

## Mosquito-borne infections in Victoria: quick comparison table for GPs (valid 29 November 2022)

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	Japanese encephalitis	Ross River fever	Murray Valley encephalitis	Barmah Forest fever	Buruli ulcer
<b>Type of causative agent</b>	Flavivirus	Alphavirus	Flavirus	Alphavirus	<i>Mycobacterium ulcerans</i>
<b>Hosts</b>	Pigs and wading birds	Mammals	Water birds	Mammals – probably marsupials	Possibly mosquitos and possums (unconfirmed)
<b>Mosquito vector to humans</b>	<i>Culex tritaeniorhynchus</i>	Multiple including <i>Culex annulirostris</i> (common banded mosquito), <i>Aedes vigilax</i> (salt marsh mosquito) and <i>Aedes notoscriptus</i> (Australian backyard mosquito)	<i>Culex annulirostris</i> (common banded mosquito)	<i>Culex annulirostris</i> (common banded mosquito) in inland areas, <i>Ochlerotatus camptorhynchus</i> (southern parts of Victoria and Tasmania) and <i>Ochlerotatus vigilax</i> (New South Wales) are the major vectors in coastal regions	Still being researched but evidence points to <i>Aedes notoscriptus</i> (Australian backyard mosquito)
<b>Current at-risk areas</b>	Northern Victoria	Most of Victoria including around waterways and coastal areas – not currently metro Melbourne	Northern Australia but outbreaks have occurred in south eastern Australia when heavy rainfall, flooding and hot weather favour bird and mosquito breeding	Endemic throughout Victoria, especially the Murray Valley and Gippsland areas	Areas of the Mornington Peninsula and the Bellarine Peninsula but numbers are increasing in the inner north of Melbourne

<b>Incubation period</b>	5 to 15 days	3 to 9 days but can range up to 21 days	7 to 12 days, but can be as short as 5 days or as long as 28 days	7 to 10 days but can range from 3 to 21 days	4 weeks to 9 months, with a median of 4 to 5 months
<b>Clinical syndrome</b>	Sudden onset of fever, headache and vomiting and risk of acute encephalitis	Fever, rash, fatigue, arthralgia and can be persistent	Fever, headache, nausea, vomiting and loss of appetite, diarrhoea and muscle aches. Rarely encephalitis	Fever, arthralgia, fatigue and rash, similar to Ross River fever and can also be persistent	Non-healing ulcer
<b>Diagnosis</b>	PCR testing	Serological testing	Serological testing or PCR of cerebrospinal fluid	Serological testing	2 dry swabs for AFB and PCR and culture
<b>Notifiable?</b>	Yes – urgent	Yes – routine	Yes – urgent	Yes – routine	Yes – routine
<b>Vaccine?</b>	Yes – for high-risk groups	No	No	No	No