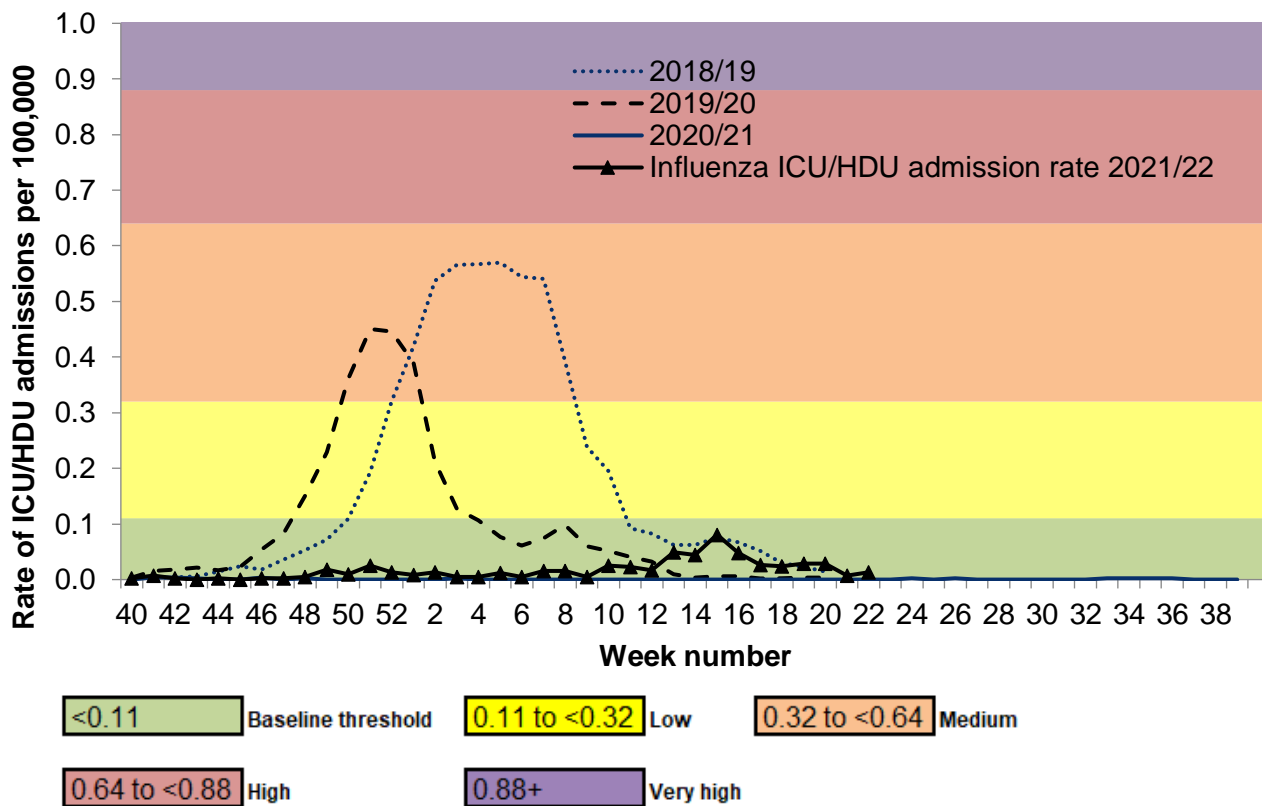


Figure 47: Weekly influenza ICU or HDU admissions by influenza type, SARI Watch, England

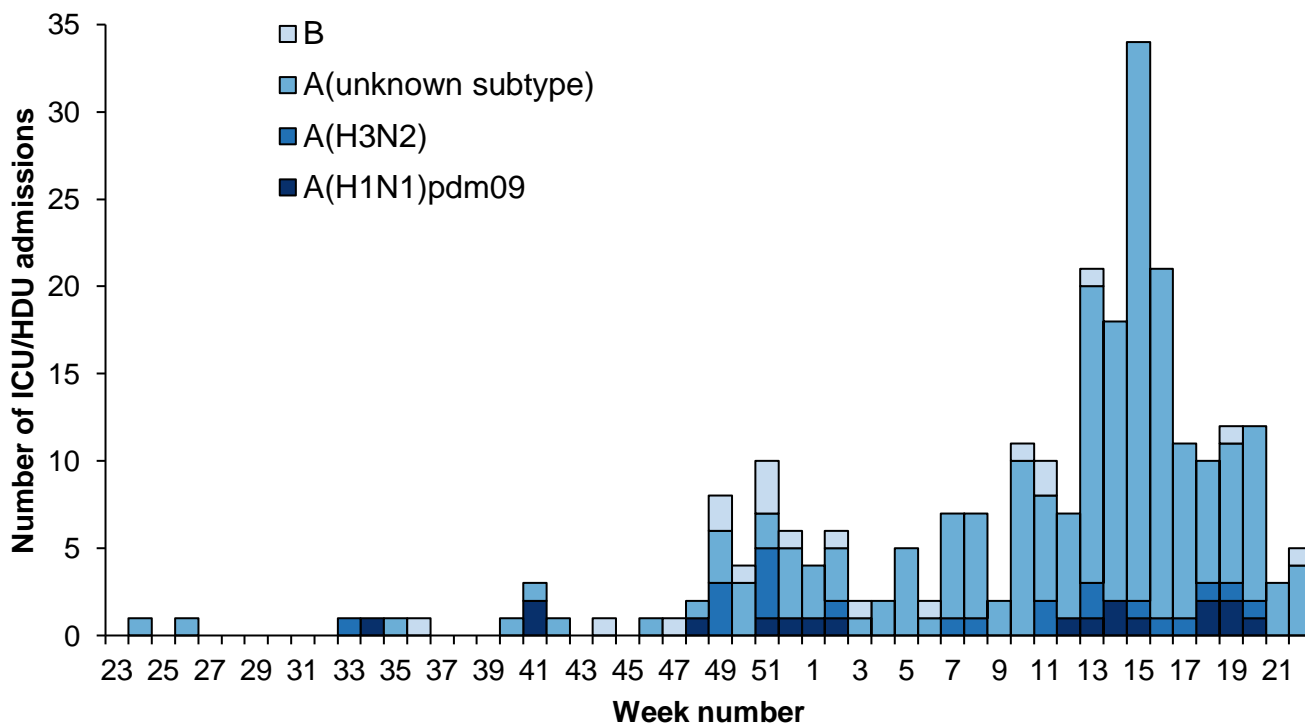
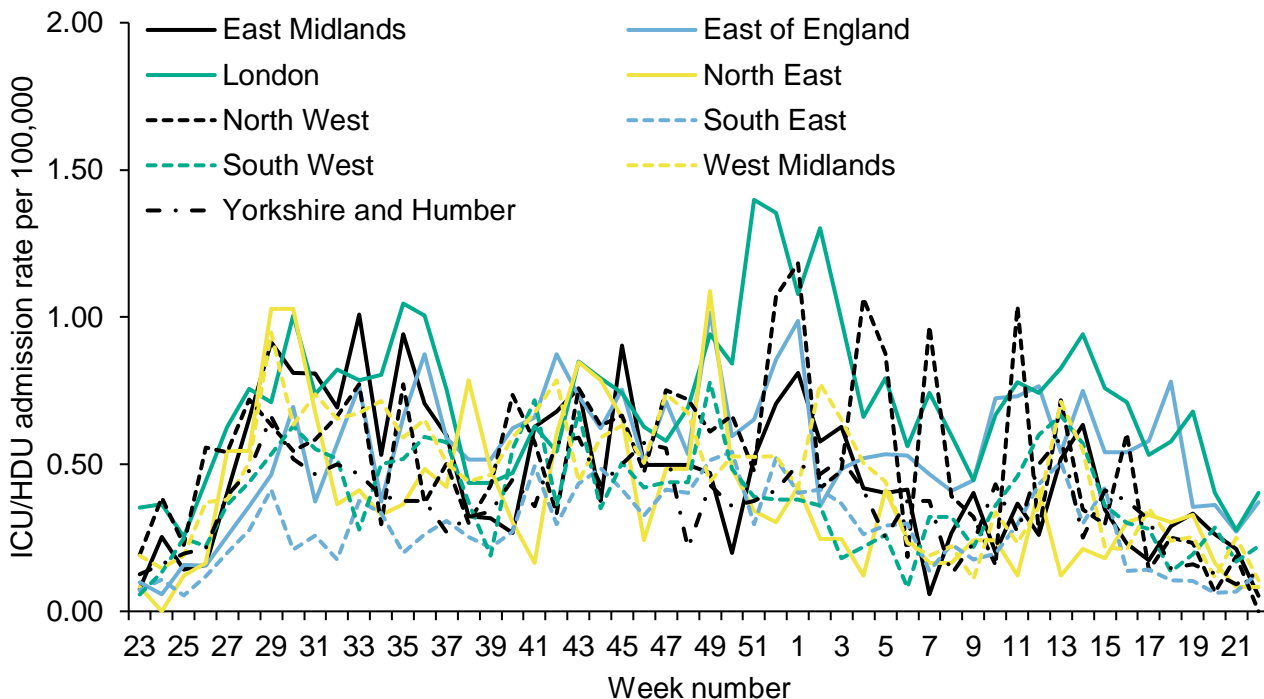


Figure 48: Weekly ICU or HDU admission rate by UKHSA Centre for new (a) COVID-19 positive cases and (b) influenza, reported through SARI Watch

(a)



(b)

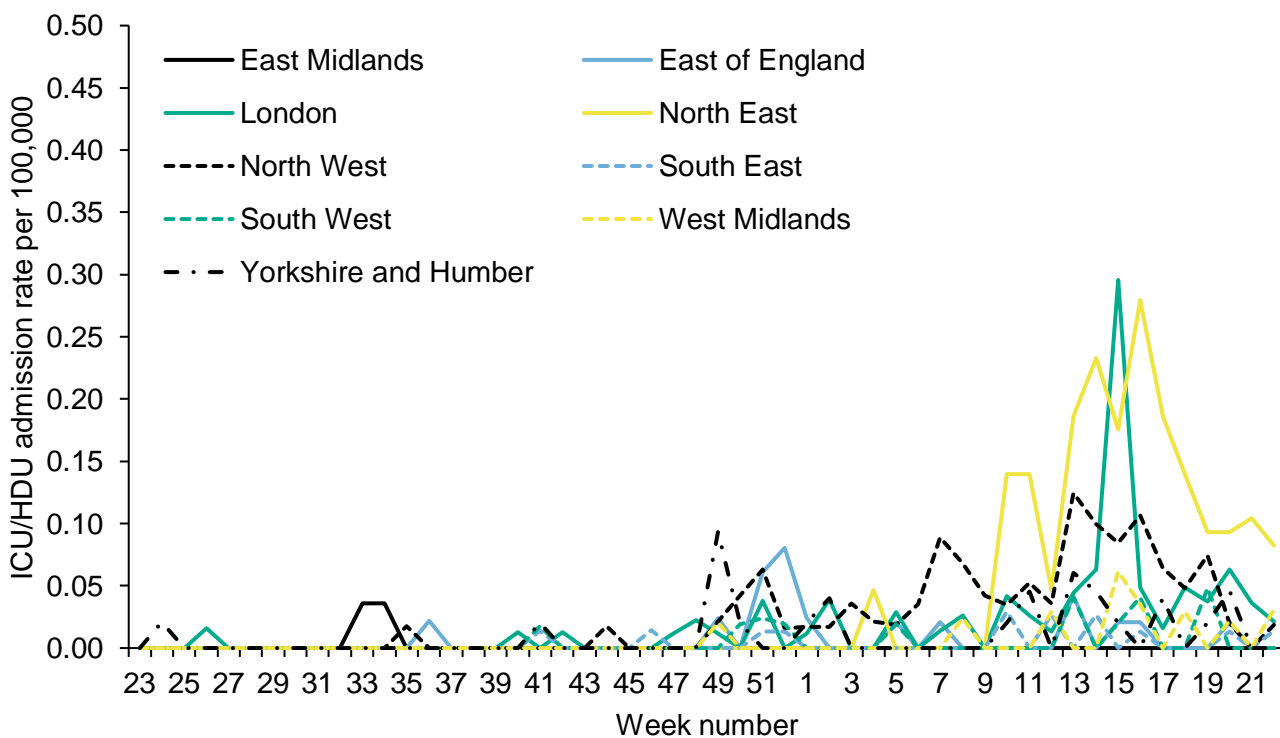
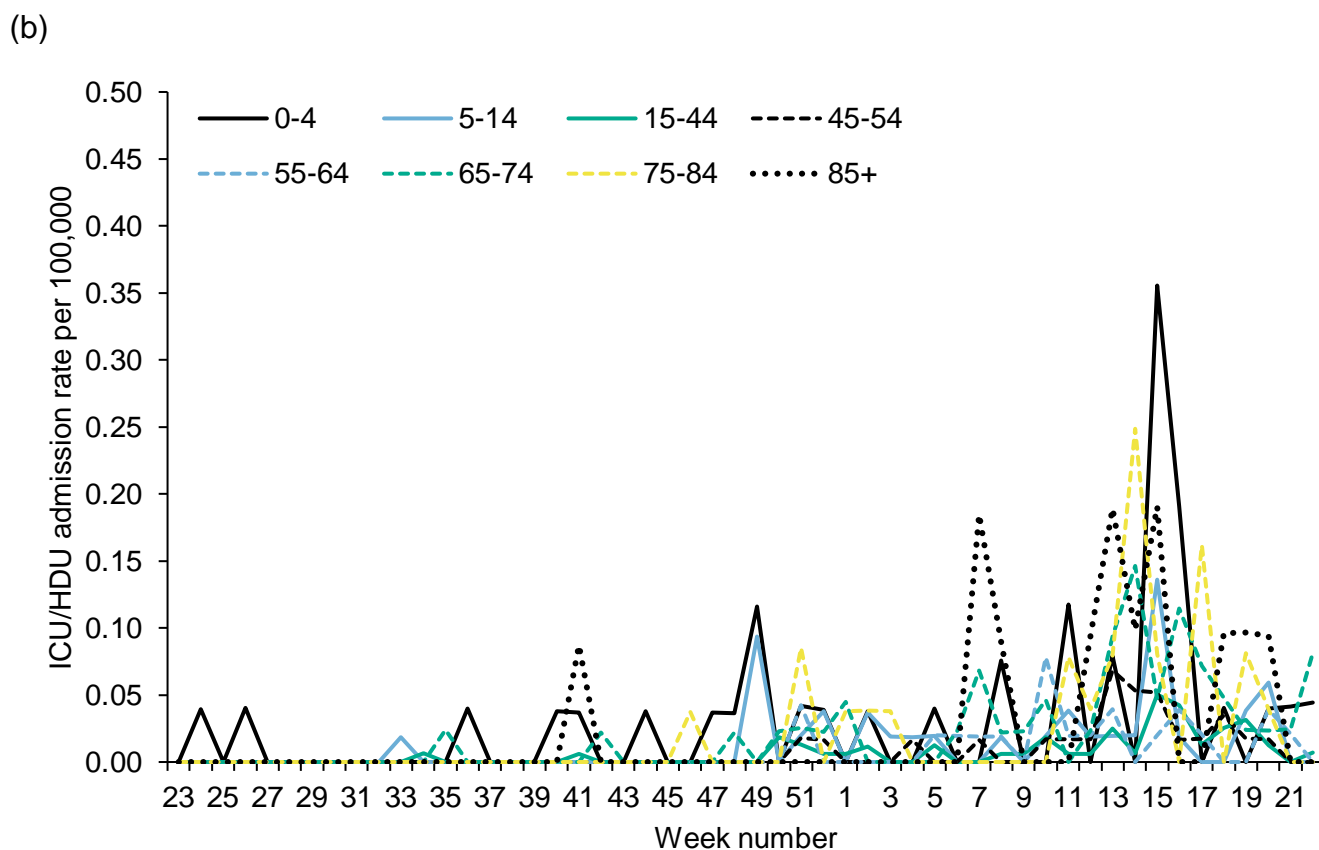
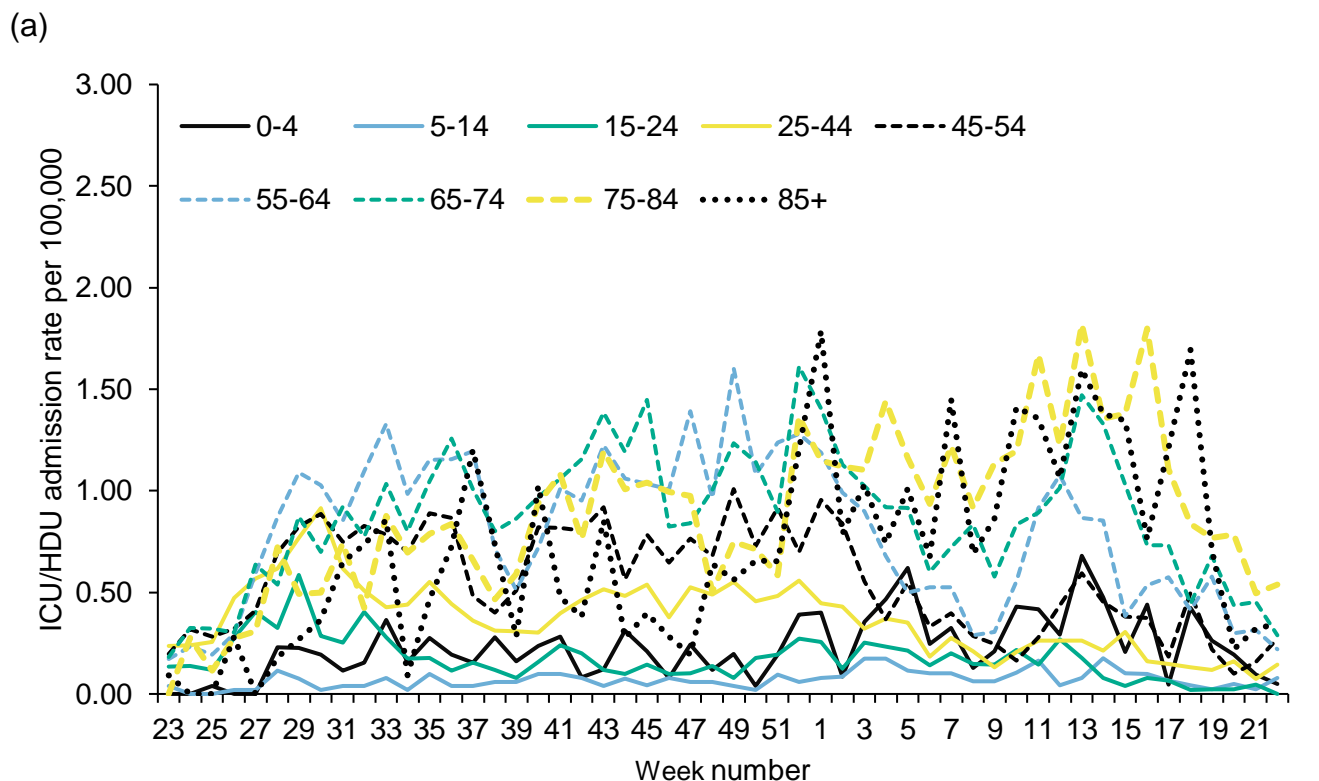


Figure 49: Weekly ICU or HDU admission rate by age group for new (a) COVID-19 positive cases and (b) influenza, reported through SARI Watch

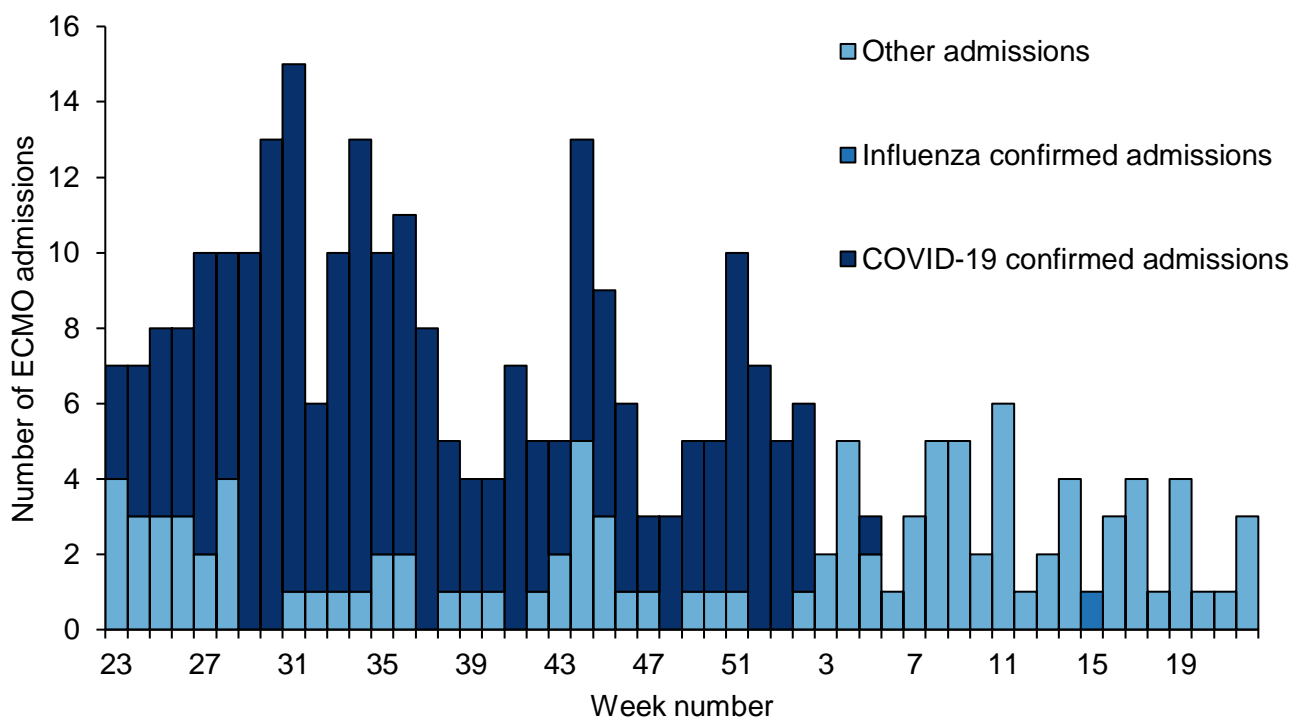


ECMO, SARI Watch

From week 23 2021, a total of 202 laboratory confirmed COVID-19 admissions have been reported from the 6 Severe Respiratory Failure (SRF) centres in the UK.

There were no new laboratory confirmed COVID-19 or influenza admissions reported in week 22 (Figure 50).

Figure 50: Laboratory confirmed ECMO admissions (COVID-19, influenza and non-COVID-19 confirmed) to Severe Respiratory Failure centres in the UK

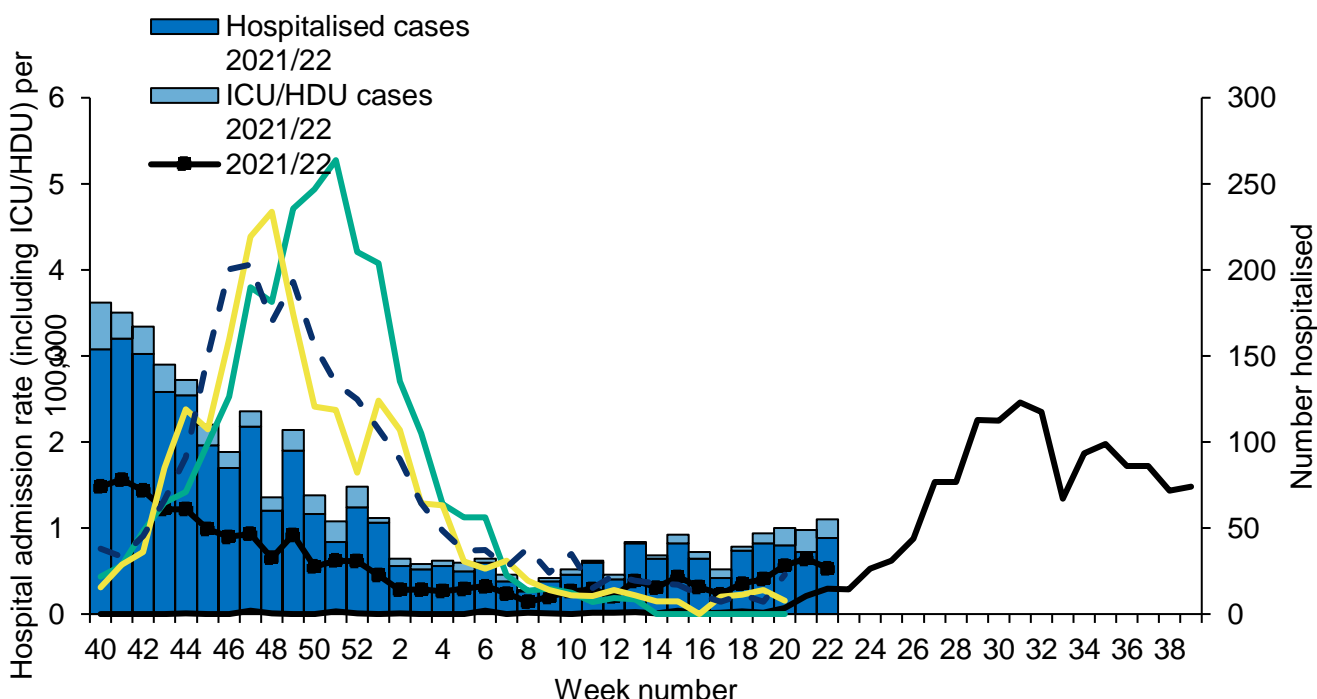


* SARI Watch data is provisional

RSV admissions, SARI Watch

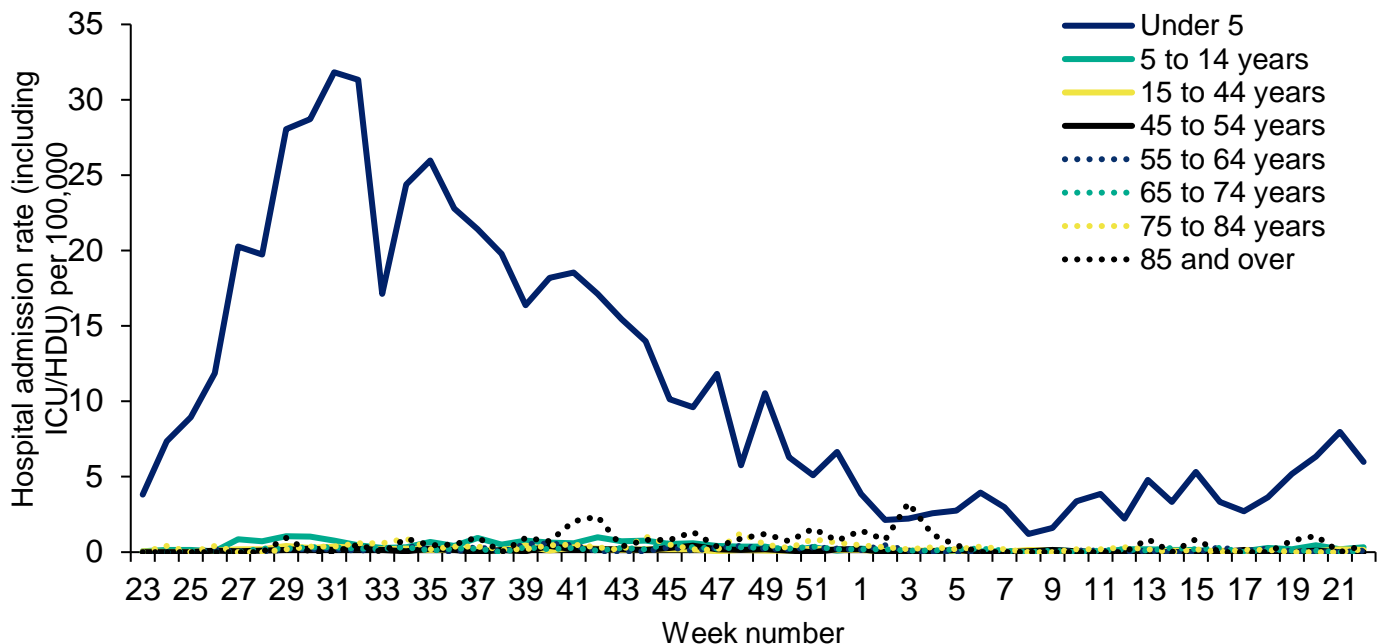
Data on hospitalisations, including ICU or HDU admissions, with Respiratory Syncytial Virus (RSV) are shown below. RSV SARI Watch surveillance is sentinel.

Figure 51: Weekly overall hospital admission rates (including ICU or HDU) of RSV positive cases per 100,000 population reported through SARI Watch, England



* Please note that in previous seasons, RSV SARI Watch surveillance has run from week 40 to week 20. In the 2020 to 2021 season this was extended to run throughout the year, to allow for surveillance of out-of-season trends

Figure 52: Weekly hospitalisation (including ICU or HDU) admission rates by age group for new RSV cases reported through SARI Watch in 2021 to 2022, England



* Please note that rates are based on the number of hospitalised cases divided by the Trust catchment population, multiplied by 100,000

* SARI Watch data is provisional

Emergency Department attendances, Syndromic surveillance

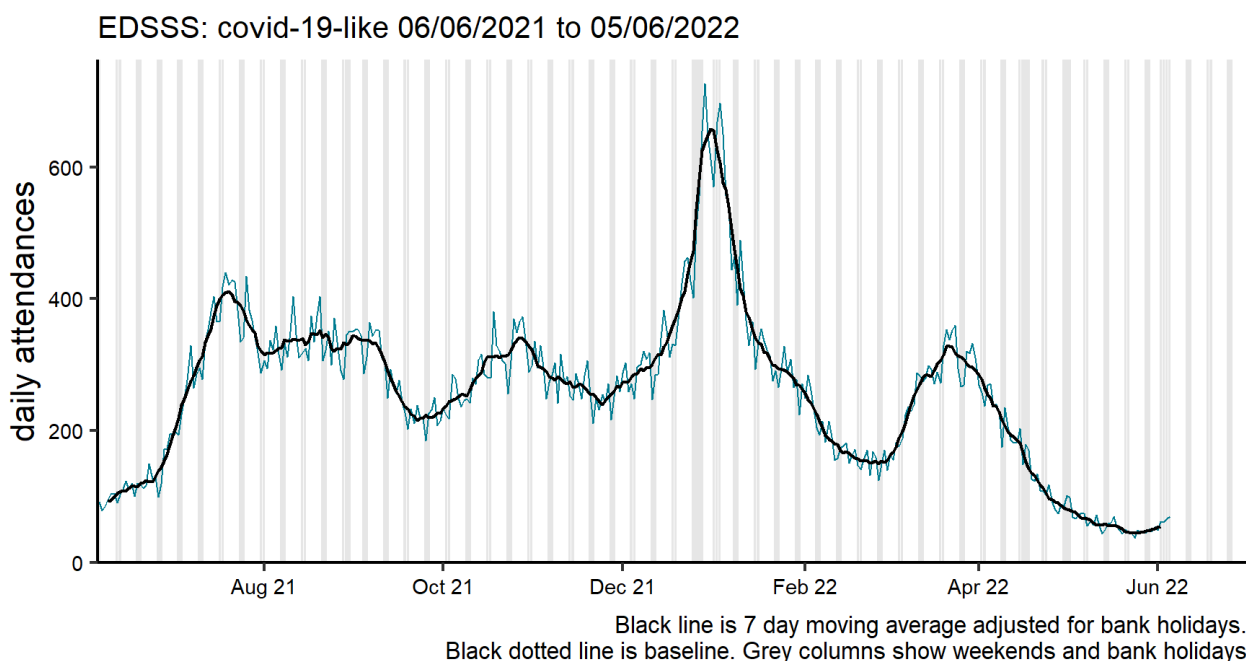
The [Emergency Department Syndromic Surveillance System \(EDSSS\)](#) monitors the daily visits in a network of emergency departments across England.

Up to 5 June, the daily number of Emergency Department (ED) attendances as reported by 139 EDs for COVID-19 increased slightly overall (Figures 53 and 54).

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 [Emergency Department Syndromic Surveillance](#) bulletin.

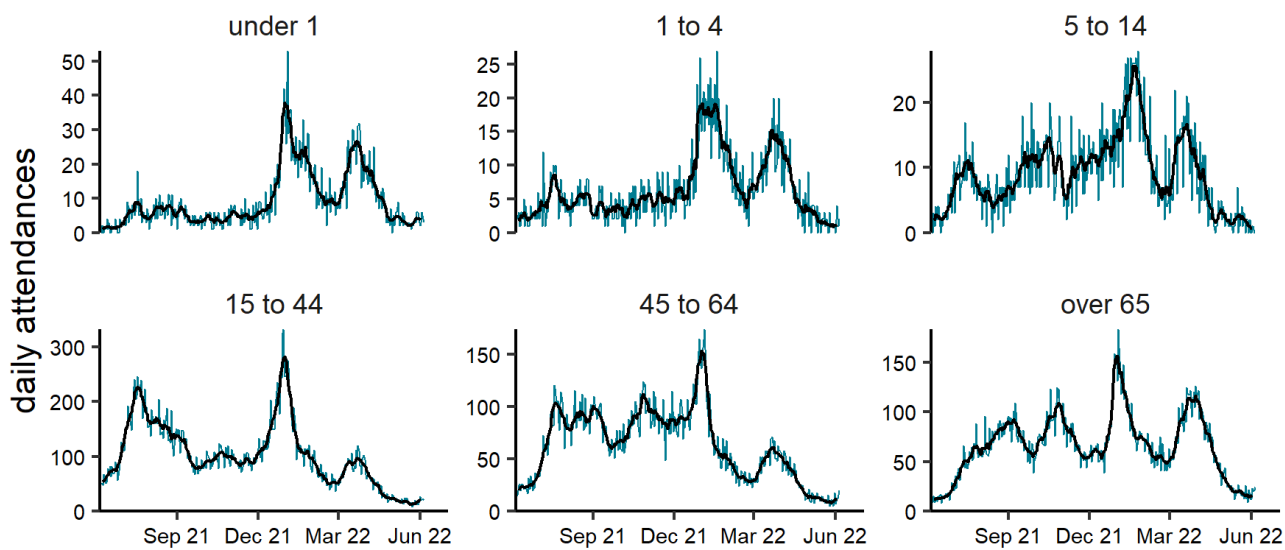
Figure 53: Daily ED attendances for COVID-19-like infections, England (a) nationally, (b) by age group and (c) by UKHSA Centre

(a)



(b)

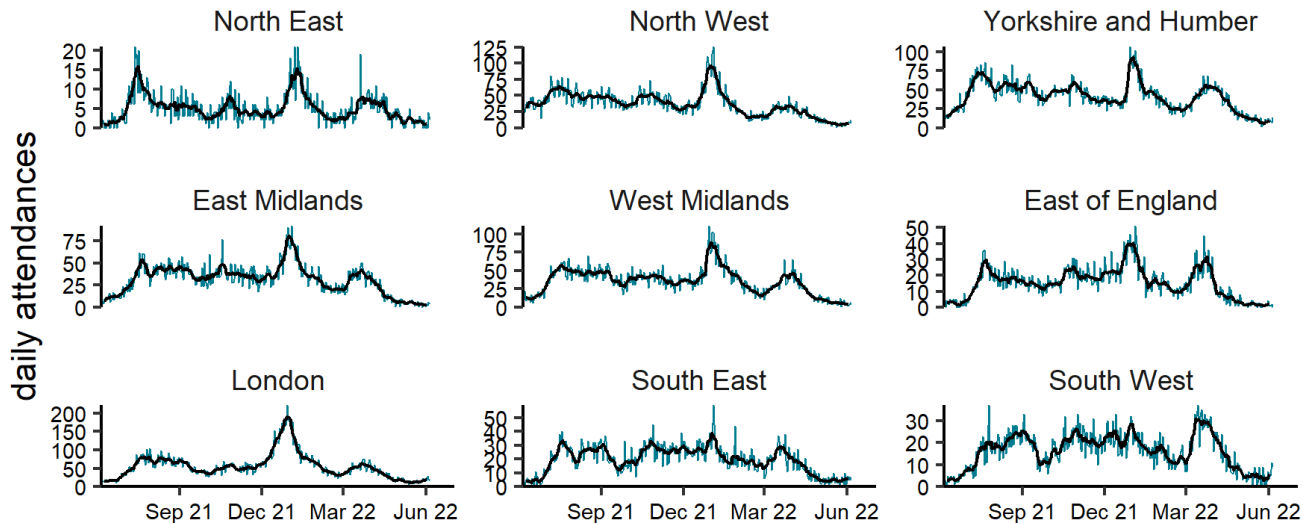
EDSSS: covid-19-like by age (years) 06/06/2021 to 05/06/2022



NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.

(c)

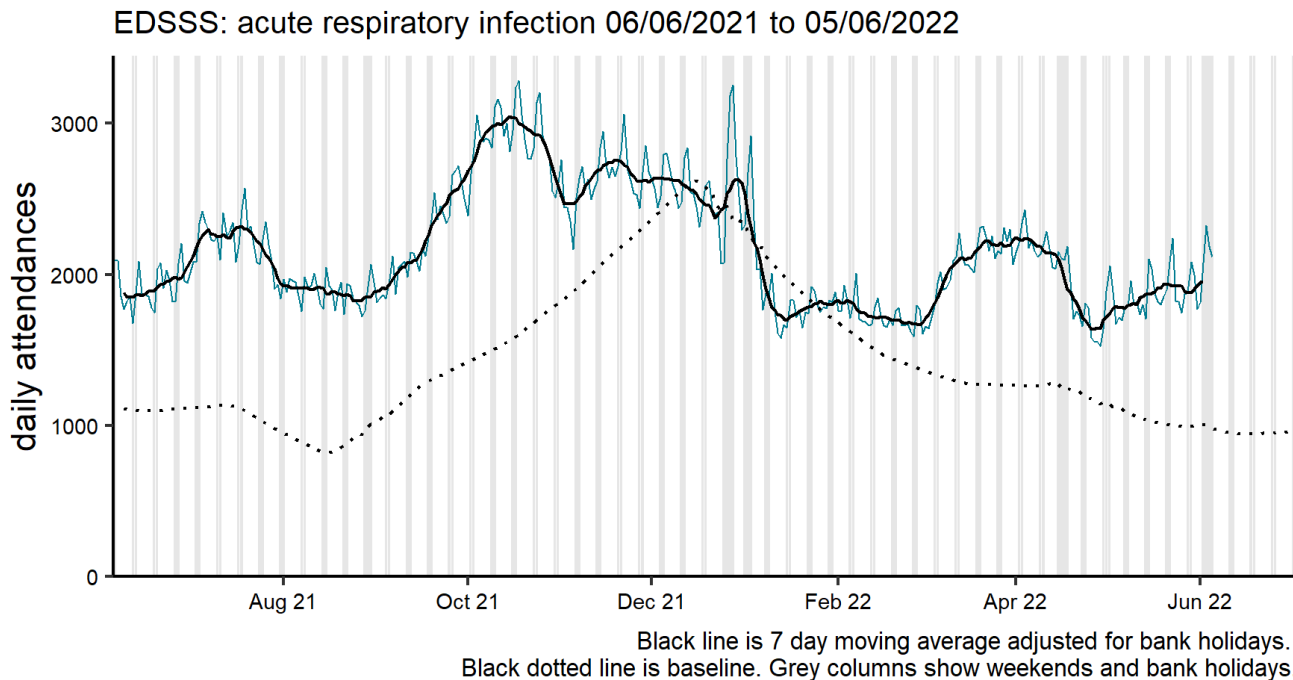
EDSSS: covid-19-like by region 06/06/2021 to 05/06/2022



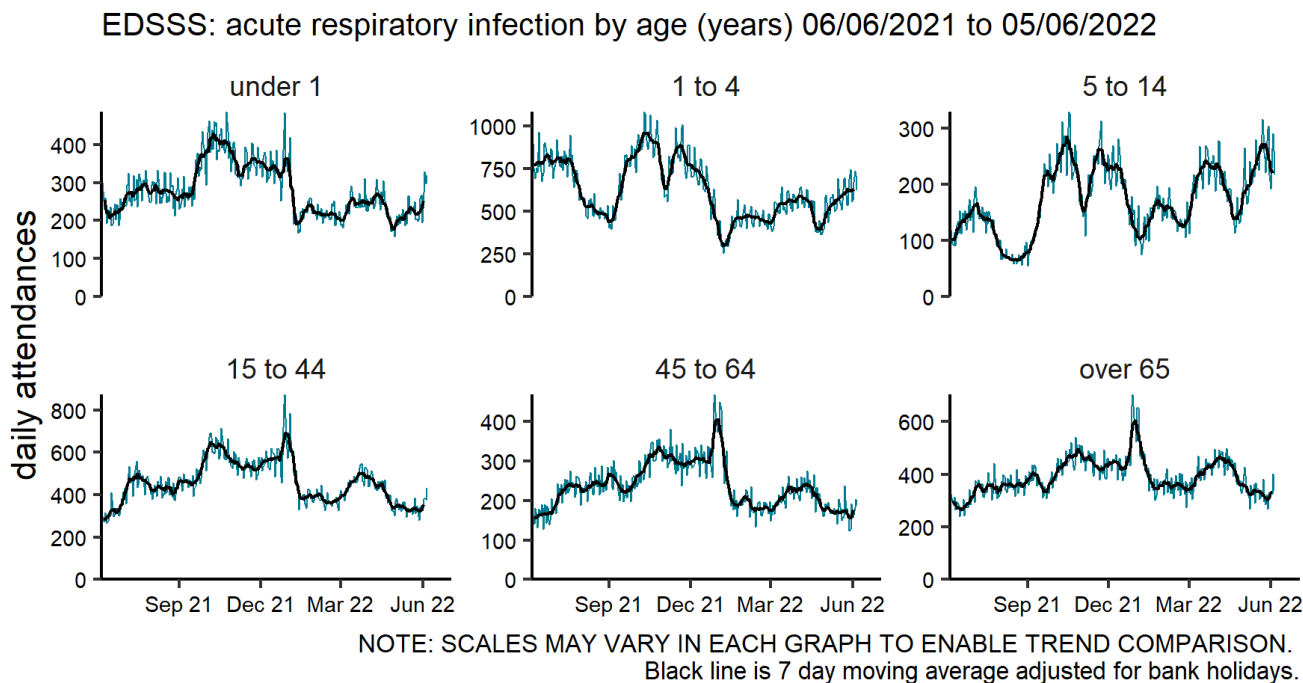
NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline.

Figure 54: Daily ED attendances for acute respiratory infections, England (a) nationally, (b) by age group and (c) by UKHSA Centre

(a)

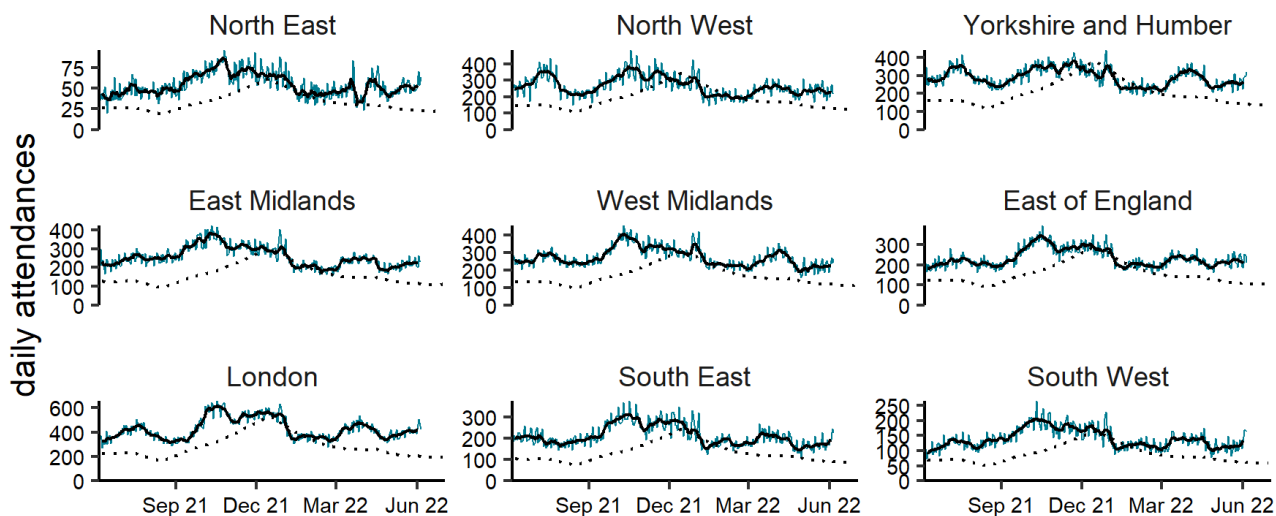


(b)



(c)

EDSSS: acute respiratory infection by region 06/06/2021 to 05/06/2022



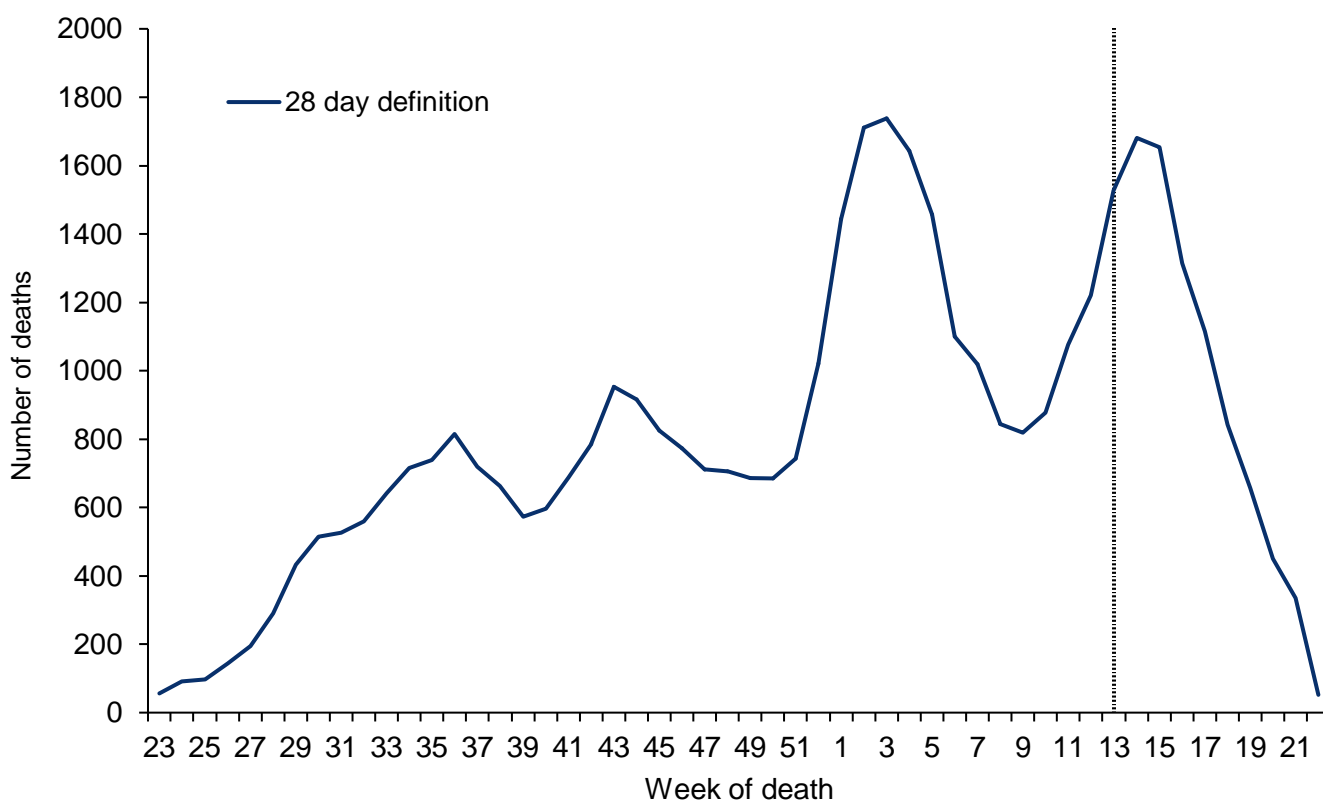
NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline.

Mortality surveillance

COVID-19 deaths

COVID-19 related deaths by the 28 day definition are reported below. This metric includes a death in a person with a positive COVID-19 test who died within (equal to or less than) 28 days of the most recent episode of infection

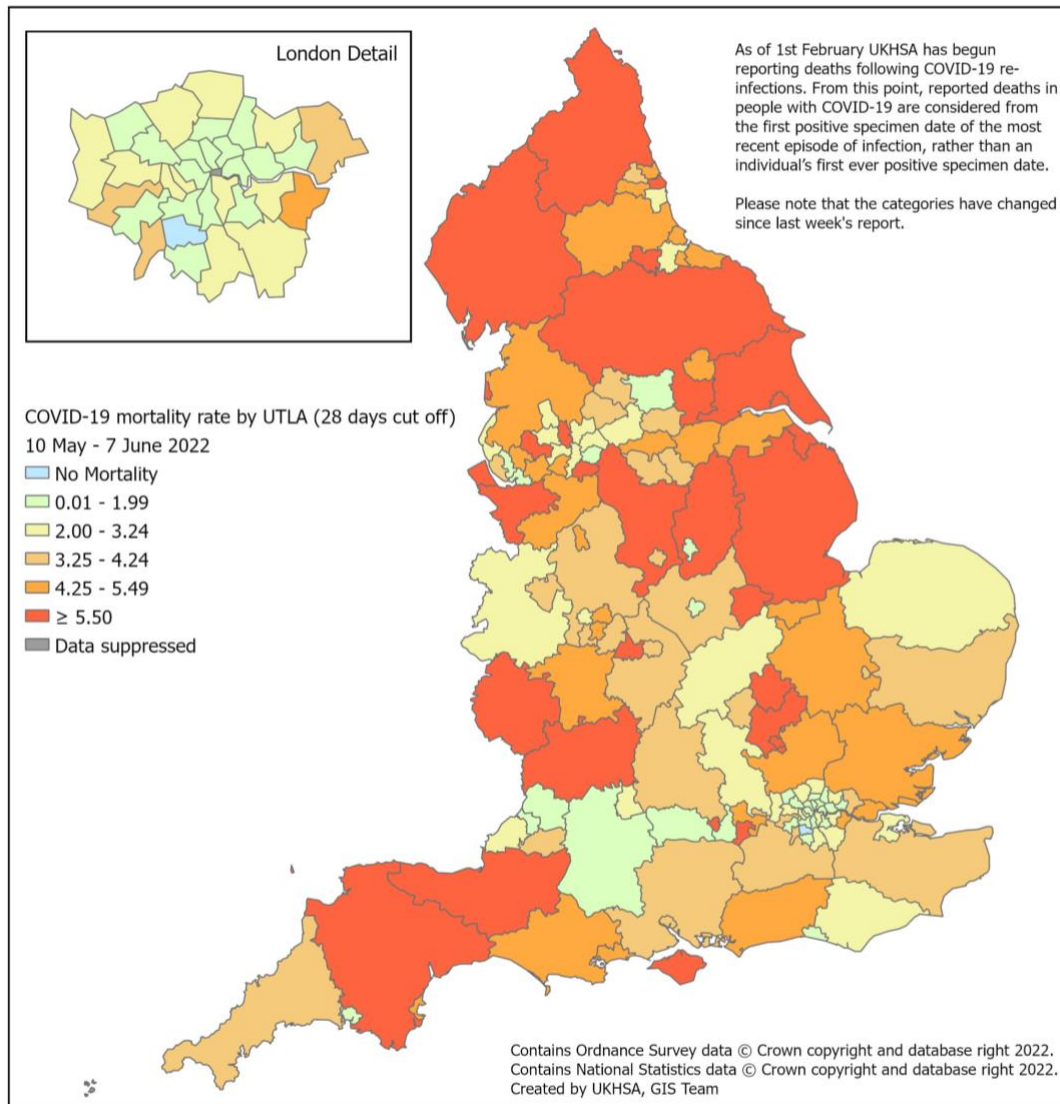
Figure 55: Number of deaths by week of death and time since a positive COVID-19 test, England



* Vertical dotted line indicates the end of provision of free universal testing for the general public in England, as outlined in the plan for [living with COVID-19](#).

* Data is shown by the week of death. This gives the most accurate analysis of this time progression, however, for the most recent weeks' numbers more deaths are expected to be registered therefore this should be interpreted with caution

Figure 57: Cumulative mortality rate of COVID-19 cases per 100,000 population tested under Pillars 1 and 2 for the past 4 weeks by 28 day definition



Daily excess all-cause mortality (England)

Deaths occurring from 1 January 2020 to 18 May 2022 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 plus or minus 7 days with an extrapolated time trend, and with 2 and 3 standard deviation (SD) limits shown (Figure 58).

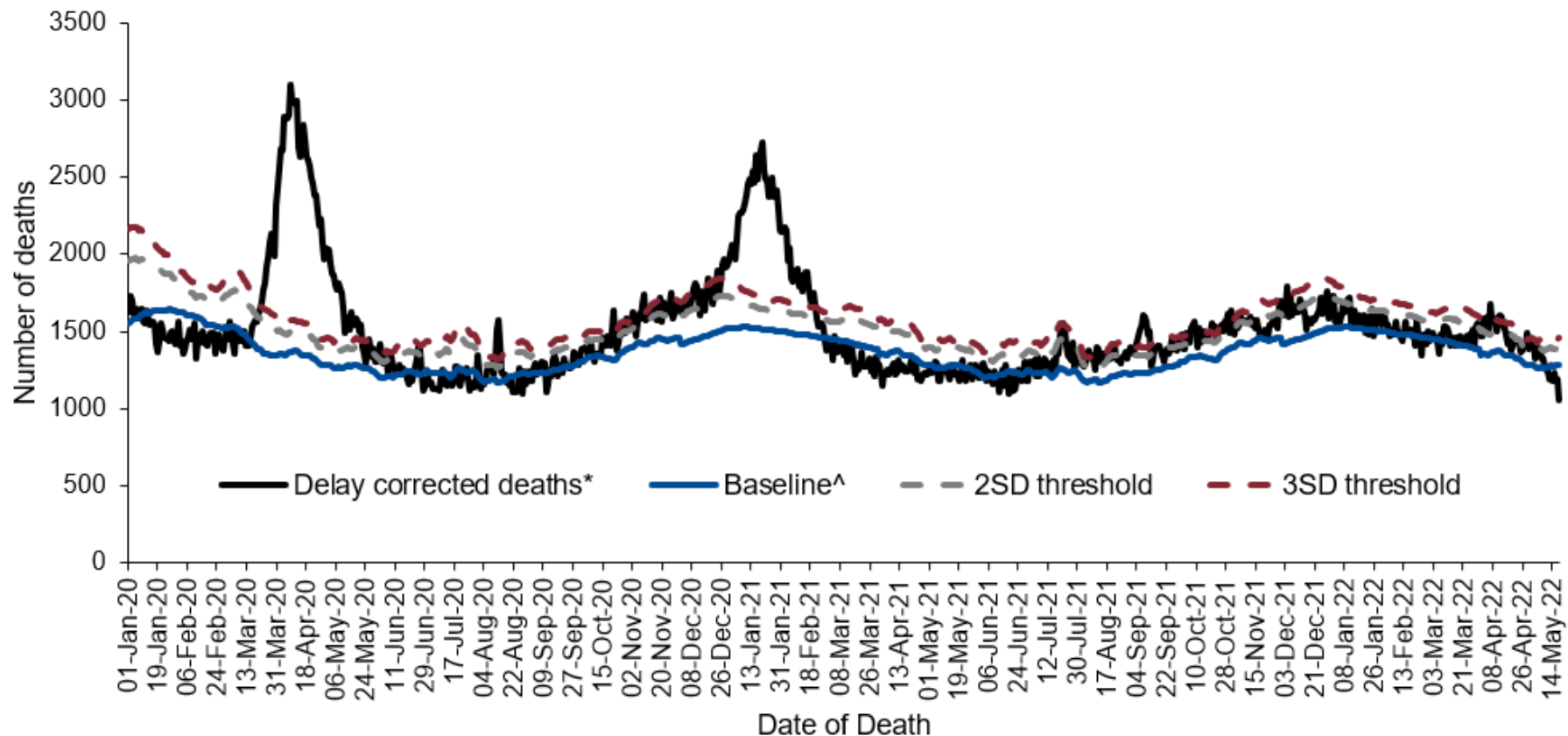
Weeks in which at least 2 days exceeded the 3SD threshold are shown in Table 4 and the daily difference from the baseline by age and region is given in Figure 59.

Note that as this data is by date of death with delay corrections, numbers are subject to change each week, particularly for more recent days.

The current week's model supersedes models presented in previous week.

No excess all-cause mortality was observed in week 20 overall, by age or sub-nationally. Week 36 of 2021 included a heatwave period of 3 days with high temperatures (mean Central England Temperature >20c) which may have contributed to the excess seen in this week. The excess mortality noted in week 33 of 2020 and week 29 of 2021 coincide with heat waves (Figure 58, 59 and Table 4).

Figure 58: Daily excess all-cause deaths in all ages, England, 1 January 2020 to 18 May 2022



^Baseline calculation:

January to November 2020: same day in previous 5 years plus or minus 1 week with a linear trend.

December 2020 to March 2021: past 3 low flu years plus or minus 2 weeks, no trend.

March 2021 onwards: same baseline as 2020

* corrected for delay to registration from death

Other measures of excess mortality published by UKHSA are the [Fingertips excess mortality in England report](#), which uses ONS death registration data; and [the all-cause mortality surveillance report](#), which uses the EuroMOMO model to measure excess deaths.

Table 4: Excess all-cause deaths by (a) age group and (b) UKHSA centres, England

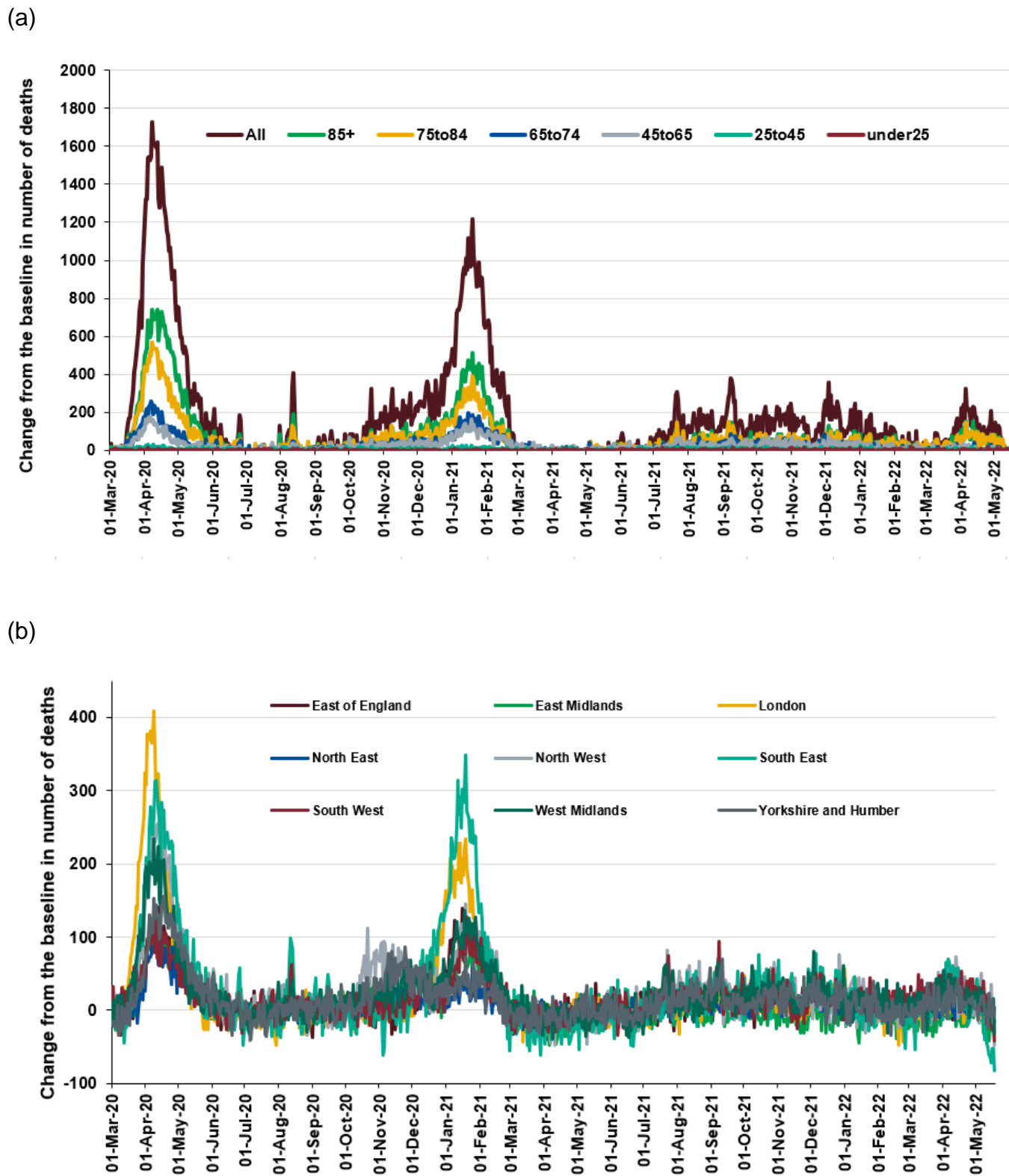
(a)

Age Group	Excess detected in week 20 2022?	Weeks in excess from week 10 to 53 2020	Weeks in excess from week 1 to 52 2021	Weeks in excess from week 1 2022
All	x	13 to 21, 33, 43, 45, 50, 52 to 53	01 to 07, 31 to 32, 35 to 36, 40 to 43, 48	14 to 15
under 25	x	None	None	None
25 to 44	x	14 to 16	None	None
45 to 64	x	12 to 19, 49 to 50, 52 to 53	01 to 08, 23, 29 to 30, 36, 40 to 44, 48	None
65 to 74	x	13 to 19, 46, 48, 52 to 53	01 to 07, 36, 43, 48	None
75 to 84	x	13 to 21, 33, 45, 49, 52 to 53	01 to 07, 32, 36, 40	14 to 16
85+	x	13 to 21, 33, 53	01 to 07, 31, 36	None

(b)

UKHSA Centres	Excess detected in week 20 2022?	Weeks in excess from week 10 to 53 2020	Weeks in excess from week 1 to 52 2021	Weeks in excess from week 1 2022
East of England	x	14 to 19, 52 to 53	01 to 07	None
East Midlands	x	13 to 19, 48	01 to 07	None
London	x	12 to 19, 33, 52 to 53	01 to 06, 36	None
North East	x	14 to 21	02 to 04	None
North West	x	13 to 19, 33, 42 to 47	01 to 07, 31 to 32, 36, 43	15
South East	x	13 to 21, 33, 50 to 53	01 to 07, 36	14
South West	x	13 to 19, 33	02 to 07, 29, 36	None
West Midlands	x	13 to 20, 45, 48	01 to 07, 29, 36, 40, 48	13 to 14
Yorkshire and Humber	x	14 to 21, 23, 43 to 50	02 to 04, 35 to 36	None

Figure 59: Daily excess all-cause deaths by (a) age group and (b) UKHSA centres, England, 1 March 2020 to 18 May 2022



Microbiological surveillance

Virus characterisation

UKHSA 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.

Information on virus characterisation for the 2021 to 2022 season is available in [previous reports](#).

Antiviral susceptibility

Influenza positive samples are screened for mutations in the virus neuraminidase (NA) and the cap-dependent endonuclease (PA) genes known to confer neuraminidase inhibitor or baloxavir resistance, respectively. The samples tested are routinely obtained for surveillance purposes, but diagnostic testing of patients suspected to be infected with antiviral-resistant virus is also performed.

Information on antiviral susceptibility for the 2021 to 2022 season is available in [previous reports](#).

SARS-CoV-2 variants

UKHSA conducts surveillance of SARS-CoV-2 variants. Further information including an overview of variants, information on new variants and [detailed surveillance of particular variants of concern](#) can be found on GOV.UK and in the [latest technical briefing](#).

Antimicrobial susceptibility

Table 6 shows in the 12 weeks up to week 22 2022, the proportion of all lower respiratory tract isolates of *Streptococcus pneumoniae*, *Haemophilus influenzae*, *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 6: Antimicrobial susceptibility surveillance in lower respiratory tract

Organism	Antibiotic	Specimens tested (N)	Specimens susceptible (%)
<i>S. pneumoniae</i>	Penicillin	1,317	89
	Macrolides	1,472	84
	Tetracycline	1,473	84
<i>H. influenzae</i>	Amoxicillin/ampicillin	5,864	50
	Co-amoxiclav	6,836	52
	Macrolides	2,136	6
	Tetracycline	6,899	98
<i>S. aureus</i>	Methicillin	2,854	94
	Macrolides	3,360	69
MRSA	Clindamycin	118	42
	Tetracycline	150	73
MSSA	Clindamycin	2,003	75
	Tetracycline	2,498	92

* Macrolides = erythromycin, azithromycin and clarithromycin

Data source: UKHSA's SGSS Antimicrobial Resistance (AMR) module, please note that this is different to the data source used in the reports published between weeks 41 2020 to 05 2021 inclusive of the 2020 to 2021 influenza season when the SGSS Communicable Disease Report (CDR) module was used instead due to a UKHSA SGSS AMR data infrastructure issue which has now been resolved. Therefore, the above results are not directly comparable to the results reported between weeks 41, 2020 and 5, 2021. The AMR module of SGSS was used during the 2019 to 2020 influenza season. There has been a reduction in the total number of bacterial positive lower respiratory tract clinical samples reported to UKHSA since mid-March 2020.

COVID-19 sero-prevalence surveillance

Since week 42 2021, updates on COVID-19 sero-prevalence estimates have been published in the weekly [COVID-19 vaccine surveillance report](#).

Influenza vaccination

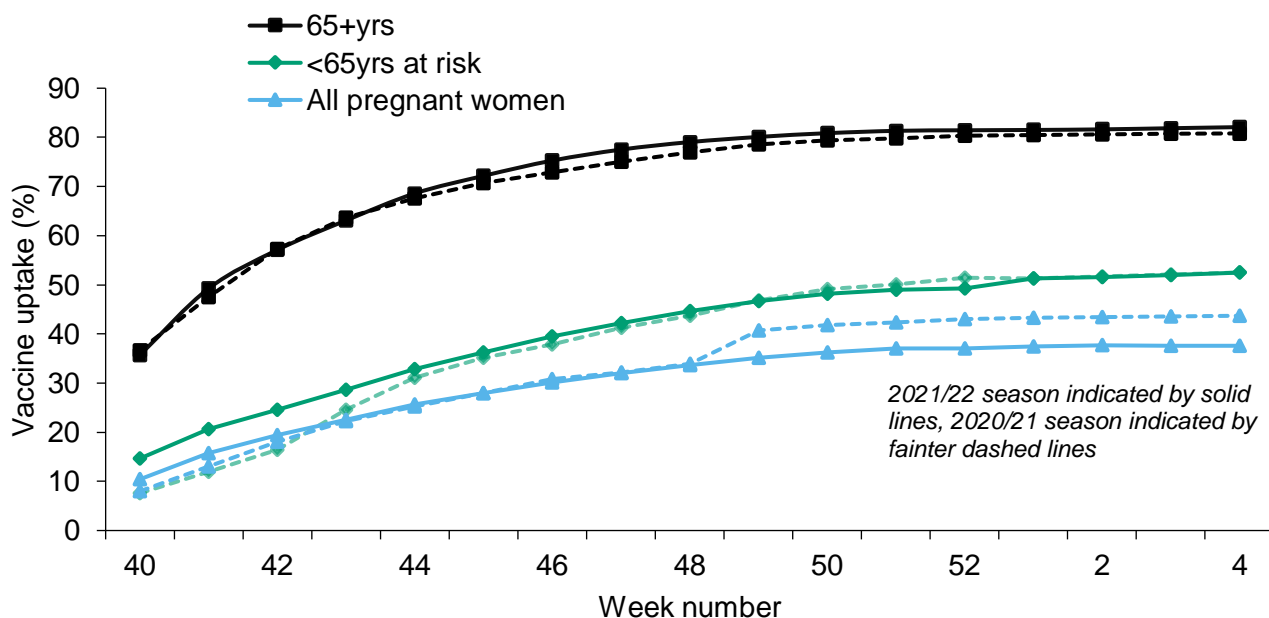
Influenza vaccine uptake in GP patients

The last publication of weekly vaccine uptake data for the 2021 to 2022 season was on 3 February 2022. That data showed that up to week 4 2022, 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 2021 to 2022 influenza vaccine in targeted groups was as follows:

- 52.5% in under 65 years in a clinical risk group
- 37.6% in all pregnant women
- 82.1% in all 65 year olds and over
- 85.1% in 65 year olds and over and in a clinical risk group
- 45.5% in those aged 50 to 64 who are not in a clinical risk group

Weekly vaccine coverage data is provisional. The sample of GP practices included in the data may change from week to week, resulting in changes to reported cumulative uptake.

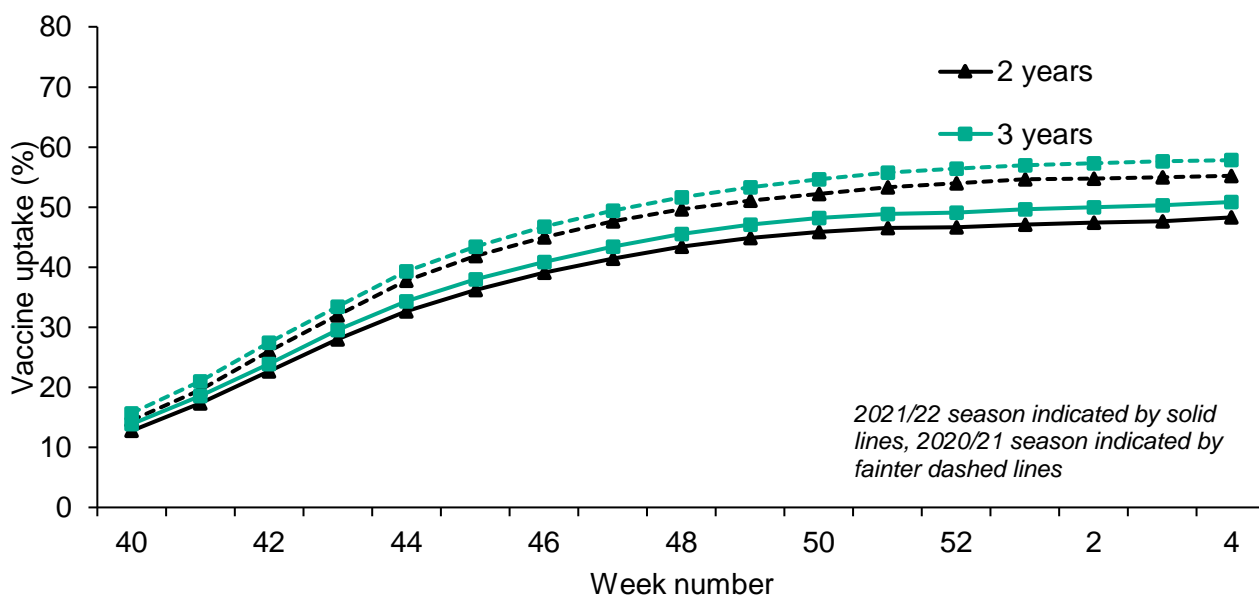
Figure 60: Cumulative weekly influenza vaccine uptake by target group in England



In 2021 to 2022, all 2 and 3 year olds continue to be eligible for influenza vaccination through their GPs. Up to week 4 2022, in 88.1% of GP practices reporting weekly to ImmForm for the childhood collection, the provisional proportion of children in England who had received the 2021 to 2022 influenza vaccine in targeted groups was as follows:

- 48.3% in all 2 year olds
- 50.8% in all 3 year olds

Figure 61: Cumulative weekly influenza vaccine uptake in 2 and 3 year olds, in England



As in previous seasons week 4 data is the last weekly publication during the influenza season. [Monthly data](#) covering vaccinations that were given between 1 September and 28 February 2022 has been published. This is the sixth publication of monthly data this season and comparator data is available for previous seasons. The monthly GP report includes ethnicity data for at-risk groups, pregnant women and for the first time, 65 years and over.

Influenza vaccine uptake in school age children

Provisional [monthly data](#) on influenza vaccine uptake in children of school years Reception to Year 11 has been published, showing the provisional proportion of children who received the 2021 to 2022 influenza vaccine via school, pharmacy or GP practice between 1 September and 31 January 2022.

Influenza vaccine uptake in healthcare workers

Provisional [monthly data](#) on influenza vaccine uptake in frontline healthcare workers has been published, showing vaccine uptake at national, commissioning region, and Trust level, and by staff group, between 1 September and 28 February 2022.

COVID-19 vaccination

COVID-19 vaccine uptake in England

COVID-19 vaccinations began in England on 8 December 2020 during week 50 2020 (week ending 13 December 2020). Cumulative data up to week 22 2022 (week ending 5 June 2022) was extracted from the National Immunisation Management Service (NIMS). The data presented this week is the provisional proportion of living people in England who had received at least one dose, two doses and three doses of a COVID-19 vaccination by age group. The overall vaccine uptake in the population for those with at least dose 1 was 70.2%, 65.9% for dose 2 and 51.8% for dose 3. The breakdown by sex showed vaccine uptake in males was 67.7% and 72.4% in females for dose 1. For dose 2 vaccine uptake by sex was 63.5% in males and 68.5% in females. For dose 3 vaccine uptake by sex was 49.2% in males and 54.7% in females. The vaccine uptake rate in adults aged 18 and over was 81.6% (41,474,506/50,796,071) for dose 1; 78.7% (39,993,890/50,796,071) for dose 2 and 64.2% (32,608,517/ 50,796,071) for dose 3.

Table 7: Provisional cumulative COVID-19 vaccine uptake by age in England

NATIONAL	People in NIMS cohort	Vaccinated with at least 1 dose		Vaccinated with at least 2 doses		Vaccinated with at least 3 doses	
		Number vaccinated	% vaccine uptake	Number vaccinated	% vaccine uptake	Number vaccinated	% vaccine uptake
Over 80	2,938,267	2,810,990	95.7	2,793,673	95.1	2,717,549	92.5
75 to under 80	2,341,318	2,243,121	95.8	2,228,004	95.2	2,173,023	92.8
70 to under 75	2,772,746	2,615,970	94.3	2,593,462	93.5	2,505,036	90.3
65 to under 70	2,986,104	2,758,340	92.4	2,726,728	91.3	2,583,322	86.5
60 to under 65	3,617,865	3,284,345	90.8	3,238,573	89.5	2,978,461	82.3
55 to under 60	4,170,826	3,715,735	89.1	3,653,649	87.6	3,273,895	78.5
50 to under 55	4,246,715	3,678,695	86.6	3,602,382	84.8	3,122,605	73.5
45 to under 50	3,956,918	3,246,836	82.1	3,156,597	79.8	2,580,012	65.2
40 to under 45	4,335,143	3,347,305	77.2	3,223,644	74.4	2,476,065	57.1
35 to under 40	4,673,227	3,398,527	72.7	3,235,919	69.2	2,304,844	49.3
30 to under 35	4,888,496	3,410,868	69.8	3,202,785	65.5	2,122,902	43.4
25 to under 30	4,557,506	3,117,371	68.4	2,886,923	63.3	1,793,187	39.3
20 to under 25	3,922,637	2,828,163	72.1	2,557,084	65.2	1,509,013	38.5
18 to under 20	1,388,303	1,018,240	73.3	894,467	64.4	468,604	33.8
16 to under 18	1,389,501	911,382	65.6	690,896	49.7	181,761	13.1
12 to under 16	2,938,905	1,575,337	53.6	1,021,345	34.8	16,285	0.6
5 to under 12	5,080,574	448,366	8.8	18,102	0.4	22	0.0
Total*	63,297,431	44,410,462	70.2	41,724,602	65.9	32,806,790	51.8

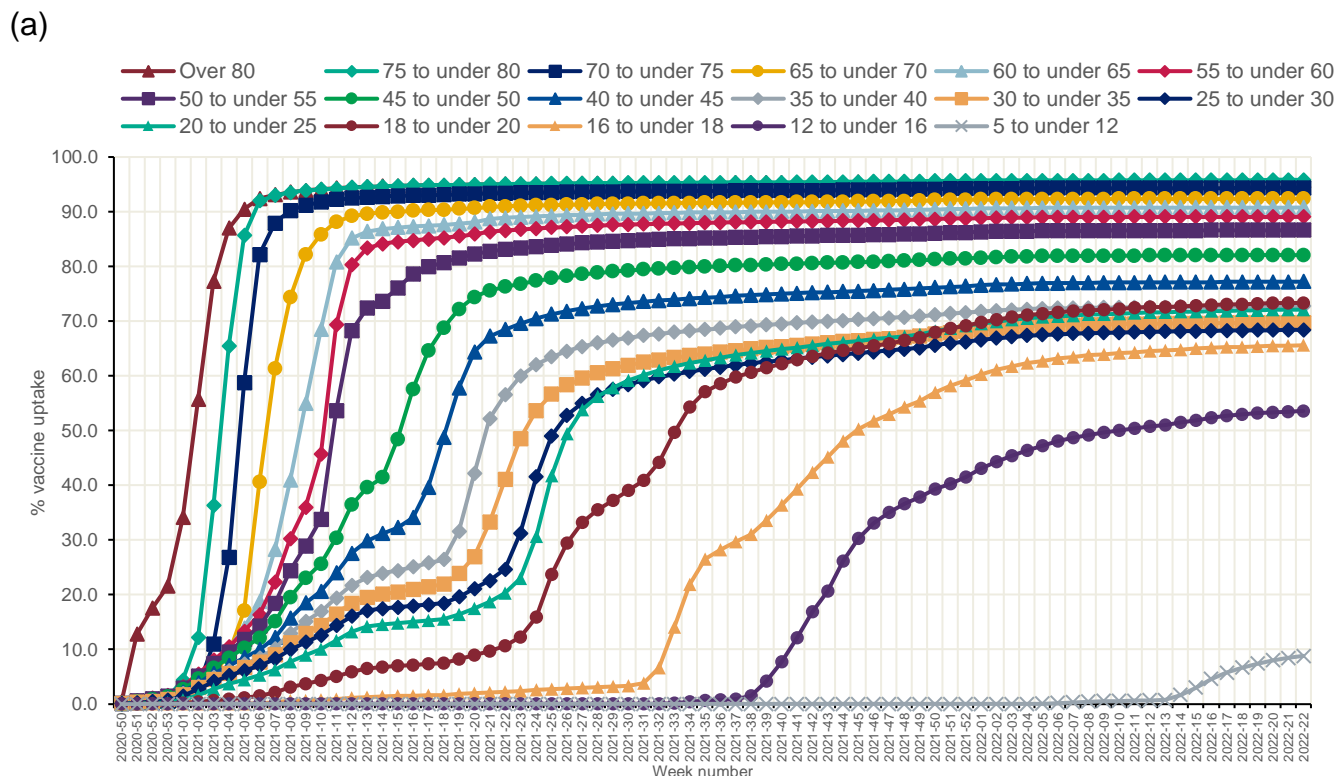
*Caution should be exercised when summing the regional or age figures as the sum of these will not equal the England total. This is due to individuals vaccinated in England who have a registered address in Scotland or Wales or where their address is unknown. There were also vaccinations where the individual had an unknown region and age group or where age is less than 5 years old.

From 18 November 2021 (week 46 2021) UKHSA started to report on those in the population with at least three doses of COVID-19 vaccine. These figures count the number of doses a person has had in chronological order and includes vaccinations given before the start of the programme where data is available to provide a more complete record of the population coverage estimates.

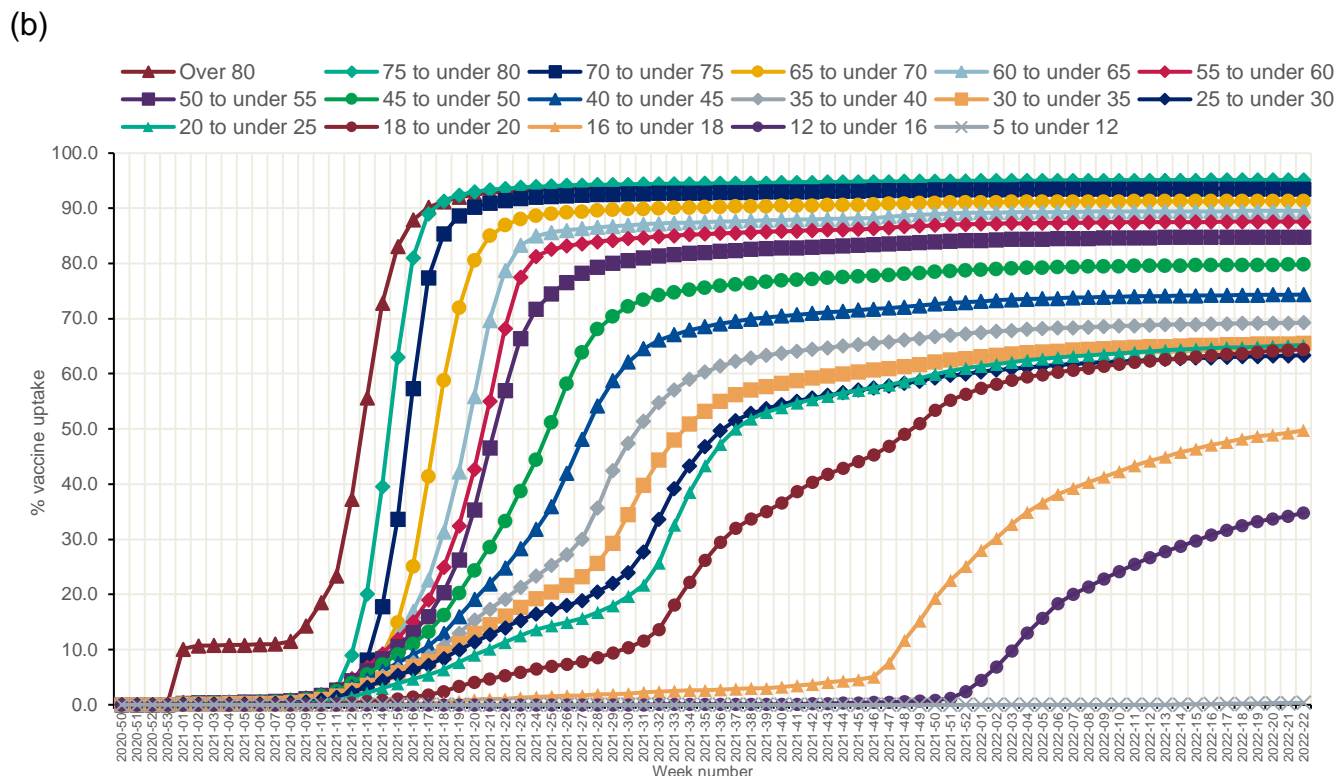
Age was previously calculated as age on the 31 August 2021 (academic cohort for all ages). Please note that from 14 April 2022 (week 15 2022), age is calculated on the date data is extracted. The weekly vaccine coverage data is extracted on a Tuesday with data capped to the previous Sunday and all backing data is updated each week going back to the start of the programme.

Data is provisional and subject to change following further validation checks. Any changes to historic figures will be reflected in the most recent publication. Please note that numbers published by UKHSA are for public health surveillance purposes only.

Figure 62: Cumulative weekly COVID-19 vaccine uptake by age in England for (a) Dose 1, (b) Dose 2 and (c) Dose 3 (please note the data for this graph is shown from week 35 (week ending 5 September 2021))



Weekly National Influenza and COVID-19 Report: week 23 report (up to week 22 data)



From the 6 January 2021 (week 1 of 2021), the [Joint Committee on Vaccination and Immunisation \(JCVI\)](#) advised initially prioritising delivery of the first vaccine dose to maximise the public health impact in the short term and reduce the number of preventable deaths from COVID-19.

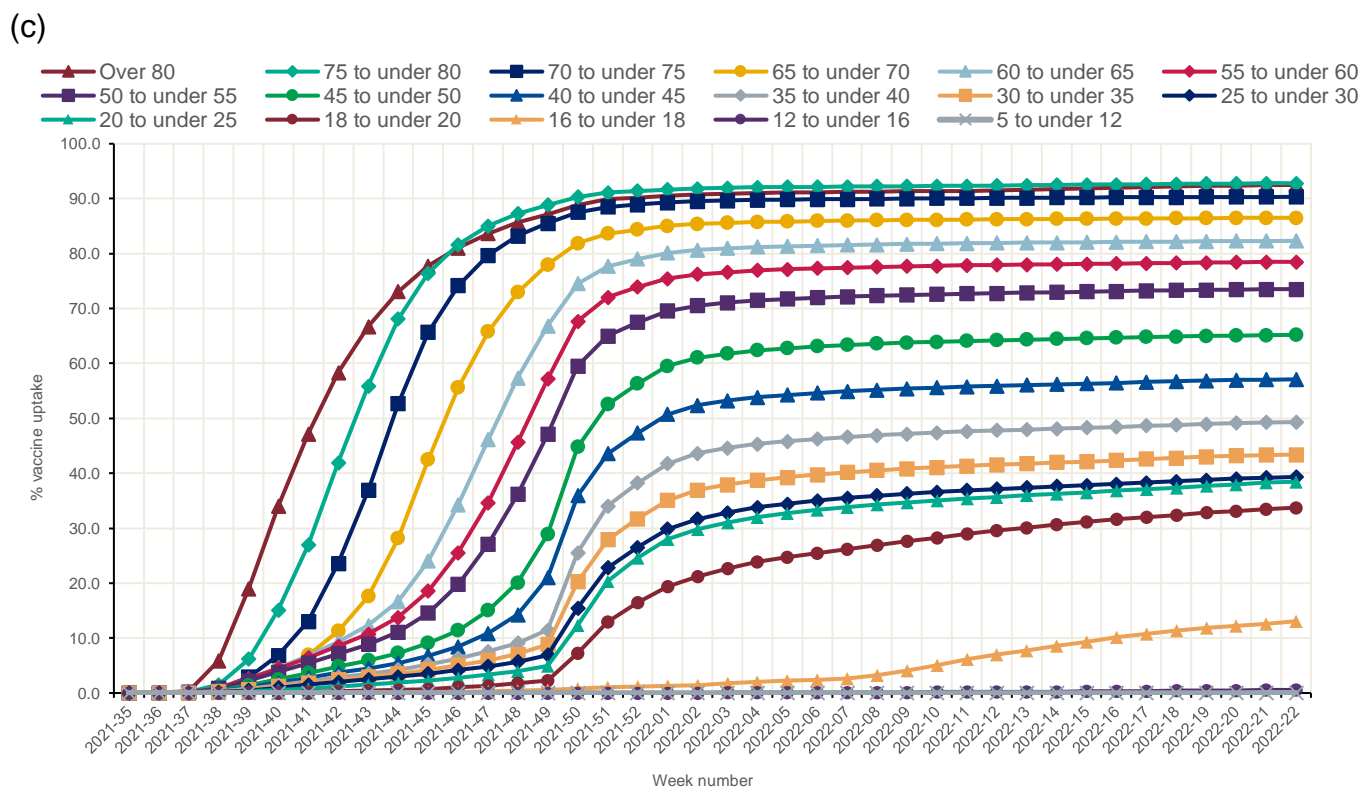


Table 8: Provisional cumulative people vaccinated with any dose of COVID-19 vaccine in the last 3 months; 3 to 6 months and vaccinated more than 6 months ago

National	People in NIMS cohort	Vaccinated in the last 3 months (84 days)		Vaccinated 3 to 6 months ago (85 to 168 days)		Vaccinated 6 months ago (169 or more days)	
		Numbers vaccinated	Percentage vaccinated	Numbers vaccinated	Percentage vaccinated	Numbers vaccinated	Percentage vaccinated
Over 80	2,938,267	2,118,664	72.1	117,725	4.0	574,602	19.6
75 to under 80	2,341,318	1,678,310	71.7	95,293	4.1	469,518	20.1
70 to under 75	2,772,746	137,712	5.0	123,579	4.5	2,354,679	84.9
65 to under 70	2,986,104	85,190	2.9	167,139	5.6	2,506,011	83.9
60 to under 65	3,617,865	85,029	2.4	287,866	8.0	2,911,450	80.5
55 to under 60	4,170,826	89,802	2.2	428,491	10.3	3,197,442	76.7
50 to under 55	4,246,715	89,783	2.1	550,070	13.0	3,038,842	71.6
45 to under 50	3,956,918	89,825	2.3	738,446	18.7	2,418,565	61.1
40 to under 45	4,335,143	106,285	2.5	846,138	19.5	2,394,882	55.2
35 to under 40	4,673,227	137,118	2.9	1,037,047	22.2	2,224,362	47.6
30 to under 35	4,888,496	174,894	3.6	1,081,723	22.1	2,154,251	44.1
25 to under 30	4,557,506	196,947	4.3	1,066,921	23.4	1,853,503	40.7
20 to under 25	3,922,637	216,108	5.5	1,034,429	26.4	1,577,626	40.2
18 to under 20	1,388,303	126,117	9.1	407,085	29.3	485,038	34.9
16 to under 18	1,389,501	231,894	16.7	375,945	27.1	303,543	21.8
12 to under 16	2,938,905	420,667	14.3	854,906	29.1	299,764	10.2
5 to under 12	5,080,574	434,323	8.5	13,800	0.3	243	0.0

Table 8 is presented to provide an overview of how recently a person has been vaccinated either through the primary vaccination campaign or the spring booster campaign. This helps us understand the data in the context of vaccine waning across the whole COVID-19 programme.

Figure 63: Provisional cumulative people vaccinated with any dose of COVID-19 vaccine in the last 3 months; 3 to 6 months and vaccinated more than 6 months ago.

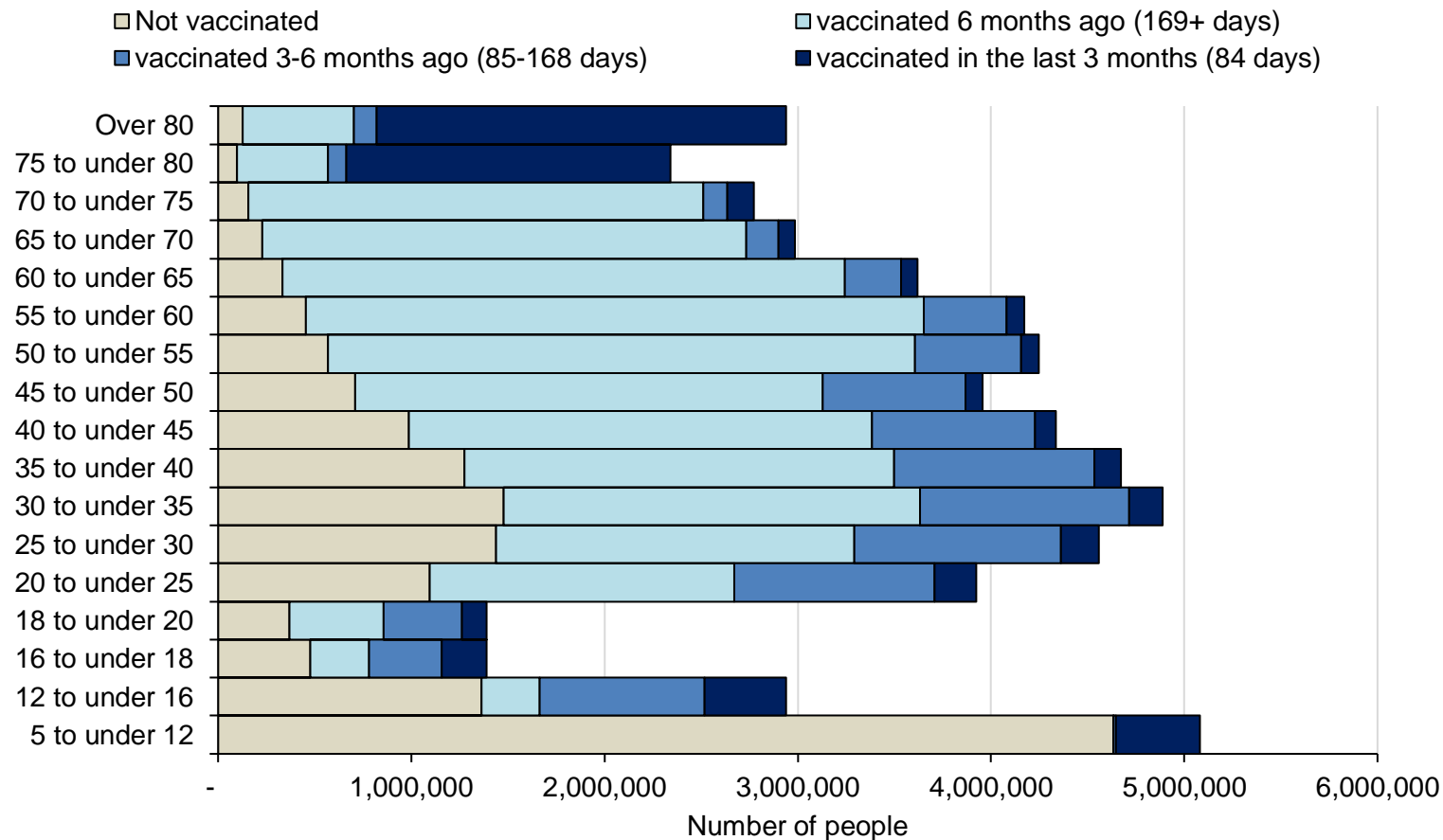


Figure 64: Age-Sex pyramid for COVID-19 vaccine uptake by age in England for Dose 1

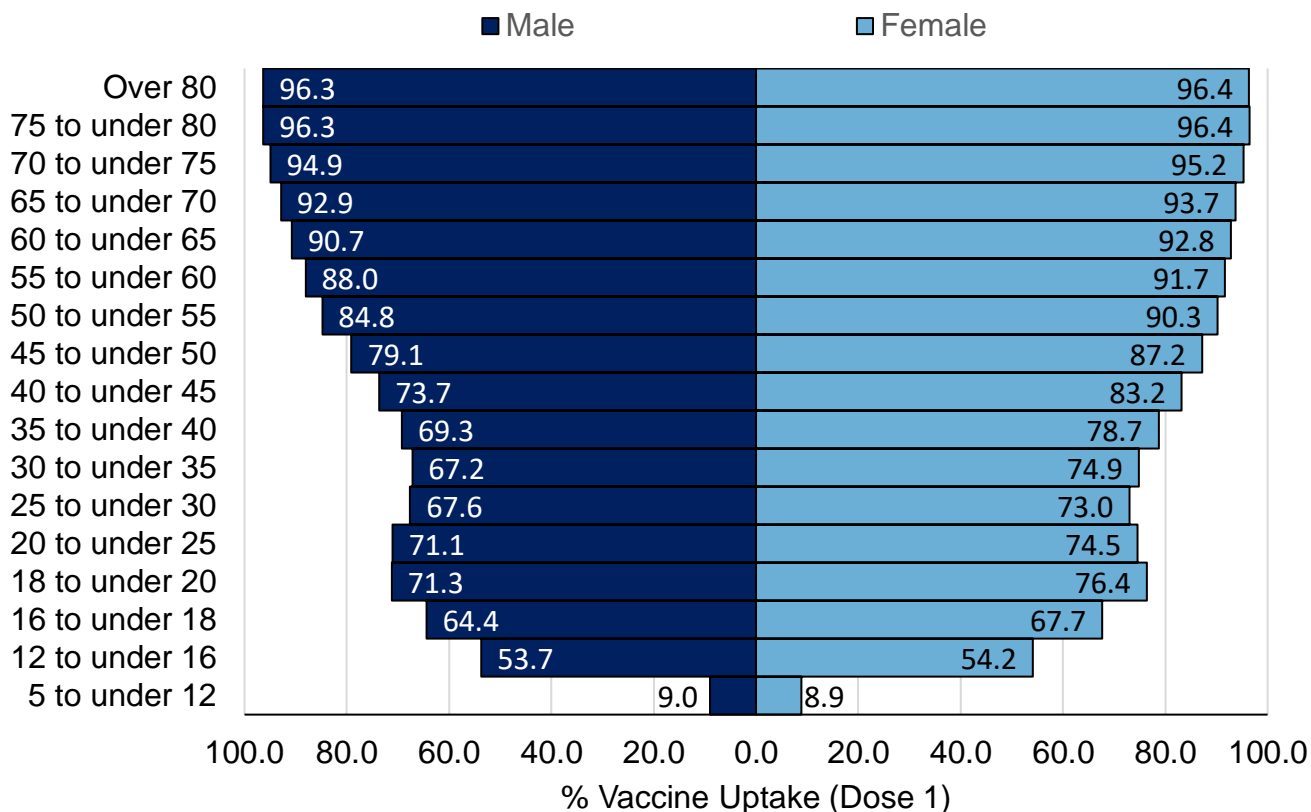


Figure 65: Age-Sex pyramid for COVID-19 vaccine uptake by age in England for Dose 2

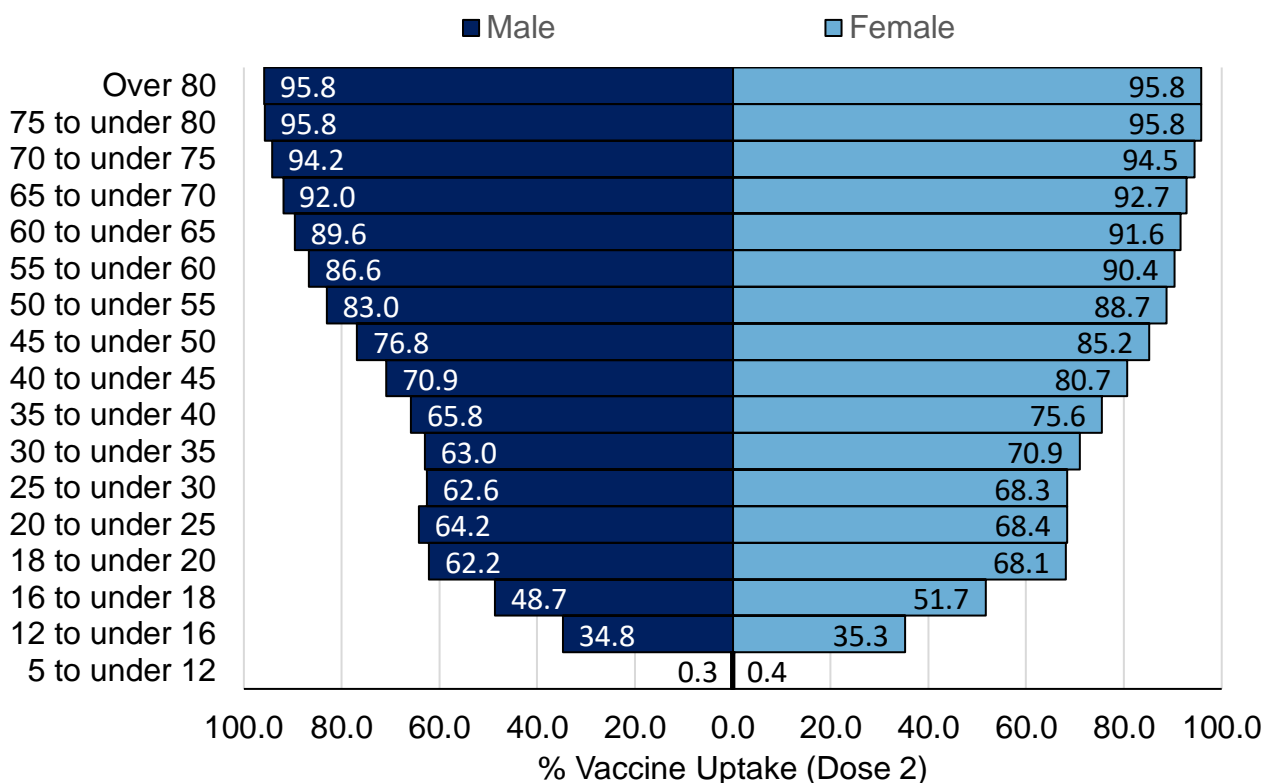
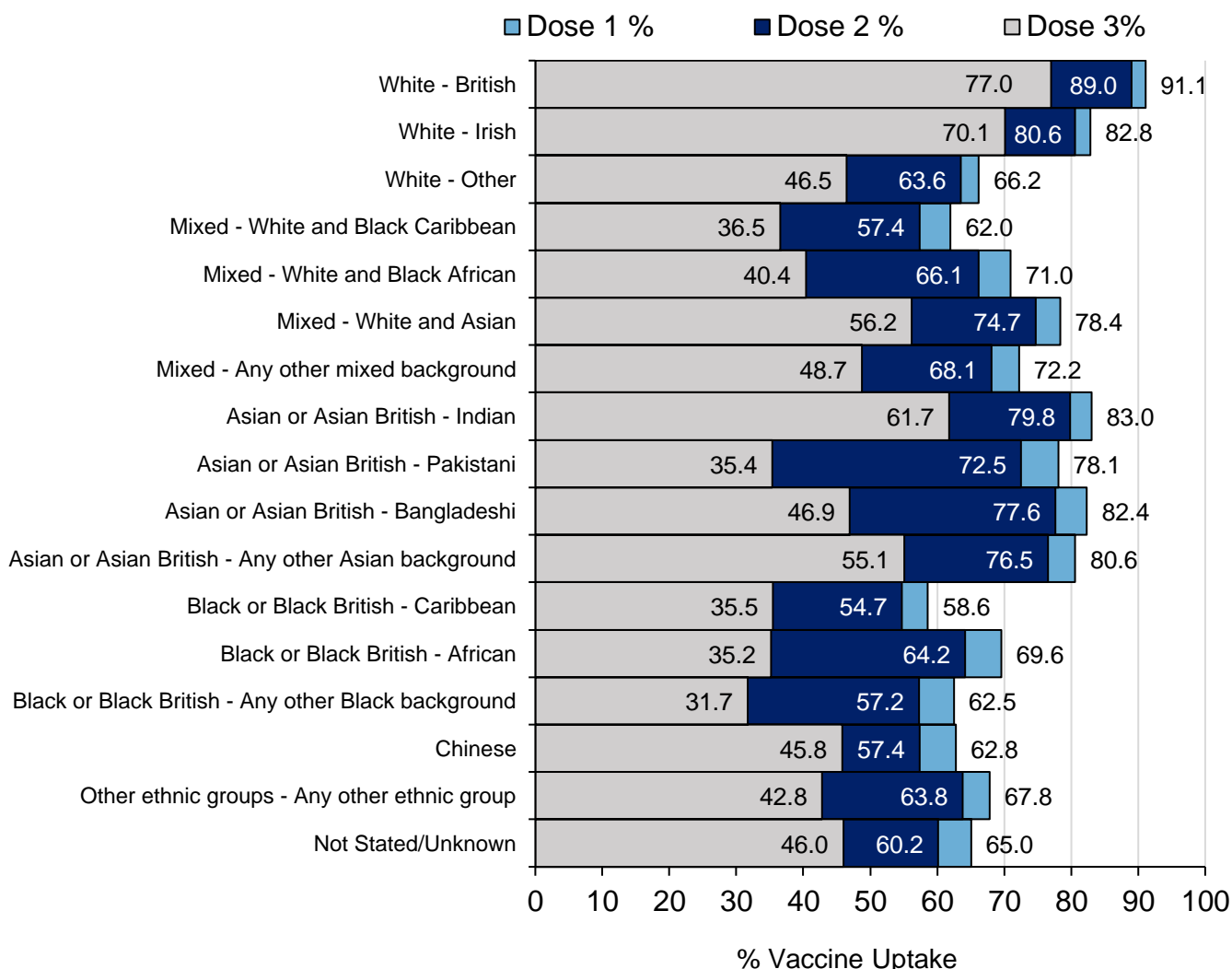


Figure 66: Cumulative weekly COVID-19 vaccine uptake by ethnicity in those living and resident in England, aged 18 and over



For a regional breakdown of the ethnicity data, please see the data file that accompanies this report.

Spring Booster Campaign

Immunity derived from vaccination declines over time and many of the oldest adults who are at much higher risk of severe coronavirus (COVID-19) received their booster vaccine dose in Autumn 2021. Therefore, as a precautionary strategy to maintain high levels of immunity, an extra spring dose is advised around six months and provided there is at least 3 months from the previous dose for adults aged 75 years and over, residents in a care home for older adults, and individuals aged 12 years and over who are immunosuppressed, as defined in the COVID-19 healthcare guidance [Green Book](#).

Tables 9 and 10 present coverage as measured against the total population of people aged 75 and over (so includes people who are not yet due to have their spring booster). It is important that unvaccinated individuals, especially vulnerable adults, receive a primary course of vaccination, irrespective of whether individuals have had previous infection. Table 11 is presented to provide an overview of how recently a person has been vaccinated either through the primary vaccination campaign or the spring booster campaign. This helps us understand the data in the context of vaccine waning across the whole COVID-19 programme. Please note that Table 11 is a subset of Table 8.

By the end of week 22 (week ending 5 June 2022), 71.5% (3,776,768 /5,279,585) of all people aged 75 and over had been vaccinated with a spring booster dose since 21 March 2022, Table 9.

Table 9: Provisional cumulative people vaccinated with at least 3 doses of COVID-19 vaccine since the start of the Spring booster campaign that began on the 21 March 2022 by age in England

National	People in NIMS cohort	Vaccinated with at least 3 doses since 21 March 2022 (spring booster)	Percentage vaccine uptake
Over 80	2,938,267	2,106,733	71.7
75 to under 80	2,341,318	1,670,035	71.3
75 and over	5,279,585	3,776,768	71.5

Weekly National Influenza and COVID-19 Report: week 23 report (up to week 22 data)

By the end of week 22 (week ending 5 June 2022), 71.9% (3,796,974/5,279,585) of people aged 75 and over have now been vaccinated within the last three months, a further 4.0% (213,018/5,279,585) last vaccinated between 3 and 6 months ago and 19.8% (1,044,120/5,279,585) vaccinated six or more months ago.

Table 10: Provisional cumulative people vaccinated with any dose of COVID-19 vaccine in the last 3 months; 3 to 6 months and vaccinated more than 6 months ago

National	People in NIMS cohort	Vaccinated in the last 3 months (84 days)		Vaccinated 3 to 6 months ago (85 to 168 days)		Vaccinated 6 months ago (169 or more days)	
		Numbers vaccinated	Percentage vaccinated	Numbers vaccinated	Percentage vaccinated	Numbers vaccinated	Percentage vaccinated
Over 80	2,938,267	2,118,664	72.1	117,725	4.0	574,602	19.6
75 to under 80	2,341,318	1,678,310	71.7	95,293	4.1	469,518	20.1
75 and over	5,279,585	3,796,974	71.9	213,018	4.0	1,044,120	19.8

Table 11: Provisional cumulative people vaccinated with a spring booster COVID-19 vaccine against those eligible by the end of each month

Age on 31 March 2022	Number of people eligible for spring booster on 31 March 2022	Number of eligible people vaccinated (up to end of previous week)	Percentage vaccine uptake (up to 8 May) in those eligible on 31 March 2022
Over 80	1,181,403	1,022,040	86.5
75 to 79	479,192	400,669	83.6
75 and over	1,660,595	1,422,709	85.7
Age on 30 April 2022	Number of people eligible for spring booster on 30 April 2022	Number of eligible people vaccinated (up to end of previous week)	Percentage vaccine uptake (up to 8 May) in those eligible on 30 April 2022
Over 80	2,243,803	1,883,450	83.9
75 to 79	1,717,788	1,463,199	85.2
75 and over	3,961,591	3,346,649	84.5

Table 11 looks at people aged 75 and over at the end of each month who are eligible for a spring booster if they have completed a primary course of two doses and are at least six months from their previous dose. Eligible population figures help to show that people who become eligible first are vaccinated earlier in the Spring booster campaign.

Please note that this uses a different age cut off definition to the rest of the report and is therefore not a subset of other tables. Eligible population figures in this table do not include those who are aged 75 and over and have not been vaccinated; unvaccinated people are taken into consideration in the coverage tables above.

Immunosuppression

Provisional vaccine uptake data in living and resident people identified as immunosuppressed in England to the end of week 22 (week ending 5 June 2022) can be found in table 10. This shows that vaccine uptake in the 515,383 identified as immunosuppressed was 95.7% for at least dose 1, 94.6% for at least 2 doses and 88.6% for at least 3 doses. Data on vaccine uptake in people with at least 3 doses by age in England can be found in the National flu and COVID-19 surveillance reports.

Table 12: Vaccine uptake in people identified as immunosuppressed in England

Immuno-suppression	People in NIMs Cohort	Numbers vaccinated with at least 1 dose	Percentage vaccine uptake with at least 1 dose	Numbers vaccinated with at least 2 doses	Percentage vaccine uptake with at least 2 doses	Numbers vaccinated with at least 3 doses	Percentage vaccine uptake with at least 3 doses
England	515,383	493,192	95.7	487,384	94.6	456,681	88.6

Table 13: Vaccine uptake in people identified as immunosuppressed in England with at least 3 doses of COVID-19 vaccine since the start of the Spring booster campaign that began on the 21 March 2022 by age in England.

Immuno-suppression	People in NIMS cohort	Vaccinated with at least 3 doses since 21 March 2022 (spring booster)	Percentage vaccine uptake
England	515,383	129,263	25.1

Tables 12 and 13 present coverage as measured against the total population of people identified as immunosuppressed, many of whom have been recently vaccinated and are therefore not yet due to have their spring booster.

Table 14: People identified as immunosuppressed in England vaccinated with any dose of COVID-19 vaccine in the last 3 months; 3 to 6 months and vaccinated more than 6 months ago.

Immuno-suppression	People in NIMS cohort	Vaccinated in the last 3 months (84 days)		Vaccinated 3 to 6 months ago (85 to 168 days)		Vaccinated 6 months ago (169 or more days)	
		Numbers vaccinated	Percentage vaccinated	Numbers vaccinated	Percentage vaccinated	Numbers vaccinated	Percentage vaccinated
England	515,383	141,309	27.4	216,361	42.0	135,522	26.3

Table 14 is presented to provide an overview of how recently a person identified as immunosuppressed has been vaccinated either through the primary vaccination campaign or the spring booster campaign. This helps us understand the data in the context of vaccine waning across the whole COVID-19 programme and shows that most people identified as immunosuppressed have been recently vaccinated.

Detailed information on the NHS Digital characterisation of the immunosuppressed group can be found on the [NHS Digital website](#).

For COVID-19 data on the real-world effectiveness and impact of the COVID-19 vaccines, please see [the COVID-19 vaccine weekly surveillance reports](#)

For COVID-19 management information on the number of COVID-19 vaccinations provided by the NHS in England, please see the [COVID-19 vaccinations](#) webpage.

For UK COVID-19 daily counts of vaccinations, please see the [Vaccinations' section of the UK COVID-19 dashboard](#).

International update

Global COVID-19 update

Globally, up to 7 June 2022, a total of 535,421,233 cases of COVID-19 infection have been reported worldwide, including 6,298,172 COVID-19 related deaths.

For further information on the global COVID-19 situation please see the [WHO COVID-19 situation reports](#).

Figure 67: Global map of cumulative COVID-19 cases

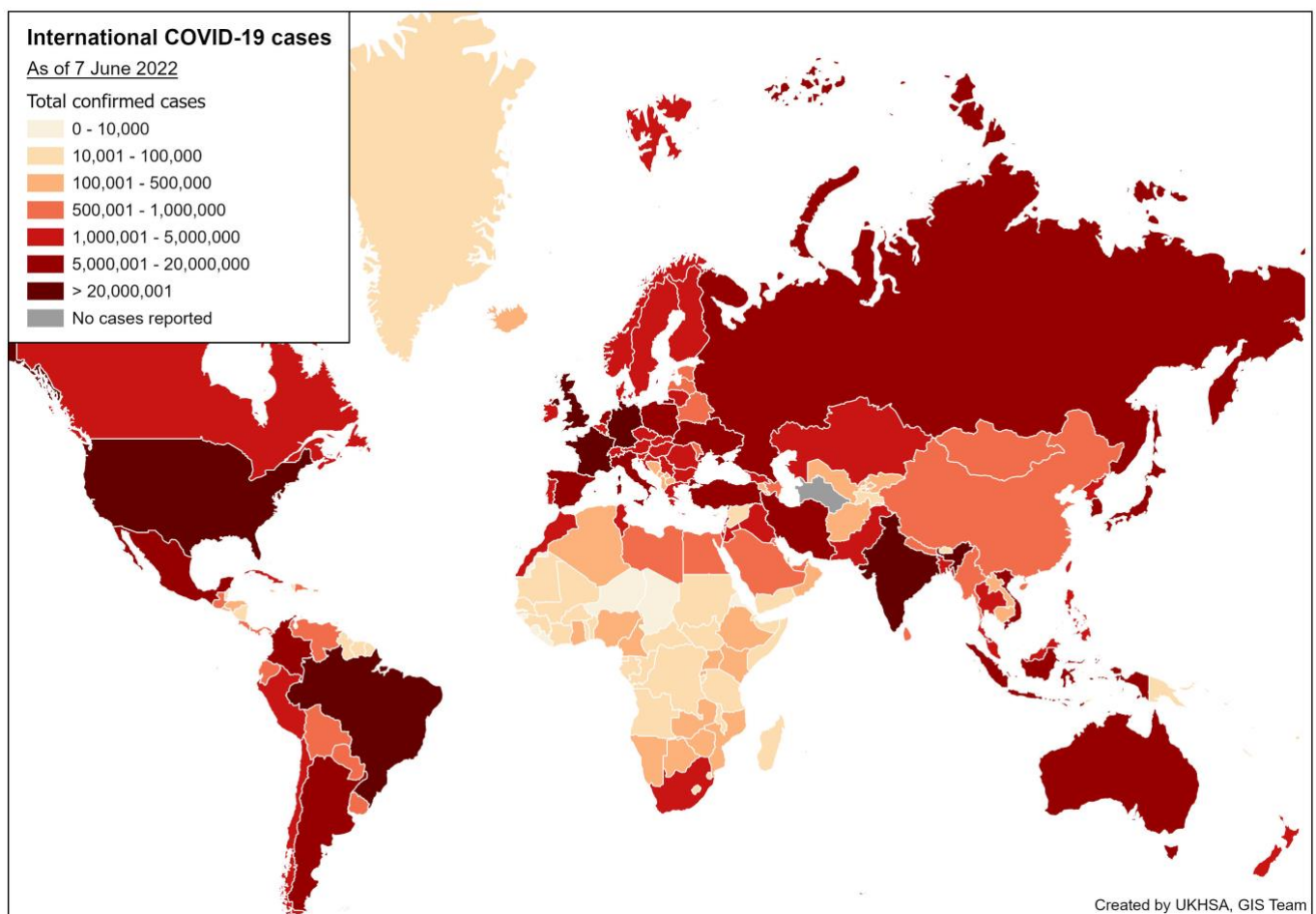


Figure 68: Global map of percentage change in weekly COVID-19 case incidence rate per 100,000 population compared to the previous week

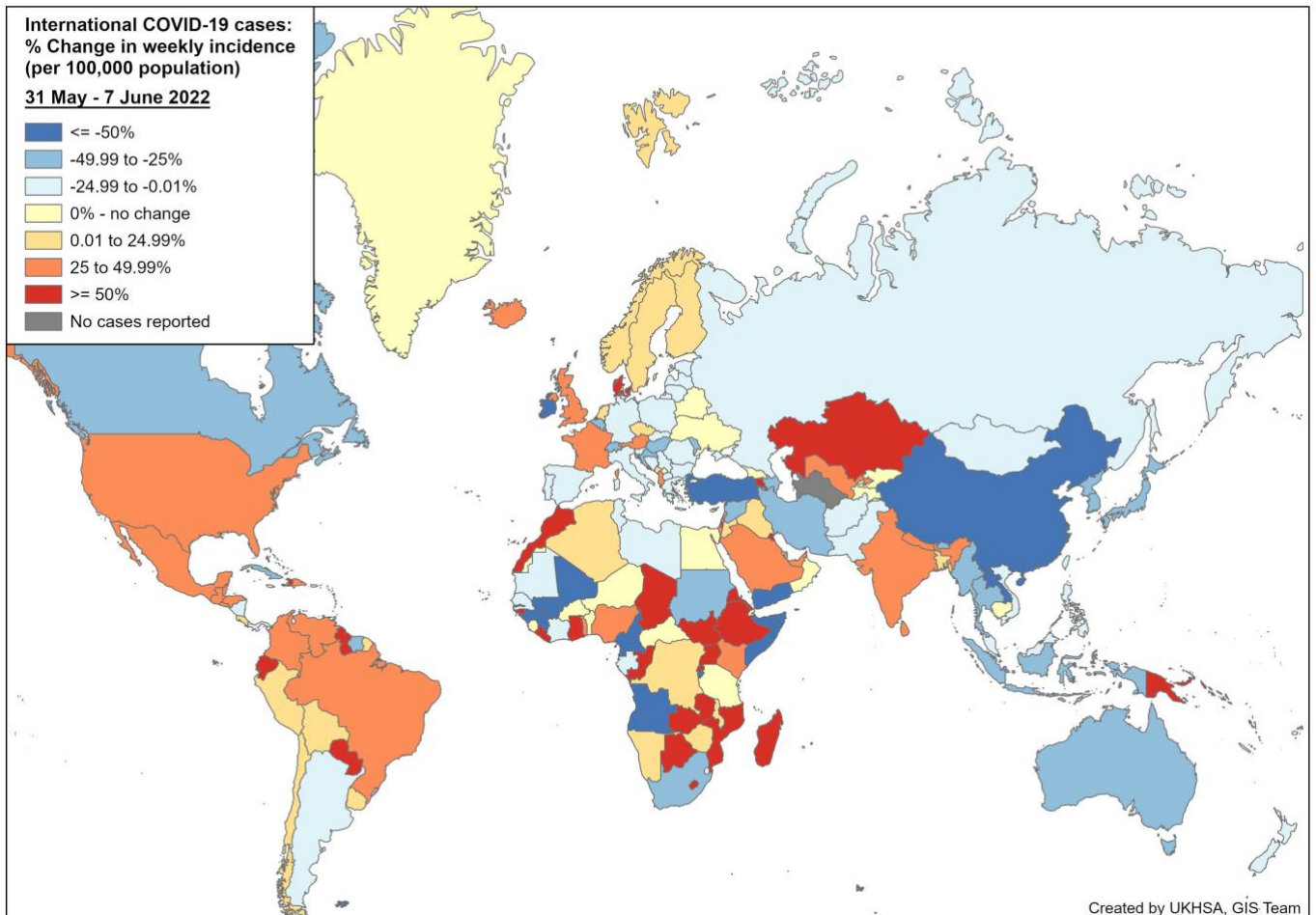
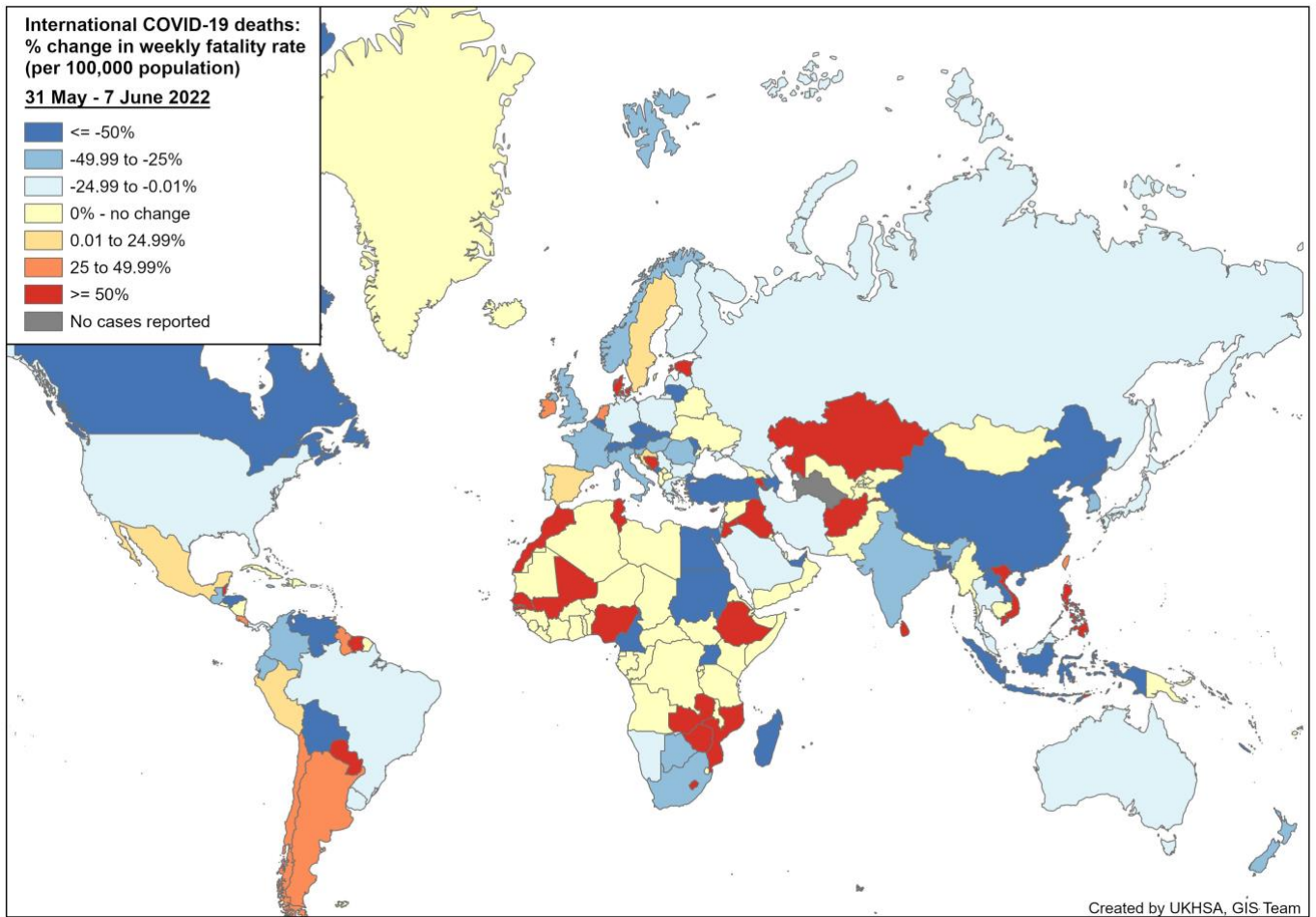


Figure 69: Global map of percentage change in weekly COVID-19 fatality rate per 100,000 population compared to the previous week



Global influenza update

Updated on 30 May 2022 (based on data up to 15 May 2022) ([WHO website](#)).

In the temperate zones of the northern hemisphere, influenza activity decreased or remained stable. Detections were mainly influenza A(H3N2) viruses and B/Victoria lineage viruses, with some detections of A(H1N1)pdm09 viruses. In the temperate zones of the southern hemisphere, influenza activity was low overall, except in Argentina and Chile. Influenza detections increased in South Africa and Australia.

In the countries of North America, influenza activity was stable compared to the previous period and influenza positivity was higher than usual for this time of year. Activity was predominantly due to influenza A viruses, with A(H3N2) predominant among the subtyped viruses.

In Europe, overall influenza continues to decline with influenza A(H3N2) predominant.

In East Asia, detections of influenza B (Victoria lineage) viruses continued to decrease in China while influenza A(H3N2) detections increased in the Southern Provinces to make influenza A (H3N2) the predominantly detected virus in China. Elsewhere, influenza illness indicators and activity remained low.

In Central Asia, no influenza detections were reported.

In Northern Africa, Tunisia reported a single influenza A (H3N2) detection.

In Western Asia, influenza activity was low across reporting countries except Georgia and Qatar where elevated detections of influenza A (H3N2) and mainly influenza A(H3N2) and some influenza A(H1N1)pdm09 and B viruses were reported respectively.

In the Caribbean and Central American countries, low influenza activity was reported with influenza A(H3N2) predominant.

In tropical South America, low influenza activity was reported with influenza A(H3N2) predominant.

In tropical Africa, influenza activity remained low with influenza A(H3N2) predominating followed by influenza B/Victoria lineage viruses.

In Southern Asia, influenza virus detections were at low levels with a few influenza A(H3N2), A(H1N1)pdm09 viruses and influenza B detections.

In South-East Asia, sporadic detections of influenza A(H3N2) were reported in Singapore and sporadic influenza A and B detections were reported in Malaysia.

The WHO Global Influenza Surveillance and Response System (GISRS) laboratories tested more than 224,033 specimens during the period 2 May to 15 May 2022. A total of 23,784 were positive for influenza viruses, of which 23,393 (98.4%) were typed as influenza A and 394 (1.6%) as influenza B. Of the sub-typed influenza A viruses, 153 (4.3%) were influenza A(H1N1)pdm09 and 3,427 (95.7%) were influenza A(H3N2). Of the characterized B viruses, all 129 (100%) belonged to the B-Victoria lineage.

Influenza in Europe

Updated on 25 May 2022, up to week 19 of 2022 ([Joint ECDC-WHO Europe Influenza weekly update](#))

This is the last weekly update for the influenza season, and updates until week 40, 2022 will be on a monthly basis.

For the region as a whole influenza activity reached well above that observed in the 2020 to 2021 season.

Influenza activity, based on sentinel primary care specimens from patients presenting with ILI or ARI symptoms, first peaked in week 52 of 2021 (when it reached 19% positivity), declining thereafter until week 4 of 2022, when it increased again reaching a plateau phase (25 to 30% positivity) between weeks 10 and 15 of 2022 (this represents late activity compared to most previous seasons) followed by a subsequent 5-week decline.

For week 20 of 2022, of 38 countries and areas reporting on intensity of influenza activity, 21 reported baseline-intensity (across the Region), 14 reported low-intensity (across the Region), 2 reported medium-intensity (Georgia and Kazakhstan) and 1 reported high-intensity (Luxembourg).

Of 39 countries and areas reporting on geographic spread of influenza viruses, 14 reported no activity (in eastern, southern and western areas), 14 reported sporadic spread (across the Region), 2 reported local spread (Republic of Moldova and United Kingdom (Scotland)), 1 reported regional spread (Luxembourg) and 8 reported widespread activity (Estonia, Georgia, Germany, Latvia, Netherlands, Norway, Portugal and Sweden).

So far in the 2021 to 2022 influenza season, of 59,819 sentinel specimens tested for influenza viruses, 7,064 were positive with the most dominant strain being A(H3).

Influenza in North America

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](#).

Influenza in Australia

ILI activity in the community has increased since March 2022, and from mid-April 2022 the number of laboratory-confirmed influenza notifications has exceeded the 5 year average.

The Australian Government Ministry of Health advises that “due to the COVID-19 epidemic in Australia, data reported from the various influenza surveillance systems may not represent an accurate reflection of influenza activity. Results should be interpreted with caution, especially where comparisons are made to previous influenza seasons.”

For further information on influenza in Australia please see the [Australian Influenza Surveillance Report and Activity Updates](#).

Other respiratory viruses

Avian influenza and other zoonotic influenza

[Latest WHO update on 13 May 2022](#)

Since the previous WHO update on 7 April 2022, 1 human case of infection with influenza A(H5N6) and 1 human case of influenza A(H5N1) have been reported officially. One human case of influenza A(H3N8) was reported in this time period from China, and based on the information currently available is the first case of human influenza A(H3N8) infection reported globally. One case of an Eurasian avian-like swine influenza A(H1N1)v virus was reported from Germany.

Middle East respiratory syndrome coronavirus (MERS-CoV)

From September 2012 to 15 May 2022, a total of 2,591 laboratory-confirmed cases of MERS-CoV and 894 associated deaths were reported globally to WHO under the International Health Regulations (IHR 2005).

On 28 April 2022, the National IHR Focal point of Oman notified WHO of one case of MERS-CoV in Oman ([WHO website](#)).

Between 22 March and 3 April 2022, the National IHR Focal Point of Qatar reported two laboratory-confirmed cases of Middle East respiratory syndrome coronavirus (MERS-CoV) infection to the WHO ([WHO website](#)).

Up to 17 August 2021, a total of 5 cases of Middle East respiratory syndrome coronavirus, MERS-CoV, (3 imported and 2 linked cases) have been confirmed in the UK through ongoing surveillance since September 2012.

Further information on management and guidance of possible cases is available [online](#). The latest [ECDC MERS-CoV risk assessment](#) highlights 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](#)

[COVID-19 vaccine surveillance reports](#)

[Previous COVID-19 vaccine surveillance reports](#)

[Public Health England \(PHE\) monitoring of the effectiveness of COVID-19 vaccination](#)

[Investigation of SARS-CoV-2 variants of concern: technical briefings](#)

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