Isle of Man Government

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COVID-19 Weekly Surveillance Report

10th 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 risen to 2.4, indicating a further rise in transmission. As seen last week, most of the increase has been in the age group 20 – 59 years.

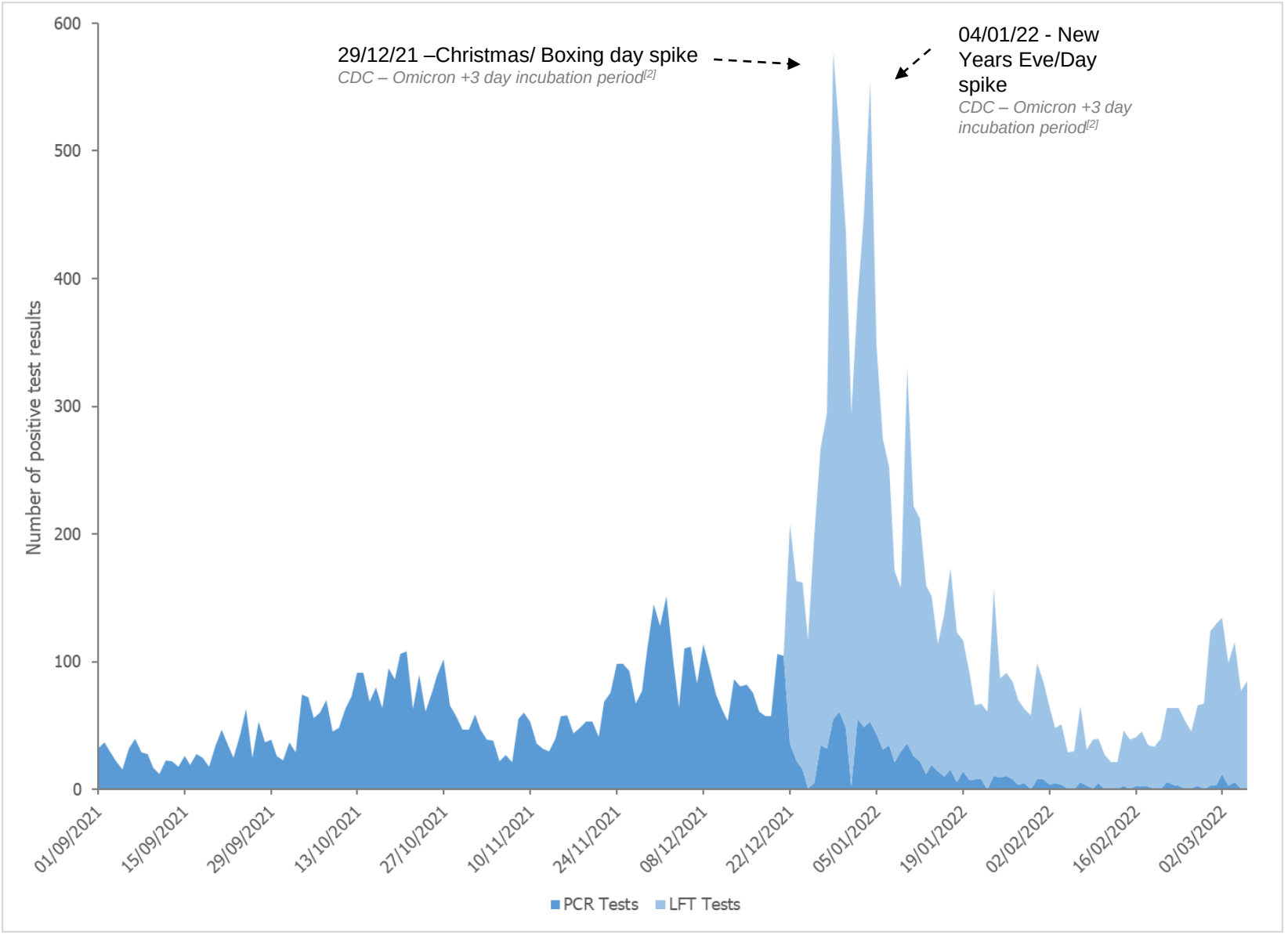
- Case ascertainment is, of course, dependent on patterns of testing and reporting so it is likely that there are more cases than are currently notified. This caveat has applied throughout the pandemic when COVID has been transmitting on Island, although the change to LFD self testing and self reporting 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 last two weeks may relate to patterns of travel around half-term and changes to testing requirements. 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. There has been a slight fall in daily case numbers towards the end of the week but it is to early to conclude whether this will mark an end to the period of infections.

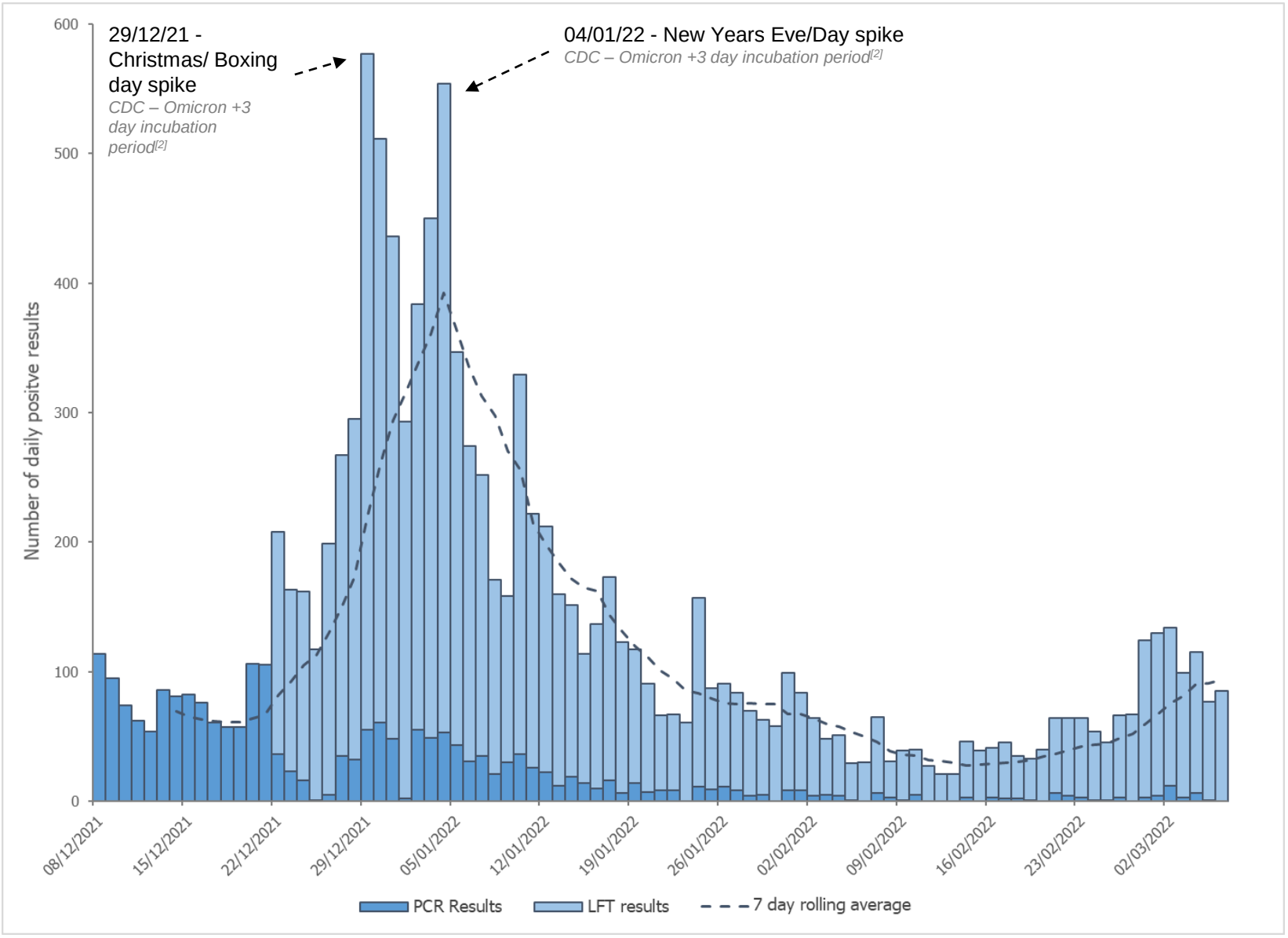
Key Points

- The current 7-day average for reported positive results is 109.
- The current trend of reported positive results is increasing.
- The effective reproduction number (R_t) was 2.14 this week, indicating an increase in rate of transmission.
- The snapshot of the Hospital is not available in this week's report.

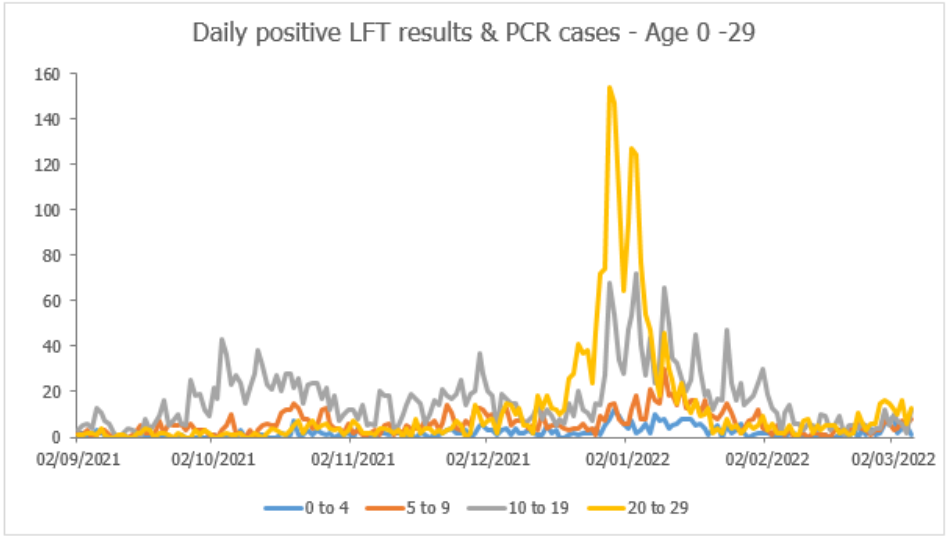
Positive COVID-19 Tests

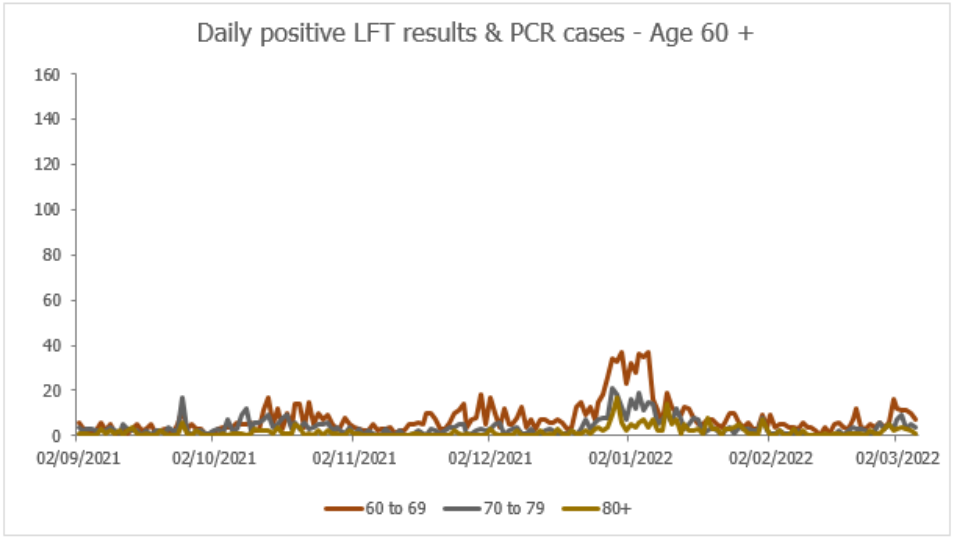


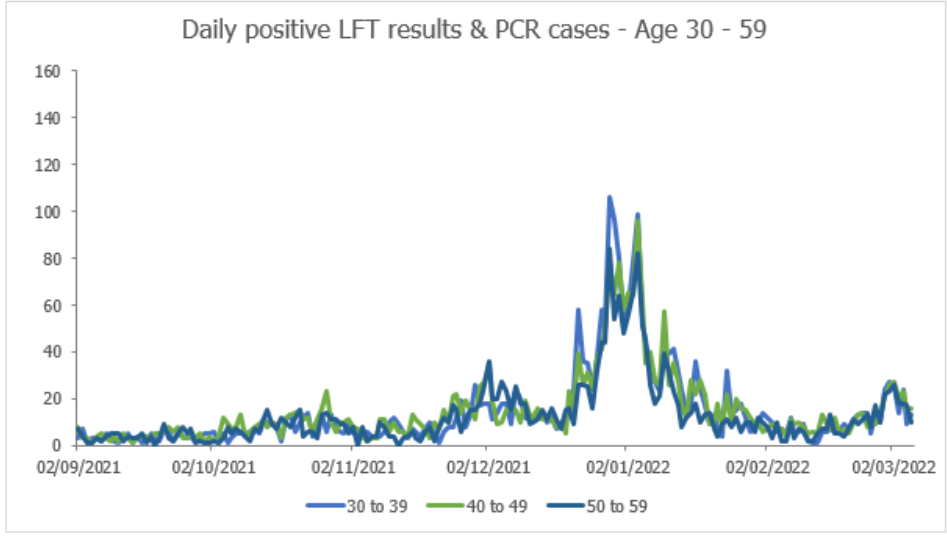
Daily Positive Results – 4th Wave

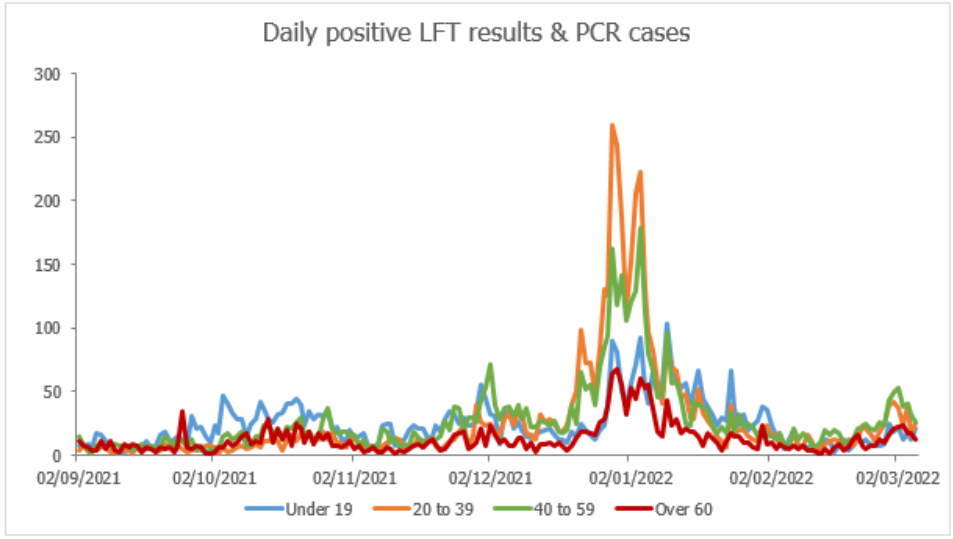


Age Group Analysis

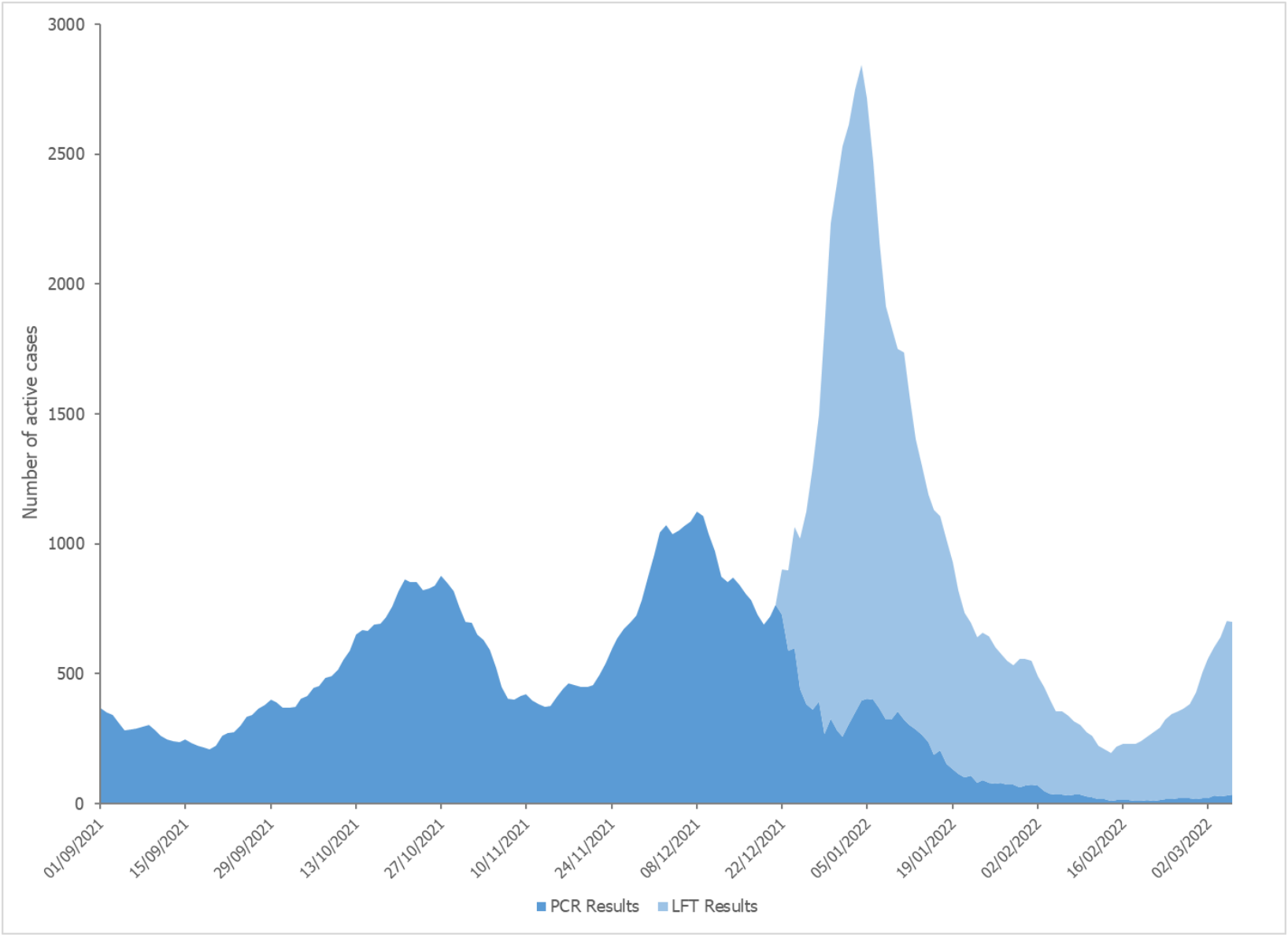




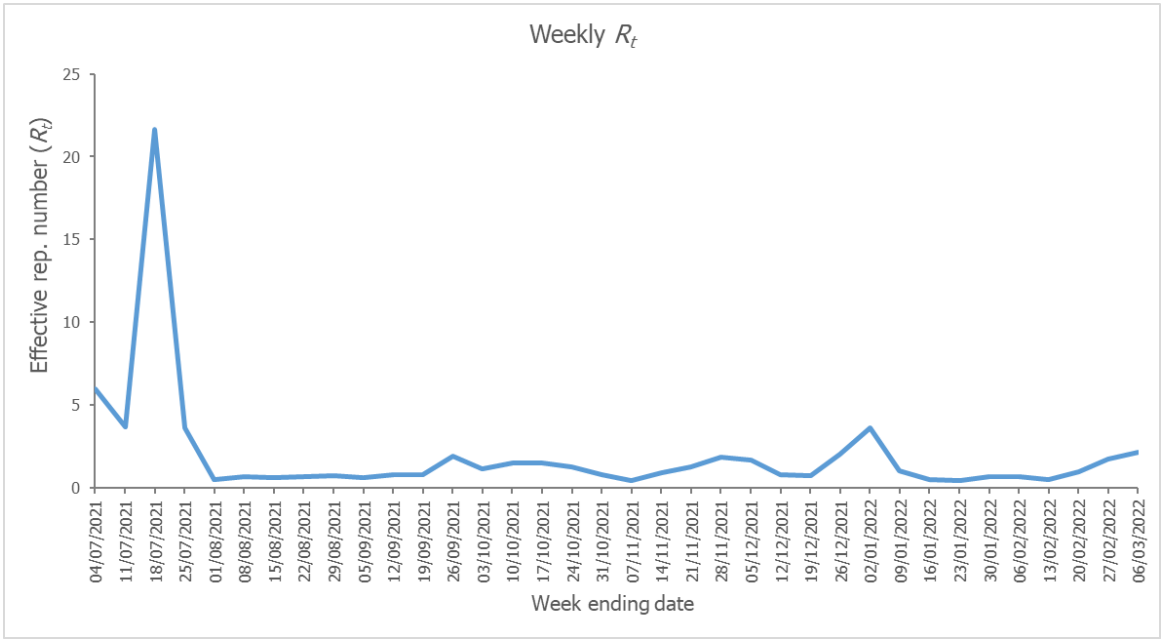




Active PCR & LFT Cases



Effective Reproduction Number (R_t)



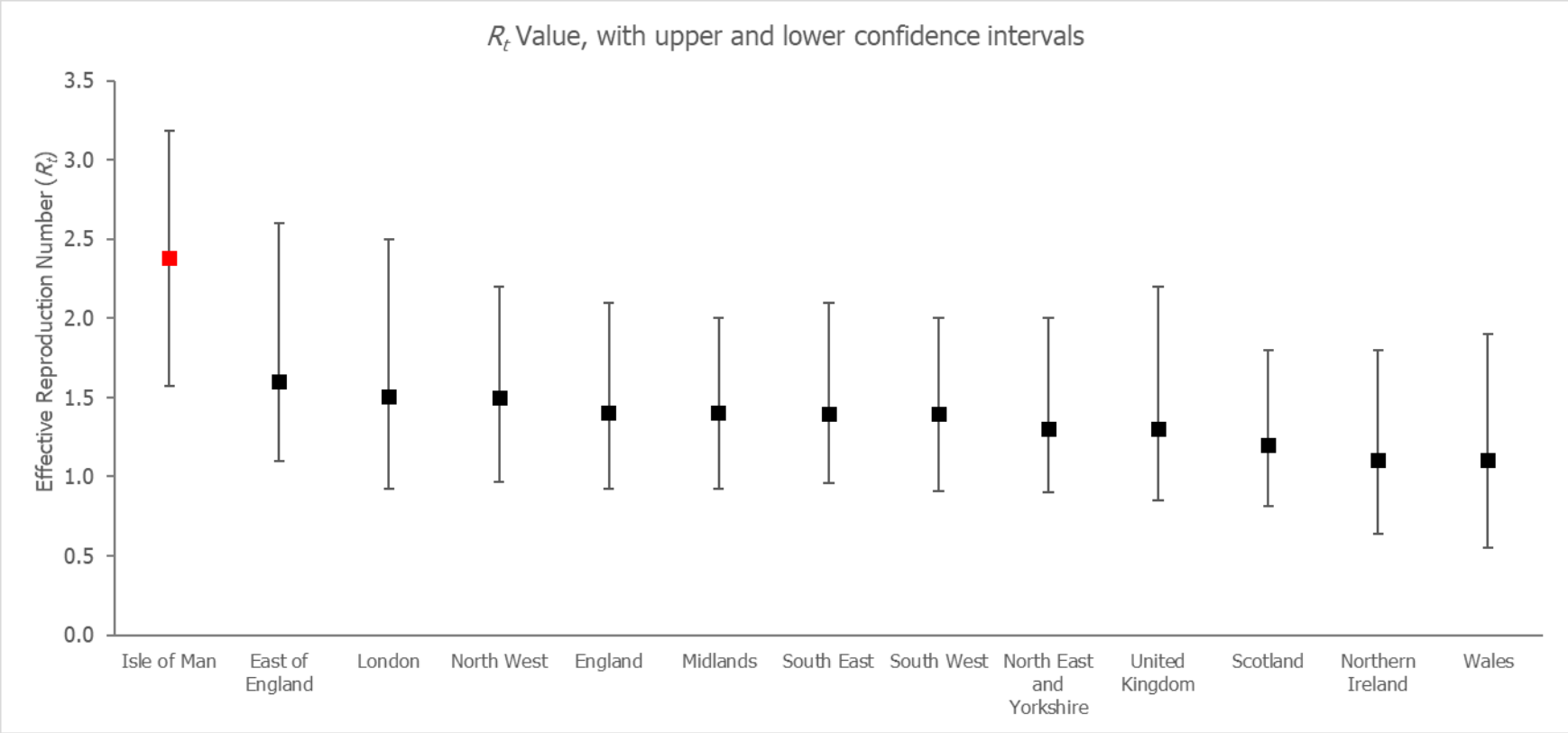
Latest 7 day
R_t = 2.14

- 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]:

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

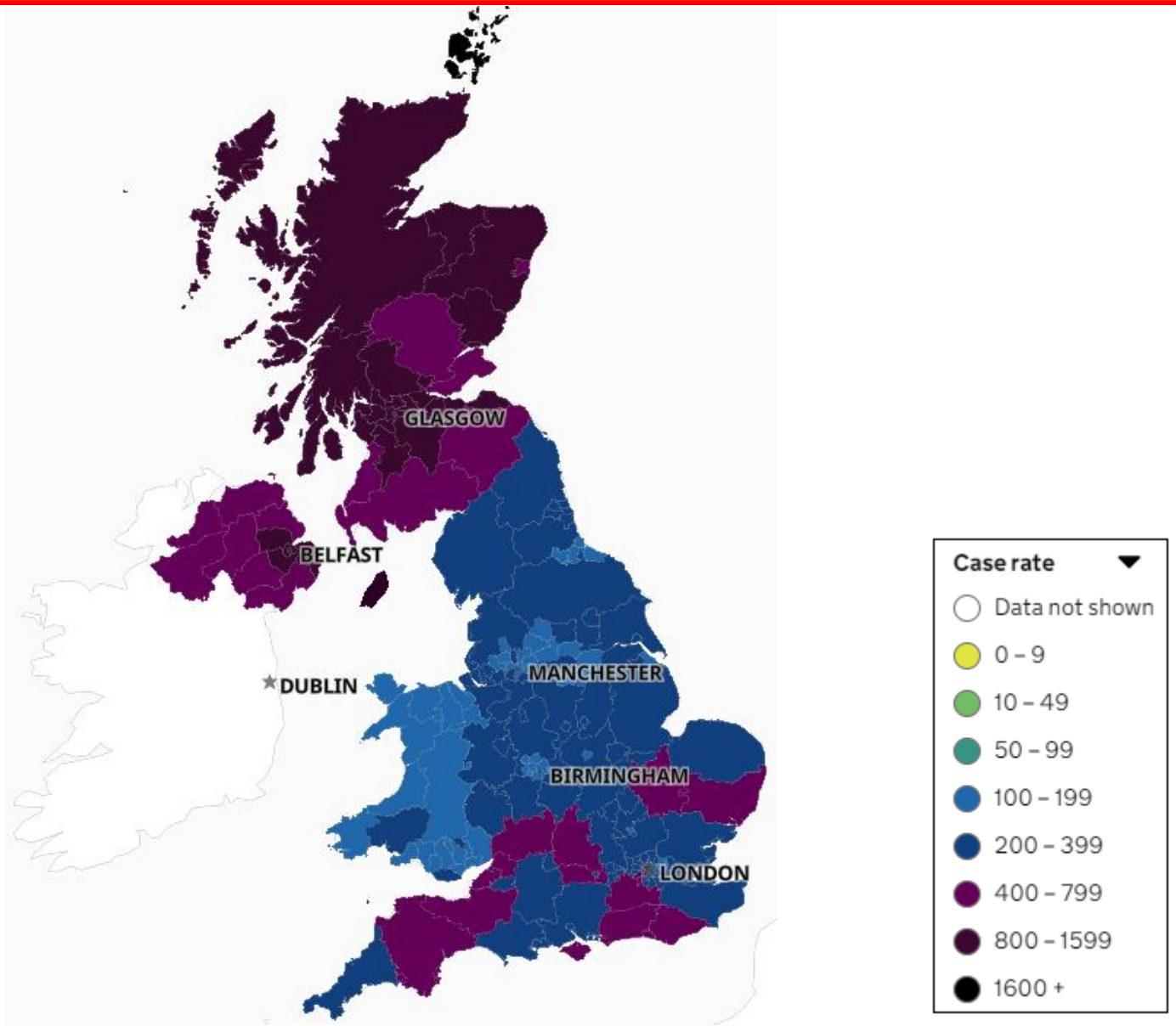
- The UK uses a more complex method of estimating R_t which we are not able to replicate here. The use of this simplified methodology limits the robustness of comparing our R_t value with UK estimates, however it provides a useful comparison between different time periods on Island. New Recoveries is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

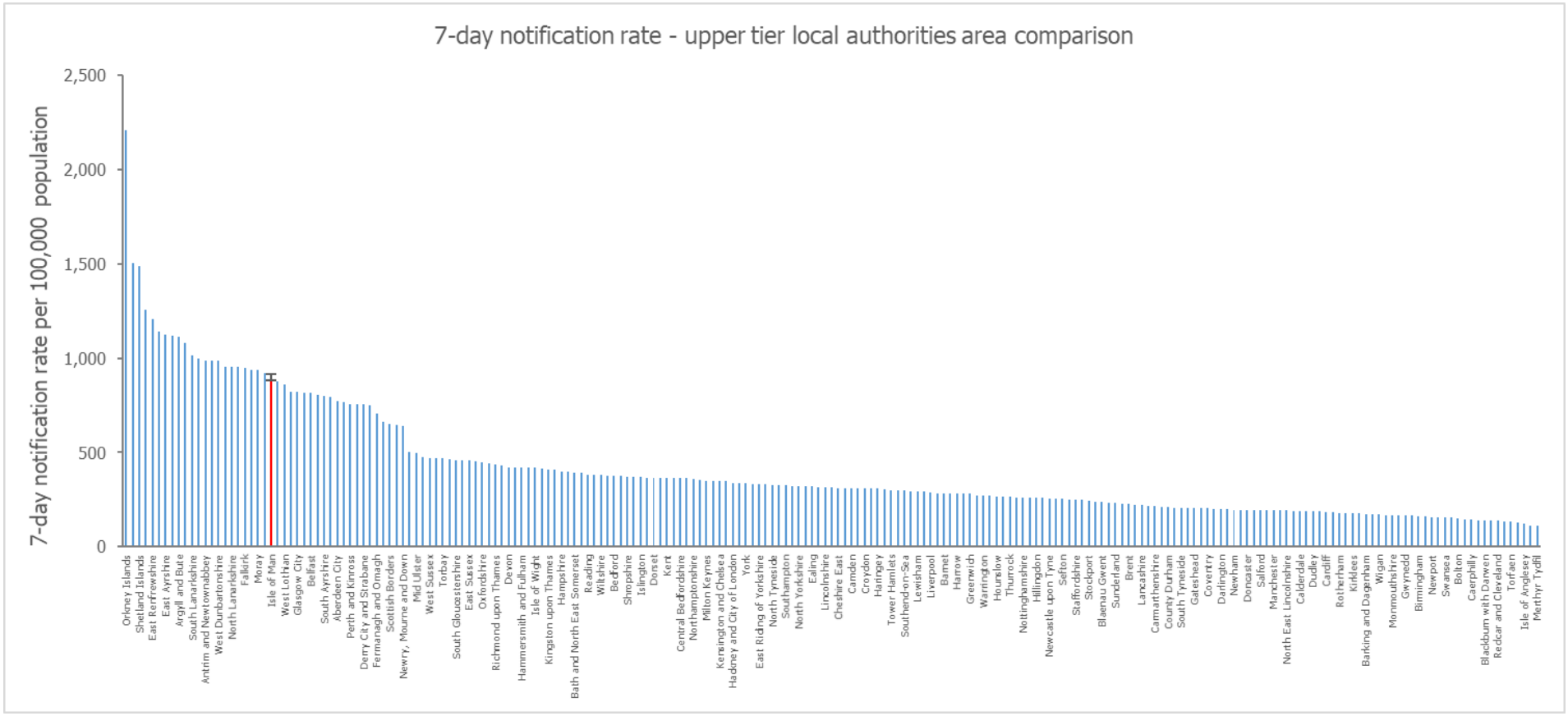


- R_t value shown for Isle of Man is R_t for 06/03/2022
- R_t values shown for United Kingdom areas are 7 day R_t values for 03/03/2022 (latest figures)

7-day Notification Rate Area Comparison

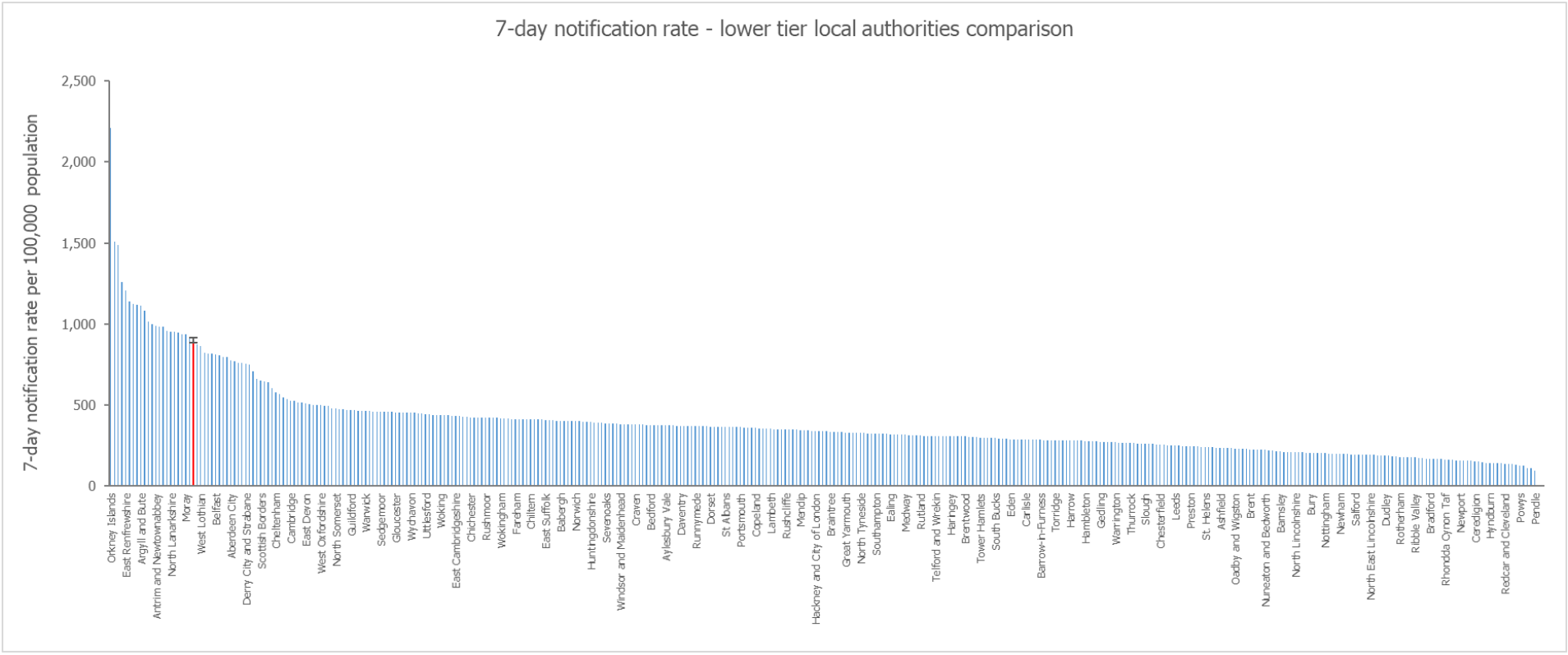


7-day Notification Rate – Upper Tier LA Comparison



The Isle of Man (shown in red), has the 23rd 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



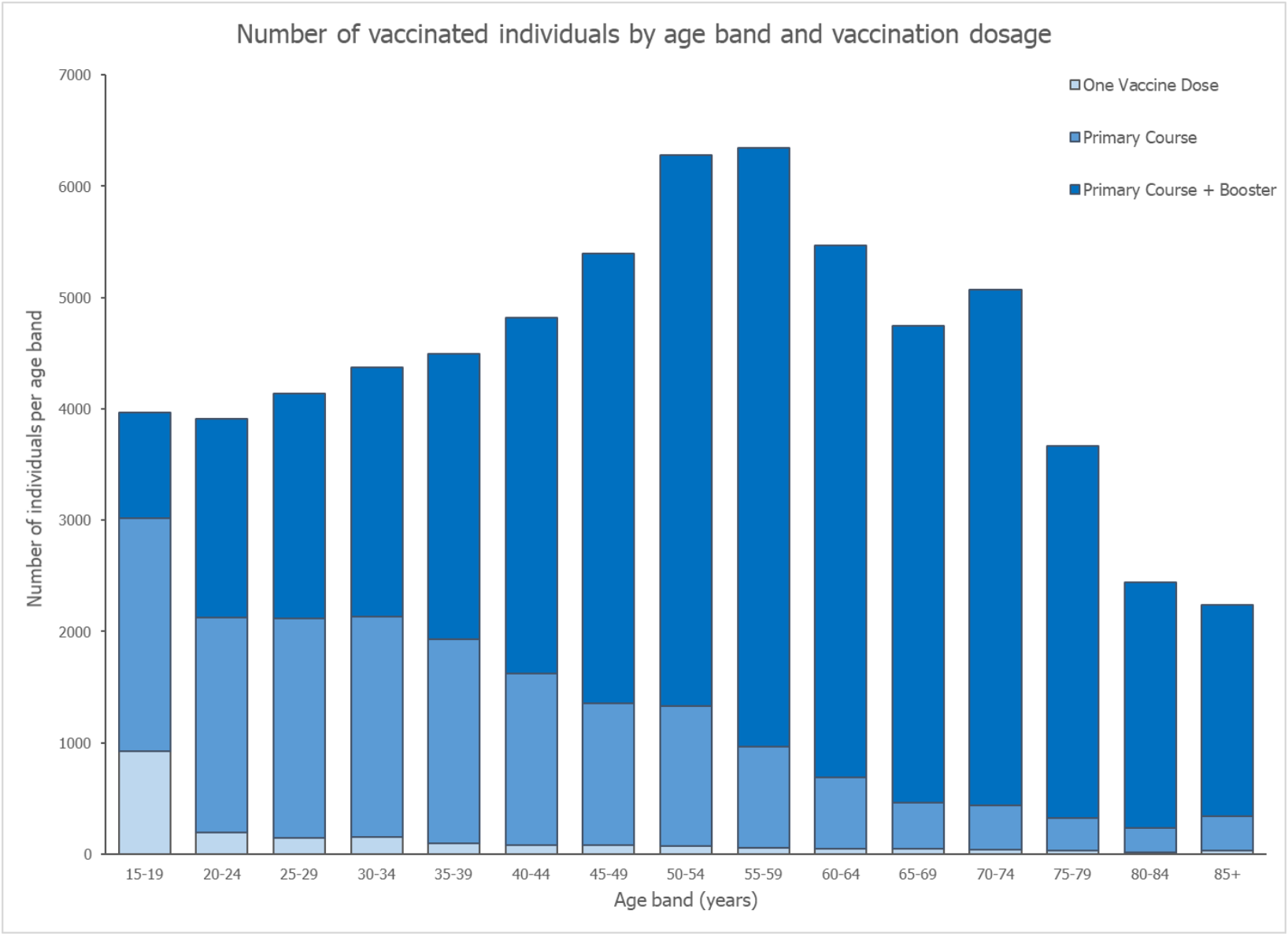
The Isle of Man (shown in red), has the 23rd highest 7-day notification rate per 100,000 population when included in the lower tier local authorities of the UK.

14-day Notification Rate Comparison

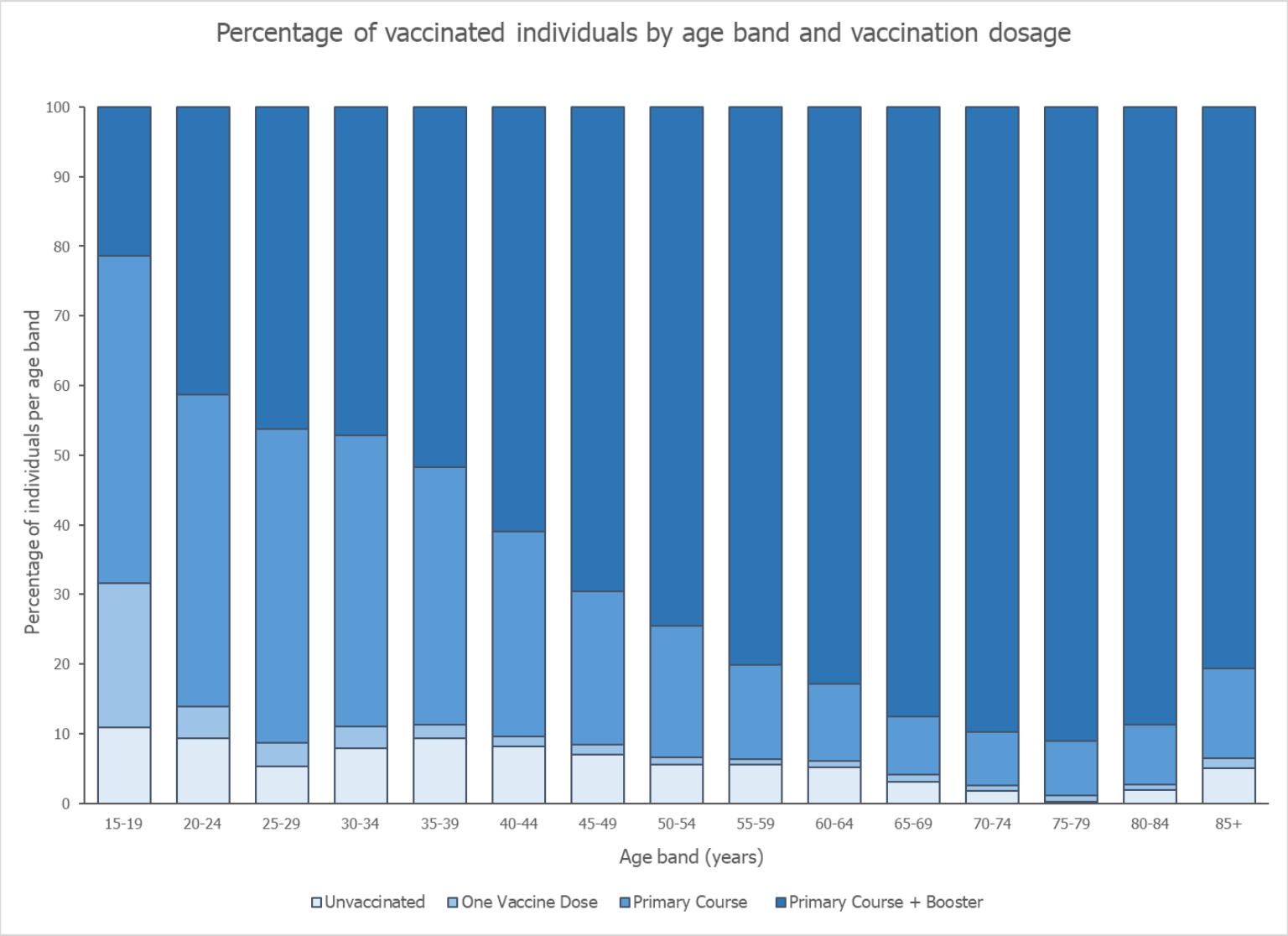
		Isle of Man			United Kingdom
Year	Week number	14 day rate	Lower CI	Upper CI	14 day rate
2021	36	617 . 41	612 . 23	622 . 60	727 . 08
	37	565 . 67	561 . 04	570 . 30	663 . 56
	38	660 . 93	654 . 07	667 . 78	643 . 48
	39	766 . 77	760 . 65	772 . 89	691 . 94
	40	874 . 96	867 . 84	882 . 08	778 . 05
	41	1136 . 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	-

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

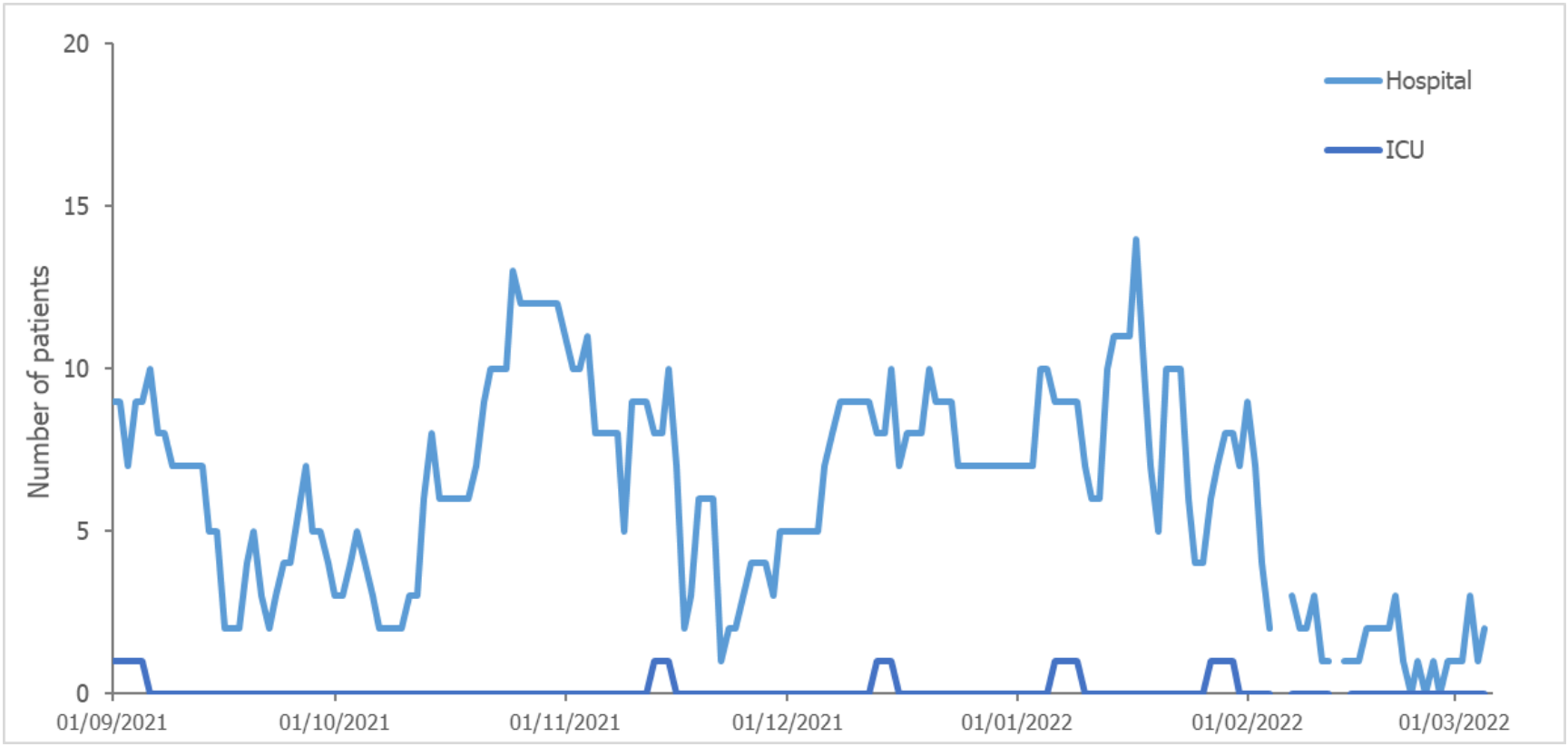


Vaccine Uptake and Coverage



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

Hospitalised Patients

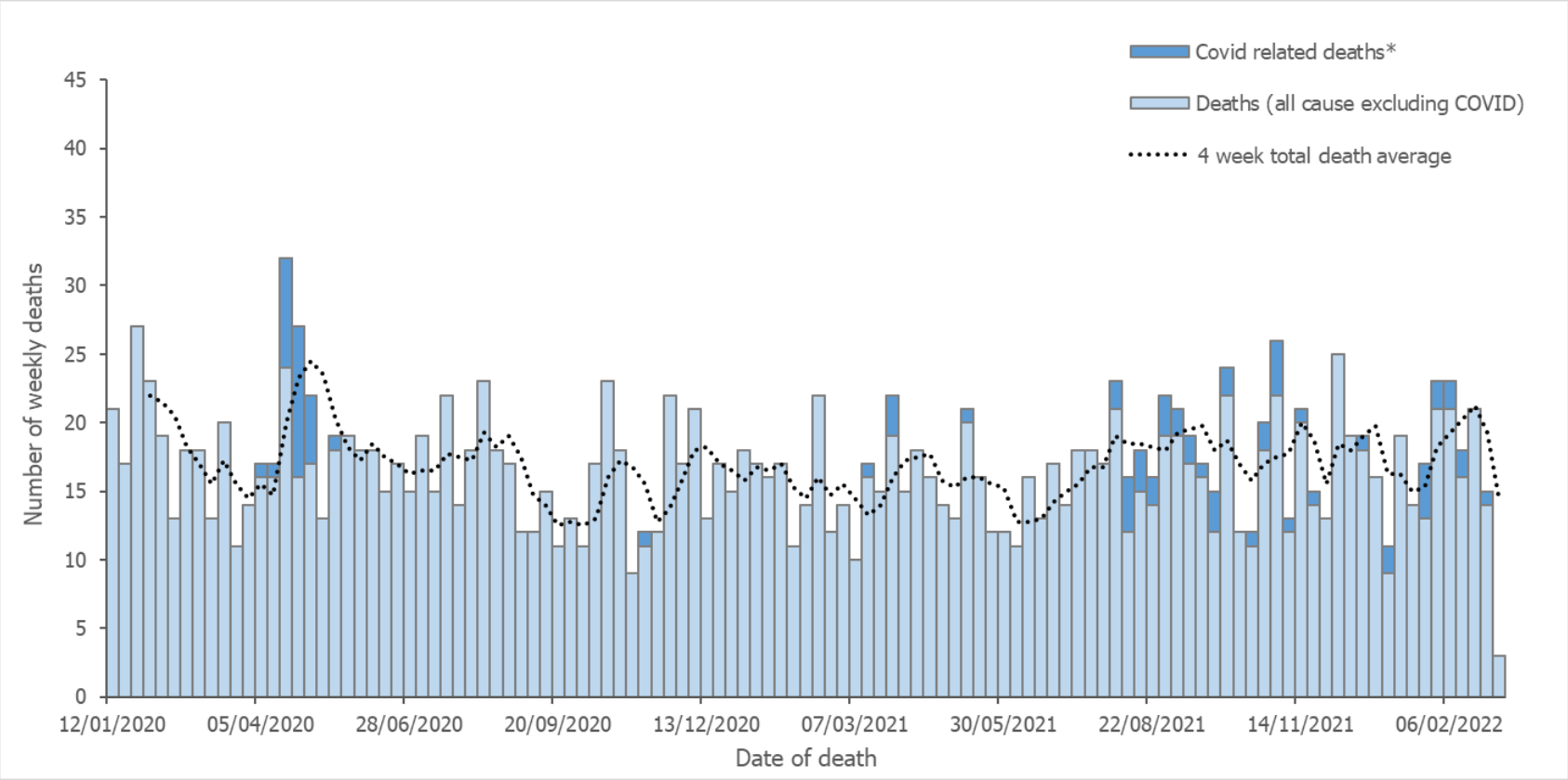


Patients in hospital with a confirmed COVID status at the time of the daily snapshot, taken at 12pm.

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

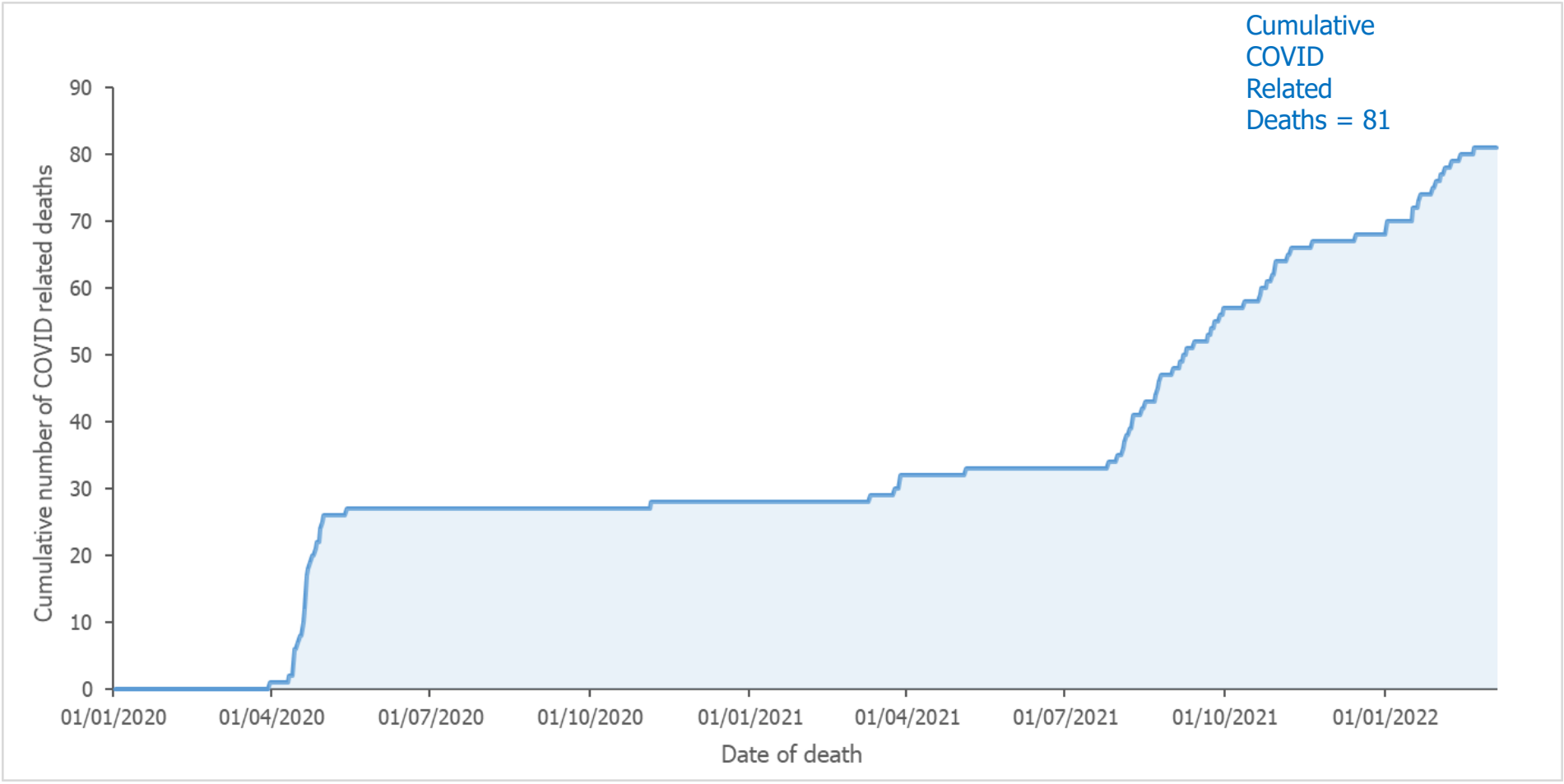


- *COVID related deaths are those where COVID-19 is mentioned **anywhere** within the death certificate. This differs from the definition used by Public Health England, who classify a COVID death as "people who had had a positive test result for COVID-19 and dies within 28 days of the first positive 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 80.

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				
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				
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				
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				
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				
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				
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				
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.