

Risk Groups: Viruses

BL = Biosafety Level; RG = Risk Group; HP = Human Pathogen; AP = Animal Pathogen; SA = [Select Agent](#); V = Vaccine available;

X = See [Section VII of Biosafety in Microbiological and Biomedical Laboratories](#) for more details on viral classifications.

	NAME	VIRAL GROUP	COMMENTS	BL CDC	RG NIH	RG CANADA	HP	AP	SA
1.	LaCrosse virus	X-Arboviruses		2 arbovirus table	2 arbovirus table				
2.	Langat virus	X-Arboviruses		2 arbovirus table	2 arbovirus table				
3.	Lassa fever virus	Arenaviruses		4	4	4	+		+
4.	Lentiviridae , except HIV-1 and HI	Retroviridae				2			
5.	Looping ill , TBE	Flaviviridae/ Flavivirus (Grp B Arbovirus)		3 arbovirus table	3 arbovirus table	4 implied	+	+	
6.	Lucke (frog) virus	Viral vector/ Animal virus							
7.	Lumpy skin disease virus								+
8.	Lymphocytic choriomeningitis (neurotropic) virus	Arenaviruses	neurotropic strains	2/3	3	3	+	+	
9.	Lymphocytic choriomeningitis virus	Arenaviruses	other viscerotropic (Canada:lab adapted)	2	2	2	+	+	
10.	Machupo virus (South American hemorrhagic fever virus)	Arenaviruses		4	4	4	+		+
11.	Malignant catarrhal fever								+
12.	Marburg virus	Filoviridae		4	4	4	+	+	+
13.	Marek's disease virus	Herpesviridae/ Animal virus vector			1 (vector)			+	
14.	Mason-Pfizer monkey virus	Viral vector/ Animal retrovirus			1				
15.	Mayaro virus	Togaviridae/ Alphavirus (Grp A Arbovirus)		3 arbovirus table	3 arbovirus table		+		

16.	Measles virus	Paramyxoviridae/ Morbillivirus			2	2 implied	+		
17.	Menangle virus	Paramyxoviridae		3+					+
18.	Middelburg	X-Arboviruses		3 arbovirus table	3 arbovirus table				
19.	Milker's node virus	Poxviridae	also Pseudocowpox virus	2 implied	2	2 implied	+	+	
20.	Molluscum contagiosum virus	Poxviridae		2 implied	2	2 implied	+		
21.	Monkeypox virus	Poxviridae/ Orthopoxvirus		2 V	3	4	+	+	+
22.	Mopeia virus (and other Tacaribe viruses)	Arenaviruses		3 arbovirus table	3 arbovirus table		+		
23.	Morbillivirus, except Rinderpest	Paramyxoviridae/ Morbillivirus				2	+	+	
24.	Mouse mammary tumor virus	Viral vector/Animal retrovirus			1				
25.	Mucambo virus	Togaviridae/ Alphavirus (Grp A Arbovirus)		3 arbovirus table	3 arbovirus table		+		
26.	Mumps virus	Paramyxoviridae/ Paramyxovirus			2	2 implied	+		
27.	Murine cytomegalovirus	Herpesviridae/ Animal virus vector			1				
28.	Murine leukemia virus	Viral vector/ Animal retrovirus			1			+	
29.	Murine sarcoma virus	Viral vector/ Animal retrovirus			1			+	
30.	Murray Valley encephalitis (Australia encephalitis)	Flaviviridae/ Flavivirus (Grp B Arbovirus)	(Australian encephalitis)	3 arbovirus table	3 arbovirus table	3	+		
31.	Nairobi Sheep Disease	Bunyaviridae/ Nairovirus	USDA Restricted	3 arbovirus table	Restricted		+	+	
32.	Nariva, Negishi	X-Arboviruses		3 arbovirus table	3 arbovirus table				
33.	Ndumu	Togaviridae/ Alphavirus (Grp A Arbovirus)		3 arbovirus table	3 arbovirus table		+	+	
34.	New Minto,	X-Arboviruses		3	3				

	Nodamura, Northway			arbovirus table	arbovirus table				
35.	Newcastle Disease virus	Paramyxoviridae/ Paramyxovirus			2	2 implied		+	+
36.	Nipah and Hendra complex viruses	Equine morbillivirus		3+					+
37.	Norwalk virus	Calciviridae			2 implied	2	+		
38.	O'Nyong-Nyong virus	Togaviridae/ Alphavirus (Grp A Arbovirus)		2 arbovirus table	2 arbovirus table	2	+		
39.	Omsk (hemorrhagic fever) TBE	Flaviviridae/ Flavivirus (Grp B Arbovirus)	hemorrhagic fever	4	4	4	+		+
40.	Oncornavirus B	Retroviridae/ Oncovirinae				2			
41.	Oncornavirus C, except HTLV I and II	Retroviridae/ Oncovirinae				2			
42.	Orbiviruses	Reoviridae			2	2			
43.	Orf virus	Poxviridae/ Parapoxvirus		2 implied	2	2 implied	+	+	
44.	Oropouche virus	Bunyaviridae/ Bunyavirus Group		3 arbovirus table	3 arbovirus table	2 implied	+		
45.	Other bunyaviridae known to be pathogenic	Bunyaviridae				2 implied			
46.	Other calciviridae	Calciviridae			2	2			
47.	Other flaviviruses known to be pathogenic	Flavivirus							
48.	Other hantaviruses	Bunyaviridae/ Hantaviruses	epidemic nephrosis virus		3	3			
49.	Other known alphaviruses	Togaviridae/ Alphavirus (Grp A Arbovirus)							
50.	Other pathogenic orthopoxviruses not in RG 2 or 4	Poxviridae/ Orthopoxvirus							
51.	Ouango, Oubangui	X-Arboviruses		3					
52.	Papillomaviruses (human)	Papovaviridae			2	2 all isolates	+		
53.	Parainfluenza virus Type 3, SF4 strain	Paramyxoviridae/ Paramyxovirus				2 implied			
54.	Parainfluenza viruses	Paramyxoviridae/ Paramyxovirus	Types 1 to 4		2 (Types 1-4)	2 implied	+	+	
55.	Paramushir, Piry	X-Arboviruses		3	3 arbovirus				

				arbovirus table	table				
56.	Paravaccinia virus	Poxviridae		2 implied	2	2 implied			
57.	Parvovirus (human)	Parvoviridae	B19		2 (B19)	2 all isolates	+		
58.	Peste des petits ruminants								+
59.	Plum pox potyvirus								+
60.	Polioviruses	Picornoviridae/ Enterovirus		2 V	2 (all types, wild and attenuated)	2 (enterovirus)	+		
61.	Polyomavirus, BK and JC viruses	Papovaviridae				2 Polyoma all isolates	+		
62.	Powassan	Flaviviridae/ Flavivirus (Grp B Arbovirus)		3 arbovirus table	3 arbovirus table	3	+	+	
63.	Prospect Hill virus	Bunyaviridae/ Hantaviruses		2 arbovirus table	2 arbovirus table		+		
64.	Pseudorabies virus	Herpesviridae/ Alphaherpesviridae				2		+	
65.	Puumala virus	Bunyaviridae/ Hantaviruses		3 arbovirus table	3 arbovirus table		+		
66.	Rabbitpox virus (vaccinia variant)	Poxviridae		2	2	2 implied	+	+	
67.	Rabies virus	Rhabdoviridae/ Lyssavirus	fixed virus is 2, street virus, 3	2 V /3	2/3	3 street, 2 (fixed)	+	+	
68.	Rat leukemia virus	Viral vector/ Animal retrovirus			1				
69.	Razdan	X-Arboviruses		3 arbovirus table	3 arbovirus table				
70.	Reoviruses	Reoviridae			2	2 Orthoreovirus, types 1-3			
71.	Respiratory syncytial virus	Paramyxoviridae/ Pneumovirus			2	2 implied	+	+	
72.	Rhadinovirus, except H. ateles and	Herpesviridae/ Rhadinovirus				2			

	H. saimiri								
73.	Rhadinovirus, except H.ateles,H. saimiri	Herpesviridae				2			
74.	Rhinovirus	Picornaviridae/ Rhinoviruses	Bovine, Equine, Human		2 (all types)	2 all isolates	+	+	
75.	Rift Valley Fever, (Zinga virus)	Bunyaviridae/ Phleboviruses	2, vaccine strain MP-12; Grp C Bunyaviridae	3 Zinga	3 (MF12 vaccine strain,2)	3	+	+	+
76.	Rinderpest virus								+
77.	Rochambeau	X-Arboviruses		3 arbovirus table	3 arbovirus table				
78.	Rocio	Flaviviridae/ Flavivirus (Grp B Arbovirus)		3 arbovirus table	3 arbovirus table		+		
79.	Ross River virus	Togaviridae/ Alphavirus (Grp A Arbovirus)		2 arbovirus table	2 arbovirus table	2	+		
80.	Rotavirus (human)	Reoviridae			2f	2 all isolates	+	+	
81.	Rubivirus (Rubella)	Togaviridae/ Rubivirus			2	2	+		
82.	Russian spring-summer encephalitis, TBE	Flaviviridae/ Flavivirus (Grp B Arbovirus)		4	4	4	+		+
83.	Sabia (South American hemorrhagic fever virus)	Arenaviruses		4		4			+
84.	Sagiyama	X-Arboviruses		3 arbovirus table	3 arbovirus table				
85.	Salanga, Santa Rosa, Saumarex Reef	X-Arboviruses		3 arbovirus table	3 arbovirus table				
86.	Sammarez Reef	Flaviviridae/ Flavivirus (Grp B Arbovirus)							
87.	Sandfly fever virus	Bunyaviridae/ Phleboviruses		2 arbovirus table	2 arbovirus table	2	+		
88.	Scrapie	Unconventional agents prions:				2		+	
89.	Semliki Forest virus	Togaviridae/ Alphavirus (Grp A Arbovirus)	most recombinant activities BL2	3 arbovirus table	3 arbovirus table	2	+		
90.	Sendai virus (murine	Paramyxoviruses/							

	parainfluenza virus type 1)	Parainfluenza viruses							
91.	Seoul virus	Bunyaviridae/ Hantaviruses		3 arbovirus table	3 arbovirus table		+		
92.	Sepik, Slovakia, Spondweni	X-Arboviruses		3 arbovirus table	3 arbovirus table				
93.	Sheep pox virus								+
94.	Shope papilloma virus	Papovavirus/ Animal virus vector			1			+	
95.	Simian immunodeficiency virus	Retroviridae/ Lentiviridae		2; 2+; 3	3			+	
96.	Simian sarcoma virus, SSV-1	Retroviridae						+	
97.	Simian virus 40 (SV40)	Papovaviridae/ Animal virus vector			1			+	
98.	Sin nombre virus	Bunyaviridae/ Hantaviruses	hantavirus pulmonary syndrome	3		3	+		
99.	Sindbis virus	Togaviridae/ Alphavirus (Grp A Arbovirus)		2 arbovirus table	2 arbovirus table	2	+	+	
100.	St. Louis encephalitis	Flaviviridae/ Flavivirus (Grp B Arbovirus)		3 arbovirus table	3 arbovirus table	3	+	+	
101.	Subsclerosing pancencephalitis	Paramyxoviridae							
102.	Swine vesicular disease virus								+
103.	Tacaribe complex	Arenaviruses		2	2	2 Tamiami, Tacribe, Pinchinde	+		
104.	Tamdy, Telok Forest, Tiacotalpan	X-Arboviruses		3 arbovirus table	3 arbovirus table				
105.	Tanapox	Poxviridae	see Yabapox	2	2	2 implied			
106.	Tensaw virus	Bunyaviridae/ Bunyavirus Group		2 arbovirus table	2 arbovirus table	2 implied			
107.	Thetalympocrypto virus	Herpesviridae/ Animal virus vector				2 all isolates			
108.	Tick-borne encephalitis	Flaviviridae/ Flavivirus (Grp B)		4					+

	complex	Arbovirus)							
109.	Tick-borne orthomyxoviridae, TBE	Orthomyxoviridae	Dhori & Thogoto (EC)	4	4 (Dhori and Thogoto)		+		
110.	Tocio	X-Arboviruses		3 arbovirus table	3 arbovirus table				
111.	Tonate virus	Togaviridae/ Alphavirus (Grp A Arbovirus)		3 arbovirus table	3 arbovirus table		+		
112.	Toroviridae	Toroviridae							
113.	Toscana virus	Bunyaviridae/ Phleboviruses		2 arbovirus table	2 arbovirus table	2	+		
114.	Turlock virus	X-Arboviruses		2	2 arbovirus table				
115.	unassigned herpesviruses HHV 7, HHV8	Herpesviridae							
116.	Vaccinia virus	Poxviridae/ Orthopoxvirus		2 V	2	2 implied	+	+	
117.	Variola (major and minor) virus	Poxviridae		R	Restricted	4			+
118.	Venezuelan equine encephalomyelitis	Togaviridae/ Alphavirus (Grp A Arbovirus)	2, vaccine strain, TC-83	3	3, (2 for vaccine TC-83)	3 (2, TC-83)	+	+	+
119.	Vesicular stomatitis virus	Rhabdoviridae	Lab adapted: Indiana, San Juan, Glasgow, Alagoas	3 (exotic, Piry)	3, 2, lab adapted strains	2 (Piry,3)	+	+	+ exotic
120.	Wesselsbron virus	Flaviviridae/ Flavivirus (Grp B Arbovirus)		3 arbovirus table	3 arbovirus table		+	+	
121.	West Nile fever virus	Flaviviridae/ Flavivirus (Grp B Arbovirus)		3 arbovirus table	3 arbovirus table		+	+	
122.	Western equine encephalomyelitis	Togaviridae/ Alphavirus (Grp A Arbovirus)		2 ,V	2,V	3	+	+	
123.	Whitepox (Variola)	Poxviridae		R	Restricted		+		
124.	Yabapox virus (Tana and Yaba)	Poxviridae		2	2	2 implied	+	+	
125.	Yellow fever virus (vaccine strain 17D)	Flaviviridae/ Flavivirus (Grp B Arbovirus)	2 see wild type	2	2	2	+		

			strain						
126.	Yellow fever virus, wild type	Flaviviridae/ Flavivirus (Grp B Arbovirus)	3 V see vaccine strain 17D	3 HEPA- exhaust all air	3	3	+		
127.	Zinga (See Rift Valley Fever)	Bunyaviridae/ Phleboviruses	see Rift Valley Fever						

(b)	Hepatitis D virus is pathogenic in workers only in the presence of simultaneous or secondary infection caused by hepatitis B virus. Vaccination against hepatitis B virus will therefore protect workers who are not affected by hepatitis B virus against hepatitis D virus (Delta).
(d)	Recommended for work involving direct contact with these agents