

**LTC HEALTHCARE-ASSOCIATED INFECTIONS
SURVEILLANCE CASE DEFINITIONS**

INFECTION	RESPIRATORY CRITERIA								
<p><i>Each RESPIRATORY HAI can only be assigned to one category. Assign in order of priority below:</i></p> <ol style="list-style-type: none"> 1. COVID, if not met move to #2 2. ILI, if not met move to #3 3. Pneumonia, if not met move to #4 4. Lower respiratory, if not met move to #5 5. Upper respiratory, if not met then you do not meet case definition for HAI 									
COVID-19	Positive viral test by PCR (polymerase chain reaction) for SARS-CoV-2 in the past 14 days								
INFLUENZA-LIKE ILLNESS (ILI)	Influenza-like illness (ILI) is characterized as: acute onset of respiratory illness with fever AND cough AND one or more of the following: <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">a. sore throat</td> <td style="width: 50%;">b. arthralgia (joint pain)</td> </tr> <tr> <td>c. prostration (extreme exhaustion)</td> <td>d. myalgia (muscular pain)</td> </tr> </table>	a. sore throat	b. arthralgia (joint pain)	c. prostration (extreme exhaustion)	d. myalgia (muscular pain)				
a. sore throat	b. arthralgia (joint pain)								
c. prostration (extreme exhaustion)	d. myalgia (muscular pain)								
<p><i>If criteria for ILI and another upper or lower RTI are met at the same time, only the diagnosis of ILI shall be recorded</i></p>									
PNEUMONIA	<p>ALL THREE criteria MUST be present:</p> <ol style="list-style-type: none"> 1. Interpretation of a chest radiograph as demonstrating pneumonia or the presence of a new infiltrate or consolidation 2. At least ONE of the following sub-criteria: <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">a. new or increased cough</td> <td style="width: 50%;">b. new or increased sputum production</td> </tr> <tr> <td>c. pleuritic chest pain</td> <td>d. respiratory rate \geq 25 breaths/min</td> </tr> <tr> <td colspan="2">e. new or changed lung examination abnormalities (e.g., rales, crackles)</td> </tr> <tr> <td colspan="2">f. O₂ saturation < 94% on room air OR reduction in O₂ saturation of > 3% from baseline</td> </tr> </table> 3. At least ONE of the <i>constitutional criteria</i> * 	a. new or increased cough	b. new or increased sputum production	c. pleuritic chest pain	d. respiratory rate \geq 25 breaths/min	e. new or changed lung examination abnormalities (e.g., rales, crackles)		f. O ₂ saturation < 94% on room air OR reduction in O ₂ saturation of > 3% from baseline	
a. new or increased cough	b. new or increased sputum production								
c. pleuritic chest pain	d. respiratory rate \geq 25 breaths/min								
e. new or changed lung examination abnormalities (e.g., rales, crackles)									
f. O ₂ saturation < 94% on room air OR reduction in O ₂ saturation of > 3% from baseline									
<p><i>Exclude symptoms related to underlying conditions, e.g., congestive heart failure or interstitial lung diseases</i></p>									
LOWER RESPIRATORY TRACT INFECTION EXCLUDING PNEUMONIA (e.g., bronchitis or tracheobronchitis)	<p>ALL THREE criteria MUST be present:</p> <ol style="list-style-type: none"> 1. Chest radiograph not performed, or negative results for pneumonia, or presence of a new infiltrate or consolidation 2. At least TWO of the following sub-criteria: <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">a. new or increased cough</td> <td style="width: 50%;">b. new or increased sputum production</td> </tr> <tr> <td>c. pleuritic chest pain</td> <td>d. respiratory rate \geq 25 breaths/min</td> </tr> <tr> <td colspan="2">e. new or changed lung examination abnormalities (e.g., rales, crackles)</td> </tr> <tr> <td colspan="2">f. O₂ saturation < 94% on room air OR reduction in O₂ saturation of > 3% from baseline</td> </tr> </table> 3. At least ONE of the <i>constitutional criteria</i> * 	a. new or increased cough	b. new or increased sputum production	c. pleuritic chest pain	d. respiratory rate \geq 25 breaths/min	e. new or changed lung examination abnormalities (e.g., rales, crackles)		f. O ₂ saturation < 94% on room air OR reduction in O ₂ saturation of > 3% from baseline	
a. new or increased cough	b. new or increased sputum production								
c. pleuritic chest pain	d. respiratory rate \geq 25 breaths/min								
e. new or changed lung examination abnormalities (e.g., rales, crackles)									
f. O ₂ saturation < 94% on room air OR reduction in O ₂ saturation of > 3% from baseline									

<p style="text-align: center;">UPPER RESPIRATORY TRACT INFECTION</p> <p>(e.g., common cold, pharyngitis)</p>	<p>EITHER criteria 1 OR 2 MUST be present:</p> <hr style="border-top: 1px dashed black;"/> <p>1. At least TWO of the following sub-criteria:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">a. fever*</td> <td style="width: 50%;">b. runny nose or sneezing</td> </tr> <tr> <td>c. new or increased cough</td> <td>d. stuffy nose/congestion</td> </tr> <tr> <td>e. sore throat, hoarseness, or difficulty swallowing</td> <td>f. swollen or tender glands in neck</td> </tr> <tr> <td colspan="2">g. shortness of breath or increased work of breathing</td> </tr> <tr> <td colspan="2">h. one of the following:</td> </tr> <tr> <td> • chills</td> <td> • joint pain</td> </tr> <tr> <td> • new headache or eye pain</td> <td> • myalgias or body aches</td> </tr> <tr> <td> • malaise or loss of appetite</td> <td></td> </tr> </table> <hr style="border-top: 1px dashed black;"/>	a. fever*	b. runny nose or sneezing	c. new or increased cough	d. stuffy nose/congestion	e. sore throat, hoarseness, or difficulty swallowing	f. swollen or tender glands in neck	g. shortness of breath or increased work of breathing		h. one of the following:		• chills	• joint pain	• new headache or eye pain	• myalgias or body aches	• malaise or loss of appetite	
	a. fever*	b. runny nose or sneezing															
c. new or increased cough	d. stuffy nose/congestion																
e. sore throat, hoarseness, or difficulty swallowing	f. swollen or tender glands in neck																
g. shortness of breath or increased work of breathing																	
h. one of the following:																	
• chills	• joint pain																
• new headache or eye pain	• myalgias or body aches																
• malaise or loss of appetite																	
<p>2. Nasopharyngeal swab positive for viral respiratory tract pathogen AND one respiratory sub-criteria (a – h) as listed above</p>																	

Exclude symptoms related to underlying conditions, e.g., allergies or chronic obstructive pulmonary disorder. If upper respiratory tract infection and lower respiratory tract infection criteria are met, record the case as a lower respiratory tract infection. Lower respiratory tract infections are associated with great morbidity and mortality, and surveillance should aim for sensitivity toward these infections

INFECTION	UTI & CATHETER ASSOCIATED UTI CRITERIA
URINARY TRACT INFECTION (UTI)	<p>For residents without an indwelling catheter, BOTH 1 AND 2 must be present:</p>
	<p>1. At least ONE of the following sub-criteria:</p> <hr/> <p>a. Acute pain, swelling, or tenderness of the testes, epididymis, or prostate</p> <p>b. Fever or leukocytosis* and AT LEAST 1 of the following localizing urinary tract sub-criteria</p> <ul style="list-style-type: none"> – Acute dysuria – Suprapubic pain – Gross hematuria – Acute costovertebral angle pain or tenderness – New or marked increase in incontinence – New or marked increase in urgency – New or marked increase in frequency <p>c. In the absence of fever or leukocytosis, 2 or more of the following localizing urinary tract sub-criteria:</p> <ul style="list-style-type: none"> – Acute dysuria – Suprapubic pain – Gross hematuria – New or marked increase in incontinence – New or marked increase in urgency – New or marked increase in frequency
	<p>2. $\geq 10^8$ CFU/L of no more than 2 species of bacteria from a midstream urine, or $\geq 10^5$ CFU/L from a specimen collected by in-and-out catheter</p>
CATHETER-ASSOCIATED UTI	<p>For residents with an indwelling catheter (i.e., any type of urinary catheter <i>in situ</i> for at least 48 hours, including suprapubic catheters), or in a midstream voided urine specimen from a resident whose catheter has been removed within the previous 48 hours, both criteria 1 and 2 must be present:</p>
	<p>1. At least ONE of the following sub-criteria:</p> <hr/> <p>a. Fever*, rigours, or new-onset hypotension (systolic blood pressure of ≤ 90 mmHg in an individual with a previously normal systolic blood pressure), with no alternate site of infection</p> <p>b. Acute change in mental status, with no alternate diagnosis, and leukocytosis*</p> <p>c. New-onset suprapubic pain or costovertebral angle pain or tenderness</p> <p>d. Purulent discharge from around the catheter</p> <p>e. Acute pain, swelling, or tenderness of the testes, epididymis, or prostate</p>
	<p>2. $\geq 10^8$ CFU/L of no more than 2 species of bacteria from urinary catheter specimen</p>
<p><i>Symptoms used to meet criteria 1 for both UTI and Catheter-Associated UTI must be present within the 3 days before and the 3 days after the day of the microbiological test used to meet criteria 2. Exclude symptoms with non-infectious causes. Application info: 3 days before OR the 3 days after, not necessarily both or all 7 days.</i></p>	

INFECTION	WOUND AND SKIN CRITERIA
CELLULITIS, SOFT TISSUE, OR WOUND INFECTION	At least ONE of the following criteria MUST be present:
	1. Pus present at a wound, skin, or soft tissue site
	2. New or increasing presence of AT LEAST 4 of the following sub-criteria: a. Heat at the affected site b. Tenderness or pain at the affected site c. Redness at the affected site d. Serous drainage at the affected site e. Swelling at the affected site f. ONE constitutional criterion*
	3. Non-commensal organism isolated with at least 1 sub-criterion from section 2 (a.-f.) above

Appendix A: CDC National Healthcare Safety Network Master Organism List for a list of common commensals

INFECTION	SCABIES CRITERIA
SCABIES	BOTH criteria MUST be present:
	1. A maculopapular and/or itching rash
	2. At least ONE of the following sub-criteria: a. Nurse Practitioner or Physician diagnosis b. Laboratory confirmation via skin scraping or biopsy c. Epidemiologic linkage to a case of scabies with laboratory confirmation

A case is considered epidemiologically linked by direct contact to a confirmed case through person-to-person transmission (e.g., common caregiver), if there is geographic proximity in the facility, or through a common exposure

*** CONSTITUTIONAL CRITERIA**

FEVER	ONE of the following criteria MUST be met:								
	1. Single temperature more than 37.8°C								
	2. Repeated oral temperatures of more than 37.2°C or rectal temperatures more than 37.5°C								
	3. Single temperature more than 1.1°C increase over baseline of non-illness temperature collected from any site								
	<i>There is insufficient evidence to indicate a specific time frame for evaluating repeated temperatures using fever criterion 2. It is suggested repeated temperatures be collected within no more than 48 hours of each other</i>								
LEUKOCYTOSIS	>11 x 10 ⁹ leukocytes/L								
ACUTE CHANGE in MENTAL STATUS from BASELINE USING the CONFUSION ASSESSMENT METHOD	ALL FOUR criteria must be present:								
	1. Evidence of acute change in mental status								
	2. Fluctuating course: behaviour fluctuating (e.g., coming and going, or changing in severity during the assessment)								
	3. Inattention: difficulty focusing attention (e.g., unable to keep track of discussion or easily distracted)								
	4. EITHER A OR B:								
	A. Disorganized thinking								
	B. Altered level of consciousness: level of consciousness is described as different from baseline (e.g., hyper-alert, sleepy, drowsy, difficult to arouse, non- responsive)								
ACUTE FUNCTIONAL DECLINE	<p>A new three-point increase in total Activities of Daily Living (ADL) score (range 0-28) from baseline, based on the following seven ADL items, each scored from 0 (independent) to 4 (total dependence)</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">1 Bed mobility</td> <td style="width: 50%;">5 Toilet use</td> </tr> <tr> <td>2 Transfer</td> <td>6 Personal hygiene</td> </tr> <tr> <td>3 Dressing</td> <td>7 Eating</td> </tr> <tr> <td>4 Locomotion within LTC home</td> <td></td> </tr> </table> <p><i>This information may not be readily available. If unable to appropriately determine rely on the other indicators above to meet the constitutional criteria.</i></p>	1 Bed mobility	5 Toilet use	2 Transfer	6 Personal hygiene	3 Dressing	7 Eating	4 Locomotion within LTC home	
1 Bed mobility	5 Toilet use								
2 Transfer	6 Personal hygiene								
3 Dressing	7 Eating								
4 Locomotion within LTC home									

For HAI Attribution to the LTC Home

BOTH of these criteria MUST be met	<p>No evidence the infection was incubating on admission to the LTC home</p> <p>Infection onset occurred >2 calendar days after admission to the LTC home</p>
---	---

National LTC case definitions can be found here:

Canadian Journal of Infection Control | Fall 2023 | Volume 38 | Issue 43 | 139-146

Manitoba Health Influenza Like Illness case definition: [Seasonal Influenza protocol \(gov.mb.ca\)](https://www.gov.mb.ca/health/publichealth/influenza/protocol.html)