

A **PRINTED** copy of this guideline may not be the most recent version. The **OFFICIAL** version is located on IHNET at the Policies & Procedures Home Page

IH0100:	Additional Precautions For All Care Areas	EFFECTIVE DATE: September 2006
		REVISED DATE: November 2010, December 12, 2012, January 2015
	Transmission Tables	REVIEWED DATE: October 2019

1.0 PURPOSE

Additional Precautions are interventions **used in addition to Routine Practices** to prevent transmission of certain microorganisms to patients and healthcare providers by interrupting transmission of infectious agents that are suspected or identified in a patient.

Routine practices properly and consistently applied should prevent transmission by the contact and droplet routes.

For certain situations that may result in extensive contamination of the environment or for microorganisms with a very low infectious dose, additional precautions may be indicated. These include contact, droplet and airborne precautions.

The **Transmission Tables** identify the transmission characteristics and precautions by condition/clinical presentation or by a specific etiology. This information guides the healthcare provider in determining when to implement and discontinue additional precautions – implementation should occur as soon as disease or risk factors are suspected or identified. A confirmed diagnosis is not necessary for additional precautions to be applied.

Table 9 identifies the additional precautions that should be used for conditions and/or clinical presentations of patients.

Table 10 identifies the additional precautions that should be used for specific etiologies identified – that is the causative microorganism has been identified.

PART C: TRANSMISSION CHARACTERISTICS AND PRECAUTIONS

Table 9: Transmission characteristics and precautions by condition/clinical presentation. Once specific etiology is known, refer to Table 10

Condition/ clinical presentation	Potential pathogens Precautions Infective material		Route of Duration of transmission precautions		Comments	
Abscess See draining wound						
Bronchiolitis	RSV, human metapneumovirus parainfluenza virus, influenza, adenovirus	Droplet and contact	Respiratory secretions	Large droplet and direct and indirect contact	Duration of symptoms	Patient should not share room with high-risk roommates
Burns, infected See draining wound						
Cellulitis Draining: See draining wound Periorbital in child <5 years old without portal of entry	H. influenzae type B in non- immune child <2 years of age; Streptococcus pneumoniae, Group A Streptococcus, S. aureus, other bacteria	Droplet if <i>H. influenzae</i> type B is possible cause, otherwise routine practices	Respiratory secretions	Large droplet, direct contact	Until 24 hours of appropriate antimicrobial therapy received or if <i>H. influenzae</i> type B ruled out	
Cold	Rhinovirus, RSV, human metapneumovirus, parainfluenza, adenovirus, coronavirus	Droplet and contact	Respiratory secretions	Large droplet and direct and indirect contact	Duration of symptoms	Patient should not share room with high-risk roommates
Conjunctivitis	onjunctivitis Adenovirus, enterovirus, chlamydia, <i>Neisseria</i> gonorrhea, other microbial agents		Eye discharge	Direct and indirect contact	Until viral etiology ruled out; duration of symptoms, up to 14 days if viral	^a Routine if non-viral
Cough, fever, acute upper respiratory tract infection	Rhinovirus, RSV, human metapneumovirus parainfluenza, influenza, adenovirus, coronavirus, pertussis	Droplet and contact	Respiratory secretions	Large droplet, direct and indirect contact	Duration of symptoms or until infectious etiology ruled out	Consider fever and asthma in child <2 years old as viral infection Patient should not share room with high-risk roommates

Condition/ clinical presentation	Potential pathogens	Precautions	Infective material	Route of transmission	Duration of precautions	Comments
Cough, fever, pulmonary infiltrates in person at risk for TB	Mycobacterium tuberculosis	Airborne	Respiratory secretions	Airborne	Until infectious TB is ruled out Until patient has received 2 weeks of effective therapy, and is improving clinically, and has 3 consecutive sputum smears negative for acid fast bacilli collected 8–24 hours apart If multi-drug-resistant TB, until sputum culture negative	TB in young children is rarely transmissible Assess visiting family members for cough http://www.phac- aspc.gc.ca/tbpc- latb/pubs/tbstand07- eng.php
Croup	Parainfluenza, influenza, human metapneumovirus, RSV, adenovirus	Droplet and contact	Respiratory secretions	Large droplet, direct and indirect contact	Duration of symptoms or until infectious cause ruled out	Patient should not share room with high-risk roommates
Decubitius (pressure ulcer, draining) See draining wound						
Dermatitis See draining wound	Many (bacteria, virus, fungus)	Contact	Pus	Direct and indirect contact	Until infectious etiology ruled out	If compatible with scabies, take appropriate precautions pending diagnosis
Desquamation, extensive See draining wound	S. aureus	Contact	Pus	Direct and indirect contact	Until contained or infection ruled out	
Diarrhea See gastroenteritis Acute diarrhea of likely infectious cause						
Draining wounds	S. aureus, Group A Streptococcus, many other bacteria	Routine Contact: ^b Major wound, droplet ^c	Pus	Direct and indirect contact	Duration of drainage	^b Major: drainage not contained by dressing ^c Droplet for first 24 hours of antimicrobial therapy if invasive group A streptococcal infection suspected
Encephalitis	Multiple microbial agents including herpes simplex virus (HSV), enterovirus, arbovirus (West Nile virus)	ADULT: Routine ^d PAEDIATRIC: Contact ^d	Feces, respiratory secretions	Direct and indirect contact (fecal/oral)	Until specific etiology established or until enterovirus ruled out	^d May be associated with other agents including measles, mumps, varicella. If identified, take appropriate precautions for associated disease

Condition/ clinical presentation	Potential pathogens	Precautions	Infective material	Route of transmission	Duration of precautions	Comments
Endometritis	Group A <i>Streptococcus</i> ; many other bacteria	Routine unless signs of toxic shock ^e				^e Contact and droplet for the first 24 hours of antimicrobial therapy if invasive group A <i>Streptococcus</i> suspected.
Enterocolitis See diarrhea						
Epiglottitis In child <5 years old	H. influenzae type B; Possible in non-immune infant <2 years of age, group A Streptococcus, S. aureus	Droplet if <i>H. influenzae</i> type B is possible cause, otherwise routine	Respiratory secretions	Large droplet, direct contact	Until 24 hours of appropriate antimicrobial therapy received or until <i>H. influenzae</i> type B ruled out	
Erysipelas Draining: See draining wound	Group A Streptococcus	Routine				
Febrile respiratory illness Usually present with symptoms of a fever greater than 38 °C and new or worsening cough or shortness of breath	Wide range of droplet-spread respiratory infections, such as colds, influenza, influenza-like illness and pneumonia	Contact and droplet precautions	Respiratory secretions			Note: elderly people and people who are immunocompromised may not have a febrile response to a respiratory infection See Ontario Best Practices for Preventing Acute Respiratory Infection in All Health Care Settings
Fever without focus (acute, in children)	Enterovirus and other pathogens	ADULT: Routine ⁷ PAEDIATRIC: Contact	Feces, respiratory secretions	Direct or indirect contact (fecal/oral)	Duration of symptoms or until enteroviral infection ruled out	¹ If findings suggest a specific transmissible infection, take precautions for that infection pending diagnosis
Food poisoning	Bacillus cereus, Clostridium perfringens, S. aureus, Salmonella, Vibrio parahaemolyticus, Escherichia coli O157, Listeria and others	ADULT: Routine ^g PAEDIATRIC: Contact	Food; feces if Salmonella or Escherichia coli O157	Foodborne, or direct and indirect contact (fecal/oral)		^g Consider contact precautions for incontinent adults if stool cannot be contained or for adults with poor hygiene who contaminate their environment Contact precautions apply to children who are incontinent or unable to comply with hygiene
Furuncies See draining wound	S. aureus					

Condition/ clinical presentation	Potential pathogens	Precautions	Infective material	Route of transmission	Duration of precautions	Comments
Gas gangrene Draining: See draining wound	Clostridium spp.					
Gastroenteritis	Diarrhea and/or vomiting due to infection or toxin	ADULT: Contact ^h PAEDIATRIC: Contact	Feces	Direct and indirect contact (fecal/oral)	Duration of symptoms for <i>C. difficile</i> , norovirus, rotavirus until ruled out. In pediatrics, until normal stools or infectious etiology ruled out	^h Use contact precautions until <i>C. difficile</i> , norovirus, rotavirus ruled out. Consider contact precautions for incontinent adults if stool cannot be contained or for adults with poor hygiene who contaminate their environment Contact precautions apply to children who are incontinent or unable to comply with hygiene See Table 10 for specific etiologies
Gingivostomatitis	HSV, other causes including radiation therapy, chemotherapy, idiopathic (aphthous)	Contact if primary and extensive HSV related. Otherwise routine	Mucosal lesions	Direct contact	While lesions present	
Guillain-Barré syndrome	Some cases associated with infection (e.g., campylobacter) ⁱ					⁷ Take precautions as appropriate for known or suspected associated infection
Hand, foot and mouth disease	Enterovirus	ADULT: Routine PAEDIATRIC: Contact	Feces, respiratory secretions	Direct and indirect contact (fecal/oral)	Duration of symptoms	Contact precautions apply to children who are incontinent or unable to comply with hygiene
Hemolytic-uremic syndrome	Some associated with <i>E. coli</i> O157	ADULT: Routine [/] PAEDIATRIC: Contact	Feces	Direct and indirect contact (fecal/oral)	Until <i>E. coli</i> O157 ruled out	⁷ Consider contact precautions for incontinent adults if stool cannot be contained or for adults with poor hygiene who contaminate their environment Contact precautions apply to children who are incontinent or unable to comply with hygiene

Condition/ clinical presentation	Potential pathogens	Precautions	Infective material	Route of transmission	Duration of precautions	Comments
Hemorrhagic fever acquired in appropriate endemic or epidemic area	Ebola, Lassa, Marburg, Crimean-Congo and others	Contact and droplet AGMP [*]	Blood and bloody body fluids; respiratory secretions; skin if Ebola and urine if Lassa	Direct and indirect contact; possibly aerosol if pneumonia Lassa: Sexual contact	Duration of symptoms or until hemorrhagic fever virus ruled out	Local public health authorities should be notified immediately ^k If AGMP necessary, see strategies to reduce aerosol generation, see <u>Part B, Section IV,</u> <u>subsection iii, 1b</u>
Hepatitis of unknown etiology	Hepatitis A, B, C, E viruses, Epstein-Barr virus and others	ADULT: Routine' PAEDIATRIC: Contact	Feces; blood and certain body fluids	Mucosal or percutaneous exposure to infective body fluids Sexual transmission Vertical; mother to child Direct and indirect contact (fecal/oral) for hepatitis A, E	For 7 days after onset of jaundice or until hepatitis A and E epidemiologically excluded	Consider contact precautions for incontinent adults if stool cannot be contained or for adults with poor hygiene who contaminate their environment unless hepatitis A and E are epidemiologically excluded Contact precautions apply to children who are incontinent or unable to comply with hygiene
Herpangina	Enterovirus	ADULT: Routine PAEDIATRIC: Contact	Feces, respiratory secretions	Direct and indirect contact (fecal/oral)	Duration of symptoms	Contact precautions apply to children who are incontinent or unable to comply with hygiene
Impetigo See draining wound	Group A Streptococcus, S. aureus					
Influenza-like illness	Influenza, other respiratory viruses	Contact and droplet	Respiratory secretions	Large droplet, direct and indirect contact	Duration of symptoms or until infectious etiology ruled out	
Kawasaki disease (mucocutaneous lymph node syndrome)	Unknown	Routine				Not known to be transmissible
Meningitis	Bacterial: Neisseria meningitidis, H. influenzae type B possible in non-immune infant <2 years of age, Streptococcus pneumoniae, Group B Streptococcus, Listeria monocytogenes, E. coli and other Gram-negative rods Mycobacterium tuberculosis	ADULT: Droplet until Neisseria meningitidis ruled out, otherwise routine PAEDIATRIC: Droplet and contact ^m Routine ⁿ	Respiratory secretions	Large droplet, direct contact	Until 24 hours of appropriate antimicrobial therapy received	^m Pediatrics: precautions for both bacterial and viral until etiology established. Droplet if viral etiology established Contact precautions apply to children who are incontinent or unable to comply with hygiene ⁿ Rule out associated

Condition/ clinical presentation	Potential pathogens	Precautions	Precautions Infective material Route of transmission		Duration of precautions	Comments
	Viral: enterovirus, arboviruses	ADULT: Routine ^o PAEDIATRIC: Contact ^o	Feces, respiratory secretions	Direct or indirect contact	Until enterovirus ruled out	^o May be associated with measles, mumps, varicella, HSV. If identified, take appropriate precautions for associated disease
	Fungus	Routine				
Necrotizing enterocolitis	Unknown, probably many organisms	Routine ^p			Duration of symptoms	^p Unknown if transmissible Take precautions if outbreak suspected
Osteomyelitis	<i>H. influenzae</i> type B possible in non-immune infant <2 years of age, <i>S. aureus</i> , other bacteria	ADULT: Routine PAEDIATRIC: Droplet if <i>H. influenzae</i> type B possible; otherwise routine			Until 24 hours of effective antimicrobial therapy or until <i>H. influenzae</i> type B ruled out	
Otitis, draining See draining wound						
Paroxysmal cough, suspected pertussis	Bordetella pertussis, Bordetella parapertussis	Droplet	Respiratory secretions	Large droplets	Until pertussis ruled out or 3 weeks after onset of paroxysmals if not treated or until 5 days of antimicrobial therapy received	Close contacts (household and HCWs) may need chemoprophylaxis and/or immunization If HCWs immunization not up to date, refer to OH and/or delegate Refer to Canadian Immunization Guide 7th Ed., 2006 for specific information available at: <u>http://www.phac-aspc.gc.ca/publicat/cig-gci/index-eng.php</u>
Pharyngitis	Group A Streptococcus, viral, Corynebacterium diphtheriae	Droplet and contact	Respiratory secretions	Direct and indirect contact; large droplets	Duration of symptoms; if Group A Streptococcus until 24 hours of antimicrobial therapy received	If diphtheria suspected, see Table 10.
Pleurodynia	Enterovirus	ADULT: Routine PAEDIATRIC: Contact	Feces, respiratory secretions	Direct and indirect contact (fecal/oral)	Duration of symptoms	Contact precautions apply to children who are incontinent or unable to comply with hygiene

Condition/ clinical presentation	Potential pathogens	Precautions	Infective material	Route of transmission	Duration of precautions	Comments
Pneumonia	Viruses, pertussis, Mycoplasma, Streptococcus pneumoniae, H. influenzae type B, S. aureus, group A Streptococcus, Gram-negative enteric rods, Chlamydia, Legionella, Pneumocystis, other fungi; other agents	ADULT: Routine ^a PAEDIATRIC: Droplet and contact	Respiratory secretions	Large droplets, direct and indirect contact	Until etiology established, then as for specific organism; no special precautions for pneumonia unless ARO, then use Contact	^q Routine for adults unless clinical, epidemiologic or microbiologic data to necessitate contact and droplet precautions (i.e., on contact and droplet for viral etiologies) Minimize exposure of immunocompromised patients, patients with chronic cardiac or lung disease, neonates
Pseudomembranous colitis	C. difficile	Contact	Feces	Direct and indirect contact (fecal/oral)	Duration of symptoms	Until 72 hours after stool is normal.
Rash compatible with scabies	Sarcoptes scabiei	Contact	Mites	Direct and indirect contact	If confirmed, until 24 hours after initiation of appropriate therapy	For typical scabies, routine (use gloves and gown for direct patient contact only) See scabies, Table 10
Rash (maculopapular) with fever and one of coryza, conjunctivitis or cough	Measles	Airborne	Respiratory secretions	Airborne	If confirmed, until 4 days after onset of rash	See measles, Table 10
Rash (petechial/purpuric) with fever	Neisseria meningitidis	Droplet if <i>N.</i> <i>meningitidis</i> suspected, otherwise routine	Respiratory secretions	Large droplets, direct contact	Discontinue if <i>Neisseria</i> <i>meningitidis</i> ruled out If <i>N. meningitidis</i> confirmed, until 24 hours of appropriate antimicrobial therapy received	
Rash (vesicular) with fever	Varicella	Airborne and contact	Respiratory secretions, skin lesion drainage	Airborne, direct and indirect contact	If confirmed, until all lesions are dry	See varicella, Table10
Rash, vesicular/pustular in appropriate epidemiologic context until smallpox, disseminated vaccinia and monkeypox ruled out	Smallpox, disseminated vaccinia, monkeypox	Contact, droplet and airborne	Lesions and respiratory secretions (monkeypox) Skin lesion exudate, oropharyngeal secretions (smallpox, disseminated vaccinia)			
Reye's syndrome	May be associated with viral infection, especially influenza, varicella					Precautions for known or suspected associated viral infection
Scalded skin syndrome (Ritter`s Disease)		Routine				

Condition/ clinical presentation	Potential pathogens	Precautions	Infective material	Route of transmission	Duration of precautions	Comments
Septic arthritis	<i>H. influenzae</i> type B possible in non-immune infant <2 years of age; <i>S. aureus, Streptococcus</i> <i>pneumoniae,</i> group A <i>Streptococcus, N gonorrhoea,</i> other bacteria	ADULT: Routine PAEDIATRIC: Droplet if <i>H. influenzae</i> type B possible; otherwise routine	Respiratory secretions for <i>H. influenzae</i> type B	Large droplet, direct contact <i>H. influenzae</i> type B	Until 24 hours of appropriate antimicrobial therapy received or until <i>H. influenzae</i> type B ruled out	
Severe respiratory illness See febrile respiratory illness						
Skin infection See cellulitus						
Toxic shock syndrome	S. aureus, Group A Streptococcus	Droplet′ Routine				'Droplet for first 24 hours of antimicrobial therapy if invasive group A streptococcal infection suspected See draining wound if drainage or pus
Urinary tract infection	Many	Routine ^s				^s Contact if ARO
Vincent's angina, Trench mouth	Multiple bacteria	Routine				
Wound infection See draining wound						

Microorganism	Clinical presentation	Precautions	Infective material	Route of transmission	Incubation period	Period of communicability	Duration of precautions	Comments
Actinomycosis (Actinomyces sp.)	Cervicofacial, thoracic or abdominal infection	Routine			Variable	Not person to person		Normal flora; infection usually secondary to trauma.
Adenovirus Respiratory strains	Respiratory tract infection (pneumonia)	Droplet and contact	Respiratory secretions	Large droplets; direct and indirect contact	1–10 days	Shortly before and until symptoms cease	Duration of symptoms	Different strains responsible for respiratory and gastrointestinal disease Patient should not share room with high-risk roommates Minimize exposure of immunocompromised patients, patients with chronic cardiac or lung disease, neonates. Symptoms may be prolonged in immunocompromised patients
	Conjunctivitis	Contact	Eye discharge	Direct and indirect contact	5–12 days	Late in incubation period until 14 days after onset	Duration of symptoms, up to 14 days	Careful attention to aseptic technique and reprocessing of ophthalmology equipment to prevent epidemic keratoconjunctivitis
Adenovirus Enteric strains	Diarrhea	ADULT: Routine ^a PAEDIATRIC: Contact	Feces	Direct and indirect contact (fecal/oral)	3–10 days	Until symptoms cease	Duration of symptoms	^a Consider contact precautions for incontinent adults if stool cannot be contained or for adults with poor hygiene who contaminate their environment Contact precautions apply to children who are incontinent or unable to comply with hygiene
Amebiasis (Entamoeba histolytica)	Dysentery and liver abscess	ADULT: Routine ^b PAEDIATRIC: Contact	Feces	Direct and indirect contact (fecal/oral)	2–4 weeks	Duration of cyst excretion	Duration of symptoms	^b Consider contact precautions for incontinent adults if stool cannot be contained or for adults with poor hygiene who contaminate their environment Contact precautions apply to children who are incontinent or unable to comply with hygiene
Anthrax (Bacillus anthracis)	Cutaneous, pulmonary	Routine			1–7 days; maybe up to 60 days	Not person-to- person		Acquired from contact with infected animals and animal products Inhalation anthrax may occur as a result of occupational exposure to anthrax spores or as a result of bioterrorism Decontamination and postexposure prophylaxis necessary for exposure to aerosols in laboratory exposures or biological terrorism

Table 10: Transmission characteristics and precautions by specific etiology^(15;492;497)

Microorganism	Clinical presentation	Precautions	Infective material	Route of transmission	Incubation period	Period of communicability	Duration of precautions	Comments
Antimicrobial- resistant organisms (AROs) Includes MRSA, VRE,-resistant Gram-negative rods and other organisms, as per ICP	Infection or colonization (i.e., asymptomatic) of any body site	Contact ^c	Infected or colonized secretions, excretions	Direct and indirect contact	Variable	Variable	As directed by ICP	^e Contact precautions for acute care (for the purpose of this document, acute care includes ambulatory care settings such as hospital emergency departments, and free-standing or facility-associated ambulatory (day) surgery or other invasive day procedures (e.g., endoscopy units, hemodialysis, ambulatory wound clinics) When symptomatic, precautions should be determined on a case by case basis as per ICP When asymptomatic, precautions not necessary in LTC, ambulatory, prehospital and home care See Appendix VI, 2. ARO See IP&C Measures for HCWs in All Healthcare Settings – Carbapenaemase-resistant Gram- negative bacilli at: http://www.phac-aspc.gc.ca/nois- sinp/guide/pubs-eng.php
Arthropod borne virus ^d (arboviruses)	Encephalitis, fever, rash, arthralgia, meningitis	Routine	Blood, tissues	Vector-borne (spread by mosquitoes, ticks)	3–21 days (varies with different arboviruses)	Not person to person except rarely by blood transfusion or organ transplantation		^d Over 100 different viruses, most limited to specific geographic areas In North America: West Nile is most common; others include California, St. Louis, Western equine, Eastern equine, Powassan, Colorado tick, Snowshoe hare, Jamestown Canyon
Ascariasis (Ascaris Iumbricoides) (roundworm)	Usually asymptomatic	Routine				Not person to person		Ova must hatch in soil to become infective.
Aspergillosis (Aspergillus spp.)	Skin, lung, wound or central nervous system infection	Routine				Not person to person		Spores in dust; infections in immunocompromised patients may be associated with construction
Avian influenza See influenza								

Microorganism	Clinical presentation	Precautions	Infective material	Route of transmission	Incubation period	Period of communicability	Duration of precautions	Comments
Astrovirus	Diarrhea	ADULT: Routine ^e PAEDIATRIC: Contact	Feces	Direct and indirect contact (fecal/oral)	3–4 days	Duration of symptoms	Duration of symptoms	^e Consider contact precautions for incontinent adults if stool cannot be contained or for adults with poor hygiene who contaminate their environment Contact precautions apply to children who are incontinent or unable to comply with hygiene
Babesiosis		Routine	Blood	Tick borne		Not person to person, except rarely by blood transfusion from asymptomatic parasitaemic donors		
Bacillus cereus	Food poisoning Nausea, vomiting, diarrhea, abdominal cramps	Routine		Foodborne				
Bed bugs (<i>Cimex lectularius</i>)	Allergic reactions and itchy welts.	Routine						Not known to transmit disease If necessary, consult professional pest control for infestation For information see: <u>http://www.cdc.gov/nceh/ehs/publicati</u> <u>ons/bed bugs cdc-</u> <u>epa_statement.htm</u>
Blastomycosis (Blastomyces dermatitidis)	Pneumonia, skin lesions	Routine				Not person to person		Acquired from spores in soil
Bocavirus Respiratory tract infection		Droplet and contact						May cohort if infected with same virus Patient should not share room with high-risk roommates
Botulism (Clostridium botulinum)	Flaccid paralysis; cranial nerve palsies	Routine		Foodborne		Not person to person		
Brucellosis (<i>Brucella sp.</i>) Undulant, Malta or Mediterranean fever	Systemic bacterial disease of acute or insidious onset	Routine			Weeks to months	Not transmitted person to person, except rarely via banked spermatozoa and sexual contact		Acquired from contact with infected animals or from contaminated food, mostly dairy products Brucella is hazardous to laboratory workers. Notify laboratory if diagnosis is suspected Prophylaxis necessary following laboratory exposure

Microorganism	Clinical presentation	Precautions	Infective material	Route of transmission	Incubation period	Period of communicability	Duration of precautions	Comments
	Draining lesions	MINOR: Routine MAJOR: Contact ^f	Drainage from open lesions	Possibly direct contact			Duration of drainage	^f MAJOR: Contact precautions necessary only if wound drainage cannot be contained by dressings
Burkholderia cepacia	Exacerbation of chronic lung disease in patients with cystic fibrosis	Contact ⁹					Until organism cleared as directed by ICP	B. cepacia can result in respiratory tract colonization or infection in patient with cystic fibrosis ^g If other cystic fibrosis patients are on the unit All interactions with other cystic fibrosis patients should be avoided
Caliciviruses See Noroviruses								
Campylobacter	Gastroenteritis	ADULT: Routine ^h PAEDIATRIC: Contact	Contaminated food, feces	Direct and indirect contact (fecal/oral)	2–5 days	Duration of excretion Person–to- person uncommon	Duration of symptoms	^h Consider contact precautions for adults if stool cannot be contained or for adults with poor hygiene who contaminate their environment Treatment with effective antimicrobial shortens period of infectivity Contact precautions apply to children who are incontinent or unable to comply with hygiene
Candidiasis (<i>Candida</i> sp.)	Many	Routine						Normal flora
Cat scratch disease (Bartonella henselae)	Fever, lymphadenopath y	Routine			16–22 days	Not person to person		Acquired from animals (cats and others)
Chancroid (Haemophilus ducreyi)	Genital ulcers	Routine		Sexual transmission	3–5 days	Until healed and as long as infectious agent persists in the original lesion		
Chickenpox See varicella								
Chlamydia trachomatis	Urethritis, cervicitis, pelvic inflammatory disease; neonatal conjunctivitis, infant pneumonia; trachoma	Routine	Conjunctival and genital secretions	Sexual transmission Mother to child at birth Trachoma: direct/indirect contact	Variable	As long as organism present in secretions		
Chlamydia pneumoniae	Pneumonia	Routine	Respiratory secretions	Unknown	Unknown	Unknown		Rare outbreaks of pneumonia in institutionalized populations

Microorganism	Clinical presentation	Precautions	Infective material	Route of transmission	Incubation period	Period of communicability	Duration of precautions	Comments
Chlamydia (<i>Chlamydophila</i>) <i>psittaci</i> (Psittacosis, Ornithosis)	Pneumonia, undifferentiated fever	Routine	Infected birds		7–14 days	Not person to person		Acquired by inhalation of desiccated droppings, secretions and dust of infected birds
Cholera (<i>Vibrio cholerae</i> 01, 0139)	Diarrhea	ADULT: Routine ⁱ PAEDIATRIC: Contact	Feces	Direct and indirect contact (fecal/oral)	2–3 days	Duration of shedding	Duration of symptoms	¹ Consider contact precautions for adults if stool cannot be contained or for adults with poor hygiene who contaminate their environment Contact precautions apply to children who are incontinent or unable to comply with hygiene
Clostridium difficile	Diarrhea, pseudo- membranous colitis	Contact	Feces	Direct and indirect contact (fecal/oral)	Variable	Duration of shedding	Duration of symptoms	Bacterial spores persist in the environment Ensure scheduled environmental cleaning During outbreaks, special attention should be paid to cleaning; hypochlorite solutions may be required if continued transmission See Appendix VI. 3. Viral Gastroenteritis Dedicate patient care equipment Relapses are common
Clostridium perfringens	Food poisoning	Routine		Foodborne	6–24 hours	Not person to person		
	Gas gangrene, abscesses, myonecrosis	Routine			Variable	Not person to person		Found in normal gut flora, soil; infection related to devitalized tissue
Coccidioido- mycosis (Coccidioides immitis)	Pneumonia, draining lesions	Routine			1–4 weeks	Not person to person		Acquired from spores in soil, dust in endemic areas
Colorado tick fever See Dengue Fever (Arbovirus)	Fever	Routine		Tick-borne	3–6 days	Not person to person		
Congenital rubella See Rubella								
Coronavirus (CoV) (other than SARS- CoV) For SARS CoV, see Severe acute respiratory syndrome	Common cold	Droplet and contact	Respiratory secretions	Direct and indirect contact Possible large droplet	2–4 days	Until symptoms cease	Duration of symptoms	May cohort if infected with same virus Patient should not share room with high-risk roommates

Microorganism	Clinical presentation	Precautions	Infective material	Route of transmission	Incubation period	Period of communicability	Duration of precautions	Comments
Coxsackievirus See Enteroviral infections								
Creutzfeldt-Jakob disease (CJD)	Chronic encephalopathy	Routine ⁱ	Contaminated neurosurgical instruments; tissue grafts from infected donors					^I PHAC guidelines for precautions for surgery and other procedures may be accessed at: http://www.phac-aspc.gc.ca/nois- sinp/guide/pubs-eng.php Notification of a suspected or diagnosed case of CJD should be made to the CJD surveillance system (1-888-489-2999)
Crimean-Congo fever See Viral hemorrhagic fevers								
Cryptococcosis (Cryptococcus neoformans)	Pneumonia, meningitis, adenopathy	Routine			Unknown	Not person to person		
Cryptosporidosis (Cryptosporidium parvum)	Diarrhea	ADULT: Routine ^k PAEDIATRIC: Contact	Feces	Direct and indirect contact (fecal/oral)	1–12 days	From onset of symptoms until several weeks after resolution	Duration of symptoms	^k Consider contact precautions for incontinent adults if stool cannot be contained or for adults with poor hygiene who contaminate their environment Contact precautions apply to children who are incontinent or unable to comply with hygiene
Cysticercosis (Taenia solium Iarvae)	T. solium larval cysts in various organs	Routine	Ova in feces	Direct contact (fecal/oral)	Months to years	While eggs present in feces		Transmissible only from humans with T. solium adult tapeworm in gastrointestinal tract (autoinfection occurs)
Cytomegalovirus	Usually asymptomatic; congenital infection, retinitis, mononucleosis, pneumonia, disseminated infection in immuno- compromised host	Routine	Saliva, genital secretions, urine, breast milk, transplanted organs or stem cells, blood products	Direct ⁴ Sexual transmission; vertical mother to child in utero, at birth or through breast milk Transfusion, transplantation	Unknown	Virus is excreted in urine, saliva, genital secretions, breast milk for many months; may persist or be episodic for life		No additional precautions for pregnant HCWs 'Close direct personal contact necessary for transmission Disease is often due to reactivation in the patient rather than transmission of infection

Microorganism	Clinical presentation	Precautions	Infective material	Route of transmission	Incubation period	Period of communicability	Duration of precautions	Comments
Dengue (arbovirus)	Fever, arthralgia, rash	Routine		Mosquito- borne	3–14 days	Not person to person		
Dermatophytosis See Tinea								
Diphtheria (Corynebacterium diphtheriae)	Cutaneous (characteristic ulcerative lesion)	Contact	Lesion drainage	Direct or indirect contact	2–5 days	If untreated, 2 weeks to several months	Until 2 cultures ^m from skin lesions are negative	^m Cultures should be taken at least 24 hours apart and at least 24 hours after cessation of antimicrobial therapy. Close contacts should be given antimicrobial prophylaxis, as per most recent NACI recommendations available at: http://www.phac- aspc.gc.ca/publicat/cig-gci/index- eng.php
	Pharyngeal (adherent greyish membrane)	Droplet	Nasopharynge al secretions	Large droplets,	2–5 days;	If untreated, 2 weeks to several months	Until 2 cultures ⁿ from both nose and throat are negative	ⁿ Cultures should be taken at least 24 hours apart and at least 24 hours after cessation of antimicrobial therapy Close contacts should be given antimicrobial prophylaxis
Ebola See Viral hemorrhagic fever								
Echinococcosis (hydatidosis) (E. granulosis, E. multilocularis)	Cysts in various organisms	Routine			Months to years	Not person to person		Acquired from contact with infected animals
Echovirus See Enterovirus								
Enterobiasis Oxyuriasis, pinworm (<i>Enterobius</i> <i>vermicularis</i>)	Perianal itching	Routine	Ova in stool, perianal region	Direct, indirect contact	Life cycle requires 2–6 weeks	As long as gravid females discharge eggs on perianal skin; eggs remain infective indoors about 2 weeks		Direct transfer of infective eggs by hand from anus to mouth of the same or another person; indirectly through clothing, bedding or other contaminated articles Close household contacts may need treatment
Enterococcus species (vancomycin- resistant only) See Vancomycin- resistant enterococci								

Microorganism	Clinical presentation	Precautions	Infective material	Route of transmission	Incubation period	Period of communicability	Duration of precautions	Comments
Enteroviral infections Echovirus, Coxsackievirus A Coxsackievirus B Enterovirus Poliovirus - See poliomyelitis	Acute febrile symptoms, aseptic meningitis, encephalitis, pharyngitis, herpangina, rash, pleurodynia, hand, foot and mouth disease	ADULT: Routine PAEDIATRIC: Contact	Feces, respiratory secretions	Direct and indirect contact (fecal/oral)	3–5 days		Duration of symptoms If poliovirus, see Poliomyelitis	Contact precautions apply to children who are incontinent or unable to comply with hygiene
	Conjunctivitis	Contact	Eye discharge	Direct and indirect contact	1–3 days		Duration of symptoms	
Epstein-Barr virus	Infectious mononucleosis	Routine	Saliva, transplanted organs or stem cells	Direct oropharyngeal route via saliva; transplantation	4–6 weeks	Prolonged; pharyngeal excretion may be intermittent or persistent for years		
Erythema infectiosum See Parvovirus B19								
Escherichia coli (enteropathogenic and enterohemorrhagic strains)	Diarrhea, food poisoning, hemolytic- uremic syndrome, thrombotic thrombocytopeni c purpura	ADULT: Routine ^o PAEDIATRIC: Contact	Feces	Direct and indirect contact (fecal/oral) Foodborne	1–8 days	Duration of shedding	Duration of symptoms If hemolytic- uremic syndrome: until 2 stools negative for E. coli O157:H7 or 10 days from onset of diarrhea	^o Consider contact precautions for incontinent adults if stool cannot be contained or for adults with poor hygiene who contaminate their environment Contact precautions apply to children who are incontinent or unable to comply with hygiene
Fifth disease See Parvovirus								
German measles See Rubella								

Microorganism	Clinical presentation	Precautions	Infective material	Route of transmission	Incubation period	Period of communicability	Duration of precautions	Comments
Giardia (Giardia lamblia)	Diarrhea	ADULT: Routine ^p PAEDIATRIC: Contact	Feces	Direct and indirect contact (fecal/oral)	3–25 days	Entire period of infection; often months	Duration of symptoms	^p Consider contact precautions for incontinent adults if stool cannot be contained or for adults with poor hygiene who contaminate their environment Contact precautions apply to children who are incontinent or unable to comply with hygiene
Granuloma inguinale (Donovanosis) (Calymmatobacteri um granulomatis)	Painless genital ulcers, inguinal ulcers, nodules	Routine		Sexual transmission	Unknown; probably between 1 and 16 weeks	Unknown; probably for the duration of open lesions on the skin or mucous membranes		
Haemophilus influenzae type B (invasive infections)	Pneumonia, epiglottitis, meningitis, bacteremia, septic arthritis, cellulitis, osteomyelitis in a child	ADULT: Routine PAEDIATRIC: Droplet	Respiratory secretions	Large droplets, direct contact	Variable	Most infectious in the week prior to onset of symptoms and during the symptoms until treated	Until 24 hours of appropriate antimicrobial therapy has been received	Close contacts <48 months old and who are not immune may need chemoprophylaxis Household contacts of such children should also receive prophylaxis
Hand foot and mouth disease See Enteroviral infections								
See Leprosy								
Hantavius (Hantavirus pulmonary syndrome)	Fever, pneumonia	Routine	Rodent excreta	Presumed aerosol transmission from rodent excreta	A few days to 6 weeks	Not well defined, person to person is rare (person to person documented for South American strains)		Infection acquired from rodents
Helicobacter pylori	Gastritis, duodenal ulcer disease	Routine		Probable ingestion of organisms; presumed fecal/oral/oral/o ral	5–10 days	Unknown		

Microorganism	Clinical presentation	Precautions	Infective material	Route of transmission	Incubation period	Period of communicability	Duration of precautions	Comments
Hepatitis A, E	Hepatitis, anicteric acute febrile symptoms	ADULT: Routine ^q PAEDIATRIC: Contact	Feces	Direct and indirect contact (fecal/oral)	A: 28–30 days E: 26–42 days	A: 2 weeks before to 1 week after onset of jaundice Shedding is prolonged in the newborn E: not known; at least 2 weeks before onset of symptoms	1 week after onset of jaundice; duration of hospitalization if newborn	^a Consider contact precautions for incontinent adults if stool cannot be contained or for adults with poor hygiene who contaminate their environment Contact precautions apply to children who are incontinent or unable to comply with hygiene Postexposure prophylaxis indicated for non-immune household contacts with significant exposure to hepatitis A if within 2 weeks of exposure Refer to Canadian Immunization Guide for specific information: http://www.phac- aspc.gc.ca/publicat/cig-gci/index- eng.php Outbreaks of HAV in HCWs have been associated with eating and drinking in patient care areas
Hepatitis B, C, D, G viruses	Hepatitis, often asymptomatic; cirrhosis, hepatic cancer	Routine	Blood, genital secretions, and certain other body fluids	Mucosal or percutaneous exposure to infective body fluids Sexual transmission; Vertical mother to child	B: 2–3 months C: 2 weeks–6 months D: 2–8 weeks	B: all persons who are hepatitis B surface- antigen- positive are infectious C: indefinite D: indefinite		Refer to Canadian Immunization Guide 7th Ed., 2006 for specific information, available at: http://www.phac- aspc.gc.ca/publicat/cig-gci/index- eng.php Contact OH or delegate if HCW has percutaneous, non-intact skin or mucous membrane exposure. Refer to CDC dialysis recommendations available at: http://www.cdc.gov/mmwr/preview/m mwrhtml/rr5005a1.htm
Herpes simplex virus	Encephalitis	ADULT: Routine PEDS: Contact						
	Neonatal	Contact	Skin or mucosal lesions; possibly all body secretions and excretions	Direct contact	Birth to 6 weeks of age		Duration of symptoms	Contact precautions are also indicated for infants delivered vaginally (or by C-section if membranes have been ruptured more than 4–6 hours) to women with active genital HSV infections, until neonatal HSV infection has been ruled out

Microorganism	Clinical presentation	Precautions	Infective material	Route of transmission	Incubation period	Period of communicability	Duration of precautions	Comments
	Mucocutaneous: disseminated or primary and extensive (gingivostomatiti s, eczema herpeticum)	Contact	Skin or mucosal lesions Sexual transmission Mother to child at birth	Direct contact	2 days–2 weeks	While lesions present	Until lesions are dry and crusted	
	Recurrent	Routine						
Herpes zoster See Varicella zoster								
Histoplasmosis (Histoplasma capsulatum)	Pneumonia, lymphadenopath y, fever	Routine			3–17 days	Not person to person		Acquired from spores in soil
Hookworm (Necator americanus, Ancyclostoma duodenale)	Usually asymptomatic	Routine		Percutaneous; fecal/oral	Few weeks to many months	Not person to person		Larvae must hatch in soil to become infectious
Human herpesvirus 6 (HHV-6) See Roseola								
Human immuno- deficiency virus (HIV)	Asymptomatic; multiple clinical presentations	Routine	Blood, genital secretions, breast milk and certain other body fluids	Mucosal or percutaneous exposure to infective body fluids Sexual transmission, vertical mother to child	Weeks to years	From onset of infection		Contact OH or delegate immediately if HCW has percutaneous, non-intact skin or mucous membrane exposure
Human meta- pneumovirus	Respiratory tract infection	Droplet and contact	Respiratory secretions	Large droplets Direct and indirect contact	3–5 days		Duration of symptoms	May cohort if infected with same virus Patient should not share room with high-risk roommates
Human T-cell leukemia virus, human T- lymphotrophic virus (HTLV-I, HTLV-II)	Usually asymptomatic, tropical spastic, paraperisis, lymphoma	Routine	Breast milk, blood and certain other body fluids	Vertical mother to child; mucosal or percutaneous exposure to infective body fluids	Weeks to years	Indefinite		
Infectious mononucleosis See Epstein-Barr virus								

S. T. S. Sandar &

Microorganism	Clinical presentation	Precautions	Infective material	Route of transmission	Incubation period	Period of communicability	Duration of precautions	Comments
Influenza Seasonal	Respiratory tract infection	Droplet and contact	Respiratory secretions	Large droplets, direct and indirect contact	1–3 days	Generally 3–7 days from clinical onset Prolonged shedding may occur in immuno- compromised individuals.	Duration of symptoms	If private room is unavailable, consider cohorting patients during outbreaks Patient should not share room with high-risk roommates Consider antiviral for exposed roommates See Guidance: IP&C Measures for HCWs in Acute Care and Long-term Care Settings at: http://www.phac-aspc.gc.ca/nois- sinp/guide/pubs-eng.php For further information for all types of influenza see: http://www.phac- aspc.gc.ca/influenza/index-eng.php
Pandemic Novel influenza viruses	Respiratory tract infection	Pandemic influenza precautions ^r	As seasonal	As seasonal	Unknown; possibly 1–7 days	Unknown, possibly up to 7 days	Duration of symptoms	See Canadian Pandemic Plan Annex F, Infection Prevention and Control and Occupational Health and Hygiene guidelines during Pandemic Influenza in Existing and Temporary Healthcare Settings, available at: http://www.phac- aspc.gc.ca/influenza/index-eng.php Refer to PHAC website for specific guidance documents. Available at http://www.phac-aspc.gc.ca/nois- sinp/guide/pubs-eng.php
Avian	Respiratory tract infection, conjunctivitis	Droplet and contact	Excreta of sick birds, possibly human respiratory tract secretions					For current information on Avian influenza, see Human Health Issues Related to Domestic Avian Influenza in Canada, available at" http://www.phac- aspc.gc.ca/influenza/index-eng.php http://www.phac- aspc.gc.ca/publicat/daio-enia/9- eng.php
Lassa fever See Viral hemorrhagic fever								
Legionella (<i>Legionella</i> spp.) Legionnaires' disease	Pneumonia, Legionnaires' disease, Pontiac fever	Routine			2–10 days;	Not person to person		Acquired from contaminated water sources (inhalation not ingestion)

Microorganism	Clinical presentation	Precautions	Infective material	Route of transmission	Incubation period	Period of communicability	Duration of precautions	Comments
Leprosy (Hansen's disease) (<i>Mycobacterium leprae</i>)	Chronic disease of skin, nerves, nasopharyngeal mucosa	Routine	Nasal secretions, skin lesions	Direct contact	9 months to 20 years			Transmitted between persons only with very prolonged extensive close personal contact Household contacts should be assessed and may be given prophylaxis
Leptospirosis (Leptospira sp.)	Fever, jaundice, aseptic meningitis	Routine			2–30 days	Direct person to person transmission is rare		Acquired from contact with animals
Lice (pediculosis) Head Body Pubic (crab) (<i>Pediculus capitas,</i> <i>Pediculus</i> <i>corporis, Pediculus</i> <i>humanus, Phthirus</i> <i>pubis</i>)	Scalp or body itch, itchy rash	Routine, plus gloves for direct patient contact only	Louse	Head and body lice: direct and indirect contact Pubic lice: usually sexual contact	6–10 days	Until effective treatment to kill lice and ova	Until 24 hours after application of appropriate pediculicide; applied as directed	Apply pediculicides as directed on label. If live lice found after therapy, repeat Head lice: wash headgear, combs, pillowcases, towels with hot water or dry clean or seal in plastic bag and store for 10 days. Body lice: as above, for all exposed clothing and bedding
Listeriosis (<i>Listeria</i> <i>monocytogenes</i>)	Fever, meningitis Congenital or neonatal infection	Routine		Foodborne; Vertical mother to child in utero or at birth	mean 21 days; 3–70 days following a single exposure to an implicated food product			Pregnant women and immunocompromised persons should avoid cheese made with unpasteurized milk, cold cuts and uncooked meat products, including hot dogs Listeria grows well at low temperatures and is able to multiply in refrigerated foods that are contaminated Nosocomial outbreaks reported in newborn nurseries due to contaminated equipment or materials
Lyme disease (Borrelia burgdorferi)	Fever, arthritis, rash, meningitis	Routine		Tickborne	To initial rash: 3–32 days; mean 7–10 days	Not person to person		
Lymphocytic choriomeningitis virus	Aseptic meningitis	Routine	Urine of rodents		6–21 days	Not person to person		Acquired from contact with rodents
Lympho- granuloma venereum (<i>C. trachomatis</i> <i>serovars</i> L1, L2, L3)	Genital ulcers, inguinal adenopathy	Routine		Sexually transmitted	Range of 3–30 days for a primary lesion			

Microorganism	Clinical presentation	Precautions	Infective material	Route of transmission	Incubation period	Period of communicability	Duration of precautions	Comments
Malaria (Plasmodium sp.)	Fever	Routine	Blood	Mosquito- borne; rarely transplacental from mother to fetus; blood transfusion	Variable; 9–14 days for P. falciparum	Not normally person to person		Can be transmitted via blood transfusion
Marburg virus See Viral haemorrhagic fever								
Measles (Rubeola)	Fever, cough, coryza, conjunctivitis, maculopapular skin rash	Airborne	Respiratory secretions	Airborne	7–18 days to onset of fever; rarely as long as 21 days	5 days before onset of rash (1– 2 days before onset of initial symptoms) until 4 days after onset of rash (longer in immuno- compromised patients)	4 days after start of rash; duration of symptoms in immuno- compromised patients	Only immune HCWs, caretakers and visitors should enter the room Respirator needed for non-immune persons who must enter Precautions should be taken with neonates born to mothers with measles infection at delivery Immunoprophylaxis is indicated for susceptible contacts Refer to Canadian Immunization Guide 7th Ed., 2006 for specific information available at: http://www.phac- aspc.gc.ca/publicat/cig-gci/index- eng.php
	Susceptible contact	Airborne	Respiratory secretions	Airborne		Potentially communicable during last 2 days of incubation period	From 5 days after first exposure through 21 days after last exposure regardless of postexposure prophylaxis	Only immune HCWs, caretakers and visitors should enter the room Respirator needed for non-immune persons who must enter Precautions should be taken with neonates born to mothers with measles infection at delivery Immunoprophylaxis is indicated for susceptible contacts
Melioidosis (Pseudomonas pseudomallei)	Pneumonia, fever	Routine	Contaminated soil		Variable			Organism in soil in Southeast Asia Person-to-person has not been proven
Meningococcus (Neisserria meningitidis)	Rash (petechial/purpu ric) with fever Meningococcem ia meningitis, pneumonia	Droplet	Respiratory secretions	Large droplet, direct contact	Usually 2–10 days		Until 24 hours of effective antimicrobial therapy has been received	Close contacts may need chemopropylaxis as per most recent NACI recommendations available at: <u>http://www.phac-</u> <u>aspc.gc.ca/publicat/cig-gci/index-</u> <u>eng.php</u> and http://www.phac- aspc.gc.ca/publicat/cig-gci/p04-meni- eng.php

Microorganism	Clinical presentation	Precautions	Infective material	Route of transmission	Incubation period	Period of communicability	Duration of precautions	Comments
Methicillin- resistant Staphylococcus aureus (MRSA) See ARO								
Molluscum contagiosum	Umbilicated papules	Routine	Contents of papules	Direct contact	2 weeks to 6 months	Unknown		Close direct personal contact needed for transmission
Monkeypox	Resembles smallpox; lymphadenopath y is a more predominant feature	Contact, ^s droplet and airborne	Lesions and respiratory secretions	Contact with infected animals; possible airborne transmission from animals to humans			^s Contact: until all lesions crusted	Transmission in hospital settings is unlikely. See http://www.cdc.gov/ncidod/monkeypo x for current recommendations
Mucormycosis (phycomycosis; zygomycosis) (Mucor, Zygomycetes)	Skin, wound, rhinocerebral, pulmonary, gastrointestinal, disseminated infection ^t	Routine	Fungal spores in dust and soil	Inhalation or ingestion of fungal spores	Unknown	Not person to person	Unknown	Acquired from spores in dust, soil ¹ Infections in immunocompromised patients
Mumps	Swelling of salivary glands, orchitis, meningitis	Droplet	Saliva	Large droplets, direct contact	Usually 16–18 days; range 14–25 days	Viral excretion highest 2 days before to 5 days after onset or parotitis	Until 5 days after onset of parotitis	Droplet precautions for exposed susceptible patients/HCWs should begin 10 days after first contact and continue through 26 days after last exposure For outbreaks, see: http://www.phac- aspc.gc.ca/publicat/ccdr- rmtc/10pdf/36s1-eng.pdf
Mycobacterium non-TB (atypical)	Lymphadenitis; pneumonia; disseminated disease in immuno- compromised host	Routine			Unknown	Not person to person		Acquired from soil, water, animal, reservoirs

Microorganism	Clinical	Precautions	Infective	Route of	Incubation	Period of	Duration of	Comments
	presentation		material	transmission	period	communicability	precautions	
Mycobacterium tuberculosis including M. tuberculosis subsp. canetti, M. bovis, M. bovis BCG, M.africanum, M. caprae, M. microti and M. pinnipedii	Confirmed or suspected respiratory (including pleural, laryngeal)	Airborne ^u	Respiratory secretions	Airborne	Weeks to years	While organisms is viable in sputum	Until deemed no longer infectious If confirmed, until patient has received 2 weeks of effective therapy, and is improving clinically, and has 3 consecutive sputum smears negative for acid fast bacilli, collected 8–24 hours apart with at least 1 early morning specimen If multi-drug- resistant TB, until sputum culture	TB in young children is rarely transmissible; due to lack of cavitary disease and weak cough Assess visiting family members for cough Canadian Tuberculosis Standards, http://www.phac-aspc.gc.ca/tbpc- latb/pubs/tbstand07-eng.php "AGMP, see strategies to reduce aerosol generation Part B, Section IV, subsection iii, 1b
	Nonpulmonary:	Routine						Most patients with nonpulmonary
	meningitis, bone or joint infection with no drainage							disease alone are noncontagious; it is important to assess for concurrent pulmonary TB
	Nonpulmonary: skin or soft tissue draining lesions	Routine, Airborne ^v	Aerosolized wound drainage				While viable micro organisms are in drainage	^v Airborne precautions if procedures that may aerosolize drainage are being performed
	PPD skin test positive with no evidence of current pulmonary disease	Routine		Non communicable			Ť	
Mycoplasma pneumoniae	Pneumonia	Droplet	Respiratory secretions	Large droplets	1–4 weeks	Unknown	Duration of symptoms	

Microorganism	Clinical presentation	Precautions	Infective material	Route of transmission	Incubation period	Period of communicability	Duration of precautions	Comments
Neisseria gonorrhoeae	Urethritis, cervicitis, pelvic inflammatory disease, arthritis, ophthalmia neonatorum, conjunctivitis	Routine		Sexual transmission Mother to child at birth Rarely: direct/indirect contact	2–7 days	May extend for months if untreated		
Neisseria meningitidis See Meningococcus								
Nocardiosis (Nocardia sp.)	Fever, pulmonary or CNS infection or disseminated disease	Routine			Unknown	Not person to person		Acquired from organisms in dust, soil
Noroviruses (Norwalk-like agents, caliciviruses)	Nausea, vomiting, diarrhea	Contact	Feces	Direct and indirect contact (fecal/oral)	Usually 24–48 hours; range of 10–50 hours	Duration of viral shedding; usual 48 hours after diarrhea resolves	48 hours after resolution of illness	During outbreaks, special attention should be made to cleaning; hypchlorite solutions may be required if continued transmission See Appendix VI 3. Viral Gastroenteritis
Orf (poxvirus)	Skin lesions	Routine			Generally 3–6 davs	Not person to person		Acquired from infected animals.
Parainfluenza virus	Respiratory tract infection	Droplet and contact	Respiratory secretions	Large droplets, direct and indirect contact	2–6 days	1-3 weeks	Duration of symptoms	May cohort if infected with same virus Patient should not share room with high-risk roommates
Parvovirus B-19 Human parvovirus	Erythema infectiosum (fifth disease), aplastic or erythrocytic crisis	Routine: fifth disease Droplet: aplastic crisis or chronic infection in immuno- compromised patient	Respiratory secretions	Large droplets, direct contact Vertical mother to fetus	4–21 days to onset of rash	Fifth disease: no longer infectious by the time the rash appears Aplastic crisis: up to 1 week after onset of crisis Immuno- compromised with chronic infection: months to years	Aplastic or erythrocytic crisis: 7 days Chronic infection in immuno- compromised patient: duration of hospitalization	
Pediculosis See lice								

Microorganism	Clinical presentation	Precautions	Infective material	Route of transmission	Incubation period	Period of communicability	Duration of precautions	Comments
Pertussis (Bordetella pertussis, Bordetella parapertussis)	Whooping cough, non- specific respiratory tract infection in infants, adolescents and adults	Droplet	Respiratory secretions	Large droplets	Average 9–10 days; range 6– 20 days	To 3 weeks after onset of paroxysms if not treated	To 3 weeks after onset of paroxysms if not treated; or until 5 days of appropriate antimicrobial therapy received	Close contacts (household and HCWs) may need chemoprophylaxis and/or immunization If HCWs immunization not up to date, refer to OH and/or delegate Refer to Canadian Immunization Guide 7th Ed., 2006 for specific information available at: http://www.phac- aspc.gc.ca/publicat/cig-gci/index- eng.php
Pinworms See Enterobius								
Plague (Yersinia pestis)	Bubonic (lymphadenitis)	Routine	Rodents and their fleas		1–7 days			
	Pneumonic (cough, fever, hemoptysis)	Droplet	Respiratory secretions	Large droplets	1–4 days	Until 48 hours of appropriate antimicrobial therapy received	Until 48 hours of appropriate antimicrobial therapy received	Close contacts and exposed HCWs may need prophylaxis
Pneumocystis jiroveci (carinii)	Pneumonia in immuno- compromised host	Routine		Unknown	Unknown			Ensure roommates are not immunocompromised
Poliomyelitis Infantile paralysis	Fever, aseptic meningitis, flaccid paralysis	Contact	Feces, respiratory secretions	Direct and indirect contact	3–35 days	Virus in the throat for approximately 1 week and in feces for 3–6 weeks	Until 6 weeks from onset of symptoms or until feces viral culture negative	Most infectious during the days before and after onset of symptoms Close contacts who are not immune should receive immunoprophylaxis
Prion disease See Creutzfeldt- Jakob disease								
Psittacosis See Chlamydia psittace								
Q Fever (Coxiella burnetii)	Pneumonia, fever	Routine	Infected animals, milk	Direct contact with infected animals; raw milk Airborne from aerosolized contaminated dust	14–39 days	Not person to person		Acquired from contact with infected animals or from ingestion of raw milk

Microorganism	Clinical presentation	Precautions	Infective material	Route of transmission	Incubation period	Period of communicability	Duration of precautions	Comments
Rabies	Acute encephalomyeliti s	Routine	Saliva	Mucosal or percutaneous exposure to saliva; corneal, tissue and organ transplantation	Usually 3–8 weeks, rarely as short as 9 days or as long as 7 years	Person-to-person transmission is theoretically possible, but rare and not well documented		Acquired from contact with infected animals Postexposure prophylaxis is recommended for percutaneous or mucosal exposure to saliva of rabid animal or patient
Rat bite fever Actinobacillus (formerly <i>Streptobacillus</i> <i>moniliformis</i>) <i>Spirillum minus</i>	Fever, arthralgia	Routine	Saliva of infected rodents; contaminated milk	Rodent bite, ingestion of contaminated milk	A. moniliformis days 3–10 days, rarely longer; S. minus 1–3 weeks	Not person-to- person		A. moniliformis: rats and other animals, contaminated milk S. minus: rats, mice only
Relapsing fever (Borellia recurrentis, other Borellia species)	Recurrent fevers	Routine		Vector-borne		Not person to person		Spread by ticks or lice
Respiratory syncytial virus (RSV)	Respiratory tract infection	Droplet and contact	Respiratory secretions	Large droplets, direct and indirect contact	2-8 days	Shortly before and for the duration of active disease	Duration of symptoms	May cohort if infected with same virus Patient should not share room with high-risk roommates
Rhinovirus	Respiratory tract infection, common cold	Contact and droplet	Respiratory secretions	Direct and indirect contact, possibly large droplets	2–3 days	Until symptoms cease	Duration of symptoms	May cohort if infected with same virus Patient should not share room with high-risk roommates
Rickettsialpox (Rickettsia akari)	Fever, rash	Routine		Mite-borne	9–14 days	Not person to person		Transmitted by mouse mites
Ringworm See Tinea								
Rocky Mountain spotted fever (Rickettsia rickettsia)	Fever, petechial rash, encephalitis	Routine		Tick-borne	3–14 days	Not transmitted from person to person, except rarely through transfusion		
Roseola infantum (HHV-6)	Rash, fever	Routine	Saliva	Direct contact	10 days	Unknown		Close direct personnel contact needed for transmission
Rotavirus	Diarrhea	Contact	Feces	Direct and indirect contact (fecal/oral)	1–3 days	Duration of viral shedding	Duration of symptoms	
Roundworm See Ascariasis								

Microorganism	Clinical presentation	Precautions	Infective material	Route of transmission	Incubation period	Period of communicability	Duration of precautions	Comments
Rubella, acquired	Fever, maculopapular rash	Droplet	Respiratory secretions	Large droplets, direct contact	14–21 days	For about 1 week before and after onset of rash.	Until 7 days after onset of rash	Only immune HCWs, caretakers and visitors should enter the room Pregnant HCWs should not care for rubella patients, regardless of their immune status If it is essential for a non-immune person to enter the room, facial protection should be worn Droplet precautions should be maintained for exposed susceptible patients from 7 days after first contact through to 21 days after last contact Administer vaccine to exposed susceptible non-pregnant persons within 3 days of exposure Refer to Canadian Immunization Guide 7th Ed., 2006 for specific information available at: http://www.phac- aspc.gc.ca/publicat/cig-gci/index- eng.php Exclude susceptible HCWs from duty from day 7 after first exposure to day 21 after last exposure, regardless of postexposure vaccination
Rubella, congenital	Congenital rubella syndrome	Droplet and contact	Respiratory secretions, urine	Direct and indirect contact; large droplets		Prolonged shedding in respiratory tract and urine; can be up to one year	Until one year of age, unless nasopharynge al and urine cultures done after 3 months of age are negative	As per Rubella, acquired
Rubeola See Measles							-	
Salmonella (including Salmonella Typhi)	Diarrhea, enteric fever, typhoid fever, food poisoning	ADULT: Routine ^w PAEDIATRIC: Contact	Feces	Direct and indirect contact (fecal/oral); foodborne	6–72 hours	Variable	Duration of symptoms	*Consider contact precautions for incontinent adults if stool cannot be contained or for adults with poor hygiene who contaminate their environment Contact precautions apply to children who are incontinent or unable to comply with hygiene

Microorganism	Clinical	Precautions	Infective	Route of	Incubation	Period of	Duration of	Comments
	presentation		material	transmission	period	communicability	precautions	
Scabies (Sarcoptes scabiei)	Itchy skin rash	Contact	Mite	Direct and indirect contact	Without previous exposure, 2–6 weeks; 1–4 days after re- exposure	Until mites and eggs are destroyed by treatment, usually after 1 or occasionally 2 courses of treatment, 1 week apart	Until 24 hours after initiation of appropriate therapy	Apply scabicide as directed on label. Wash clothes and bedding in hot water, dry clean or seal in a plastic bag, and store for 1 week Household contacts should be treated
Scarlet fever See Group A Streptococcus								
Schistosomiasis (bilharziasis) (Schistosoma sp.)	Diarrhea, fever, itchy rash Hepatospleno- megaly, hematuria	Routine				Not person to person		Contact with larvae in contaminated water.
Shigella	Diarrhea	ADULT: Routine ^x PAEDIATRIC: Contact	Feces	Direct and indirect contact (fecal/oral)	1–3 days	Usually 4 weeks if not treated	Duration of symptoms	*Consider contact precautions for incontinent adults if stool cannot be contained or for adults with poor hygiene who contaminate their environment Contact precautions apply to children who are incontinent or unable to comply with hygiene Treatment with effective antimicrobial shortens period of infectivity
Severe acute respiratory syndrome (SARS coronavirus)	Malaise, myalgia, headache, fever, respiratory symptoms (cough, increasing shortness of breath), pneumonia, acute respiratory distress syndrome	Contact and droplet ^y AGMP	Respiratory secretions, stool	Droplet, direct and indirect contact Aerosols during AGMP	3–10 days	Not yet determined; suggested to be less than 21 days	10 days following resolution of fever if respiratory symptoms have also resolved	^y AGMP, see strategies to reduce aerosol generation, see Part B, Section IV, subsection iii, 1b May cohort if infected with same virus Patient should not share room with high-risk roommates
Shingles See Herpes zoster								

Microorganism	Clinical presentation	Precautions	Infective material	Route of transmission	Incubation period	Period of communicability	Duration of precautions	Comments
Smallpox (variola virus) Generalized vaccinia, eczema vaccinatum See Vaccinia for management of vaccinated persons	Fever, vesicular/pustula r in appropriate epidemiologic context	Droplet, contact and airborne	Skin lesion exudate, oropharyngeal secretions	Airborne, direct and Indirect contact	7–10 days	Onset of mucosal lesions, until all skin lesions have crusted	Until all scabs have crusted and separated (3–4 weeks)	Immunization of HCWs was stopped in 1977 Refer to Canadian Immunization Guide 7th Ed., 2006 for information regarding vaccine, http://www.phac- aspc.gc.ca/publicat/cig-gci/index- eng.php NACI Statement on Smallpox Vaccination, http://www.phac- aspc.gc.ca/publicat/ccdr- rmtc/02vol28/28sup/acs1.html Care preferably should be provided by immune HCWs; non-vaccinated HCWs should not provide care if immune HCWs are available Respirator for all regardless of vaccination status
Sporotrichosis (Sporothrix schenckii)	Skin lesions, disseminated	Routine			Variable	Rare person to person		Acquired from spores in soil, on vegetation
Staphylococcus aureus (if methicillin- resistant, see also ARO)	Skin (furuncles, impetigo) wound or burn infection; abscess; scalded skin syndrome, osteomyelitis	MINOR: Routine MAJOR: Contact ^z	Drainage, pus	Direct and indirect contact	Variable	As long as organism is in the exudates or drainage	Until drainage resolved or contained by dressings	^z MAJOR: drainage not contained by dressings
	Endometritis	Routine						
	Produ poisoning Pneumonia	ADULT:	Respiratory	Large droplets,	Variable		Until 24 hours	
		Routine PAEDIATRIC: Droplet	secretions	direct contact			of appropriate antimicrobial therapy received	
	Toxic shock syndrome	Routine						
Streptobacillus moniliformis disease See Rat-bite fever								
Streptococcus pneumoniae	Pneumonia, meningitis and other	Routine			Variable			Normal flora

Microorganism	Clinical presentation	Precautions	Infective material	Route of transmission	Incubation period	Period of communicability	Duration of precautions	Comments
Streptococcus, Group A (Streptococcus pyogenes)	Skin (e.g., erysipelas, impetigo), wound or burn infection	MINOR: Routine MAJOR: Contact ^{aa}	Drainage, pus	Direct and indirect contact	1–3 days, rarely longer	As long as organism is in the exudates or drainage	Until 24 hours of appropriate antimicrobial therapy received	^{aa} MAJOR: drainage not contained by dressings
	Scarlet fever, pharyngitis, in children	ADULT: Routine PAEDIATRIC: Contact and droplet	Respiratory secretions	Large droplets,	2–5 days	10–21 days if not treated	Until 24 hours of appropriate antimicrobial therapy received	
	Group A Streptococcus endometritis (puerperal fever)	Routine						
	Group A Streptococcus toxic shock, invasive disease (including necrotizing fasciitis, myositis, meningitis, pneumonia)	Droplet and contact	Respiratory secretions, wound drainage	Large droplets, direct or indirect contact			Until 24 hours of appropriate antimicrobial therapy received	Chemoprophylaxis may be indicated for close contacts of patients with invasive disease or toxic shock syndrome For further information see: http://www.phac- aspc.gc.ca/publicat/ccdr- rmtc/06pdf/32s2_e.pdf
Streptococcus, Group B (Streptococcus agalactiae)	Group B Streptococcus newborn sepsis, pneumonia, meningitis	Routine		Mother to child at birth	Early onset: 1– 7 days of age; late onset: 7 days to 3 months of age			Normal flora
Stronglyoides (Stronglyoides stercoralis)	Usually asymptomatic	Routine	Larvae in feces		Unknown	Rarely transmitted person to person		Infective larvae in soil May cause disseminated disease in immuno-compromised patient
Syphilis (Treponema pallidum)	Genital, skin or mucosal lesions, disseminated disease, neurological or cardiac disease; latent infection	Routine Gloves for direct contact with skin lesions	Genital secretions, lesion exudates	Direct contact with infectious exudates or lesions Sexual transmission, Intrauterine or intrapartum from mother to child	10–90 days; usually 3 weeks	When moist muco-cutaneous lesions of primary and secondary syphilis are present		

Microorganism	Clinical presentation	Precautions	Infective material	Route of transmission	Incubation period	Period of communicability	Duration of precautions	Comments
Tapeworm (Taenia saginata, Taenia solium, Diphyllobothrium latum)	Usually asymptomatic	Routine	Larvae in food	Foodborne	Variable	Not transmissible person to person		Consumption of larvae in raw or undercooked beef or pork or raw fish; larvae develop into adult tapeworms in gastrointestinal tract Individuals with T. solium adult tapeworms may transmit cysticercosis to others
Tapeworm (Hymenolepsis nana)	Usually asymptomatic	Routine	Ova in rodent or human feces	Direct contact (fecal/oral)	2–4 weeks	While ova in feces		
Tetanus (Clostridium tetani)	Tetanus	Routine			1 day to several months	Not person to person		Acquired from spores in soil which germinate in wounds, devitalized tissue
Tinea (Dermatophytosis) (Trichophyton sp., Microsporom sp., Epidermophyton sp., Malassezia furor)	Ringworm (skin, beard, scalp, groin, perineal region); athletes foot; pityriasis versicolor	Routine	Organism in skin or hair	Direct skin-to- skin contact	Variable; 4–14 days	While lesion present		May be acquired from animals, shared combs, brushes, clothing, hats, sheets, shower stalls
Toxic shock syndrome See S. aureus, Group A Streptococcus								
Toxocariasis (Toxocara canis, Toxocara cati)	Fever, wheeze, rash, eosinophilia	Routine	Ova in dog/cat feces		Unknown	Not person to person		Acquired from contact with dogs, cats
Toxoplasmosis (Toxoplasma gondii)	Asymptomatic, fever, lymphadenopath y; retinitis, encephalitis in immuno- compromised host; congenital infection	Routine		Intrauterine transmission from mother to foetus; transplantation of stem cells or organs	5–23 days			Acquired by contact with infected felines or soil contaminated by felines, consumption of raw meat, contaminated raw vegetables or contaminated water
Trachoma See Chlamydia trachomatis								
Transmissible spongiform encephalopathy See Creutzfeld- Jacob disease								

Microorganism	Clinical presentation	Precautions	Infective material	Route of transmission	Incubation period	Period of communicability	Duration of precautions	Comments
Trench fever (Bartonella quintana)	Relapsing fevers, rash	Routine	Feces of human body lice	Louse-borne	7–30 days	Not person to person in the absence of lice		
Trichinosis (Trichinella spiralis)	Fever, rash, diarrhea	Routine	Infected meat	Food-borne	5–45 days	Not person to person		Acquired from consumption of infected meat
Trichomoniasis (Trichomonas vaginalis)	Vaginitis	Routine		Sexually transmitted	4–20 days	Duration of infection		
Trichuriasis (whipworm) (Trichuris trichiura)	Abdominal pain, diarrhea	Routine			Unknown	Not person to person		Ova must hatch in soil to be infective
Tuberculosis (TB) See Mycobacterium tuberculosis								
Tularemia (Francisella tularensis)	Fever, lymphadenopath y, pneumonia	Routine			1–14 days	Not person to person		Acquired from contact with infected animals F. tularensis is hazardous to laboratory workers; notify laboratory if diagnosis is suspected
Typhoid/ paratyphoid fever See Salmonella								
Typhus fever (Rickettsia typhi) Endemic flea- borne typhus	Fever, rash	Routine	Rat fleas	Flea borne	From 1–2 weeks, commonly 12 days	Not transmitted person to person		
Rickettsia prowazekii Epidemic louse- borne fever	Fever, rash	Routine	Human body louse	Louse borne	1–2 weeks			Person-to-person through close personal contact, not transmitted in absence of louse

Microorganism	Clinical presentation	Precautions	Infective material	Route of transmission	Incubation period	Period of communicability	Duration of precautions	Comments
Vaccinia	Range of adverse reactions to the smallpox vaccine (e.g., eczema vaccinatum, generalized or progressive vaccinia, other)	Contact	Skin exudates	Direct and indirect contact	3–5 days	Until all skin lesions resolved and scabs separated	Until all skin lesions dry and crusted and scabs separated	Vaccinia may be spread by touching a vaccination site before it has healed or by touching bandages or clothing that may have been contaminated with live virus from the smallpox vaccination site. Immunization of HCWs was stopped in 1977. Refer to Canadian Immunization Guide 7th Ed., 2006 for information regarding vaccine, http://www.phac- aspc.gc.ca/publicat/cig-gci/index- eng.php NACI Statement on Smallpox Vaccination, http://www.phac- aspc.gc.ca/publicat/ccdr- rmtc/02vol28/28sup/acs1.html
Vancomycin- resistant enterococci (VRE)	Infection or colonization of any body site	Contact	Infected or colonized secretions, excretions	Direct and indirect contact	Variable	Duration of colonization	As directed by ICP	Enterococci persist in the environment; pay special attention to cleaning See Appendix VI, 2. ARO
Vancomycin- resistant S. aureus (VRSA) Theoretical; to date, not reported	Infection or colonization of any body site	Contact	Infected or colonized secretions, excretions	Direct and indirect contact	Variable	Duration of colonization	As directed by ICP	Local public health authorities should be notified immediately See Appendix VI, 2. ARO.
Varicella zoster virus Varicella (chickenpox)	Fever with vesicular rash	Airborne and contact	Skin lesion drainage, respiratory secretions	Airborne, direct and indirect contact	10–21 days	1–2 days before rash and until skin lesions have crusted May be prolonged in immuno- compromised patients	Until all lesions have crusted and dried	HCWs, roommates and caregivers should be immune to chickenpox No additional precautions for pregnant HCWs Respirators for non-immune persons that must enter Susceptible high-risk contacts should receive varicella zoster immunoglobulin as soon as possible, latest within 96 hours of exposure Varicella zoster immunoglobulin may extend the incubation period to 28 days Refer to Canadian Immunization for specific information, available at: http://www.phac- aspc.gc.ca/publicat/cig-gci/index- eng.php

Microorganism	Clinical presentation	Precautions	Infective material	Route of transmission	Incubation period	Period of communicability	Duration of precautions	Comments
Herpes zoster (shingles), disseminated	Vesicular skin lesions	Airborne and Contact	Vesicle fluid, respiratory secretions	Airborne, direct and indirect contact		Until all lesions have crusted and dried	Until all lesions have crusted and dried	HCWs, roommates and caregivers should be immune to chickenpox Respirators for non-immune persons that must enter Susceptible high-risk contacts should receive varicella zoster immunoglobulin as soon as possible, latest within 96 hours of exposure Varicella zoster immunoglobulin may extend the incubation period to 28 days
Herpes zoster, localized Immuno- compromised host	Vesicular skin lesions in dermatomal distribution	Airborne and contact	Vesicle fluid	Direct and indirect contact, airborne		Until all lesions have crusted and dried and disseminated infection is ruled out	Until 24 hours after antiviral therapy started; then as for localized zoster in normal host	Localized zoster may disseminate in immunocompromised host if not treated HCWs, roommates and caregivers should be immune to chickenpox Susceptible high-risk contacts should receive varicella zoster immunoglobulin as soon as possible, latest within 96 hours of exposure Varicella zoster immunoglobulin may extend the incubation period to 28 days
Herpes zoster, localized Normal host	Vesicular skin lesions in dermatomal distribution	Routine Contact ^{bb} and airborne	Vesicle fluid	Direct and indirect contact, possibly airborne		Until all lesions have crusted and dried	Until all lesions have crusted and dried	^{bb} Consider contact and airborne for cases of extensive localized zoster that cannot be covered, in situations where there are varicella susceptible patients/HCWs.
Varicella or herpes zoster contact	Susceptible contact	Airborne	Respiratory secretions	Airborne	10–21 days	Potentially communicable during last 2 days of incubation period	From 8 days after first contact until 21 days after last contact with rash, regardless of postexposure vaccination (28 days if given varicella zoster immuno- globulin)	Airborne precautions should be taken with neonates born to mothers with varicella onset <5 days before delivery HCWs, roommates and caregivers should be immune to chickenpox
Variola See smallpox								

Microorganism	Clinical presentation	Precautions	Infective material	Route of transmission	Incubation period	Period of communicability	Duration of precautions	Comments
Vibrio parahaemolyticus enteritis	Diarrhea, food poisoning	Routine	Contaminated food, especially seafood	Foodborne	Between 12 and 24 hours; range from 4– 30 hours			
Vincent's angina (trench mouth)		Routine						
Viral hemorrhagic fevers (Lassa, Ebola, Marburg, Crimean- Congo viruses)	Hemorrhagic fever	Contact and droplet AGMP [∞]	Blood and bloody body fluids, respiratory secretions Lassa: urine	Direct and Indirect contact Lassa: Sexual contact	Lassa: 1–3 weeks Ebola: 2–21 days	Unknown, possibly several weeks Lassa virus may be excreted in urine for 3–9 weeks after onset	Until symptoms resolve	Local public health authorities should be notified immediately. ^{cc} AGMP necessary: see strategies to reduce aerosol generation, see Part B, Section IV, subsection iii, 1b
West Nile virus See Arboviruses								
Whipworm See Trichuriasis								
Whooping cough See Pertussis								
Yersinia enterocolitica; Y. pseudotuberculosi s	Diarrhea, mesenteric adenitis	ADULT: Routine ^{dd} PAEDIATRIC: Contact	Feces	Direct and indirect contact (fecal/oral); foodborne	3–7 days, generally under 10 days	Duration of excretion in stool	Duration of symptoms	^{dd} Consider contact precautions for incontinent adults if stool cannot be contained or for adults with poor hygiene who contaminate their environment Contact precautions apply to children who are incontinent or unable to comply with hygiene
Zoster See Varicella (Herpes zoster)								
Zygomycosis (Phycomycosis) See Mucormycsis								