

# Appendix B: Provincial Case Definitions for Diseases of Public Health Significance

**Disease: Acute Flaccid Paralysis (AFP)**

Effective: February 2019

# Acute Flaccid Paralysis (AFP)

## 1.0 Provincial Reporting

Confirmed cases of disease

## 2.0 Type of Surveillance

Case-by-case

## 3.0 Case Classification

### 3.1 Confirmed Case

Acute onset of focal weakness or paralysis characterized as flaccid (reduced tone) without other obvious cause (e.g., trauma) in children < 15 years old. Cases of Guillain-Barré Syndrome (GBS) should be included as cases of Acute Flaccid Paralysis (AFP). Although this is categorized as “confirmed” it is actually a clinical case definition.

Transient weakness (e.g., postictal weakness) should not be reported.

## 4.0 Laboratory Evidence

### 4.1 Laboratory Confirmation

AFP is a constellation of symptoms, which can be caused by a number of pathogens. Laboratory testing is used to rule out and/or determine pathogens causing AFP.

- Stool samples: Collection of two stool samples within two weeks (up to six weeks) after the onset of paralysis for viral studies and campylobacter;
- Viral throat swab;
- Serology testing is not recommended for diagnosis of polio or non-polio enterovirus infection;
- Depending on the clinical presentation, a nasopharyngeal swab, and/or cerebrospinal fluid (CSF) may be collected to assist with the investigation; and
- Neurologic investigations, as appropriate, should take place (electromyography, nerve conduction studies, MRI, CT).

### 4.2 Approved/Validated Tests

Not applicable

### 4.3 Indications and Limitations

- The commercially available nucleic acid amplification test (NAAT) does not differentiate polioviruses from other enteroviruses.

## 5.0 Clinical Evidence

See confirmed case definition above.

**Note:** Other conditions present symptoms similar to paralytic poliomyelitis. A record is kept of all definitive diagnoses for all reported cases of AFP meeting the clinical case definition. GBS is the most common cause of AFP in childhood. Other differential diagnoses include, but are not limited to, transverse myelitis, peripheral neuropathy, enteroviruses, acute non-bacterial meningitis, brain abscess, China syndrome and post-polio sequelae. Poliomyelitis must be distinguished from other paralytic conditions by isolation of polio virus from stool.

## 6.0 ICD 10 Code(s)

There are no specific ICD codes for non-specific acute flaccid paralysis, as it is a clinical presentation of a set of symptoms and not a final diagnosis.

## 7.0 Comments

Polio is targeted for eradication. As such, it requires highly sensitive surveillance for AFP, including immediate case investigation and specimen collection. The case definitions implemented by Canada's Working Group on Polio Eradication are standardized case definitions recommended by the World Health Organization (WHO).

Other conditions present symptoms similar to paralytic poliomyelitis. Documenting polio-specific investigations, regardless of suspected diagnosis, is the means by which Canada maintains its polio-free certification. In addition, global surveillance indicators for certification include the detection of at least one AFP case in every 100,000 children under 15 years of age. Canadian data are reported regularly to the WHO.

## 8.0 Sources

Pan American Health Organization. Poliomyelitis Eradication Field Guide. Washington, DC: PAHO; 2006. Available from:

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Public Health Agency of Canada. Acute flaccid paralysis surveillance: a global platform for detecting and responding to priority infectious diseases. Canada Communicable Disease Report. 2004;30(24).

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Rotondo J, Desai S, Pless R, Rukshanda A, Squires S, Booth T. Acute flaccid paralysis surveillance: The need for ruling out polio infection. Paediatrics & Child Health. 2015;20(6).

World Health Organization. Polio Eradication & Endgame Strategic Plan 2013–2018. Geneva: WHO; 2013. Available from: <http://polioeradication.org/who-we-are/strategy/>

## 9.0 Document History

**Table 1: History of Revisions**

<b>Revision Date</b>	<b>Document Section</b>	<b>Description of Revisions</b>
Dec 2013		New document.
February 2019	General	Minor revisions were made to support the regulation change to Diseases of Public Health Significance.
February 2019	8.0 References	Section updated and renamed to Sources.

