Case Definitions of Other Communicable Diseases of Topical Public Health Concern

Acute flaccid paralysis

(Last updated on 14 July 2008)

Description

Acute flaccid paralysis (AFP) is defined as acute onset of focal weakness or paralysis characterized as flaccid (reduced muscle tone). The AFP surveillance has been set up primarily for detecting acute poliomyelitis among children under 15 years of age.

Acute flaccid paralysis may result from different causes, such as paralytic poliomyelitis, Guillain-Barré syndrome, transverse myelitis, traumatic neuritis, infectious and toxic neuropathies, tick paralysis, myasthenia gravis, porphyria, botulism, insecticide poisoning, polymyositis, trichinosis and periodic paralysis.

After investigation, a reported AFP will be further classified into paralytic poliomyelitis, polio-compatible, and non-polio AFP based on the respective clinical, epidemiological and laboratory findings. A case of paralytic poliomyelitis is notifiable.

Laboratory criteria

AFP surveillance is set up to ensure sensitive detection of wild poliovirus in areas where it has been free of for a prolonged period. Hence, to rule out the diagnosis of acute poliomyelitis, two adequate stool samples collected at least 24-48 hours apart, 0-14 days after onset of paralysis should be submitted for viral study.

An adequate stool sample refers to a stool sample with adequate volume (8-10 grams) and arrives in the laboratory in good condition within 72 hours of collection. Good condition refers to the condition where there is no desiccation or leakage of the stool, together with adequate documentation and evidence that the specimen is kept at 4-8 ^{o}C (based on presence of ice or temperature indicator).

Non-polio AFP case

A non-polio AFP case is:

- a case with acute paralytic illness for which adequate stool specimens were obtained within 2 weeks after onset of paralysis and was negative for poliovirus
- an AFP case without adequate stool specimens but with reliable follow-up information indicating no residual paralysis at 60 days
- any AFP case with inadequate stool specimens classified as “non-polio AFP” after expert review (Please refer to “polio-compatible”)

Polio-compatible case

A polio-compatible case is an AFP case in which inadequate stool specimens were collected within 2 weeks of the onset of paralysis, and there is either an acute paralytic illness with polio-compatible residual paralysis at 60 days, or death takes place within 60 days, or the case is lost to follow-up. The cases should undergo expert review. It may subsequently be classified either as “non-polio AFP” or “Polio-compatible” depending on the epidemiological and clinical information.

Brucellosis

(Last updated on 20 June 2008)

Description

An illness characterized by acute or insidious onset, with continued, intermittent or irregular fever of variable duration, profuse sweating particularly at night, fatigue, anorexia, weight loss, headache, arthralgia and generalized aching. Local infection of various organs may occur.

Laboratory criteria

Any one of the following:

- Isolation of *Brucella* species from a clinical specimen
- Four-fold or greater rise in *Brucella* agglutination titre between acute- and convalescent-phase serum specimens

Confirmed case

A clinically compatible case that is laboratory confirmed.

Probable case

A clinically compatible case with

- Epidemiological linkage to a confirmed case; **OR**
- Supportive serology (i.e., *Brucella* agglutination titre of ≥ 160 in one or more serum specimens obtained after onset of symptoms)

B virus infection

(Last updated on 5 April 2024)

Description

B virus (also known as herpes simiae virus) is a type of herpes virus that is usually found among macaques. B virus can be found in the saliva, urine and stool of infected macaques. Human infections are mainly caused by bites or scratches by infected macaques.

Symptoms usually occur within 1 month of the patient being exposed. Infected persons may initially present with flu-like symptoms, such as fever and chills, muscle ache, fatigue and headache. Vesicular skin lesions may then occur at the bite or scratch site. As disease progresses, the virus can spread to the central nervous system (CNS) resulting in pain/numbness/itchiness near the wound, problems with muscle coordination, damage to the nervous system and even death. Other symptoms suggestive of CNS involvement include hyperesthesia, ataxia, diplopia, agitation and ascending flaccid paralysis.

Reporting criteria

An individual with history of monkey scratch/bite with wound within 1 month of illness onset **AND** features suggestive of CNS infection

OR

An individual with detection of nucleic acid of B virus in a clinical specimen.

Confirmed case

A clinically compatible illness that is laboratory confirmed.

Cryptosporidiosis

(Last updated on 2 December 2019)

Clinical Description

Cryptosporidiosis is an infection caused by the protozoan *Cryptosporidium* species. Persons infected with *Cryptosporidium* may be asymptomatic. For those who develop symptoms, common symptoms include diarrhoea, abdominal cramps, fever, nausea, vomiting, dehydration and weight loss. The disease can be prolonged and life-threatening in severely immunocompromised persons.

Laboratory Criteria

Any one of the following in an appropriate clinical specimen (e.g. stool, intestinal fluid, tissue sample or biopsy specimens):

- Detection of nucleic acid of *Cryptosporidium*;
- Detection of *Cryptosporidium* antigen by direct fluorescence antibody test or enzyme immunoassay; OR
- Detection of *Cryptosporidium* oocysts by microscopic examination.

Case Classification

Confirmed case

A clinically compatible case that fulfils any of the above laboratory criteria.

Severe paediatric enterovirus infection (other than EV71 and poliovirus*)

(Last updated in June 2011, effective on 1 June 2011)

Description

Enteroviruses cause mild illness like non-specific febrile illness, herpangina, and hand, foot and mouth disease, commonly in young children. However severe complications can develop in some patients. These include meningitis, encephalitis, acute flaccid paralysis, other central nervous system complication (e.g. cerebellar ataxia), myocarditis / pericarditis, pulmonary edema or hemorrhage, and death.

Laboratory Criteria

Any one of the following:

- Isolation of enterovirus (other than EV71 and poliovirus) from a clinical specimen
- Detection of enterovirus (other than EV71 and poliovirus) by PCR from a clinical specimen

Confirmed case

A clinically compatible case that is laboratory confirmed.

Reporting criteria for severe paediatric enterovirus infection (other than EV71 and poliovirus*)

(Last updated in June 2011, effective on 1 June 2011)

An individual fulfilling both the ***Clinical Criteria AND Laboratory Criteria*** should be reported to Centre for Health Protection for further investigation.

Clinical Criteria

1. Children <=12 years old on date of admission; AND
2. A person presented with the following condition:
    - Meningitis; OR
    - Encephalitis; OR
    - Acute flaccid paralysis; OR
    - Other central nervous system complication (e.g. cerebellar ataxia); OR
    - Myocarditis/pericarditis; OR
    - Pulmonary edema or hemorrhage OR
    - Death

Laboratory Criteria

Any one of the following:

- Isolation of enterovirus (other than EV71 and poliovirus) from a clinical specimen
- Detection of enterovirus (other than EV71 and poliovirus) by PCR from a clinical specimen

*Acute poliomyelitis and EV71 infection are notifiable infectious diseases.

Severe paediatric influenza-associated complication/death

(Last updated in December 2014, effective on 13 January 2012)

Description

Young children are at higher risk of having complications when infected by influenza viruses, such as pneumonia, sepsis, encephalitis, myocarditis and death.

Laboratory criteria

Any positive test for influenza viruses:

- Isolation of influenza viruses from clinical specimens in viral culture;
- Positive immunofluorescence (IF) test for influenza viruses;
- A four-fold or higher rise in specific antibody titre for influenza viruses between acute and convalescent sera;
- Positive Polymerase Chain Reaction for influenza viruses; or
- Positive rapid antigen test for influenza viruses.

Confirmed case

A suspected case with laboratory confirmation.

Suspected case

An individual fulfilling the reporting criteria:

1. Children <18 years old on date of admission; AND
2. with fever and respiratory symptoms; AND
3. one of the following complications:
    - severe pneumonia (requiring admission to intensive care unit or assisted ventilation); OR
    - sepsis; OR
    - shock; OR
    - encephalopathy; OR
    - myocarditis; OR
    - death.

Reporting criteria for severe paediatric influenza-associated complication/death

(Last updated in December 2014, effective on 13 January 2012)

An individual fulfilling all the following 3 criteria should be reported to the Centre for Health Protection for further investigation:

1. Children <18 years old on date of admission; AND
2. with fever and respiratory symptoms; AND
3. one of the following complications:
    - severe pneumonia (requiring admission to intensive care unit or assisted ventilation); OR
    - sepsis; OR
    - shock; OR
    - encephalopathy; OR
    - myocarditis; OR
    - death.

Vibrio vulnificus infection (with necrotising fasciitis)

(Last updated on 7 September 2023)

Description

Vibrio vulnificus has drawn much concern for causing rapidly fatal necrotizing fasciitis in some individuals who have suffered from contamination of minor skin wound with salt-water containing the organism. It is uncommon but severe involving the subcutaneous soft tissues, particularly the superficial and the deep fascia.

Most patients present with signs of inflammation such as erythema, swelling, and pain at the affected site. Severe pain disproportionate to local findings and in association with systemic toxicity should raise the suspicion of necrotizing fasciitis. The organism can also cause septicaemia, cellulitis, and occasionally gastroenteritis.

Laboratory criteria

Isolation of *Vibrio vulnificus* from tissue biopsy, blood culture, or the relevant clinical specimen.

Confirmed case

A clinically compatible case that is laboratory confirmed.