

## Comparing self-reported rates of Non-Communicable Diseases (NCD) among people self-identifying as living with a disability to the broader population during the Vanuatu COVID-19 vaccination rollout (2021–2022)

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## Abstract

Background: Several epidemiological studies have demonstrated that people living with disability may be at higher risk of being affected by an underlying condition(s). Here we evaluate the self-reported rates of non-communicable diseases (NCDs) such as hypertension and diabetes among COVID19 vaccine recipients living with a disability and compare these to self-reported rates among the broader population.

Methods: The data source was Vanuatu's COVID-19 electronic vaccination registry which was implemented in 2021 to support the implementation of the COVID19 vaccination program. The registry contains key health-related information of COVID19 vaccine recipients such as disability as well as incidence of NCDs affecting recipients, specifically, hypertension, diabetes, asthma, cardiac issues, and kidney disease. This information was self-reported and reviewed by a clinician as part of the registration process. A total of 143,388 adult vaccine client registrations (registered between June 2021 and August 2022) were extracted and de-identified. We analyzed the number of people who have indicated living with a disability who also reported having at least one NCD and compare these figures with the incidence of NCD among the broader population

Results: Of the client registrations analyzed, 2,742 (2%) reported living with a disability. Among these, 20% (538) also reported having at least one NCD. This is in sharp contrast to self-reported rates among people who do not have a disability with 7% self-reporting at least one NCD. The most disparate self-reported rates were observed for diabetes, with almost 4 times higher reporting rates among people living with disability compared to the general population

Discussion: Self-reported rates of NCDs among people who self-identified as living with disability is nearly 3 times higher compared to people not living with disability. This data strongly suggests that people living with a disability in Vanuatu have a higher disease burden compared to the broader population.