
INVESTIGATING LEPTOSPIROSIS ON EFATE ISLAND IN 2023 THROUGH A ONE HEALTH APPROACH.

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INTRODUCTION

- Leptospirosis cases surged in Vanuatu post Cyclones Judy and Kevin (Mar. 2023), affecting all age groups.
- Caused by pathogenic *Leptospira* bacteria, transmitted via contaminated water/soil with infected animal urine, symptoms range from fever to organ failure if untreated.
- Rising cases resulted from increased bacteria exposure in the environment, exacerbated by heavy rainfall.
- The investigation sought data to understand transmission and develop preventive measures for public health.



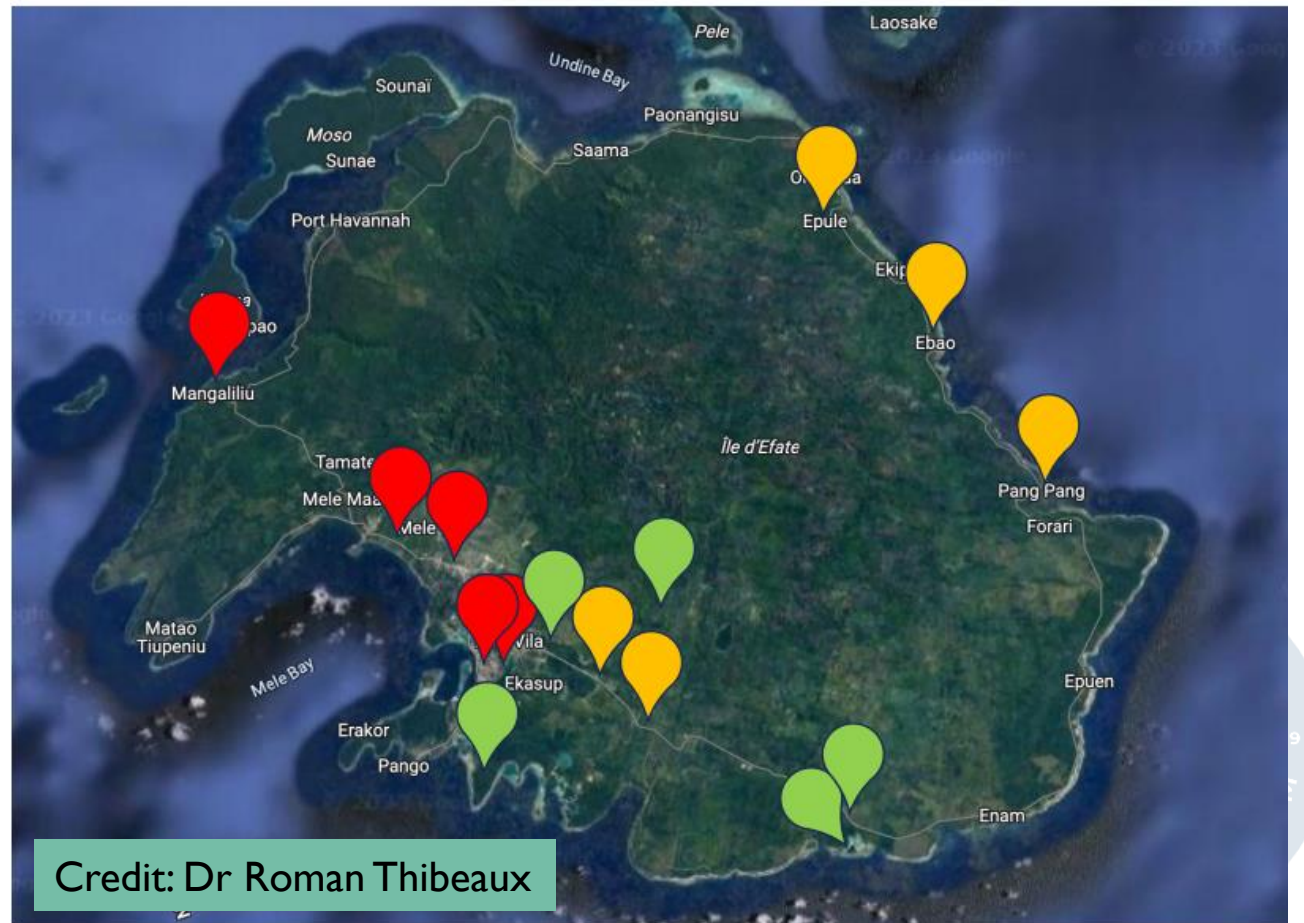
METHODS

- A multidisciplinary team carried out the sample collection. Using the mechanism of one health approach.
- Field investigation



METHODS

- Sites were chosen due to high number of cases in the area.
- Total of 16 sites investigated, samples collected included soil, water, and animal.



RESULTS



- Pathogenic *Leptospira* detected at 13 of 16 field sites.
- Molecular analysis confirmed presence of the bacteria in 24 of 50 samples.



RESULTS

- Leptospira-specific antibodies identified in 3 pig samples, while one cattle tested positive, indicating chronic carrier status as well as the flying fox kidney swab.



DISCUSSION

- Field investigation and molecular analysis detected widespread *Leptospira*, posing risks to humans and animals.
- The pathogen was found in soil and water samples, emphasizing the need for control.
- Molecular analysis confirmed its active circulation in the area, with pigs, cattle, and flying foxes as potential sources.
- Effective measures, including reservoir monitoring, are needed to manage the disease.



RECOMMENDATIONS / IMPLICATIONS

- Widespread *Leptospira* presence in areas with recent human cases identified, aiding in targeted prevention efforts.
- Provide training and capacity-building opportunities for healthcare professionals, veterinarians, and environmental workers to enhance their knowledge of Leptospirosis prevention and control.
- Regularly monitor and survey potential reservoirs of *Leptospira*, including wildlife species and domestic animals.
- Emphasizing the importance of One Health collaboration for effective zoonotic disease management.



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