

Arbovirus Surveillance Summary 2021-2022

April 2022

Summary

- No cases of **Ross River virus** or **Barmah Forest virus** infection in a SESLHD resident were reported in April 2022
- One confirmed case of **malaria** and one confirmed case of **dengue virus** infection in SESLHD residents were reported in April 2022. Both infections were acquired overseas
- Mosquito numbers were average to high when compared to numbers usually seen in April

1. Surveillance of Ross River and Barmah Forest Virus infections

In South Eastern Sydney Local Health District (SESLHD), place of acquisition continues to be investigated for all confirmed cases, as well as for those probable cases who reside in areas along the Georges River where there is potentially increased risk of local transmission of the Ross River and Barmah Forest viruses (postcodes 2210 and 2234).

a. April 2022

- No cases of **Ross River virus** infection in a SESLHD resident has been notified.
- No cases of **Barmah Forest virus** infection in a SESLHD resident have been notified.
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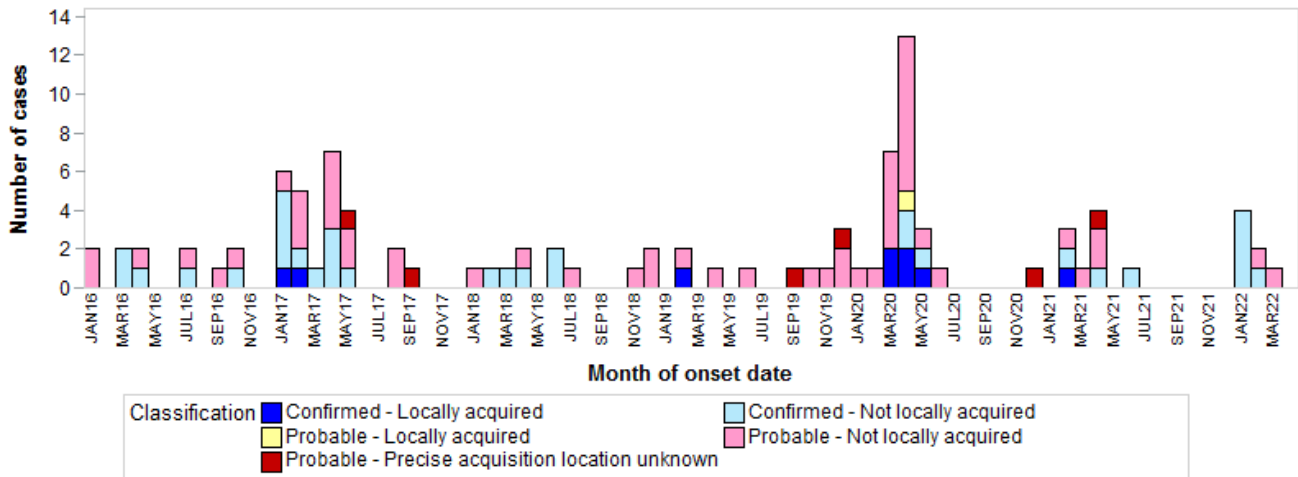
b. This season (1 October 2021 to 30 April 2022)

- Five confirmed cases of **Ross River virus** infection in a SESLHD resident have been notified.
- Two probable cases of **Ross River virus** infection in a SESLHD resident have been notified.
- No cases of **Barmah Forest virus** infection in SESLHD residents have been notified.

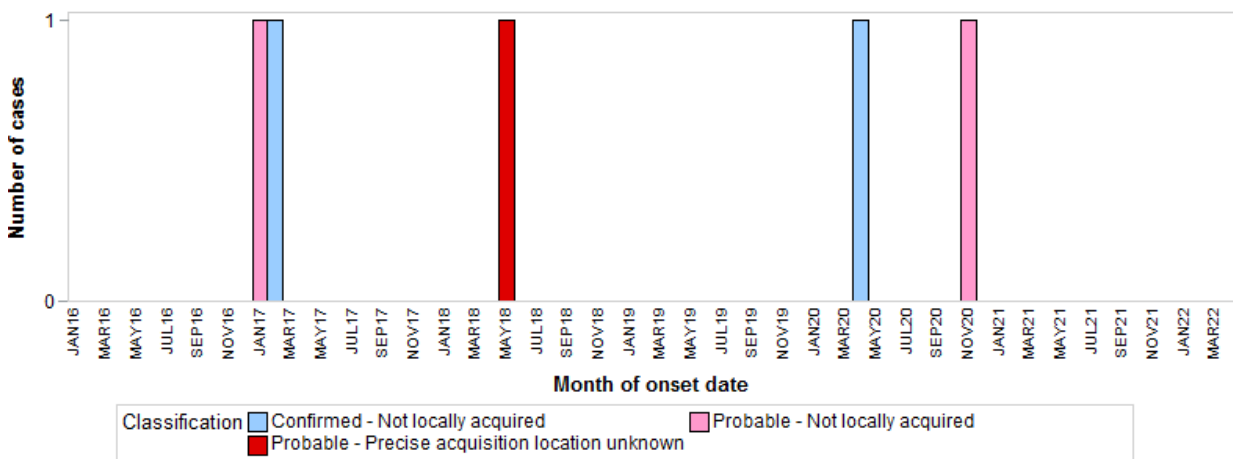
Confirmed and probable cases among South Eastern Sydney LHD residents, since 1 October 2021

| | Acquired in SESLHD | Not known to be acquired in SESLHD | | |
|----------------------------|--------------------|------------------------------------|-------------------|--------------------------------------|
| | | Acquired elsewhere in Australia | Acquired overseas | Precise acquisition location unknown |
| Ross River virus | | | | |
| Confirmed | 0 | 5 | 0 | 0 |
| Probable | 0 | 2 | 0 | 0 |
| Barmah Forest virus | | | | |
| Confirmed | 0 | 0 | 0 | 0 |
| Probable | 0 | 0 | 0 | 0 |
| Total | 0 | 7 | 0 | 0 |

Confirmed and probable Ross River virus infections in South Eastern Sydney LHD residents, by location of acquisition, 2016 to date



Confirmed and probable Barmah Forest virus infections in South Eastern Sydney LHD residents, by location of acquisition, 2016 to date



2. Summary of other arboviruses not known to be locally transmitted

One confirmed case of **dengue virus** infection and one confirmed case of **malaria** have been notified in local residents this month. Both infections were acquired overseas.

Since 1 October 2021 (current season) two confirmed cases of **dengue virus** infection and one confirmed case of **malaria** have been notified in local residents. All infections were acquired overseas.

On February 28 NSW Health issued an alert following the detection of Japanese encephalitis virus in several pig farms in the west of the state. While local transmission of Japanese encephalitis is unlikely in SESLHD, the favoured mosquito vector for the virus, *Culex annulirostris* is common in the region.

3. Mosquito surveillance in the Georges River region

Mosquito surveillance along the Georges River is undertaken from late November to April each year. The detection of increased mosquito numbers may signal an increased risk of arboviral infection. The predominant species of mosquito in the coastal area of the Georges River which may pose a risk to human health is *Ochlerotatus (Aedes) vigilax*, a known carrier of Ross River and Barmah Forest viruses. Three sites close to SESLHD residents used for mosquito surveillance include Illawong, Alford's Point and Picnic Point (in SWSLHD).

- Average mosquito numbers in April 2022 were high at Alford's Point when compared to average April numbers from the previous six seasons at this location.
- Average mosquito numbers in April 2022 were slightly below average at Picnic Point when compared to average April numbers from the previous six seasons at this location.
- There were no very high individual mosquito counts in April 2022.



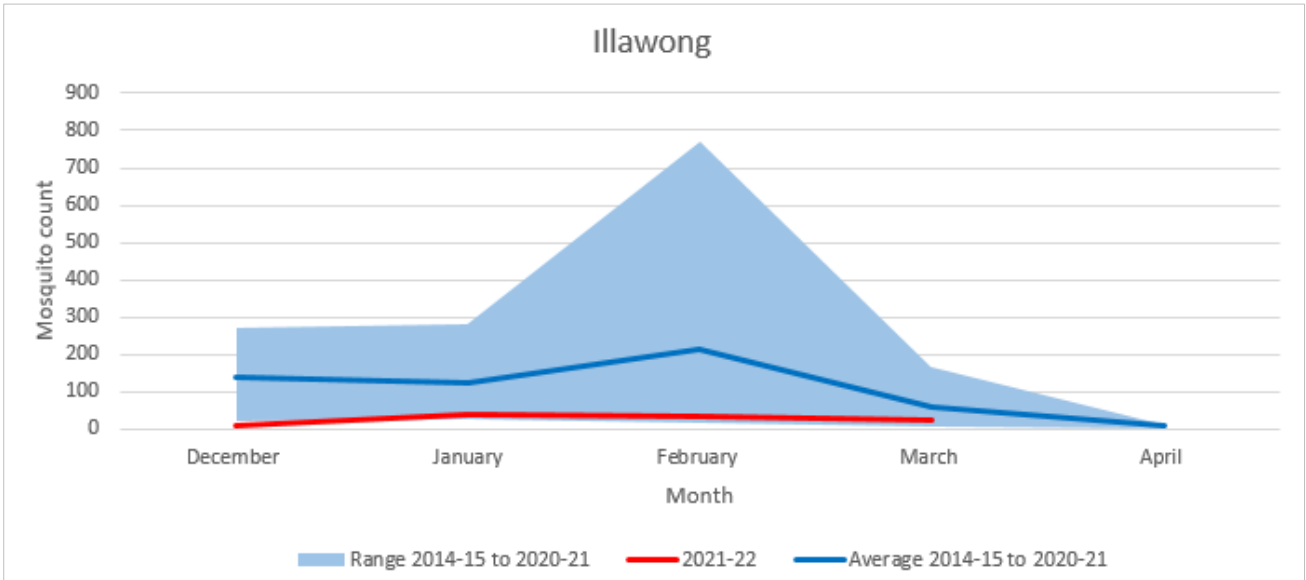
Mosquito surveillance sites on the Georges River near SESLHD residents (blue overlay highlights SESLHD region)

Mosquito numbers as a daily average per month, by current season and 2014 to 2021 seasons

| Site | Season | Average mosquito count | | | | |
|-----------------------|-----------------------|------------------------|--------------|--------------|-------------|-----------|
| | | December | January | February | March | April |
| Illawong | This season | 11 | 39 | 33 | 26 | ^ |
| | All previous seasons* | (24 – 272) | (28 – 283) | (15 – 772) | (6 – 165) | (1 – 13) |
| Alford's Point | This season | 105 | 289 | 93 | 134 | 78 |
| | All previous seasons* | (238 – 2589) | (147 – 3718) | (219 – 3954) | (99 – 2165) | (14 – 66) |
| Picnic Point (SWSLHD) | This season | 24 | 87 | 139 | 92 | 34 |
| | All previous seasons* | (41 – 3006) | (26 – 5639) | (108 – 6672) | (60 – 2624) | (7 – 139) |

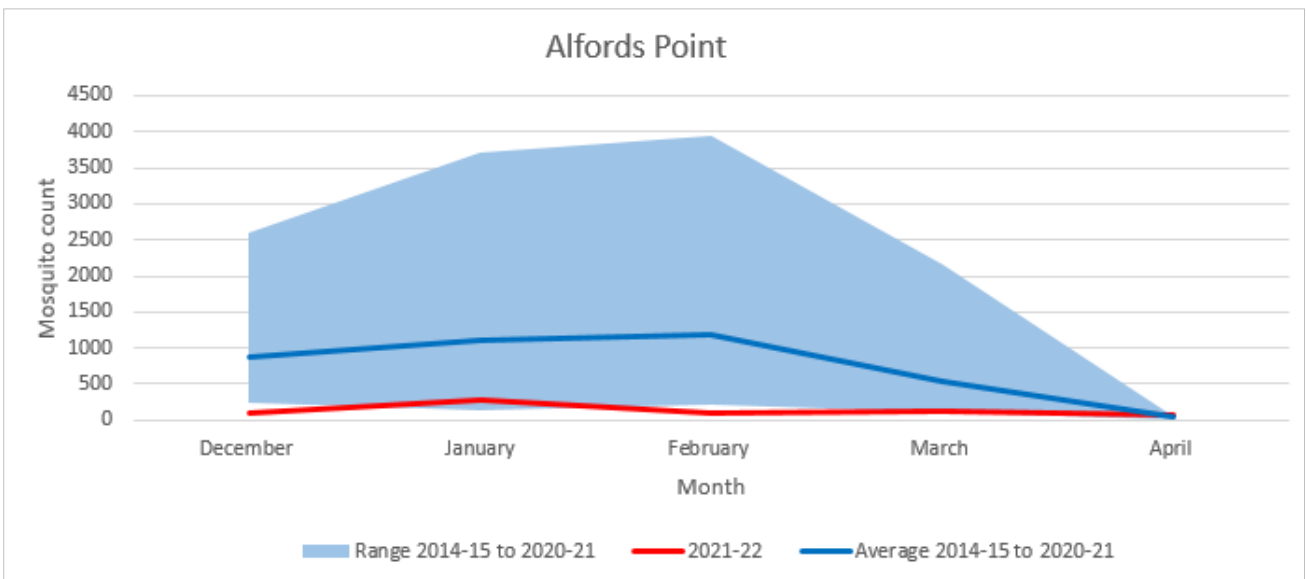
*2014-15 to 2020-21 range

^No data collected for April

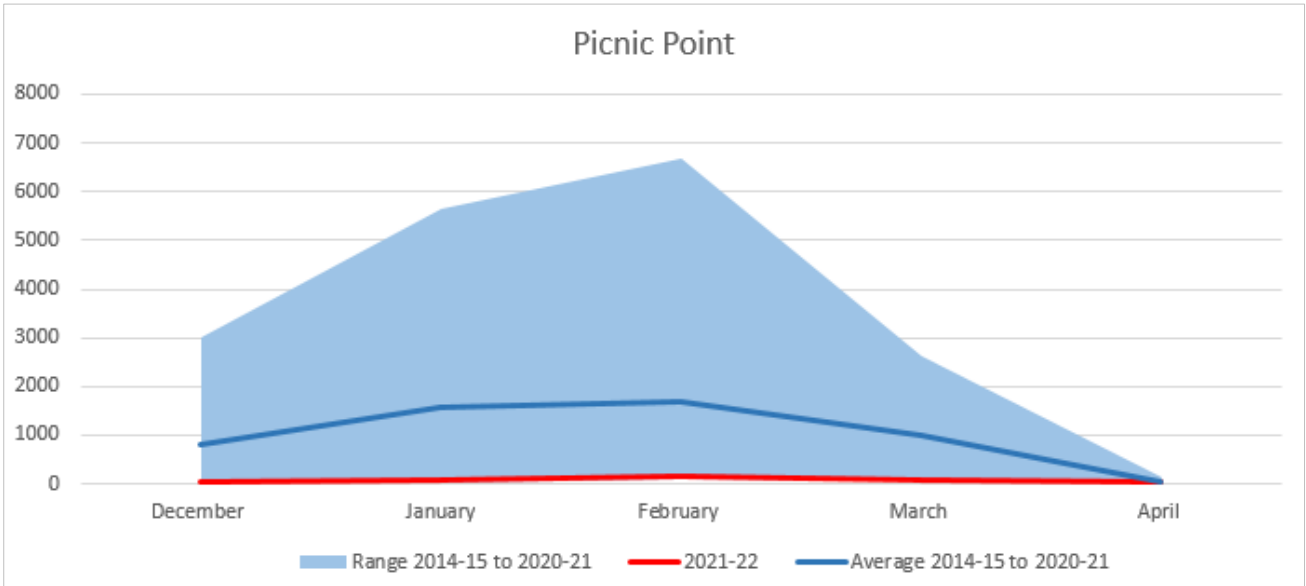


Illawong – average monthly mosquito count, seasons 2014-15 to 2020-21 and 2021-22

(No mosquito trapping occurred at Illawong in April 2022)



Alfords Point – average monthly mosquito count, seasons 2014-15 to 2020-21 and 2021-22



Picnic Point – average monthly mosquito count, seasons 2014-15 to 2020-21 and 2021-22