

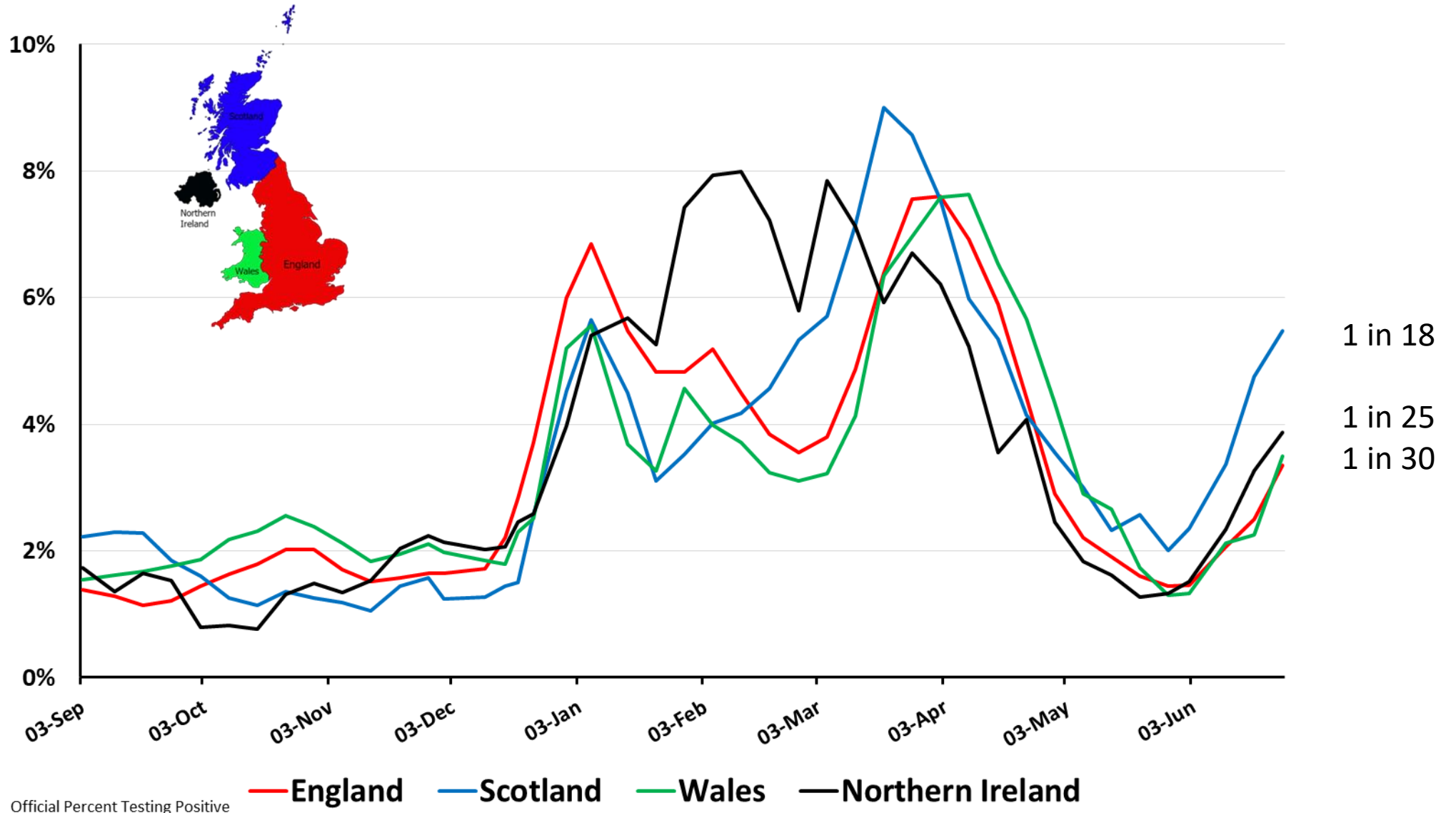
INDEPENDENT SAGE DATA HEADLINES 1 JULY 2022

- We are in the BA.5 wave
- Infections increasing in:
 - all UK nations – Scotland ahead with **1 in 18** testing positive
 - all age groups
- Hospitals
 - increasing hospitalisations
 - increasing numbers of people in hospital and in mechanical ventilation beds
- Data
 - ONS Covid Infection Survey is being reduced
 - Covid dashboard is now being updated weekly rather than daily
 - We are increasingly looking in the rear view mirror to find out what is coming

**PEOPLE TESTING
POSITIVE**

Percent Testing Positive by Nation: 3 Sep 2021 to 25 Jun 2022

(Source: ONS Coronavirus (COVID-19) Infection Survey results)



Official Percent Testing Positive

— England — Scotland — Wales — Northern Ireland

Thanks to Bob Hawkins for the chart

22 June 2022 Risk assessment for SARS-CoV-2 variants VOC-22APR-03 and VOC-22APR-04 UK Health Security Agency

Indicator	Red, amber, or green status*	Confidence level	Assessment and rationale
Overall growth advantage	Red	High	<p>Evidence of a growth advantage compared to BA.2</p> <p>BA.4 and BA.5 are now likely to be dominant in England. There is now an associated overall increase in coronavirus (COVID-19) incidence. The growth advantage is also evident in multiple other countries, including those with prior BA.2 waves similar to the UK.</p>
Growth advantage 1: Transmissibility		Insufficient information	<p>Insufficient data</p> <p>There is no direct data on transmissibility and there is no current ability to measure this directly from surveillance data. Based on data reported to VTG, ACE2 binding is increased for BA.4 and BA.5 compared to prior Omicron variants.</p>
Growth advantage 2: Immune evasion	Red	Moderate	<p>There is evidence of some antigenic change compared to BA.2, based on laboratory data (moderate confidence); insufficient data to assess vaccine effectiveness</p> <p>BA.4 and BA.5 are most closely related to BA.2. Structural modelling indicates there is likely to be antigenic change compared to BA.1 and BA.2, which may affect the binding of neutralising antibodies.</p> <p>Neutralisation data from prior Omicron infections (human or hamster) shows neutralisation of BA.4 is substantially reduced using BA.1 antisera but there is a more moderate drop in neutralisation by BA.2 specific antisera. Sera from triple vaccinees shows similar or lower neutralisation for BA.4 compared to BA.2 or BA.1. Sera from vaccinees with BA.1 or BA.2 breakthrough infections shows better cross reactivity against BA.4, although there is variation in the data.</p> <p>There is evidence from 2 national surveillance studies of ongoing reinfection, including after prior Omicron variant infection. There is insufficient data for a robust assessment of vaccine effectiveness but in population and survey data there were no early indicators of a large change. The current epidemiological data, whilst incomplete, is consistent with the neutralisation findings.</p>
Infection severity		Low	<p>In vitro data suggests similarity to previous Omicron variants; epidemiological data requires close monitoring</p> <p>There has been an increase in people admitted to hospital with COVID-19 in England. Whilst this accompanies an increase in incidence generally, early analysis suggests that the infection hospitalisation rate may be increasing from its low base of approximately 0.3% across all age groups.</p> <p>The reason for any observed increase in IHR is unclear. The properties of BA.4 and BA.5 as assessed in vitro are approximately in keeping with those of other Omicron variants, although it is possible, based on preliminary data, that there have been small changes in phenotype compared to BA.2. These require further confirmation and assessment of clinical significance.</p> <p>Countries which have experienced BA.4 and BA.5 waves have not experienced apparent high severity of disease and hospitalisation rates have tended to remain lower than previous waves.</p>

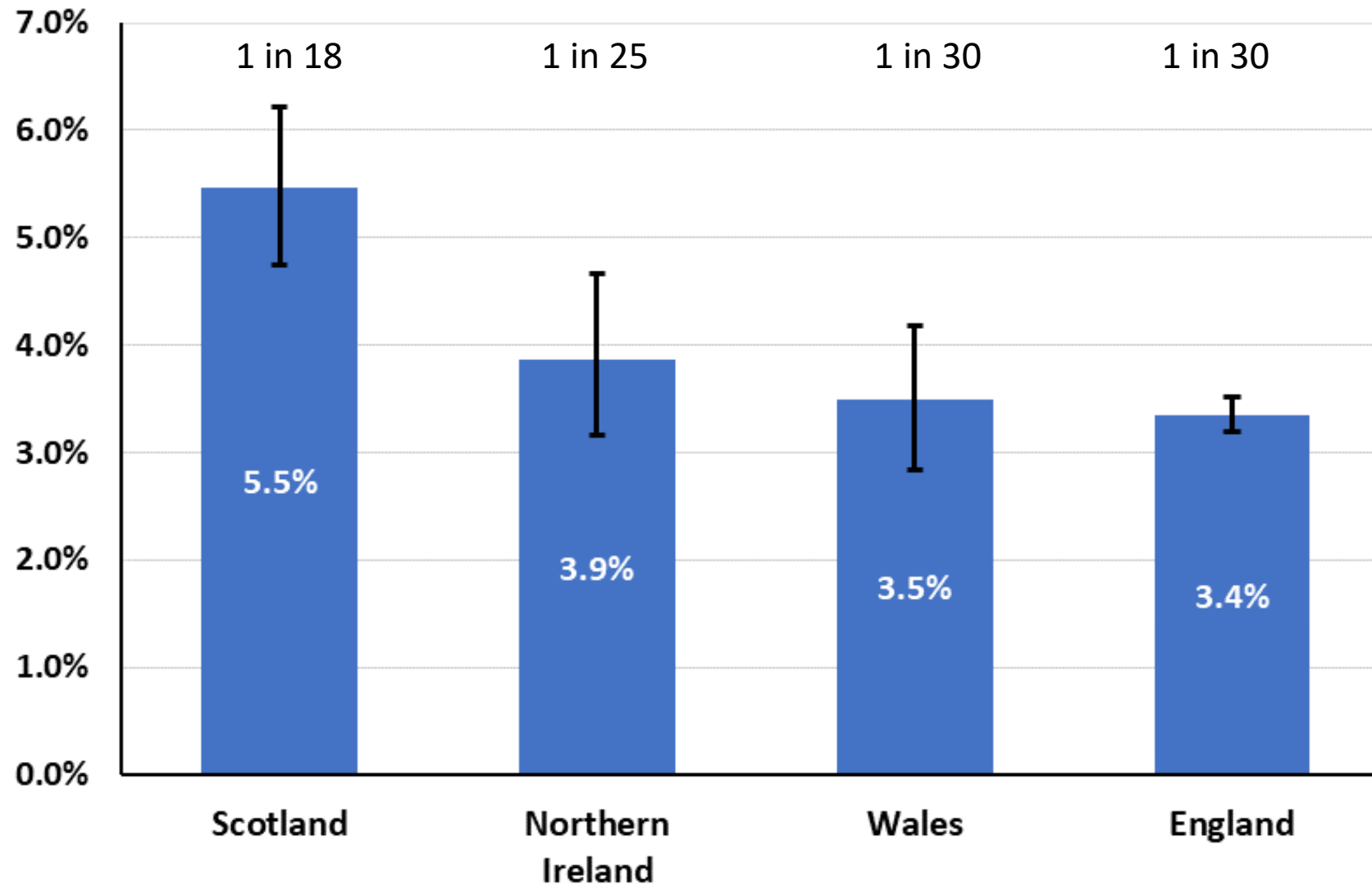
* Refer to scale and confidence grading slide.

Source: UKHSA 24 June 2022 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/114444/BA.4_BA.5_Risk_Assessments_28_April_2022.pdf

BA.4 / BA.5 Risk Assessments first published 28 April 2022

Percent Testing Positive by Home Nation: 25 Jun 2022

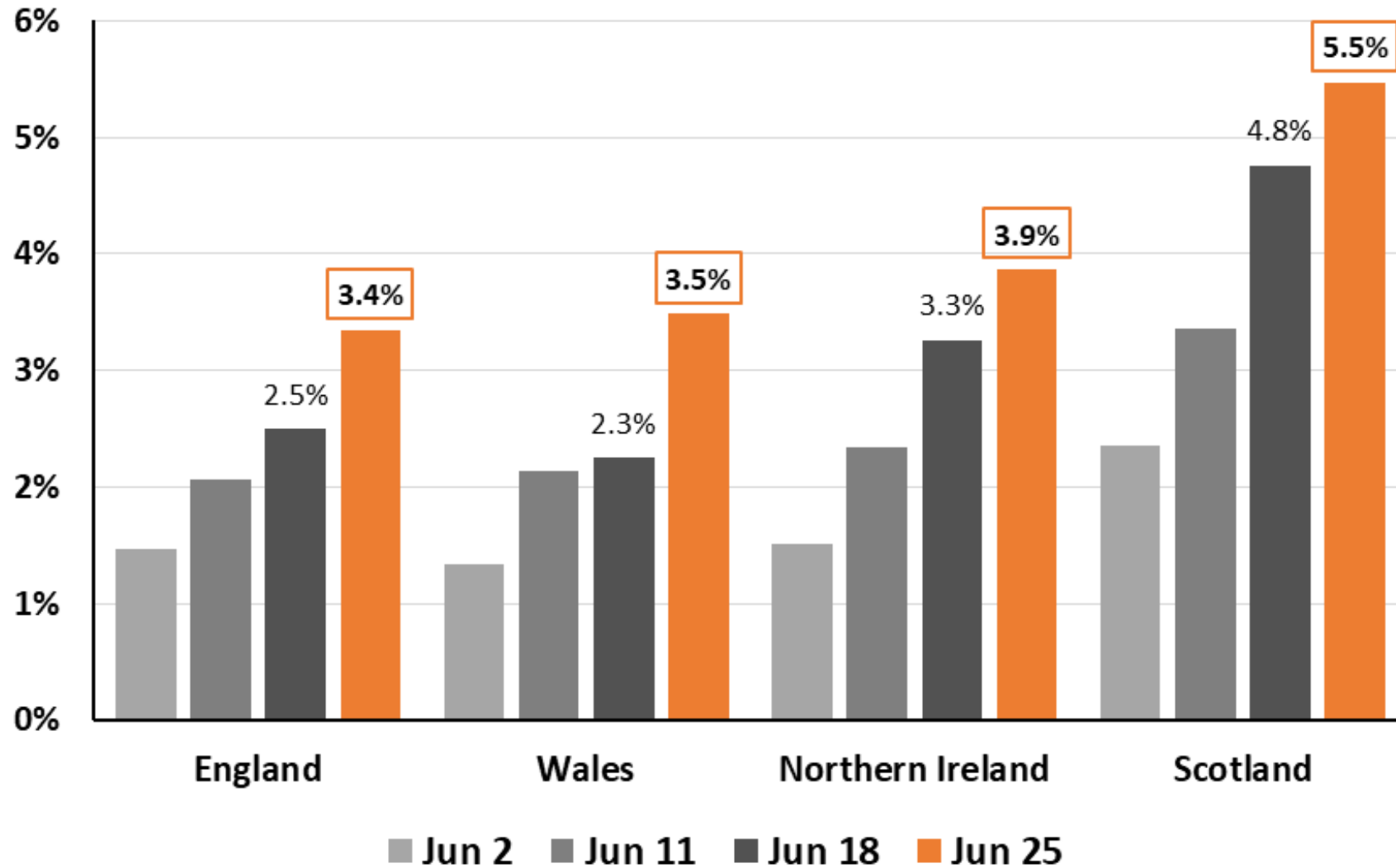
(Source: ONS Coronavirus (COVID-19) Infection Survey results)



Thanks to Bob Hawkins for the chart

Percent Testing Positive by Home Nation: Recent Trend

(Source: ONS Coronavirus (COVID-19) Infection Survey results)



Thanks to Bob Hawkins for the chart

Percent Testing Positive by Region: Recent Trend

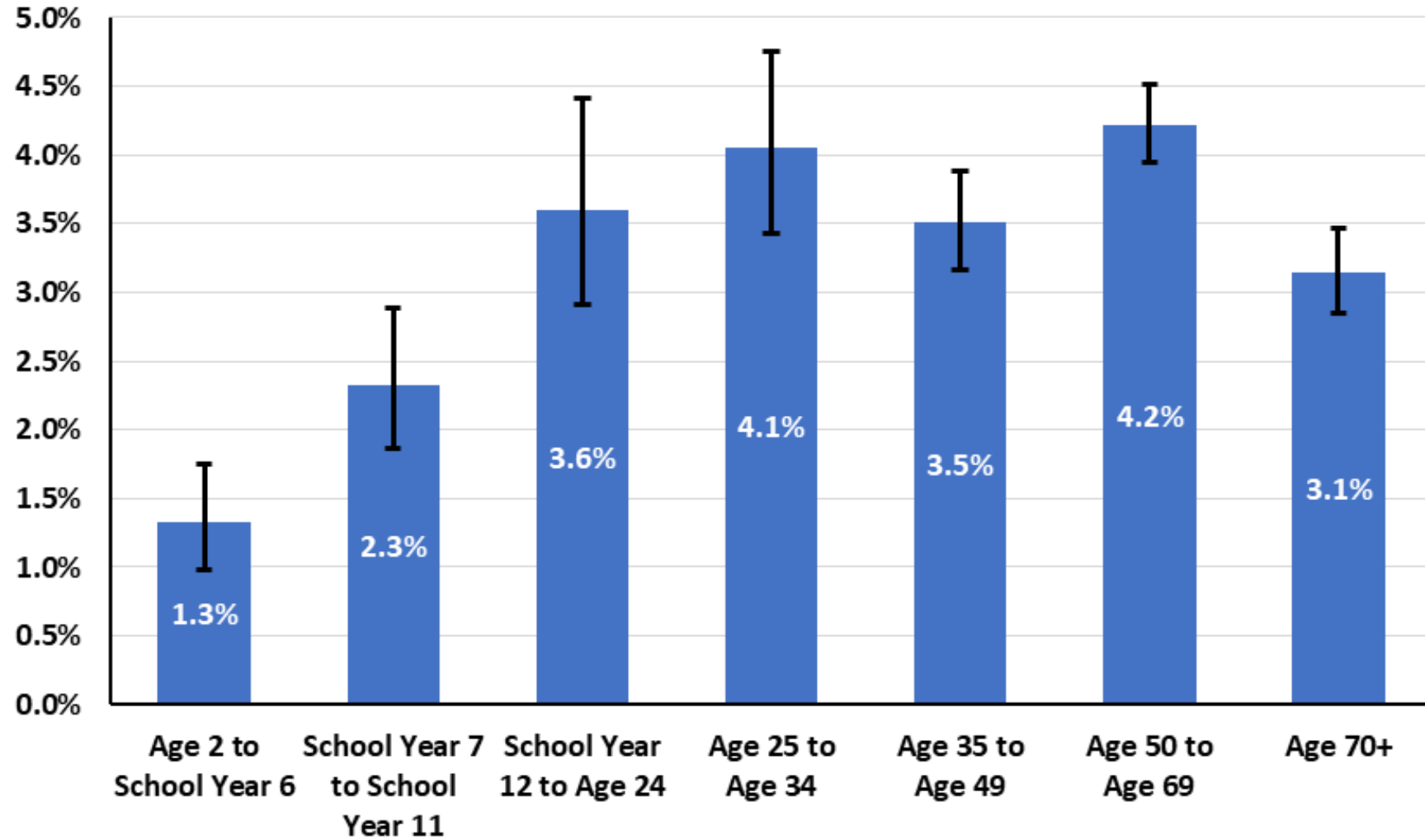
(Source: ONS Coronavirus (COVID-19) Infection Survey results)



Thanks to Bob Hawkins for the chart

Percent Testing Positive by Age for England: 25 Jun 2022

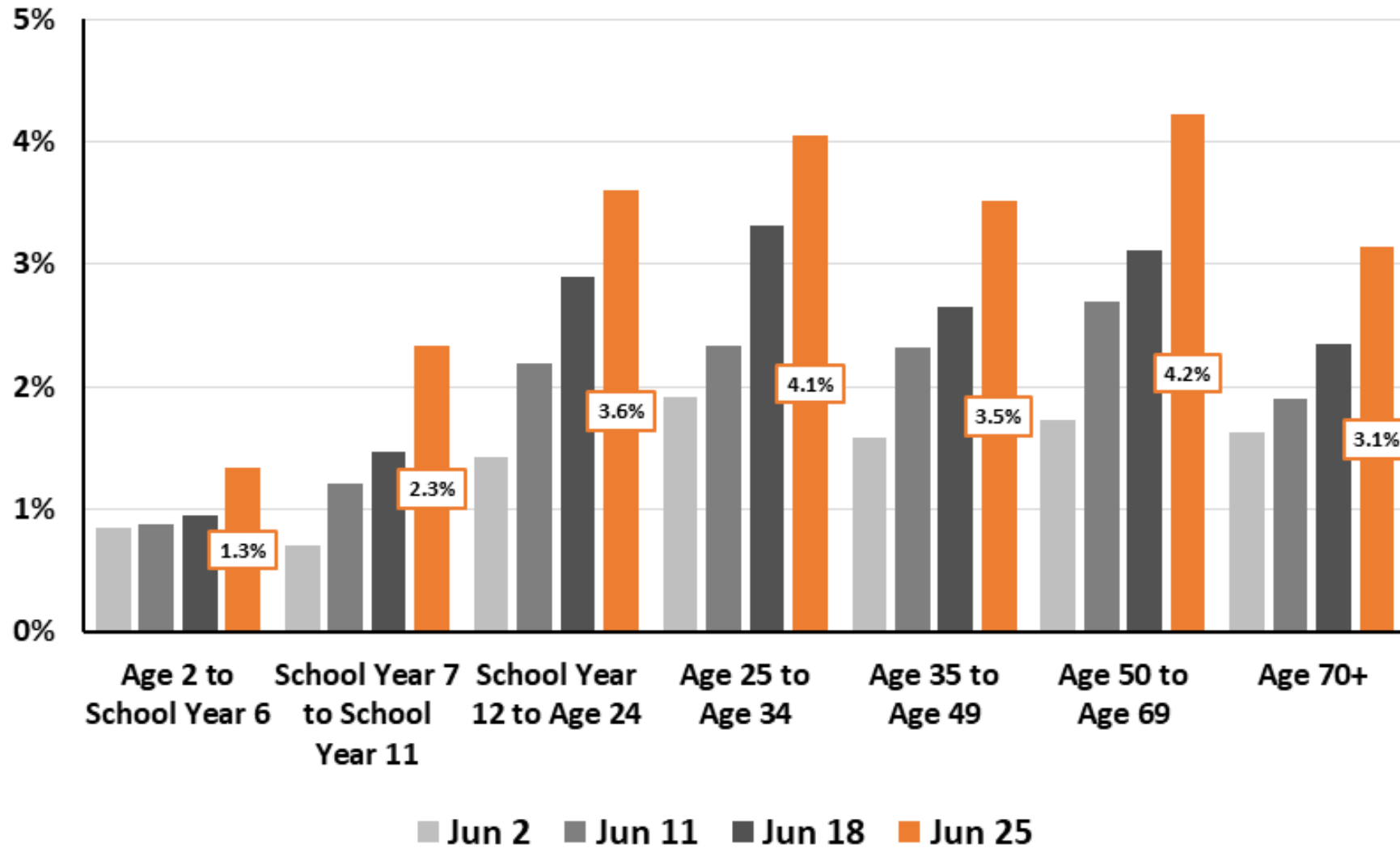
(Source: ONS Coronavirus (COVID-19) Infection Survey results)



Thanks to Bob Hawkins for the chart

Percent Testing Positive by Age for England: Recent Trend

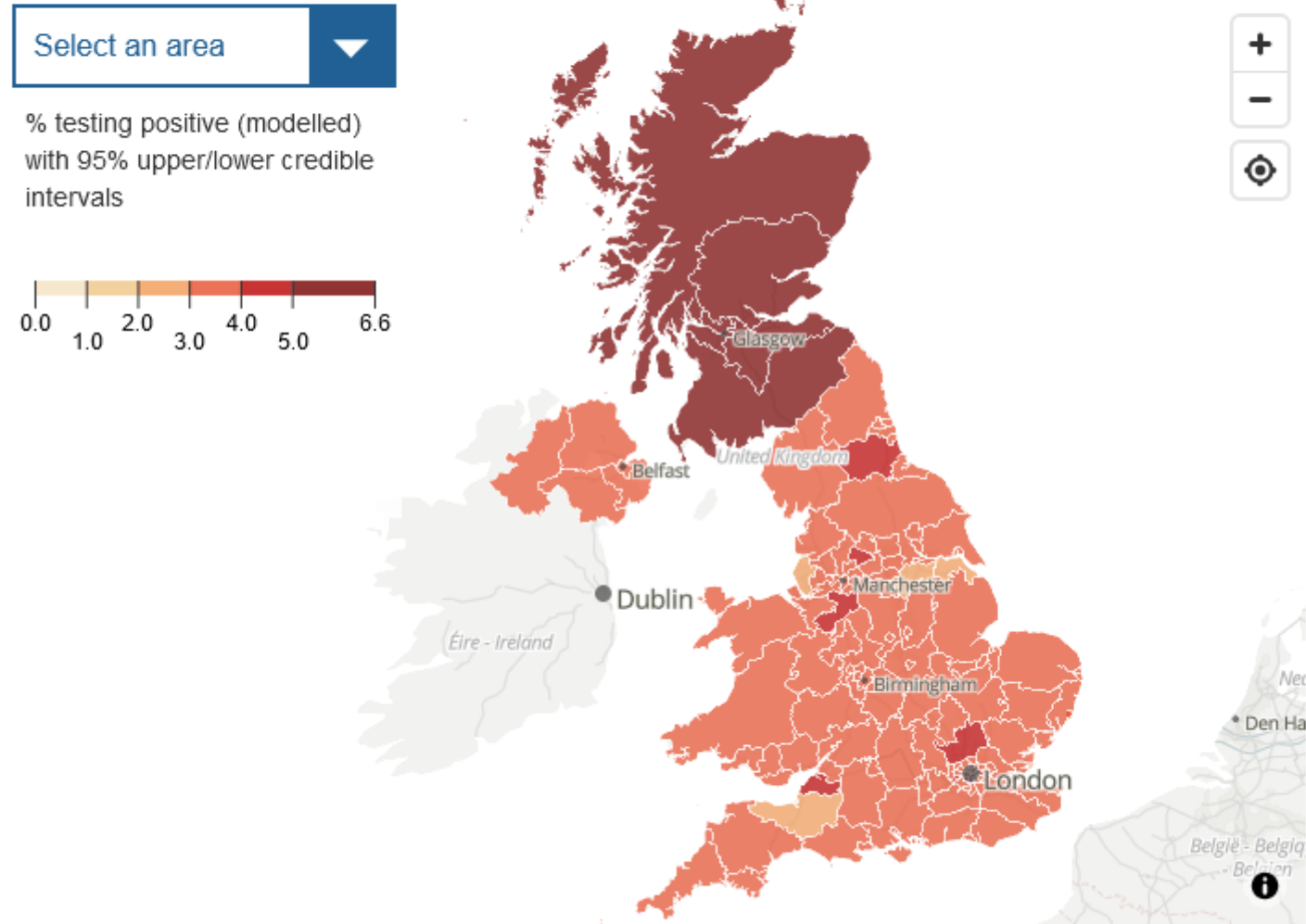
(Source: ONS Coronavirus (COVID-19) Infection Survey results)



Thanks to Bob Hawkins for the chart

Figure 3: The percentage testing positive for coronavirus (COVID-19) by UK sub-regions

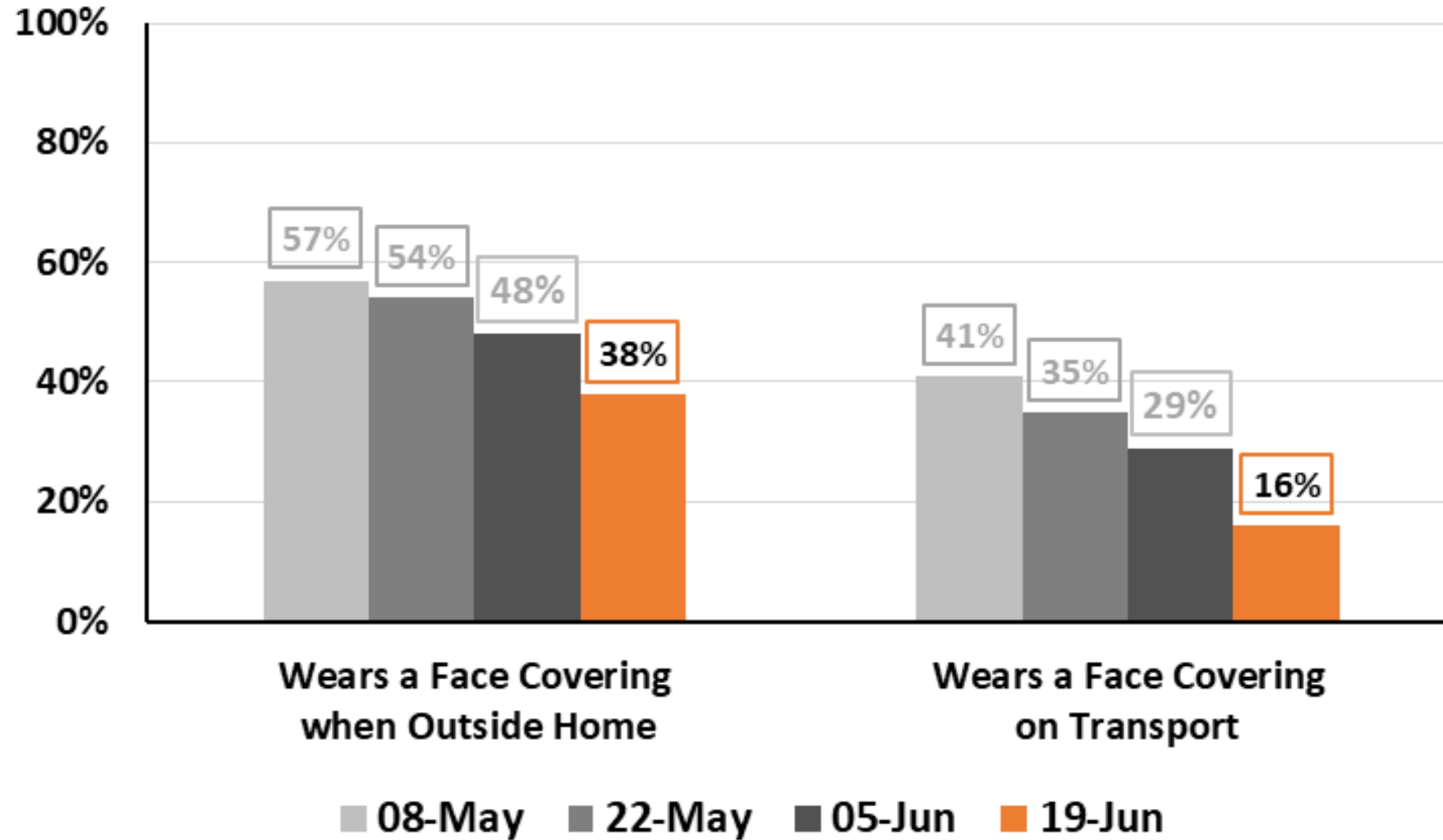
Modelled percentage of the population testing positive for COVID-19 on nose and throat swabs by sub-regional geography, 18 to 24 June 2022



Source: Office for National Statistics – Coronavirus (COVID-19) Infection Survey

Percent of People who Wear Face Coverings when Outside Home and On Transport -- Recent Trends

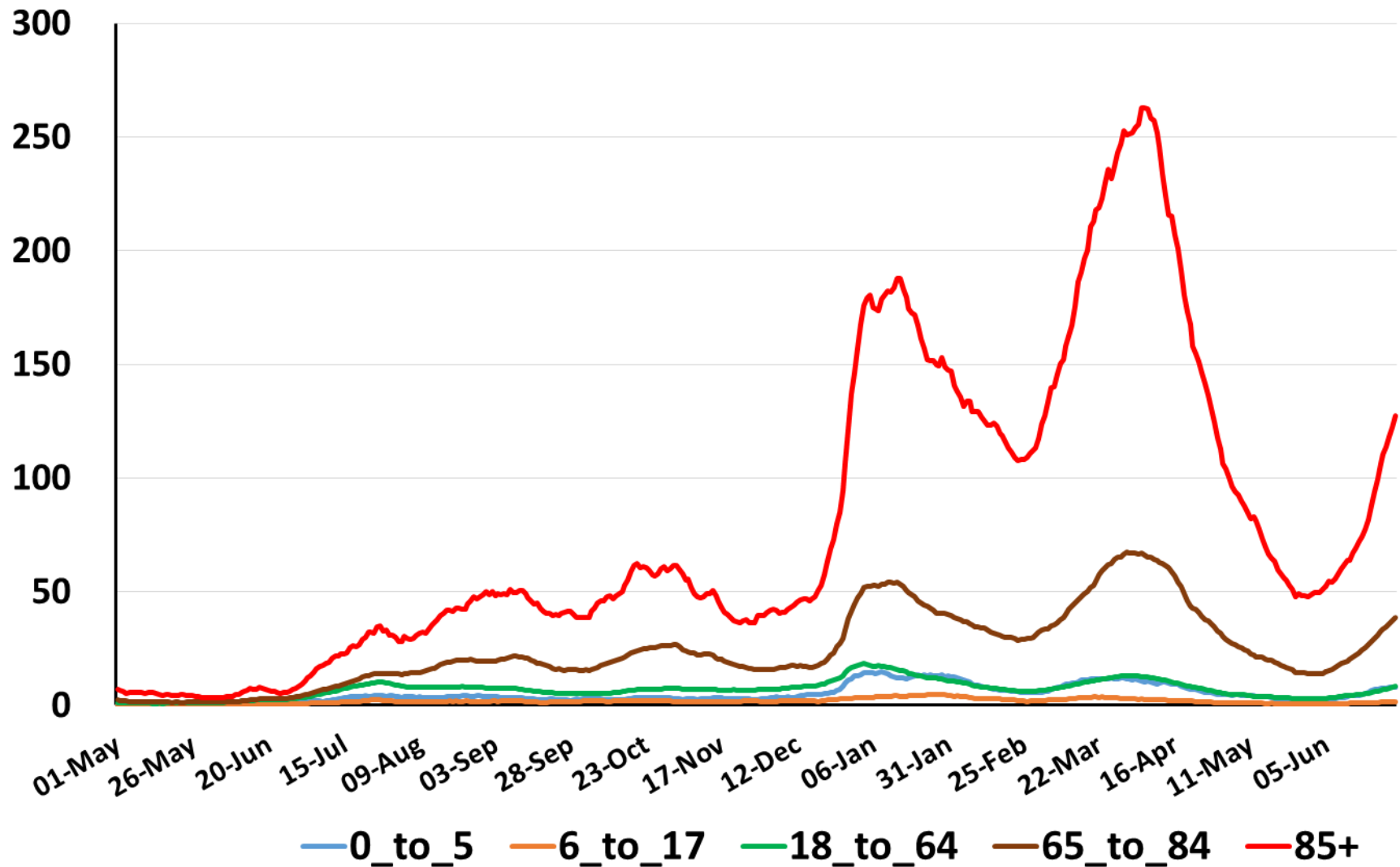
(Source: Coronavirus and the social impacts on Great Britain Survey)



HOSPITAL DATA

Seven Day Hospital Admissions Rate per 100K by Age in England: May 1 2021 – Mar 8 2022

(Source: Covid Daily Update)

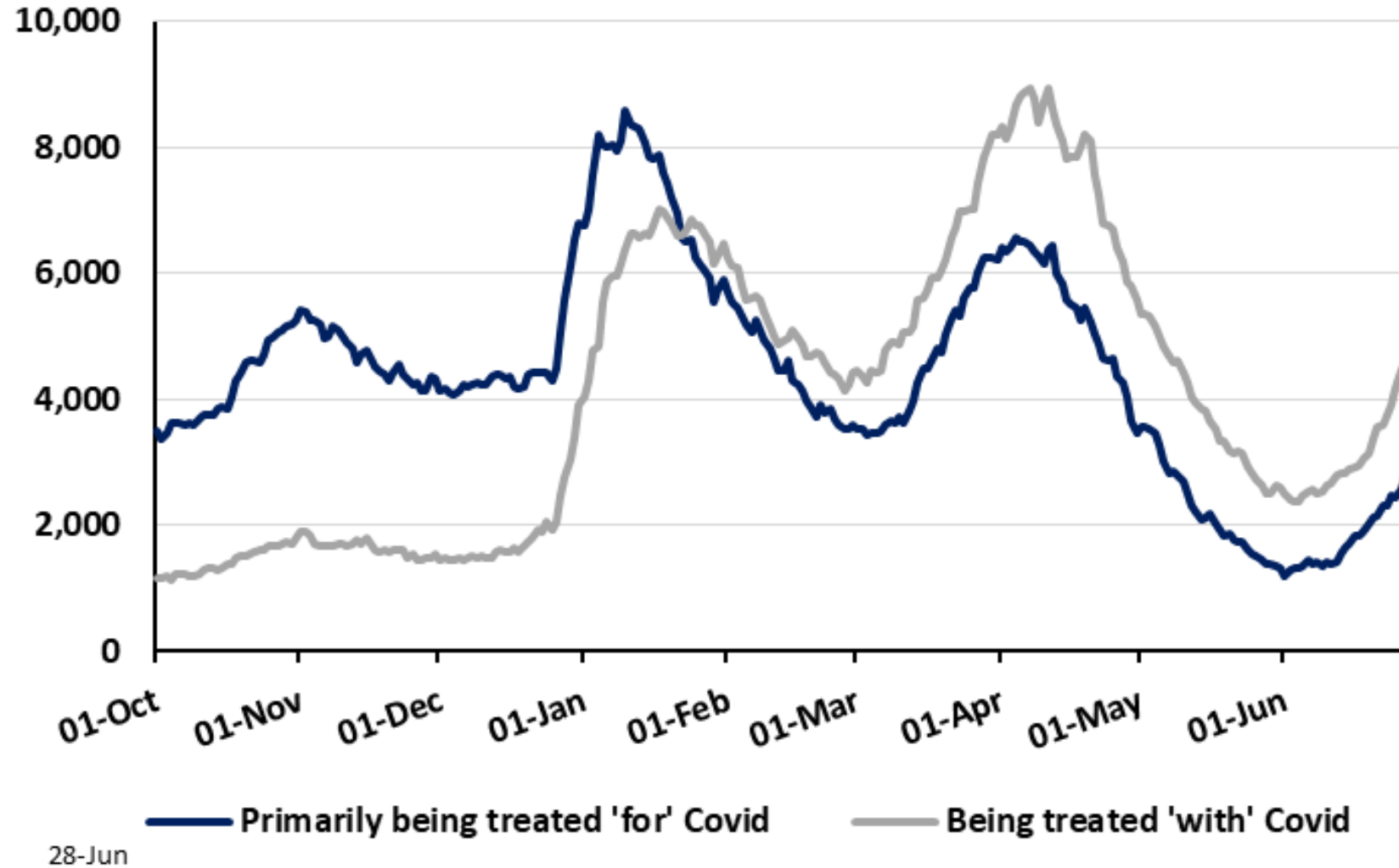


Admission Rate

28-Jun-22

Daily Occupied Beds by Primarily and Incidental Covid for England: Oct 1 2021 – Jun 28 2022

(Source: NHS COVID-19 Hospital Activity)

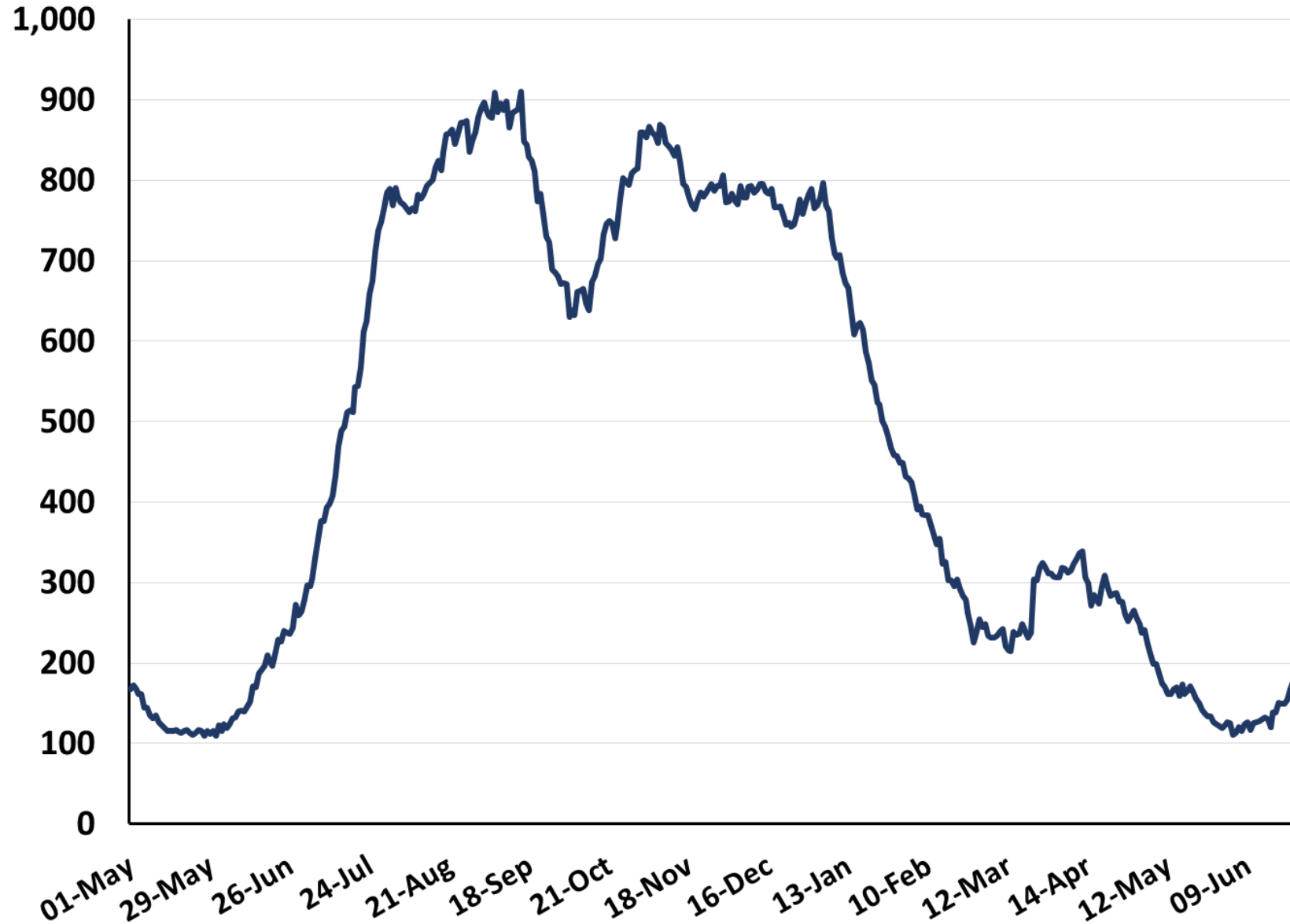


<https://www.england.nhs.uk/statistics/statistical-work-areas/covid-19-hospital-activity/>

Daily Occupied Mechanically Ventilated Beds for England

May 1 2021 – Jun 28 2022

(Source: Covid Daily Update)



Healthcare in England ▾

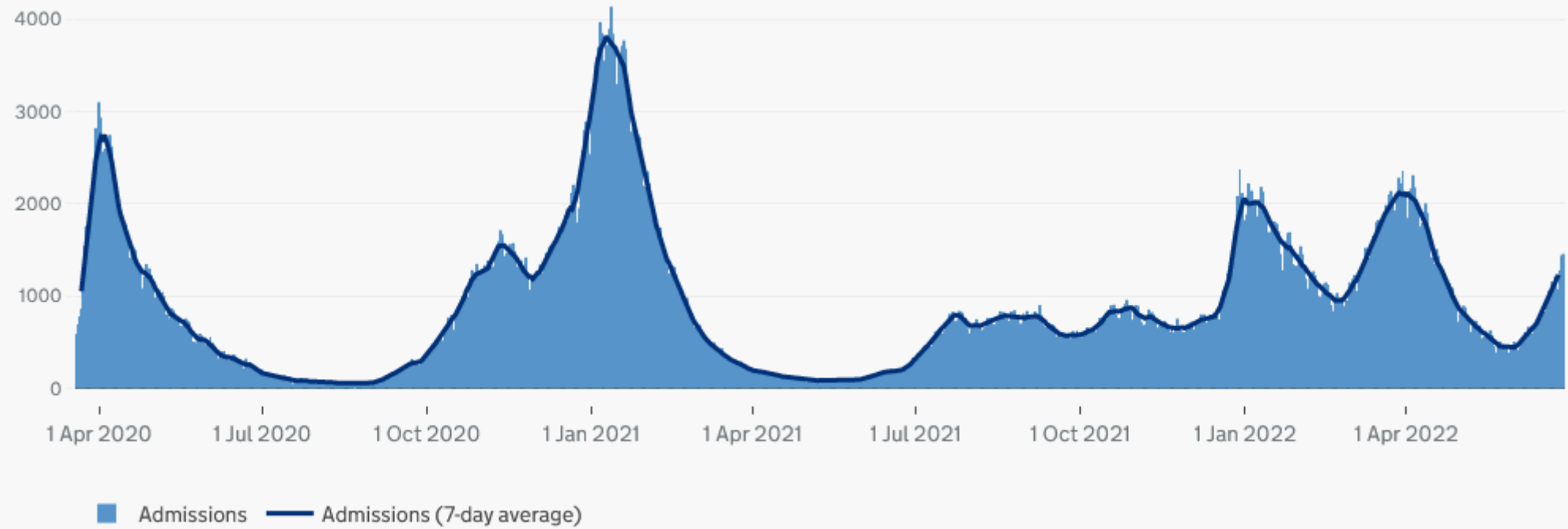
Patients admitted to hospital

Daily and total numbers of COVID-19 patients admitted to hospital. Data are not updated every day by all 4 nations (England, Northern Ireland, Wales and Scotland). Figures are not comparable as Wales includes suspected COVID-19 patients while the other nations include only confirmed cases.

Daily Total Data table About

all 1y 6m 3m 1m

Linear Log



Patients in hospital and in mechanical ventilation beds – whole pandemic

Healthcare in England ▾

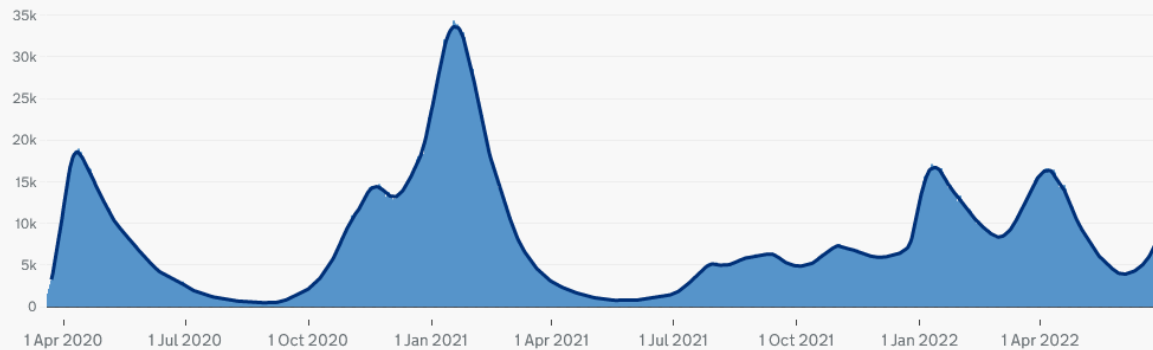
Patients in hospital

Daily count of confirmed COVID-19 patients in hospital at 8am. Data are not updated every day.

[Daily](#) [Data table](#) [About](#)

[all](#) [1y](#) [6m](#) [3m](#) [1m](#)

[Linear](#) [Log](#)



■ COVID-19 patients — COVID-19 patients (7-day average)

Healthcare in England ▾

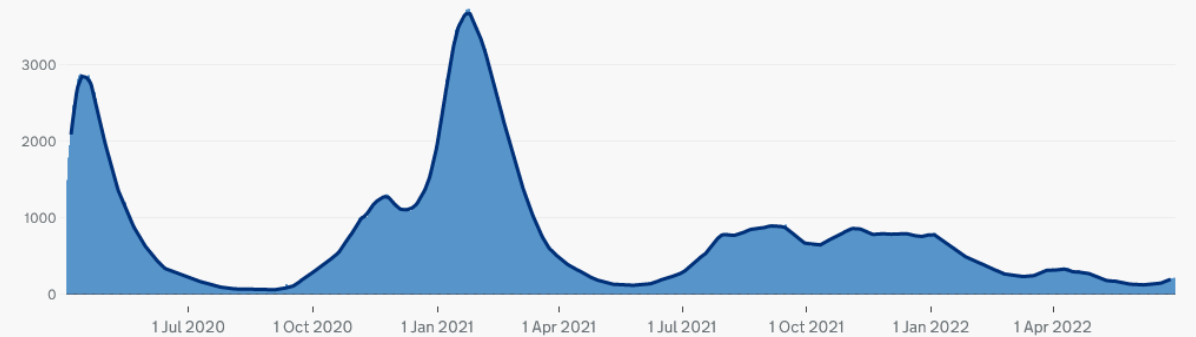
Patients in mechanical ventilation beds

Daily count of COVID-19 patients in mechanical ventilation beds, and 7-day rolling average. Data are not updated every day.

[Daily](#) [Data table](#) [About](#)

[all](#) [1y](#) [6m](#) [3m](#) [1m](#)

[Linear](#) [Log](#)

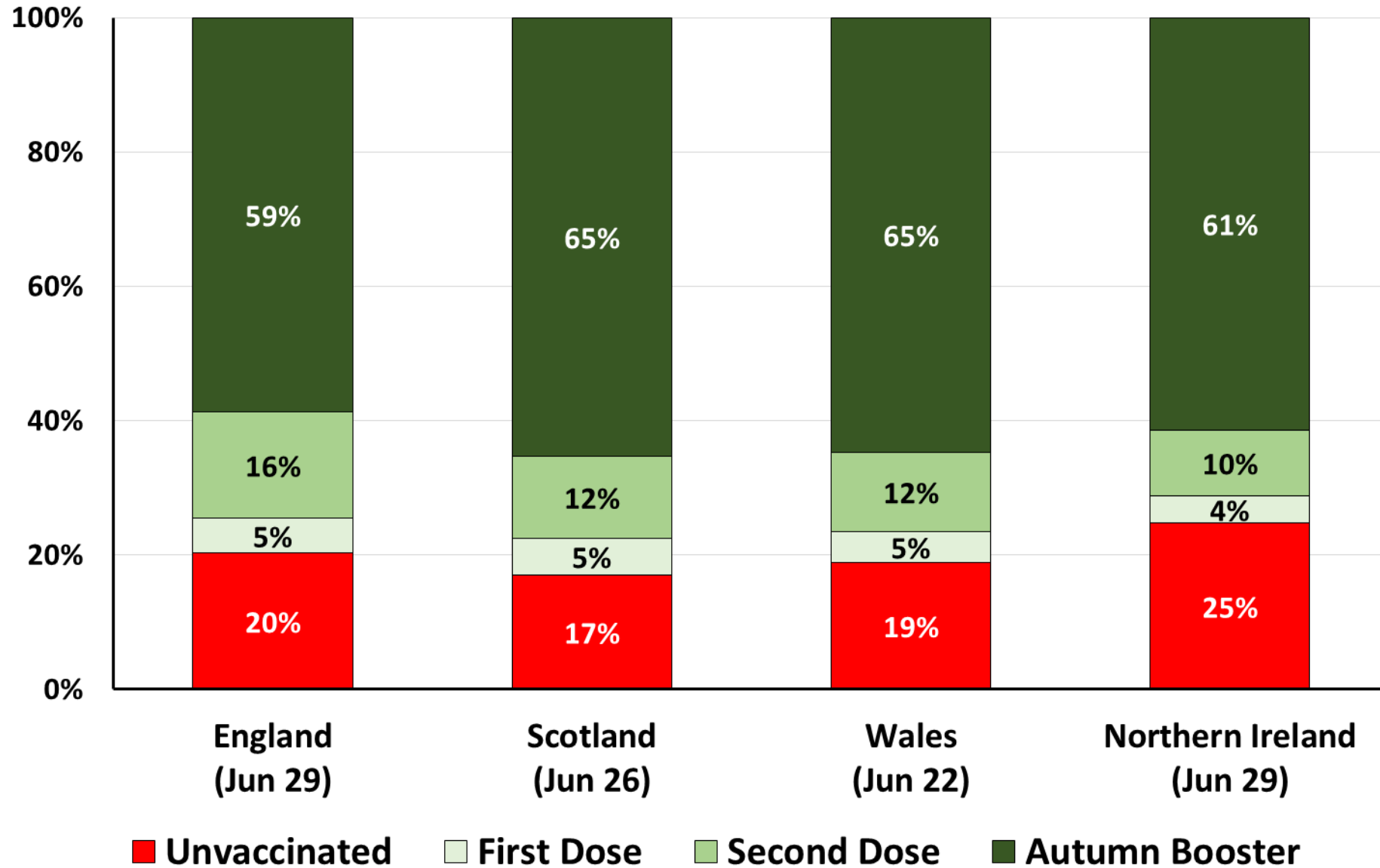


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VACCINATION

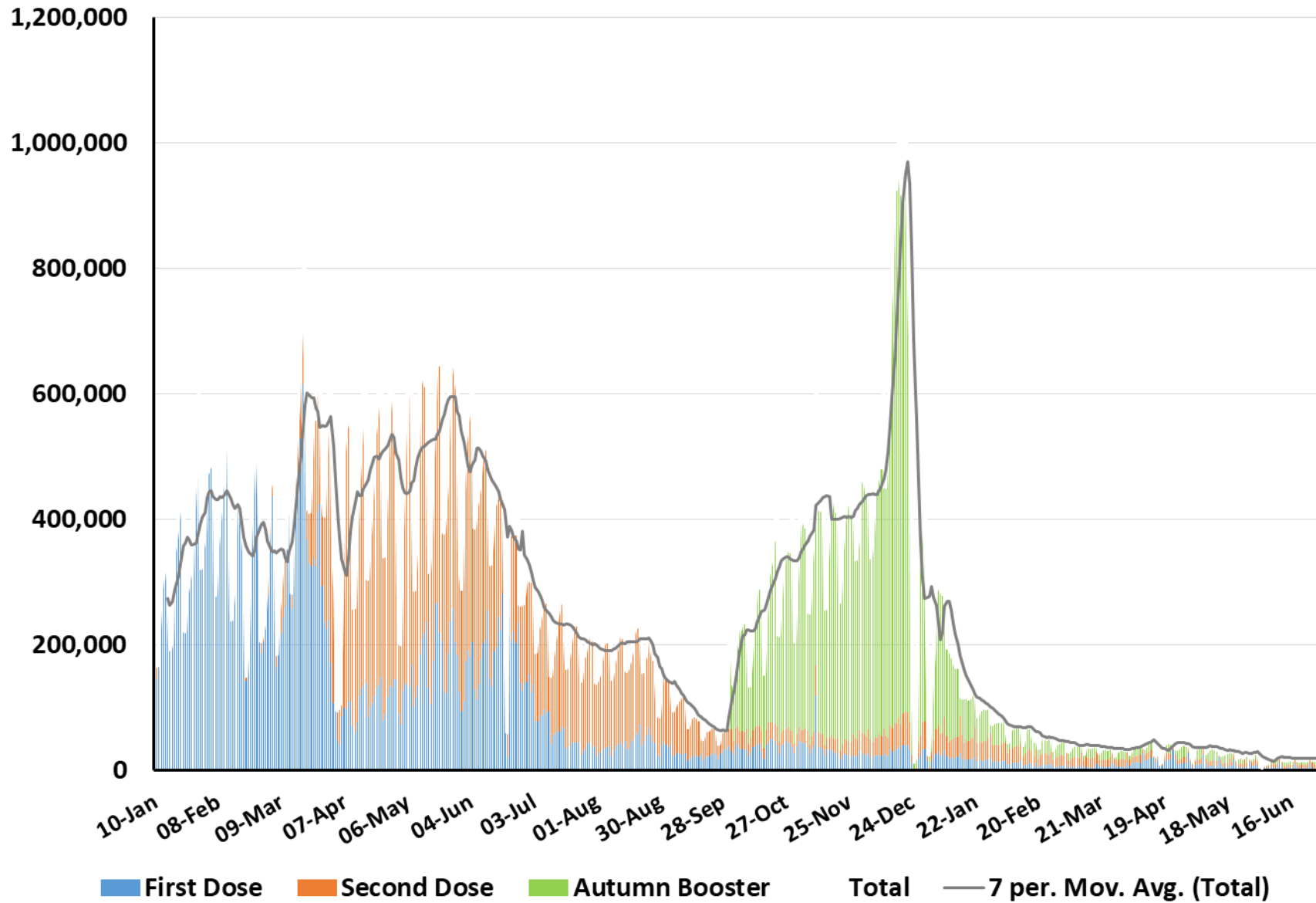
Percent of Total Population Unvaccinated, First Dose, Second Dose, and Autumn Booster – Latest Data

(Source: Covid Daily Update and Mid-2020 ONS Population Estimates)



Number of First, Second, and Autumn Booster Doses given by Day in the UK Jan 11, 2021 to Jun 29, 2022

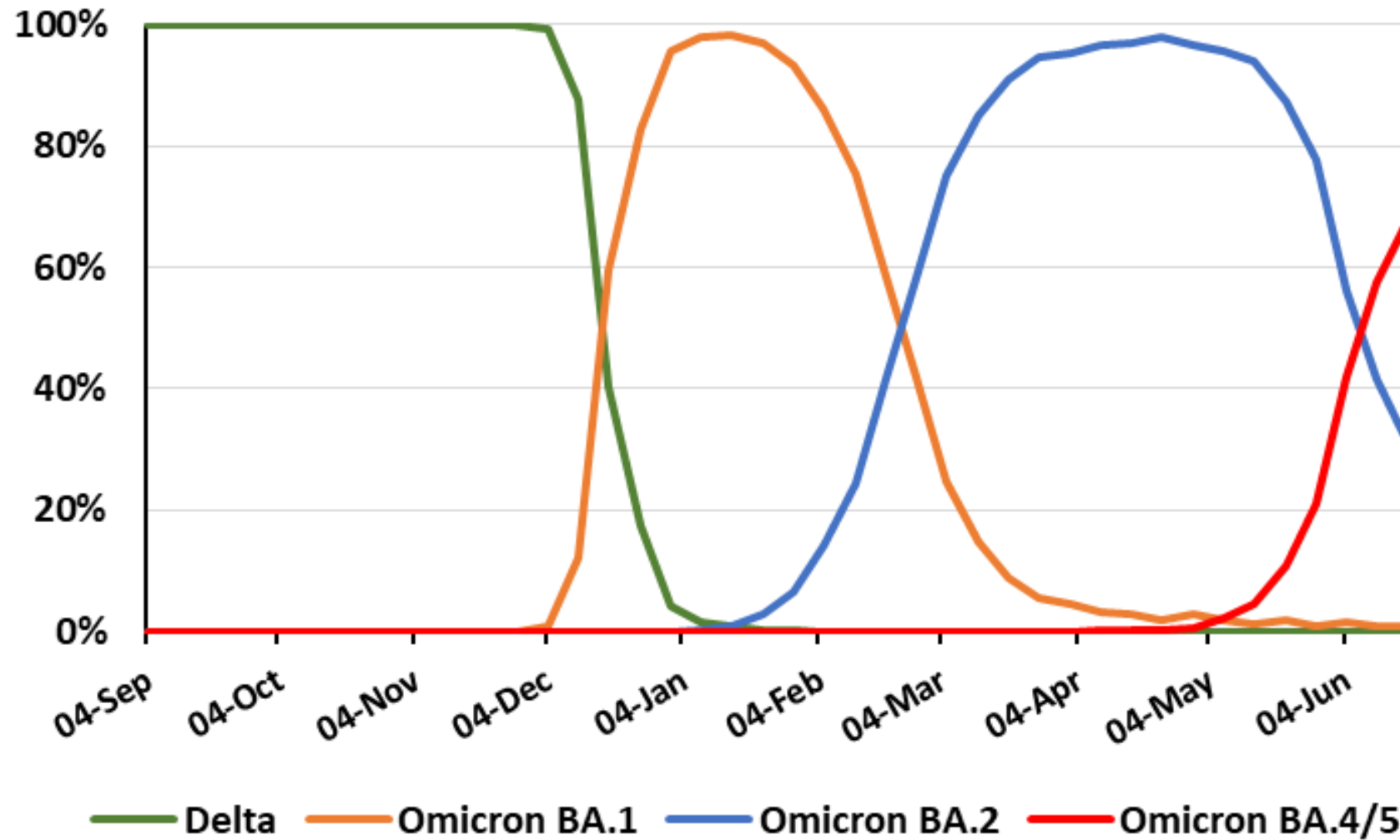
(Source: Covid Daily Update)



VARIANTS

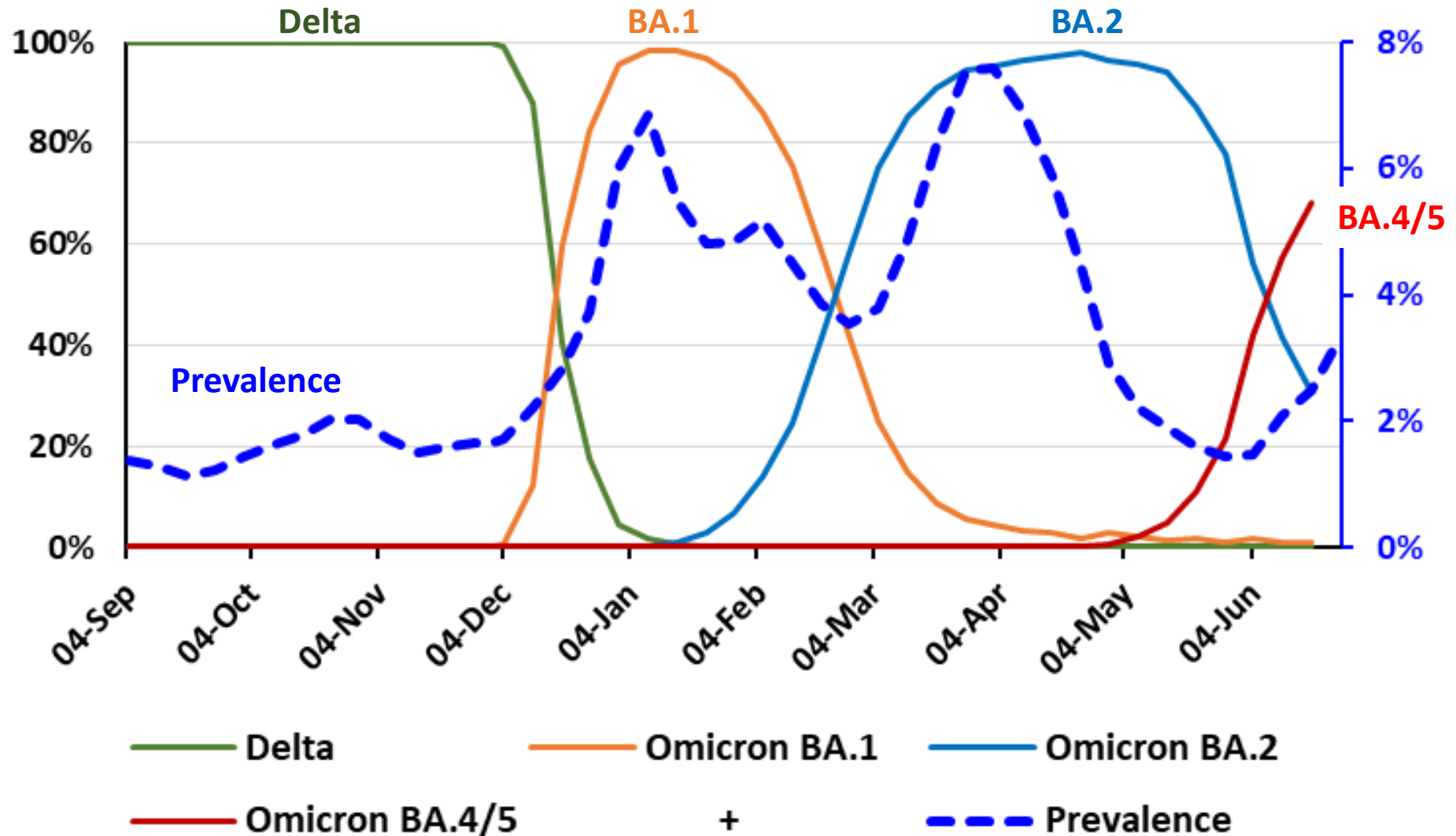
Percent of Variants by Week for England: Sep 4 2021 to Jun 18 2022

(Source: Sanger Institute COVID-19 Genomic Surveillance Website)



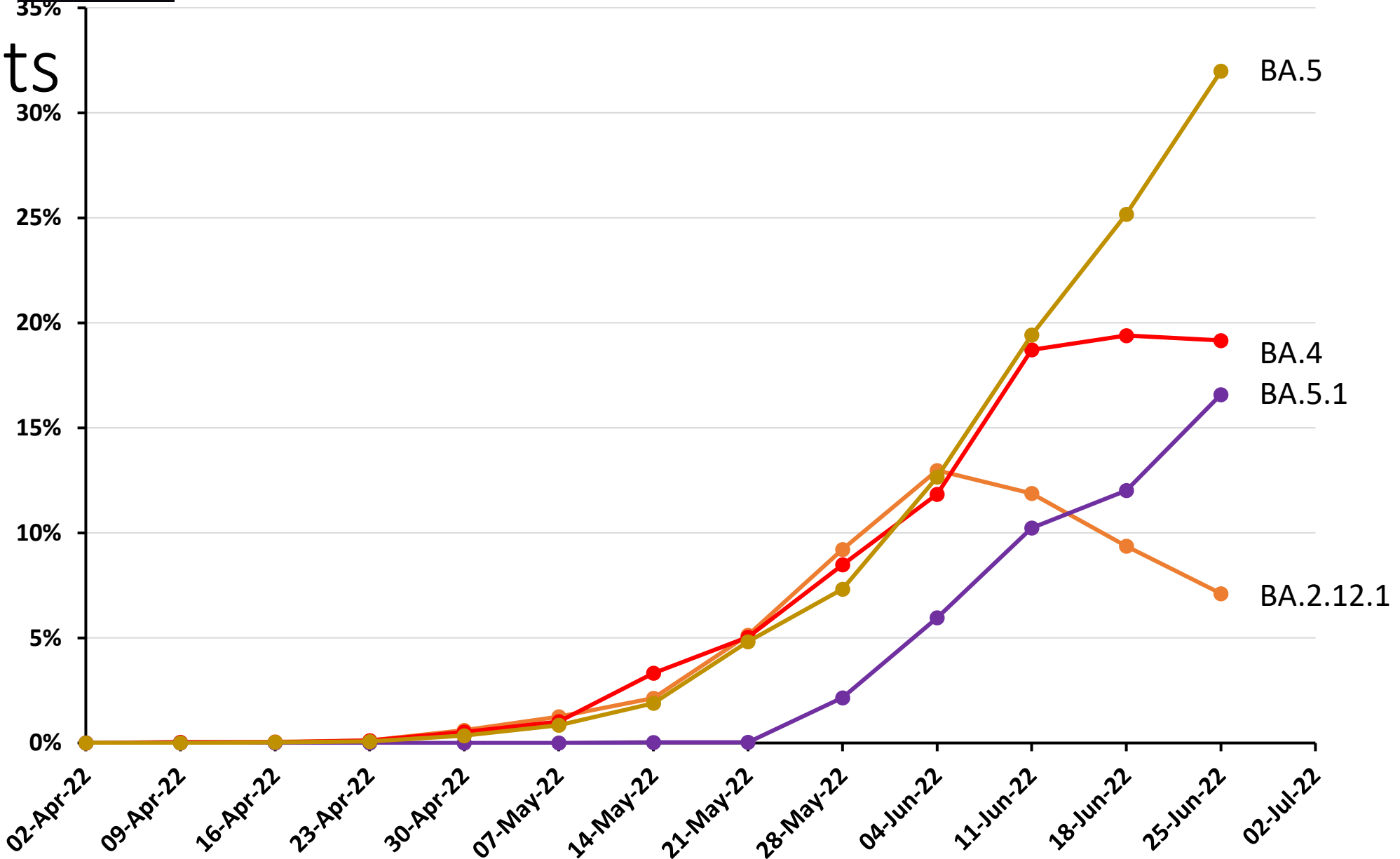
Proportion of Variants and Prevalence by Week for England Sep 4 2021 to Jun 25 2022

(Source: ONS Coronavirus (COVID-19) Infection Survey results and Sanger Institute COVID-19 Genomic Surveillance Website)



Thanks to Bob Hawkins for the chart

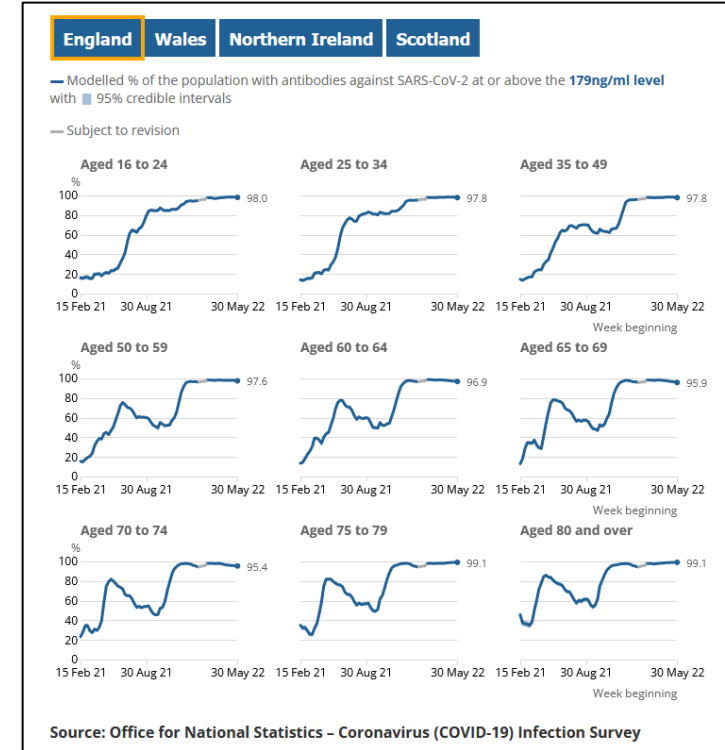
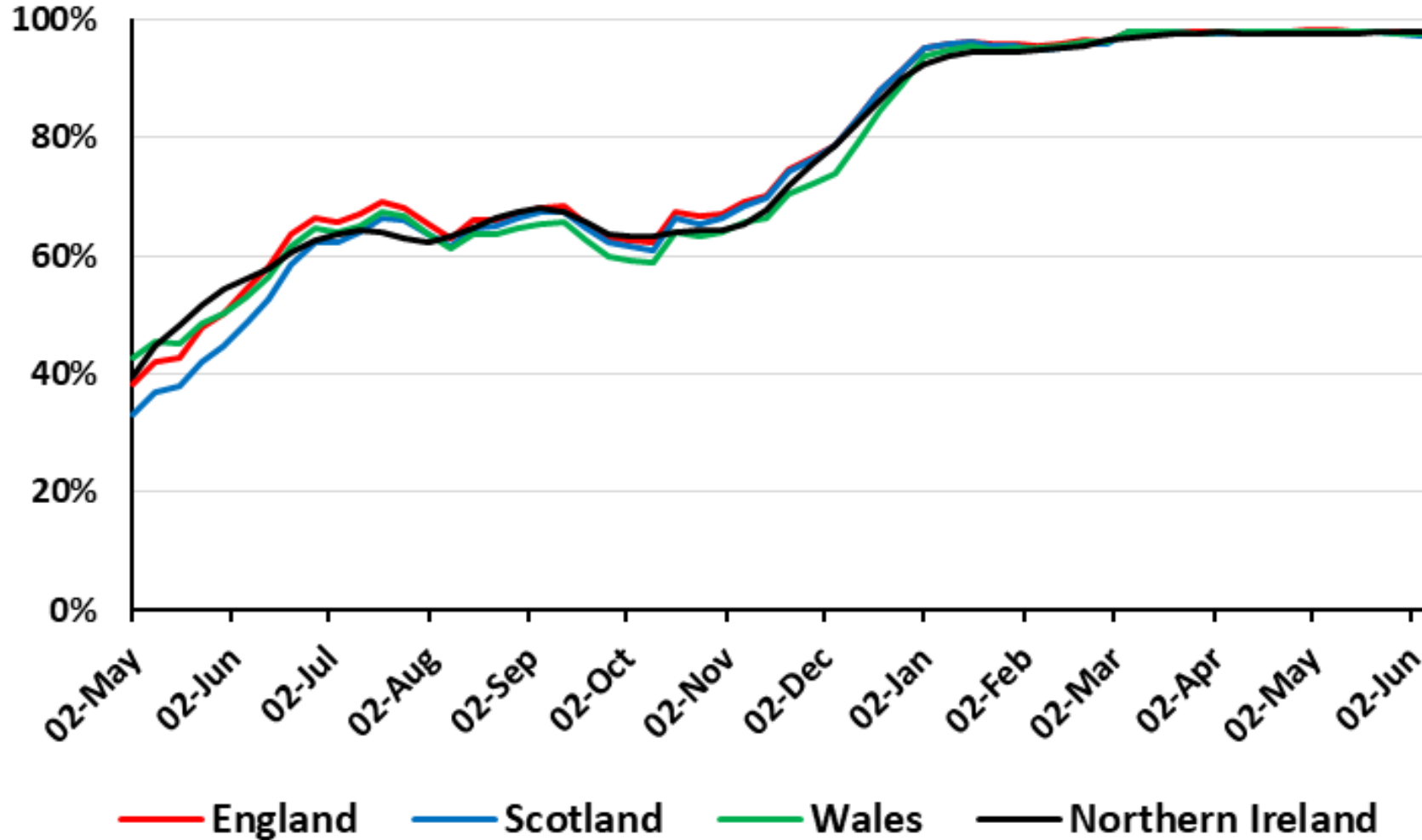
Variants



Thanks to Christina Pagel for the chart. Data: COG

Percent of adults aged 16 years and over estimated to have antibodies against Covid by Nation: 1 May 2021 to 5 Jun 2022

(Source: ONS Coronavirus (COVID-19) antibody and vaccination data for the UK)



How you can continue to keep yourself and your loved ones safe

Vaccines

Get vaccinated to reduce your risk of catching COVID-19 and becoming seriously ill, and to reduce the risk of spreading the virus to others.

Fresh air

Letting fresh air in if meeting indoors, or meeting outside to disperse COVID-19 particles and reduce the risk of spreading the virus.

Face covering

Considerer wearing a face covering in crowded, enclosed spaces.

Stay at home if unwell

Try to stay at home if you are unwell.

Hand washing

Wash your hands regularly to limit the spread of COVID-19.

Source: UKHSA, Accessed 1 July 2022

<https://www.gov.uk/government/publications/vaccine-update-issue-330-june-2022-covid-19-spring-special-edition/vaccine-update-issue-330-june-2022-covid-19-spring-special-edition>

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