Data reflected in this summary of mosquito-borne disease in the Goldfields-Esperance Region 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)

Four RRV cases were notified by both lab and doctor during this quarter. No follow up data are available. This number of cases was significantly above the long term mean for August but only by one case, and otherwise has been at or below the long term mean for the previous 12 months.
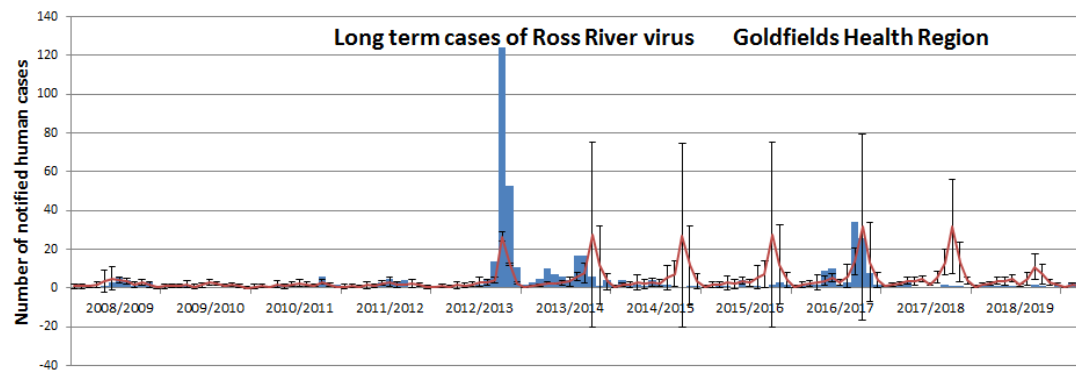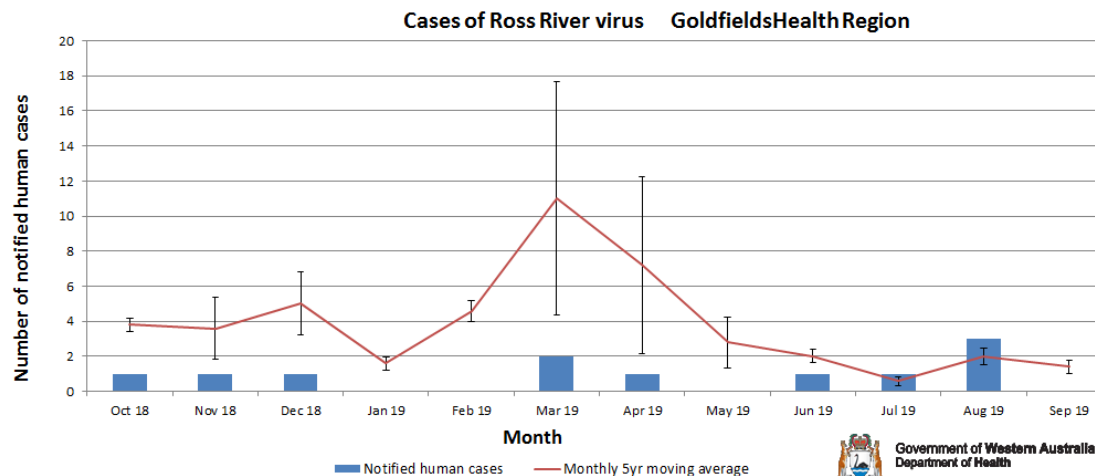

RRV 2019	Jul	Aug	Sep	Total
Goldfields-Esperance	1	3		4
Kalgoorlie/Boulder (C)	1	3		4
KALGOORLIE	1	1		2
SOMERVILLE		1		1
HANNANS		1		1
Total	1	3		4

Barmah Forest virus (BFV)

There were no BFV cases reported during this quarter, or during 2018/19 for this region. The long term monthly mean for the Goldfields is less than one case per month.
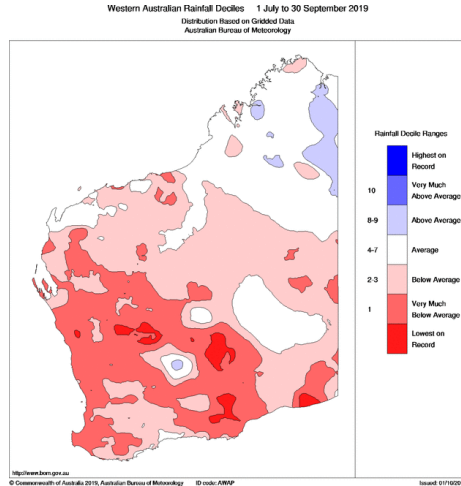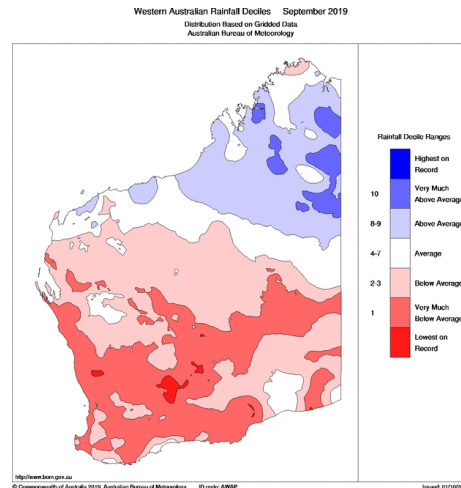
Data reflected in this summary of mosquito-borne disease in the East Metro Region is taken from the Western Australia Notifiable Infectious Disease Database (WANIDD) and includes enhanced surveillance data collected by Population Health Units and Local Governments. (Only locations with notified cases of disease are shown in tables and figures).

Relative Rainfall Jun - Aug (Winter) 2019

Western Australian Rainfall Deciles   1 July to 30 September 2019
Distribution Based on Gridded Data
Australian Bureau of Meteorology

Relative Rainfall Sep 2019

Western Australian Rainfall Deciles   September 2019
Distribution Based on Gridded Data
Australian Bureau of Meteorology

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	3.0
PILBARA	4	3	1	0	0	0	0	0	0	0	0	0	8	13.0	11.6
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	0	0	0	0	0	0	5	8.1	8.0
WHEATBELT	0	1	0	0	0	0	0	0	0	0	0	0	1	1.4	0.8
METRO	8	15	17	0	0	0	0	0	0	0	0	0	40	2.2	2.1
PEEL	4	5	4	0	0	0	0	0	0	0	0	0	13	4.9	4.5
LESCHENAULT	2	4	1	0	0	0	0	0	0	0	0	0	7	9.5	8.7
GEOGRAPHE	1	4	1	0	0	0	0	0	0	0	0	0	6	10.7	14.0
ELSEWHERE SW	0	2	0	0	0	0	0	0	0	0	0	0	2	4.2	4.1
SOUTHWEST	7	15	6	0	0	0	0	0	0	0	0	0	28	6.3	
GREAT SOUTHERN	0	1	0	0	0	0	0	0	0	0	0	0	1	1.7	1.6
GOLDFIELDS-ESPERANCE	2	3	0	0	0	0	0	0	0	0	0	0	5	8.9	9.1
WA UNDETERMINED	0	0	0	0	0	0	0	0	0	0	0	0	0		
INTERSTATE	3	0	0	0	0	0	0	0	0	0	0	0	3		
WA TOTAL (does not include interstate)	**25**	**39**	**25**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**89**		

1) Data current as at 01/10/2019 – table may vary from previous or future versions due to inclusion of additional enhanced surveillance data

2) Source of data: Western Australian Notifiable Infectious Diseases Database (comprising Doctor's notifications to Public Health Units & Communicable Disease Control Directorate; Laboratory reports to Communicable Disease Control Directorate from participating pathology laboratories); Enhanced Surveillance Data (comprising case follow-ups from Environmental Health Officers; patient interviews; Doctor's comments on notification forms)

3) Month of onset and suburb/town of exposure determined from Enhanced Surveillance Data where available, and from Doctor's notifications or laboratory reports where not available

4) Data varies from official Western Australian Notifiable Infectious Diseases Database records due to inclusion of Enhanced Surveillance Data

5) Where it is not clearly defined if a case occurred in a particular suburb or a local Government (e.g. Mandurah suburb or the City of Mandurah the case has been entered as a "local government case – unknown suburb" – (e.g. City of Mandurah unknown)

6) Where a place of exposure occurs in a suburb that carries over 2 Local Governments and it is not clearly defined which local government it occurred in, the case has been entered in the Local Government where the largest portion of the suburb occurs

7) Crude Rate per 100, 000. Age Standardised Rate to Australian Standard Population.

8) This information is the intellectual property of the Biological and Applied Environmental Health Hazards unit of the WA Department of Health and may not be used for any purpose without prior permission

El Niño–Southern Oscillation (ENSO) weather forecast based on interaction between the atmosphere and tropical Pacific Ocean. Can be El Nino or La Nina.

El Niño conditions are associated with a decrease in rainfall and tidal activity, generally drier conditions.

La Niña brings wetter, cooler days and warmer nights (due to increased cloud cover) conducive to mosquito breeding and mosquito borne diseases.

Positive Indian Ocean Dipole brings below average winter–spring rainfall, and above average temperatures.
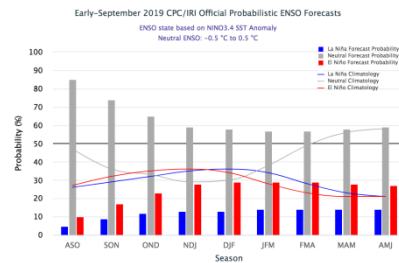
Australian Bureau of Meteorology (BOM) ENSO issued 1 October 2019

ENSO remains neutral and the **positive Indian Ocean Dipole has strengthened.**

It is likely to persist through to the end of spring, being the dominant climate driver for Australia's weather for much of the rest of 2019.

International Research Institute for Climate and society IRI ENSO Forecast issued 12 September 2019

ENSO Alert Status is Not Active.
ENSO-neutral is favoured during Sep – Nov 2019 and expected to continue through to March/autumn 2020.


Early–September 2019 CPC/IRI Official Probabilistic ENSO Forecasts
ENSO state based on NINO3.4 SST Anomaly
Neutral ENSO: -0.5 °C to 0.5 °C

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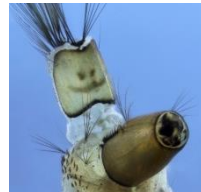
Australian BOM Climate Outlook issued 26 September 2019

Chance of exceeding the median rainfall for October to December 2019

Rainfall is likely to be drier across most of the country during October to January. However, for northwest WA, there are slightly increased chances of above average rainfall from October to December .
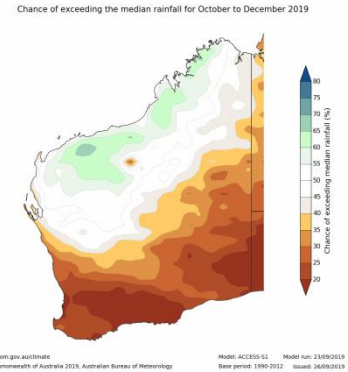
Warmer end to the year very likely.

Chance of exceeding the median maximum temperature for October to December 2019

Daytime temperatures are very likely to be warmer than average for virtually all of Australia for the remainder of 2019 and early 2020.
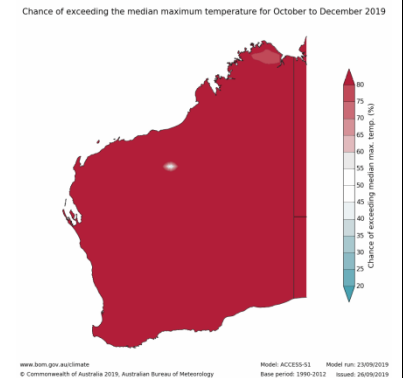
Warmer than average nights during October to December.

Chance of exceeding the median minimum temperature for October to December 2019

3