Category 1: Immediate reporting telephonically followed by written or electronic notification within 24hrs of diagnosing a case

ACUTE FLACID PARALYSIS

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
Viral infection transmitted through the oro-fecal route. Causes paralysis in about 1/100 infected individuals.	✓ Health care practitioner *(nurse or doctor making the clinical diagnosis)* ✓ Laboratory making the diagnosis	Any child under 15 years of age with AFP (acute flaccid paralysis, or sudden onset of hypotonic weakness, including Guillian Barre syndrome) or any person of any age with paralytic illness if polio is suspected Disease incubation period is 7-21 days	Any child under 15 years of age with AFP (acute flaccid paralysis, or sudden onset of hypotonic weakness, including Guillian Barre syndrome) or any person of any age with paralytic illness if polio is suspected	A case is confirmed as a polio case See polio case definition

Category 1: Immediate reporting telephonically followed by written or electronic notification within 24hrs of diagnosing a case

ACUTE RHEUMATIC FEVER

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
	✓ Health care practitioner *(nurse or doctor making the clinical diagnosis)*	A primary episode of RF is two major, or 1 major+2 minor manifestations plus evidence of a preceding group A streptococcal infection. Major manifestations include carditis; polyarthritis; chorea; erythema marginatum; subcutaneous nodules. Minor manifestations include clinical signs (fever, polyarthragia), laboratory signs (increased ESR or white cell count). Supporting evidence of streptococcal infection within the last 45 days are prolonged PP-R interval on ECG, elevated or rising antistreptolysin-O or other antistreptococcal antibody; a positive throat culture; a rapid antigen test for group A strep, recent scarlet fever.		No laboratory diagnosis

Category 1: Immediate reporting telephonically followed by written or electronic notification within 24hrs of diagnosing a case

ANTHRAX

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
"Anthrax is an acute infectious disease caused by the spore-forming bacterium Bacillus anthracis. The disease most commonly occurs in wild and domestic animals such as cattle, sheep, goats, camels, antelope and other herbivores. Humans can also get anthrax when they are exposed to infected animals or tissue from these animals. Persons who may have been exposed to anthrax are not contagious, so quarantine is not appropriate Symptoms vary, depending on how the disease was contracted. Most (about 95 %) anthrax infections occur when the bacterium enters through skin lesions (cuts or abrasions) such as when handling contaminated wool, hides, leather or hair products (especially goat hair) of infected animals. Deaths rarely occur when appropriate antimicrobial therapy is applied. About 20 % of untreated cases of cutaneous anthrax will result in death. Other forms are gastrointestinal anthrax: This form of anthrax may follow the consumption of contaminated meat and is characterised by an acute inflammation of the gastointestinal tract. Intestinal anthrax results in death in 25 to 60 % of cases, unless treated intensively and early; And inhalation anthrax: Initial symptoms may resemble a common cold. After several days, the symptoms may develop into severe breathing problems and shock. Inhalation anthrax is usually fatal unless treated intensively and early by means of antibiotics. Anthrax is found throughout South Africa but more frequently in the Northern Cape and northern Kruger National Park (Limpopo).	✓ Healthcare practitioner based on clinical diagnosis ✓ Laboratory based on laboratory diagnosis	A person with either Skin lesion evolving over 1-6 days from a papular through a vesicular stage, to a depressed black eschar invariably accompanied by oedema that may be mild to extensive with fever, malaise and lymphadenopathy OR Nausea, vomiting and anorexia followed by fever, vomiting of blood, bloody diarrhoea OR Rapid onset of hypoxia, shortness of breath and high temperature, with radiological evidence of mediastinal widening or pleural effusion OR Acute onset of high fever, convulsions, loss of consciousness and meningeal signs and symptoms AND having relevant epidemiological exposure (e.g. Occupational contact with ruminants that have died recently; or animal products e.g. skins; or contact with anthrax spores contaminated soil, in drugs or ingestion of undercooked, contaminated or raw meat).	A probable case is a suspected case with laboratory Gram+ve Bacillus culture (and possible presence of endospores).	A confirmed case is a person with laboratory evidence of infection with Bacillus anthracis by (Culture isolation of Bacillus anthracis - like organisms or spores from any clinical specimen and PCR confirmation of cultured isolate).

Category 1: Immediate reporting telephonically followed by written or electronic notification within 24hrs of diagnosing a case

BOTULISM

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
Botulism is a rare but serious paralytic illness caused by a nerve toxin that is produced by the bacterium Clostridium botulinum and sometimes by strains of Clostridium butyricum and Clostridium baratii. Foodborne botulism is caused by eating foods that contain the botulinum toxin. Botulism is suspected in humans when there is a history of ingestion of suspect food OR of a fresh, contaminated wound in the 2 weeks before onset of symptoms. The most frequent source is home-canned foods, prepared in an unsafe manner.Wound botulism is caused by toxin produced from a wound infected with Clostridium botulinum. Injection drug users are at increased risk for wound botulism. Infant botulism is caused by consuming the spores of the botulinum bacteria, which then grow in the intestines and release toxin.The classic symptoms of adult botulism are of the muscle paralysis caused by the bacterial toxin and include: double vision, blurred vision, drooping eyelids, slurred speech, difficulty swallowing,dry mouth, and muscle weakness. If untreated, these symptoms may progress to cause paralysis of the respiratory muscles, arms, legs, and trunk. The disease can be fatal in 5 to 10% of cases. Incubation period - 18 to 36 hours after eating a contaminated food, but as early as 6 hours or as late as 10 days.	✓ Healthcare practitioner based on clinical diagnosis ✓ Laboratory based on laboratory diagnosis	A person with double or blurred vision, muscle and bulbar weakness. Symmetric paralysis may progress rapidly, death **AND** having relevant epidemiological exposure (Ingestion of foods contaminated with Botulinum toxin; or Clostridium botulinum contaminated wound with in situ toxin production).	A probable case is either a suspected case with laboratory toxin +ve assay in mice and/or Gram+ve Bacillus (clubshaped) anaerobic culture; OR a person with clinically compatible illness that ate the same food as a confirmed case.	A confirmed case is a person with laboratory evidence of Clostridium botulinum infection by a. Culture isolation of Clostridium botulinum; **OR** b. Detection of Clostridium botulinum toxin in blood or faeces or patient's food via Mouse toxicity and neutralization assay).

Category 1: Immediate reporting telephonically followed by written or electronic notification within 24hrs of diagnosing a case

CHOLERA

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
	✓ Healthcare practitioner based on clinical diagnosis ✓ Laboratory based on laboratory diagnosis	A suspected case may be considered · in an area where the disease is not known to be present, a patient aged 5 years or more develops severe dehydration or dies from acute watery diarrhoea; · in an area where there is a cholera epidemic, a patient aged 5 years or more develops acute watery diarrhoea, with or without vomiting.	A suspected case with an epidemiologic link to a confirmed cholera case	A case of cholera is confirmed when Vibrio cholerae O1 or O139 is isolated from any patient with diarrhoea.

Category 1: Immediate reporting telephonically followed by written or electronic notification within 24hrs of diagnosing a case

FOOD BORNE ILLNESS OUTBREAK

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
	✓ Health care practitioner *(nurse or doctor making the clinical diagnosis)*	An incident in which two or more persons experience a similar illness and are epidemiologically linked		No laboratory confirmation

Category 1: Immediate reporting telephonically followed by written or electronic notification within 24hrs of diagnosing a case

MALARIA

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
Systemic febrile infection caused by 5 species of mosquito-transmitted protozoal parasites, generally acquired in known risk areas, but occasionally associated with blood transfusions, needle injuries, and imported mosquitoes in non-endemic areas. Incubation period - Usually 10 – 14 days; range 7-21 days, depending on species.	✓ Healthcare practitioner based on clinical diagnosis ✓ Laboratory based on laboratory diagnosis	Acute febrile flu-like illness (AFFI) in a person with a history of exposure in a known malaria-endemic area; or in a non-endemic area, AFFI with a history of blood transfusion or injections, or AFFI with no other cause for illness and compatible non-specific laboratory findings, especially thrombocytopenia.	Clinically suspected case in a recognized malaria outbreak situation.	Positive malaria test (blood smear, rapid antigen, PCR) for any of the species: *P. falciparum, P. vivax, P. ovale, P. malariae, P. knowlesi.*

Category 1: Immediate reporting telephonically followed by written or electronic notification within 24hrs of diagnosing a case

MEASLES

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
Highly infectious viral disease transmitted by the respiratory route. Infectivity is greatest in the 3 days before the onset of rash, and 75%–90% of susceptible individuals develop the disease. Incubation period – 8-12 days	✓ Healthcare practitioner based on clinical diagnosis ✓ Laboratory based on laboratory diagnosis	Any person in whom a clinician suspects measles infection **OR** any person with fever and maculopapular rash (i.e. non-vesicular) and cough, coryza (i.e. runny nose) or conjunctivitis (i.e. red eyes).	Suspected measles case with epi link to a known measles case	• Compatible measles clinical case (not epidemiologically linked, no blood specimen) • Confirmed measles cases (IgM +ve **or** PCR+ve) • Discarded (IgM -ve or vaccine associated)

Category 1: Immediate reporting telephonically followed by written or electronic notification within 24hrs of diagnosing a case

MENINGOCOCCAL DISEASE

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
Meningococcal disease, caused by *Neisseria meningitidis*, can present as meningitis, septicaemia, respiratory or focal infections. Spread through droplets or intimate contact with nasopharyngeal secretions. Mortality rate is high if not treated and chemoprophylaxis is crucial for contacts. Asymptomatic carriage occurs. Incubation period – 3 to 5 days	✓ Healthcare practitioner based on clinical diagnosis **and** ✓ Laboratory based on laboratory diagnosis	Clinical diagnosis of meningitis, septicaemia or other invasive disease (e.g. orbital cellulitis, septic arthritis) where the physician, considers that meningococcal disease is the most likely diagnosis. May progress rapidly to purpura fulminans, shock, and death.	Clinical diagnosis of meningitis, septicaemia or other invasive disease (e.g. orbital cellulitis, septic arthritis) where the physician, considers that meningococcal disease is the most likely diagnosis. May progress rapidly to purpura fulminans, shock, and death.	Isolation of *N. meningitidis* from a normally sterile site specimen (e.g., blood; cerebrospinal, pericardial or synovial fluid), or a positive Gram stain and latex result, or a positive PCR result. ***** Although not meeting the definition of a confirmed case, meningococcal conjunctivitis is considered an indication for public health action because of the high immediate risk of invasive disease.

Category 1: Immediate reporting telephonically followed by written or electronic notification within 24hrs of diagnosing a case

PLAGUE

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
Plague is a disease that affects humans and other mammals. It is caused by the bacterium, Yersinia pestis. Humans usually get plague after exposure to saliva or feces of fleas that are carrying the plague bacterium or by handling an animal infected with plague. Pneumonic plague is transmissible from human-to-human via aerosolised droplets and is the most deadly form (90 - 95% CFR) . Bubonic plague is the most common form of plague. The key feature of bubonic plague is a swollen, painful lymph node, usually in the groin, armpit or neck. Other symptoms include fever, chills, headache, and extreme exhaustion. Antibiotics are effective in treating plague. If not treated early, the bacteria can spread to other parts of the body and cause septicemic or pneumonic plague and cause death (80% CFR). Plague epidemics have occurred in Africa, Asia, and South America but since the 1990s, most human cases have occurred in Africa. The 3 most endemic countries are Madagascar, the Democratic Republic of Congo and Peru. The last human cases of plague in South Africa were in 1982. Incubation period – 1 to 6 days (bubonic), 12-48 hours (pneumonic).	✓ Healthcare practitioner based on clinical diagnosis ✓ Laboratory based on laboratory diagnosis	A person with fever, chills, headache, malaise, prostration, and leukocytosis that manifests in one or more of the following principal clinical forms: a. regional lymphadenitis in the groin, armpit or neck, b. septicemia without an evident bubo, c. pneumonia.	A probable case is either a suspected case with laboratory suggestive evidence of Yersinia pestis infection by (a. If Gram-ve or bipolar-staining coccobacilli are seen on a smear taken from affected tissue (e.g. a bubo, or blood or a tracheal aspirate); OR b. Smear or tissue material is positive for the presence of Yersinia pestis F1 antigen by immunofluorescence or by ELISA or by other validated antigen detection system e.g. rapid dipstick assay; AND/OR a single serum specimen is positive for anti-F1 antibody by ELISA; OR a person with clinically compatible illness with epidemiological link to a confirmed case.	A confirmed case is a person with laboratory detection and identification of Yersinia pestis infection by (a. If an organism cultured from the affected tissue is lysed by Yersinia pestis-specific bacteriophage or verified by automated system (VITEK, Maldi-Tof, Microscan); OR b. IgG seroconversion or ≥4-fold rise in titre of anti-F1 antibody level over 2 weeks)

Category 1: Immediate reporting telephonically followed by written or electronic notification within 24hrs of diagnosing a case

POLIOMYELITIS

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
	✓ Laboratory making the diagnosis	Any child under 15 years of age with AFP (acute flaccid paralysis, or sudden onset of hypotonic weakness, including Guillian Barre syndrome) or any person of any age with paralytic illness if polio is suspected	N/A	Laboratory confirmation of of wildtype polio or vaccine derived polio virus (VDPV) or Sabin polio virus from stool sample or CSF

Category 1: Immediate reporting telephonically followed by written or electronic notification within 24hrs of diagnosing a case

RABIES (HUMAN)

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
Rabies virus causes acute infection of the central nervous system. There is a wide variability in the time it takes for symptoms to appear following exposure to saliva of an infected animal (from about two weeks to several years, 30 days on average) and treatment with post-exposure prophylaxis comprising rabies immune globulin and/or vaccine can prevent the illness. Dogs, mongoose, cats, jackal, cattle and goats are the commonest animal sources for human rabies in South Africa. Levels of exposures are touching or feeding animals or licking intact skin; nibbling of uncovered skin or superficial scratch without bleeding; bites or scratches penetrating skin or bat bites or scratches or licking of mucous areas or broken skin or abrasions. If the animal is still alive and healthy 14 days after exposure, then risk of rabies exposure is very low. Rabies is endemic throughout South Africa, most reported from the Eastern portion. Once symptoms begin, rabies is almost invariably fatal.	✓ Healthcare practitioner based on clinical diagnosis ✓ Laboratory based on laboratory diagnosis	The first symptoms of rabies begin with flu-like illness, including headache, fever and fatigue and a feeling of anxiety, cephalalgia. The excitation phase that follows is characterized by hyperesthesia, dilation of pupils and increased salivation. As the disease progresses swallowing dysfunction is seen in most patients and there may be spasms of the respiratory muscles and generalized convulsions. The illness progresses rapidly to paralysis, delirium, convulsions and death, usually within a week or two of the onset of illness.	A probable case is a suspected case AND having relevant epidemiological exposure (contact with a suspected rabid animal).	A confirmed case is a person with laboratory evidence of rabies infection by detection of a. Rabies virus nucleic acid by RT PCR on saliva, skin biopsy or CSF or anti-rabies antibodies in CSF (ante-mortem); **OR** b. Rabies virus antigen in brain tissue by FAT or rabies virus nucleic acid in skin biopsy (post mortem).

Category 1: Immediate reporting telephonically followed by written or electronic notification within 24hrs of diagnosing a case

RESPIRATORY DISEASE CAUSED BY A NOVEL RESPIRATORY PATHOGEN

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
Not available as pathogens may vary.	✓ Healthcare practitioner based on clinical diagnosis ✓ Laboratory based on laboratory diagnosis	Clusters (e.g., 3 or more cases in 72 hours, or 5 or more cases in a 5-day period) of severe respiratory illness (hospitalised or warranting hospitalisation or ICU admission or death) with evidence of common exposure or epidemiologic link. Attention should be given to recent travel or exposure to animals implicated in zoonotic transmission of respiratory pathogens.	Not available as pathogens may vary.	Not available as pathogens may vary.

Category 1: Immediate reporting telephonically followed by written or electronic notification within 24hrs of diagnosing a case

RIFT VALLEY FEVER (HUMAN)

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
Rift Valley fever is a viral disease affecting both domesticated ruminant animals and humans. Virus transmission is mosquito- borne amongst the animals (Culex and Aedes spp.) and occurs via zoonotic route to humans i.e. contact of blood or bodily secretions of infected livestock. There are vaccines available for animals but not for humans. Reducing risk for humans relies primarily on prevention of infection in animals.There is no antiviral treatment for RVF. Humans can experience a flu-like febrile illness, headache, nausea, myalgia, arthralgia, joint pain, neck stiffness, sensitivity to light, loss of appetite, vomiting; < 1% hemorrhagic and/or encephalitic form of disease, jaundice, neurological disease (1-4 weeks after disease onset) - intense headache, loss of memory, hallucinations, confusion, disorientation, vertigo, convulsions, lethargy, coma; hemorrhagic symptoms (2-4 days after disease onset) severe liver impairment, bleeding (from venepunture sites, petechia, purpura, ecchymoses, gastrointestinal, from the nose, gums, menorrhagia); (disease onset-4 weeks) ocular disease (loss of acuity of central vision, sometimes scotomas, residual scarring of the retina or permanent uni-or bilateral blindness. Moderate leukopenia, later: leukocytosis, hemoconcentration if advanced stage, mild-to moderate thrombocytopenia, AST> ALT elevated, lactate level > 4 mmol/L (36 mg/dL), DIC not common, proteinuria.	✓ Healthcare practitioner based on clinical diagnosis ✓ Laboratory based on laboratory diagnosis	A person with acute onset of fever > 38°C with at least one of the following signs and symptoms: headache, nausea, myalgia, arthralgia, neck stiffness, sensitivity to light, loss of appetite, vomiting, diarrhoea, abdominal pain with sometimes either of severe clinical findings: 1. ALT, AST or γ-glutamyl transpeptidase level elevation (3 x), clinical jaundice, hepatitis; OR 2. features of encephalitis, such as confusion, disorientation, drowsiness, coma, neck stiffness, hemiparesis, paraparesis, or convulsions; OR 3. bleeding, into skin (ecchymosis, purpura, petechiae), vomiting of blood, blood in stool, or bleeding from rectum, nose, puncture sites or vagina, decreased platelets count; OR 4. retinitis, unexplained acute vision loss or blind spots (scotomas); OR 5. unexplicable sudden death with a history of fever, lethargy, diarrhea, abdominal pain, nausea, vomiting, or headache in the preceding 2 weeks AND epidemiological evidence (a person belonging to a high risk category included the following: a) recent close contact with livestock and game animals in or from RVF-affected areas, including slaughtering and butchering (traditional or commercial), disposal of carcasses and fetuses, assisting with birthing or other animal husbandry activities that resulted in exposure to animal blood and body fluids, or veterinary procedures and necropsies; b) residing in an area where RVF is known to occur or has the potential to occur and recent mosquito bites; or c) consuming unpasteurized milk from RVF-affected areas).	A probable case is a suspected case with laboratory IgM antibodies against RVF virus.	A confirmed case is a person with laboratory evidence of RVF virus infection by (a.PCR positive and virus isolation from the patient's first (single) specimen; OR b.PCR positive and IgM positive result on patient's first (single) specimen; OR c. PCR positive on two separate specimens from the same patient collected at least one day apart; OR d. PCR positive but IgM/IgG negative result in patient's first specimen and PCR negative but IgM/IgG positive result in patient's second specimen collected at least one day apart; OR e. Increase in IgM/IgG titres between acute and convalescent specimens).

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SMALLPOX

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
Smallpox is an acute contagious disease caused by the variola virus, a member of the orthopoxvirus family. It was one of the world's most devastating diseases known to humanity. The last known natural case was in Somalia in 1977. It was declared eradicated in 1980 following a global immunization campaign led by the World Health Organization. Smallpox is transmitted from person to person via infective droplets during close contact with infected symptomatic people. Smallpox has two main forms: variola major and variola minor. The two forms showed similar lesions. The disease followed a milder course in variola minor, which had a case fatality rate of less than 1 per cent. The fatality rate of variola major was around 30%. In the past, smallpox was sometimes confused with chickenpox, a worldwide infection of children that is seldom lethal. Chickenpox can be distinguished from smallpox by its much more superficial lesions, their presence more on the trunk than on the face and extremities, and by the development of successive crops of lesions in the same area.	✓ Healthcare practitioner based on clinical diagnosis ✓ Laboratory based on laboratory diagnosis	A person with acute onset of fever ≥38.3°C and malaise, and severe prostration with headache and backache occurring 2 to 4 days before rash onset AND subsequent development of a maculopapular rash starting on the face and forearms, then spreading to the trunk and legs, and evolving within 48 hours to deep-seated, firm/hard and round well-circumscribed vesicles and later pustules, which may become umbilicated or confluent AND lesions that appear in the same stage of development (i.e. all are vesicles or all are pustules) on any given part of the body (e.g. the face or arm) AND no alternative diagnosis explaining the illness.	A probable case is a suspected case with either laboratory evidence by (a. Detection of a poxvirus resembling variola virus by electron microscopy; OR b. Isolation of variola virus pending confirmation; OR c. Detection of variola virus by nucleic acid testing pending confirmation); OR epidemiological linked to confirmed case).	A confirmed case is a person with laboratory evidence of smallpox virus infection by (a. Isolation of variola virus and PCR confirmation of cultured isolate; OR b. Detection of variola virus by PCR).

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VIRAL HAEMORRHAGIC FEVER DISEASES : EBOLA

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
"Ebola is a hemorrhagic fever (EVD) caused by a filovirus of five distinct species. Bundibugyo, Sudan and Zaire viruses have been associated with large EVD outbreaks in Central and West Africa. An outbreak happens when Ebola is first introduced into the human population through close contact with the blood, secretions, organs or other bodily fluids of infected forest animals (e.g. non-human primates and other mammals, fruit bats). Secondary human-to-human then spreads in the community resulting from close contact with the blood, secretions, organs, or other bodily fluids of infected people. High risk exists for people when providing direct patient care or handling dead bodies (funerals). Transmission via infected semen can occur up to seven weeks after clinical recovery. Vaccines have been development and tried following the largest outbreak of Ebola in West Africa in 2014-2015. Generally, EVD is a severe febrile illness characterized by sudden onset of fever, and non-specific symptoms in the first 2 to 3 days e.g. severe headache, myalgia, intense weakness, sore throat, sometimes conjunctival injection, followed by 2 to 4 days period of deterioration with severe sore throat, chest, abdominal pain, maculopapular rash on trunk and shoulders, diarrhea, vomiting, impaired kidney and liver function and sometimes bleeding (petechiae, ecchymosis, from venepuncture sites, visceral hemorrhagic effusions), thrombocytopenia, leukopenia, elevated AST, ALT, abortion, hiccups, somnolence, delirium, shock, coma for fatal cases during 2-4 days period and occurs after 6 to 9 days, case-fatality rate is high at 25-90%. Filoviruses are endemic in Sub-Saharan Africa. South Africa has only had one encounter with the deadly Ebola virus, with two infections and one fatality. In 1996 a doctor who has been treating patients in Gabon travelled back to Johannesburg South Africa. He fell ill but recovered, however the nurse who was treating him caught the virus and died.	✓ Health care practitioner *(nurse or doctor making the clinical diagnosis)* ✓ Laboratory making the diagnosis	A person with sudden onset of fever > 38.5 with at least three of the following signs and symptoms:headaches, vomiting, anorexia, loss of appetite, diarrhoea, lethargy, stomach pain, myalgia, arthralgia, difficulty in swallowing, breathing difficulties, hiccups, bloody diarrhoea, bleeding from gums, bleeding into skin (purpura), bleeding into eyes and urine OR any sudden inexplicable death. AND having relevant epidemiological exposure (had contact with a suspected, probable or confirmed Ebola case or a dead or sick animal (bats, rodents, or primates) or residence in—or travel to—an endemic area within 21 days of illness onset or laboratory exposure or exposure to semen from a confirmed acute or convalescent case of EVD within the 10 weeks of that person's onset of symptoms).	Any deceased suspected case (where it has not been possible to collect specimens for laboratory confirmation) having an epidemiological link.	A confirmed case is a person with laboratory evidence of Ebola virus infection by (a.PCR positive and virus isolation from the patient's first (single) specimen; OR b.PCR positive and IgM positive result on patient's first (single) specimen; OR c. PCR positive on two separate specimens from the same patient collected at least one day apart; OR d. PCR positive but IgM/IgG negative result in patient's first specimen and PCR negative but IgM/IgG positive result in patient's second specimen collected at least one day apart; OR e. Increase in IgM/IgG titres between acute and convalescent specimens) OR is a suspected case with laboratory suggestive evidence of Ebola virus infection by (IgM positive result on patient's first specimen).

Category 1: Immediate reporting telephonically followed by written or electronic notification within 24hrs of diagnosing a case

VIRAL HAEMORRHAGIC FEVER DISEASES : MARBURG

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
Marburg is a haemorrhagic fever (MHF) caused by a filovirus. Originally, human infection results from prolonged exposure to mines or caves inhabited by Rousettus bats colonies. Transmission is mainly human-to-human, resulting from close contact with the blood, secretions, organs or other bodily fluids of infected persons. Burial ceremonies where mourners have direct contact with the body of the deceased can play a significant role in the transmission of Marburg. Transmission via infected semen can occur up to seven weeks after clinical recovery. No specific antiviral treatment or vaccine is available. Marburg and Ebola viruses are the two members of the Filoviridae family (filovirus). Though caused by different viruses, the two diseases are clinically similar. Case fatality ratio of MHF ranges from 24% up to 88%. Outbreaks and sporadic cases have been reported Germany (from laboratory work with monkeys from Uganda), Serbia, Angola, Democratic Republic of the Congo, Kenya, South Africa (in a person with recent travel history to Zimbabwe) and Uganda. In 2008, two independent cases were reported in travelers who visited a cave inhabited by Rousettus bat colonies in Uganda.	✓ Health care practitioner *(nurse or doctor making the clinical diagnosis)* ✓ Laboratory making the diagnosis	A person with sudden onset of fever > 38.5 with at least three of the following signs and symptoms:headaches, vomiting, anorexia, loss of appetite, diarrhoea, lethargy, stomach pain, myalgia, arthralgia, difficulty in swallowing, breathing difficulties, hiccups, bloody diarrhoea, bleeding from gums, bleeding into skin (purpura), bleeding into eyes and urine OR any sudden inexplicable death. AND having relevant epidemiological exposure (had contact with a suspected, probable or confirmed Marburg case or was in a mine or cave, residence in—or travel to—an endemic area within 9 days of illness onset, laboratory exposure, exposure to semen from a confirmed acute or convalescent case of Marburg within the 10 weeks of that person's onset of symptoms).	Any deceased suspected case (where it has not been possible to collect specimens for laboratory confirmation) having an epidemiological link.	A confirmed case is a person with laboratory evidence of Marburg virus infection by (a.PCR positive and virus isolation from the patient's first (single) specimen; OR b.PCR positive and IgM positive result on patient's first (single) specimen; OR c. PCR positive on two separate specimens from the same patient collected at least one day apart; OR d. PCR positive but IgM/IgG negative result in patient's first specimen and PCR negative but IgM/IgG positive result in patient's second specimen collected at least one day apart; OR e. Increase in IgM/IgG titres between acute and convalescent specimens) OR is a suspected case with laboratory suggestive evidence of Marburg virus infection by (IgM positive result on patient's first specimen).

Category 1: Immediate reporting telephonically followed by written or electronic notification within 24hrs of diagnosing a case

VIRAL HAEMORRHAGIC FEVER DISEASES : LASSA FEVER

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
Lassa Fever (LASF) is a viral hemorraghic fever endemic exclusively to West Africa, caused by a rodent-borne arenavirus. Transmission of LAS virus is believed to occur via exposure to rodent excreta, either from direct inoculation to the mucous membranes or from inhalation of aerosols produced when rodents urinate. Secondary human-to-human transmission via contact with infected blood or bodily fluids, from oral or mucosal exposure is generally moderate. The antiviral drug ribavirin seems to be an effective treatment for Lassa fever if given early on in the course of clinical illness.The disease has a gradual onset of fever with malaise, anorexia, headache, chest or retrosternal pain, sore throat, myalgia, arthralgia, lumbosacral pain, dizziness, erythemic or exudative pharynx, nausea, vomiting, epigastric, abdominal pain, tenderness, diarrhoea, morbilliform, maculopapular or petechial rash in fair-skinned people only, dry cough, no jaundice, edema, swelling of the face, and neck specific, bleeding (conjunctival injection or subconjunctival hemorrhage, facial flushing, hematemesis, melena, hematochezia, metrorrhagia, petechiae, epistaxis, bleeding from the gums and venepuncture sites, vaginal bleeding, hemoptysis or hematuria infrequent), mild-to moderate thrombocytopenia, hypotension, shock, moderate leukopenia, later leukocytosis, increased AST, ALT and AST> ALT, lactate level greater than 36 mg/dL, proteinuria common, spontaneous abortion, neurological complications (disorientation, tremor, ataxia, seizures, coma), normothermic, hypothermic in late stage. The overall case-fatality rate is 1%. Observed case-fatality rate among patients hospitalized with severe cases of Lassa fever is 15%	✓ Health care practitioner *(nurse or doctor making the clinical diagnosis)* ✓ Laboratory making the diagnosis	A person with gradual onset of fever >38 °C AND 1. at least two minor signs or symptoms: headache, sore throat, vomiting, diffuse abdominal pain or tenderness, chest or retrosternal pain, cough, diarrhoea, generalized myalgia or arthralgia, profuse weakness, proteinuria, leucopenia AND one major sign or symptom: bleeding from the mouth, nose, rectum, or vagina, swollen neck or face, conjunctivitis or subconjunctival bleeding, spontaneous abortion, petechial or hemorrhagic rash, new onset of tinnitus or altered hearing, persistent hypotension, elevated AST or ALT OR 2. at least two major signs or symptoms; AND having relevant epidemiological exposure (known contact to a person suspected, probably or confirmed to have lassa fever or have travelled to an endemic area in the past 21 days).	Any deceased suspected case (where it has not been possible to collect specimens for laboratory confirmation) having an epidemiological link.	A confirmed case is a person with laboratory evidence of Lassa virus infection by (a.PCR positive and virus isolation from the patient's first (single) specimen; OR b.PCR positive and IgM positive result on patient's first (single) specimen; OR c. PCR positive on two separate specimens from the same patient collected at least one day apart; OR d. PCR positive but IgM/IgG negative result in patient's first specimen and PCR negative but IgM/IgG positive result in patient's second specimen collected at least one day apart; OR e. Increase in IgM/IgG titres between acute and convalescent specimens) OR is a suspected case with laboratory suggestive evidence of Lassa virus infection by (IgM positive result on patient's first specimen).

Category 1: Immediate reporting telephonically followed by written or electronic notification within 24hrs of diagnosing a case

VIRAL HAEMORRHAGIC FEVER DISEASES : LUJO

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
Lujo is a hemorraghic fever/LHF caused by an arenavirus. LHF is contracted by humans via nosocomial route i.e. direct contact with infected blood, urine or pharyngeal secretions from infected person or rodent-borne through contact with virus-contaminated excreta, via inhalation of dust or aerosolized materials or vomites soiled with rodent feces or urine, or ingestion of contaminated food. First it presents as non-specific febrile illness with fever, headache and myalgia, followed by diarrhea, pharyngitis, terminal features include severe respiratory distress, neurological signs and circulatory collapse. Severe bleeding is not a prominent feature, moderate thrombocytopenia (20-104 x 10^9 cells/L), increased AST and leukocytosis. Ribavirine may improve prognosis when administered in early course of disease. To date only five cases of LHF have been recognized and laboratory confirmed following a nosocomial outbreak in South Africa in 2008. The index case was medevacuated from Zambia to South Africa and consequently infected four HCWs. There was evidence of rodent activity on the index case farm.	✓ Health care practitioner *(nurse or doctor making the clinical diagnosis)* ✓ Laboratory making the diagnosis	A person with acute onset of fever >38.5°C, and at least three of the following signs and symptoms: severe headache, myalgia, diarrhea, pharyngitis, abdominal pain, retrosternal chest pain, respiratory distress, moderate thrombocytopenia, increased AST and leukocytosis, proteinuria, neurological signs or sudden inexplicable death AND having relevant epidemiological exposure (contact with a suspected, probable or confirmed Lujo case or a dead or sick animal (rodents) within the past 21 days).	Any deceased suspected case (where it has not been possible to collect specimens for laboratory confirmation) having an epidemiological link.	A confirmed case is a person with laboratory evidence of Lujo virus infection by (a.PCR positive and virus isolation from the patient's first (single) specimen; OR b.PCR positive and IgM positive result on patient's first (single) specimen; OR c. PCR positive on two separate specimens from the same patient collected at least one day apart; OR d. PCR positive but IgM/IgG negative result in patient's first specimen and PCR negative but IgM/IgG positive result in patient's second specimen collected at least one day apart; OR e. Increase in IgM/IgG titres between acute and convalescent specimens) OR is a suspected case with laboratory suggestive evidence of Lujo virus infection by (IgM positive result on patient's first specimen).

Category 1: Immediate reporting telephonically followed by written or electronic notification within 24hrs of diagnosing a case

VIRAL HAEMORRHAGIC FEVER DISEASES : CRIMEAN-CONGO

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
Congo fever is a viral hemorrhagic fever (CCHF) caused by a nairovirus. Humans become infected through the bites or crushing of ticks, by contact with a patient with CCHF during the acute phase of infection or by contact with blood or tissues from viremic livestock. The geographic range of the CCHF virus is known to be the most extensive one among the tick borne viruses related to human health. The disease has been reported in parts of Africa, Asia and Eastern Europe. CCHF is the only endemic viral hemorrhagic fever to South Africa, primarily in the inland central plateau. No vaccine is available as yet and limited antiviral treatment, ribavirin for administration in the early phase of disease. Person presents in the first week of illness with high fever, headache, malaise, arthralgias, myalgias, nausea, abdominal pain, rarely diarrhea; hyptension, conjunctivitis, cutaneous flushing, skin rash, from 3-10 days: bleeding from various sites (petechiae, mucous membrane, conjunctival hemorrhage, hematuria, hematemesis, melena, mild to severe thrombocytopenia ((8 g/dL), platelet count < 105plts/L), moderate or severe leukopenia, sometimes leucosytosis, hemoglobulin and/or hematocrit could be decreased later in disease course, elevated liver enzymes (ALT >3 x, AST > 3x, GGT > 3 x, LDH > 2 x, usually AST> ALT), hemophagocytosis and DIC common, lactate dehydrogenase > 4 mmmol/L (36 mg/dL), creatine phospokinase elevated > 2 x , blood urea nitrogen and creatinine (> 150um) increased, proteinuria, oliguria/anuria may occur. Further complications (1-2 weeks) are CNS abnormality, hepatomegaly, splenomegaly, jaundice, ascites, hemorrhagic diathesis, shock, multi-organ system failure, death (case-fatality rate 3-30%).	✓ Health care practitioner *(nurse or doctor making the clinical diagnosis)* ✓ Laboratory making the diagnosis	A person with acute onset of fever > 38°C, and with at least three of the following signs and symptoms: severe headache, nausea, vomiting, myalgia, prostration, pharyngitis, conjunctival injection, flushing, petechial rashes, bleeding into skin (ecchymoses), from nose, vomiting of blood, blood in urine or stool, decreased platelets count, hypotension and shock, leukopenia or leukocytosis, elevated AST or ALT (> 100 U/L), oedema or neurologic signs. A rickettsial diagnosis is excluded. AND having relevant epidemiological exposure (History of being bitten by tick/s or crushed tick with bare hands OR Had direct contact with fresh blood or other tissues of livestock or game OR Had direct contact with blood, secretion or excretions of confirmed or suspected CCHF patient (including needle pricks) OR Resided in or visited a rural environment where contact with livestock or ticks was possible in the past 15 days).	Any deceased suspected case (where it has not been possible to collect specimens for laboratory confirmation) having an epidemiological link.	A confirmed case is a person with laboratory evidence of CCHF virus infection by (a.PCR positive and virus isolation from the patient's first (single) specimen; OR b.PCR positive and IgM positive result on patient's first (single) specimen; OR c. PCR positive on two separate specimens from the same patient collected at least one day apart; OR d. PCR positive but IgM/IgG negative result in patient's first specimen and PCR negative but IgM/IgG positive result in patient's second specimen collected at least one day apart; OR e. Increase in IgM/IgG titres between acute and convalescent specimens) OR is a suspected case with laboratory suggestive evidence of CCHF virus infection by (IgM positive result on patient's first specimen).

Category 1: Immediate reporting telephonically followed by written or electronic notification within 24hrs of diagnosing a case

WATERBORNE ILLNESS OUTBREAK

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
	✓ Health care practitioner *(nurse or doctor making the clinical diagnosis)* ✓ Laboratory making the diagnosis	An incident in which two or more persons experience a similar illness and are epidemiologically linked		

Category 1: Immediate reporting telephonically followed by written or electronic notification within 24hrs of diagnosing a case

YELLOW FEVER

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
Yellow fever is an acute viral haemorrhagic disease transmitted by infected mosquitoes (Aedes aegypti). Humans can be fully potected if administered vaccination at least a month prior to travel to an endemic area in parts of Africa and South America. Vaccination at least ten days prior to travel provides 80-100% protection. Some infections can be mild but most lead to serious illness characterised by two stages. In the first stage fever, muscle pain, back ache, nausea, vomiting, headache and weakness occur. In most cases, symptoms disappear after 3 to 4 days. About 15 to 25 per cent of those with yellow fever progress to the second stage also known as the 'toxic' stage, within 24 hours of recovering from initial symptoms, of which half die within 10 to 14 days after onset of illness. Visible bleeding from the mouth, nose, eyes or stomach, jaundice, dark urine, abdominal pain, vomiting, kidney and liver failure can occur during the second stage.	✓ Health care practitioner *(nurse or doctor making the clinical diagnosis)* ✓ Laboratory making the diagnosis	A person with sudden onset of fever >38.5°C and with at least one of the following signs and symptoms: chills, headache, back and muscle pain, nausea and vomiting either or not followed by a 24hr. remission and a recurrence of signs and symptoms with jaundice, hepatitis, albuminuria, renal failure within two weeks or haemorrhagic signs, shock or death within three weeks of onset of illness AND having relevant epidemiological exposure (History of travel to a yellow fever endemic area in the week preceding the onset of illness, in the absence of having received vaccination against yellow fever in the past).	Any deceased suspected case (where it has not been possible to collect specimens for laboratory confirmation) having an epidemiological link.	A confirmed case is a yellow fever unvaccinated person with laboratory evidence of yellow fever virus infection by (a.PCR positive and virus isolation from the patient's first (single) specimen; OR b.PCR positive and IgM positive result on patient's first (single) specimen; OR c. PCR positive on two separate specimens from the same patient collected at least one day apart; OR d. PCR positive but IgM/IgG negative result in patient's first specimen and PCR negative but IgM/IgG positive result in patient's second specimen collected at least one day apart; OR e. Increase in IgM/IgG titres between acute and convalescent specimens).

Category 2: Written or electronic notification within 7days of diagnosing a case. The case must be notified following laboratory confirmation

AGRICULTURAL OR STOCK REMEDY POISONING

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
	✓ Health care practitioner *(nurse or doctor receiving the laboratory result)* ✓ Laboratory making the diagnosis			

Category 2: Written or electronic notification within 7days of diagnosing a case. The case must be notified following laboratory confirmation

BILHARZIA (schistosomiasis)

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
Parasitic fluke (schistosome) infection, acquired by skin exposure to surface water inhabited by infected intermediate host snails. Two species of schistosome produce urogenital and intestinal infections, respectively, with both shared and organ-specific clinical features.	✓ Health care practitioner *(nurse or doctor receiving the laboratory result)* ✓ Laboratory making the diagnosis	A person with compatible clinical features of acute infection (fever, hepatosplenomegaly, urticaria, diarrhoea, etc), or intermediate infection (haematuria, cervicitis, etc) or late infection (hydronephrosis, portal hypertension, etc), and history of exposure in an endemic area.	A person with compatible clinical features and history of exposure in an endemic area, plus a single positive serological or antigen test, and/or haematuria, and/or raised eosinophil count (>0.45 x 10^9/L).	Schistosome eggs reported in urine or faeces, or on histopathology in biopsy samples; or ≥4-fold rise in titre of serological test over 2 weeks; or repeatedly positive antigen test

Category 2: Written or electronic notification within 7days of diagnosing a case. The case must be notified following laboratory confirmation

BRUCELLOSIS

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
Brucellosis is an infectious disease caused by Brucella bacteria (melitensis and abortus). People can get the disease when they are in contact with infected animals or animal products contaminated (unpasteurised milk/dairy products) with the Brucella bacteria. Animals that are most commonly infected include sheep, cattle, goats. Pig, and dog brucellosis have not occurred in South Africa. Initial symptoms can include: fever, sweats, malaise, anorexia, headache, pain in muscles, joint, and/or back, fatigue. Some signs and symptoms may persist for longer periods of time. Others may never go away or reoccur and include recurrent fevers, arthritis, swelling of the testicle and scrotum area, swelling of the heart (endocarditis), neurologic symptoms (in up to 5% of all cases), chronic fatigue, depression, swelling of the liver and/or spleen. There is a vaccine available for prevention in animals and reduce risk of exposure to humans. Treatment of human brucellosis requires longterm multiple antibiotic course. Brucellosis is rarely fatal if treated; in untreated persons, estimates of the case fatality rate vary from less than 2% to 5%. Deaths are usually caused by endocarditis or meningitis.	✓ Health care practitioner *(nurse or doctor receiving the laboratory result)* ✓ Laboratory making the diagnosis	A person with acute or insidious onset of intermittent or irregular fever of variable duration, night sweats, undue fatigue, anorexia, weight loss, headache, and arthralgia. Local infection of organs may occur AND having relevant epidemiological exposure (e.g Occupational contact with infected ruminants or birth excretions or fetuses; or by eating or drinking unpasteurized/raw dairy products or undercooked meat; or breathing brucella bacteria in slaughterhouses or laboratory).	A probable case is a suspected case with a. laboratory Gram-ve Bacillus culture; OR b. A single high agglutination titre to Brucella; OR c. Detection of Brucella species by PCR testing from a normally sterile site other than blood.	A confirmed case is a person with laboratory evidence of Brucella infection by (a. Culture isolation of Brucella species; OR b.Detection of Brucella species by PCR testing from a blood sample; OR c.IgG seroconversion or a significant increase in IgG antibody level (e.g. fourfold or greater rise) to Brucella).

Category 2: Written or electronic notification within 7days of diagnosing a case. The case must be notified following laboratory confirmation

CONGENITAL RUBELLA SYNDROME

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
Clinical syndrome consisting of birth defects occurring in an infant whose mother had rubella infection in pregnancy	✓ Health care practitioner *(nurse or doctor receiving the laboratory result)* ✓ Laboratory making the diagnosis	A child less than 12 months of age with at least one of the following: cataracts, glaucoma, congenital heart disease, hearing impairment, pigmentary retinopathy, purpura, hepatosplenomegaly, jaundice, microcephaly, developmental delay, meningoencephalitis, radioluscent bone disease	1)An infant with no laboratory confirmation of rubella infection but at least two of the following without a more plausible etiology: -cataracts or congenital glaucoma, -congenital heart disease -hearing impairment, -pigmentary retinopathy; 2)An infant with no laboratory confirmation of rubella infection but at least one of the following without a more plausible etiology; -cataracts or congenital glaucoma, -congenital heart disease -hearing impairment, -pigmentary retinopathy; **AND** one or more of the following: -purpura, -hepatosplenomegaly, -jaundice, -microcephaly, -developmental delay, -meningoencephalitis, -radiolucent bone disease.	A suspected case with at least one of the following: detection of rubella-specific immunoglobulin M antibody OR positive rubella-specific immunoglobulin G antibodies whose titre does not drop by at least two fold within a 4 week period OR a specimen that is PCR-positive for rubella virus

Category 2: Written or electronic notification within 7days of diagnosing a case. The case must be notified following laboratory confirmation

CONGENITAL SYPHILIS

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
A condition affecting an infant or child (< 2 years) whose mother had untreated or inadequately treated syphilis. **Early Congenital Syphilis**: may present anytime in infancy or early childhood (< 2 years). An infected infant may be asymptomatic at birth and develop signs 4-8 weeks after birth.	✓ Health care practitioner *(nurse or doctor receiving the laboratory result)* ✓ Laboratory making the diagnosis	Infant or child < 2 years whose mother had **untreated or *inadequately treated syphilis at delivery, regardless of signs in infant**	An infant or child who has a **reactive non-treponemal test for syphilis (RPR) AND any one of the following**: • Any evidence of congenital syphilis on physical examination: hepatosplenomegaly, skin rash, jaundice, anaemia, mucosal lesions, nasal discharge • Any evidence of congenital syphilis on x-ray of long bones: e.g. periostitis, tibial erosions • An elevated cerebrospinal fluid (CSF) white cell count and protein (without other cause) • A reactive cerebrospinal fluid (CSF) venereal disease research laboratory test (VDRL) test • A reactive serum IgM antibody test (e.g. FTA-Abs IgM) OR Stillborn neonate whose mother had **untreated or *inadequately treated syphilis at delivery** *Inadequately treated mother: reactive ante-natal non-treponemal test (RPR or rapid test) AND inadequate penicillin dosing (i.e. **did not receive** at least **1 dose** of benzathine penicillin **more than 30 days before** delivery)	Probable case with confirmatory laboratory tests on placenta/ amniotic fluid/ autopsy material/ exudates from suspicious lesions/ body fluids e.g. nasal discharge, CSF • motile treponemes seen on darkfield microscopy and/or • *Treponema pallidum* DNA positive on PCR

Category 2: Written or electronic notification within 7days of diagnosing a case. The case must be notified following laboratory confirmation

DIPHTHERIA

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
Caused by infection with toxin-producing strains of *Corynebacterium diphtheriae*, *C. ulcerans* or *C. pseudotuberculosis*. Occurs in two forms: the most common form is disease affecting the upper respiratory tract mucosa ('respiratory' diphtheria), and the skin (cutaneous diphtheria). Spread via droplets or direct contact with infected skin lesions or respiratory secretions.	✓ Health care practitioner *(nurse or doctor receiving the laboratory result)* ✓ Laboratory making the diagnosis	A person who presents with an upper-respiratory tract illness characterised by sore throat, low-grade fever AND an adherent membrane of the nose, pharynx, tonsils, or larynx. OR cutaneous diphtheria as described in probable definition.	A person who presents with an upper-respiratory tract illness characterised by sore throat, low-grade fever AND an adherent membrane of the nose, pharynx, tonsils, or larynx; OR A person who has an epidemiological link to a confirmed case, who has respiratory tract symptoms but no membrane; OR A patient with a skin lesion; AND *C. diphtheriae/C. ulcerans/C. pseudotuberculosis* has been isolated from relevant specimens but toxigenicity status has not been confirmed.	Any person with signs and symptoms consistent with diphtheria (respiratory and/or cutaneous) and culture or detection by PCR of *C. diphtheriae* or *C. ulcerans* or *C. pseudotuberculosis* from a clinical specimen which is confirmed to be tox gene positive by PCR or toxin-producing by ELEK testing.

Category 2: Written or electronic notification within 7days of diagnosing a case. The case must be notified following laboratory confirmation

ENTERIC FEVER (TYPHOID OR PARATYPHOID FEVER)

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
	✓ Health care practitioner *(nurse or doctor receiving the laboratory result)* ✓ Laboratory making the diagnosis	Cannot be notified as a clinically suspected case		All specimens: Culture-confirmed Salmonella isolate, biochemically confirmed as Salmonella; biochemically consisitent with *Salmonella Typhi*; serotyping confirmed as *Salmonella Typhi* (O:9; H:d). *Note serological tests have poor sensitivity and specificity in the South African context and should not be used to prove/disprove diagnoses.*

Category 2: Written or electronic notification within 7days of diagnosing a case. The case must be notified following laboratory confirmation

HAEMOPHILUS INFLUENZAE TYPE B

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
Haemophilus influenzae type b (Hib) causes pneumonia, septicaemia, meningitis, epiglottitis, septic arthritis, cellulitis, otitis media, and purulent pericarditis, as well as less common invasive infections such as endocarditis, osteomyelitis, and peritonitis. Infections are clinically indistinguishable from infections caused by other bacteria. Spread by droplets or direct contact with respiratory tract secretions. Asymptomatic carriage occurs.	✓ Health care practitioner *(nurse or doctor receiving the laboratory result)* ✓ Laboratory making the diagnosis	Cannot be notified as a clinically suspected case	Invasive disease such as bacteremia, meningitis, epiglottitis, cellulitis, septic arthritis, pneumonia, empyema, pericarditis or osteomyelitis where the public health physician, in consultation with the physician and microbiologist, considers that Hib disease is the most likely diagnosis	The isolation of *Haemophilus influenzae* type b from a normally sterile site specimen (e.g., blood; cerebrospinal, pericardial or synovial fluid), or a positive Gram stain and latex result, or a positive PCR result.

Category 2: Written or electronic notification within 7days of diagnosing a case. The case must be notified following laboratory confirmation

HEPATITIS A

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
	✓ Health care practitioner *(nurse or doctor receiving the laboratory result)* ✓ Laboratory making the diagnosis	This condition cannot be notified clinically, as it mimics any other cause of jaundice.		The presence of Hepatitis A-specific IgM antibodies(Anti-HAV IgM).

Category 2: Written or electronic notification within 7days of diagnosing a case. The case must be notified following laboratory confirmation

HEPATITIS B

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
Viral infection of the liver. Modes of transmission include perinatal, blood borne (e.g. health-care setting, PWID) and Sexual.	✓ Health care practitioner *(nurse or doctor receiving the laboratory result)* ✓ Laboratory making the diagnosis	-Acute: discrete onset of an acute illness with signs/symptoms of (i) acute infectious illness (e.g. fever, malaise, fatigue) and (ii) liver damage (e.g. anorexia, nausea, jaundice, dark urine, right upper quadrant tenderness, AND/OR raised alanine aminotransferase (ALT) levels more than ten times the upper limit of normal) - Chronic: person not meeting the case definition for acute hepatitis (e.g. person tested in the context of the evaluation of a chronic liver disease, a check-up or a survey)	N/A	1)Acute: -IgM anti-HBc positive, or - IgM anti-HBc +ve AND HBsAg positive 2)Chronic: - HBsAg +ve OR -Dual positive for total anti-HBc AND HBsAg

Category 2: Written or electronic notification within 7days of diagnosing a case. The case must be notified following laboratory confirmation

HEPATITIS C

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
Viral infection of the liver. Main route of transmission is blood borne (e.g. health-care setting, PWID). Perinatal and Sexual transmission rare.	✓ Health care practitioner (nurse or doctor receiving the laboratory result) ✓ Laboratory making the diagnosis	-Discrete onset of an acute illness with signs/symptoms of (i) acute infectious illness (e.g. fever, malaise, fatigue) and (ii) liver damage (e.g. anorexia, nausea, jaundice, dark urine, right upper quadrant tenderness, AND/OR raised alanine aminotransferase (ALT) levels more than ten times the upper limit of normal) - Chronic: person not meeting the case definition for acute hepatitis (e.g. person tested in the context of the evaluation of a chronic liver disease, a check-up or a survey)	N/A	1)Acute: HCV RNA +ve and anti-HCV –ve OR Seroconversion to anti-HCV positive 2)Chronic: HCV RNA +ve OR HCV Ag +ve

Category 2: Written or electronic notification within 7days of diagnosing a case. The case must be notified following laboratory confirmation

HEPATITIS E

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
	✓ Health care practitioner (nurse or doctor receiving the laboratory result) ✓ Laboratory making the diagnosis	This condition cannot be notified cbased on clinical suspiscion		The presence of Hepatitis E-specific IgM antibodies (Anti-HEV IgM).

Category 2: Written or electronic notification within 7days of diagnosing a case. The case must be notified following laboratory confirmation

LEAD POISONING

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
	✓ Health care practitioner (nurse or doctor receiving the laboratory result) ✓ Laboratory making the diagnosis			

Category 2: Written or electronic notification within 7days of diagnosing a case. The case must be notified following laboratory confirmation

LEGIONELLOSIS

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
Disease caused by bacteria from the genus *Legionella* commonly presents with a spectrum of illness ranging from asymptomatic, to severe pneumonia (Legionnaire's Disease), often requiring hospitalisation. Acquired from inhalation of contaminated aerosols.	✓ Health care practitioner (nurse or doctor receiving the laboratory result) ✓ Laboratory making the diagnosis	Any person with clinical/radiological evidence of pneumonia where the public health physician, in consultation with the physician and microbiologist, considers that Legionnaire's disease as the most likely diagnosis.	Any person with clinical/radiological evidence of pneumonia with: 1) *Legionella pneumophila* non-serogroup 1 or other *Legionella* spp. specific antibody response (fourfold or greater rise in specific serum antibody titer).	Any person with clinical/radiological evidence of pneumonia and at least one of the following: 1) Isolation of *Legionella* spp. from a respiratory specimen or any normally sterile site 2) Detection of *Legionella pneumophila* serogroup 1 antigen in urine 3) Detection of *Legionella* spp. nucleic acid in a clinical specimen 4) *Legionella* pneumophila serogroup 1 specific antibody response (fourfold or greater rise in specific serum antibody titer).

Category 2: Written or electronic notification within 7days of diagnosing a case. The case must be notified following laboratory confirmation

LEPROSY

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
	✓ Health care practitioner (nurse or doctor receiving the laboratory result) ✓ Laboratory making the diagnosis	A case of leprosy is defined as any person having one or more of the following • Hypo-pigmented or reddish skin lesion(s) with definitive loss of sensation; • Damage to the peripheral nerves, as demonstrated by loss of sensation and weakness or morbidity of the muscles of hands, feet or face; and		A positive skin-smear for acid-fast bacilli or positive biopsy. (But where laboratory test cannot be conducted, diagnosis is often established from patient 's clinical signs and symptoms).

Category 2: Written or electronic notification within 7days of diagnosing a case. The case must be notified following laboratory confirmation

MATERNAL DEATH (PREGNANCY, CHILDBIRTH AND PUERPERIUM)

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
	✓ Health care practitioner (nurse or doctor receiving the laboratory result)			No laboratory based confirmation

Category 2: Written or electronic notification within 7days of diagnosing a case. The case must be notified following laboratory confirmation

MERCURY POISONING

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
	✓ Health care practitioner (nurse or doctor receiving the laboratory result) ✓ Laboratory making the diagnosis			

Category 2: Written or electronic notification within 7days of diagnosing a case. The case must be notified following laboratory confirmation

PERTUSSIS

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
Highly contagious bacterial respiratory tract disease, caused by *Bordetella pertussis.* It occurs mainly in infants and young children and is transmitted through respiratory secretions.	✓ Health care practitioner (nurse or doctor receiving the laboratory result) ✓ Laboratory making the diagnosis	Any person with an acute cough illness lasting ≥14 days (cough illness of any duration for children <1 year), without an apparent cause plus one or more of the following signs or symptoms: paroxysms of coughing; or inspiratory "whoop"; or post-tussive vomiting.	A suspected case with signs and symptoms consistent with pertussis and confirmed epidemiologic linkage to a laboratory-confirmed case of pertussis in the 21 days before the onset of symptoms.	Any person with signs and symptoms consistent with pertussis and Isolation *of B. pertussis* from a clinical respiratory specimen OR polymerase chain reaction positive for pertussis OR specific antibody response (fourfold or greater rise in specific serum antibody titer).

Category 2: Written or electronic notification within 7days of diagnosing a case. The case must be notified following laboratory confirmation

SOIL TRANSMITTED HELMINTHS

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
	✓ Health care practitioner (nurse or doctor receiving the laboratory result) ✓ Laboratory making the diagnosis			

Category 2: Written or electronic notification within 7days of diagnosing a case.

TETANUS

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
	✓ Health care practitioner (nurse or doctor making the diagnosis)			

Category 2: Written or electronic notification within 7days of diagnosing a case. The case must be notified following laboratory confirmation

Tuberculosis: pulmonary
Tuberculosis: extra-pulmonary
Tuberculosis: multidrug-resistant (MDR-TB)
Tuberculosis: extensively drug-resistant (XDR-TB)

Disease epidemiology	Who must notify	Clinical case definition (Suspected case)	Probable case definition	Confirmed case definition
	✓ Health care practitioner (nurse or doctor receiving the laboratory result) ✓ Laboratory making the diagnosis	Refer to the TB national treatment guidelines for South Africa	Refer to the TB national treatment guidelines for South Africa	Refer to the TB national treatment guidelines for South Africa