

Acute haemorrhagic fever syndrome

RATIONALE FOR SURVEILLANCE

Acute haemorrhagic fever syndromes can be attributable to dengue (dengue haemorrhagic fever), Ebola-Marburg viral diseases, Lassa fever, yellow fever, Rift Valley fever, hantavirus infections, Crimean-Congo haemorrhagic fever, and other viral, bacterial or rickettsial diseases with a potential to produce epidemics. All cases of acute haemorrhagic fever syndrome, whether single or in clusters, should therefore be notified early, without waiting for the causal agent to be identified, according to the syndromic approach of revised *International Health Regulations* (IHR). Surveillance of acute haemorrhagic fever syndrome is aimed at early detection of cases in order to avoid epidemics and the possible international spread of the disease.

RECOMMENDED CASE DEFINITION

Clinical case description (revised IHR)

Acute onset of fever of less than 3 weeks duration in a severely ill patient
and

any 2 of the following

- haemorrhagic or purpuric rash
- epistaxis
- haematemesis
- haemoptysis
- blood in stools
- other haemorrhagic symptom **and** no known predisposing host factors for haemorrhagic manifestations

Note: During epidemics, most infected patients do not show haemorrhagic symptoms and a specific case definition, according to the suspected or proven disease, has to be used (see disease-specific case definitions in this manual for Ebola, Lassa, dengue, and yellow fever, or specific WHO Outbreak Control Guidelines*).

* Available for Ebola haemorrhagic fever, dengue haemorrhagic fever, yellow fever.

RECOMMENDED TYPES OF SURVEILLANCE

Immediate case-based reporting of acute haemorrhagic fever syndrome, whether occurring singly or in clusters, from peripheral to intermediate and central level, in order to ensure rapid investigation and laboratory confirmation.

All cases must be investigated, with contact tracing. Blood samples and appropriate clinical specimens must be collected to confirm a diagnosis as rapidly as possible.

RECOMMENDED MINIMUM DATA ELEMENTS

Case-based data

- Unique identifier, name, age, sex
- Geographical information
- Profession, place of work
- Date of onset of syndrome
- Date of hospitalization
- Date of death if relevant
- Number of contacts with ill patients
- Date and type of contacts with other cases
- Clinical samples taken for laboratory investigation (including date of sampling)

AGGREGATED DATA

- Number of cases
- Number of deaths
- Number of contacts
and aggregated vector and/or animal reservoir data as appropriate

RECOMMENDED DATA ANALYSES, PRESENTATION, REPORTS

Routine

- Total cumulative number of cases
- Total cumulative number of deaths
- Geographic distribution of cases
- Date of reported cases

During outbreaks

- Total cumulative number of cases
- Epidemic curve
- Total cumulative number of deaths
- Case-fatality rate
- Current number of patients
- Geographic distribution of cases
- Attack rate (age-specific if possible)
- Current number of hospitalized patients
- Date of reporting of last identified case
- Date of death or hospital discharge of the last reported case
- Contacts:
 - Current number of contacts requiring follow up
 - Current number of contacts actually under follow-up
 - Geographic distribution of contacts

PRINCIPAL USES OF DATA FOR DECISION-MAKING

Routine surveillance data

- Detect an isolated case or an outbreak and take appropriate control measures

During outbreaks

- Active case finding and contact tracing:
 - Identify all cases and contacts
 - Assess and monitor the spread of an outbreak
- Evaluate control measures
- Provide basis for research

SPECIAL ASPECTS

Acute haemorrhagic fever syndrome is one of the syndromes subject to notification to WHO in the revised *International Health Regulations* (pending implementation).

CONTACT

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