

INFECTIOUS AGENT	DISEASE OR CONDITION	ROUTE OR MODE OF TRANSMISSION	INCUBATION PERIOD	COMMUNICABLE PERIOD	VACCINE
HIV	HIV infection (AIDS)	Blood and blood products (infected IV needles) Sexual contact Transplacental and perinatal	To detectable antibodies: <1 mo To disease diagnosis: <1–8 y or more	From asymptomatic through life	Vaccine in progress Pre- and postexposure medications available
HBV	Type B hepatitis “serum” hepatitis	Blood Saliva and all body fluids Sexual contact Perinatal	60–150 d (average 90 d)	Carrier state: indefinite	Yes
HCV	Type C hepatitis	<b>Percutaneous</b> exposure to blood and blood products (infected IV needles) Transplacental and perinatal	2 wk–6 mo (average 6–9 wk)	1 wk before onset of symptoms, persists in most persons indefinitely Carrier state: indefinite	Vaccine in progress
Delta hepatitis virus (HDV) Delta agent	Delta hepatitis	Coinfection with HBV Blood Sexual contacts Perinatal	2–8 wk	All phases of active infection	HBV vaccine
Hepatitis E virus (HEV) ET-NANB	Type E hepatitis Enterically transmitted non-A, non-B	Fecal–oral Contaminated water Consumption of infected animals	15–60 d (average 40 d)	Unknown	No
Herpes simplex virus Type 1 (HSV-1) Type 2 (HSV-2)	Acute herpetic gingivostomatitis Herpes labialis Ocular herpes Herpetic whitlow Genital herpes	Saliva Direct contact (lip, hand) Indirect contact (on objects, limited survival) Sexual contact	2–20 d (average 6 d)	Labialis: 1 d before lesions are crusted Acute stomatitis: 7 wk after recovery <b>Viral shedding</b> in saliva 1–4 d Asymptomatic infection: with viral shedding Reactivation period: with viral shedding	No

HPV	Genital warts Cervical cancer Anogenital cancer Oropharyngeal cancer Recurrent respiratory papillomatosis	Sexual contact	2–3 mo	Contagious for life	Vaccine available for types 6, 11, 16, 18
VZV (HHV-3)	Chicken pox (varicella) Shingles (zoster)	Chicken pox: direct and indirect contact, airborne droplet Shingles: reactivation of HHV-3	10–21 d Average 14–16 d	1–2 d prior to onset of rash until all vesicles are crusted	Yes
EBV (HHV-4)	Infectious mononucleosis Oral hairy leukoplakia	Direct contact Saliva	4–6 wk	Prolonged Pharyngeal excretion up to 1 y after infection	No
CMV (HHV-5)	Neonatal CMV infection Cytomegaloviral disease	Perinatal Direct contact (most body secretions) Blood transfusion Organ transplantation Saliva	3–12 wk postpartum 2–4 wk after transfusion or transplant	Months to years	No
<i>Mycobacterium tuberculosis</i>	Tuberculosis	Droplet nuclei Sputum Saliva	3–8 wk, occasionally 12 wk Latency decades or indefinite	As long as viable bacilli are discharged in sputum	BCG (Bacille Calmette-Guérin) has limited efficacy approx. 15 y
<i>Corynebacterium diphtheriae</i>	Diphtheria	Direct and indirect	2–5 d	4 wk if no treatment; 3 d after antibiotic treatment started	Yes
<i>Treponema pallidum</i>	Syphilis Congenital syphilis	Direct contact Transplacental	10 d–3 mo (average 21 d)	Variable and indefinite 2–4 y	No
<i>Neisseria gonorrhoeae</i>	Gonorrhea Gonococcal pharyngitis	Direct contact Indirect (short survival of organisms)	2–5 d	May be subclinical and continue for months and years if untreated	No
<i>Bordetella pertussis</i>	Whooping cough Pertussis	Direct contact with discharges	up to 3 wk (average 7–10 d)	Untreated: 3 wk after paroxysmal cough Treated: 5 d after antibiotic started	Yes
<i>Mumps virus (paramyxovirus)</i>	Infectious parotitis (mumps)	Direct contact (saliva) Airborne droplet	14–25 d (average 18 d)	From 1 wk before parotid swelling until 5 d after swelling	Yes
<i>Poliovirus types 1, 2, 3</i>	Poliomyelitis	Direct contact (saliva) Droplet Fecal–oral	7–14 d	As long as virus is secreted, most infectious 7–10 d before and after onset of symptoms	Yes

<i>Influenza viruses (A, B, C)</i>	Influenza	Nasal discharge Respiratory droplets	Average 7–67 hr Type A average 34 hr Type B average 14 hr	1 d before symptoms Peaks 1–2 d after Can last for 7 d	Yes
<i>Measles virus (Morbillivirus)</i>	Rubeola (measles)	Direct contact Saliva Airborne droplet	7–18 d (average 10 d) to fever, 14 d to rash	Few days before fever to 4 d after rash appears	Yes
<i>Rubella virus (Togavirus)</i>	Rubella (German measles) Congenital rubella syndrome	Nasopharyngeal secretions Direct contact Airborne droplets Maternal infection first trimester	13–20 d	From 1 wk before to 5 d after rash appears Highly communicable Infants shed virus for months after birth	Yes
<i>Group A streptococci (beta-hemolytic) Streptococcus pyogenes</i>	Streptococcal sore throat Scarlet fever Impetigo Erysipelas Cellulitis Toxic shock syndrome Wound infections	Respiratory droplets Direct contact	1–5 d (average 2 d)	14–21 d, untreated Many nasal oropharyngeal carriers	No
<i>Staphylococcus aureus</i> <i>Staphylococcus epidermidis</i>	Abscesses Boils (furuncle) Cellulitis Impetigo Bacterial pneumonia	Saliva Exudates Respiratory droplets Nasal discharge	4–10 d Variable and indefinite	While lesions drain and carrier state persists	No
<i>Candida albicans</i>	Candidiasis	Secretions Excretions (oral, skin, vaginal)	Variable 2–5 d for “thrush” in children	While lesions are present	No
<i>Streptococcus pneumoniae</i>	Pneumonia Pneumococcal pneumonia	Droplet Direct contact Indirect	1–3 d Not well determined	While virulent organisms are discharged	Yes

### Description

- ◆ Pathogens are often present within the oral cavity without producing oral signs or symptoms, a fact of particular importance to the total consideration of prevention of disease transmission.
- ◆ Tuberculosis (TB), viral hepatitis, herpetic infections, and acquired immunodeficiency syndrome (HIV/AIDS) are included in this chapter because of the special problems they create in personal and patient care.

### ? Knowledge Check 5.2

#### < Result Summary

Which types of hepatitis are *not* an occupational concern for the dental hygienist?

Hepatitis A and E

Hepatitis B and C

Hepatitis C and D

Hepatitis B and D

? Knowledge Check 5.3

< Result Summary

Which statement is correct regarding HPV?

No vaccine is available for HPV.

HPV is transmitted via respirations

HPV is contagious for life.

The incubation period for HPV is 1 to 2 months.