

# ACCESS TO AND USE OF MOSQUITO BED NETS FOR MALARIA PREVENTION IN VANUATU

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VANUATU 2ND HEALTH RESEARCH SYMPOSIUM

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## INTRODUCTION

- The Ministry of Health and its partners have consistently worked to contain and eliminate malaria across Vanuatu
  - Annual parasite incidence has fallen from 74 per 1,000 in 2003 to 3.7 per 1,000 in 2017
  - The last malaria death was recorded in 2012
  - Tafea was declared malaria-free in 2017
- The use of long-lasting insecticidal nets have been integral to these achievements
- National malaria elimination requires concerted & evidenceinformed efforts



#### METHODS

- The study utilised a multistage cluster sampling approach & multi-method digitised survey
- A survey of malaria endemic provinces with 6 foci health zones and 6 nonfoci health zones selected.
- Across November 2020, enumerators surveyed 132 villages across 12 health zones and 5 provinces
- Teams reached 1,841 households with 7,480 people residing in residents the night before the survey



#### RESULTS

- 92.07% of households had at least one long lasting insecticidal net (LLIN)
- 76.21% of households had sufficient LLINs Average of 2.83 nets
- While 68.41% of household members slept under an LLIN the night preceding the survey, rates varied with:
  - Those residing in Shefa having lower utilisation (54.11%)
  - Women were statistically less likely to sleep under LLINs than men
  - Children <5 had the lowest reported rate of sleeping under an LLIN</p>
  - Pregnant women less likely to sleep under an LLIN than men, children and other women



### RESULTS



- Diverse cleaning and care practices were identified.
- Old or damaged LLINs were commonly repurposed with about a third of households never formally disposing of nets.
- However, more than half of households (58.07%) incorrectly dispose of LLINs including burning LLINs and throwing them into the bush, oceans or waterways.
  - Findings project that ~21,000 LLINs are incorrectly disposed of annually across Vanuatu



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### DISCUSSION

- Findings demonstrate considerable success in LLIN distribution and accompanying malaria messaging.
- More tailored efforts are needed to understand and address locale, gendered and age-based disparities in LLIN access and utilisation.
- LLIN care, repurposing and disposal required increased focus to ensure sustained efficacy of nets and alignment between the malaria program and Vanuatu's broader environmental concerns.



#### FINAL REMARKS

- The history, approach and successes of the Vanuatu National Malaria and Other Vector Borne Diseases Control Program hold useful health systems insights.
- Malaria elimination remains a feasible objective but is contingent on consciously addressing inequities.
- Management the LLIN waste stream is also paramount in mitigating unintended environmental consequences.





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