



SAMPLE URINE CULTURE REPORT

As a part of your homes participation in the Public Health Agency of Canada's antimicrobial stewardship project, you are receiving this monthly Urine Culture Report on your ordering data.

[YOUR LTCH] | [DATE]

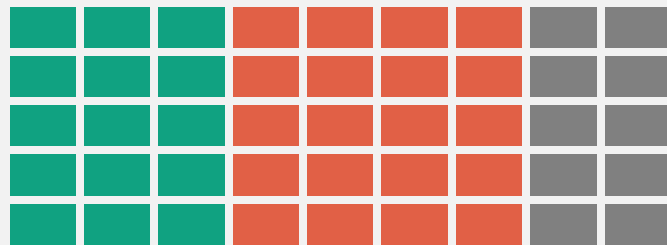
[Your home] is committed to antimicrobial stewardship, which helps reduce harm to residents from unnecessary antibiotic use and combat antimicrobial resistance. As part of that commitment, [your LTCH] has stated its goal to have **[X%] of urine cultures be aligned with [guidelines](#)** (modified Loeb criteria, see [Appendix](#)) by [DATE].

[Your LTCH] ordered 43 urine cultures during [DATE].

Based on the documented signs and symptoms shared with PHAC, **[X% (X of Y)]** of urine cultures ordered at [your LTCH] met minimum criteria for collection.

[X] were ordered without documentation, so alignment with guidelines could not be estimated.

Proportion of urine cultures aligned with guidelines

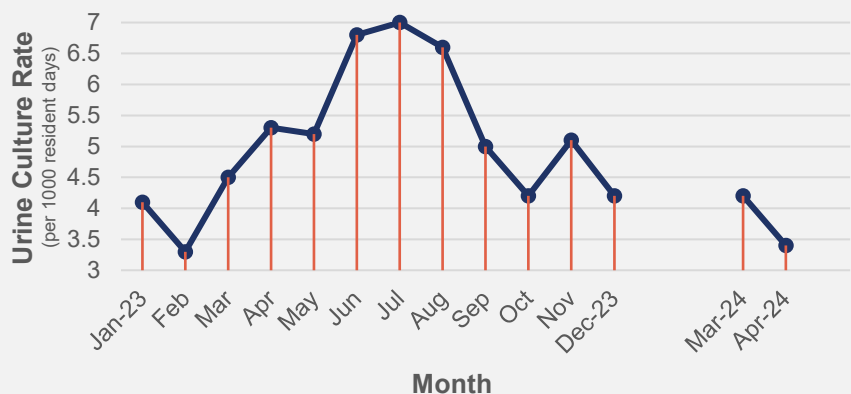


■ Aligned ■ Not Aligned ■ No documentation

Next month, let's aim to meet [your LTCH]'s goal of **[X%]** of urine culture orders that are aligned with guidelines.

To do that, only send a urine culture when a resident meets [minimum criteria for UTI](#).

[Your LTCH] monthly urine culture order rate



BEST PRACTICES



If a resident does not meet the minimum criteria for UTI...

- Assess for alternative explanations,
- Order other targeted investigations,
- Consider the need for increased fluid intake, monitoring and early re-assessment for development of signs and symptoms.

Scan the QR code or refer to the Appendix for more resources.

We recognize that reducing urine culture orders is not an easy task, and we appreciate your efforts in providing the best care for your residents. Thank you for your support of the study and your role in antimicrobial stewardship.

*Signature **

Name

Title (e.g., Medical Director, IPAC director)

APPENDIX:

Why did I receive this report?

You are receiving this report because [your LTCH] is participating in an antimicrobial stewardship quality improvement project led by the Public Health Agency of Canada. The goal of the project is to **optimize** urine specimen collection and related antimicrobial use according to [guidelines](#) (modified Loeb criteria) ^{1,2} to help reduce harm to residents from unnecessary antibiotic use and combat antimicrobial resistance.

1. Loeb M, Bentley DW, Bradley S, et al. Development of minimum criteria for the initiation of antibiotics in residents of long-term-care facilities: results of a consensus conference. Infect Control Hosp Epidemiol 2001;22:120-4. <https://doi.org/10.1086/501875>
2. Loeb M, Brazil K, Lohfeld L, et al. Effect of a multifaceted intervention on number of antimicrobial prescriptions for suspected urinary tract infections in residents of nursing homes: cluster randomised controlled trial. BMJ 2005;331:669. <https://doi.org/10.1136/bmj.38602.586343.55>

How do I know these data are accurate?

Data are collected by a member of the project implementation team in [your LTCH]. The data are then securely sent to PHAC, where they are analyzed by PHAC experts. The data are used to prepare this report, which is first verified with [your LTCH]'s implementation team before being shared with you.

How is our urine culture order rate calculated?

Urine culture order rate is the absolute number of urine cultures ordered by [your LTCH] during the calendar month divided by the total number of days residents stayed at [your LTCH] during the calendar month, multiplied by 1000.

$$\text{Urine cultures per 1000 resident days} = \frac{\text{Number of urine cultures ordered by [your LTCH] during the calendar month}}{\text{Total number of days residents stayed at [your LTCH] during the calendar month}} \times 1000$$

How is our target urine culture order rate determined?

At the beginning of this project, the PHAC research team met [your LTCH]'s implementation team to determine a suitable urine culture order rate target. Data on historical urine culture order rate and alignment with guidelines was considered, along with consideration of the unique circumstances at [your LTCH].

How is alignment with guidelines determined?

Each month, the local implementation reviews resident charts and collects data on the signs and symptoms prompting each urine culture order. This data are then securely sent to PHAC where PHAC experts compare the documented signs and symptoms with the minimum criteria for UTI.

See below for an example:

Minimum Criteria for UTI	Resident 1
In a catheterized resident:	
One or more of the following:	
Fever ($\geq 37.9^{\circ}\text{C}$ or a 1.5°C increase above baseline on at least two occasions over the last 12 hours)	
Side/flank/lower stomach/lower back pain	
New onset delirium	
In a non-catheterized resident:	
Painful urination (<i>if yes, order urine culture</i>)	X
Two or more of the following:	
Fever ($\geq 37.9^{\circ}\text{C}$ or a 1.5°C increase above baseline on at least two occasions over the last 12 hours)	✓
New/increased Urgency	X
New/increased Frequency	X
New/increased side/flank/lower stomach/lower back pain	X
Blood in urine	X
Acute onset of delirium in residents with advanced dementia*	
Other relevant clinical context:	None provided
Meets minimum criteria for UTI:	NO

* The following signs and symptoms do not indicate a UTI alone:

- Changes in mental status from baseline (disorientation, confusion, agitation)
- Decline in functional status from baseline (activities of daily living)

What are some limitations of these data?

The alignment-to-guidelines data are dependent on the documentation of signs and symptoms data – if documentation is missing, a urine culture ordered may be inaccurately marked as against guidelines. Urine culture order rate will naturally fluctuate based on the needs of [your LTCH]'s resident population and many other factors.

Despite these limitations reviewing your home's rate of urine culture over time and an estimation of alignment to guidelines can provide a helpful point of reflection for reviewing your practice.

Where can I go to learn more?

[Choosing Wisely Canada: Using Antibiotics Wisely Campaign](#)

Using Antibiotics Wisely in Long-term Care from Choosing Wisely Canada has comprehensive practice change recommendations for UTI management for clinicians in a variety of roles.

Piggott, K. L., Trimble, J., & Leis, J. A. (2023). Reducing unnecessary urine culture testing in residents of long term care facilities. *bmj*, 382. <https://doi.org/10.1136/bmj-2023-075566>

A recent article with practical recommendations for management of asymptomatic bacteriuria and urinary tract infection.

[AMMI Asymptomatic bacteriuria Toolkit](#)

Clinical practice guideline for the management of asymptomatic bacteriuria from the Association of Medical Microbiology and Infectious Disease Canada.

[Public Health Ontario: UTI Program](#)

A variety of resources for UTI management from Public Health Ontario.