

**ORGANISMS THAT COMMONLY CAUSE ACUTE  
 INFECTIOUS ARTHRITIS**

Patient Groups	Organism	Typical Sources
Adults and adolescents	Gonococci (young adults of reproductive age), nongonococcal bacteria ( <i>Staphylococcus aureus</i> , streptococci), <i>Neisseria meningitidis</i> in unusual cases	Cervical, urethral, rectal, or pharyngeal infection with bacteremic dissemination (for gonococci); bacteremia (for staphylococci and streptococci)
Newborns	Group B streptococci, <i>Escherichia coli</i> (and other gram-negative enteric bacteria), <i>S. aureus</i>	Maternal-fetal transmission; IV punctures or catheters with bacteremic dissemination
Children ≤ 3 yr	<i>Streptococcus pyogenes</i> , <i>Streptococcus pneumoniae</i> , <i>S. aureus</i>	Bacteremia (eg, otitis media, URIs, skin infections, meningitis)
Age 3 yr to adolescence	<i>S. aureus</i> , streptococci, <i>Neisseria gonorrhoeae</i> , <i>Pseudomonas aeruginosa</i> , <i>Kingella kingae</i>	Bacteremia or contiguous spread
Children with meningitis, bacteremia, palpable purpura	<i>N. meningitidis</i> (uncommon)	Bacteremia
All ages	Viruses (eg, parvovirus B19; hepatitis B; hepatitis C; rubella virus [active infection and after immunization]; togavirus; varicella; mumps [in adults]; adenovirus; coxsackie viruses A9, B2, B3, B4, and B6; retroviruses, including HIV; Epstein-Barr virus)	Viremia or immune complex deposition
Patients with possible tick exposure	<i>Borrelia burgdorferi</i> (causing Lyme disease)	Bacteremia
Patients with bite wounds	Often polymicrobial	Direct joint penetration, usually the small joints of the hands
Human	<i>Eikenella corrodens</i> , group B streptococci, <i>S. aureus</i> , oral anaerobes (eg, <i>Fusobacterium</i> sp, peptostreptococci, <i>Bacteroides</i> sp)	
Dogs or cats	<i>S. aureus</i> , <i>Pasteurella multocida</i> , <i>Pseudomonas</i> sp, <i>Moraxella</i> sp, <i>Haemophilus</i> sp	
Rats	<i>S. aureus</i> , <i>Streptobacillus moniliformis</i> , <i>Spirillum minus</i>	

**ORGANISMS THAT COMMONLY CAUSE ACUTE  
 INFECTIOUS ARTHRITIS—Continued**

Patient Groups	Organism	Typical Sources
Elderly; patients with severe joint trauma; serious disease (immunosuppression, hemodialysis, SLE, RA, diabetes, cancer)	Staphylococci, gram-negative bacteria (eg, <i>Enterobacter</i> , <i>P. aeruginosa</i> , <i>Serratia marcescens</i> ), <i>Salmonella</i>	Urinary tract, skin
Patients with polyarticular infections	Streptococci	Pharyngitis, cellulitis, GI and GU infections
Patients with joint penetration (by injury, arthrocentesis, or arthrotomy), contiguous infection, diabetes, cancer	Anaerobes (eg, <i>Propionibacterium acnes</i> , <i>Peptostreptococcus magnus</i> , <i>Fusobacterium</i> sp, <i>Clostridium</i> sp, <i>Bacteroides</i> sp); often as mixed infections with facultative or aerobic bacteria such as <i>S. aureus</i> , <i>Staphylococcus epidermidis</i> , <i>E. coli</i>	Abdomen, genitals, odontogenic infections, sinuses, ischemic limbs, decubitus ulcers
HIV-infected patients	<i>S. aureus</i> , streptococci, <i>Salmonella</i> sp, mycobacteria	Skin, mucous membranes, catheters
IV drug abusers	Gram-negative bacteria, <i>S. aureus</i> , streptococci	Bacteremia