

**TABLE 88-2** INFECTIONS EXHIBITING FEVER AS THE SOLE OR DOMINANT FEATURE

INFECTIOUS AGENT OR SOURCE	EPIDEMIOLOGIC EXPOSURE AND HISTORY	DISTINCTIVE CLINICAL AND LABORATORY FINDINGS
VIRUSES		
Rhinovirus, adenovirus, parainfluenza	None (adenovirus in epidemics)	Often URI symptoms; throat and rectal cultures; rapid viral antigen testing
Middle East respiratory syndrome (MERS)	Travel to Arabian Peninsula or contact from Middle East	Pneumonia with ARDS; viral antigen testing of sputum; PCR of normally sterile sites (CDC)
Enteroviruses (nonpolioviruses: coxsackieviruses, echovirus)	Summer, epidemic	Occasionally aseptic meningitis, rash, pleurodynia, herpangina; serologic or nucleic acid testing (PCR)
Influenza	Winter, epidemic	Headache, myalgias, arthralgias; nasopharyngeal culture, rapid viral antigen testing
EBV, CMV	Close personal contact; blood or tissue exposure; occupational or perinatal exposure	Monospot test, EBV specific antibodies; EBV PCR in immunocompromised; CMV IgM shell vial assay; CMV antigenemia assay; CMV DNA of CSF; culture and histopathology of tissues
Colorado tick fever	Southwest and northwest regions, tick exposure	Biphasic illness, leukopenia; blood, CSF cultures, serologic or PCR
Deer tick virus (Powassan virus)	New York State tick exposure	Altered mentation or encephalitis; serum and CSF IgM (CDC)
BACTERIA		
<i>Staphylococcus aureus</i>	IV drug users, IV catheters, hemodialysis, dermatitis	Must exclude endocarditis; blood cultures
<i>Listeria monocytogenes</i>	Depressed cell-mediated immunity	Meningitis may also be present; blood, CSF cultures
<i>Salmonella typhi</i> , <i>Salmonella paratyphi</i>	Food or water contaminated by carrier or patient	Headache, myalgias, diarrhea, or constipation, transient rose spots; blood, marrow, or stool cultures
Streptococci	Valvular heart disease	Low-grade fever, fatigue; blood cultures
ANIMAL EXPOSURE		
<i>Coxiella burnetii</i> (Q fever)	Exposure to infected livestock, parturient animals	Headache, occasionally pneumonitis, hepatitis, culture-negative endocarditis; serologic testing
<i>Leptospira interrogans</i>	Water contaminated by urine From dogs, cats, rodents, small mammals	Headache, myalgias, conjunctival suffusion, biphasic illness, aseptic meningitis; serologic testing

ARDS, Acute respiratory disease syndrome; CDC, Centers for Disease Control and Prevention case definition; CMV, cytomegalovirus; CSF, cerebrospinal fluid; EBV, Epstein-Barr virus; IgM, immunoglobulin M; IV, intravenous; PCR, polymerase chain reaction; URI, upper respiratory infection.

TABLE 88-3 DIFFERENTIAL DIAGNOSIS OF INFECTIOUS AGENTS PRODUCING FEVER AND RASH

MACULOPAPULAR, ERYTHEMATOUS LESIONS	DIFFUSE ERYTHRODERMA
Enterovirus	Group A streptococci (scarlet fever, toxic shock syndrome)
EBV, CMV, <i>Toxoplasma gondii</i>	<i>Staphylococcus aureus</i> (toxic shock syndrome)
Acute HIV infection	DISTINCTIVE RASH
Colorado tick fever virus	Ecthyma gangrenosum: <i>Pseudomonas aeruginosa</i>
<i>Salmonella typhi</i>	Erythema migrans: Lyme disease
<i>Leptospira interrogans</i>	MUCOUS MEMBRANE LESIONS
Measles virus	Vesicular pharyngitis: coxsackievirus A
Rubella virus	Palatal petechiae: rubella, EBV, scarlet fever (group A streptococci)
Hepatitis B virus	Erythema: toxic shock syndrome (<i>Staphylococcus aureus</i> and group A streptococci)
<i>Treponema pallidum</i>	Oral ulceronodular lesion: <i>Histoplasma capsulatum</i>
Parvovirus B19	Koplik's spots: measles virus
Human herpesvirus 6	
VESICULAR LESIONS	
Varicella-zoster virus	
Herpes simplex virus	
Coxsackievirus A	
<i>Vibrio vulnificus</i>	
CUTANEOUS PETECHIAE	
<i>Neisseria gonorrhoeae</i>	
<i>Neisseria meningitidis</i>	
<i>Rickettsia rickettsii</i> (Rocky Mountain spotted fever)	
<i>Rickettsia typhi</i> (murine typhus)	
<i>Ehrlichia chaffeensis</i>	
Echoviruses	
<i>Streptococcus viridans</i> (endocarditis)	

CMV, Cytomegalovirus; EBV, Epstein-Barr virus; HIV, human immunodeficiency virus.