

Mycoplasma spp. except *M. mycoides* and *M. agalactiae* which are restricted animal pathogens (See Appendix B–V)

Neisseria gonorrhoea,* *N. meningitidis**

Nocardia asteroides, *N. brasiliensis*, *N. otitiscaviarum*, *N. transvalensis*

Rhodococcus equi

Salmonella spp. and serotypes including *S. arizonae*, *S. choleraesuis*, *S. enteritidis*, *S. gallinarum-pullorum*, *S. meleagridis*, *S. paratyphi*, A, B, C, *S. typhi**, *S. typhimurium*,

Shigella spp.* and serotypes including *S. boydii*, *S. dysenteriae*, Type 1, *S. flexneri*, *S. sonnei*

Sphaerophorus necrophorus

Staphylococcus aureus

Streptobacillus moniliformis

Streptococcus spp. including *Streptococcus pneumoniae*, *S. pyogenes*

Treponema pallidum, *T. carateum*

Vibrio cholerae, *V. parahemolyticus*, *V. vulnificus*

Yersinia enterocolitica, *Y. pestis**

Appendix B–III–B–2. Risk Group 2—Fungal Agents³

Blastomyces dermatitidis

Cladosporium bantianum, *C. (Xylohypha) trichoides*

*Cryptococcus neoformans*⁴

Dactylaria galopava (*Ochroconis gallopavum*)

Epidermophyton spp.

Exophiala (Wangiella) dermatitidis

Fonsecaea pedrosoi

Microsporium spp.

Paracoccidioides brasiliensis

Penicillium marneffei

Sporothrix schenckii

Trichophyton spp.

Appendix B–III–B–3. Risk Group 2—Parasitic Agents

Ancylostoma spp., human hookworms including *A. duodenale*, *A. ceylanicum*

Ascaris spp. including *Ascaris lumbricoides* suum

Babesia spp. including *B. divergens*, *B. microti*

Brugia spp. filaria worms including *B. malayi*, *B. timori*

Coccidia spp.

Cryptosporidium spp. including *C. parvum*

Cysticercus cellulosae (hydatid cyst, larva of *T. solium*)

Echinococcus spp. including *E. granulosus*, *E. multilocularis*, *E. vogeli*

Entamoeba histolytica

Enterobius spp.

Fasciola spp. including *F. gigantica*, *F. hepatica*

Giardia spp. including *G. lamblia*

Heterophyes spp.

Hymenolepis spp. including *H. diminuta*, *H. nana*

Isospora spp.

Leishmania spp. including *L. braziliensis*, *L. donovani*, *L. ethiopia*, *L. major*, *L. mexicana*, *L. peruviana*, *L. tropica*

Loa loa filaria

Microsporidium spp.

Naegleria fowleri

Necator spp. human hookworm, including *N. americanus*

Onchoerca spp. filaria including, *O. volvulus*

Plasmodium spp. including simian species, *P. cynomologi*, *P. falciparum*, *P. malariae*, *P. ovale*, *P. vivax*

Sarcocystis spp. including *S. suis hominis*

Schistosoma spp. including *S. haematobium*, *S. intercalatum*, *S. japonicum*, *S. mansoni*, *S. mekongi*

Strongyloides spp. including *S. stercoralis*

Taenia solium

Toxocara spp. including *T. canis*

Toxoplasma spp. including *T. gondii*

Trichinella spiralis

Trypanosoma spp. including *T. brucei* *brucei*, *T. brucei gambiense*, *T. brucei rhodesiense*, *T. cruzi*

Wuchereria bancrofti (filaria)

Appendix B–III–B–4. Risk Group 2—Viruses and prions (See Tables 3 and 4)

Adenoviruses-human, all types

Arboviruses (See Table 3)

Arenaviruses (See Table 3)

Bunyamwera virus

Coronaviruses

Coxsackie A and B viruses

Creutzfeldt-Jacob disease agent (prion)

Echoviruses—all types

Encephalomyocarditis virus (EMC)

Encephalomyelitis viruses^{5*} (See Table 3)

Hepatitis A, B*, C*, D, E viruses

Herpesviruses* including Cytomegalovirus, Epstein Barr, Herpes simplex types 1 and 2 and Herpes zoster, except Herpesvirus simiae (Monkey B virus) which is in Risk Group 4

Human Immunodeficiency Virus (HIV) all serotypes

Human T-cell lymphotropic viruses* (HTLV) types 1 and 2.

Influenza viruses

Kuru (prion)

Lymphocytic choriomeningitis virus* (except neurotropic strains)

Lymphogranuloma venereum agent

Measles virus

Molluscum contagiosum virus

Mumps virus

Orf virus

Papovaviridae including human papilloma viruses

Parainfluenza virus

Paravaccinia virus

Polioviruses—all types, wild and attenuated

Poxviruses⁶—all types such as Cowpox**, Monkeypox** or Vaccinia**, Camelpox, Milker's node virus, Molluscum contagiosum virus, Orf, Rabbitpox, Tanapox and Yabapox, with the exception of Alastrim, Smallpox, and Whitepox (See Appendix B VI–H)

Rabies virus⁷—all strains, including fixed/attenuated virus, except Rabies street virus

Reoviruses all types

Respiratory syncytial virus

Rhinoviruses all types

Rubella virus

Simian viruses all types including simian immunodeficiency virus*, except

Herpesvirus simiae (Monkey B virus) and Marburg virus which are in Risk Group 4

Transmissible Spongiform Encephalopathies (TME)-prions (Creutzfeldt-Jacob; Kuru)

Vesicular Stomatitis Virus, lab adapted strains: VSV-Indiana, San Juan and Glasgow

Appendix B–III–B–5. Risk Group 2—Moderate Risk Oncogenic Viruses (See Appendix B–VI–G)

Adenovirus

Adenovirus 2—Simian virus 40 (Ad2–SV40)

Epstein-Barr virus (EBV)

Feline leukemia virus (FeLV)

Feline sarcoma virus (FeSV)

Gibbon leukemia virus (GaLV)

Herpesvirus (HV) ateles

Herpesvirus (HV) saimiri

Papovaviridae including human papilloma viruses

Simian sarcoma virus (SSV)–1

Yabapox virus

Appendix B–III–C. Risk Group 3—Agents

Indigenous or exotic agents which may cause serious or potentially lethal disease as a result of exposure by the inhalation route. Agents involving special hazards to laboratory personnel or agents derived from outside the

³ When “spp” follows the name of a genus, or “serotype” follows a species, only those species or serotypes known to be pathogenic to healthy human adults are to be included in this list.

⁴ Risk Group 2 agent for which droplets/aerosols are handled in a Biological Safety Cabinet (BSC).

⁵ Risk Group 2 Viruses for which droplets/aerosols are handled with BL 3 practices.

⁶ All types with double asterisk can be handled at BL2 in a BSC by immunized personnel.

⁷ Rabies virus may be handled at BL 2 by immunized personnel using a BSC.