



Health Care-Associated Infection (HAI) Surveillance QUICK REFERENCE GUIDE for LTC Facilities (LTCF)

SURVEILLANCE PURPOSE:

1. Ensure the HAI surveillance in Long Term Care Facilities (LTCF) is evidence based.
2. Track HAI infections, identify outbreaks and emerging trends, have a process to analyze the data, and share the information with LTC team members, senior leadership (site and regional), governing bodies, and others as appropriate.
3. Provide infection prevention and control (IP&C) recommendations and quality improvement initiatives that work to minimize the number of HAIs and prevent outbreaks.

Surveillance is the ongoing systematic collection, collation and analysis of data.

Targeted surveillance is surveillance carried out in specific areas or targeted at specific organisms or procedures.

- Phase 1: Respiratory surveillance (Implemented: April 1, 2024)
- Phase 2: Urinary Tract (UTI); Wound and Skin (W&S); Scabies (Implementation July 1, 2024)
- Phase 3: Gastrointestinal (GI); *Clostridioides difficile* infection (CDI) (Implementation pending)
- Phase 4: Multi Drug Resistant Organisms (MDRO) (Implementation pending)

Surveillance rates will provide the Incidence Rate (a measurement of new cases of infection within a population over a given period of time).

TOOLS

Site Nursing/designate:

Green font = tool development underway

- Surveillance of HAIs – Line list PAPER
 - Respiratory Surveillance of HAIs – Line list PAPER
 - UTI/W&S/Scabies Surveillance of HAIs – Line list PAPER
 - GI/CDI/MDRO surveillance of HAIs – Line list PAPER
- Education Resources
 - Respiratory Surveillance of HAIs – Educational Resource
 - UTI/W&S/Scabies Surveillance of HAIs - Educational Resource
 - GI/CDI Surveillance of HAIs – Educational Resource
 - MDRO Surveillance of HAIs – Educational Resource

Infection Control Support Associate (ICSA) in cooperation with WRHA Infection Control Professional (ICP):

- Surveillance case definitions
 - Respiratory HAI surveillance definitions
 - UTI/W&S/Scabies HAI surveillance definitions
 - GI/CDI HAI Surveillance definitions
 - MDRO HAI and colonization surveillance definitions
- Surveillance of HAIs – Electronic copy of line list
 - Respiratory Surveillance of HAIs – Electronic copy
 - UTI/W&S/Scabies Surveillance of HAIs – Electronic copy
 - GI/CDI/MDRO Surveillance of HAIs – Electronic copy
- Surveillance Data Base



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DATA COLLECTION:

Responsibility: Site Nursing/designate

1. Surveillance of HAIs – PAPER Line List

UTI/CAUTI/SKIN-WOUND Daily Infection Signs and Symptoms Surveillance Form - Line List																																		
Facility:		Unit:										Month:																						
only put date from the same month on one form.																																		
Patient Information																																		
Patient #	Resident Name	PHIN	Room #	Date symptoms started (dd-mm-yy)	Date Precautions initiated (dd-mm-yy)	Constitutional		UTI/CAUTI				Wounds/Skin/Soft Tissue		Other																				
						Fever*	Acute functional decline*	Acute change in mental status from baseline*	Leucocytosis >11 x 10 ⁹ leukocytes/L	Catheter insitu or removed < 48 hrs ago (Y/N)	Acute costovertebral angle pain or tenderness	Acute dysuria	Acute pain, swelling, or tenderness of the testes, epididymis, or prostate	Gross hematuria	New or marked increase in frequency	New or marked increase in incontinence	New or marked increase in urgency	Purulent discharge from around the catheter	Rigours, or new-onset hypotension with no alternate site of infection	Suprapubic pain	Heat at affected site	Pus present at a wound, skin, or soft tissue site	Redness at affected site	Serous drainage at affected site	Swelling at affected site	Tenderness/pain at affected site	Maculopapular &/or itching rash; Scabies investigation	Date specimen submitted to lab (dd-mm-yy)	Laboratory result organism	Date Additional Precautions resolved (dd-mm-yy)	Death / Hospitalized / Recovered	Nurse completing assessment (initials)		
1																																		
2																																		
3																																		
4																																		

The nurse/designate

- assesses for signs and symptoms of infection, and
- documents on the applicable 'PAPER Surveillance of HAIs – Line list'. *Note: this does not replace the requirement to do an Integrated Progress Note (IPN).*

INSTRUCTIONS FOR USE	
1. Add all residents with symptoms to this line list for all conditions under surveillance.	6. Ensure notification to ICSA/WRHA ICP continues by facility identified process.
2. Do not use Wite-Out®/correction tape on line list; if an error has been made, strike out the whole line and use a new line.	7. Contact facility ICSA with questions or concerns.
3. Exclude cases with existing or chronic conditions who are at baseline.	8. Print line list on double sided legal paper; request printer to flip pages on the short side.
4. Start a new line list sheet each month.	9. The first nurse to make an assessment puts their initials at the end of row.
5. Retain the hard copy for record retention.	10. Additional symptoms can be added on the same row later using new nurses' initials in the appropriate column.

- At the top of the 'PAPER UTI/W&S/Scabies HAI Surveillance' sheet you will find a table, as shown below. One designated nurse on each shift (days, evenings, nights) is responsible to ensure the surveillance forms have been updated. This nurse will initial the forms when completed. This will provide a method to ensure surveillance data is added to the forms on a regular basis.



Health Care-Associated Infection (HAI) Surveillance QUICK REFERENCE GUIDE for LTC Facilities (LTCF)

Staff Initials and Shift that Assessment was Completed																																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
D																																
E																																
N																																

UTI/CAUTI/SKIN-WOUND Daily Infection Signs and Symptoms Surveillance Form - Line List																																				
Facility:		Unit:		Month:	only put data from the same month on one form.																															
Patient Information				Constitutional										UTI/CAUTI										Wounds/Skin/Soft Tissue								Other				
Patient #	Int Name	PHIN	Room #	is started (mm-yy)	: Initiated (mm-yy)	Fever	Chills	Malaise	Headache	URI	Diarrhea	Nausea	Vomiting	Abdominal pain	Flank pain	Joint pain	Neutrophilia	Leukopenia	Urgency	Dysuria	Frequency	Discharge	Uterine tenderness	Abdominal tenderness	Redness	Swelling	Pain	Drainage	Ulceration	Debridement	Other	Submitter (mm-yy)	Organism	Result (mm-yy)	Recovered	Resident (Initials)

3. Resources for Site Nursing/designate education

- Respiratory Surveillance of HAIs – Line List Education Resource
 - Respiratory Surveillance of HAIs Power Point – [Training video](#)
 - UTI/W&S/Scabies Surveillance of HAIs – Line List Educational Resource

DATA REVIEW:

Responsibility: ICSA in cooperation with WRHA ICP

- Any time after the 7th day each month, collect the previous month’s ‘PAPER Surveillance of HAIs – Line list’s’ from each of the units. Where an outbreak crosses into the next month, a photocopy of the previous months ‘PAPER Surveillance of HAIs – Line lists’ can be left for units to reference total case numbers.
- Carefully apply the appropriate case definition to each resident listed on the ‘PAPER Surveillance of HAIs – Line list’s’. Note all that meet case definition and prepare to add to the database.

DATA BASE ENTRIES:

The rate calculation is performed using the following formula:

$$\text{Incidence rate (rate of new cases)} = \frac{\text{Number of new cases of a particular infection type during the month}}{\text{Total number of residents days for the same month}}$$

The resident days for each month may be obtainable through the administrator or finance department, depending on the organization.

Responsibility: ICSA in cooperation with WRHA ICP

ICSA to complete. Data entry deadline: 30 days after the end of the month. Add in resident days when received.

Infection Instructions The *Infections Tab* is used to input your resident data related to cases of infections.

8. In the second table on the Total Inf tab (Monthly rates of home acquired infections, per 1000) corresponding to the month in order for the rate to be calculated. Resident days is defined as the number of days a resident was present on the month (i.e. a resident who was present on January 1st and still present on January 31st has contributed 31 days to the total). A resident who was admitted on January 20th but still present on the 31st has contributed 11 days to the total). Every month must be entered.



Health Care-Associated Infection (HAI) Surveillance QUICK REFERENCE GUIDE for LTC Facilities (LTCF)

ALWAYS ENTER COLUMN B IN THE UNITS TAB (UNIT NAMES) FIRST PRIOR TO USING SURVEILLANCE SPREADSHEETS.

1. Enter the name of the LTCF at the top of the form. Enter the year in the 'year' cell at the top of the form. It is recommended to start a new file every year.
2. Enter the month during which the signs or symptoms of the infections started. Enter the resident name, unit/wing/floor or any location identifying information, room number and date the symptoms started.
3. From the dropdown box, indicate Yes or No in the column titled 'Was the infection determined to be acquired within the current facility (Y/N)'. Refer to the case definitions for instructions on how to attribute cases to either the LTCF/RH or elsewhere (e.g., another healthcare facility, community). Only cases attributed to the LTCF/RH (and therefore classified as healthcare-associated/home-associated) will be used to calculate rates. A **Yes** or **No** must be entered into this cell.
4. Using the case validation forms and/or the case definition document, determine if the resident's signs and symptoms of infection satisfy the case definition for the suspected infection. Refer to the daily surveillance form, resident progress notes, laboratory results, diagnostic imaging results and any other documentation or test performed related to the infection to make the decision. If the resident meets the case definition, enter an **X** under the corresponding infection type. Additional lab, antibiotic, physician diagnosis and comments can be added in the Comments column on the right-hand side. If anything other than an **X** is entered into the cell, it will not be counted as a case.
5. Start a new line for each resident. If the same resident develops more than one infection, start a new line for each infection.
6. The columns titled 'Other' can be used to customize the form to the needs of the LTCF. For example, if a LTCF has a large population with Hepatitis B and is concerned about specifically tracking Hepatitis B infections, an 'Other' column can be renamed Hepatitis B and this specific infection can be tracked.
7. On the **Total Inf tab**, ensure the numbers of each infection type are counting accurately in the first table (Summary of infections occurring within the home) (e.g. if 3 residents with respiratory tract infections met the case definition for the month of January on the Infections tab, the number 3 should appear in the January / Respiratory cell).
8. In the second table on the Total Inf tab (Monthly rates of home acquired infections, per 10000 resident days), the total number of resident days must be entered in the row corresponding to the month in order for the rate to be calculated. Resident days is defined as the total number of days all of the residents were at risk for an infection during the month (i.e. a resident who was present on January 1st and still present on January 31st has contributed 31 resident days to the total while a resident who was a new admission on January 20th but still present on the 31st has contributed 11 days to the total). Even if there are no cases of infections in a given month, resident days for that month must be entered.
9. Below each table, a graph is generated reflecting the total number of infections by infection type per month or reflecting the rates by infection type per month.



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OUTBREAK REPORTING:

Responsibility: ICSA in cooperation with WRHA ICP

1. Surveillance of HAIs – Electronic copy

UTI/CAUTI/SKIN-WOUND Daily Infection Signs and Symptoms Surveillance Form - Line List																
Facility:		only put data from the same month on one form.														
Unit:		Month:														
Patient Information		Patient Information														
Patient #	Resident Name	PHIN	Room #	Date symptoms started (dd-mm-yy)	Date Precautions initiated (dd-mm-yy)	Constitutional	UTI/CAUTI	Wounds/Skin/Soft Tissue	Other	Laboratory result organism	Date Additional Precautions resolved (dd-mm-yy)	Death / Hospitalized / Recovered	Nurse completing assessment (initials)	ICP/ICSA Healthcare associated infection? - Attributable to your facility/unit (Y/N)	ICP/ICSA Reliably isolated	Date lab confirmed results received (dd-mm-yyyy)
1																
2																
3																
4																
5																
6																
7																

- a. The nurse/designate will
 - i. have completed their routine, monthly surveillance activities (i.e., no change in their data collection methods)
 - ii. assess for signs and symptoms of infection, and
 - iii. document on the applicable 'PAPER Surveillance of HAIs – Line list'. *Note: this does not replace the requirement to do an Integrated Progress Note (IPN).*
- b. The ICSA will
 - i. Identify which resident on the paper line list should be added to the 'Surveillance of HAIs – Electronic copy' outbreak line list (i.e., add outbreak cases)
 - ii. Password protect the line list and confidentially forward to the WRHA ICP for evaluation and discussion.

*Note: During **outbreaks only**, residents listed on the 'PAPER Surveillance of HAIs – Line list' need to be transcribed to the 'Surveillance of HAIs – Electronic copy'.*