

Policy and guidelines

REVISED SURVEILLANCE CASE DEFINITIONS

This report provides the revised surveillance case definitions approved by the Communicable Diseases Network Australia (CDNA) since 1 July 2016.

The Case Definitions Working Group (CDWG) is a subcommittee of the CDNA and comprises members representing all states and territories, the Australian Government Department of Health, the Public Health Laboratory Network (PHLN), OzFoodNet, the Kirby Institute, the National Centre for Immunisation Research and Surveillance and other communicable disease

experts. CDWG develops and revises surveillance case definitions for all diseases reported to the National Notifiable Diseases Surveillance System. Surveillance case definitions incorporate laboratory, clinical and epidemiological elements as appropriate.

The following case definitions have been reviewed by CDWG and endorsed by PHLN and CDNA.

The listeriosis case definition will be implemented on 1 January 2017 and supersedes any previous versions.

Listeriosis

Reporting

Only confirmed cases should be notified. Where a mother and fetus (≥ 20 weeks gestation)/neonate are both confirmed, both cases should be notified.

Confirmed case

A confirmed case requires either:

1. laboratory definitive evidence.

OR

2. Clinical AND epidemiological evidence.

Laboratory definitive evidence

Isolation or detection of *Listeria monocytogenes* from a site that is normally sterile, including fetal gastrointestinal contents.

Clinical evidence

1. A fetus/neonate where the gestational outcome is one of the following:
 - a. Stillbirth
 - b. Premature birth (<37 weeks gestation)
 - c. Diagnosis (within the first month of life) with at least one of the following:
 - Granulomatosis infantiseptica
 - Meningitis or meningoencephalitis

- Septicaemia
- Congenital pneumonia
- Lesions on skin, mucosal membranes or conjunctivae
- Respiratory distress and fever at birth

AND

In the absence of another plausible diagnosis

OR

2. A mother has experienced at least one of the following conditions during pregnancy:
 - a. Fever of unknown origin
 - b. Influenza like illness
 - c. Meningitis or meningoencephalitis
 - d. Septicaemia
 - e. Localised infections such as arthritis, endocarditis and abscesses
 - f. preterm labour/abruption

AND

In the absence of another plausible diagnosis

Epidemiological evidence

A maternal/fetal pair where one of either the mother or fetus/neonate is a confirmed case by **laboratory definitive evidence** (up to 2 weeks postpartum).

Notes

1. The clinical AND epidemiological evidence criteria for a confirmed case means that if the mother is a confirmed case by laboratory definitive evidence, then the fetus/neonate is also a confirmed case if they have the defined (fetus/neonate) clinical evidence, and vice versa.
2. Laboratory definitive evidence in a fetus < 20 weeks gestation means the mother only is a confirmed case.

Summary of changes to listeriosis surveillance case definition

Addition of clinical evidence and epidemiological evidence as alternative criteria for a confirmed case.

Definition of fetus as ≥20 weeks gestation.

Dengue virus infection**Reporting**

Both confirmed cases and probable cases should be notified.

Confirmed case

A confirmed case requires:

Laboratory definitive evidence AND clinical evidence

Laboratory definitive evidence*

Isolation of dengue virus

OR

Detection of dengue virus by nucleic acid testing

OR

Detection of non-structural protein 1 (NS1) antigen in blood by EIA

OR

IgG seroconversion or a significant increase in antibody level or a fourfold or greater rise in titre to dengue virus, proven by neutralisation or another specific test

OR

Detection of dengue virus-specific IgM in cerebrospinal fluid, in the absence of IgM to Murray Valley encephalitis, West Nile virus /Kunjin or Japanese encephalitis viruses

Clinical evidence

A clinically compatible illness (e.g. fever, headache, arthralgia, myalgia, rash, nausea/vomiting)

Probable case

A probable case requires:

Laboratory suggestive evidence AND clinical evidence AND epidemiological evidence

OR

Clinical evidence AND household epidemiological evidence

Laboratory suggestive evidence

Detection of NS1 antigen in blood by a rapid antigen test[†]

OR

Detection of dengue virus-specific IgM in blood

Clinical evidence

As for confirmed case

Epidemiological evidence

Exposure, between 3 and 14 days prior to onset, in

EITHER

a country with known dengue activity

OR

a dengue-receptive area[‡] in Australia WHERE a locally-acquired or imported case has been documented with onset within a month

* Confirmation of the laboratory result by an arbovirus reference laboratory is required if the infection was acquired in Australia but outside a dengue-receptive area as defined in the Dengue National Guideline for Public Health Units.

† Unless dengue NS1 antigen by EIA is negative

‡ As defined in the Dengue CDNA National Guideline for Public Health Units.

Household epidemiological evidence

AND

Living in the same house[§] as a locally-acquired case in a dengue-receptive area³ of Australia within a month of the onset in the case.

At least one case in the chain of epidemiologically linked cases (which may involve many cases) is laboratory confirmed.

[§] The case must have spent all the exposure period (from 14 days prior to onset to 3 days prior to onset) living in the same house as the epi-linked confirmed case.

Summary of changes to dengue surveillance case definition	Under laboratory definitive evidence, addition of “by EIA” after the NS1 antigen clause. Clinical evidence simplified. Addition of clinical evidence and household epidemiological evidence as alternative criteria for a probable case. Addition of “NS1 antigen in blood by a rapid antigen test” as laboratory suggestive evidence. Epidemiological evidence updated to specify exposure time and change the description of Australian exposure.
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