Appendix 2

Characteristics of Diseases Studied at BUMC and which may be Studied at BUMC and the Boston-NBL

Appendix 2: Characteristics of Diseases Studied at BUMC and which may be Studied at BUMC and the Boston-NBL

TABLE 1

Characteristics of Primary Diseases That Are Being or Have Previously Been Studied at BUMC, at BSL-2 and BSL-3

Disease	Infectious Agent	Occurrence	Reservoir[2]	Transmission[3]	Incubation Period[4]	Communicable Period[5]
Bacterial Diseases						
Lyme Disease	*Borrelia burgdorferi*	Along the Atlantic coast, concentrated between Massachusetts and Maryland; upper Midwest; and local areas of California and Oregon. Cases reported from 47 states, Canada. Also occurs in Europe and Asia.	Primarily wild rodents.	Primarily ticks of the genus Ixodes.	3-32 days, mean of 7-10 days.	No evidence of person-to-person transmission.
Plague	Yersinia pestis, Yersinia enterocolitica	Wild rodent plague occurs in the western U.S.; large areas of South America; north central, eastern, and southern Africa; central and southeast Asia, and south-eastern Europe near the Caspian Sea; and localized areas in the Russian Federation and Kazakhstan. Recent outbreaks of have occurred in Africa and Asia, and local outbreaks South America.	Wild rodents, rabbits and hares, wild carnivores and domestic cats.	People generally become infected by being bitten by an infected rodent flea or handling an infected animal; rarely by airborne droplets from human patients or household cats with plague pharyngitis or pneumonia.	1-7 days.	Fleas may remain infective for months. Pneumonic plague may be highly communicable under some conditions. Bubonic (swollen lymph nodes) form is rarely transmitted directly.

Appendix 2: Characteristics of Diseases Studied at BUMC and which may be Studied at BUMC and the Boston-NBL

TABLE 1

Characteristics of Primary Diseases That Are Being or Have Previously Been Studied at BUMC, at BSL-2 and BSL-3

Disease	Infectious Agent	Occurrence	Reservoir[2]	Transmission[3]	Incubation Period[4]	Communicable Period[5]
Tuberculosis (TB)	Mycobacterium tuberculosis complex. Includes M. tuberculosis and M. africanum from humans, M. bovis from cattle	Worldwide.	Humans, rarely primates. Possibly diseased cattle, swine, badgers, and other mammals	Coughing or sneezing by people with tuberculosis of the lungs or throat. Rarely transmitted through direct contact with broken skin or mucous membrane. Bovine tuberculosis may be acquired from tuberculosis cattle or unpasturized milk products.	2-10 weeks. Latent (inactive, asymptomatic) infection may persist for a lifetime.	As long as viable tubercle bacilli are being discharged while coughing.
Brucellosis	Brucella melitensis,	Worldwide- high risks are the Mediterranean Basin (Portugal, Spain, Southern France, Italy, Greece, Turkey, North Africa), South and Central America, Eastern Europe, Asia, Africa, the Caribbean, and the Middle East.	Sheep, goats, cows, or camels	The most common way to be infected is by eating or drinking contaminated milk products. Direct person to person rare	8 weeks to 1 year	Unclear
Antibiotic- resistant Staphylococcus infection	Staphylococcus Aureus, Staphylococcal enterotoxin	Worldwide	Humans, rarely animals	Person-to-person	Variable and indefinite. Often 4-10 days.	Variable: as long as purulent lesions continue to drain or the carrier state persists.
Conjunctivitis ("pinkeye")	Chlamydia trachomatis	Worldwide	Humans	Direct contact with infectious eye or nasal discharges, or contact with contaminated towels or clothing.	5-12 days	As long as active lesions are present.

Appendix 2: Characteristics of Diseases Studied at BUMC and which may be Studied at BUMC and the Boston-NBL

TABLE 1

Characteristics of Primary Diseases That Are Being or Have Previously Been Studied at BUMC, at BSL-2 and BSL-3

Disease	Infectious Agent	Occurrence	Reservoir[2]	Transmission[3]	Incubation Period[4]	Communicable Period[5]
Sexually transmitted Chlamydia	*Chlamydia trachomatis*	Worldwide	Humans	Person-to-person transmission through sexual intercourse.	7-14 days.	Unknown
Tularemia	*Francisella tularensis*	Worldwide	Primarily rabbits, and rodents,	Primarily through exposure of aerosols or droplets from rabbits or rodent.	3-14 days	Can remain active in natural moist conditions in the environment for several weeks. No evidence of person-to - person transmission
Cholera	*Vibrio cholerae*	Cholera spread from India in 19th century, currently some outbreaks in Japan and South Pacific; few sporadic cases in North America; recent outbreak in South America	Humans and environmental reservoirs – such as water,	Primarily through ingestion of water contaminated with feces or vomitus of patients; ingestion of food which had been contaminated by dirty water, feces, soiled hands or flies	From a few hours to 5 days; usually 2-3 days	Communicable for the duration of time it is found in stool, usually only a few days after recovery
Salmonellosis	*Salmonella urbana, Salmonella typhimurium*	Worldwide	Wide range of domestic and wild animals, including poultry, swine, cattle, rodents, and pets; also infected humans.	Eating contaminated food (raw or undercooked). Fecal-oral transmission from person to person.	6-72 hours	Extremely variable, throughout the course of infection; usually several days to weeks.
Friedlander's pneumonia	*K .pneumoniae*, K, spp.	Worldwide	Humans, animals	Transmitted through contact with contaminated feces	Not clearly defined	Not directly transmitted
Family Enterobacteriaceae	Enterobacter aerogenes	Worldwide	Soil, water, sewage, intestinal tract of humans and animals, dairy products	Contact of mucous membranes, fecal-oral transmission	Not clearly defined	As long as viable organisms are shed

Appendix 2: Characteristics of Diseases Studied at BUMC and which may be Studied at BUMC and the Boston-NBL

TABLE I

Characteristics of Primary Diseases That Are Being or Have Previously Been Studied at BUMC, at BSL-2 and BSL-3

Disease	Infectious Agent	Occurrence	Reservoir[2]	Transmission[3]	Incubation Period[4]	Communicable Period[5]
Chronic urinary tract infections, bacteremia, pneumonia	*Proteus mirabilis*	Worldwide	Soil, water, sewage and part of normal flora of intestinal tract	Produces infections after leaving normal habitat in intestinal tract	Not clearly defined	Not transmitted person to person
Family Pseudomonadaceae	*Pseudomonas aeruginosa*	Worldwide	Humans, animals, plants	Direct contact with contaminated water	depending on infection; eye infection - 24 to 72 hours	Can be transmitted during course of active infection
Gonorrhea	Neisseria gonorrhoeae	Worldwide	Humans	Mucuous membrane contact	2-7 days	may extend for months if untreated, effective therapy usually ends communicability within hours
Meningococcal meningitis, Meningococcal infection, cerebrospinal fever, meningococcemia	Neisseria meningitidis	Worldwide	Humans	Direct contact, usually droplets	2-10 days, usually 3-4 days	Communicable until meningococci are no longer present in discharges;
Anthrax	Bacillus anthracis	Worldwide	Cattle, sheep, goats, camel, antelopes, and other herbivores	Cutaneous, gastroentestinal, and inhalation exposures. Anthrax is not contagious and can not be transmitted person-to person contact	Symptoms occur within 7 days.	Can live naturally in the soil for many years.

Appendix 2: Characteristics of Diseases Studied at BUMC and which may be Studied at BUMC and the Boston-NBL

TABLE 1

Characteristics of Primary Diseases That Are Being or Have Previously Been Studied at BUMC, at BSL-2 and BSL-3

Disease	Infectious Agent	Occurrence	Reservoir[2]	Transmission[3]	Incubation Period[4]	Communicable Period[5]
Viral Diseases						
Acquired Immuno-deficiency Syndrome (AIDS)	Human immunodeficiency virus (HIV), a retrovirus. Two seroligc types: HIV-1 and HIV-2	Worldwide	Humans	Person-to-person transmission through sexual contact, sharing HIV contaminated needles and syringes, transfusion of infected blood or its components, transplant of infected tissues or organs. Transmission through bodily secretions not yet been reported.	Generally 1-3 months. Time from infection to diagnosis can be < 1 year to 15 years or more.	Unknown, presumed to be throughout life.
Non-HIV retroviral infections e.g., (Adult T-cell leukemia, T-cell lymphosarcoma)	Retroviruses; e.g human T-cell lymphotrophic virus (HTLV-I, HTLV-II)	Japan, Caribbean, Pacific coast of South America, equatorial Africa, southern USA.	Humans	Infection early in life primarily through breast milk. Also through transfer of blood or blood products, IV drug use, or sexual activity.	Exposure through breast milk leads to tumor development in the adult with a peak at age 50.	Throughout infection.
Flu; orthomyxovirus; influenza virus types A, B, and C	Haemophilus influenza	Worldwide	Influenza A virus - humans; swine, horses; domestic and wild avian species, influenza B virus - humans only	By direct contact through droplet infection	Usually 1-4 days	Highly communicable; probably limited to 3-5 days from clinical onset, up to 7 days in young children
Toxins						
Botulism	Botulinum neurotoxin producing species of Clostridium, Clostridium perfringens epsilon	US and worldwide	Bacterial toxin that is produced from contaminated food, canning processes	Not spread person to person, Foodborne, wound, or infant botulinum	6 hrs- 10 days	None

Appendix 2: Characteristics of Diseases Studied at BUMC and which may be Studied at BUMC and the Boston-NBL

TABLE 1

Characteristics of Primary Diseases That Are Being or Have Previously Been Studied at BUMC, at BSL-2 and BSL-3

Disease	Infectious Agent	Occurrence	Reservoir[2]	Transmission[3]	Incubation Period[4]	Communicable Period[5]
	toxin,					
Naturally-found toxin	Conotoxin	Found Worldwide	Cone snail	Not spread person to person, No antidote	Less than 6 hrs- 3-5 days	None
Naturally-found toxin	Ricin	Found Worldwide	Castor bean plant	Not spread person to person, No antidote	Less than 6 hrs- 3-5 days	None
Naturally-found toxin	Tetrodotoxin (T-2 toxin)	Found Worldwide	Found in puffer fish	Not spread person to person, No antidote	15 minutes-24hours	None
Fungal Diseases						
Cryptococcosis, Torulosis, European blastomycosis	Cryptococcus neoformans	Worldwide	Humans; cats, dogs, horses, cows, monkeys and other animals	Inhalation route	Unknown	Not Directly Transmitted person to person
Aspergillus fumigatus, *A. niger*, *A. flavus*, Aspergillosis, Farmer's lung	Aspergillus fumigatus	Worldwide	Nature, soil, hay, food grans	Inhalation of airborne conidia	Variable, few days to weeks	Not Directly Transmitted person to person

1 Reservoir of infection – Any animal, plant, plant, soil, or substance (or combination) in which the infectious agent normally lives and multiplies; and serves as a source of infection
2 Transmission – Mechanism by which an infectious agent is spread from source or reservoir to another person.
3 Incubation period – The time interval between infection and the appearance of the first sign or symptom of the disease.
4 Communicable Period – The time during which and infections agent may be transferred directly from an infected person to another uninfected person.
Source: APHA. 2000. The control of communicable diseases manual (17th edition), J. Chin, editor. American Public Health Association, 800 I Street, NW, Washington, DC 20001-3710

TABLE 2

Characteristics of Primary Diseases which may be Studied at BUMC and NBL BSL-2 and BSL-3 laboratories in addition to those listed in Table 1

Disease	Infectious Agent	Occurrence	Reservoir[2]	Transmission[3]	Incubation Period[4]	Communicable Period[5]
Bacterial Diseases						
Chlamydial Pneumonia	Chlamyid pneumoniae, strain TWAR	Worldwide	Humans; no avian associations, not dogs or cats.	Unknown, possibly direct contact with secretions, spread via particles to which bacteria adhere, and airborne spread.	Unknown, possibly at least 20 days	Unknown but believed to be 8 months or more.
Salmonellosis	Salmonella entericaserovar	Worldwide	Wide range of domestic and wild animals, including poultry, swine, cattle, rodents, and pets; also infected humans.	Eating contaminated food (raw or undercooked). Fecal-oral transmission from person to person.	6-72 hours	Extremely variable, throughout the course of infection; usually several days to weeks.
Streptococcal epidemics and vaccine development	Streptococcus pyogenes	Worldwide	Humans	Person-to-person, often through exposure to large respiratory droplets from an infected patient or carrier, or direct contact.	Short; usually 1-3 days.	10-21 days in untreated and uncomplicated cases. Weeks to months in untreated conditions with purulent discharges.
Psittacosis (Parrot fever)	Chlamydia psittaci	Worldwide	Primarily parakeets, parrots and lovebirds; less often in poultry, pigeons, canaries and sea birds.	Inhaling the agent from desiccated droppings, secretions, and dust from feathers of infected birds.	1-4 weeks.	No person-to-person transmission. Infected birds may shed the agent intermittently, and sometimes continuously for weeks to months.
Endemic Relapsing Fever	Borrelia hermsii	Endemic in the United States	Rodents and soft- bodied ticks	Ticks Onitodoros hermsii	5-15 days.	No person-to-person transmission
Glanders, Malleomyces mallei, Farcy, Malleus; formerly classified with Pseudomonas	Burkholderia mallei (formerly Pseudomonas mallei)	Has disappeared from most regions of the world, particularly Asia and Mediterranean areas	Environmental organism found in soil and water; horses, mules, donkeys	Direct contact with nasal secretions of horses, aerosols of horses	1-14 days	Survives outside host up to 30 days

TABLE 2

Characteristics of Primary Diseases which may be Studied at BUMC and NBL BSL-2 and BSL-3 laboratories in addition to those listed in Table 1

Disease	Infectious Agent	Occurrence	Reservoir[2]	Transmission[3]	Incubation Period[4]	Communicable Period[5]
Melioidosis, Whitmore disease; (formerly Pseudomonas)	Burkholderia pseudomallei	Worldwide distribution, however, found primarily in tropical or subtropical regions, especially in Southeast Asia and northern Australia	Environmental organism found in certain waters and soils; animals include sheep, goats, horses, swine, monkey and rodents	Contact with soil and water from endemic areas	2 days	Person to Person extremely rare
Mycoplasma spp.	Mycoplasma capricolumni M.F38/M. mycoides capri	Worldwide	In nature - soil, water, milk, dust, tissues of domestic animals	Skin or mucous membrane contact with droplets of contaminated animals, soil.	Long incubation period-up to 10 yrs	No evidence of person-to-person transmission
Fungal Diseases						
Coccidioidomycosis, Valley Fever, Desert fever	Coccocidiodesimmitis, C. posadasii	Worldwide	Found naturally in soil	Inhalation of infected soil	1-4 weeks	None, no person-to-person transmission
Viral diseases						
Severe acute respiratory syndrome	SARS-associated coronavirus (SARS-CoV)	Worldwide, concentrated outbreaks in Asia in 2002-2003	Human to human	Close person-to-person contact through respiratory droplets	2-14 days	Patients most contagious in 2nd week, possible up to 10 days after fever disappears

TABLE 2

Characteristics of Primary Diseases which may be Studied at BUMC and NBL BSL-2 and BSL-3 laboratories in addition to those listed in Table 1

Disease	Infectious Agent	Occurrence	Reservoir[2]	Transmission[3]	Incubation Period[4]	Communicable Period[5]
Monkeypox Virus, Smallpox, Alastrim	Variola major, Variola minor	Worldwide Pox Viruses	Non-human primates, humans	Generally, direct and fairly prolonged face-to-face contact is required to spread smallpox from one person to another. Smallpox also can be spread through direct contact with infected bodily fluids or contaminated objects such as bedding or clothing	12-14 days	0-4 days
Hendra Virus	Paramyxoviridae	Australia, Malaysia, Singapore,	Flying foxes (bats of the genus Pteropus)	Exposure to body fluids and excretions of horses infected with Hendra virus	3-14 days	None
Rift Valley Fever Virus	Genus Phlebovirus in the family Bunyaviridae	Regions of eastern and southern Africa where sheep and cattle are raised, but the virus also exists in most countries of sub-Saharan Africa and in Madagascar	Cattle, sheep	Humans can get RVF as a result of bites from mosquitoes and possibly other bloodsucking insects that serve as vectors. Humans can also get the disease if they are exposed to either the blood or other body fluids of infected animals.	0-2 weeks	None

TABLE 2

Characteristics of Primary Diseases which may be Studied at BUMC and NBL BSL-2 and BSL-3 laboratories in addition to those listed in Table 1

Disease	Infectious Agent	Occurrence	Reservoir[2]	Transmission[3]	Incubation Period[4]	Communicable Period[5]
Peripheral T-cell lymphoma) Aleutian mink disease parvovirus	Parvoviruses	Worldwide	Wild and domestic mink and mustelids	Contact with infected animals through biting, urine and respiratory secretions.	Variable; 20-90 days.	Throughout infection
Rabies	Rabies virus; a rhabdovirus of the genus Lyssavirus	Worldwide	Wild and domestic canids, skunks, raccoons, mongooses, and certain bats are primary reservoirs.	Saliva of rabid animal is introduced by a bite or scratch, rarely through a break in the skin or intact mucous membrane.		While theoretically possible, person-to-person transmission has never been documented.
Toxins						
Naturally-found toxin-dinoflagellates, which include Alexandrium tamarense, Gymnodinium catenatum, and Pyrodinium bahamense		Found Worldwide, particularly in North America	Naturally occurring toxin in algae-found in algal blooms	Not spread person to person	Immediate-2 days	None
Natural Poison	Abrin	Found worldwide	Seeds of a plant called the rosary pea or jequirity pea	Not spread person to person, Inhalation, Absorption, and ingestion 3 routes of accidental exposure in environment	Less than 6 hrs- 3 days	None

TABLE 2

Characteristics of Primary Diseases which may be Studied at BUMC and NBL BSL-2 and BSL-3 laboratories in addition to those listed in Table 1

Disease	Infectious Agent	Occurrence	Reservoir[2]	Transmission[3]	Incubation Period[4]	Communicable Period[5]
Rickettsial Diseases						
Q Fever	Coxiella burnetii	Reported from all continents. Endemic in areas where reservoir animals are present. Veterinarians, ranchers, farmers, meatpackers, lab workers are at high risk.	Sheep, cattle, goats, cats, dogs, some wild mammals, birds, ticks are natural reservoirs	Commonly transmitted by airborne coxiellae in dust particles contaminated with birth fluids or excreta from infected animals.	Usually 2-3 weeks.	Direct person-to- person transmission is unlikely. Possibly through contaminated clothing.
Rocky Mountain Spotted Fever	Rickettsia rickettsii	Throughout the U.S, and in Canada, Central and South America.	Ticks, small and medium-sized mammals.	Ticks	3-14 days	No person-to-person transmission.

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2 Transmission – Mechanism by which an infectious agent is spread from source or reservoir to another person.

3 Incubation period – The time interval between infection and the appearance of the first sign or symptom of the disease.

4 Communicable Period – The time during which and infections agent may be transferred directly from an infected person to another uninfected person.

Source: APHA. 2000. The control of communicable diseases manual (17th edition), J. Chin, editor. American Public Health Association, 800 I Street, NW, Washington, DC

TABLE 3

Characteristics of Viral and Bacterial Diseases which may be Studied at NBL, BSL-4 Laboratories

Disease	Infectious Agent	Occurrence	Reservoir[2]	Transmission[3]	Incubation Period[4]	Communicable Period[5]
Tick-borne encephalitdes a. Central European tick-borne encephalitis (CEE Subtype) b. Russian Spring-summer Encephalitis (FE Subtype)	A complex within the flaviviruses; minor antigenic differences exist. Viruses causing these diseases are closely related.	CEE Subtype Predominates in Europe, while FE Subtype has been found predominantly in the far eastern region of the former Soviet Union.	Ticks or ticks and mammals in combination. Rodents and other small mammals and birds serve as sources of tick infections with CEE and FEE Subtypes.	Bite of an infected tick or by consumption of milk from certain infected animals.	7-14 days.	No direct person-to-person transmission.
Congo-Crimean hemorrhagic fever	Congo-Crimean hemmorhagic fever virus (Bunyaviridae, Nairovirus)	Observed in the steppe regions of western Crimea, Kersch Peninsula, Kazakhstan, Uzbekistan, Rostov and Astrakhan regions of Russia, Albania and Bosnia-Herzogovina, Bulgaria, Iraq, Arabian Peninsula, Pakistan, western China, tropical Africa and South Africa.	Hares, birds and Hyalomma ticks. Domestic animals may serve as hosts. Hosts are unkown in tropical Africa.	Bite of an infected adult tick. Direct person-to-person transmission through contact with blood and secretions from infected patients. Infection also associated with butchering infected animals.	1-12 days, usually 1-3 days.	During period of infection. Highly infectious in hospital setting; infections are common following exposure to blood and secretions.

TABLE 3

Characteristics of Viral and Bacterial Diseases which may be Studied at NBL, BSL-4 Laboratories

Disease	Infectious Agent	Occurrence	Reservoir[2]	Transmission[3]	Incubation Period[4]	Communicable Period[5]
Ebola hemorrhagic fever	Ebola virus; a filovirus, related to but antigenically distinct from Marburg virus.	Confirmed cases reported from Africa in the Democratic Republic of the Congo, Republic of the Congo, Gabon, Sudan, Ivory Coast, and Uganda.	Unknown despite extensive studies. Believed to be animal-borne	Person-to-person transmission through direct contact with infected blood secretions, organs or semen. Risk is highest during late stages of illness. Under natural conditions, airborne transmission among humans has not been documented.	2-21 days	As long as blood and secretions contain virus.
Nipah virus encephalitis.	Nipah virus; a paramyxovirus	Malaysia	Maybe fruit bats. Infected pigs may serve as a source of human exposure.	Believed to be by transmitted via aerosols, but transmission efficiency from pigs to humans is low. No documented person-to-person transmission.	Unknown	Unknown

TABLE 3

Characteristics of Viral and Bacterial Diseases which may be Studied at NBL, BSL-4 Laboratories

Disease	Infectious Agent	Occurrence	Reservoir[2]	Transmission[3]	Incubation Period[4]	Communicable Period[5]
Kyasanur Forest disease	Flavivirus belonging to the tickborne encephalitis-louping Ill complex.	Kyasanur Forest of the Shimonga and Kanara districts of Karnataka, India.	Probably rodents, shrews, monkeys, and ticks.	By bite of infective (especially nymphal) ticks; most likely Haemaphysalis spinigera.	3-8 days.	Not directly transmitted from person to person. Infected ticks remains so for life.
South American arenaviral hemorrhagic fevers: a. Argentinian b. Bolivian c. Venezuelan d. Brazilian	Tacaribe complex of arenavirus a. Junín virus. b. Machup virus c. Guanarito virus d. Sabiá virus	a. Argentinian pampas b. Rural northeastern Bolivian c. Venezuelan d. Brazilian	Wild rodents; but unknown for Sabiá virus.	Transmission to humans occurs primarily by inhalation of small particle aerosols derived directly from rodent excreta containing virus, saliva, to body fluids. Virus deposited in the environment may also be infective when ingested or by contact with cuts or abrasions. While uncommon, person-to-person transmission of Machupo virus has been documented in health care and family settings.		

TABLE 3

Characteristics of Viral and Bacterial Diseases which may be Studied at NBL, BSL-4 Laboratories

Disease	Infectious Agent	Occurrence	Reservoir[2]	Transmission[3]	Incubation Period[4]	Communicable Period[5]
Omsk hemorrhagic fever	Flavivirus belonging to the tickborne encephalitis-louping Ill complex.	Forest steppe regions of western Siberia; within the Omsk, Novosibirsk, Kurgan and Tjumen regions.	Rodents, including muskrat, and ticks.	By bite of infective (especially nymphal) ticks; most likely Dermacentor reticulates and D. marginatus. Direct transmission from muskrat to human occurs, with disease in families of muskrat trappers.	3-8 days.	Not directly transmitted from person to person. Infected ticks remains so for life.
Lassa fever	Lassa virus; an arenavirus, serologically related to lymphotocytic choriomeningitis, Machupo, Junín, Guanarito and Sabiá viruses.	Sierra Leone, Liberia, Guinea and regions of Nigeria.	Wild rodents; in west Africa, the Mastomys species complex.	Primarily through aerosol or direct contact with excreta of infected rodents deposited on surfaces such as floors and beds or in food and water. Direct contact with blood through inoculation with contaminated needles and pharyngeal secretions or urine of infected patient. Infections can also spread by sexual contact.	6-21 days.	During acute febrile phase when virus is present in the throat. Virus may be excreted in urine of patients for 3-9 weeks from onset of illness.

TABLE 3

Characteristics of Viral and Bacterial Diseases which may be Studied at NBL, BSL-4 Laboratories

Disease	Infectious Agent	Occurrence	Reservoir[2]	Transmission[3]	Incubation Period[4]	Communicable Period[5]
Marburg fever	Marburg virus; a filovirus, related to but antigenically distinct from Ebola virus.	Zimbabwe, Kenya, Democratic Republic of the Congo. Six cases in Germany and Yugoslavia in 1967 followed exposure to African green monkeys from Uganda.	Unknown despite extensive studies. Believed to be animal-borne	Person-to-person transmission through direct contact with infected blood, secretions, organs or semen. Risk is highest during late stages of illness. Under natural conditions, airborne transmission among humans has not been documented	3-9 days	As long as blood and secretions contain virus
Herpes B Virus	Cercopithecine herpesvirus	Worldwide	Macaque non-human primates	Primate to Human transmission normally through animal bite or contact with body fluids into mucous membranes or open wound	1-4 weeks	Macques need to be treated with Universal precautions, as many contain the virus but do not show symptoms. Once primate is B Virus +, will be for life, all blood and secretions must be treated as if containing virus.

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