



Public Health
England

Protecting and improving the nation's health

Weekly national Influenza and COVID-19 surveillance report

**Week 25 report (up to week 24 data)
24 June 2021**

Executive summary

This report summarises the information from the surveillance systems which are used to monitor Coronavirus Disease 2019 (COVID-19), influenza, and other seasonal respiratory viruses in England. References to COVID-19 represent the disease name and SARS-CoV-2 represent the virus name. The report is based on data from week 24 (between 14 June and 20 June 2021) and for some indicators daily data up to 22 June 2021.

Surveillance indicators suggest that at a national level COVID-19 activity increased in week 24 of 2021. Laboratory indicators suggest that influenza activity is low.

Overall case rates increased in week 24. Case rates increased in all age groups and regions, and most ethnic groups. Overall Pillar 1 and Pillar 2 positivity increased compared to the previous week, most notably in younger age groups.

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

COVID-19 hospitalisations increased slightly in week 24. Deaths with COVID-19 increased slightly based on the 28-day definition in week 24.

COVID-19 vaccine coverage was 58.0% for dose 1 at the end of week 24, reaching over 90% in all cohorts over the age of 60 years and over 80% in all cohorts over 50 years. COVID-19 vaccine coverage was 42.7% for dose 2 at the end of week 24.

The impact of the vaccination programme is particularly notable in the seroprevalence data which indicates that approximately 82.0% of blood donors aged 17 and over have antibodies to SARS-CoV-2 from either infection or vaccination, compared to 15.3% from infection alone. High levels of seropositivity for vaccination or infection continue to be observed in those aged over 50, as well as increases in those aged 40 to 49 and 30 to 39, following vaccination rollout.

Through Respiratory Datamart, there were no influenza positive samples detected in week 24. Other indicators for influenza such as hospital admissions and GP influenza-like illness consultation rates remain low. Respiratory syncytial virus (RSV) positivity increased slightly to 1.7%, while parainfluenza positivity decreased to 5.9% in week 24. Rhinovirus, adenovirus and human metapneumovirus (hMPV) positivity remained low at 6.2%, 1.6% and 0.3% respectively.

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Laboratory surveillance

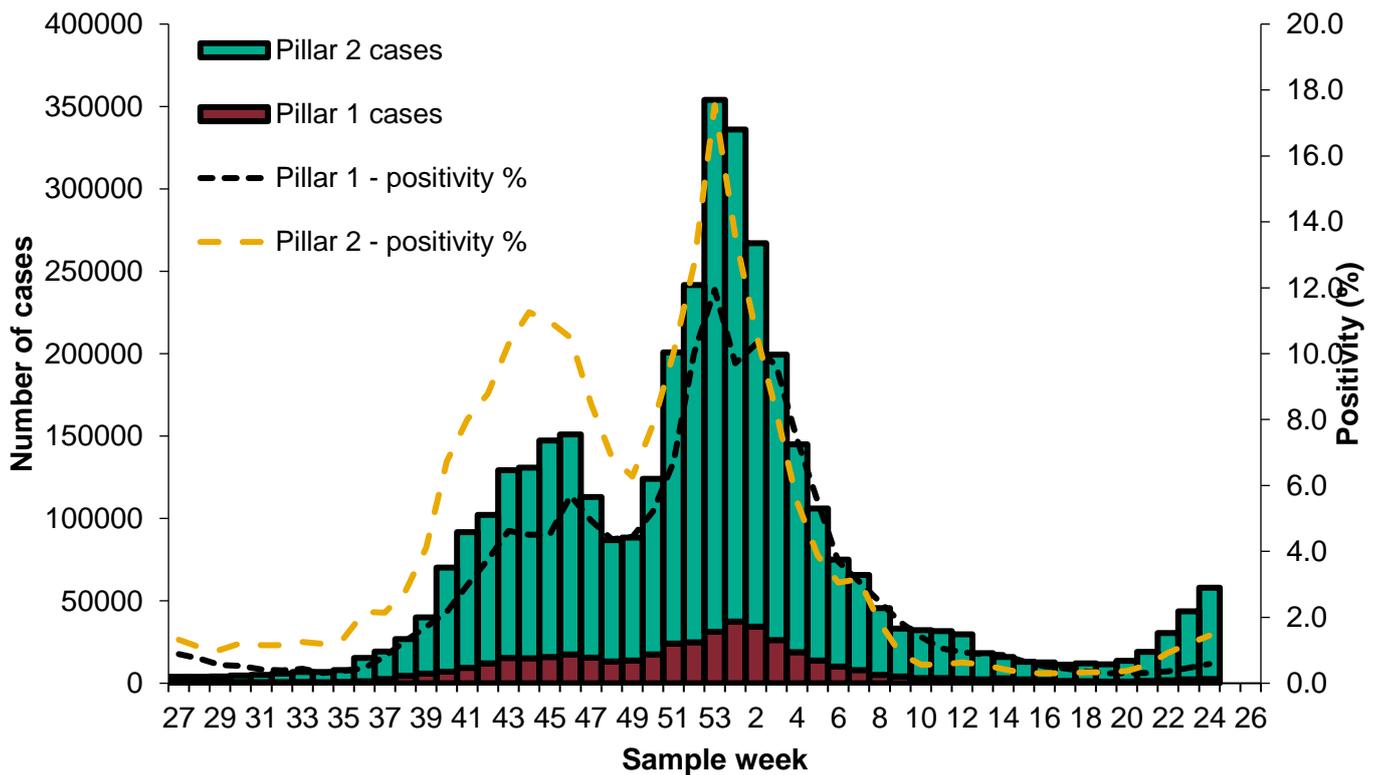
Confirmed COVID-19 cases (England)

As of 09:00 on 22 June 2021, a total of 4,053,782 first positive cases have been confirmed for COVID-19 in England under Pillars 1 and 2.

Overall case rates increased in week 24. Case rates increased in all age groups and regions, and most ethnic groups. Overall Pillar 1 and Pillar 2 positivity increased compared to the previous week.

Data on variants of concern or under investigation are available [here](#) and [here](#).

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

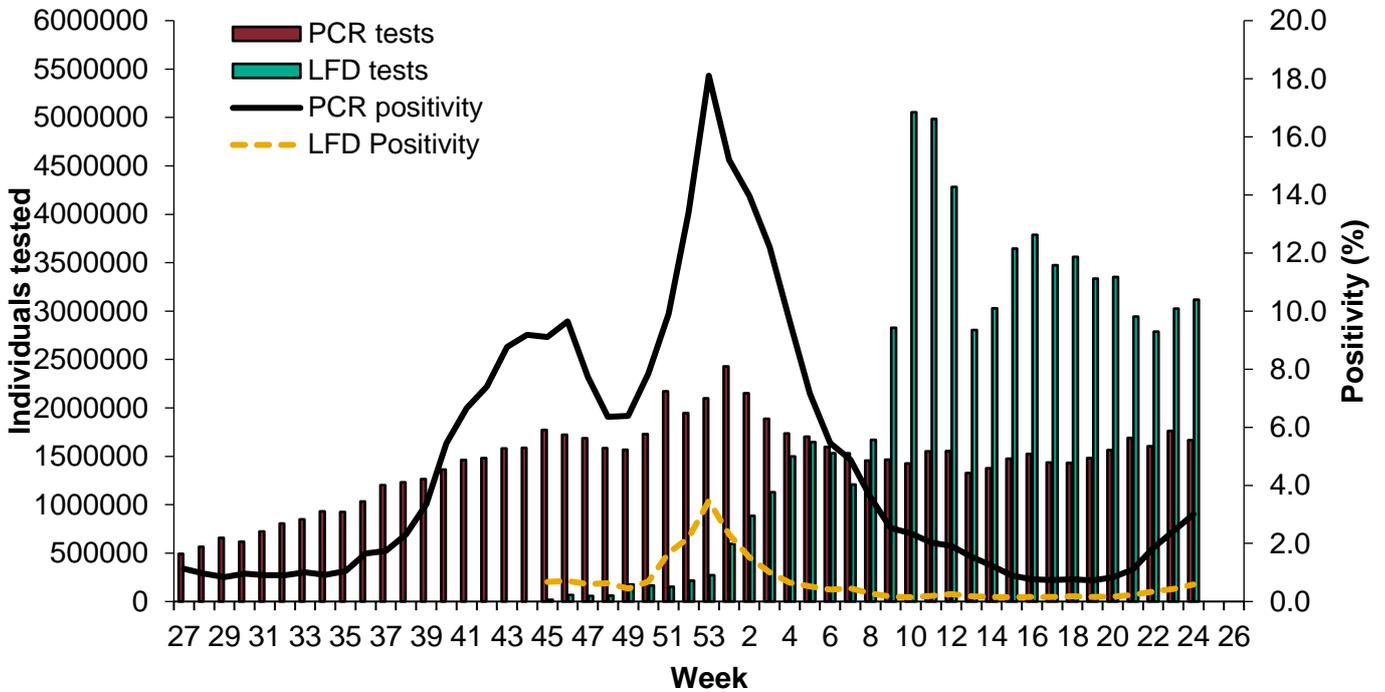


*The data are shown by the week the specimen was taken from the person being tested. This gives the most accurate analysis of this time progression, however, for the most recent week results for more samples are expected therefore this should be interpreted with caution.

* Positivity (excluding Figure 2) is calculated as the number of individuals testing positive during the week divided by the number of individuals tested during the week. Both PCR and lateral flow device (LFD) testing are included.

*Cases who test positive through a rapid LFD test and subsequently receive a negative PCR test within 3 days of the positive LFD are removed from the overall case counts

Figure 2: Weekly positivity (%) of confirmed COVID-19 and number of individuals tested by type of test, under Pillar 1 and 2 (SGSS and Respiratory DataMart)



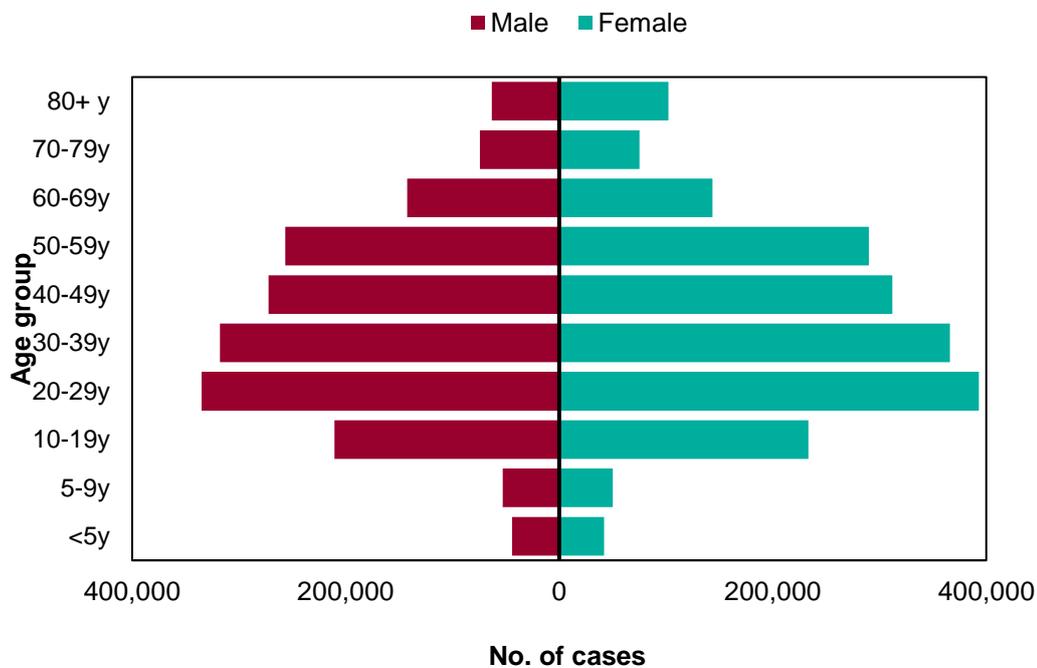
*For Figure 2 positivity is calculated as the number of individuals testing positive using a specific test type during the week, divided by the number of individuals tested using that specific test type during the week.

*Please note that an individual may appear under both PCR and LFD tests if they have been tested using both test types in a given week.

Age and sex

Figure 3: Age/sex pyramids for confirmed COVID-19 cases tested under Pillars 1 and 2 (a) cumulative number since week 27 (n=3,777,448), and (b) in weeks 23 and 24 (n=101,075)

(a)



(b)

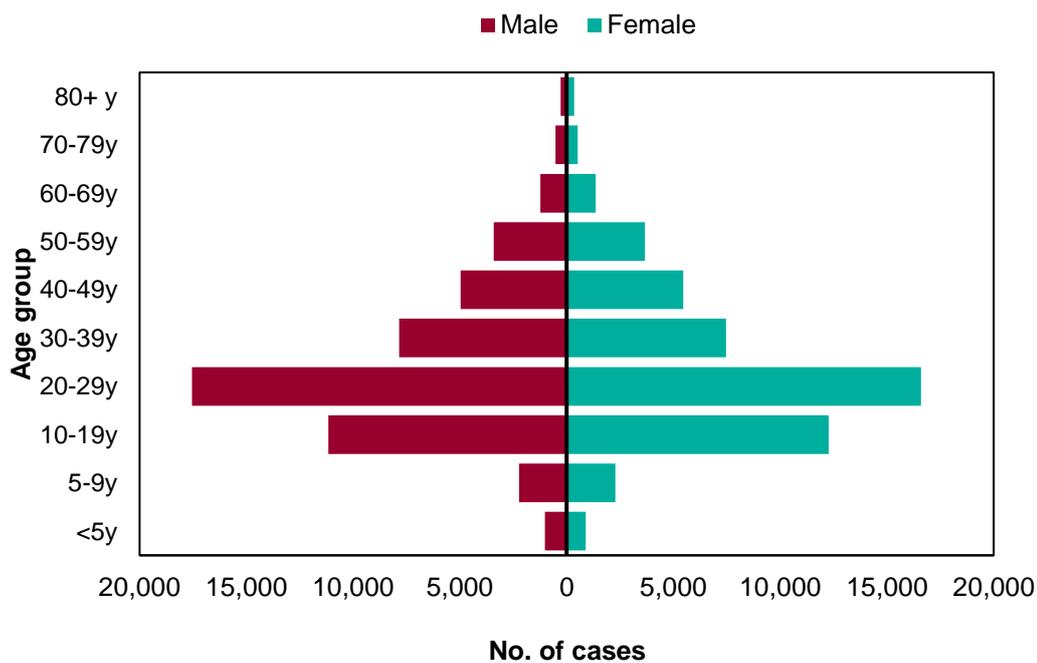


Figure 4: Weekly confirmed COVID-19 case rates per 100,000, tested under Pillar 1 and Pillar 2, by sex

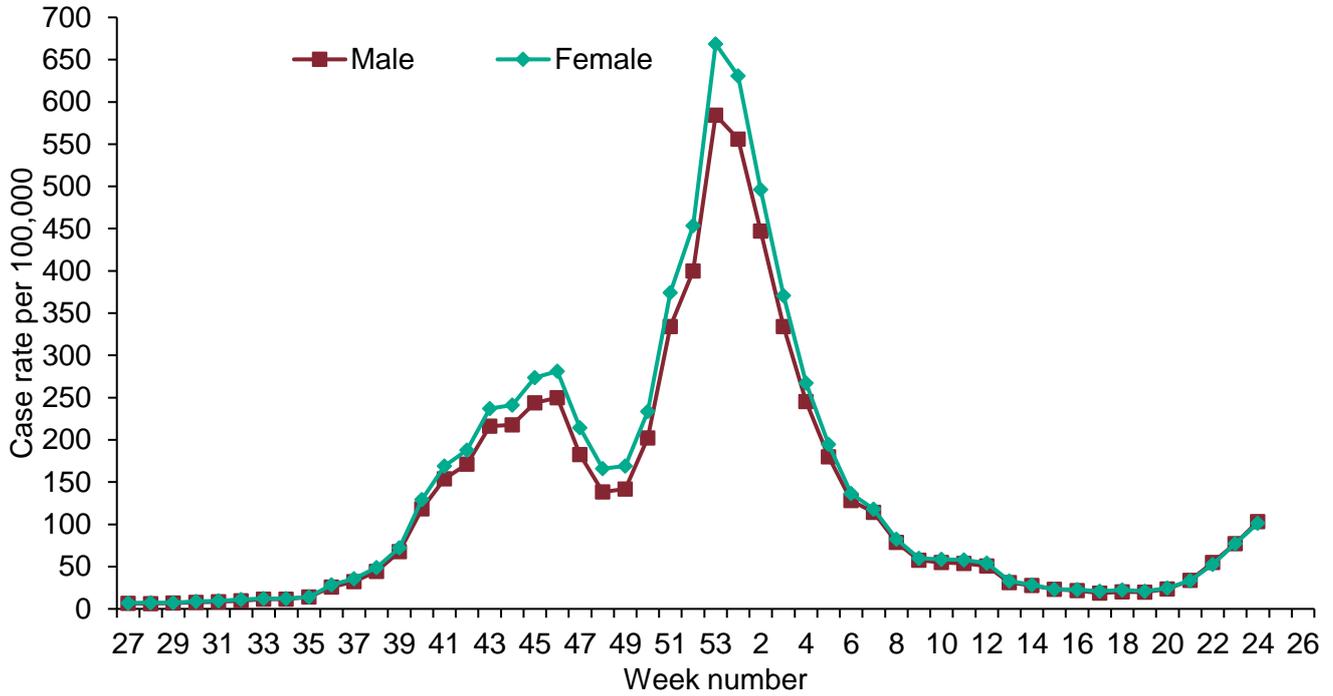


Figure 5: Weekly confirmed COVID-19 case rates per 100,000, tested under Pillar 1 and Pillar 2, by age group

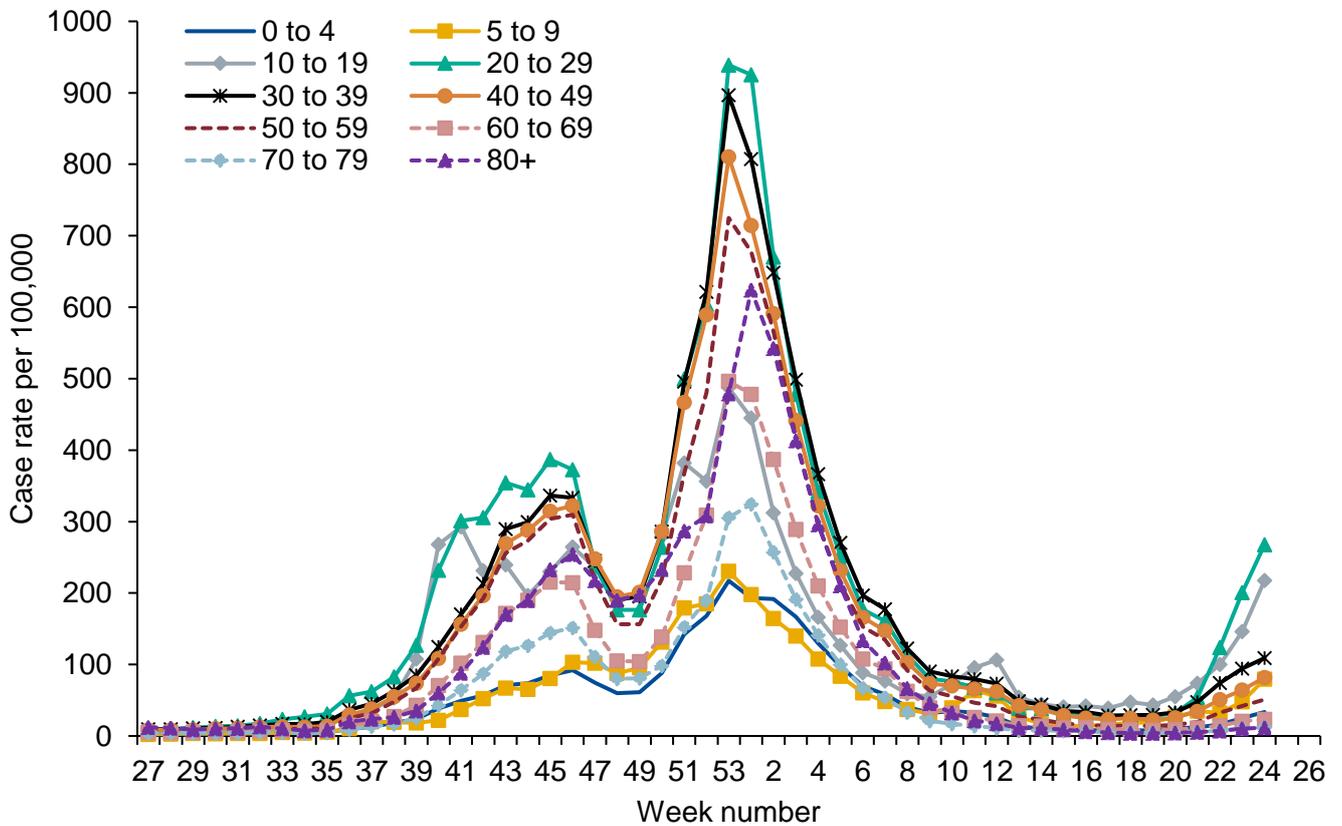
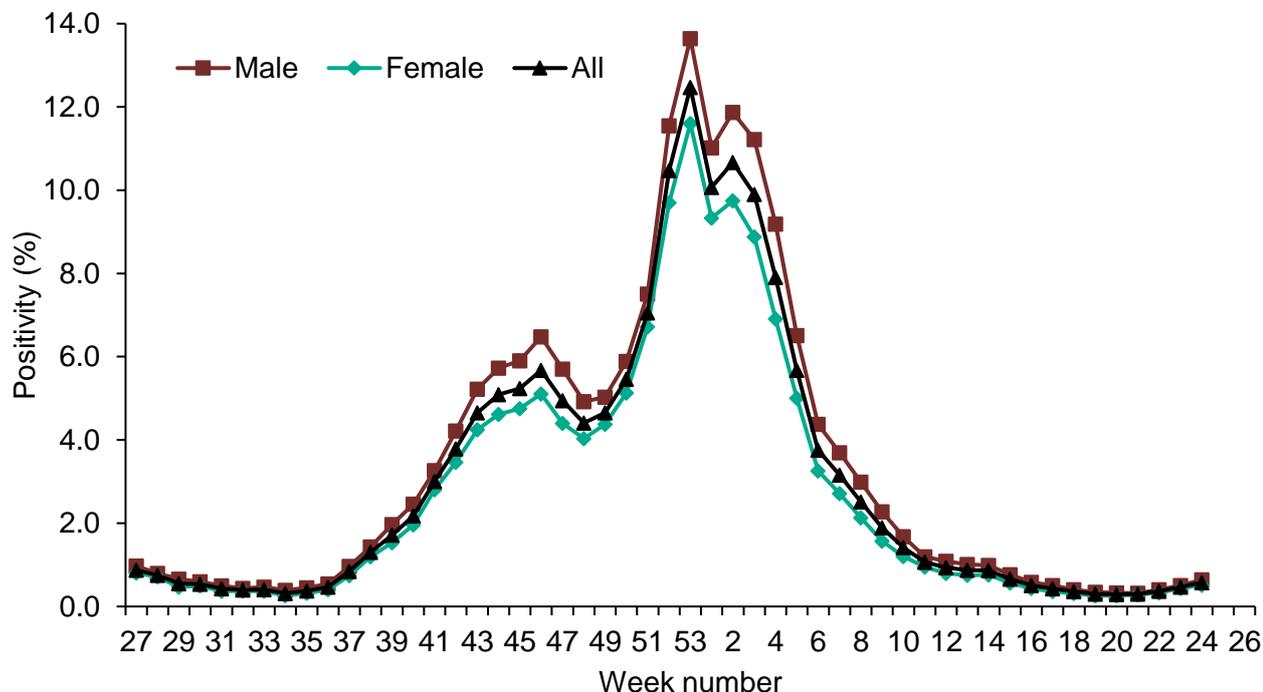


Figure 6: Weekly positivity (%) of confirmed COVID-19 cases tested overall and by sex under (a) Pillar 1 and (b) Pillar 2, (SGSS and Respiratory DataMart)

(a)



(b)

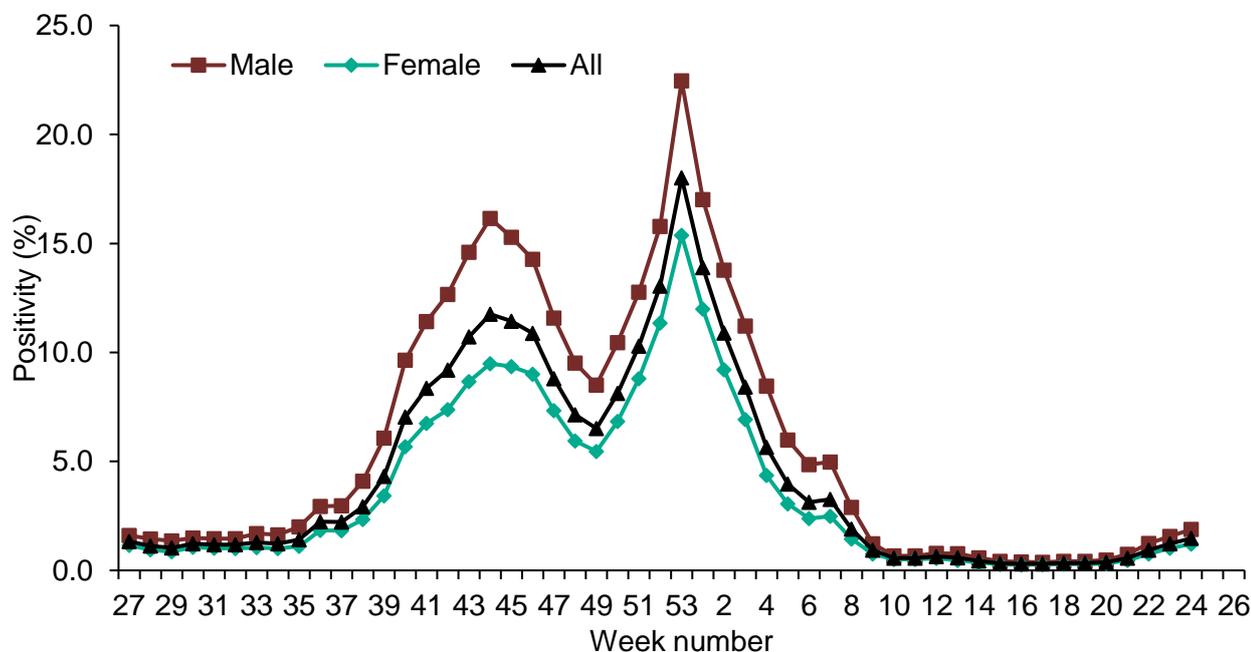
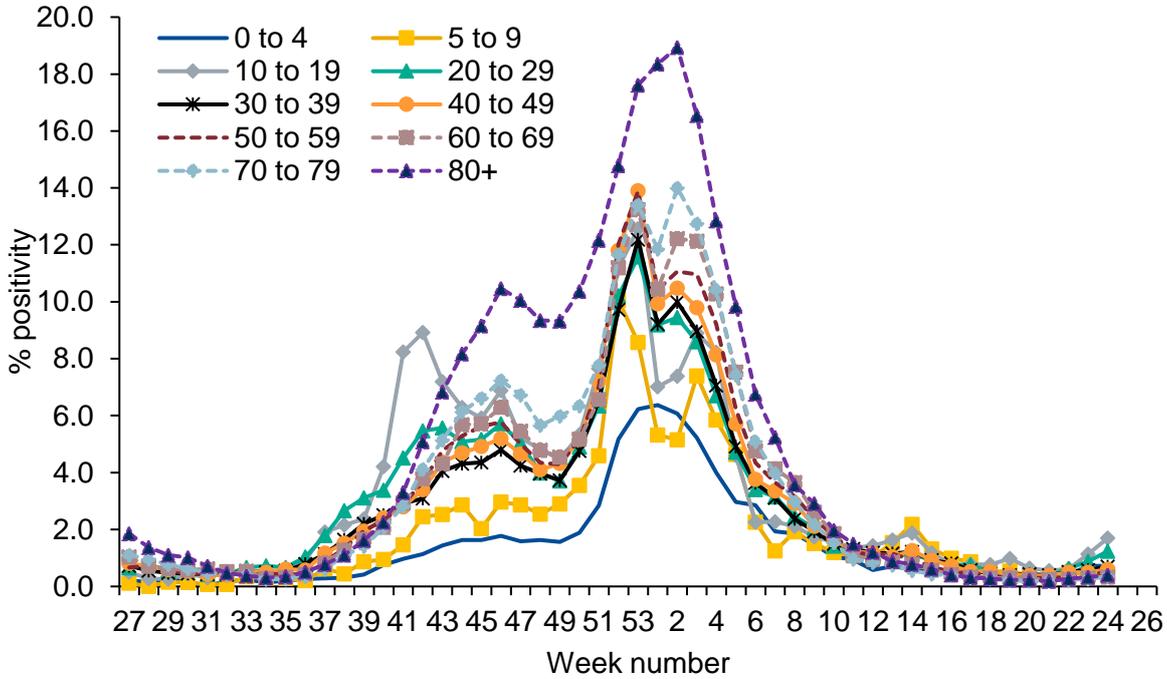
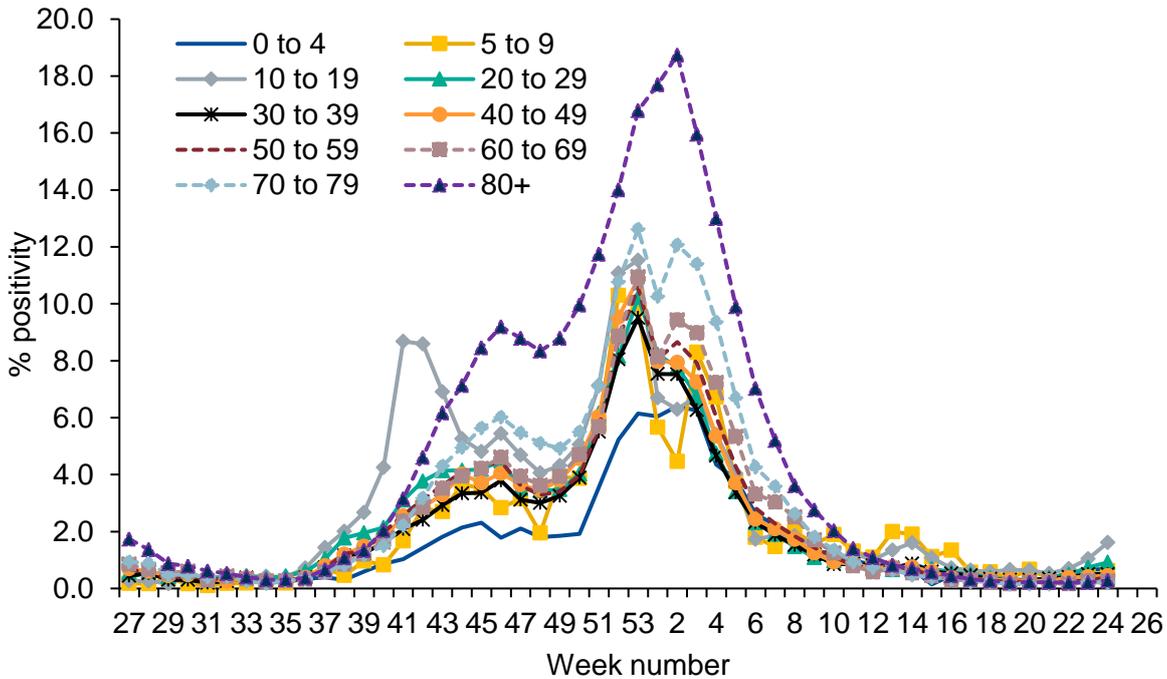


Figure 7: Weekly positivity (%) of confirmed COVID-19 cases tested under Pillar 1, (a) by male and age group and (b) by female and age group and; under Pillar 2, (c) by male and age group and (d) by female and age group, (SGSS and Respiratory DataMart)

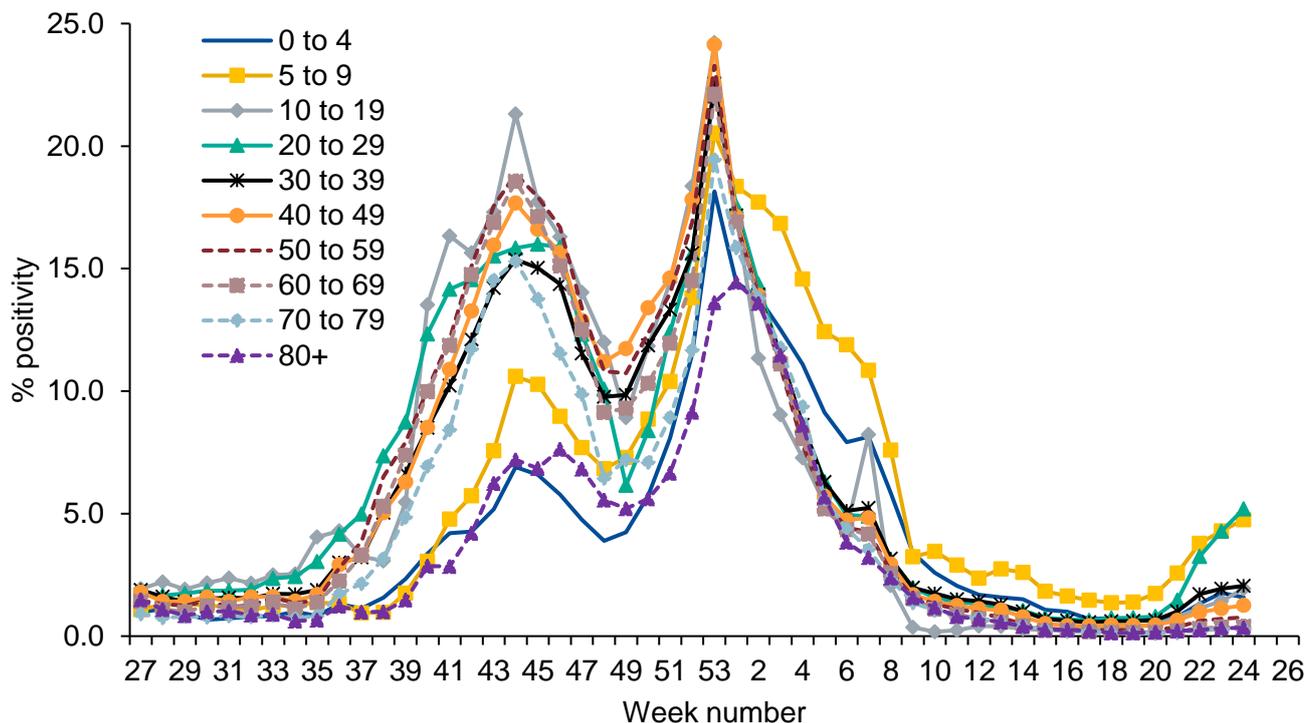
(a) Pillar 1 - Male



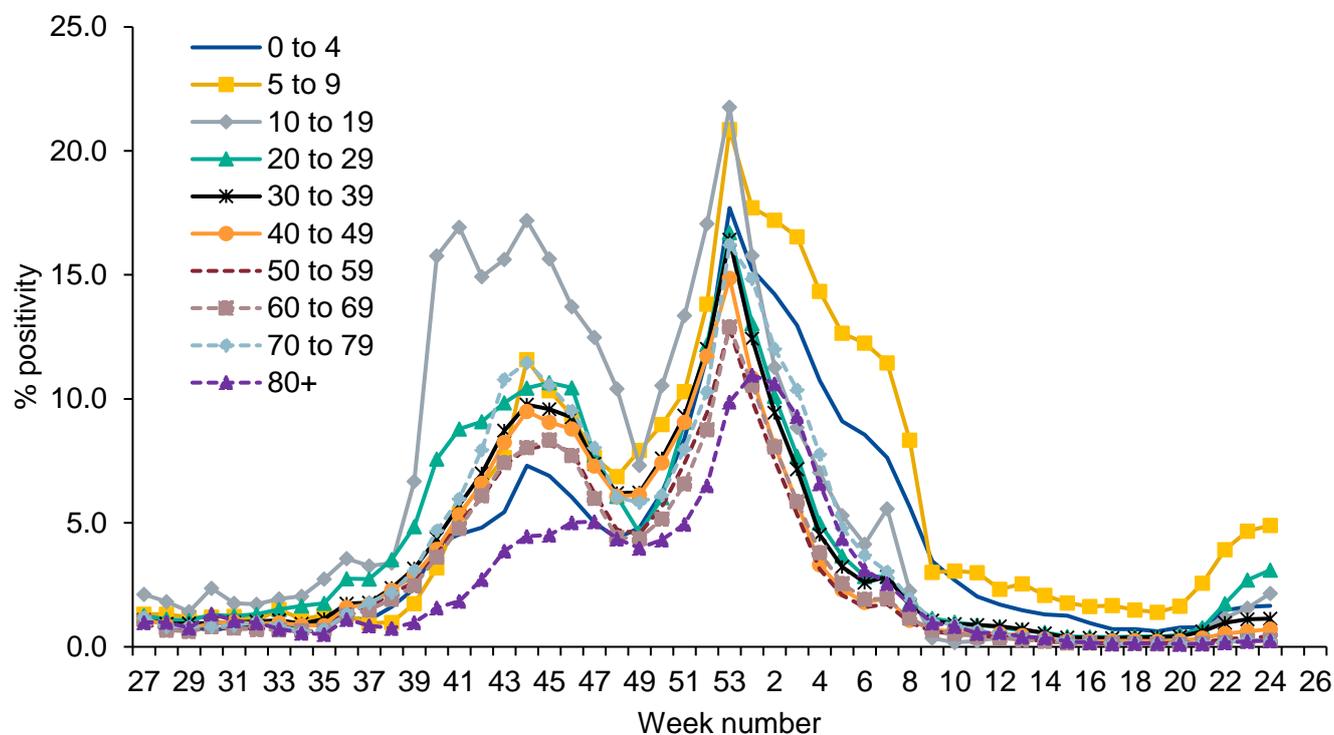
(b) Pillar 1 - Female



(c) Pillar 2 - Male



(d) Pillar 2 - Female



Geography

Table 1: Cumulative number of cases under Pillars 1 and 2 (n=4,015,574) and cumulative number of cases since week 27 under Pillar 1 and 2 (3,780,763)

| PHE Centres | Cumulative Pillar 1 + 2 cases | Cumulative since week 27, Pillar 1 + 2 cases |
|----------------------|-------------------------------|--|
| North East | 204,220 | 189,220 |
| North West | 667,458 | 625,205 |
| Yorkshire and Humber | 417,325 | 388,646 |
| West Midlands | 444,812 | 419,667 |
| East Midlands | 341,728 | 321,086 |
| East of England | 421,631 | 397,504 |
| London | 747,544 | 713,942 |
| South East | 538,082 | 505,395 |
| South West | 232,774 | 220,098 |

Figure 8: Weekly confirmed COVID-19 case rates per 100,000 population (Pillar 1 and Pillar 2), by PHE Centres and sample week

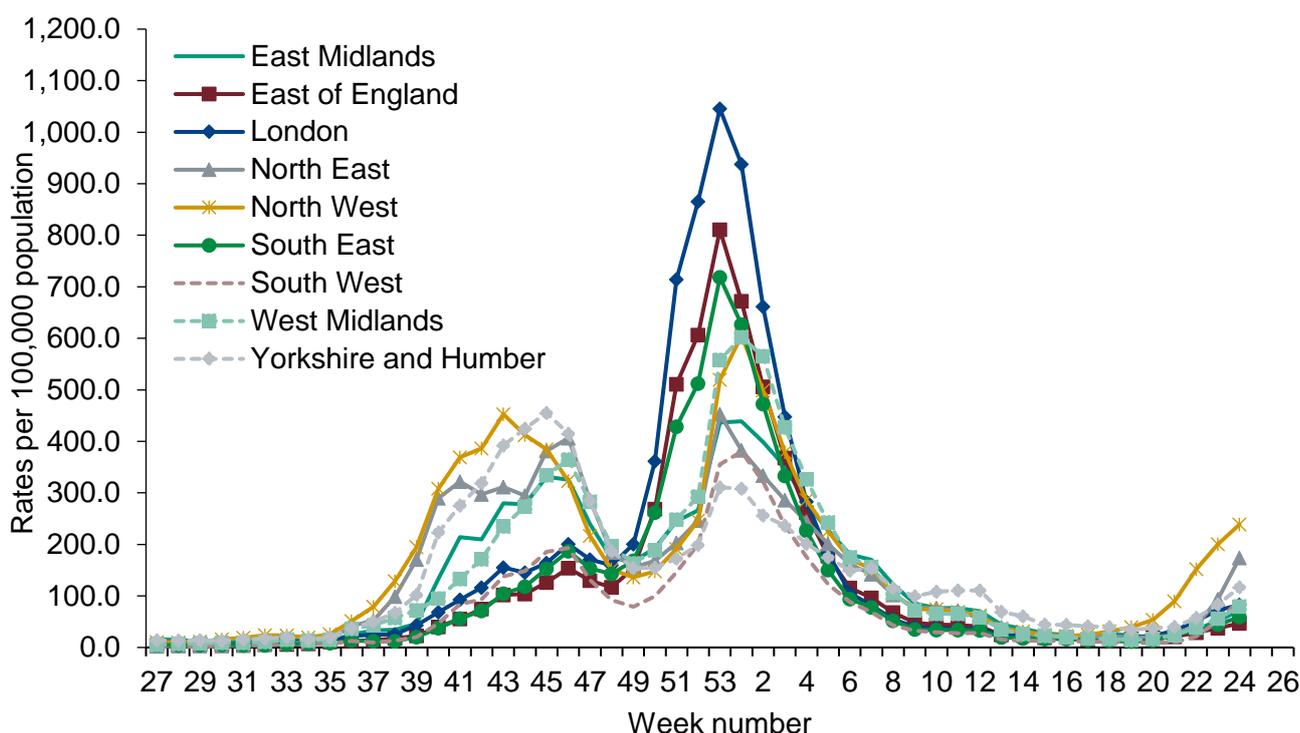


Figure 9: Weekly positivity of confirmed COVID-19 cases tested under (a) Pillar 1 (%) and (b) Pillar 2 (%), by PHE Centres and sample week, (SGSS and Respiratory DataMart)

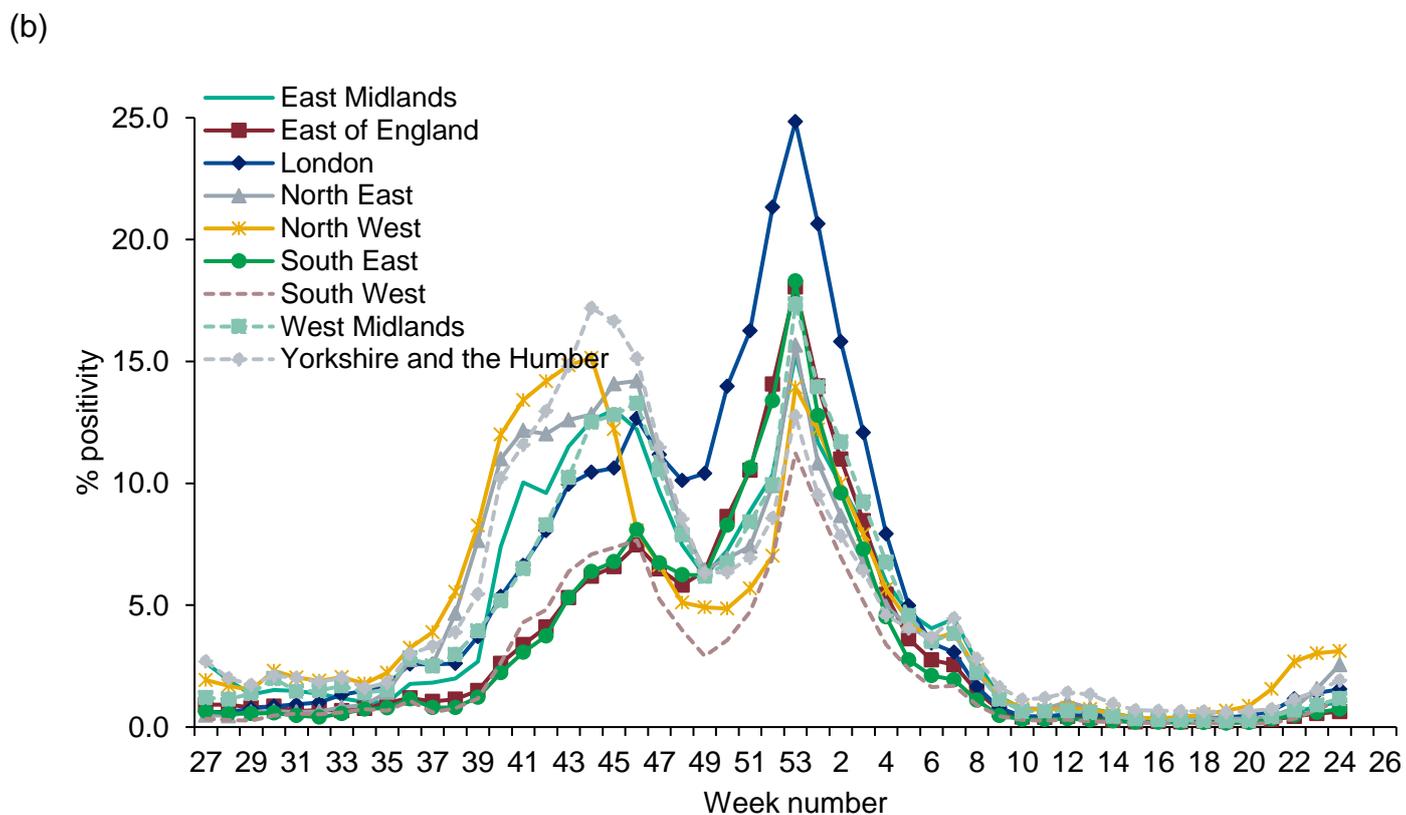
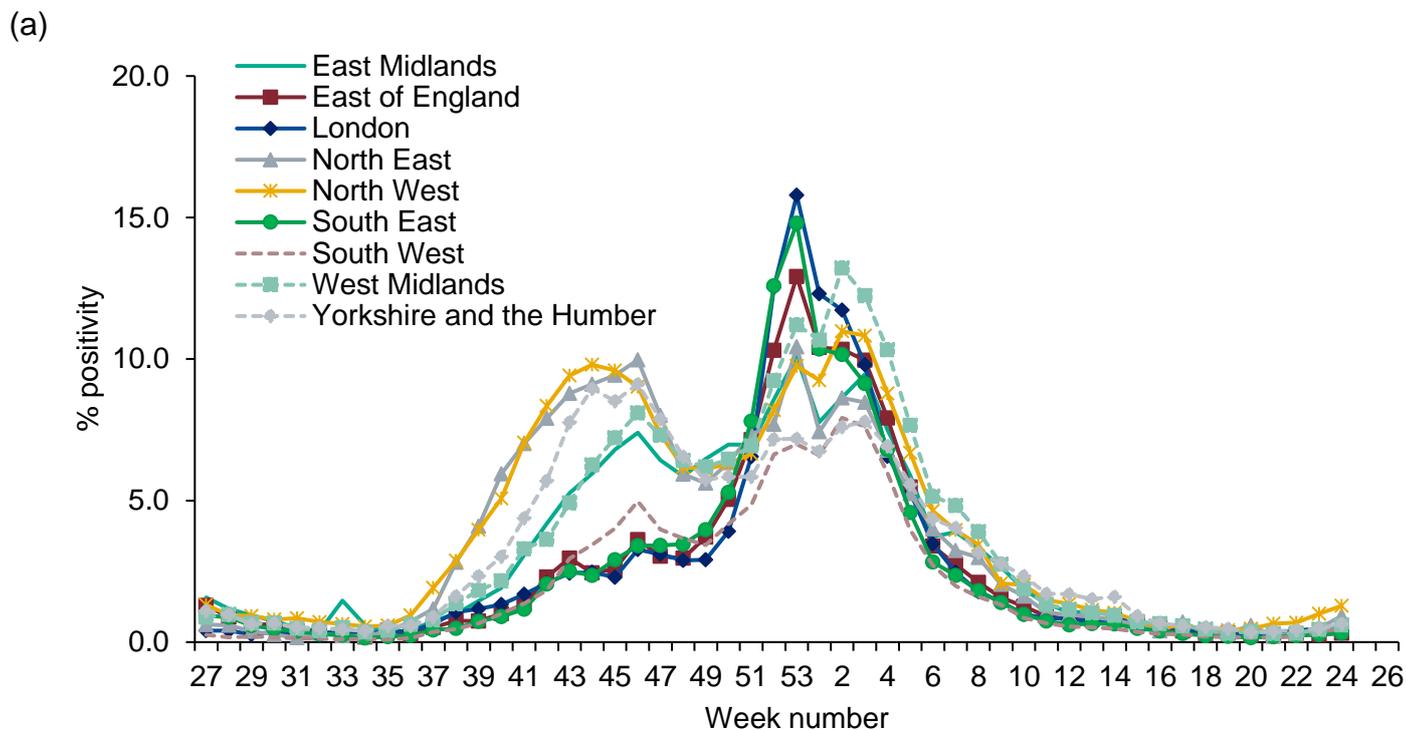
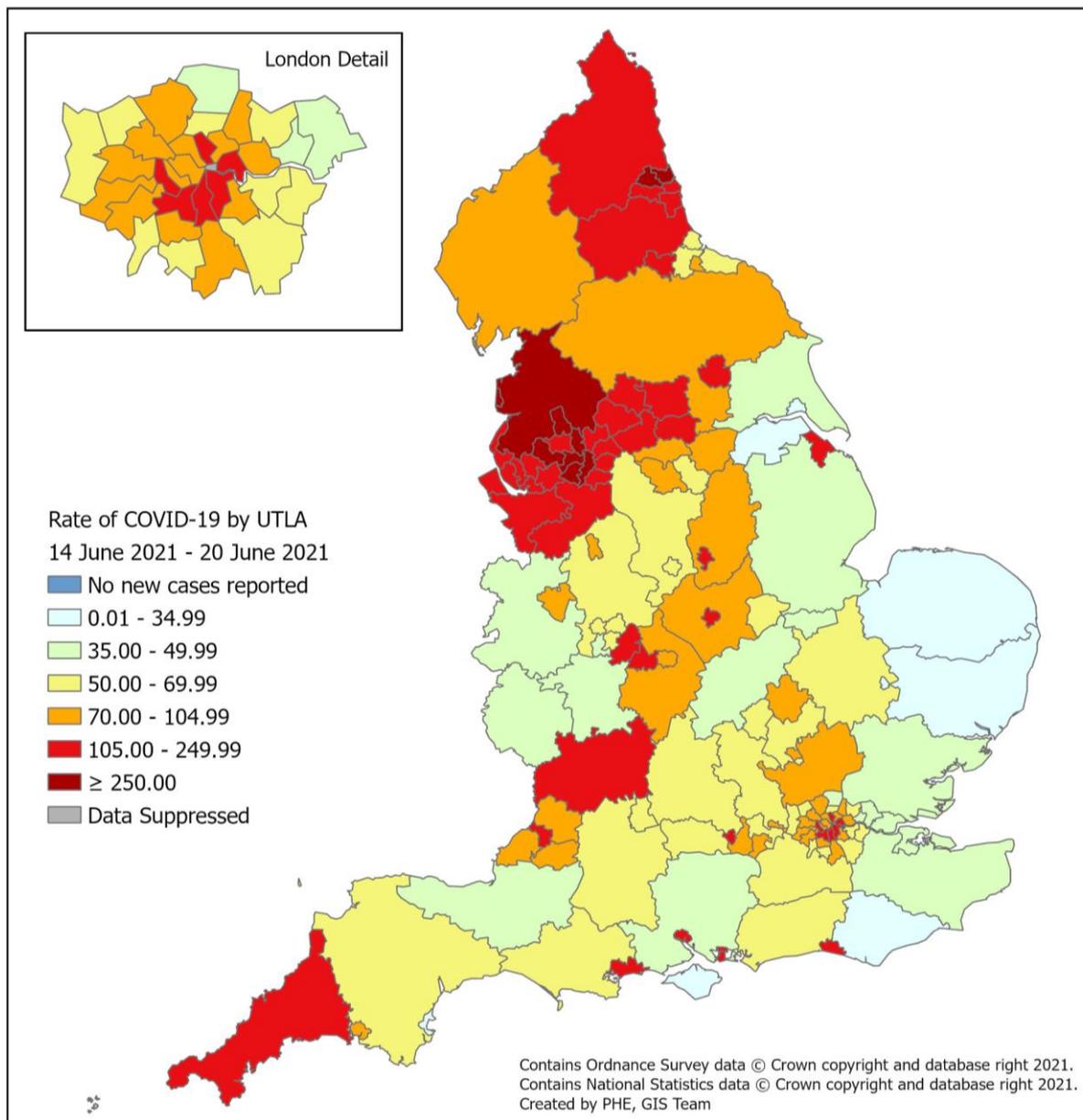
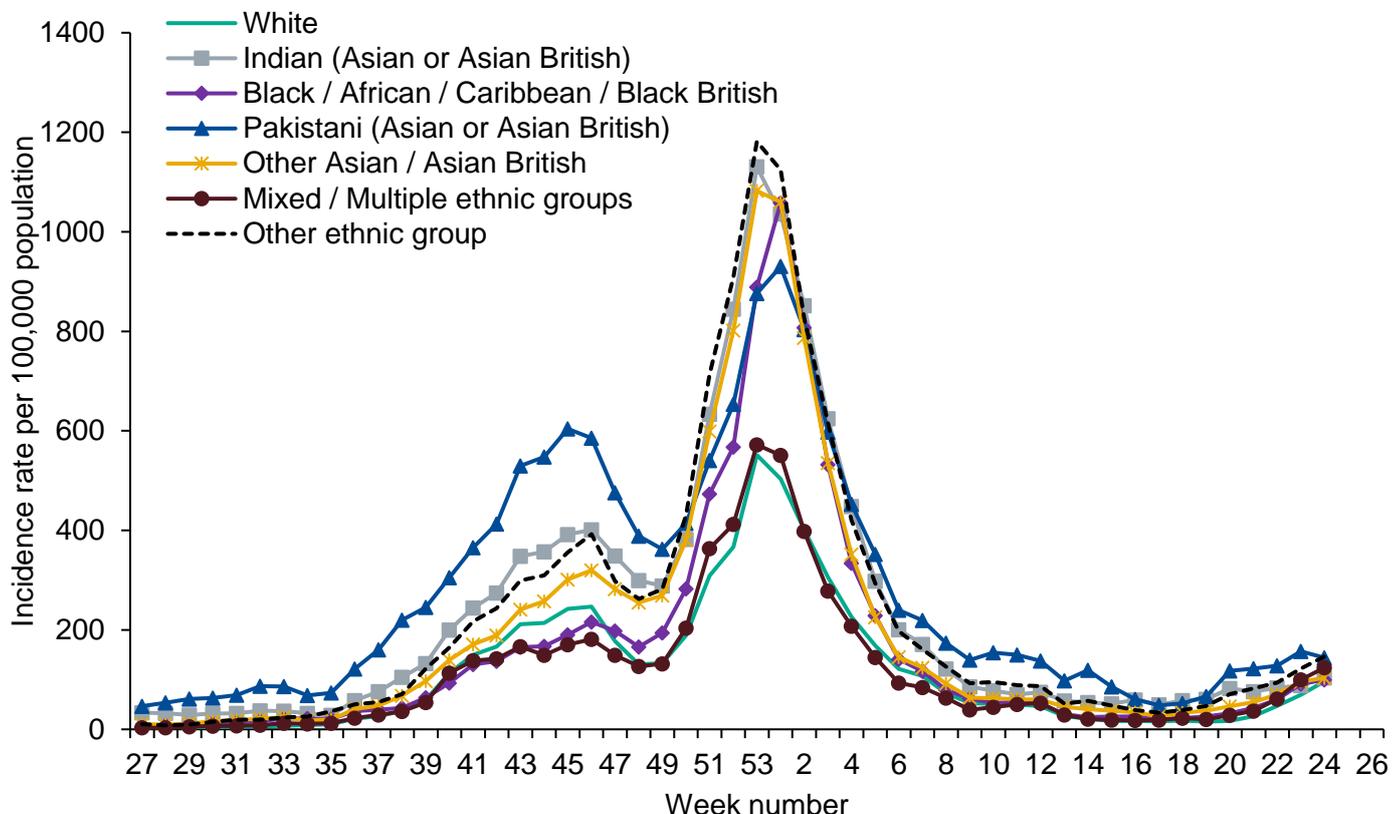


Figure 10: Weekly rate of COVID-19 cases per 100,000 population (Pillar 1 and 2), by upper-tier local authority, England (box shows enlarged map of London area)



Ethnicity

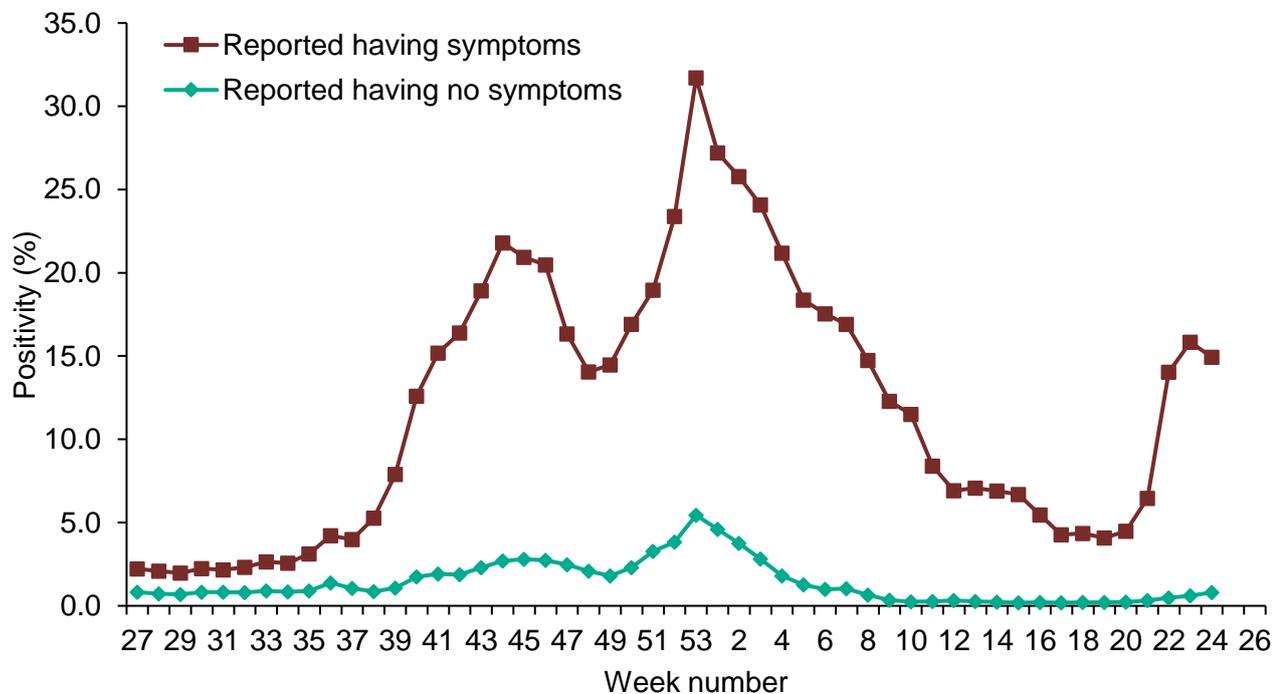
Figure 11: Weekly incidence per 100,000 population by ethnicity, England



* From the week 24 report onwards, the ethnicity analysis is based on a new method for assigning ethnicity developed by PHE. The previous method used the most recent ethnicity recorded through linkage to Hospital Episode Statistics and was supplemented by ethnicity recorded in pillar 2 cases. However, this method led to unfeasibly high rates in the 'Other' ethnic group when applied to COVID-19 cases, hospitalisation or mortality. As the recording of ethnicity in pillar 2 cases has improved over time, the new method uses the pillar 2 ethnicity and supplements this with the most frequent ethnicity recorded through linkage to Hospital Episode Statistics, unless the most frequent was 'Other' when the second most frequent was chosen.

Positivity by symptoms

Figure 12: Weekly positivity of confirmed COVID-19 cases by symptoms reported on Pillar 2 test request, (SGSS and Respiratory DataMart)



Possible SARS-CoV-2 reinfection in England

The following figures present population data based on the first time that individuals tested positive for SARS-CoV-2 through PCR and/or lateral flow device testing in England together with those who have tested positive for SARS-CoV-2 through PCR and/or lateral flow testing with an interval of at least 90 days between two consecutive positive tests. 15,893 possible reinfections have been identified, of which 53 have been confirmed by identification of genetically distinct specimens from each illness episode.

Further details on the methodology, as well as additional data on reinfections are available in the graph set published alongside this report.

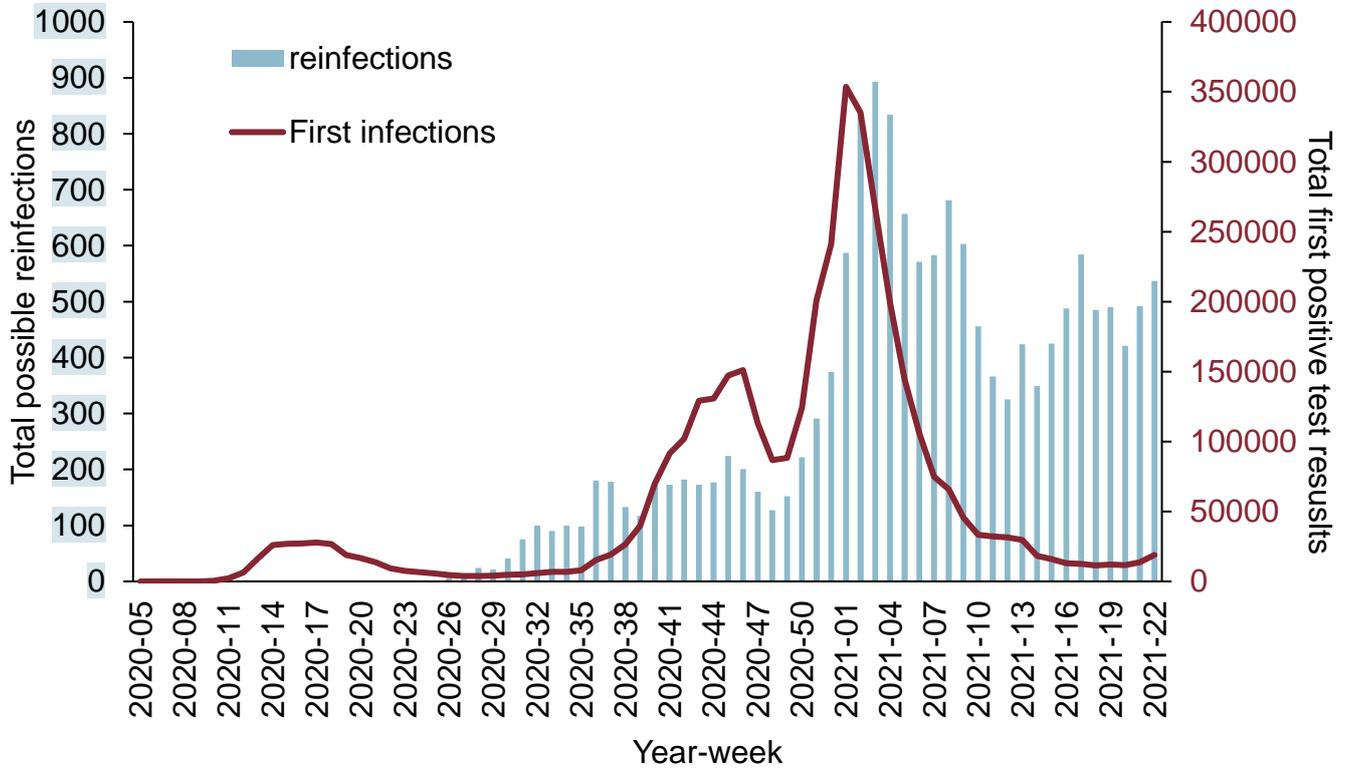
Please note that this section will be updated monthly. Last update was 17 June 2021.

It is important to consider reinfections in the context of first infections and there is a 90-day delay before people with a first infection can become eligible for reinfection.

Figure 13 shows the numbers of possible reinfections and numbers of first infections (secondary Y-axis) by week of onset (based on sample date throughout) through the weeks of the pandemic.

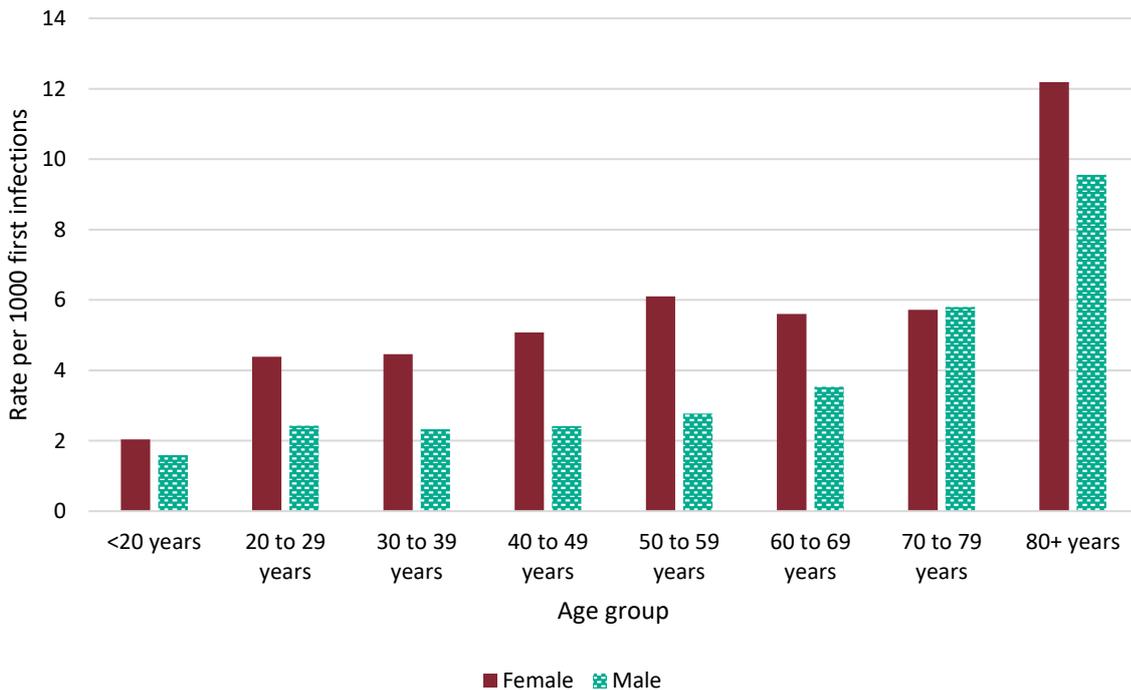
Figure 14 shows the age and sex distribution of possible reinfections by overall rate per 1000 first infections.

Figure 13: First COVID-19 positive test results* and possible reinfections by week in England to week 22 2021



*These data have been derived independently based on Pillar 1 and Pillar 2 datasets and may therefore differ to previously published data.

Figure 14: Overall possible reinfection rate per 1000 first positive COVID-19 result (to week 22 2021) by sex and age group in England



Respiratory DataMart system (England)

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

In week 24 2021, out of the 100,806 respiratory specimens reported through the Respiratory DataMart System (based on data received from 14 out of 16 laboratories), 965 samples were positive for SARS-CoV-2 with an overall positivity of 1.0%. The highest positivity was noted in the 5 to 14-year olds at 2.2% in week 24. The overall influenza positivity remained very low at 0.0% in week 24, with none of the 2,599 samples testing positive.

Respiratory syncytial virus (RSV) positivity increased slightly from 1.2% in week 23 to 1.7% in week 24. Parainfluenza positivity decreased from 9.2% in week 23 to 5.9% in week 24. Rhinovirus, adenovirus and human metapneumovirus (hMPV) positivity remained low at 6.2%, 1.6% and 0.3% respectively in week 24 (Figure 16).

Figure 15: DataMart samples positive for influenza and weekly positivity (%) for influenza and SARS-CoV-2, England

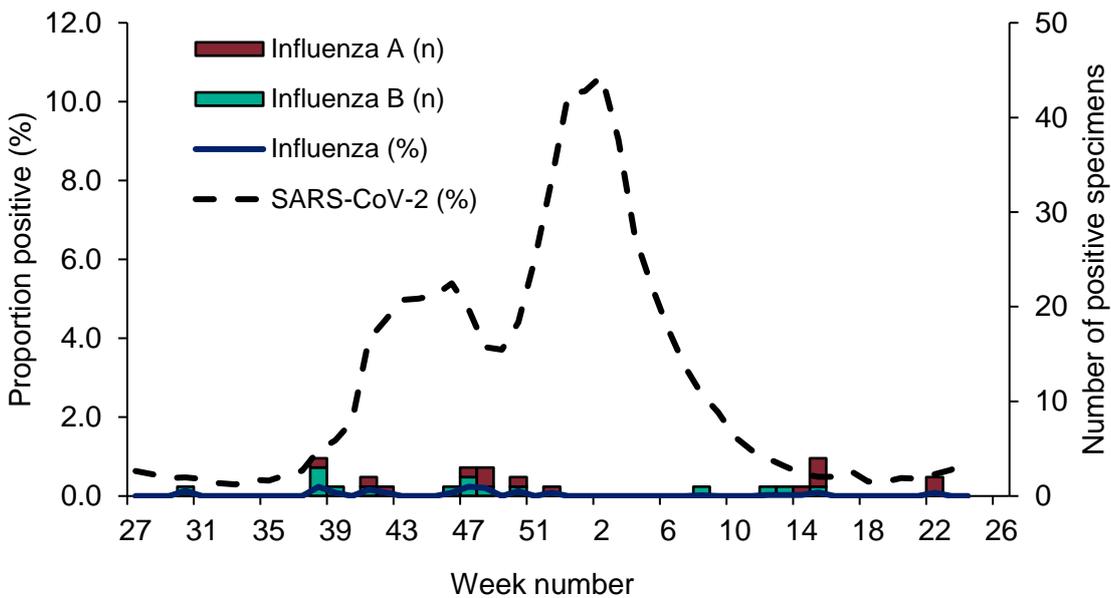


Figure 16: DataMart weekly positivity (%) for other respiratory viruses, England

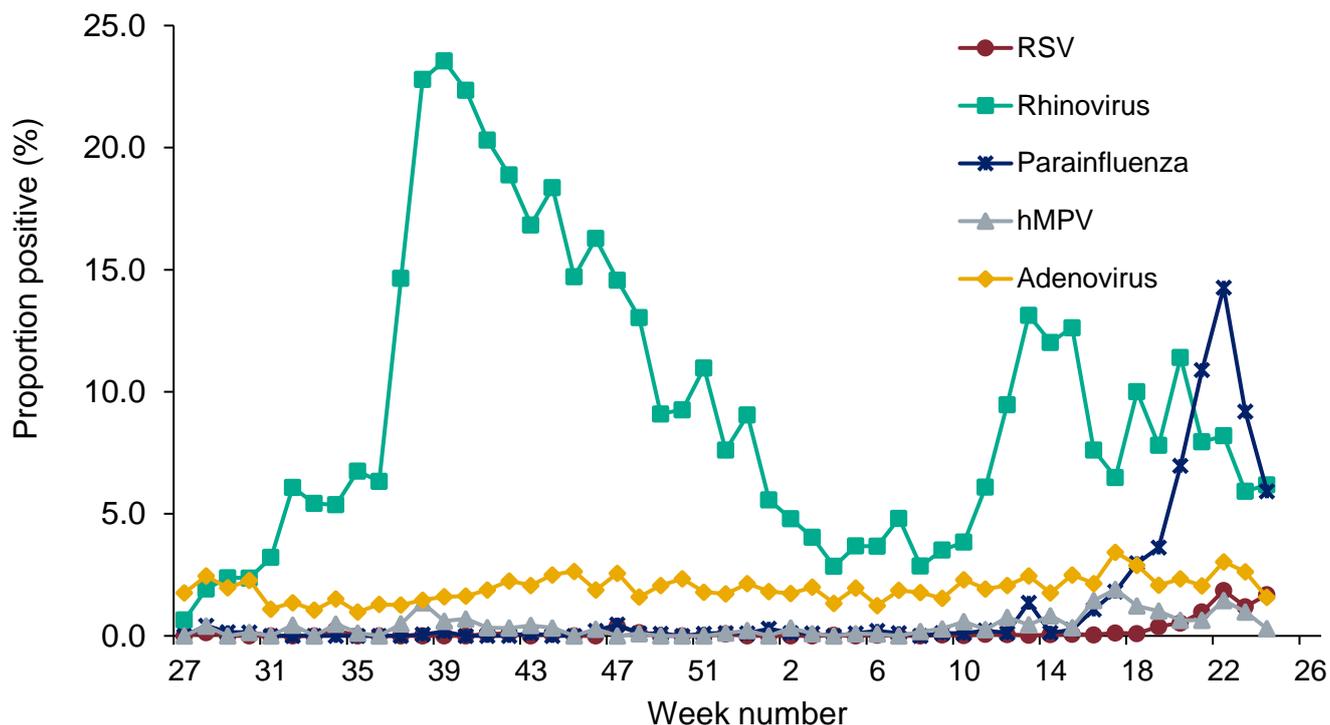
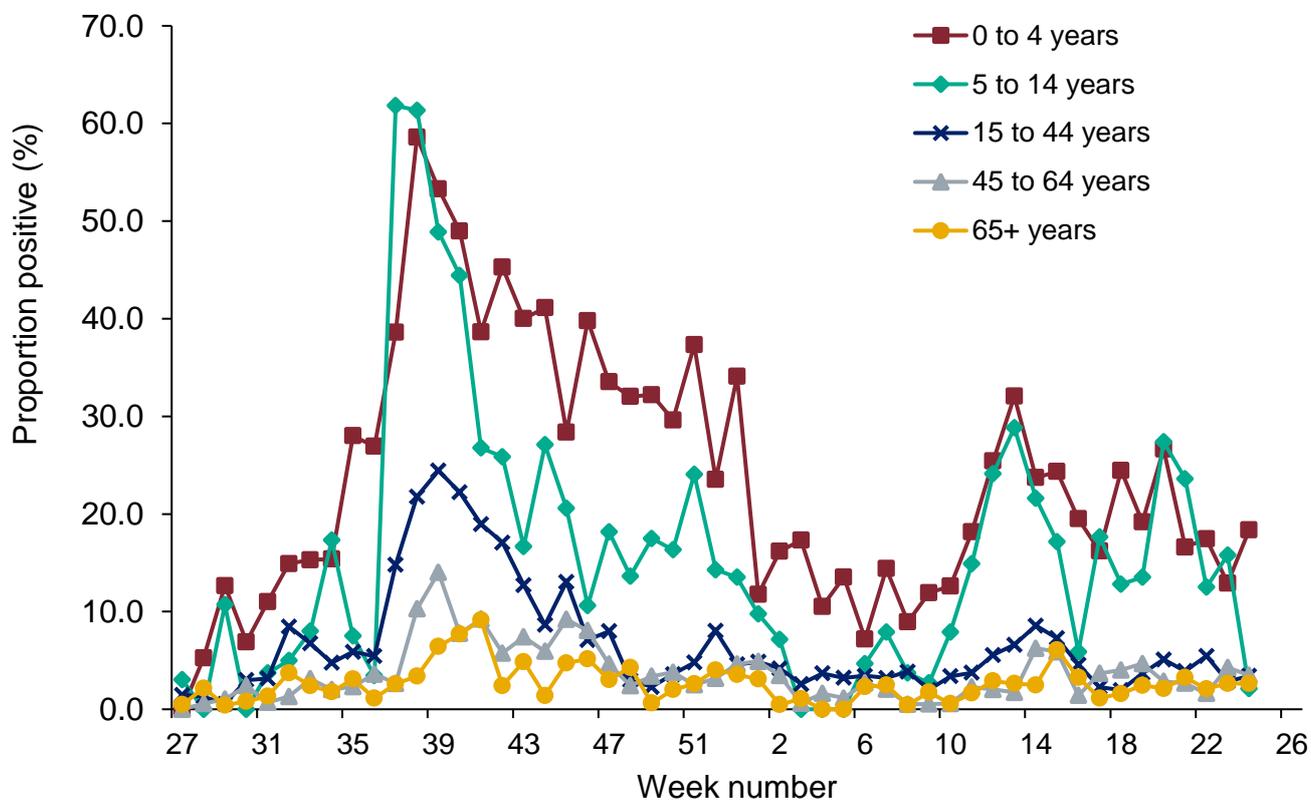


Figure 17: DataMart weekly positivity (%) for rhinovirus by age, England



Community surveillance

Acute respiratory infection incidents

Here we present data on acute respiratory infection (ARI) incidents in different settings that are reported to PHE 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. A subset of these will meet the criteria of a confirmed outbreak i.e. where two or more laboratory confirmed cases (SARS-CoV-2, influenza or other respiratory pathogens) are linked to a particular setting. Incidents where suspected cases test negative for COVID-19 or other respiratory pathogens, or cases are subsequently found not to have direct links to the setting are discarded.

The number of ARI incidents in each setting with at least one laboratory confirmed case of COVID-19 (or other respiratory pathogen) are reported below. As outlined above, only a subset of these will go on to be confirmed as outbreaks.

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

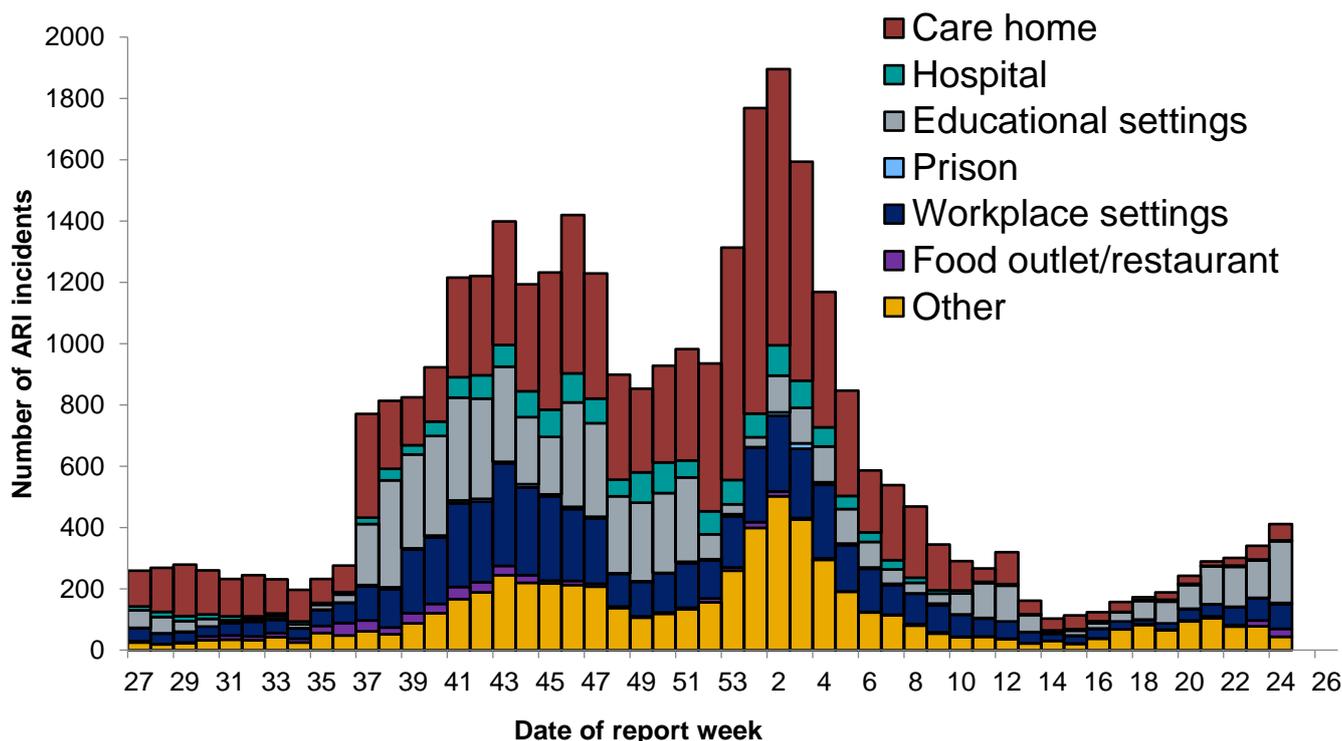
Data caveats:

- 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 PHE 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.
- A national school helpline started operating on 17 September 2020 and a Universities helpline started operating on 7 October. This is likely to have had an impact on the number of situations/outbreaks being reported to HPTs in these settings.
- 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 PHE also varies significantly by setting. This needs to be taken into account when interpreting the weekly number of reported incidents by setting and caution should be used when making comparisons between settings.
- In light of the above, comparisons between Regions and settings are not advised as they may be misleading.

411 new ARI incidents have been reported in week 24 in the UK (Figure 18):

- 53 incidents were from care homes where 39 had at least one linked case that tested positive for SARS-CoV-2 where test results were available
- 201 incidents were from educational settings where 151 had at least one linked case that tested positive for SARS-CoV-2
- 3 incidents were from hospitals, with no test results available
- 4 incidents were from prisons, with all testing positive for SARS-CoV-2
- 81 incidents were from workplace settings where 52 had at least one linked case that tested positive for SARS-CoV-2
- 26 incidents were from food outlets/restaurants where 20 had at least one linked case testing positive for SARS-CoV-2
- 43 incidents were from other settings where 27 had at least one linked case that tested positive for SARS-CoV-2

Figure 18: Number of acute respiratory infection (ARI) incidents by setting, UK



*excludes data from Wales

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

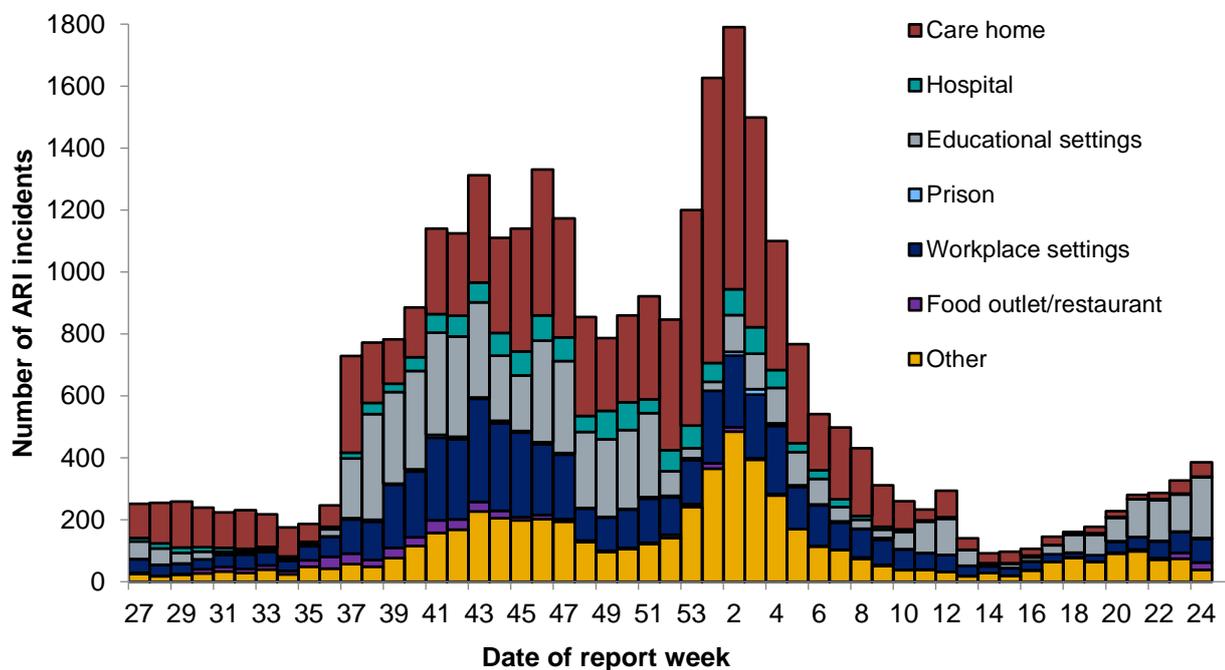


Figure 20: Number of acute respiratory infection (ARI) incidents in care homes by virus type from week 27, England

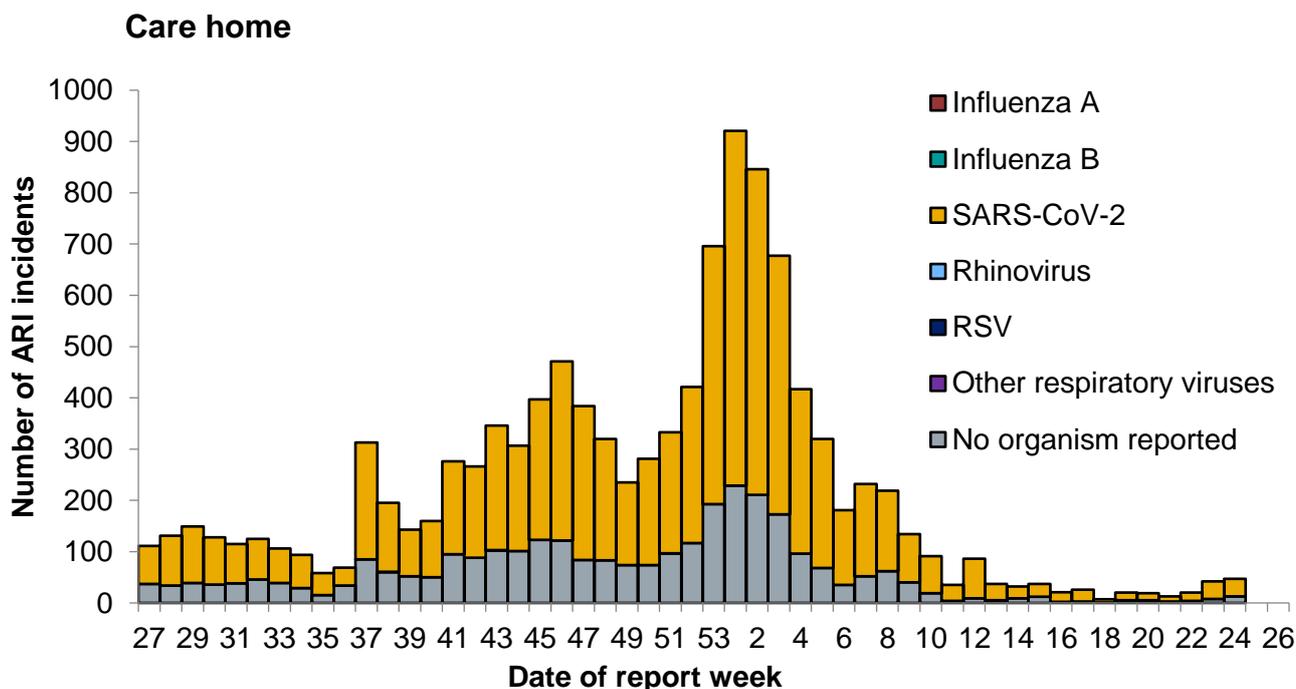


Figure 21: Number of acute respiratory infection (ARI) incidents in hospitals by virus type from week 27, England

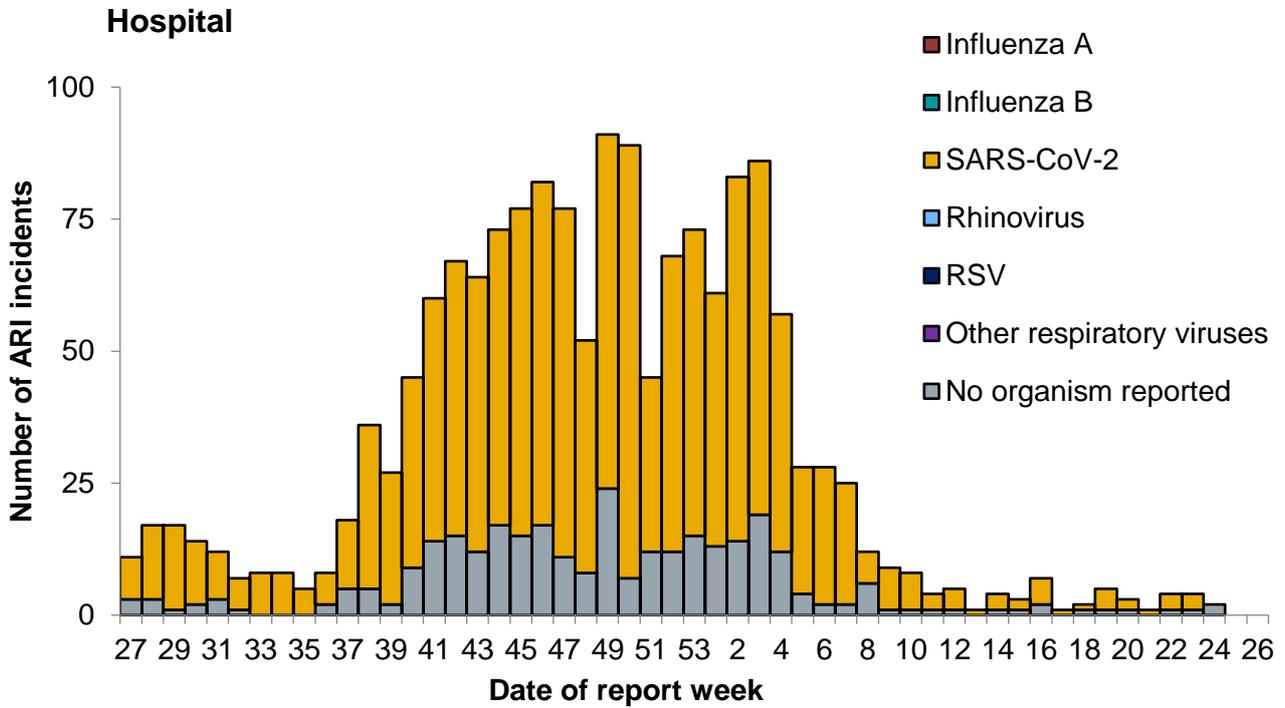


Figure 22: Number of acute respiratory infection (ARI) incidents in educational settings by virus type from week 27, England

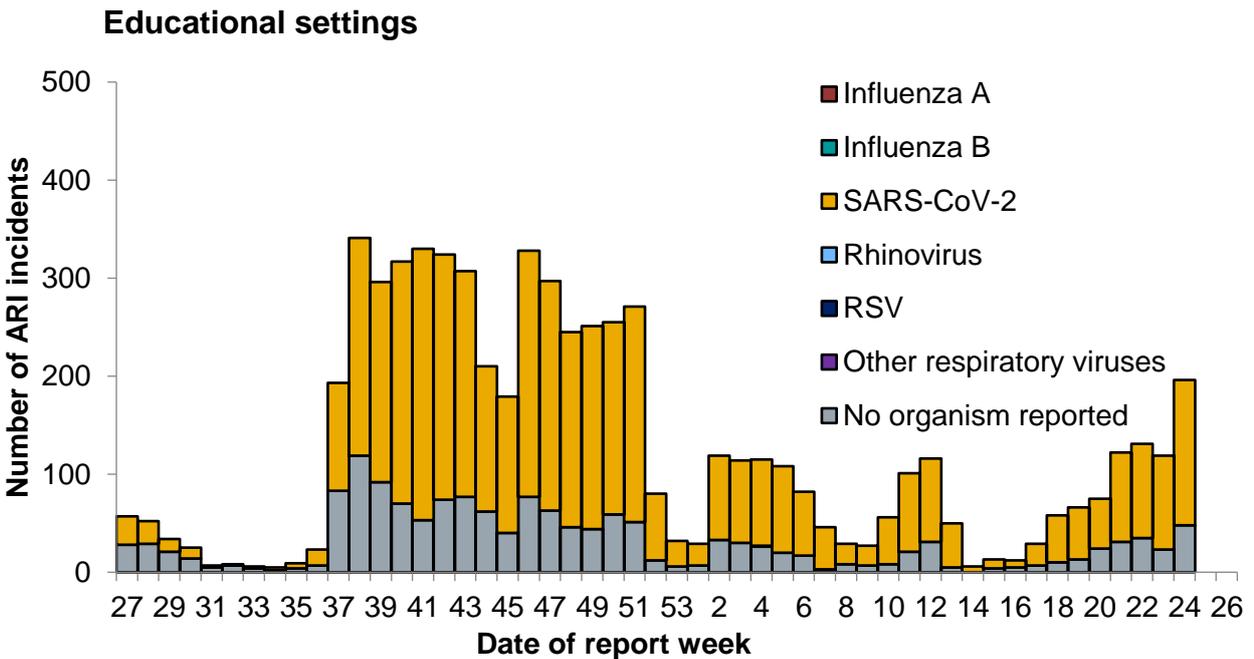


Figure 23: Number of acute respiratory infection (ARI) incidents in prisons by virus type from week 27, England

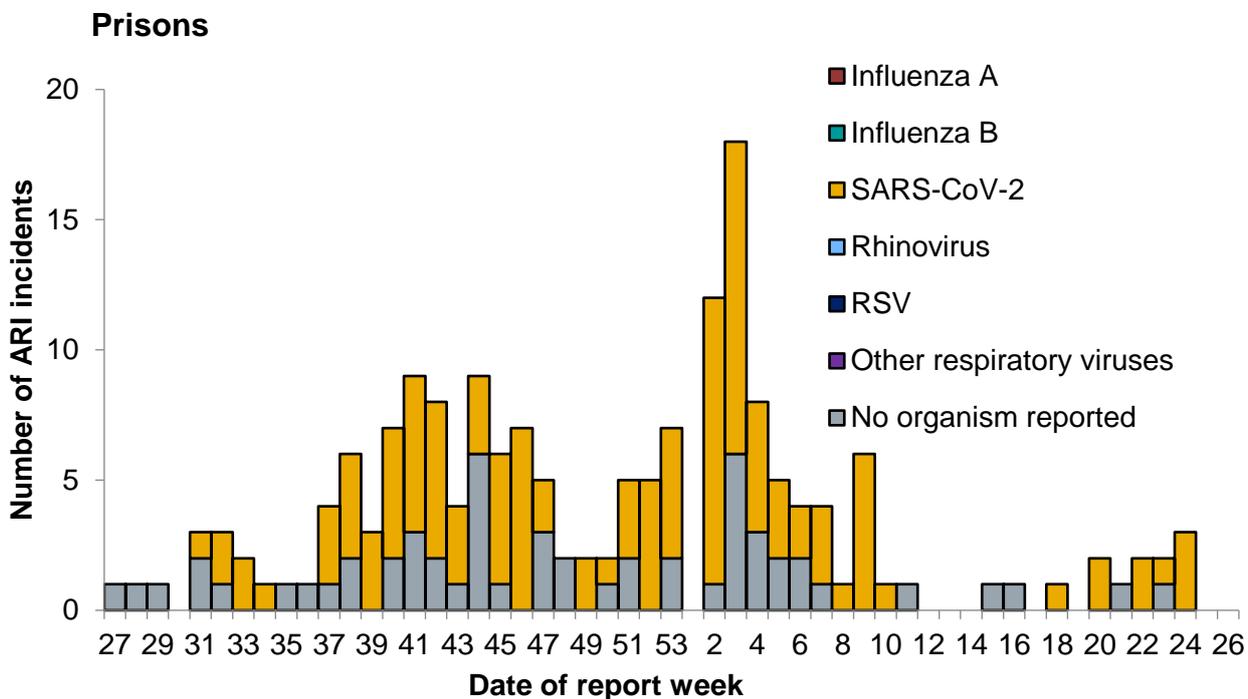


Figure 24: Number of acute respiratory infection (ARI) incidents in workplace settings by virus type from week 27, England

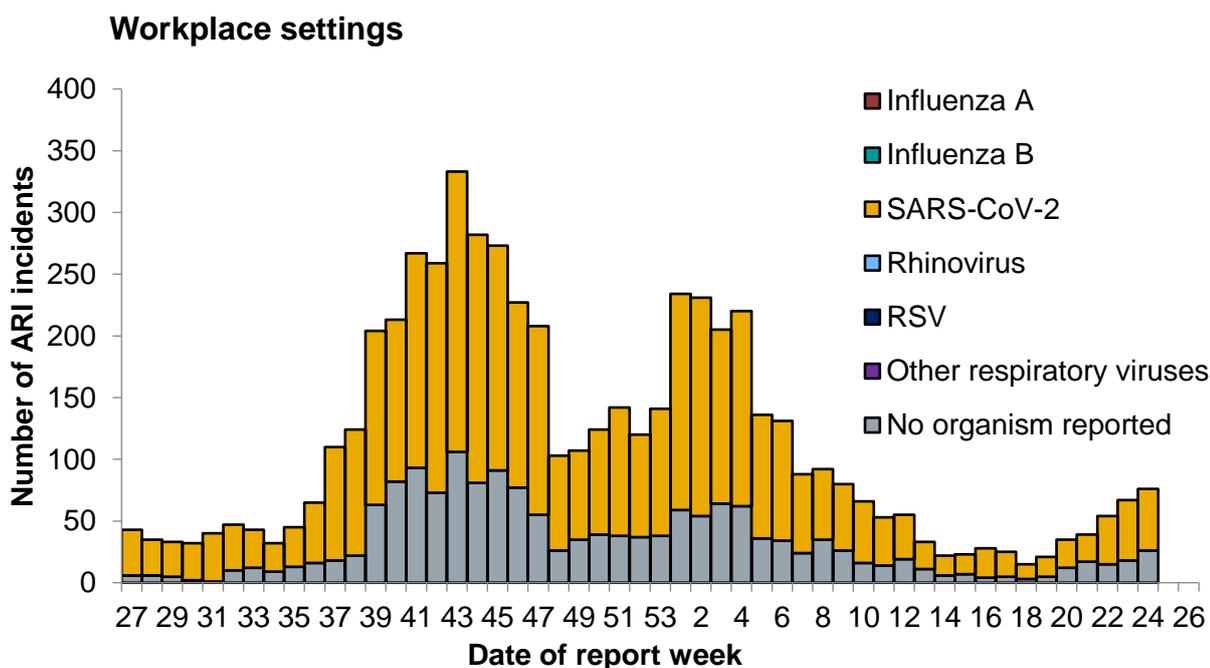


Figure 25: Number of acute respiratory infection (ARI) incidents in food outlet/restaurants settings by virus type from week 27, England

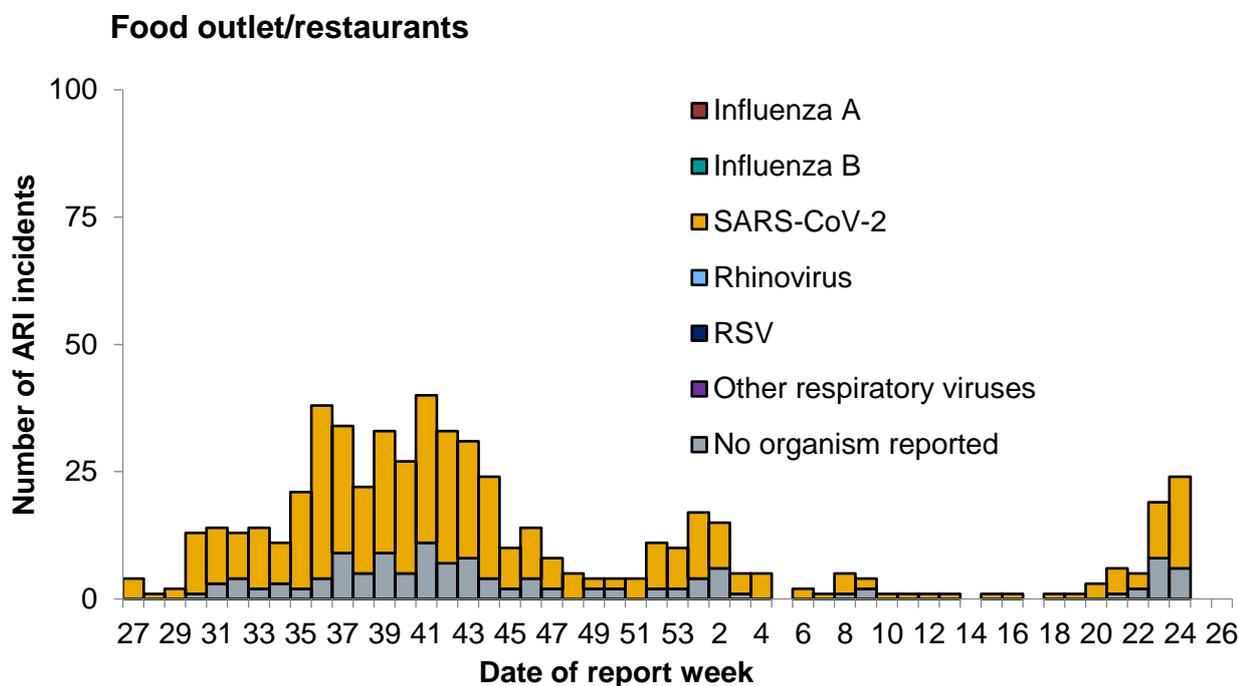


Figure 26: Number of acute respiratory infection (ARI) incidents in other settings by virus type from week 27, England

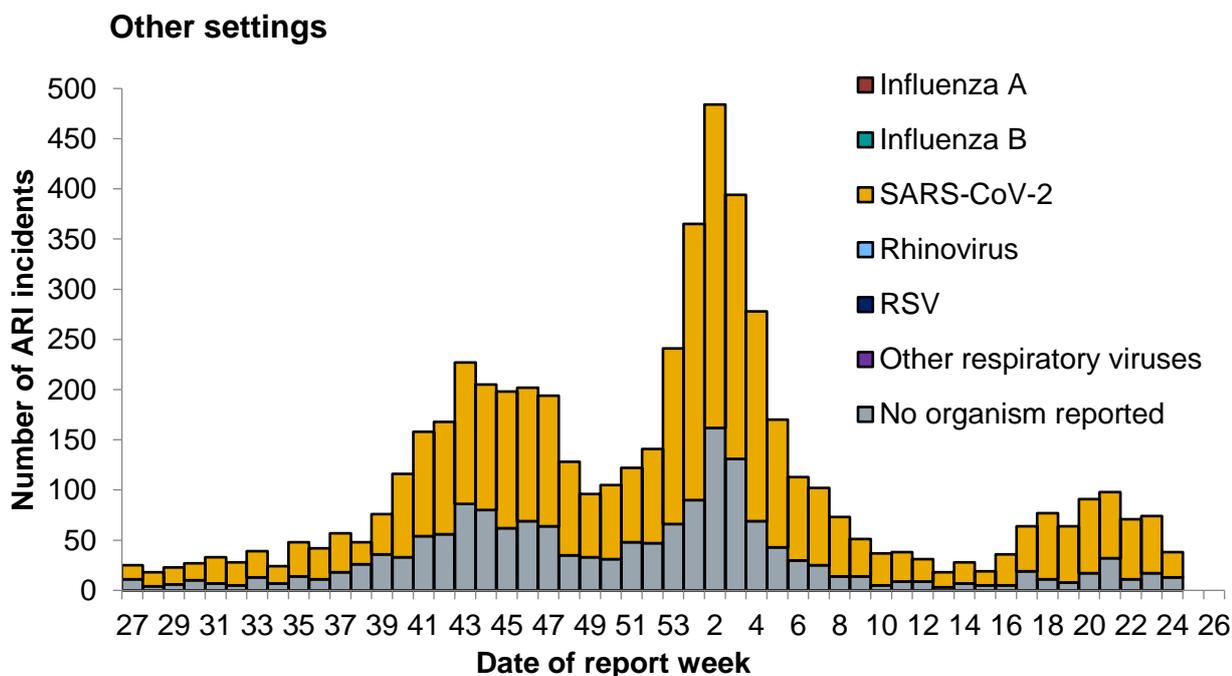


Table 2: Total number of situations/incidents by institution and PHE Centres over the past four weeks with the total number in the last week in brackets

| PHE Centres | Care home | Hospital | Educational settings | Prisons | Workplace settings | Food outlet/restaurant settings | Other settings | Total |
|----------------------|-----------|----------|----------------------|---------|--------------------|---------------------------------|----------------|-----------|
| East of England | 4(3) | 2(0) | 18(5) | 0(0) | 6(1) | 1(1) | 18(1) | 49(11) |
| East Midlands | 14(4) | 1(1) | 28(9) | 0(0) | 15(6) | 0(0) | 6(1) | 64(21) |
| London | 5(1) | 3(1) | 90(31) | 0(0) | 26(8) | 7(5) | 30(7) | 161(53) |
| North East | 11(5) | 0(0) | 3(1) | 1(1) | 2(0) | 0(0) | 10(0) | 27(7) |
| North West | 25(8) | 2(0) | 98(31) | 2(1) | 95(33) | 12(3) | 34(7) | 268(83) |
| South East | 8(2) | 0(0) | 174(60) | 1(0) | 25(10) | 8(4) | 82(7) | 298(83) |
| South West | 32(17) | 1(0) | 45(23) | 0(0) | 28(11) | 9(3) | 54(3) | 169(57) |
| West Midlands | 16(4) | 2(0) | 74(23) | 1(0) | 21(4) | 13(7) | 18(6) | 145(44) |
| Yorkshire and Humber | 7(3) | 0(0) | 38(13) | 3(1) | 18(3) | 4(1) | 29(6) | 99(27) |
| Total | 122(47) | 11(2) | 568(196) | 8(3) | 236(76) | 54(24) | 281(38) | 1280(386) |

COVID-19 cases by type of residence

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

In week 24, the highest percentage of confirmed COVID-19 cases by type of residence was seen in residential dwelling (Table 3).

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

| Type of residence | Week 19 | Week 20 | Week 21 | Week 22 | Week 23 | Week 24 |
|--|---------|---------|---------|---------|---------|---------|
| Residential dwelling (including houses, flats, sheltered accommodation) | 93.3 | 93.6 | 93.7 | 93.0 | 91.7 | 90.7 |
| Undetermined | 3.3 | 3.0 | 3.1 | 2.7 | 3.0 | 3.5 |
| Care/Nursing home | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 |
| Residential institution (including residential education) | 0.6 | 0.6 | 0.4 | 0.6 | 1.1 | 1.3 |
| Other property classifications | 0.9 | 0.9 | 0.7 | 0.8 | 0.9 | 1.0 |
| House in multiple occupancy (HMO) | 0.6 | 0.6 | 0.6 | 0.9 | 1.3 | 1.8 |
| Medical facilities (including hospitals and hospices, and mental health) | 0.7 | 0.8 | 1.1 | 1.5 | 1.6 | 1.5 |
| Prisons, detention centres, secure units | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Overseas address | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| No fixed abode | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

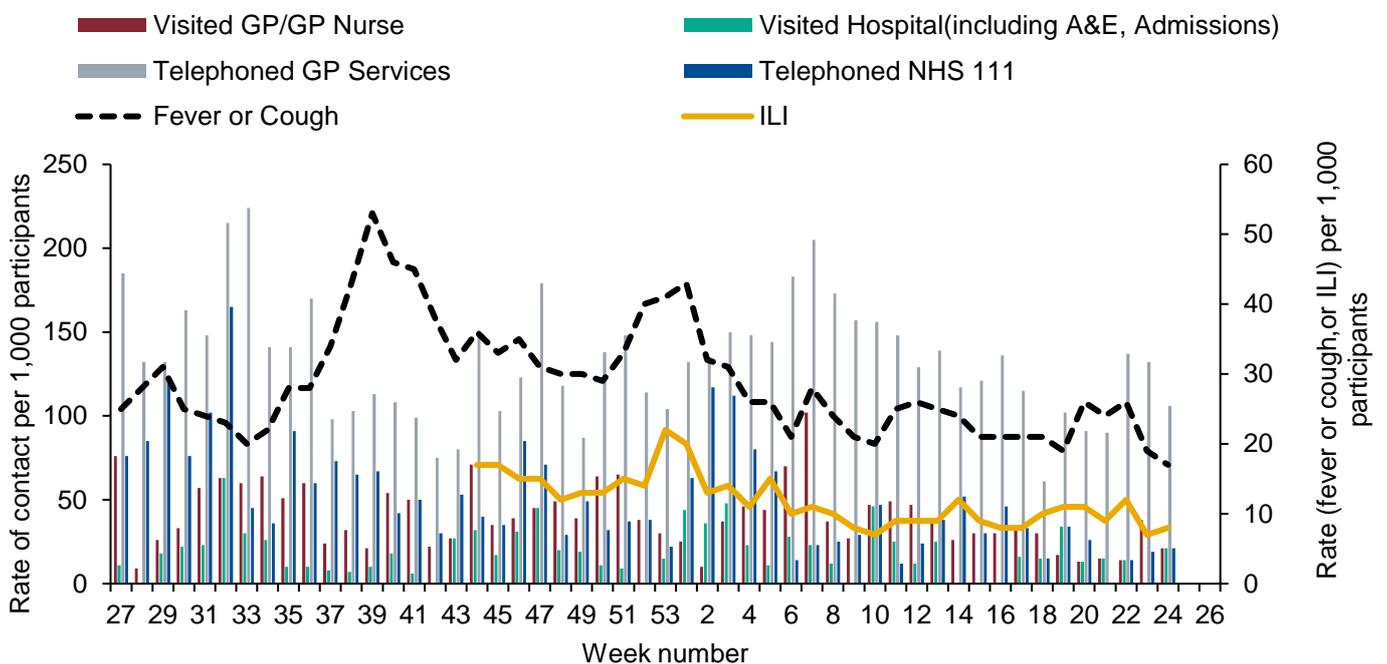
FluSurvey

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.

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 2,795 participants completed the weekly surveillance survey in week 24, of which 47 (1.7%) reported fever or cough and 23 (0.8%) reported influenza-like illness (ILI). The most commonly used healthcare services reported by respondents remains telephoning a GP practice (Figure 27).

Figure 27: FluSurvey participants self-reporting fever or cough and ILI symptoms, and trends in healthcare seeking behaviour among these participants, England

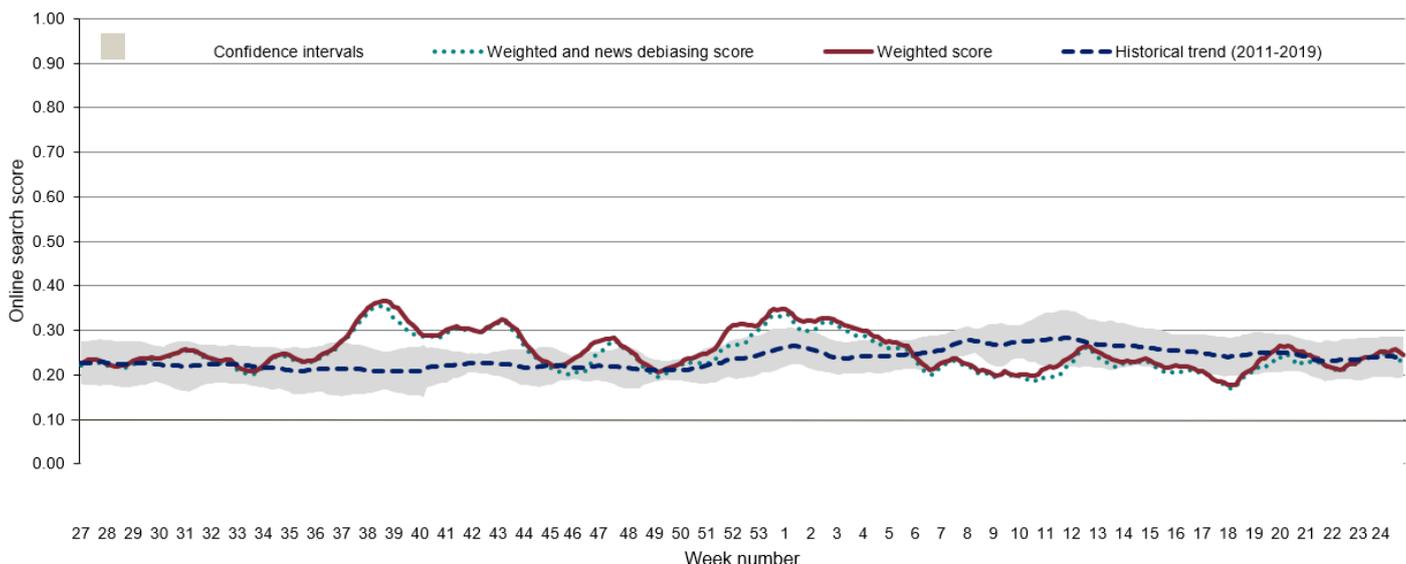


Google search queries

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” (e.g. “covid-19”). The search query frequency time series has been weighted based on symptom frequency as reported in other data sources. Frequency of searches for symptoms is compared with a baseline calculated from historical daily data. Further information on this model is available [here](#).

During week 24, the overall and media-debiasing weighted Google search scores remained stable (Figure 28).

Figure 28: Normalised Google search score for COVID-19 symptoms, with weighted score for media-debiasing and historical trend, England



NHS 111

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

Up to 20 June, NHS 111 calls for cold/flu and for loss of taste or smell remained stable, while calls for potential COVID-19 increased. Online assessments for cold/flu and loss of taste or smell remained stable, while those for potential COVID-19 increased (Figure 29 and 30).

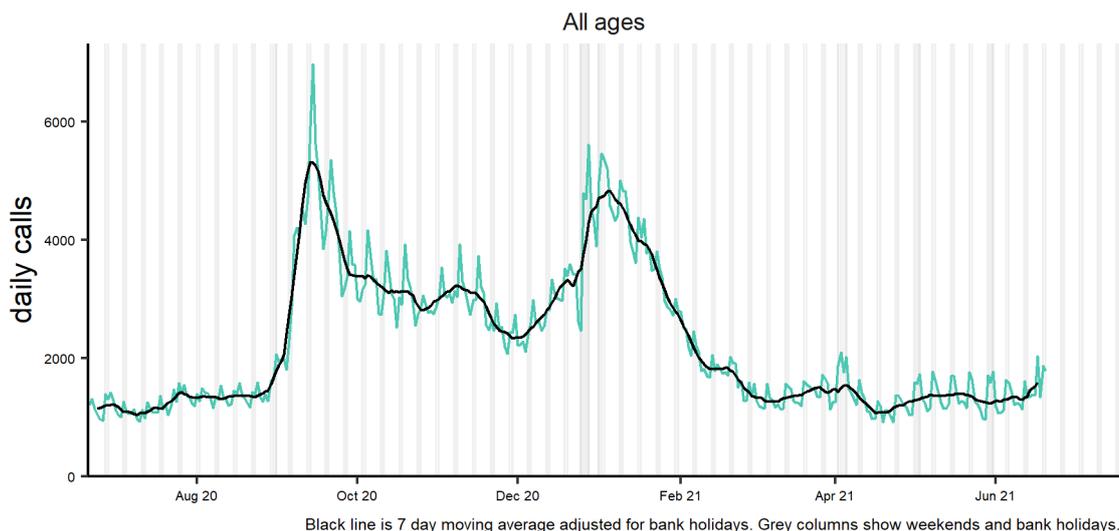
Please note that NHS 111 callers (from 11 May 2020) and NHS 111 online users (from 11 June 2020), who are assessed as having probable COVID-19 symptoms are now triaged using symptom specific pathways e.g. cold/flu, which are included in routine syndromic indicators.

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

Figure 29: NHS 111 telephony indicators (and 7-day moving average) for number of (a) daily potential COVID-19 calls, (b) daily cold/flu calls and (c) daily loss of taste or smell calls for all ages, England

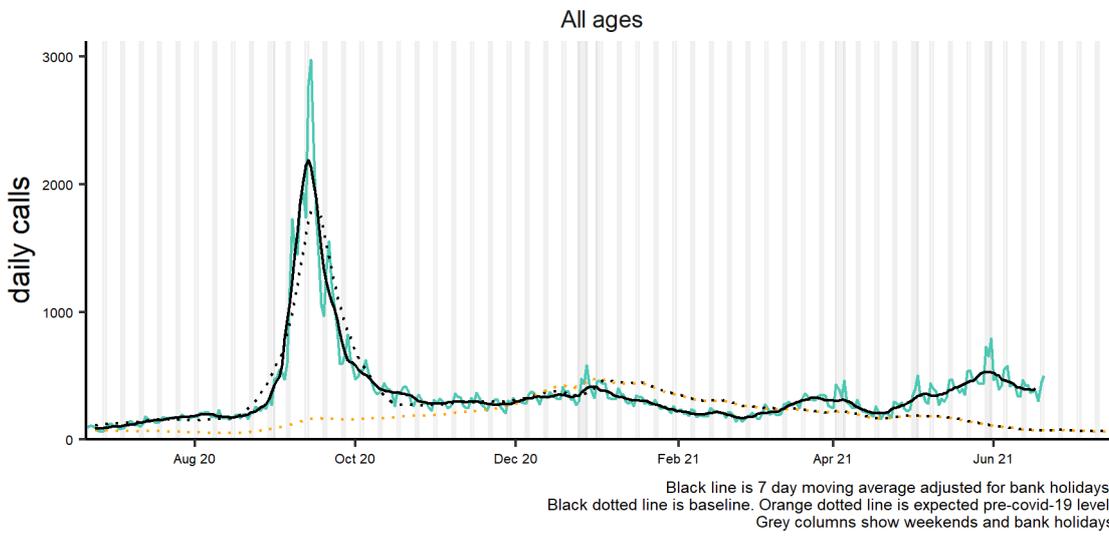
(a)

Potential covid-19 21/06/2020 - 20/06/2021



(b)

Cold or flu 21/06/2020 - 20/06/2021



(c)

Loss of taste or smell 21/06/2020 - 20/06/2021

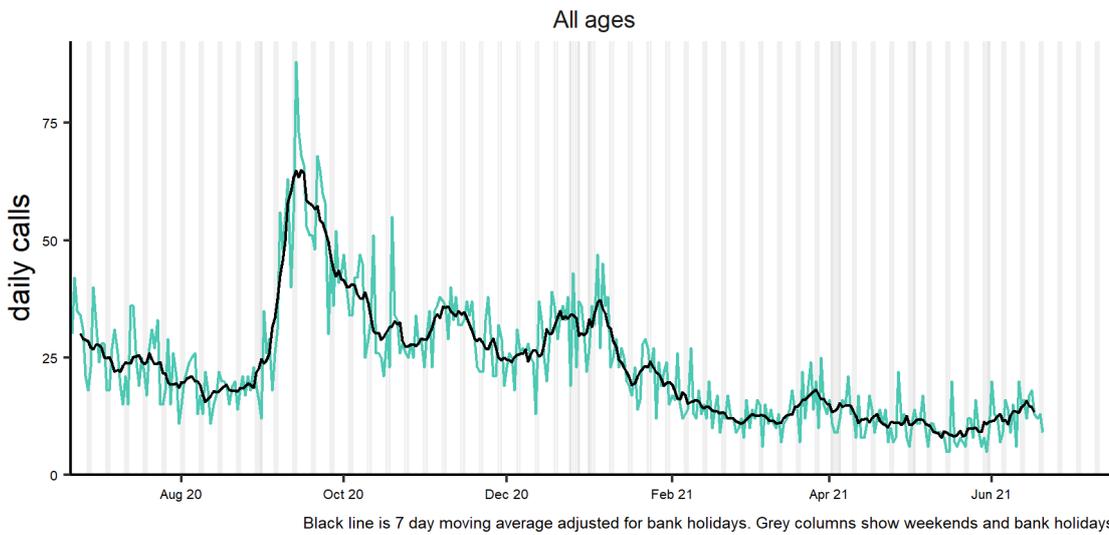
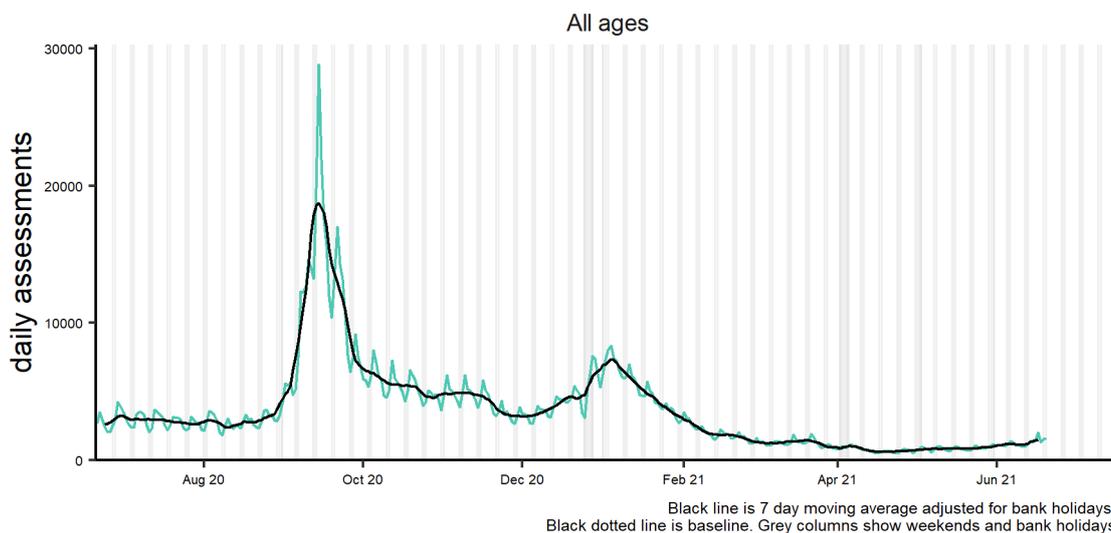


Figure 30: NHS 111 completed online assessments (and 7-day moving average) for (a) daily potential COVID-19 online assessments, (b) daily cold/flu online assessments and (c) daily loss of taste or smell online assessments, as the number of completed online assessments for all ages, England

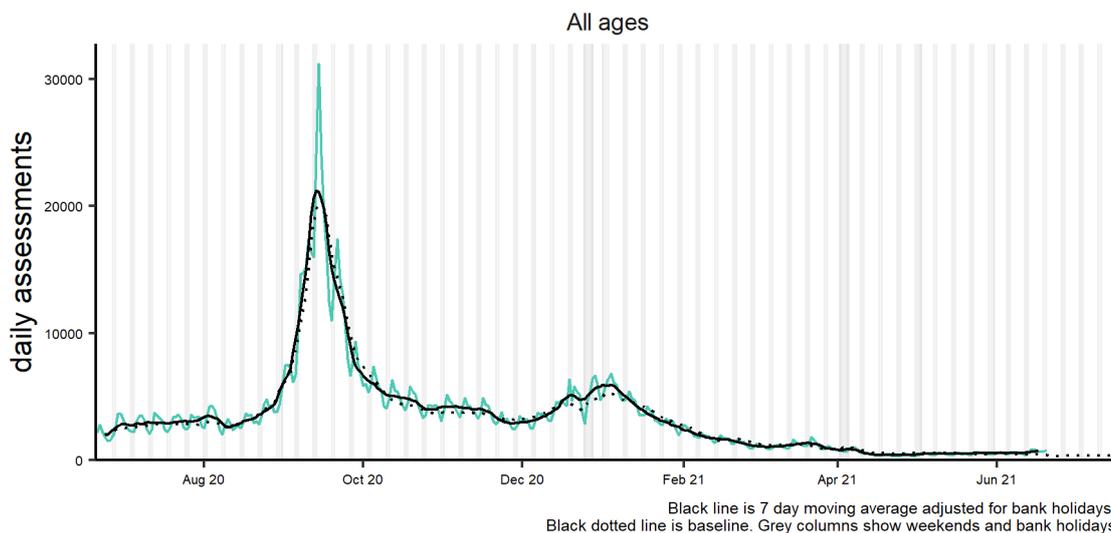
(a)

Potential covid-19 21/06/2020 - 20/06/2021



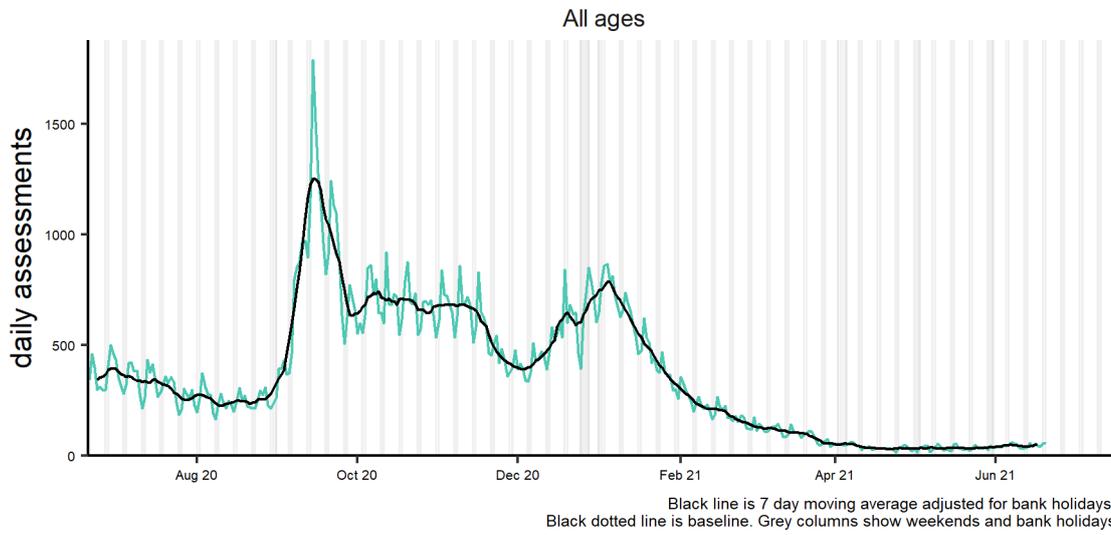
(b)

Cold or flu 21/06/2020 - 20/06/2021



(c)

Loss of taste or smell 21/06/2020 - 20/06/2021



Primary care surveillance

RCGP (England)

The weekly ILI consultation rate through the RCGP surveillance was 0.3 per 100,000 registered population in participating GP practices in week 24 compared to 0.7 per 100,000 in the previous week. This is below the baseline threshold (12.2 per 100,000) (Figure 31). By age group, the highest rates were seen in the under 1-year olds (2.5 per 100,000). The Lower Respiratory Tract Infections (LRTI) consultation rate was at 28.6 per 100,000 in week 24, compared to the rate of 30.5 per 100,000 in the previous week. The COVID-19-like indicator consultation rate was at 64.9 per 100,000 in week 24 compared to a rate of 51.2 per 100,000 in the previous week (Figure 32).

Figure 31: RCGP ILI consultation rates, all ages, England

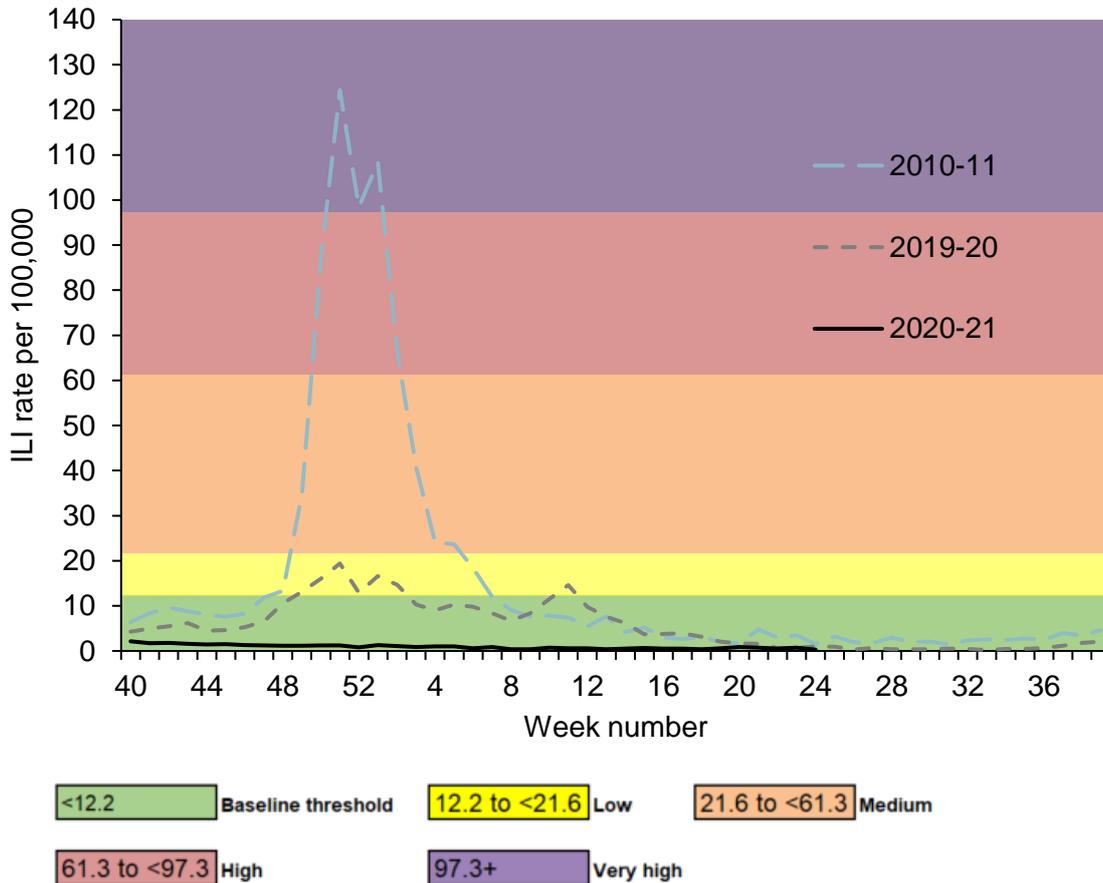
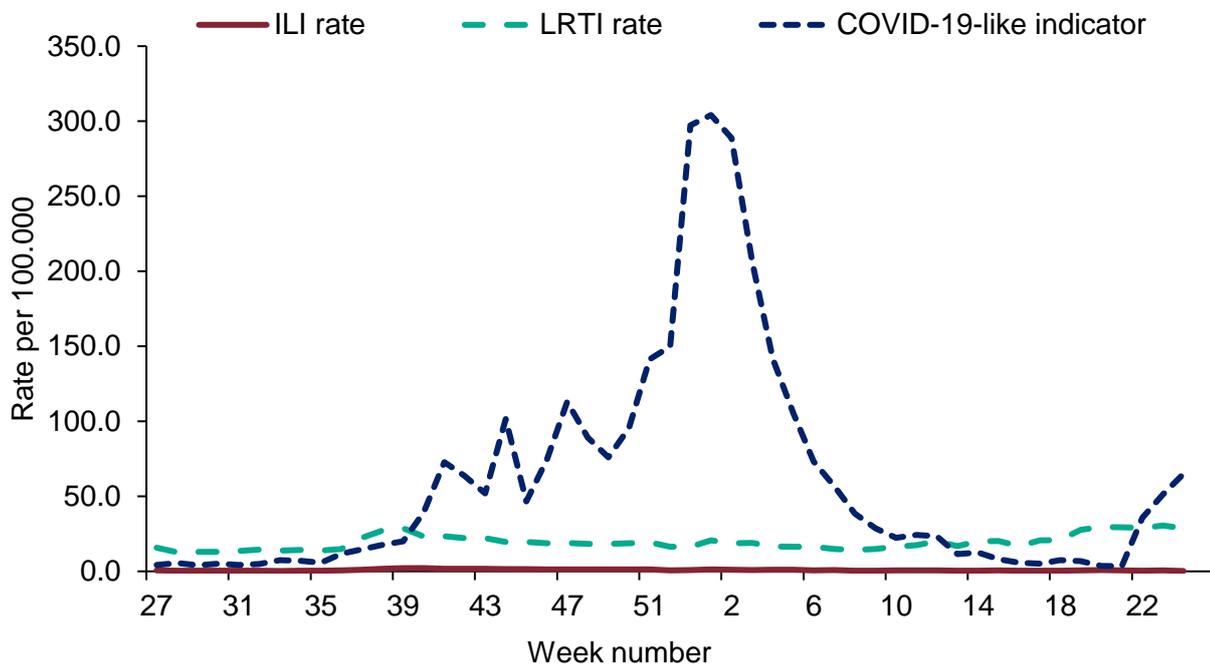


Figure 32: RCGP ILI, LRTI and COVID-19-like indicator consultation rates, England



UK

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

By age group, the highest rates were seen in the 1 to 4-year olds in Scotland (1.3 per 100,000) and the 45 to 64-year olds in Wales (1.0 per 100,000).

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

| GP ILI consultation rates (all ages) | Week number | | | | | | | | | | | | | | |
|--------------------------------------|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| England (RCGP) | 0.7 | 0.6 | 0.6 | 0.3 | 0.5 | 0.6 | 0.5 | 0.5 | 0.4 | 0.6 | 0.9 | 0.7 | 0.5 | 0.7 | 0.3 |
| Wales | 0.5 | 0.0 | 1.0 | 0.5 | 0.5 | 0.5 | 0.0 | 0.0 | 0.3 | 0.8 | 0.5 | 0.0 | 0.5 | 0.7 | 0.3 |
| Scotland | 0.2 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.5 |
| Northern Ireland | 0.7 | 0.6 | 0.6 | 0.4 | 0.3 | 0.8 | 0.4 | 0.7 | 0.1 | 0.5 | 0.5 | 0.4 | 0.4 | 0.6 | |

The Moving Epidemic Method (MEM) has been adopted by the European Centre for Disease Prevention and Control to calculate thresholds for GP ILI consultations for the start of influenza activity (based on 10 seasons excluding 2009/10), in a standardised approach across Europe. For MEM threshold values for each country, please visit:

<https://www.gov.uk/guidance/sources-of-uk-flu-data-influenza-surveillance-in-the-uk#clinical-surveillance-through-primary-care>

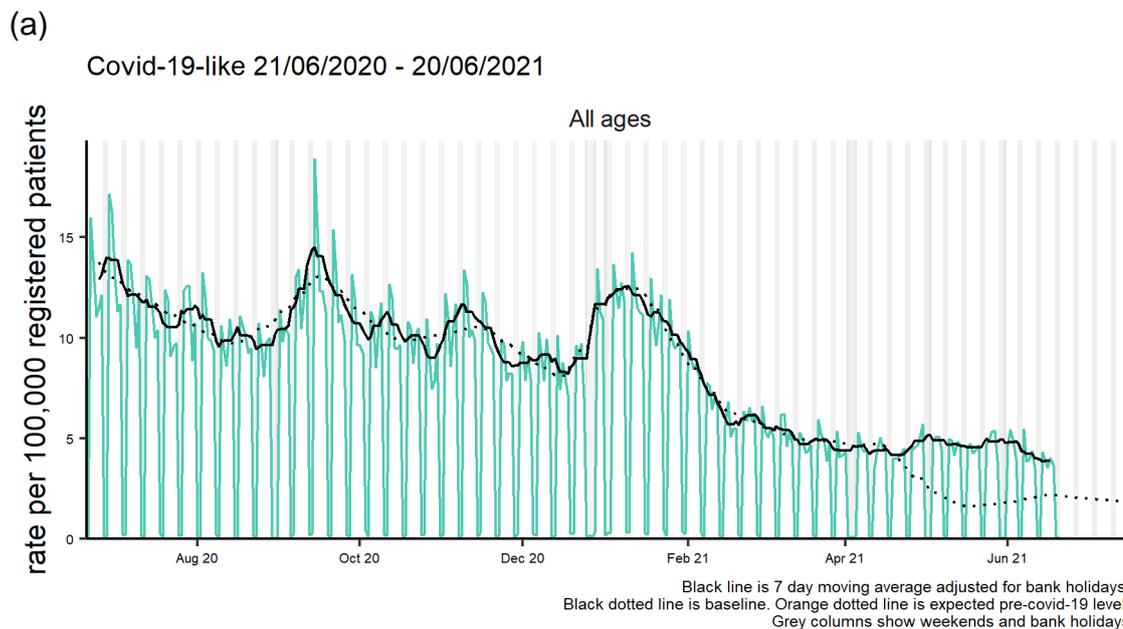
GP In Hours, Syndromic Surveillance

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

Up to 20 June GP in-hours consultations for potential COVID-19 decreased, while consultations for influenza-like illness remained similar to baseline levels (Figure 33).

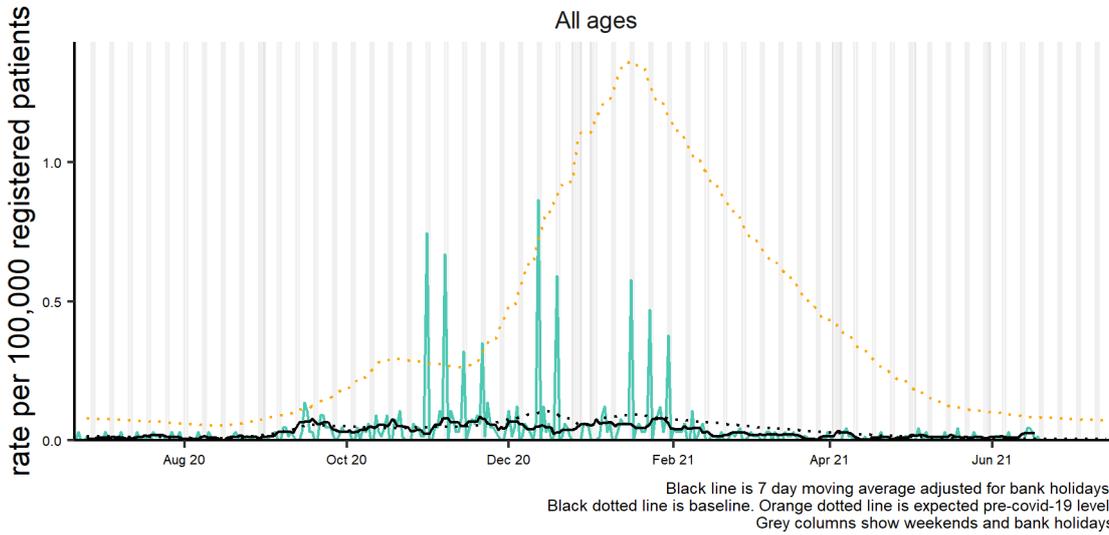
Further information about caveats is available from the [PHE GP In Hours Syndromic Surveillance bulletin](#).

Figure 33: GPIH clinical indicators for (a) potential COVID-19 GP consultations and (b) influenza-like illness GP consultations, England



(b)

Influenza-like illness 21/06/2020 - 20/06/2021



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

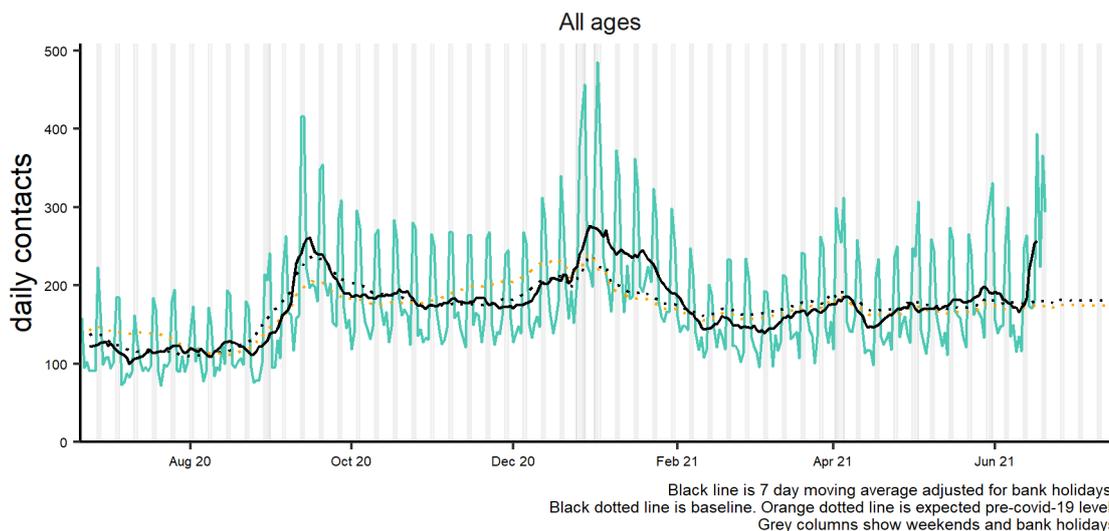
The GP Out of Hours (GPOOH) syndromic surveillance system monitors the numbers of daily unscheduled visits and calls to GPs during evenings, overnight, on weekends and on public holidays. This system covers around 55% of England’s out of hour activity.

Up to 20 June, GP out-of-hours and unscheduled care consultations for acute respiratory infections and influenza-like illness remained stable, while those for difficulty breathing/asthma/wheeze increased (Figure 34).

Figure 34: GPOOH number of daily contacts for all ages for (a) difficulty breathing/wheeze/asthma, (b) influenza-like illness and (c) acute respiratory infections, England

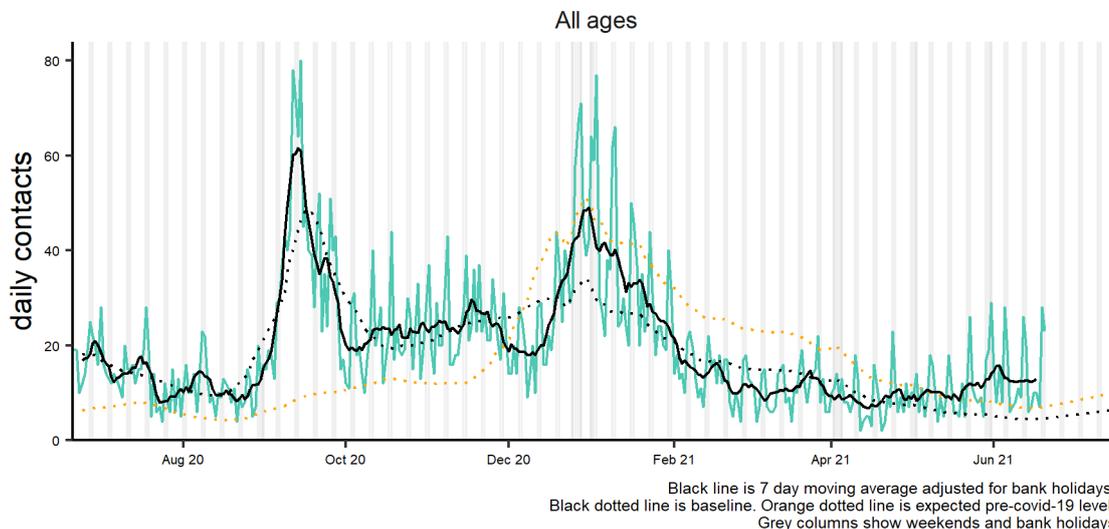
(a)

Difficulty breathing, wheeze or asthma 21/06/2020 - 20/06/2021



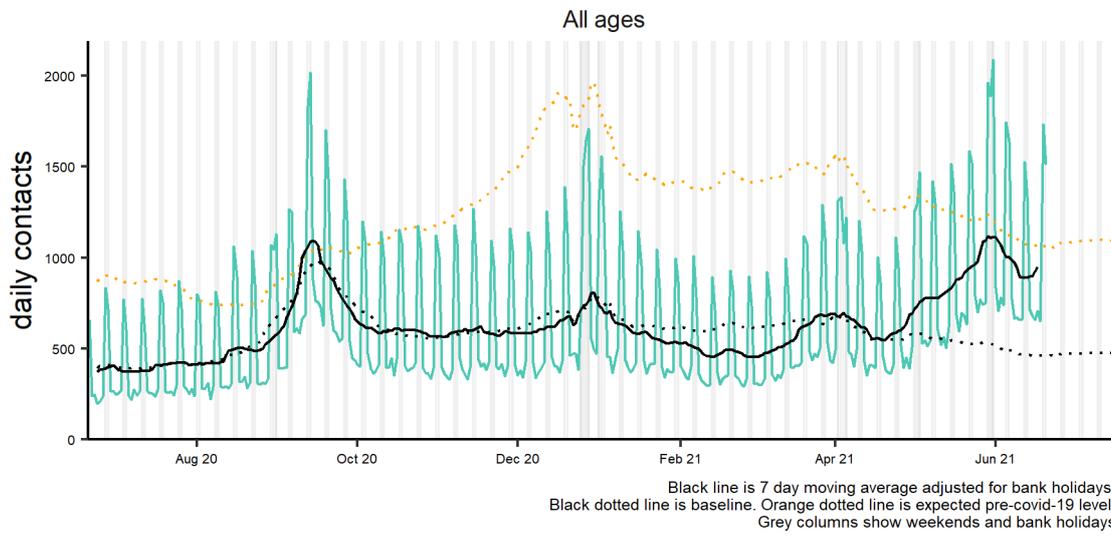
(b)

Influenza-like illness 21/06/2020 - 20/06/2021



(c)

Acute respiratory infection 21/06/2020 - 20/06/2021

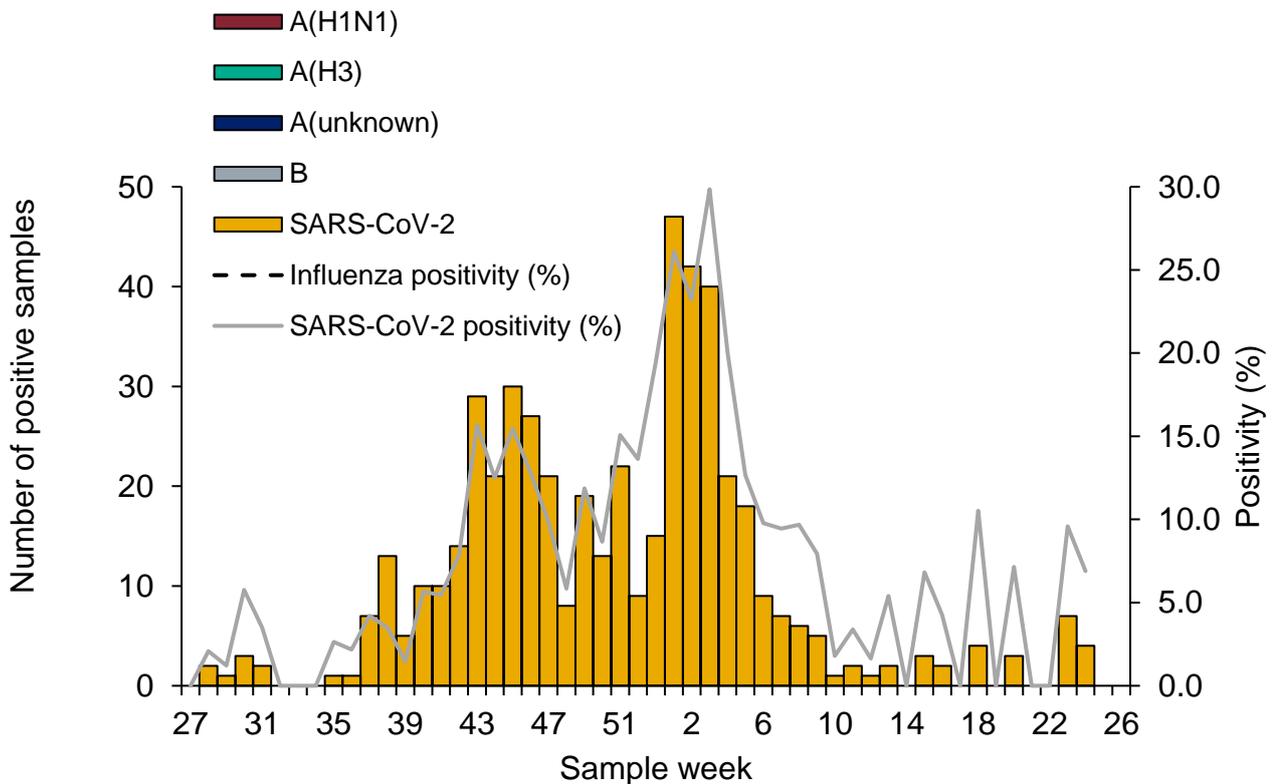


Sentinel swabbing scheme in the UK

In week 24 2021, 4 samples tested positive for SARS-CoV-2 with an overall positivity of 6.9% (4/58) compared to 9.6% (7/73) in the previous week, through the UK GP sentinel swabbing schemes (Figure 35).

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

Figure 35: Number of influenza and COVID-19 positive samples and weekly positivity (%), UK GP sentinel swabbing scheme



*For the most recent week, more samples are expected to be tested therefore the graph in Figure 35 should be interpreted with caution

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

Secondary care surveillance

SARI Watch

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

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

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

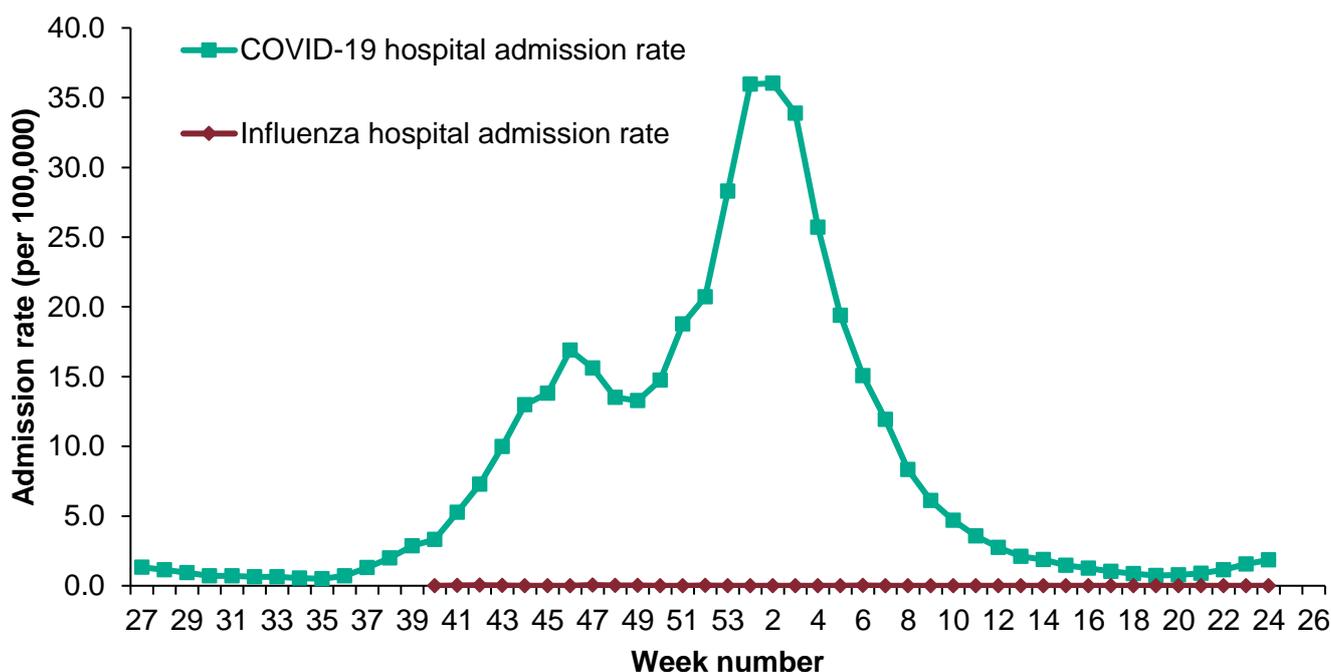
Hospitalisations, SARI Watch

In week 24, the overall weekly hospital admission rate for COVID-19 increased. There were no new hospital admissions for influenza in week 24.

The hospitalisation rate for COVID-19 was at 1.86 per 100,000 in week 24 compared to 1.56 per 100,000 in the previous week.

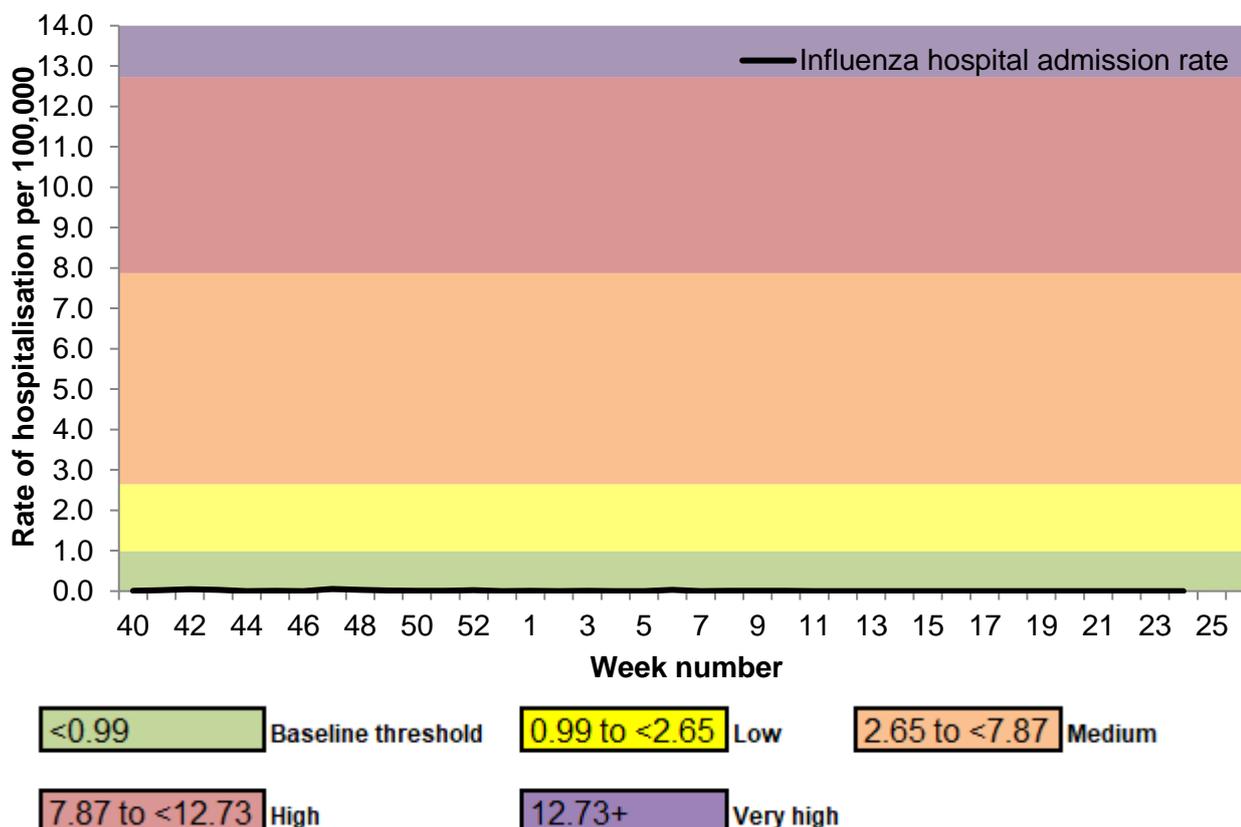
By PHE centre, the highest hospital admission rate for COVID-19 was observed in the North West. By age groups, the highest hospital admission rate for confirmed COVID-19 was in the 85+ year olds.

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



- * influenza hospital admission rate is reported from week 40 2020 onwards
- * influenza hospital admission rate based on 19 sentinel NHS trusts for week 24
- * COVID-19 hospital admission rate based on 114 NHS trusts for week 24
- * SARI Watch data are provisional.

Figure 37: Weekly overall influenza hospital admission rates per 100,000 trust catchment population with MEM thresholds, SARI Watch, England



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

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

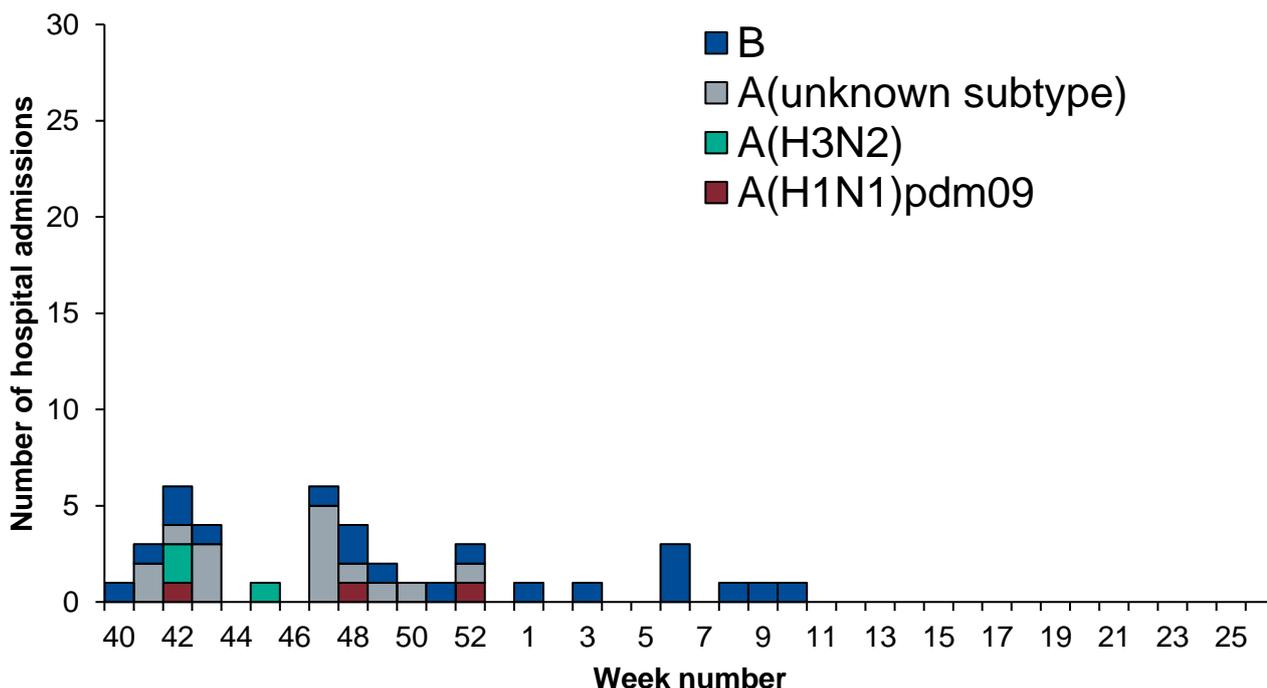


Figure 39: Weekly hospital admission rate by PHE Centre for new (a) COVID-19 positive cases and (b) influenza reported through SARI Watch

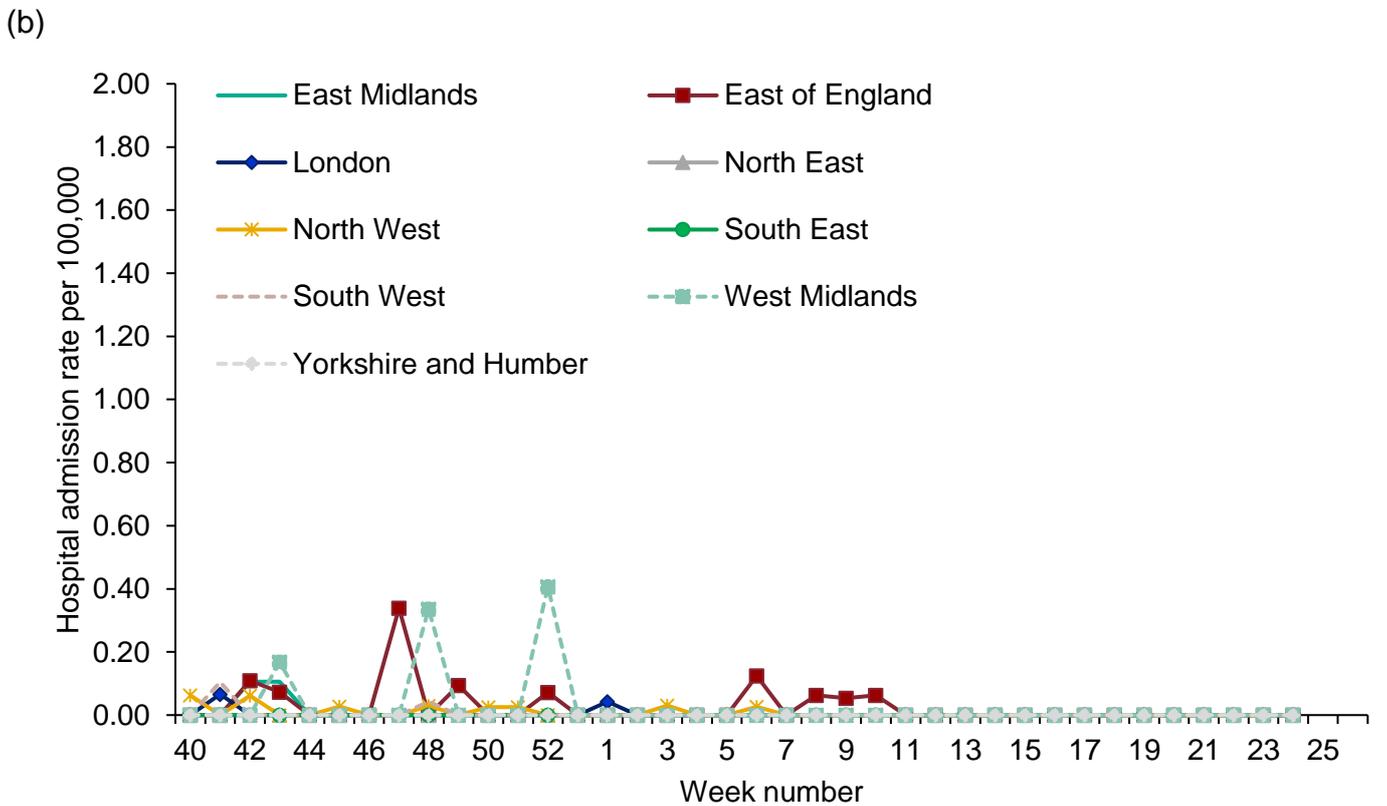
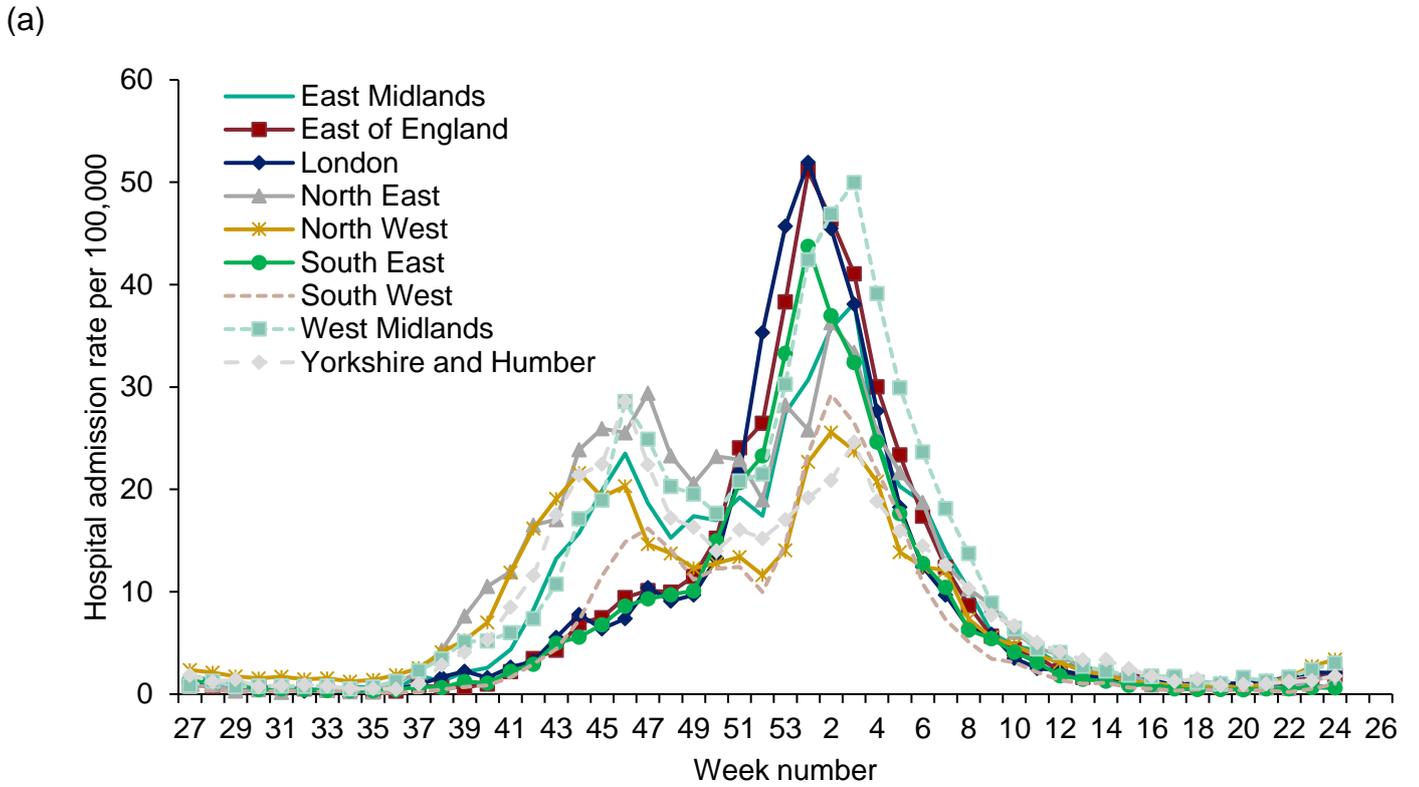
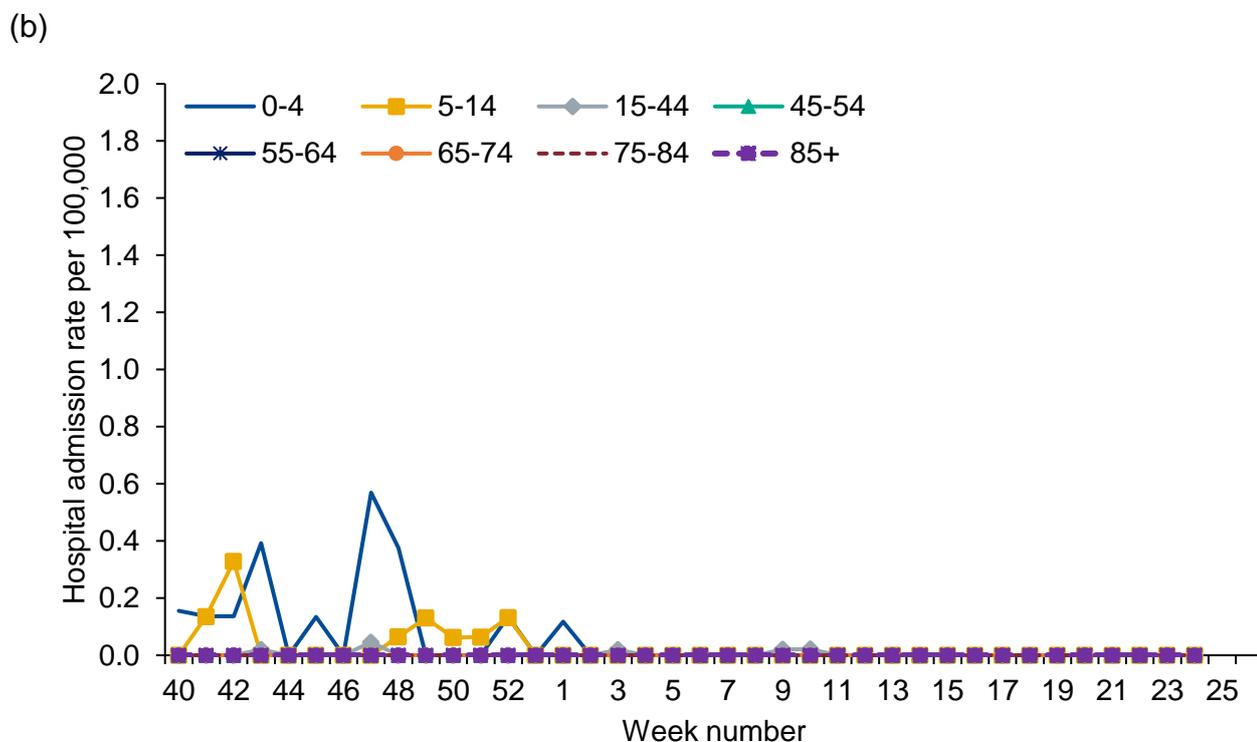
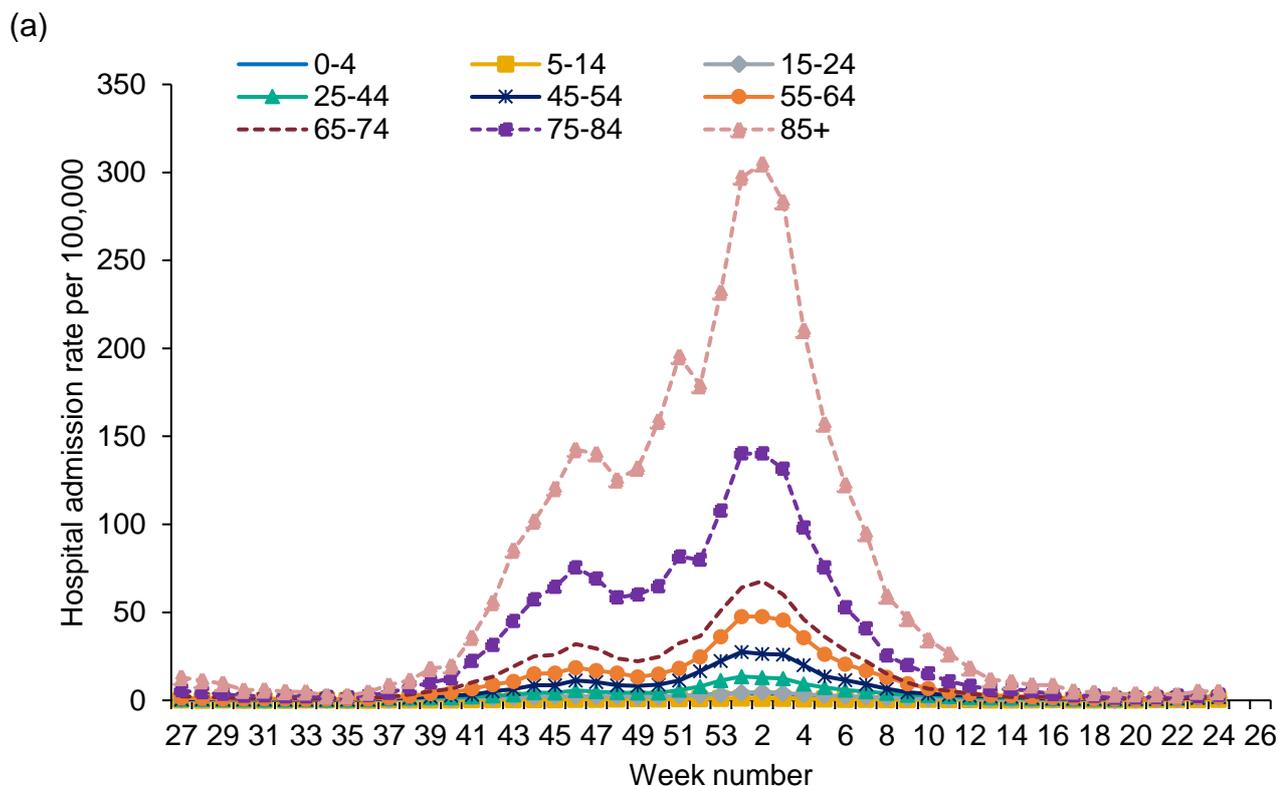


Figure 40: Weekly hospital admission rate by age group for new (a) COVID-19 positive cases and (b) influenza reported through SARI Watch



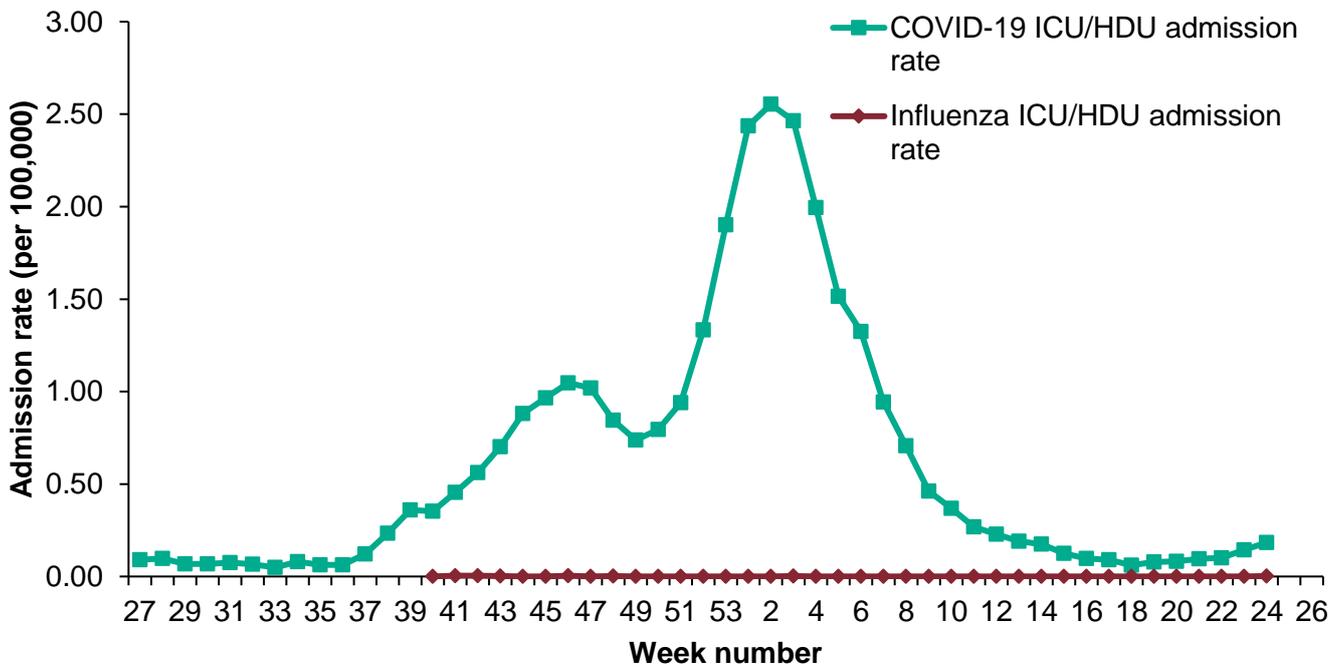
ICU/HDU admissions, SARI Watch

In week 24, the overall weekly ICU/HDU admission rates for COVID-19 increased slightly. There was 1 new ICU/HDU admission for influenza in week 24.

The ICU/HDU rate for COVID-19 was at 0.18 per 100,000 in week 24 compared to 0.14 per 100,000 in the previous week.

By PHE Centre, the highest ICU/HDU admission rates for COVID-19 were observed in the North West. By age groups, the highest ICU/HDU admission rates for COVID-19 were observed in the 45 to 54 and 65 to 74-year olds.

Figure 41: Weekly overall ICU/HDU admission rates per 100,000 of new COVID-19 and influenza positive cases reported through SARI Watch, England



- * influenza ICU/HDU admission rate is reported from week 40 2020 onwards
- * influenza ICU/HDU admission rate based on 85 NHS trusts for week 24
- * COVID-19 ICU/HDU admission rate based on 108 NHS trusts for week 24
- * SARI Watch data are provisional.

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

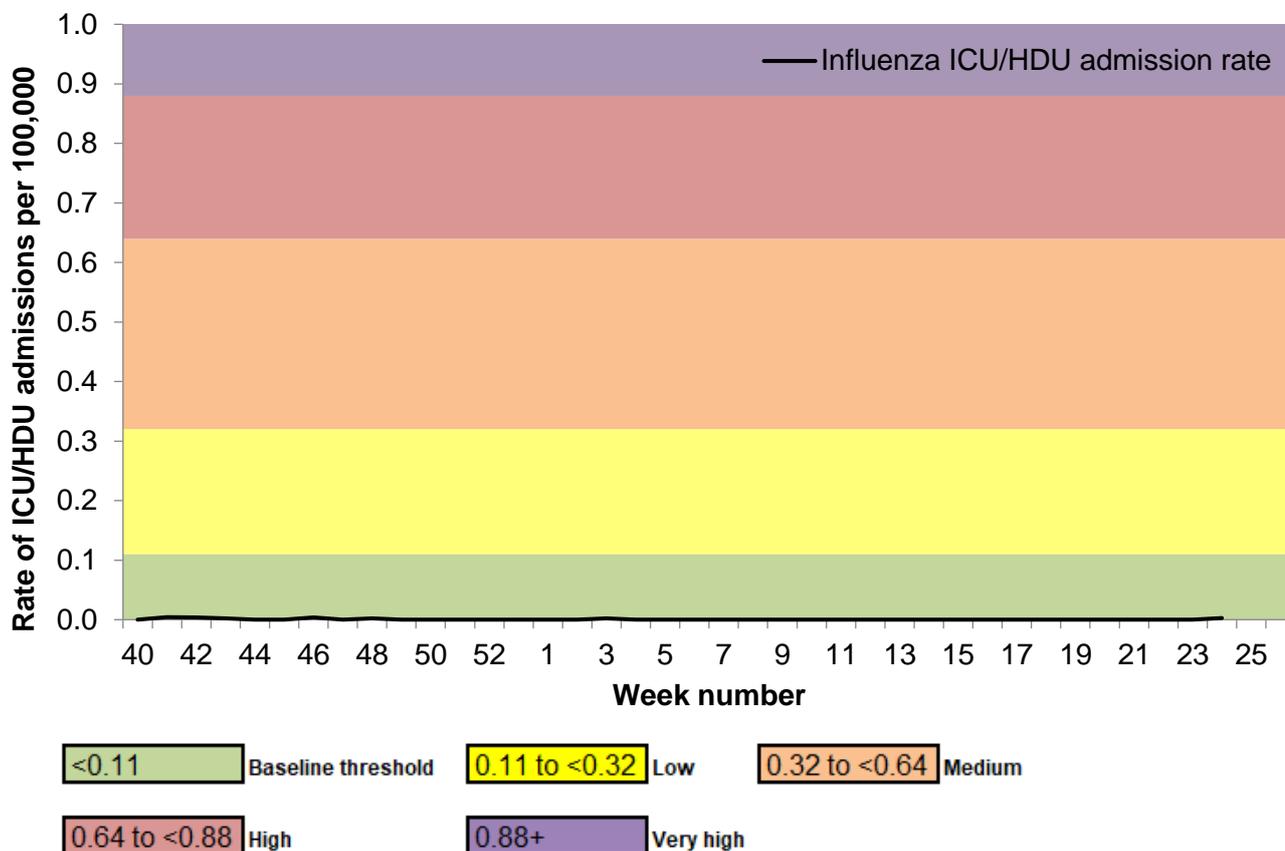


Figure 43: Weekly influenza ICU/HDU admissions by influenza type, SARI Watch, England

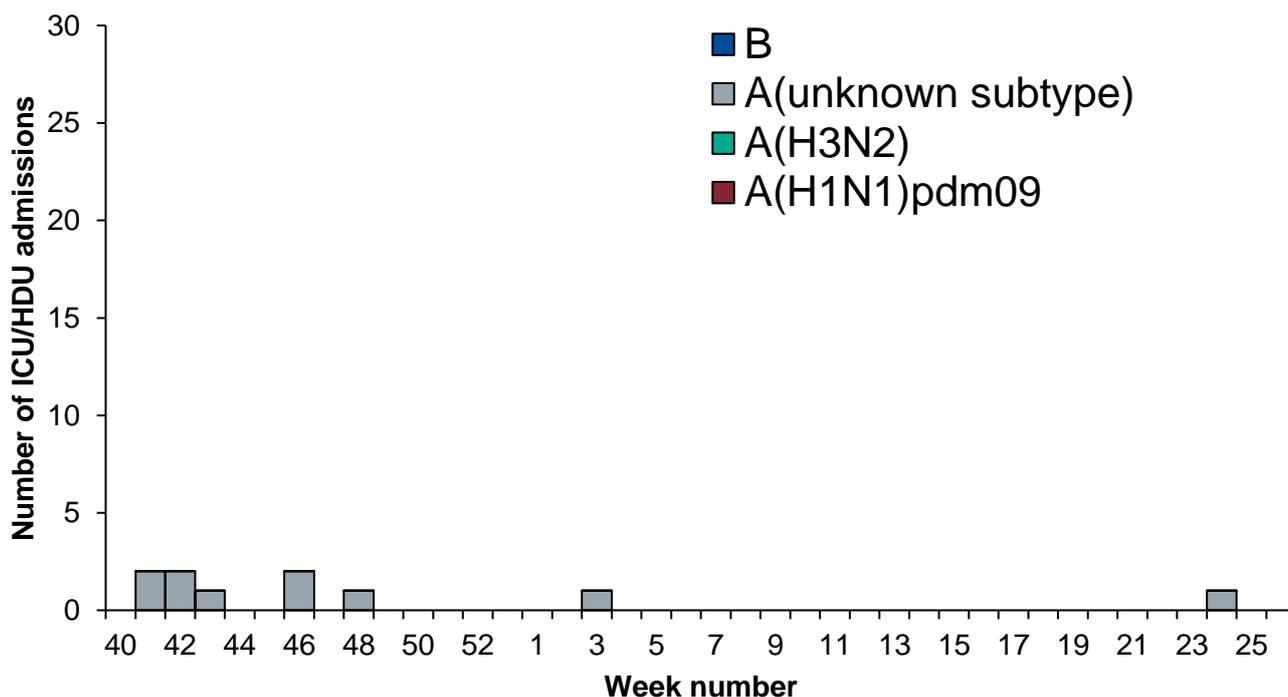


Figure 44: Weekly ICU/HDU admission rate by PHE Centre for new (a) COVID-19 positive cases and (b) influenza reported through SARI Watch

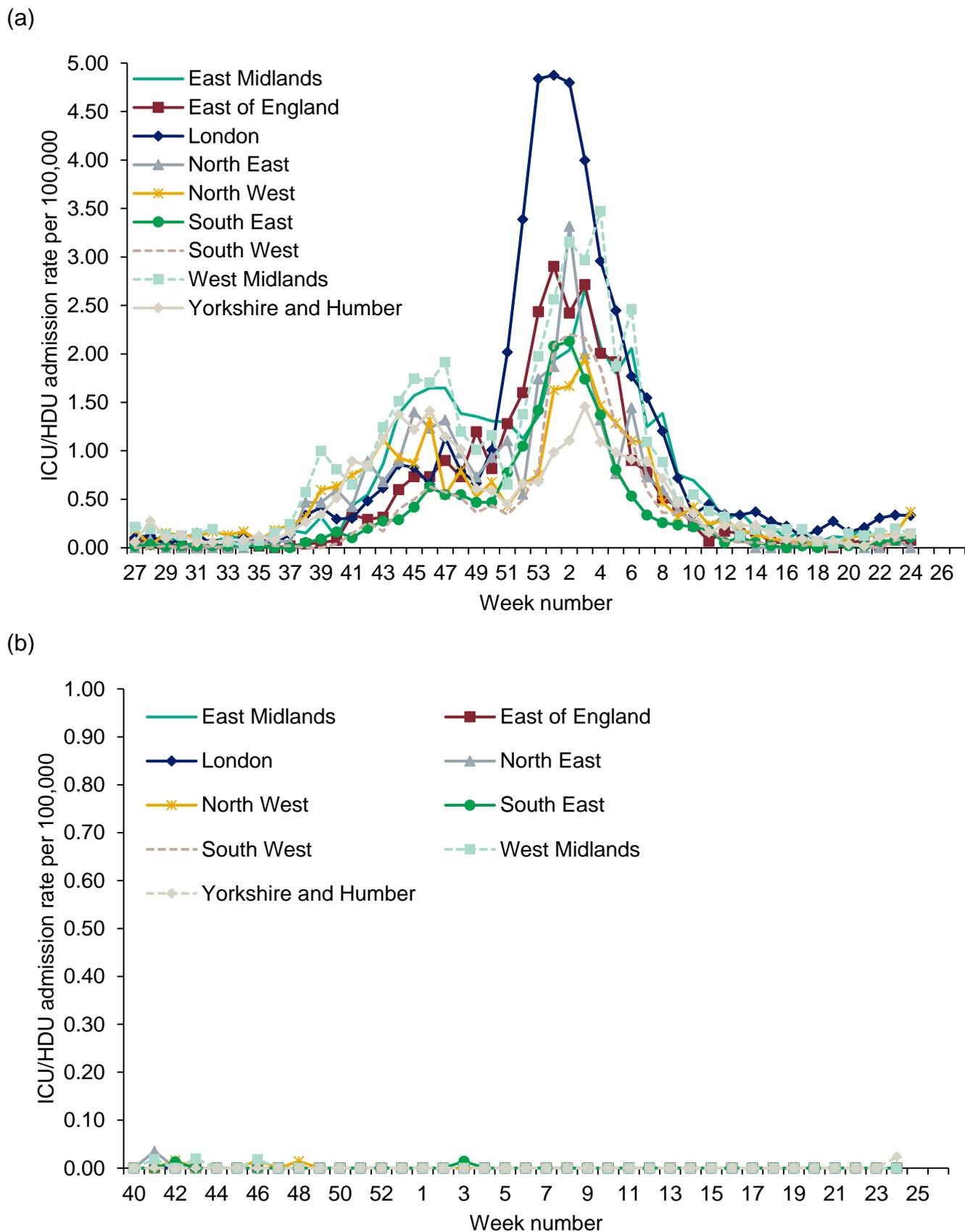
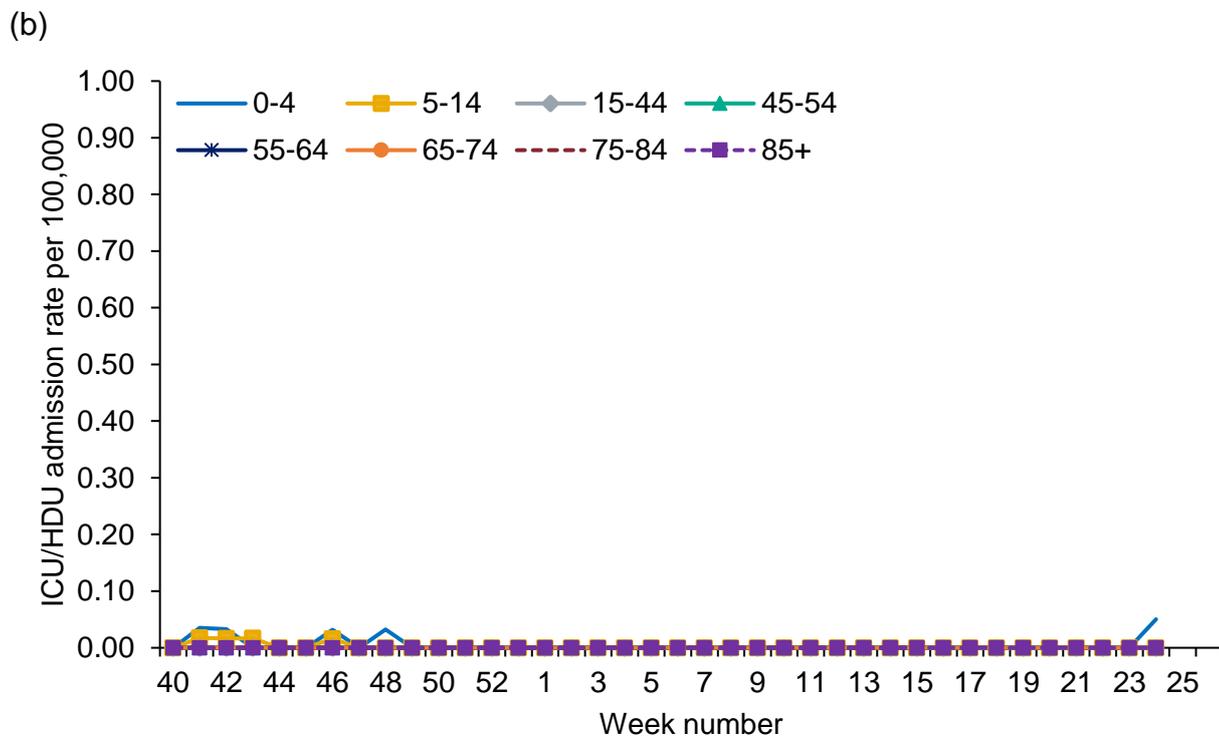
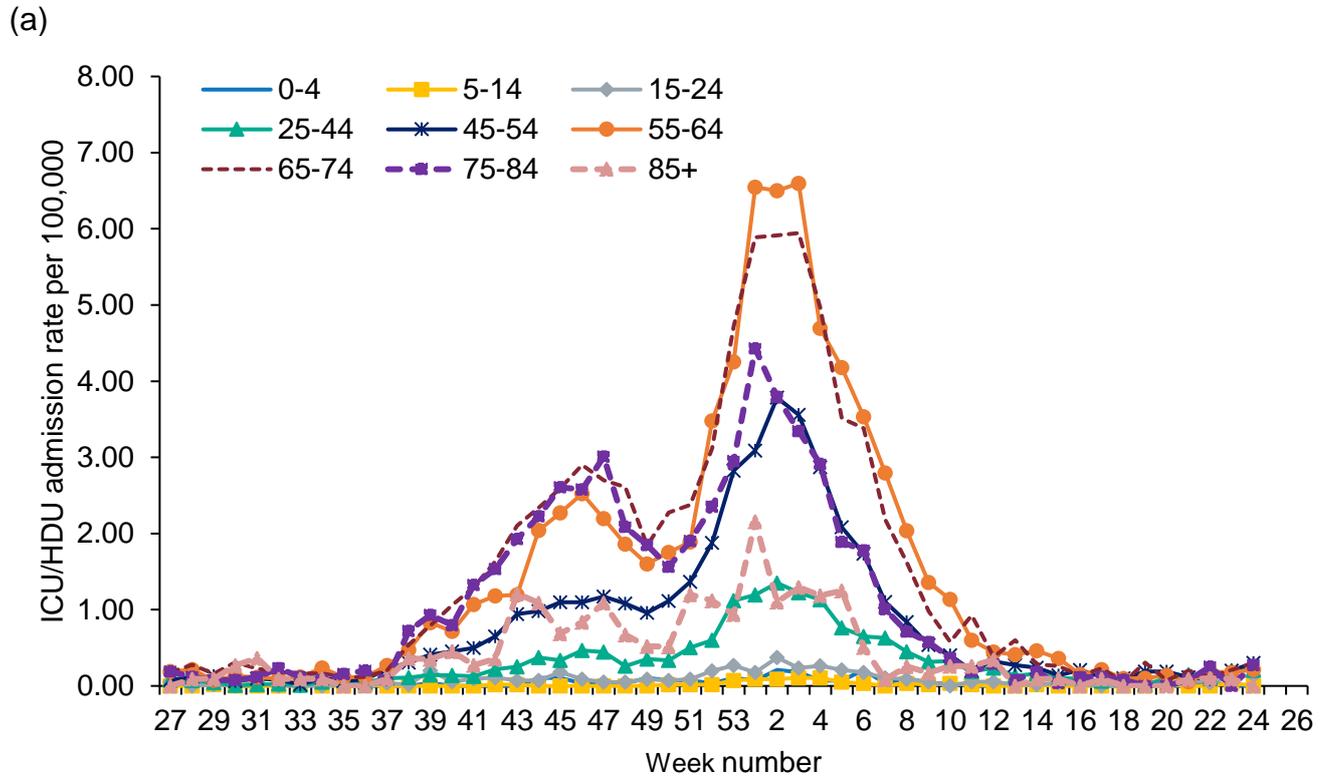


Figure 45: Weekly ICU/HDU admission rate by age group for new (a) COVID-19 positive cases and (b) influenza reported through SARI Watch

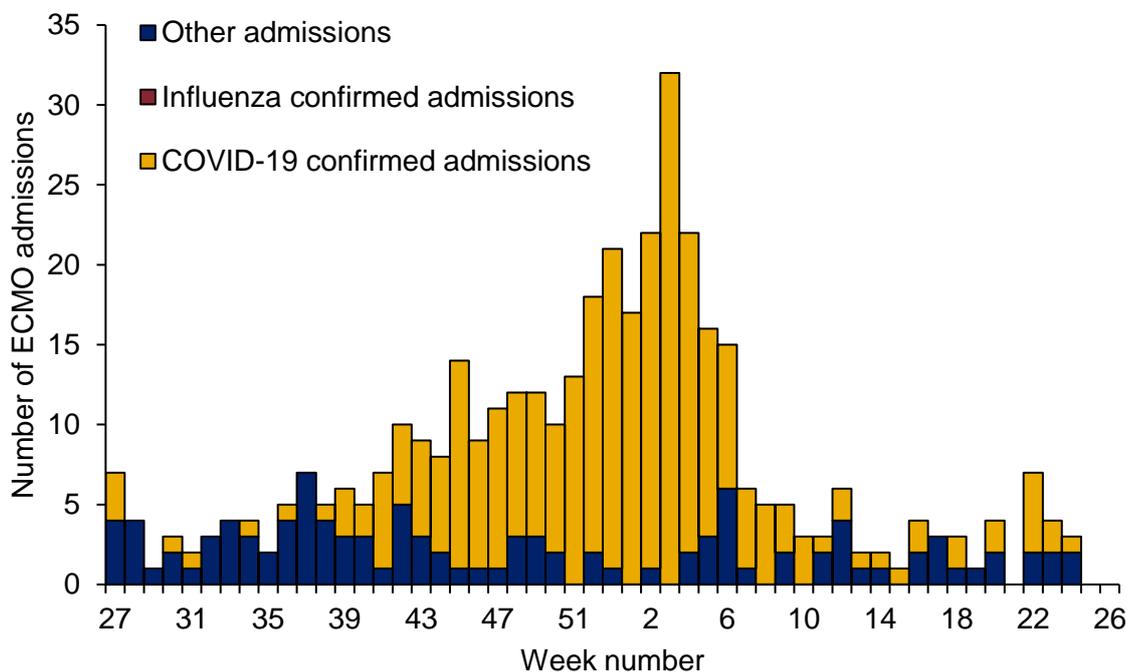


ECMO, SARI Watch

From week 27 2020, a total of 290 laboratory confirmed COVID-19 admissions have been reported from the 6 Severe Respiratory Failure (SRF) centres in the UK.

There was 1 new laboratory confirmed COVID-19 admission reported in week 24 (Figure 46).

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



Emergency Department attendances, Syndromic surveillance

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

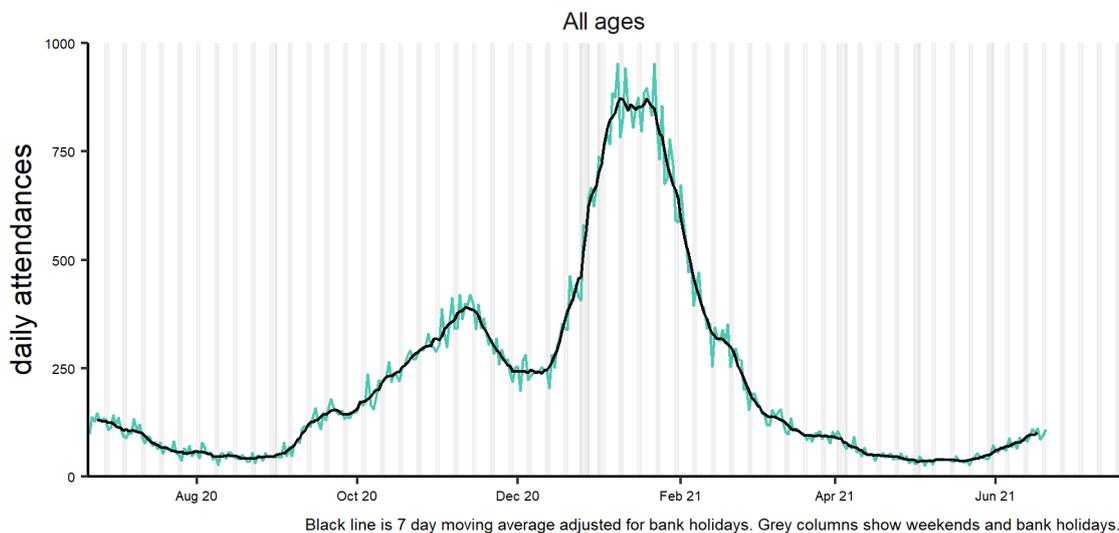
Up to 20 June 2021, the daily number of ED attendances for all ages as reported by 117 EDs for COVID-19-like infection increased slightly, while attendances for acute respiratory infections remained stable (Figure 47).

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

Figure 47: Daily ED attendances for (a) COVID-19-like and (b) acute respiratory infections, all ages, England

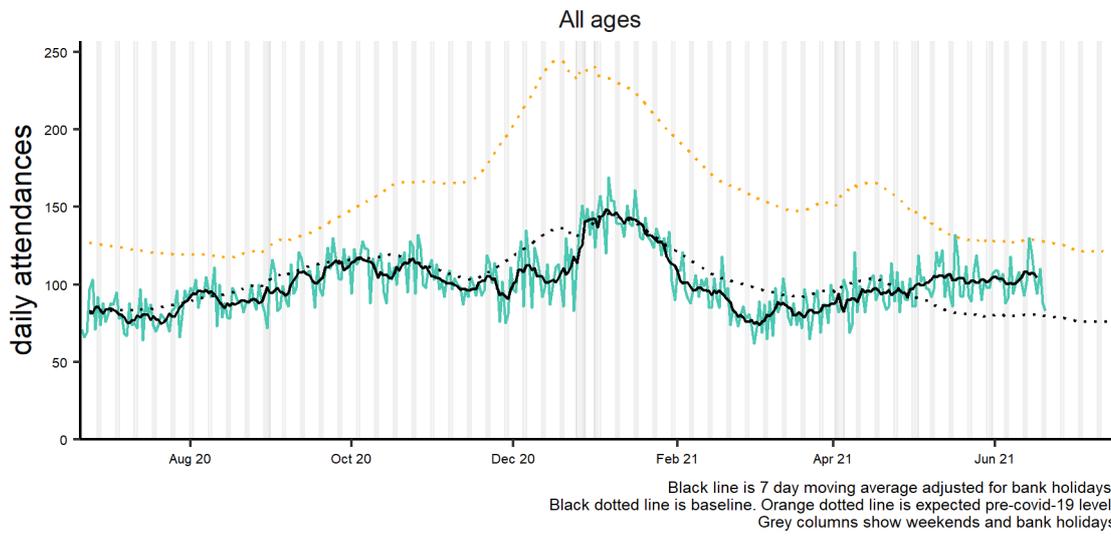
(a)

Covid-19-like 21/06/2020 - 20/06/2021



(b)

Pneumonia 21/06/2020 - 20/06/2021



Mortality surveillance

Cumulative COVID-19 deaths

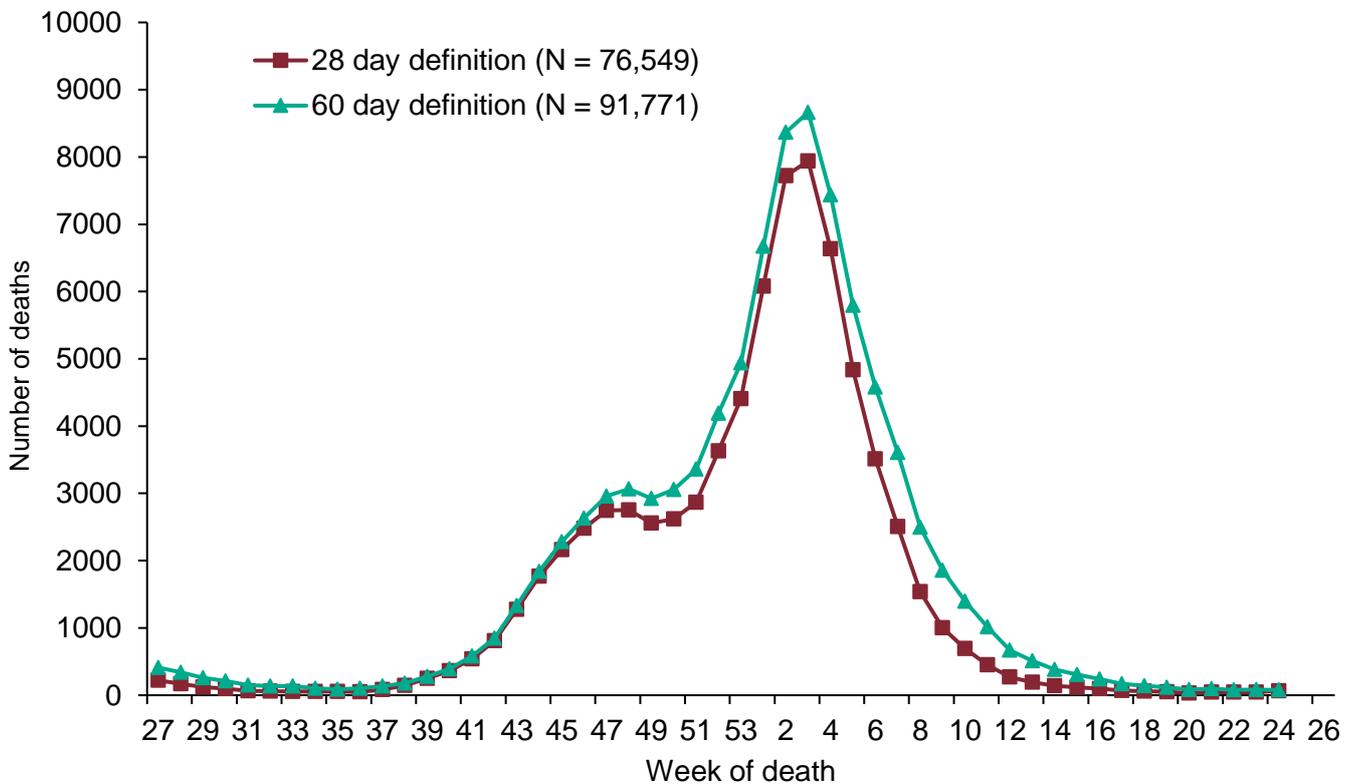
Changes to the definitions of COVID-19 related deaths in England are described in more detail in an accompanying PHE technical summary.

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

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

The introduction of these definitions will affect the numbers which have been presented in past reports and therefore Figure 48 represents these differences by definition.

Figure 48: Number of deaths since week 27 by week of death and time since laboratory confirmation of COVID-19, England



*The data are 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 49: Age/sex pyramid of laboratory confirmed COVID-19 deaths, since week 27

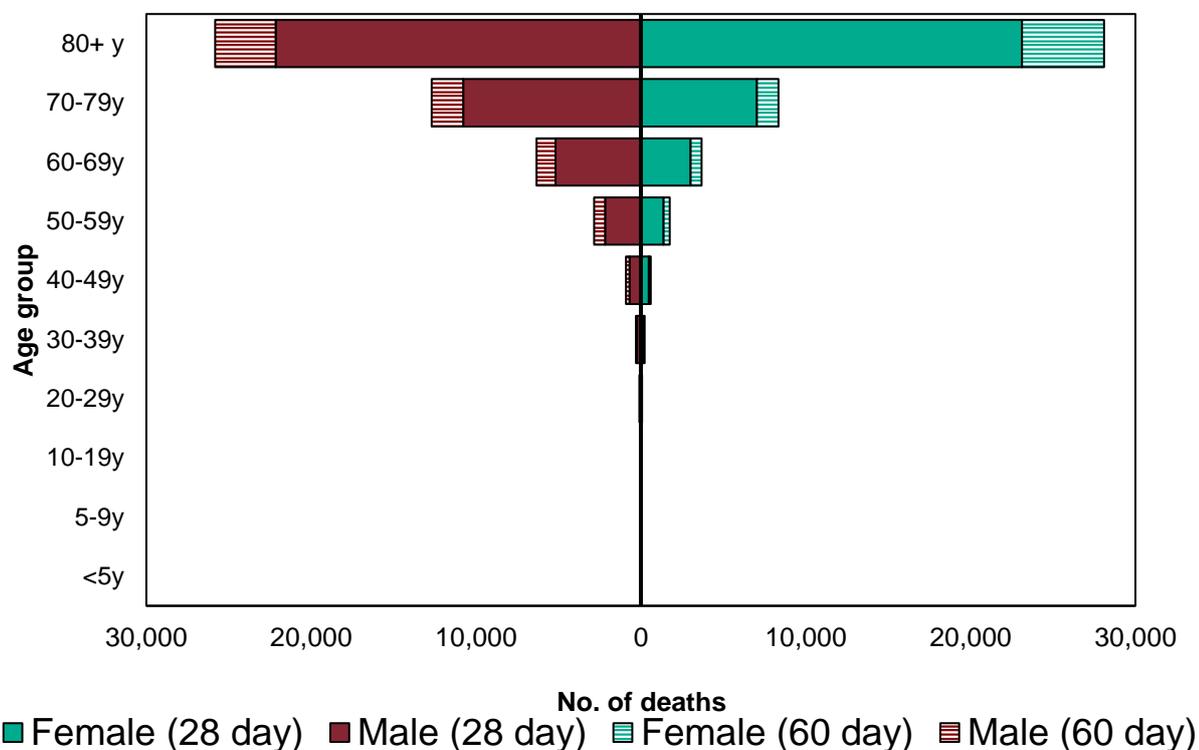


Table 5: Ethnic group (%) of COVID-19 deaths and time since laboratory confirmation of COVID-19, England

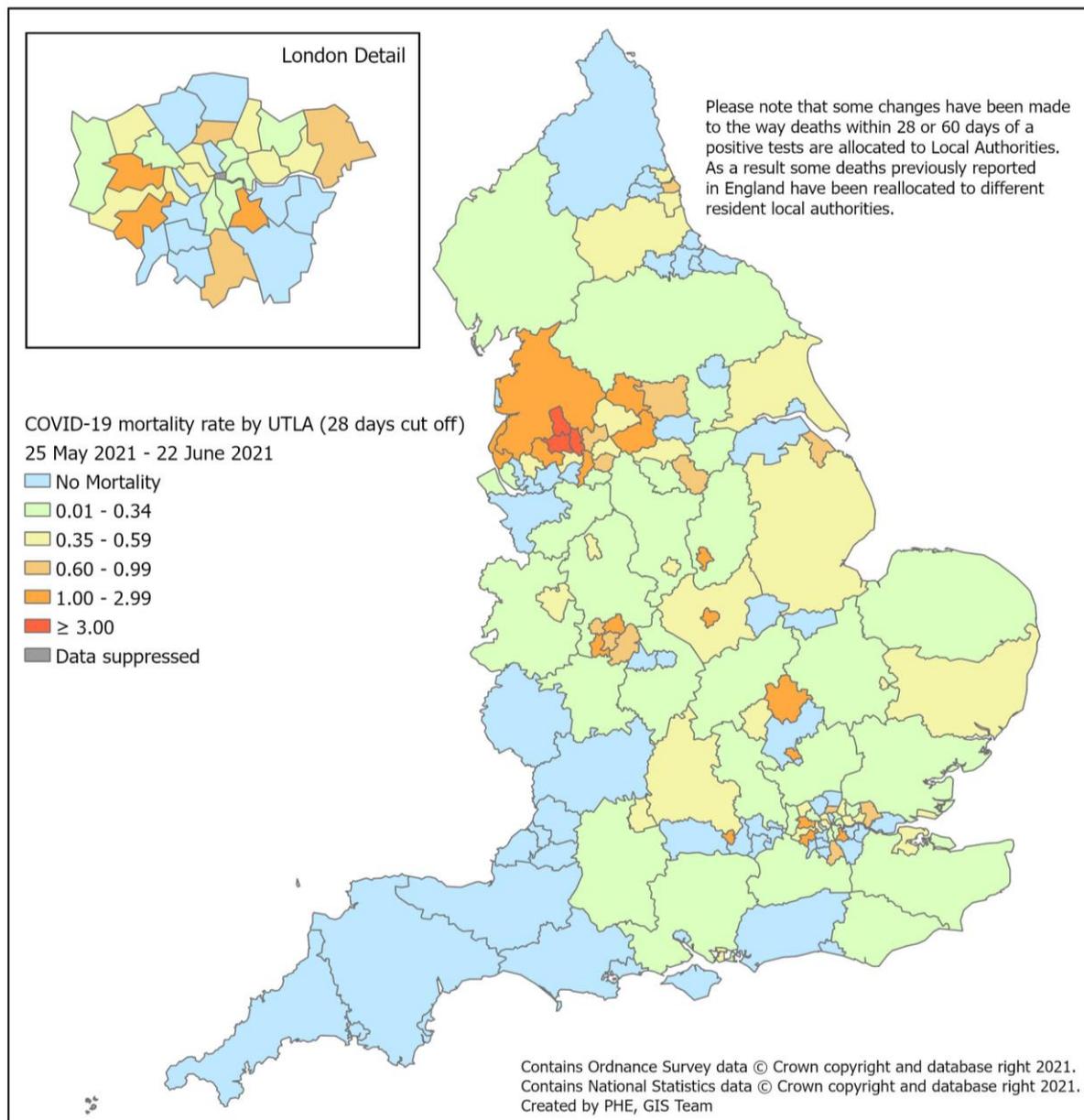
| Ethnicity | 28 day definition | 60 day definition |
|---|-------------------|-------------------|
| White | 88.7 | 88.8 |
| Asian / Asian British | 7.1 | 7.0 |
| Black / African / Caribbean / Black British | 2.6 | 2.6 |
| Mixed / Multiple ethnic groups | 0.5 | 0.5 |
| Other ethnic group | 1.1 | 1.2 |

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

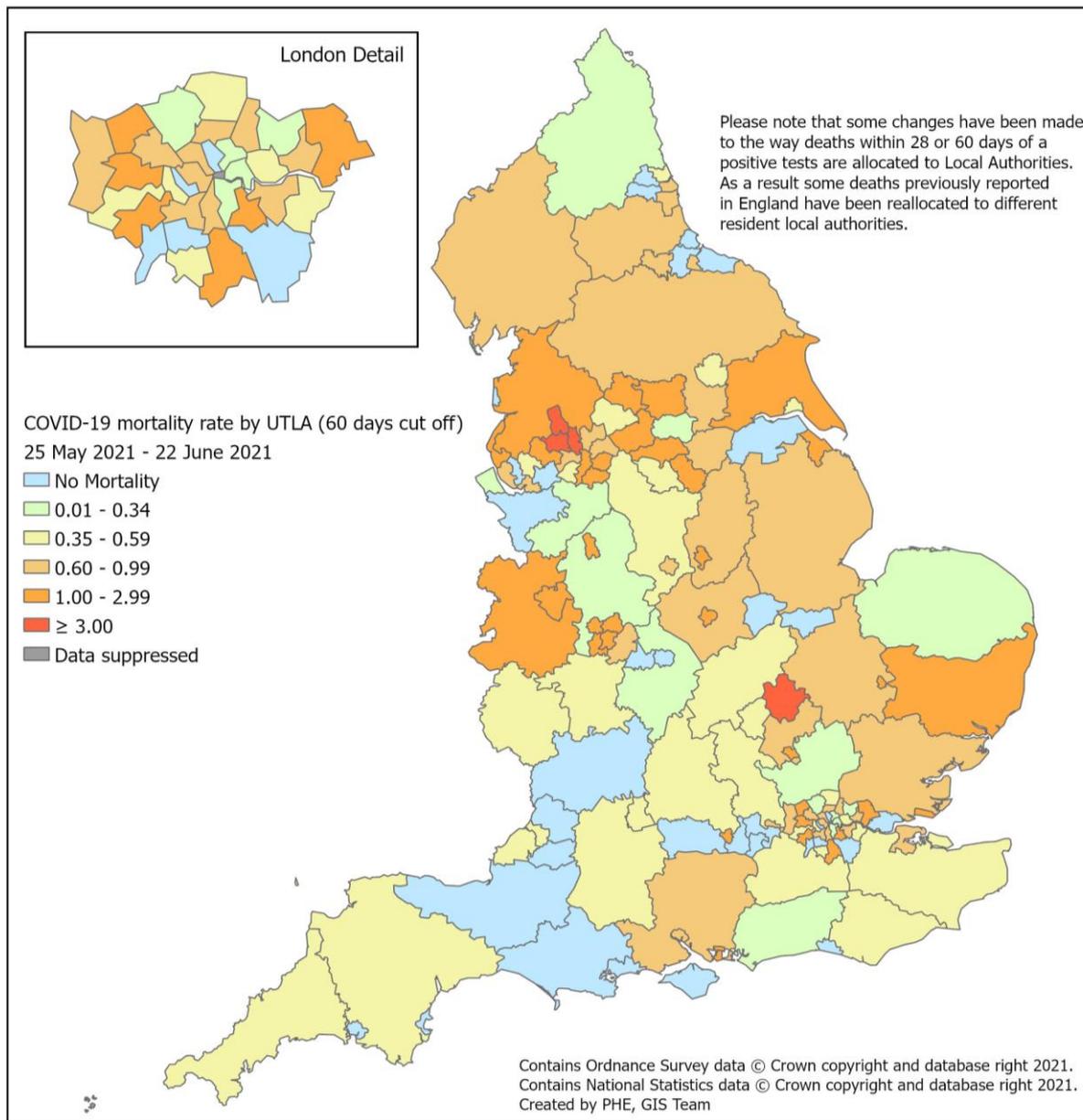
| PHE Centres | 28 day definition | 60 day definition |
|----------------------|--------------------------|--------------------------|
| North East | 3,864 | 4,648 |
| North West | 12,037 | 14,470 |
| Yorkshire and Humber | 7,530 | 9,038 |
| West Midlands | 9,038 | 10,913 |
| East Midlands | 7,315 | 8,766 |
| East of England | 9,769 | 11,656 |
| London | 9,472 | 11,466 |
| South East | 12,155 | 14,550 |
| South West | 4,963 | 5,835 |

Figure 50: Cumulative mortality rate of COVID-19 cases per 100,000 population tested under Pillars 1 and 2 for the past four weeks by (a) 28 day definition and (b) 60 day definition

(a)



(b)



Daily excess all-cause mortality (England)

Deaths occurring from 01 January 2020 to 16 June 2021 were assessed to calculate the daily excess above a baseline using age-group and region specific all cause deaths as provided daily by the General Register Office (GRO). The deaths were corrected to allow for delay to registration based on past data on these delays and the baseline was from the same day of the year in the previous 5 years +/- 7 days with an extrapolated time trend, and with 2 and 3 standard deviation (SD) limits shown (Figure 51).

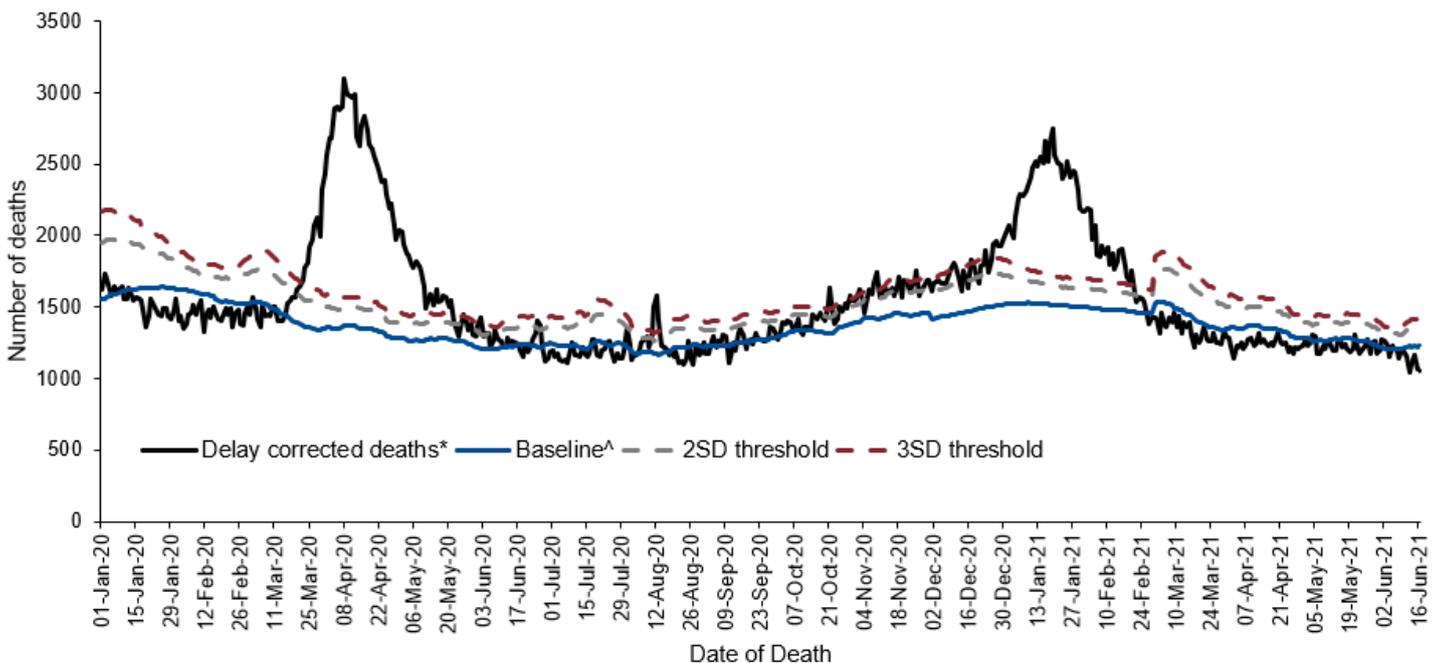
Weeks in which at least 2 days exceeded the 3SD threshold are shown in Table 7 and the daily difference from the baseline by age and region is given in Figure 51.

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

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

No significant excess all-cause mortality was observed in week 23 overall, by age or sub-nationally. The excess noted in week 33 coincides with a heat wave (Figure 51, 52 and Table 7).

Figure 51: Daily excess all-cause deaths in all ages, England, 01 January 2020 to 16 June 2021



^Baseline calculation:

January to November 2020: same day in previous 5 years +/- 1 week with a linear trend.

December 2020 to February 2021: past 3 low flu years +/- 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 PHE are the [Fingertips excess mortality in England report](#), which uses ONS death registration data; and the [PHE all-cause mortality surveillance report](#), which uses the EuroMOMO model to measure excess deaths.

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

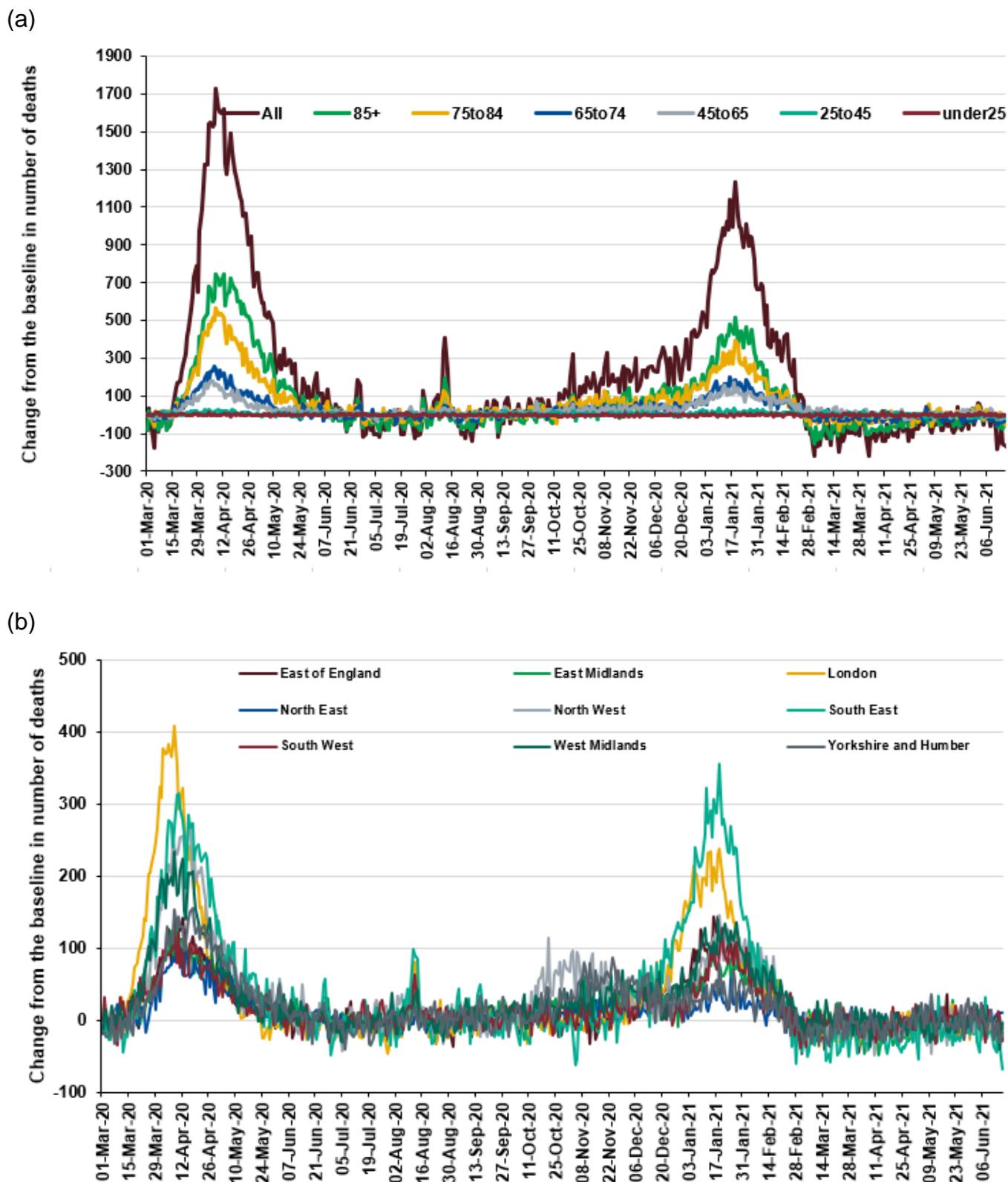
(a)

| Age Group | Excess detected in week 23 2021? | Weeks in excess from week 10 to 53 2020 | Weeks in excess from week 01 to 23 2021 |
|-----------|----------------------------------|---|---|
| All | x | 13 to 21, 33, 43, 45, 47, 50, 52 to 53 | 01 to 07 |
| under 25 | x | None | None |
| 25 to 44 | x | 14 to 16 | 03 to 04, 14 |
| 45 to 64 | x | 12 to 19, 49 to 50, 52 to 53 | 01 to 08 |
| 65 to 74 | x | 13 to 19, 48, 52 to 53 | 01 to 07 |
| 75 to 84 | x | 13 to 21, 33, 45, 49, 52 to 53 | 01 to 07 |
| 85+ | x | 13 to 21, 33, 53 | 01 to 07 |

(b)

| PHE Centres | Excess detected in week 23 2021? | Weeks in excess from week 10 to 53 2020 | Weeks in excess from week 01 to 23 2021 |
|----------------------|----------------------------------|---|---|
| East of England | x | 14 to 19, 52 to 53 | 01 to 07 |
| East Midlands | x | 13 to 19, 48 | 01 to 07 |
| London | x | 12 to 19, 33, 51 to 53 | 01 to 06 |
| North East | x | 14 to 21 | 02 to 04 |
| North West | x | 13 to 19, 33, 42 to 47 | 01 to 07 |
| South East | x | 13 to 21, 33, 50 to 53 | 01 to 07 |
| South West | x | 13 to 19, 33 | 01 to 07 |
| West Midlands | x | 13 to 20, 45, 48, 53 | 01 to 07 |
| Yorkshire and Humber | x | 14 to 21, 23, 43 to 50 | 02 to 04 |

Figure 52: Daily excess all-cause deaths by (a) age group and (b) PHE centres, England, 01 March 2020 to 16 June 2021



Microbiological surveillance

SARS-CoV-2 variants

PHE 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 [here](#), and in the latest technical briefing [here](#).

Antimicrobial susceptibility

Table 8 shows in the 12 weeks up to week 24 2021, 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 8: Antimicrobial susceptibility surveillance in lower respiratory tract

| Organism | Antibiotic | Specimens tested | |
|----------------------|------------------------|------------------|---------------------------|
| | | (N) | Specimens susceptible (%) |
| <i>S. pneumoniae</i> | Penicillin | 1,356 | 84 |
| | Macrolides | 1,515 | 80 |
| | Tetracycline | 1,492 | 82 |
| <i>H. influenzae</i> | Amoxicillin/ampicillin | 4,939 | 59 |
| | Co-amoxiclav | 5,382 | 66 |
| | Macrolides | 1,512 | 7 |
| | Tetracycline | 5,406 | 98 |
| <i>S. aureus</i> | Methicillin | 4,886 | 93 |
| | Macrolides | 5,499 | 72 |
| MRSA | Clindamycin | 245 | 48 |
| | Tetracycline | 305 | 76 |
| MSSA | Clindamycin | 3,458 | 78 |
| | Tetracycline | 4,303 | 93 |

* Macrolides = erythromycin, azithromycin and clarithromycin

Data source: PHE's SGSS 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 2020/21 influenza season when the SGSS CDR module was used instead due to a PHE 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 05 2021. The AMR module of SGSS was used during the 2019/20 influenza

season. There has been a reduction in the total number of bacterial positive lower respiratory tract clinical samples reported to PHE since mid-March 2020

COVID-19 sero-prevalence surveillance

The results from testing samples provided by healthy adult blood donors aged 17 years and older, supplied by the NHS Blood and Transplant (NHS BT collection) between weeks 35 2020 and week 23 2021 are summarised. This programme has previously involved testing approximately 1000 donor samples from two different NHS regions each week. As of week 44 2020, approximately 250 samples from each geographic NHS region are tested each week. The COVID-19 vaccination campaign began on the 8 December 2020 (week 50) with a phased roll out by age and risk group.

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

The results presented here are based on testing blood donor samples with Roche nucleoprotein (N) and Roche spike (S) antibody assays.

Nucleoprotein (Roche N) assays only detect post-infection antibodies, whereas spike (Roche S) assays will detect both post-infection antibodies and vaccine-induced antibodies. Thus, changes in seropositivity for the Roche N assay will reflect the effect of natural infection. Increases in seropositivity as measured by S antibody will reflect both infection and vaccination. Antibody responses to both targets will reflect infection or vaccination occurring at least 2 to 3 weeks previously given the time taken to generate a COVID-19 antibody response. Donors have been asked to defer donations for 7 days post vaccination.

This report presents Roche N and Roche S seropositivity estimates on the same set of samples, using a 4-week rolling prevalence for national and regional estimates. Seroprevalence estimates reported are based on seropositivity which are unadjusted for the sensitivity and specificity of the assays used.

National prevalence

Overall population weighted (by age group, sex and NHS region) antibody prevalence among blood donors aged 17 years and older in England was 15.3% (95% CI 14.5% - 16.2%) using the Roche N assay and 82.0% (95% CI 81.2% - 82.9%) using the Roche S assay for the period 17 May – 13 June (weeks 20-23 2021). 1,105/7,351 were Roche N positive and 6,265/7,352 samples were Roche S positive. This compares with 15.6% (95% CI 14.7% - 16.5%) Roche N seropositivity and 73.6% (95% CI 72.7% - 74.5%) Roche S seropositivity for the period of 19 April 2021 – 16 May 2021 (weeks 16-19 2021).

Seropositivity (weighted by region, age group and sex) varies over time. Figure 53 shows the overall 4-weekly rolling proportion seropositive over time for the Roche N and Roche S assays. Seropositivity estimates are plotted weekly using the mid-point of a rolling 4-weekly period.

Regional prevalence of infection over time

Seropositivity (weighted by age group and sex) using the Roche N assay which detects infection only, varies by region (Figure 54). Seropositivity estimates are plotted weekly using the mid-point of a rolling 4-weekly period.

In London, the 4-weekly rolling seropositivity increased from 20.3% (95% CI 17.5% - 23.4%) in weeks 16-19 2021 to 24.6% (95% CI 22.2% - 27.2%) in weeks 20-23 2021.

Data from the North West show that seropositivity has increased slightly from 17.7% (95% CI 15.3% - 20.2%) in weeks 16-19 2021 to 18.7% (95% CI 16.1% - 21.7%) in weeks 20-23 2021.

In the East of England, seropositivity has decreased from 15.8% (95% CI 13.5% - 18.3%) in weeks 16-19 2021 to 13.0% (95% CI 11.0% - 15.3%) in weeks 20-23 2021.

Seropositivity has remained stable in the South East region being 10.9% (95% CI 9.0% - 13.1%) in weeks 16-19 2021 compared to 10.4% (95% CI 8.8% - 12.4%) in weeks 20-23 2021.

In the South West region, seropositivity has decreased slightly from 9.9% (95% CI 8.1% - 12.0%) in weeks 16-19 2021 to 8.4% (95% CI 6.7% - 10.5%) in weeks 20-23 2021.

Seropositivity in the North East and Yorkshire region showed a decrease from 16.8% (95% CI 14.5% - 19.5%) in weeks 16-19 2021 to 14.7% (95% CI 12.5% - 17.2%) in weeks 20-23 2021.

Data from the Midlands show the proportion seropositive decreased modestly from 15.9% (95% CI 14.1% - 18.0%) in weeks 16-19 2021 to 15.0% (95% CI 12.8% - 17.5%) in weeks 20-23 2021.

The fluctuations observed across some regions based on testing using the Roche N assay are likely to reflect ongoing transmission occurring 2 to 3 weeks before sampling or variation in precise locations of sampling within a region. Recently these fluctuations are all within variation seen in previous weeks across the regions.

Prevalence by age group

Seropositivity estimates by age group using the Roche N and Roche S assays are presented below. Prevalence for all age groups for weeks 41-44 has been excluded due to a change in sampling strategy from week 44 which resulted in a small number of samples from older age groups in some regions which makes interpretation of trends for this period difficult.

Based on testing samples using the Roche N assay (Figure 55) as a marker of infection, the highest seropositivity has consistently been observed in those aged 17-29 and the lowest in those aged 70-84. Prevalence in individuals aged 17-29 has remained stable in recent weeks being 21.2% (95% CI 18.8% - 23.8%) in weeks 16-19 2021 and 21.9% (95% CI 18.5% - 23.7%) in weeks 20-23 2021.

Roche N seropositivity has continued to plateau across most age groups and this was first observed in the 70-84 age group. The earlier plateauing of Roche N seropositivity in the older age groups likely reflects the additional role vaccination is having in reducing viral infection ahead of reduction seen from national restrictions alone in younger age groups.

The increase in vaccination especially in the older age groups is seen by the sharp increase in seropositivity using the Roche S assay (Figure 55). Whilst prevalence in those aged 17-29 has remained relatively stable at 46.1% (95% CI 43.2% - 49.1%) in weeks 16-19 2021 compared to 49.1% (95% CI 45.9% - 52.3%) in weeks 20-23 2021, this compares with larger increases in older age groups.

Roche S seropositivity increased earliest in those aged 70-84 and since week 13 plateaued, reaching 98.8% (95% CI 96.5% - 99.6%) in weeks 20-23 2021. Seropositivity in those aged 60-69 has also plateaued since week 16 reaching 98.6% (95% CI 97.7% - 99.2%) in weeks 20-23 2021. A plateauing in Roche S seropositivity has recently been observed in those aged 50-59 reaching 98.5% (95% CI 97.8% - 99.0%) in weeks 20-23 2021. A notable increase has been observed in the 40 to 49-year olds from 71.2% (95% CI 68.8% - 73.5%) in weeks 16-19 to 93.3% (95% CI 91.9%-94.5%) in weeks 19-22. Currently the greatest increase observed is in the 30 to 39-year olds, from 44.7% (95% CI 42.2% - 47.2%) in weeks 16-19 to 68.0% (95% CI 65.5%- 70.5%) in weeks 19-22.

Vaccination is making an important contribution to the overall Roche S increases observed since the roll out of the vaccination programme, particularly individuals aged 50 years and above who have been prioritised for vaccination as part of the phase 1 programme and more recently in those aged 40-49 and 30-39 as part of phase 2 of the vaccination programme. The plateauing of seropositivity, using the Roche N assay, in these groups is likely to reflect vaccine impact.

Figure 53: Overall 4-weekly rolling SARS-CoV-2 antibody seroprevalence (% seropositive) in blood donors

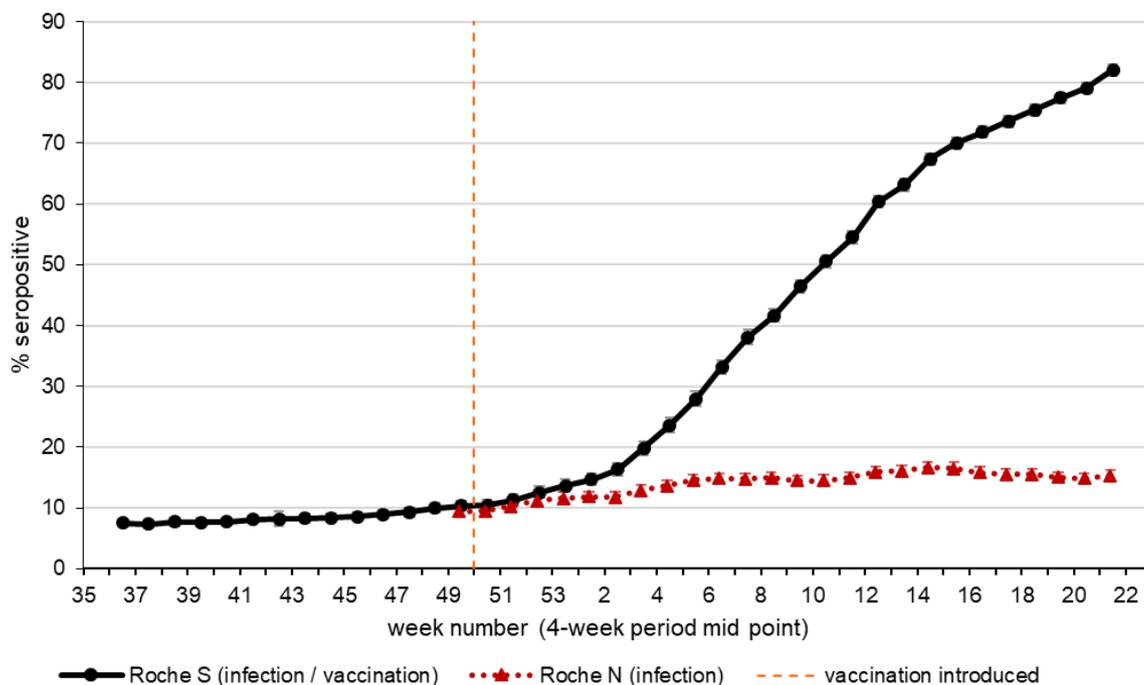


Figure 54: 4-weekly rolling SARS-CoV-2 antibody seroprevalence (% seropositive) in blood donors by region, using Roche N test; error bars show 95% confidence intervals

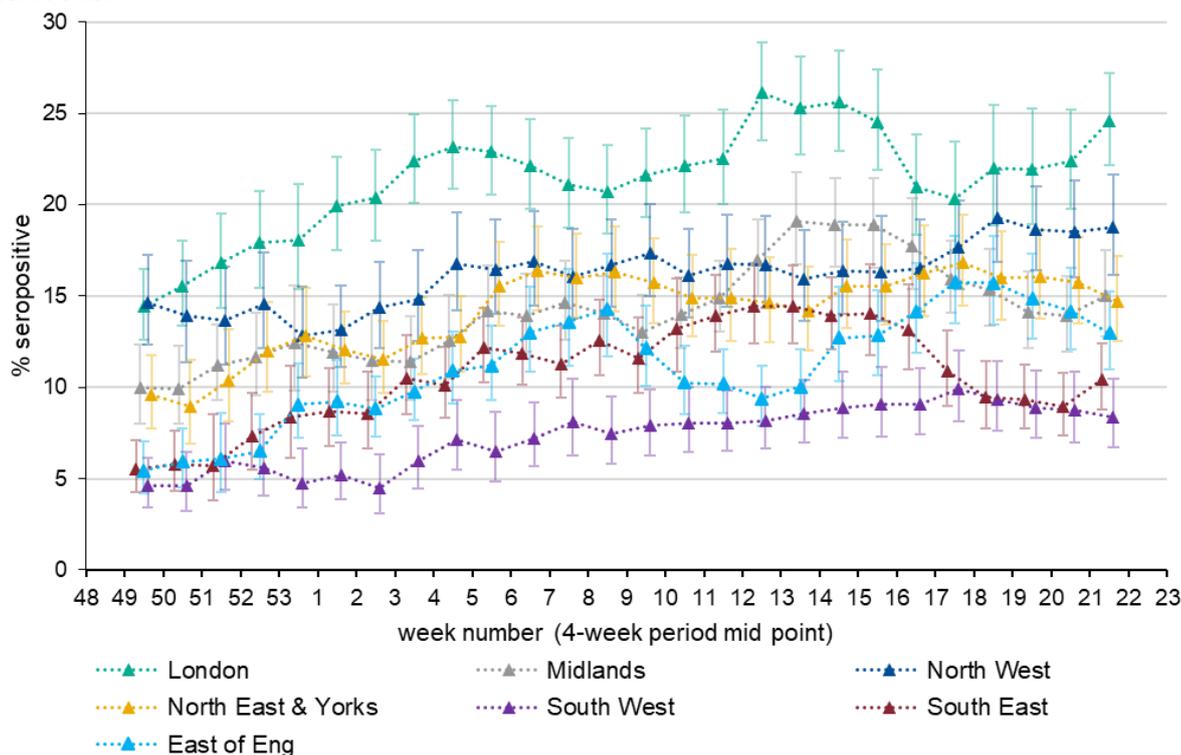
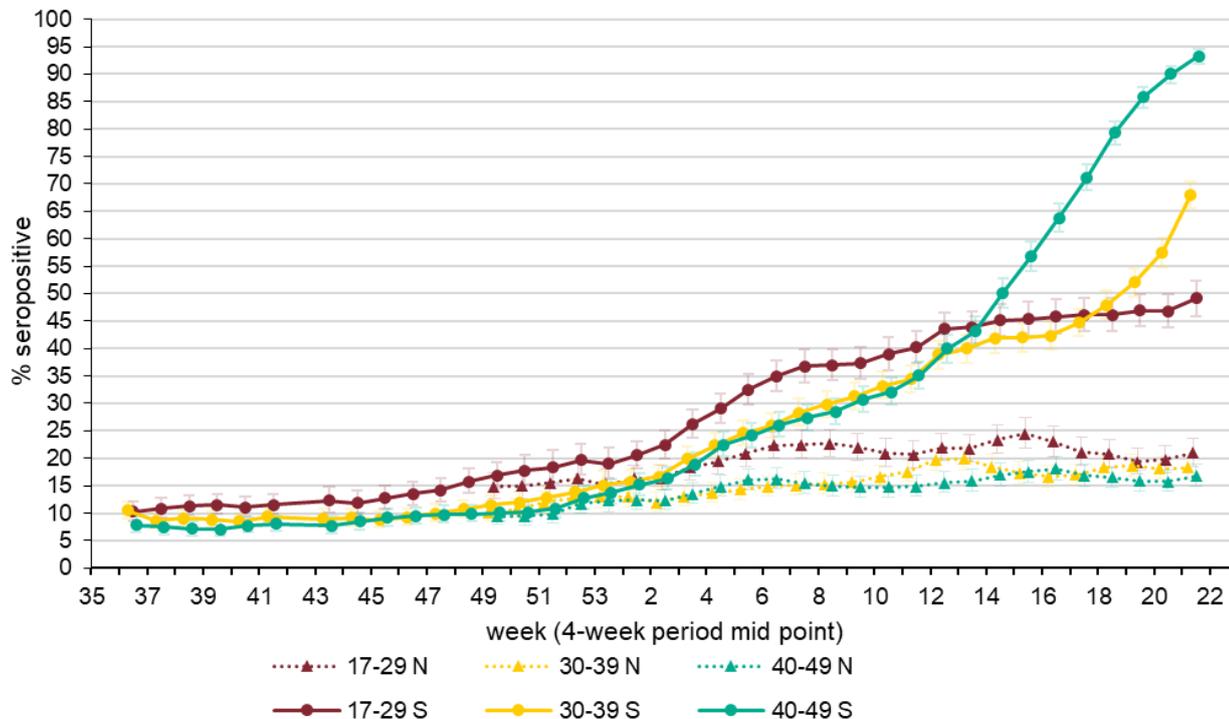
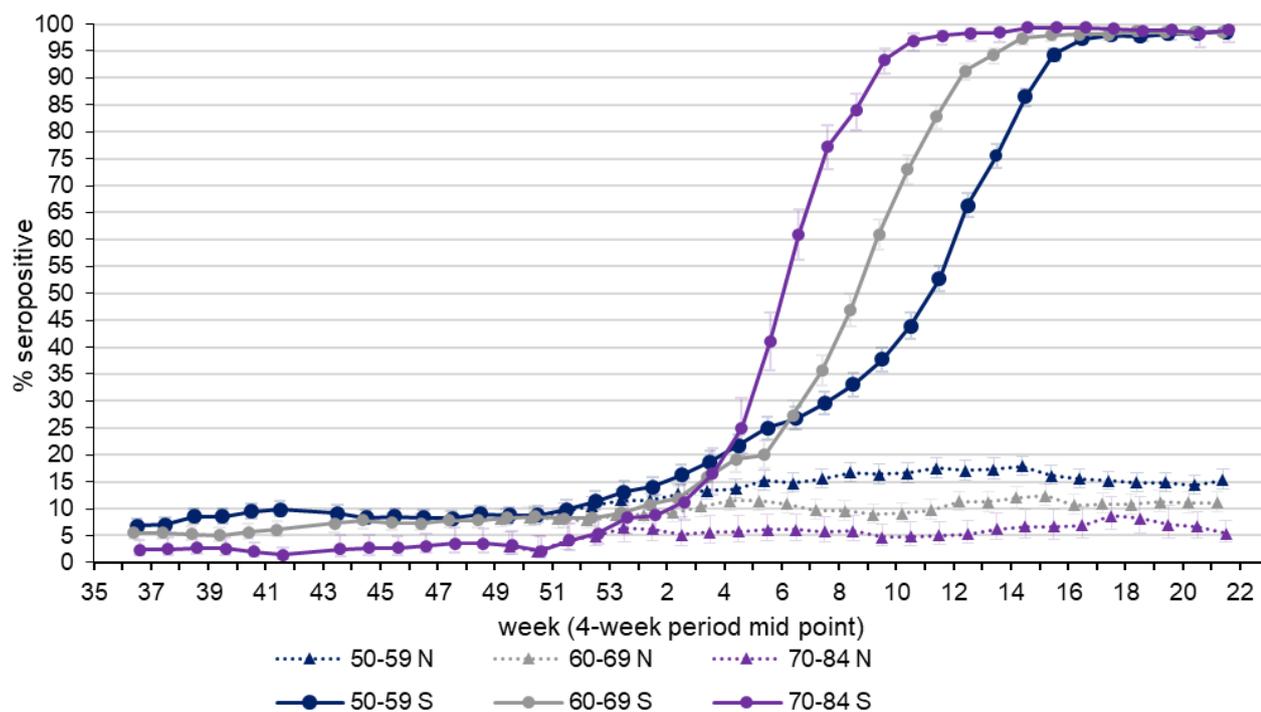


Figure 55: Population weighted 4-weekly rolling SARS-CoV-2 antibody seroprevalence (% seropositive) in blood donors from the Roche S and Roche N assays by a) age groups 17-29, 30-39 and 40-49, b) age group 50-59, 60-69 70-84

(a)



(b)



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 24 2021 (week ending 20 June 2021) was extracted from the National Immunisation Management Service (NIMS). The data presented this week is the provisional proportion of people in England who had received one dose and two doses of a COVID-19 vaccination by age group. The overall vaccine uptake in the population for dose 1 was 58% and 42.7% for dose 2. The breakdown by sex showed vaccine uptake in males was 55.2% and 60.8% in females for dose 1. For dose 2 total uptake was 39% in males and 46.4% in females. The vaccine uptake rate in adults aged 18 and over was 72.5% (35,784,900/49,345,115) for dose 1 and 53.4% (26,337,396/49,345,115) for dose 2.

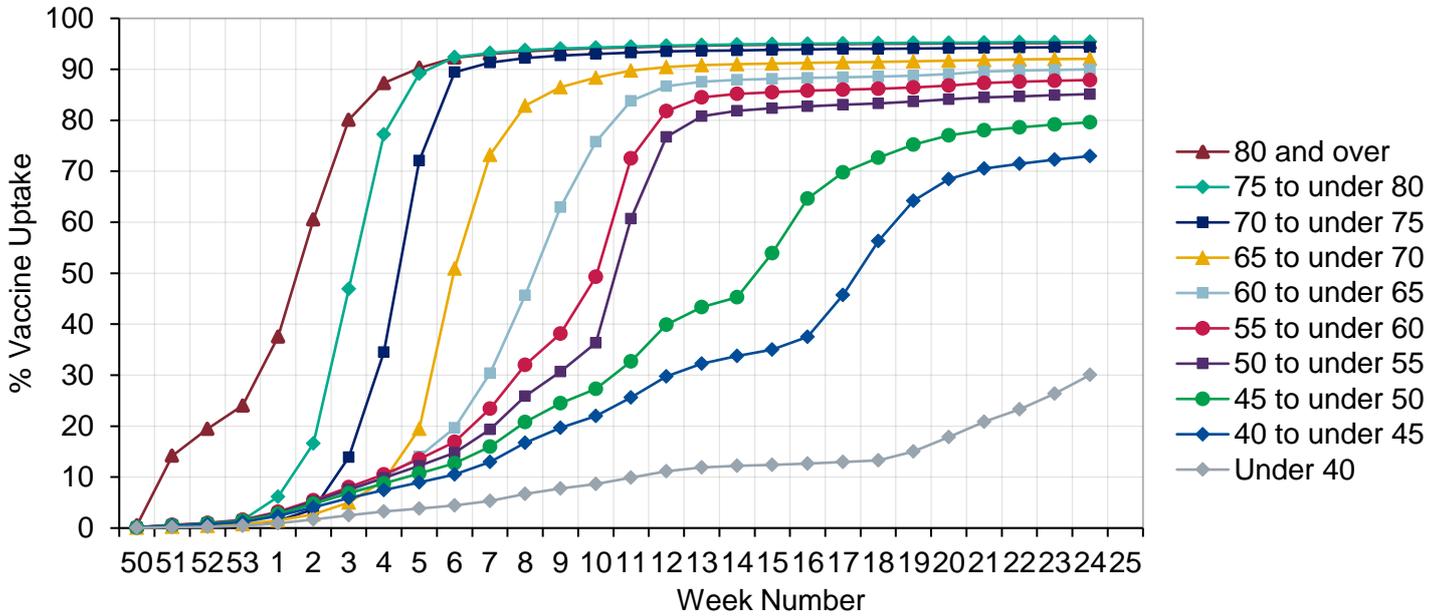
Table 9: Provisional cumulative COVID-19 vaccine uptake by age in England

| Age group | Vaccinated with at least 1 dose | | | Vaccinated with 2 doses | | |
|-----------------------------|---------------------------------|-------------------|------------------|-------------------------|-------------------|------------------|
| | People in NIMS cohort | Number vaccinated | % vaccine uptake | People in NIMS cohort | Number vaccinated | % vaccine uptake |
| 80 years and over | 2,807,312 | 2,672,447 | 95.2 | 2,807,312 | 2,606,337 | 92.8 |
| 75 to under 80 years | 2,081,033 | 1,984,550 | 95.4 | 2,081,033 | 1,952,370 | 93.8 |
| 70 to under 75 years | 2,873,939 | 2,711,342 | 94.3 | 2,873,939 | 2,664,219 | 92.7 |
| 65 to under 70 years | 2,890,439 | 2,660,844 | 92.1 | 2,890,439 | 2,589,905 | 89.6 |
| 60 to under 65 years | 3,448,984 | 3,103,801 | 90.0 | 3,448,984 | 2,962,459 | 85.9 |
| 55 to under 60 years | 4,073,898 | 3,581,198 | 87.9 | 4,073,898 | 3,349,957 | 82.2 |
| 50 to under 55 years | 4,220,848 | 3,593,650 | 85.1 | 4,220,848 | 3,290,310 | 78.0 |
| 45 to under 50 years | 3,991,837 | 3,177,565 | 79.6 | 3,991,837 | 1,930,327 | 48.4 |
| 40 to under 45 years | 4,114,712 | 3,002,573 | 73.0 | 4,114,712 | 1,417,721 | 34.5 |
| Under 40 years | 31,346,281 | 9,413,113 | 30.0 | 31,346,281 | 3,628,874 | 11.6 |
| Total | 61,849,283 | 35,901,578 | 58.0 | 61,849,283 | 26,392,701 | 42.7 |

Data are 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 PHE are for public health surveillance purposes only.

Figure 56: Cumulative weekly COVID-19 vaccine uptake by age in England for (a) Dose 1 and (b) Dose 2

(a)



(b)

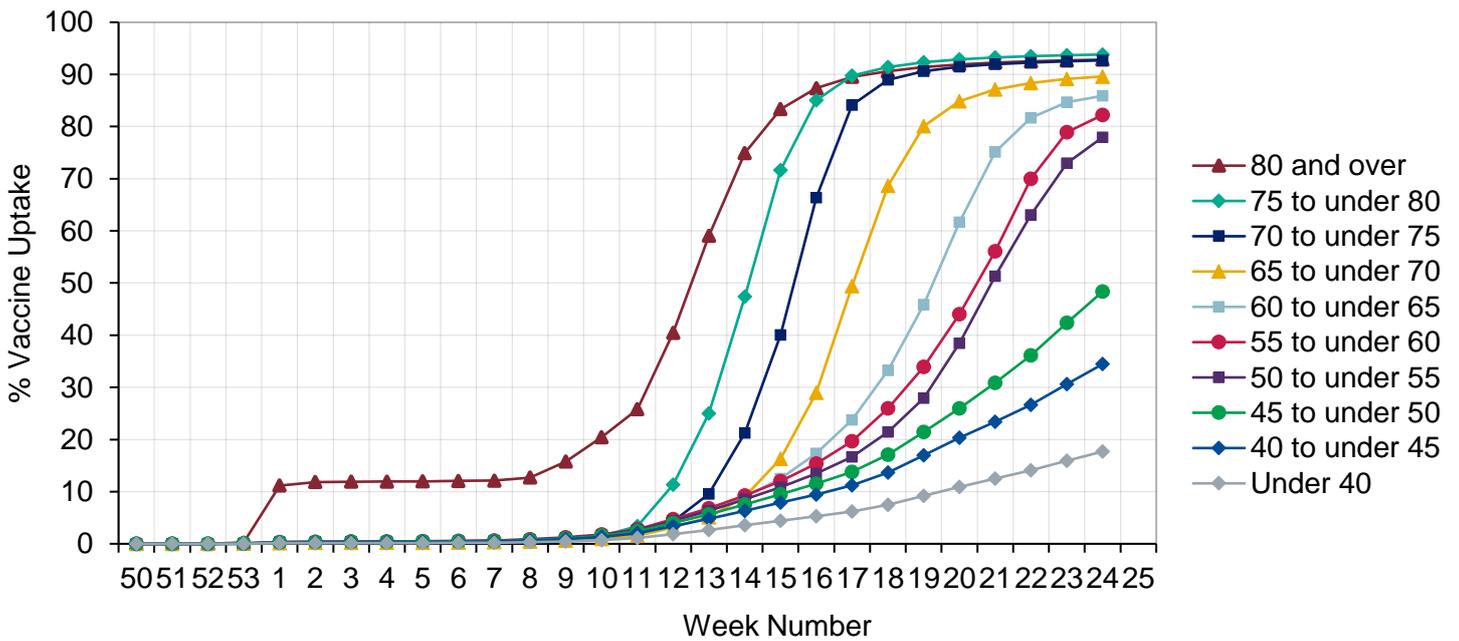


Figure 57: Age/Sex pyramid for COVID-19 vaccine uptake by age in England for Dose 1

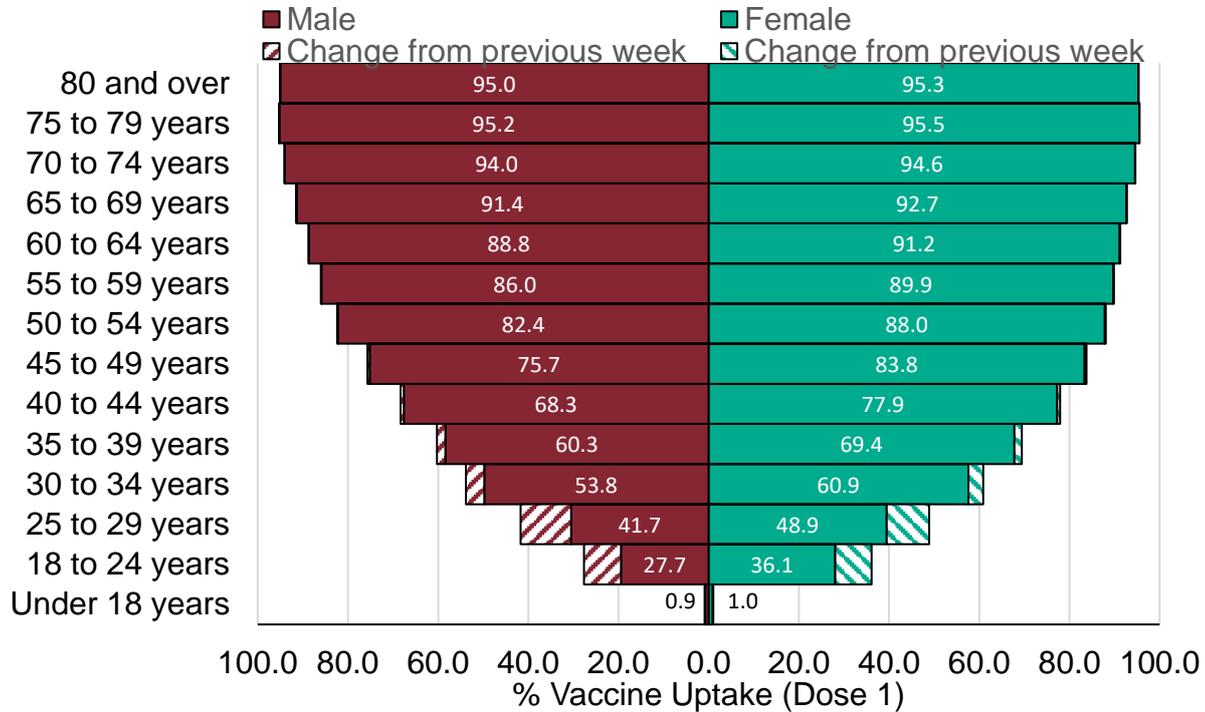


Figure 58: Age/Sex pyramid for COVID-19 vaccine uptake by age in England for Dose 2

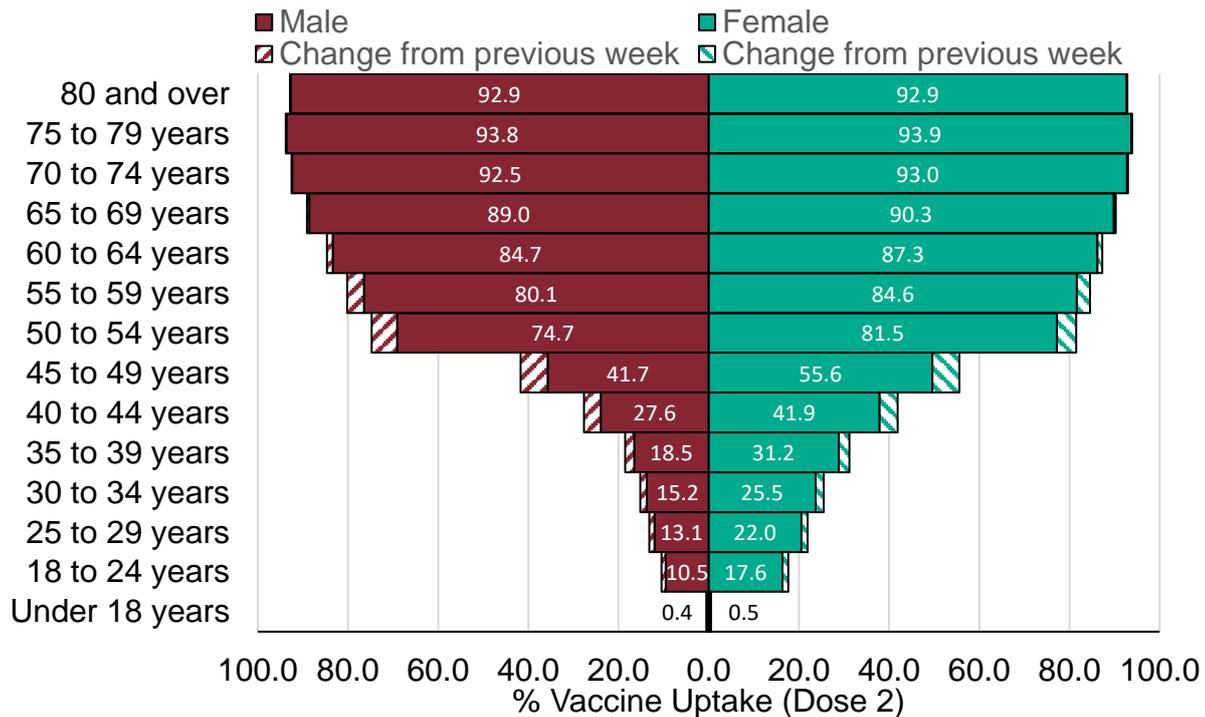
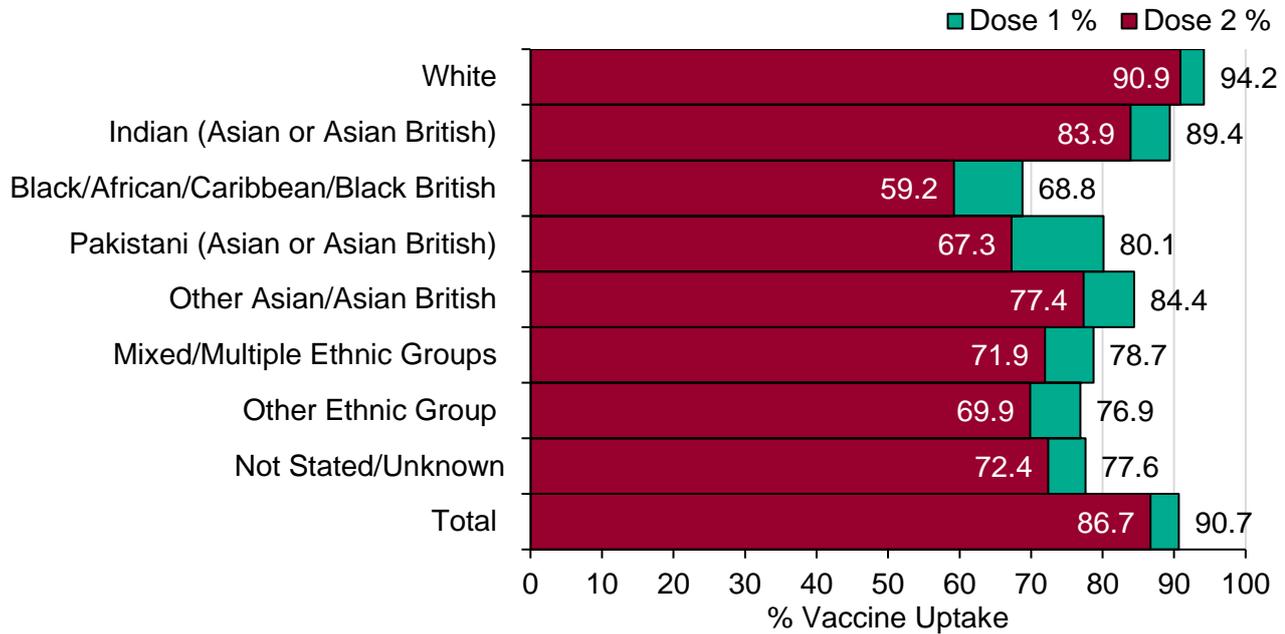


Figure 59: Cumulative weekly COVID-19 vaccine uptake by ethnicity in England in those aged 50 and over



From the 6 January 2021 (week 1 2021), the JCVI advises 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. The statement can be accessed [here](#)

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

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

International update

Global COVID-19 update

Globally, up to 22 June 2021, 178,600,073 cases of COVID-19 infection have been reported worldwide, including 3,876,153 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

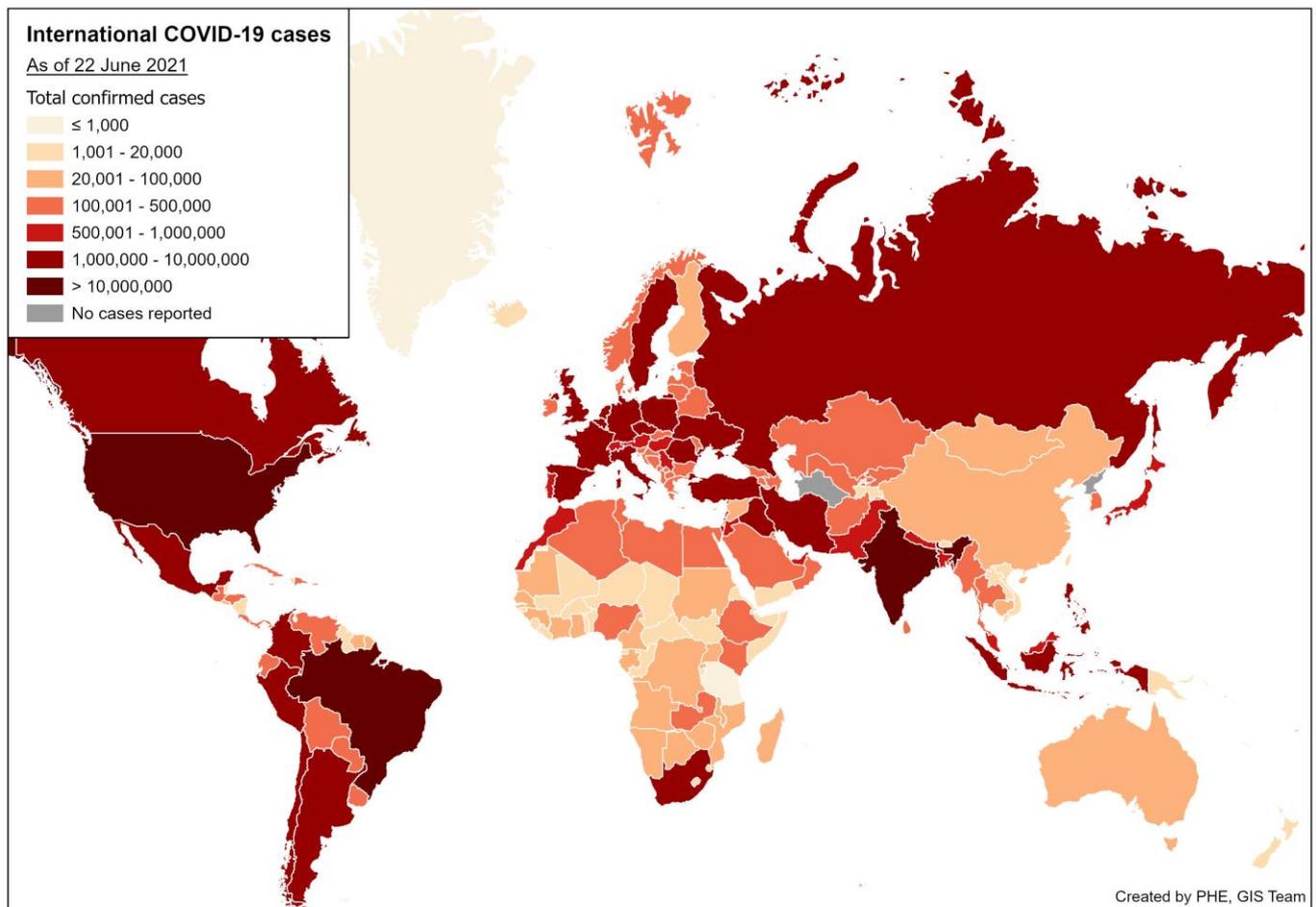
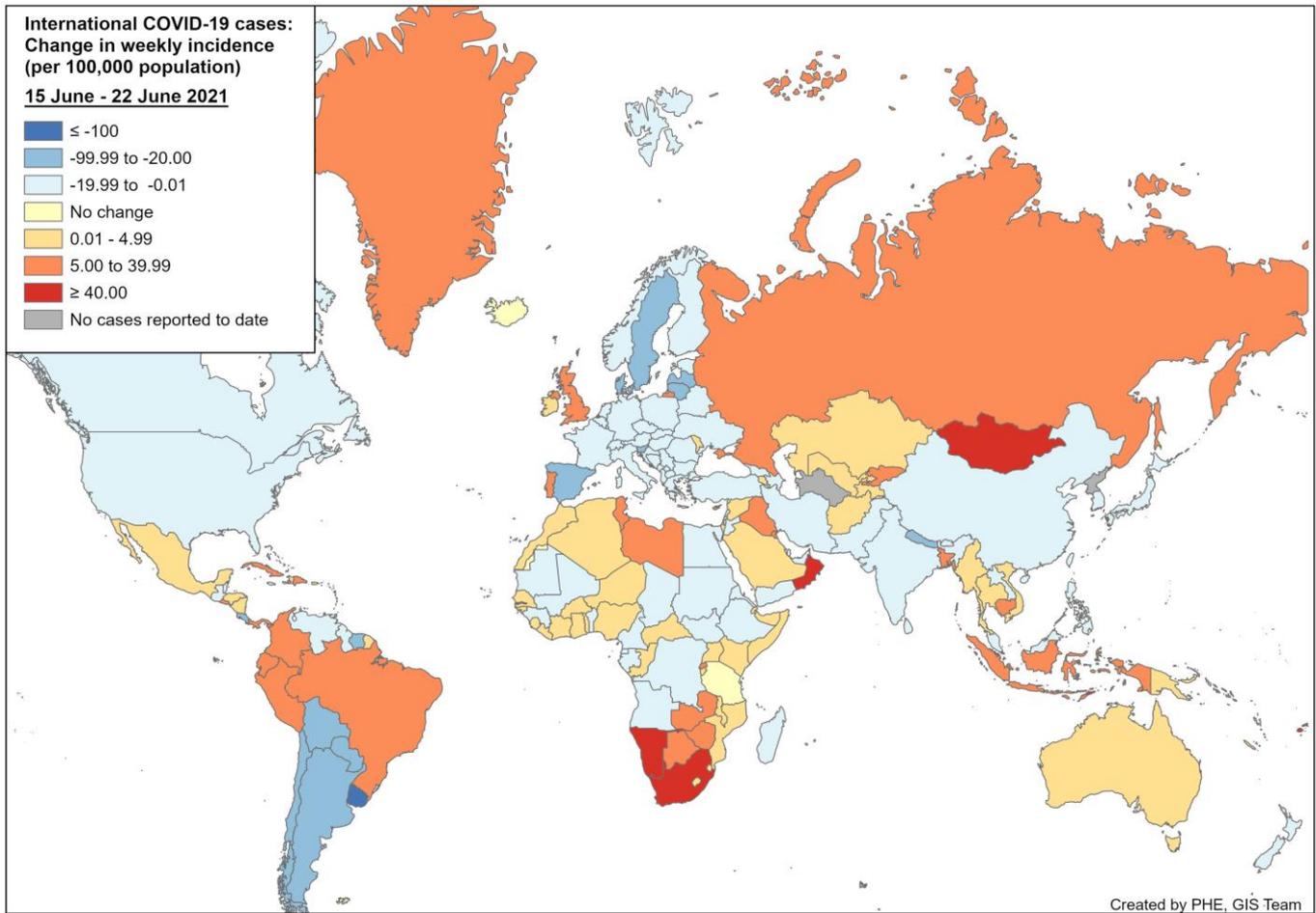


Figure 61: Global map of change in weekly COVID-19 case incidence rate per 100,000 population compared to the previous week



Created by PHE, GIS Team

Global influenza update

Updated on 7 June 2021 (based on data up to 23 May 2021) ([WHO website](#)).

In the temperate zones of the northern hemisphere, influenza activity remained below baseline overall. In the temperate zone of the southern hemisphere, influenza activity was reported at inter-seasonal level. Worldwide, influenza B detections accounted for the majority of the very low numbers of detections reported.

In the Caribbean and Central American countries, no influenza was reported across reporting countries.

In the tropical countries of South America, no influenza detections were reported for this period.

In Western Africa, few detections of influenza A(H1N1)pdm09 and A(H3N2) were reported in Côte d'Ivoire and influenza A(H1N1)pdm09 in Ghana.

In Middle Africa, few detections of influenza A(H1N1)pdm09 and A(H3N2) were reported in Cameroon in recent weeks.

In Eastern Africa, no detections of influenza viruses were reported across reporting countries.

In Southern Asia, detections of predominately influenza A(H3N2) viruses continued to be reported in India.

In South East Asia, no influenza detections were reported across reporting countries.

In the countries of North America, influenza activity indicators, including the percent of tests positive for influenza and influenza like illness (ILI) activity, were at very low levels, despite testing at usual or increased levels.

In Europe, influenza activity remained at very low level with sporadic detections of influenza A and B viruses reported in some countries.

In Central Asia, no influenza detections were reported across reporting countries.

In Northern Africa, increased detections of influenza A(H3N2) and B were reported in Egypt in recent weeks.

In Western Asia, influenza and ILI activity remained low overall. Qatar reported continued detections of influenza B viruses.

In Central Asia, no influenza detections were reported across reporting countries.

In East Asia, influenza illness indicators and influenza activity remained low. Increased detections of influenza B-Victoria lineage virus were reported from northern and southern China though these detections are remaining low compared to previous years.

The WHO GISRS laboratories tested more than 284780 specimens during that time period. A total of 764 specimens were positive for influenza viruses, of which 69 (9%) were typed as influenza A and 695 (91%) as influenza B. Of the sub-typed influenza A viruses, 11 (55%) were influenza A(H1N1)pdm09 and 9 (45%) were influenza A(H3N2). The lineage for 646 influenza B viruses was determined: 4 (0.6%) belonged to the B-Yamagata lineage and 642 (99.4%) to the B-Victoria lineage.

Influenza in Europe

Updated on 01 June 2021 ([Joint ECDC-WHO Europe Influenza weekly update](#))

For week 20 2021, influenza activity remained at inter-seasonal levels throughout Europe.

For week 20 2021, of 444 sentinel specimens tested for influenza viruses, none were positive. Since the start of the season, of 43,474 sentinel-source specimens tested for influenza viruses, 46 were positive.

Influenza in the Northern Hemisphere

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

For further information on influenza in Canada please see the [Public Health Agency weekly influenza report](#).

Other respiratory viruses

Avian influenza

Latest update on 21 May 2021 ([WHO website](#))

Since the previous update on 15 April 2021, one case of human infection with avian influenza A(H9N2) virus, three human cases of infection with influenza A(H1N1) variant viruses, and one human case of infection with an influenza A(H1N2) variant virus were reported officially.

Influenza A(H5) viruses:

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

Influenza A(H7N9) viruses:

There have been no publicly available reports from animal health authorities in China or other countries on influenza A(H7N9) virus detections in animals in recent months.⁵ Overall, the risk assessments have not changed.

Influenza A(H9N2) viruses:

Since the last risk assessment on 15 April 2021, one human case of infection with an influenza A(H9N2) virus was reported from China on 25 April 2021. Influenza A(H9N2) was detected in 30-year-old woman from Guangdong province, who had illness onset on 20 April 2021, as part of routine influenza-like illness (ILI) surveillance. Avian influenza A(H9N2) viruses are enzootic in poultry in Asia and increasingly reported in poultry in Africa.

Middle East respiratory syndrome coronavirus (MERS-CoV)

Latest update on 20 April 2021 ([WHO website](#))

Up to 20 April 2021, a total of five cases of Middle East respiratory syndrome coronavirus, MERS-CoV, (three imported and two linked cases) have been confirmed in the UK through the on-going surveillance since September 2012.

On 2 February 2021, the National IHR Focal Point of the United Arab Emirates (UAE) notified WHO of one laboratory-confirmed case of MERS-CoV ([WHO website](#)).

Between 1 January 2021 and 11 March 2021, the National IHR Focal Point of Saudi Arabia reported seven additional cases of Middle East respiratory syndrome (MERS-CoV) infection, including three associated deaths ([WHO website](#)).

From 2012 through 11 March 2021, a total of 2,574 laboratory-confirmed cases of MERS-CoV and 886 associated deaths were reported globally to WHO under the International Health regulations (IHR 2005).

Further information on management and guidance of possible cases is available online. The latest ECDC MERS-CoV risk assessment can be found [here](#), where it is highlighted that risk of widespread transmission of MERS-CoV remains very low.

Related links

[Previous national COVID-19 reports](#)

[Previous weekly influenza reports](#)

[Annual influenza reports](#)

[Sources of influenza surveillance data](#)

[Sources of COVID-19 surveillance data](#)

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

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Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. We do this through world-leading science, research, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. We are an executive agency of the Department of Health and Social Care, and a distinct delivery organisation with operational autonomy. We provide government, local government, the NHS, Parliament, industry and the public with evidence-based professional, scientific and delivery expertise and support.

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