# Surveillance case definitions for notifiable infectious diseases and related conditions in Western Australia

Communicable Disease Control Directorate September 2025



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# Revision history

Version	Changes					
September	Removal of diseases from the Surveillance Case Definitions Manual that are					
2025	both nationally notifiable, and where the WA case definition and notes did not differ from the national case definition and notes. The revision history for all					
	diseases has been retained as below. National surveillance case definitions can					
	be found at <a href="https://www.health.gov.au/resources/collections/cdna-surveillance-case-definitions">https://www.health.gov.au/resources/collections/cdna-surveillance-case-definitions</a> .					
	Acute post-streptococcal glomerulonephritis (not nationally notifiable)					
	Changes to wording for laboratory evidence of recent streptococcal infection					
	and notes.					
	Carbapenemase-producing Acinetobacter baumanii complex infection or					
	colonisation (not nationally notifiable)					
	Addition of carbapenemase-producing <i>Acinetobacter baumanii</i> complex <i>Enterobacterales</i> infection or colonisation case definition.					
	Carbapenemase-producing Enterobacterales infection or colonisation (not nationally notifiable)					
	Addition of carbapenemase-producing <i>Enterobacterales</i> infection or					
	colonisation case definition.					
	Carbapenem-resistant <i>Enterobacteriaceae</i> infection or colonisation (not nationally notifiable)					
	Removal of carbapenem-resistant <i>Enterobacteriaceae</i> infection or colonisation					
	case definition.					
	Carbapenemase-producing Pseudomonas aeruginosa infection or colonisation					
	(not nationally notifiable)					
	<ul> <li>Addition of carbapenemase-producing Pseudomonas aeruginosa infection or colonisation case definition.</li> </ul>					
	Methicillin-resistant Staphylococcus aureus infection or colonisation (not					
	<ul> <li>nationally notifiable)</li> <li>Removal of mec gene confirmation as part of laboratory definitive evidence.</li> </ul>					
<b>D</b> 1 2222	j ,					
December 2023	<ul> <li><u>Candida auris infection or colonisation (not nationally notifiable)</u></li> <li>Addition of Candida auris infection or colonisation case definition.</li> </ul>					
	The following changes were made to reflect recent updates to the Australian national notifiable diseases case definitions:					
	Syphilis – congenital					
	Criteria amended for "laboratory definitive evidence (stillbirth)" to include placenta, umbilical cord and amniotic fluid as suitable specimens.					
March 2023	The following changes were made to reflect recent updates to the Australian national notifiable diseases case definitions:					
	Japanese encephalitis virus infection					
	Confirmed case: need for clinical evidence removed, need for second laboratory confirmation of cases acquired in mainland Australia removed,					

- addition of requirement for laboratory with "extensive experience in the diagnostic testing of arbovirus", laboratory definitive evidence revised.
- Addition of probable case definition.

#### Monkeypox virus infection

• Addition of Monkeypox virus infection case definition.

#### Syphilis - congenital

- Relabelling "laboratory definitive evidence" to "laboratory definitive evidence (live birth)" and creation of "laboratory definitive evidence (stillborn)".
- Relabelling "laboratory suggestive evidence" to "laboratory suggestive evidence (live birth) and creation of "laboratory suggestive evidence (stillborn)". Inclusion of Treponema pallidum-specific rapid immunochromatography to determine positivity in the mother of the congenital syphilis case.
- Polymerase Chain Reaction (PCR) specified under nucleic acid amplification (NAA) test.
- Restructuring of "clinical evidence" to "clinical evidence (confirmed)" and "clinical evidence (probable)".
- Notes added for stillbirth and livebirth, neonatal death, perinatal period and a minor update to treatment.

#### Tuberculosis

- Laboratory definitive evidence rewritten to exclude *M. tuberculosis*, *M. bovis* or *M. africanum* from notification.
- Clinical evidence was rewritten to exclude "clinical" from the statement on two places: A clinician experienced in tuberculosis makes a clinical diagnosis of tuberculosis, including follow-up assessment to ensure a consistent course.

#### January 2023

# The following changes were made to reflect recent updates to the Australian national notifiable diseases case definitions:

#### Chlamydial infection (excluding eye infections)

 Addition of clarifying statement around point of care testing as laboratory evidence.

#### Gonococcal infection

 Addition of clarifying statement around point of care testing as laboratory evidence.

#### Hepatitis C (individual aged less than 24 months)

New case definition added.

#### Hepatitis C newly acquired

- Reference to individuals <24 months from the newly acquired case definition has been removed to create new category (Hepatitis C (individual aged less than 24 months).
- Additional lines of laboratory (definitive and suggestive) and clinical evidence, including evidence to support re-infection.
- Addition of footnotes regarding inclusion of positive point of care test results as evidence and sustained virological response.

#### Hepatitis C unspecified

• Inclusion of additional lines of laboratory evidence.

• Addition of footnotes regarding inclusion of positive point of care test results as evidence and sustained virological response.

#### Human immunodeficiency virus (HIV) infection – child aged <18 months

- Laboratory definitive and laboratory suggestive evidence updated to reflect advances in laboratory testing.
- Detection of HIV nucleic acid (RNA or DNA) included as laboratory definitive and suggestive evidence.

#### Human immunodeficiency virus (HIV) infection – individual aged ≥18 months

- Integration of HIV newly acquired and HIV unspecified into one case definition that covers both stages of infection.
- Laboratory definitive and laboratory suggestive evidence updated to reflect advances in laboratory testing.
- Detection of HIV nucleic acid (RNA or DNA) included as laboratory definitive evidence (in combination with other evidence) and as laboratory suggestive evidence.

#### February 2022

# The following changes were made to reflect recent updates to the Australian national notifiable diseases case definitions:

#### Influenza case definition

• In Laboratory definitive evidence, removal of "Single high titre by CFT or HAI to influenza virus" from the list of laboratory definitive evidence.

#### Leptospirosis case definition

 Inclusion of a probable category for cases with laboratory suggestive evidence.

#### Mumps case definition

- Inclusion of a probable case definition.
- Additional detail to laboratory definitive evidence and inclusion of a footnote to allow recently vaccinated cased to potentially be considered as confirmed cases.
- Laboratory suggestive evidence moved and adjusted to form part of the probable case definition.
- Adjustment to the clinical evidence criteria.

# September 2021

# The following changes were made to reflect recent updates to the Australian national notifiable diseases case definitions:

#### Invasive group A streptococcal disease

• Addition of invasive group A streptococcal (iGAS) disease case definition.

#### Respiratory syncytial virus laboratory-confirmed

 Addition of respiratory syncytial virus (RSV) laboratory-confirmed case definition.

#### January 2019

# The following changes were made to reflect recent updates to the Australian national notifiable diseases case definitions:

#### Smallpox case definition

- Removal of "credible" and addition of "syndrome consistent with".
- Addition of a footnote under clinical evidence.
- · Additional detail to epidemiological links.

#### **July 2019**

# The following changes were made to reflect recent updates to the Australian national notifiable diseases case definitions:

#### Gonococcal infection case definition

- "Detection of typical Gram-negative intracellular diplococci in a smear from a genital tract specimen" removed as a source of laboratory definitive evidence.
- Implemented by the Communicable Diseases Network Australia (CDNA) on 01 January 2019.

#### Measles case definition

- Additional detail to laboratory definitive evidence and inclusion of a footnote to allow recently vaccinated cases to potentially be considered as confirmed cases
- IgM antibody detection adjusted and moved from laboratory definitive evidence to laboratory suggestive evidence.
- Additional detail to epidemiological evidence including contact for infectious period changed from five days before rash onset to 24 hours before onset of prodromal symptoms or four days before rash onset.
- Implemented by the CDNA on 01 July 2019.

#### Rubella (non-congenital) case definition

- Additional detail to laboratory definitive evidence and inclusion of a footnote to allow recently vaccinated cases to potentially be considered as confirmed cases.
- IgM antibody detection adjusted and moved from laboratory definitive evidence to laboratory suggestive evidence.
- Rephrasing of the probable case definition evidence requirements with no change to the actual evidence require.
- Implemented by the CDNA on 01 July 2019.

#### November 2018

#### Pertussis case definition

 The following WA note was removed from the pertussis case definition as laboratories in WA were no longer performing mucosal IgA testing for pertussis: "If a patient has been diagnosed by mucosal IgA only, then clinical evidence that includes paroxysms of coughing, inspiratory whoop, or posttussive vomiting does not need to be considered."

#### November 2018

The Surveillance Case Definitions Manual was reviewed and updated to be consistent with current Western Australian and Australian case definitions for notifiable infectious diseases and related conditions.

### Introduction

This document contains surveillance case definitions for fourteen infectious diseases or related conditions that are notifiable in Western Australia but are not nationally notifiable. These include: acute post-streptococcal glomerulonephritis (APSGN), acute rheumatic fever/rheumatic heart disease, amoebic meningoencephalitis, *Candida auris* infection or colonisation, carbapenemase-producing organism (carbapenemase-producing *Acinetobacter baumanii* complex, carbapenemase-producing Enterobacterales and carbapenemase-producing *Pseudomonas aeruginosa*) infection or colonisation, chancroid, Hendra virus infection, melioidosis, methicillin-resistant *staphylococcus aureus* (MRSA) infection or colonisation, typhus/rickettsial infection, vancomycin-resistant enterococci (VRE) infection or colonisation, and *Yersinia* infection.

It also contains several of nationally notifiable infectious diseases where WA includes additional explanatory notes to facilitate case classification (e.g. Barmah Forest virus infection, chlamydial infection, legionellosis, Ross River virus infection).

National case definitions for notifiable infectious diseases are developed or reviewed for various reasons, such as when emerging infectious diseases are recognised or new diagnostic tests are introduced. Further information on nationally notifiable infectious diseases can be found at <a href="https://www.health.gov.au/resources/collections/cdna-surveillance-case-definitions">https://www.health.gov.au/resources/collections/cdna-surveillance-case-definitions</a>.

## Not nationally notifiable

#### Acute post-streptococcal glomerulonephritis

(last updated 2025)

#### Reporting

Both confirmed cases and probable cases should be notified.

All suspected cases of acute post-streptococcal glomerulonephritis (APSGN) must be simultaneously notified to the regional paediatric team **and** local Public Health Unit.

#### Confirmed case

A confirmed case requires both <u>clinical evidence</u> and <u>laboratory evidence</u>.

#### Probable case

A probable case requires clinical evidence only.

#### Possible case

A possible case requires <u>laboratory evidence</u> only (also see note 1 below).

#### Clinical evidence

At least two of the following:

- facial oedema and/or peripheral oedema
- hypertension, according to age and sex percentiles (see note 2 below)
- moderate haematuria on dipstick (≥2+ red blood cells).

#### Laboratory evidence

1. Haematuria on microscopy (red blood cells >10/μL) (if microscopy is not available, then 'moderate' haematuria on dipstick fulfils this criterion)

#### and

 Evidence of recent streptococcal infection (isolation or detection of group A streptococci by culture, NAAT or rapid antigen detection test from skin or throat, or elevated/rising anti-streptolysin O titre (ASOT) or anti-DNase B titre)

#### and

3. Reduced C3 complement level.

#### **Notes**

- Possible (subclinical) cases may be detected when screening contacts of a case of APSGN. Subclinical cases are primarily characterised by microscopic haematuria, and do not meet clinical criteria. The significance of subclinical cases is unknown and currently there are no recommendations for Public Health Units to actively find or manage these cases. The treating clinician should discuss subclinical cases with a nephrologist or paediatrician and manage accordingly.
- 2. Hypertension in children includes a systolic reading above the 95th percentile specific to the age and gender of the child (see table below).
- 3. If all other criteria have been fulfilled but the only evidence of recent streptococcal

- infection is isolation or detection of group C or group G streptococci from skin or throat, this could be considered a confirmed case after discussion between the local <u>Public</u> Health Unit and the treating paediatrician.
- 4. All suspected cases of APSGN must be simultaneously notified to the regional paediatric team **and** local <u>Public Health Unit</u>. For questions or concerns regarding diagnosis or immediate management of APSGN, contact the regional paediatrician.

95th centile systolic blood pressure levels by age and sex (at 50th centile for height)

Age (years)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Boys	103	106	109	111	112	114	115	116	118	119	121	123	126	128	131	134	136
Girls	104	105	107	108	110	111	113	115	117	119	121	123	124	126	127	128	129

Source: National High Blood Pressure Education Program Working Group on High Blood Pressure in Children and Adolescents. The fourth report on the diagnosis, evaluation, and treatment of high blood pressure in children and adolescents. *Pediatrics*. 2004;114(suppl 2):555-76. Data for children on 50th centile for height. Full data including adjustments for height at <a href="http://www.nhlbi.nih.gov/files/docs/resources/heart/hbp">http://www.nhlbi.nih.gov/files/docs/resources/heart/hbp</a> ped.pdf.

#### Acute rheumatic fever and rheumatic heart disease

(last updated 2018)

#### Reporting

Notify any suspected cases of Acute Rheumatic Fever (ARF) and Rheumatic Heart Disease (RHD) directly to the Western Australia Rheumatic Heart Disease Register and Control Program. Non-WA Health service providers should submit notifications by fax to 6553 0899. For health service providers within WA Health, notifications can be submitted by fax or emailed to <a href="RHDRegister@health.wa.gov.au">RHDRegister@health.wa.gov.au</a>.

#### **Case definitions**

For ARF and RHD case definitions please refer to *The Australian guideline for prevention, diagnosis and management of acute rheumatic fever and rheumatic heart disease* available at <a href="https://www.rhdaustralia.org.au/arf-rhd-guideline">https://www.rhdaustralia.org.au/arf-rhd-guideline</a>, or contact the WA RHD Register and Control Program.

#### **Notes**

ARF and RHD notifications are recorded on the WA Rheumatic Heart Disease Register and are not included on the WA Notifiable Infectious Diseases Database (WANIDD).

#### **Contact details**

Western Australian RHD Register and Control Program

Phone: 1300 622 745 Fax: 6553 0899

Email: RHDRegister@health.wa.gov.au

Communicable Diseases Network Australia (CDNA) Series of National Guidelines

The CDNA Guidelines for ARF and RHD are available at:

https://www.health.gov.au/resources/publications/acute-rheumatic-fever-and-rheumatic-heart-disease-cdna-national-guidelines-for-public-health-units.

## Amoebic meningoencephalitis

(last updated 2018)

#### Reporting

Only confirmed cases should be notified.

#### **Confirmed case**

Demonstration of *Naegleria*, *Acanthamoeba* species or any other free living amoeba including *Balamuthia mandrillaris* in cerebrospinal fluid (CSF) or tissues.

Specimens should be referred to a reference laboratory for confirmation.

#### Candida auris infection or colonisation

(last updated 2023)

#### Reporting

Only confirmed cases should be notified.

#### Confirmed case

A confirmed case requires <u>laboratory definitive evidence</u> only.

#### Laboratory definitive evidence

Isolation of *Candida auris* from clinical and screening specimens, i.e. infection and colonisation.

#### **Notes**

Candida auris infection or colonisation is a notifiable condition via laboratory notification to the Communicable Disease Control Directorate at the Department of Health in Western Australia – notification by healthcare providers, or to Public Health Units, is not required.

Private and public laboratories that identify *Candida auris* are required to forward the isolate with patient details to the Mycology Department, PathWest Laboratory Medicine Western Australia located at Fiona Stanley Hospital, for further molecular typing and notification to the National Alert System for Critical Antimicrobial Resistances (CARAlert).

Candida auris surveillance data are reported separately to other notifiable infectious disease data.

# Carbapenemase-producing Acinetobacter baumannii complex infection or colonisation

(last updated 2025)

#### Reporting

Only <u>confirmed cases</u> identified from clinical and screening specimens, i.e. infection and colonisation, should be notified.

#### **Confirmed case**

A confirmed case requires laboratory definitive evidence.

#### Laboratory definitive evidence

Isolation of *Acinetobacter baumannii* complex with detection of a carbapenemase gene in a sample taken from any site (clinical or screening specimen).

#### **Notes**

Carbapenemase-producing *Acinetobacter baumannii* (CPAB) complex infection or colonisation is a notifiable condition via laboratory notification to the Communicable Disease Control Directorate at the Department of Health in Western Australia – notification by healthcare providers, or to Public Health Units, is not required.

Private and public laboratories that identify CPAB cases are required to forward the CPAB isolate with patient details to the PathWest Laboratory Medicine Western Australia Gramnegative Reference Laboratory located at the QEII Medical Centre, for molecular testing and notification to the National Alert System for Critical Antimicrobial Resistances (CARAlert).

CPAB surveillance data are reported separately to other notifiable infectious disease data.

# Carbapenemase-producing *Enterobacterales* infection or colonisation (last updated 2025)

#### Reporting

Only <u>confirmed cases</u> identified from clinical and screening specimens, i.e. infection and colonisation, should be notified.

#### **Confirmed case**

A confirmed case requires laboratory definitive evidence.

#### Laboratory definitive evidence

Isolation of *Enterobacterales* with detection of a carbapenemase gene in a sample taken from any site (clinical or screening specimen).

#### **Notes**

Carbapenemase-producing *Enterobacterales* (CPE) infection or colonisation is a notifiable condition via laboratory notification to the Communicable Disease Control Directorate at the Department of Health in Western Australia – notification by healthcare providers, or to Public Health Units, is not required.

Private and public laboratories that identify CPE cases are required to forward the CPE isolate with patient details to the PathWest Laboratory Medicine Western Australia Gramnegative Reference Laboratory located at the QEII Medical Centre, for molecular testing and notification to the National Alert System for Critical Antimicrobial Resistances (CARAlert).

CPE surveillance data are reported separately to other notifiable infectious disease data.

# Carbapenemase-producing *Pseudomonas aeruginosa* infection or colonisation

(last updated 2025)

#### Reporting

Only <u>confirmed cases</u> identified from clinical and screening specimens, i.e. infection and colonisation, should be notified.

#### Confirmed case

A confirmed case requires laboratory definitive evidence.

#### Laboratory definitive evidence

Isolation of *Pseudomonas aeruginosa* with detection of a carbapenemase gene in a sample taken from any site (clinical or screening specimen).

#### **Notes**

Carbapenemase-producing *Pseudomonas aeruginosa* (CPPA) infection or colonisation is a notifiable condition via laboratory notification to the Communicable Disease Control Directorate at the Department of Health in Western Australia – notification by healthcare providers, or to Public Health Units, is not required.

Private and public laboratories that identify CPPA cases are required to forward the CPPA isolate with patient details to the PathWest Laboratory Medicine Western Australia Gramnegative Reference Laboratory located at the QEII Medical Centre, for molecular testing and notification to the National Alert System for Critical Antimicrobial Resistances (CARAlert).

CPPA surveillance data are reported separately to other notifiable infectious disease data.

#### Chancroid (soft sore)

(last updated 2013)

#### Reporting

Both confirmed cases and probable cases should be notified.

#### Confirmed case

A confirmed case requires laboratory definitive evidence only.

#### Probable case

A probable case requires clinical evidence and epidemiological evidence.

#### Laboratory definitive evidence

Detection of Haemophilus ducreyi from a clinical specimen.

#### Clinical evidence

Clinically compatible ulcerative lesions.

#### **Epidemiological evidence**

- 1. Sexual contact between two people at a time when:
  - a. one of them is likely to be infectious (until an appropriate course of treatment has been completed and lesions are healed); **and**
  - b. the other has an illness that starts within 3 to 14 (usually 3-5) days after this contact and
- 2. At least one case in the chain of epidemiologically linked cases (which may involve many cases) is laboratory confirmed, where syphilis, granuloma inguinale and herpes simplex virus have been excluded through laboratory testing and clinical assessment as a cause of the ulcers.

#### Hendra virus infection

(last updated 09 November 2016)

#### Reporting

Only confirmed cases should be notified.

#### Confirmed case

A confirmed case requires laboratory definitive evidence

or

Laboratory suggestive evidence and epidemiological evidence and clinical evidence.

#### Laboratory definitive evidence

1. Isolation of Hendra virus

or

2. Detection of Hendra virus by nucleic acid testing.

#### Laboratory suggestive evidence

1. Detection of antibody to Hendra virus by microsphere immunoassay, confirmed by specific immunofluorescent assay

or

2. Detection of antibody to Hendra virus by virus neutralisation test.

#### **Epidemiological evidence**

Exposure, within 21 days prior to onset of symptoms, to a horse with confirmed Hendra virus infection, or where heightened suspicion of Hendra virus infection exists as advised by the relevant animal health agency.

#### Clinical evidence

Clinically compatible acute illness including influenza-like illness, pneumonia and meningitis.

Communicable Diseases Network Australia (CDNA) Series of National Guidelines

The CDNA Guidelines for Hendra virus are available at:

https://www.health.gov.au/resources/publications/hendra-virus-cdna-national-guidelines-for-public-health-units.

#### Melioidosis

(last updated 2008)

#### Reporting

Only confirmed cases should be notified.

#### **Confirmed case**

A confirmed case requires <u>laboratory definitive evidence</u> only.

#### Laboratory definitive evidence

- 1. Isolation of *Burkholderia pseudomallei* in blood culture or other specimen **or**
- 2. Detection of *B. pseudomallei* in blood or other sterile site specimens by nucleic acid amplification test.

# Methicillin-resistant *Staphylococcus aureus* infection or colonisation (last updated 2025)

#### Reporting

Only <u>confirmed cases</u> identified from clinical and screening specimens, i.e. infection and colonisation, should be notified.

#### Confirmed case

A confirmed case requires <u>laboratory definitive evidence</u> only.

#### Laboratory definitive evidence

Isolation of *Staphylococcus aureus* by culture from any site, that are resistant to methicillin (includes flucloxacillin).

#### **Notes**

Methicillin-resistant *Staphylococcus aureus* (MRSA) infection or colonisation is a notifiable condition via laboratory notification to the Communicable Disease Control Directorate at the Department of Health in Western Australia – notification by healthcare providers, or to Public Health Units, is not required.

Private and public laboratories that identify MRSA cases are required to forward the MRSA isolate with patient details to the PathWest Laboratory Medicine Western Australia Grampositive Reference Laboratory located at Fiona Stanley Hospital. The PathWest Grampositive Reference Laboratory works in collaboration with the Antimicrobial Resistance Infectious Diseases Research (AMR-ID) Laboratory at Murdoch University.

MRSA surveillance data are reported separately to other notifiable infectious disease data.

#### Typhus or rickettsial infection

(includes murine typhus, louse borne typhus, scrub typhus, Queensland tick typhus, African tick typhus and the "spotted fevers")

(last updated 2013)

#### Reporting

Both confirmed cases and probable cases should be notified.

#### Confirmed case

A confirmed case requires laboratory definitive evidence.

#### Probable case

A probable case requires <u>laboratory suggestive evidence</u> and <u>clinical evidence</u> and <u>epidemiological evidence</u>.

#### Laboratory definitive evidence

1. Detection (culture or nucleic acid testing) of *Rickettsia* species or *Orientia* tsutsugamushi in a clinical specimen

or

2. Seroconversion or a fourfold or greater rise in serum antibody titre to a Rickettsial or *Orientia* sp. group between acute and convalescent phase sera.

#### Laboratory suggestive evidence

A single elevated antibody titre to a rickettsial or *Orientia* species group.

#### Clinical evidence

A clinically compatible illness (fever and at least one of headache, myalgia, rash or eschar).

#### **Epidemiological evidence**

In the month prior to onset of illness, history of travel to a region (in Australia or overseas) where the detected *Orientia* or *Rickettsia* species or group is known to occur (see Table).

#### **Notes**

Some laboratories report results at the species level (e.g. *Rickettsia conorii*), however, if the species is not known to occur in the place where the infection was most likely acquired (see Table), then it should be reported at the 'group' level (e.g. a reported *R. conorii* infection that was likely to have been acquired in WA, where it has not previously been detected, would be recorded on the WA Notifiable Infectious Diseases Database (WANIDD) as "spotted fever group").

#### Classification and geographic distribution of Orientia and Rickettsia species

Group	Species	Vector	Disease	Geographical distribution	
Scrub typhus (one species)	Orientia tsutsugamushi	Mites ( <i>Leptotrombidium</i> spp)	Scrub typhus	Northern WA, Northern Territory and Queensland, overseas	
	Rickettsia australis²	Ticks	Queensland tick typhus	East coast of Australia	
	Rickettsia honei	Reptile ticks	Flinders Island spotted fever	Victoria, Tasmania, parts of South Australia, New South Wales, overseas	
Spotted fever group <sup>1</sup> (20 species –	Rickettsia honei subspecies marmionii	Ticks	Australian spotted fever	Eastern states of Australia	
only some listed here)	Rickettsia africae	Ticks	African Tick Bite fever	Overseas	
	Rickettsia conorii	Ticks	Subspecies cause different fevers, e.g. Mediterranean spotted fever, Israeli spotted fever	Overseas	
	Rickettsia rickettsii	Ticks	Rocky Mountain spotted fever	Overseas (Americas)	
Typhus group (two species)	Rickettsia typhi	Rat flea	Murine (or endemic) typhus	Australia (including WA), overseas	
	Rickettsia prowazekii	Human body louse	Epidemic typhus (jail fever)	Overseas	
Transitional	Rickettsia felis	Fleas	Cat flea rickettsiosis	Australia (including WA), overseas	
group (two species)	Rickettsia akari	Mouse mite	Rickettsial pox	Overseas (North America, Europe, Africa)	

#### Notes:

- 1. The 20 established *Rickettsia* species in the spotted fever group are not known to occur in WA. However, it is possible that other spotted fever group *Rickettsia* sp. may cause locally-acquired disease, given that at least one other species in this group has been detected in ticks sourced from parts of WA, and human cases without a travel history outside WA have been diagnosed with spotted fever group infection (demonstration of four-fold rise in titre).
- 2. Some authors classify this species within the transitional group.

#### Vancomycin-resistant enterococci infection or colonisation

(last updated 2017)

#### Reporting

Only <u>confirmed cases</u> identified from clinical and screening specimens, i.e. infection and colonisation, should be notified.

#### Confirmed case

A confirmed case requires laboratory definitive evidence only.

#### Laboratory definitive evidence

Isolation of *Enterococcus faecalis* or *Enterococcus faecium* by culture from any sites, that are resistant to vancomycin, and carry the *vanA*, *vanB* or *vanM* gene.

#### **Notes**

Vancomycin-resistant enterococci (VRE) infection or colonisation is a notifiable condition via laboratory notification to the Communicable Disease Control Directorate at the Department of Health in Western Australia – notification by healthcare providers, or to Public Health Units, is not required.

Private and public laboratories that identify VRE cases are required to forward the VRE isolate with patient details for molecular testing at the PathWest Laboratory Medicine Western Australia Gram-positive Reference Laboratory located at Fiona Stanley Hospital. The PathWest Gram-positive Reference Laboratory works in collaboration with the Antimicrobial Resistance Infectious Diseases Research (AMR-ID) Laboratory at Murdoch University.

VRE surveillance data are reported separately to other notifiable infectious disease data.

#### Yersinia infection

(last updated 2013)

#### Reporting

Only confirmed cases should be notified.

#### **Confirmed case**

A confirmed case requires <u>laboratory definitive evidence</u> only.

#### Laboratory definitive evidence

- 1. Isolation or detection of *Yersinia enterocolitica or Yersinia pseudotuberculosis*
- 2. A fourfold or greater rise in serum antibody titres between acute and convalescent phase sera

or

3. A single elevated antibody titre in a patient with a clinically compatible illness.

## Nationally notifiable but WA definition or notes differ

#### Barmah Forest virus infection

(last updated 01 January 2016)

#### Reporting

Both confirmed cases and probable cases should be notified.

#### **Confirmed case**

A confirmed case requires <u>laboratory definitive evidence</u> only.

#### Probable case

A probable case requires <u>laboratory suggestive evidence</u> only.

#### Laboratory definitive evidence

1. Isolation of Barmah Forest virus

or

2. Detection of Barmah Forest virus by nucleic acid testing

or

3. IgG seroconversion or a significant increase in IgG antibody level (e.g. fourfold or greater rise in titre) to Barmah Forest virus

#### Laboratory suggestive evidence

Detection of Barmah Forest virus IgM **and** Barmah Forest virus IgG **except** if Barmah Forest virus IgG is known to have been detected in a specimen collected greater than 3 months earlier.

#### **WA** notes

If Barmah Forest virus-specific IgM **and** Ross River virus-specific IgM are both detected in a specimen, then to meet the probable case definition for Barmah Forest virus infection, Barmah Forest virus IgG must also be detected.

#### Chlamydial infection (excluding eye infections)

(last updated 01 January 2023)

#### Reporting

Only confirmed cases should be notified.

#### Confirmed case

A confirmed case requires laboratory definitive evidence only.

#### Laboratory definitive evidence

1. Isolation of Chlamydia trachomatis

or

2. Detection of Chlamydia trachomatis by nucleic acid testing\*

or

3. Detection of Chlamydia trachomatis antigen.

#### **WA** notes

- 1. Only sexually acquired chlamydia infections should be reported (i.e. those identified from urine, urethral, endocervical, anorectal and pharyngeal specimens). Ocular or perinatal infections should not be reported.
- 2. Lymphogranuloma venereum (*Chlamydia trachomatis* serovars L1, L2 or L3) is notified as chlamydial infection, and differentiated in the serogroup/type field of the WA Notifiable Infectious Diseases Database (WANIDD).

<sup>\*</sup> The use of point-of-care tests in the context of this case definition are for the purposes of surveillance. These point-of-care tests for detecting *Chlamydia trachomatis* must be listed on the <u>Australian Register of Therapeutic Goods</u> and administered by appropriately trained persons in-line with National Pathology Accreditation Advisory Council's (NPAAC) <u>Requirements for Point-of-Care Testing</u>. Because point-of-care tests are sometimes used outside of a quality management governance environment or an accredited pathology laboratory (as described by NPAAC), the PHLN laboratory case definition does not apply to tests performed in these settings.

#### Legionellosis

(last updated 01 January 2013)

#### Reporting

Both confirmed cases and probable cases should be notified.

#### Confirmed case

A confirmed case requires laboratory definitive evidence and clinical evidence.

#### Probable case

A probable case requires laboratory suggestive evidence and clinical evidence.

#### Laboratory definitive evidence

1. Isolation of Legionella

or

2. Detection of Legionella urinary antigen

or

3. Seroconversion or a significant increase in antibody level or a fourfold or greater rise in titre to *Legionella*.

#### Laboratory suggestive evidence

1. Single high antibody titre to Legionella\*

or

2. Detection of Legionella by nucleic acid testing

or

3. Detection of Legionella by direct fluorescence assay.

#### Clinical evidence for confirmed cases

1. Fever

or

2. Cough

or

3. Pneumonia.

#### Clinical evidence for probable cases

1. Fever and cough

or

2. Pneumonia.

#### **WA** notes

\* Because of high community seroprevalence to *Legionella longbeachae* in WA, antibody titres of 512 or less will not generally be accepted as evidence for probable cases, unless there is good clinical or radiographic evidence of pneumonia.

Communicable Diseases Network Australia (CDNA) Series of National Guidelines
The CDNA Guidelines for Legionellosis are available at:

https://www.health.gov.au/resources/publications/legionellosis-cdna-national-guidelines-for-public-health-units.

#### Ross River virus infection

(last updated 01 January 2016)

#### Reporting

Both confirmed cases and probable cases should be notified.

#### Confirmed case

A confirmed case requires <u>laboratory definitive evidence</u> only.

#### Probable case

A probable case requires laboratory suggestive evidence only.

#### Laboratory definitive evidence

1. Isolation of Ross River virus

or

2. Detection of Ross River virus by nucleic acid testing

or

3. IgG seroconversion or a significant increase in IgG antibody level (e.g. fourfold or greater rise in titre) to Ross River virus

#### Laboratory suggestive evidence

Detection of Ross River virus IgM **and** Ross River virus IgG **except** if Ross River virus IgG is known to have been detected in a specimen collected greater than 3 months earlier.

#### **WA** notes

If Ross River virus-specific IgM **and** Barmah Forest virus-specific IgM are both detected in the specimen, then to meet the probable case definition for Ross River virus infection, Ross River virus IgG must also be detected.

## Appendix A: Note regarding detection of IgG

Wherever possible when a serological diagnosis is made, recent infection should be shown to have occurred by demonstrating a significant change in IgG between acute and convalescent sera. It is particularly important for infections which either fail to produce a measurable IgM response (e.g. influenza) or where the IgM response persists for extended periods (e.g. flavivirus infections). Usually an interval of 10-14 days is sufficient, although for some infections (e.g. legionellosis) the antibody rise may take up to 4-6 weeks. Significant changes in IgG may be shown by either:

- Seroconversion: Change from IgG negative to IgG positive between acute and convalescent samples. This may be used for confirming recent infection using tests that do not quantify the antibody levels. That includes most enzyme-linked immunosorbent assays, particle agglutination, immunofluorescent antibody and latex agglutination tests.
- Significant increase in antibody level or titre: This is generally confined to tests which
  use titrations in two-fold dilutions, in which a four-fold increase is regarded as
  significant. For enzyme-linked immunosorbent assays that are not titrated, it may be
  possible to establish changes in absorbance that may be regarded as significant.

## Appendix B: Epidemiological linkage

#### General description of an epidemiological link

An epidemiological link is established when there is:

- 1. Contact between two people involving a plausible mode of transmission at a time when:
  - a. one of them is likely to be infectious; and
  - b. the other has an illness which starts within the incubation period after this contact and
- 2. At least one case in the chain of epidemiologically linked cases (which may involve many cases) is laboratory confirmed.

#### Notes and examples of epidemiological linkage

- To be notified, epidemiologically linked cases must also satisfy the clinical criteria.
- Cases may be identified/reported in a different order to that in which they became ill.
- If the linked case became ill after the laboratory confirmed case, then the link is prospective (Figure A). If the linked case became ill before the laboratory confirmed case then the link is retrospective (Figure B). A chain of epidemiologically linked cases is established when further cases are either retrospectively or prospectively linked to those already linked to the laboratory confirmed case (Figure C).

Exposure

period

Latent

period

Infectious

period

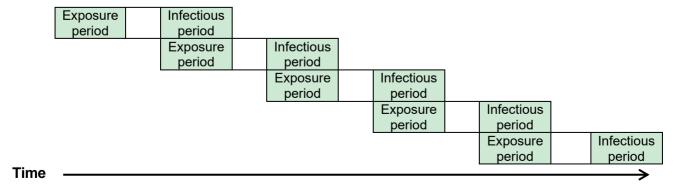
Figure A: Prospectively linked case

**Epidemiologically linked case** 

**Time** 

Laboratory confirmed case	Exposure period	Latent period	Infectious period		
Epidemiologically linked case Time			Exposure period	Incubation period	Clinical disease
Figure B: Retrospectively linked c	ase				
Laboratory confirmed case	Exposure period	Incubation period	Clinical disease		

Figure C: Chain of epidemiologically linked cases (example)\*



<sup>\*</sup> One case in the chain needs to be laboratory confirmed

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