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# Overview of recent arboviral threats in the Pacific

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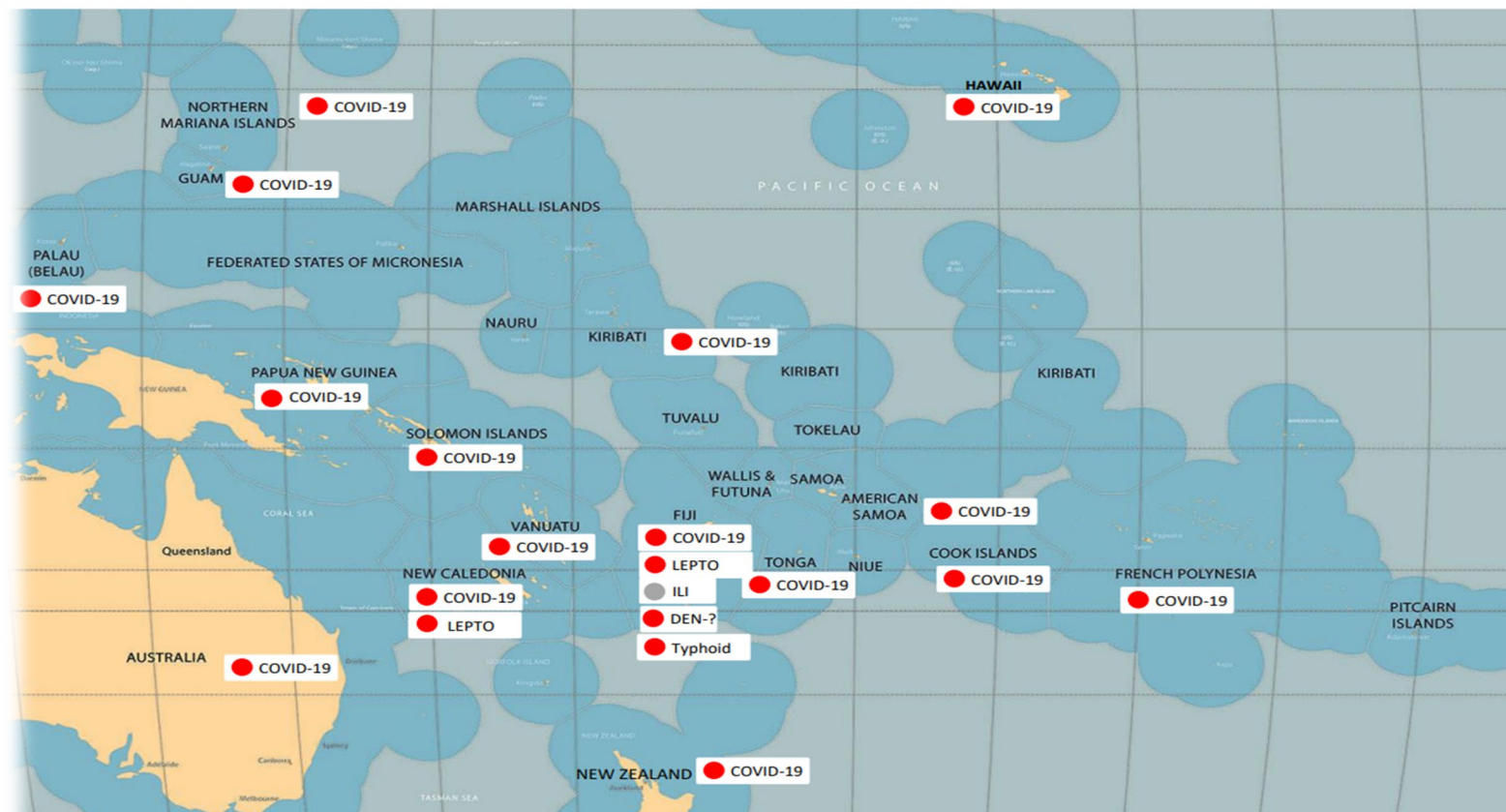





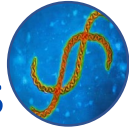
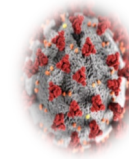
## Introduction

- Emerging and re-emerging diseases are significant threats to Pacific health security.
- The region has been threatened by unprecedented outbreaks of arboviral diseases (dengue fever, zika and chikungunya) over the last decade or so.
- Zika virus first emerged in the region in Yap State, FSM in 2007 and later declared a Public Health of International Concern (PHEIC) in 2016 (1 Feb-18 November).
- Drivers of emerging and re-emerging arboviral diseases include population growth and movement, encroachment into vector habitats, changes in vector behaviour due to rapid urbanization and changes in natural habitats brought about by climate change.

# Epidemic and emerging disease alerts in the Pacific as of 15 March 2022

Epidemic and emerging disease alerts in the Pacific as of 15 March 2022



- 1 Dengue fever 
- 1 Influenza 
- 1 Typhoid fever 
- 2 Leptospirosis 
- 16 COVID-19 

**Legend**

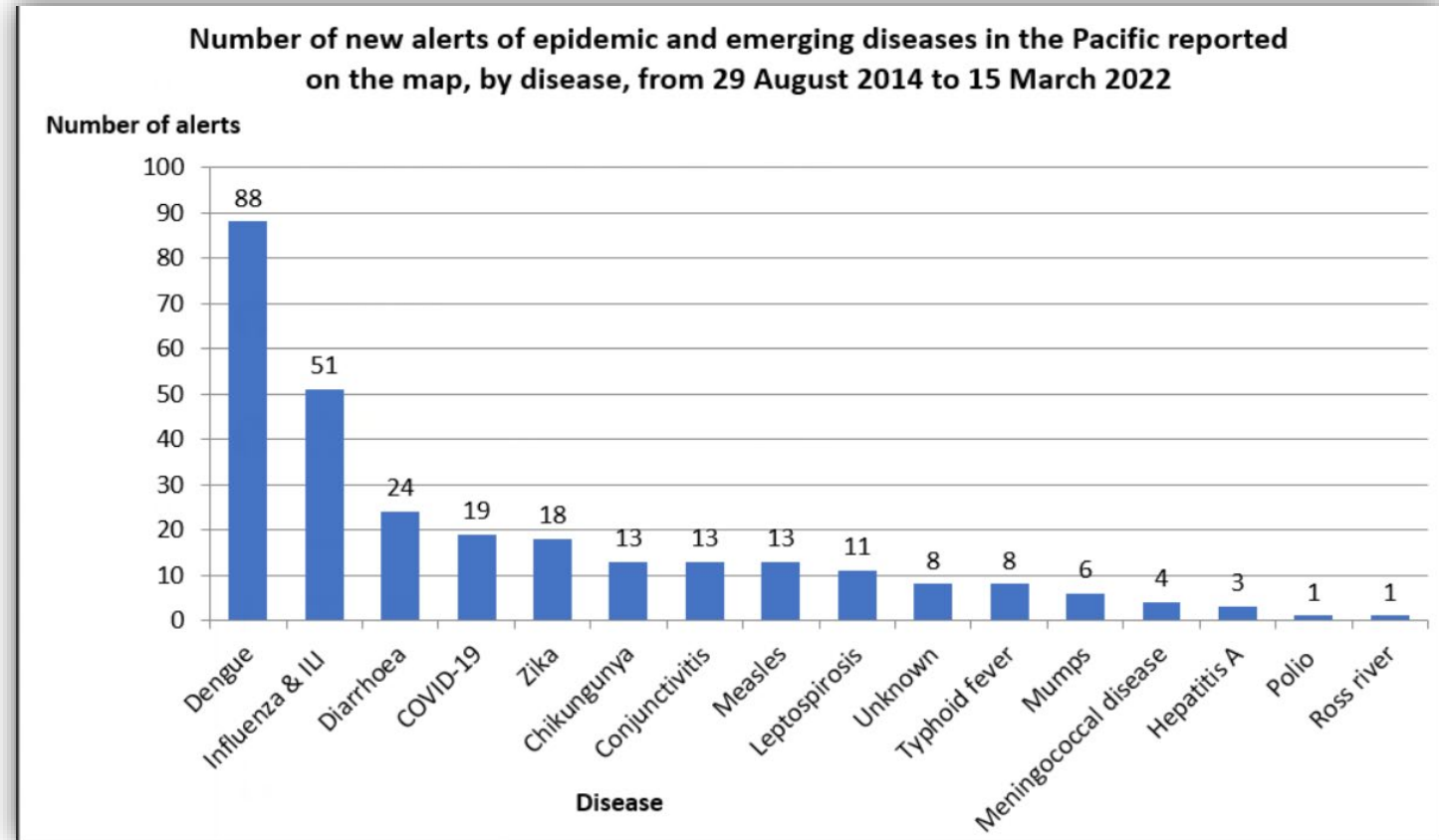
- Cases reported are increasing or peaking.
- Cases reported are decreasing or circulation is ongoing.
- Awaiting confirmation of aetiology.
- ★ No update for more than 2 weeks

COVID-19: Coronavirus disease 19  
(Blue alert for COVID-19 indicates no new local case for 14 days)  
(Red alert for COVID-19 indicates new local case in the past 14 days)  
DEN-?: Dengue serotype unknown, ILI: Influenza-like illness, LEPTO: Leptospirosis

# Reported number of new alerts: 2014 - 15 March 2022



- 281 alerts from 29 August 2014 to 15 March 2022
- Dengue fever tops all alerts for this period

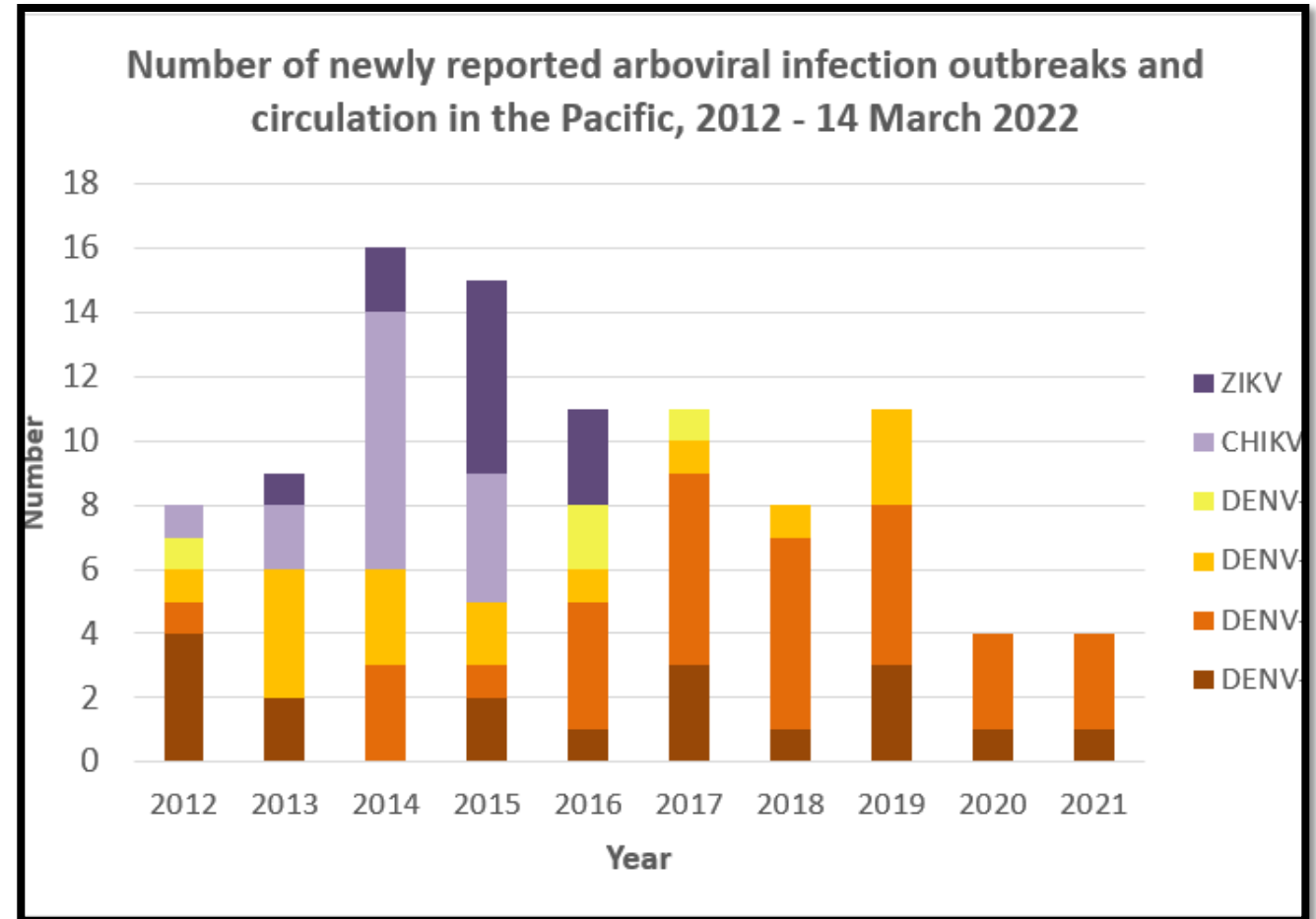


Source: Pacific Community (SPC) Regional Epidemic Intelligence System Database.

# Newly reported arboviral outbreaks: January 2012 – 14 March 2022

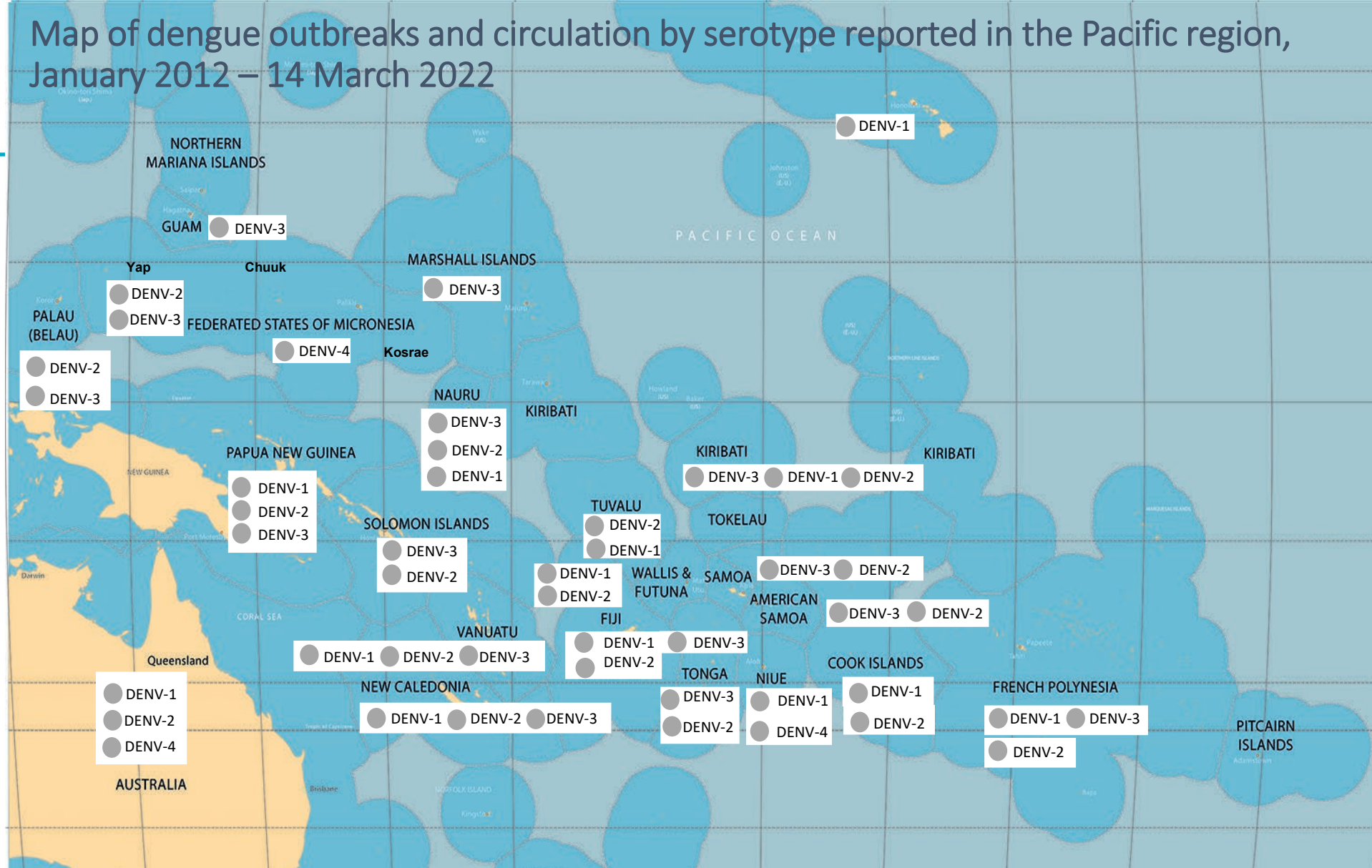


- 97 newly reported arboviral outbreaks and circulation
- Total number of newly reported dengue outbreaks and circulation was 70: DENV1-18, DENV2-32, DENV3-16 and DENV4-4
- Total number of newly reported Zika virus outbreaks was 12
- Total number of newly reported Chikungunya outbreaks was 15



Source: Pacific Community (SPC) Regional Epidemic Intelligence System Database.

# Map of dengue outbreaks and circulation by serotype reported in the Pacific region, January 2012 – 14 March 2022



## Legend

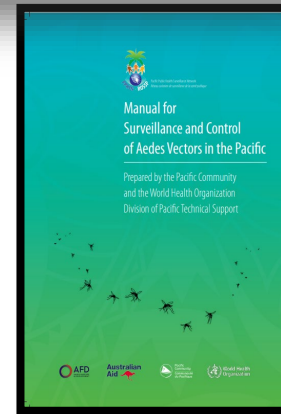
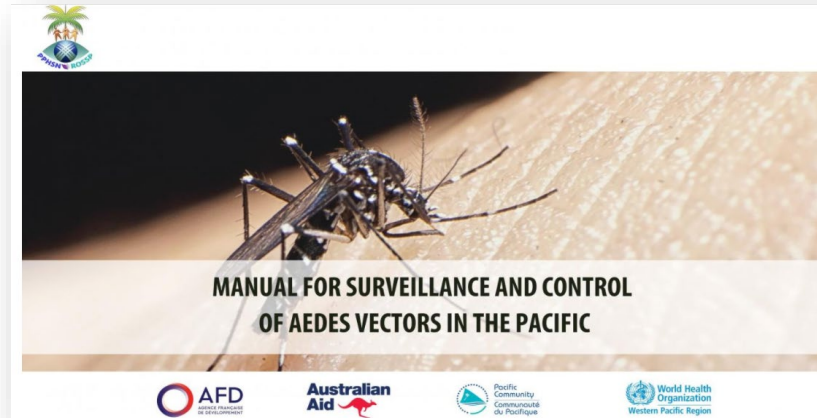
- Cases reported are increasing or peaking.
- Cases reported are decreasing or viral circulation is ongoing
- Outbreak or viral circulation is over.

# What is SPC doing?

- Strengthening surveillance of arboviral diseases through a One Health approach
- Production of knowledge products
- Signing of Agreement between SPC and JCU (PacMOSSI) on capacity building on entomology
- Risk communication and awareness on arboviral diseases via various media platforms
- Support for operational research
- Support for serosurveys of dengue fever in Vanuatu and New Caledonia in collaboration with IPNC and the Ministries of Health of the two countries
- Development of a dengue fever predictive tool in collaboration with IRD
- Conduct of a feasibility study for establishment of regional insectary



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New agreement puts spotlight on managing deadly mosquito born viral disease epidemics in the Pacific

Suva | 11 October 2021



ABC Pacific Beat: PacMOSSI project looking to ramp up mosquito control and reduce disease

22 October 2021

