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Sr. No.	Disease	Modified Case Definitions
1	Dengue / DHF	A case compatible with the clinical description of dengue fever with at least one of the following: • Demonstration of dengue virus NS-1 antigen in serum sample by ELISA. • Demonstration of IgM antibodies by IgM antibody capture ELISA in single serum sample. • IgG seroconversion in paired sera after 2 weeks with fourfold increase of IgG titre. • Detection of viral nucleic acid by polymerase Chain reaction (PCR). • Isolation of the dengue virus (virus culture +ve) from serum, plasma, leucocytes. (Source – Dengue National guidelines,NVBDCP 2014)
2	Chikungunya	A case compatible with the clinical description of chikungunya fever with at least one of the following: • Demonstration of IgM antibodies by IgM antibody capture ELISA in a single serum sample. • Detection of viral nucleic acid by PCR. • Isolation of chikungunya virus from clinical specimen. (Source – Mid Term Plan Guidelines,NVBDCP 2013)

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3	Leptospirosis	A case compatible with the clinical description of leptospirosis with at least one of the following: • Isolation of leptospirosis from clinical specimen. • Four fold or greater rise in the MAT titre between acute and convalescent phase serum specimens run in parallel. • Positive by any two different type of rapid test. • Detection of pathogenic Leptospira DNA (e.g., by PCR) from a clinical specimen. Source -Programme for Prevention and Control of Leptospirosis NCDC 2015 (Operational Guidelines-**modified on 25/10/16, NCDC)**
4	Japanese Encephalitis	Laboratory-Confirmed JE: A suspected case of AES with any one of the following markers: • Demonstration of JE specific IgM antibodies in serum and/or CSF by IgM antibody capture ELISA. • Nucleic acid detection by PCR • Four fold difference in lgG antibody titre in paired sera • Virus isolation from brain tissue • Antigen detection by immunofluroscence (Source -National Programme for Prevention and Control of Japanese Encephalitis/Acute Encephalitis Syndrome, 2014 NVBDCP)
5	Shigellosis	A case of acute diarrhoea/ dysentery with isolation of Shigella species from stool sample. (Source - Public Health Laboratory Network case definitions, May 2000)
6	Hepatitis A	A case compatible with the clinical description of acute hepatitis with demonstration of anti-HAV IgM in serum sample. (Source: IDSP case definitions)

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7	Hepatitis E	A case compatible with the clinical description of acute hepatitis with demonstration of anti-HEV IgM in serum sample. (Source: IDSP case definitions)
8	Diphtheria	A case compatible with clinical description of diphtheria with isolation of Corynebacterium diphtheriae from a clinical specimen. (Source: WHO recommended Surveillance standards. WHO, 2nd edition, 1999)
9	Meningococcal Meningitis	• Isolation of *N. meningitidis* ➢ From a normally sterile body site (e.g., blood or CSF, or less commonly, synovial, pleural, or pericardial fluid); or ➢ From purpuric lesions • Detection of *N. meningitidis*-specific nucleic acid in a specimen obtained from a normally sterile body site (e.g., blood or CSF), using a validated polymerase chain reaction (PCR) assay; or (Source: CDC Case Definition 2015 NNDSS)
10	Typhoid Fever	A case compatible with the clinical description of typhoid fever with confirmed positive culture (blood, bone marrow, stool, urine) of *S. typhi*/ S paratyphi. (Source- Background document: The diagnosis, treatment and prevention of typhoid fever. WHO May 2003)

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11	Cholera	A case of acute diarrhoea with isolation and identification of Vibrio cholerae serogroup O1 or O139 by culture of a stool specimen. (Source- Prevention and control of cholera outbreaks: WHO policy and recommendations 2008)
12	Malaria	A case with parasite in the peripheral blood smear detected through microscopy or positive through antigen detecting Rapid Diagnostic Test (RDTs) is to be considered as laboratory confirmed malaria case. (Source: NVBDCP guidelines 2013)
13	Yellow Fever	**Confirmed case** – A suspected case that is laboratory confirmed. A suspected case is confirmed when, in the absence of recent yellow fever vaccination, yellow-fever-specific IgM is found in the serum, or when a fourfold or greater rise in IgG levels is found in PAIRED acute AND convalescent sera, or when yellow fever virus is isolated in cell culture or laboratory animals, or in case of positive post-mortem liver histopathology, or when yellow fever antigens are detected in tissues by immunohistochemistry, or when yellow fever virus genomic sequences are detected in blood or organs by molecular diagnostic techniques such as Reverse Transcription Polymerase Chain Reaction (RT- PCR).

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14	Measles	Presence of measles-specific IgM antibodies (WHO) OR An acute febrile rash illness† with (CDC) • A positive serologic test for measles immunoglobulin M antibody‡§; or • Detection of measles-virus specific nucleic acid‡ from a clinical specimen using polymerase chain reaction; or • Isolation of measles virus‡ from a clinical specimen; or • IgG seroconversion‡ or a significant rise in measles immunoglobulin G antibody‡ using any evaluated and validated method; or • Direct epidemiologic linkage to a case confirmed by one of the methods above. Source - WHO–recommended standards for surveillance of selected Vaccine-preventable diseases, Feb2003 & https://wwwn.cdc.gov/nndss/conditions/measles/case-definition/2013/ (**modified on 25/10/16, NCDC)** † Temperature does not need to reach ≥101°F/38.3°C and rash does not need to last ≥3 days. ‡ Not explained by MMR vaccination during the previous 6-45 days. § Not otherwise ruled out by other confirmatory testing or more specific measles testing in a public health laboratory.

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15	Pertussis	A person meeting the case definition of pertussis, with: 1. Isolation of B. pertussis from a clinical specimen. OR 2. Polymerase chain reaction (PCR) positive for pertussis. **Source –WHO–recommended standards for surveillance of selected vaccine-preventable diseases Feb 2003 (modified on 25/10/16, NCDC)**
16	Rubella	Presence of rubella-specific IgM antibodies. (WHO) OR A case with or without symptoms who has laboratory evidence of rubella infection confirmed by one or more of the following laboratory tests (CDC) • Positive serologic test for rubella IgM antibody†* • Detection of rubella-virus specific nucleic acid by polymerase chain reaction; **or** • Isolation of rubella virus; **or** • IgG seroconversion† or a significant rise between acute- and convalescent-phase titres in serum rubella IgG antibody level by any standard serologic assay **(**Source - WHO–recommended standards for surveillance of selected Vaccine-preventable diseases, Feb2003 & https://wwwn.cdc.gov/nndss/conditions/rubella/case-definition/2013/ (modified **on 25/10/16, NCDC)** † Not explained by MMR vaccination during the previous 6-45 days. * Not otherwise ruled out by more specific testing in a public health laboratory.

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<table>
<tr>
<td>17</td>
<td>Scrub Typhus</td>
<td>A probable case# laboratory-confirmed by any one of the following assays:

• A case is one in which IgM ELISA is positive for scrub typhus.
• O. Tsutsugamushi DNA is detected in eschar samples or whole blood by PCR
• Seroconversion or four fold rise or fall in antibody titres in paired sera detected by Indirect Immune Fluorescence Assay (IFA) or Indirect Immunoperoxidase Assay (IPA) or ELISA

(Source – Modified (25.10.16) - Guidelines for diagnosis and management of Rickettsial diseases in India ICMR February 2015)

#Clinical case of Scrub Typhus is defined as:

Acute undifferentiated febrile illness of 5 days or more with or without eschar should be suspected as a case of Rickettsial infection. (If eschar is present, fever of less than 5 days duration should be considered as scrub typhus.)

Other presenting features may be headache and rash, lymphadenopathy, multi-organ involvement like liver, lung and kidney involvement.

The differential diagnosis of dengue, malaria, pneumonia, leptospirosis and typhoid should be kept in mind.</td>
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<table>
<tr>
<td>18</td>
<td>Anthrax</td>
<td>A probable case# laboratory-confirmed by any one of the following :

• The clinical specimen in culture shows encapsulated, non-motile, non-haemolytic Gram positive bacilli susceptible to penicillin and confirmed by validated PCR for presence of toxin and capsule genes.
• Evidence of B. Anthracis DNA by validated PCR in clinical specimen collected from a normally sterile site such as blood or CSF or lesion of other affected tissue (skin, pulmonary, reticuloendothelial, or gastrointestinal).
Source: Training Manual for Veterinary Consultants under IDSP, 2015(modified on 25/10/16, NCDC)

#Clinical case of Anthrax is defined as:

Cutaneous anthrax: Skin infection begins as a painless, pruritic papule that resembles an insect bite but within 1-2 days develops into a vesicle (usually 1-3 cm in diameter) and then a painless ulcer with a characteristic black necrotic (dying) area in the centre. Systemic symptoms are mild and may include malaise and low-grade fever. There may be regional lymphangitis and lymphadenopathy. Occasionally more severe form of cutaneous anthrax may occur with extensive local oedema, induration and toxaemia.

Gastrointestinal anthrax: The intestinal disease form of anthrax may follow the consumption of contaminated meat and is characterized by an acute inflammation of the intestinal tract. There are two clinical forms of intestinal anthrax.Symptoms include nausea, vomiting, fever, abdominal pain, hematemesis, bloody diarrhoea and massive ascites. Unless treatment starts early toxaemia and shock develop resulting in death.

Oropharyngeal anthrax: Main clinical features are sore throat, dysphagia, fever, lymphadenopathy in the neck and toxaemia. Even with treatment mortality is high, about 50%.

Meningitis may complicate any of the three primary forms. It resembles meningitis due to other causes although it is frequently haemorrhagic. Diagnosis is confirmed by demonstration of the organism in the CSF by microscopy or culture or both.</td>
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19	KFD(Kyasanur Forest Disease)	A probable* case laboratory-confirmed by any one of the following assays: • Positive for immunoglobulin M (IgM) enzyme-linked immunosorbent assay (ELISA) for KFD. • Isolation of KFDV in cell culture or in a mouse model, from blood or tissues; • Detection of KFDV-specific genetic sequence by reverse transcription polymerase chain reaction (RT-PCR) or real time RT-PCR from blood or tissues. **Source – WHO South-East Asia Journal of Public Health | January-March 2014**(modified on 25.10.16, NCDC) *Patient with sudden onset of high fever with headache and/or myalgia, within a radius of 5 km surrounding the areas reporting recent monkey deaths or laboratory confirmed KFD cases
20	CCHF (Crimean Congo Haemorrhagic Fever)	A probable^ case laboratory-confirmed by any one of the following assays: • Detection by ELISA or IFA of specific IgM antibodies against CCHF virus • A 4-fold increase in specific IgG antibodies against CCHF virus in the acute and convalescence sera. • Detection of CCHF virus genome in a clinical specimen by RT-PCR. • CCHF virus isolation **Source – NCDC CCHF CD alert January 2011(modified on 25.10.16,NCDC)**

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		^A patient with abrupt onset of high fever >38.5°C and any of the following symptoms, severe headache, myalgia, nausea, vomiting, and/or diarrhoea with Thrombocytopenia < 50,000/cmm with haemorrhagic manifestations* in the absence of any known precipitating factor for haemorrhagic manifestation And with any one of the following • History of contact with tissues, blood, or other biological fluids from a possibly infected animal (e.g., abattoir workers, livestock owners, veterinarians) within 14 days prior the onset of symptoms • Healthcare workers in healthcare facilities, with a history of exposure within 14 days prior to the onset of symptom to a, probable, or laboratory-confirmed CCHF case. * Haemorrhagic manifestation includes - hematoma at an injection site, petechiae, purpuric rash, bleeding from nose, hematemesis, hemoptysis, gastrointestinal haemorrhage, gingival haemorrhage