



Mosquito-borne disease

Follow-up questionnaire for human cases

Background

All cases of mosquito-borne diseases that meet case definition criteria should be notified to the relevant Public Health Unit or Communicable Diseases Control Directorate of the WA Department of Health by the patient's doctor or GP.

Ross River virus (RRV) and **Barmah Forest virus (BFV)** occur throughout the State. RRV is WA's most common mosquito-borne disease.

Murray Valley encephalitis (MVE) and **Kunjin (KUN)** viruses are much rarer and occur in the northern regions of WA.

Infections with RRV or BFV can result in a range of symptoms that may last for weeks or even months. Infections with MVE virus can be severe and potentially fatal. Whilst KUN virus infection is not as severe, it can still result in neurological symptoms. As there is currently no vaccine or cure for any of these diseases, the only way to prevent illness is to reduce the potential for interaction between mosquitoes and people.

This questionnaire is designed to assist in identifying the most likely time/place of exposure to the mosquito-borne virus. The Environmental Health Directorate, WA Department of Health, uses this information to define high risk regions and direct mosquito management priorities throughout WA.

Confidentiality

Information collected from this questionnaire will remain completely confidential. It will be used solely for the purpose of guiding the WA Department of Health to prevent the spread of mosquito-borne diseases. No information that identifies individuals will be made available outside the WA Department of Health.

Return completed forms

This questionnaire can be completed by the patient, medical personnel or local government Environmental Health staff. Please return the completed questionnaire by email, fax or post to:

Scan and Email: medical.entomology@health.wa.gov.au	Fax: (08) 9383 1819	Post: Medical Entomology Environmental Health Hazards Environmental Health Directorate WA Department of Health PO Box 8172 Perth Business Centre WA 6849
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Further information

Please contact the Medical Entomology team by email medical.entomology@health.wa.gov.au or phone (08) 9285 5500 for further information or to request an electronic version of this questionnaire.



Legend:

- CDCD:** Communicable Disease Control Directorate
- LG EHO:** Local government environmental health officer
- ME:** Medical Entomology
- PHU:** Public Health Unit

Patient sick with suspected mosquito-borne disease

Patient visits General Practitioner (GP)

Patient referred to laboratory for serology testing

Mosquito-borne disease confirmed

No mosquito-borne disease detected

No notification – no follow-up required

Mosquito-borne disease notification
(Mandatory notification by diagnosing GP and/or laboratory using Communicable Diseases Notification Form)

Metropolitan case

Notification form sent to **CDCD** by diagnosing GP and/or laboratory

CDCD enters data into WANNID

Notification received by **ME**

ME sends 'GP-notified' cases to **LG EHO** to complete follow-up questionnaire

LG EHO contacts patient and conducts follow up

LG EHO sends completed follow-up questionnaire to **ME** by email, fax or post

Regional case

Notification form sent to **PHU** by diagnosing GP and/or laboratory
Data entered into WANIDD by **PHU**

PHU regularly updates **LG EHOs** in regards to notification in LG areas and clusters of disease

PHU sends 'GP-notified' cases to **LG EHO** to complete follow-up questionnaire

PHU to complete follow-up questionnaire for 'GP-notified' cases

LG EHO contacts patient to complete follow-up

PHU contacts patient to complete follow-up

LG EHO liases with **PHU** to provide follow-up information to **ME** by email, fax or post

PHU liases with **LG EHO** to provide follow-up information to **ME** by email, fax or post



Mosquito-borne Disease Case Follow-up Questionnaire

Section 1 Patient Details				Today's Date: / /					
Name:				Notification ID: – (eg. 1234 - 56789)					
Gender (tick box) M F				Date of Birth: / /					
Home street address (not PO Box):				<small>Day Month Year</small>					
Town / Suburb:				State:		Postcode:			
Please indicate who completed this form (<i>tick box and provide the individual's full name, where required</i>):									
<input type="checkbox"/> Person with the illness (<i>as above</i>) <input type="checkbox"/> EHO (<i>Name & Local Govt</i>) <input type="checkbox"/> Other (<i>Name & position/relation to patient</i>)									
The following questions relate to the patient									
1) Which disease/s have you been diagnosed with (<i>tick more than one box if you were diagnosed with more than one virus</i>)									
Ross River virus (RRV)		Murray Valley encephalitis (MVE) virus		Other (specify):					
Barmah Forest virus (BFV)		Kunjin virus (KUN)							
2) What is your occupation?									
3) Does your job (or usual daily routine) require you to work mostly				Indoors	Outdoors	Both			
4) Does your job (or usual daily routine) involve travel to regional Western Australia?				Yes		No			
5) Have you noticed mosquitoes at:				Home: Yes No		Work: Yes No			
The following questions relate to the patient's symptoms and possible exposure									
6) What was the approximate date you first noticed symptoms ? (<i>Note: This may be days/months before visiting the doctor or receiving a diagnosis. If you do not know the exact date, please provide an approximate timing</i>).									
/ /			OR		/				
<small>Day Month Year</small>					<small>early / mid / late Month Year</small>				
7) Listed below are common symptoms of mosquito-borne diseases. Please tick the boxes if you experienced any of the following symptoms									
Symptom	Yes	No	Unknown	Symptom	Yes	No	Unknown		
Headaches				Skin rash					
Nausea				Sore muscles (myalgia)					
Fever				Painful/swollen joints (arthralgia)					
Tiredness				Tingling palms or soles of feet					
Dizziness				Drowsiness, floppiness, irritability (in children)					
Neck stiffness									
8) Symptoms of RRV, BFV, MVE or KUN disease first appear between 3 days and 3 weeks after being bitten by an infected mosquito. Knowing where you have been during this time can help determine the most likely place where you were infected. Please indicate all suburbs/towns you visited in the 3 weeks before symptoms began (e.g. Albany, Broome, Joondalup) and whether you work, reside or visited there. <i>Note: More specific details about these locations are requested on the next page.</i>									
Suburb / Town		Reside	Work	Visit	Suburb / Town		Reside	Work	Visit
1)					4)				
2)					5)				
3)					6)				



The following section relates to the most likely place the patient was exposed to mosquitoes in the **3 weeks before symptoms** began

- Please indicate the **most likely place where you were bitten by mosquitoes** in **Section 2** (below);
- If there was more than one place, use **Section 3** (next page) to indicate another place of exposure to mosquitoes;
- Complete Part A if you know the street address of the location where you were most likely bitten by mosquitoes (e.g. Lot 47 Thompson Road, Baldivis); **OR**
- Complete Part B to describe the location if you do not know the street address (e.g. southern side of Thompson Lake in Thompson Park, near Johnson Street, Carnarvon WA);
- It is important that you provide **as much detail as possible**. We need to **identify the location** to a street or lot number or a particular part of a recreational area.

Section 2 Most likely place of exposure

(Please answer Part A OR Part B and questions 9 - 14)

PART A: Known street address

House/Lot No:

Street Name:

Suburb:

State:

Postcode:

PART B: Geographical Location

Location Description:

Nearest Suburb/Town:

State:

Postcode:

Nearest Landmark/Street intersection/Other detail (To help pinpoint the exposure location):

9) Please indicate approximate date/s you were at the above location in the 3 weeks before you became ill

(eg. 1st week of January, 6 - 10th April)

10) Was the majority of your time spent at the above location:

Indoors

Outdoors

Both

11) Did you notice mosquitoes at the above location?

Yes

No

12) Do you remember being bitten by mosquitoes at the above location?

Yes

No

13) Were you participating in any of the following recreational activities at this location?

Caravanning/camping

Gardening

Fishing

Undertaking a physical activity/sport

Visiting a beach/wetland/river/lake

Other (specify):

14) Which personal protection measures did you use whilst at this location?

Application of a chemical-based repellent

Application of a natural-based repellent

Wore protective, long-sleeved clothing

Used mosquito nets (ie. face, swag, bed net etc)

Ensured windows/doors are adequately screened

Other (specify):



Section 3 Second most likely place of exposure

(Please answer Part A OR Part B and questions 15 - 20)

PART A: Known street address

House/Lot No:

Street Name:

Suburb:

State:

Postcode:

PART B: Geographical Location

Location Description:

Nearest Suburb/Town:

State:

Postcode:

Nearest Landmark/Street intersection/Other detail (To help pinpoint the exposure location):

15) Please indicate approximate date/s you were at the above location in the 3 weeks before you became ill

(eg. 1st week of January, 6 - 10th April)

16) Was the majority of your time spent at the above location: Indoors Outdoors Both

17) Did you notice mosquitoes at the above location? Yes No

18) Do you remember being bitten by mosquitoes at the above location? Yes No

19) Were you participating in any of the following recreational activities at this location?

- Caravaning/camping
- Gardening
- Fishing
- Undertaking a physical activity/sport
- Visiting a beach/wetland/river/lake
- Other (specify):

20) Which personal protection measures did you use whilst at this location?

- Application of a chemical-based repellent
- Application of a natural-based repellent
- Wore protective, long-sleeved clothing
- Used mosquito nets (ie. face, swag, bed net etc)
- Ensured windows/doors are adequately screened
- Other (specify):

Other information

Please use the following space to add any further details that may help us define the location where you may have been infected or as extra space to expand on previous answers



Important note:

This section is only required for severe mosquito-borne disease cases such as MVE and KUN. You do not need to complete this section for RRV or BFV cases.

Section 4 MVE and KUN ONLY – Contact tracing information

Please complete the following for any relatives, friends, work colleagues or other persons known to you, who were with you and may have been exposed to biting mosquitoes in the three weeks leading up to the onset of your illness. This will enable the Department of Health to ensure that other individuals who may have been exposed at the same time are advised about signs and symptoms of serious diseases, such as MVE, and to seek medical attention quickly in the event that they develop such symptoms.

Contact Details

1 Person 1 Name:

Gender (*tick box*): M F Date of Birth: / /

Home address:

Home phone: Mobile phone:

2 Person 2 Name:

Gender (*tick box*): M F Date of Birth: / /

Home address:

Home phone: Mobile phone:

3 Person 3 Name:

Gender (*tick box*): M F Date of Birth: / /

Home address:

Home phone: Mobile phone:

4 Person 4 Name:

Gender (*tick box*): M F Date of Birth: / /

Home address:

Home phone: Mobile phone:

5 Person 5 Name:

Gender (*tick box*): M F Date of Birth: / /

Home address:

Home phone: Mobile phone:

Note: Please attach additional pages for any further contacts.