

TABLE E-1 Microbiological Spectrum of Isolates from the Site of Infection by Primary Musculoskeletal Infection (MSI) Type

	Osteomyelitis		Septic Arthritis		Pyomyositis		Abscess		All MSI	
	No.	%	No.	%	No.	%	No.	%	No.	%
Pathogen										
Methicillin-resistant <i>Staphylococcus aureus</i> (MRSA)	67	19.0	10	5.0	13	31.0	149	54.2	239	27.5
Oxacillin-sensitive <i>Staphylococcus aureus</i> (OSSA)	78	22.1	19	9.5	4	9.5	50	18.2	151	17.4
Group-A beta-hemolytic streptococci (GABHS)	6	1.7	9	4.5	2	4.8	11	4.0	28	3.2
<i>Streptococcus pneumoniae</i>	3	0.8	7	3.5					10	1.2
<i>Pseudomonas aeruginosa</i>	6	1.7					1	0.4	7	0.8
<i>Kingella kingae</i>	3	0.8	3	1.5					6	0.7
Alpha-hemolytic streptococci	1	0.3	1	0.5			1	0.4	3	0.3
<i>Neisseria gonorrhoeae</i>			3	1.5					3	0.3
<i>Streptococcus agalactiae</i>	1	0.3	1	0.5			1	0.4	3	0.3
Group-G streptococci							3	1.1	3	0.3
<i>Streptococcus milleri</i>					1	2.4	2	0.7	3	0.3
<i>Candida tropicalis</i>	1	0.3	1	0.5					2	0.2
<i>Escherichia coli</i>	1	0.3	1	0.5					2	0.2
<i>Eikenella corrodens</i>	2	0.6							2	0.2
<i>Enterobacter cloacae</i>	1	0.3	1	0.5					2	0.2
<i>Haemophilus influenzae</i>			2	1.0					2	0.2
Salmonella species	1	0.3	1	0.5					2	0.2
<i>Bacteroides fragilis</i>	1	0.3							1	0.1
Beta streptococci	1	0.3							1	0.1
<i>Candida albicans</i>			1	0.5					1	0.1
<i>Coccidioides immitis</i>	1	0.3							1	0.1
Clostridium species	1	0.3							1	0.1
Curvularia species			1	0.5					1	0.1
<i>Enterobacter cloacae</i> and <i>Citrobacter freundii</i>	1	0.3							1	0.1
<i>Enterococcus faecalis</i>	1	0.3							1	0.1
<i>Eurella multocida</i>							1	0.4	1	0.1
Fusarium species	1	0.3							1	0.1
<i>Gemella morbillorum</i> and <i>Peptostreptococcus</i> species							1	0.4	1	0.1
Lichtheimia species	1	0.3							1	0.1
<i>Moraxella lacunata</i>			1	0.5					1	0.1
<i>Mycobacterium avium</i>							1	0.4	1	0.1
<i>Peptostreptococcus</i> species			1	0.5					1	0.1
<i>Propionibacterium acnes</i>			1	0.5					1	0.1
Group-D Salmonella	1	0.3							1	0.1
<i>Shigella sonnei</i>			1	0.5					1	0.1
<i>Staphylococcus intermedius</i> and <i>Clostridium subterminale</i>					1	2.4			1	0.1
<i>Streptococcus anginosus</i>							1	0.4	1	0.1
Possible contaminant*	7	2.0	5	2.5			4	1.5	16	1.8

continued

TABLE E-1 (continued)										
	Osteomyelitis		Septic Arthritis		Pyomyositis		Abscess		All MSI	
	No.	%	No.	%	No.	%	No.	%	No.	%
Culture-negative or no culture material from infection site										
Culture-negative	39	11.0	125	62.8	12	28.6	30	10.9	206	23.7
No culture material	127	36.0	4	2.0	9	21.4	19	6.9	159	18.3
Total	353		199		42		275		869	
*Coagulase-negative staphylococci, <i>Propionibacterium acnes</i> , and <i>Staphylococcus hemolyticus</i> .										

	Infection-Site Culture				Blood Culture			
	Negative* (no. [%])	Positive* (no. [%])	Total (no.)	P Value	Negative* (no. [%])	Positive* (no. [%])	Total (no.)	P Value
Prehospital antibiotic				0.0376				0.0238
No	182 (37.3)	306 (62.7)	488		361 (78.6)	98 (21.4)	459	
Yes	65 (29.3)	157 (70.7)	222		164 (86.3)	26 (13.7)	190	
Total	247 (34.8)	463 (65.2)	710		525 (80.9)	124 (19.1)	649	
CMC antibiotic prior to culture†				<0.0001				0.2137
No	161 (45.5)	193 (54.5)	354		428 (81.8)	95 (18.2)	523	
Yes	86 (24.2)	270 (75.8)	356		97 (77.0)	29 (23.0)	126	
Total	247 (34.8)	463 (65.2)	710		525 (80.9)	124 (19.1)	649	
Both prehospital and CMC antibiotic†				0.0043				0.4113
No	217 (37.2)	367 (62.8)	584		489 (80.6)	118 (19.4)	607	
Yes	30 (23.8)	96 (76.2)	126		36 (85.7)	6 (14.3)	42	
Total	247 (34.8)	463 (65.2)	710		525 (80.9)	124 (19.1)	649	
*Percentages are of the total number of positive and negative results. †CMC = Children’s Medical Center.								