

Table of Biosafety Levels for Biological Agents

The Office of Laboratory Safety follows the categorizing of infectious agents into levels as described in Biosafety in Microbiological and Biomedical Laboratories (BMBL), 5th edition, written and published by the Centers for Disease Control (CDC) and NIH. The descriptions of biosafety levels (BSL) 1 – 4 parallel those in the NIH Guidelines for research involving recombinant DNA. The BSL categories are divided up by risk of disease combined with availability of preventive and therapeutic treatments. The table below contains a list of agents and their categories. An asterisk (*) indicates select agents.

Bacterial Agent	BSL
<i>Actinobacter calceticus</i>	2
<i>Actinobacillus</i> sp.	2
<i>Actinomyces</i> sp.	2
<i>Aeromaonas</i> sp.	2
<i>Arachnida propionica</i>	2
<i>Bacillus alvei</i>	2
<i>Bacillus anthracis</i> *	2
<i>Bacteroides</i> sp.	2
<i>Bartonella</i> sp.	2
<i>Bordetella</i> sp.	2
<i>Bordetella pertussis</i>	2
<i>Borrelia</i> sp.	2
<i>Brucella</i> sp.*	2/3
<i>Campylobacter fetus</i> var. <i>jejuni</i>	2
<i>Camplobacter</i> sp.	2
<i>Chlamydia psittaci</i>	2
<i>Chlamydia pneumoniae</i>	2/3
<i>Chlamydia trachomatis</i>	3
<i>Clostridium botulinum</i> *	2/3
<i>Clostridium tetani</i>	2
<i>Corynebacterium diphtheriae</i>	2
<i>Corynebacterium equi</i>	2
<i>Corynebacterium haemolyticum</i>	2
<i>Corynebacterium pseudotuberculosis</i>	2
<i>Corynebacterium pseudotuberculosis</i>	2
<i>Corynebacterium pseudotuberculosis</i>	2
<i>Corynebacterium renale</i>	2
Enterobacteriaceae all other	2
<i>Erysipelothrix rhusiopathiae</i>	2
<i>Escherichia coli</i>	2
<i>Escherichia coli</i> K12 derivative	1
<i>Francisella tularensis</i> *	2/3
<i>Fusobacterium</i> sp.	2
<i>Haemophilus</i> sp.	2
<i>Klebsiella</i> sp.	2
<i>Legionella pneumophila</i>	2/3
<i>Leptospira interrogans</i> all servars	2
<i>Listeria</i> sp.	2
<i>Moraxella</i> sp.	2
<i>Mycobacterium avium</i>	2
<i>Mycobacterium bovis</i>	3
<i>Mycobacterium leprae</i>	2
<i>Mycobacterium</i> sp.	2
<i>Mycobacterium tuberculosis</i>	2/3
<i>Mycoplasma</i> sp.	2
<i>Neisseria gonorrhoeae</i>	2/3
<i>Neisseria meningitidis</i>	2/3
<i>Nocardia</i> sp.	2

Pasteurella sp.	2
Pseudomonas mallei	2/3
Neisseria gonorrhoeae	2/3
Pseudomonas testosterone	2
Rotococcus (Coryne.) equi	2
Salmonella sp.	2
Salmonella typhi	2/3
Shigella sp.	2
Staphylococcus sp.	2
Streptococcus sp.	2
Streptocacillus moniliformis	2
Streptomyces somaliensis	2
Treponema pallidum	2
Vibrio sp.	2
Yersinia pestis*	2/3
Fungal Agent	BSL
Blastomyces dermatitides	2
Coccidioides immitis*	2/3
Cryptococcus neoformans	2
Epidermophyton – pathogenic sp.	2
Histoplasma capsulatum	2/3
Microsporium – pathogenic sp.	2
Paracoccidioides brasiliensis	2
Sporothrix schenckii	2
Trichophyton – pathogenic sp.	2
Candida albicans	2
Miscellaneous Molds	2
Parasitic Agent	BSL
Anaplasma sp.	2
Ascaris sp.	2
Coccidia sp.	2
Cryptosporidia sp.	2
Echinococcus Granulosus	2
Ehrlichia sp.	2
Entamoeba sp.	2
Enterobius sp.	2
Fasciola sp.	2
Giardia sp.	2
Haemobartonella sp.	2
Hymenolepsis nana	2
Leishmania sp.	2
Leukocytozoon sp.	2
Naegleria sp.	2
Plasmodium sp.	2
Sarcocystis sp.	2
Schistosoma sp.	2
Strongyloides sp.	2
Taenia solium	2
Toxocara canis	2
Toxoplasma sp.	2
Trichinella spiralis	2
Trypanosoma sp.	2
Rickettsial Agent	BSL
Coxiella burnetii*	2/3
Rickettsia akari	2/3
Rickettsia australis	2/3
Rickettsia canada	2/3
Rickettsia conorii	2/3
Rickettsia prowazekii*	2/3
Rickettsia rickettsii*	2/3
Rickettsia siberica	2/3
Rickettsia tsutsugamushi	2/3

Rickettsia typhi (R. mooseri)	2/3
Rochalimaea quintana	2
Rochalimaea vinsonii	2
Spotted Fever Group – other	2/3
Viral Agent	BSL
Adenoviruses	2
Adenoviruses – animal – all	2
Aleutian Disease Virus	2
Arboviruses – certain	2
Arboviruses – certain	3
Arboviruses – certain	4
Arenaviruses – certain	3
Arenaviruses – certain	4
Avian Erthyroblastosis Virus	2
Avian Leucosis Virus	2
Avian Lymphomatosis Virus	2
Avian Myeloblastosis Virus	2
Bovine Encephalomyelitis Virus	2
Bovine Leukemia Virus	2
Bovine Respiratory Syncytial Virus	2
Bovine Rhinotracheitis (IBR)	2
Cache Valley Virus	2
Canine Hepatitis Virus	2
Canine Distemper Virus	2
Caprine Arthritis	2
Coxsackie A & B Viruses	2
Cytomegaloviruses	2
Encephalomyelitis Virus*	2
Echovirus	2
Dengue Virus	2
Encephalomyocarditis Virus	2
Epidemic Diarrhea Infant Mice	2
Epstein-Barr Virus	2
Feline Leukemia Virus	2
Feline Sarcoma Virus	2
Filoviruses	2
Flanders Virus	2
Gibbon Ape Lymphosarcoma	2
Hart Park Virus	2
Hemorrhagic Fever Agents*	2
Hepatitis A Virus, Hepatitis E Virus	2
Hepatitis B Virus, Hepatitis C Virus, Hepatitis D Virus	2
Herpesvirus – other	2
Herpesvirus ateles	2
Herpesvirus saimir	2
Herpesvirus Simiae (B-virus)	3
Human Herpesviruses	2
Hog Cholera Virus	2
Human T-Cell Leukemia Virus I & II	2
Infectious Bronchitis Virus	2
Influenza Virus	2
Influenza Virus Virulent Avian	3
K (Rate) Virus	2
Lactic Dehydrogenase Elevating	2
Langat Virus	2
Laryngotracheitis Virus	2
Lassa Virus*	4
Low Risk Oncogenic Viruses	2
Lymphocytic Choriomeningitis Virus	2/3
Marburg Virus*	4
Measles Virus	2
Meningopneumonitis Virus	2

Mouse Encephalomyelitis Virus	2
Mouse Hepatitis Virus	2
Mouse Leukemia Virus	2
Mouse Pneumonia Virus	2
Mumps Virus	2
Myxomatosis Virus	2
Newcastle Disease Virus	2
Newcastle Disease Virus (VVND)	2
Non-Defective Adenovirus 2SV40 HYB	2
Papilloma Virus Shope	2
Parainfluenza Virus	2
Poliovirus – all types	2
Polyoma Virus	2
Poxvirus alastrim	2
Poxvirus monkey pox	3
Poxvirus – Smallpox*	
Poxvirus sp.	2
Pseudorabies Virus	2
Rabies Virus	2/3
Reovirus sp.	2
Respiratory Syncytial Virus	2
Retroviruses, including HIV & SIV	2/3
Rhinovirus sp.	2
Rous Sarcoma Virus	2
Rubella Virus	2
Simian Virus – other	2
Simian T-Cell Leukemia Virus	2
Sindbis Virus	2
Slow Viruses	2
Tensaw Virus	2
Tick-Borne Encephalitis Complex	4
Transmissible Spongiform Encephalopathies (Creutzfeldt-Jakob, kuru, and related agents)	2
Turlock Virus	2
Vaccinia Virus	2
Venezuelan Equine Encephalitis*	3
Vesicular Stomatitis – lab adapted	2
Vesicular Somatitis Virus	3
Woolly Monkey Fibrosarcoma	3
Yaba Virus	2
Yellow Fever Virus 17D Strain*	2
Yellow Fever Virus Except 17D*	3