

NSW Arbovirus Surveillance and Mosquito Monitoring 2025-2026

Environmental Health Branch, Health Protection NSW

Weekly Update: Week ending 20 December 2025



Bottom left - Common banded mosquito, *Culex annulirostris* **Top and bottom right** - Saltmarsh mosquito, *Aedes vigilax* (Copyright 2020)

Weekly reports are available on [Mosquito-borne disease surveillance](#).

Please send questions or comments about this report to:

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Testing and scientific services are provided by the Department of Medical Entomology, NSW Health Pathology, Institute of Clinical Pathology and Medical Research (ICPMR) for mosquito surveillance, and the Arbovirus Emerging Diseases Unit, NSW Health Pathology (ICPMR) for sentinel chicken surveillance.

The arbovirus surveillance and mosquito monitoring results in this report remain the property of the NSW Ministry of Health and may not be used or disseminated to unauthorised persons or organisations without permission.

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Summary

Arbovirus Detections

Sentinel Chickens

• There were no seroconversions in sentinel chickens for the week ending 20 December 2025.

Mosquito Isolates

• There were no arbovirus detections in mosquito samples in the week ending 20 December 2025.

Mosquito Abundance

Inland

- **Low:** Balranald, Bourke, Cootamundra, Deniliquin, Murrumbidgee, Tamworth, Wagga Wagga, West Wyalong.
- **Medium:** Moree.
- **High:** Griffith, Leeton.

Coastal

- **Low:** Batemans Bay, Byron Bay, Gosford, Lismore, Port Macquarie, Wyong.
- **Medium:** Ballina, Lake Cathie, Narooma.

Sydney

- **Low:** Blacktown, Canada Bay, Cumberland, Earlwood, Georges River, Hawkesbury, Hills Shire, Northern Beaches, Penrith, Sydney Olympic Park.
- **Medium:** Liverpool, Parramatta.
- **High:** Bankstown.

Environmental Conditions

Climate

- In the week ending 20 December 2025, rainfall was average or below average across all of NSW.
- In the coming week, 26 December 2025 to 1 January 2026, rainfall is expected to be about average across most of NSW and above average in areas inland stretching from Goulburn and Griffith to Cobar and Dubbo.
- Minimum temperatures are expected to be above average across most of NSW and very much above average in the Far West and along the coast near the QLD border. Minimum temperatures are expected to be about average near the South Coast and in most of the inland region in the northeastern quadrant of NSW.
- Maximum temperatures in the next week are expected to be above average in the western half of NSW, below average in the north eastern quadrant of NSW and about average elsewhere.

Tides

- High tides over 1.8 metres are predicted for 21-22 December 2025 and 1-7 January 2026 which could trigger hatching of *Aedes vigilax*.

Human Arboviral Disease Notifications

Ross River Virus

Two probable cases were notified in the week ending 20 December 2025.

Barmah Forest Virus

No probable cases were notified in the week ending 20 December 2025.

Arbovirus Detections

This section details detections of Murray Valley encephalitis virus, Japanese encephalitis virus, Kunjin virus, Ross River virus and Barmah Forest virus in the NSW Arbovirus Surveillance and Mosquito Monitoring Program.

Sentinel chickens

Chickens are bled for detection of antibodies directed against Murray Valley encephalitis virus, Japanese encephalitis virus and Kunjin virus, indicating exposure to these viruses. Test results for the past week are shown in the map below. A positive test result indicates one or more chickens in a flock tested positive for the **first time** to antibodies directed against a particular virus, indicating newly acquired infection.

Sentinel chicken antibody test results for samples collected in the week ending 20 December 2025

In the week ending 20 December 2025, there were no seroconversions in sentinel chickens.

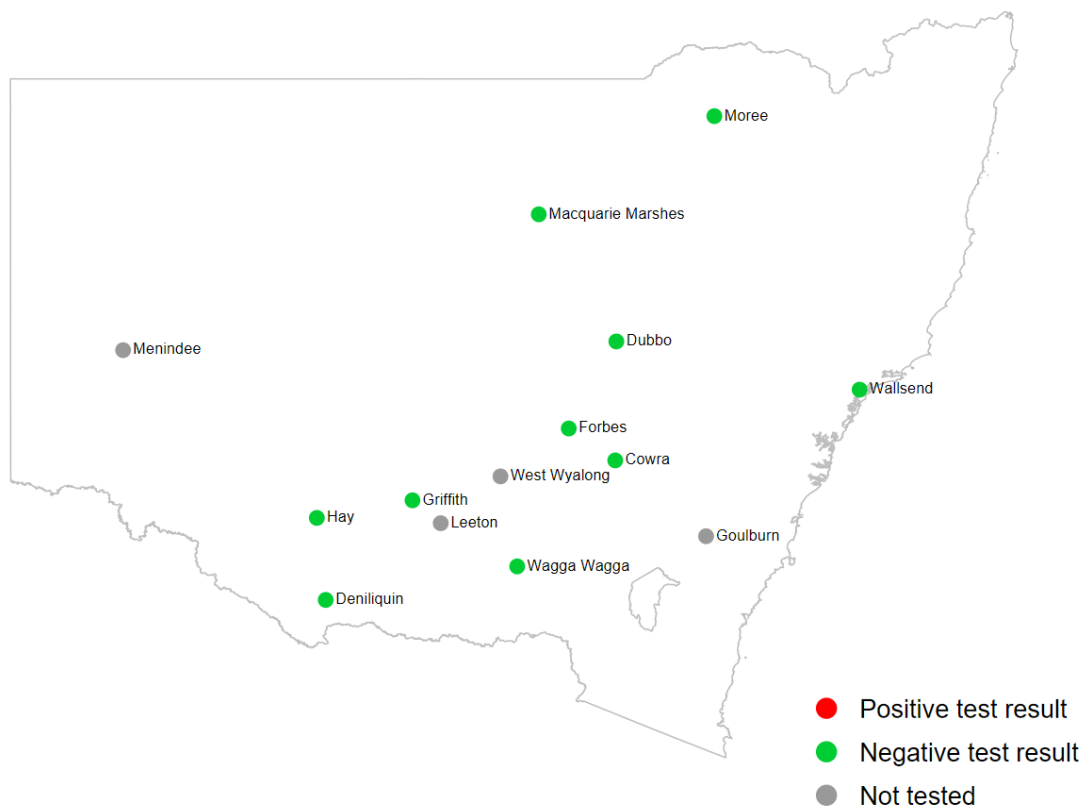


Table 1: Positive test results in the 2025-2026 surveillance season.

Date of sample collection	Location	Virus
2025-11-20	Cowra	Kunjin

Sydney sites

The map highlights detections of arboviruses that can cause human notifiable conditions, such as Murray Valley encephalitis virus, Japanese encephalitis virus, Kunjin virus, Ross River virus, and Barmah Forest virus. Detections of all arboviruses (including Edge Hill virus, Stratford virus and Kokobera virus) for the season are detailed in the positive test results for the 2025-2026 surveillance season.



There have been no arbovirus detections in Sydney sites during the 2024-2025 arbovirus season.

Mosquito abundance

This section details counts of mosquitoes in the NSW Arbovirus Surveillance and Mosquito Monitoring Program. Each location represents the count average for all trapping sites at that location for the most recent week that collections were provided prior to preparation of this report.

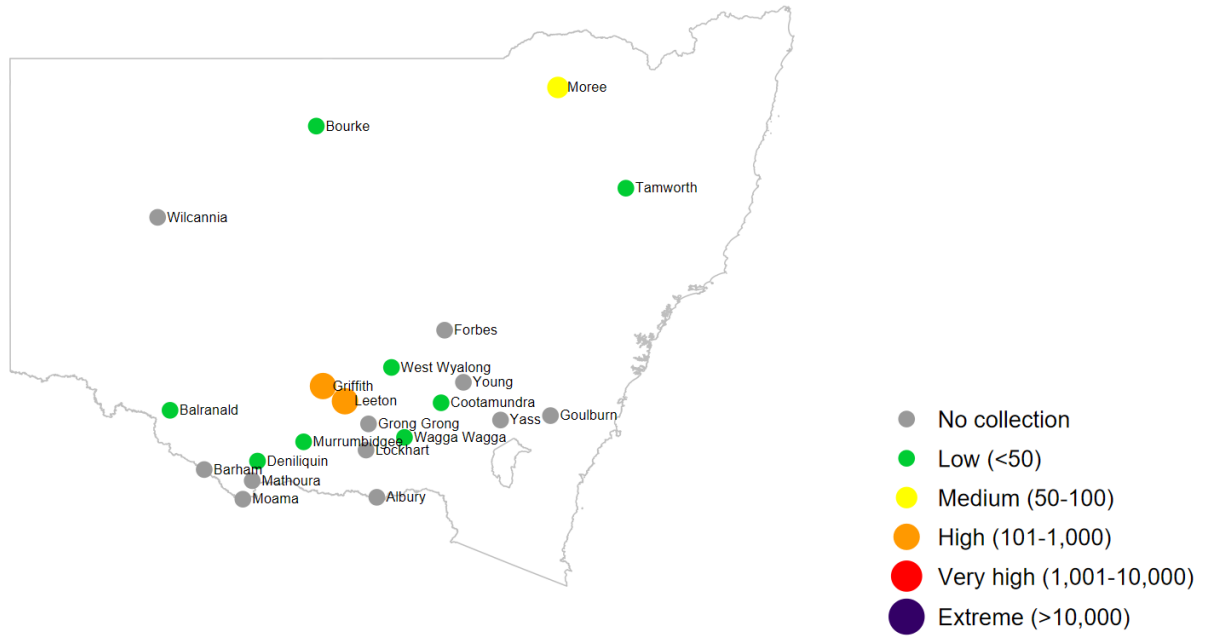
Culex annulirostris and *Aedes vigilax* are vectors of interest for Ross River virus and Barmah Forest virus, *Culex annulirostris* is also a vector for Japanese encephalitis virus.

Mosquito counts

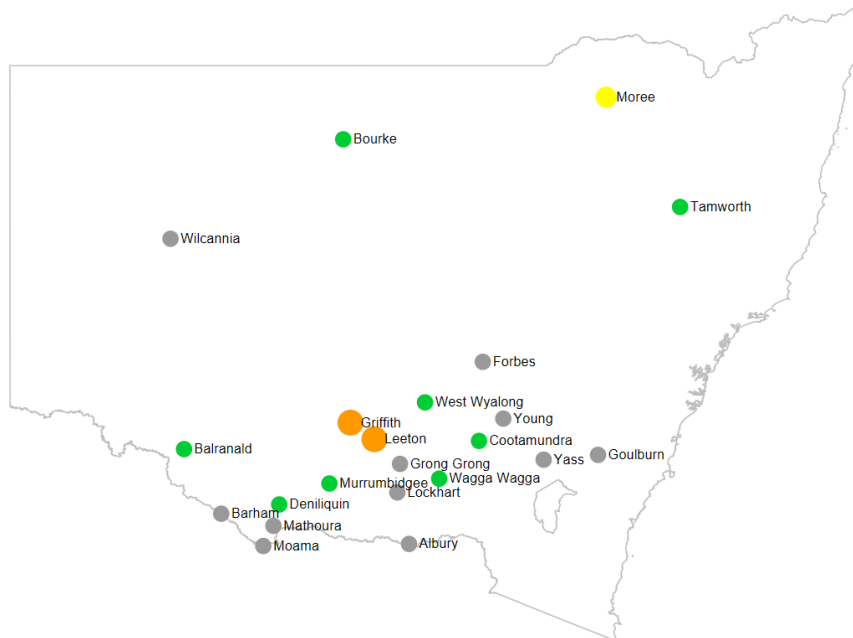
Mosquito counts (average per trap per location) for mosquito trapping sites reported in the week ending 20 December 2025

Inland sites

Total mosquito counts

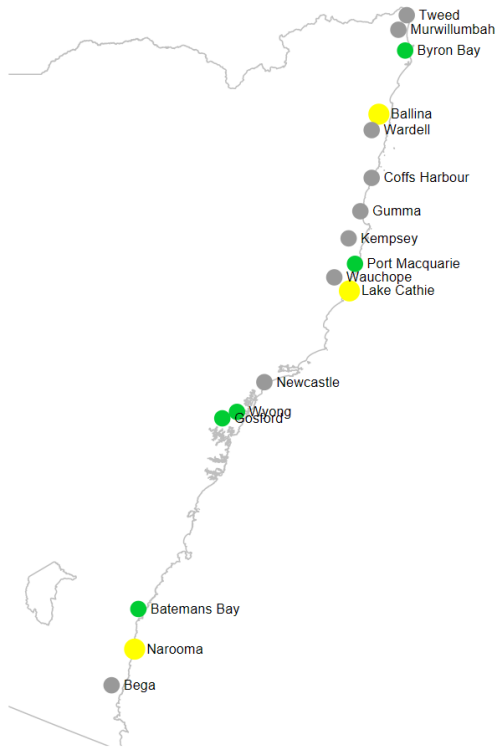


Culex annulirostris counts

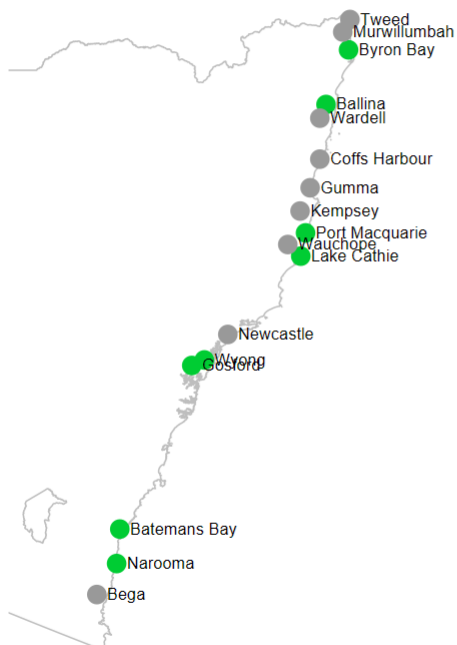


Coastal sites

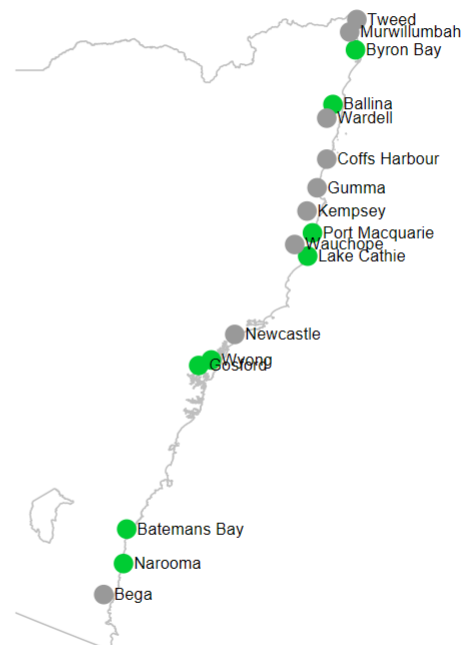
Total mosquito counts



Culex annulirostris counts

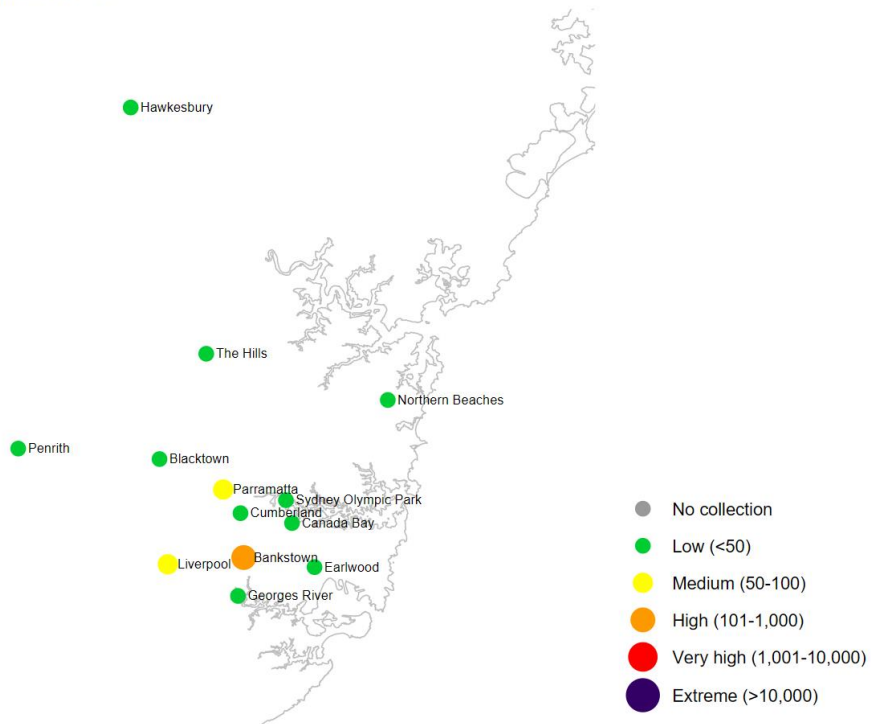


Aedes vigilax counts

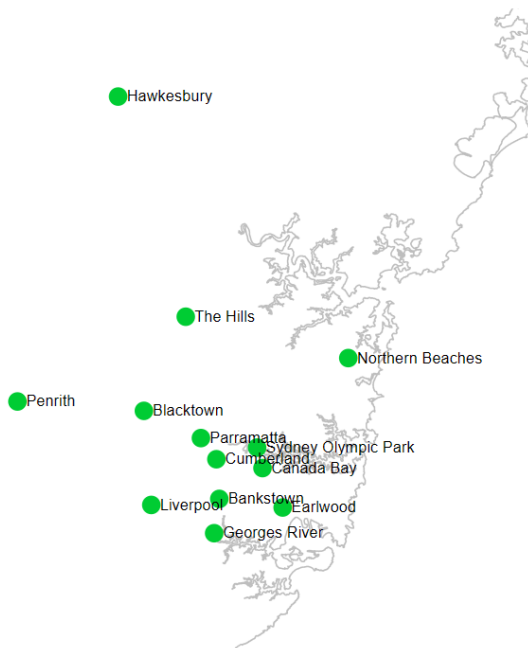


Sydney sites

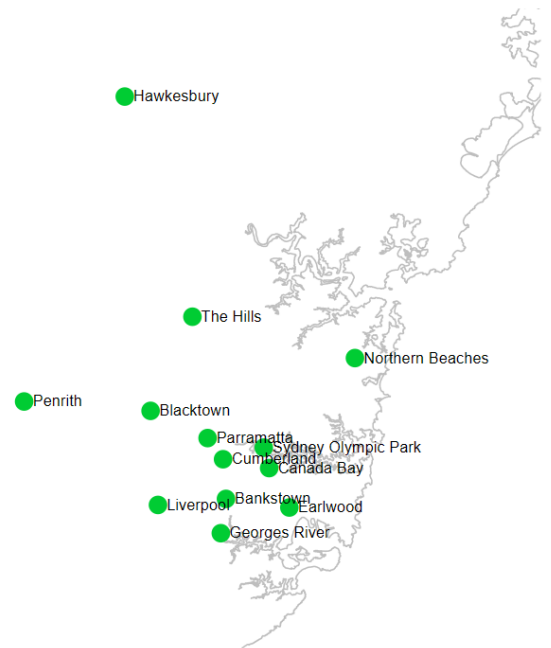
Total mosquito counts



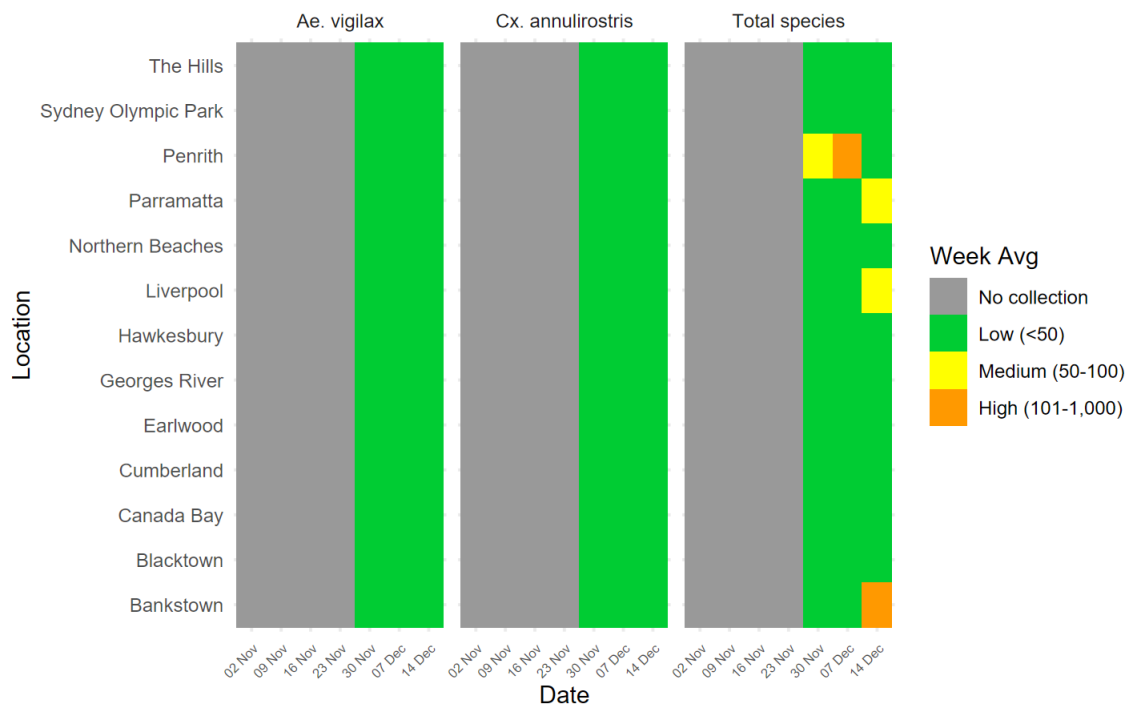
Culex annulirostris counts



Aedes vigilax counts



Number of mosquitoes trapped in Sydney (weekly average)



Human arboviral disease notifications

Under the *NSW Public Health Act 2010*, human arboviral infections are notifiable in NSW.

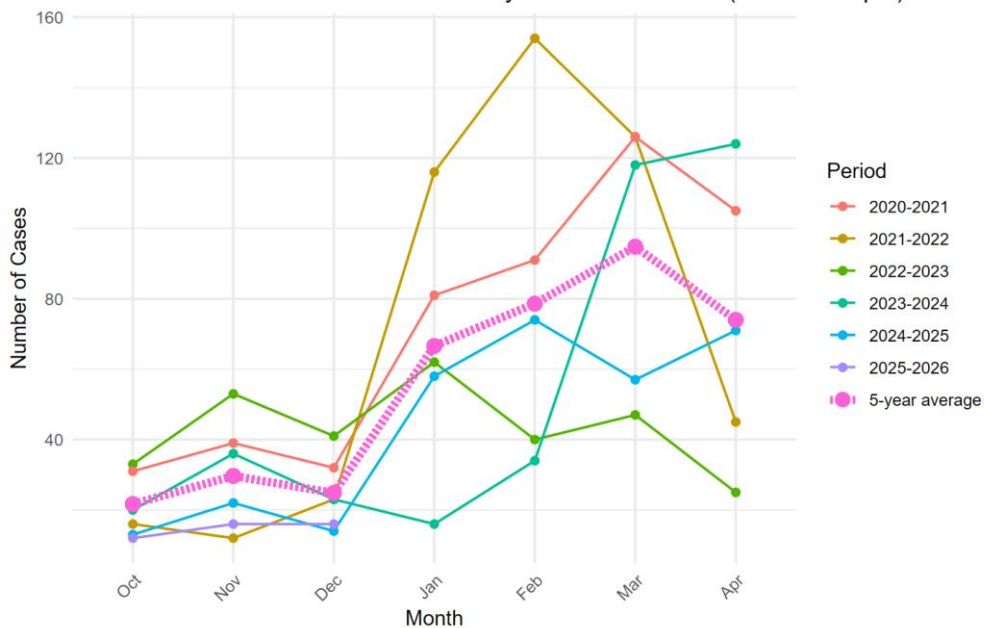
Recent notifications of Ross River virus and Barmah Forest virus infections in humans (by date of case report received)

Notifications of Ross River virus and Barmah Forest virus infections, by month of disease onset (the earlier of patient-reported onset or specimen collection date), are available online at the [NSW Health website - infectious diseases data](#).

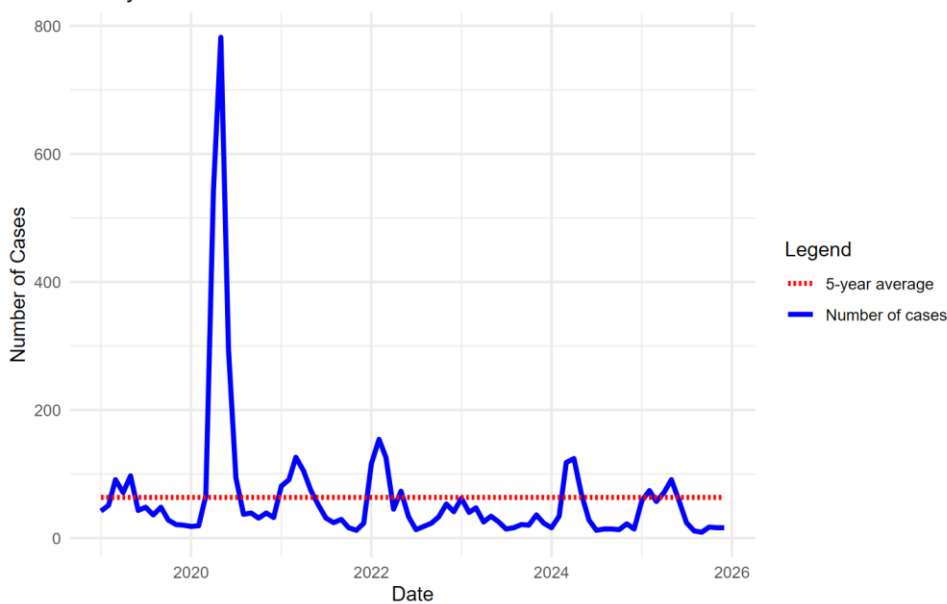
The following figures show notifications for the current NSW Arbovirus Surveillance and Mosquito Monitoring season (2025-2026), and the same period in the previous four years.

Ross River virus

Ross River virus notifications in NSW by month since 2020 (October - April)



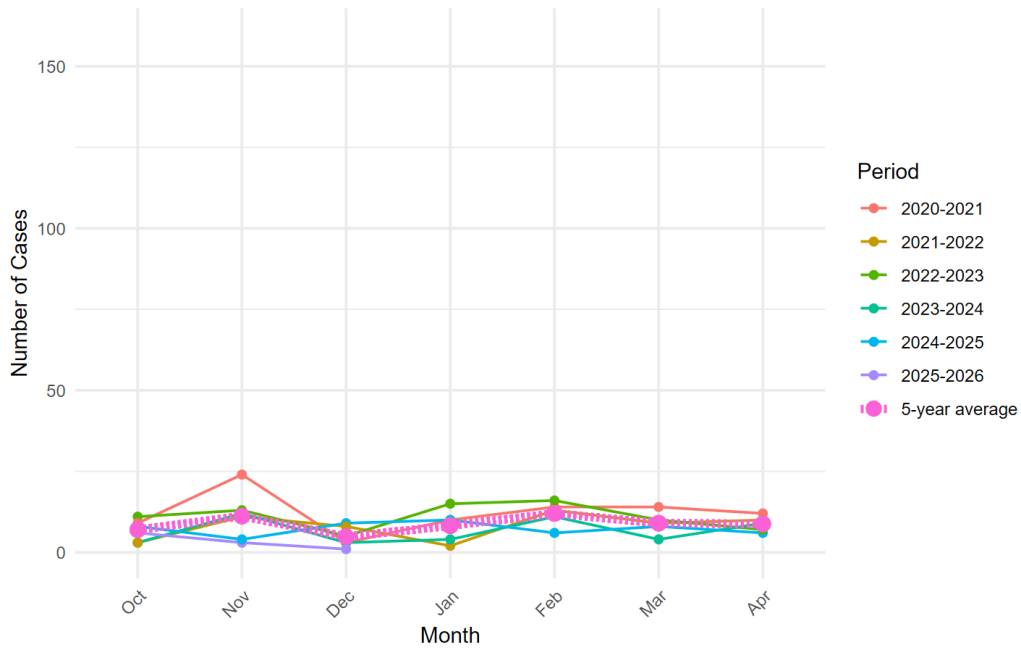
Yearly Ross River virus notification trends in NSW since 2019



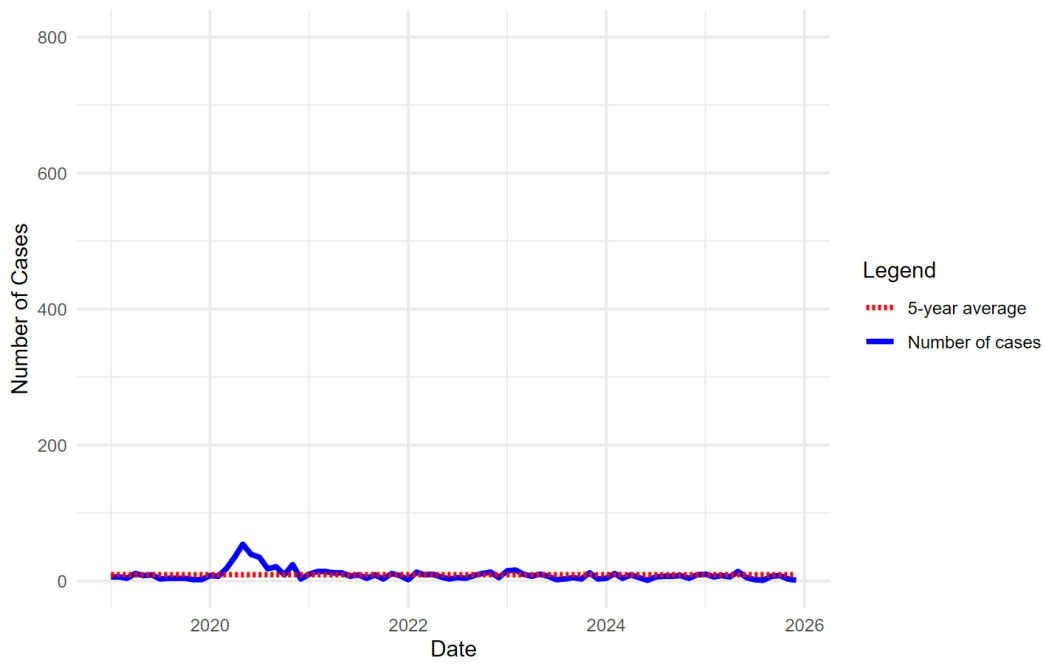
Note: Presented human cases include both confirmed and probable cases.

Barmah Forest virus

Barmah Forest virus notifications in NSW by month since 2020 (October - April)



Yearly Barmah Forest virus notification trends in NSW since 2019



Note: Presented human cases include both confirmed and probable cases.