Isle of Man Government

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COVID-19 Weekly Surveillance Report

3rd February 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.

- Overall, cases appear to have plateaued over the past week. In most age groups, cases have either remained level or fallen slightly. Cases have fallen or remained level this week across most age groups, apart from small rises in the 10-19 and 40-59 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.

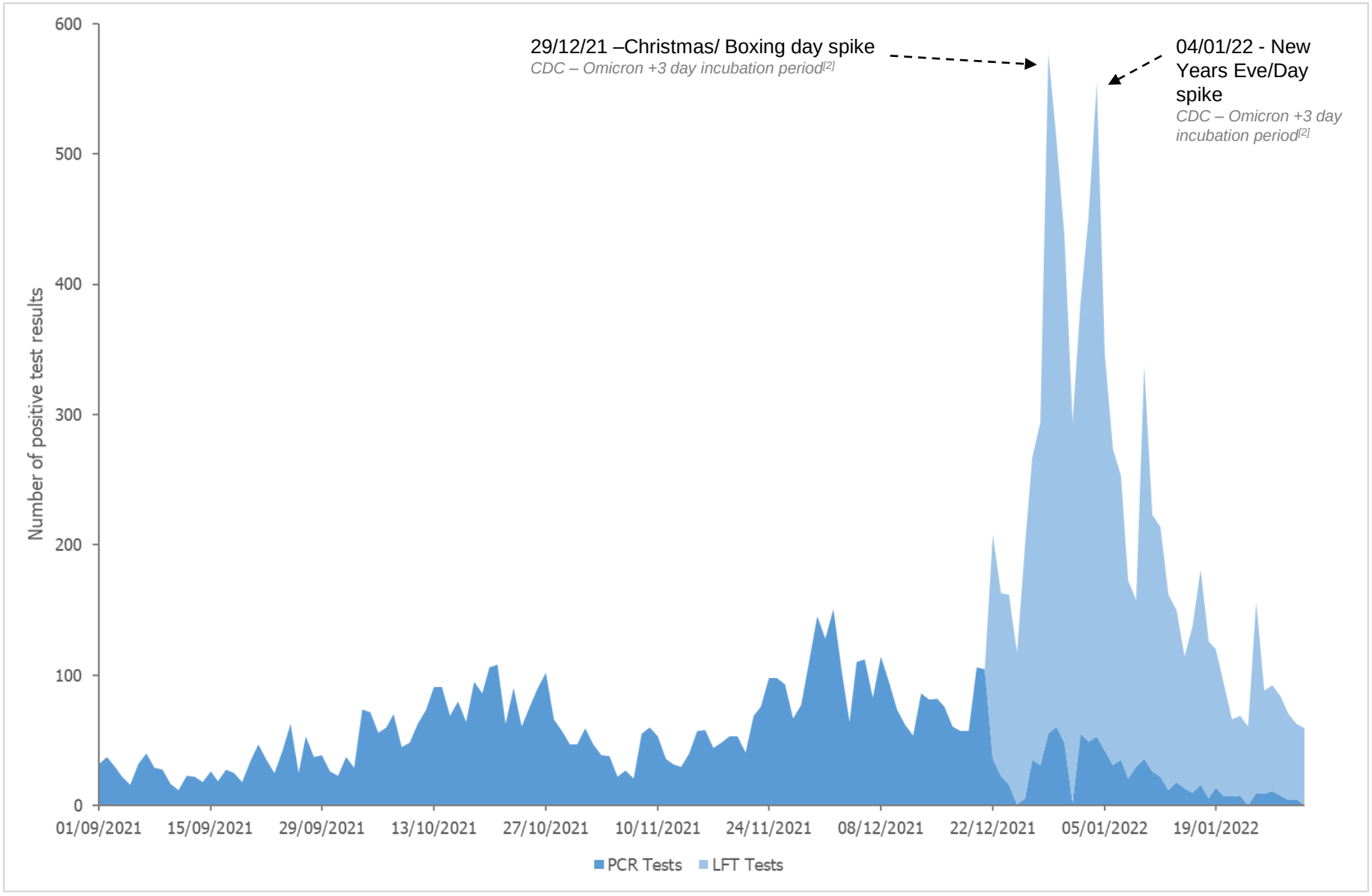
- Case ascertainment is, of course, dependent on patterns of testing and reporting so it is likely that there are more cases than are currently notified. This caveat has applied throughout the pandemic when COVID has been transmitting on Island, although the change to LFD self testing and self reporting 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.

- Based on trends in the UK and elsewhere (e.g. South Africa), we may be entering a period when we will see case numbers remaining at a plateau for a time. This will depend on levels of immunity and patterns of mixing in our communities, both of which impact on transmission.

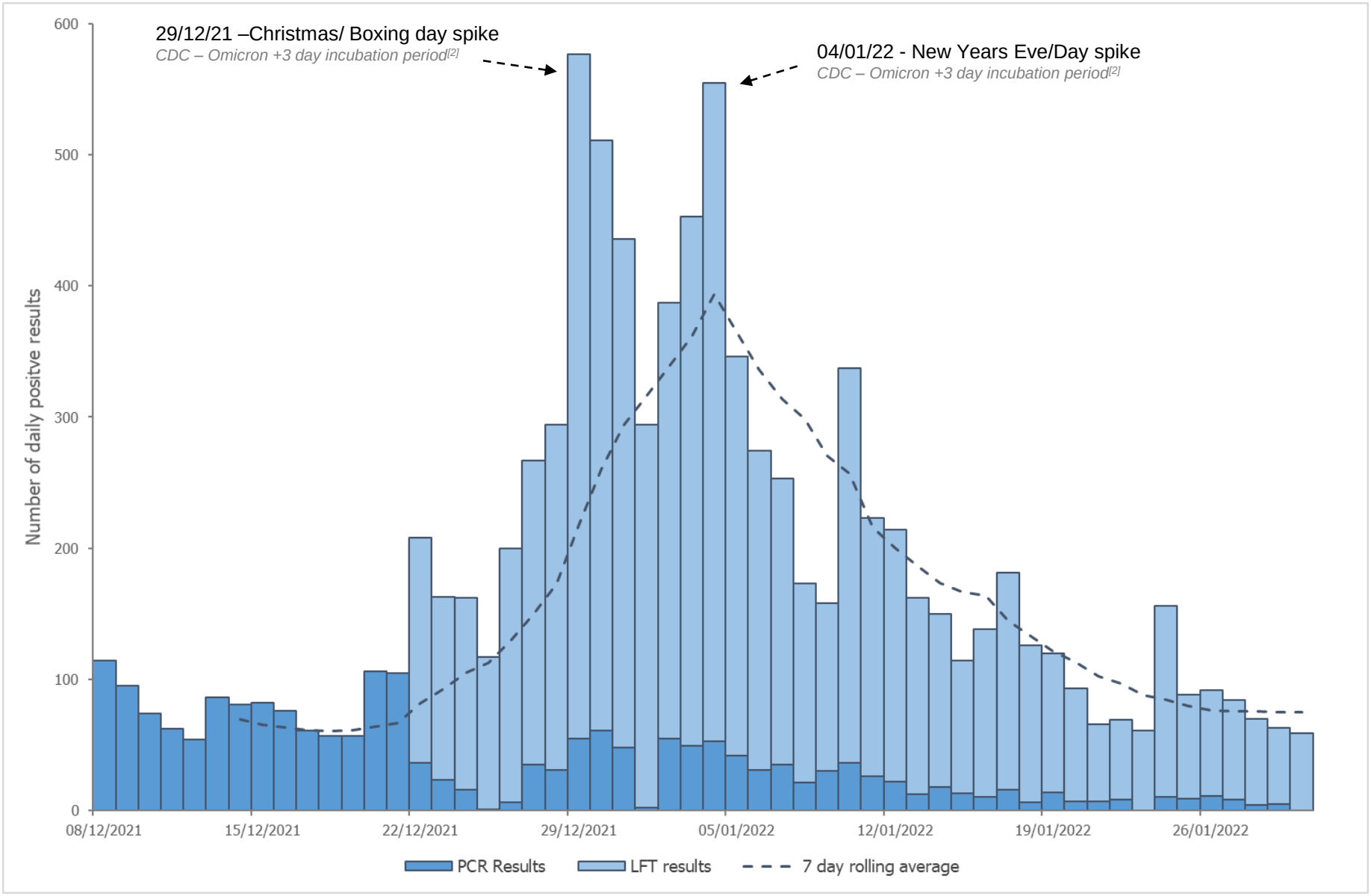
Key Points

- The current 7-day average for reported positive results is around 87.
- The current overall trend of reported positive results is levelling off.
- The effective reproduction number (R_t) was 0.66 this week, indicating a very slight increase in rate of transmission. However, as R_t remains <1, this is consistent with the observed plateauing and not indicative of a further surge in cases.
- The snapshot of the Hospital shows 9 patients currently admitted with a COVID positive status.

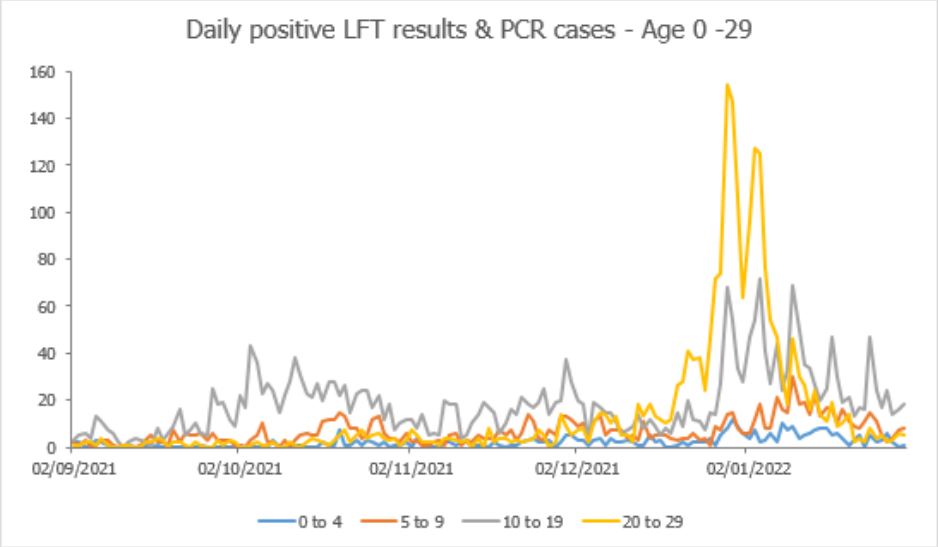
Positive COVID-19 Tests

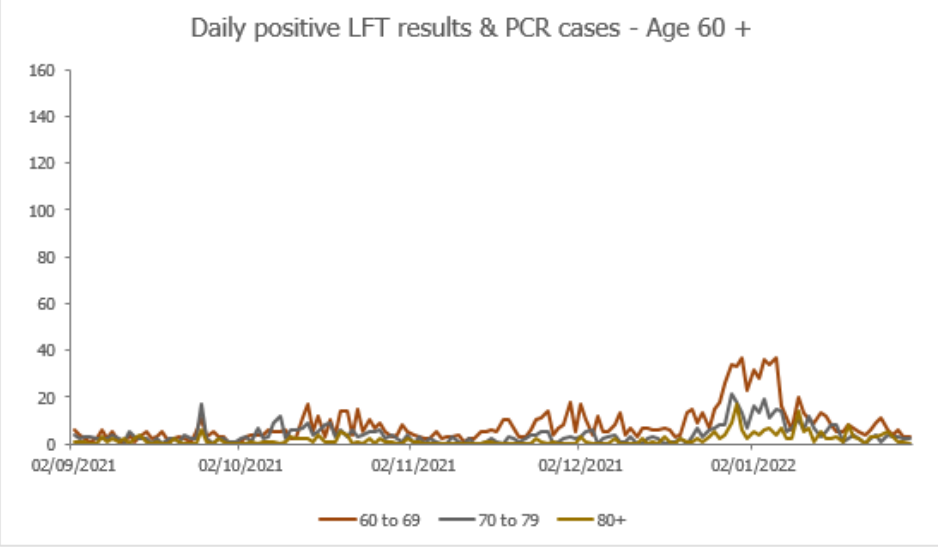


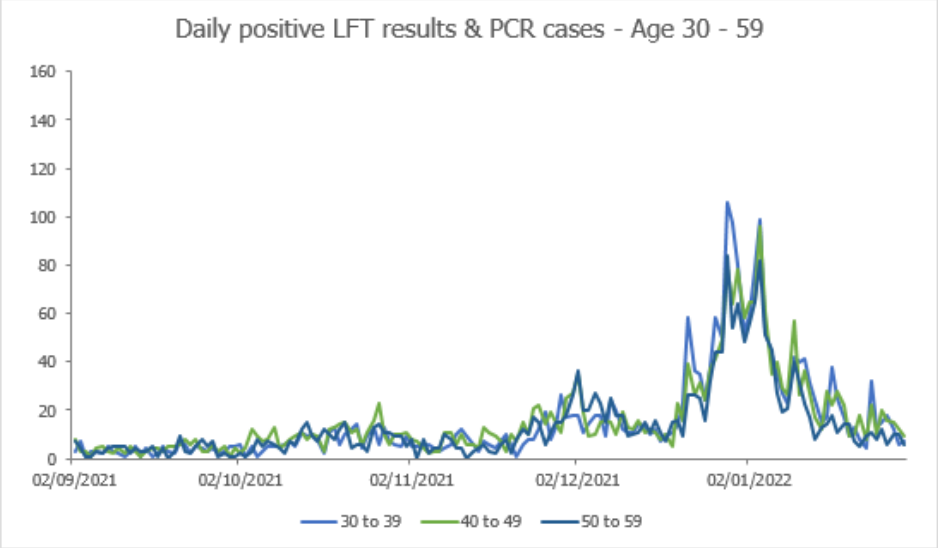
Daily Positive Results – 4th Wave

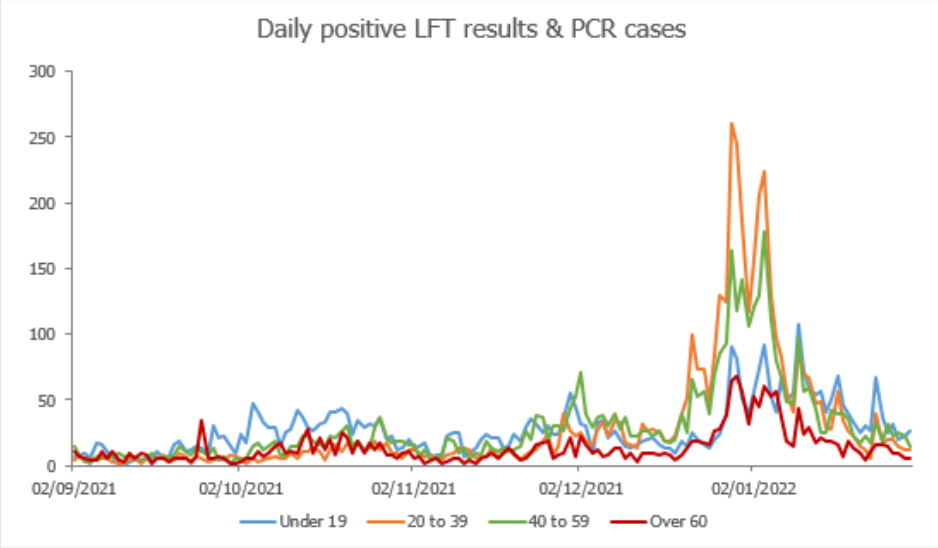


Age Group Analysis

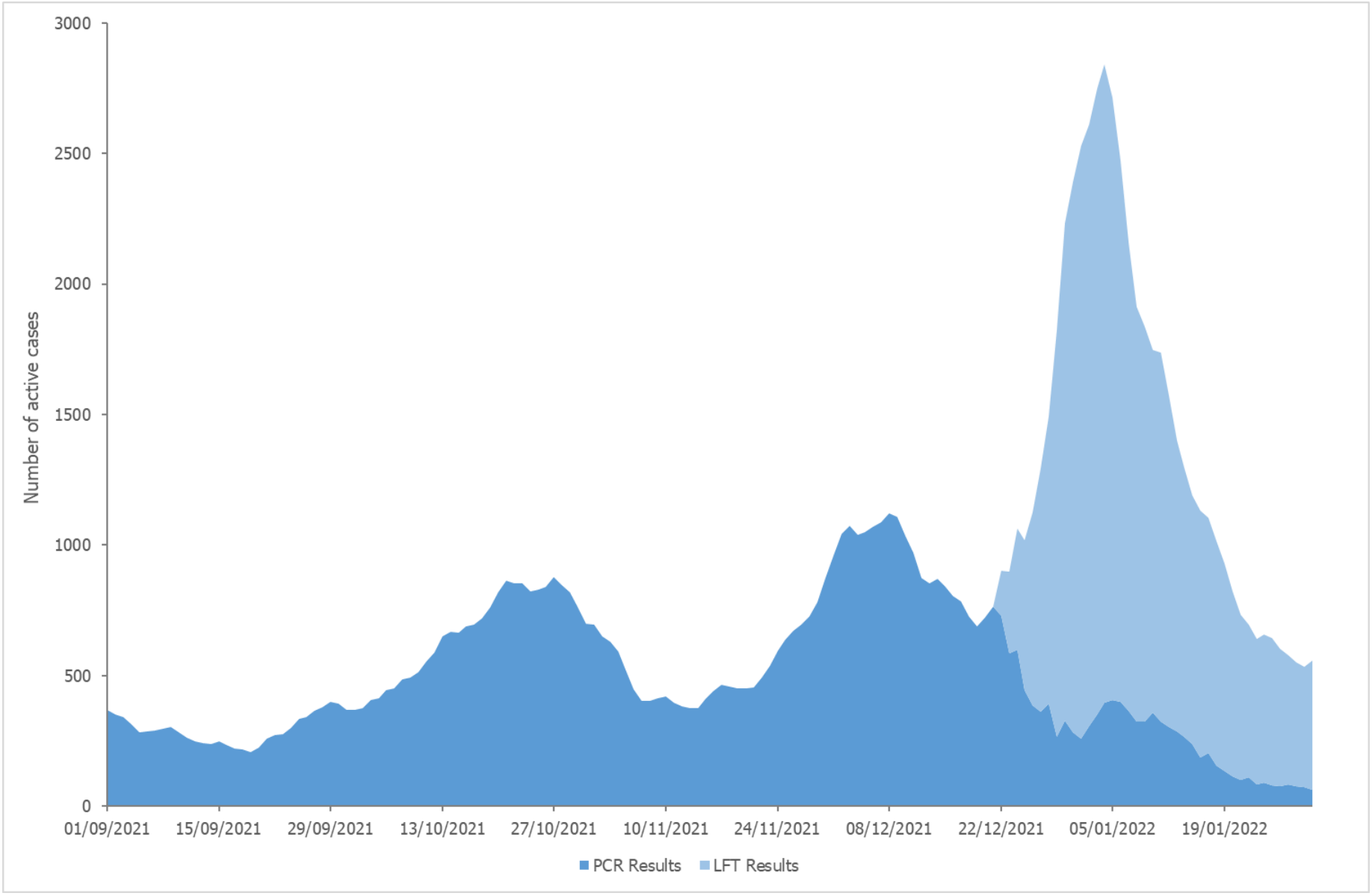




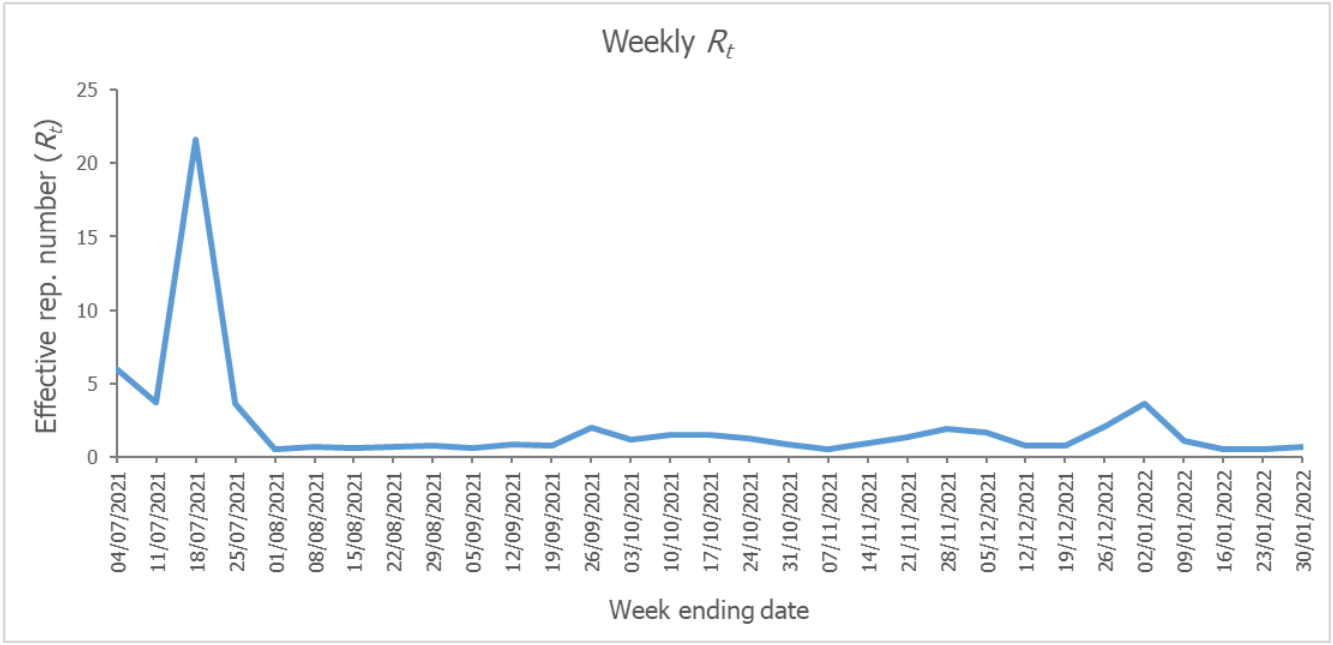




Active PCR & LFT Cases



Effective Reproduction Number (R_t)



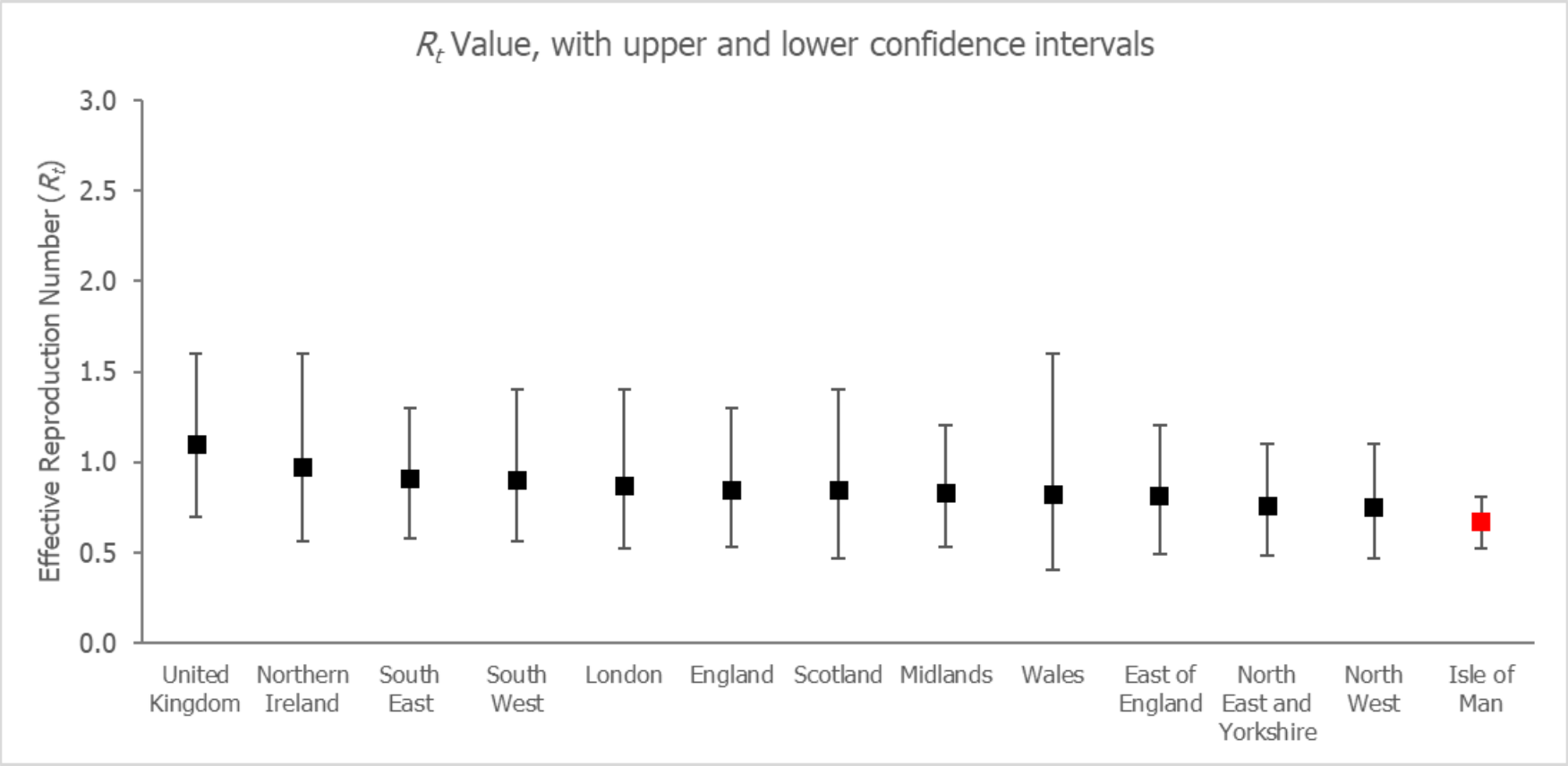
Latest 7 day
$R_t = 0.66$

- 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]:

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

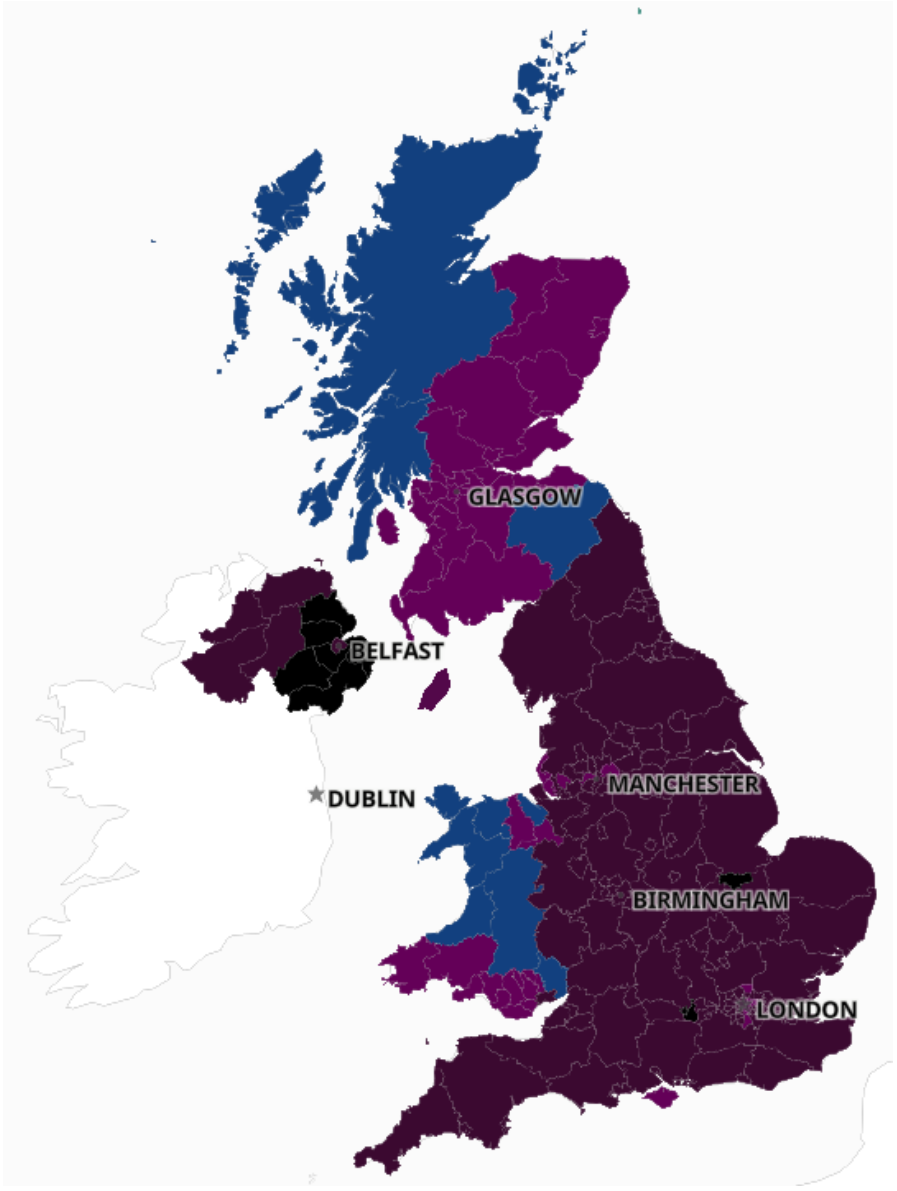
- The UK uses a more complex method of estimating R_t which we are not able to replicate here. The use of this simplified methodology limits the robustness of comparing our R_t value with UK estimates, however it provides a useful comparison between different time periods on Island. New Recoveries is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

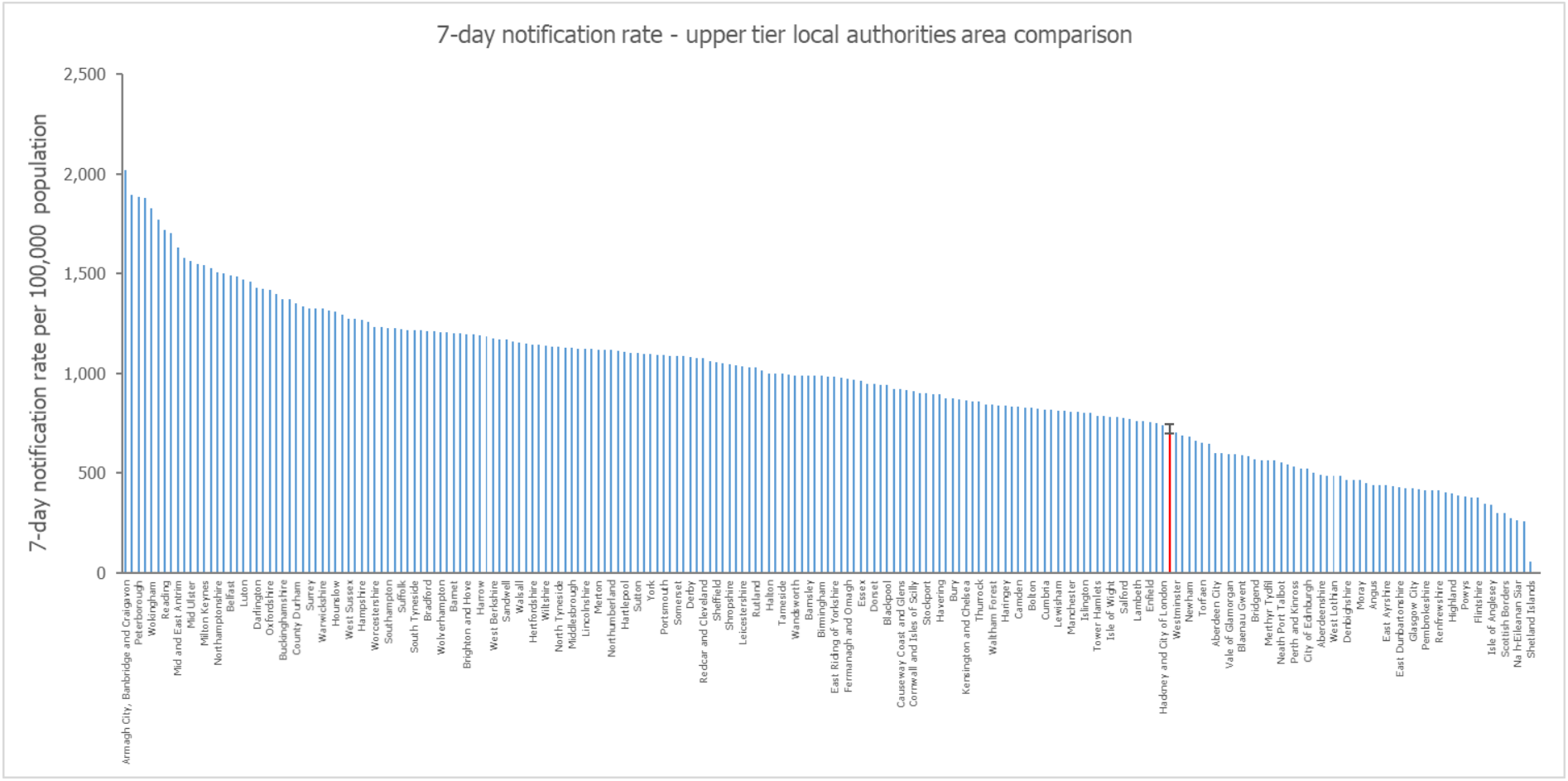


- R_t value shown for Isle of Man is R_t for 30/01/2022
- R_t values shown for United Kingdom areas are 7 day R_t values for 26/01/2022 (latest figures)

7-day Notification Rate Area Comparison

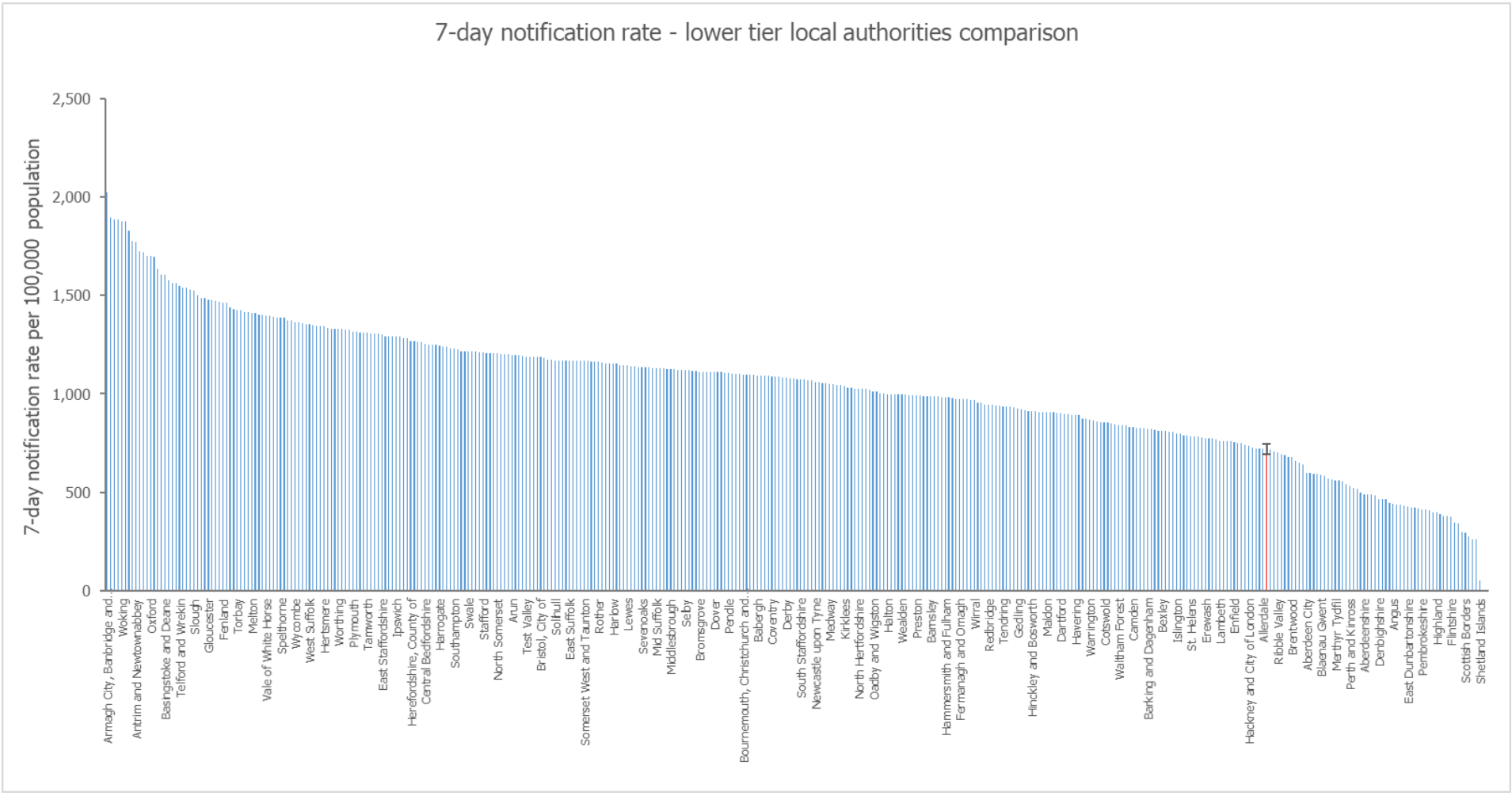


7-day Notification Rate – Upper Tier LA Comparison



The Isle of Man (shown in red), has the 160th 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 322nd highest 7-day notification rate per 100,000 population when included in the lower tier local authorities of the UK.

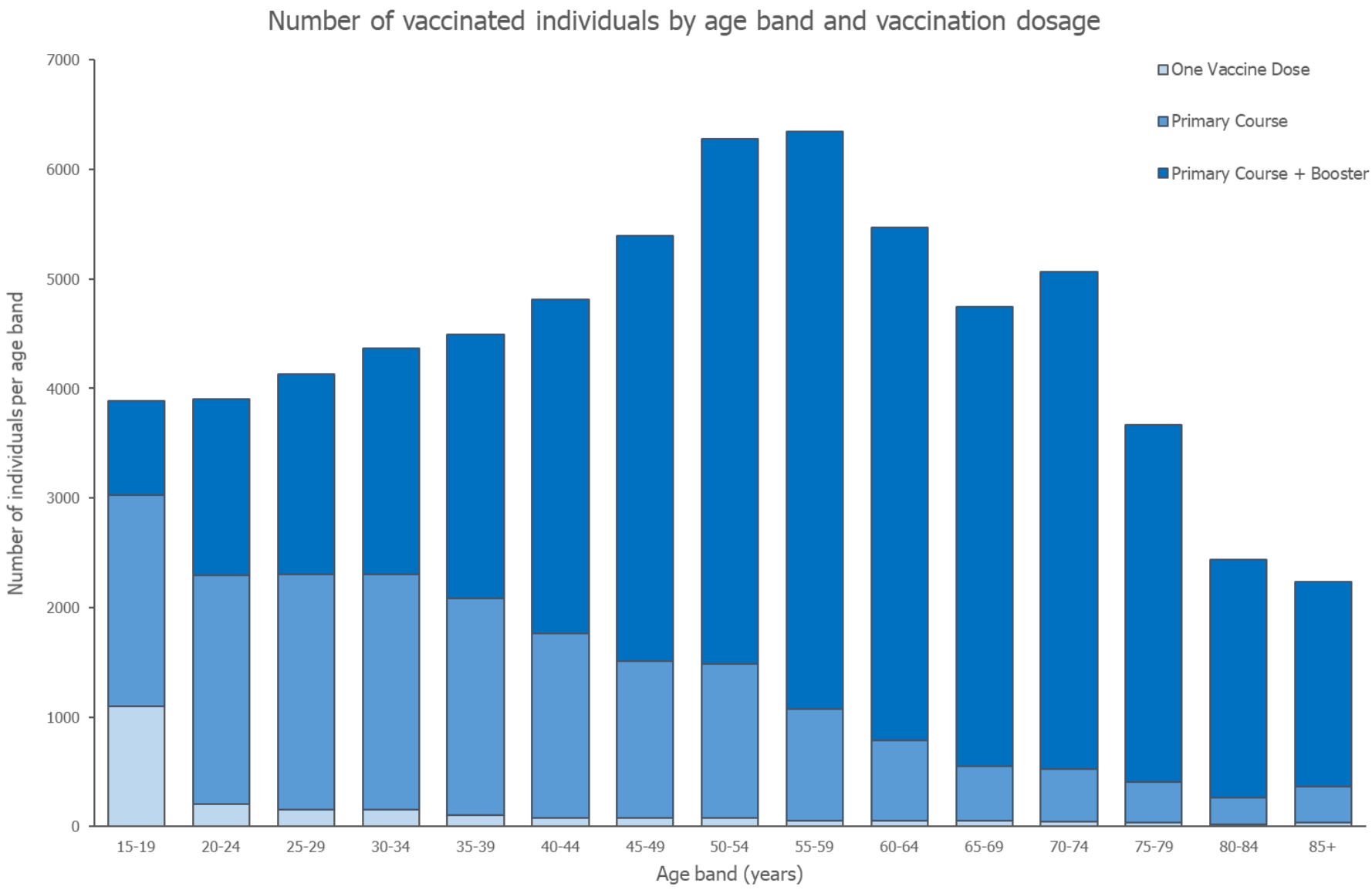
14-day Notification Rate Comparison

		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	-

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

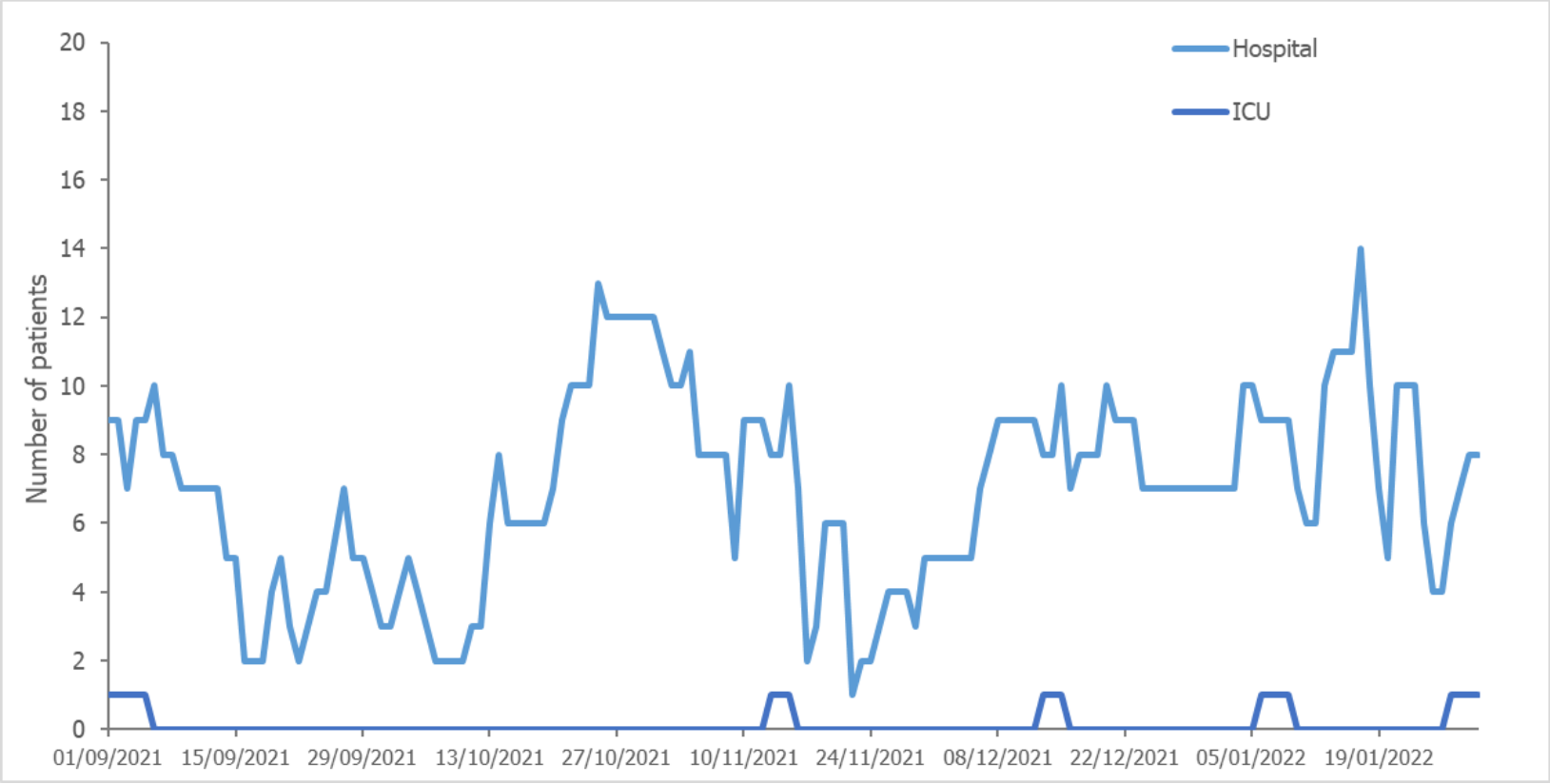
Vaccine Uptake and Coverage



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

Hospitalised Patients

This data shows number of patients in hospital with a COVID positive status at the time of the daily snapshot, taken at 12pm.



Hospitalised Patients

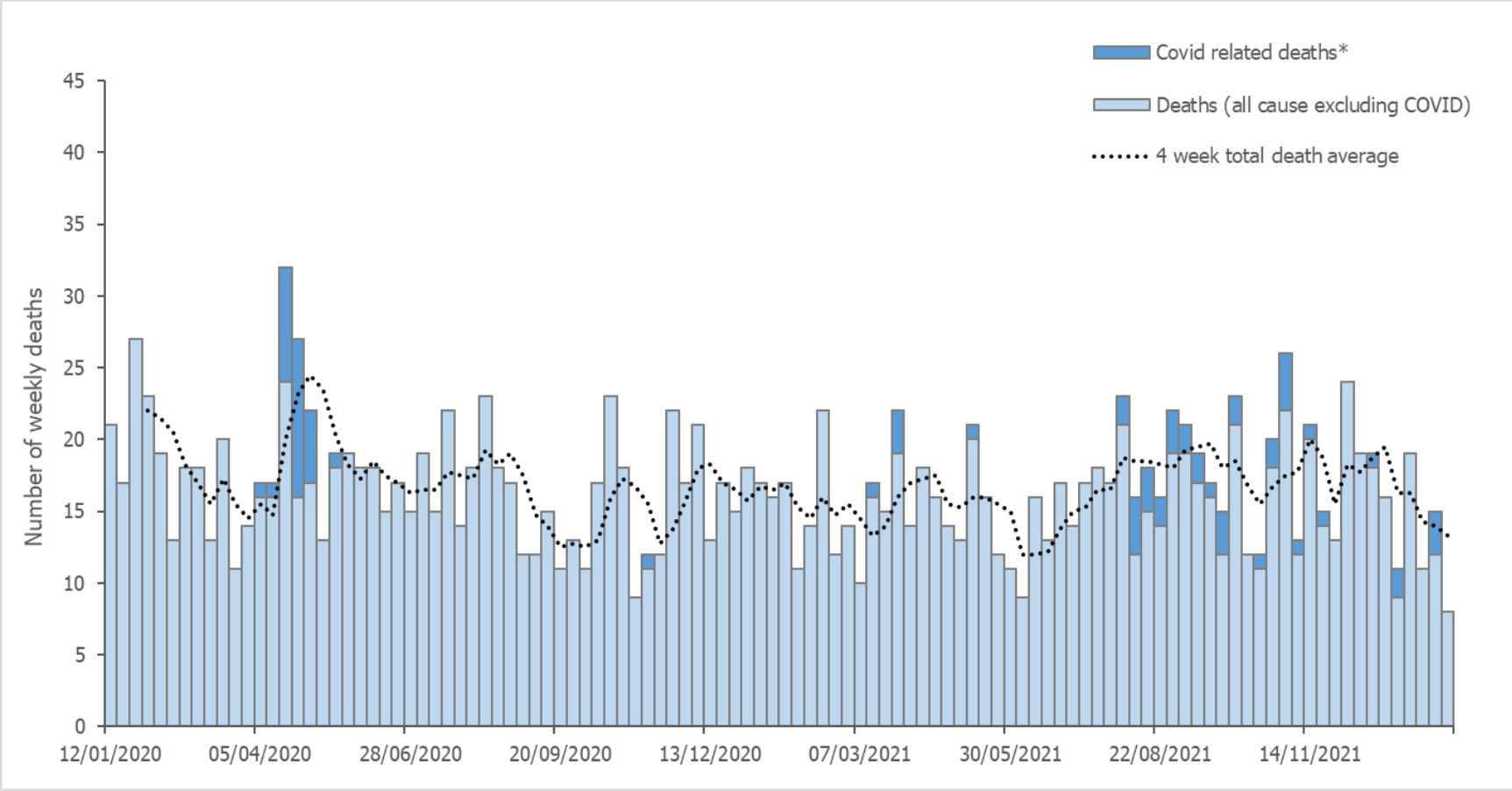
This figure is a snapshot of the cases in Hospital. This snapshot was taken on 01/02/2022.

SUMMARY

Total Patients	**9**

Vaccination Status of Hospital Admissions	
Fully Vaccinated + Booster	66.7%
Fully Vaccinated	33.3%
Unvaccinated	0.0%

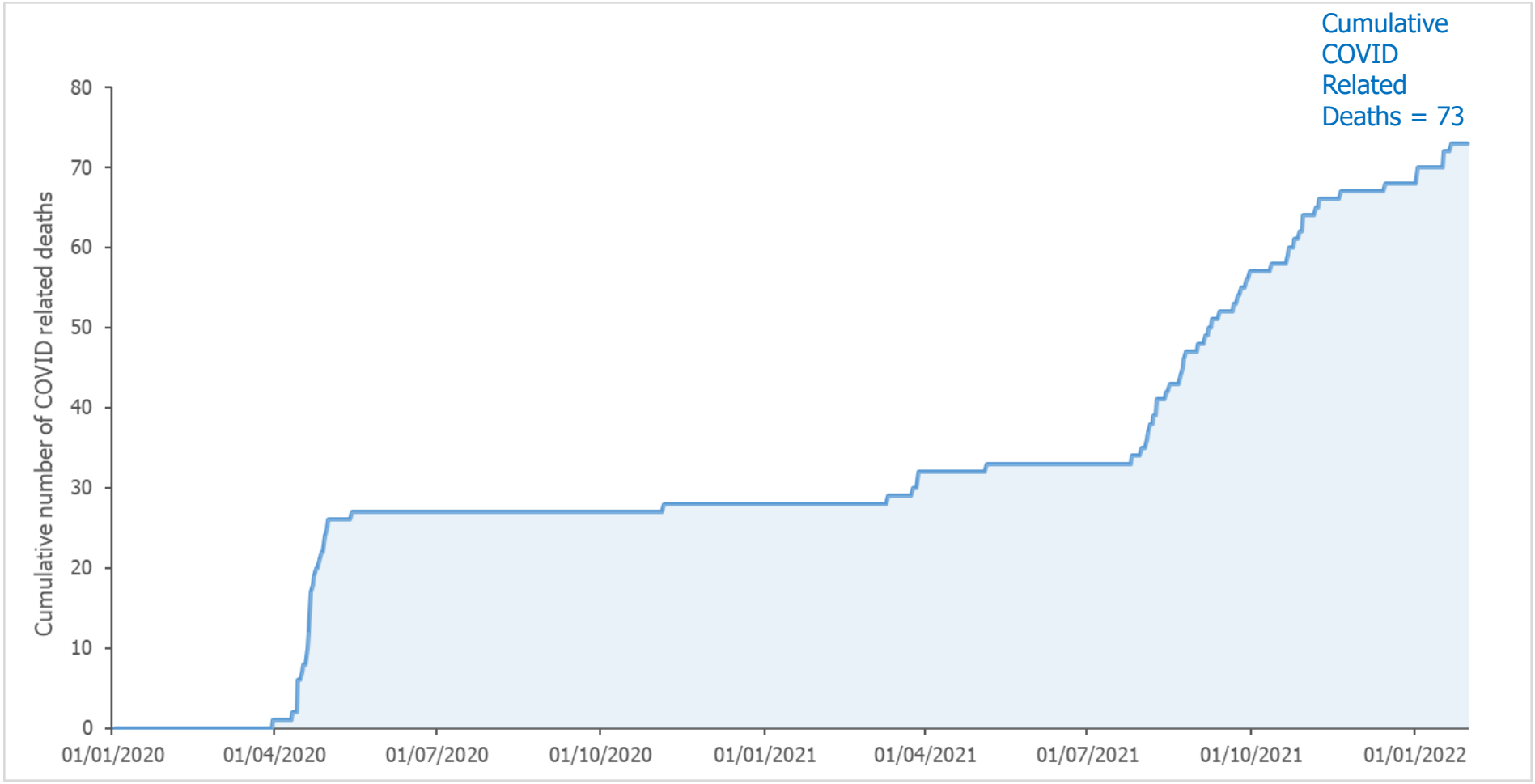
Weekly Deaths – Whole Pandemic



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. This also means that the most recent numbers will be incomplete at the time of release, and will update in subsequent reports.

* 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



Arrivals Testing

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.

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
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
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
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
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
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
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	17-Jan	0.71		
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		
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		
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		
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		
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		
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		
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		
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		

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

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.