

Disease	Causative Agent	Type of Microorganism	Main Lesion Type	Typical Location	Key Clinical Features	Epidemiology / Transmission	Pathogenesis (Core Idea)	Diagnosis	Treatment	Important Notes
HSV Infection (Herpes Simplex Virus)	HSV-1, HSV-2	DNA virus (Herpesvirus)	Grouped vesicles → shallow ulcers	HSV-1: above waist (oral) HSV-2: below waist (genital)	Tingling prodrome, mild fever, vesicles on erythematous base, yellow crust	HSV-1 common in children, HSV-2 sexually transmitted, virus shed by asymptomatic people	Virus infects epithelial cells → travels to sensory nerves → latency in trigeminal (HSV-1) or sacral (HSV-2) ganglia	Clinical appearance, Tzanck smear, serology (IgM/IgG), PCR	Acyclovir, valacyclovir, famciclovir	Lifelong infection with recurrences
Varicella (Chickenpox)	Varicella Zoster Virus	DNA virus (Herpesvirus)	Vesicles in multiple stages	Mainly trunk (centripetal distribution)	Fever, malaise, pruritic rash, lesions: macules → papules → vesicles → pustules → crusts	Highly contagious, spread by respiratory droplets or contact	Virus replicates in respiratory tract → viremia → skin infection	Clinical, Tzanck smear, serology	Supportive care, acyclovir if severe	"Dewdrops on rose petals" appearance
Zoster (Shingles)	Reactivation of VZV	DNA virus	Grouped vesicles	One or two dermatomes	Severe pain, vesicles become pustules or bullae	More common in older adults	Reactivation of latent virus in sensory ganglia	Clinical	Acyclovir, valacyclovir, famciclovir	Complication: postherpetic neuralgia
Hand-Foot-Mouth Disease (HFMD)	Coxsackievirus A16, Enterovirus 71	RNA virus (Enterovirus)	Vesicles → ulcers	Mouth, palms, soles, buttocks	Low fever, abdominal pain, respiratory symptoms, oral ulcers	Highly contagious, fecal-oral or oral-oral spread	Virus replicates in nasopharynx & ileum → viremia	Clinical or PCR	Supportive care	Rare complications: aseptic meningitis, myocarditis
Herpangina	Coxsackievirus A (most common)	RNA virus (Enterovirus)	Vesicles / ulcers	Posterior oropharynx	Sudden fever, sore throat, headache, anorexia	Epidemics in children, summer/autumn	Enterovirus infection of oropharyngeal mucosa	Clinical	Symptomatic care, topical anesthetics	Self-limiting
Acne vulgaris	Cutibacterium acnes	Gram-positive bacteria	Comedones, papules, pustules	Face, chest, back	Blackheads, whiteheads, inflammatory lesions	Very common in puberty	4 factors: follicular plugging + sebum + bacteria + inflammation	Clinical	Benzoyl peroxide, retinoids, antibiotics	May cause permanent scars
Folliculitis	Mostly Staphylococcus aureus	Gram-positive bacteria	Pustules at hair follicle	Any hair-bearing skin	Small superficial pustules	May occur with poor hygiene or irritation	Bacterial infection of hair follicle	Clinical, culture	Warm compress, antibiotics	"Hot-tub folliculitis" caused by Pseudomonas
Furuncle (Boil)	Staphylococcus aureus	Gram-positive bacteria	Deep pus-filled lesion	Hair-bearing skin	Painful abscess	Same risk factors as folliculitis	Deeper infection of hair follicle	Clinical	Drainage ± antibiotics	Involves dermis & subcutaneous tissue
Carbuncle	Staphylococcus aureus	Gram-positive bacteria	Multiple connected abscesses	Neck, upper back	Severe painful lesions with sinus tracts	Common in diabetics, obese	Several furuncles connected subcutaneously	Clinical, culture	Drainage + systemic antibiotics	Multiple draining sinuses
Herpetic Whitlow	HSV-1 (60%), HSV-2 (40%)	DNA virus	Vesicles → pustules	Fingers near nail	Painful vesicles, itching, lymphadenopathy	Common in healthcare workers and thumb-sucking children	Virus enters through broken skin	Clinical, Tzanck smear, PCR	Analgesics, topical/oral acyclovir	Spread by direct contact
Gonococcemia	Neisseria gonorrhoeae	Gram-negative diplococcus	Papules → pustules / bullae	Distal extremities	Widespread pustules on erythematous or hemorrhagic base	Disseminated STI	Bacteria spread through bloodstream	Clinical	IV antibiotics (ceftriaxone etc.)	Avoid sexual contact with infected persons

