



Government of **Western Australia**  
Department of **Health**

# Medical Entomology Quarterly Report

April – June 2025

Pilbara Health Region

**Data current as at 8 August 2025**

*Data reflected in this summary of mosquito-borne disease is taken from the Western Australia Notifiable Infectious Disease Database (WANIDD) and includes enhanced surveillance data (ESD) collected by Population Health Units (PHUs) and local governments (LGs) (Note: only locations with notified cases of disease are shown in tables and figures).*

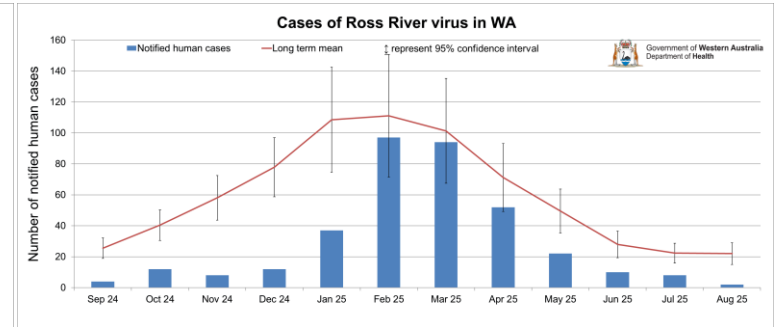
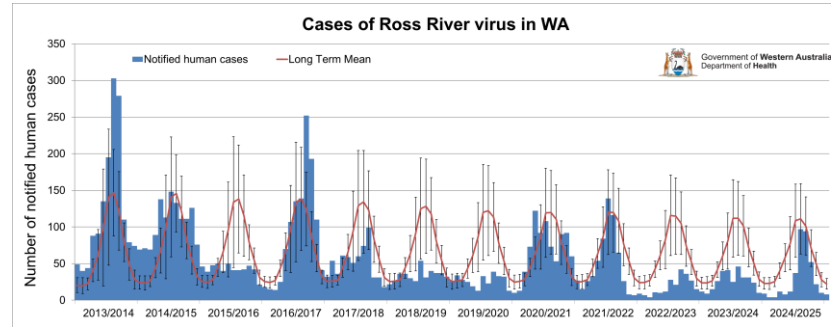


# Ross River virus Disease Case Data Summary April – June 2025

## Western Australia

# 84

RRV case notifications received between April – June 2025 in WA



- WA’s RRV case numbers were below the long term mean for all months of this quarter.
- WA’s long term mean for RRV cases is 716 cases per year, and 149 cases for this quarter.
- The Enhanced Surveillance Follow-up Survey response rate for RRV cases in this quarter: 39%#

#The date and location of exposure will often be different to information provided on notification forms in 90% and 50% of the cases, respectively. Data is more accurate when follow-up surveys are completed. This response rate is calculated as number of follow-up surveys received divided by total number of notified cases.

Medical Entomology Region	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total	Crude Rate*	Age Std Rate
Kimberley	1	1	0	1	2	1	2	5	7	4	1	0	25	64.2	71.7
Pilbara	1	0	0	0	0	0	0	1	2	2	0	1	7	11.9	10.2
Gascoyne	1	0	0	0	0	0	0	0	0	0	0	0	1	9.9	9.8
Midwest	0	0	0	3	2	0	1	4	0	0	2	2	14	21.5	22.9
Wheatbelt	0	0	1	0	1	1	4	2	0	0	0	1	10	14.2	15.6
Metro	4	0	1	3	1	4	9	32	39	23	10	2	128	6.6	6.4
Sw - Peel	1	0	2	2	2	2	7	25	25	7	3	1	77	25.9	24.1
Sw - Leschenault	0	0	0	0	0	1	1	12	7	9	2	1	33	41.3	37.4
SW - Geographe	1	2	0	1	0	0	2	3	4	0	1	1	15	24.2	23.0
Sw - Elsewhere	0	1	0	0	0	3	10	8	4	2	0	0	28	53.9	58.1
South West (Total)	2	3	2	3	2	6	20	48	40	18	6	3	153	31.1	
Great Southern	0	0	0	0	0	0	0	3	6	5	3	1	18	27.9	28.9
Goldfields-Esperance	0	0	0	2	0	0	1	2	0	0	0	0	5	8.8	9.4
WA Undetermined	0	0	0	0	0	0	0	0	0	0	0	0	0		
Interstate	1	0	1	1	0	2	1	4	4	1	0	0	15		
<b>WA Total (Does Not Include Interstate)</b>	<b>9</b>	<b>4</b>	<b>4</b>	<b>12</b>	<b>8</b>	<b>12</b>	<b>37</b>	<b>97</b>	<b>94</b>	<b>52</b>	<b>22</b>	<b>10</b>	<b>361</b>		

\* Crude Rate per 100, 000 and Age Standardised Rate per 100, 000 compared to Australian Standard Population (to eliminate the effect of differences in population age structures between geographic areas).



# Ross River virus Disease Case Data Summary April – June 2025

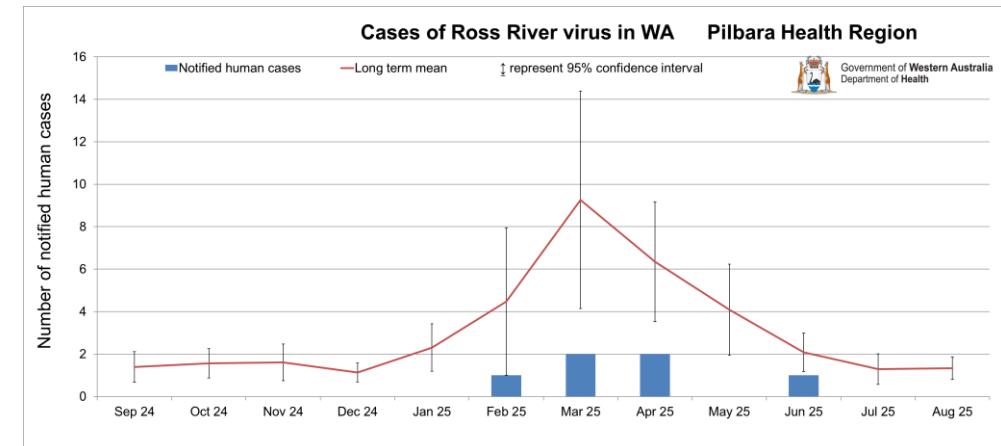
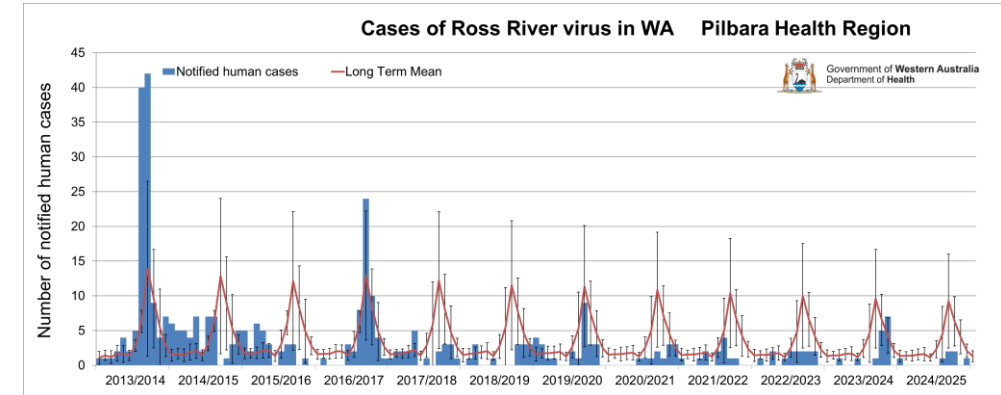
## Pilbara Health Region

# 3

RRV case notifications received between April – June 2025 in the Pilbara Health Region

- This region’s RRV case numbers were below the long term mean for all months of this quarter.
- The long term mean for RRV cases in this region is 37 cases per year, and 13 cases for this quarter.
- 1 Enhanced Surveillance Follow-up Survey was received during this quarter.

Pilbara Health Region RRV Cases	Apr	May	Jun	Total
<b>Ashburton (S)</b>	1			1
Karjini	1			1
<b>Port Hedland (T)</b>			1	1
Port Hedland			1	1
<b>Karratha (C)</b>	1			1
Millars Well	1			1
<b>Total</b>	2		1	3



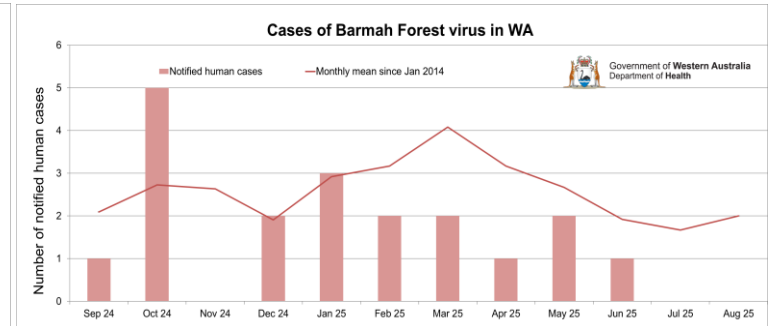
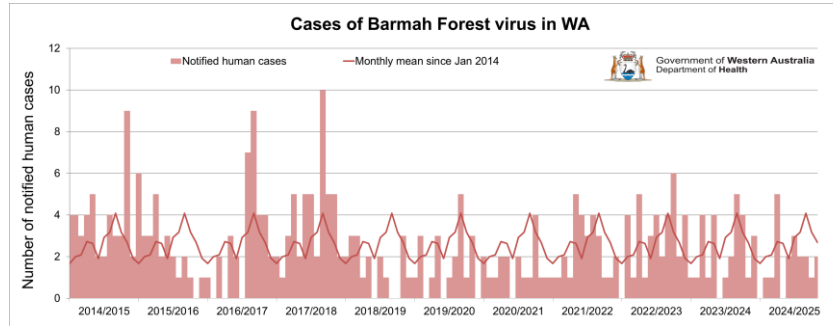


# Barmah Forest virus Disease Case Data Summary April – June 2025

## Western Australia and Pilbara Health Region

### 4 BFV case notifications received between April – June 2025 in WA

- WA’s BFV case numbers were below the long term mean for all months of this quarter.
- WA’s long term mean for BFV cases is 31 cases per year, and 8 cases for this quarter.



### 2 BFV case notifications received between April – June 2025 in the Pilbara Health Region

Pilbara Health Region BFV Cases	Apr	May	Jun	Total
Port Hedland (T)			1	1
South Hedland			1	1
Karratha (C)		1		1
Nickol		1		1
<b>Total</b>		<b>1</b>	<b>1</b>	<b>2</b>

- This region’s BFV case numbers were below the long term mean for April, and above the long term mean for May and June.
- The long term mean for BFV cases in this region is 2 cases per year, and 1 case for this quarter.
- 1 Enhanced Surveillance Follow-up Survey was received during this quarter.

Medical Entomology Region	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total	Crude Rate*	Age Std Rate
Kimberley	0	0	0	0	0	0	1	0	0	0	0	0	1	2.6	2.2
Pilbara	0	0	0	1	0	0	1	0	0	0	1	1	4	6.8	7.6
Gascoyne	0	0	0	0	0	1	0	0	0	0	0	0	1	9.9	9.5
Midwest	0	0	0	1	0	0	0	0	0	0	0	0	1	1.5	1.9
Wheatbelt	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
Metro	0	0	0	2	0	1	1	0	0	0	0	0	4	0.2	0.2
Sw - Peel	0	0	0	1	0	0	0	1	0	1	1	0	4	1.3	1.0
Sw - Leschenault	0	1	0	0	0	0	0	0	1	0	0	0	2	2.5	2.9
SW - Geographe	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
Sw - Elsewhere	0	0	1	0	0	0	0	0	1	0	0	0	2	3.9	3.7
South West (Total)	0	1	1	1	0	0	0	1	2	1	1	0	8	1.6	
Great Southern	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
Goldfields-Esperance	0	0	0	0	0	0	0	1	0	0	0	0	1	1.8	1.7
WA Undetermined	0	0	0	0	0	0	0	0	0	0	0	0	0		
Interstate	0	0	0	0	0	0	0	0	0	0	0	0	0		
<b>WA Total (Does Not Include Interstate)</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>20</b>		

\* Crude Rate per 100, 000 and Age Standardised Rate per 100, 000 compared to Australian Standard Population (to eliminate the effect of differences in population age structures between geographic areas).



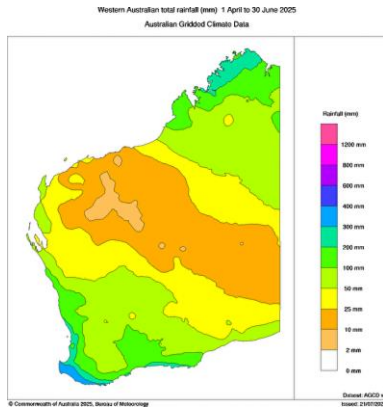
# Climate Summary April – June 2025

## Western Australia

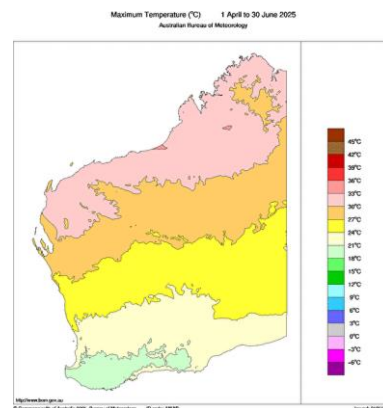
### Climate Driver Update history

#### Climate Summary for April, May, and June 2025:

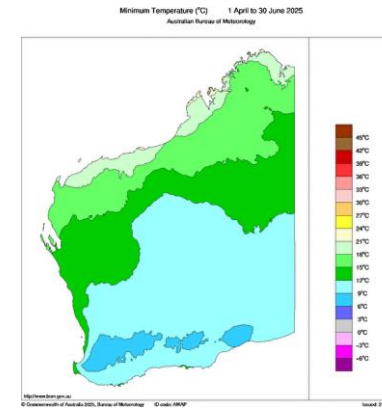
#### Recorded Rainfall



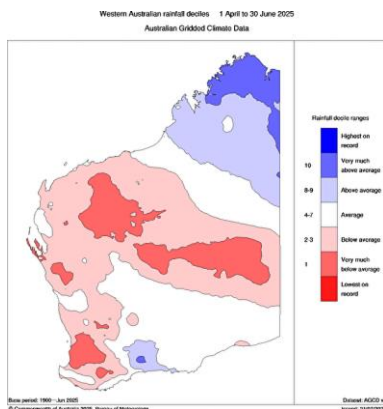
#### Recorded Maximum Temperatures



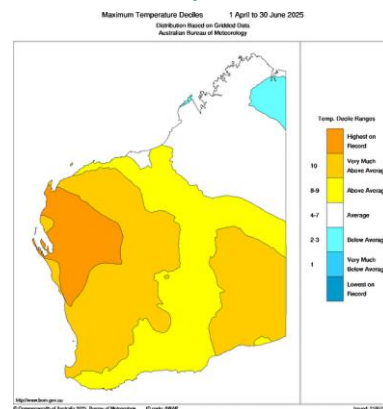
#### Recorded Minimum Temperatures



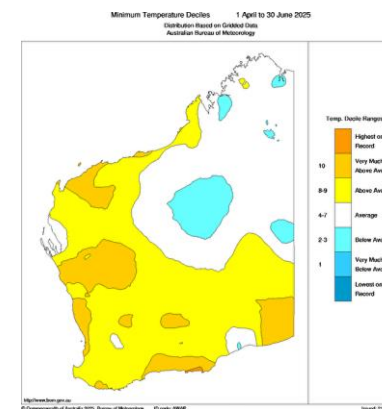
#### Rainfall Deciles



#### Maximum Temperature Deciles



#### Minimum Temperature Deciles





# Mosquito-borne Disease Risk Outlook

## Western Australia

### Risk Outlook:

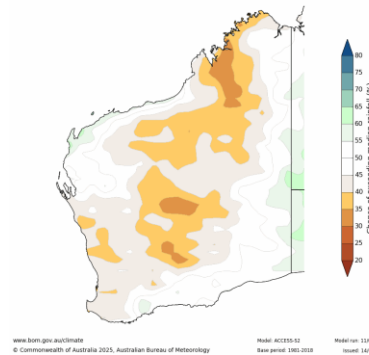
Following a very active Flavivirus season in northern WA in 2024/25, the end of the wet season resulted in a significant reduction in Flavivirus activity to negligible levels. The last detection in our surveillance systems was in May, and human cases have not been reported since March. Given we are in the dry season in northern WA, we expect mosquito-borne virus activity to remain low for the next few months.

Ross River virus activity has continued to be below average through the winter months, although this is the time when activity is at its lowest. Since July 1 2025, we have received ten notifications of RRV. Barmah Forest virus was detected in mosquitoes in the South West in June 2025, but there have been no human notifications so far this financial year. Although rainfall is predicted to be slightly below average in the South West, warmer temperatures and tidal inundations will see mosquito numbers increase, with mosquito-borne disease notifications also expected to increase.

### Climate Outlook for September – November 2025 (as at 14 August 2025):

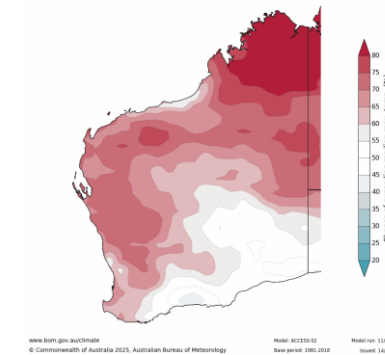
Rainfall is likely to be below average for WA

Chance of exceeding the median rainfall for September to November 2025



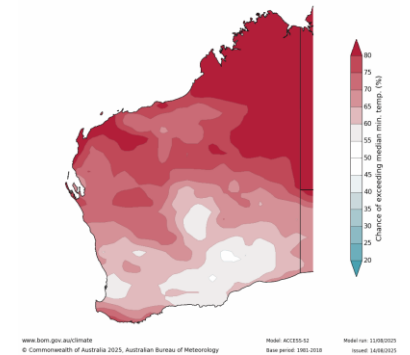
Warmer than average days are forecast for most of WA

Chance of exceeding the median maximum temperature for September to November 2025



Warmer than average nights are forecast for most of WA

Chance of exceeding the median minimum temperature for September to November 2025



### Southern Hemisphere Monitoring (as at 12 August 2025):

A negative Indian Ocean Dipole event is likely in the coming months

#### Descriptions of Major Climate Drivers in WA

Weather forecasts based on interactions between oceanic and atmospheric conditions. For more information see [Australian Climate Influences](#).

**El Niño/ La Niña (ENSO Pacific Ocean)** mainly affects north and east of WA.

**El Niño:** Typically associated with drier conditions, decreased tidal activity and warmer days in south. Late start to northern wet season with less cyclones and less flooding.

**La Niña:** Typically associated with wetter, cooler days and warmer nights (due to increased cloud cover). Earlier start to the northern wet season with more tropical cyclones. More conducive to mosquito breeding and possible mosquito-borne virus activity.

**Indian Ocean Dipole (IOD)** mainly affects mid two thirds of WA.

**Positive IOD:** Typically associated with reduced winter/spring rainfall, warmer conditions in the south, and cooler in the north.

**Negative IOD:** Typically associated with wetter winter/spring, cooler days in the south, warmer in the north with increased chances of rainfall/flooding.

**Southern Annular Mode (SAM)** mainly affects south of WA, impact varies by season, trending towards a more positive phase in summer - contribution still under research.

**Positive SAM:** warmer and drier conditions. Boosted by La Nina conditions.

**Negative SAM:** cooler and wetter conditions.

Please contact Medical Entomology if more information is required | (08) 9285 5500 | Email: medical.entomology@health.wa.gov.au

Data reflected in this summary of mosquito-borne disease is taken from the Western Australia Notifiable Infectious Disease Database (WANIDD) and includes enhanced surveillance data (ESD) collected by Population Health Units (PHUs) and local governments (LGs) (Note: only locations with notified cases of disease are shown in tables and figures). Data current as at 8 August 2025.