

Aerobic Gram-Positive Cocci (Continued)

Current Name	Synonym	Current Name	Synonym
<i>Enterococcus flavescens</i>		<i>Streptococcus alactolyticus</i>	
<i>Enterococcus gallinarum</i>	<i>Streptococcus gallinarum</i>	<i>Streptococcus milleri</i> group	Viridans streptococci
<i>Enterococcus hirae</i>		<i>Streptococcus anginosus</i>	
<i>Enterococcus malodoratus</i>		<i>Streptococcus constellatus</i>	
<i>Enterococcus mundtii</i>		<i>Streptococcus intermedius</i>	
<i>Enterococcus pseudoavium</i>		<i>Streptococcus mitis</i> group	Viridans streptococci
<i>Enterococcus raffinosus</i>		<i>Streptococcus mitis</i>	
<i>Enterococcus solitarius</i>		<i>Streptococcus mitior</i>	
<i>Faklamia hominis</i>		<i>Streptococcus sanguis</i> II	
<i>Faklamia ignava</i>		<i>Streptococcus oralis</i>	
<i>Faklamia languida</i>		<i>Streptococcus mutans</i> group	Viridans streptococci
<i>Faklamia sourekii</i>		<i>Streptococcus cricetus</i>	
<i>Gemella bergeri</i>	<i>Gemella bergeriae</i>	<i>Streptococcus mutans</i>	
<i>Gemella haemolysans</i>	<i>Neisseria haemolysans</i>	<i>Streptococcus rattus</i>	
<i>Gemella morbillorum</i>	<i>Streptococcus morbillorum</i>	<i>Streptococcus sobrinus</i>	
	<i>Peptostreptococcus morbillorum</i>	<i>Streptococcus pneumoniae</i>	<i>Diplococcus pneumoniae</i>
<i>Gemella sanguis</i>		<i>Streptococcus pyogenes</i> group	
<i>Globicatella sanguis</i>	Salt-tolerant viridans streptococci	<i>Streptococcus pyogenes</i>	Group A streptococci
		<i>Streptococcus agalactiae</i>	Group B streptococci
<i>Helcococcus kunzii</i>		<i>Streptococcus canis</i>	
<i>Ignavigranum ruoffiae</i>		<i>Streptococcus dysgalactiae</i> ssp. <i>equisimilis</i>	Group C streptococci
<i>Lactococcus garvieae</i>	<i>Streptococcus garvieae</i> Lancefield group N		<i>Streptococcus equi</i>
			<i>Streptococcus equi</i> ssp. <i>zooepidermidis</i>
<i>Lactococcus lactis</i>			<i>Streptococcus equisimilis</i>
<i>Leuconostoc citreum</i>			Group G streptococci
<i>Leuconostoc cremoris</i>		<i>Streptococcus iniae</i>	<i>Streptococcus shiloi</i>
<i>Leuconostoc dextranicum</i>		<i>Streptococcus porcinus</i>	
<i>Leuconostoc lactis</i>		<i>Streptococcus salivarius</i> group	Viridans streptococci
<i>Leuconostoc mesenteroides</i>		<i>Streptococcus salivarius</i>	
<i>Leuconostoc pseudomesenteroides</i>		<i>Streptococcus salivarius</i>	
<i>Oenococcus oeni</i>	<i>Leuconostoc oenos</i>	<i>Streptococcus thermophilus</i>	
<i>Pediococcus acidilactici</i>		<i>Streptococcus vestibularis</i>	
<i>Pediococcus damnosus</i>		<i>Streptococcus sanguis</i> group	Viridans streptococci
<i>Pediococcus dextrinicus</i>		<i>Streptococcus crista</i>	
<i>Pediococcus equinus</i>	<i>Streptococcus equinus</i>	<i>Streptococcus gordonii</i>	
<i>Pediococcus parvulus</i>		<i>Streptococcus parasanguis</i>	
<i>Pediococcus pentosaceus</i>		<i>Streptococcus sanguis</i> I	
<i>Streptococcus acidominimus</i>		<i>Streptococcus suis</i>	
<i>Streptococcus bovis</i> group	Group D streptococci	<i>Vagococcus fluvialis</i>	
<i>Streptococcus bovis</i>		<i>Weissella paramesenteroides</i>	<i>Leuconostoc paramesenteroides</i>
<i>Streptococcus equinus</i>			

Aerobic Gram-Negative Cocci

Pertinent characteristics: occur singly or in pairs or clumps; catalase and oxidase positive.

Current Name	Synonym	Current Name	Synonym
<i>Lautropia mirabilis</i>	<i>Sarcina mirabilis</i>	<i>Neisseria elongata</i> ssp. <i>elongata</i>	<i>Neisseria elongata</i>
<i>Neisseria canis</i>		<i>Neisseria elongata</i> ssp. <i>glycolytica</i>	<i>Neisseria elongata</i>
<i>Neisseria cinerea</i>	<i>Micrococcus cinereus</i> <i>Neisseria pharyngis</i>		

Aerobic Gram-Negative Cocci (Continued)

Current Name	Synonym	Current Name	Synonym
<i>Neisseria elongata</i> ssp. <i>nitroreducens</i>	<i>Neisseria elongata</i> CDC group M-6	<i>Neisseria sicca</i>	
<i>Neisseria flavescens</i>		<i>Neisseria subflava</i> biovar <i>flava</i>	<i>Neisseria subflava</i>
<i>Neisseria gonorrhoeae</i>		<i>Neisseria subflava</i> biovar <i>perflava</i>	<i>Neisseria subflava</i>
<i>Neisseria kochii</i>		<i>Neisseria subflava</i> biovar <i>subflava</i>	<i>Neisseria subflava</i>
<i>Neisseria lactamica</i>		<i>Neisseria weaveri</i>	<i>Moraxella</i> species M-5 CDC group M-5
<i>Neisseria meningitidis</i>			
<i>Neisseria mucosa</i>			
<i>Neisseria parelongata</i>			
<i>Neisseria polysaccharea</i>			

Aerobic Gram-Positive Bacilli

Pertinent characteristics: rod-like; catalase negative or positive; some are acid-fast stain positive and some have branching; only *Bacillus*, *Brevibacillus*, *Brevibacterium*, and *Paenibacillus* species produce spores.

Current Name	Synonym	Current Name	Synonym
<i>Actinomadura latina</i>		<i>Corynebacterium amycolatum</i>	<i>Corynebacterium xerosis</i>
<i>Actinomadura madurae</i>			<i>Corynebacterium minutissimum</i>
<i>Actinomadura pelletieri</i>			<i>Corynebacterium striatum</i>
<i>Amycolata autotrophica</i>			CDC coryneform group F-2 and I-2
<i>Amycolatopsis orientalis</i>	<i>Nocardia orientalis</i> <i>Streptomyces orientalis</i>	<i>Corynebacterium argenteratense</i>	
<i>Arthrobacter creatinolyticus</i>		<i>Corynebacterium auris</i>	CDC coryneform group ANF-1
<i>Arthrobacter cummingsii</i>			
<i>Arthrobacter woluwensis</i>			
<i>Aureobacterium</i> species	<i>Corynebacterium aquaticum</i>	<i>Corynebacterium confusum</i>	
<i>Bacillus anthracis</i>		<i>Corynebacterium coyleae</i>	
<i>Bacillus cereus</i>		<i>Corynebacterium diphtheriae</i>	
<i>Bacillus circulans</i>		<i>Corynebacterium durum</i>	
<i>Bacillus coagulans</i>		<i>Corynebacterium falsenii</i>	
<i>Bacillus licheniformis</i>		<i>Corynebacterium glucuronolyticum</i>	
<i>Bacillus megaterium</i>		<i>Corynebacterium imitans</i>	
<i>Bacillus mycoides</i>		<i>Corynebacterium jeikeium</i>	<i>Corynebacterium</i> group JK CDC coryneform group JK
<i>Bacillus pumilus</i>			
<i>Bacillus sphaericus</i>			
<i>Bacillus subtilis</i>		<i>Corynebacterium kroppenstedtii</i>	
<i>Bacillus thuringiensis</i>		<i>Corynebacterium lipophiloflavum</i>	
<i>Brevibacillus agri</i>		<i>Corynebacterium macginleyi</i>	CDC coryneform group G-1
<i>Brevibacillus brevis</i>	<i>Bacillus brevis</i>	<i>Corynebacterium matruchotii</i>	<i>Bacterionema matruchotii</i>
<i>Brevibacillus laterosporus</i>	<i>Bacillus laterosporus</i>	<i>Corynebacterium minutissimum</i>	
<i>Brevibacterium casei</i>	CDC coryneform group B-1 and B-3	<i>Corynebacterium mucifaciens</i>	
<i>Brevibacterium epidermidis</i>		<i>Corynebacterium pilosum</i>	
<i>Brevibacterium mcbrellneri</i>		<i>Corynebacterium propinquum</i>	CDC coryneform group ANF-3
<i>Brevibacterium otitidis</i>			
<i>Callatomonas turbata</i>	<i>Oerskovia turbata</i>	<i>Corynebacterium pseudodiphtheriticum</i>	<i>Corynebacterium hofmanii</i>
<i>Cellulomonas hominis</i>	CDC coryneform group A-3	<i>Corynebacterium pseudotuberculosis</i>	
<i>Corynebacterium accolens</i>			
<i>Corynebacterium afermentans</i> ssp. <i>afermentans</i>	CDC coryneform group ANF-1		
<i>Corynebacterium afermentans</i> ssp. <i>lipophilum</i>	CDC coryneform group ANF-1		

Aerobic Gram-Positive Bacilli (Continued)

Current Name	Synonym	Current Name	Synonym
<i>Corynebacterium riegelii</i>		<i>Mycobacterium chelonae</i>	<i>Mycobacterium chelonae</i> ssp. <i>chelonae</i>
<i>Corynebacterium sanguinis</i>			<i>Mycobacterium chelonae</i>
<i>Corynebacterium singulare</i>			<i>Mycobacterium chelonae</i>
<i>Corynebacterium striatum</i>		<i>Mycobacterium chubuense</i>	
<i>Corynebacterium sundsvallense</i>	<i>Corynebacterium thomssenii</i>	<i>Mycobacterium confluentis</i>	
	<i>Rothia dentocarrosa</i>	<i>Mycobacterium conspicuum</i>	
<i>Corynebacterium ulcerans</i>		<i>Mycobacterium cookii</i>	
<i>Corynebacterium urealyticum</i>	<i>Corynebacterium</i> group D2	<i>Mycobacterium flavescens</i>	
	CDC coryneform group D2	<i>Mycobacterium fortuitum</i>	<i>Mycobacterium fortuitum</i> ssp. <i>fortuitum</i>
<i>Corynebacterium xerosis</i>			<i>Mycobacterium fortuitum</i> (third biovariant complex)
<i>Curtobacterium species</i>			sorbitol positive
<i>Dermabacter hominis</i>	CDC fermentative coryneform groups 3 and 5		<i>Mycobacterium fortuitum</i> (third biovariant complex)
<i>Dermatophilus congolensis</i>			sorbitol negative
<i>Erysipelothrix rhusiopathiae</i>	<i>Erysipelothrix insidiosa</i>	<i>Mycobacterium gadium</i>	
<i>Exiguobacterium acetylicum</i>		<i>Mycobacterium gastrii</i>	
<i>Exiguobacterium aurantiacum</i>		<i>Mycobacterium genavense</i>	
<i>Brevibacterium aurantiacum</i>		<i>Mycobacterium gordonae</i>	<i>Mycobacterium aquae</i>
<i>Gardnerella vaginalis</i>	<i>Haemophilus vaginalis</i>	<i>Mycobacterium haemophilum</i>	
	<i>Corynebacterium vaginalis</i>	<i>Mycobacterium hassiacum</i>	
<i>Gordona aichiensis</i>	<i>Rhodococcus aichiensis</i>	<i>Mycobacterium heidelbergense</i>	
	<i>Tsukamurella aichiensis</i>	<i>Mycobacterium intracellulare</i>	
<i>Gordona bronchialis</i>	<i>Rhodococcus bronchialis</i>	<i>Mycobacterium interjectum</i>	
<i>Gordona rubropertincta</i>	<i>Rhodococcus rubiopertincta</i>	<i>Mycobacterium interjectum</i>	
<i>Gordona sputi</i>	<i>Rhodococcus sputi</i>	<i>Mycobacterium kansasii</i>	
	<i>Rhodococcus chubuensis</i>	<i>Mycobacterium lentiflavum</i>	
<i>Gordona terrae</i>	<i>Rhodococcus terrae</i>	<i>Mycobacterium leprae</i>	
<i>Kurthia species</i>		<i>Mycobacterium mageritense</i>	
<i>Lactobacillus species</i>		<i>Mycobacterium maichiense</i>	
<i>Listeria bulgaria</i>		<i>Mycobacterium malmoense</i>	
<i>Listeria grayi</i> ssp. <i>grayi</i>	<i>Listeria grayi</i>	<i>Mycobacterium marinum</i>	<i>Mycobacterium balnei</i>
<i>Listeria ivanovii</i> ssp. <i>ivanovii</i>	<i>Listeria monocytogenes</i> serovar 5	<i>Mycobacterium microgenicum</i>	
<i>Listeria ivanovii</i> ssp. <i>londoniensis</i>		<i>Mycobacterium microti</i>	
<i>Listeria monocytogenes</i>		<i>Mycobacterium mucogenicum</i>	<i>Mycobacterium chelonae</i> -like organism (MCLO)
<i>Microbacterium species</i>	CDC coryneform groups A-4 and A-5	<i>Mycobacterium neoaurum</i>	
<i>Microbacterium arborescens</i>	CDC coryneform group A-4	<i>Mycobacterium nonchromogenicum</i>	
<i>Microbacterium imperiale</i>	CDC coryneform group A-4	<i>Mycobacterium novocastiense</i>	
<i>Mycobacterium abscessus</i>	<i>Mycobacterium chelonae</i> ssp. <i>abscessus</i>	<i>Mycobacterium peregrinum</i>	<i>Mycobacterium fortuitum</i> biovar <i>peregrinum</i>
<i>Mycobacterium africanum</i>		<i>Mycobacterium phlei</i>	
<i>Mycobacterium alvei</i>		<i>Mycobacterium scrofulaceum</i>	
<i>Mycobacterium asiaticum</i>		<i>Mycobacterium shimoidei</i>	
<i>Mycobacterium aurum</i>		<i>Mycobacterium simiae</i>	<i>Mycobacterium habana</i>
<i>Mycobacterium avium</i>		<i>Mycobacterium smegmatis</i>	
<i>Mycobacterium bohemicum</i>		<i>Mycobacterium szulgai</i>	
<i>Mycobacterium bovis</i>		<i>Mycobacterium terrae</i>	
<i>Mycobacterium branderi</i>		<i>Mycobacterium thermoresistibile</i>	
<i>Mycobacterium brumae</i>		<i>Mycobacterium triplex</i>	
<i>Mycobacterium celatum</i>			

Aerobic Gram-Positive Bacilli (Continued)

Current Name	Synonym	Current Name	Synonym
<i>Mycobacterium triviale</i>		<i>Oerskovia turbata</i>	CDC coryneform groups A-3 and A-4
<i>Mycobacterium tuberculosis</i>		<i>Oerskovia xanthineolytica</i>	CDC coryneform groups A-1 and A-2
<i>Mycobacterium ulcerans</i>	<i>Mycobacterium buruli</i>	<i>Paenibacillus alvei</i>	<i>Bacillus alvei</i>
<i>Mycobacterium vaccae</i>		<i>Paenibacillus macerans</i>	<i>Bacillus macerans</i>
<i>Mycobacterium xenopi</i>		<i>Paenibacillus polymyxa</i>	<i>Bacillus polymyxa</i>
<i>Nocardia asteroides</i>		<i>Rhodococcus equi</i>	<i>Corynebacterium equi</i>
<i>Nocardia brasiliensis</i>		<i>Rothia dentocariosa</i>	<i>Nocardia dentocariosus</i>
<i>Nocardia brevicatena</i>		<i>Streptomyces anulatus</i>	<i>Streptomyces griseus</i>
<i>Nocardia farcinica</i>		<i>Streptomyces paraguayensis</i>	
<i>Nocardia nova</i>		<i>Streptomyces somaliensis</i>	
<i>Nocardia otitidiscaviarum</i>	<i>Nocardia caviae</i>	<i>Tropheryma whippelii</i>	
<i>Nocardia pseudobrasiliensis</i>		<i>Tsukamurella inchoensis</i>	
<i>Nocardia transvalensis</i>		<i>Tsukamurella paurometabola</i>	<i>Gordona aurantiaca</i>
<i>Nocardioopsis dassonvillei</i>	<i>Actionmadura dassonvillei</i> <i>Nocardia dassonvillei</i>	<i>Tsukamurella pulmonis</i>	
<i>Nocardioopsis synnemataformans</i>		<i>Tsukamurella tyrosinosolvans</i>	
		<i>Turicella otitidis</i>	<i>Rhodococcus aurantiacus</i>

Aerobic Gram-Negative Bacilli: Enterobacteriaceae

Pertinent characteristics: ferment sugars; oxidase negative; most reduce nitrate to nitrite. Diagnostic laboratories may report *Salmonella* serovars by name, e.g., *Salmonella typhi* or *Salmonella* serovar *typhi*.

Current Name	Synonym	Current Name	Synonym
<i>Budvicia aquatica</i>		<i>Edwardsiella hoshinae</i>	
<i>Buttiauxella noackiae</i>	CDC enteric group 59	<i>Edwardsiella tarda</i>	
<i>Cedecea davisae</i>	CDC enteric group 15	<i>Enterobacter aerogenes</i>	<i>Aerobacter aerogenes</i>
<i>Cedecea lapagei</i>		<i>Enterobacter agglomerans</i>	group
<i>Cedecea neteri</i>	<i>Cedecea</i> sp. 4	<i>Enterobacter amnigenus</i>	
<i>Cedecea</i> sp. 3		<i>Enterobacter asburiae</i>	CDC enteric group 17
<i>Cedecea</i> sp. 5		<i>Enterobacter cancerogenus</i>	<i>Enterobacter taylorae</i> <i>Erwinia cancerogena</i> CDC enteric group 19
<i>Citrobacter amalonaticus</i>	<i>Levinea amalonatica</i>	<i>Enterobacter cloacae</i>	
<i>Citrobacter braakii</i>	<i>Citrobacter freundii</i>	<i>Enterobacter gergoviae</i>	
<i>Citrobacter diversus</i>		<i>Enterobacter hormaechei</i>	CDC enteric group 75
<i>Citrobacter farmeri</i>	<i>Citrobacter amalonaticus</i> biogroup 1	<i>Enterobacter intermedius</i>	<i>Enterobacter intermedium</i>
<i>Citrobacter freundii</i>	<i>Colobactrum freundii</i>	<i>Enterobacter kobei</i>	
<i>Citrobacter gillenii</i>	<i>Citrobacter</i> genomospecies 10 <i>Citrobacter freundii</i>	<i>Enterobacter sakazakii</i>	
<i>Citrobacter koseri</i>	<i>Citrobacter diversus</i> <i>Levinea malonatica</i>	<i>Erwinia persicinus</i>	
<i>Citrobacter murliniae</i>	<i>Citrobacter</i> genomospecies 11 <i>Citrobacter freundii</i>	<i>Escherichia blattae</i>	
<i>Citrobacter rodentium</i>	<i>Citrobacter</i> genomospecies 9 <i>Citrobacter freundii</i>	<i>Escherichia coli</i>	
<i>Citrobacter sedlakii</i>	<i>Citrobacter</i> genomospecies 8 <i>Citrobacter freundii</i>	<i>Escherichia fergusonii</i>	CDC enteric group 10
<i>Citrobacter werkmanii</i>	<i>Citrobacter</i> genomospecies 7 <i>Citrobacter freundii</i>	<i>Escherichia hermannii</i>	CDC enteric group 11
<i>Citrobacter youngae</i>	<i>Citrobacter</i> genomospecies 5 <i>Citrobacter freundii</i>	<i>Escherichia vulneris</i>	CDC enteric group 1
		<i>Ewingella americana</i>	CDC enteric group 40
		<i>Hafnia alvei</i>	<i>Enterobacter hafniae</i>
		<i>Klebsiella ornithinolytica</i>	<i>Klebsiella oxytoca</i> ornithine positive
		<i>Klebsiella oxytoca</i>	

Aerobic Gram-Negative Bacilli: Enterobacteriaceae (Continued)

Current Name	Synonym	Current Name	Synonym
<i>Klebsiella planticola</i>	<i>Klebsiella trivisanii</i>	<i>Salmonella choleraesuis</i> ssp. <i>houtenae</i>	<i>Salmonella</i> subgroup 4
<i>Klebsiella pneumoniae</i> ssp. <i>ozaenae</i>	<i>Klebsiella ozaenae</i>	<i>Salmonella choleraesuis</i> ssp. <i>indica</i>	<i>Salmonella</i> subgroup 6
<i>Klebsiella pneumoniae</i> ssp. <i>pneumoniae</i>	<i>Klebsiella pneumoniae</i>	<i>Salmonella choleraesuis</i> ssp. <i>salamae</i>	<i>Salmonella</i> subgroup 2
<i>Klebsiella pneumoniae</i> ssp. <i>rhinoscleromatis</i>	<i>Klebsiella rhinoscleromatis</i>	<i>Serratia ficaria</i>	
<i>Klebsiella terrigena</i>		<i>Serratia fonticola</i>	
<i>Kluyvera ascorbata</i>	CDC enteric group 8	<i>Serratia grimesii</i>	<i>Serratia liquefaciens</i>
<i>Kluyvera cryocrescens</i>		<i>Serratia liquefaciens</i>	<i>Enterobacter liquefaciens</i>
<i>Kluyvera georgiana</i>	CDC enteric group 36/37 <i>Kluyvera</i> species group 3	<i>Serratia marcescens</i>	
<i>Leclercia adecarboxylata</i>	<i>Escherichia adecarboxylata</i>	<i>Serratia odorifera</i>	
	CDC enteric group 41	<i>Serratia plymuthica</i>	
<i>Leminorella grimontii</i>	CDC enteric group 57	<i>Serratia proteamaculans</i> ssp. <i>proteamaculans</i>	<i>Serratia liquefaciens</i>
<i>Leminorella richardii</i>		<i>Serratia proteamaculans</i> ssp. <i>quinovora</i>	<i>Serratia liquefaciens</i>
<i>Moellerella wisconsensis</i>	CDC enteric group 46	<i>Serratia rubidaea</i>	
<i>Morganella morganii</i> ssp. <i>morganii</i>	<i>Proteus morganii</i>	<i>Shigella boydii</i>	<i>Shigella</i> biogroup C
<i>Morganella morganii</i> ssp. <i>sibonii</i>	<i>Proteus morganii</i>	<i>Shigella dysenteriae</i>	<i>Shigella</i> biogroup A
<i>Pantoea agglomerans</i>	<i>Enterobacter agglomerans</i>	<i>Shigella flexneri</i>	<i>Shigella</i> biogroup B
<i>Pantoea dispersa</i>		<i>Shigella sonnei</i>	<i>Shigella</i> biogroup D
<i>Photorhabdus luminescens</i>	<i>Xenorhabdus luminescens</i>	<i>Tatumella ptyseos</i>	CDC group EF-9
<i>Pragia fontium</i>		<i>Trabulsiella guamensis</i>	CDC enteric group 90
<i>Proteus mirabilis</i>		<i>Yersinia aldovae</i>	
<i>Proteus penneri</i>	<i>Proteus vulgaris</i> biogroup 1	<i>Yersinia bercovieri</i>	<i>Yersinia enterocolitica</i> biogroup 3b
<i>Proteus vulgaris</i>	<i>Proteus vulgaris</i> biogroup 2	<i>Yersinia enterocolitica</i>	<i>Pasteurella enterocolitica</i>
<i>Providencia alcalifaciens</i>	<i>Proteus inconstans</i>	<i>Yersinia frederiksenii</i>	
<i>Providencia rettgeri</i>	<i>Proteus rettgeri</i>	<i>Yersinia intermedia</i>	
<i>Providencia rustigianii</i>	<i>Providencia alcalifaciens</i> biogroup 3	<i>Yersinia kristensenii</i>	
<i>Providencia stuartii</i>	<i>Proteus inconstans</i>	<i>Yersinia mollaretii</i>	<i>Yersinia enterocolitica</i> biogroup 3a
<i>Rahnella aquatilis</i>		<i>Yersinia pestis</i>	<i>Pasteurella pestis</i>
<i>Salmonella bongori</i>	<i>Salmonella</i> subgroup 5	<i>Yersinia pseudotuberculosis</i>	<i>Pasteurella</i> <i>pseudotuberculosis</i>
<i>Salmonella choleraesuis</i> ssp. <i>arizonae</i>	<i>Salmonella</i> subgroup 3a		
<i>Salmonella choleraesuis</i> ssp. <i>choleraesuis</i>	<i>Salmonella</i> subgroup 1	<i>Yersinia rohdei</i>	
<i>Salmonella choleraesuis</i> ssp. <i>diarizonae</i>	<i>Salmonella</i> subgroup 3b	<i>Yokenella regensburgei</i>	<i>Koserella trabulsii</i> CDC enteric group 45

Aerobic Gram-Negative Bacilli: Nonenterobacteriaceae—Fermentative

Pertinent characteristics: ferment sugars; oxidase positive.

Current Name	Synonym	Current Name	Synonym
<i>Aeromonas allosaccharophila</i>		<i>Aeromonas media</i>	
<i>Aeromonas bestiarum</i>		<i>Aeromonas salmonicida</i>	
<i>Aeromonas caviae</i>		<i>Aeromonas schubertii</i>	
<i>Aeromonas enteropelogenes</i>		<i>Aeromonas trota</i>	
<i>Aeromonas hydrophila</i>	<i>Pseudomonas hydrophila</i>	<i>Aeromonas veronii</i> biovar <i>sobria</i>	
<i>Aeromonas jandaei</i>			

Aerobic Gram-Negative Bacilli: Nonenterobacteriaceae—Fermentative (Continued)

Current Name	Synonym	Current Name	Synonym
<i>Aeromonas veronii</i> biovar <i>veronii</i>		<i>Plesiomonas shigelloides</i>	<i>Aeromonas shigelloides</i>
<i>Chromobacterium violaceum</i>	<i>Bacillus violaceus</i>	<i>Vibrio alginolyticus</i>	<i>Vibrio parahaemolyticus</i> biotype 2
<i>Pasteurella aerogenes</i>		<i>Vibrio carchariae</i>	
<i>Pasteurella bettyae</i>	CDC group HB-5	<i>Vibrio cholerae</i>	<i>Vibrio comma</i>
<i>Pasteurella canis</i>	<i>Pasteurella multocida</i> biotype 6	<i>Vibrio cincinnatiensis</i>	
<i>Pasteurella dagmatis</i>	<i>Pasteurella</i> new species 1	<i>Vibrio damsela</i>	CDC group EF-5
	<i>Pasteurella</i> "gas"	<i>Vibrio fluvialis</i>	CDC group EF-6
<i>Pasteurella gallinarum</i>		<i>Vibrio furnissii</i>	<i>Vibrio fluvialis</i> biogroup 2
<i>Pasteurella haemolytica</i>		<i>Vibrio hollisae</i>	CDC group EF-13
<i>Pasteurella</i> -like	CDC group EF-4		CDC enteric group 42
<i>Pasteurella multocida</i> ssp. <i>gallicida</i>	<i>Pasteurella septica</i>	<i>Vibrio metschnikovii</i>	CDC enteric group 16
<i>Pasteurella multocida</i> ssp. <i>multocida</i>			<i>Vibrio cholerae</i> biovar <i>proteus</i>
<i>Pasteurella multocida</i> ssp. <i>septica</i>		<i>Vibrio mimicus</i>	<i>Vibrio cholerae</i> sucrose negative
<i>Pasteurella pneumotropica</i>		<i>Vibrio parahaemolyticus</i>	
<i>Pasteurella stomatis</i>		<i>Vibrio vulnificus</i>	CDC group EF-3
			<i>Beneckeia vulnifica</i>

Aerobic Gram-Negative Bacilli: Nonenterobacteriaceae—Nonfermentative

Pertinent characteristics: may or may not oxidize sugars; catalase positive; oxidase variable.

Current Name	Synonym	Current Name	Synonym
<i>Achromobacter piechaudii</i>	<i>Alcaligenes piechaudii</i>	<i>Acinetobacter radioresistens</i>	
<i>Achromobacter xylosoxidans</i> ssp. <i>denitrificans</i>	<i>Alcaligenes denitrificans</i>	<i>Agrobacterium radiobacter</i>	<i>Agrobacterium tumefaciens</i> CDC group Vd-3
	<i>Alcaligenes xylosoxidans</i> ssp. <i>denitrificans</i>	<i>Alcaligenes faecalis</i> ssp. <i>faecalis</i>	<i>Alcaligenes odorans</i> <i>Pseudomonas odorans</i> CDC group VI
	CDC group Vc	<i>Balneatrix alpica</i>	
<i>Achromobacter xylosoxidans</i> ssp. <i>xylosoxidans</i>	<i>Alcaligenes xylosoxidans</i>	<i>Bergeyella zoohelcum</i>	<i>Weeksella zoohelcum</i> CDC group IIj
	<i>Alcaligenes xylosoxidans</i> ssp. <i>xylosoxidans</i>		<i>Pseudomonas diminuta</i> CDC group Ia
	<i>Alcaligenes denitrificans</i> ssp. <i>xylosoxidans</i>	<i>Brevundimonas diminuta</i>	
	<i>Achromobacter xylosoxidans</i> CDC groups IIIa and IIIb	<i>Brevundimonas vesicularis</i>	<i>Pseudomonas vesicularis</i> <i>Corynebacterium vesiculare</i>
<i>Acidovorax delafieldii</i>	<i>Pseudomonas delafieldii</i>	<i>Burkholderia cepacia</i>	<i>Pseudomonas cepacia</i> <i>Pseudomonas multivorans</i> <i>Pseudomonas kingae</i> CDC group EO-1
<i>Acidovorax facilis</i>	<i>Pseudomonas facilis</i>		<i>Pseudomonas gladioli</i> <i>Pseudomonas marginata</i>
<i>Acidovorax temperans</i>	<i>Pseudomonas temperans</i>	<i>Burkholderia mallei</i>	<i>Pseudomonas mallei</i> <i>Actinobacillus mallei</i>
<i>Acinetobacter baumannii</i>	<i>Acinetobacter anitratus</i>	<i>Burkholderia pseudomallei</i>	<i>Pseudomonas pseudomallei</i>
<i>Acinetobacter calcoaceticus</i>	<i>Acinetobacter anitratus</i>	<i>Chryseobacterium gleum</i>	<i>Flavobacterium gleum</i> CDC group IIb
	<i>Acinetobacter calcoaceticus</i> ssp. <i>calcoaceticus</i>		<i>Flavobacterium indologenes</i> CDC group IIb
<i>Acinetobacter haemolyticus</i>	<i>Acinetobacter anitratus</i>	<i>Chryseobacterium indologenes</i>	
<i>Acinetobacter johnsonii</i>			
<i>Acinetobacter junii</i>			
<i>Acinetobacter lwoffii</i>	<i>Acinetobacter anitratus</i>		
	<i>Acinetobacter calcoaceticus</i> ssp. <i>lwoffii</i>		

Aerobic Gram-Negative Bacilli: Nonenterobacteriaceae—Nonfermentative (Continued)

Current Name	Synonym	Current Name	Synonym
<i>Chryseobacterium meningosepticum</i>	<i>Flavobacterium meningosepticum</i> CDC group IIa	<i>Pseudomonas stutzeri</i>	CDC group Vb-1
<i>Comamonas acidovorans</i>	<i>Pseudomonas acidovorans</i>	<i>Pseudomonas stutzeri</i> -like	CDC group Vb-3
<i>Comamonas terrigena</i>	CDC group EF-19	<i>Psychrobacter immobilis</i>	<i>Micrococcus cryophilus</i>
<i>Comamonas testosteroni</i>	<i>Pseudomonas testosteroni</i>	<i>Psychrobacter phenylpyruvicus</i>	<i>Moraxella phenylpyruvicus</i> CDC group M-2
<i>Empedobacter brevis</i>	<i>Flavobacterium breve</i>	<i>Ralstonia pickettii</i>	<i>Burkholderia pickettii</i> <i>Pseudomonas pickettii</i> CDC groups Va-1, Va-2, Va-3
<i>Flavobacterium</i> group IIe	CDC group IIe		<i>Pseudomonas thomasi</i>
<i>Flavobacterium</i> group IIIh	CDC group IIIh	<i>Roseomonas cervicalis</i>	CDC "pink coccoid" group
<i>Flavobacterium</i> group IIIi	CDC group IIIi	<i>Roseomonas fauriae</i>	CDC "pink coccoid" group
<i>Methylobacterium</i> species		<i>Roseomonas</i> genomospecies 4	CDC "pink coccoid" group
<i>Moraxella atlantae</i>	CDC group M-3	<i>Roseomonas</i> genomospecies 5	CDC "pink coccoid" group
<i>Moraxella canis</i>		<i>Roseomonas</i> genomospecies 6	CDC "pink coccoid" group
<i>Moraxella catarrhalis</i>	<i>Branhamella catarrhalis</i> <i>Neisseria catarrhalis</i> <i>Moraxella liquefaciens</i>	<i>Roseomonas gilardii</i>	
<i>Moraxella lacunata</i>		<i>Shewanella alga</i>	
<i>Moraxella lincolnia</i>		<i>Shewanella putrefaciens</i>	<i>Alteromonas putrefaciens</i> <i>Pseudomonas putrefaciens</i> CDC groups Ib-1 and Ib-2
<i>Moraxella nonliquefaciens</i>			<i>Flavobacterium mizutaii</i> <i>Flavobacterium multivorum</i> CDC group IIk-2
<i>Moraxella osloensis</i>		<i>Sphingobacterium</i>	<i>Flavobacterium spiritivorum</i> <i>Sphingobacterium versatilis</i> <i>Sphingobacterium yabuuchiae</i> CDC group IIk-3
<i>Myroides odoratus</i>	<i>Chryseobacterium odoratum</i> <i>Flavobacterium odoratum</i> CDC group M-4f	<i>Sphingobacterium thalpophilum</i>	<i>Flavobacterium thalpophilum</i>
<i>Myroides odoratimimus</i>		<i>Sphingomonas parapaucimobilis</i>	<i>Pseudomonas paucimobilis</i> CDC group IIk-1
<i>Ochrobactrum anthropi</i>	<i>Achromobacter</i> species biotypes 1 and 2 CDC groups Vd-1 and Vd-2	<i>Sphingomonas sanguis</i>	
<i>Ochrobactrum intermedium</i>		<i>Sphingomonas yanoikuyae</i>	
<i>Oligella ureolytica</i>	CDC group IVe	<i>Stenotrophomonas africana</i>	
<i>Oligella urethralis</i>	<i>Moraxella urethralis</i> CDC group M-4	<i>Stenotrophomonas maltophilia</i>	<i>Xanthomonas maltophilia</i> <i>Pseudomonas maltophilia</i> <i>Flavobacterium genitale</i> CDC group IIl
<i>Pseudomonas aeruginosa</i>	<i>Pseudomonas pyocyanea</i> <i>Bacterium aeruginosum</i>	<i>Weeksella virosa</i>	
<i>Pseudomonas alcaligenes</i>			
<i>Pseudomonas chlororaphis</i>	<i>Pseudomonas aureofaciens</i>		
<i>Pseudomonas fluorescens</i>			
<i>Pseudomonas luteola</i>	<i>Chryseomonas luteola</i> CDC group Ve-1		
<i>Pseudomonas mendocina</i>	CDC group Vb-2		
<i>Pseudomonas oryzihabitans</i>	<i>Flavimonas oryzihabitans</i> CDC group Ve-2		
<i>Pseudomonas pertucinogena</i>	<i>Bordetella pertussis</i> rough phase IV		
<i>Pseudomonas pseudoalcaligenes</i>	<i>Pseudomonas alcaligenes</i> biotype B		
<i>Pseudomonas putida</i>			

Aerobic Gram-Negative Fastidious Coccobacilli

Pertinent characteristics: small, curved or straight gram-negative bacilli or coccobacilli; may require CO₂ and enriched media or special conditions for adequate growth.

Current Name	Synonym	Current Name	Synonym
<i>Actinobacillus actinomycetemcomitans</i>	CDC groups HB-3 and HB-4	<i>Campylobacter upsaliensis</i>	
<i>Actinobacillus equuli</i>		<i>Campylobacter ureolyticus</i>	<i>Bacteroides ureolyticus</i>
<i>Actinobacillus hominis</i>		<i>Capnocytophaga canimorsus</i>	CDC group DF-2
<i>Actinobacillus lignieresii</i>		<i>Capnocytophaga cynodegmi</i>	CDC group DF-2
<i>Actinobacillus ureae</i>	<i>Pasteurella ureae</i>	<i>Capnocytophaga gingivalis</i>	CDC group DF-1
<i>Afipia broomeae</i>		<i>Capnocytophaga granulosa</i>	
<i>Afipia clevelandensis</i>		<i>Capnocytophaga haemolytica</i>	
<i>Afipia felis</i>		<i>Capnocytophaga ochracea</i>	CDC group DF-1
<i>Arcobacter butzleri</i>	<i>Campylobacter butzleri</i>	<i>Capnocytophaga sputigena</i>	CDC group DF-1
<i>Arcobacter cryaerophilus</i>	<i>Campylobacter cryaerophila</i>	<i>Cardiobacterium hominis</i>	CDC group IId
<i>Bartonella bacilliformis</i>		<i>Chlamydia pneumoniae</i>	TWAR
<i>Bartonella clarridgeiae</i>		<i>Chlamydia psittaci</i>	
<i>Bartonella elizabethae</i>	<i>Rochalimaea elizabethae</i>	<i>Chlamydia trachomatis</i>	
<i>Bartonella henselae</i>	<i>Rochalimaea henselae</i>	<i>Coxiella burnetii</i>	
<i>Bartonella quintana</i>	<i>Rochalimaea quintana</i>	<i>Ehrlichia</i> species	Human granulocytic ehrlichiosis
<i>Bartonella vinsonii</i>	<i>Rochalimaea vinsonii</i>	<i>Ehrlichia canis</i>	
<i>Bordetella bronchiseptica</i>	CDC group IVa	<i>Ehrlichia chaffeensis</i>	Human monocytic ehrlichiosis
<i>Bordetella hinzii</i>		<i>Ehrlichia sennetsu</i>	
<i>Bordetella holmesii</i>	CDC group NO-2	<i>Eikenella corrodens</i>	CDC group HB-1
<i>Bordetella parapertussis</i>		<i>Flexispira rappini</i>	<i>Helicobacter rappini</i>
<i>Bordetella pertussis</i>		<i>Francisella philomiragia</i>	<i>Yersinia philomiragia</i>
<i>Bordetella trematum</i>		<i>Francisella tularensis</i> biovar novicida	<i>Francisella novicida</i>
<i>Brucella abortus</i>			<i>Pasteurella tularensis</i>
<i>Brucella canis</i>			<i>Bacterium tularense</i>
<i>Brucella melitensis</i>		<i>Francisella tularensis</i> biovar palearctica	<i>Francisella tularensis</i> type B
<i>Brucella suis</i>			<i>Bacterium tularense</i>
<i>Calymmatobacterium granulomatis</i>		<i>Francisella tularensis</i> biovar tularensis	<i>Francisella tularensis</i> type A
<i>Campylobacter coli</i>			<i>Pasteurella tularensis</i>
<i>Campylobacter concisus</i>	CDC group EF-22		<i>Bacterium tularense</i>
<i>Campylobacter curvus</i>	<i>Wolinella curva</i>	<i>Haemophilus aphrophilus</i>	CDC group HB-2
<i>Campylobacter fetus</i> ssp. <i>fetus</i>	<i>Vibrio fetus</i>	<i>Haemophilus ducreyi</i>	
<i>Campylobacter fetus</i> ssp. <i>venerealis</i>		<i>Haemophilus haemolyticus</i>	
<i>Campylobacter gracilis</i>	<i>Bacteroides gracilis</i>	<i>Haemophilus influenzae</i>	<i>Haemophilus aegyptius</i>
<i>Campylobacter hyointestinalis</i> ssp. <i>hyointestinalis</i>		<i>Haemophilus</i> parahaemolyticus	
<i>Campylobacter jejuni</i> ssp. <i>doylei</i>		<i>Haemophilus parainfluenzae</i>	
<i>Campylobacter jejuni</i> ssp. <i>jejuni</i>		<i>Haemophilus paraphrophilus</i>	
<i>Campylobacter lari</i>	<i>Campylobacter laridis</i>	<i>Haemophilus segnis</i>	
<i>Campylobacter mucosalis</i>		<i>Helicobacter bizzozeronii</i>	
<i>Campylobacter rectus</i>	<i>Wolinella recta</i>	<i>Helicobacter canis</i>	
<i>Campylobacter showae</i>		<i>Helicobacter cinaedi</i>	<i>Campylobacter cinaedi</i>
<i>Campylobacter sputorum</i> ssp. <i>sputorum</i>		<i>Helicobacter fennelliae</i>	<i>Campylobacter fennelliae</i>
<i>Campylobacter sputorum</i> ssp. <i>paraureolyticus</i>		<i>Helicobacter heilmannii</i>	<i>Gastrospirillum hominis</i>
		<i>Helicobacter pullorum</i>	
		<i>Helicobacter pylori</i>	<i>Campylobacter pylori</i>
		<i>Helicobacter westmeadii</i>	
		<i>Kingella denitrificans</i>	CDC group TM-1
		<i>Kingella kingae</i>	<i>Moraxella kingae</i>
			<i>Moraxella kingii</i>

Aerobic Gram-Negative Fastidious Coccobacilli (Continued)

Current Name	Synonym	Current Name	Synonym
<i>Kingella oralis</i>		<i>Legionella tucsonensis</i>	
<i>Legionella anisa</i>		<i>Legionella wadsworthii</i>	
<i>Legionella birminghamensis</i>		<i>Orientia tsutsugamushi</i>	<i>Rickettsia tsutsugamushi</i>
<i>Legionella bozemanii</i>	<i>Fluoribacter bozemanae</i>	<i>Rickettsia africana</i>	
<i>Legionella cincinnatiensis</i>		<i>Rickettsia akari</i>	
<i>Legionella dumoffii</i>	<i>Fluoribacter dumoffii</i>	<i>Rickettsia australis</i>	
<i>Legionella feeleyi</i>		<i>Rickettsia conorii</i>	
<i>Legionella gormanii</i>		<i>Rickettsia felis</i>	
<i>Legionella hackeliae</i>		<i>Rickettsia honei</i>	
<i>Legionella israelensis</i>		<i>Rickettsia japonica</i>	
<i>Legionella jordanis</i>		<i>Rickettsia prowazekii</i>	
<i>Legionella lansingensis</i>		<i>Rickettsia rickettsii</i>	
<i>Legionella longbeachae</i>		<i>Rickettsia sibirica</i>	
<i>Legionella maceachernii</i>		<i>Rickettsia slovacica</i>	
<i>Legionella micdadei</i>	<i>Tatlockia micdadei</i>	<i>Rickettsia typhi</i>	
<i>Legionella oakridgensis</i>		<i>Streptobacillus moniliformis</i>	<i>Haverhillia multiformis</i>
<i>Legionella pneumophila</i>		<i>Suttonella indologenes</i>	<i>Kingella indologenes</i>
<i>Legionella sainthelensi</i>			

Mycoplasma (Pleuropneumonia-Like Organisms [PPLO])

Pertinent characteristics: small, highly pleomorphic organisms that are difficult to observe with routine stains; require complex medium for growth.

Current Name	Synonym	Current Name	Synonym
<i>Mycoplasma buccale</i>		<i>Mycoplasma penetrans</i>	
<i>Mycoplasma faucium</i>		<i>Mycoplasma pirum</i>	
<i>Mycoplasma fermentans</i>	<i>Mycoplasma incognitus</i>	<i>Mycoplasma pneumoniae</i>	
<i>Mycoplasma genitalium</i>		<i>Mycoplasma primatum</i>	
<i>Mycoplasma hominis</i>		<i>Mycoplasma salivarium</i>	
<i>Mycoplasma lipophilum</i>		<i>Mycoplasma spermatophilum</i>	
<i>Mycoplasma orale</i>		<i>Ureaplasma urealyticum</i>	T-mycoplasma

Treponemataceae (Spiral Organisms)

Pertinent characteristics: filamentous, spiral organisms that may or may not stain with usual laboratory stains; require complex media or animal host for growth.

Current Name	Synonym	Current Name	Synonym
<i>Borrelia afzelii</i>		<i>Borrelia latyschewii</i>	
<i>Borrelia andersonii</i>		<i>Borrelia lonestari</i>	
<i>Borrelia anserina</i>		<i>Borrelia lusitaniae</i>	
<i>Borrelia bissettii</i>		<i>Borrelia mazzottii</i>	
<i>Borrelia burgdorferi</i>		<i>Borrelia miyamotoi</i>	
<i>Borrelia caucasica</i>		<i>Borrelia parkeri</i>	
<i>Borrelia crocidurae</i>		<i>Borrelia persica</i>	
<i>Borrelia duttonii</i>		<i>Borrelia recurrentis</i>	
<i>Borrelia garinii</i>		<i>Borrelia tanukii</i>	
<i>Borrelia hermsii</i>		<i>Borrelia turdae</i>	
<i>Borrelia hispanica</i>		<i>Borrelia turicatae</i>	
<i>Borrelia japonica</i>		<i>Borrelia valaisiana</i>	

Treponemataceae (Spiral Organisms) (Continued)

Current Name	Synonym	Current Name	Synonym
<i>Borrelia venezuelensis</i>		<i>Leptospira noguchii</i>	
<i>Brachyspira aalborgi</i>		<i>Leptospira santarosai</i>	
<i>Brachyspira pilosicoli</i>	<i>Serpulina pilosicoli</i>	<i>Leptospira weilii</i>	
<i>Leptospira borgpetersenii</i>		<i>Spirillum minus</i>	<i>Spirillum minor</i>
<i>Leptospira inadai</i>		<i>Treponema amylovorum</i>	
<i>Leptospira interrogans</i>		<i>Treponema carateum</i>	
<i>Leptospira interrogans</i> serogroup <i>autumnalis</i>		<i>Treponema denticola</i>	
<i>Leptospira interrogans</i> serogroup <i>ballum</i>		<i>Treponema maltophilum</i>	
<i>Leptospira interrogans</i> serogroup <i>bataviae</i>		<i>Treponema medium</i>	
<i>Leptospira interrogans</i> serogroup <i>canicola</i>		<i>Treponema minutum</i>	
<i>Leptospira interrogans</i> serogroup <i>grippityphosa</i>		<i>Treponema pallidum</i> ssp. <i>endemicum</i>	<i>Treponema pallidum</i>
<i>Leptospira interrogans</i> serogroup		<i>Treponema pallidum</i> ssp. <i>pallidum</i>	<i>Treponema pallidum</i>
<i>Leptospira interrogans</i> serogroup <i>icterohaemorrhagiae</i>		<i>Treponema pallidum</i> ssp. <i>pertenue</i>	<i>Treponema pertenuae</i>
<i>Leptospira interrogans</i> serogroup <i>pomona</i>		<i>Treponema pectinovorum</i>	
<i>Leptospira kirschneri</i>		<i>Treponema phagedenis</i>	
		<i>Treponema refringens</i>	
		<i>Treponema skoliodontum</i>	
		<i>Treponema socranskii</i>	
		<i>Treponema vincentii</i>	