



UK Health
Security
Agency

Weekly national Influenza and COVID-19 surveillance report

Week 22 report (up to week 21 data)

6 June 2022

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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 23 May 2022 and 29 May 2022) and for some indicators daily data up to 31 May 2022.

Due to the Spring Bank Holiday and Jubilee Bank Holiday, this report is published on 6 June 2022.

Please note that in line with the end of the 2021 to 2022 influenza season, some influenza indicators will not be included from this week's report onwards. Reporting will recommence in the autumn for the 2022 to 2023 influenza season.

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 COVID-19 activity continued to decrease in week 21 of 2022. Surveillance indicators suggest influenza activity is low and decreased in week 21 in 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 decreased in week 21. Case rates decreased slightly in all age groups, regions and ethnic groups, with decreases most notable in those aged over 80.

The overall number of reported acute respiratory incidents decreased compared to the previous week. SARS-CoV-2 was identified in the majority of these.

COVID-19 hospitalisations decreased in week 21. 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 is very low, with a decrease to 0.7% in week 21. Other indicators for influenza such as hospital admissions and GP influenza-like illness consultation rates remain low. RSV positivity continued to increase to 3.8% overall and 13.8% in the under 5 year olds in week 21, while rhinovirus positivity decreased to 8.7%. Adenovirus positivity decreased to 3.6% overall. Parainfluenza positivity decreased to 4.5%, while human metapneumovirus (hMPV) positivity remained low at 0.2% in week 21.

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 31 May 2022, a total of 1,645,042 episodes have been confirmed for COVID-19 in England under Pillar 1, and 17,112,641 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 decreased in week 21. Case rates decreased slightly in all age groups, regions and ethnic groups, with decreases most notable in those aged over 80.

Please note that due to a technical issue, positivity data was unavailable for the week 22 report.

* 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](#).

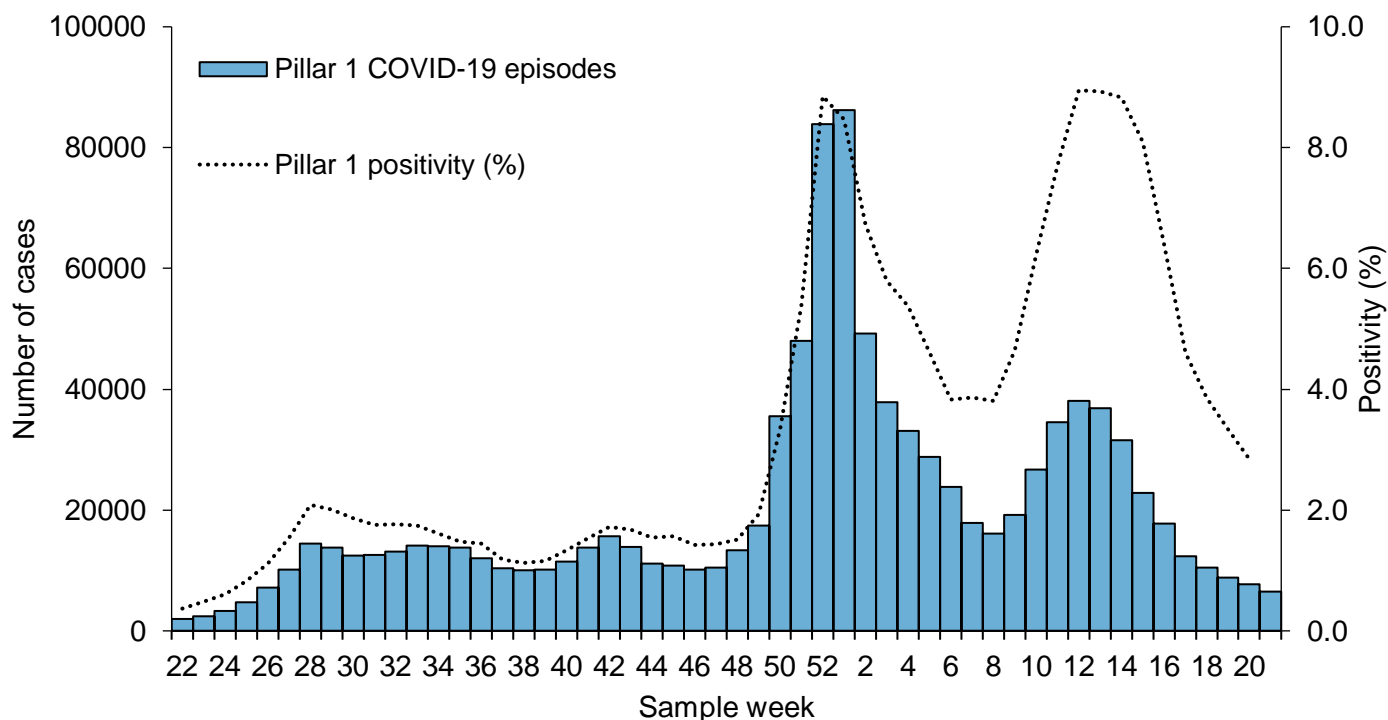
* From the week 32 2021 report onwards, case rates have been updated to use the latest Office for National Statistics (ONS) population estimates for mid-2020. Previously case rates were calculated using the mid-2019 population estimates. Rates by ethnicity and Indices of Multiple Deprivation (IMD) quantile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

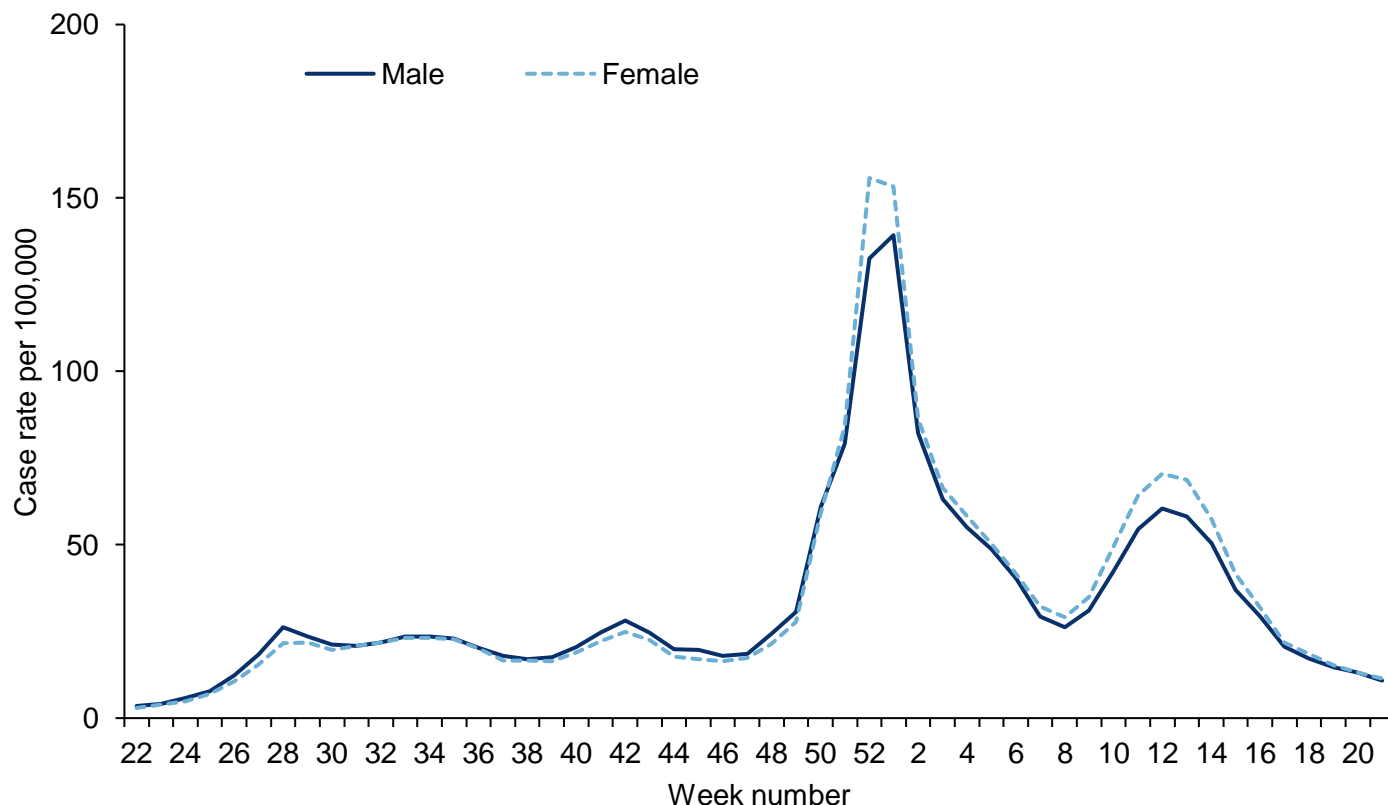


Figure 3: Weekly confirmed COVID-19 case rates per 100,000, by episode, tested under Pillar 1, by age group

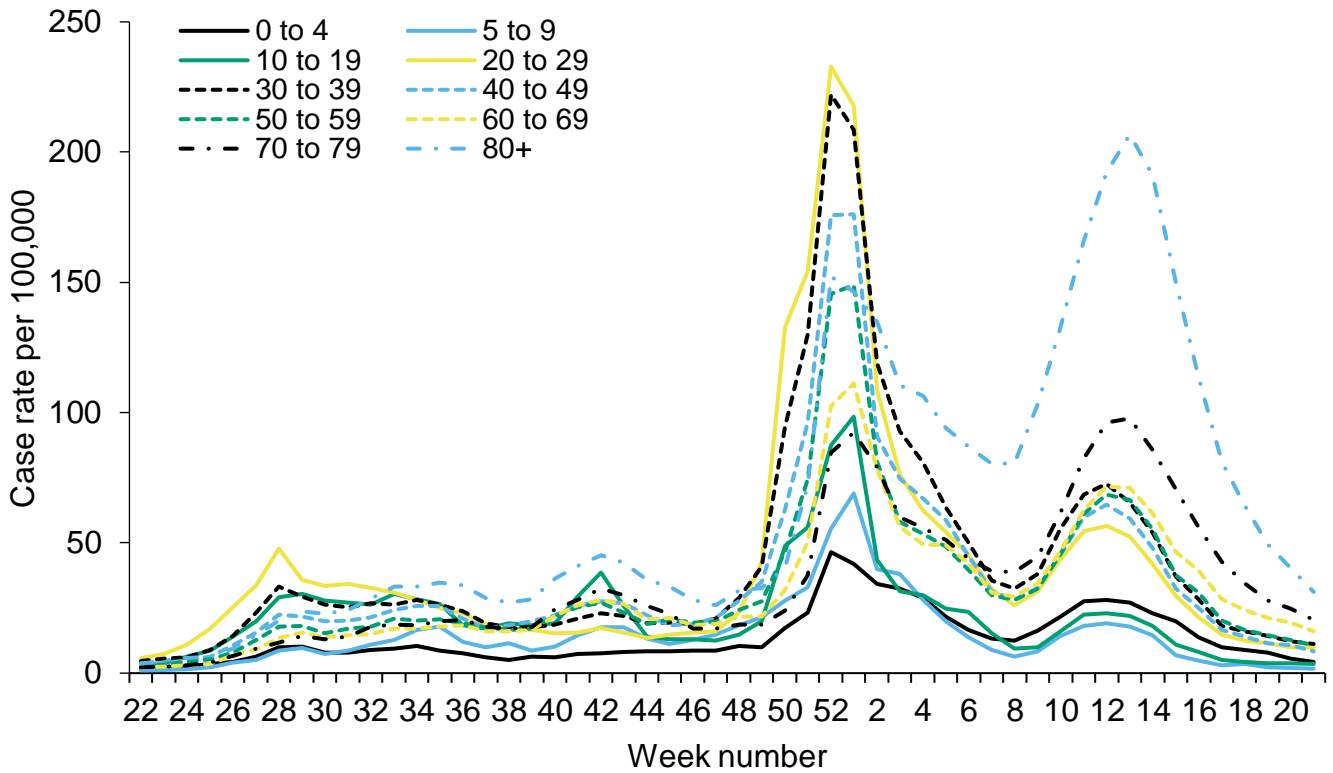


Figure 4: Weekly PCR positivity (%) of confirmed COVID-19 cases tested overall and by sex under Pillar 1

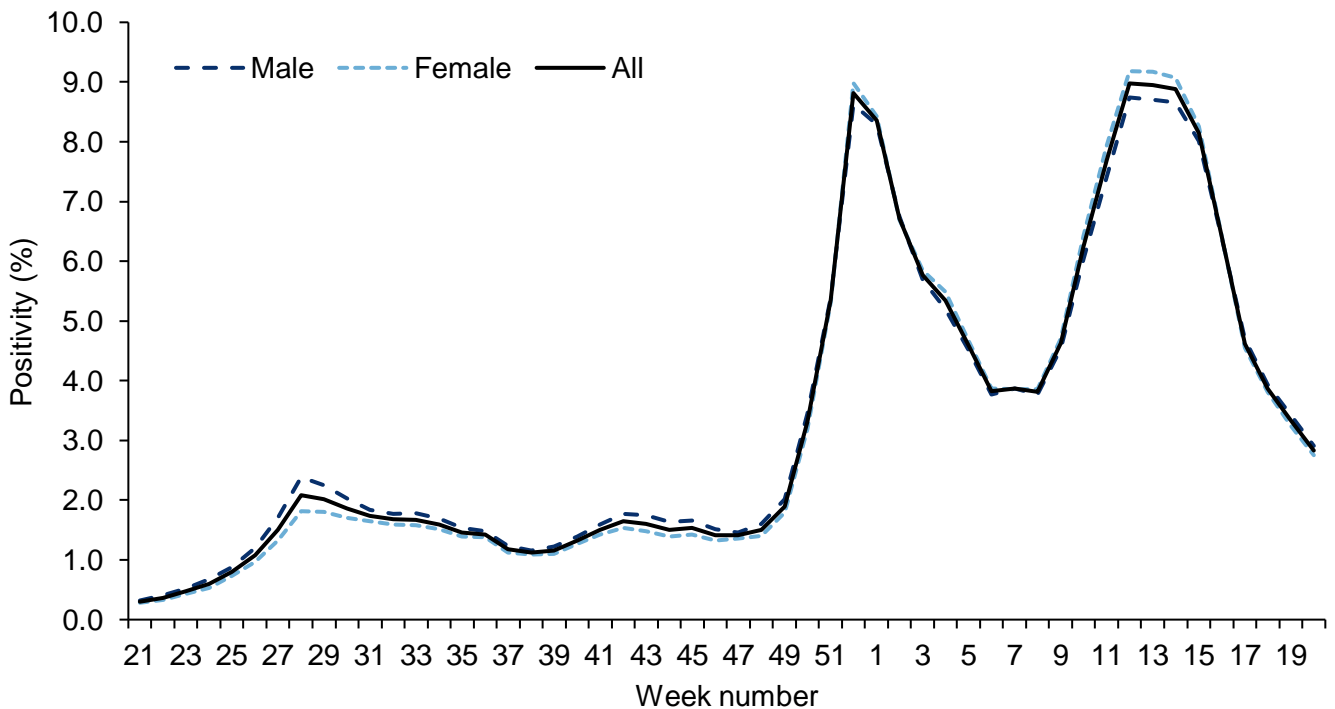
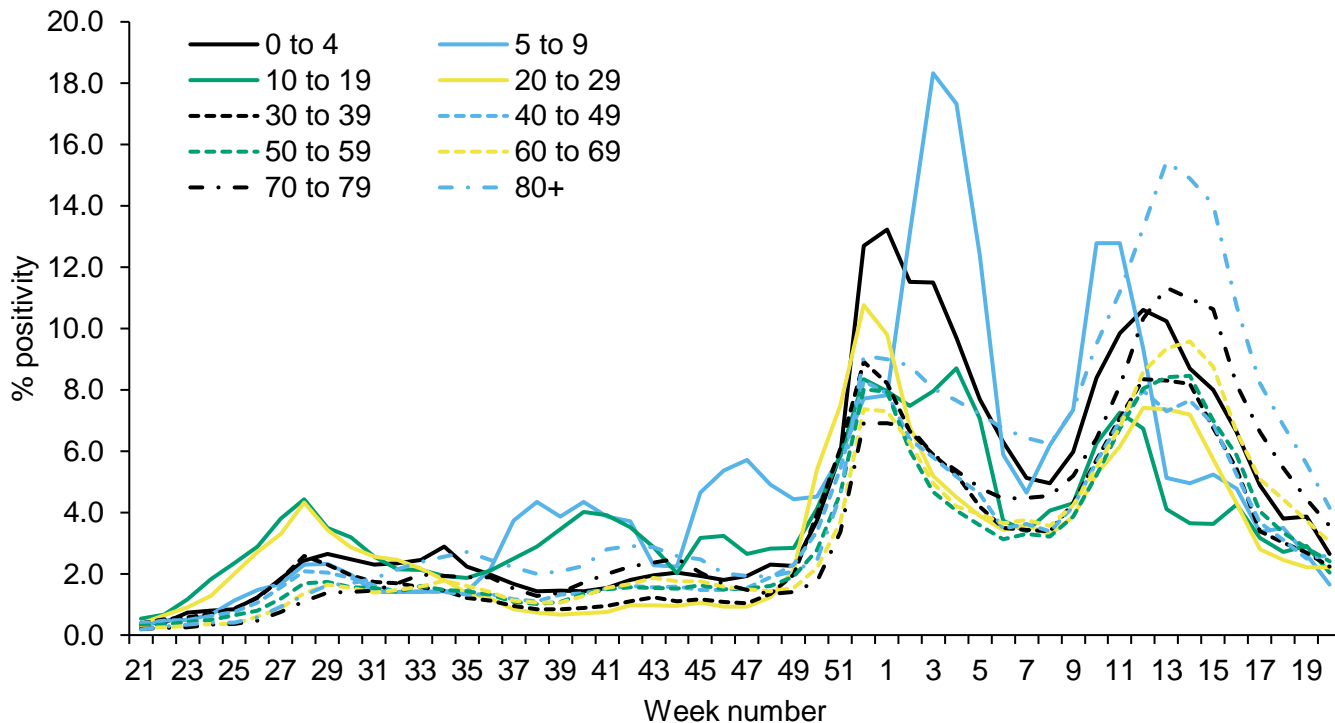
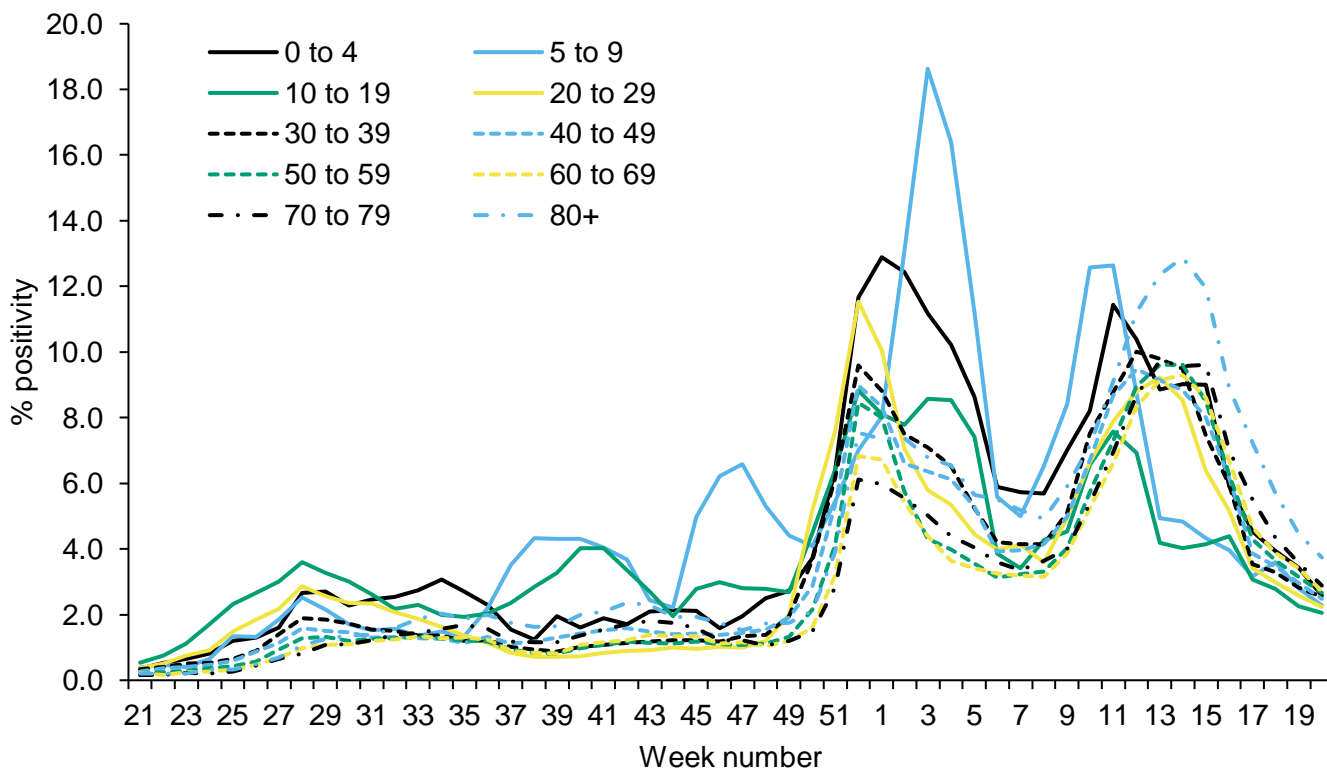


Figure 5: Weekly PCR positivity (%) of confirmed COVID-19 cases tested under Pillar 1, (a) by male and age group and (b) by female and age group

(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

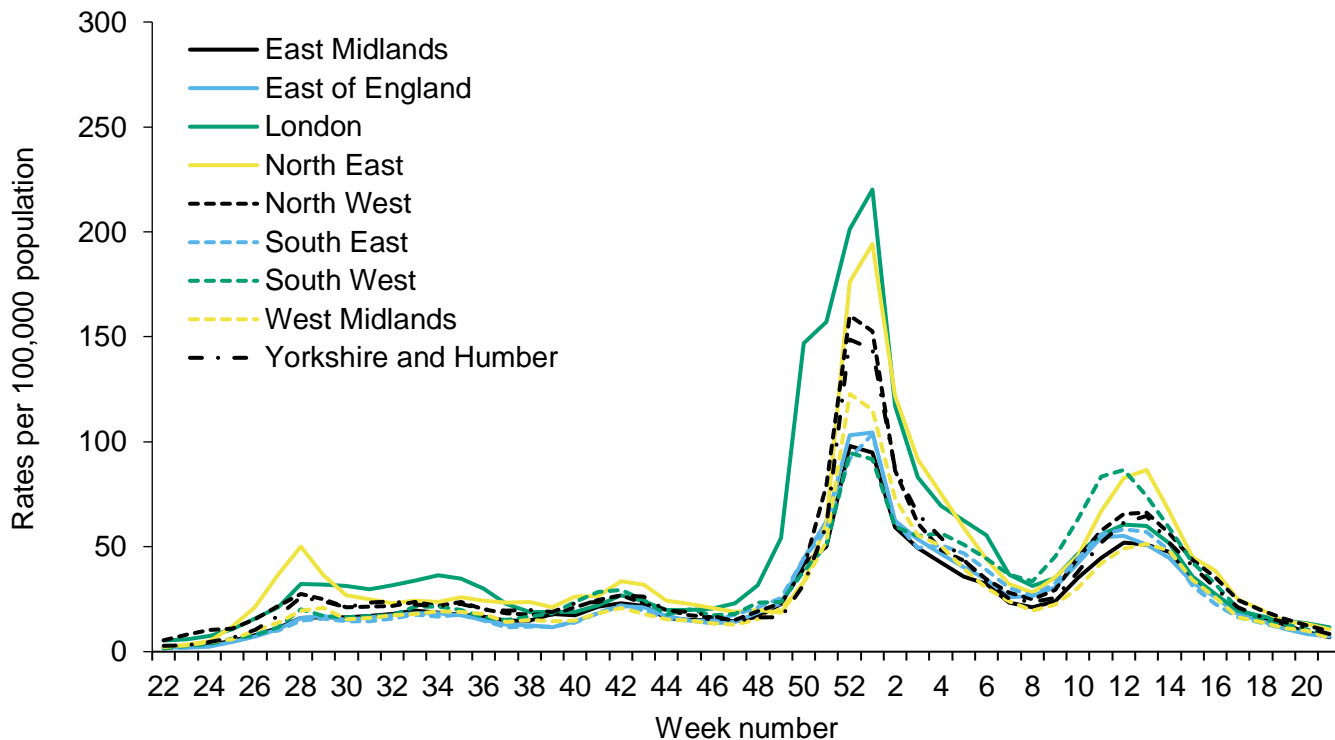


Figure 7: Weekly PCR positivity of confirmed COVID-19 cases tested under Pillar 1 (%) by UKHSA Centres and sample week

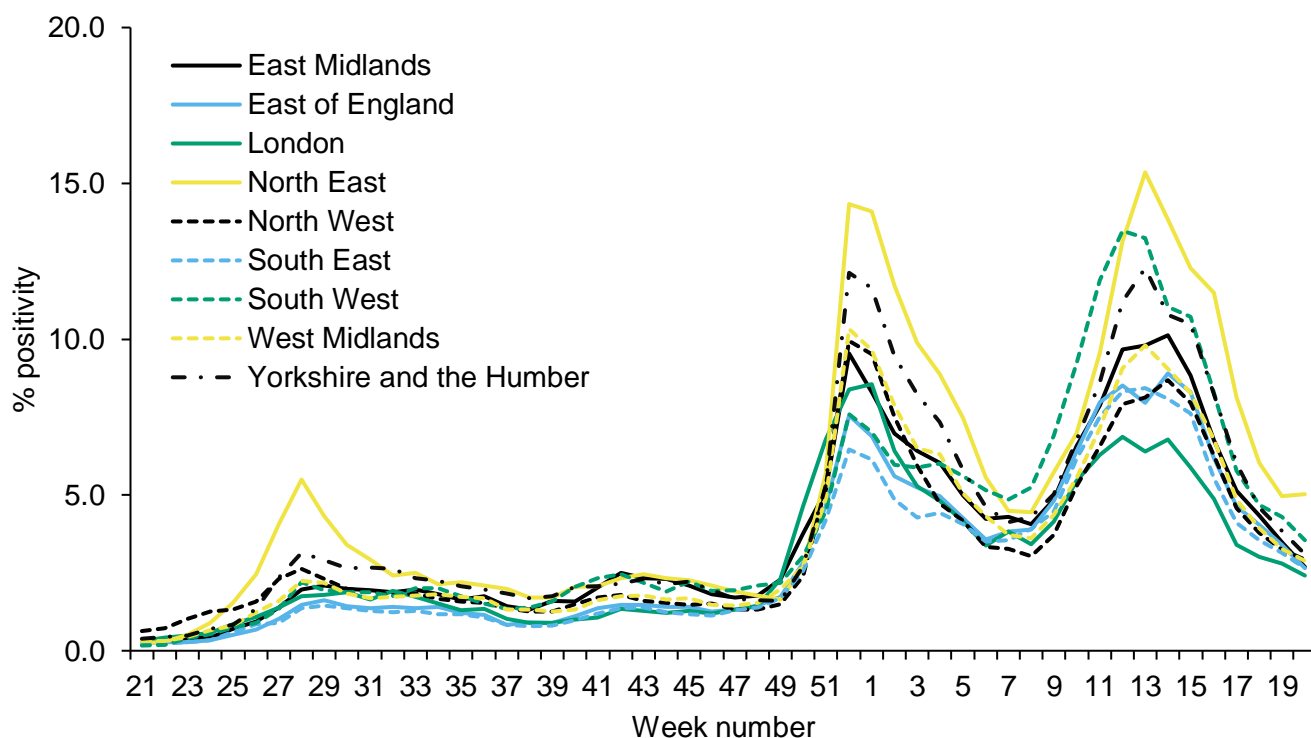
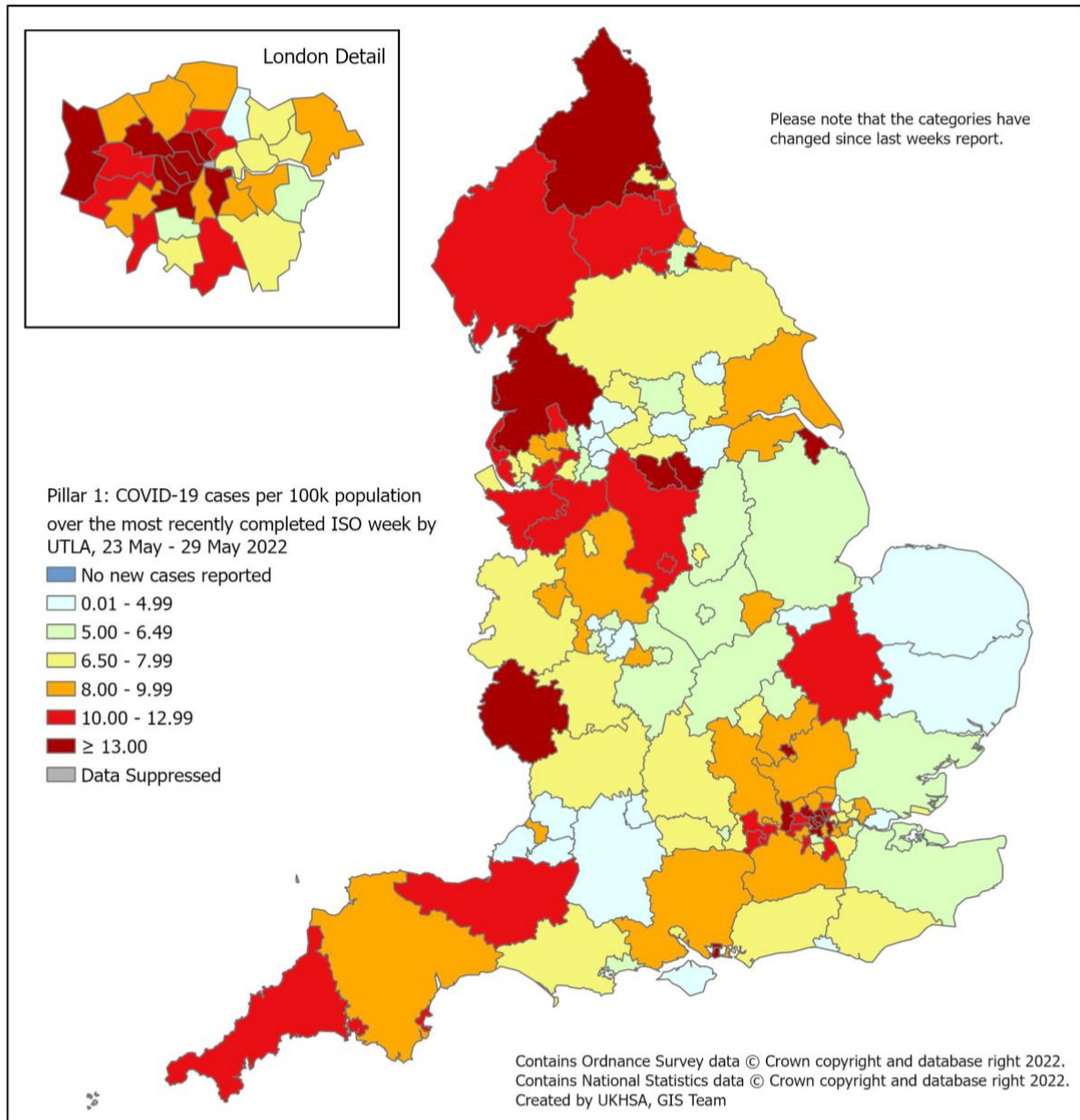
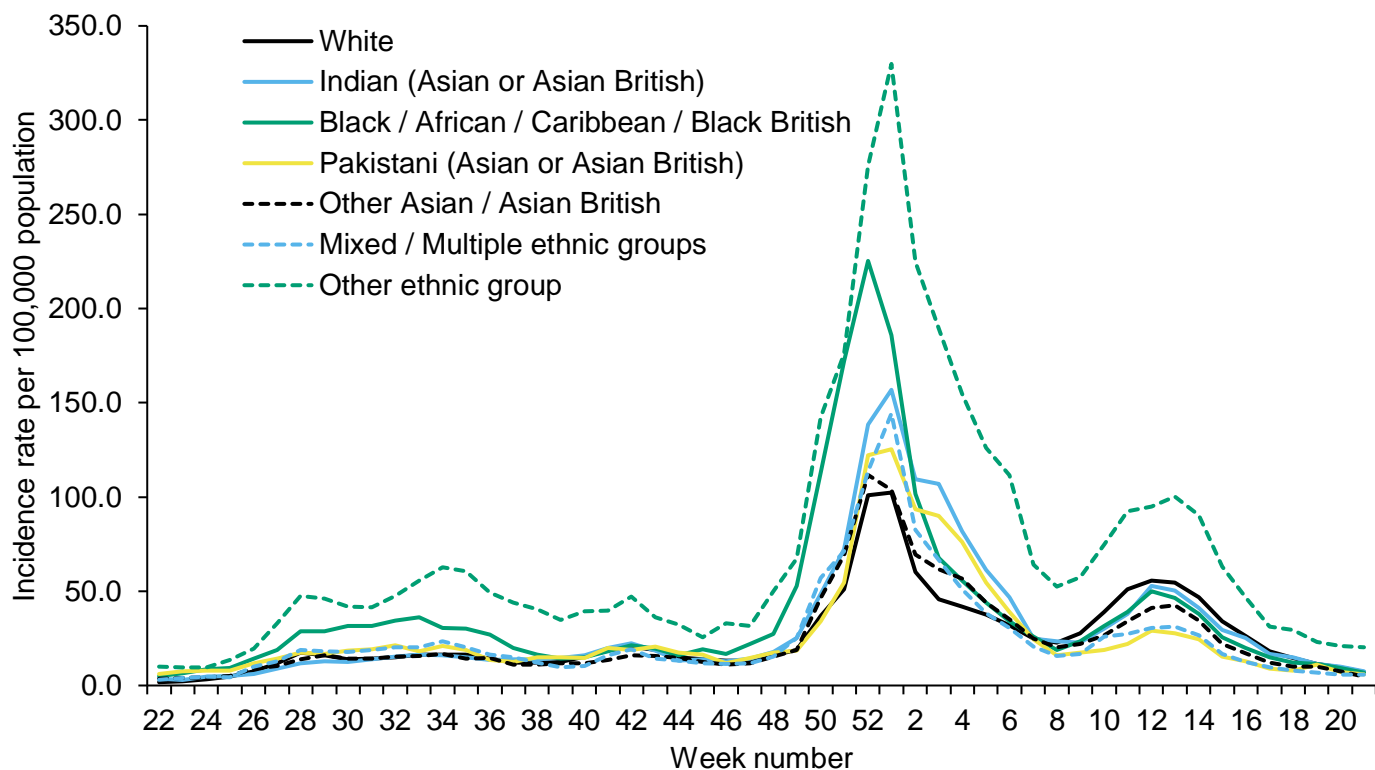


Figure 8: Weekly rate of COVID-19 episodes per 100,000 population (Pillar 1), by upper-tier local authority, England (box shows enlarged map of London area)



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 21 of 2022, out of the 51,360 respiratory specimens reported through the Respiratory DataMart System (based on data received from 16 out of 17 laboratories), 905 samples were positive for SARS-CoV-2 with an overall positivity of 1.8%. The highest positivity was noted in the 15 to 44 year olds at 1.9% in week 21.

The overall influenza positivity remained very low and decreased to 0.7% in week 21, with 53 samples testing positive for influenza (including 8 influenza A(H3N2), 5 influenza A(H1N1)pdm09, 36 influenza A(not subtyped) and 4 influenza B).

Respiratory syncytial virus (RSV) positivity continued to increase to 3.8% in week 21, with the highest positivity in the under 5 year olds at 13.8%.

Adenovirus positivity decreased to 3.6% overall with the highest positivity in under 5 year olds at 7.9%. Rhinovirus positivity was at 8.7% overall and 19.4% in under 5 year olds. Parainfluenza positivity decreased to 4.5%, while human metapneumovirus (hMPV) positivity remained low at 0.2% in week 21 (Figure 12).

Figure 10: Respiratory DataMart samples positive for influenza and weekly positivity (%) for influenza, England

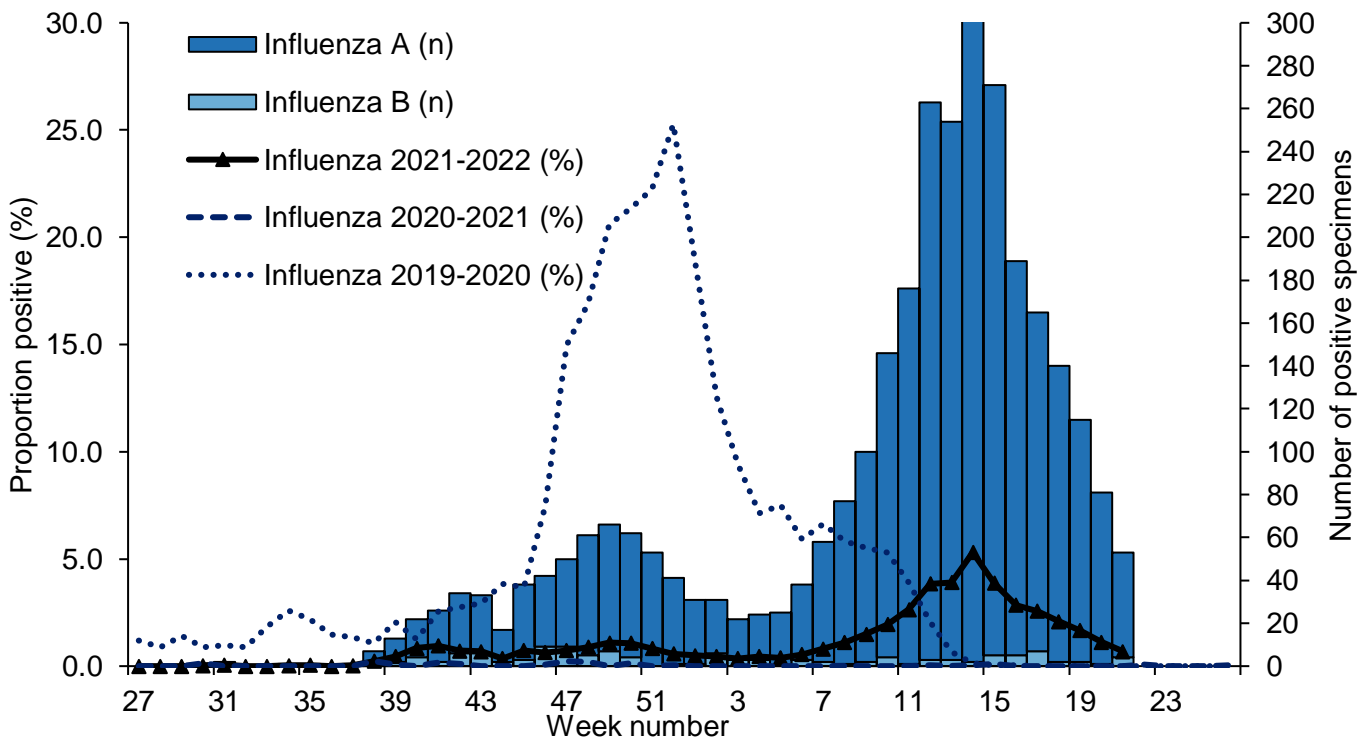


Figure 11: Respiratory DataMart weekly positivity (%) for SARS-CoV-2, England

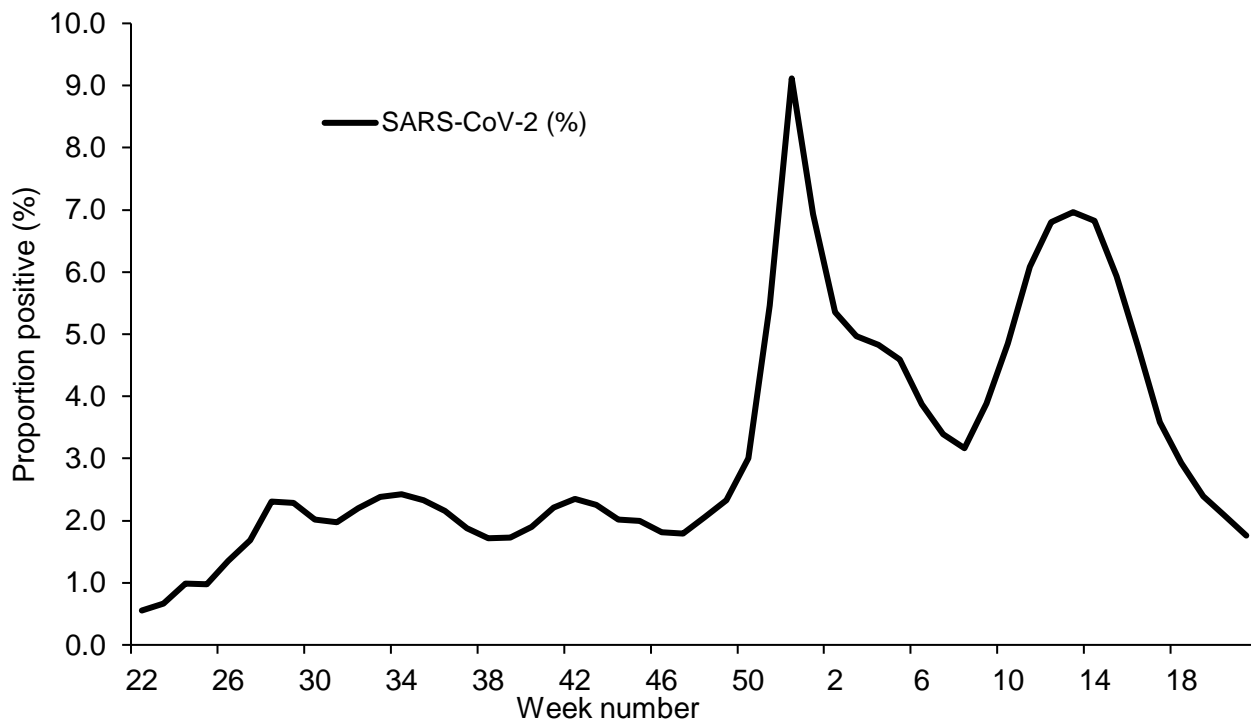


Figure 12: Respiratory DataMart weekly positivity (%) for other respiratory viruses, England

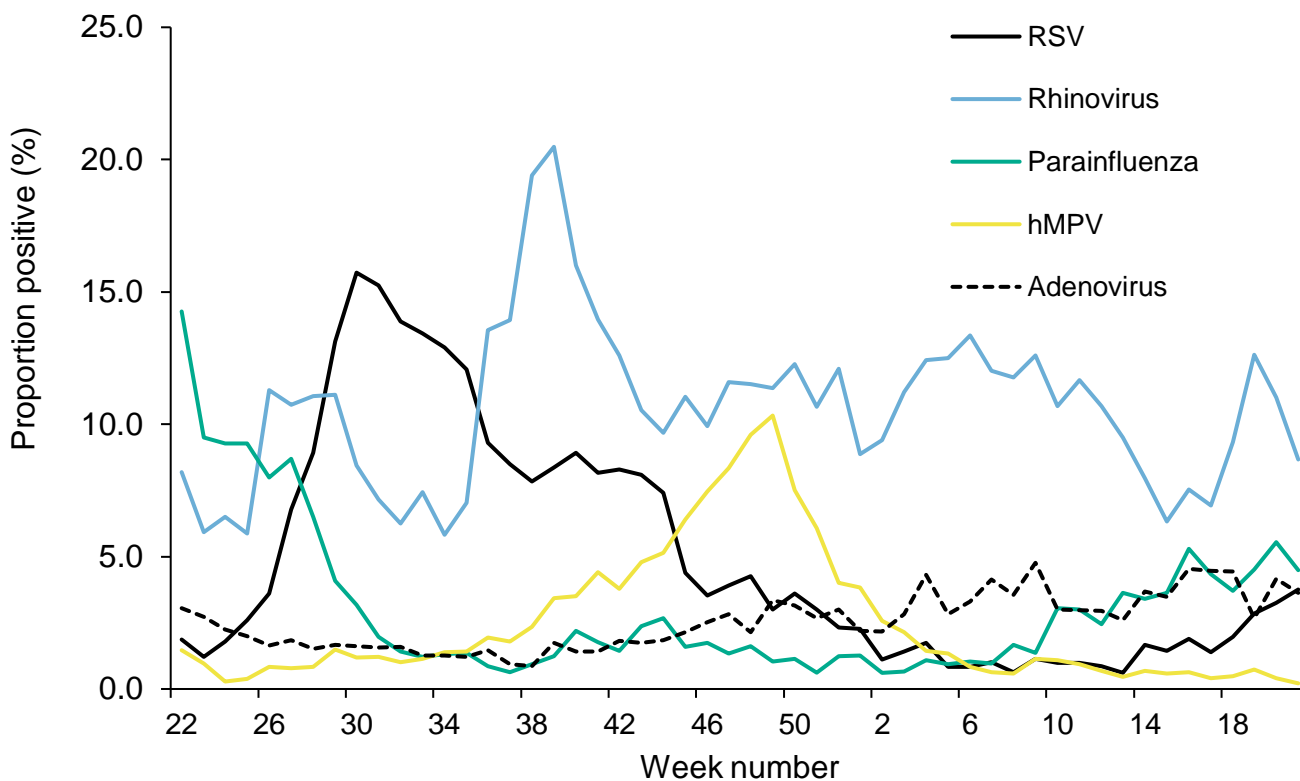


Figure 13: Respiratory DataMart weekly positivity (%) for adenovirus by age, England

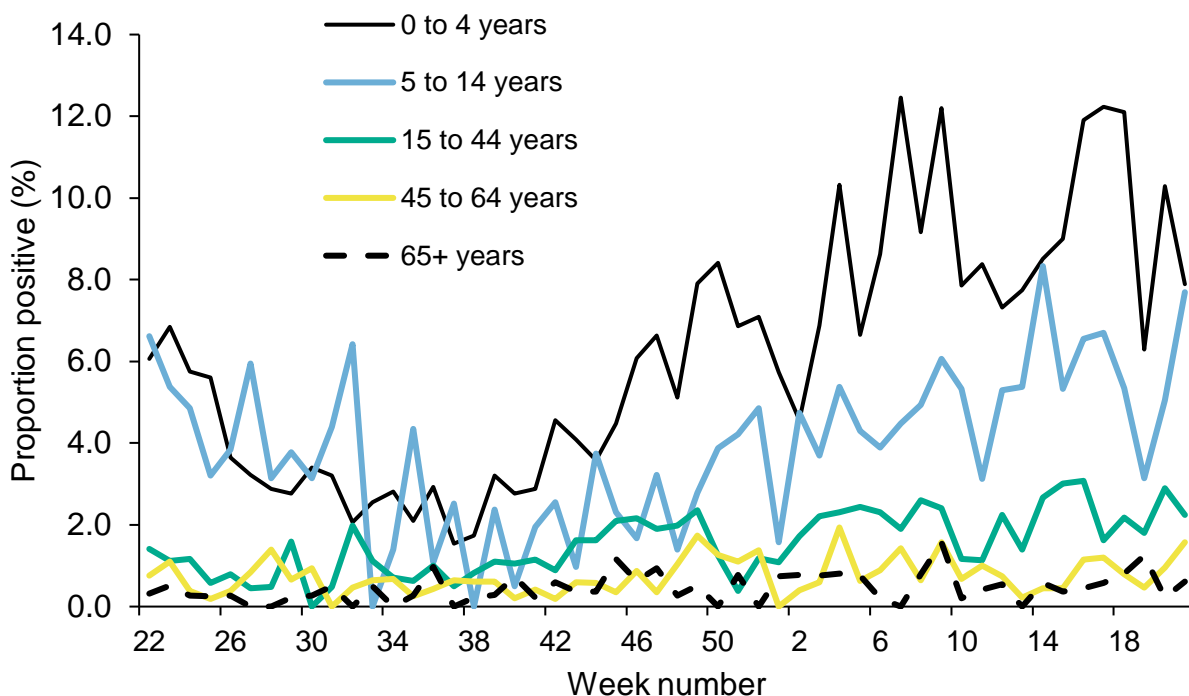


Figure 14: Respiratory DataMart weekly positivity (%) for rhinovirus by age, England

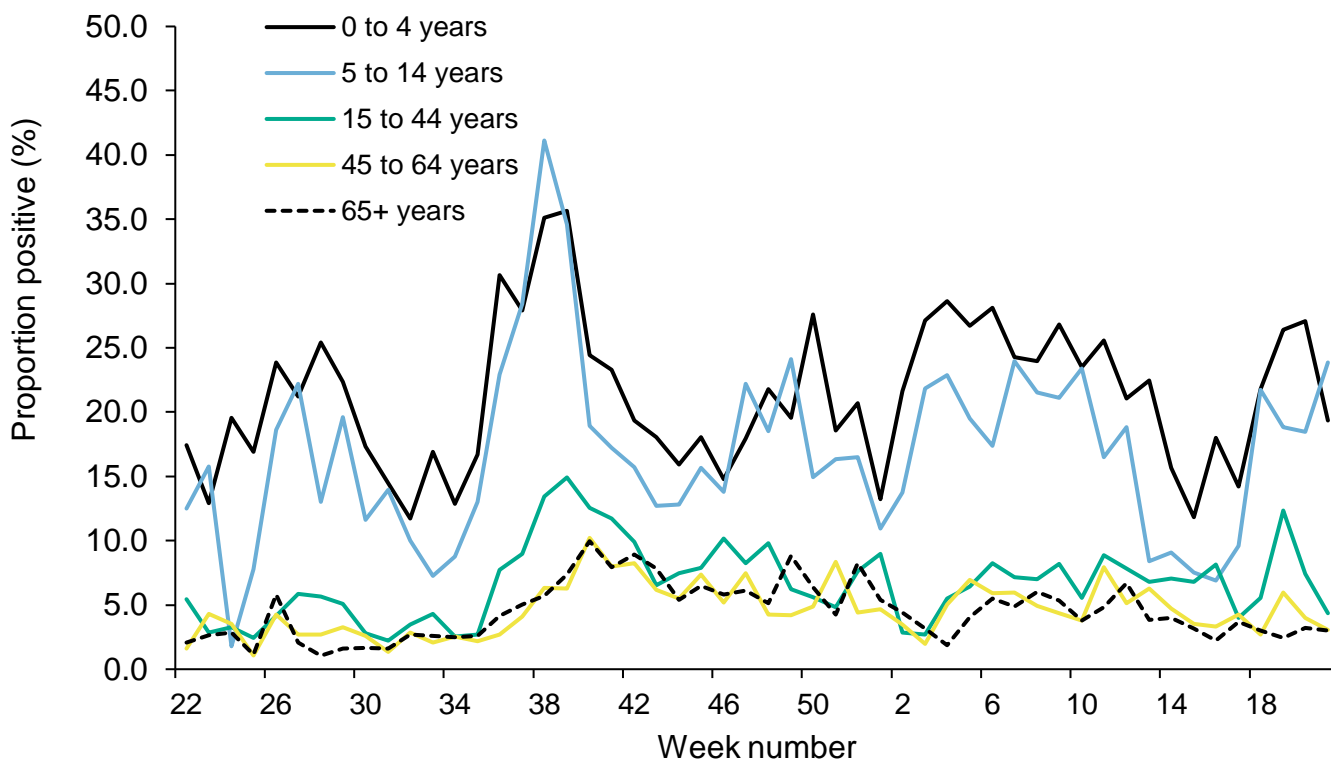
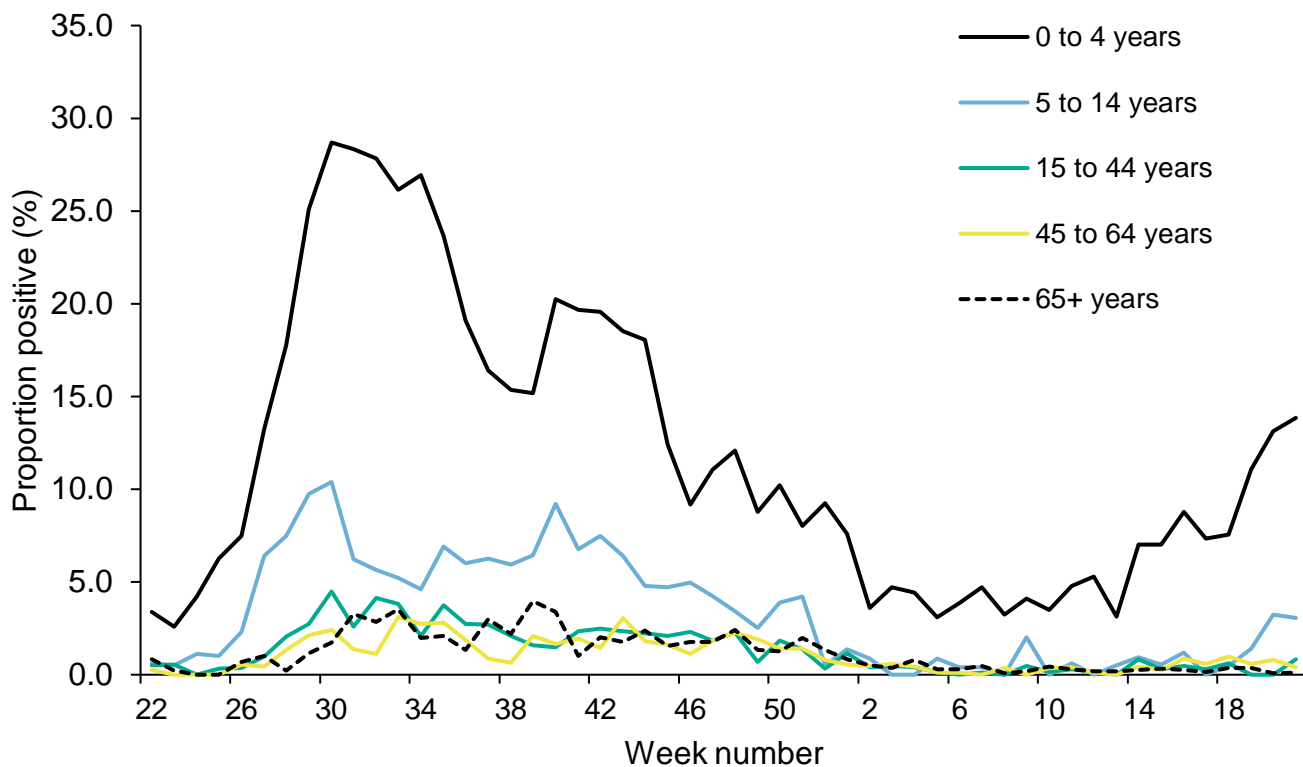


Figure 15: Respiratory DataMart weekly positivity (%) for RSV by age, England



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.

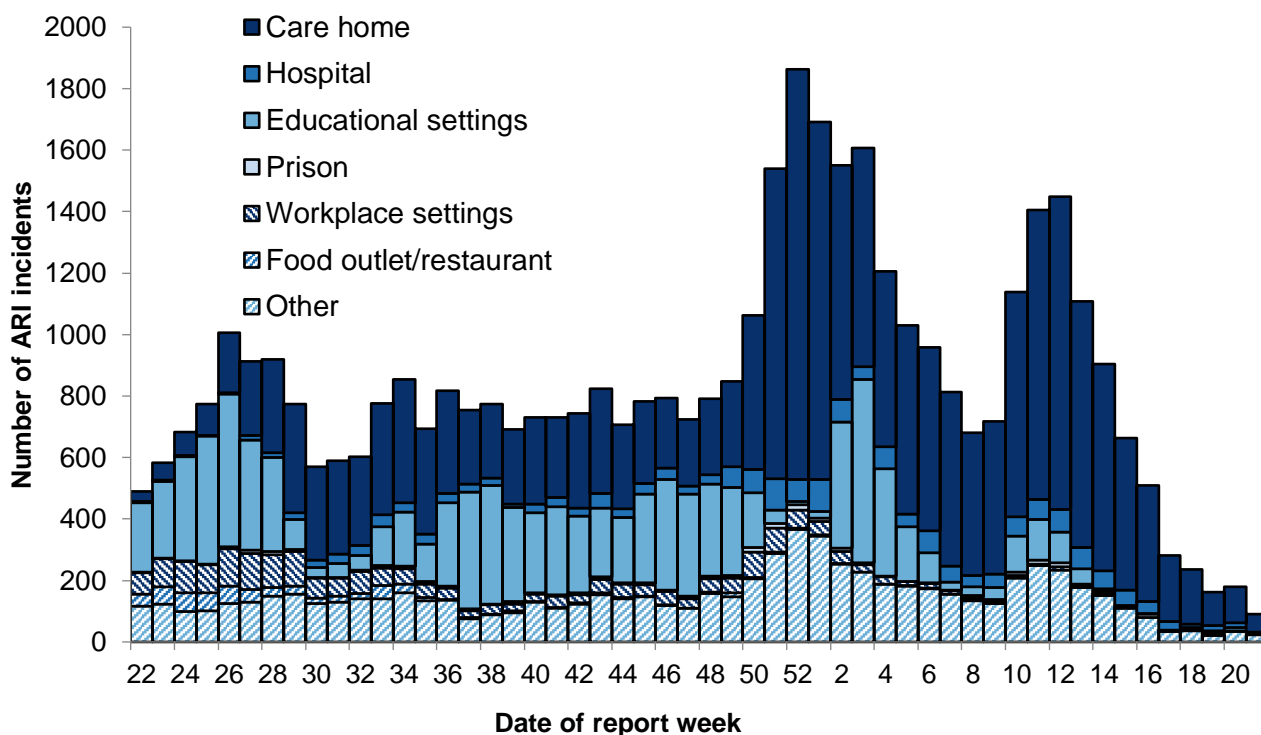
Data caveats:

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.

91 new ARI incidents have been reported in week 21 in the UK (Figure 16):

- 60 incidents were from care homes where 38 had at least one linked case that tested positive for SARS-CoV-2 and 1 tested positive for influenza A(not subtyped)
- 4 incidents were from educational settings where 1 tested positive for SARS-CoV-2
- 3 incidents were from hospitals, where all had at least one linked case that tested positive for SARS-CoV-2
- No incidents were from workplace settings
- No incidents were from prisons
- No incidents were from a food outlet or restaurant setting
- 24 incidents were from other settings where 11 had at least one linked case that tested positive for SARS-CoV-2

Figure 16: Number of acute respiratory infection (ARI) incidents by setting, UK



*Excludes data from Wales

Figure 17: Number of acute respiratory infection (ARI) incidents by setting, England

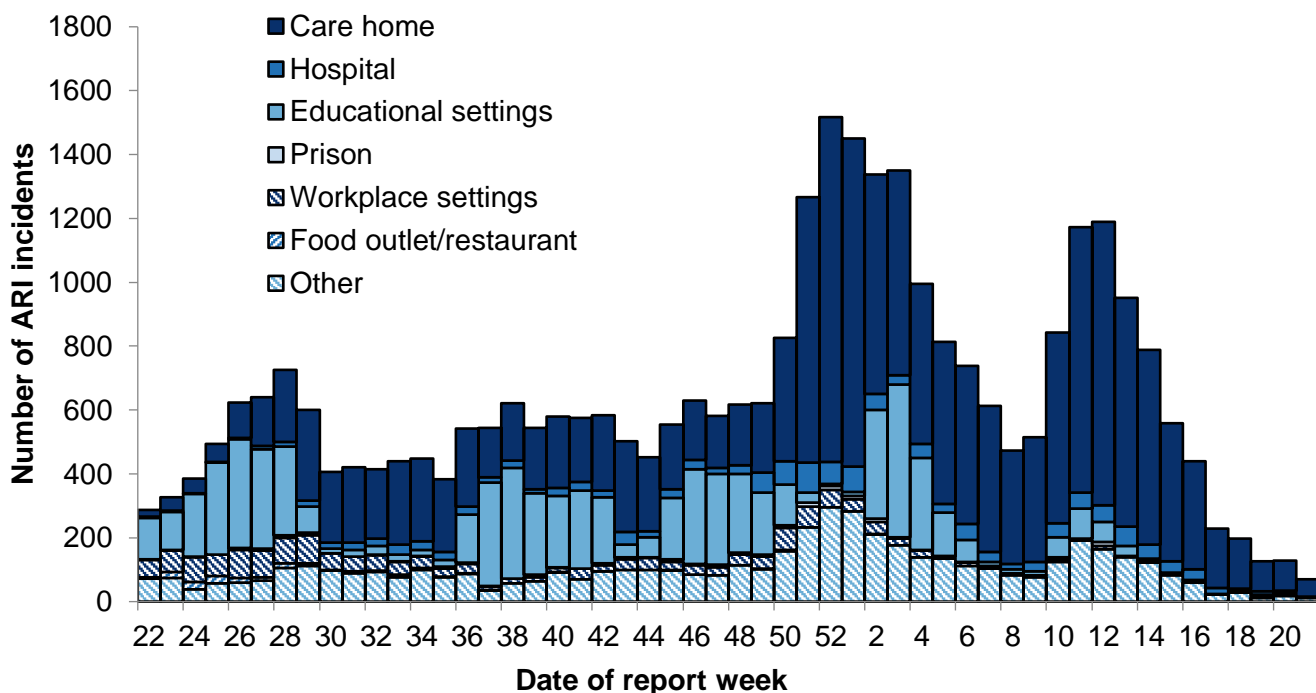


Figure 18: Number of acute respiratory infection (ARI) incidents in care homes by virus type, England

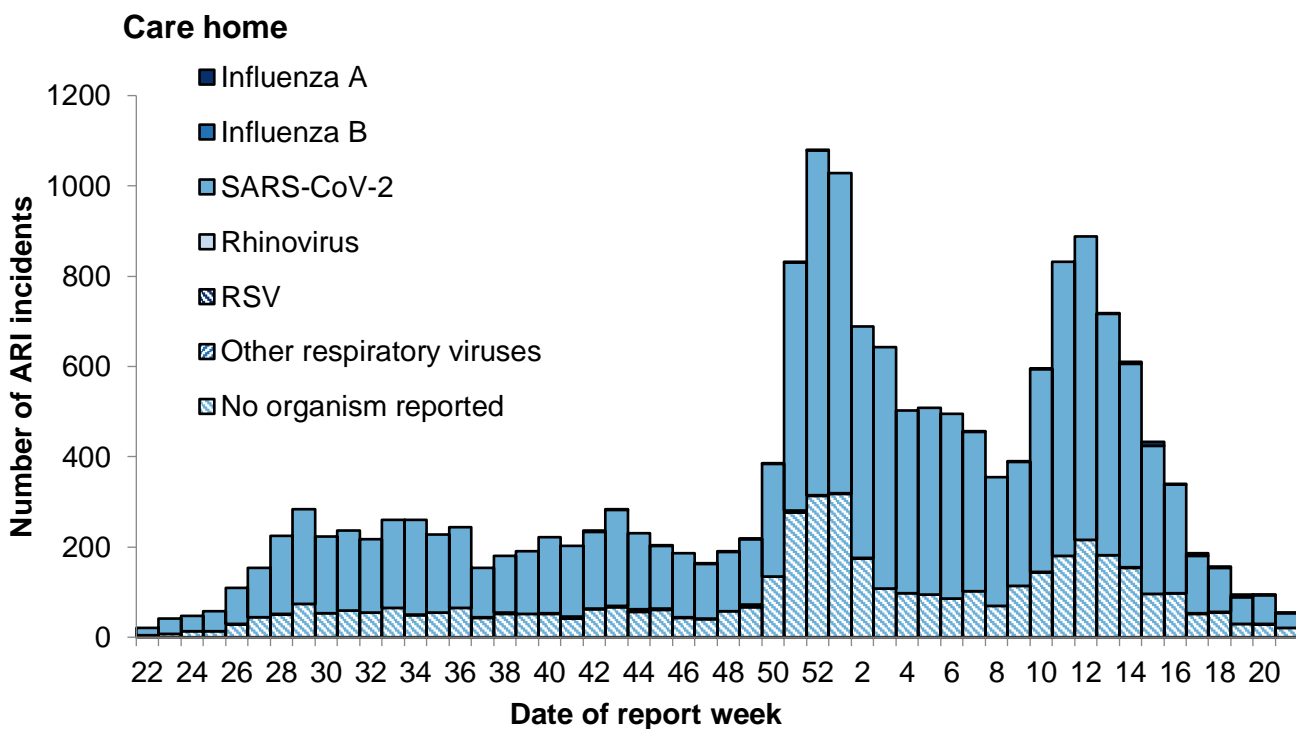


Figure 19: Number of acute respiratory infection (ARI) incidents in hospitals by virus type, England

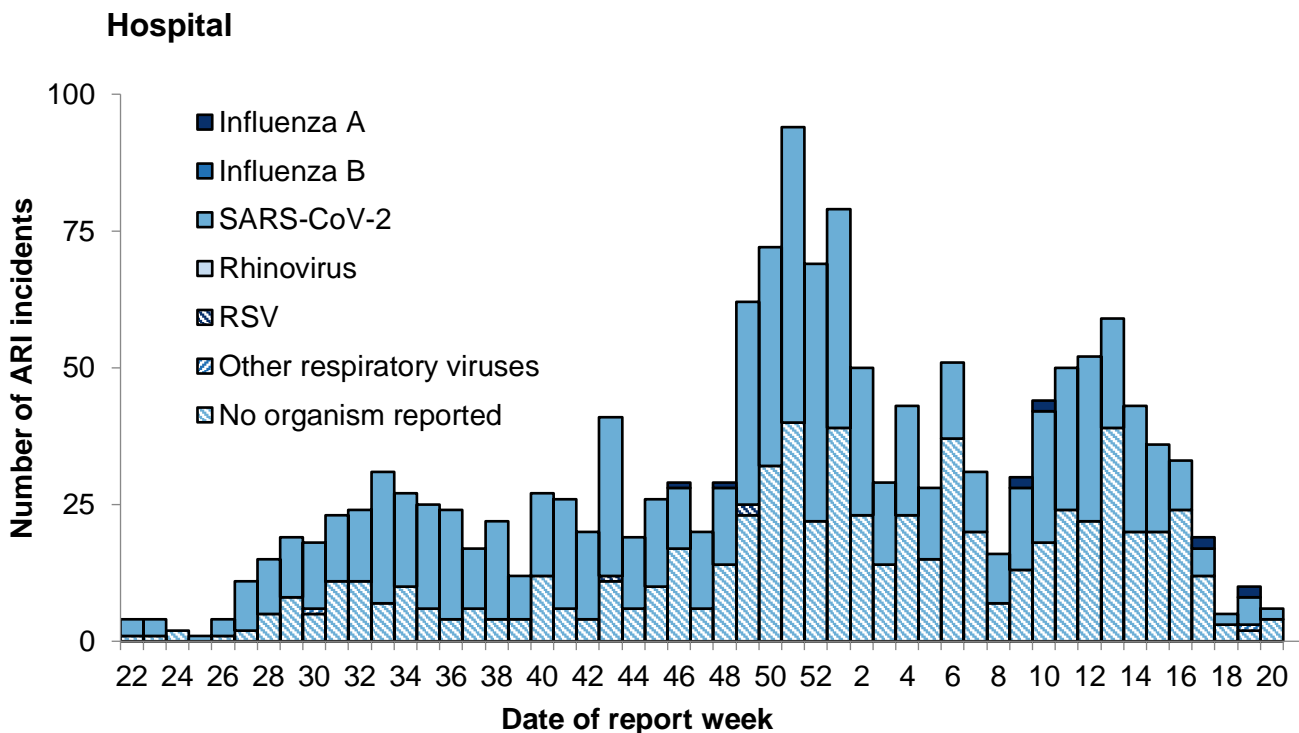


Figure 20: Number of acute respiratory infection (ARI) incidents in educational settings by virus type, England

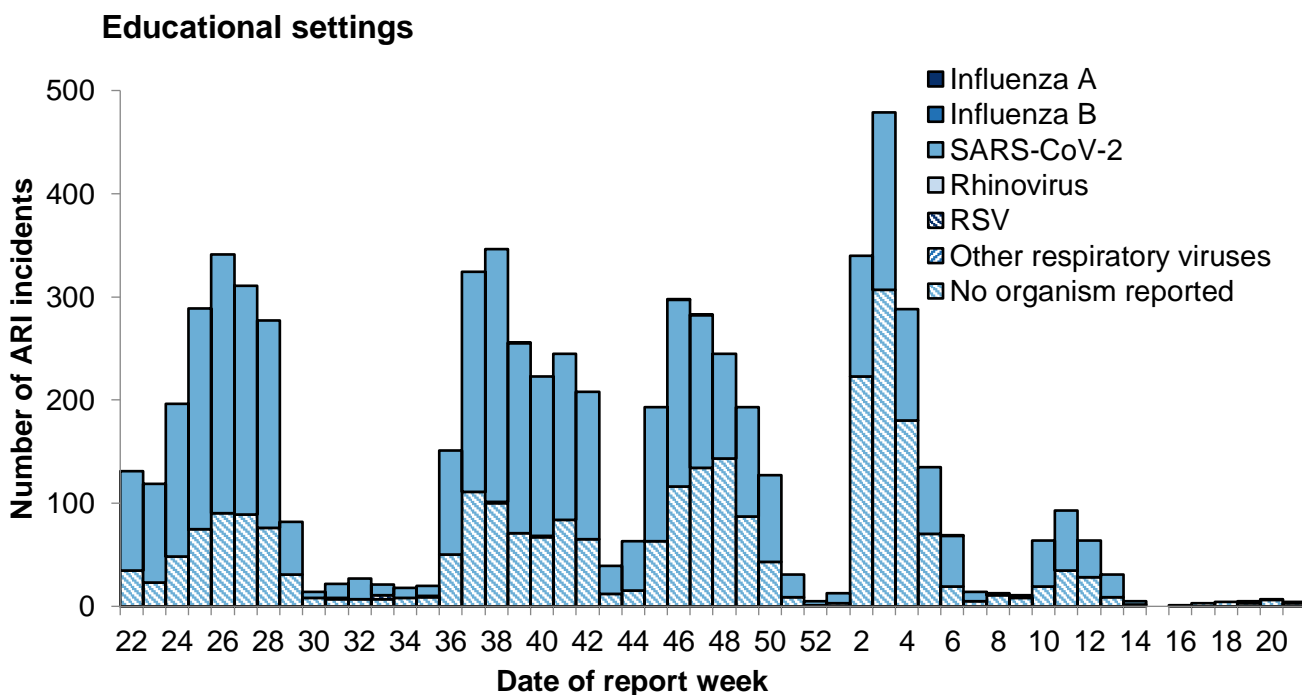


Figure 21: Number of acute respiratory infection (ARI) incidents in prisons by virus type, England

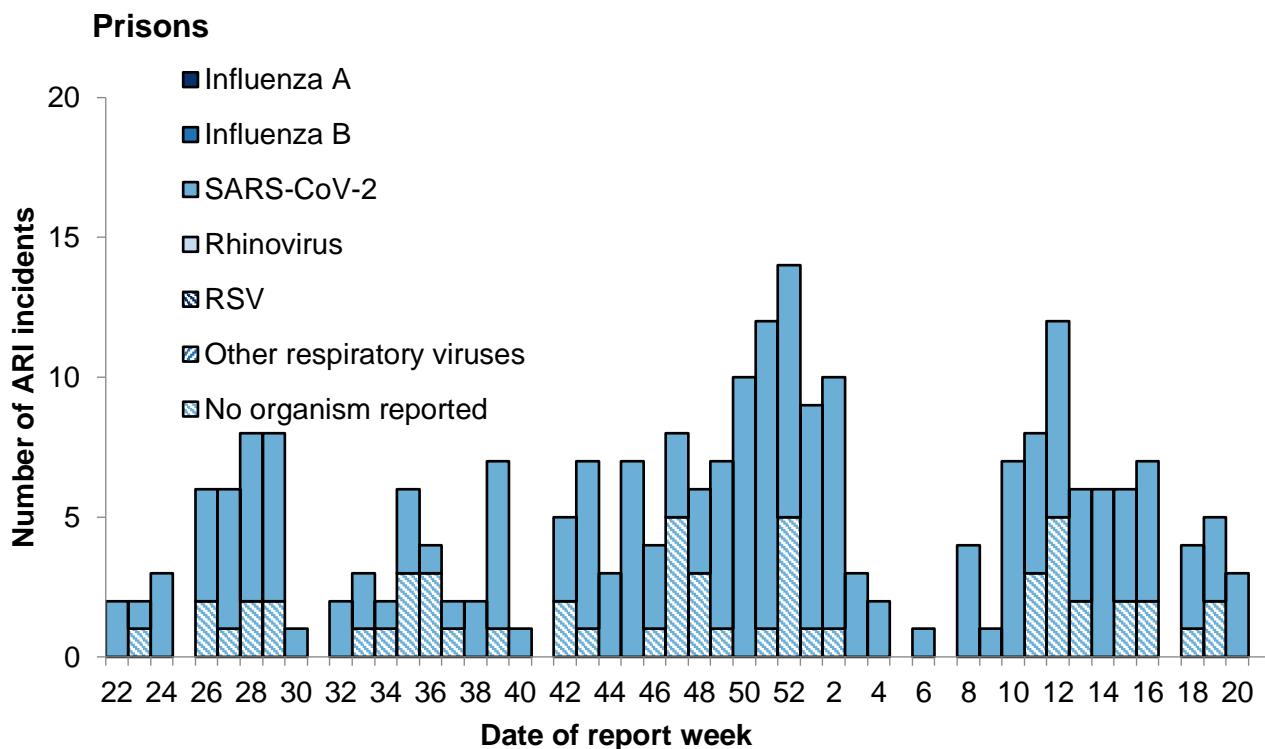


Figure 22: Number of acute respiratory infection (ARI) incidents in workplace settings by virus type, England

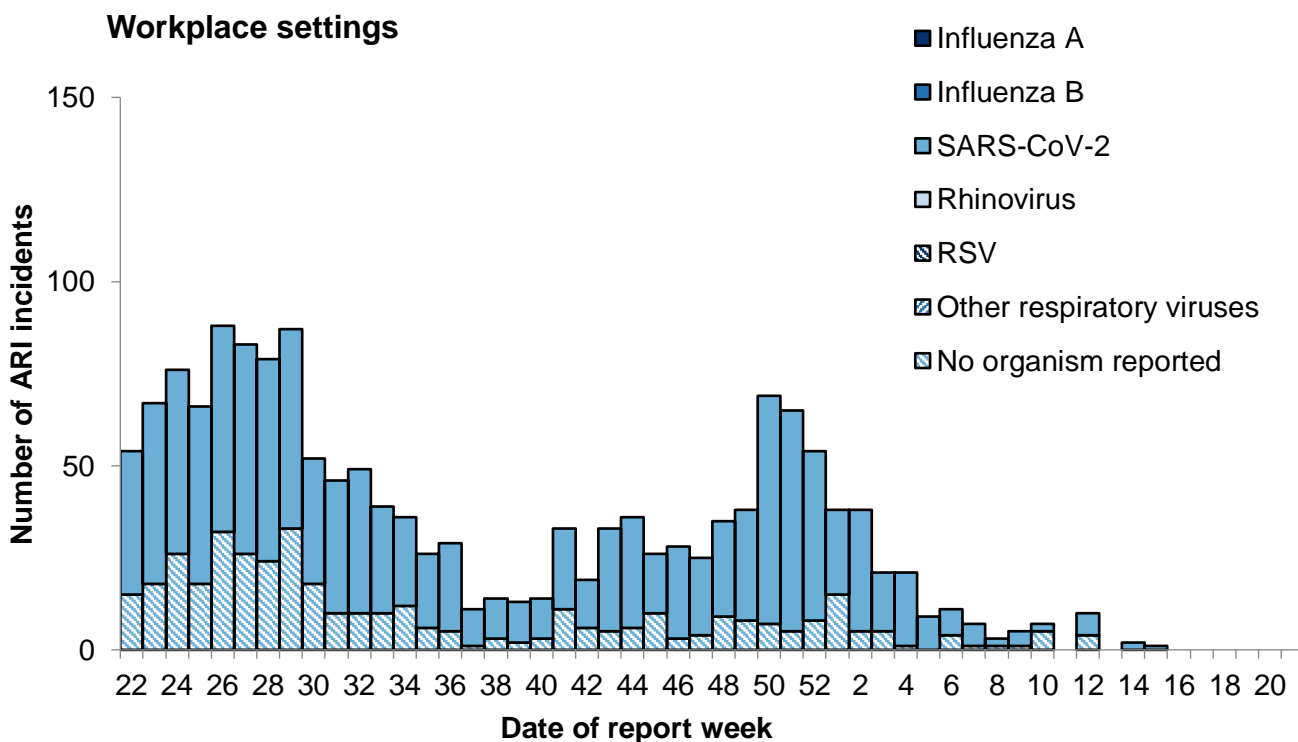


Figure 23: Number of acute respiratory infection (ARI) incidents in food outlet or restaurant settings by virus type, England

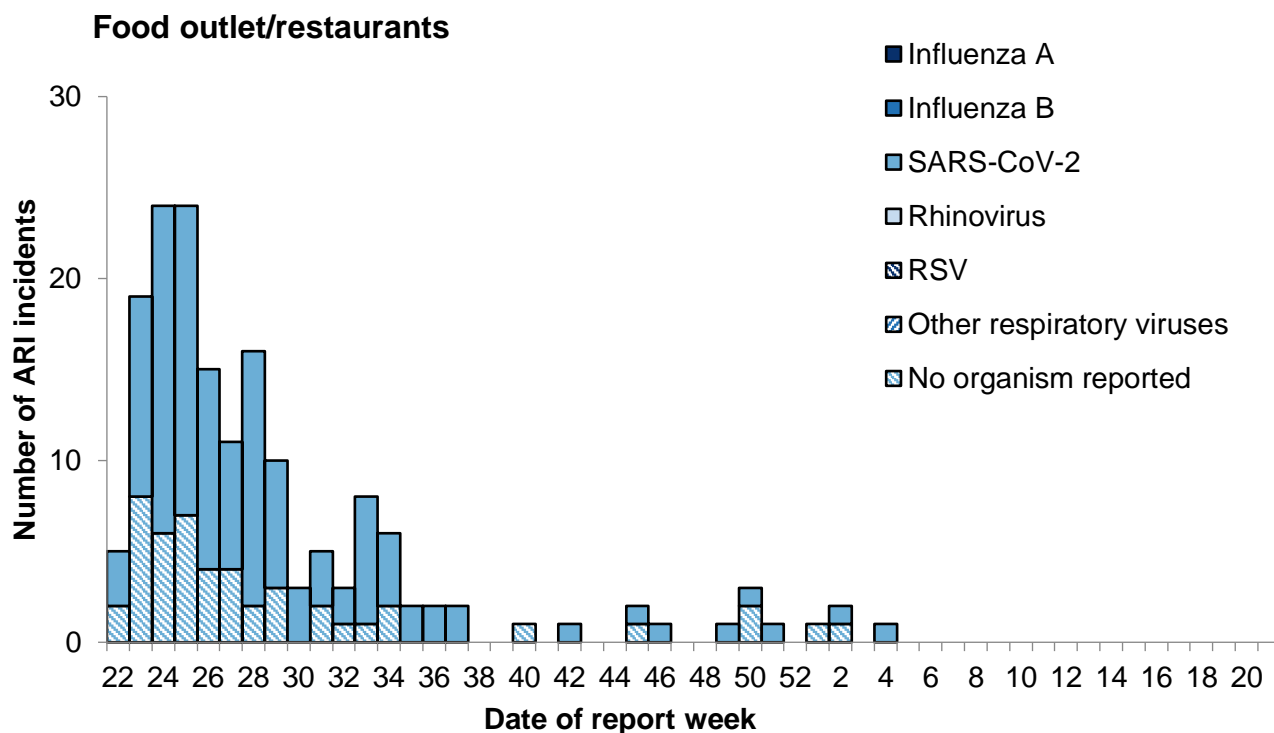


Figure 24: Number of acute respiratory infection (ARI) incidents in other settings by virus type from, England

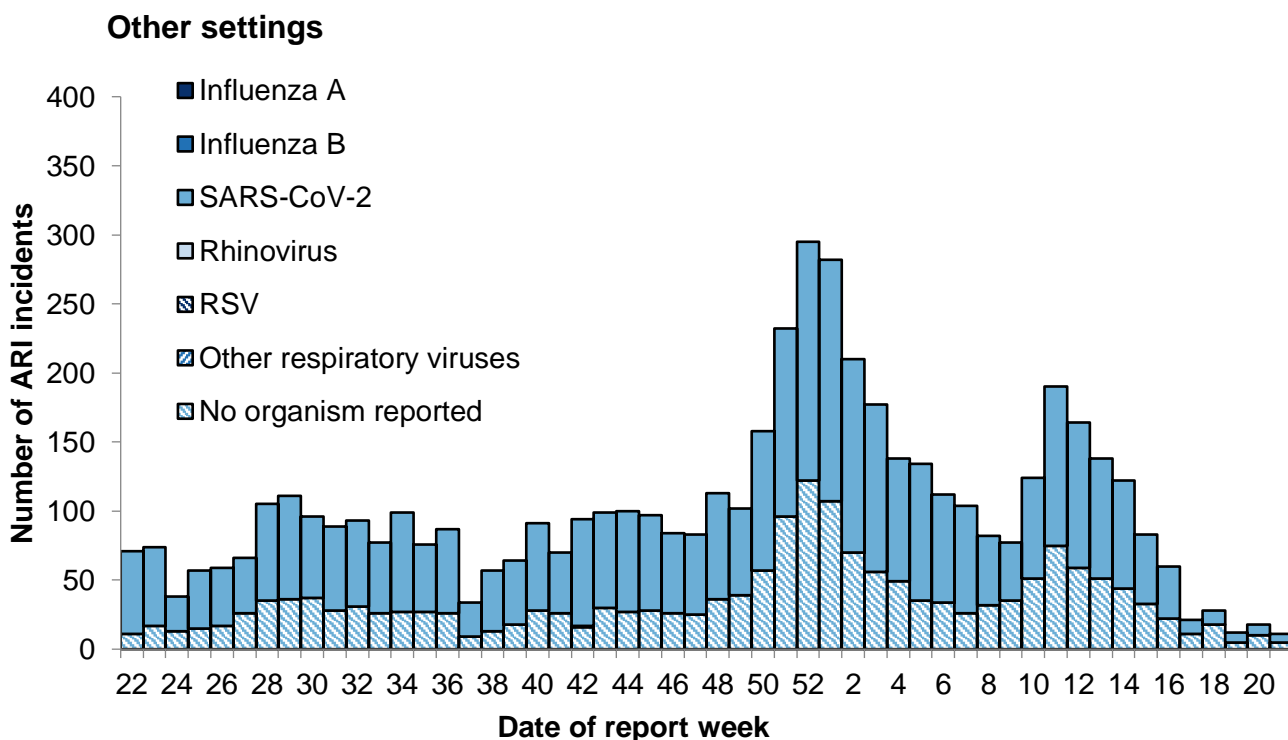


Table 1: Total number of situations and incidents by institution and UKHSA Centres over the past 4 weeks with the total number in the last week in brackets

UKHSA Centres	Care home	Hospital	Educational settings	Prisons	Workplace settings	Food outlet/ restaurant settings	Other settings	Total
East of England	40(3)	1(0)	0(0)	1(0)	0(0)	0(0)	24(1)	66(4)
East Midlands	53(5)	0(0)	1(0)	4(0)	0(0)	0(0)	9(1)	67(6)
London	38(10)	9(0)	7(1)	1(0)	0(0)	0(0)	6(3)	61(14)
North East	30(2)	0(0)	0(0)	1(0)	0(0)	0(0)	1(0)	32(2)
North West	26(6)	0(0)	3(0)	0(0)	0(0)	0(0)	9(4)	38(10)
South East	42(4)	3(0)	4(1)	2(0)	0(0)	0(0)	2(0)	53(5)
South West	117(19)	2(0)	3(2)	0(0)	0(0)	0(0)	2(0)	124(21)
West Midlands	15(0)	3(0)	2(0)	1(0)	0(0)	0(0)	1(0)	22(0)
Yorkshire and Humber	40(5)	3(0)	0(0)	2(0)	0(0)	0(0)	15(2)	60(7)
Total	401(54)	21(0)	20(4)	12(0)	0(0)	0(0)	69(11)	523(69)

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 2,161 participants completed the weekly surveillance survey in week 21, of which 105 (4.9%) reported fever or cough and 21 (1.0%) reported ILI. The most commonly used healthcare services reported by respondents remains visiting GP services (Figure 25).

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

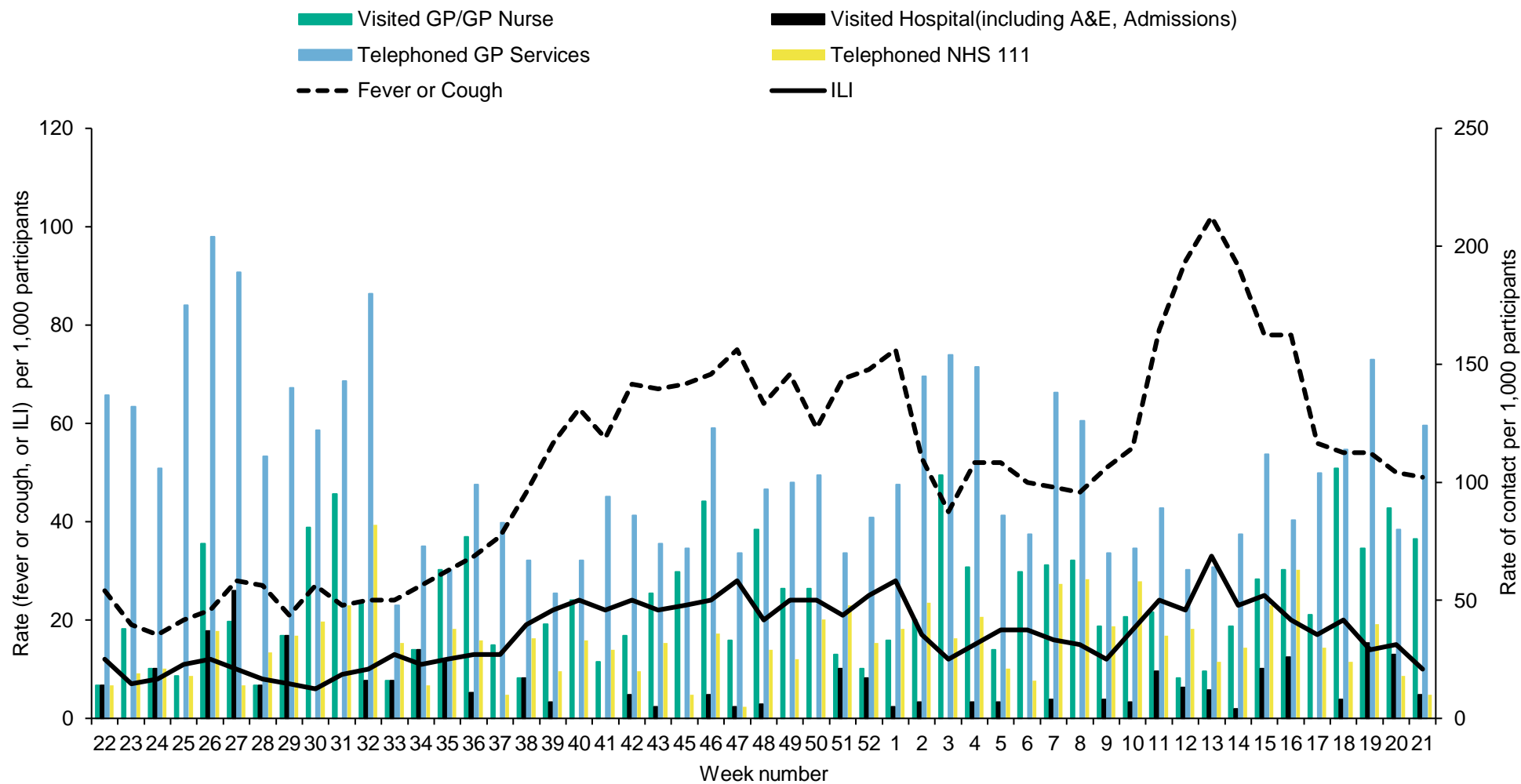
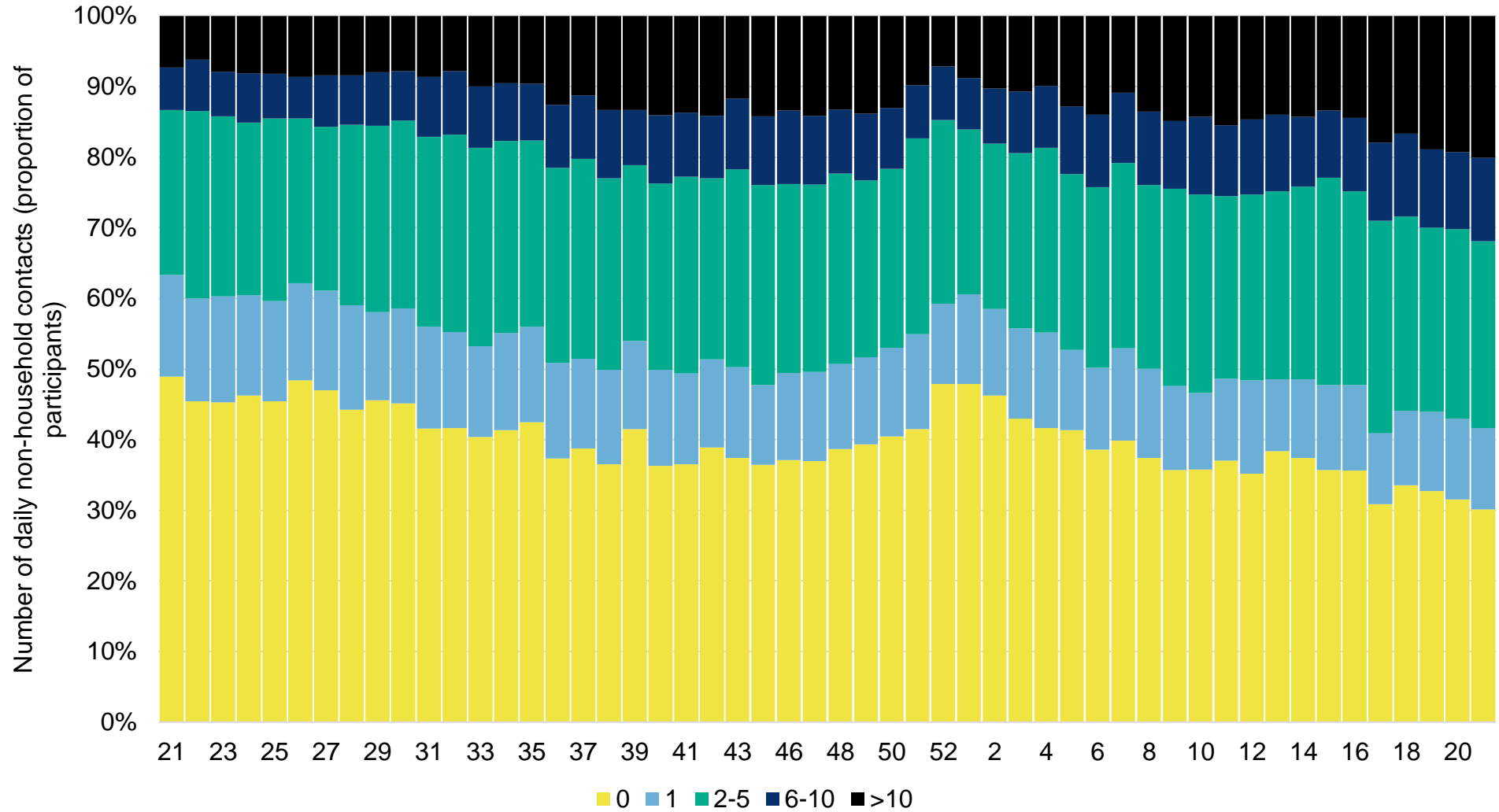


Figure 26: FluSurvey participants' self-reported number of social contacts outside the household

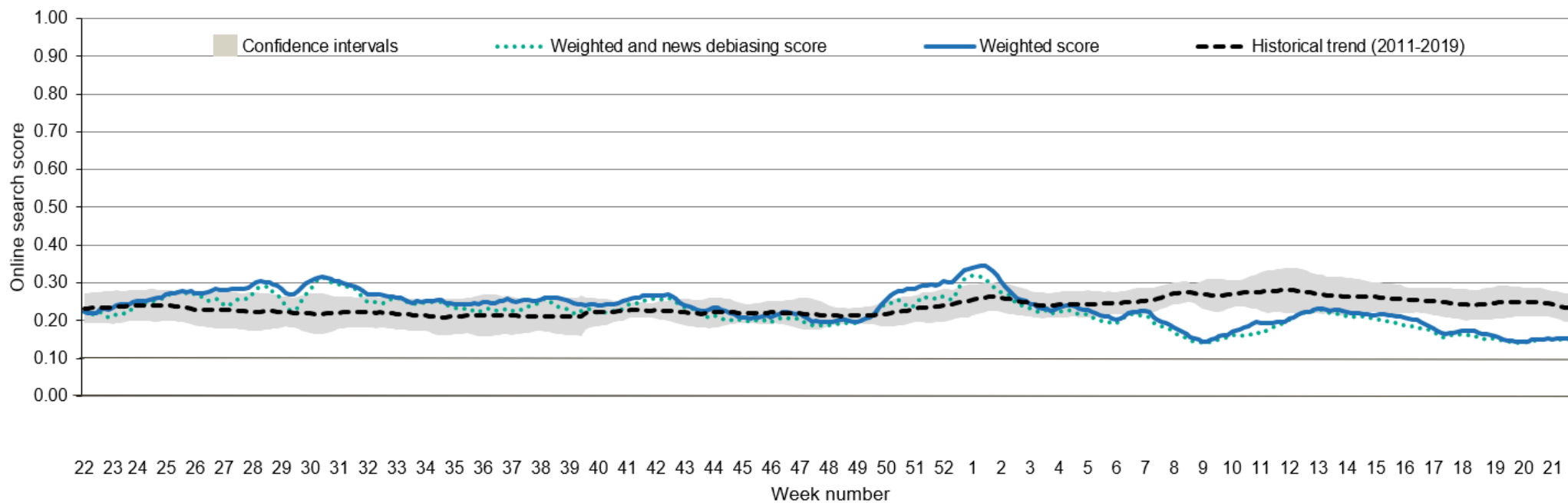


Google search queries

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 21, the overall and media-debiasing weighted Google search scores remained similar to the previous week (Figure 27).

Figure 27: 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 29 May, NHS 111 calls for cold or flu and cough increased slightly, particularly in children under 14 years (Figure 28 and 29).

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 28: 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

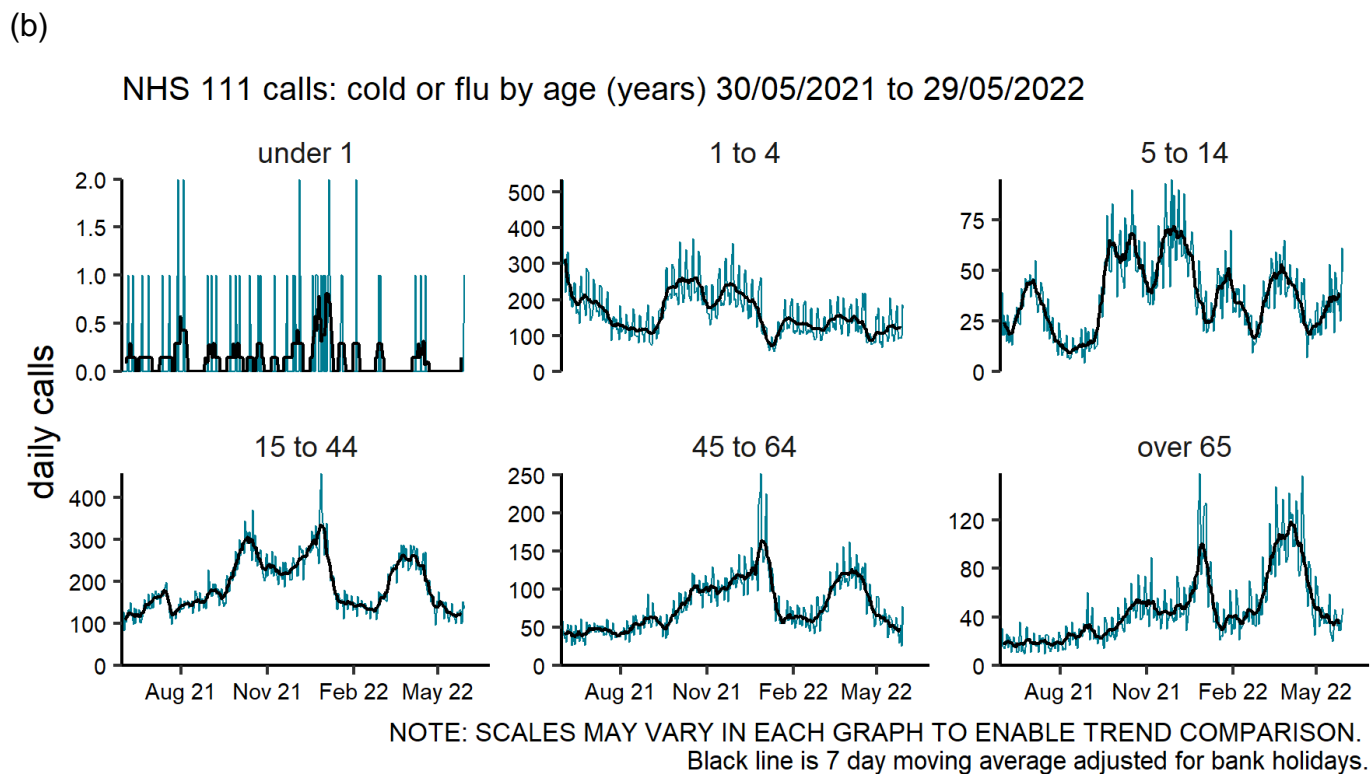
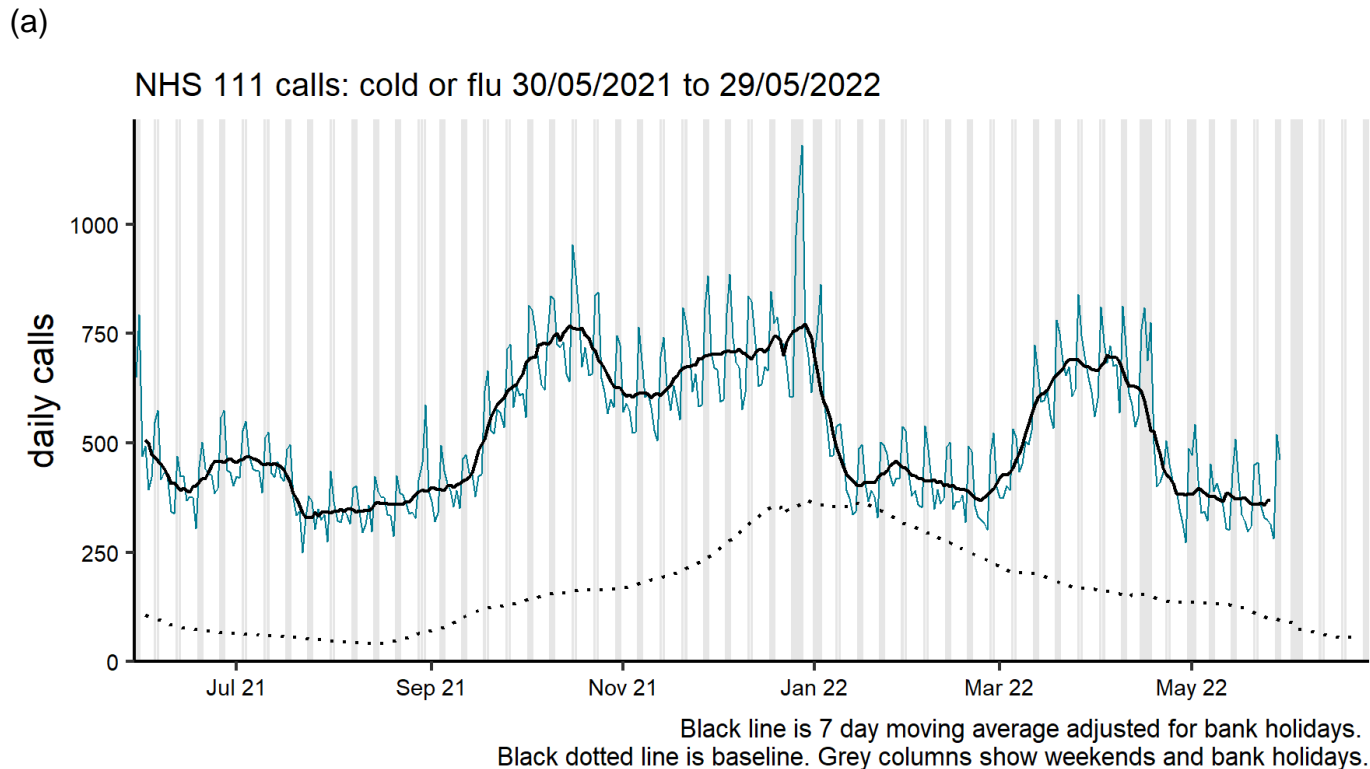
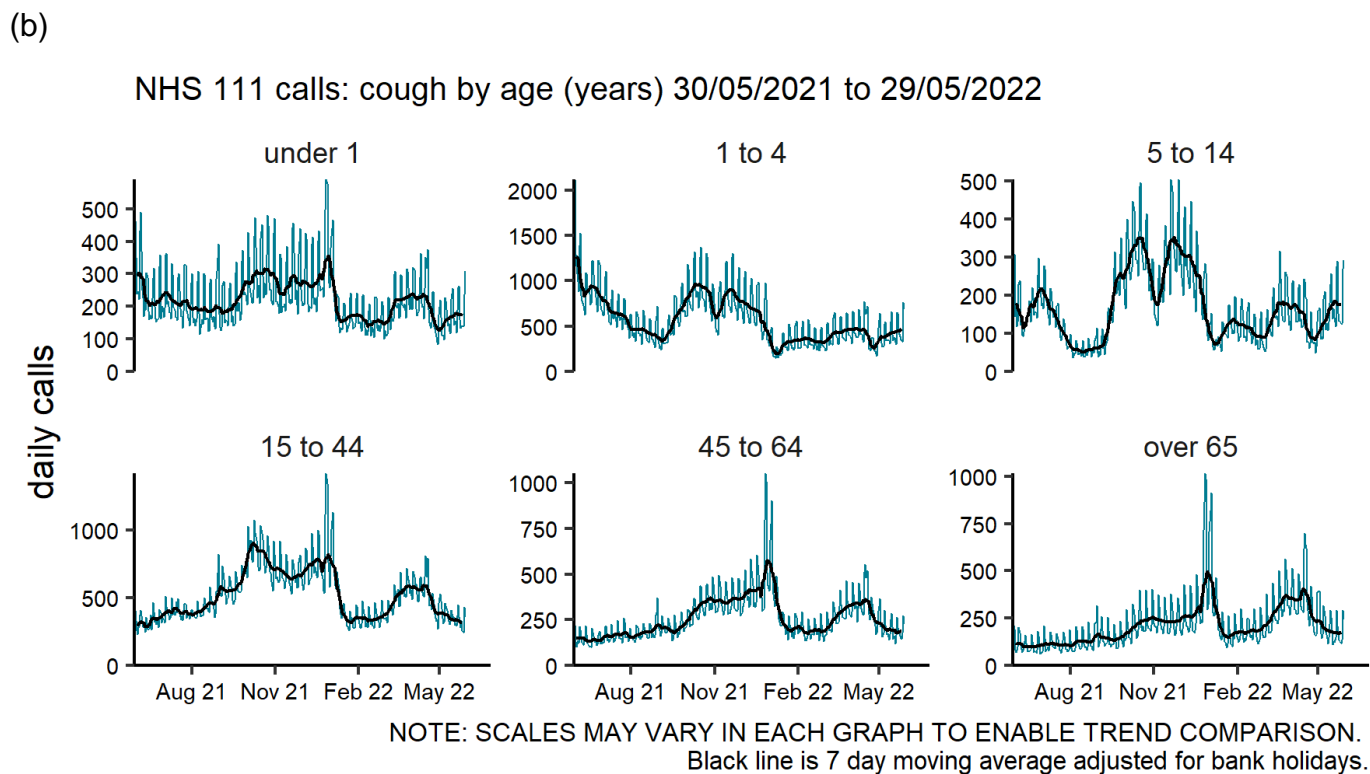
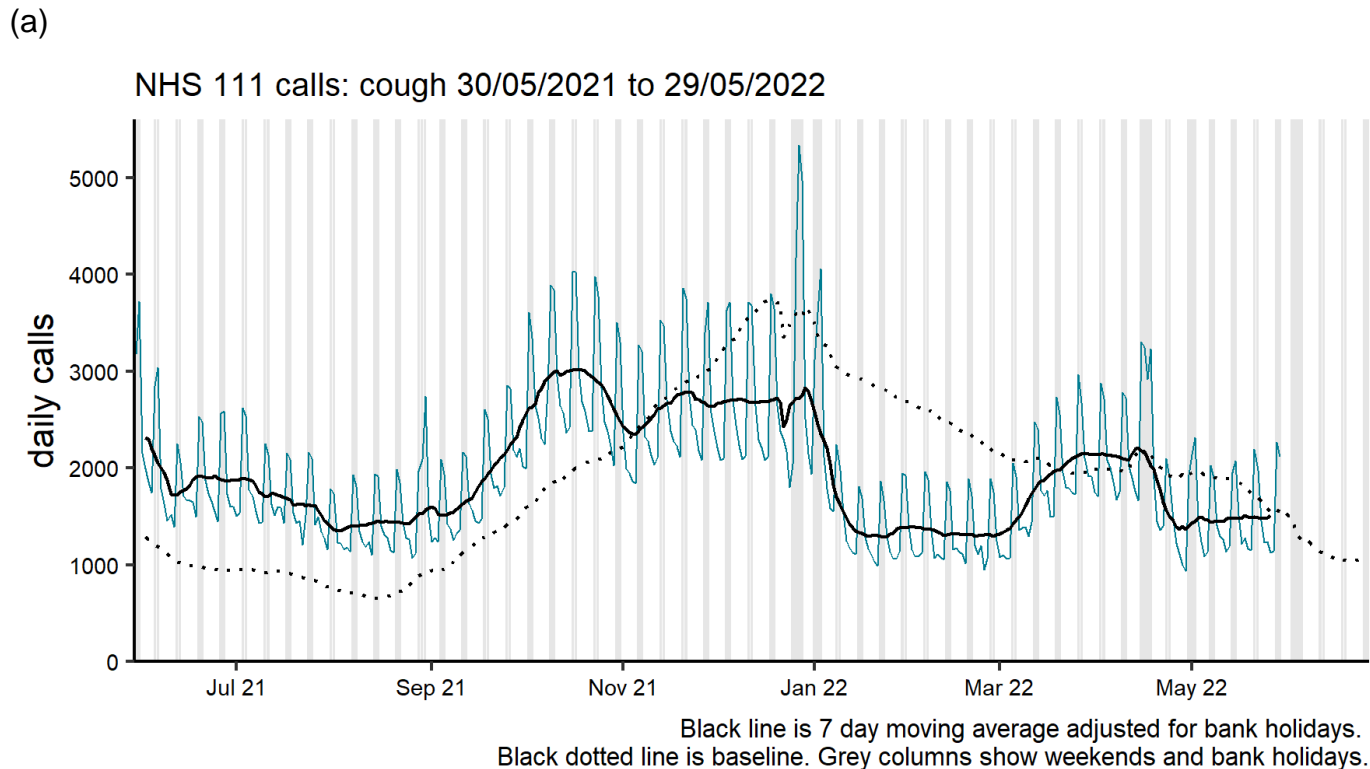


Figure 29: NHS 111 telephony indicators (and 7-day moving average) for number of daily cough calls, England (a) nationally and (b) by age group



Primary care surveillance

RCGP (England)

The weekly ILI consultation rate through the RCGP surveillance was 1.2 per 100,000 registered population in participating GP practices in week 21 compared to 1.4 per 100,000 in the previous week. This is below the baseline threshold (12.2 per 100,000) (Figure 30). By age group, the highest rates were seen in the 1 to 4 year olds (2.8 per 100,000). The lower respiratory tract infections (LRTI) consultation rate was at 45.3 per 100,000 in week 21, compared to the rate of 43.6 per 100,000 in the previous week. The COVID-19 indicator rate was at 43.1 per 100,000 in week 21 compared to a rate of 51.5 per 100,000 in the previous week (Figure 31).

Figure 30: RCGP ILI consultation rates, all ages, England

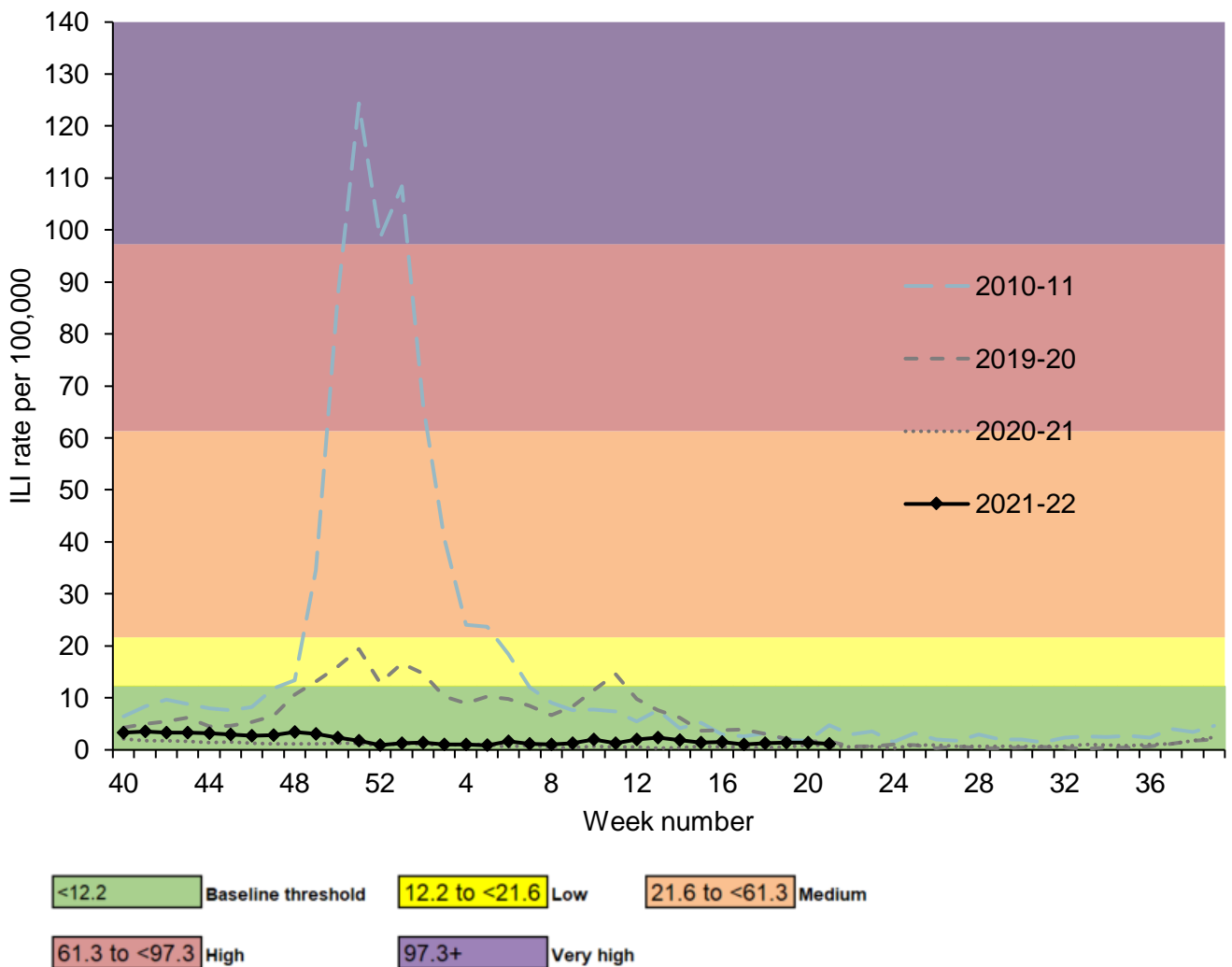
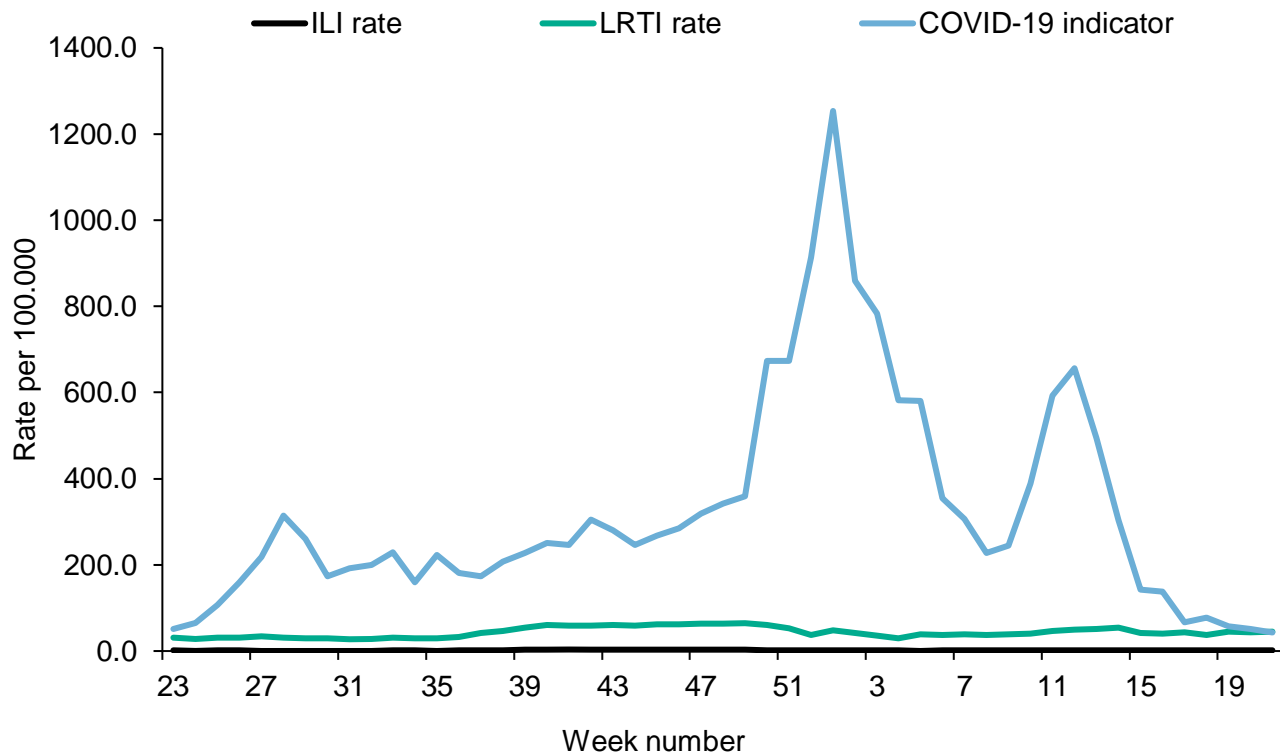


Figure 31: RCGP ILI, LRTI and COVID-19 indicator rates, England



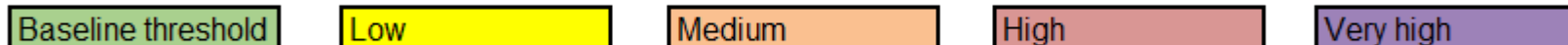
UK

Overall, weekly ILI consultations rates were below baseline levels in all UK schemes (Table 2).

By age group, the highest incidence age groups were in the 15 to 44 and the 45 to 64 year olds in Scotland (0.9 per 100,000) and the 45 to 64 year olds in Northern Ireland (2.2 per 100,000) respectively.

Table 2: 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
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
Wales	0.7	2.3	1.9	2.0	1.7	0.0	0.7	2.0	2.2	1.3	2.4	
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
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



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

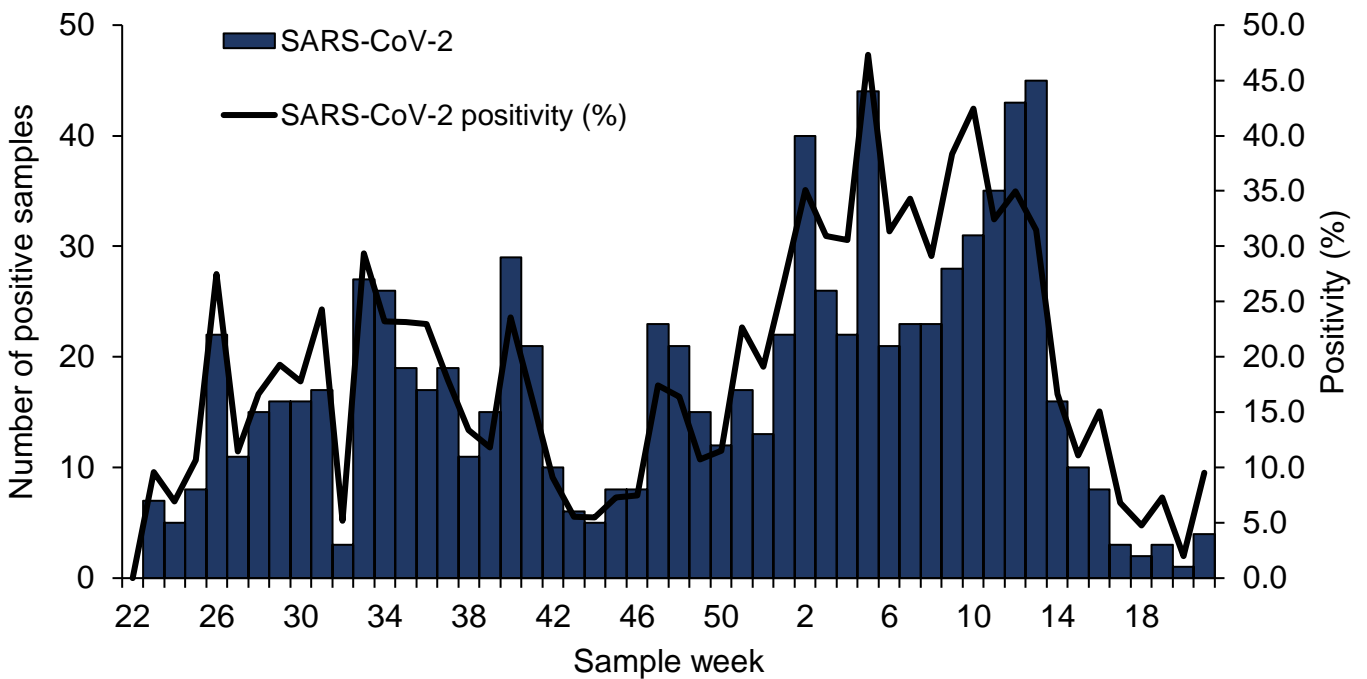
In week 21 2022, 4 samples tested positive for SARS-CoV-2 through the UK GP sentinel swabbing schemes (including England and Northern Ireland) (Figure 32).

In week 20, no samples tested positive for influenza and 2 samples tested positive for RSV in England through the GP sentinel swabbing scheme.

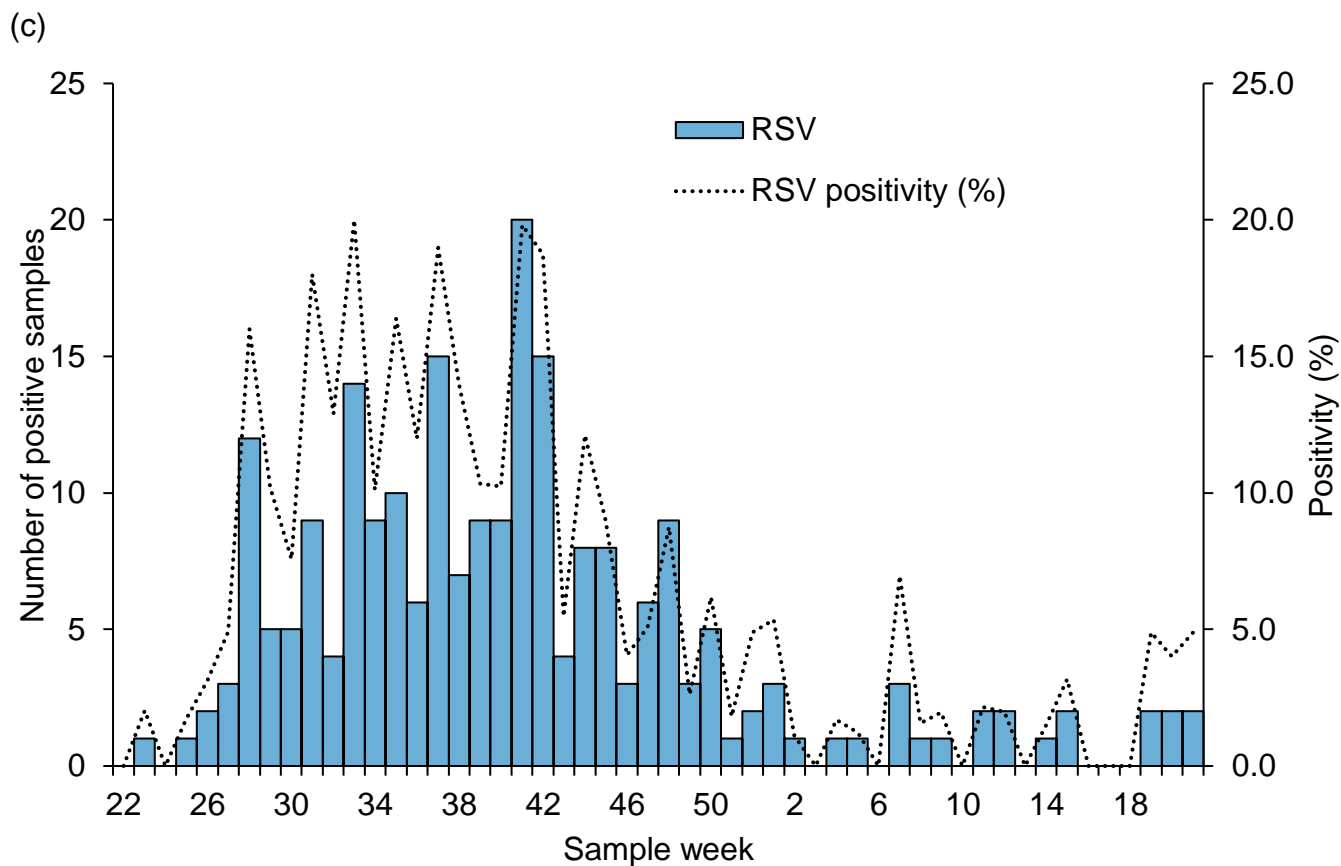
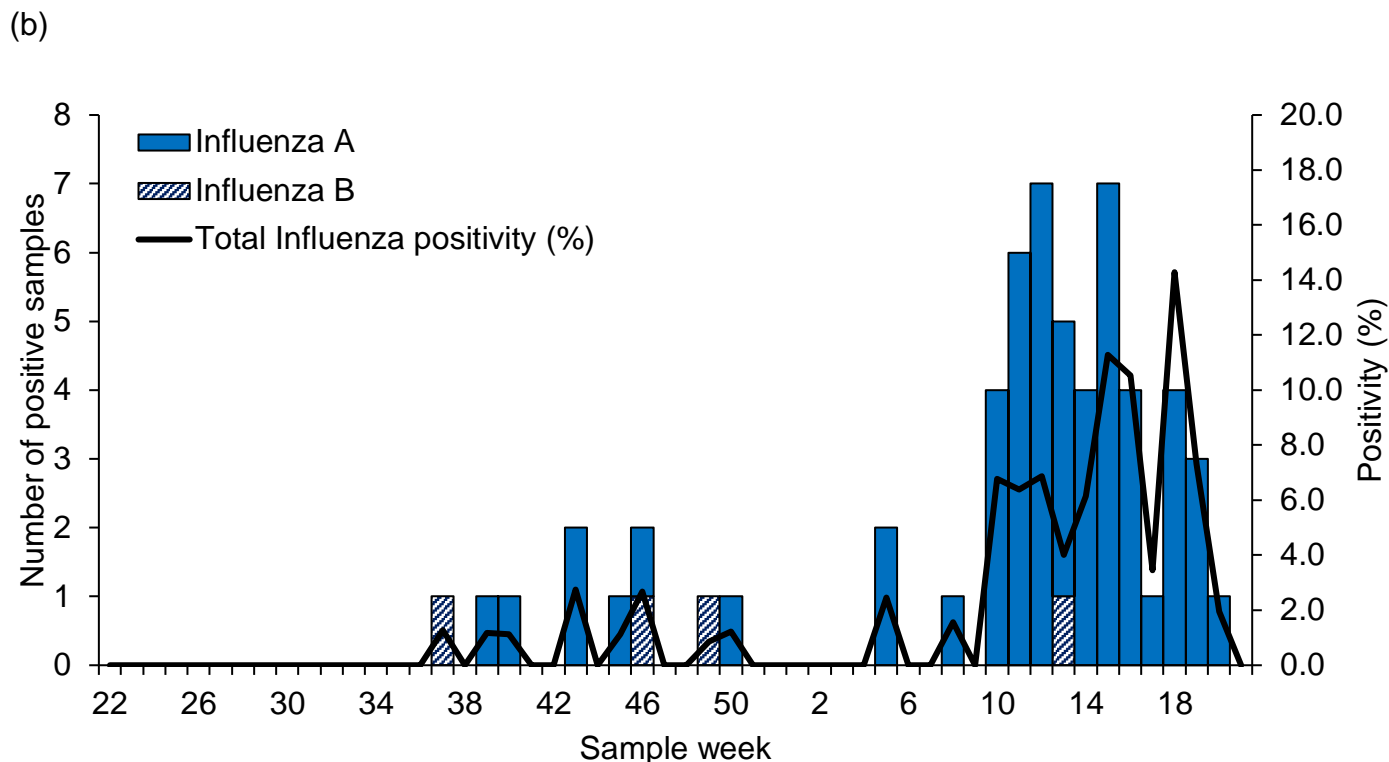
* Please note that due to lower sample numbers data from week 14 of 2022 onwards should be interpreted with caution.

Figure 32: Number of positive samples and weekly positivity (%) for (a) COVID-19 and (b) Influenza and (c) RSV, GP sentinel swabbing scheme

(a)



* Please note that data for Northern Ireland was unavailable in weeks 19 to 21 of 2022



*For the most recent week, more samples are expected to be tested therefore the graphs in Figure 32 should be interpreted with caution

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

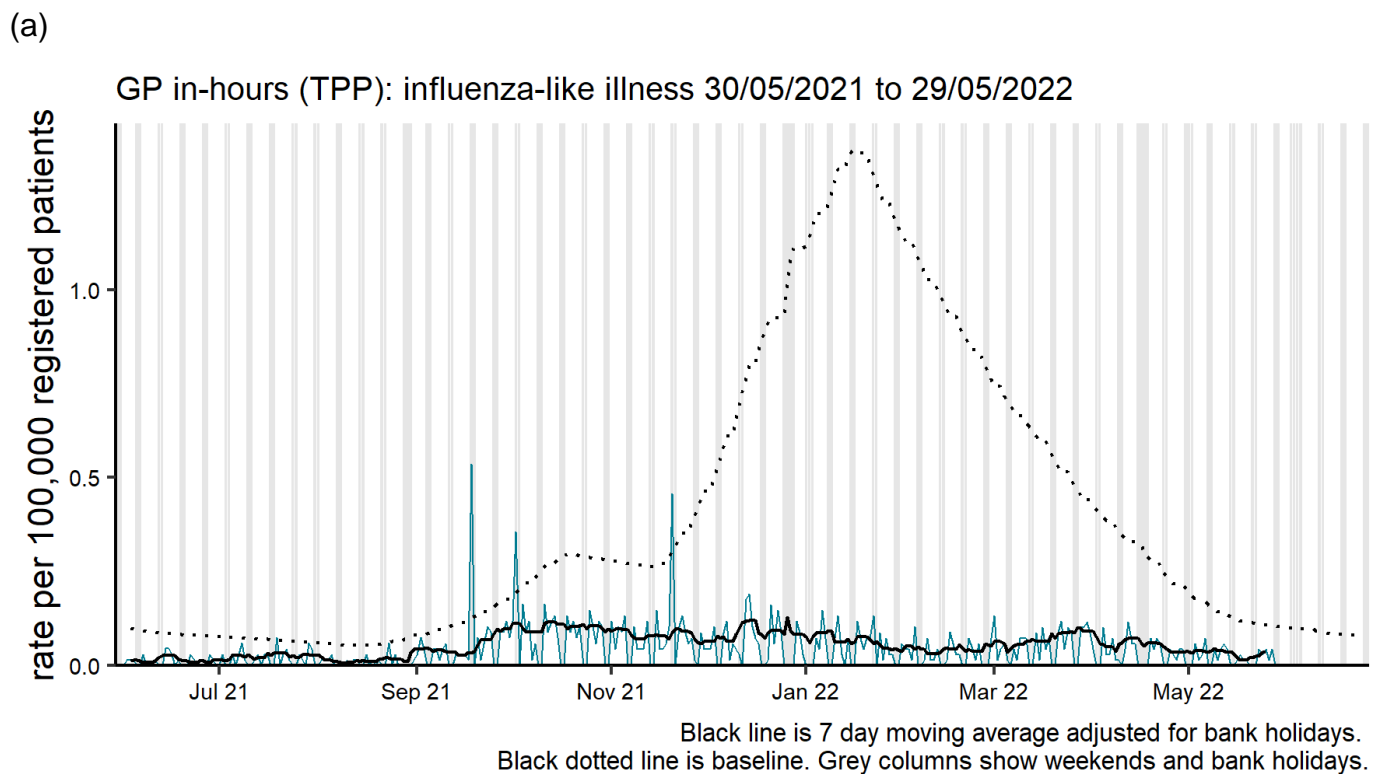
GP In Hours, Syndromic Surveillance

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

Up to 29 May, GP in-hours consultations for influenza-like illness remained stable nationally (Figure 33).

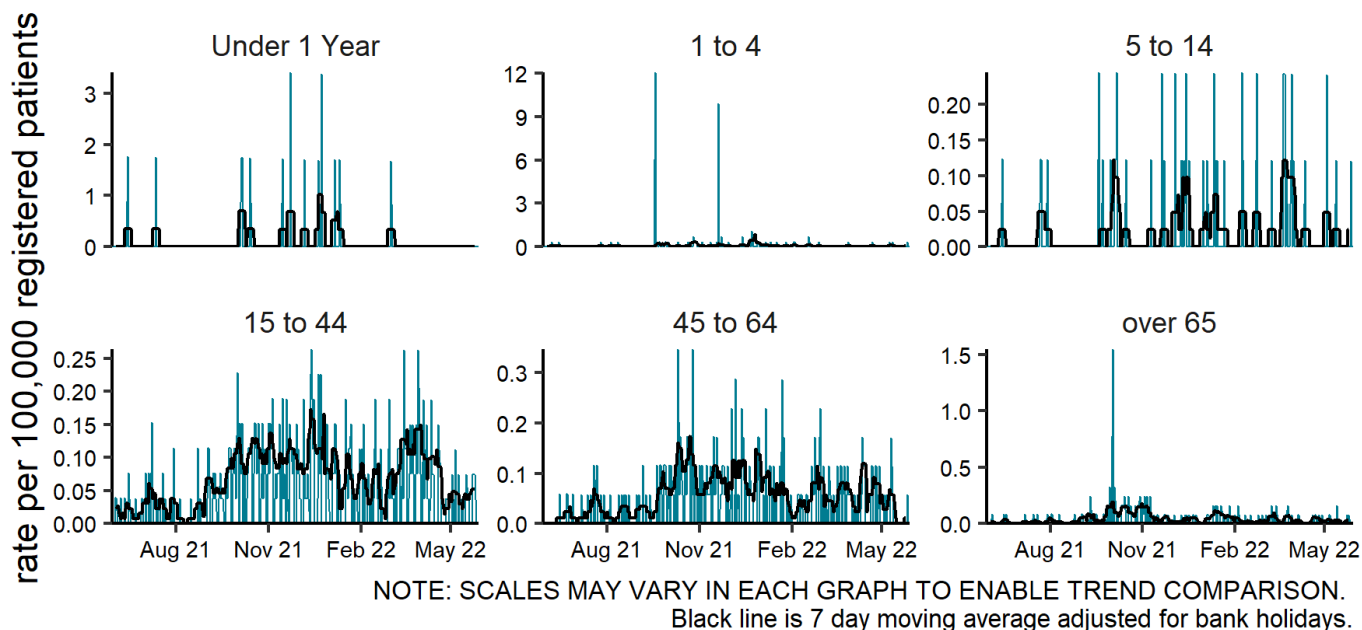
Further indicators and information about caveats are available from the [GP In Hours Syndromic Surveillance bulletin](#).

Figure 33: GPIH clinical indicators for influenza-like illness GP consultations, England (a) nationally, (b) by age group and (c) by UKHSA Centre



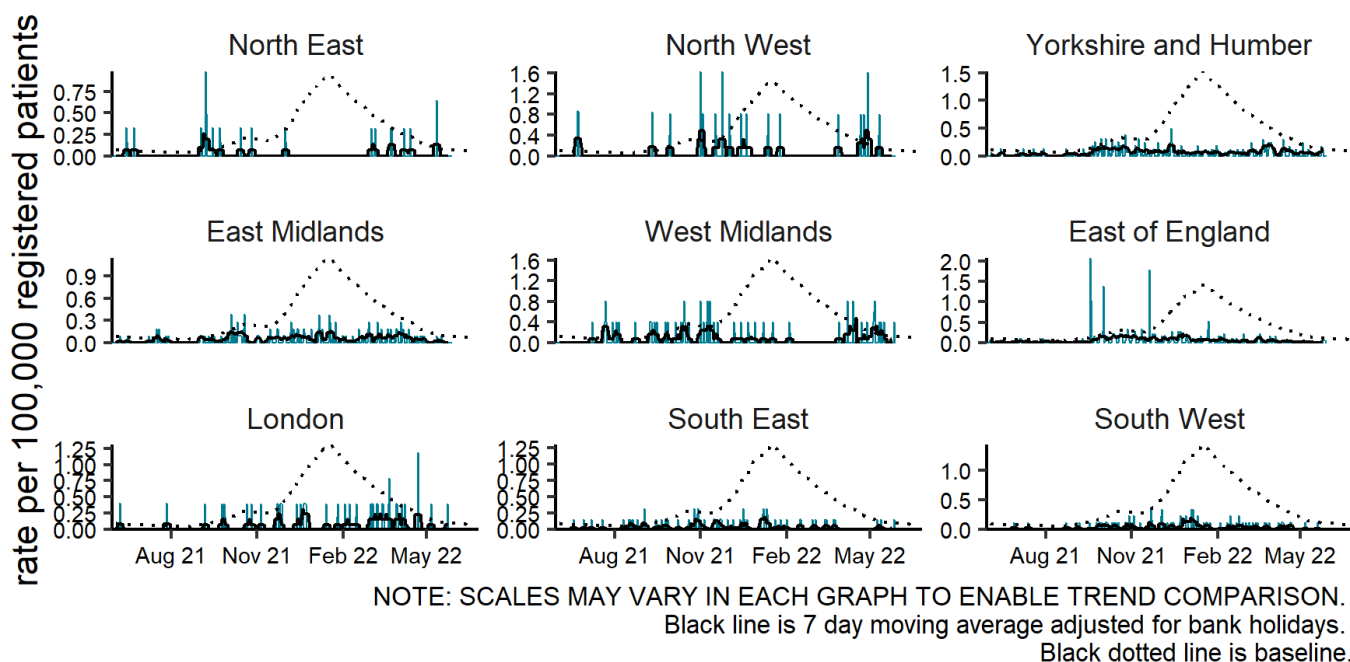
(b)

GP in-hours (TPP): influenza-like illness by age (years) 30/05/2021 to 29/05/2022



(c)

GP in-hours (TPP): influenza-like illness by region 30/05/2021 to 29/05/2022



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 29 May GP out-of-hours and unscheduled care consultations for acute respiratory infections increased in children under 14 years old, and for influenza-like illness remained stable (Figures 34 and 35).

Figure 34: GPOOH number of daily contacts for all ages for influenza-like illness, England

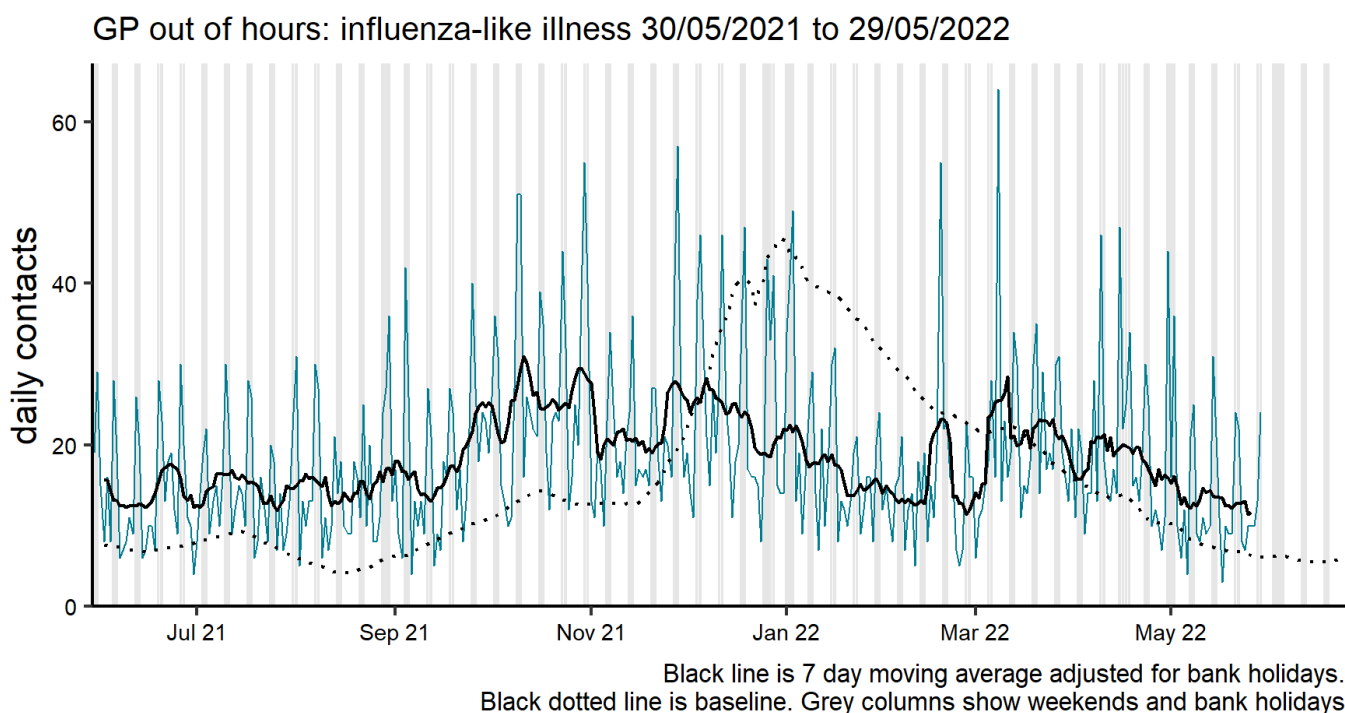
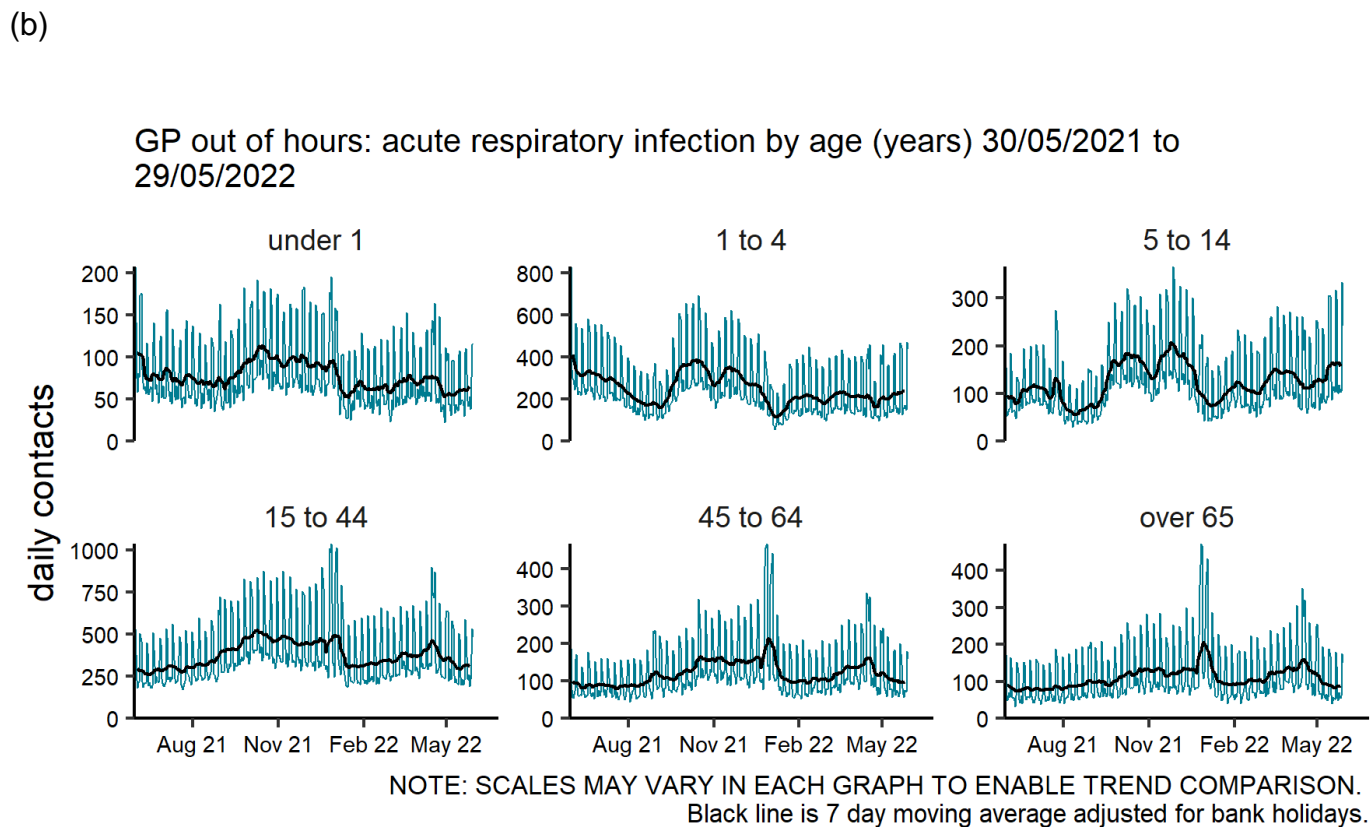
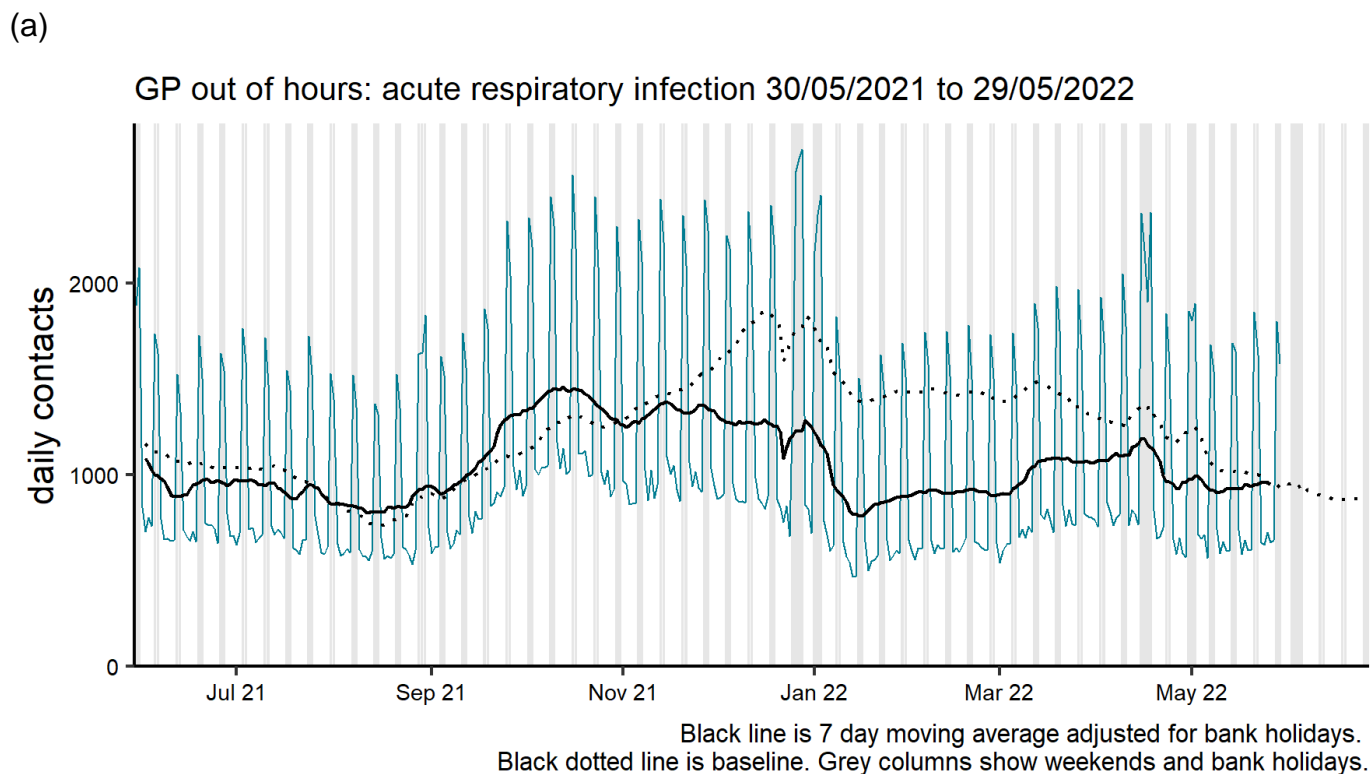


Figure 35: GPOOH number of daily contacts for acute respiratory infections, England (a) nationally and (b) by age group



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.

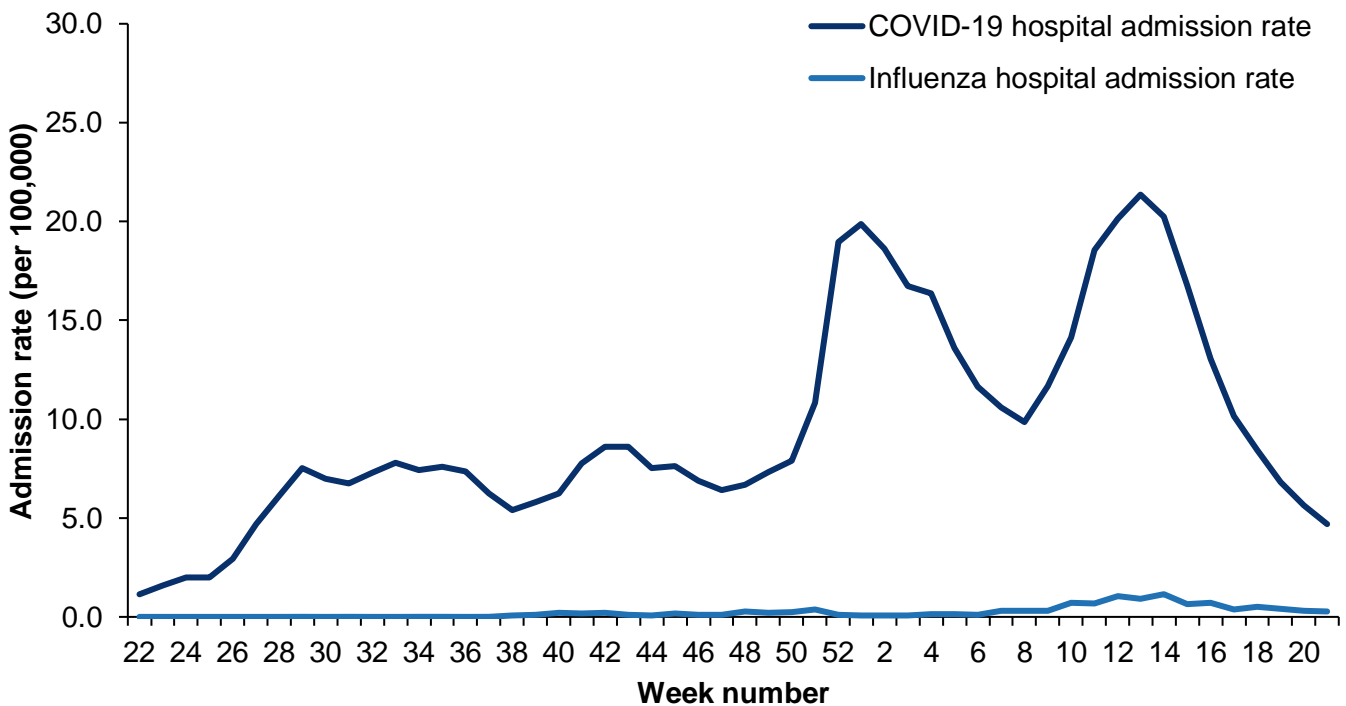
Hospitalisations, SARI Watch

In week 21, the overall weekly hospital admission rate for COVID-19 decreased. The hospitalisation rate for COVID-19 was at 4.69 per 100,000 in week 21 compared to 5.62 per 100,000 in the previous week.

By UKHSA centre, the highest hospital admission rate for COVID-19 was 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 0.26 per 100,000 in week 21 compared to 0.32 per 100,000 in the previous week. There were 22 new hospital admissions to sentinel Trusts for influenza (4 influenza A(H3N2), 3 influenza A(H1N1)pdm09 and 15 influenza A(not subtyped)) in week 21.

Figure 36: Weekly overall hospital admission rates of new COVID-19 and influenza positive cases per 100,000 population reported through SARI Watch, England



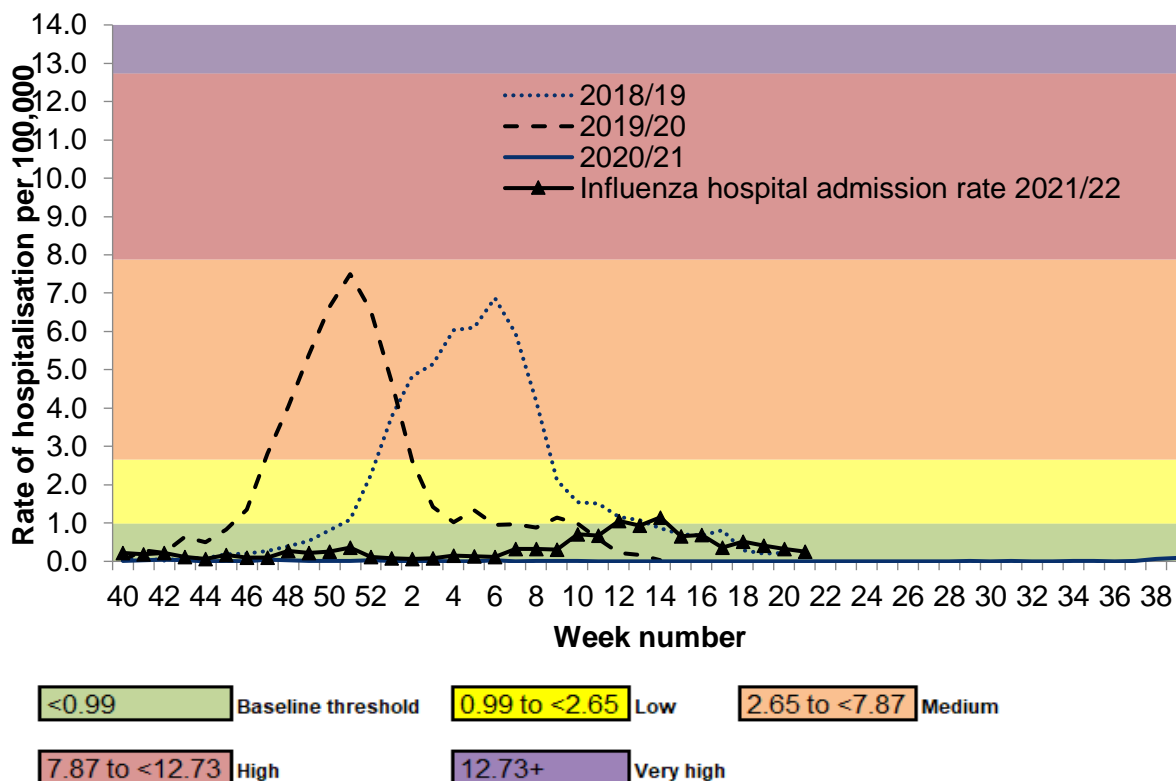
* influenza hospital admission rate is reported from week 22 2021 onwards

* influenza hospital admission rate based on 22 sentinel NHS trusts for week 21

* COVID-19 hospital admission rate based on 95 NHS trusts for week 21

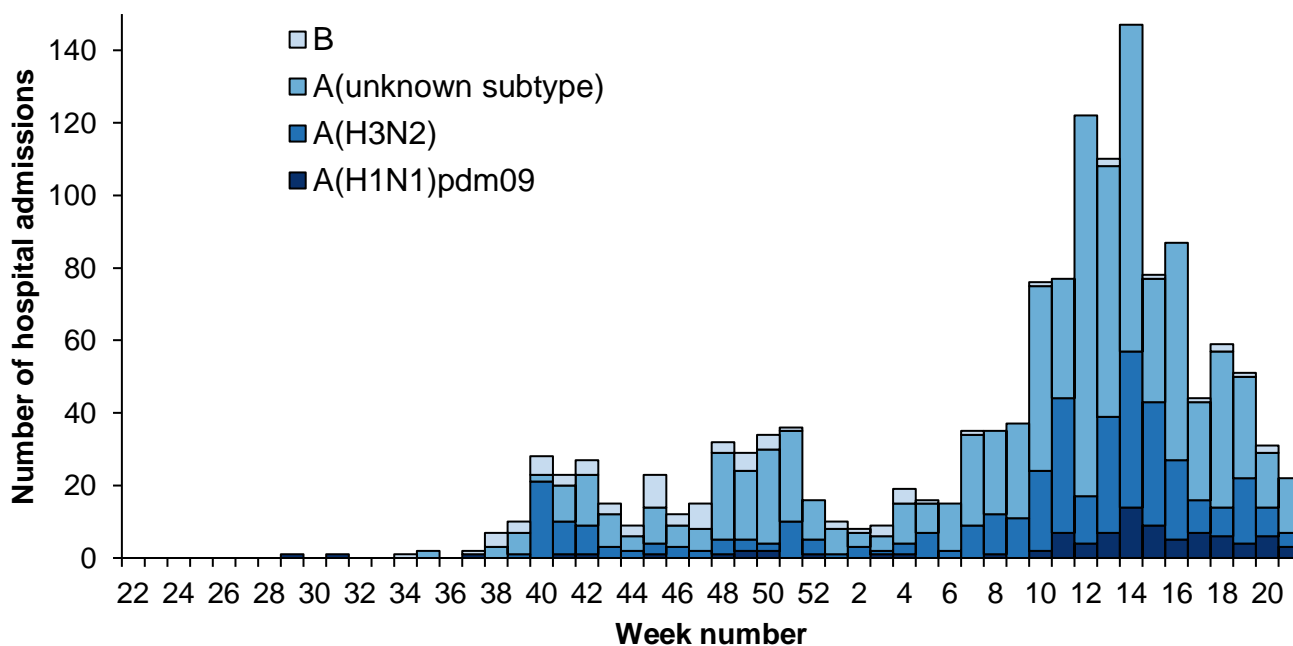
* SARI Watch data is provisional

Figure 37: 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 38: Weekly influenza hospital admissions by influenza type, SARI Watch, England



*number of influenza hospital admissions based on sentinel NHS trusts

Figure 39: Weekly hospital admission rate by UKHSA Centre for new (a) COVID-19 positive cases and (b) influenza reported through SARI Watch

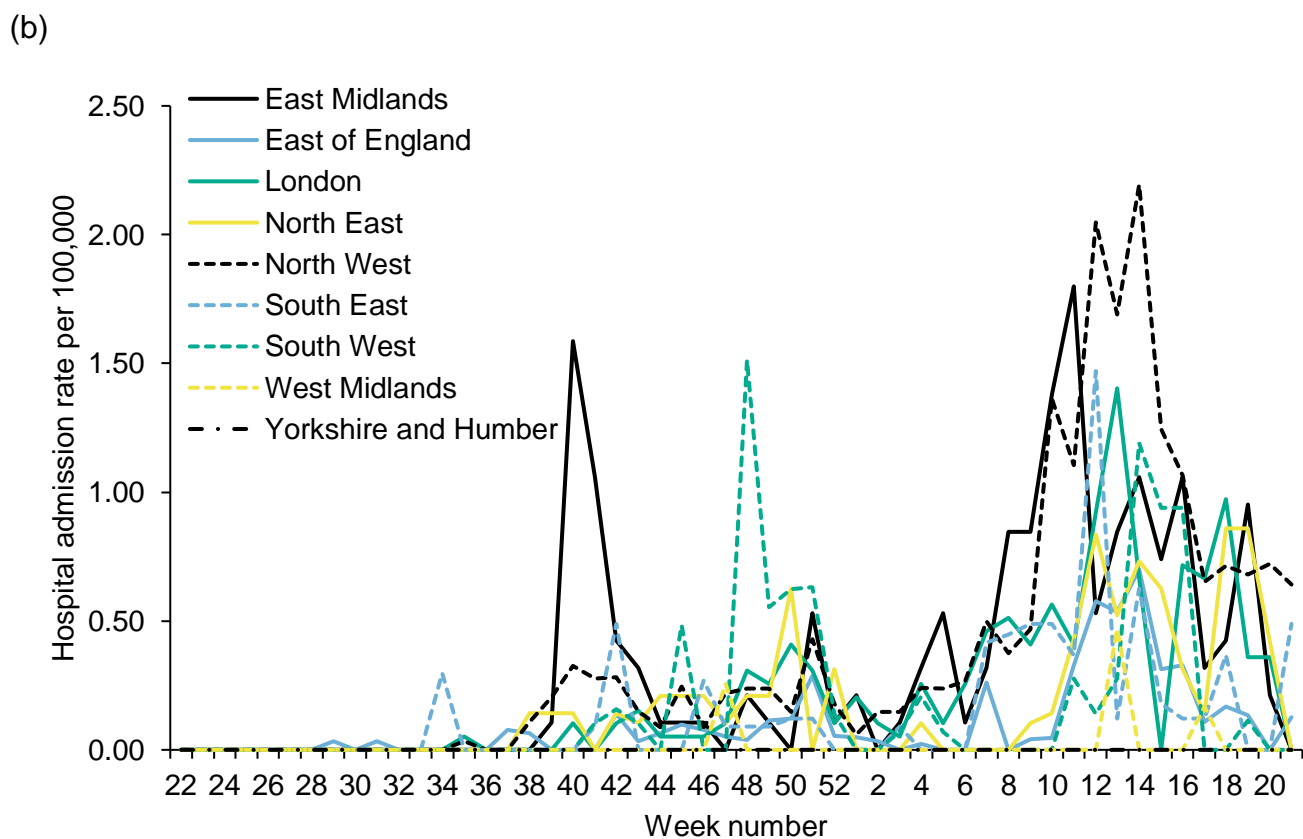
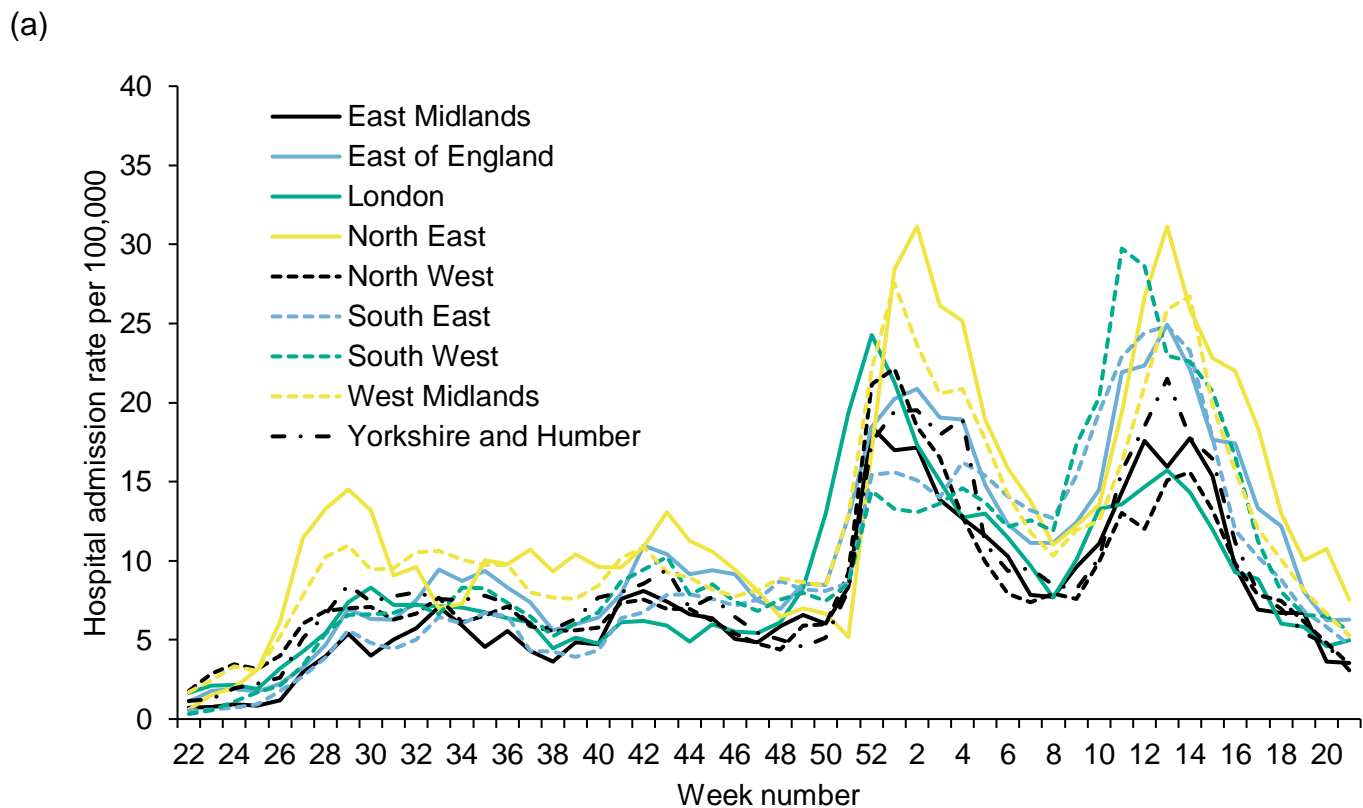
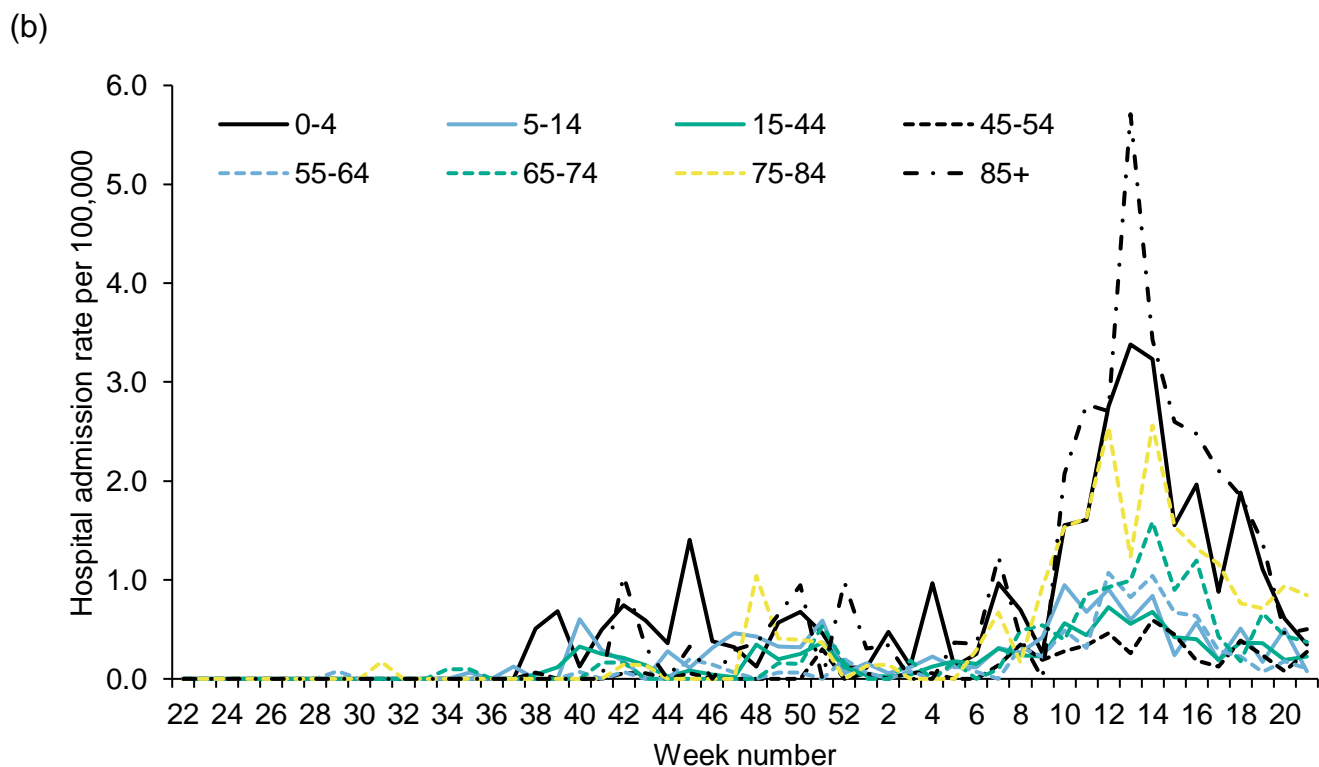
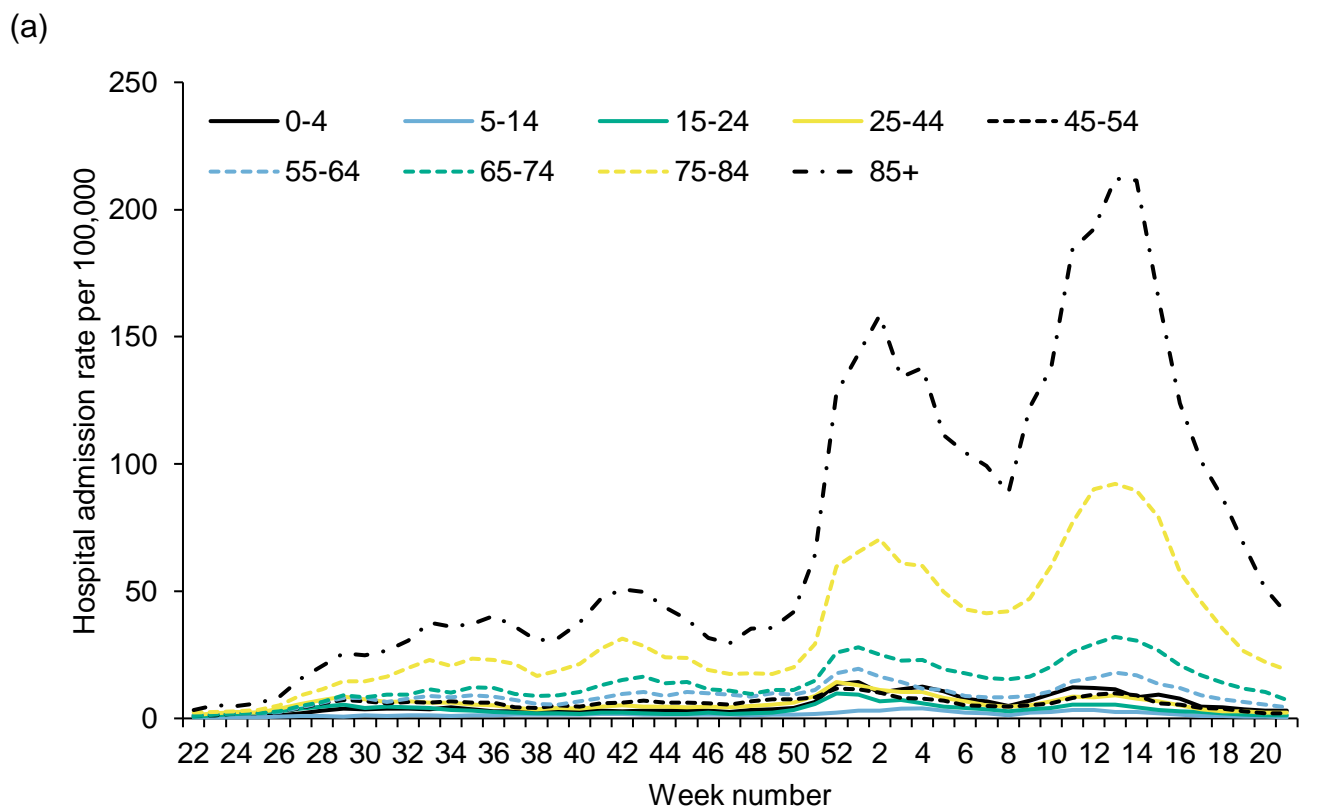


Figure 40: Weekly hospital admission rate by age group for new (a) COVID-19 positive cases and (b) influenza reported through SARI Watch



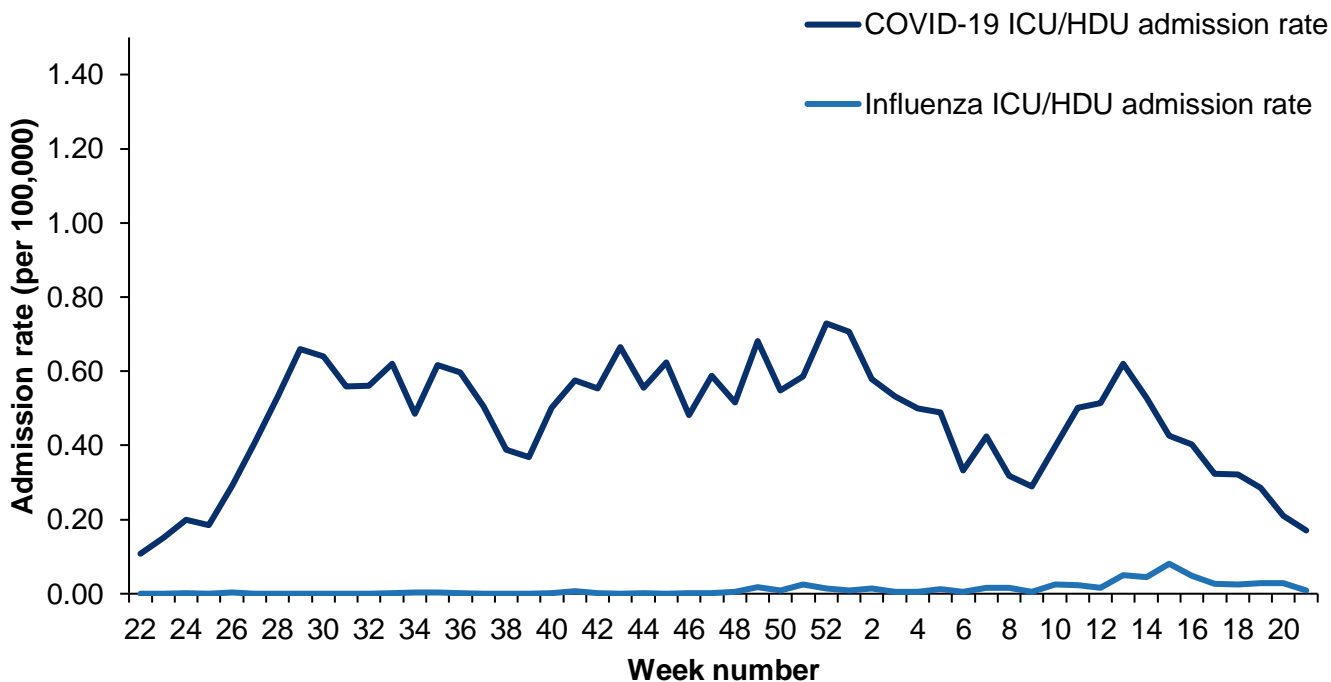
ICU or HDU admissions, SARI Watch

In week 21, the overall weekly ICU or HDU admission rates for COVID-19 decreased. The ICU or HDU rate for COVID-19 was at 0.17 per 100,000 in week 21 compared to 0.21 per 100,000 in the previous week.

By UKHSA Centre, the highest ICU or HDU admission rates for COVID-19 were 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 21 compared to 0.03 per 100,000 in the previous week. There were 3 new case reports of ICU or HDU admissions for influenza (3 influenza A(not subtyped)) in week 21.

Figure 41: 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 93 NHS trusts for week 21

* COVID-19 ICU or HDU admission rate based on 83 NHS trusts for week 21

* SARI Watch data is provisional

Figure 42: Weekly overall influenza ICU or HDU admission rates per 100,000 trust catchment population with MEM thresholds, SARI Watch, England

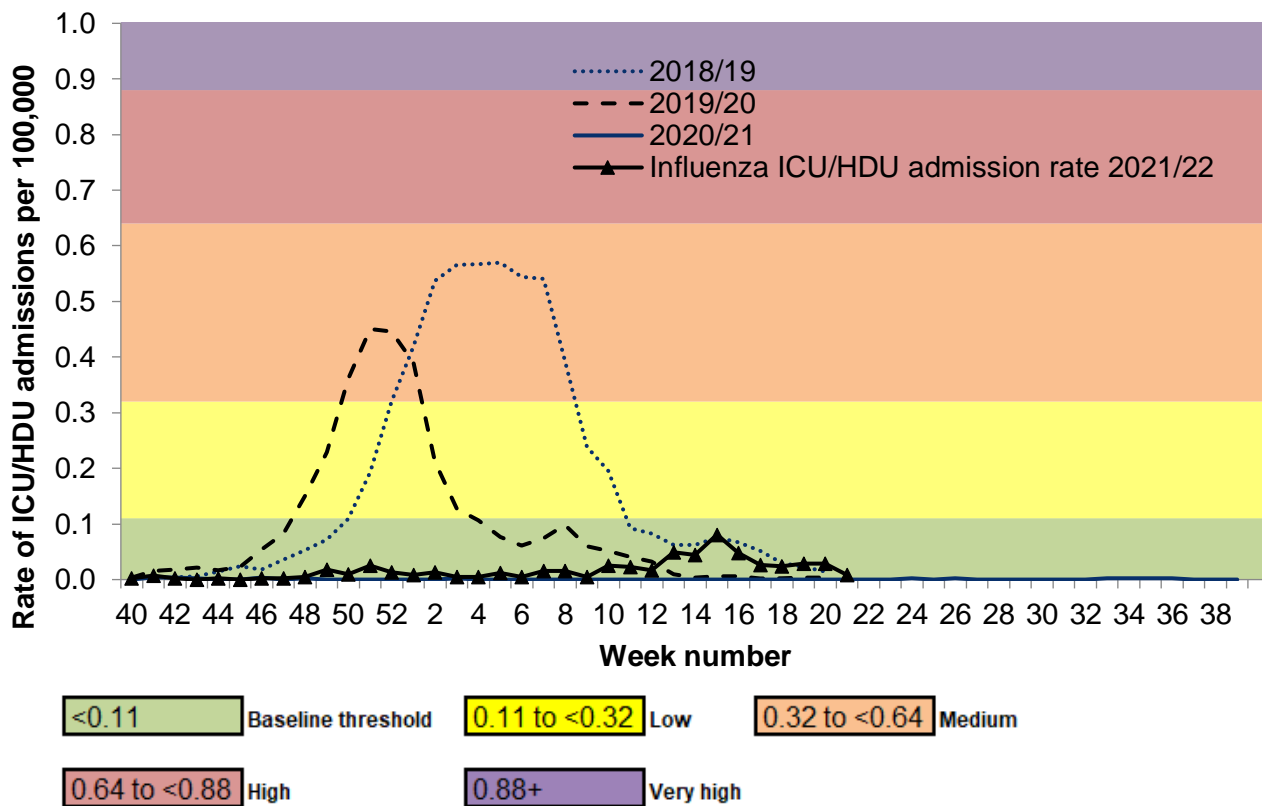


Figure 43: Weekly influenza ICU or HDU admissions by influenza type, SARI Watch, England

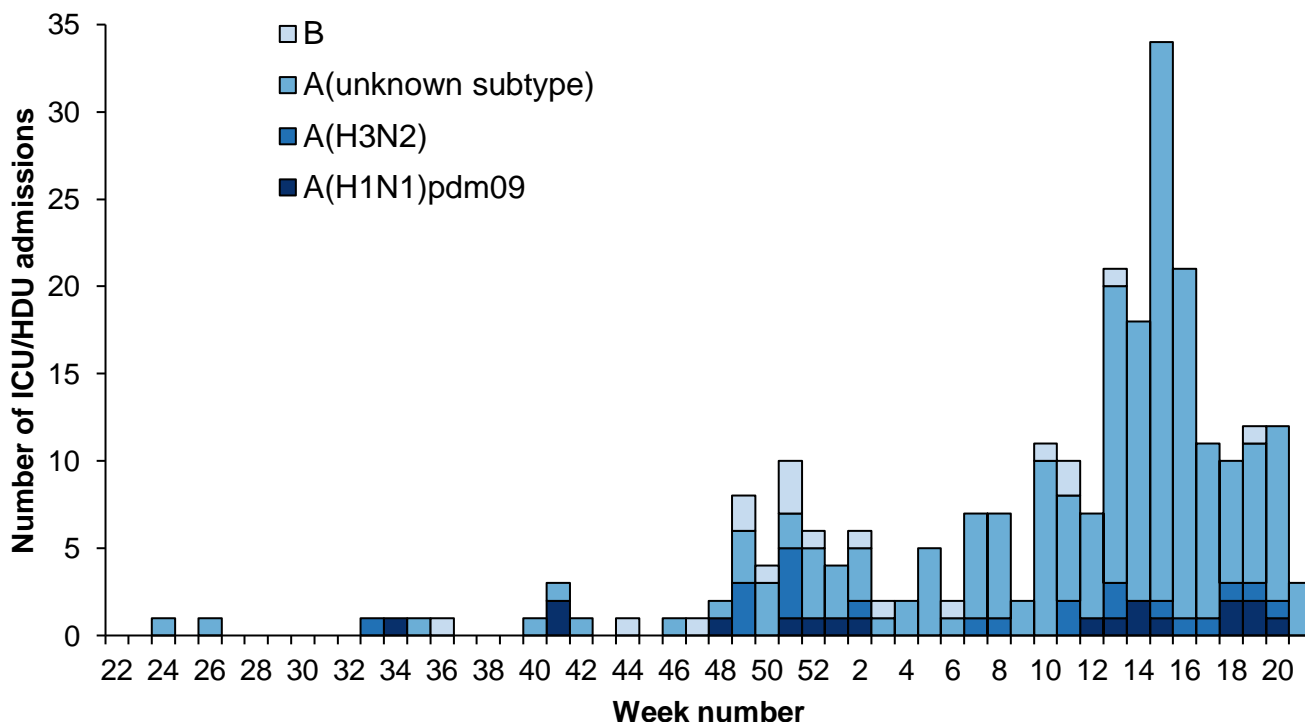


Figure 44: Weekly ICU or HDU admission rate by UKHSA Centre for new (a) COVID-19 positive cases and (b) influenza, reported through SARI Watch

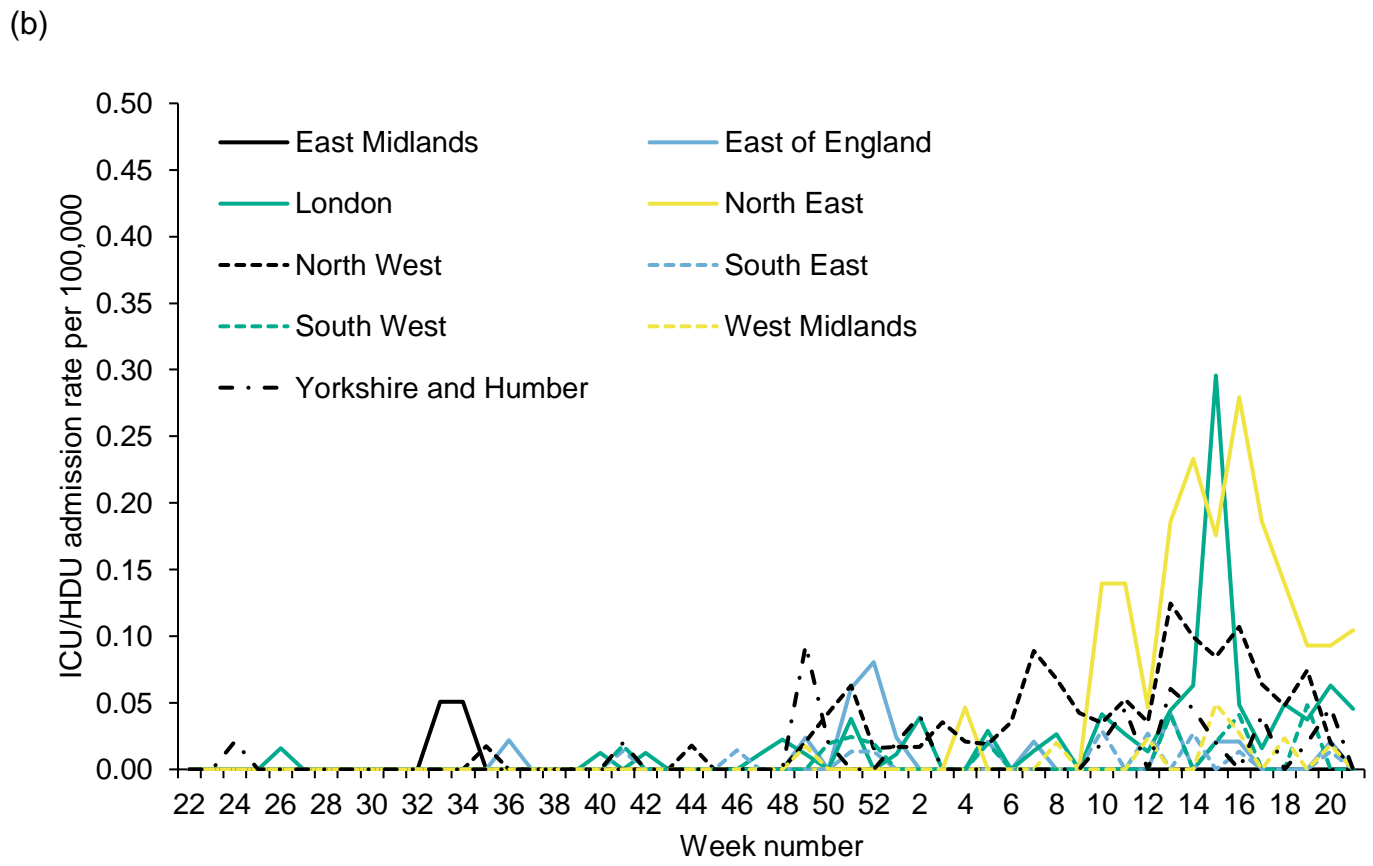
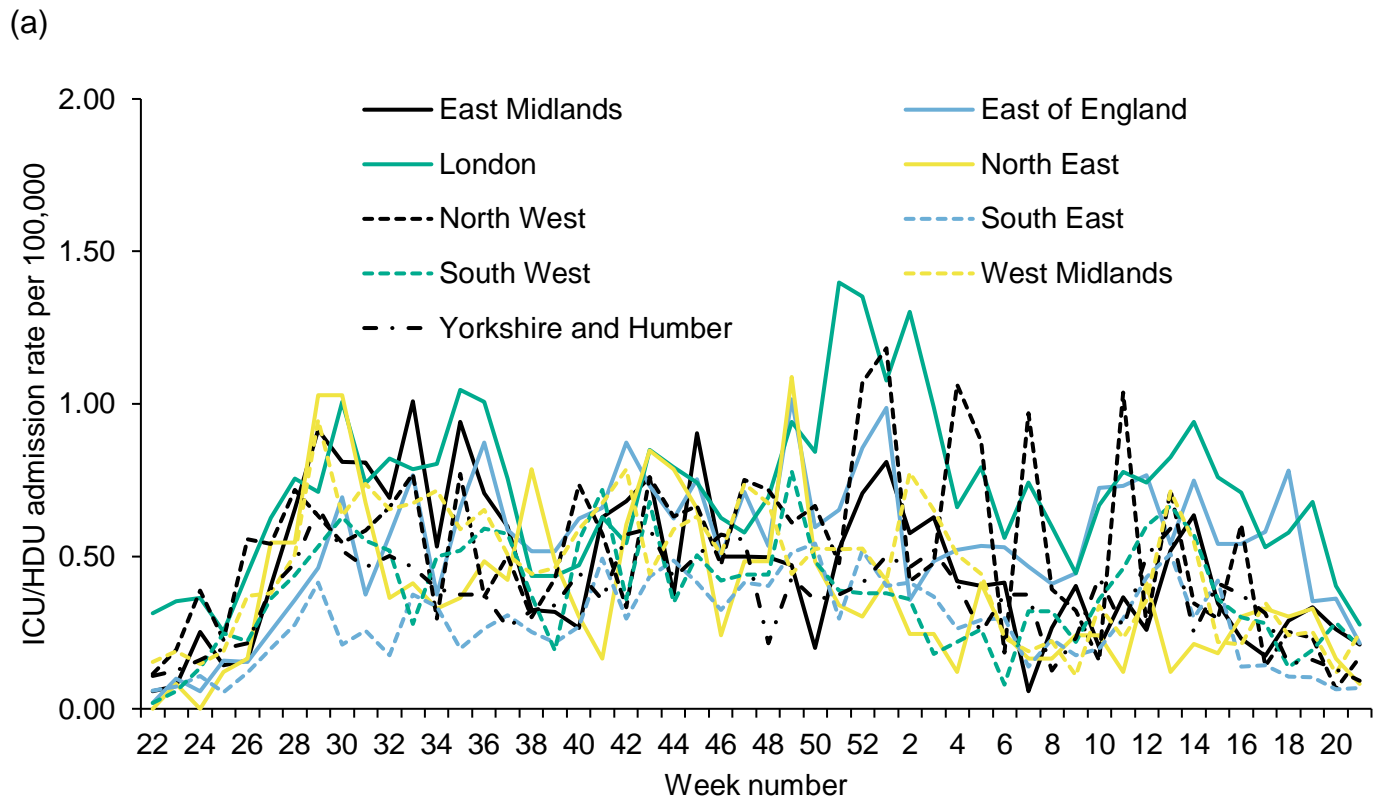
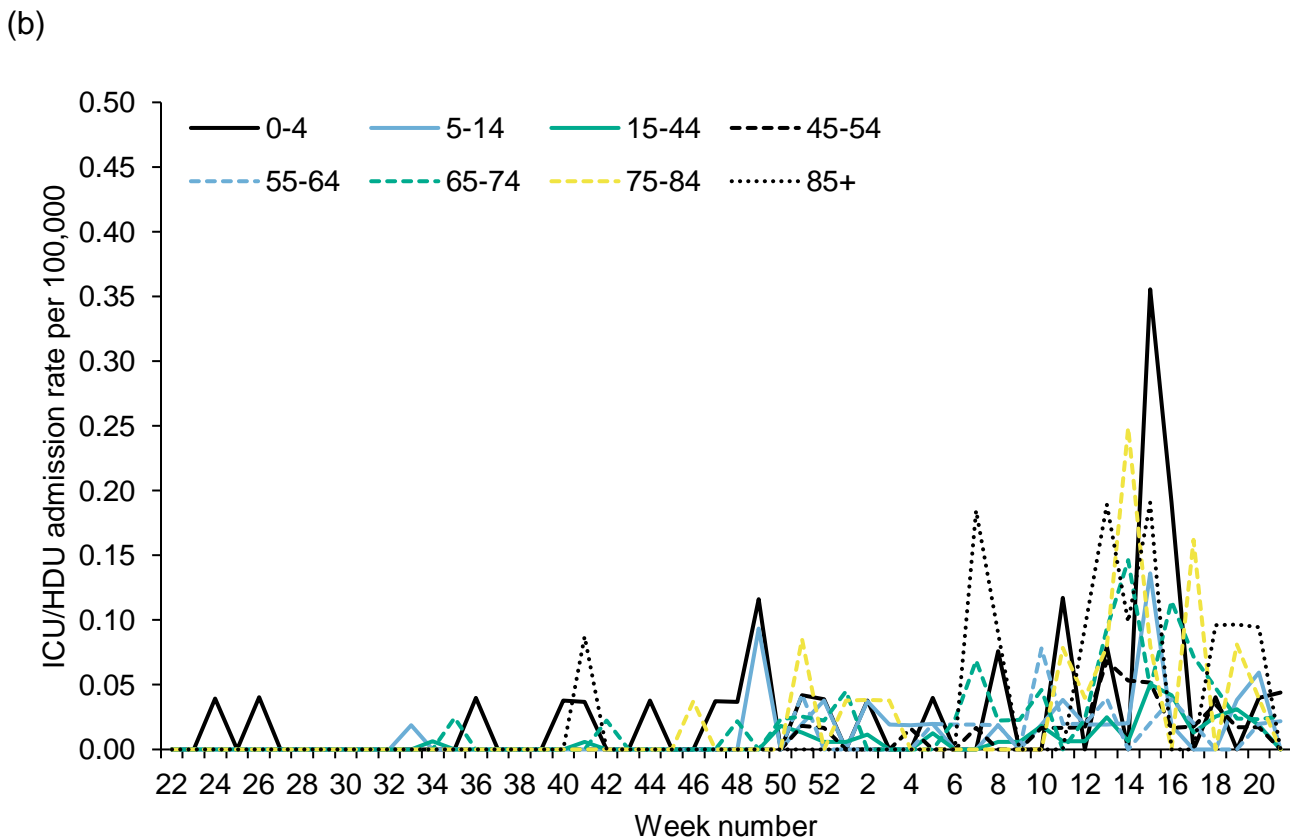
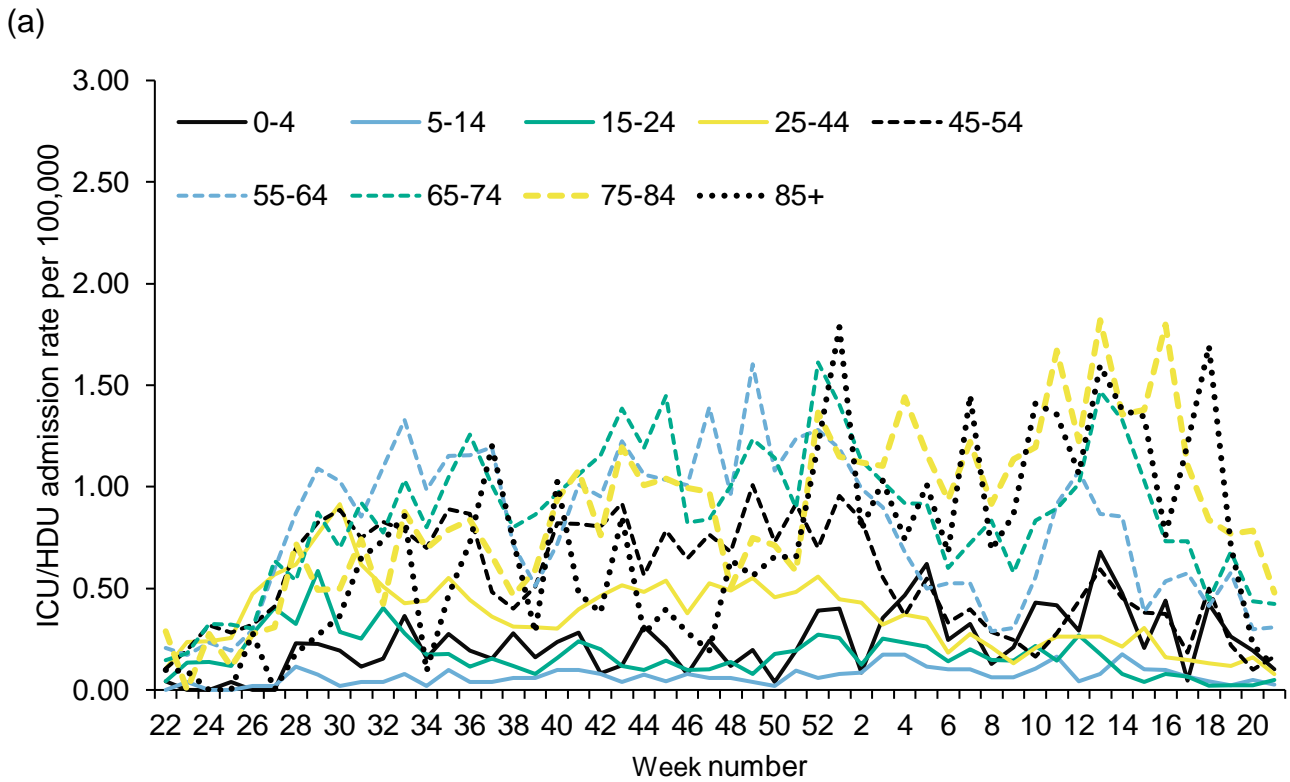


Figure 45: Weekly ICU or HDU admission rate by age group for new (a) COVID-19 positive cases and (b) influenza, reported through SARI Watch

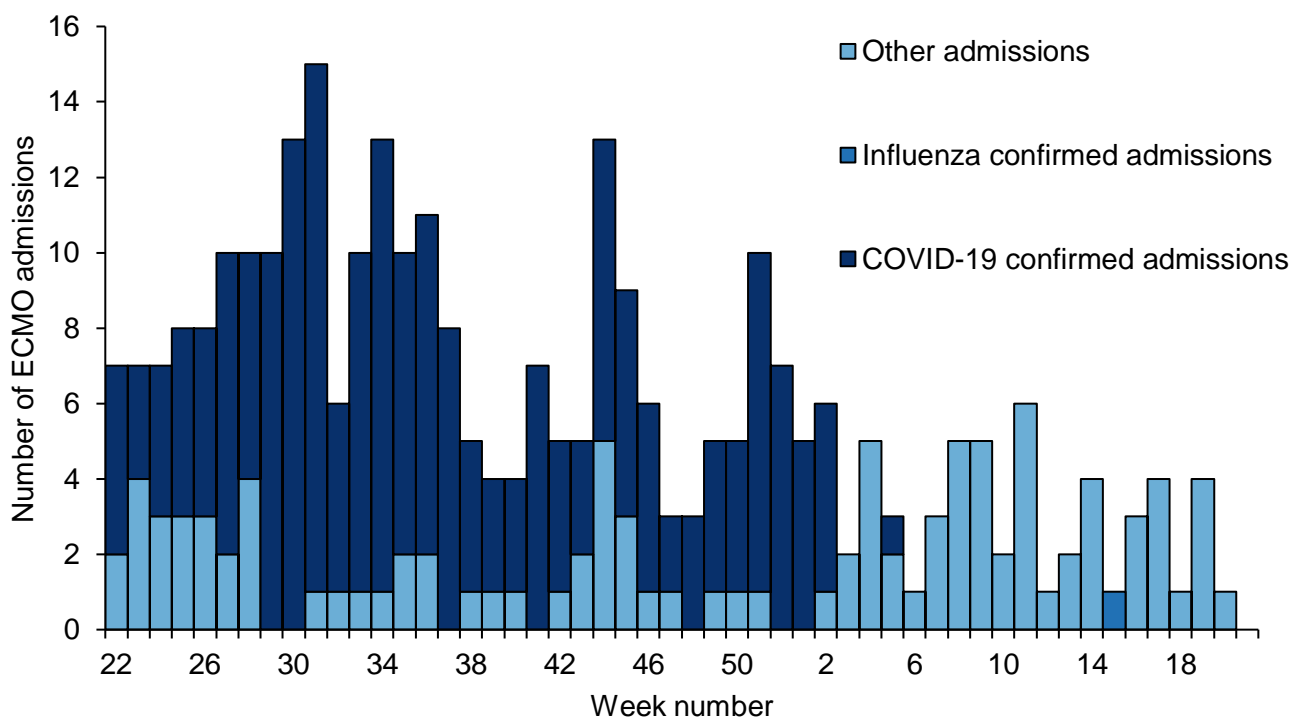


ECMO, SARI Watch

From week 22 2021, a total of 207 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 21 (Figure 46).

Figure 46: Laboratory confirmed ECMO admissions (COVID-19, influenza and non-COVID-19 confirmed) to Severe Respiratory Failure centres in the UK

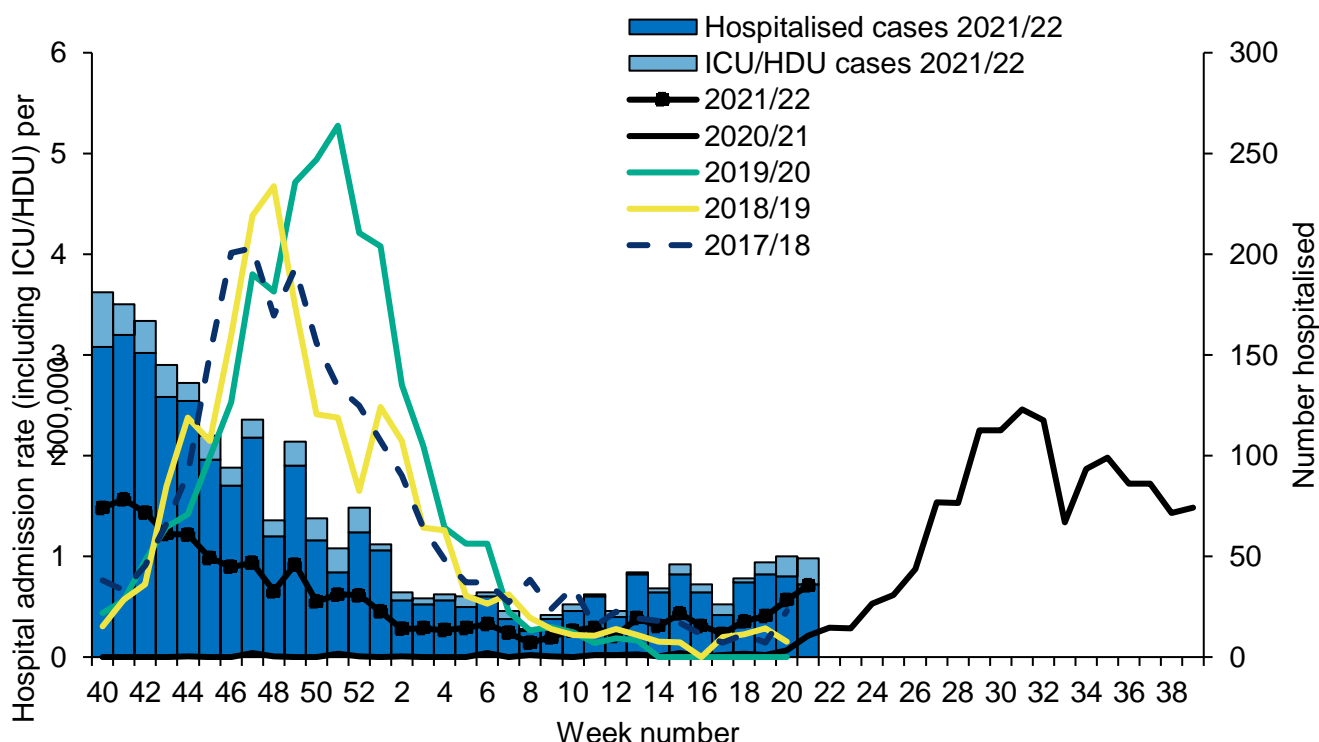


* SARI Watch data is provisional

RSV admissions, SARI Watch

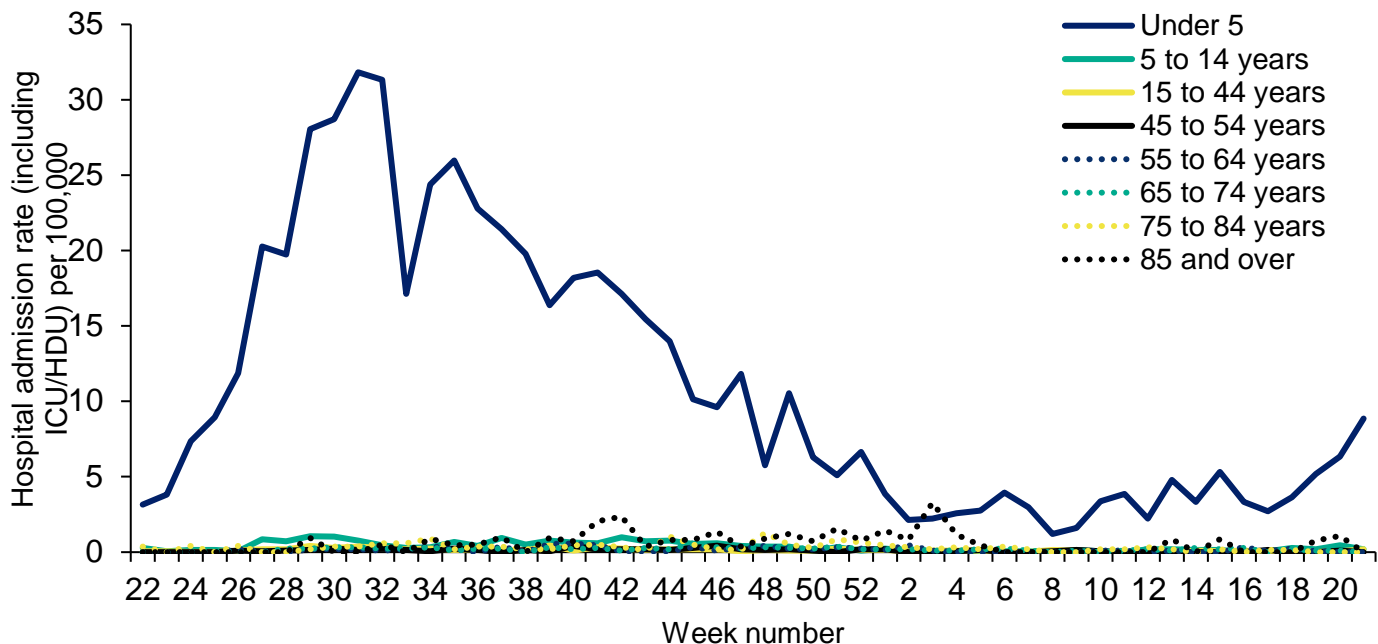
Data on hospitalisations, including ICU or HDU admissions, with respiratory syncytial virus (RSV) are shown below. RSV SARI Watch surveillance is sentinel.

Figure 47: 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 48: 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

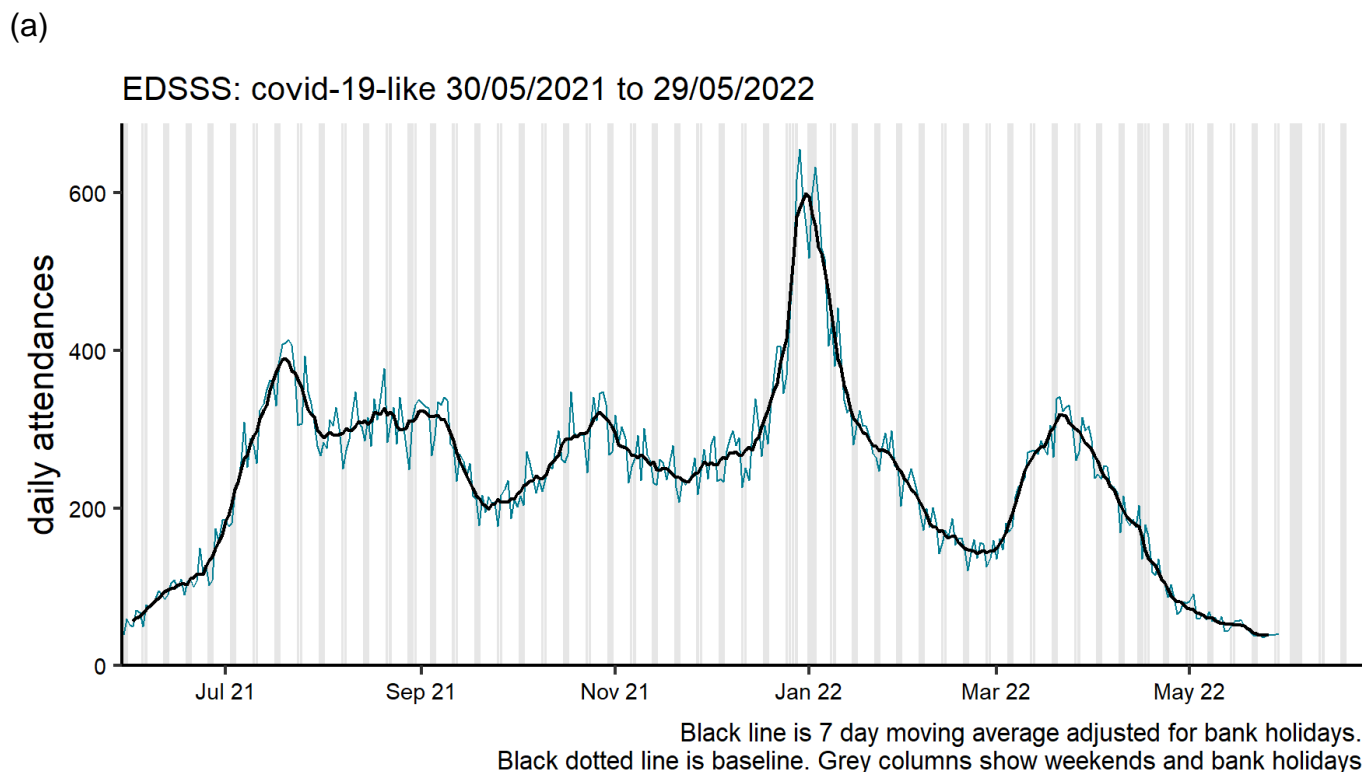
Emergency Department attendances, Syndromic surveillance

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

Up to 29 May, the daily number of Emergency Department (ED) attendances as reported by 135 EDs for COVID-19-like and ARI remained stable (Figures 49 and 50).

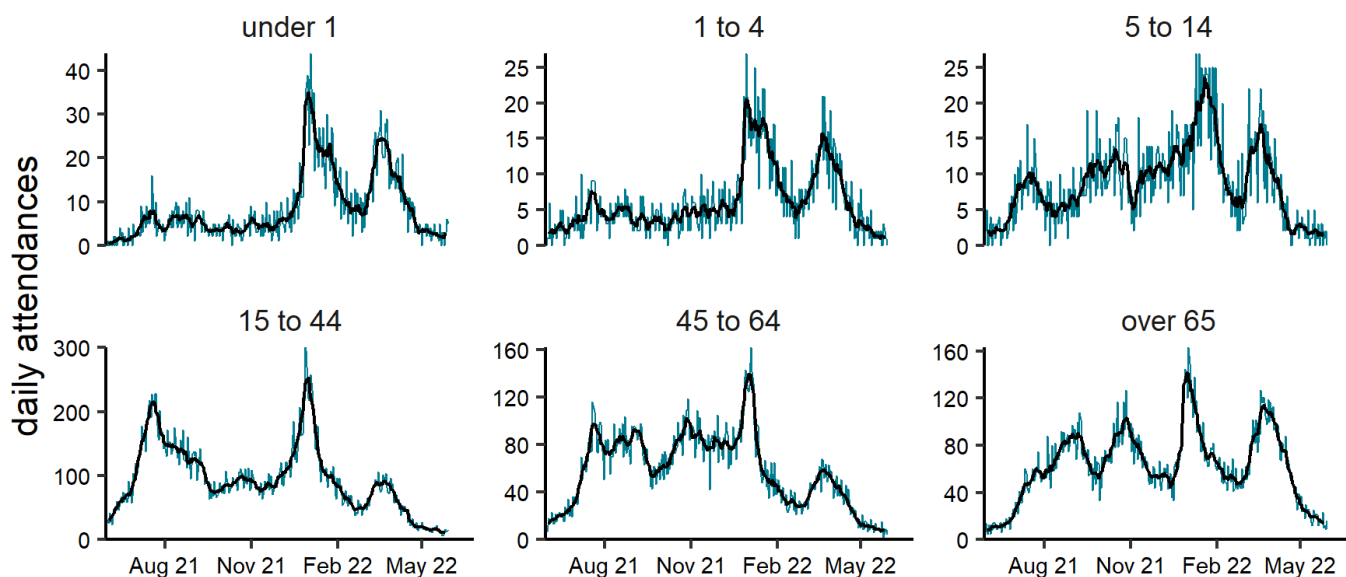
Please note: the COVID-19-like ED indicator is an underestimation of the number of COVID-19 attendances as it only includes attendances with a COVID-19-like diagnosis as their primary diagnosis. The EDSSS COVID-19-like indicator should therefore be used to monitor trends in ED attendances and not to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

Figure 49: Daily ED attendances for COVID-19-like infections, England (a) nationally, (b) by age group and (c) by UKHSA Centre



(b)

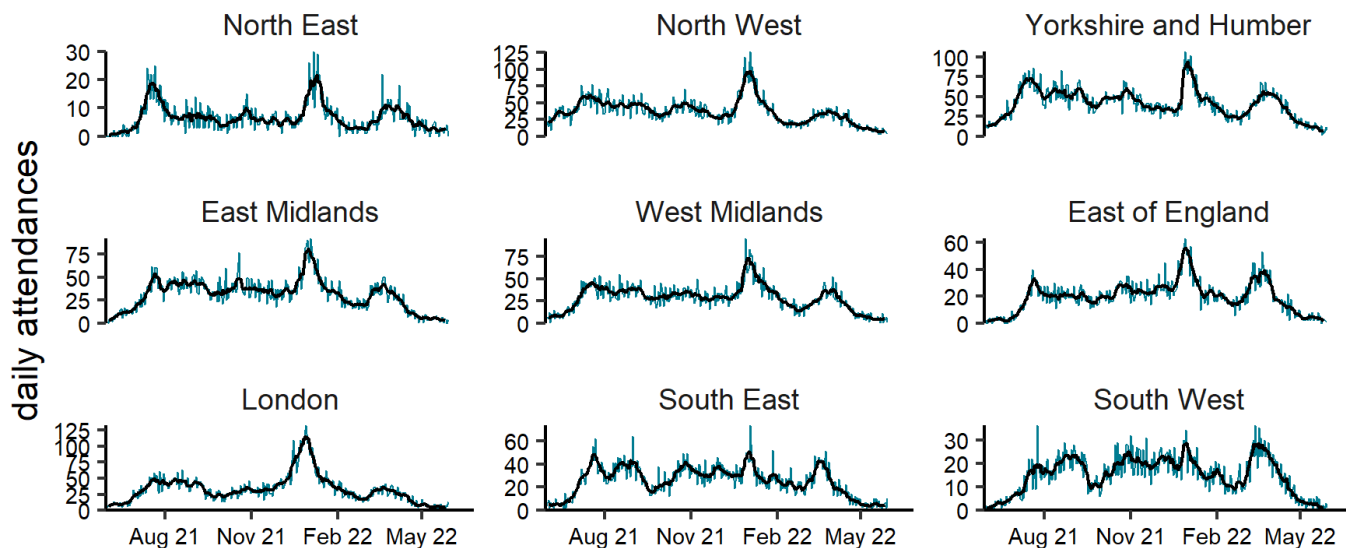
EDSSS: covid-19-like by age (years) 30/05/2021 to 29/05/2022



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

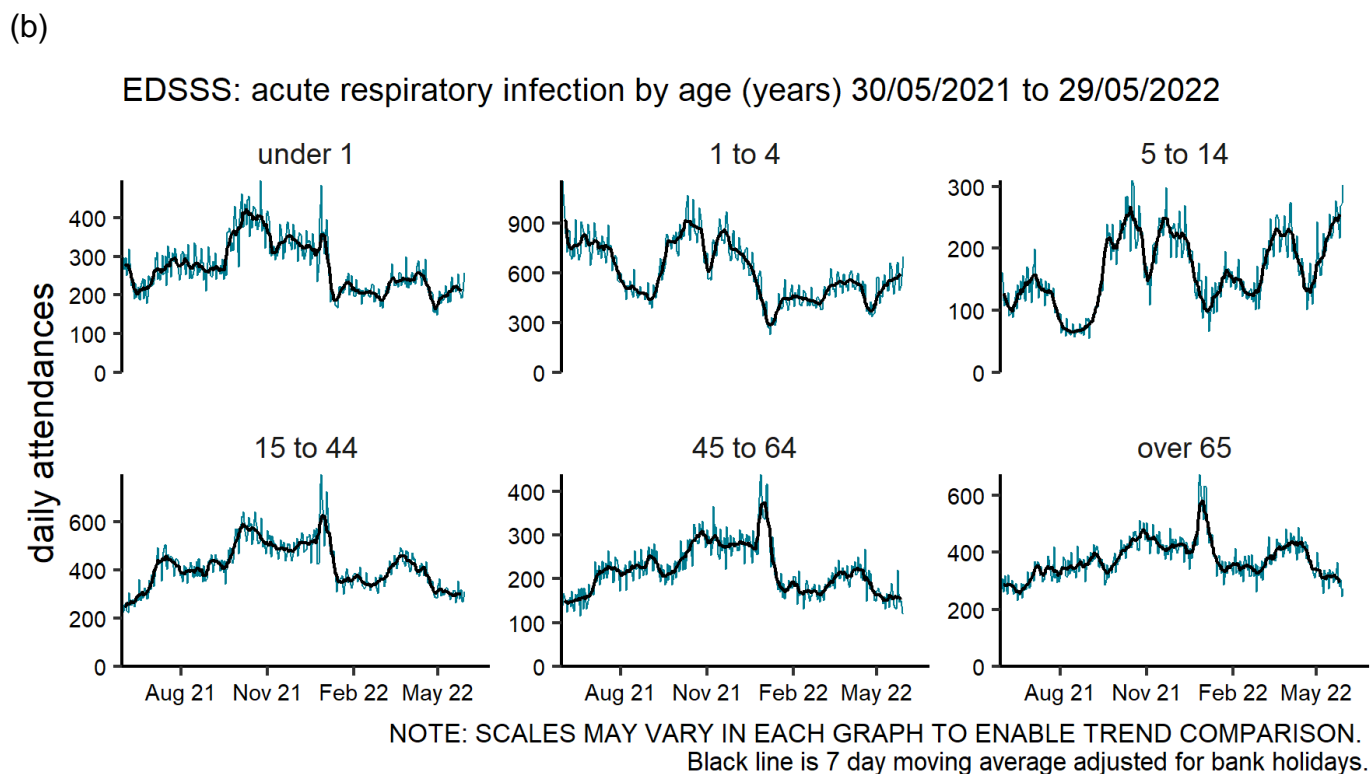
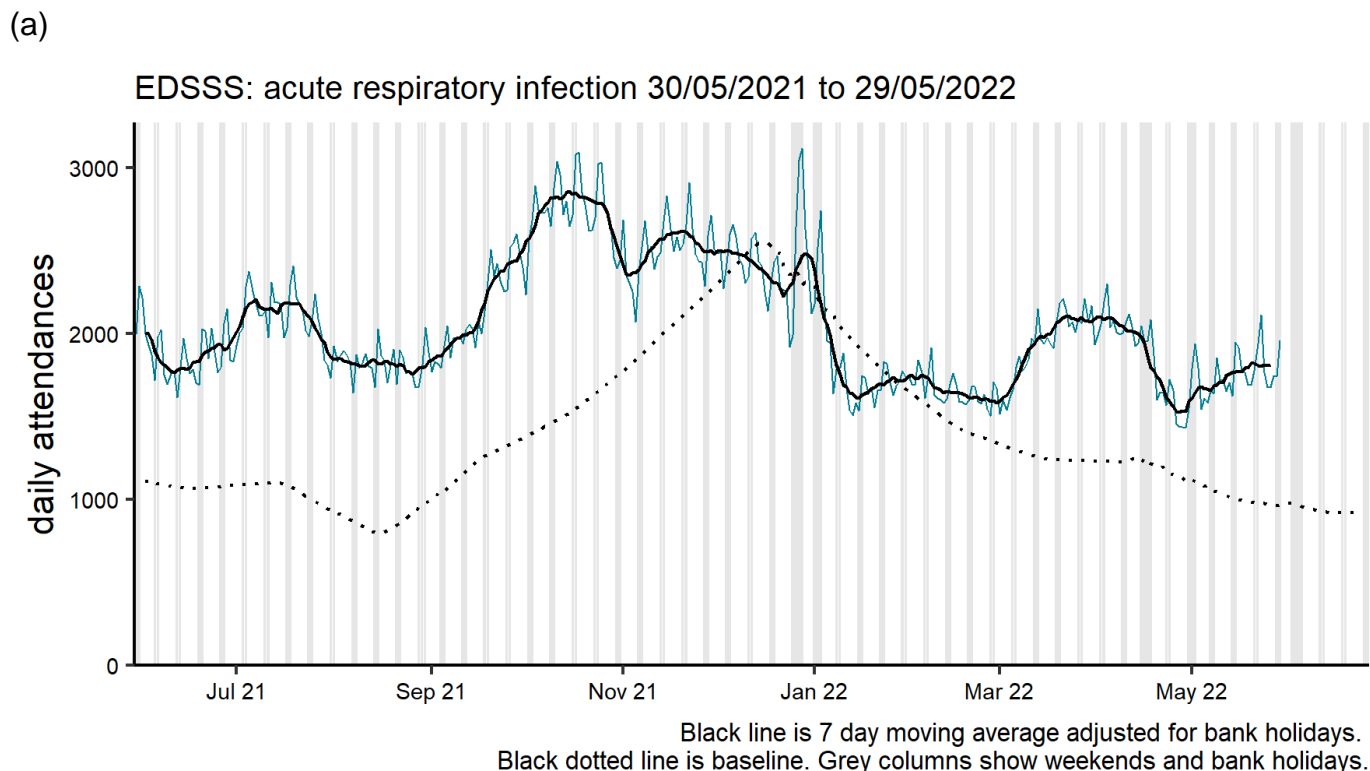
(c)

EDSSS: covid-19-like by region 30/05/2021 to 29/05/2022



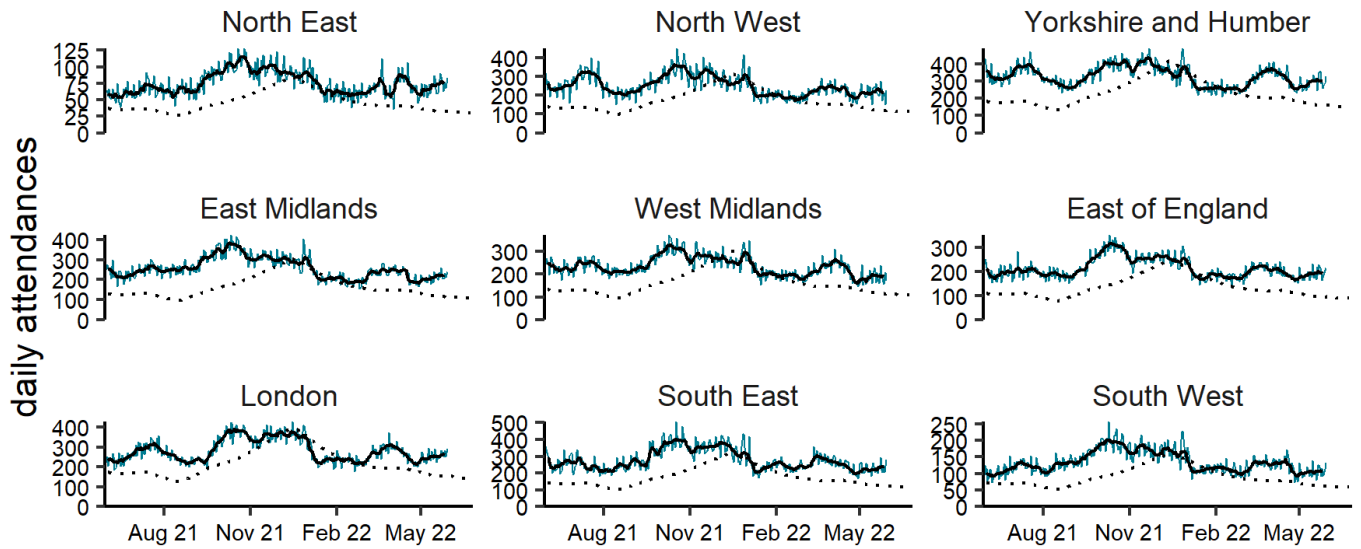
NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline.

Figure 50: Daily ED attendances for acute respiratory infections, England (a) nationally, (b) by age group and (c) by UKHSA Centre



(c)

EDSSS: acute respiratory infection by region 30/05/2021 to 29/05/2022



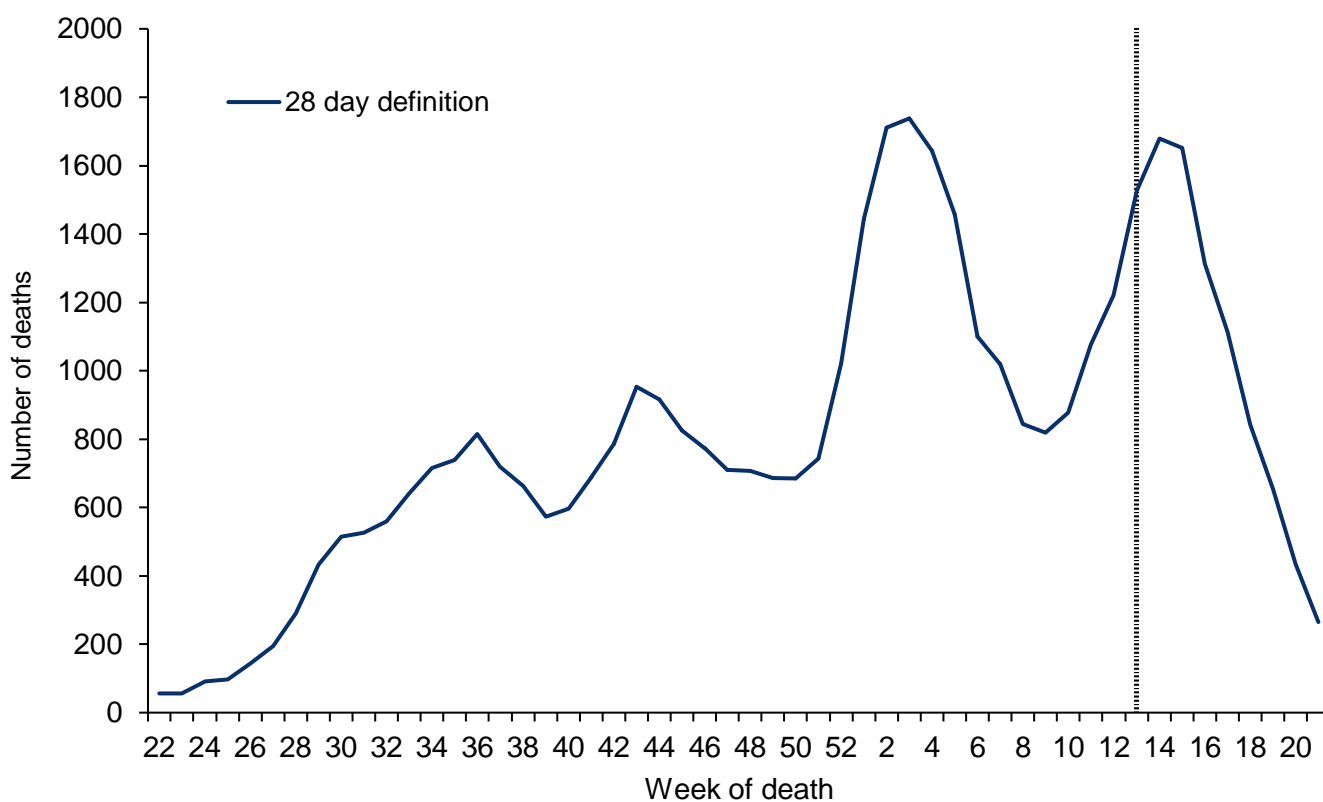
NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON.
Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline.

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

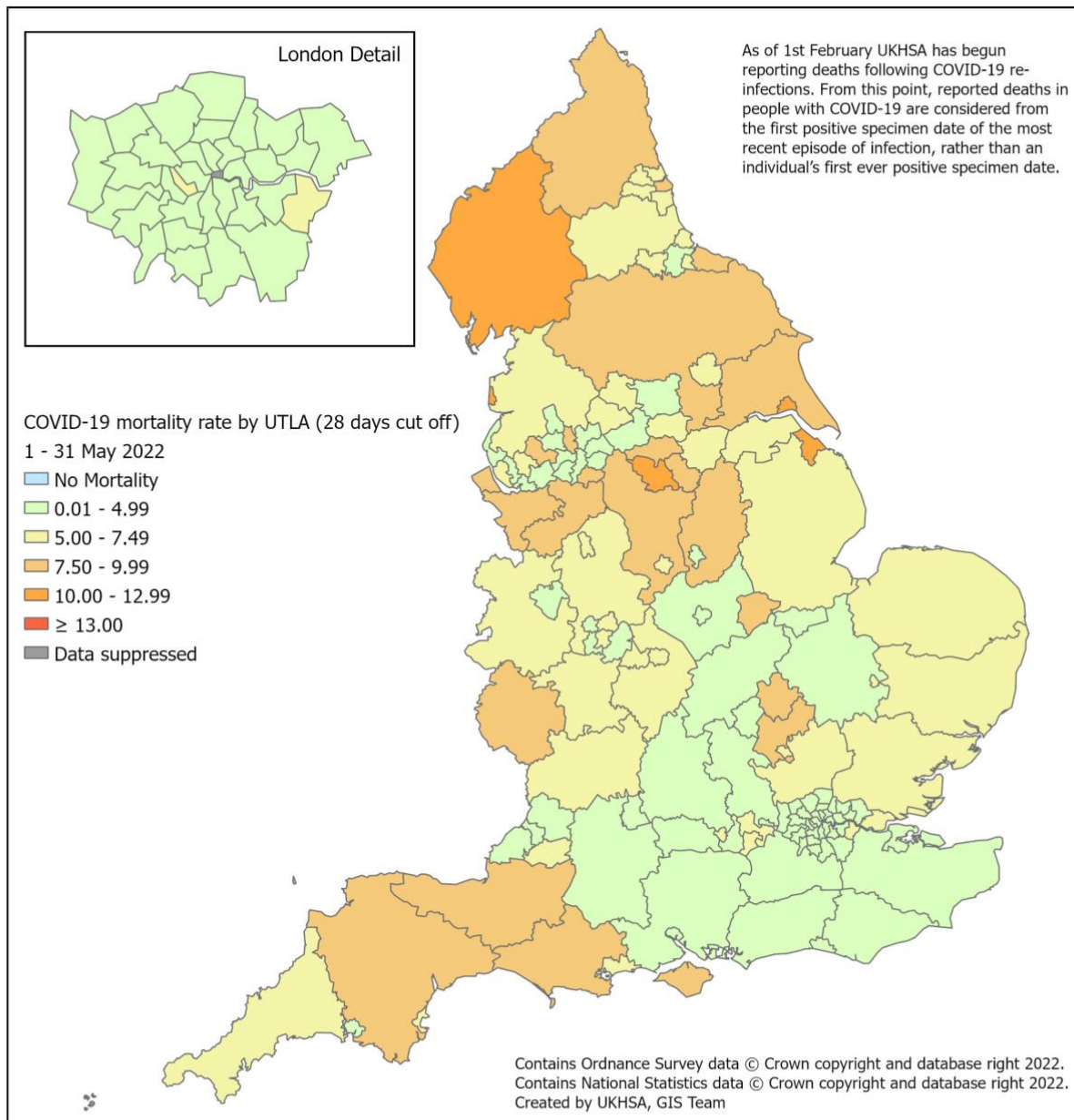
Figure 51: Number of deaths by week of death and time since a positive COVID-19 test, England



* 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 52: 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 25 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 53).

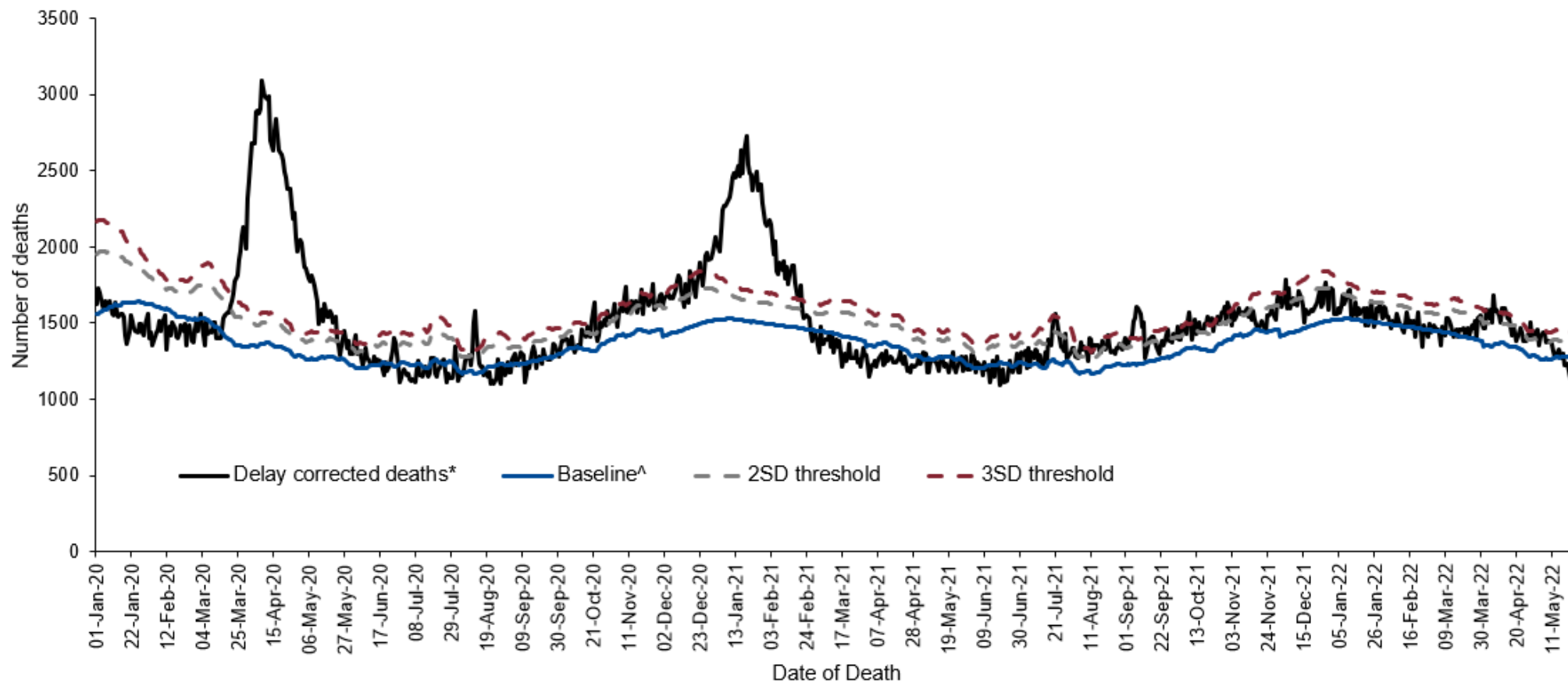
Weeks in which at least 2 days exceeded the 3SD threshold are shown in Table 3 and the daily difference from the baseline by age and region is given in Figure 54.

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 53, 54 and Table 3).

Figure 53: Daily excess all-cause deaths in all ages, England, 1 January 2020 to 25 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 3: Excess all-cause deaths by (a) age group and (b) UKHSA centres, England

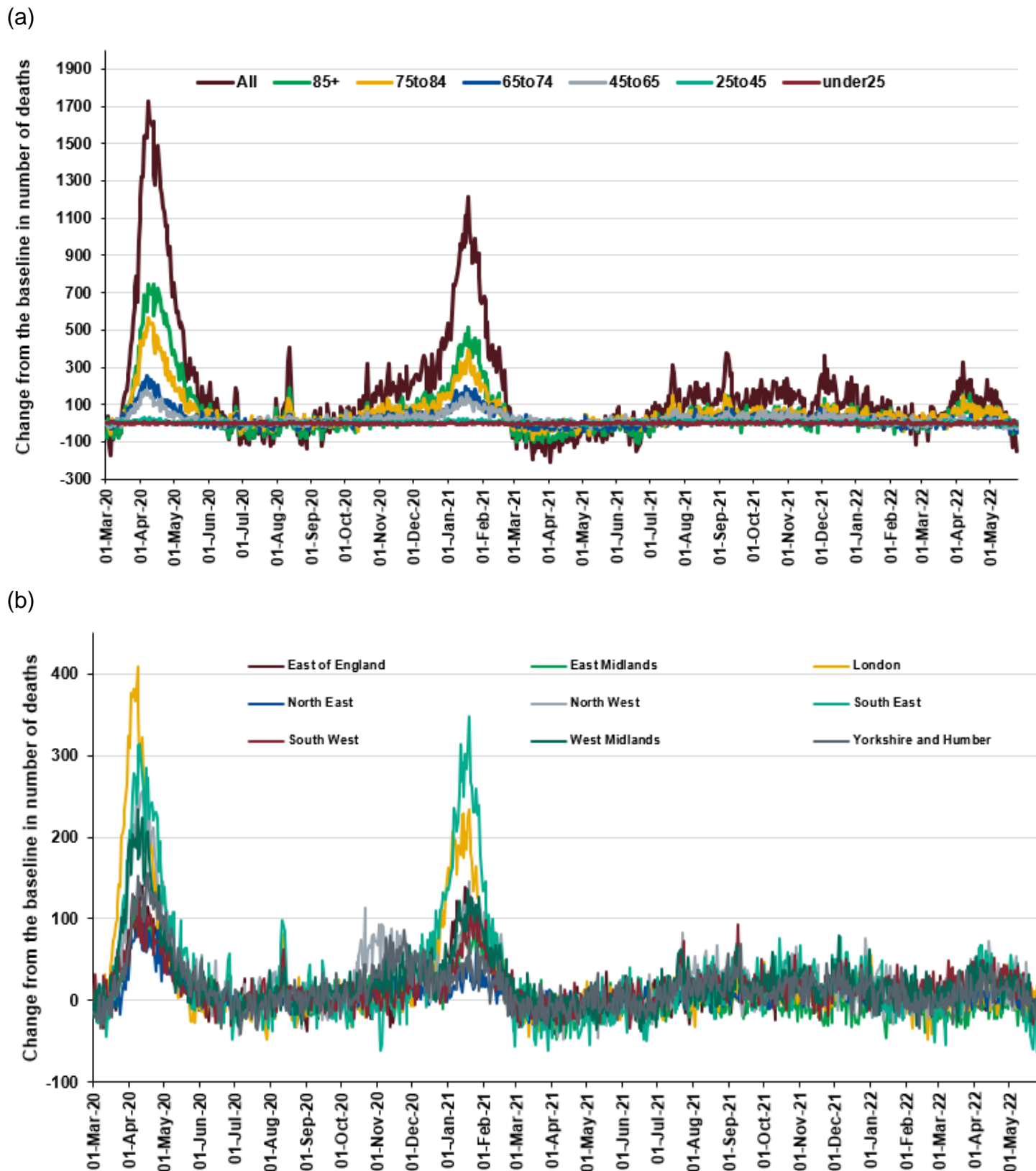
(a)

Age Group	Excess detected in week 21 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, 18
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 to 49	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 18
85+	x	13 to 21, 33, 53	01 to 07, 36	None

(b)

UKHSA Centres	Excess detected in week 21 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, 41	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 54: Daily excess all-cause deaths by (a) age group and (b) UKHSA centres, England, 1 March 2020 to 25 May 2022



Microbiological surveillance

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 4 shows in the 12 weeks up to week 21 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 4: Antimicrobial susceptibility surveillance in lower respiratory tract

Organism	Antibiotic	Specimens tested (N)	Specimens susceptible (%)
<i>S. pneumoniae</i>	Penicillin	1,397	89
	Macrolides	1,557	84
	Tetracycline	1,569	84
<i>H. influenzae</i>	Amoxicillin/ampicillin	6,152	50
	Co-amoxiclav	7,130	53
	Macrolides	2,208	6
	Tetracycline	7,200	98
<i>S. aureus</i>	Methicillin	2,996	94
	Macrolides	3,526	69
MRSA	Clindamycin	125	41
	Tetracycline	159	74
MSSA	Clindamycin	2,113	75
	Tetracycline	2,617	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](#).

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 21 2022 (week ending 29 May 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 70.1%, 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 68.4% in females. For dose 3 vaccine uptake by sex was 49.1% in males and 54.7% in females. The vaccine uptake rate in adults aged 18 and over was 81.7% (41,465,471/50,779,734) for dose 1; 78.7% (39,980,137/50,779,734) for dose 2 and 64.2% (32,576,832/ 50,779,734) for dose 3

Table 5: 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	2,934,025	2,807,002	95.7	2,789,675	95.1	2,712,787	92.5
75 to under 80	2,337,404	2,239,354	95.8	2,224,226	95.2	2,169,105	92.8
70 to under 75	2,774,515	2,618,019	94.4	2,595,524	93.5	2,506,954	90.4
65 to under 70	2,983,896	2,756,680	92.4	2,725,075	91.3	2,581,751	86.5
60 to under 65	3,615,299	3,282,399	90.8	3,236,637	89.5	2,976,508	82.3
55 to under 60	4,170,017	3,715,500	89.1	3,653,334	87.6	3,273,048	78.5
50 to under 55	4,246,640	3,679,320	86.6	3,602,866	84.8	3,122,431	73.5
45 to under 50	3,957,299	3,248,281	82.1	3,157,889	79.8	2,580,202	65.2
40 to under 45	4,331,967	3,346,067	77.2	3,222,198	74.4	2,473,682	57.1
35 to under 40	4,670,380	3,397,463	72.7	3,234,521	69.3	2,301,945	49.3
30 to under 35	4,887,611	3,410,849	69.8	3,202,158	65.5	2,119,675	43.4
25 to under 30	4,557,546	3,117,575	68.4	2,886,123	63.3	1,788,762	39.2
20 to under 25	3,925,321	2,828,843	72.1	2,556,321	65.1	1,502,563	38.3
18 to under 20	1,387,814	1,018,119	73.4	893,590	64.4	467,420	33.7
16 to under 18	1,388,641	911,375	65.6	686,566	49.4	177,843	12.8
12 to under 16	2,937,494	1,577,277	53.7	1,011,656	34.4	15,458	0.5
5 to under 12	5,080,285	431,969	8.5	16,988	0.3	23	0.0
Under 5	3,097,754	114	0.0	11	0.0	2	0.0
Total*	63,283,908	44,386,966	70.1	41,695,721	65.9	32,770,364	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

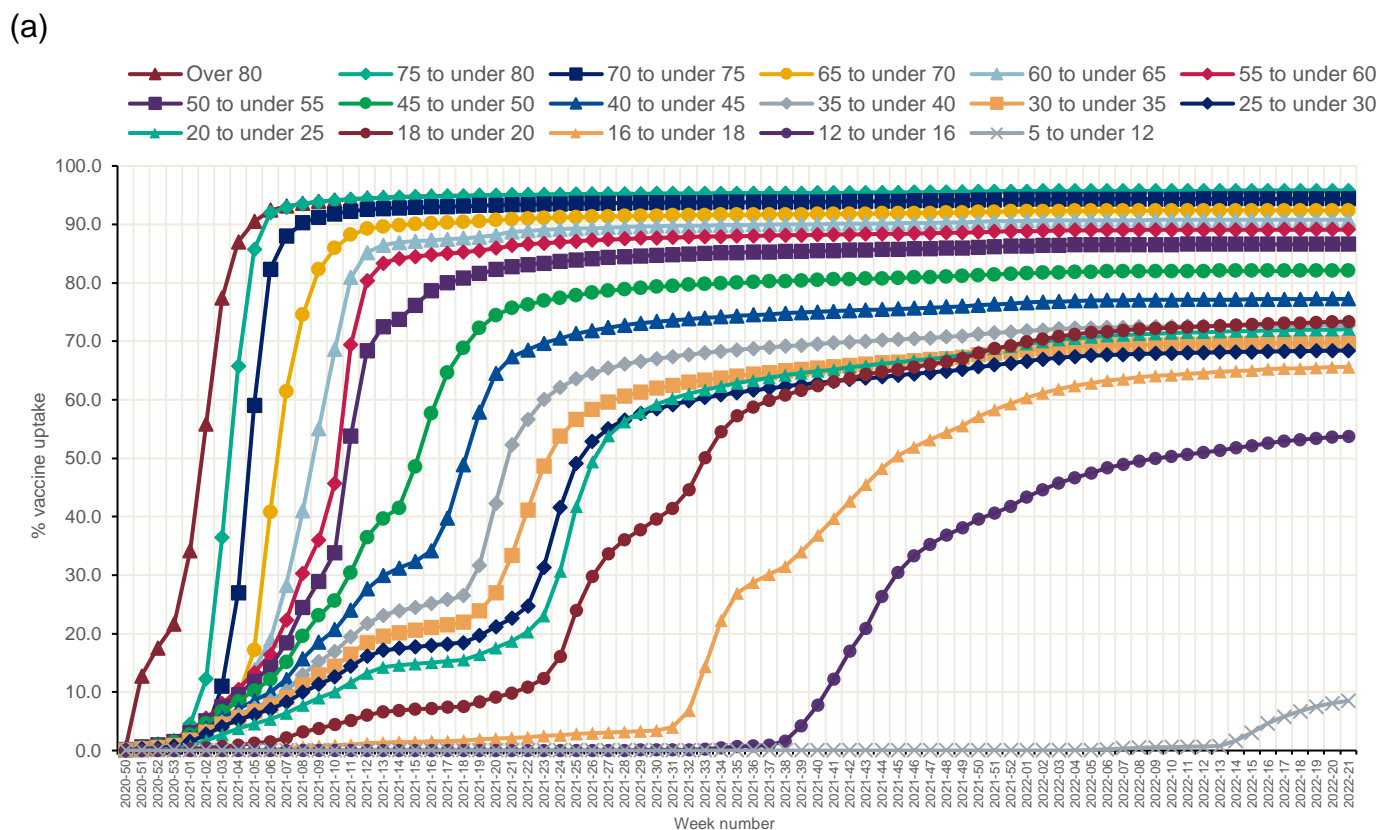
in Scotland or Wales or where their address is unknown. There were also vaccinations where the individual had an unknown region and age group or where age is less than 5 years old.

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.

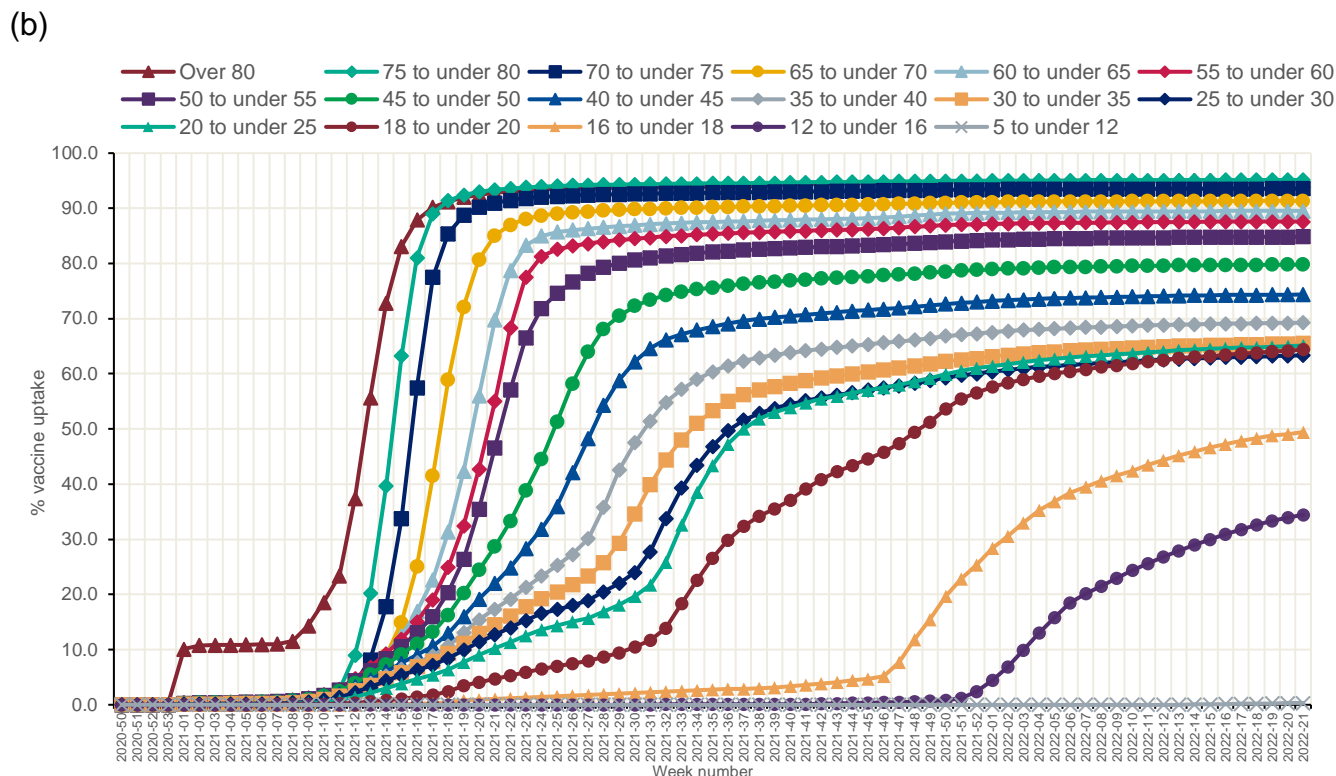
Age was previously calculated as age on the 31 August 2021 (academic cohort for all ages). Please note that from 14 April 2022 (week 15 2022), age is calculated on the date data is extracted. The weekly vaccine coverage data is extracted on a Tuesday with data capped to the previous Sunday and all backing 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 55: 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 22 report (up to week 21 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.

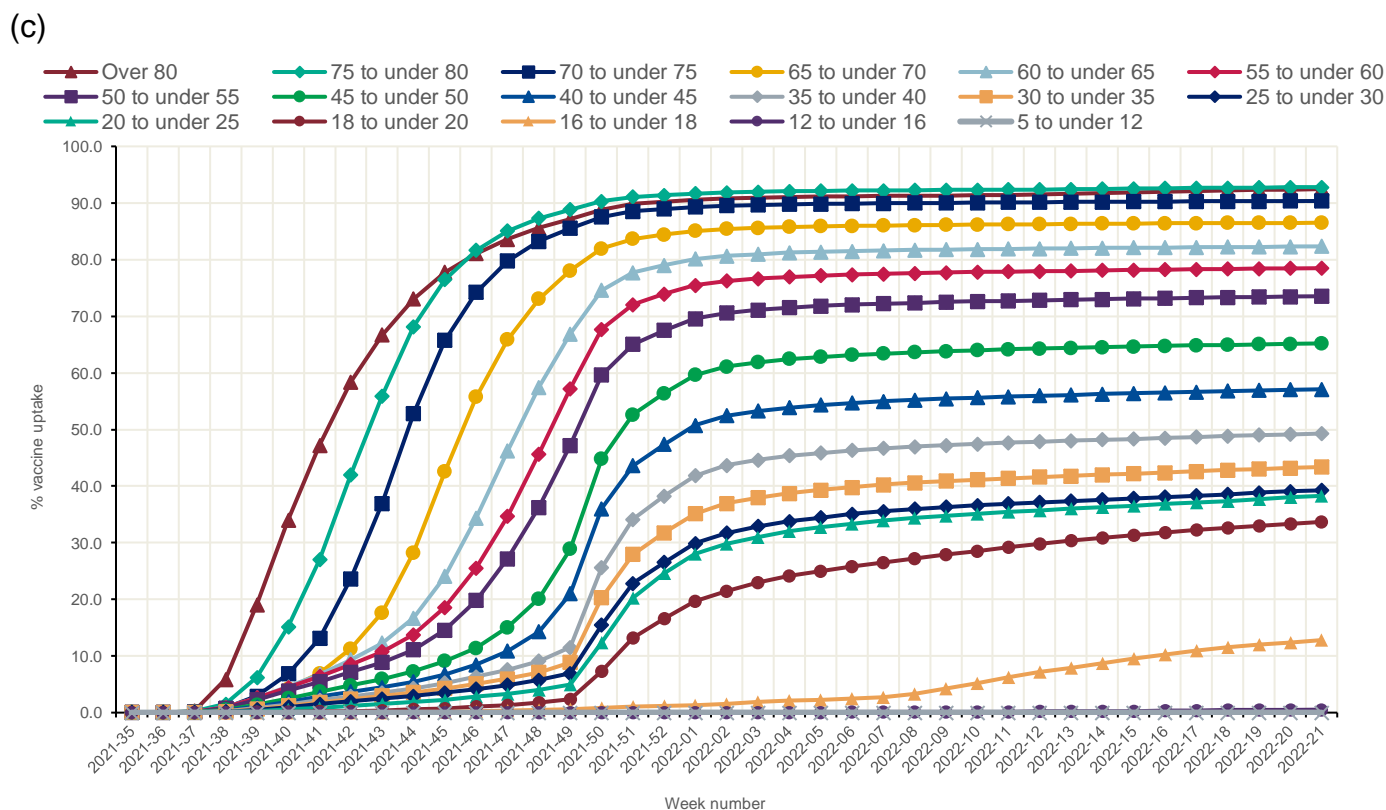


Table 6: Provisional cumulative people vaccinated with any dose of COVID-19 vaccine in the last 3 months; 3 to 6 months and vaccinated more than 6 months ago

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	2,934,025	2,083,809	71.0	151,610	5.2	571,584	19.5
75 to under 80	2,337,404	1,652,741	70.7	121,797	5.2	464,816	19.9
70 to under 75	2,774,515	138,991	5.0	177,586	6.4	2,301,442	82.9
65 to under 70	2,983,896	85,329	2.9	281,729	9.4	2,389,622	80.1
60 to under 65	3,615,299	86,633	2.4	562,275	15.6	2,633,491	72.8
55 to under 60	4,170,017	93,025	2.2	861,302	20.7	2,761,173	66.2
50 to under 55	4,246,640	94,200	2.2	1,077,522	25.4	2,507,598	59.0
45 to under 50	3,957,299	96,007	2.4	1,389,361	35.1	1,762,913	44.5
40 to under 45	4,331,967	114,921	2.7	1,527,020	35.3	1,704,126	39.3
35 to under 40	4,670,380	148,490	3.2	1,767,817	37.9	1,481,156	31.7
30 to under 35	4,887,611	189,228	3.9	1,722,856	35.2	1,498,765	30.7
25 to under 30	4,557,546	212,502	4.7	1,538,273	33.8	1,366,800	30.0
20 to under 25	3,925,321	229,708	5.9	1,409,733	35.9	1,189,402	30.3
18 to under 20	1,387,814	134,471	9.7	513,673	37.0	369,975	26.7
16 to under 18	1,388,641	248,864	17.9	412,791	29.7	249,720	18.0
12 to under 16	2,937,494	451,732	15.4	843,363	28.7	282,182	9.6
5 to under 12	5,080,285	418,505	8.2	13,258	0.3	206	0.0

Table 6 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 56: 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

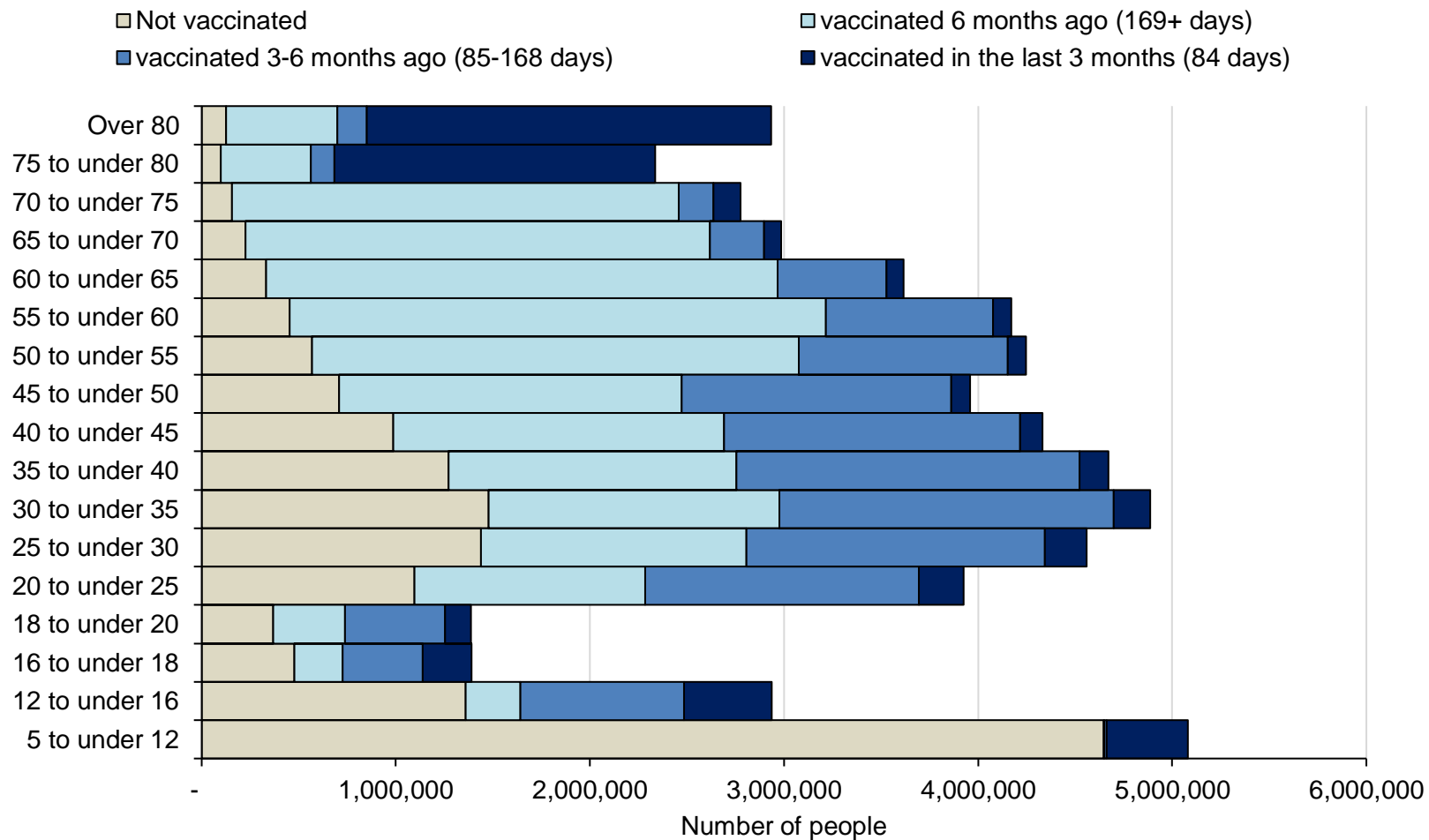


Figure 57: Age-Sex pyramid for COVID-19 vaccine uptake by age in England for Dose 1

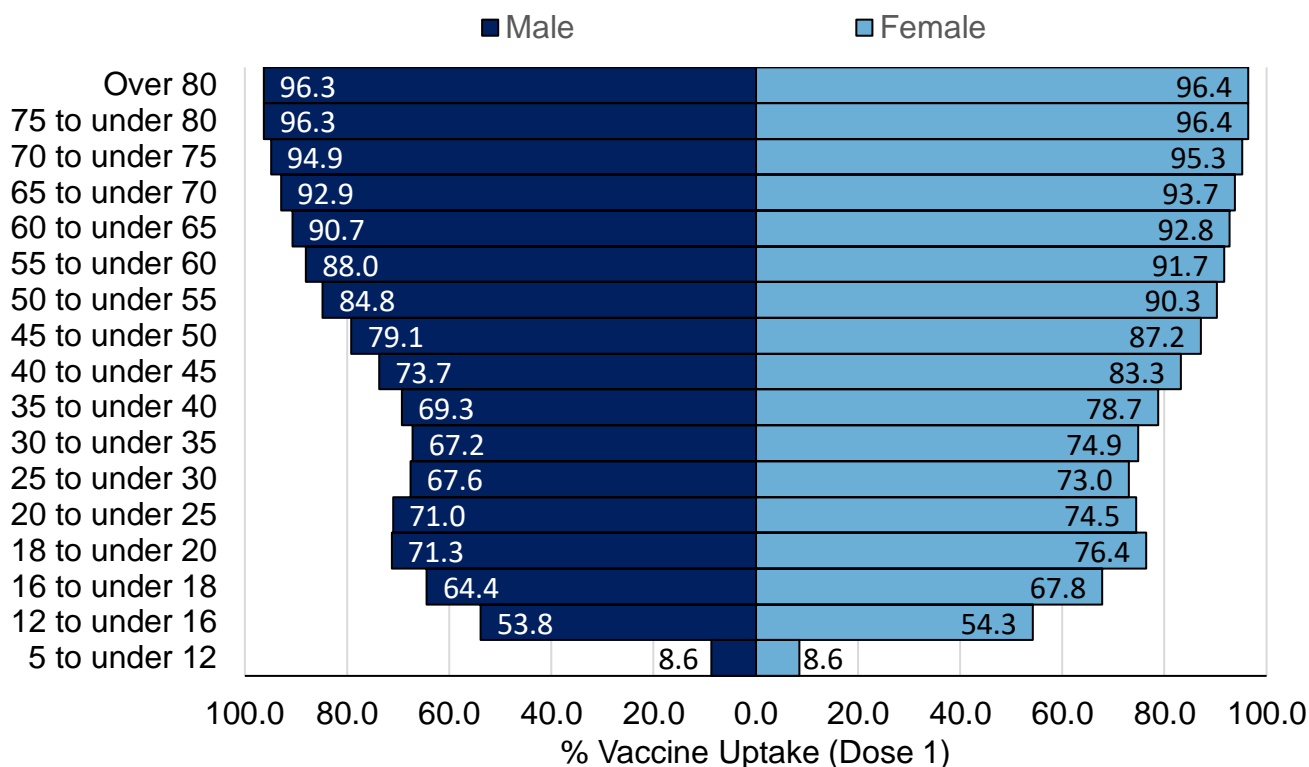


Figure 58: Age-Sex pyramid for COVID-19 vaccine uptake by age in England for Dose 2

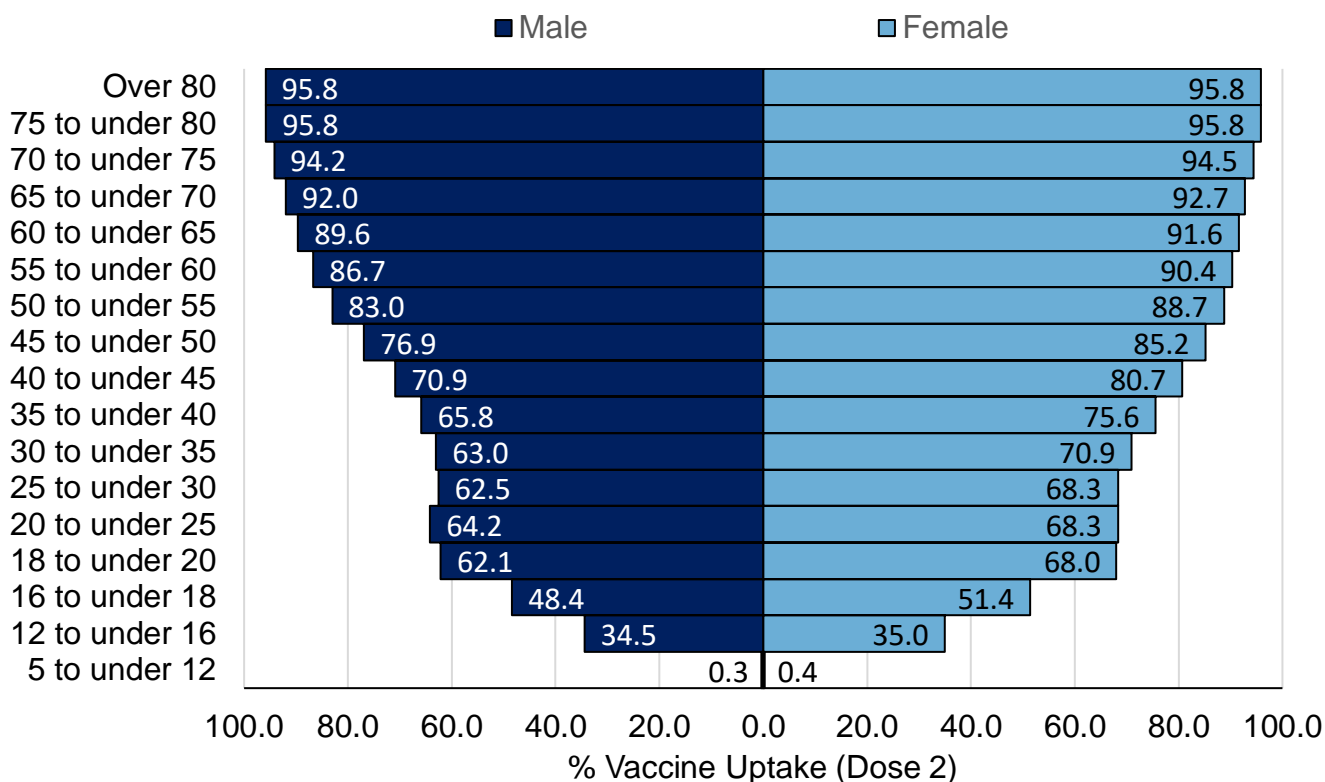
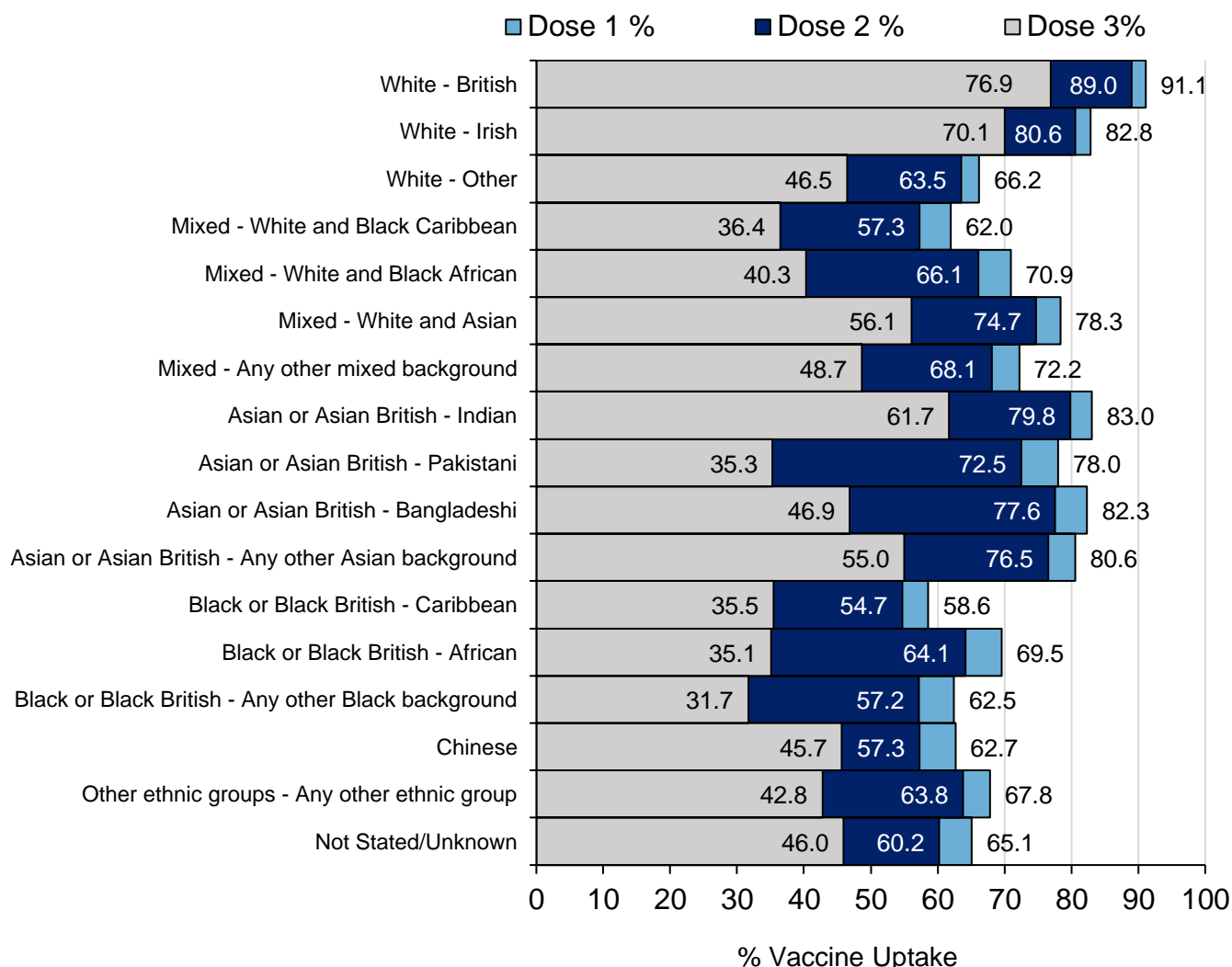


Figure 59: Cumulative weekly COVID-19 vaccine uptake by ethnicity in those living and resident in England, aged 18 and over



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 7 and 8 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 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. Please note that Table 8 is a subset of Table 6.

By the end of week 21 (week ending 29 May 2022), 70.3% (3,705,409 /5,271,429) of all people aged 75 and over had been vaccinated with a spring booster dose since 21 March 2022, Table 7.

Table 7: 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	2,934,025	2,065,676	70.4
75 to under 80	2,337,404	1,639,733	70.2
75 and over	5,271,429	3,705,409	70.3

By the end of last week, 70.9% (3,736,550/5,271,429) of people aged 75 and over have now been vaccinated within the last three months, a further 5.2% (273,407/5,271,429) last vaccinated between 3 and 6 months ago and 19.7% (1,036,400/5,271,429) vaccinated six or more months ago.

Table 8: Provisional cumulative people aged 75 and over 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	2,934,025	2,083,809	71.0	151,610	5.2	571,584	19.5
75 to under 80	2,337,404	1,652,741	70.7	121,797	5.2	464,816	19.9
75 and over	5,271,429	3,736,550	70.9	273,407	5.2	1,036,400	19.7

Table 9: Provisional cumulative people vaccinated with a spring booster COVID-19 vaccine against those eligible by the end of each month

Age at end of March	Eligible by the end of March	Of those eligible by the end of March, numbers vaccinated	Percentage vaccine uptake eligible end of March
Over 80	1,183,319	1,016,728	85.9
75 - 79	479,559	398,875	83.2
75 and over	1,662,878	1,415,603	85.1
Age at end of April	Eligible by the end of April	Of those eligible by the end of April, numbers vaccinated	Percentage vaccine uptake eligible end of April
Over 80	2,248,445	1,864,566	82.9
75 - 79	1,719,572	1,448,369	84.2
75 and over	3,968,017	3,312,935	83.5

Table 9 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 21 (week ending 29 May 2022) can be found in table 10. This shows that vaccine uptake in the 516,018 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 10: 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	516,018	493,789	95.7	487,948	94.6	457,059	88.6

Table 11: 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	516,018	116,521	22.6

Tables 10 and 11 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 12: 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	516,018	141,425	27.4	226,648	43.9	125,716	24.4

Table 12 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 31 May 2022, a total of 531,906,054 cases of COVID-19 infection have been reported worldwide, including 6,287,161 COVID-19 related deaths.

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

Figure 60: Global map of cumulative COVID-19 cases

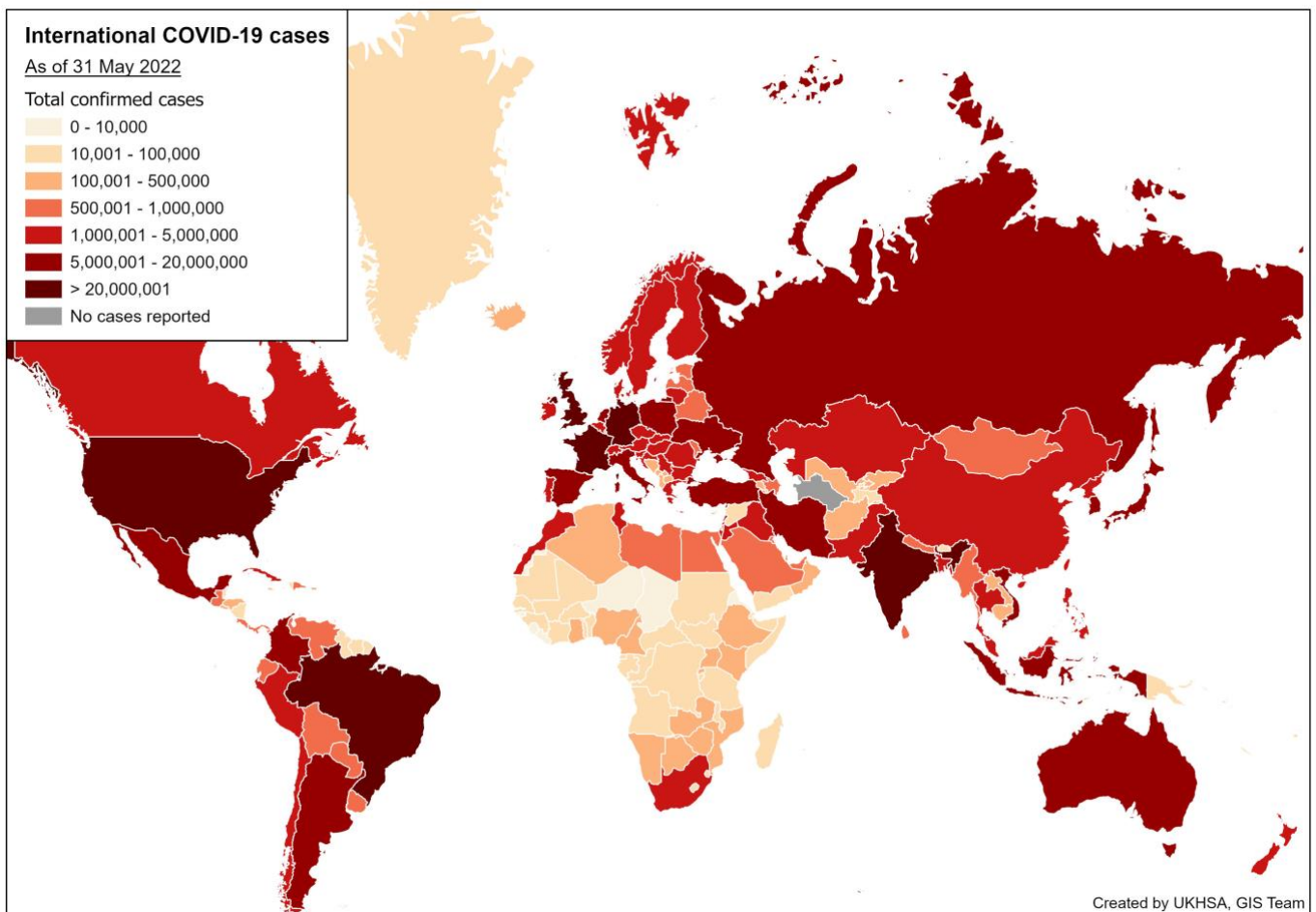


Figure 61: Global map of percentage change in weekly COVID-19 case incidence rate per 100,000 population compared to the previous week

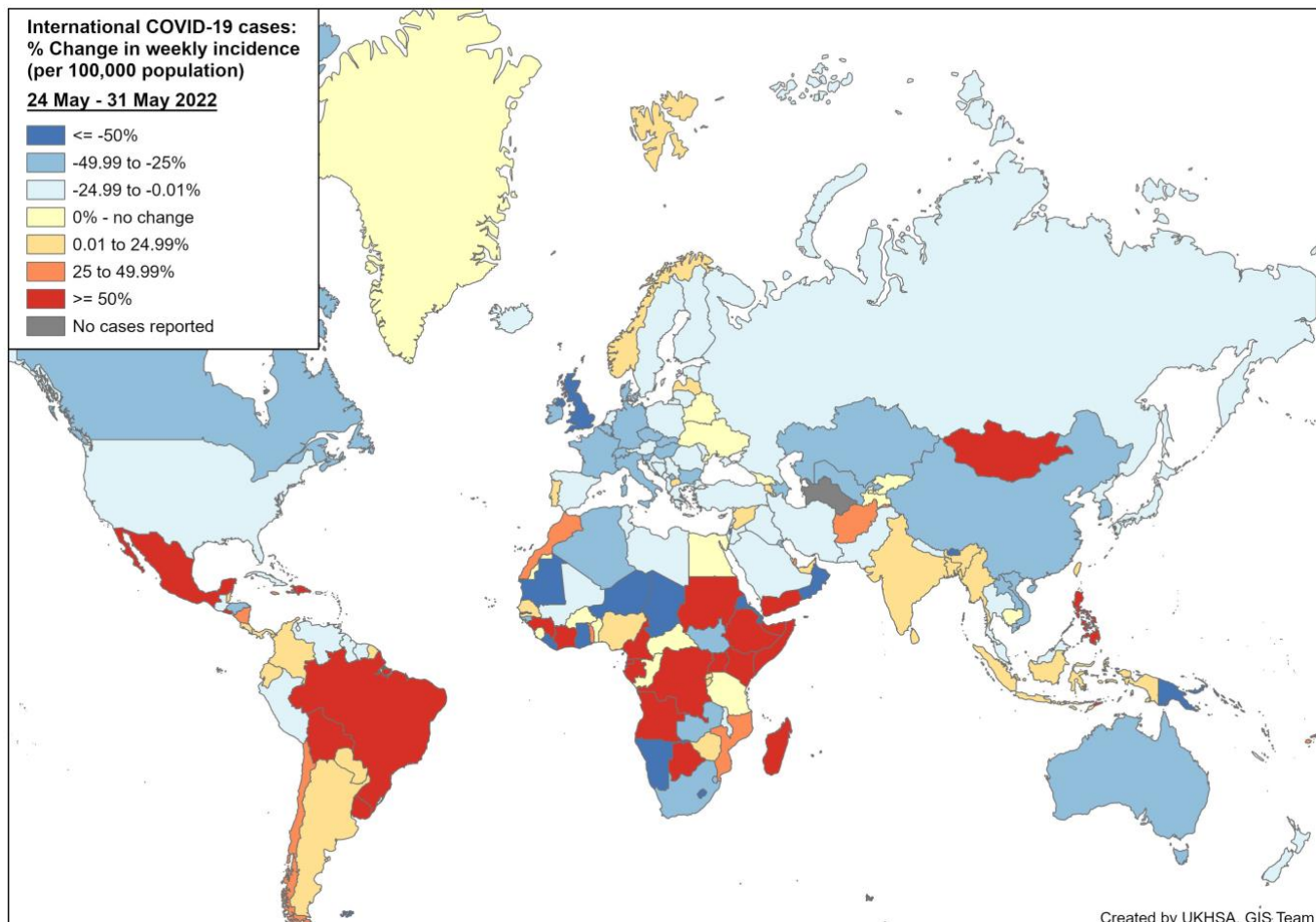
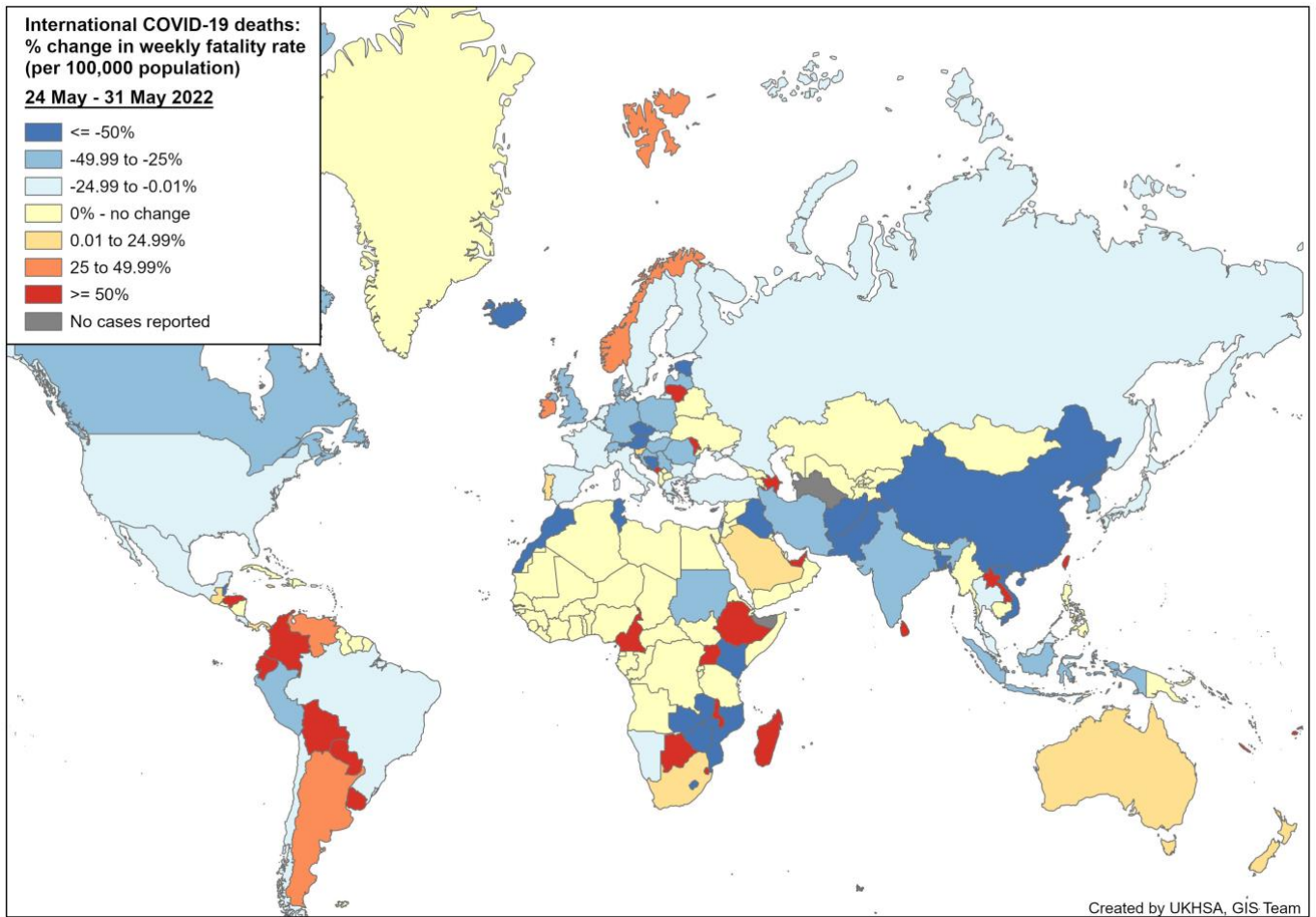


Figure 62: Global map of percentage change in weekly COVID-19 fatality rate per 100,000 population compared to the previous week



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 1 June 2022, up to week 20 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.

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

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.”

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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