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

Medical Entomology Quarterly Report

Wheatbelt region: Oct – Dec 2019

Ross River virus disease case data summary

Wheatbelt region: Oct – Dec 2019

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 collected by Population Health Units and local governments (only locations with notified cases of disease are shown in tables and figures).

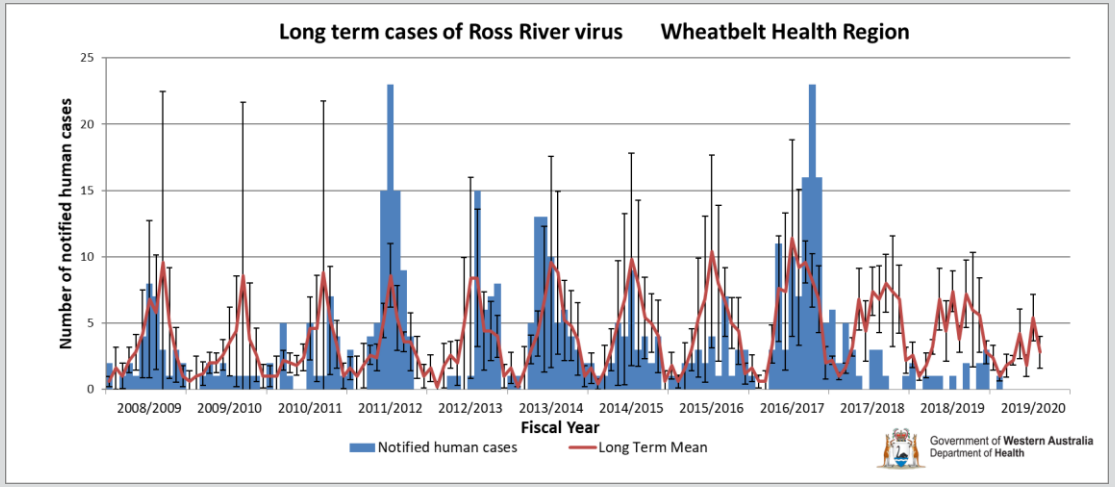
Ross River virus (RRV)

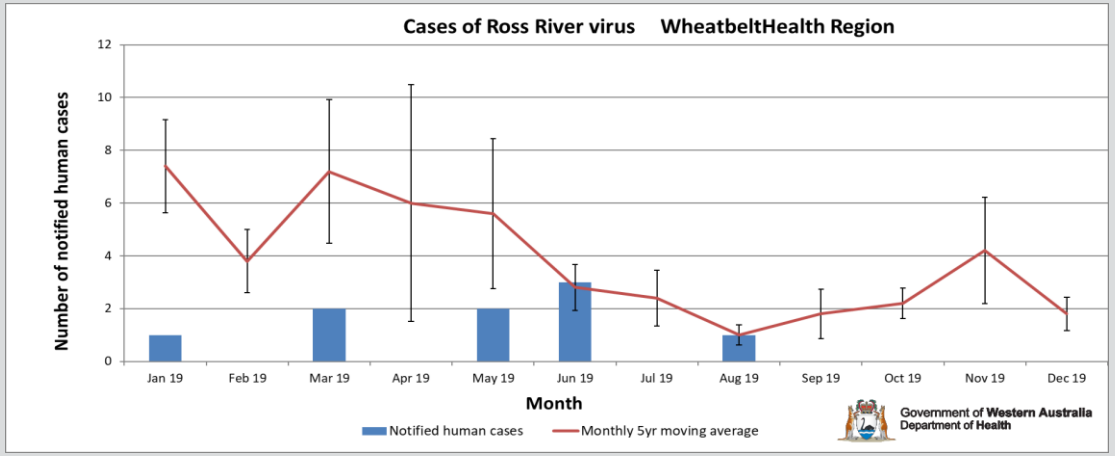
Wheatbelt Health region

No RRV cases were notified.

The number of cases is significantly below the 5 year moving average for this quarter.

Wheatbelt Health region





Ross River virus disease case data summary

Western Australia: 2019/20

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 collected by Population Health Units and local governments (only locations with notified cases of disease are shown in tables and figures).

Ross River virus (RRV)

Western Australia

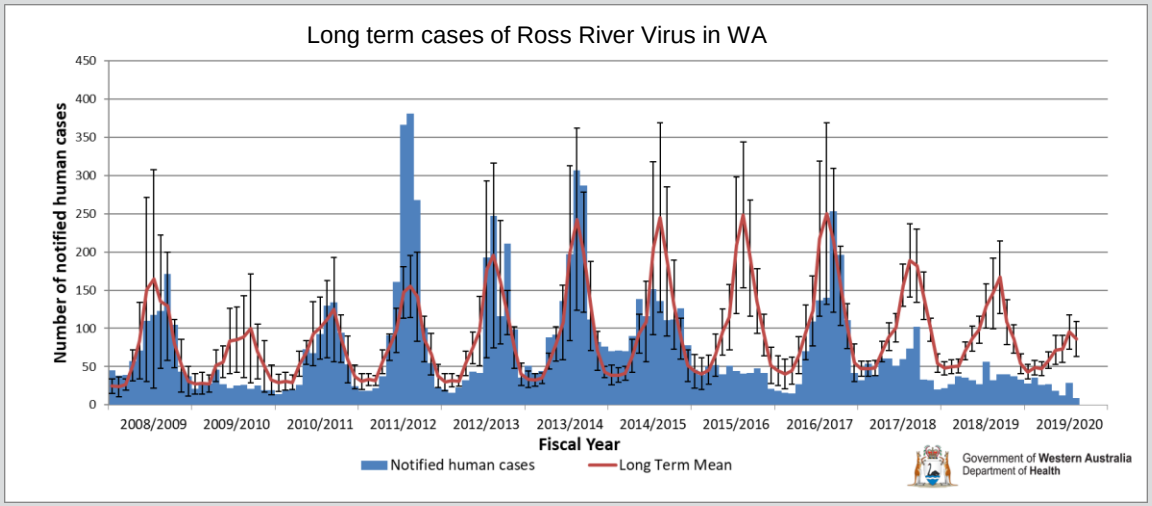
A total of 181 cases of RRV have been reported between 1 July 2019 and 15 February 2020 in Western Australia.

The number of cases was significantly below the 5-year moving average.

Serologically confirmed doctor-notified and laboratory reported cases of Ross River virus disease each month in WA, July 2019 - June 2020 #

#Compiled by the Medical Entomology, WA Department of Health

REGION		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total	Crude Rate	Age Std Rate
KIMBERLEY		0	1	0	0	0	0	0	0	0	0	0	0	1	2.8	2.9
PILBARA		4	3	1	1	1	0	3	0	0	0	0	0	13	21.1	18.8
GASCOYNE		0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
MIDWEST		4	0	1	0	0	0	1	0	0	0	0	0	6	9.9	9.4
WHEATBELT		0	1	0	0	0	0	0	0	0	0	0	0	1	1.5	0.8
METRO		7	15	17	14	8	3	14	8	0	0	0	0	86	4.8	4.6
	PEEL	4	4	4	2	5	3	4	1	0	0	0	0	27	9.9	8.9
	LESCHENAULT	3	2	2	2	0	1	1	0	0	0	0	0	11	14.9	14.2
	GEOGRAPHE	1	4	1	2	3	4	3	0	0	0	0	0	18	31.6	36.2
	ELSEWHERE SW	0	2	0	3	1	0	1	0	0	0	0	0	7	14.7	15.6
SOUTH WEST		8	12	7	9	9	8	9	1	0	0	0	0	63	14.0	
GREAT SOUTHERN		0	1	0	2	0	0	2	0	0	0	0	0	5	8.2	8.6
GOLDFIELDS-ESPERANCE		2	3	0	0	0	1	0	0	0	0	0	0	6	10.9	11.3
WA UNDETERMINED		0	0	0	0	0	0	0	0	0	0	0	0	0		
INTERSTATE		3	0	0	1	0	0	0	0	0	0	0	0	4		
WA TOTAL (does not include interstate)		**25**	**36**	**26**	**26**	**18**	**12**	**29**	**9**	**0**	**0**	**0**	**0**	**181**		



Barmah Forest virus disease case data summary

Wheatbelt and State summary: 2019/20

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 collected by Population Health Units and local governments (only locations with notified cases of disease are shown in tables and figures).

Barmah Forest virus (BFV)

Wheatbelt region

No BFV cases were notified.

The 5 year moving average is less than one case per month for this region.

Barmah Forest virus (BFV)

Western Australia

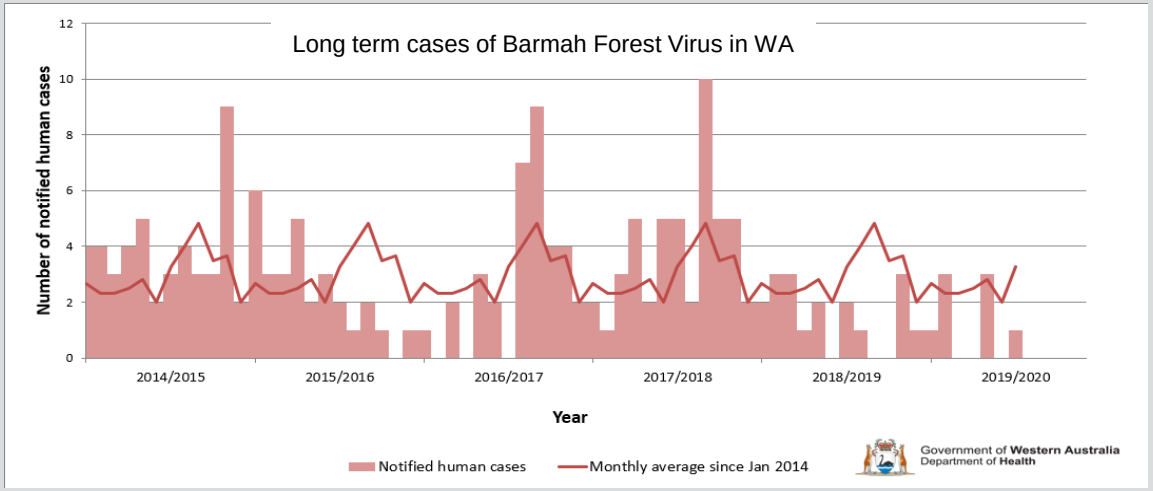
A total of 7 cases of BFV have been reported between 1 July 2019 and 31 January 2020 in Western Australia.

The number of cases was significantly below the 5-year moving average.

Serologically confirmed doctor-notified and laboratory reported cases of Barmah Forest virus disease each month in WA, July 2019 - June 2020 #

#Compiled by the Medical Entomology, WA Department of Health

REGION		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total	Crude Rate	Age Std Rate
KIMBERLEY		0	1	0	0	0	0	0	0	0	0	0	0	1	2.8	2.9
PILBARA		0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
GASCOYNE		1	0	0	0	0	0	0	0	0	0	0	0	1	10.6	9.7
MIDWEST		0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
WHEATBELT		0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
METRO		0	2	0	0	0	0	0	0	0	0	0	0	2	0.1	0.1
	PEEL	0	0	0	0	1	0	0	0	0	0	0	0	1	0.4	0.3
	LESCHENAULT	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
	GEOGRAPHE	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
	ELSEWHERE SW	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
SOUTH WEST		0	0	0	0	1	0	0	0	0	0	0	0	1	0.2	
GREAT SOUTHERN		0	0	0	0	1	0	0	0	0	0	0	0	1	1.6	1.0
GOLDFIELDS-ESPERANCE		0	0	0	0	1	0	0	0	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		
WA TOTAL (does not include interstate)		**1**	**3**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**		



Climate outlook for Western Australia

March – May 2020

Predicted impact of climatic conditions on mosquito breeding

ENSO and the Indian Ocean Dipole are neutral and likely to remain neutral though autumn. As a result average seasonal rainfall is expected.

Impact on mosquito breeding: Average rainfall conditions are less conducive to mosquito breeding in natural environments. However in the south west a higher chance of above average rainfall is predicted, combined with warmer temperatures may bring an increased chance of mosquito breeding and mosquito borne disease prevalence.

El Niño–Southern Oscillation (ENSO)

A weather forecast based on interaction between the atmosphere and tropical Pacific Ocean. Conditions can be El Niño, La Niña or neutral:

El Niño: associated with drier conditions, decreased rainfall and tidal activity.

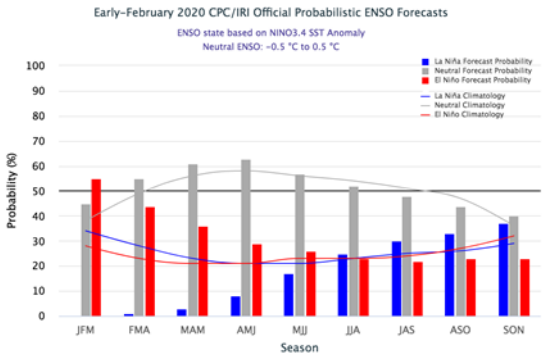
La Niña: associated with wetter, cooler days and warmer nights. More conducive to mosquito breeding.

Positive Indian Ocean Dipole

Brings below average rainfall, and above average temperatures.

International Research Institute for Climate and Society (IRI ENSO) Forecast

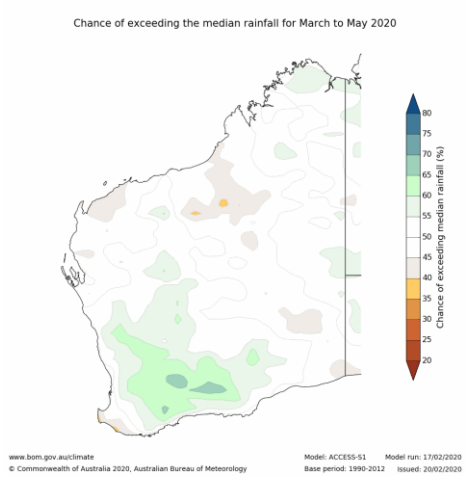
Issued 13 February 2020



ENSO Alert Status is Not Active. ENSO-neutral is expected to continue through to Autumn and Winter 2020.

Australian BOM Rainfall Outlook

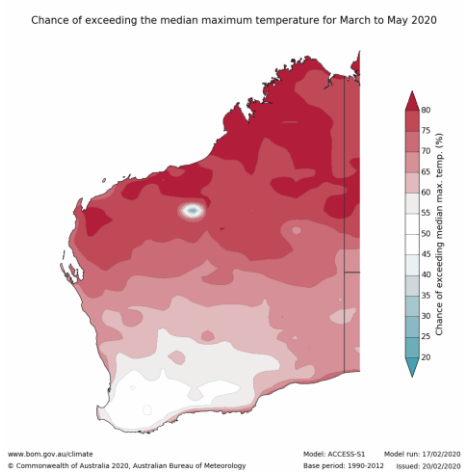
Issued 20 February 2020



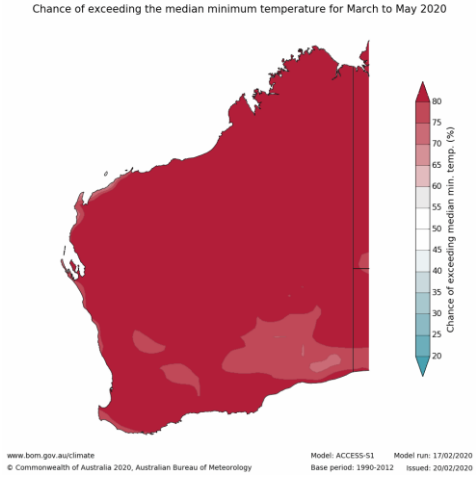
Rainfall is likely to be above average in the south west of WA.

Australian BOM Temperature Outlook

Issued 20 February 2020



Daytime temperatures for autumn are likely to be above average across Australia, although days have roughly equal chances of being above or below average in the south.



Autumn night-time temperatures are likely to be warmer than average.