Isle of Man Government

Reiltys Ellan Vannin



# COVID-19 Weekly Surveillance Report

*12 August 2022*

**Public Health Directorate**

# Introduction

This report is a summary of indicators which are used to understand the dynamics of the spread of COVID-19 on the Isle of Man.

From Thursday 7 July 2022, the Public Health Weekly Surveillance Report will move to a Friday publication. The last Thursday publication of this report will be Thursday 7 July 2022. The period of data reported within each report will remain the same (i.e. report published 15 July 2022 is for data up to and including 10 July 2022).

The COVID-19 results are a combination of positive PCR and LFD tests.

The report has been compiled by the Public Health Intelligence Team using data from Manx Care, the Civil Registry and the Lateral Flow Device (LFD) test system.

# Key Points

- The current 7-day average for reported positive results is 15.
- The trend of case numbers reported from testing shows a plateau this week.
- The effective reproduction number ($R_t$) was 0.9 this week.
- The snapshot of the Hospital is not available in this week's report.
- The latest ONS Infection Survey[1] shows the percentage of people testing positive for COVID-19 continues to decrease in England, Wales, and Scotland; the trend remained uncertain in Northern Ireland.

# Wave Surveillance

- This week saw a decrease or plateau in case numbers across all age groups. The effective reproduction number ($R_t$) increased from 0.5 to 0.9 this week. It is worth noting that $R_t$ values, as seen in the daily $R_t$ table (Appendix 1), are sensitive to large fluctuations when daily case numbers are small. Therefore, consideration should be taken of other epidemiological data to gain a true understanding of patterns of spread.

- Case ascertainment and calculation of the reproduction number is, of course, dependent on patterns of testing and reporting so it is likely that there are more cases than are currently notified. This caveat has applied throughout the pandemic when COVID-19 has been transmitting on Island, although the change to LFD self testing and self reporting may have impacted on that to an unknown extent. Further changes to testing guidance published on 1 April 2022 are likely having an additional impact. This week we have seen a slight increase in seven day average daily reporting from 14 to 15.

- It should be noted that due to the differences in testing strategies on the Isle of Man compared to the UK, comparisons are shown for guidance only.

# United Kingdom COVID-19 Infection Survey[1]

The following points are for the week ending 25 July 2022 for Wales and Northern Ireland, and the week ending 26 July 2022 for England and Scotland.

- The percentage of people testing positive for coronavirus (COVID-19) continued to decrease in England, Wales and Scotland; and the trend remained uncertain in Northern Ireland.

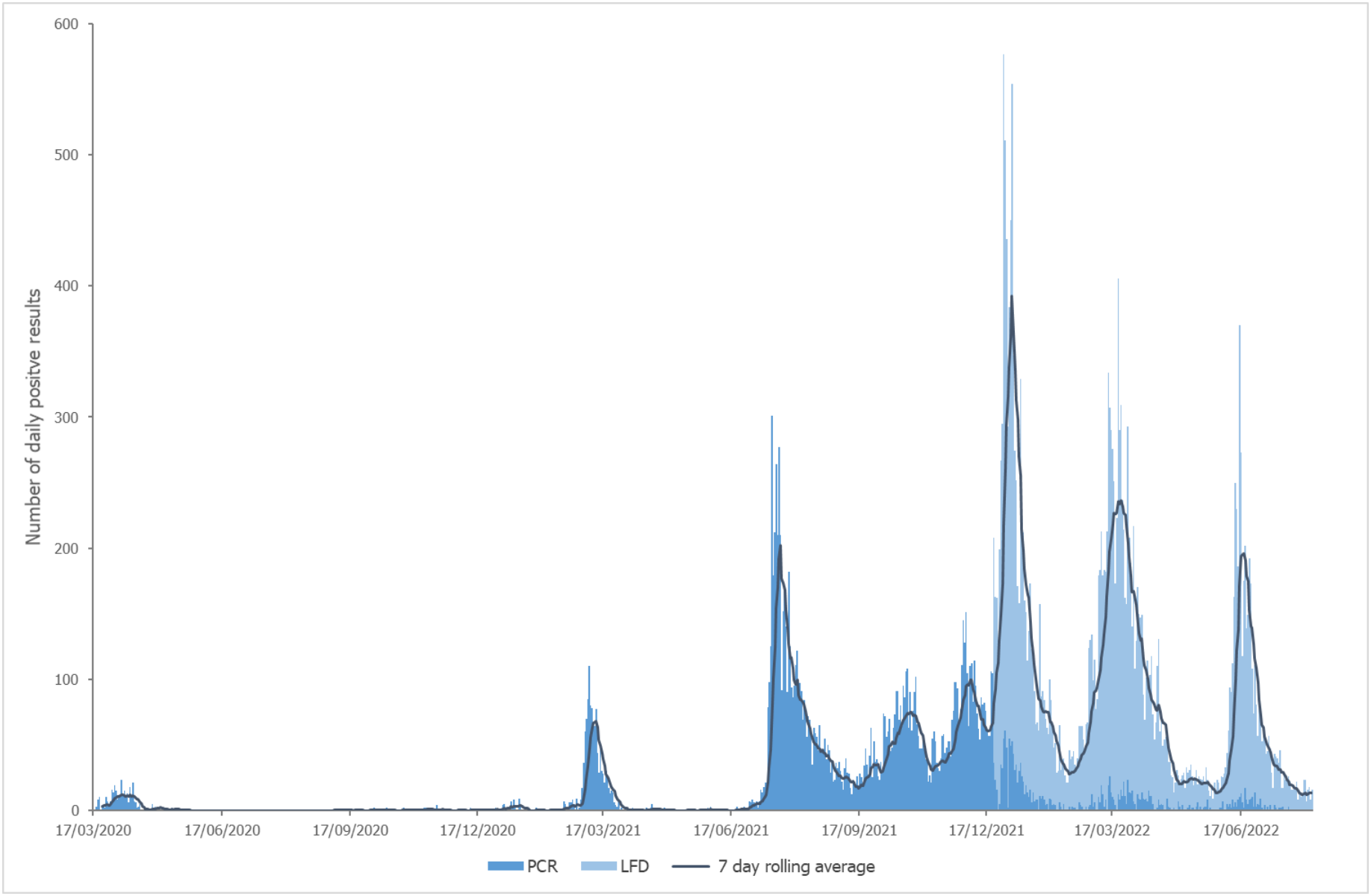
- In England, the estimated number of people testing positive for COVID-19 was 2,106,000 (95% credible interval: 1,987,200 to 2,234,800), equating to 3.86% of the population, or around 1 in 25 people.

- In Wales, the estimated number of people testing positive for COVID-19 was 108,800 (95% credible interval: 84,500 to 136,200), equating to 3.58% of the population, or around 1 in 30 people.

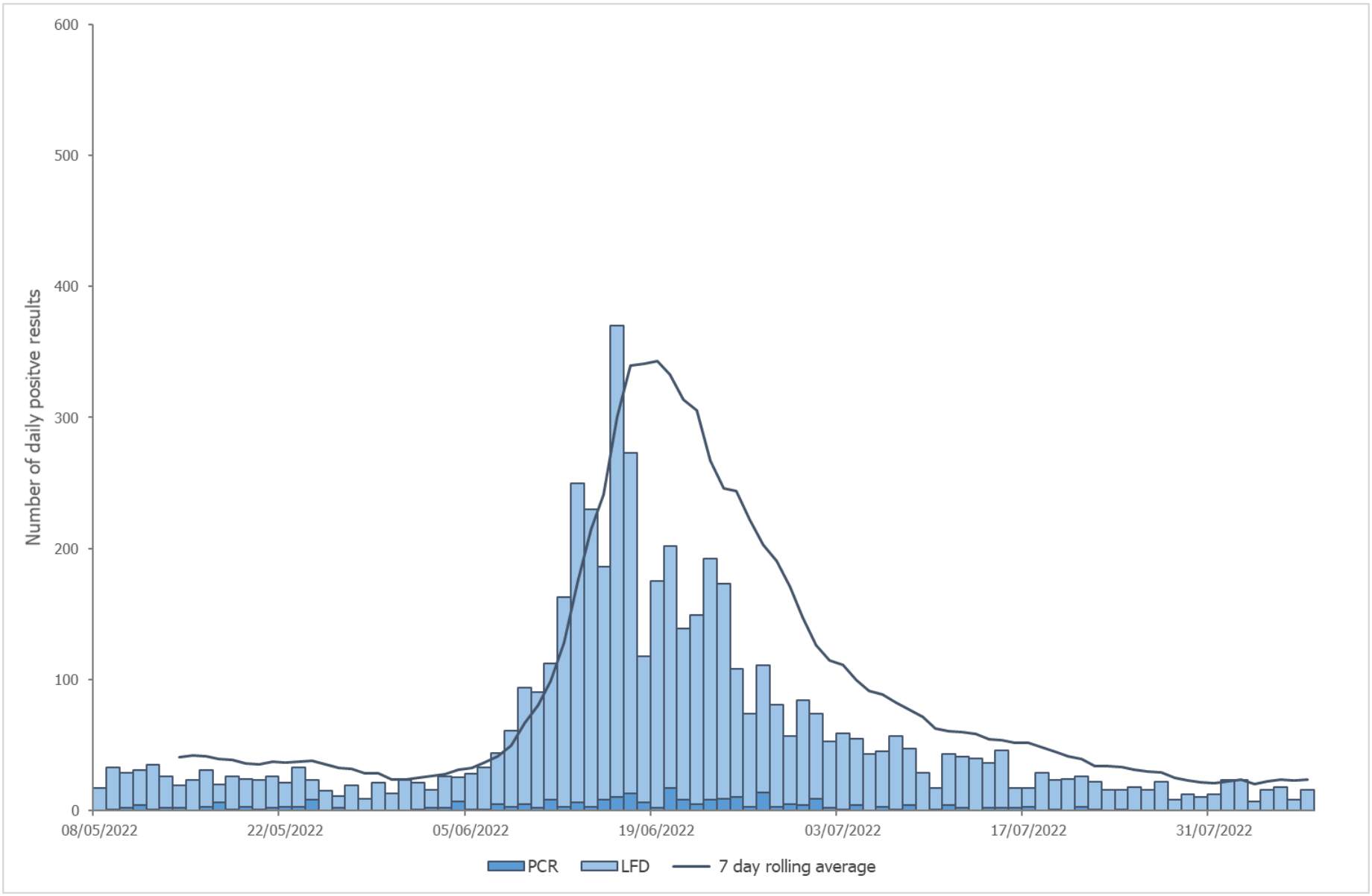
- In Northern Ireland, the estimated number of people testing positive for COVID-19 was 109,800 (95% credible interval: 83,500 to 138,300), equating to 5.98% of the population, or around 1 in 17 people.

- In Scotland, the estimated number of people testing positive for COVID-19 was 260,800 (95% credible interval: 211,900 to 314,700), equating to 4.95% of the population, or around 1 in 20 people.

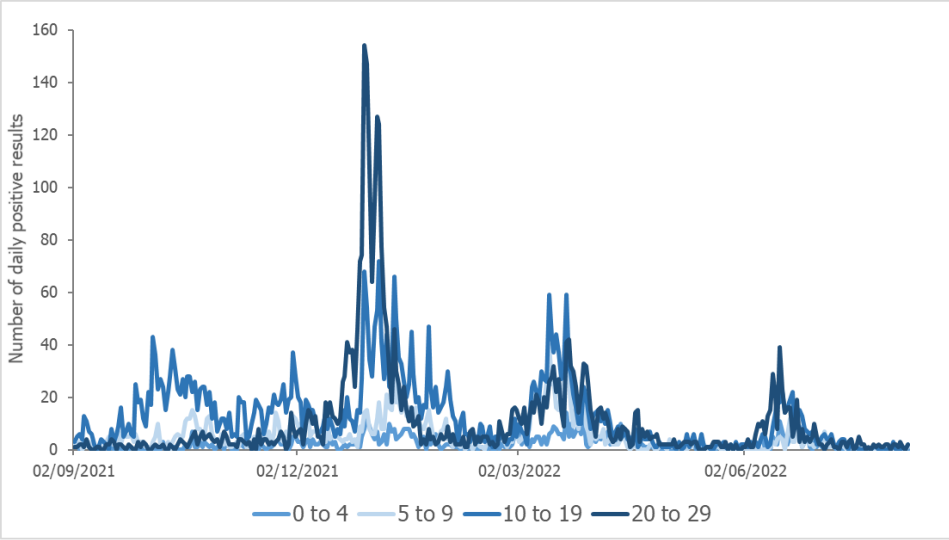
# Positive COVID-19 Tests – Whole Pandemic

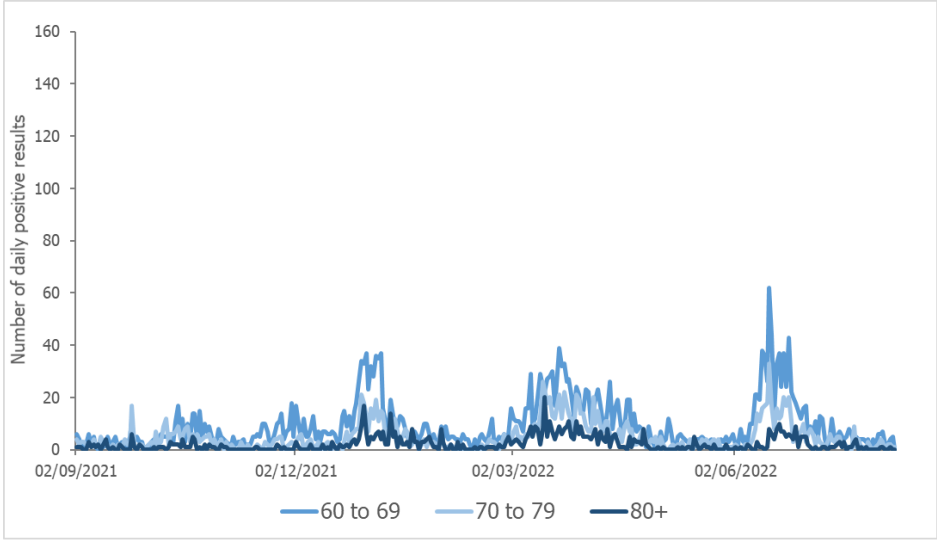


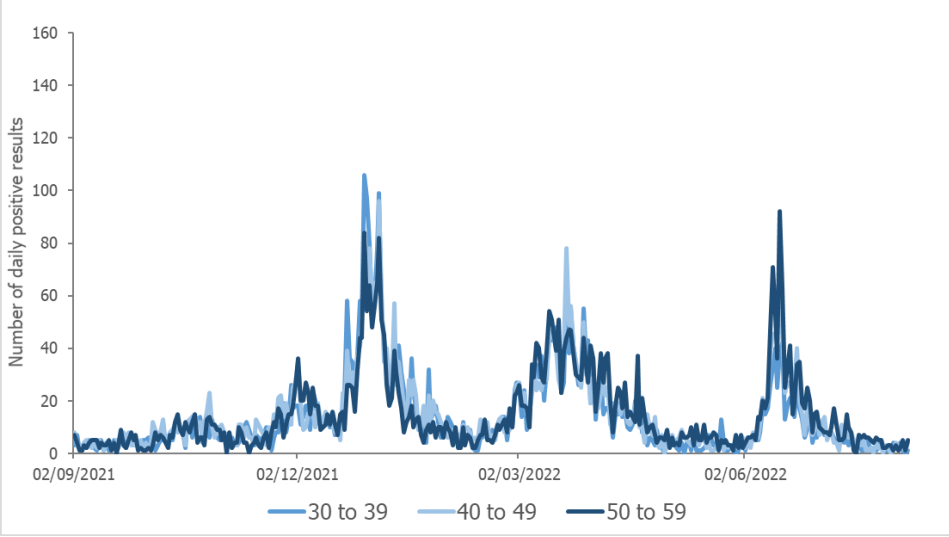
# Daily Positive Results – Latest 3-months

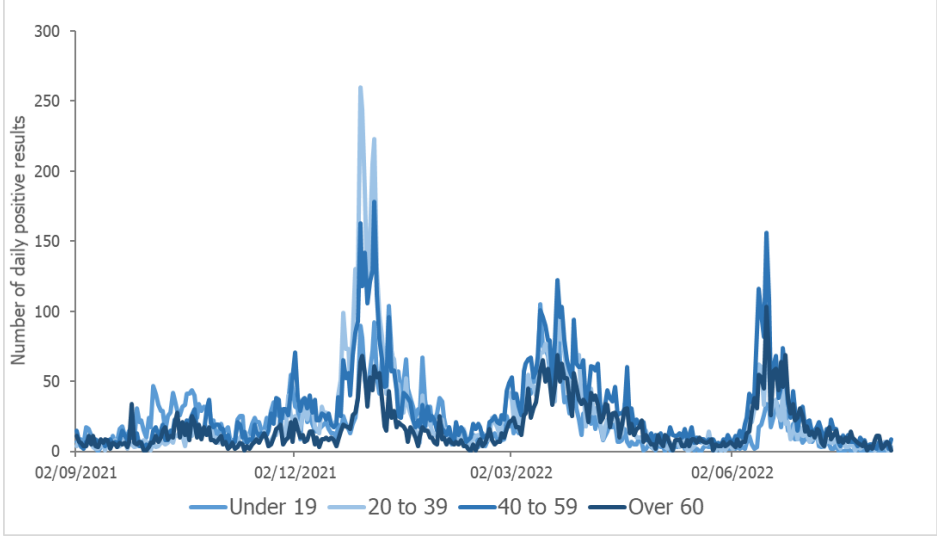


# Age Group Analysis

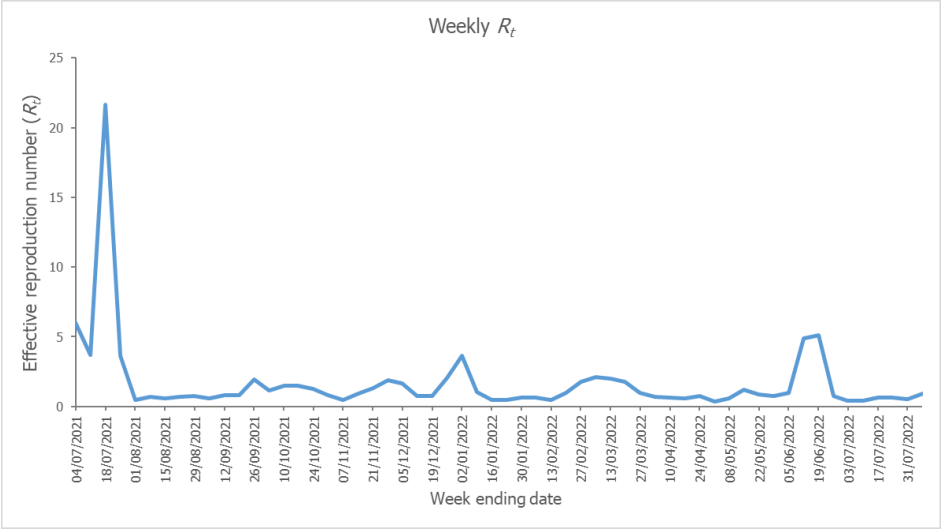


# Effective Reproduction Number ($R_t$)



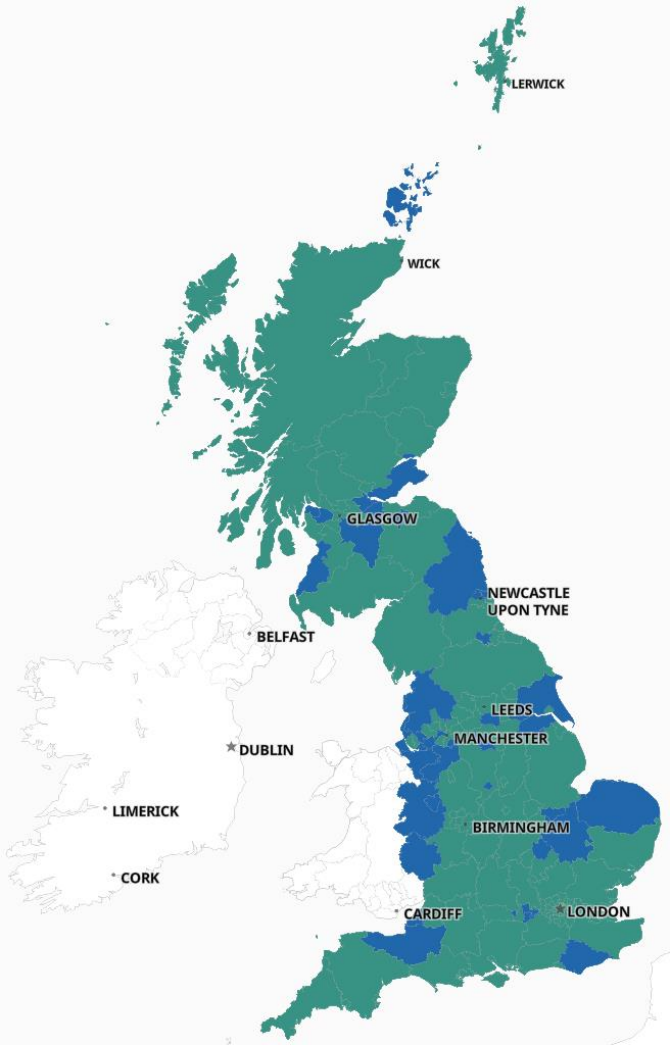

Latest 7 day $R_t$ = 0.9

- The Effective Reproduction Number ($R_t$) represents the number of secondary infections generated by each case over time 't' (over a week as presented here) and can be dramatically modified by applying effective interventions.
- When $R_t > 1$ there are more new infections than recoveries, thus the number of infected individuals in the population is increasing, while for $R_t < 1$ the number of infected individuals must be decreasing for the opposite reason.
- The calculation of $R_t$ is as follows[2]:

$$R_t\,(t_i) = \frac{\text{New Infections}}{\text{New Recoveries} + \text{New Deaths}}$$

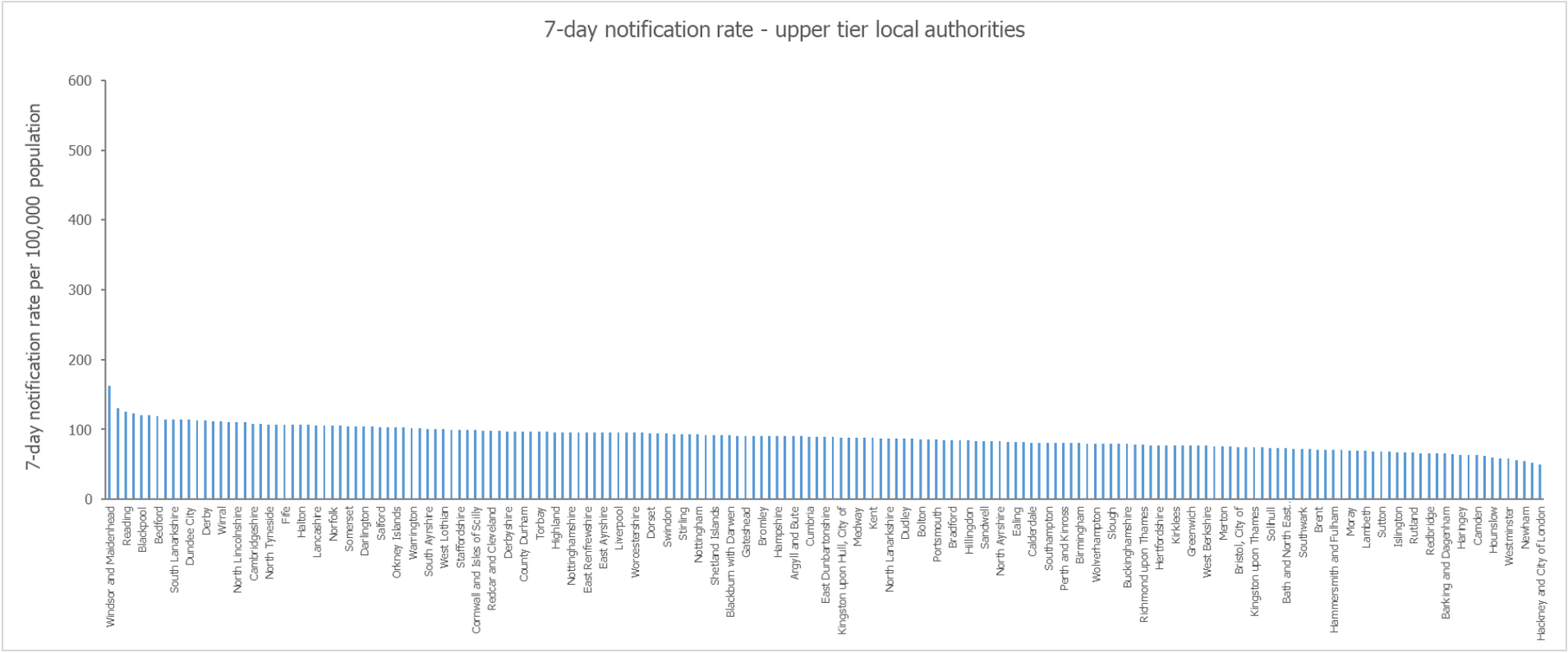
- The UK uses a more complex method of estimating $R_t$ which we are not able to replicate here. The use of this simplified methodology limits the robustness of comparing our $R_t$ value with UK estimates, however it provides a useful comparison between different time periods on Island. New Recoveries is calculated using the presumed 10 day recovery period from positive test result.
- A full table of daily $R_t$ values for the current wave is available in Appendix 1.
- It is worth noting that $R_t$ values, as seen in the daily $R_t$ table (Appendix 1), are sensitive to large fluctuations when daily reported case numbers are small. Therefore, consideration should be taken of other epidemiological data to gain a true understanding of patterns of spread.

# 7-day Notification Rate Area Comparison



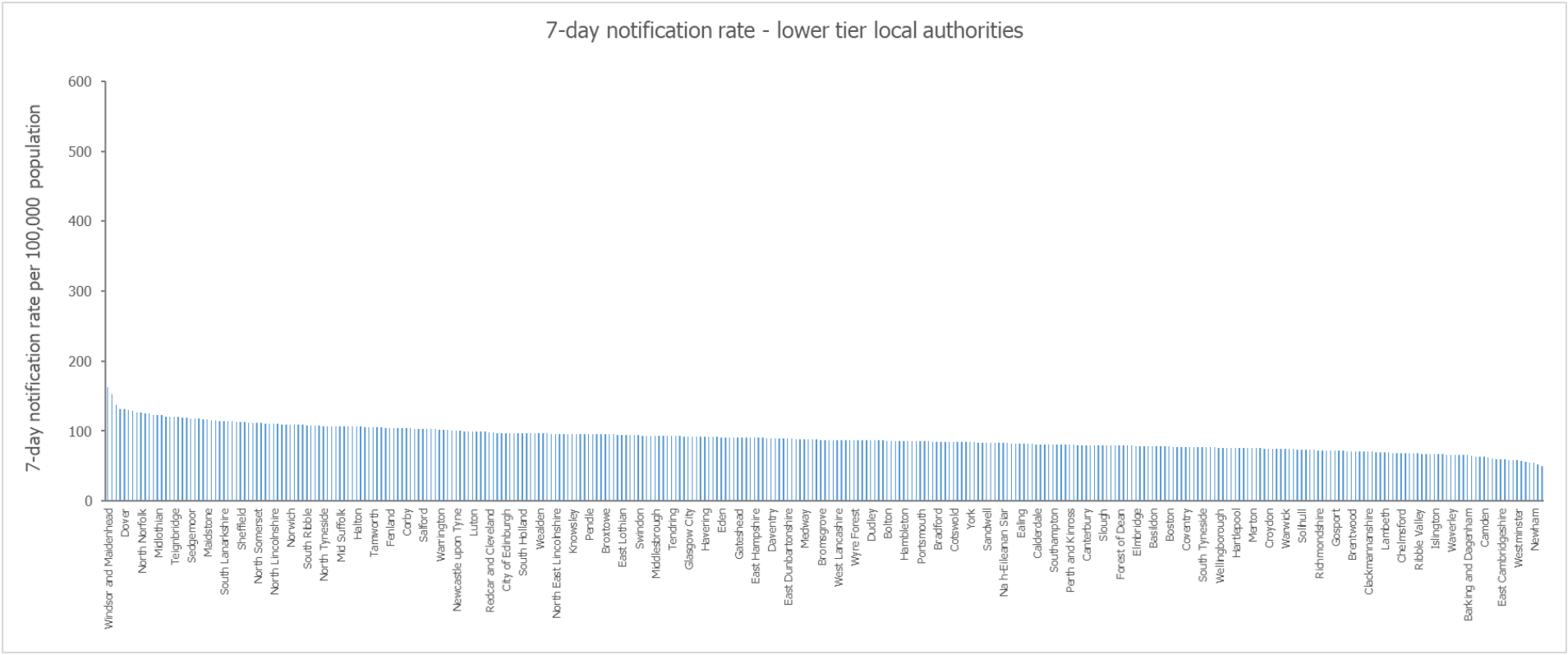

It should be noted that there are two reasons why data may not be shown. Firstly, data is not shown for areas with fewer than 3 cases at middle layer super output area (MSOA) level, to protect individuals' identity. Secondly, data may not be shown if the data is delayed or unavailable. It should also be noted that Isle of Man data is not shown here due to the lack of comparability of data resulting from the differences in testing availability and strategy on the Isle of Man compared to the UK.

# 7-day Notification Rate – UK Upper Tier Local Authorities



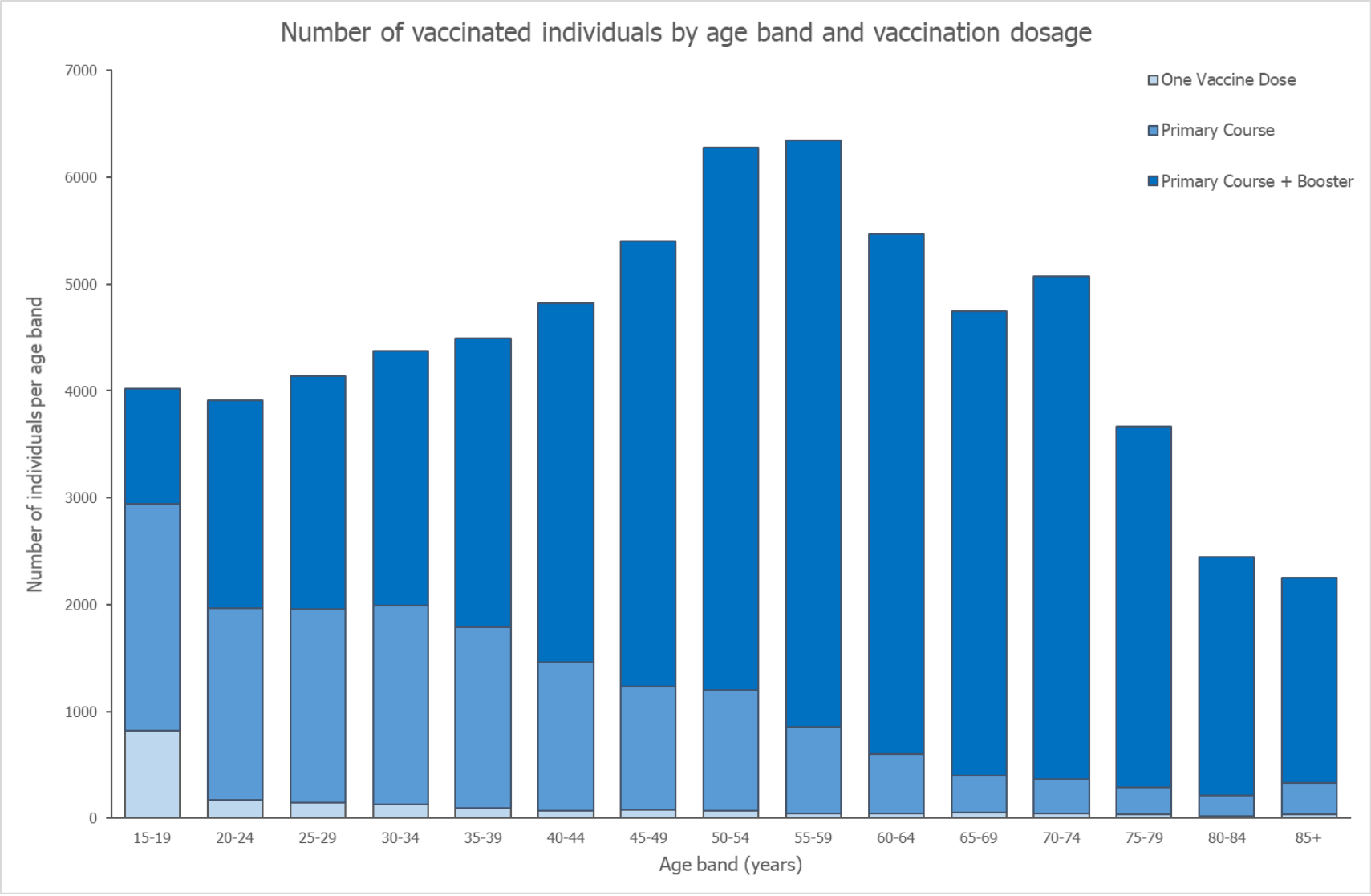

The data shown here is 7-day notification rate per 100,000 population for Upper Tier Local Authorities in the United Kingdom. It should be noted that Isle of Man data is not shown here due to the lack of comparability of data resulting from the differences in testing availability and strategy on the Isle of Man compared to the UK.

# 7-day Notification Rate – UK Lower Tier Local Authorities



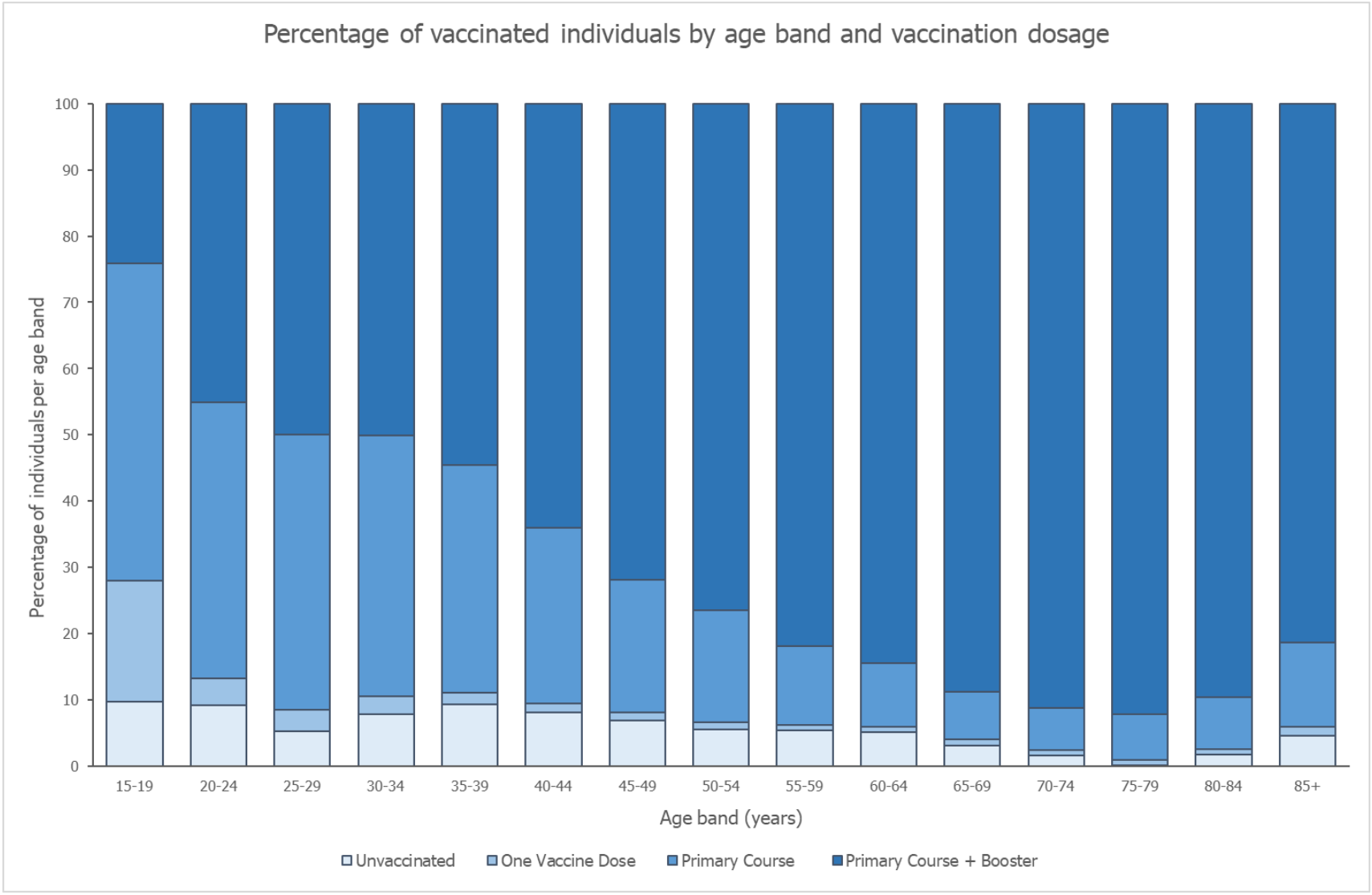

The data shown here is 7-day notification rate per 100,000 population for Lower Tier Local Authorities in the United Kingdom. It should be noted that Isle of Man data is not shown here due to the lack of comparability of data resulting from the differences in testing availability and strategy on the Isle of Man compared to the UK.

# Vaccine Uptake and Coverage




Please note that, due to data system issues this week's report does not contain updated data for vaccine uptake and coverage.

# Vaccine Uptake and Coverage




This data uses the 2021 Census populations as reference for eligible population[3]. Please note that, due to data system issues this week's report does not contain updated data for vaccine uptake and coverage.

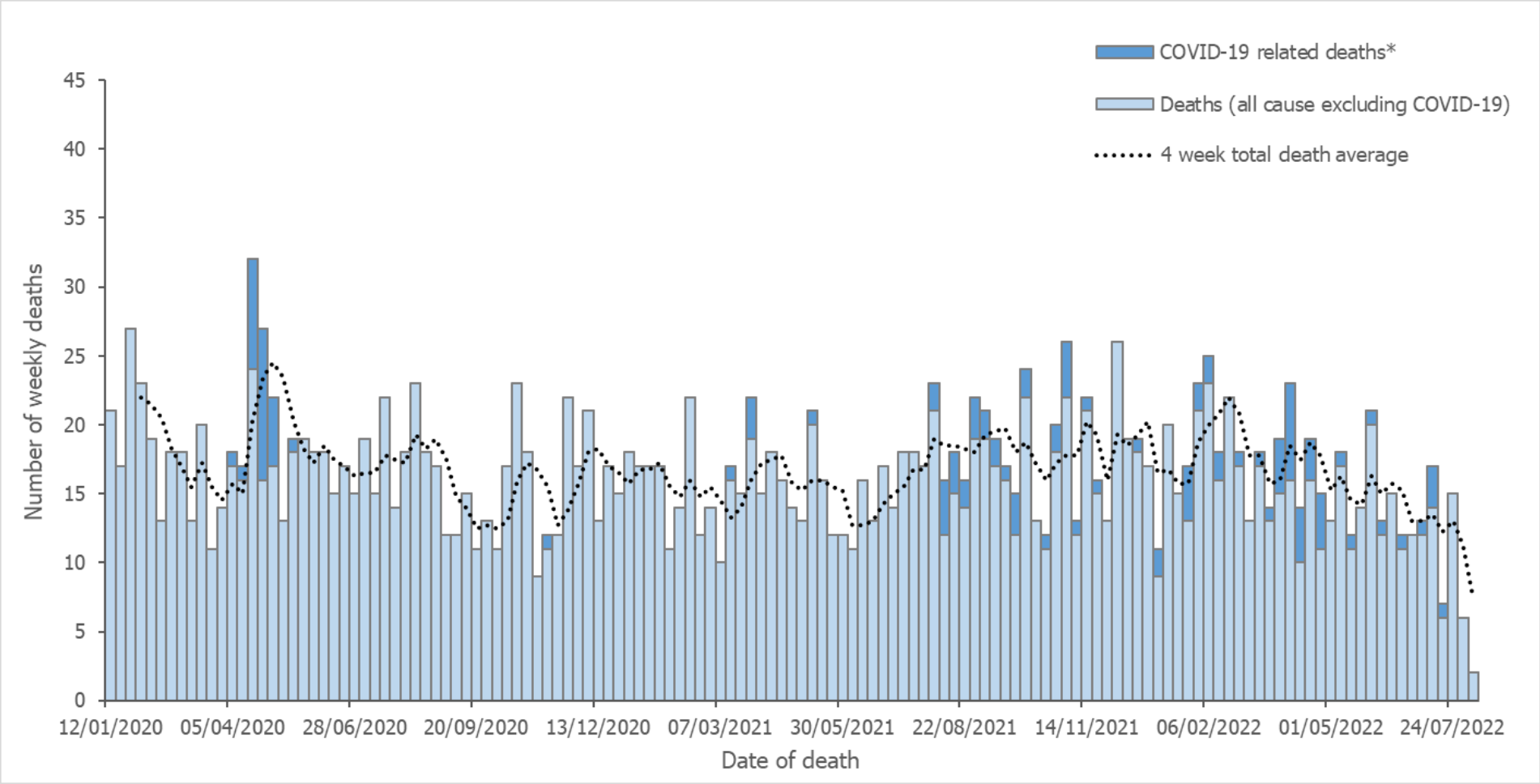
# Hospitalised Patients

Due to small numbers, and the associated caveats and identifiability, the Hospital snapshot is not available in this week's report.

# Hospitalised Patients

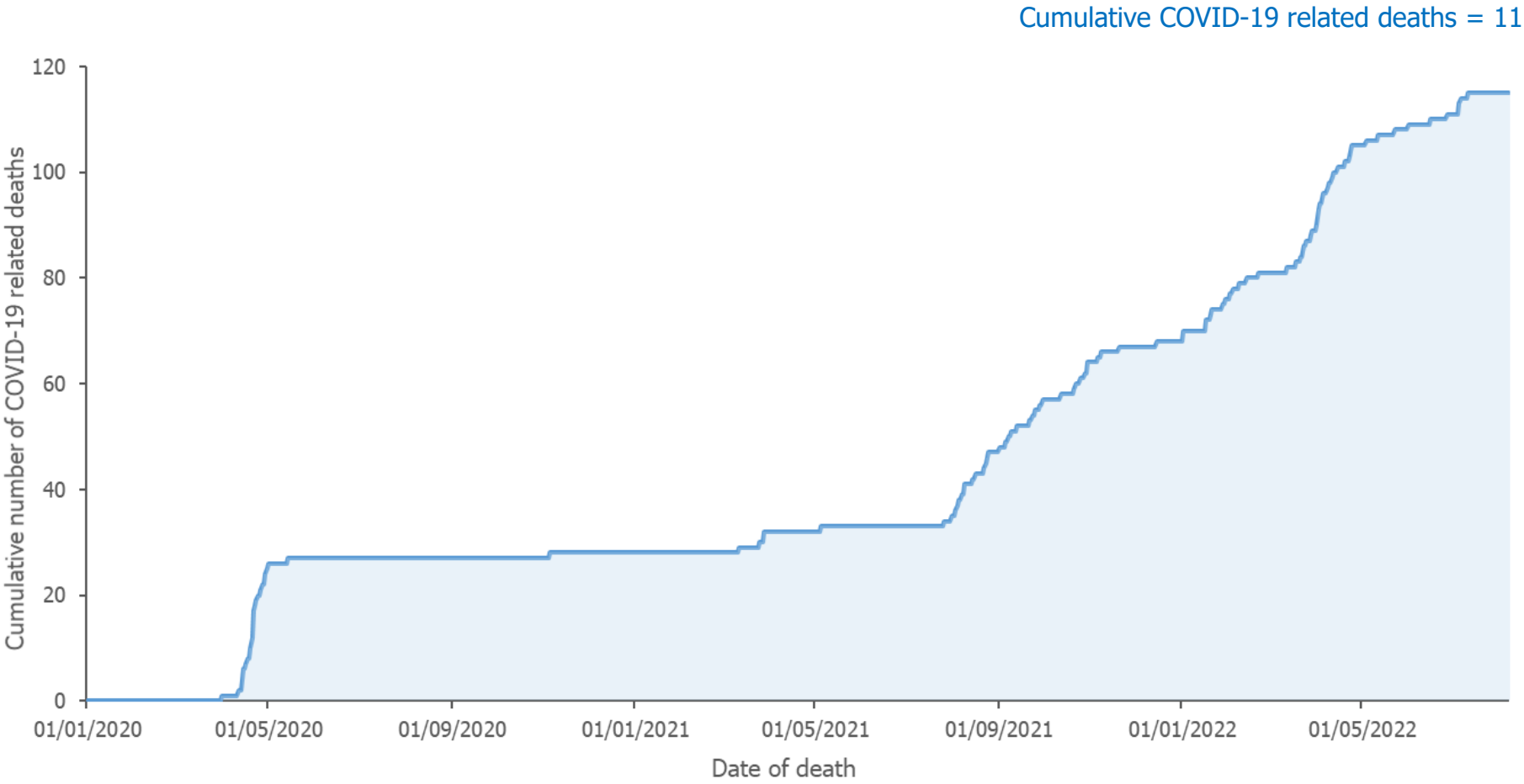
Due to small numbers, and the associated caveats and identifiability, the additional narrative for the Hospital snapshot is not available in this week's report.

# Weekly Deaths – Whole Pandemic

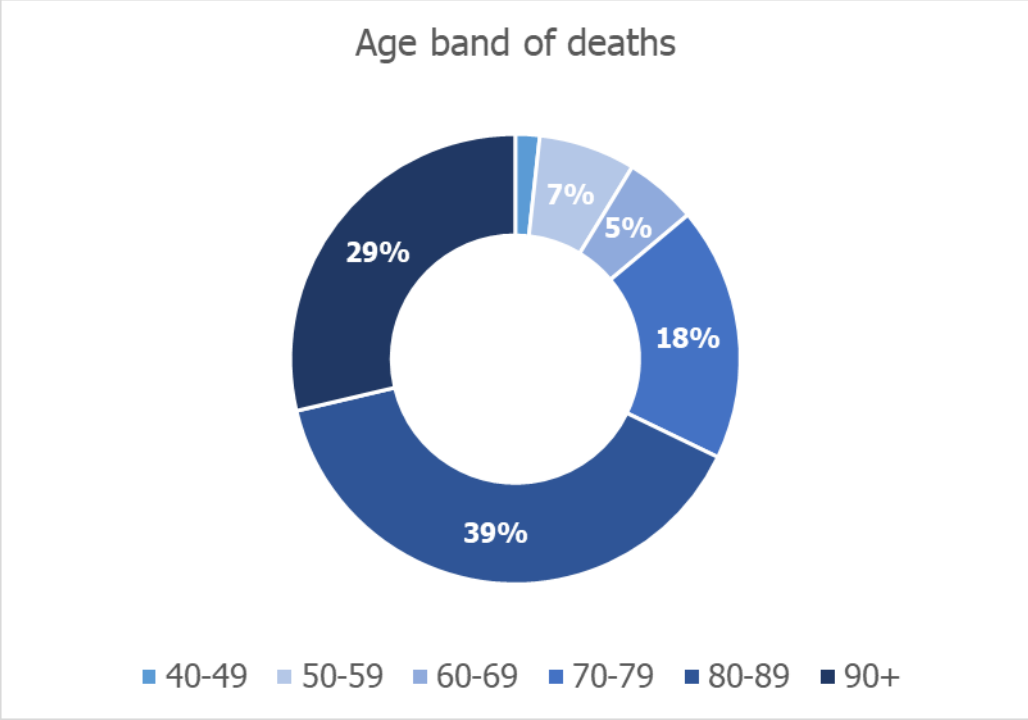



- *COVID-19 related deaths are those where COVID-19 is mentioned anywhere on the death certificate.
- Death registrations are often delayed and therefore deaths occurring in a given week may not be input into the week of which death occurred until a later date, meaning figures are likely to change retrospectively as data is updated. This also means that the most recent numbers will be incomplete at the time of release, and will update in subsequent reports.

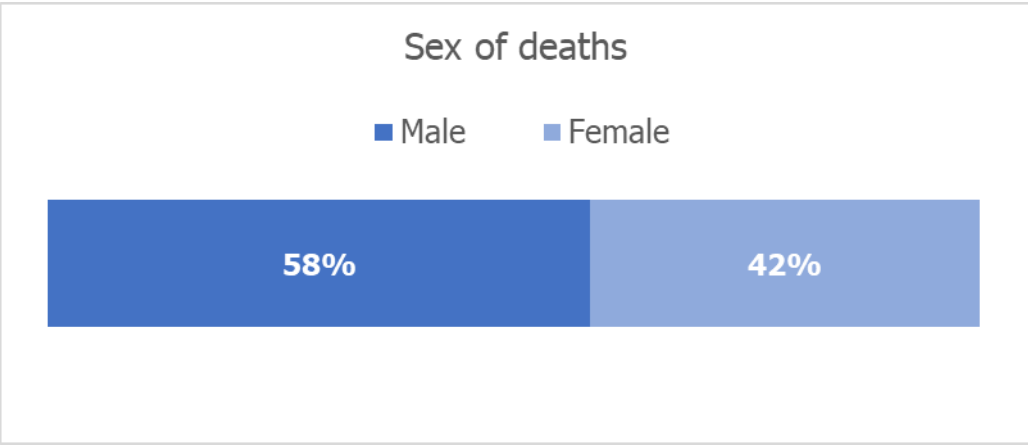
# Cumulative COVID-19 Related Deaths



# COVID-Related Deaths Overview




| Age band of deaths | No. of deaths | % of total deaths |
|---|---|---|
| 40-49 | 2 | 1.7% |
| 50-59 | 8 | 7.0% |
| 60-69 | 6 | 5.2% |
| 70-79 | 21 | 18.3% |
| 80-89 | 45 | 39.1% |
| 90+ | 33 | 28.7% |




| Place of death | No. of deaths |
|---|---|
| Hospital | 53 |
| Hospice | 4 |
| Nursing/Residential Home | 46 |
| Domestic Property | 12 |

# Definitions

**Vaccination Status**

- One dose = those who have received only one dose
- Primary Course = those who have received a full course (two or three dose). Third dose, those with immunosuppression only.
- Primary Course + Booster = a full course plus a booster(s)

# Appendix 1

| Date | Daily $R_t$ | Date | Daily $R_t$ | Date | Daily $R_t$ | Date | Daily $R_t$ | Date | Daily $R_t$ | Date | Daily $R_t$ | Date | Daily $R_t$ | Date | Daily $R_t$ | Date | Daily $R_t$ | Date | Daily $R_t$ | Date | Daily $R_t$ | Date | Daily $R_t$ | Date | Daily $R_t$ | Date | Daily $R_t$ | Date | Daily $R_t$ | Date | Daily $R_t$ | Date | Daily $R_t$ | Date | Daily $R_t$ | Date | Daily $R_t$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01-Jul | 6.00 | 20-Jul | 11.67 | 08-Aug | 0.67 | 27-Aug | 0.54 | 15-Sep | 1.63 | 04-Oct | 1.76 | 23-Oct | 0.99 | 11-Nov | 0.61 | 30-Nov | 2.74 | 19-Dec | 0.60 | 07-Jan | 0.86 | 26-Jan | 0.67 | 14-Feb | 0.92 | 05-Mar | 1.20 | 24-Mar | 0.71 | 12-Apr | 0.90 | 01-May | 0.28 | 20-May | 0.79 | 08-Jun | 2.76 |
| 02-Jul | 2.67 | 21-Jul | 13.14 | 09-Aug | 0.73 | 28-Aug | 0.79 | 16-Sep | 0.59 | 05-Oct | 1.14 | 24-Oct | 0.67 | 12-Nov | 0.67 | 01-Dec | 3.12 | 20-Dec | 1.43 | 08-Jan | 0.30 | 27-Jan | 0.46 | 15-Feb | 1.34 | 06-Mar | 1.57 | 25-Mar | 0.70 | 13-Apr | 0.79 | 02-May | 0.63 | 21-May | 0.90 | 09-Jun | 6.85 |
| 03-Jul | 6.00 | 22-Jul | 9.55 | 10-Aug | 0.64 | 29-Aug | 0.34 | 17-Sep | 0.70 | 06-Oct | 2.24 | 25-Oct | 1.09 | 13-Nov | 0.77 | 02-Dec | 2.19 | 21-Dec | 1.69 | 09-Jan | 0.31 | 28-Jan | 0.56 | 16-Feb | 1.37 | 07-Mar | 3.96 | 26-Mar | 0.56 | 14-Apr | 0.69 | 03-May | 0.50 | 22-May | 0.60 | 10-Jun | 3.83 |
| 04-Jul | 5.00 | 23-Jul | 1.13 | 11-Aug | 0.76 | 30-Aug | 0.51 | 18-Sep | 0.86 | 07-Oct | 1.13 | 26-Oct | 1.13 | 14-Nov | 1.05 | 03-Dec | 1.38 | 22-Dec | 3.85 | 10-Jan | 0.77 | 29-Jan | 0.53 | 17-Feb | 0.70 | 08-Mar | 2.77 | 27-Mar | 0.57 | 15-Apr | 0.49 | 04-May | 0.38 | 23-May | 1.22 | 11-Jun | 4.95 |
| 05-Jul | 7.00 | 24-Jul | 1.56 | 12-Aug | 0.63 | 31-Aug | 0.78 | 19-Sep | 0.64 | 08-Oct | 1.89 | 27-Oct | 1.59 | 15-Nov | 2.59 | 04-Dec | 0.65 | 23-Dec | 1.88 | 11-Jan | 0.76 | 30-Jan | 0.63 | 18-Feb | 1.16 | 09-Mar | 3.18 | 28-Mar | 1.17 | 16-Apr | 0.37 | 05-May | 0.44 | 24-May | 1.21 | 12-Jun | 10.00 |
| 06-Jul | 0.67 | 25-Jul | 1.35 | 13-Aug | 0.48 | 01-Sep | 0.68 | 20-Sep | 2.00 | 09-Oct | 1.15 | 28-Oct | 0.71 | 16-Nov | 2.15 | 05-Dec | 1.11 | 24-Dec | 2.00 | 12-Jan | 0.55 | 31-Jan | 1.48 | 19-Feb | 0.87 | 10-Mar | 1.44 | 29-Mar | 1.20 | 17-Apr | 0.45 | 06-May | 0.73 | 25-May | 0.65 | 13-Jun | 9.62 |
| 07-Jul | 7.00 | 26-Jul | 0.47 | 14-Aug | 0.40 | 02-Sep | 0.66 | 21-Sep | 3.62 | 10-Oct | 1.85 | 29-Oct | 0.66 | 17-Nov | 2.10 | 06-Dec | 1.20 | 25-Dec | 1.43 | 13-Jan | 0.35 | 01-Feb | 1.22 | 20-Feb | 1.03 | 11-Mar | 1.41 | 30-Mar | 0.83 | 18-Apr | 1.25 | 07-May | 0.78 | 26-May | 0.35 | 14-Jun | 9.20 |
| 08-Jul | 6.00 | 27-Jul | 0.52 | 15-Aug | 0.65 | 03-Sep | 0.77 | 22-Sep | 1.52 | 11-Oct | 2.74 | 30-Oct | 0.44 | 18-Nov | 0.87 | 07-Dec | 1.24 | 26-Dec | 2.62 | 14-Jan | 0.27 | 02-Feb | 1.03 | 21-Feb | 2.37 | 12-Mar | 1.35 | 31-Mar | 0.34 | 19-Apr | 1.90 | 08-May | 0.63 | 27-May | 0.95 | 15-Jun | 6.61 |
| 09-Jul | 7.00 | 28-Jul | 0.86 | 16-Aug | 0.63 | 04-Sep | 0.44 | 23-Sep | 1.09 | 12-Oct | 1.97 | 31-Oct | 0.43 | 19-Nov | 0.88 | 08-Dec | 1.48 | 27-Dec | 4.38 | 15-Jan | 0.33 | 03-Feb | 0.31 | 22-Feb | 3.05 | 13-Mar | 2.15 | 01-Apr | 0.75 | 20-Apr | 0.59 | 09-May | 1.32 | 28-May | 0.35 | 16-Jun | 11.21 |
| 10-Jul | 2.57 | 29-Jul | 0.48 | 17-Aug | 0.81 | 05-Sep | 0.33 | 24-Sep | 2.33 | 13-Oct | 3.03 | 01-Nov | 0.94 | 20-Nov | 1.00 | 09-Dec | 0.86 | 28-Dec | 5.16 | 16-Jan | 0.50 | 04-Feb | 0.57 | 23-Feb | 3.05 | 14-Mar | 2.90 | 02-Apr | 0.35 | 21-Apr | 0.66 | 10-May | 2.07 | 29-May | 0.88 | 17-Jun | 6.20 |
| 11-Jul | 3.50 | 30-Jul | 0.45 | 18-Aug | 0.56 | 06-Sep | 1.07 | 25-Sep | 2.33 | 14-Oct | 1.23 | 02-Nov | 0.53 | 21-Nov | 1.14 | 10-Dec | 0.51 | 29-Dec | 10.12 | 17-Jan | 0.71 | 05-Feb | 0.32 | 24-Feb | 1.17 | 15-Mar | 3.99 | 03-Apr | 0.54 | 22-Apr | 0.51 | 11-May | 1.38 | 30-May | 0.57 | 18-Jun | 1.93 |
| 12-Jul | 2.75 | 31-Jul | 0.31 | 19-Aug | 0.92 | 07-Sep | 1.05 | 26-Sep | 1.32 | 15-Oct | 0.96 | 03-Nov | 0.64 | 22-Nov | 2.16 | 11-Dec | 0.48 | 30-Dec | 4.82 | 18-Jan | 0.73 | 06-Feb | 0.36 | 25-Feb | 1.15 | 16-Mar | 3.41 | 04-Apr | 0.79 | 23-Apr | 0.53 | 12-May | 1.13 | 31-May | 0.88 | 19-Jun | 1.86 |
| 13-Jul | 13.33 | 01-Aug | 0.45 | 20-Aug | 0.80 | 08-Sep | 1.32 | 27-Sep | 1.89 | 16-Oct | 1.43 | 04-Nov | 0.50 | 23-Nov | 2.53 | 12-Dec | 0.36 | 31-Dec | 4.15 | 19-Jan | 0.76 | 07-Feb | 0.91 | 26-Feb | 1.61 | 17-Mar | 1.55 | 05-Apr | 0.93 | 24-Apr | 0.47 | 13-May | 0.96 | 01-Jun | 1.00 | 20-Jun | 2.23 |
| 14-Jul | 19.60 | 02-Aug | 1.22 | 21-Aug | 0.64 | 09-Sep | 1.17 | 28-Sep | 1.42 | 17-Oct | 1.07 | 05-Nov | 0.24 | 24-Nov | 2.45 | 13-Dec | 0.82 | 01-Jan | 1.41 | 20-Jan | 0.28 | 08-Feb | 0.48 | 27-Feb | 1.49 | 18-Mar | 1.37 | 06-Apr | 0.92 | 25-Apr | 0.75 | 14-May | 0.90 | 02-Jun | 0.48 | 21-Jun | 1.24 |
| 15-Jul | 17.86 | 03-Aug | 0.80 | 22-Aug | 0.66 | 10-Sep | 0.47 | 29-Sep | 2.17 | 18-Oct | 1.36 | 06-Nov | 0.26 | 25-Nov | 1.74 | 14-Dec | 1.27 | 02-Jan | 2.38 | 21-Jan | 0.30 | 09-Feb | 0.66 | 28-Feb | 3.44 | 19-Mar | 0.81 | 07-Apr | 0.51 | 26-Apr | 0.69 | 15-May | 0.96 | 03-Jun | 1.13 | 22-Jun | 0.91 |
| 16-Jul | 150.50 | 04-Aug | 0.51 | 23-Aug | 0.93 | 11-Sep | 0.38 | 30-Sep | 0.74 | 19-Oct | 1.91 | 07-Nov | 0.31 | 26-Nov | 1.60 | 15-Dec | 0.74 | 03-Jan | 2.80 | 22-Jan | 0.32 | 10-Feb | 0.41 | 01-Mar | 3.82 | 20-Mar | 1.25 | 08-Apr | 0.43 | 27-Apr | 0.55 | 16-May | 1.15 | 04-Jun | 1.67 | 23-Jun | 0.77 |
| 17-Jul | 25.57 | 05-Aug | 0.68 | 24-Aug | 1.08 | 12-Sep | 0.62 | 01-Oct | 0.49 | 20-Oct | 2.21 | 08-Nov | 0.95 | 27-Nov | 1.52 | 16-Dec | 0.68 | 04-Jan | 4.74 | 23-Jan | 0.38 | 11-Feb | 0.32 | 02-Mar | 3.27 | 21-Mar | 2.22 | 09Apr | 0.37 | 28-Apr | 0.25 | 17-May | 0.69 | 05-Jun | 2.55 | 24-Jun | 0.71 |
| 18-Jul | 17.67 | 06-Aug | 0.99 | 25-Aug | 0.78 | 13-Sep | 0.71 | 02-Oct | 1.06 | 21-Oct | 1.73 | 09-Nov | 1.28 | 28-Nov | 1.60 | 17-Dec | 0.73 | 05-Jan | 1.74 | 24-Jan | 1.05 | 12-Feb | 0.33 | 03-Mar | 1.55 | 22-Mar | 1.60 | 10-Apr | 0.73 | 29-Apr | 0.19 | 18-May | 1.53 | 06-Jun | 1.68 | 25-Jun | 0.53 |
| 19-Jul | 18.57 | 07-Aug | 0.38 | 26-Aug | 0.80 | 14-Sep | 0.82 | 03-Oct | 1.20 | 22-Oct | 0.86 | 10-Nov | 1.13 | 29-Nov | 2.09 | 18-Dec | 0.50 | 06-Jan | 1.03 | 25-Jan | 0.77 | 13-Feb | 0.44 | 04-Mar | 1.80 | 23-Mar | 1.44 | 11-Apr | 0.52 | 30-Apr | 0.23 | 19-May | 0.73 | 07-Jun | 4.33 | 26-Jun | 0.19 |

# Appendix 1

| Date | Daily $R_t$ | Date | Daily $R_t$ | Date | Daily $R_t$ |
|---|---|---|---|---|---|
| 27-Jun | 0.39 | 16-Jul | 0.39 | 04-Aug | 0.89 |
| 28-Jun | 0.69 | 17-Jul | 0.30 | 05-Aug | 1.13 |
| 29-Jun | 0.33 | 18-Jul | 0.63 | 06-Aug | 0.36 |
| 30-Jun | 0.41 | 19-Jul | 0.79 | 07-Aug | 2.00 |
| 01-Jul | 0.53 | 20-Jul | 1.41 | | |
| 02-Jul | 0.36 | 21-Jul | 0.62 | | |
| 03-Jul | 0.31 | 22-Jul | 0.54 | | |
| 04-Jul | 0.32 | 23-Jul | 0.40 | | |
| 05-Jul | 0.39 | 24-Jul | 0.44 | | |
| 06-Jul | 0.60 | 25-Jul | 0.39 | | |
| 07-Jul | 0.53 | 26-Jul | 0.94 | | |
| 08-Jul | 0.57 | 27-Jul | 1.29 | | |
| 09-Jul | 0.51 | 28-Jul | 0.28 | | |
| 10-Jul | 0.20 | 29-Jul | 0.52 | | |
| 11-Jul | 0.57 | 30-Jul | 0.42 | | |
| 12-Jul | 0.77 | 31-Jul | 0.46 | | |
| 13-Jul | 0.68 | 01-Aug | 1.05 | | |
| 14-Jul | 0.65 | 02-Aug | 1.44 | | |
| 15-Jul | 1.07 | 03-Aug | 0.44 | | |

# References


[1] Coronavirus (COVID-19) Infection Survey, UK: 5 August 2022
https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/bulletins/coronaviruscovid19infectionsurveypilot/5august2022

[2] Contreras, S., Villavicencio, H. A., Medina-Ortiz, D., Saavedra, C. P., & Olivera-Nappa, Á. (2020). Real-Time Estimation of $R_t$ for Supporting Public-Health Policies Against COVID-19. *Frontiers in public health*, *8*, 556689. https://doi.org/10.3389/fpubh.2020.556689

[3] https://www.gov.im/media/1375604/2021-01-27-census-report-part-i-final-2.pdf

# Data Disclaimer

While we have used reasonable efforts to ensure the accuracy of the data used within this report, data may be subject to change and historical amendment as new systems become established.

The quality of data provided to Public Health by other organisations is the responsibility of the originating organisation.

Produced on behalf of Professor Hugo van Woerden, Interim Director of Public Health.