

## **Hepatitis B testing coverage among pregnant women attending antenatal clinics in Efate, Vanuatu, 2018 – 2021.**

### **Authors:**

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**Background:** Hepatitis B is transmitted through contact with blood or other body fluids, with mother-to-child transmission the most common route of transmission. Vanuatu policy includes hepatitis B screening in the first antenatal care visit (ANC-1). This study aims to assess hepatitis B screening and percentage positive among women seeking antenatal services on the main island of Efate, Vanuatu.

**Methods:** This was a cross-sectional study using routinely collected administrative data extracted from the Vila Central Hospital (VCH) laboratory database and from the Ministry of Health DHIS2 database specifically filtering the data related to the six ANC clinics across Efate. Outcome measures were (1) pregnant women presenting for ANC-1 who had a hepatitis B screening test at VCH laboratory. (2) Pregnant women presenting for ANC-1 that were hepatitis B positive. Data for 2018 to 2021 were included.

**Results:** The annual number of ANC-1 visits on Efate remained stable between 3200 to 3400 from 2018 to 2021, with an average of 3370 per year. The screening coverage decreased slightly from 86% in 2019 to 81% in 2021. VCH-ANC provides approximately 70% of all ANC-1 visits, whilst other sites contributed less than 30% of the total ANC-1 visits. The total number of HBsAg screening tests performed for ANC-1 pregnant women between 2018 and 2021 was 10,868, from which 706 were reactive (6%). Yearly, percentage positive remained stable at 7% between 2018 and 2020, and in 2021 decreased to 5%.

**Conclusion:** In 2021 testing coverage reduced by 6%. In 2022 the number of pregnant women screened for hepatitis B also decreased. This decrease is due to the introduction of the Vila Central Hospital Covid-19 surge support plan in 2021 due to the covid-19 outbreak, which included decentralization of ANC-1 services to community – based health facilities. However, this did not allow the decentralisation of laboratory services, requiring women to make a trip to VCH anyways, which may have influenced access to hepatitis B testing. The decrease in positivity is most likely due to vaccine-derived immunity. It is recommended that hepatitis B screening is also decentralised to community-based health facilities.

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