
Subject: COVID-19 Case Vaccine Status Report

Date: 28 February 2022

Executive Summary

- This report presents local data on the vaccine status of COVID-19 positive cases in those aged 12 and over in Jersey
- Local estimates show that between July 2021 and January 2022, unvaccinated people were more likely to test positive for COVID-19 than those who had been vaccinated
- The impact of booster vaccinations in Jersey can be seen in December 2021 and January 2022 data, when those who had received their COVID-19 booster vaccine (third dose) were least likely to test positive. Unvaccinated people were estimated to be around 2 to 5 times more likely to test positive for COVID-19 than those who were boosted
- The local data presented in this report should not be used as a scientific estimate of vaccine efficacy, for many reasons including the very small population size (see notes). Jersey's data is, however, in line with the results of controlled clinical trials and real-world data from other jurisdictions, which demonstrate that vaccination provides protection against COVID-19 infection¹

Updates since the last publication – Data for January 2022 has now been added to the analysis.

Context

This report provides a summary of the vaccination status amongst reported COVID-19 positive cases in Jersey from July 2021 onwards. The estimated vaccination coverage of Jersey's population (aged 12 and over) is used to estimate monthly positivity rates for unvaccinated, single dose vaccinated, and double dose (or more) vaccinated population groups. Data for December 2021 onwards has split the triple vaccinated individuals into a separate group for analysis. More details on the vaccine coverage amongst Jersey's population used in this report can be found at www.gov.je².

The majority of Jersey's population are now vaccinated, and this context is crucially important for interpreting the data on vaccination status of positive cases. Please see Appendix 1 for demonstration of the importance of considering population denominators. Please note that the data provided in this report should not be used to infer vaccine efficacy, due to the small population size, and the absence of a professional scientific study set up (including control populations). Those interested in understanding the efficacy of the COVID-19 vaccines should refer to the published literature available from controlled studies and real-world data from larger jurisdictions¹.

The dominant COVID-19 variant in Jersey and the UK during the time period between July to November 2021 was the "Delta" variant. The "Omicron" variant, which may evade vaccine immunity to some degree³, was confirmed on-island in December 2021.

¹ [COVID-19 vaccine weekly surveillance reports](https://www.gov.uk/government/publications/covid-19-vaccine-weekly-surveillance-reports)

www.gov.uk/government/publications/covid-19-vaccine-weekly-surveillance-reports

² www.gov.je/Health/Coronavirus/pages/coronaviruscases

³ [SARS-CoV-2 variants of concern and variants under investigation in England Technical briefing](https://www.gov.uk/government/publications/investigation-of-sars-cov-2-variants-technical-briefings)

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A recent report from Health and Community Services ([Vaccine Status of COVID19 Patients in Jersey General Hospital.pdf](#)) found that in the six-month period July to December 2021, the estimated relative risk of admission to Jersey General Hospital due to clinical COVID for those aged 40 and over was 3.5-14.4 times greater in those who had received less than two doses of COVID vaccine than in those who received two or more doses of the vaccine.

Please see www.gov.je/health/coronavirus for the latest advice and guidance on how to protect yourselves and the community against the threat of COVID-19.

Notes

1) *Determination of Vaccine Status*

The vaccine status of each positive case is determined by matching details of positive cases to local vaccine administration records. Please note that there are a minority of cases in which correct vaccine status is not guaranteed. For example, where details have been incorrectly recorded (for example, if spelling errors were made by inbound passengers when completing details for their test at the border) there may not be a correct match to the vaccine data held in the Jersey government vaccine data set. A small number of individuals may have received vaccination in another jurisdiction, and have not notified Jersey government of this, and therefore matching is not possible. For a small number of positive cases in individuals who have declared themselves not resident in Jersey, vaccine status has been determined by self-declaration, and is unverifiable. The data published in this report may be revised where higher quality data become available. Please note that here “double dose vaccinated” and “Booster Dose Vaccinated” are defined as individuals for whom at least two weeks has passed since receiving their second or third COVID vaccination respectively.

2) *Monthly Aggregation and Reporting in Arrears*

Data is summarised monthly in order to ensure that the data published is non-disclosive and protects privacy of infected individuals. Please note that if infection rates decline in future months, it may become inappropriate to publish a breakdown by vaccine status in this way. Data is reported in arrears to ensure the most accurate information available is used.

3) *Population Denominator Estimates*

Confidence is high for the estimated number of Islanders who have been vaccinated (as the government holds records of all vaccines administered on-Island). However, there is some uncertainty around the number of people who are not vaccinated, as the size of this group is estimated by subtracting the number of vaccinated individuals from the overall 2019 population estimates from Statistics Jersey. Since the number of unvaccinated Islanders is much smaller than the number of vaccinated Islanders, any discrepancies between the estimated and actual population size could have a substantial impact on the estimated size of the unvaccinated cohort. Drawing conclusions from the data provided should, therefore, be treated with due caution. Please note also that population denominators change over time as more people come forward to receive vaccinations, which is why a population range (from the beginning to the end of each month) has been used for each.

Results

Table 1 details the vaccine status of cases in those aged 12 and over reported in Jersey between July and January 2022. Monthly positivity rates are estimated for the following population groups: unvaccinated, single dose vaccinated, and those who have received at least two doses. From December 2021, those having received a booster dose are considered as a separate group.

- Estimates suggest that unvaccinated individuals were more likely to test positive for COVID-19 than those who received at least two doses. Relative risk over the July to November 2021 period shows that unvaccinated people were between 2.6 – 4.1 times more likely to test positive for COVID-19 than those who have received at least two doses
- In December 2021 and January 2022, those who'd received a booster dose were less likely to test positive than unvaccinated individuals, or those who hadn't received their booster (Table 1)

Table 1. Positive COVID-19 cases in Jersey per month (July to January 2022, by date of positive swab) in those aged 12 and over, split by vaccine status. Range of population estimates (for those aged 12 and over) taken from vaccine coverage in Jersey as at the beginning and end of each month. Positivity for each group calculated as the percentage of individuals in each population cohort who tested positive for COVID-19 during the one month period. Relative risk calculated by comparing the positivity of unvaccinated with that of those who had received at least two doses, or for December 2021 and January 2022 data: those who had received a booster dose.

	Population estimate range over month (Age 12 and over)	Positive Cases (Age 12 and over)	Positivity	Relative Risk
JULY 2021				
Unvaccinated	19,898 – 26,103	1,953	7.5% - 9.8%	Unvaccinated people were 3.7 to 4.1 times more likely to test positive during the month than double vaccinated
Single Dose Vaccinated	11,721 – 15,646	966	6.2% - 8.2%	
Double Dose Vaccinated or more	52,376 – 62,506	1,261	2.0% - 2.4%	
AUGUST 2021				
Unvaccinated	17,200 – 19,802	398	2.0% - 2.3%	Unvaccinated people were ~ 3.5 times more likely to test positive during the month than double vaccinated
Single Dose Vaccinated	4,644 – 11,234	44	0.4% - 0.9%	
Double Dose Vaccinated or more	63,089 – 72,281	414	0.6% - 0.7%	
SEPTEMBER 2021				
Unvaccinated	16,117 – 17,199	218	1.3% - 1.4%	Unvaccinated people were 2.8 – 2.9 times more likely to test positive during the month than double vaccinated
Single Dose Vaccinated	3,283 – 4,642	21	0.5% - 0.6%	
Double Dose Vaccinated or more	72,284 – 74,722	336	0.4% - 0.5%	
OCTOBER 2021				
Unvaccinated	14,736 – 16,072	325	2.0% - 2.2%	Unvaccinated people were 2.6 – 2.8 times more likely to test positive during the month than double vaccinated
Single Dose Vaccinated	3,306 – 4,251	54	1.3% - 1.6%	
Double Dose Vaccinated or more	74,747 – 75,138	595	0.8% - 0.8%	
NOVEMBER 2021				
Unvaccinated	13,871 – 14,708	909	6.2% - 6.6%	Unvaccinated people were 3.4 – 3.6 times more likely to test positive during the month than double vaccinated
Single Dose Vaccinated	4,270 – 4,702	204	4.3% - 4.8%	
Double Dose Vaccinated or more	75,147 – 75,552	1,374	1.8% - 1.8%	
DECEMBER 2021				
Unvaccinated	12,616 – 13,849	1,439	10.4% - 11.4%	Unvaccinated people were 3.2 – 4.8 times more likely to test positive during the month than those who'd received a booster (third) dose
Single Dose Vaccinated	4,897 – 4,703	288	5.9% - 6.1%	
Double Dose Vaccinated	48,887 – 32,548	2,475	5.1% - 7.6%	
Booster Dose Vaccinated	26,686 – 44,064	955	2.2% – 3.6%	
JANUARY 2022				
Unvaccinated	11,748 – 12,281	2,236	18.2% - 19.0%	Unvaccinated people were 2.6 – 3.2 times more likely to test positive during the month than those who'd received a booster (third) dose
Single Dose Vaccinated	4,925 – 4,734	625	12.7% - 14.2%	
Double Dose Vaccinated	48,994 – 32,554	2,678	8.4% - 13.4%	
Booster Dose Vaccinated	26,848 – 44,332	3,260	5.6% – 7.2%	

Appendix 1

The graphic below is for demonstrative purposes only, and uses simplified figures to help explain the importance of denominators when considering risk. It is not based on Jersey's data. Please see content of the report above for Jersey actual figures

