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 2013.

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 (DoH), the Public Health Laboratory Network (PHLN), OzFoodNet, the Kirby Institute, the National Centre for Immunisation Research and Surveillance (NCIRS) and other communicable disease experts. CDWG develops and revises surveillance case definitions for all diseases reported to the National Notifiable Diseases Surveillance System. Surveillance (NNDSS) case definitions incorporate laboratory, clinical and epidemiological elements as appropriate.

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

These case definitions will be implemented on 1 January 2014 and supersede any previous versions.

Poliovirus (non-paralytic) infection

(Effective 1 January 2014)

Reporting

Isolation or detection of poliovirus from clinical specimens with laboratory definitive evidence should be notified.

This case definition should be used for asymptomatic patients or patients with illness not consistent with acute flaccid paralysis.

Laboratory definitive evidence

Wild poliovirus infection

Isolation of wild poliovirus (confirmed in the National Enterovirus Reference Laboratory) OR detection of wild poliovirus by nucleic acid testing (confirmed in the National Enterovirus Reference Laboratory).

Sabin-like poliovirus infection

Isolation of Sabin-like poliovirus (confirmed in the National Enterovirus Reference Laboratory) OR detection of Sabin-like poliovirus by nucleic acid testing (confirmed in the National Enterovirus Reference Laboratory) except where there has been vaccination with Sabin oral polio vaccine in the six weeks* prior to the date of specimen collection.

* Note: This period may be longer for immunocompromised individuals

Vaccine derived poliovirus (VDPV) infection

Isolation of poliovirus (confirmed in the National Enterovirus Reference Laboratory) OR detection of poliovirus by nucleic acid testing (confirmed in the National Enterovirus Reference Laboratory), characterised as a vaccine derived poliovirus according to the current definition of the World Health Organization (reported by the National Enterovirus Reference Laboratory).

Poliovirus (non paralytic) infection changes

Laboratory definitive evidence

Changed National Poliovirus Reference Laboratory to National Enterovirus Reference Laboratory.

Sabin-like poliovirus infection

Added 'except where there has been vaccination with Sabin oral polio vaccine in the six weeks* prior to the date of specimen collection.'

Added * Note: This period may be longer for immunocompromised individuals.

Poliomyelitis (paralytic 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

Wild poliovirus infection

Isolation of wild poliovirus (confirmed in the National Enterovirus Reference Laboratory) OR detection of wild poliovirus by nucleic acid testing (confirmed in the National Enterovirus Reference Laboratory).

Vaccine-associated paralytic poliomyelitis (VAPP)

Isolation of Sabin-like poliovirus (confirmed in the National Enterovirus Reference Laboratory) OR detection of Sabin-like poliovirus by nucleic acid testing (confirmed in the National Enterovirus Reference Laboratory).

Vaccine derived poliovirus (VDPV) infection

Isolation of poliovirus (confirmed in the National Enterovirus Reference Laboratory) OR detection of poliovirus by nucleic acid testing (confirmed in the National Enterovirus Reference Laboratory), characterised as a vaccine derived poliovirus according to the current definition of the World Health Organization (reported by the National Enterovirus Reference Laboratory).

Clinical evidence

Any child under 15 years of age with acute flaccid paralysis* (including Guillain-Barré syndrome) or any person of any age with paralytic illness if polio is suspected.

For a case to be classified as VAPP the determination must be made by the Polio Expert Panel.

Probable case

A probable case of poliomyelitis (paralytic infection) requires clinical evidence AND the case not discarded as non-polio paralytic illness by the Polio Expert Panel.

Clinical evidence

As with confirmed case.

Acute flaccid paralysis syndrome is characterised by rapid onset of weakness of an individual's extremities, often including weakness of the muscles of respiration and swallowing, progressing to maximum severity within 1–10 days. The term "flaccid" indicates the absence of spasticity or other signs of disordered central nervous system (CNS) motor tracts such as hyperflexia, clonus, or extensor plantar responses. (Excerpt from Acute onset flaccid paralysis; World Health Organization 1993; WHO/MNH/EPI/93.3. Geneva)

Poliovirus (non paralytic) infection changes	**Laboratory definitive evidence** Changed National Poliovirus Reference Laboratory to National Enterovirus Reference Laboratory and changed Polio Expert Committee to Polio Expert Panel.

Viral haemorrhagic fever

(Effective 1 January 2014)

(Quarantinable – includes Ebola, Marburg, Lassa and Crimean-Congo fevers)

Reporting

Both confirmed cases and probable cases should be notified.

Confirmed case

A confirmed case requires laboratory definitive evidence only.

Laboratory definitive evidence

Laboratory definitive evidence requires confirmation by the Special Pathogens Laboratory, CDC, Atlanta, or the Special Pathogens Laboratory, National Institute of Virology (NIV), Johannesburg

Isolation of a specific virus

OR

Detection of specific virus by nucleic acid testing or antigen detection assay

OR

IgG seroconversion or a significant increase in antibody level or a fourfold or greater rise in titre to specific virus.

Probable case

A probable case requires laboratory suggestive evidence AND clinical evidence AND epidemiological evidence.

Laboratory suggestive evidence

Isolation of virus pending confirmation by CDC, Atlanta or NIV, Johannesburg

OR

Detection of specific virus by nucleic acid testing, pending confirmation by CDC, Atlanta or NIV, Johannesburg

OR

IgG seroconversion or a significant increase in antibody level or a fourfold or greater rise in titre to specific virus pending confirmation by CDC, Atlanta or NIV, Johannesburg

OR

Detection of IgM to a specific virus.

Clinical evidence

A compatible clinical illness as determined by an infectious disease physician. Common presenting complaints are fever myalgia, and prostration, with headache, pharyngitis, conjunctival injection, flushing, gastrointestinal symptoms. This may be complicated by spontaneous bleeding, petechiae, hypotension and perhaps shock, oedema and neurologic involvement.

Epidemiological evidence

History of travel to an endemic/epidemic area within 9 days (Marburg), 13 days (Crimean Congo) or 21 days (Lassa, Ebola) of illness onset. Filoviruses are endemic in Sub-Saharan Africa, Lassa in Western Africa, Crimean Congo in Africa and the Middle East to West China

OR

Contact with a confirmed case

OR

Exposure to viral haemorrhagic fever (VHF)-infected blood or tissues.

Viral haemorrhagic fever changes	**Laboratory definitive evidence**
	Added ‘or the Special Pathogens Laboratory, National Institute of Virology (NIV), Johannesburg’.
	Removed ‘viral haemorrhagic fever’ virus.
	Added ‘specific’ virus.
	Added ‘or’ antigen detection assay.
	Removed ‘or electron microscopy’