Isle of Man Government

Reiltys Ellan Vannin



# COVID-19 Weekly Surveillance Report

## *20th January 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 continue to be in a fourth wave of COVID infection, driven by the omicron variant which remains the dominant strain, accounting for the majority of our cases.

- Cases have fallen again this week across most age groups. To date we are not seeing spread into older age groups or significant rises in infection in children and young people following school reopening.

- 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.

- We are now seeing a continued trend towards a fall in cases. There was a slight rise in cases reported at the end of the week. On the data currently available, this does not indicate a trend towards a resurgence in case numbers and the position will become clearer as further data accrues.

# Wave Surveillance

In response to concerns regarding the omicron variant, from 30th November, 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): No entry exemption or permit required, but will need to complete a landing card and take an LFT within 12 hours of arriving on Island and submit the result online.
- Non-Resident (fully vaccinated): Will need to complete a vaccination exemption form, landing card and take an LFT within 12 hours of arriving on Island and submit the result online.
- Non-Resident (not fully vaccinated): Will need to apply for a Manx Entry Permit and, if approved, complete a landing card and take an LFT within 12 hours of arrival and submit the result online. A PCR test must also be undertaken within 48 hours of arrival – isolating until a negative result is confirmed. A day 6 follow-up test will also be required.

Until a negative LFT result is confirmed all travellers should avoid entering public buildings.

If the LFT result is positive, travellers must isolate immediately and report their result.

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

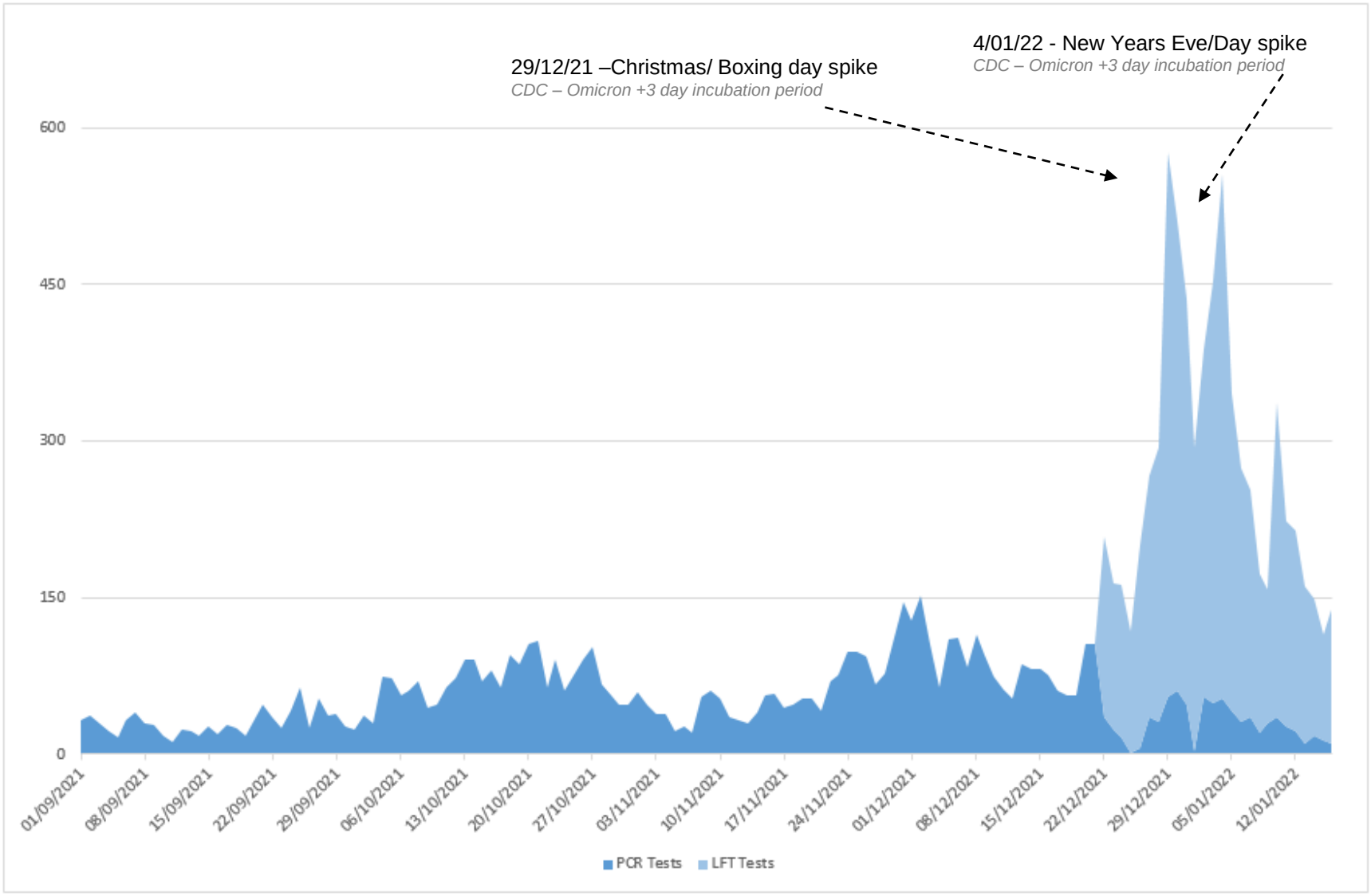
- Fully vaccinated traveller: **From 00:01 on 11 January 2022** Will need to complete a vaccination exemption form, landing card and take a LFT within 12 hours of arriving on Island and submit the result online.
- Non vaccinated/ not fully vaccinated traveller: Will need to apply for a Manx Entry Permit and, if approved, complete a landing card. Will then isolate for 7 days, having a PCR test within 48 hours of arrival, and on day 6 before leaving isolation.

All PCR tests will cost £30.00 total per traveller.

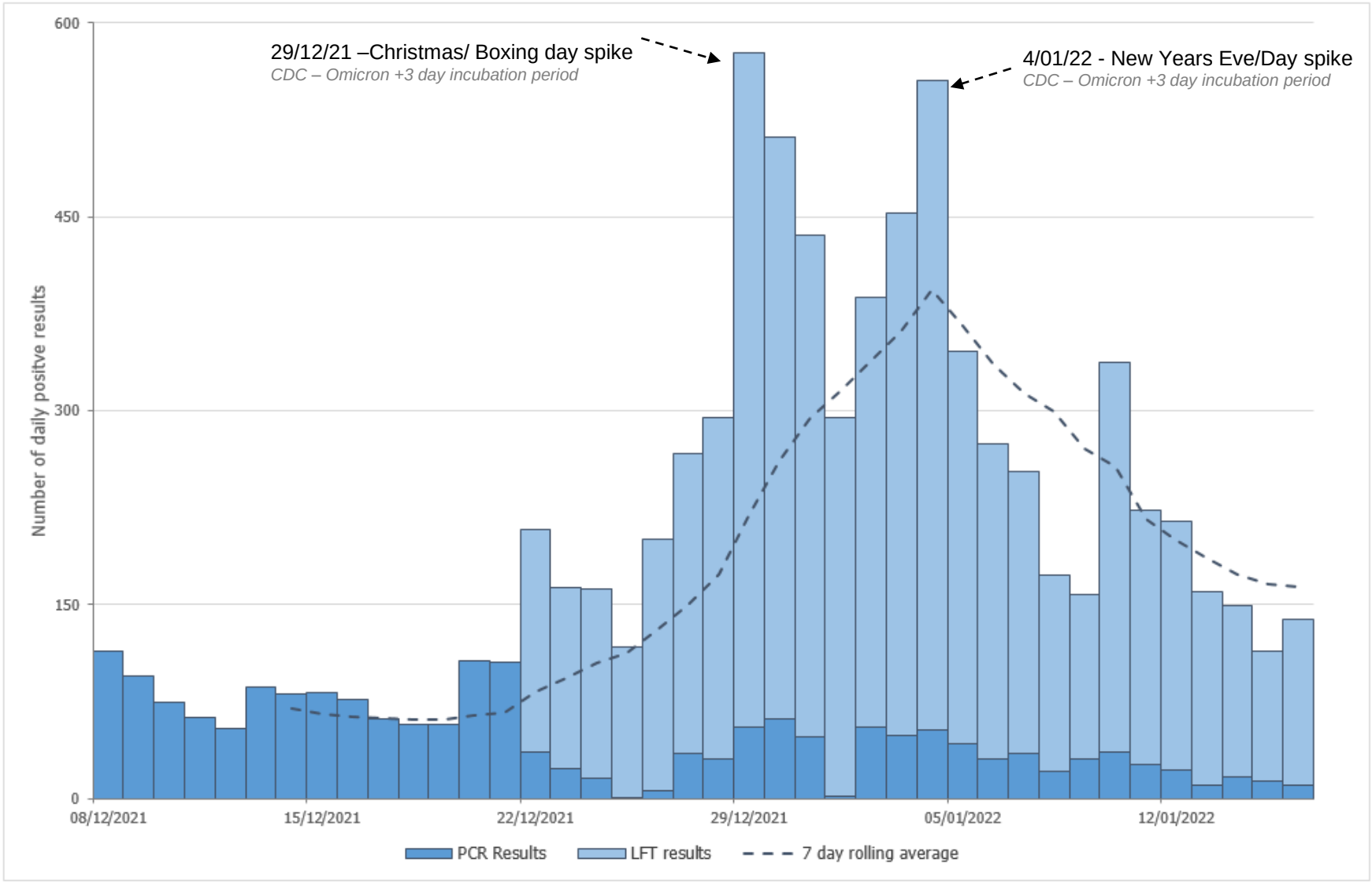
# Key Points

- The current 7-day average for reported positive results is around 191.
- The current overall trend of reported positive results is decreasing.
- The effective reproduction number ($R_t$) was 0.49 this week, indicating that the omicron wave may now have peaked and that the rate of transmission is slowing.
- The snapshot census of the Hospital shows 7 patients currently admitted with a COVID positive status.

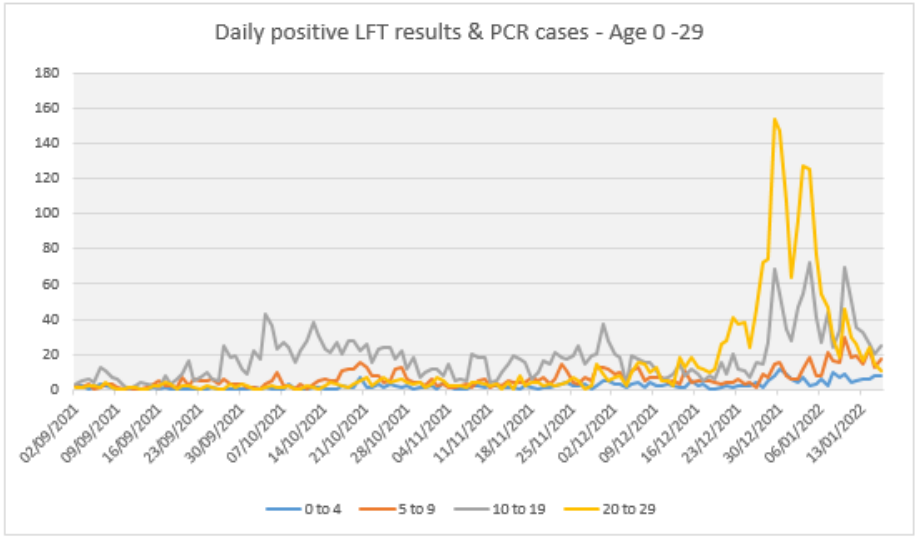
# Positive COVID-19 Tests

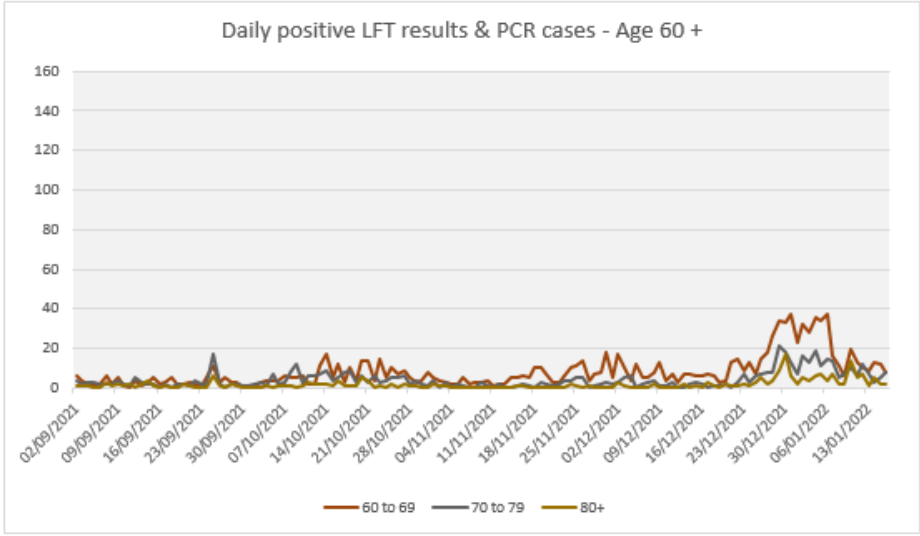


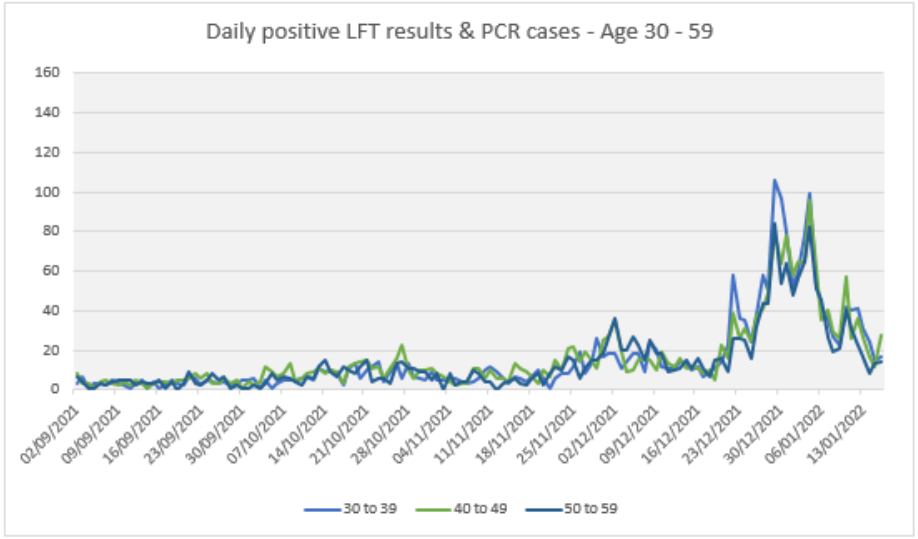
# Daily Positive Results – 4th Wave

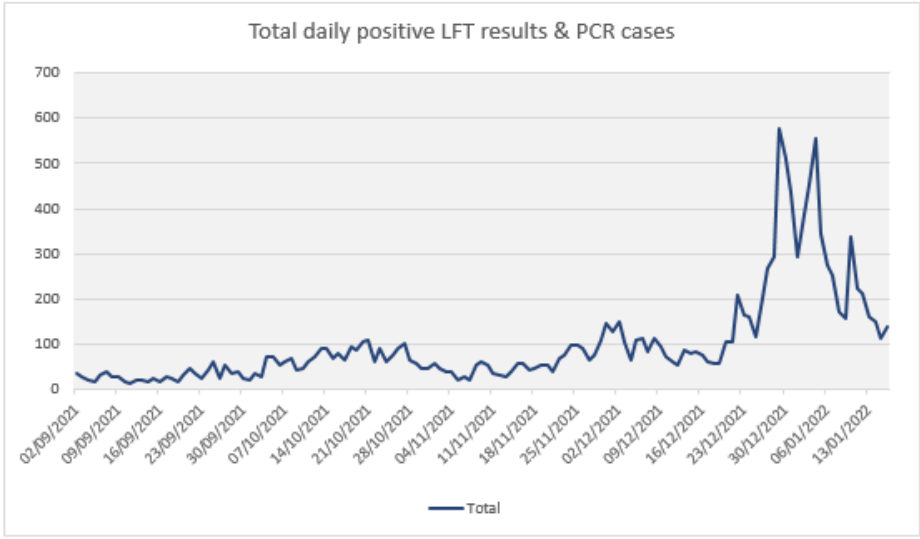


# Age Group Analysis

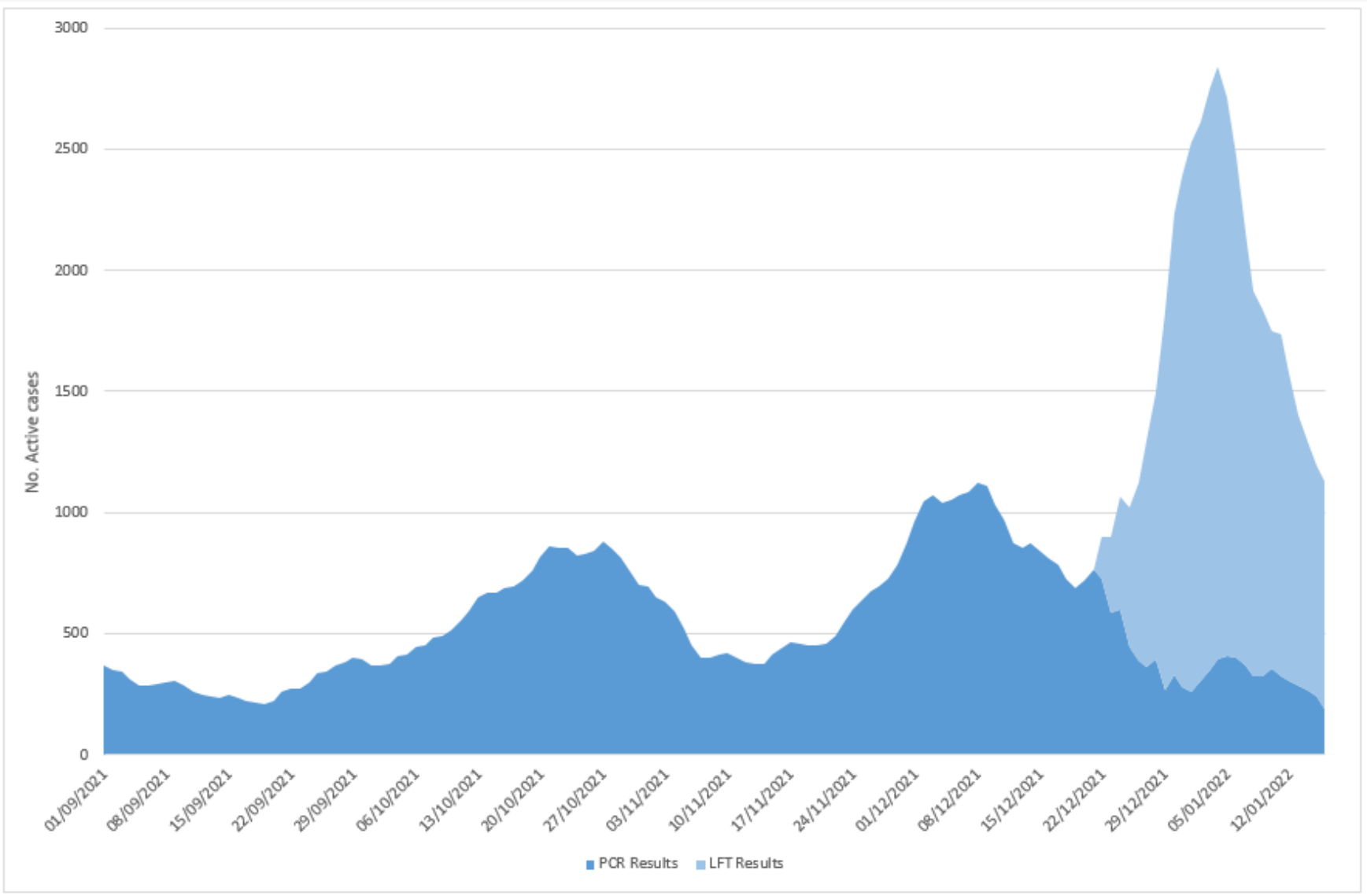


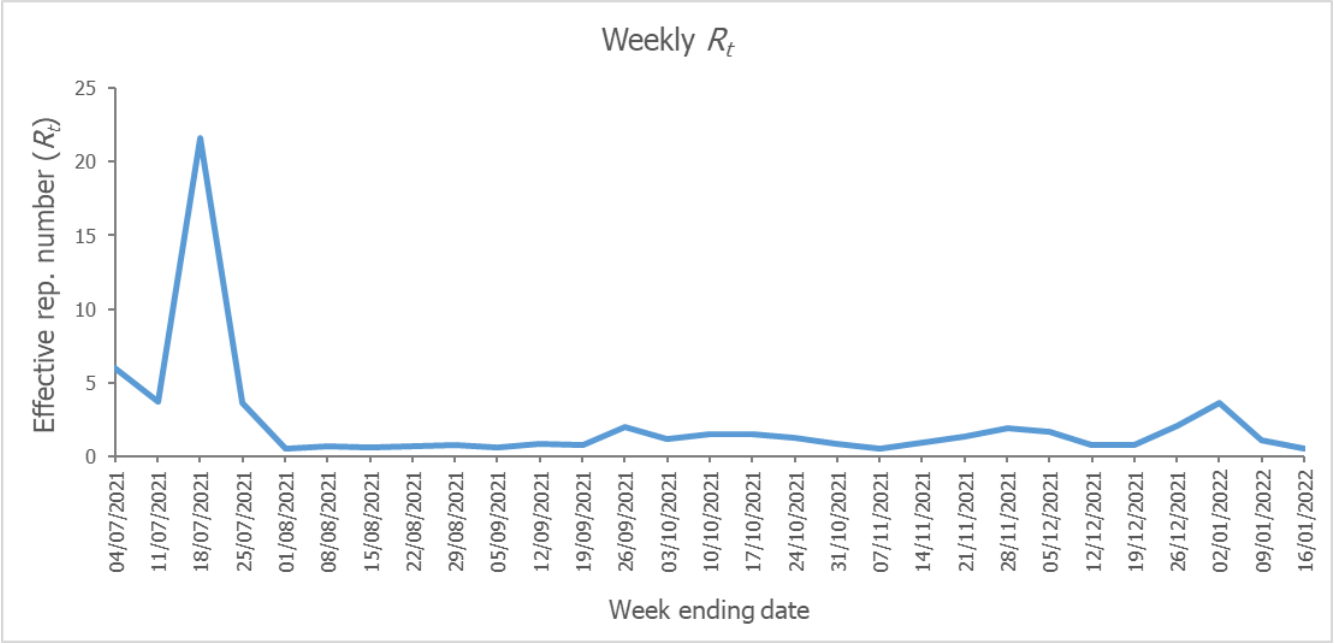



# Active PCR & LFT Cases



# Effective Reproduction Number ($R_t$)



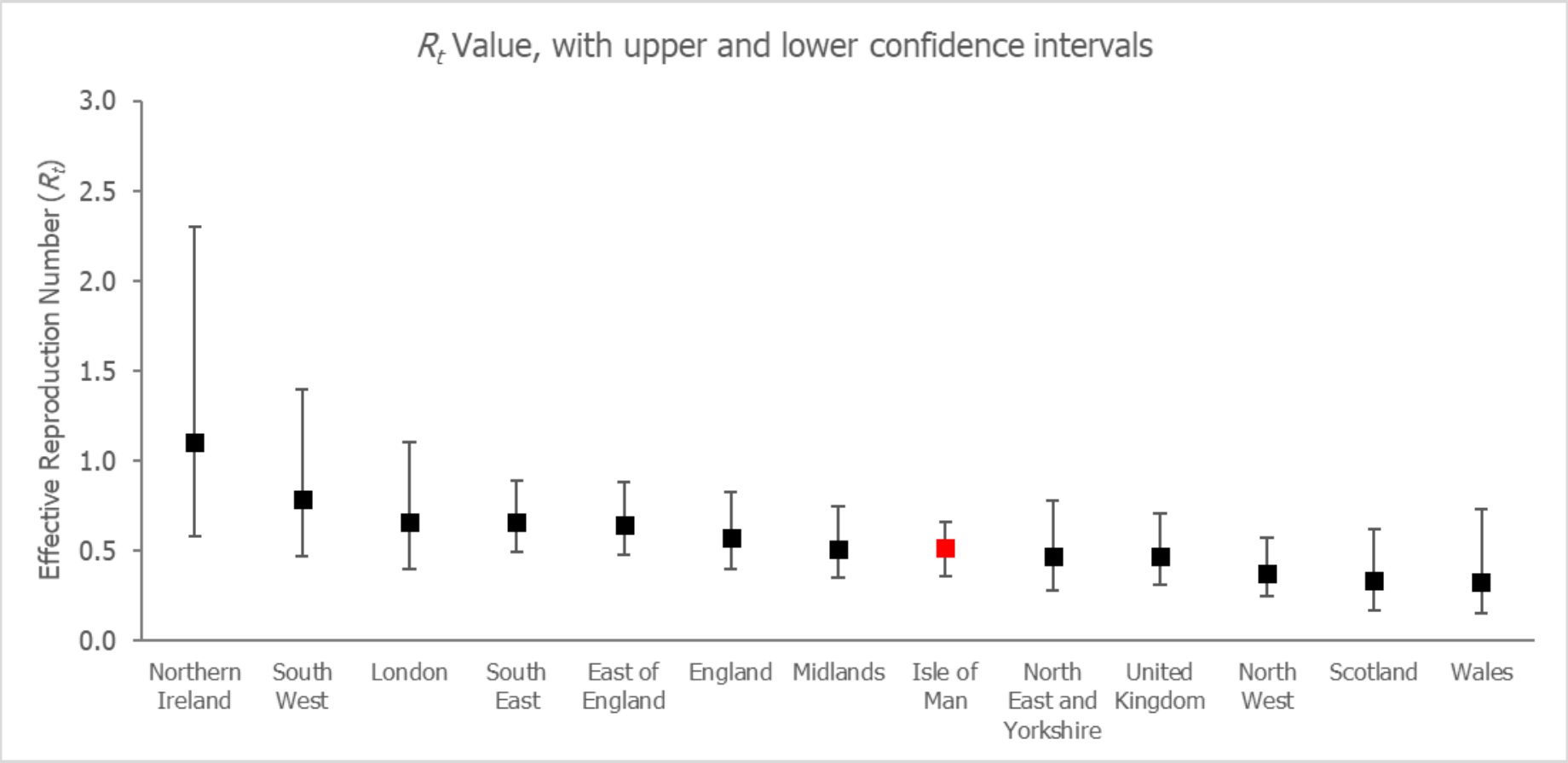

Latest 7 day
$R_t = 0.49$

- 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]:

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

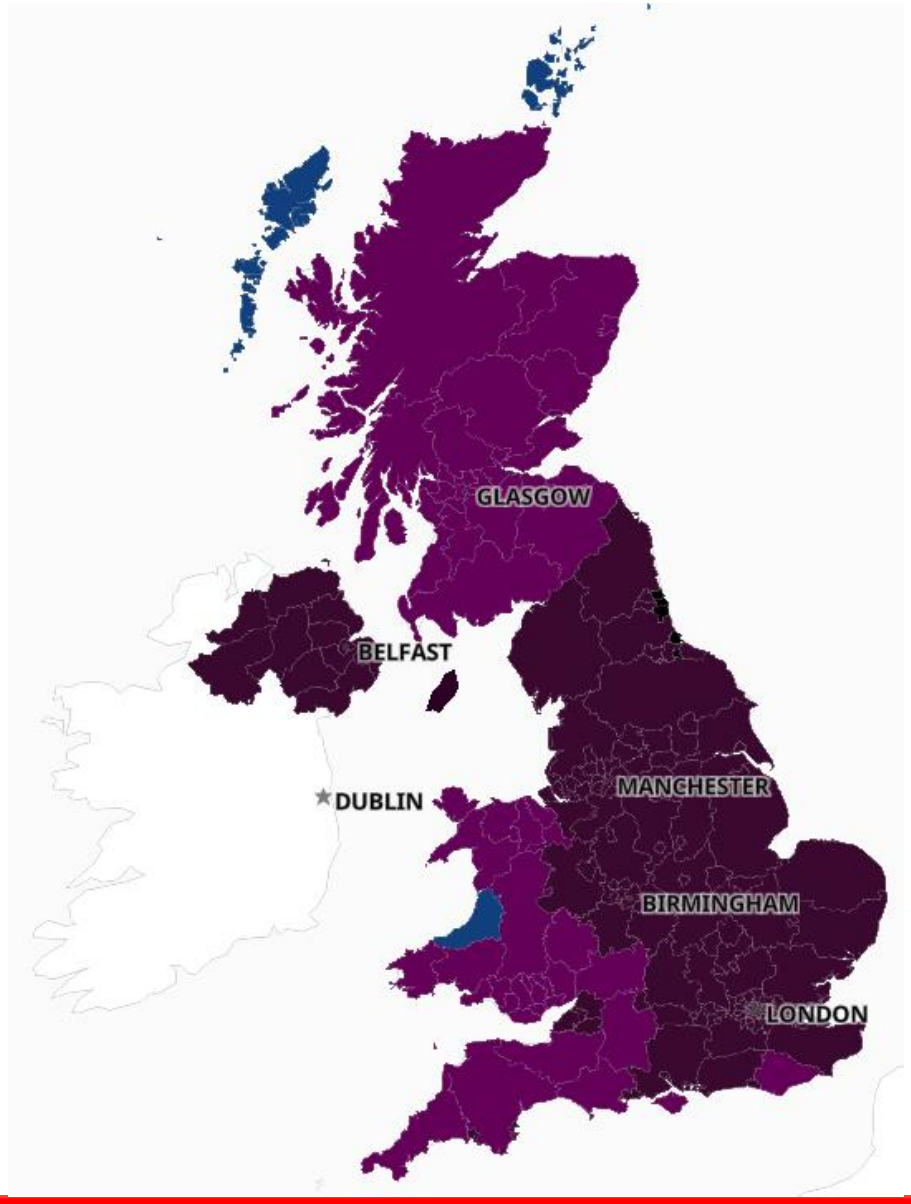
- The UK uses a more complex method of estimating $R_t$ which we are not able to replicate here. The use of this simplified methodology limits the robustness of comparing our $R_t$ value with UK estimates, however it provides a useful comparison between different time periods on Island. New Recoveries is calculated using the presumed 10 day recovery period from positive PCR test result.
- A full table of daily $R_t$ values for the current wave is available in Appendix 1.

# $R_t$ Area Comparison

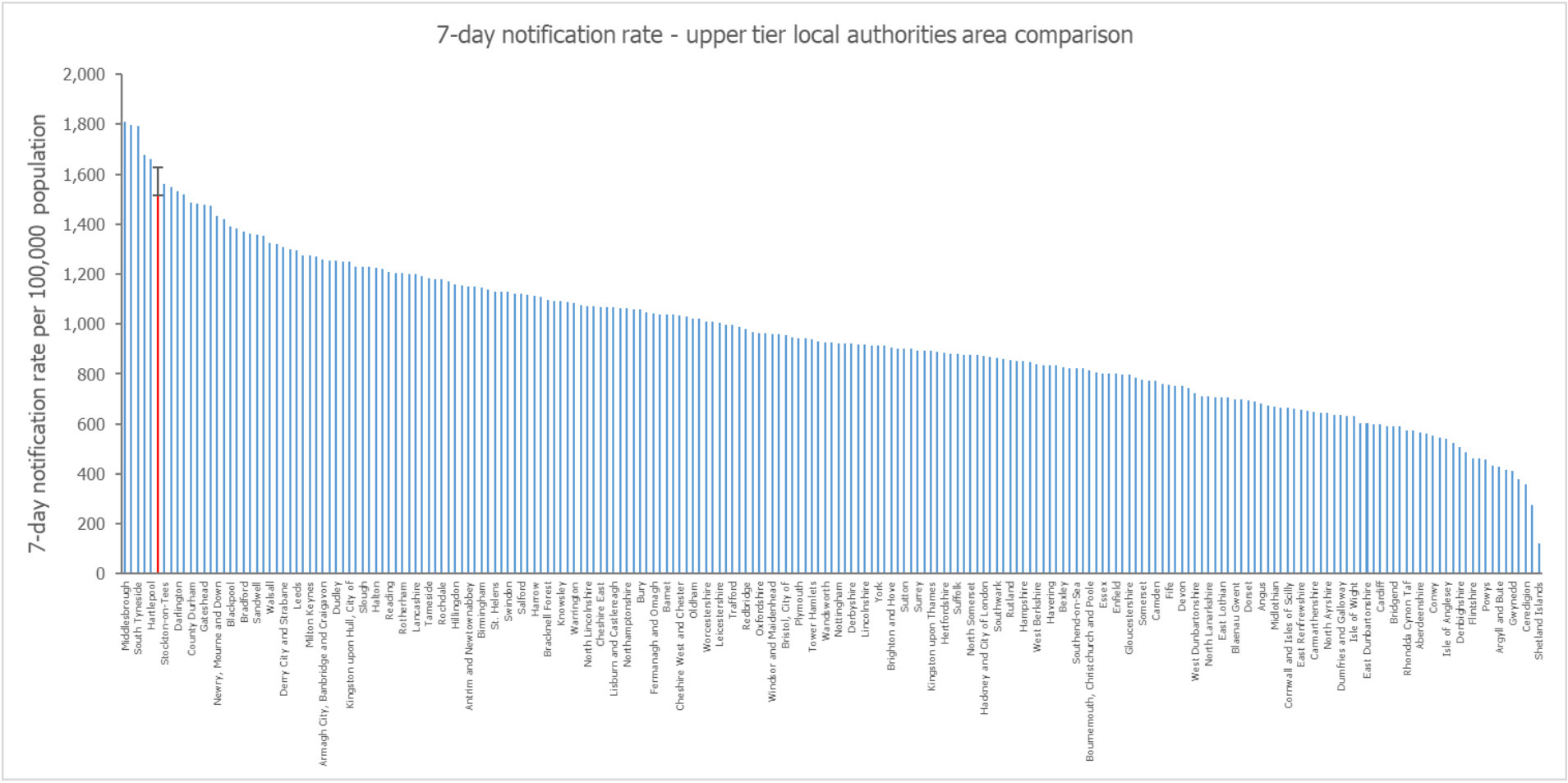



- $R_t$ value shown for Isle of Man is $R_t$ for 16/01/2022
- $R_t$ values shown for United Kingdom areas are 7 day $R_t$ values for 13/01/2022 (latest figures)

# 7-day Notification Rate Area Comparison

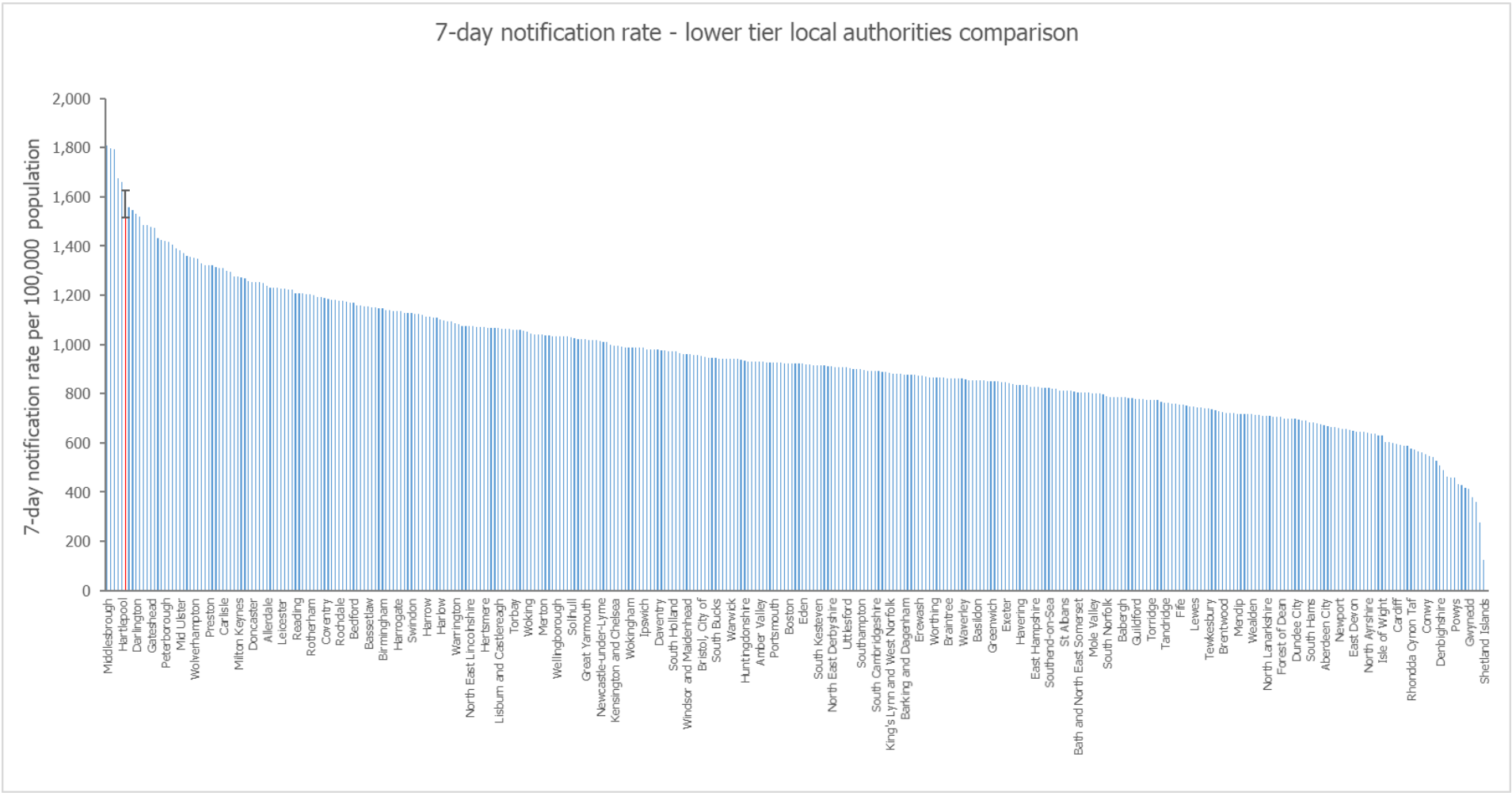


# 7-day Notification Rate – Upper Tier LA Comparison




The Isle of Man (shown in red), has the 6th 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 6th highest 7-day notification rate per 100,000 population when included in the lower tier local authorities of the UK.

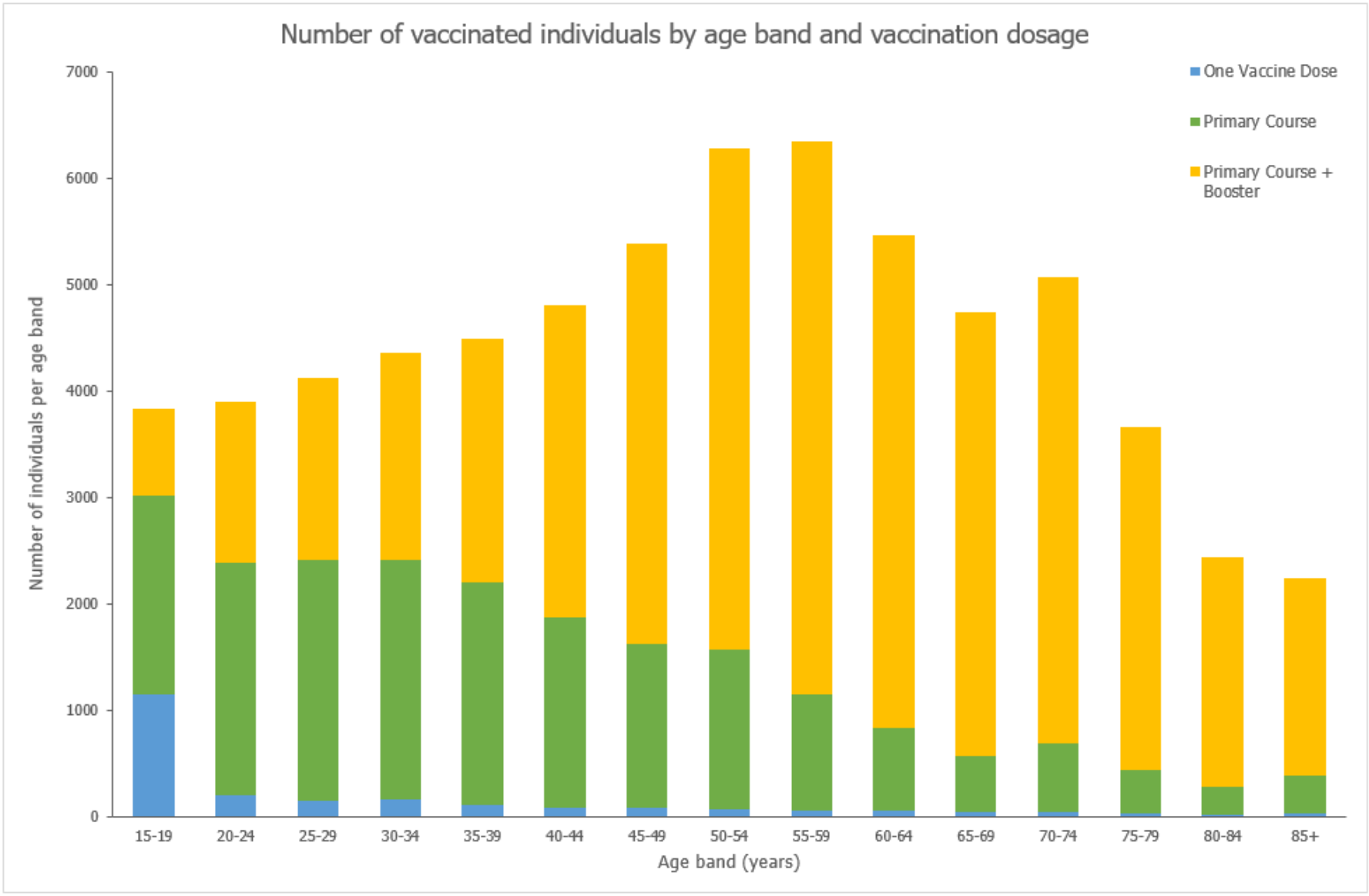
# 14-day Notification Rate Comparison

| | | 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 | 01 | 5851.91 | 5781.44 | 5922.39 | - |
| | 02 | 4170.19 | 4102.45 | 4236.94 | - |

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.

Since the week ending 10/10/21, the Isle of Man has had significantly higher 14 day notification rates than the UK

# Vaccine Uptake and Coverage




This data will be expanded in future reports to show % of eligible population vaccinated using the 2021 census data

# Hospitalised Patients

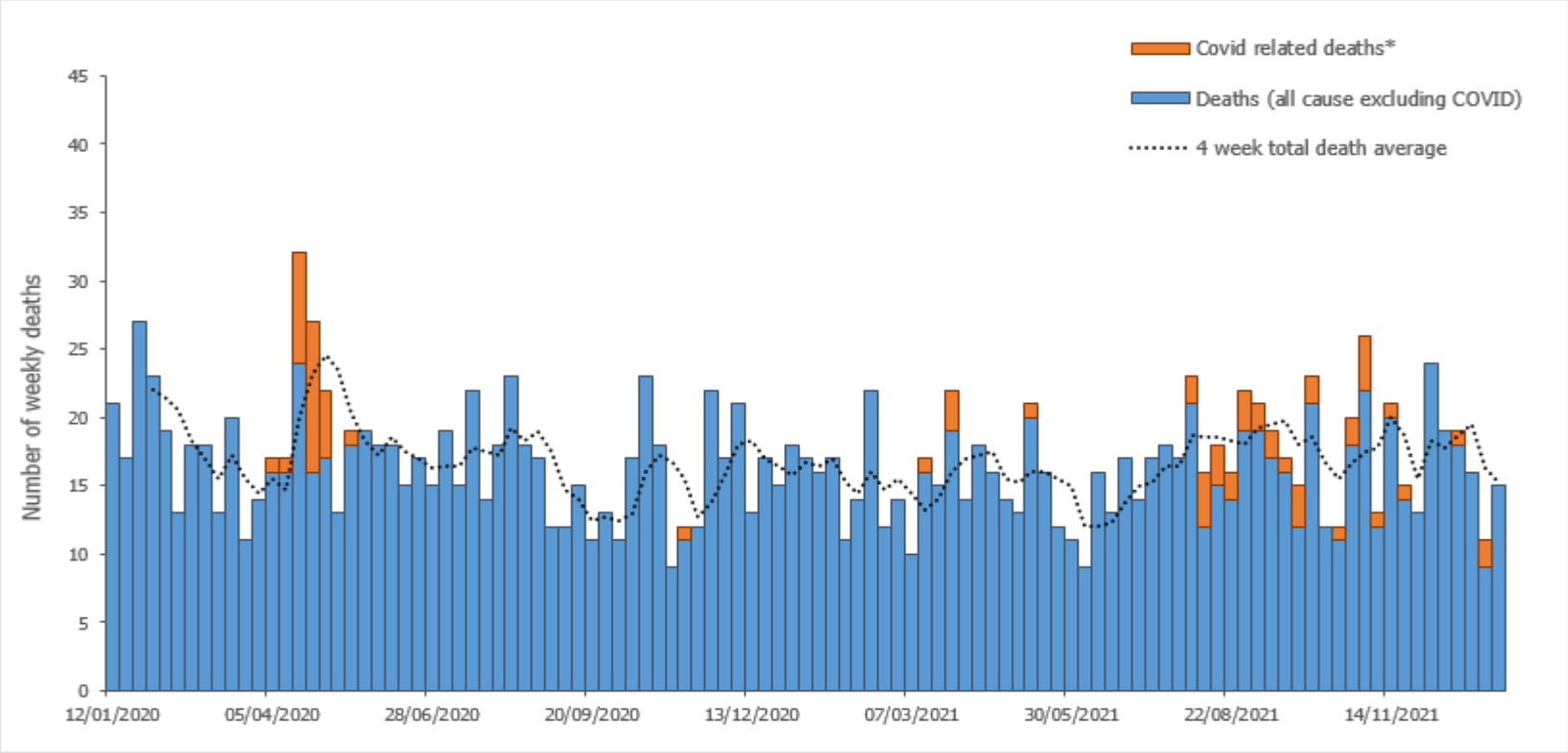
This figure is a snapshot census of the cases in Hospital.

## SUMMARY

| | |
|---|---|
| **Total Patients** | **7** |

| **Vaccination Status of Hospital Admissions** | |
|---|---|
| **Fully Vaccinated + Booster** | 42.9% |
| **Fully Vaccinated** | 14.3% |
| **Unvaccinated** | 42.9% |

# Weekly Deaths – Whole Pandemic

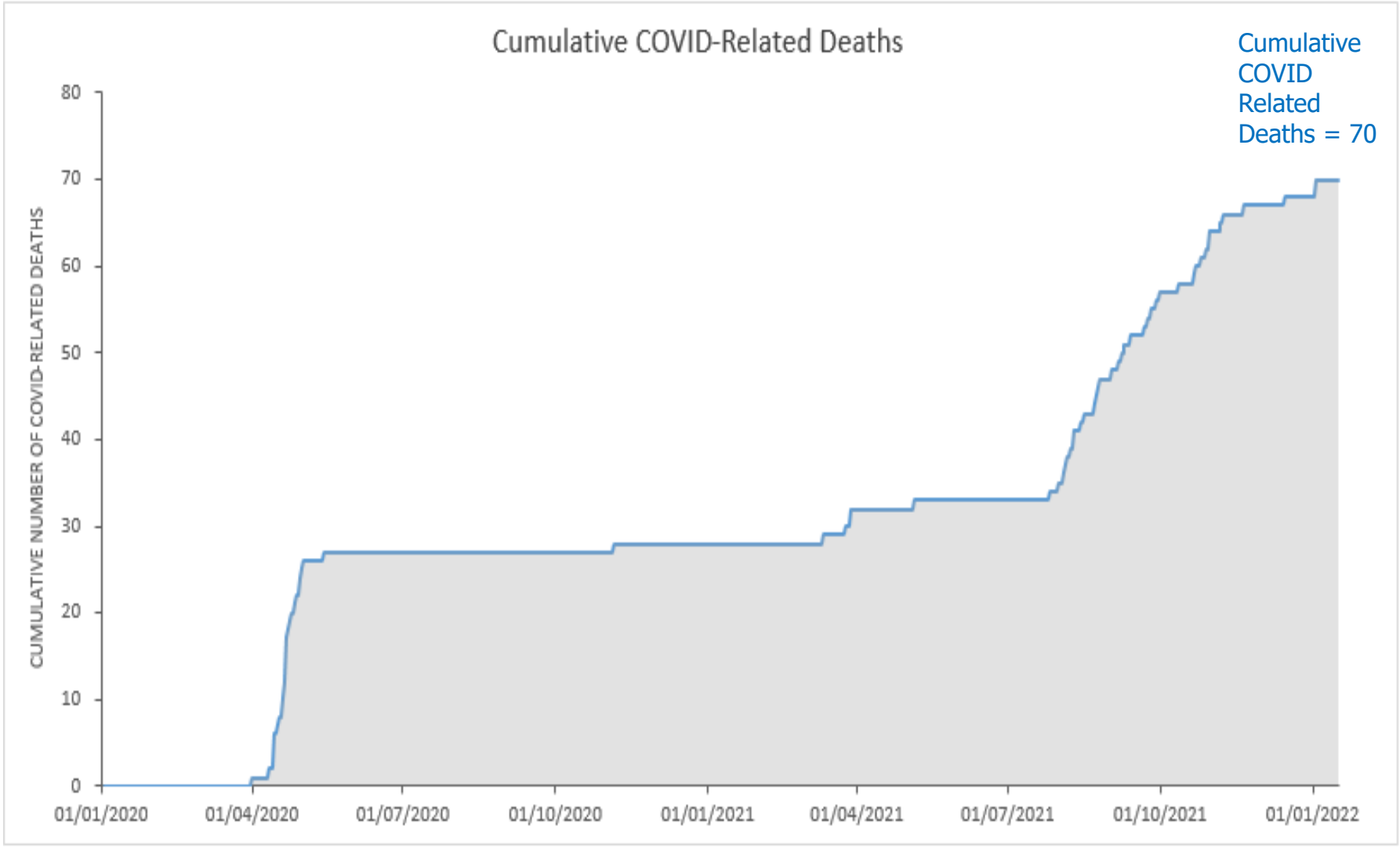



*Note*: Death registrations are often delayed and therefore deaths occurring in a given week may not be input into the week of which death occurred until a later date, meaning figures are likely to change retrospectively as data is updated and the most recent week's numbers will be incomplete.

Weekly death data is 11 days behind the Weekly Surveillance Report's release date. This is to allow for death registrations to be received with any delays and stop an incorrect perceived 'sudden drop' in weekly deaths that would occur if an appropriate time period was not given to allow for death registrations to be received in due course.

*COVID 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."

# Cumulative COVID-Related Deaths



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

# 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, C., Fauver,J. Buss, B., & Donahue, M. Investigation of a SARS-CoV-2 B.1.1.529 (Omicron) Variant Cluster — Nebraska, November–December2021. https://www.cdc.gov/mmwr/volumes/70/wr/mm705152e3.htm

# 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.