Ministry of Health
Vanuatu Government
COVID-19

Weekly epidemiological update: COVID-19 in Vanuatu

Prepared by the National Surveillance, Research & Emergency Response Unit
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Report date: 28 September, 2022
Reporting period: 19 September to 25 September 2022 (EpiWeek 38)
Next report: 05 October 2022

Highlights

- A total of 11,940 individuals with COVID-19 were detected in Vanuatu until the end of EpiWeek 38 2022 (4 during EpiWeek 38)
- A total of six provinces, including 45 islands, were affected by the end of EpiWeek 38
- The number of cases reported decreased nationally in EpiWeek 38 by 87%
- **Until the end of EpiWeek 38:**
    - Cases that were not fully vaccinated were 2.3 times more likely to be hospitalised compared to fully vaccinated cases
    - Cases that were not fully vaccinated were 2.1 times as likely to have critical COVID-19 infection compared to fully vaccinated cases
    - Cases that were not fully vaccinated were 3.2 times as likely to have severe COVID-19 infection compared to fully vaccinated cases
    - Cases that were not fully vaccinated were 1.5 times more likely to die from COVID-19 compared to fully vaccinated cases

Changes to this report

- *Priority groups for COVID-19 testing in Vanuatu after 1 July 2022 include: (1) Recent international travellers (2) Any person who is at risk of severe disease or hospitalisation for COVID-19 who presents with COVID-19 symptoms at a health facility and (3) any person admitted to a hospital across Vanuatu with influenza-like illness*
- *Due to the changes in the COVID-19 testing strategy, cases notified are no longer representative of cases in the broader population. Therefore, this report will focus on describing overall cases, hospitalisations and deaths*
- *Sections that provided a more detailed description of provincial distribution and characteristics of cases will no longer be included.*

Section 1. Summary of COVID notifications for COVID-19 in Vanuatu

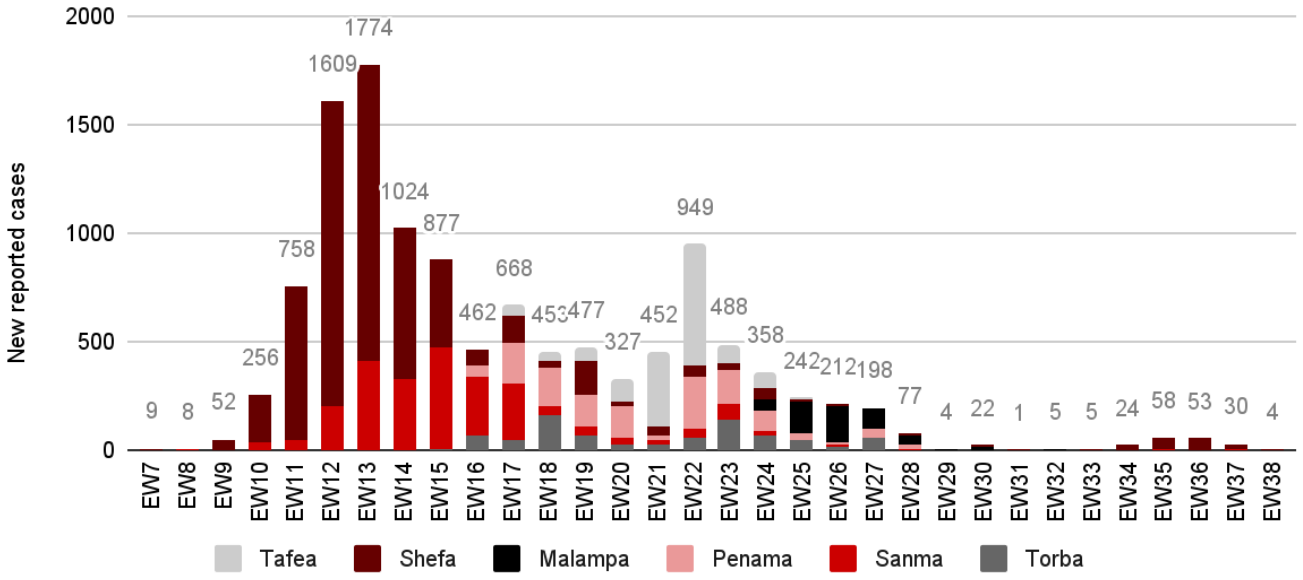
Table 1. Number of confirmed cases by province, until the end of EpiWeek[1] 38 2022

	Number of new cases			Number of deaths	
	EpiWeek38	EpiWeek38 (change)	2022	EpiWeek38 (change)	2022
National	4	4 (-87%)	11940	0 (-87%)	14
Torba	0	0 (NC)	793	0 (NC)	0
Sanma	0	0 (-100%)	2334	0%	3
Penama	0	0 (NC)	1334	0 (NC)	0
Malampa	0	0 (NC)	524	0 (NC)	0
Shefa	4	4 (-79%)	5631	0 (%)	11
Tafea	0	0 (-100%)	1324	0 (%)	0

NC=Not able to be calculated

A total of 11,940 individuals with COVID-19 have been detected in Vanuatu until the end of EpiWeek 38 2022 (4 during EpiWeek 38). The cases were reported in Shefa and no cases in the other five provinces. The number of cases reported decreased nationally in EpiWeek 38 by 87%

Figure 1. Number of newly reported locally-acquired cases of COVID-19 in Vanuatu, by EpiWeek of notification and province, EpiWeek 7- EpiWeek 38



[1] An epidemiological week is a standardised method of counting weeks to allow for the comparison of data year after year. Note that counts may be different to that reported in the Situation Report due to different reporting periods.

Section 2. Hospitalisations and deaths

Hospitalisation rate with and for COVID-19

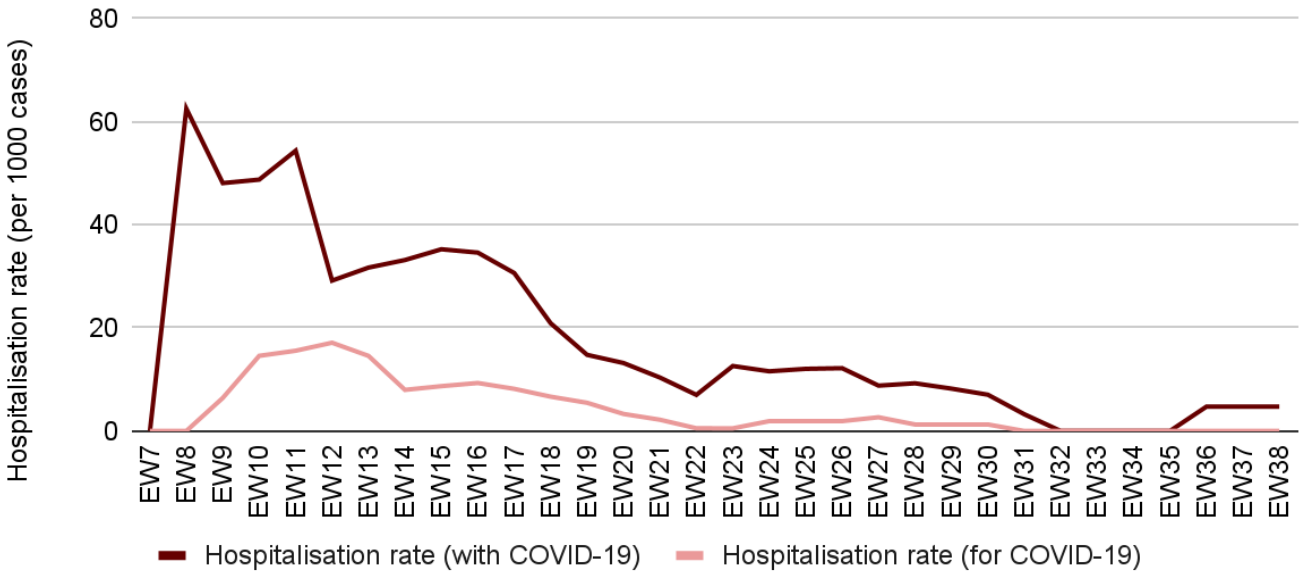
By the end of EpiWeek 38, a total of 273 people diagnosed with COVID-19 were hospitalised in Vanuatu in 2022. There was no Hospitalised case in EpiWeek 38.

Until the end of EpiWeek 38, 2% of all cases had been hospitalised where there was a diagnosis of COVID-19 however not all hospitalised cases were hospitalised as a direct result of their COVID-19 infection. A total of 74 cases (1% of all cases) have been hospitalised due to their COVID-19 infection to date in Vanuatu.

Among the 273 people diagnosed with COVID-19 that were hospitalised, 74 were pregnant women attending hospital for delivery and not due to COVID-19 infection or other health issues. These women are not included in the denominator for subsequent analyses.

The 4-week rolling hospitalisation rate for cases (for all reasons) and for COVID-19 has decreased since a peak in EpiWeek 8. In EpiWeek 38, the 4-week rolling hospitalisation rate due to COVID was 3 cases hospitalised per 1000 cases and the hospitalisation rate with COVID-19 was zero case hospitalised per 1000 cases.

Figure 2. Hospitalisation rate (per 1000 cases) by EpiWeek,until end of EpiWeek 38,2022



Province of COVID-19 hospitalisations

Among all cases hospitalised due to COVID-19 to date, the majority have been hospitalised in Shefa province.

Figure 3. Province of COVID-19 hospitalisation to date, 2022

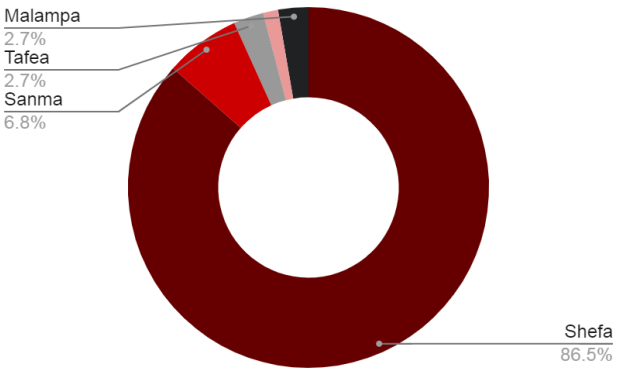
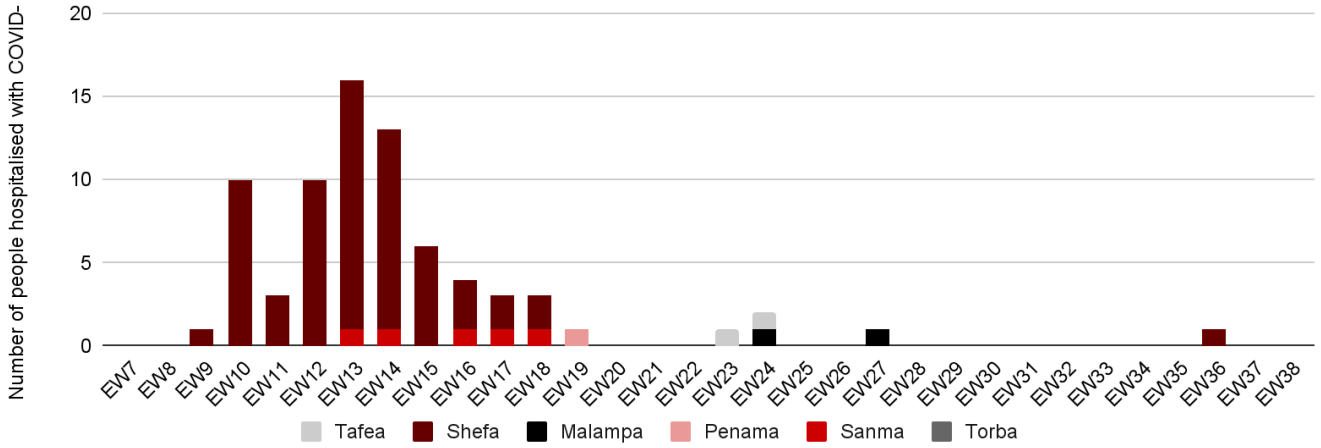


Figure 4. Number of cases hospitalised for COVID-19 by province and EpiWeek 7, until end of EpiWeek 38, 2022



Vaccination status of COVID-19 hospitalisations

Case hospitalisation rates differ by vaccination status. Until the end of EpiWeek 38, the hospitalisation rate for COVID-19 was 0.6% for vaccinated cases and 1.4% for unvaccinated cases. This means that currently, **cases that were not vaccinated are 2.3 times more likely to be hospitalised for COVID-19 compared to fully vaccinated cases**. Small fluctuations are expected over time and the hospitalisation rate ratio will only be calculated every four weeks.

Table 2. Vaccination status among cases hospitalised for COVID-19, until end of EpiWeek 38, 2022

	Vaccinated	Unvaccinated
Hospitalised for COVID-19	35	38
Hospitalisation rate	0.6%	1.4%

The risk of severe COVID-19 differs by vaccination status. **Until the end of EpiWeek 38, the risk of having a critical level of COVID-19 infection was 2.1 times higher for cases that were not fully vaccinated (compared to fully vaccinated cases). Until the end of EpiWeek 38, the risk of having a severe level of COVID-19 infection was 3.2 times higher for cases that were not fully vaccinated (compared to fully**

vaccinated cases. Small fluctuations are expected over time and the hospitalisation rate ratio will only be calculated every four weeks.

Table 3. Vaccination status among cases hospitalised for COVID-19, until end of EpiWeek 38, 2022

Highest level of severity among hospitalised cases	Fully vaccinated	Not fully vaccinated	Risk ratio
Mild	73	52	1.5
Moderate	9	6	1.4
Severe	8	12	3.2
Critical	8	8	2.1

COVID-19 mortality

A total of 14 people were sadly confirmed to have died from COVID-19 at the end of EpiWeek 38. The vaccination status for two deceased cases is unknown. Case fatality rates differ by vaccination status. Until the end of EpiWeek 38, the case fatality rate for COVID-19 was 0.1% for vaccinated cases and 0.2% for unvaccinated cases. This means that, as of EpiWeek 38, **cases that were not fully vaccinated were 1.5 times more likely to die from COVID-19 compared to fully vaccinated cases**. We note that the number of deaths is very small and the analysis does not take into consideration other factors such as age and underlying conditions, however it is a useful crude metric to communicate the importance of vaccination.

Section 3: Surveillance of SARS-CoV-2 variants

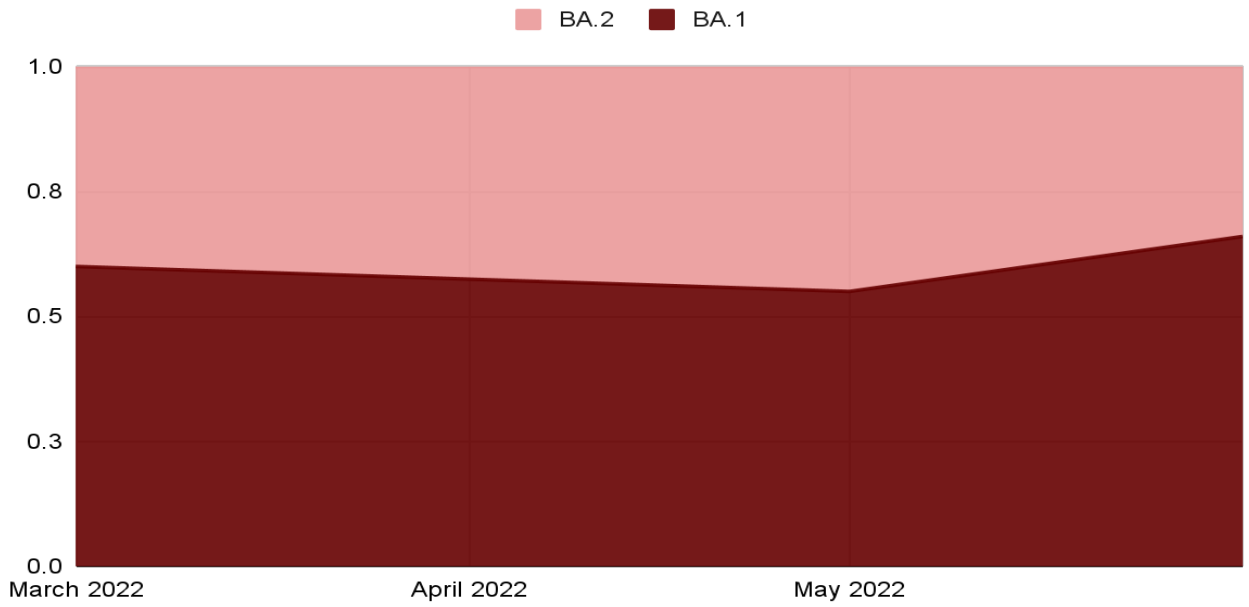
Whole genome sequencing (WGS) is important to follow the emergence and impact of Variants of Interest (VOIs) and Variants of Concern (VOCs).

The World Health Organization currently lists one VOC (Omicron). This includes BA.1, BA.2, BA.3, BA.4, BA.5 and descendent lineages. It also includes BA.1/BA.2 circulating recombinant forms. Previous VOC including alpha, beta, gamma and delta are no longer considered a circulating VOC by the World Health Organization.

The Vanuatu Ministry of Health has a WGS surveillance strategy in place to regularly assess a representative selection of positive specimens. This data complements other surveillance and epidemiological activities in Vanuatu. Vanuatu does not have capacity to perform sequencing in-country and all samples are sent to the Microbiological Diagnostic Unit Public Health Laboratory, located within the Doherty Institute, in Australia.

To date, all positive samples submitted for WGS in 2022 have been identified as the Omicron VOC and all have been either the BA.1 or BA.2 Pango lineage.

Figure 5. Proportion of SARS-CoV-2 positive samples submitted for whole genomic surveillance and the reported Pango lineage, 2022



Acknowledgements

The Ministry of Health Surveillance and Response Unit thanks all medical officers and laboratory officers for reporting and providing data for this report. Thank you to the provincial surveillance officers and health care workers involved in outbreak response. Thank you to private doctors who are also providing testing and providing data to the Ministry of Health. The Ministry of Health thanks the Microbiological Diagnostic Unit Public Health Laboratory for their support in whole genomic sequencing. Thank you to all of the surge support staff and partners who are supporting the Surveillance and Response Unit in case investigation and contact tracing.