

ID	Genus	Species	Comments	BL	RG	RG	RG	RG	RG	HP	AP	
				BMBL-93 CDC	NIH rDNA-96	LCDC-96 (Canada)	EU-96	Belgium-97 Annex VIII	Australia-95			
1	Acinetobacter	baumannii	was Herellea vaginicola, A. calcoaceticus ssp. anitratus		2					2 implied	+	
2	Acinetobacter	lwoffii	formerly Mima polymorpha							2 implied	+	
3	Actinobacillus	actinomycetem-comiana	genus Hemophilus		2 implied	implied	2			2 implied	+	
4	Actinobacillus	spp	EC-Haemophilus actinomycetemcomitans		2	2	see 1 spp listed			2	+	
5	Actinomadura	madurae					2	2			+	
6	Actinomadura	pelletieri					2	2			+	
7	Actinomyces	bovis						2		2 implied		+
8	Actinomyces	gerencseriae					2	2		2 implied	+	
9	Actinomyces	israelii					2	2		2 implied	+	
10	Actinomyces	naeslundii								2 implied		
11	Actinomyces	pyogenes	was Corynebacterium		2	2 (as Corynebacterium)	2	2		2 implied	+	+
12	Actinomyces	spp					2	2		2	+	+
13	Aeromonas	hydrophilia			2			2		2 implied	+	+
14	Aeromonas	punctata								2 implied		
15	Aeromonas	spp.								2	+	
16	Afpia	spp								2		
17	Amycolata	autotrophica			2						+	
18	Arachnia	propionica	was Propionibacterium propionicum								+	
19	Arcanobacterium	haemolyticum	was Corynebacterium		2	2 (as Corynebacterium)	2	2		2	+	
20	Archanobacterium	equi	was Corynebacterium				2 implied				+	
22	Bacillus	anthracis		2/3	2*	3	3	3		3	+	+
23	Bacillus	cereus				2		2		2	+	+
24	Bacillus	thuringiensis						2				+
25	Bacteroides	fragilis					2	2		2 implied	+	+
26	Bacteroides	spp					see 1 spp listed	2		2	+	+
27	Bartonella	bacilliformis				2	2	3		2 implied	+	
28	Bartonella	elizabethae				2					+	
29	Bartonella	spp.			see species listed	see spp listed	see 1 spp listed			2	+	
30	Bartonella	henselae	was genus Rochalimaea		2	2		2		2 implied	+	
31	Bartonella	quintana	was genus Rochalimaea	2	2	2	2 as Rochlimea	2		2 implied	+	
32	Bartonella	vinsonii	was genus Rochalimaea	2	2					2 implied	+	
33	Bordetella	all spp		See 1 sp	2	3 sp listed	3 species listed			2	+	
34	Bordetella	bronchiseptica			2 implied	2	2	2 human, 3		2 implied	+	+

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35	Bordetella	parapertussis			2 implied	2	2	2	2	2 implied	+	
36	Bordetella	pertussis		2	2	2	2, V	2	2	2 implied	+	
37	Borrelia	burgdorferi			2	2	2	2	2	2 implied	+	+
38	Borrelia	duttoni					2	2	2	2 implied	+	
39	Borrelia	recurrentis			2	2	2	2	2	2 implied	+	
40	Borrelia	spp			see species listed	see 2 sp listed	2	2	2	2	+	+
41	Borrelia	vincenti				2				2 implied		
42	Brucella	abortus		3	3	3 implied	3	3	3	3 implied	+	+
43	Brucella	canis		3	3	3 implied	3	3	3	3 implied	+	+
44	Brucella	melitensis		3 (USDA restricted)	3	3 implied	3	3	3	3 implied	+	+
45	Brucella	ovis			3 implied	3 implied	3 implied	3	3	2	+	+
46	Brucella	spp	except B. ovis	3	3	3	see spp			3	+	+
47	Brucella	suis		3	3	3 implied	3	3	3	3	+	+
49	Burkholderia	mallei	was Pseudomonas		3	3	3 as Pseudomonas	3	3	3 implied	+	+
51	Calymmatobacterium	granulomatis										
52	Campylobacter	coli		2	2	2	2 implied	2	2	2 implied	+	+
53	Campylobacter	fetus	subsp fetus	2 ssp fetus	2	2	2	2	2	2 implied	+	+
54	Campylobacter	jejuni		2	2	2	2	2	2	2 implied	+	+
55	Campylobacter	spp		2 implied	see spp	2	2	2	2	2	+	+
56	Campylobacter	sputorum				2 (all spp)	2 implied			2 implied	+	
57	Capnocytophaga	spp								2	+	
58	Cardiobacterium	hominis					2	2	2	2	+	
59	Chlamydia	pneumoniae			2	2	2	2	2	2 implied	+	
60	Chlamydia	psittaci	avian strains, 3	2	2	2, non-avian 3, avian	2 (3 avian spp)	2, non-avian 3, avian	3, avian	2 implied	+	+
61	Chlamydia	spp	C. pneumoniae, EU=2, Belgium=2	see 2 spp	see 3 spp	see 2 spp	see 3 spp			2	+	
62	Chlamydia	trachomatis	lymphogranuloma venereum agent	2	2	2	2	2	2	2 implied	+	+
63	Citrobacter	spp						OP	2	2	+	
64	Clostridium	botulinum		2 V/3	2	2	2, T	2	2	2 G,S	+	+
65	Clostridium	chauvoei			2	2	2 implied	3	2	2 implied		+
66	Clostridium	difficile				2	2 implied			2 implied	+	
67	Clostridium	equi					2 implied			2 implied		+
68	Clostridium	haemolyticum			2	2	2 implied	2	2	2 implied		+
69	Clostridium	histolyticum			2	2	2 implied			2 implied	+	
70	Clostridium	novyi			2	2	2 implied	2	2	2 implied		+
71	Clostridium	perfringens				2	2	2	2	2 implied	+	+
72	Clostridium	septicum			2	2	2 implied	3	2	2 implied		+
73	Clostridium	sordelli				2	2 implied	2	2	2 implied		+
74	Clostridium	spp			2	see spp	2	2	2	2		
75	Clostridium	tetani		2 V	2	2	2, T, V	2	2	2, V	+	+
76	Corynebacterium	bovis					2	2	2	2		+
77	Corynebacterium	diphtheriae		2 V	2	2	2, T, V	2	2	2, V	+	
79	Corynebacterium	minutissimum					2	2	2	2	+	
80	Corynebacterium	pseudotuberculosis			2	2	2	2	2	2	+	+
82	Corynebacterium	spp			see 3 species listed	see 4 spp	2	2	2	2	+	
83	Corynebacterium	ulcerans					2 implied			2		

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84	Coxiella	burnetii		3	3	3	3	3	3, V		
85	Dermatophilus	congolensis			2			2 human, 3	2	+	+
86	Edwardsiella	tarda			2	2	2	2 human, 3	2	+	+
87	Eikenella	corrodens					2	2	2	+	
88	Enterobacter	aerogenes/cloacae					2	2	2 implied	+	
89	Enterobacter	spp.					2	2	2	+	
90	Enterococcus	spp	(Streptococcus faecalis)				2	2	2	+	+
91	Ehrlichia	sennetsu	(Rickettsia)				2				
92	Ehrlichia	spp					2				
93	Erysipelothrix	rhusiopathiae	was spp insidiosa		2	2 (insidiosa)	2	2	2 implied	+	+
94	Erysipelothrix	spp.							2		
95	Escherichia	coli	(pathogenic)		2	2 (et,inv,hemor.)	2	2	2		
96	Escherichia	coli K12	genetically crippled		1		1				
97	Flavobacterium	meningosepticum					2		2 implied	+	
98	Flavobacterium	spp							2		
99	Fluoribacter	bozemanae	was Legionella				2	2		+	
100	Francisella	novocida				2				+	
101	Francisella	tularensis	Type A	3 V	3	3 (Type A, biovar tularensis)	3	3	3	+	+
102	Francisella	tularensis	Type B	2 V		2 (Type B, biovar palaeartica)	2	2	2	+	+
103	Fusobacterium	necrophorum				2	2	2	2 implied	+	+
104	Fusobacterium	spp							2		
105	Gardnerella	vaginalis					2	2		+	
106	Haemophilus	ducreyi			2	2	2	2	2 implied	+	
108	Haemophilus	spp			see 2 spp	see spp	2	2	2	+	+
109	Hartmanella	spp									
110	Helicobacter	pylori	was genus Campylobacter		2	2	2	2		+	
112	Kingella	kingae						OP	2	+	
113	Klebsiella	oxytoca			1		2	2	2 implied	+	
114	Klebsiella	pneumoniae			2 implied		2	2	2 implied	+	+
115	Klebsiella	spp			2		2	2	2	+	+
116	Lactobacillus	spp			1						
117	Legionella	pneumophila		2	2	2 implied	2	2	2 implied	+	+
118	Legionella	spp		2	2	2	2	2	2	+	
119	Legionella-like organisms			2		2 implied					
120	Leptospira	interrogans	all serotypes (icterohemorrhagiae)	2	2	2 (all serovars)	2 (all serovars)	2 human, 3 animal	2, E	+	+
121	Listeria	ivanovii			2 implied		2	2		+	+
122	Listeria	monocytogenes			2 implied	2	2	2	2	+	+
123	Listeria	spp			2		2 species listed				
124	Mima	polymorpha	Acinetobacter								
125	Moraxella	spp			2			2	2	+	+
126	Morganella	morganii					2	2		+	+
127	Mycobacterium	africanum			2 implied	2 implied	3, V (*)	3	2,CGVT implied	+	+
128	Mycobacterium	asiaticum		2	2	2 implied		2	2,CGVT implied	+	+
129	Mycobacterium	avium-intracellulare	(avium in Canada)	2	2	2 implied	2	2 human, 3 animal	2,CGVT implied	+	+

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130	Mycobacterium	bovis	BCG is 2	3	3	3 (2, BCG)	3 (2 BCG), V (*)	3	2,CGVT implied	+	+
131	Mycobacterium	chelonae	EU chelonae	2	2	2 implied	2	2	2,CGVT implied	+	+
132	Mycobacterium	fortuitum		2	2	2 implied	2	2	2,CGVT implied	+	+
133	Mycobacterium	kansasii		2	2	2 implied	2	2	2,CGVT implied	+	
134	Mycobacterium	leprae		2	2	2 implied	3	3	2,CGVT implied	+	
135	Mycobacterium	malmoense		2	2	2 implied	2	2	2,CGVT implied	+	
137	Mycobacterium	microti			2 implied	2 implied	3 (*)	3 (*)	2,CGVT implied	+	
138	Mycobacterium	paratuberculosis	Mycobacterium avium subsp. Paratuberculosis	2	2	2 implied	2	2 human, 3 animal	2,CGVT implied	+	+
139	Mycobacterium	scrofulaceum		2	2	2 implied	2	2	2,CGVT implied	+	
140	Mycobacterium	simiae		2	2	2 implied	2	2	2,CGVT implied	+	+
142	Mycobacterium	szulgai		2	2	2 implied	2	2	2,CGVT implied	+	
143	Mycobacterium	tuberculosis	3, V,T for multiply resistant	3	3	3	3, V	3	2,CGVT implied		
144	Mycobacterium	ulcerans		2	2	2 implied	3 (*)	3 (*)	2,CGVT implied	+	+
145	Mycobacterium	xenopi		2	2	2 implied	2	2	2,CGVT implied	+	+
146	Mycoplasma	hominis			2 implied	2		2		+	
147	Mycoplasma	mycoides			Restricted AP			3 subsp. capri, 4 subsp. Mycoides			+
148	Mycoplasma	pneumoniae			2 implied	2	2	2	2	+	
149	Mycoplasma	agalactiae			Restricted AP			3			+
150	Mycoplasma	spp			2, except M. mycoides, M agalactiae	see sp		2 see species listed	see sp	+	
151	Neisseria	gonorrhoeae		2 (BSC)	2	2	2	2		+	
152	Neisseria	meningitidis		2 (BSC)	2	2	2, V	2		+	
153	Neisseria	spp		see species listed	see species listed	see spp	see spp	2	2	+	+
154	Nocardia	asteroides			2	2	2	2	2 implied	+	+
155	Nocardia	brasiliensis			2	2	2	2	2 implied	+	+
156	Nocardia	caviae							2 implied		
157	Nocardia	farcinica					2	2	2 implied	+	+
158	Nocardia	nova					2	2	2 implied	+	
159	Nocardia	spp			see species listed	see spp	see spp		2	+	
160	Nocardia	transvalensis			2						
161	Nocardia	otitidis-caviarum	EU otitidis-caviarum		2		2	2		+	
163	Pasteurella	multocida			3	3, Type B; 2 implied other types	2	2 human, 3 animal	2 implied	+	+
164	Pasteurella	pneumotropica				2 implied	2 implied		2 implied		
165	Pasteurella	spp	type B, "buffalo", other virulent		2, except those listed as 3	2	2	2	2	+	+
166	Peptostreptococcus	anaerobius					2	2		+	
167	Plesiomonas	shigelloides					2	2	2	+	+
169	Prevotella	spp					2	2		+	
170	Proteus	mirabilis					2	2	2 implied	+	
171	Proteus	penneri					2	2	2 implied	+	
172	Proteus	spp.					see species listed	2	2	+	
173	Proteus	vulgaris					2	2	2 implied	+	

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174	Providencia	alcalifaciens					2	2	2 implied	+	
175	Providencia	rettgeri					2	2	2 implied	+	
176	Providencia	spp					2	2	2	+	
177	Pseudomonas	aeruginosa			2	2	2	2	2 implied	+	
178	Pseudomonas	spp	except <i>P. mallei</i> , <i>Burholderia maiiei</i>						2		
179	Rhodococcus	equi			2		2	2	2	+	+
180	Rickettsia	(vole)			2	3 implied					
181	Rickettsia	akari		3	3	3 implied	3 (*)	3 (*)	3 implied	+	+
182	Rickettsia	australis		3	3	3 implied			3 implied	+	
183	Rickettsia	canada		3	3	3 implied	3 (*)	3 (*)	3 implied	+	
184	Rickettsia	conorii		3	3	3 implied	3	3	3 implied	+	+
185	Rickettsia	montana				3 implied	3 (*)	3 (*)	3 implied	+	
186	Rickettsia	mooseri	see <i>R. typhi</i>			3 implied	3		3 implied		
187	Rickettsia	parkeri				3 implied			3 implied		
188	Rickettsia	prowazekii		3	3	3 implied	3	3	3 implied	+	
189	Rickettsia	rhipicephali				3 implied			3 implied	+	
190	Rickettsia	rickettsii		3	3	3 implied	3	3	3 implied	+	+
191	Rickettsia	sennetsu	see <i>Bartonella</i>			3 implied			3 implied		
193	Rickettsia	spp			3 (except vole, 2)	3	2	2	3	+	+
194	Rickettsia	tsutsugamushi		3	3	3 implied	3	3		+	+
195	Rickettsia	typhi (mooseri)			3	3 implied	3, (mooseri)	3		+	+
196	Salmonella	arizonae			2	2, <i>S. enterica</i> serovar <i>arizonae</i> (Arizona <i>hinshawii</i>)	2	2	2 implied	+	+
197	Salmonella	cholerasuis			2	2, <i>S. enterica</i> .		2, <i>S. enterica</i>	2 implied	+	+
198	Salmonella	enteritidis			2	2, <i>S. enterica</i> ?	2	2	2 implied	+	+
200	Salmonella	meleagridis			2	2, <i>S. enterica</i> ser. <i>meleagridis</i>			2 implied		
201	Salmonella	paratyphi,A,B,C	A, B, C		2	2, <i>S. enterica</i> ser paratyphi B, Schottmulleri	2, V	2	2 implied	+	
202	Salmonella	spp	all spp and serotypes/ serovars	see 1 species listed	2	2, see spp	2 see spp	2	2	+	+
203	Salmonella	typhi		2 V, 3	2	2, <i>S. enterica</i>	3, V (*)	3 (*)	2 G,V	+	
204	Salmonella	typhimurium			2	2, <i>S. enterica</i> ser typhimurium	2	2	2 implied	+	+
205	Serpulina	spp					2	2		+	+
206	Serratia	marcescens						OP	2	+	
207	Serretia	liquefaciens							2		
208	Shigella	boydii		2 implied	2	2	2	2	2 implied	+	
209	Shigella	dysenteriae	Type 1	2 implied	2	2	3, T (*)	3 (*)	2 implied	+	
210	Shigella	flexneri		2	2	2	2	2	2 implied	+	
211	Shigella	sonnei		2 implied	2	2	2	2	2 implied	+	
212	Shigella	spp.		2	2	See 4 spp	See species listed		2		
213	Sphaerophorus	necrophorus			2						
214	Staphylococcus	aureus			2	2	2	2	2	+	+
215	Staphylococcus	epidermidis						2			+

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216	Streptobacillus	moniliformis			2	2	2	2	2	+	+
217	Streptobacillus	spp			see species listed	see 1 spp	see 1 spp listed	see species listed		+	
219	Streptococcus	pneumoniae			2	2 implied	2	2	2 implied	+	
220	Streptococcus	pyogenes	Canada Lancefield Groups A-D, G		2	2 implied	2	2	2 implied	+	
221	Streptococcus	spp.	see also Enterococcus spp		2	2, Grps A, B, C, D, G	2	2	2	+	+
222	Streptococcus	suis					2	2		+	+
223	Treponema	carateum			2	2	2	2		+	
224	Treponema	pallidum		2	2	2	2	2	2, G, E	+	
225	Treponema	pertenuae				2	2	2	2, G, E	+	
227	Treponema	vincentii				2		2		+	
228	Ureaplasma	urealyticum				2		2		+	+
229	Vibrio	cholerae	including El Tor (EU, Belgium)	2	2	2, incl El Tor	2	2	2 implied	+	
230	Vibrio	parahaemolyticus		2	2	2	2	2	2 implied	+	
231	Vibrio	spp		see 2 spp	see 3 species listed	see 2 spp	2	2	2	+	+
232	Vibrio	vulnificus			2	2	2 implied	2	2 implied	+	+
233	Yersinia	enterocolitica			2	2	2	2	2 implied	+	+
234	Yersinia	pestis	2 V, 3 aerosols and antibiotic resistant strains		3	3	3, V	3	3	+	+
235	Yersinia	pseudotuberculosis				2	2	2	2 implied	+	+
236	Yersinia	spp	except Y. pestis	see 1 spp	see 2 species listed	see 3 spp	2	2	2	+	

(*) EU - May present a limited risk of infection for workers because they are not normally infectious by air-borne route. Member States shall assess the containment measures to be applied to such agents taking account of the nature of specific activities in question and of the quantity of the agent involved, with a view to determining whether, in particular circumstances, some of these measures may be dispensed with.

(*) Belgium - May present a limited risk of infection for workers because they are not normally infectious by air-borne route.

BL - Biosafety Level
 RG - Risk Group
 OP - Opportunistic Pathogen
 V - Vaccine available
 T - Toxin produced
 AP - Animal Pathogen
 HP - Human Pathogen

Please forward any comments or corrections to Stefan Wagener at: stefan@msu.edu or fax to: (517) 353-4871