Isle of Man Government

Reiltys Ellan Vannin



COVID-19 Weekly Surveillance Report

01st June 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

- This week saw a fall or plateauing in case numbers across all age groups. The effective reproduction number (R_t) was 0.77 this week, a further slight decrease from last week's value of 0.86. 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.

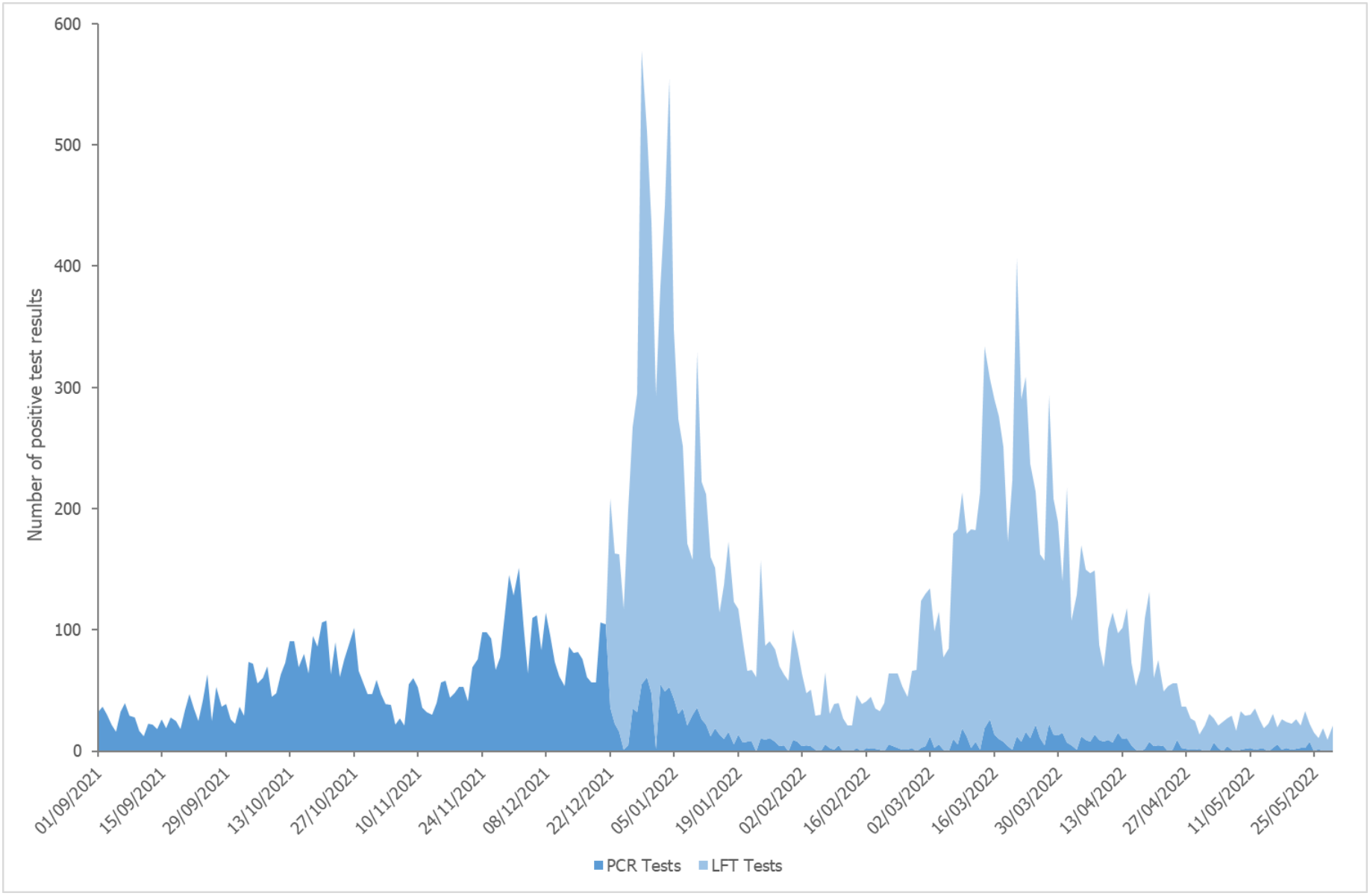
- Case ascertainment and calculation of the reproduction number is, of course, dependent on patterns of testing and reporting so it is likely that there are more cases than are currently notified. This caveat has applied throughout the pandemic when COVID has been transmitting on Island, although the 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 are likely having an additional impact. This week we have seen a slight fall in seven day average daily reporting from 24 to 18. Some of this is likely to be due to changes in testing and reporting. However, there is also likely to be a true fall as this would be in line with the fall in cases currently being reported in the UK from the Office of National Statistics Infection Survey.

- In the absence of new variants of concern, we would expect the fall in cases to continue as the current BA.2 omicron wave passes through the susceptible population and we move through Spring into Summer. Our current continuing trend in case numbers supports this.

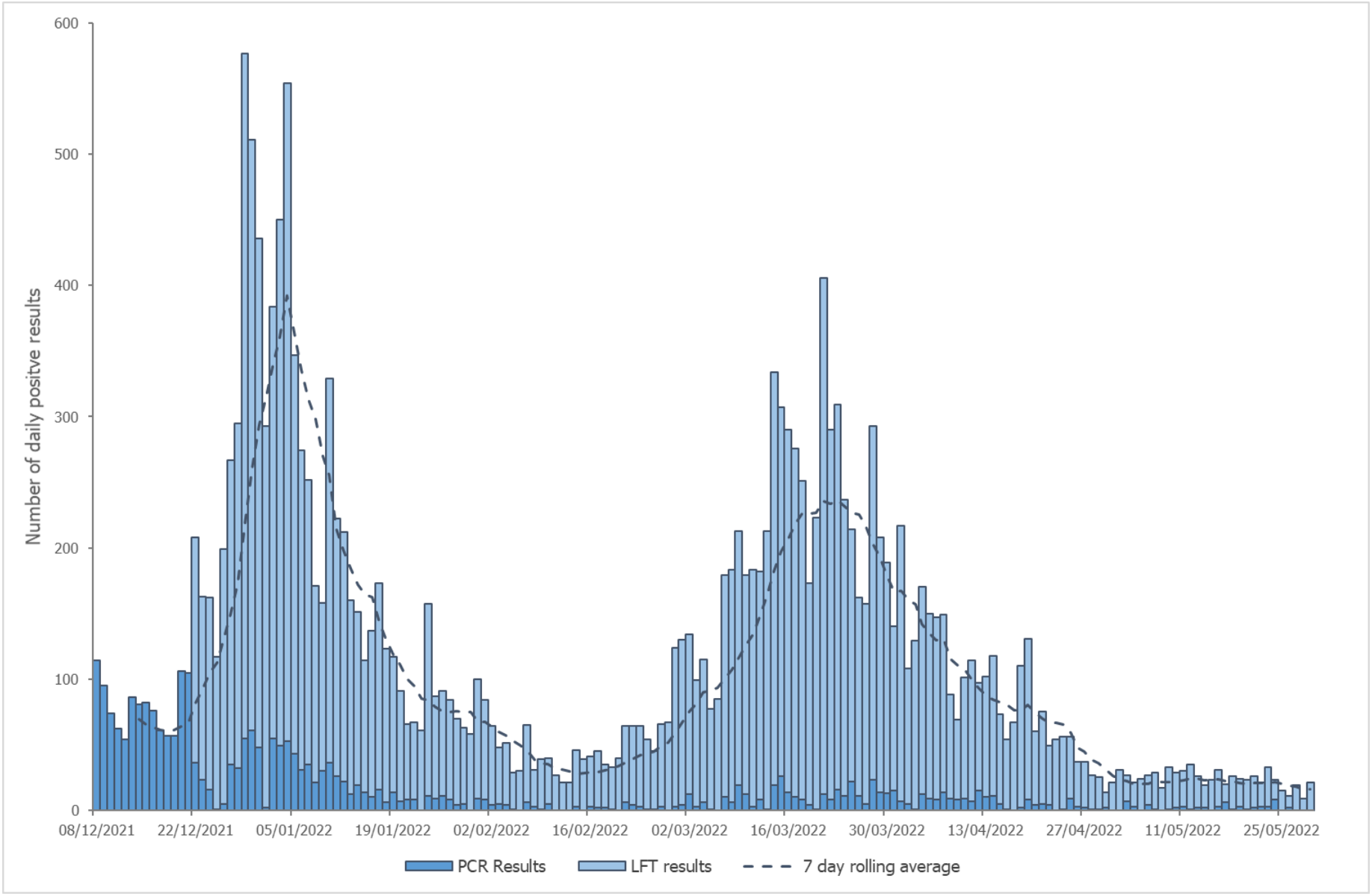
Key Points

- The current 7-day average for reported positive results is 18.
- The trend of case numbers reported from testing shows a slight decrease this week.
- The effective reproduction number (R_t) was 0.77 this week.
- The snapshot of the Hospital shows 7 patients currently admitted with a COVID positive status.

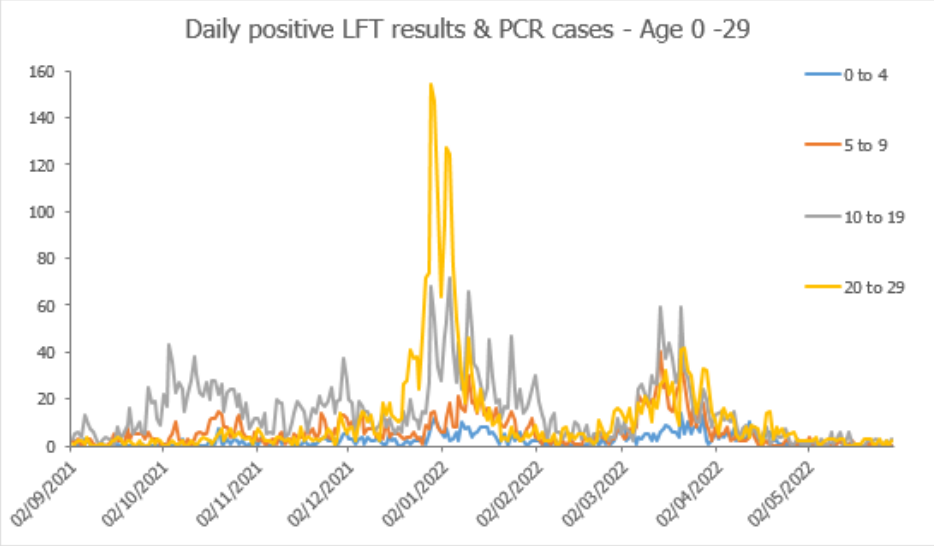
Positive COVID-19 Tests

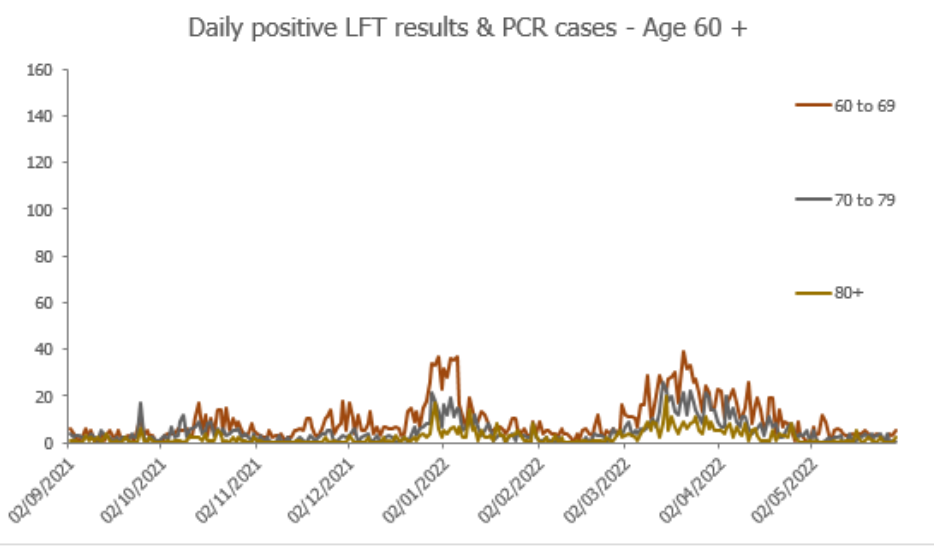


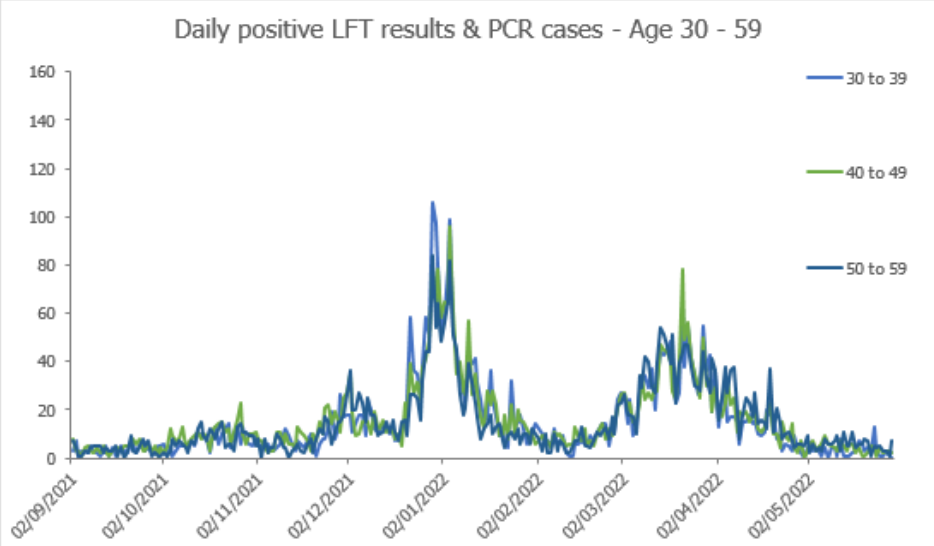
Daily Positive Results – 4th Wave

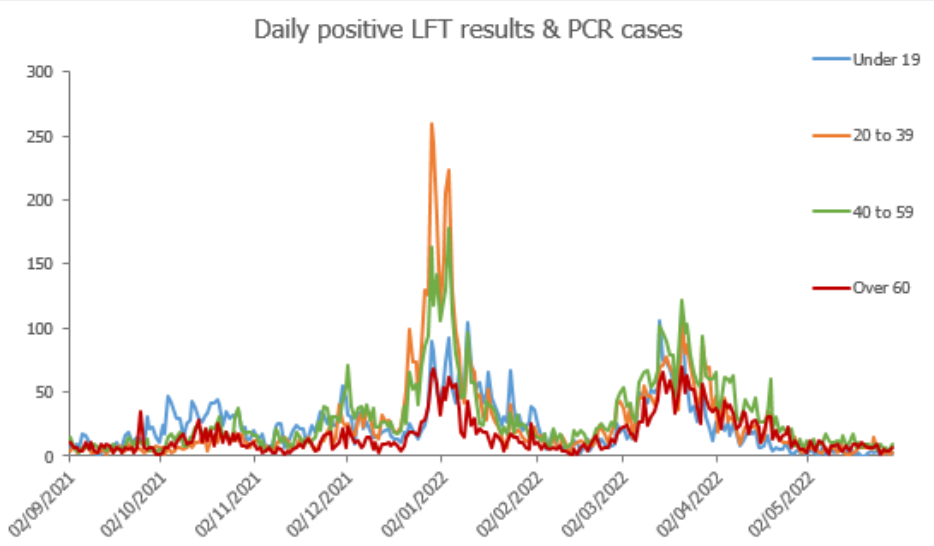


Age Group Analysis

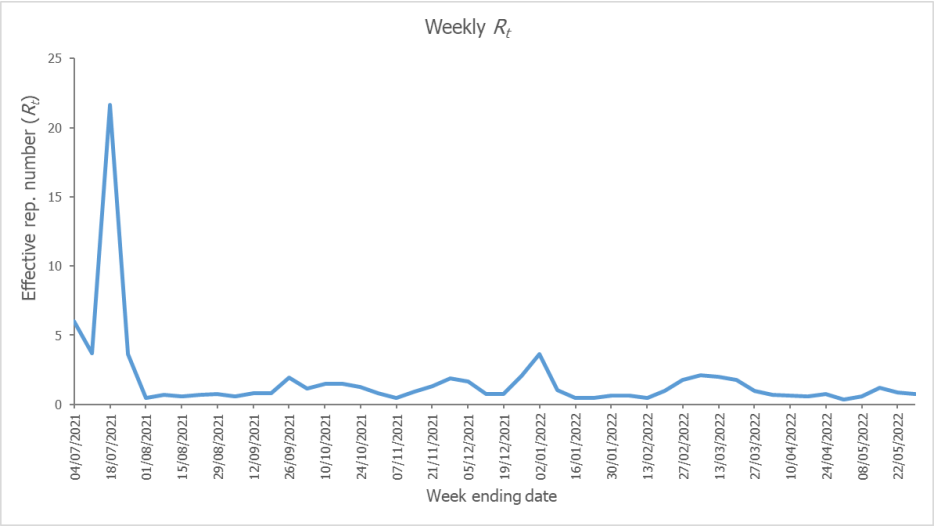








Effective Reproduction Number (R_t)



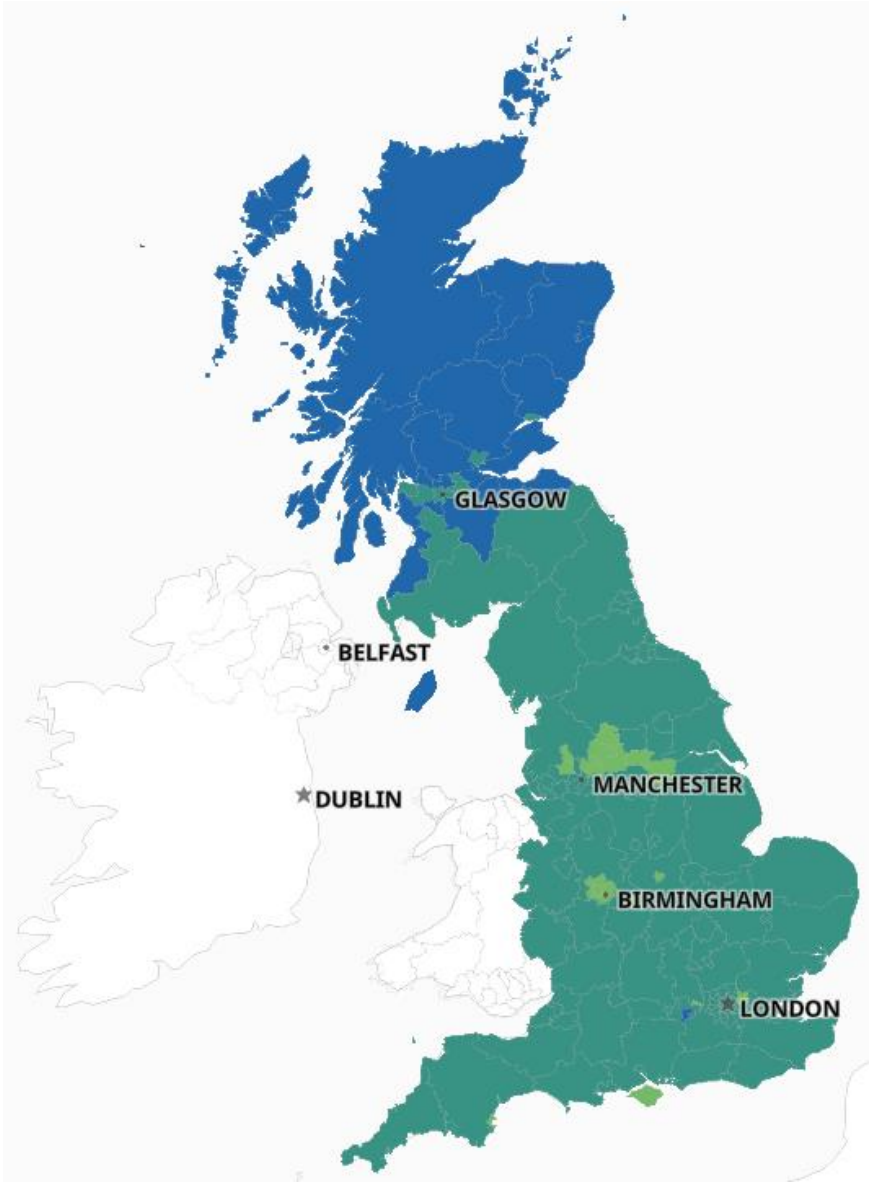
Latest 7 day
R_t = 0.77

- 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]:

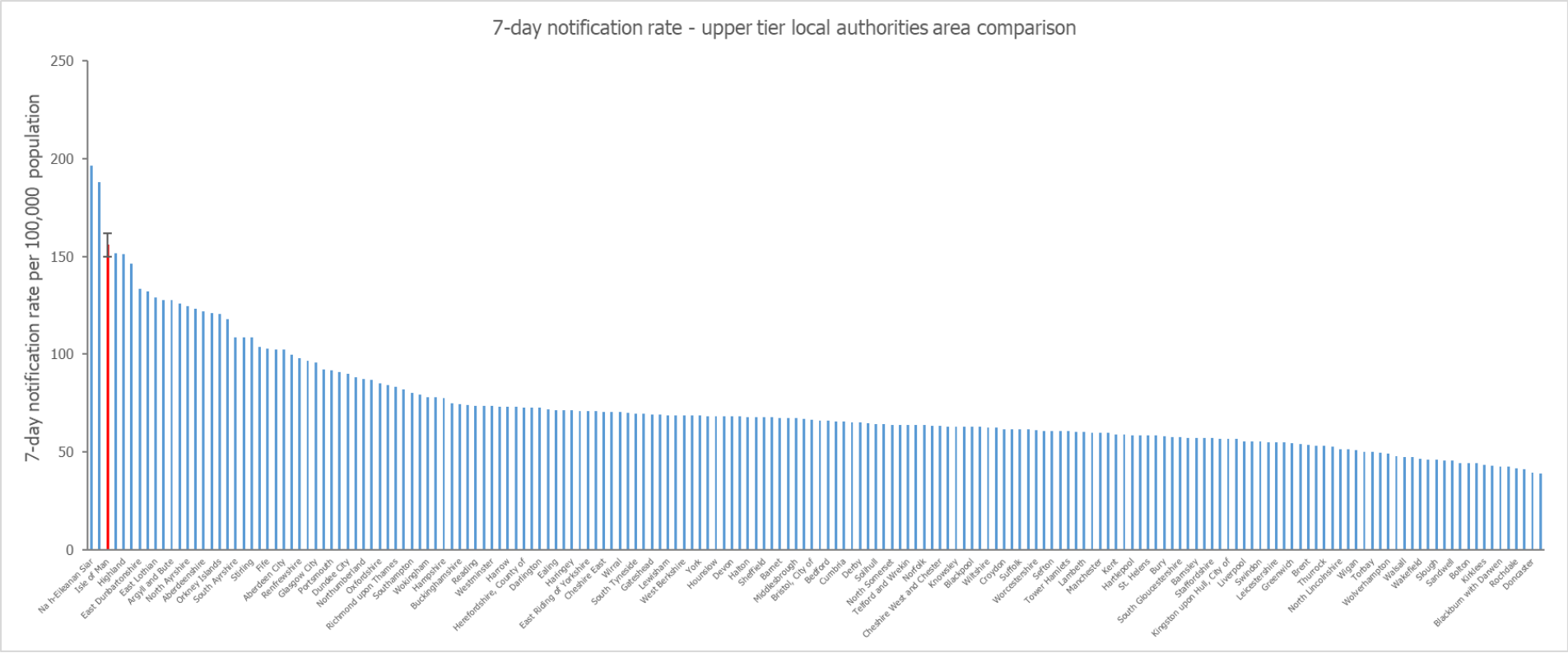
$$R_t\,(t_i) = \frac{\text{New Infections}}{\text{New Recoveries} + \text{New Deaths}}$$

- 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.
- 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.

7-day Notification Rate Area Comparison

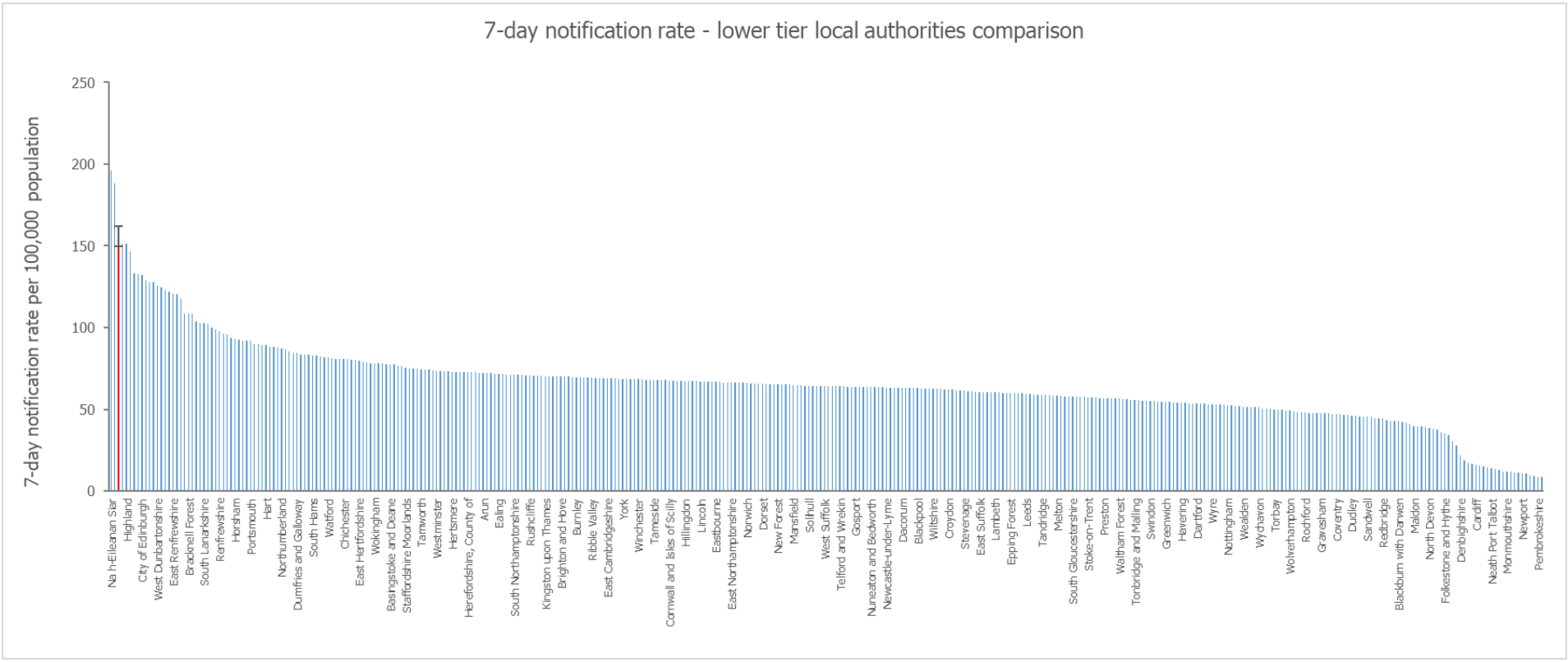


7-day Notification Rate – Upper Tier LA Comparison



The Isle of Man (shown in red), has the 3rd highest 7-day notification rate per 100,000 population when included in the upper tier local authorities of the UK. It should be noted that the differences in testing availability on the Isle of Man compared to areas in the UK are likely to impact the 7-day notification rate data.

7-day Notification Rate – Lower Tier LA Comparison



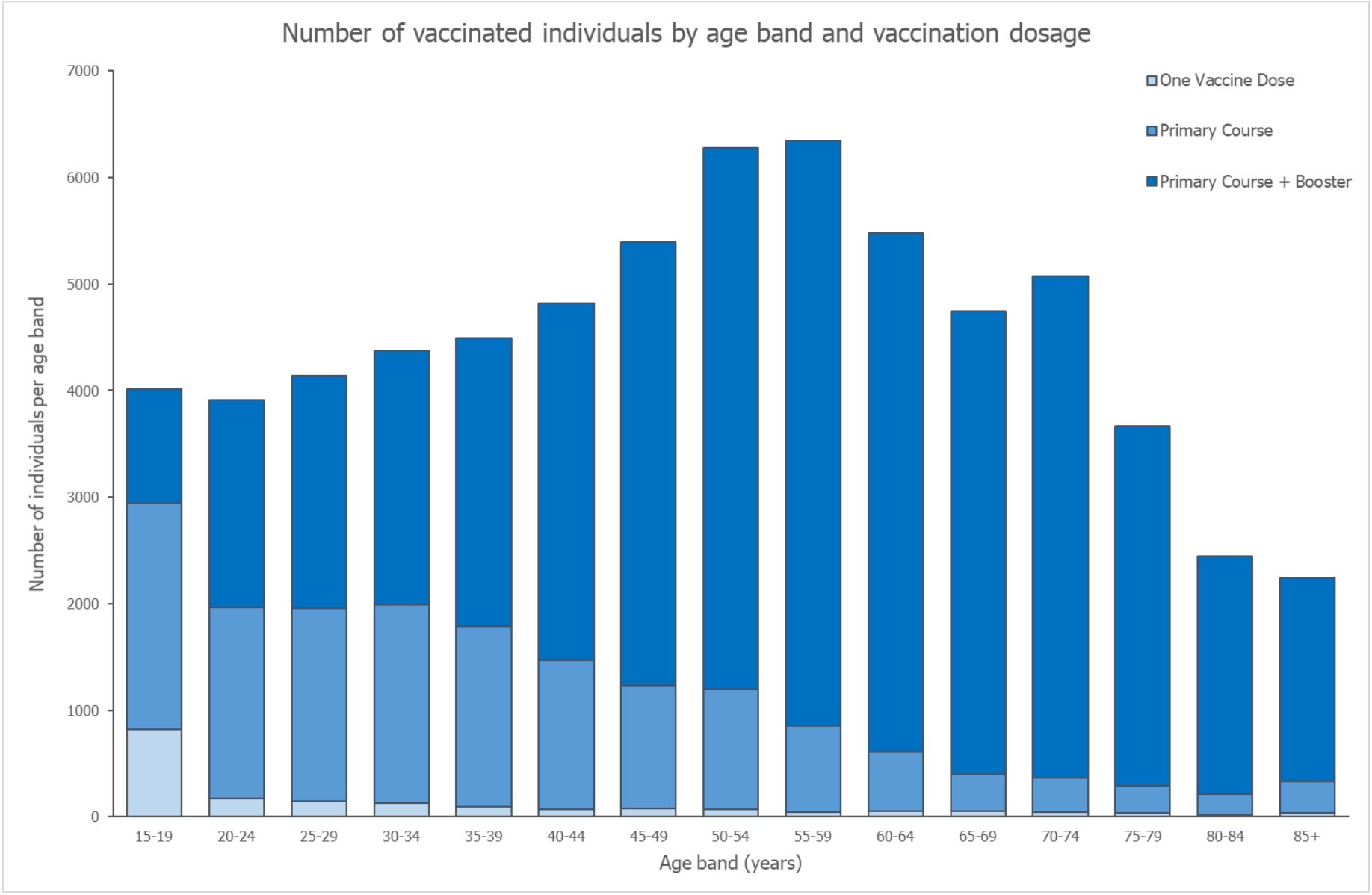
The Isle of Man (shown in red), has the 3rd highest 7-day notification rate per 100,000 population when included in the lower tier local authorities of the UK. It should be noted that the differences in testing availability on the Isle of Man compared to areas in the UK are likely to impact the 7-day notification rate data.

14-day Notification Rate Comparison

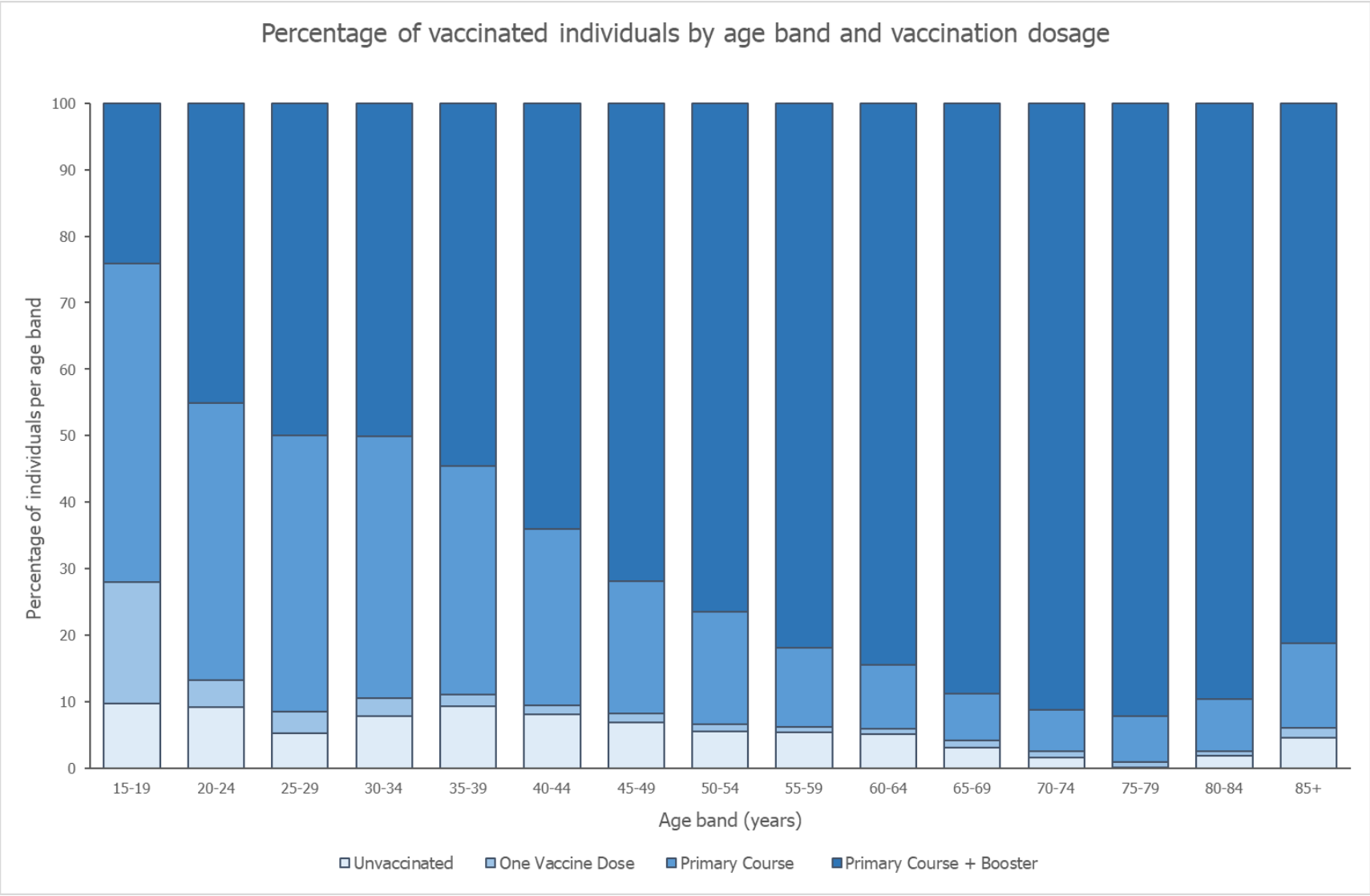
		Isle of Man			United Kingdom
Year	Week number	14-day rate	Lower CI	Upper CI	14-day rate
2021	36	617 . 41	612 . 23	622 . 60	727 . 08
	37	565 . 67	561 . 04	570 . 30	663 . 56
	38	660 . 93	654 . 07	667 . 78	643 . 48
	39	766 . 77	760 . 65	772 . 89	691 . 94
	40	874 . 96	867 . 84	882 . 08	778 . 05
	41	1136 . 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	1293 . 95
	11	3743 . 30	3714 . 64	3771 . 95	1415 . 20
	12	4267 . 81	4230 . 67	4304 . 94	1357 . 28
	13	3951 . 91	3548 . 23	3634 . 95	1691 . 45
	14	2529 . 64	2498 . 87	2560 . 41	1329 . 78
	15	1760 . 51	1741 . 72	1779 . 30	570 . 02
	16	1364 . 19	1349 . 45	1378 . 93	563 . 56
	17	883 . 20	865 . 76	900 . 64	479 . 31
	18	461 . 00	455 . 68	466 . 33	217 . 36
	19	435 . 13	432 . 41	437 . 85	190 . 92
	20	434 . 17	431 . 63	436 . 70	153 . 85
	21	359 . 23	355 . 70	362 . 76	-

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. Please note that differences in testing availability between the Isle of Man and United Kingdom will likely impact the 14-day notification rate data.

Vaccine Uptake and Coverage

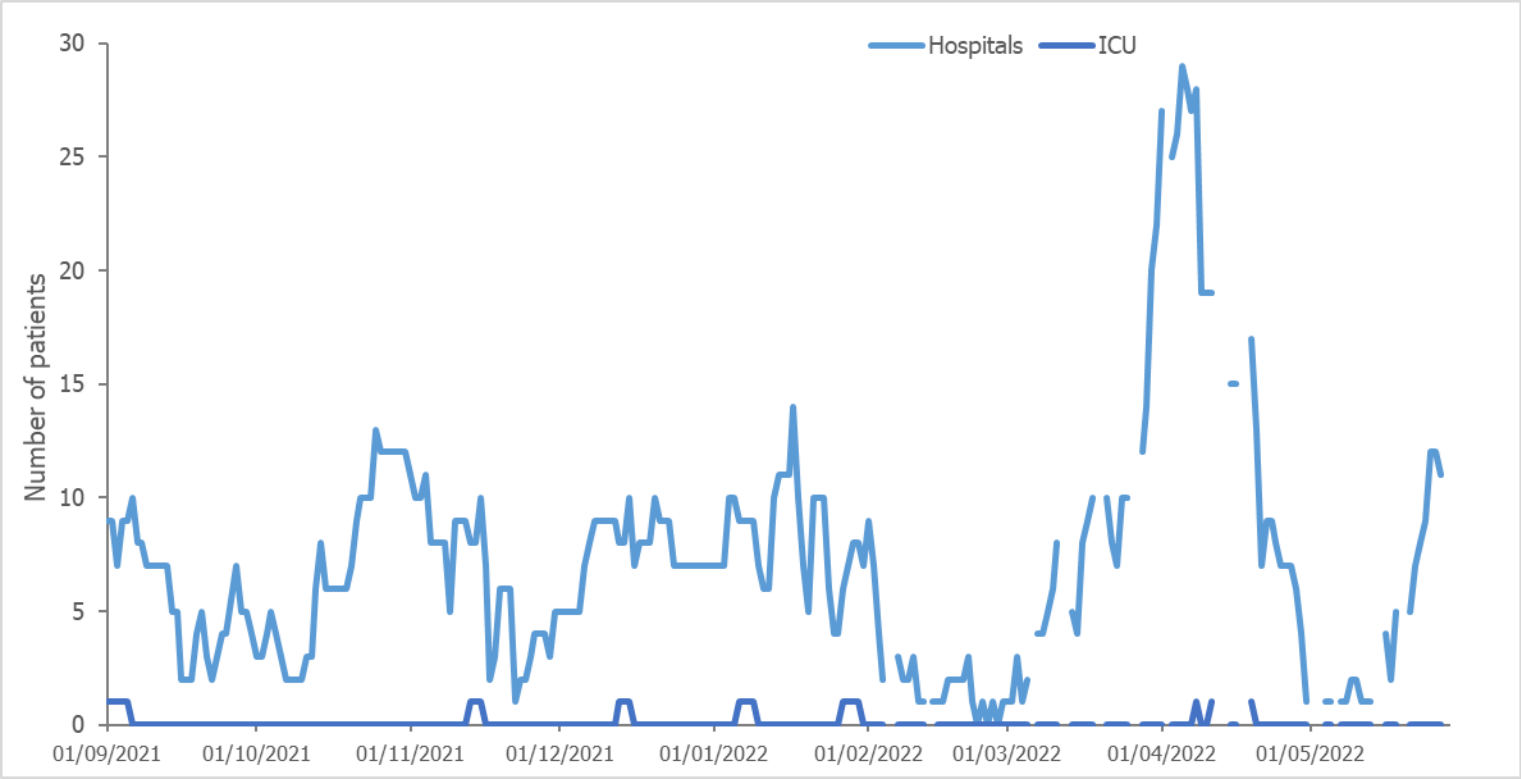


Vaccine Uptake and Coverage



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

Hospitalised Patients



Patients in both Nobles Hospital and Ramsey Cottage Hospital with a confirmed COVID-positive status at the time of the daily snapshot, taken at 12pm.

Hospitalised Patients

SUMMARY

Total Patients	**7**

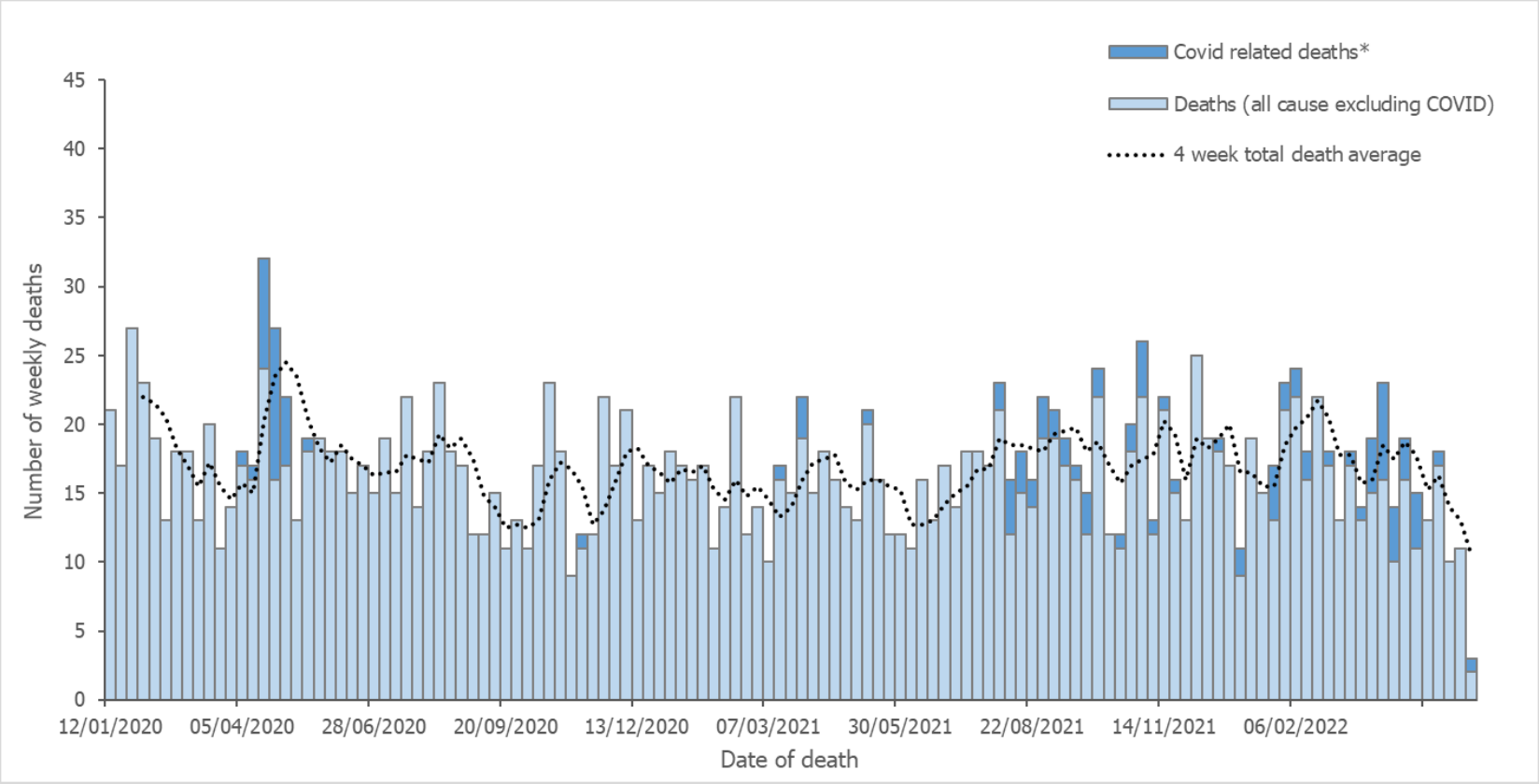
Vaccination Status of Hospital Admissions	
Primary Course + Booster	57%
Primary Course	29%
One Vaccine Dose	0%
Unvaccinated	14%

Snapshot – 31/05/2022

Hospitalised Patients

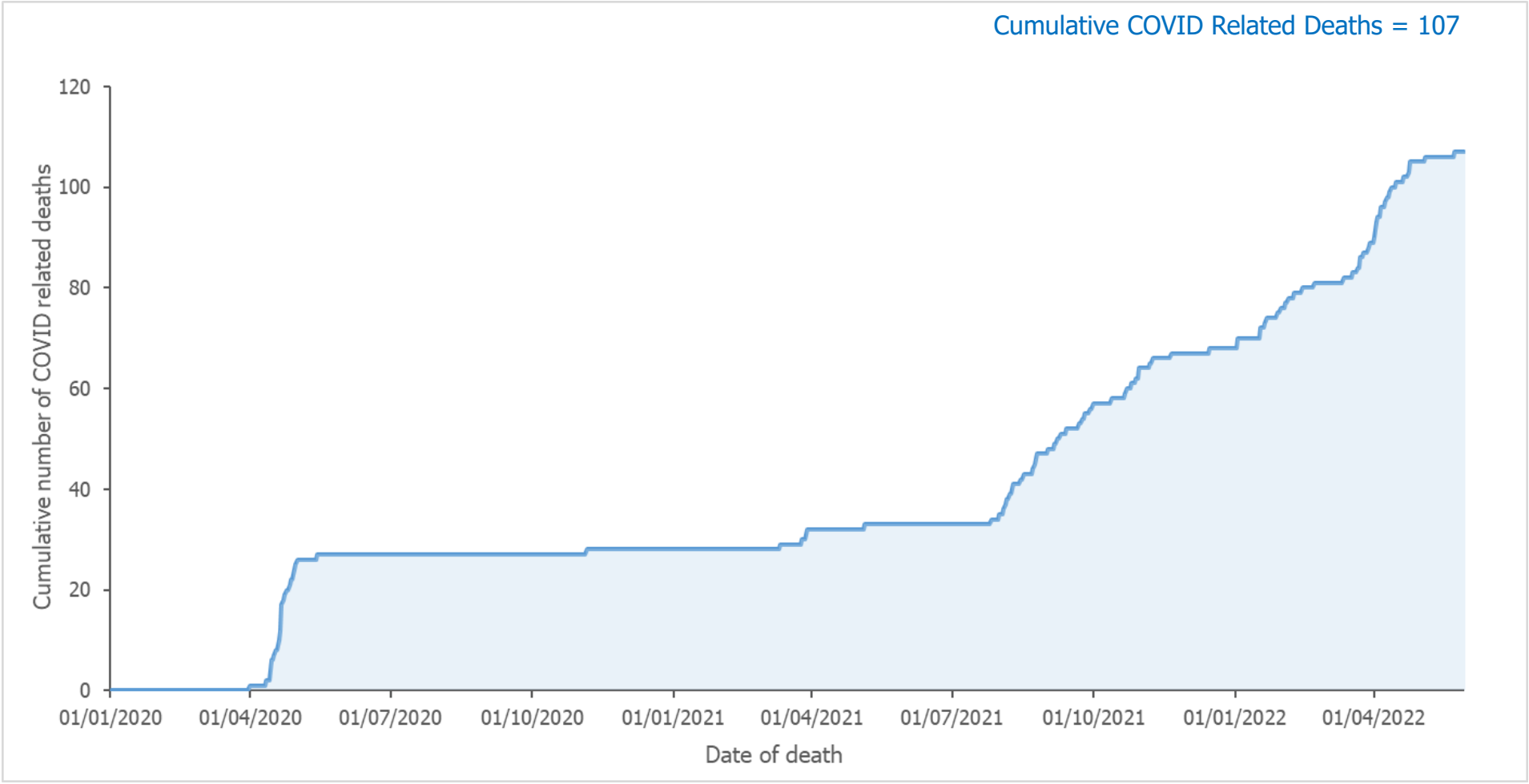
Due to small numbers, and the associated caveats and identifiability, the additional narrative for the Hospital snapshot is not available in this week's report.

Weekly Deaths – Whole Pandemic

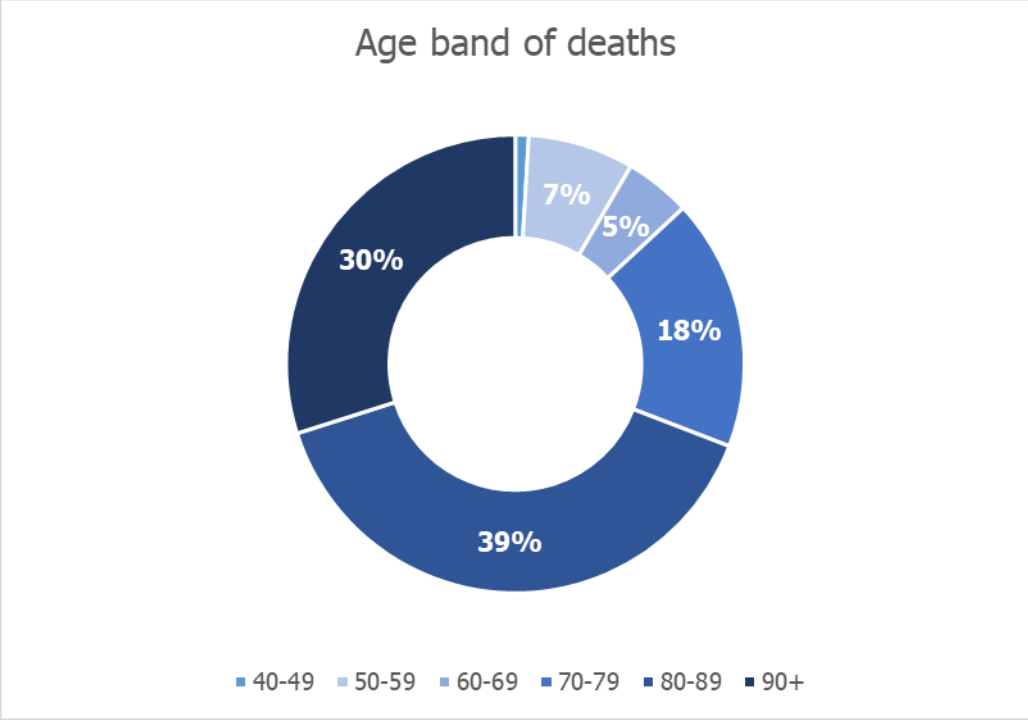


- *COVID related deaths are those where COVID-19 is mentioned **anywhere** within the death certificate.
- **Death registrations are often delayed** and therefore deaths occurring in a given week may not be input into the week of which death occurred until a later date, meaning figures are likely to 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 stands at 107.

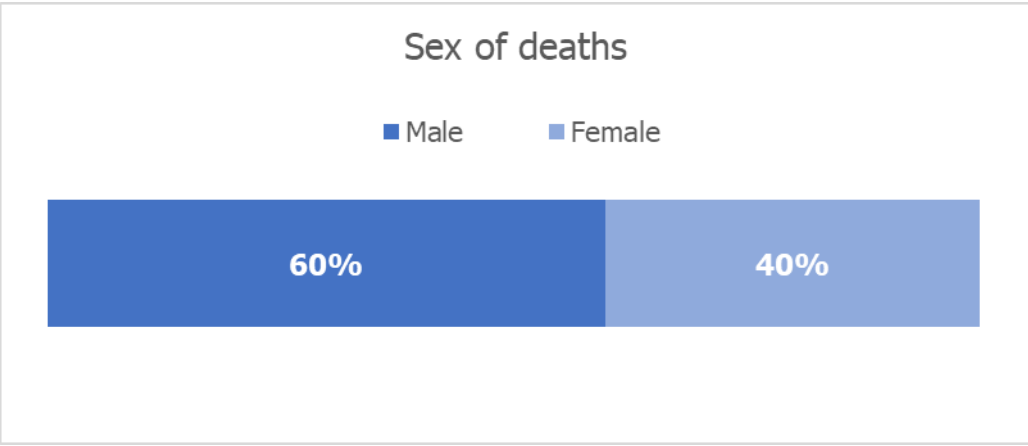
Cumulative COVID-Related Deaths



COVID-Related Deaths Overview



Age band of deaths	No. of deaths	% of total deaths
40-49	1	0.9%
50-59	8	7.5%
60-69	5	4.7%
70-79	19	17.8%
80-89	42	39.3%
90+	32	29.9%



Place of death	No. of deaths
Hospital	52
Hospice	4
Nursing/Residential Home	41
Domestic Property	10

Arrivals Testing

From the 1st April, arrivals testing requirements are as follows:

As of 1 April 2022 there are no travel related restrictions on the Isle of Man.

You **do not** need to:

- complete a travel declaration form before you travel to the Isle of Man from abroad
- take any COVID-19 tests before you travel or after you arrive
- isolate when you arrive

This applies whether you are vaccinated or not.

Other countries may have rules about what you need to do to leave the country to travel to UK/ Isle of Man. You should check travel advice for the country you are travelling from.

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	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
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
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
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
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
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
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
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
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
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
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		
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		
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		
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		
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		
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		
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		
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		
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		

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.