Isle of Man Government

Reiltys Ellan Vannin



# COVID-19 Weekly Surveillance Report

*17th March 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.

This report will be published each Thursday for data up to and including the previous Sunday e.g. 12th August is for data up to 8th August.

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

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

# Wave Surveillance

- We have seen a continued overall increase in case numbers this week. The reproduction rate has fallen slightly to 2.00, indicating a slowing in the rate of increase. The increase in cases has been seen across most age groups this week, with increases across all age groups (other than those aged 0-4 years). Although the majority of cases continue to be in the 30-59 age group, we have also seen a smaller rise in older adults and children and young people (aged 5-19).

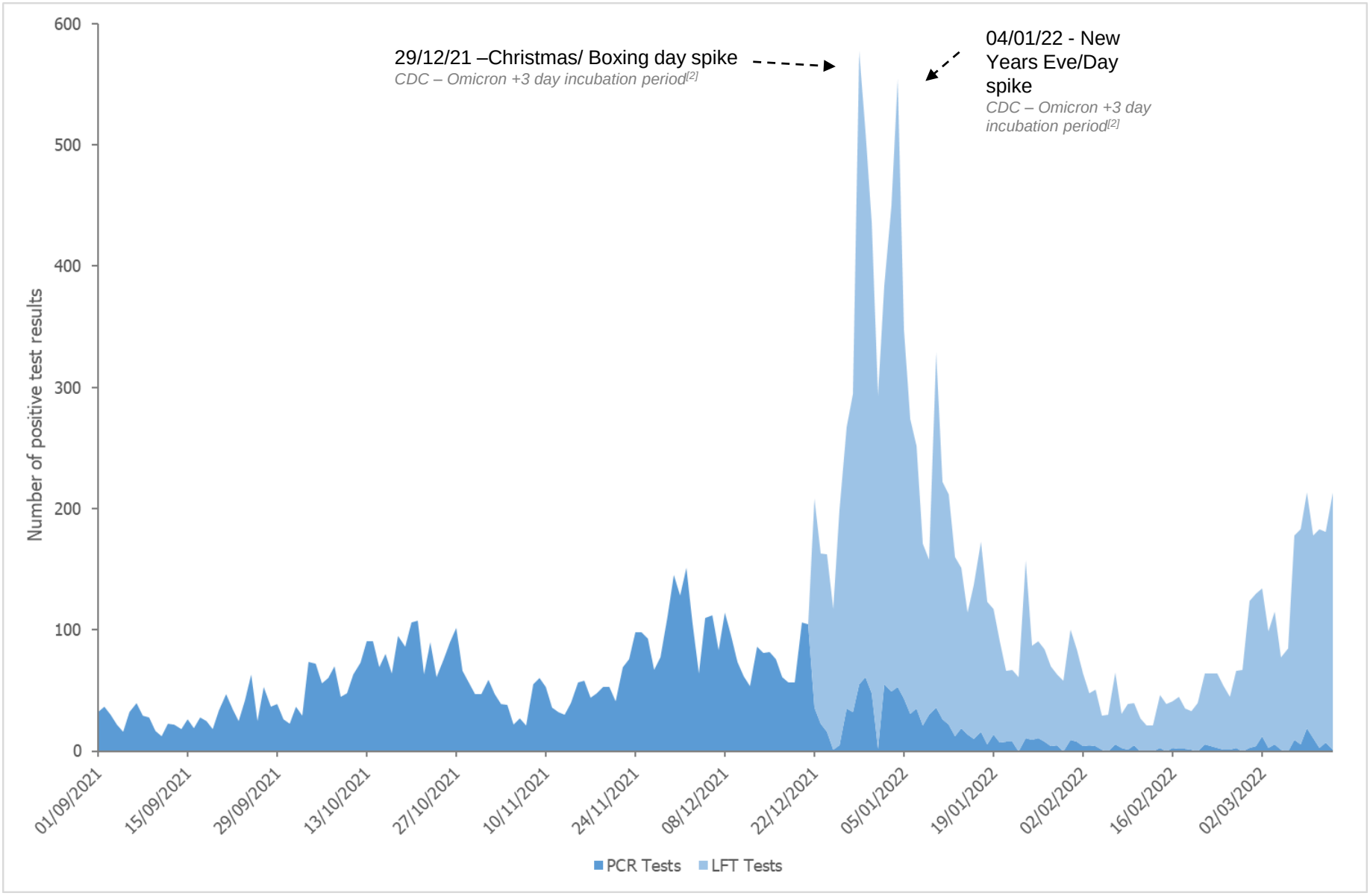
- Case ascertainment is, of course, dependent on patterns of testing and reporting so it is likely that there are more cases than are currently notified. This caveat has applied throughout the pandemic when COVID has been transmitting on Island, although the change to LFD self testing and self reporting may have impacted on that to an unknown extent. However, as the majority of omicron infections are mild, case numbers per se are now a less important measure than pressure on health and care services.

- The upward trend over the past few weeks is in line with that being seen across the British Isles. It is likely to result from increased travel, changes in patterns of behaviour and mixing following reduction of restrictions here and elsewhere and the increased transmissibility of the BA.2 variant of omicron which is now widespread here and across the British Isles. How long this persists will depend on levels of immunity, patterns of mixing in our communities and travel, all of which have an impact on transmission.

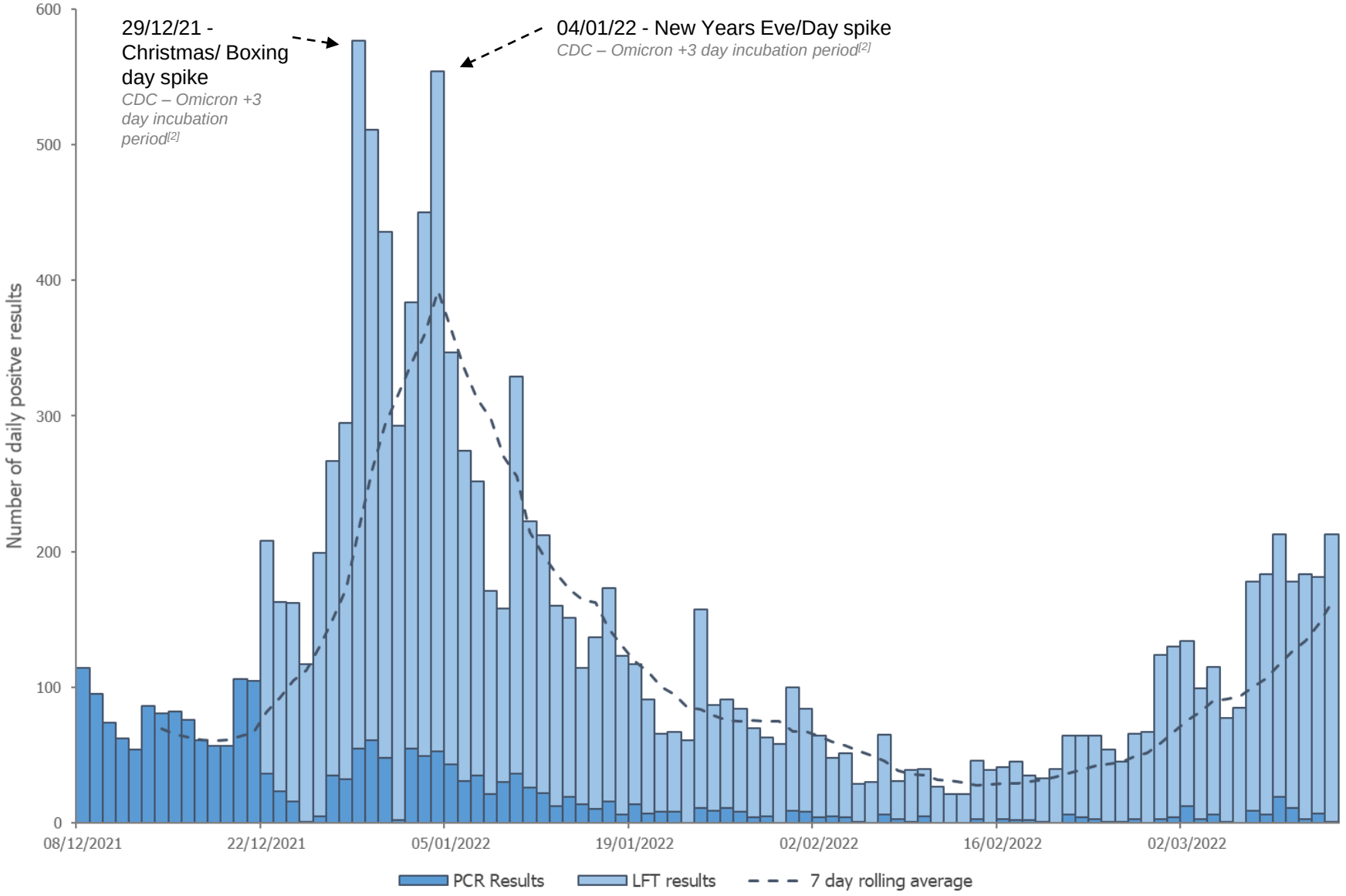
# Key Points

- The current 7-day average for reported positive results is 190.
- The current trend of reported positive results is increasing.
- The effective reproduction number ($R_t$) was 2.00 this week, indicating a slight slowing in the rate of increase in transmission.
- The snapshot of the Hospital is not available in this week's report.

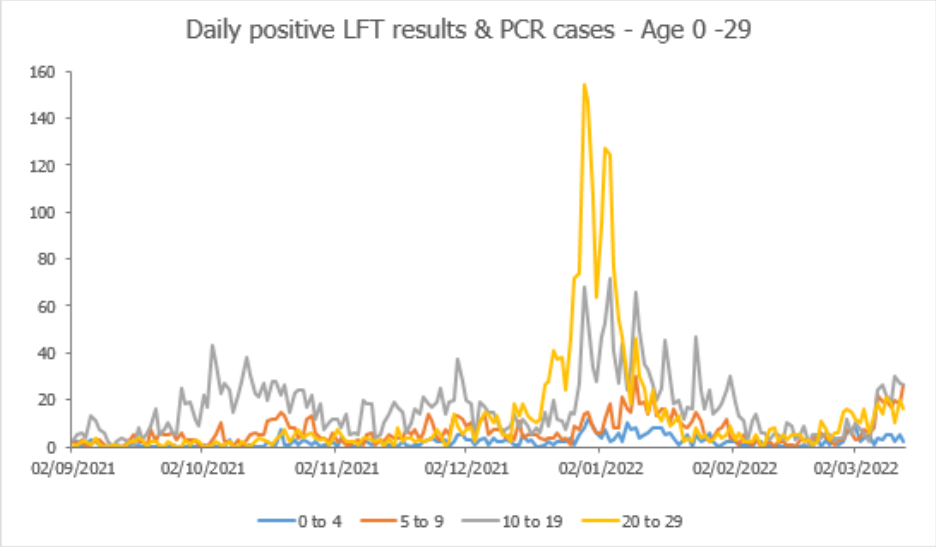
# Positive COVID-19 Tests

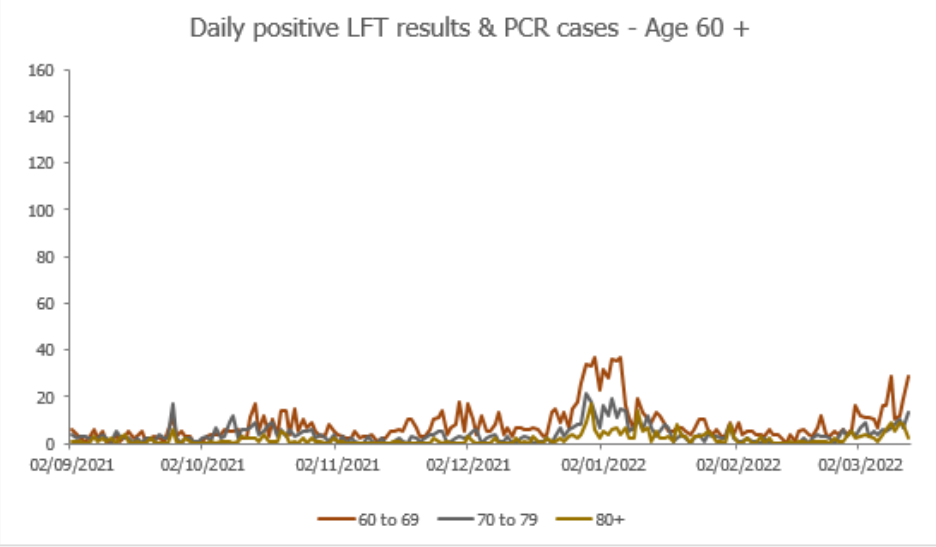


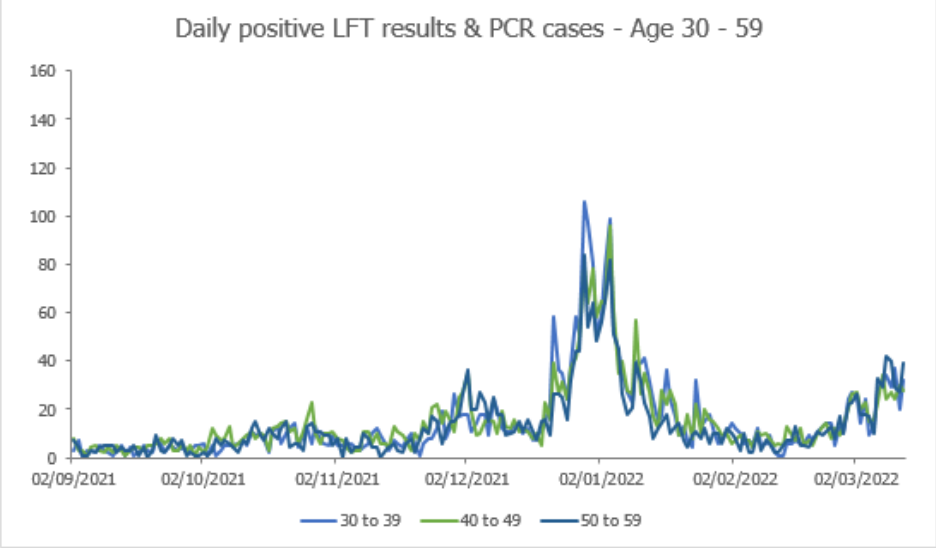
# Daily Positive Results – 4th Wave

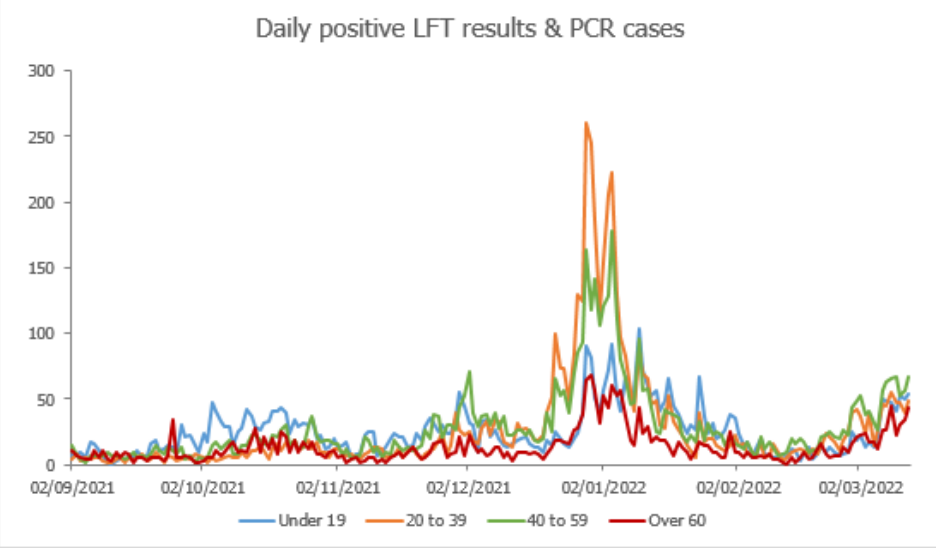


# Age Group Analysis

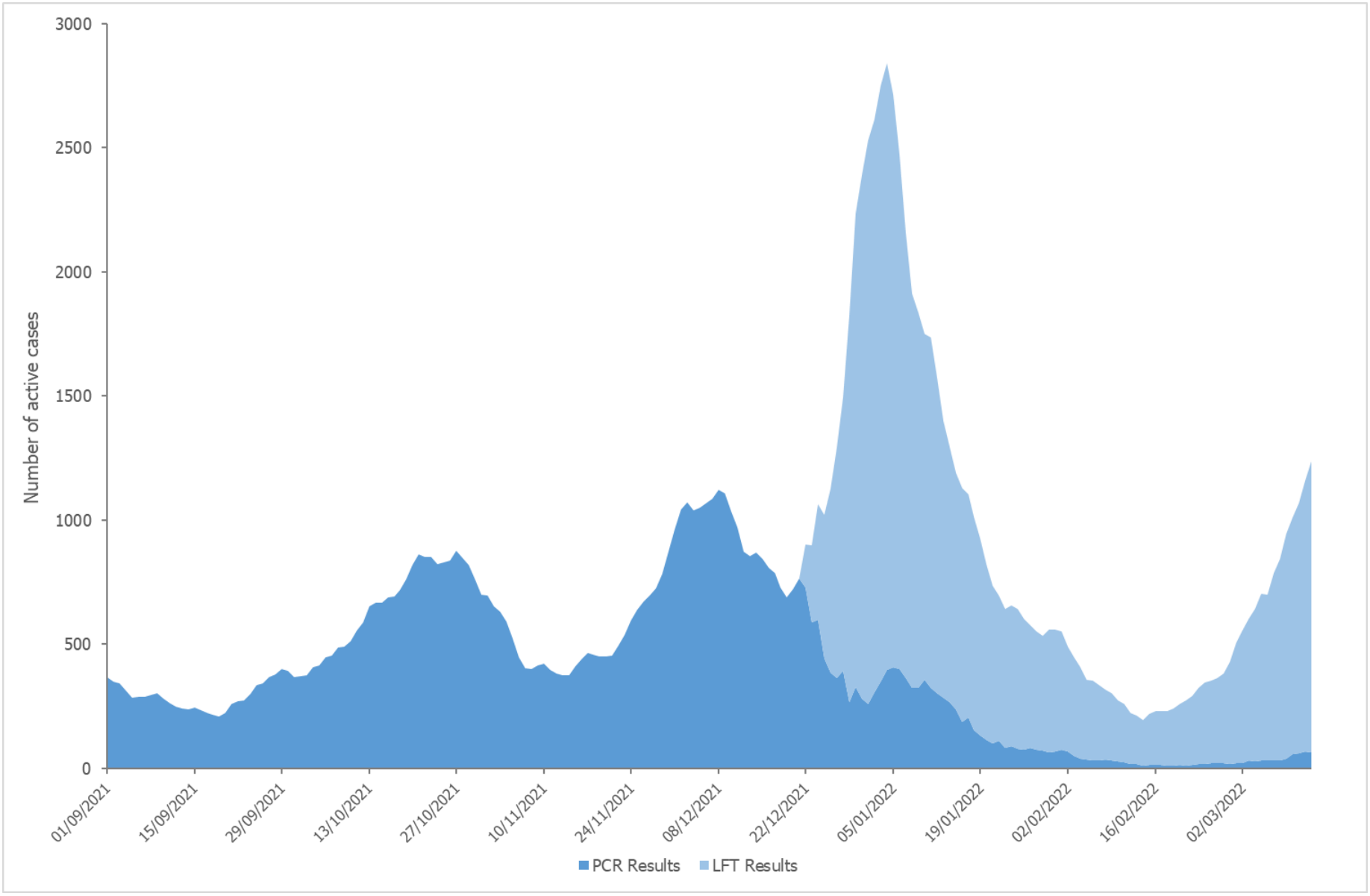


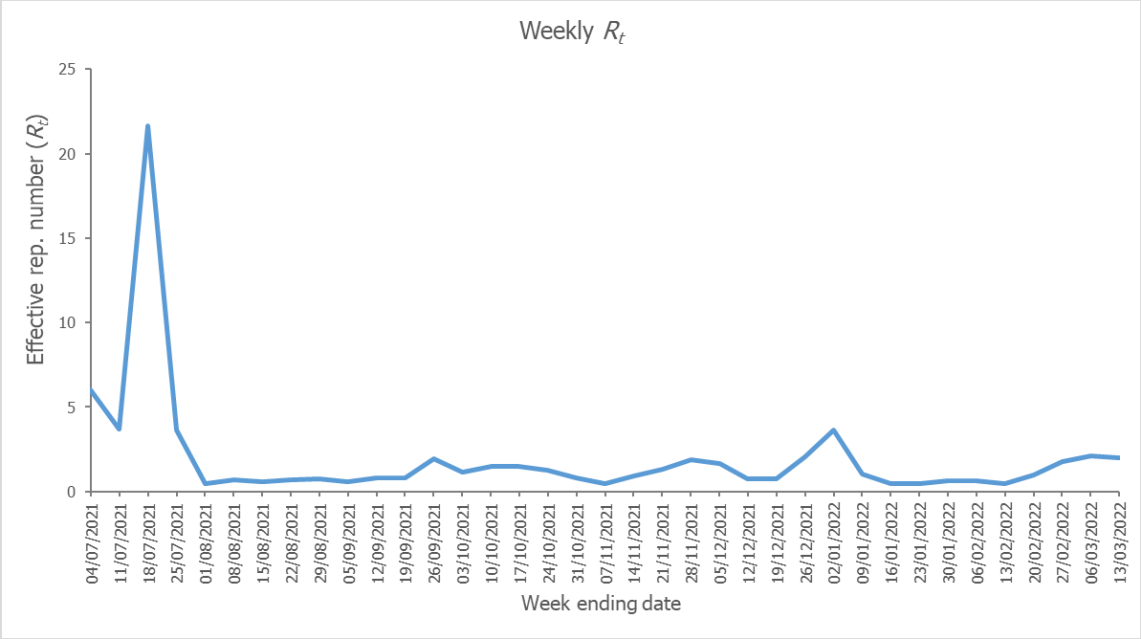



# Active PCR & LFT Cases



# Effective Reproduction Number ($R_t$)



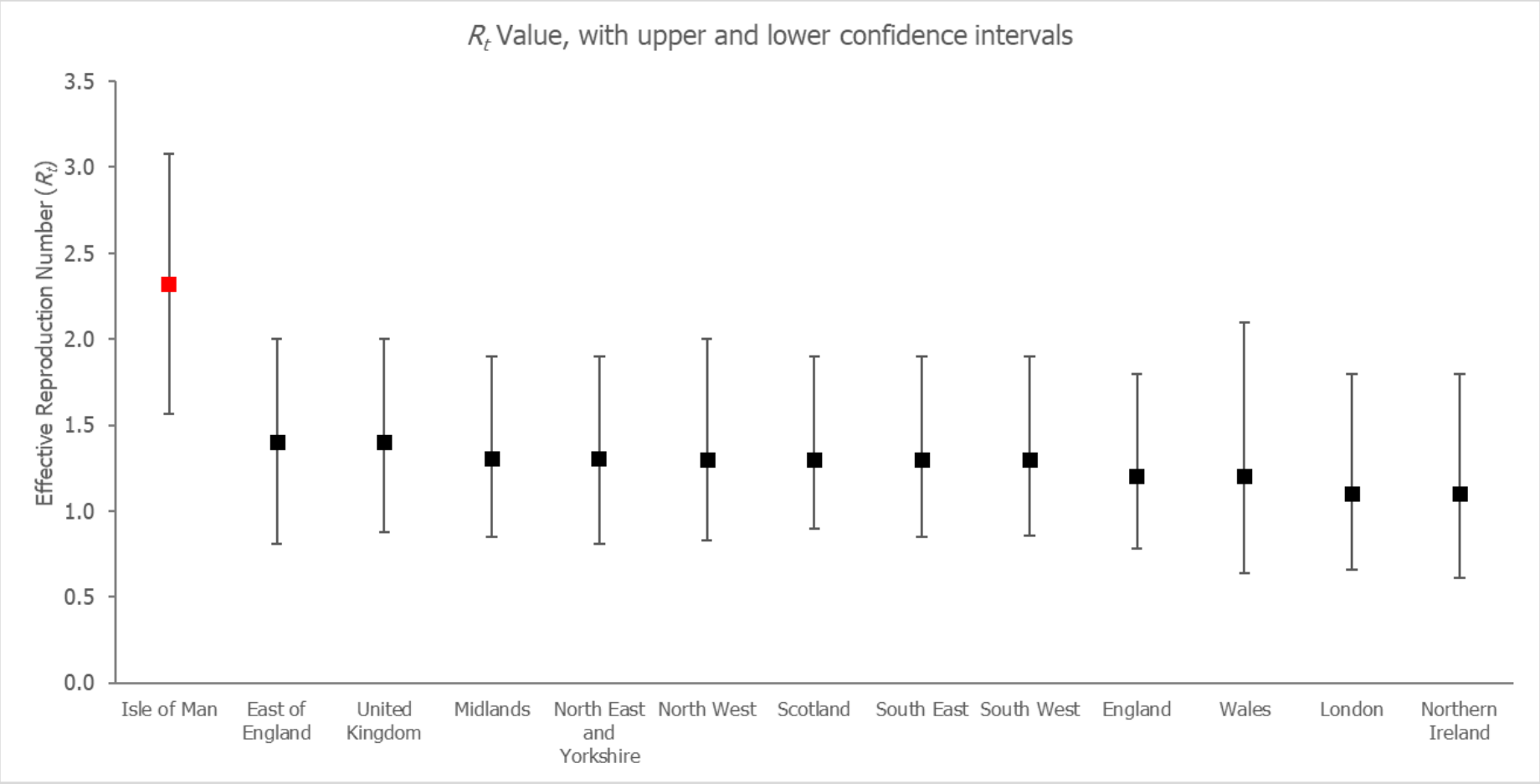

Latest 7 day
$R_t$ = 2.00

- 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[1]:

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

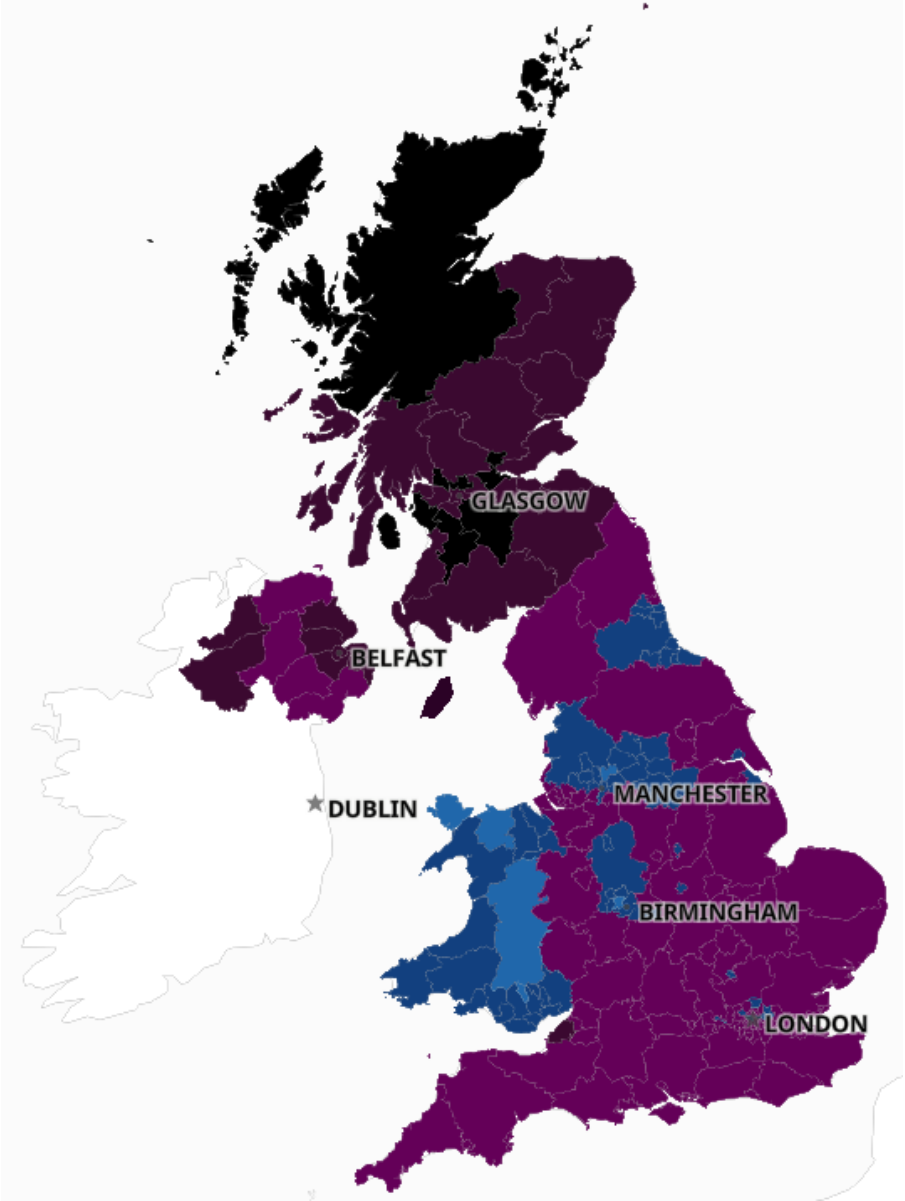
- The UK uses a more complex method of estimating $R_t$ which we are not able to replicate here. The use of this simplified methodology limits the robustness of comparing our $R_t$ value with UK estimates, however it provides a useful comparison between different time periods on Island. New Recoveries 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.

# $R_t$ Area Comparison

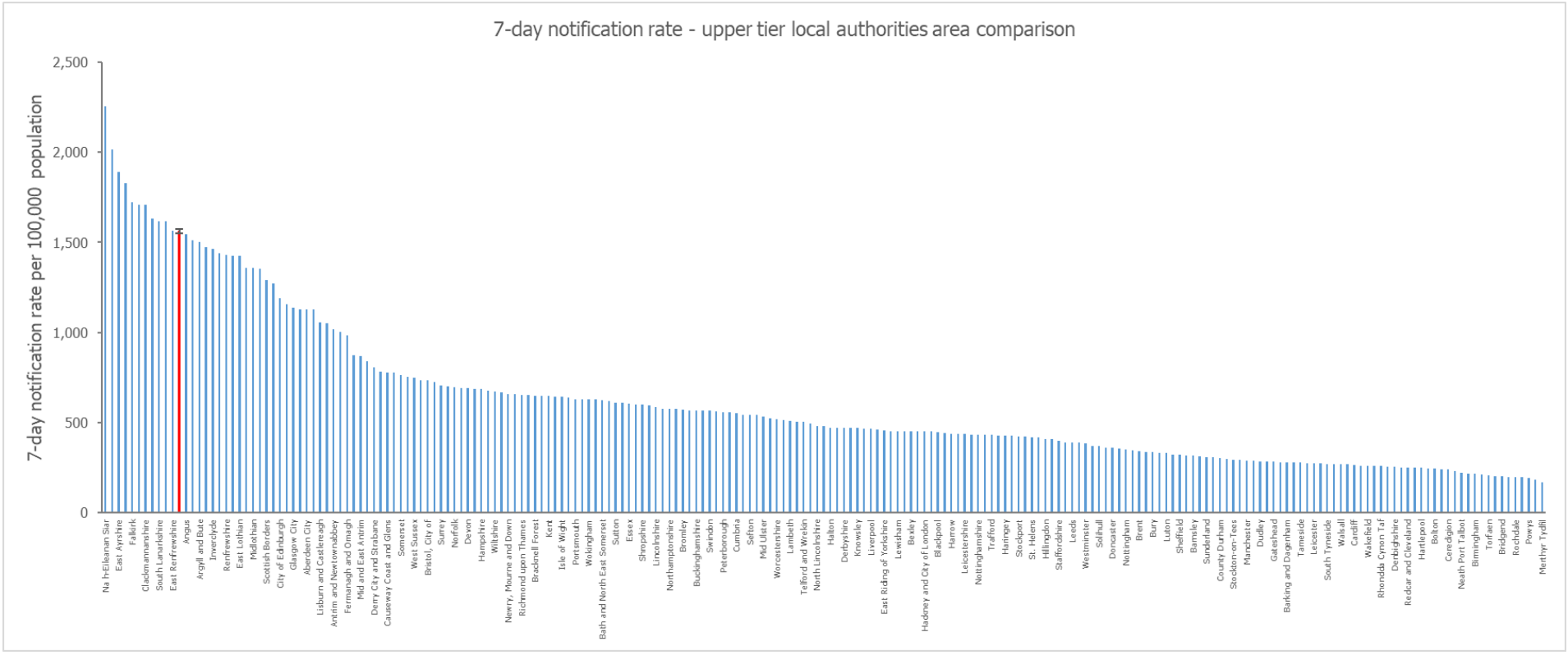



- $R_t$ value shown for Isle of Man is $R_t$ for 13/03/2022
- $R_t$ values shown for United Kingdom areas are 7 day $R_t$ values for 07/03/2022 (latest figures)

# 7-day Notification Rate Area Comparison

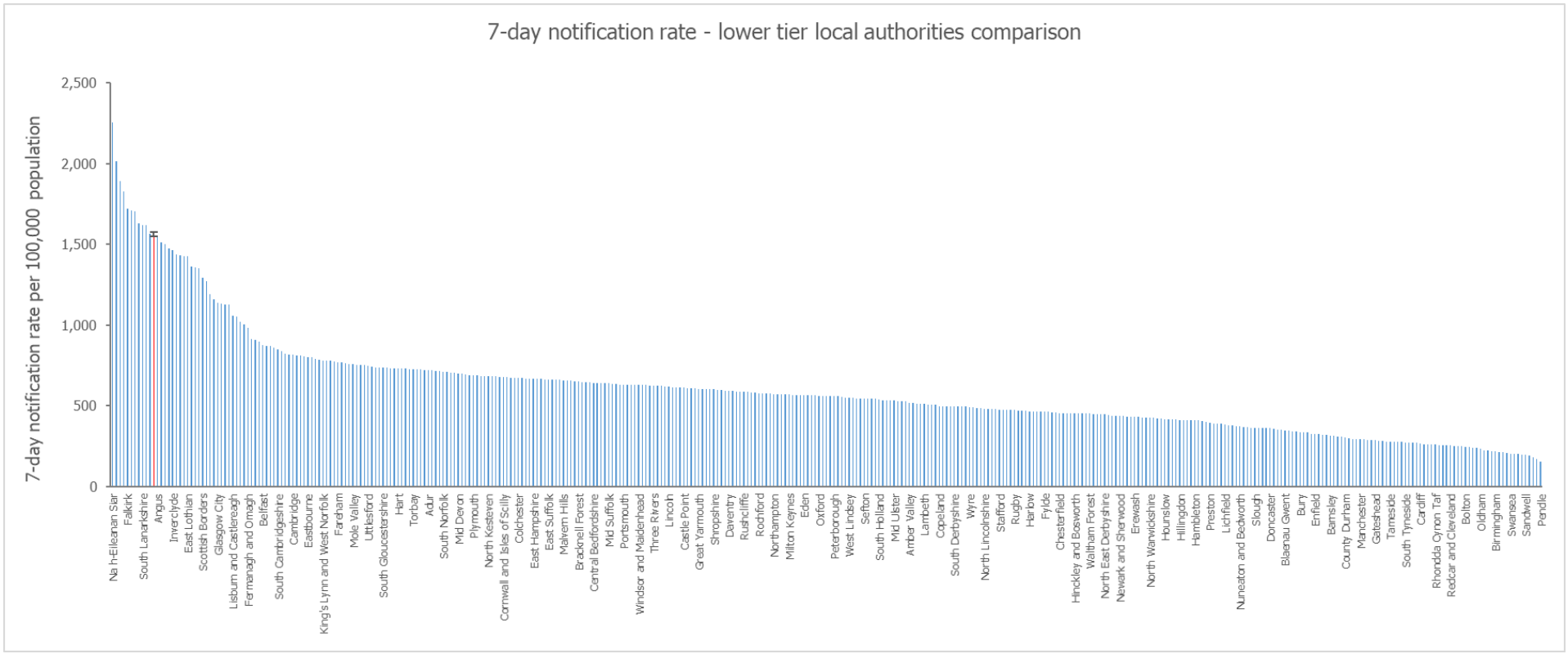


# 7-day Notification Rate – Upper Tier LA Comparison




The Isle of Man (shown in red), has the 12th highest 7-day notification rate per 100,000 population when included in the upper tier local authorities of the UK.

# 7-day Notification Rate – Lower Tier LA Comparison



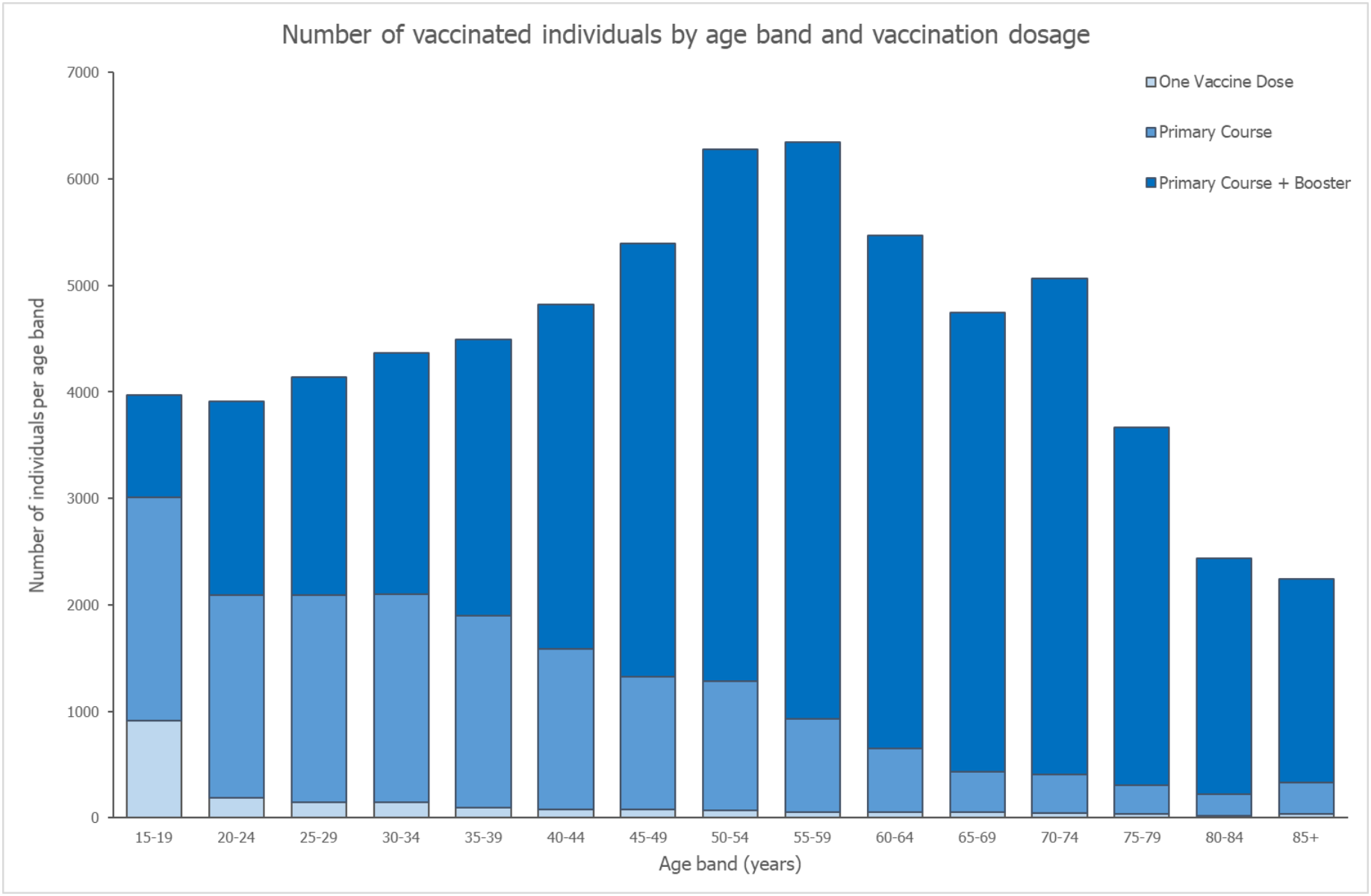

The Isle of Man (shown in red), has the 12th highest 7-day notification rate per 100,000 population when included in the lower tier local authorities of the UK.

# 14-day Notification Rate Comparison

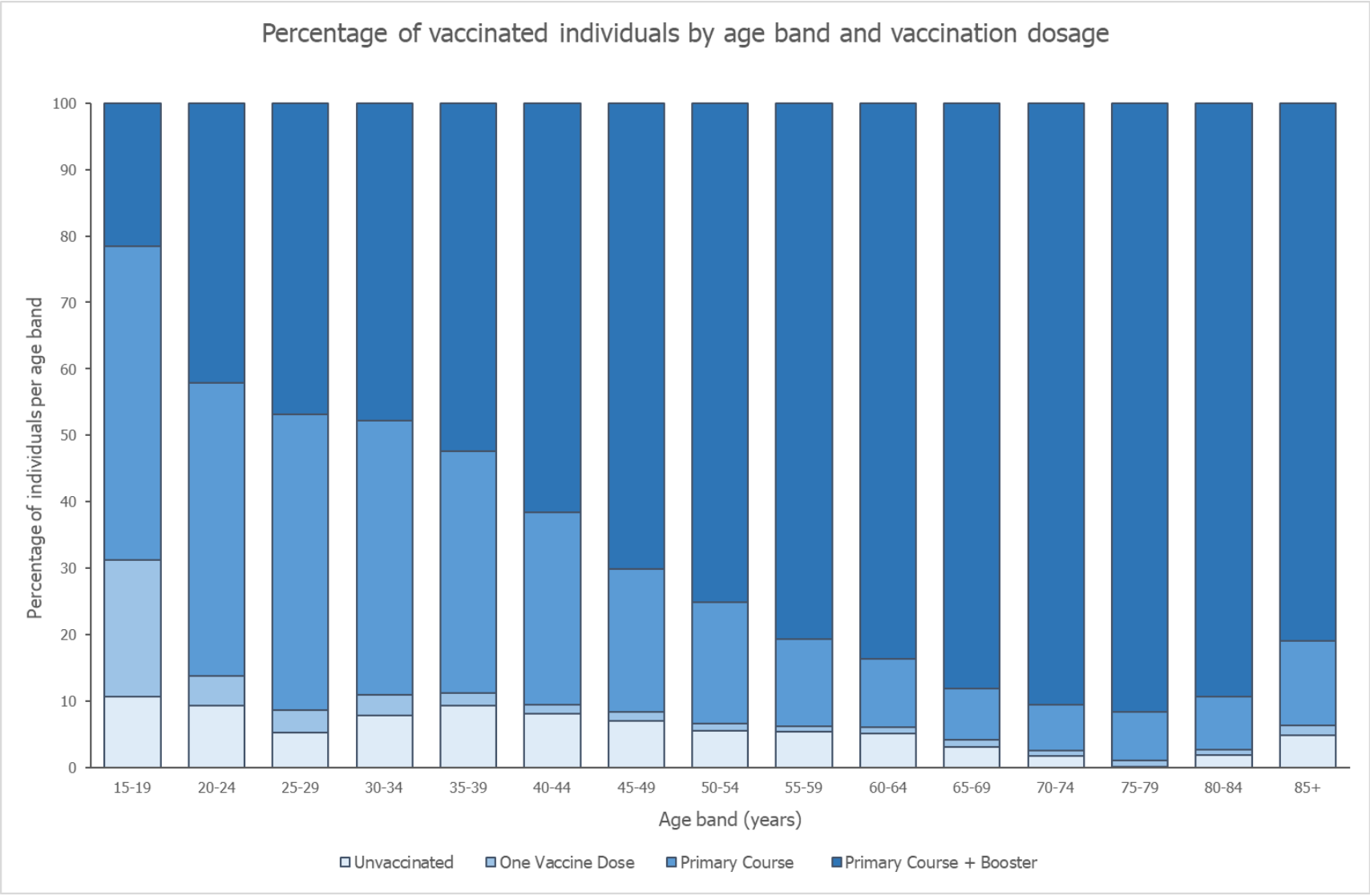
| | | Isle of Man | | | United Kingdom |
|---|---|---|---|---|---|
| Year | Week number | 14 day rate | Lower CI | Upper CI | 14 day rate |
| 2021 | 36 | 617 . 41 | 612 . 23 | 622 . 60 | 727 . 08 |
| | 37 | 565 . 67 | 561 . 04 | 570 . 30 | 663 . 56 |
| | 38 | 660 . 93 | 654 . 07 | 667 . 78 | 643 . 48 |
| | 39 | 766 . 77 | 760 . 65 | 772 . 89 | 691 . 94 |
| | 40 | 874 . 96 | 867 . 84 | 882 . 08 | 778 . 05 |
| | 41 | 1136 . 04 | 1128 . 80 | 1143 . 29 | 805 . 89 |
| | 42 | 1357 . 14 | 1348 . 52 | 1365 . 75 | 852 . 05 |
| | 43 | 1303 . 04 | 1291 . 68 | 1314 . 39 | 936 . 14 |
| | 44 | 878 . 49 | 865 . 69 | 891 . 29 | 776 . 13 |
| | 45 | 666 . 81 | 660 . 02 | 673 . 60 | 697 . 62 |
| | 46 | 785 . 59 | 780 . 35 | 790 . 83 | 798 . 68 |
| | 47 | 1110 . 17 | 1099 . 81 | 1120 . 53 | 860 . 74 |
| | 48 | 1660 . 55 | 1645 . 83 | 1675 . 27 | 909 . 34 |
| | 49 | 1680 . 54 | 1664 . 71 | 1696 . 38 | 988 . 25 |
| | 50 | 1299 . 51 | 1289 . 26 | 1309 . 77 | 1317 . 95 |
| | 51 | 1834 . 60 | 1807 . 69 | 1861 . 52 | - |
| | 52 | 4497 . 13 | 4417 . 01 | 4577 . 25 | 2753 . 48 |
| 2022 | 1 | 5851 . 91 | 5781 . 44 | 5922 . 39 | - |
| | 2 | 4170 . 19 | 4102 . 45 | 4236 . 94 | 2911 . 96 |
| | 3 | 2412 . 03 | 2372 . 78 | 2451 . 28 | 1824 . 83 |
| | 4 | 1561 . 76 | 1542 . 00 | 1581 . 53 | 2008 . 64 |
| | 5 | 1193 . 67 | 1176 . 69 | 1210 . 65 | 1594 . 05 |
| | 6 | 759 . 71 | 747 . 32 | 772 . 11 | 1429 . 55 |
| | 7 | 617 . 41 | 611 . 64 | 623 . 19 | 1179 . 00 |
| | 8 | 830 . 28 | 823 . 86 | 836 . 69 | 791 . 47 |
| | 9 | 1397 . 12 | 1381 . 42 | 1412 . 82 | 939 . 69 |
| | 10 | 2461 . 43 | 2437 . 40 | 2485 . 45 | - |

The 14-day rate is calculated by totalling new confirmed cases over the past 14-day period, dividing this number by the total population, and then multiplying by 100,000 to enable area comparisons.

# Vaccine Uptake and Coverage

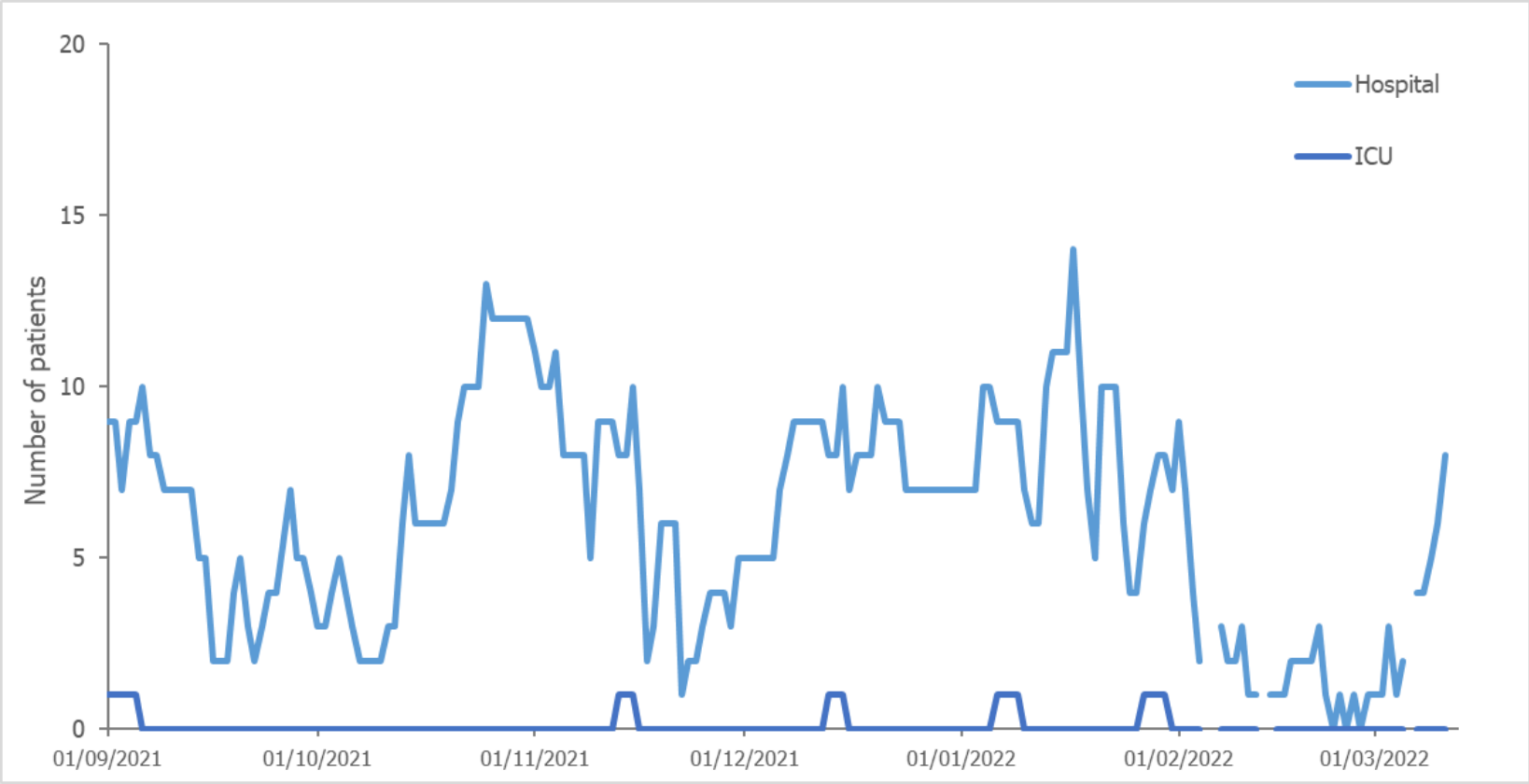


# Vaccine Uptake and Coverage




This data uses the 2021 Census populations as reference for eligible population[3].

# Hospitalised Patients

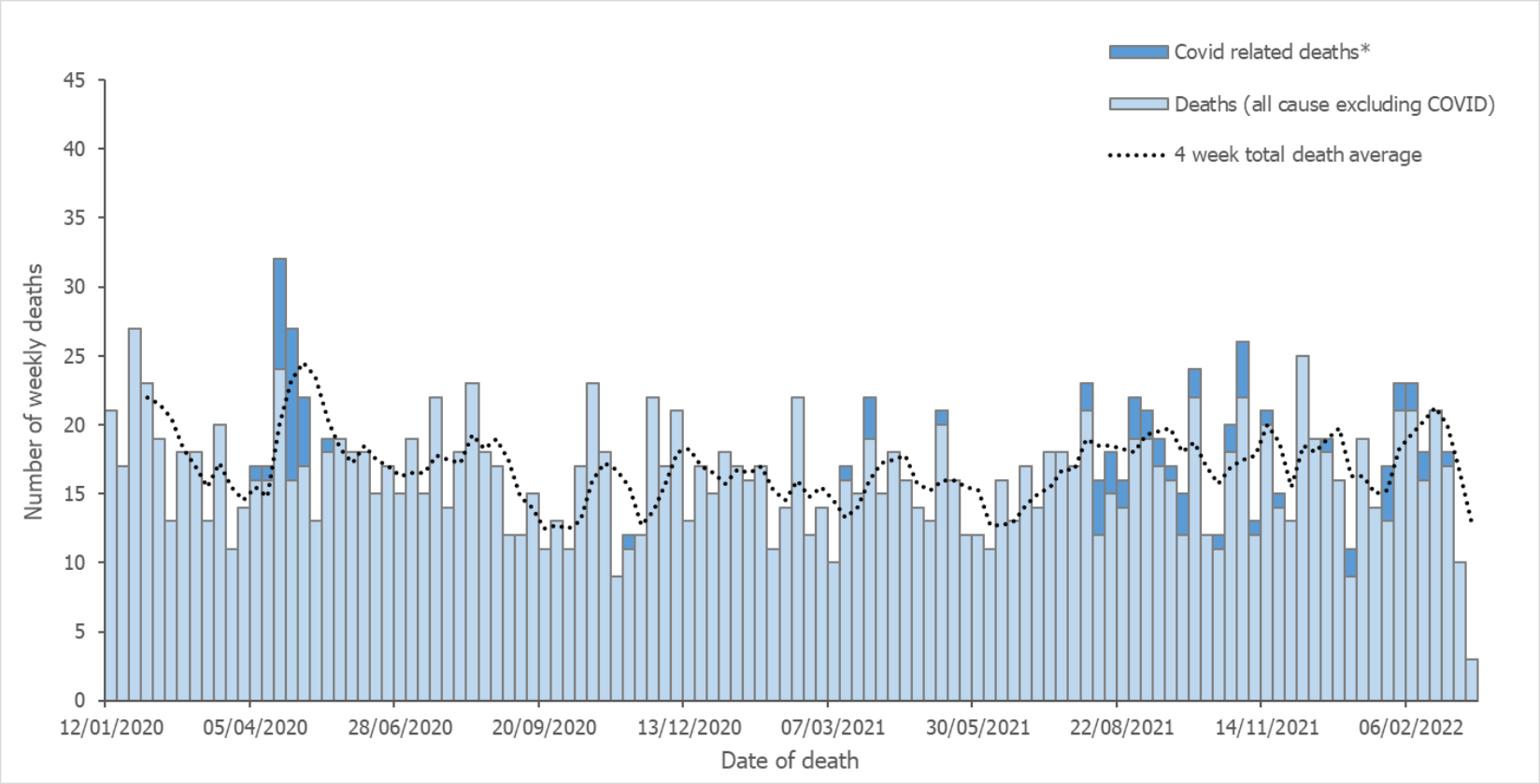



Patients in hospital with a confirmed COVID status at the time of the daily snapshot, taken at 12pm.

# Hospitalised Patients

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

# Weekly Deaths – Whole Pandemic

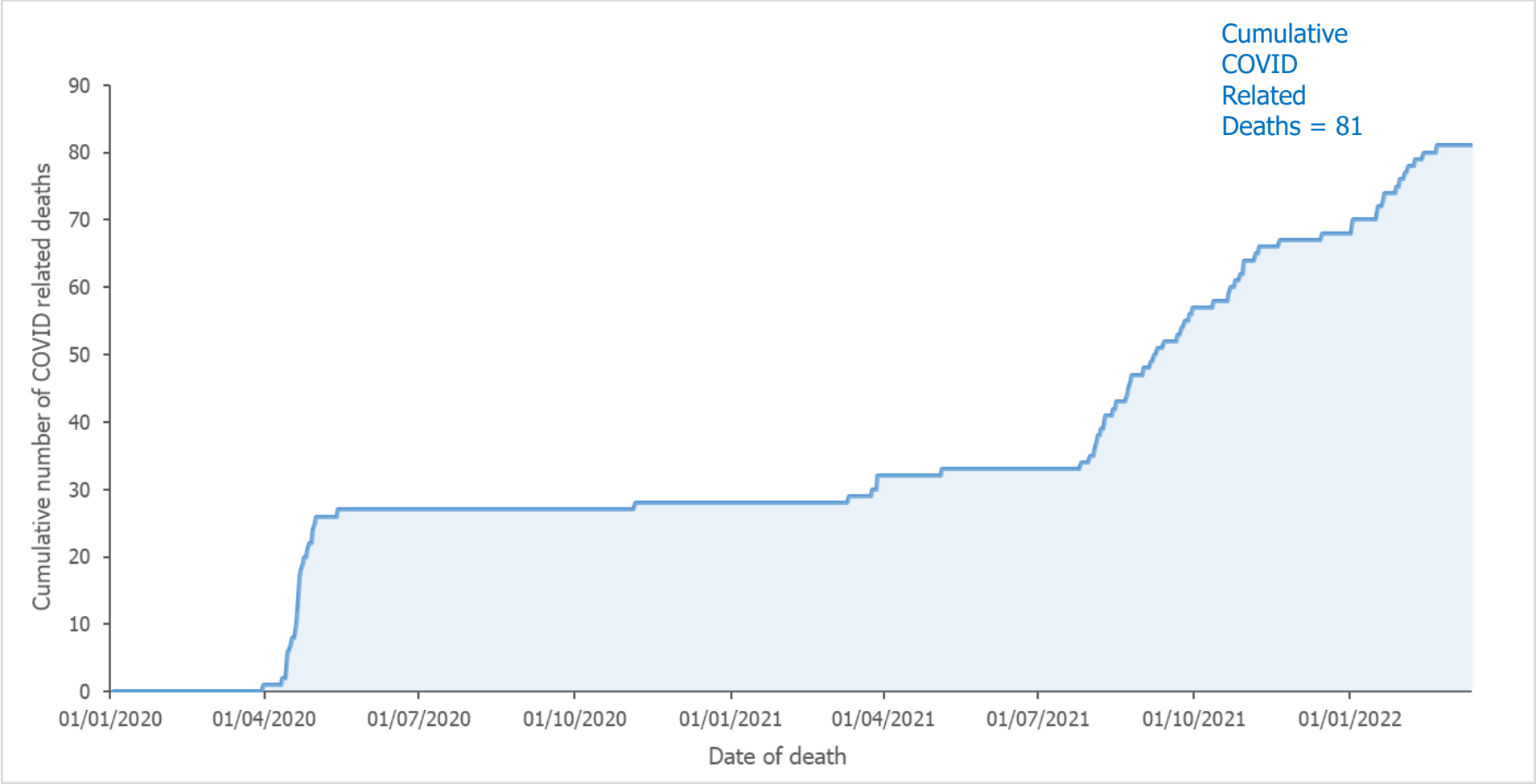



- *COVID related deaths are those where COVID-19 is mentioned **anywhere** within the death certificate. This differs from the definition used by Public Health England, who classify a COVID death as "people who had had a positive test result for COVID-19 and dies within 28 days of the first positive test result."

- **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 remains at 81.

# Cumulative COVID-Related Deaths



# Arrivals Testing

From the 11th February, arrivals testing requirements are as follows:

**Any travellers who have only been within the Common Travel Area** (British Isles, Ireland, Jersey and Guernsey) in the 10 days before arrival, will have to:

- Manx Resident (regardless of vaccination status): Just completes a landing card.
- Non-Resident (fully vaccinated/has natural immunity): Will need a Vaccination or Immunity Exemption and, if approved, complete a landing card.
- Non-Resident (not fully vaccinated/no natural immunity): Will need a Manx Entry Permit and, if approved, complete a landing card. A PCR test must also be undertaken on Island within 48 hours of arrival.

**Any International Travellers** (who have been outside the CTA in the 10 days before arrival) will have to:

- Fully vaccinated traveller: Will need a Vaccination Exemption and, if approved, complete a landing card.
- Non vaccinated/ not fully vaccinated traveller: Non-resident will need a Manx Entry Permit and, if approved, complete a landing card. Resident just completes a landing card. Both resident and non-resident will need a PCR test on Island within 48 hours of arriving.

A PCR test costs £30 total per traveller.

# 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

# 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 $R_t$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 | | |
| 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 | | |
| 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 | | |
| 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 | | |
| 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 | | |
| 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 | | |
| 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 | | |
| 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 | | |
| 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 | | |
| 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 | | |

# References


[1] 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

[2] Jansen, L., Tegomoh, B., Lange, K., Showalter, K., Figliomeni, J., Abdalhamid, B., Iwen, P. C., Fauver, J., Buss, B., & Donahue, M. (2021). Investigation of a SARS-CoV-2 B.1.1.529 (Omicron) Variant Cluster - Nebraska, November-December 2021. MMWR. Morbidity and mortality weekly report, 70(5152), 1782–1784. https://doi.org/10.15585/mmwr.mm705152e3

[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.