

Reimbursement Policy

Urine Culture Testing for Bacteria

[POLICY DESCRIPTION](#) | [INDICATIONS AND/OR LIMITATIONS OF COVERAGE](#) | [APPLICABLE STATE AND FEDERAL REGULATIONS](#) | [APPLICABLE CPT/HCPCS PROCEDURE CODES](#) | [EVIDENCE-BASED SCIENTIFIC REFERENCES](#) | [REVISION HISTORY](#)

I. Policy Description

Bacteriuria is the presence of bacteria in the urine. Urinary tract infections (UTIs) can occur in the urinary system and can be either symptomatic or asymptomatic. UTIs can include cystitis, an infection of the bladder or lower urinary tract; pyelonephritis, an infection of the upper urinary tract or kidney; urosepsis; urethritis; and male-specific conditions, such as bacterial prostatitis and epididymitis.^{1,2} Typically, in an infected person, bacteriuria, and pyuria (the presence of pus in the urine) are present and can be present in both symptomatic and asymptomatic UTIs. A urine culture can be performed to determine the presence of bacteria and to characterize the bacterial infection.³

For guidance on pathogen panel testing from urine samples, please see AHS-G2149 Pathogen Panel Testing.

II. Indications and/or Limitations of Coverage

Application of coverage criteria is dependent upon an individual's benefit coverage at the time of the request. Specifications pertaining to Medicare and Medicaid can be found in the "Applicable State and Federal Regulations" section of this policy document.

- 1) For pregnant individuals, urine culture testing (with isolate identification and antibiotic susceptibilities if applicable) for a urinary tract infection (UTI) **MEETS COVERAGE CRITERIA.**
- 2) For asymptomatic individuals undergoing urological interventions which breach the mucosa, urine culture testing (with isolate identification and antibiotic susceptibilities if applicable) prior to the procedure **MEETS COVERAGE CRITERIA.**
- 3) For individuals exhibiting at least one sign or symptom of a possible UTI or bacteriuria (see Note 1 below), urine culture testing (with isolate identification and antibiotic susceptibilities if applicable) **MEETS COVERAGE CRITERIA.**

Reimbursement Policy

- 4) To assess pyelonephritis, urine culture testing (with isolate identification and antibiotic susceptibilities if applicable) **MEETS COVERAGE CRITERIA**.
- 5) For all other instances of asymptomatic UTI or asymptomatic bacteriuria not described above, urine culture testing (with isolate identification and antibiotic susceptibilities if applicable) **DOES NOT MEET COVERAGE CRITERIA**.
- 6) For individuals that show evidence of clinical resolution of infection, follow-up urine culture testing for an uncomplicated UTI **DOES NOT MEET COVERAGE CRITERIA**.

The following does not meet coverage criteria due to a lack of available published scientific literature confirming that the test(s) is/are required and beneficial for the diagnosis and treatment of an individual's illness.

- 7) Urine culture testing (with isolate identification and antibiotic susceptibilities if applicable) **DOES NOT MEET COVERAGE CRITERIA** in **any** of the following situations:
 - a) As a part of initial screening for asymptomatic prostatitis.
 - b) As a part of assessment or prognosis of prostate biopsy.

NOTES:

Note 1: Signs and symptoms of UTI/bacteriuria:

- Symptoms of a bladder infection include pain or burning while urinating, frequent urination, feeling the need to urinate despite having an empty bladder, bloody urine, and/or pressure or cramping in the groin or lower abdomen.⁴
- Symptoms of a kidney infection include fever, chills, lower back pain or pain in the side of your back, and/or nausea or vomiting.⁴
- Symptoms of a UTI in infants, babies and toddlers include fever, belly pain or fullness, strong, foul-smelling urine, weight loss, irritability, vomiting, poor feeding, fatigue, yellowish skin or eyes, and/or diarrhea.⁵
- Symptoms of a UTI in older kids include daytime accidents or bedwetting after being fully potty trained, painful or difficult urination, pain or discomfort in their lower belly, back or side, urine that smells bad, is cloudy or has blood in it, nausea and/or vomiting, fever and chills, fatigue, and/or a frequent, urgent need to urinate, especially if only a small amount comes out when they go.⁵

Reimbursement Policy

- Symptoms of a UTI in older, frail people or people with a urinary catheter include leaking urine (wetting themselves or incontinence) that is worse than usual, new shivering or shaking (rigors), and/or changes in behavior, such as acting agitated or confused (delirium).⁶

III. Applicable State and Federal Regulations

DISCLAIMER: If there is a conflict between this Policy and any relevant, applicable government policy for a particular member [e.g., Local Coverage Determinations (LCDs) or National Coverage Determinations (NCDs) for Medicare and/or state coverage for Medicaid], then the government policy will be used to make the determination. For the most up-to-date Medicare policies and coverage, please visit the Medicare search website: <https://www.cms.gov/medicare-coverage-database/search.aspx>. For the most up-to-date Medicaid policies and coverage, visit the applicable state Medicaid website.

Food and Drug Administration (FDA)

Many labs have developed specific tests that they must validate and perform in house. These laboratory-developed tests (LDTs) are regulated by the Centers for Medicare and Medicaid (CMS) as high-complexity tests under the Clinical Laboratory Improvement Amendments of 1988 (CLIA '88). LDTs are not approved or cleared by the U. S. Food and Drug Administration; however, FDA clearance or approval is not currently required for clinical use.

Reimbursement Policy

IV. Applicable CPT/HCPCS Procedure Codes

CPT	Code Description
87077	Culture, bacterial; aerobic isolate, additional methods required for definitive identification, each isolate
87086	Culture, bacterial; quantitative colony count, urine
87088	Culture, bacterial; with isolation and presumptive identification of each isolate, urine
87140	Culture, typing; immunofluorescent method, each antiserum
87147	Culture, typing; immunologic method, other than immunofluorescence (e.g., agglutination grouping), per antiserum
87149	Culture, typing; identification by nucleic acid (DNA or RNA) probe, direct probe technique, per culture or isolate, each organism probed
87181	Susceptibility studies, antimicrobial agent; agar dilution method, per agent (e.g., antibiotic gradient strip)
87186	Susceptibility studies, antimicrobial agent; microdilution or agar dilution (minimum inhibitory concentration [MIC] or breakpoint), each multi-antimicrobial, per plate

Current Procedural Terminology© American Medical Association. All Rights reserved.

Procedure codes appearing in Medical Policy documents are included only as a general reference tool for each policy. They may not be all-inclusive.

V. Evidence-based Scientific References

1. Hooton TM, Gupta K. Acute complicated urinary tract infection (including pyelonephritis) in adults. Wolters Kluwer. Updated June 5, 2025. <https://www.uptodate.com/contents/acute-complicated-urinary-tract-infection-including-pyelonephritis-in-adults>
2. Bonkat G, Bartoletti R, Bruyère R, et al. European Association of Urology (EAU) Guidelines on Urological Infections Uroweb. <https://d56bochluxqnz.cloudfront.net/documents/full-guideline/EAU-Guidelines-on-Urological-Infections-2024.pdf>
3. Meyrier A. Sampling and evaluation of voided urine in the diagnosis of urinary tract infection in adults. Updated Feb 28, 2025. <https://www.uptodate.com/contents/sampling-and-evaluation-of-voided-urine-in-the-diagnosis-of-urinary-tract-infection-in-adults>
4. CDC. Urinary Tract Infection Basics. Updated January 22, 2024. <https://www.cdc.gov/uti/about/>
5. Cleveland Clinic. Urinary Tract Infection (UTI) in Kids. Updated June 2, 2025. <https://my.clevelandclinic.org/health/diseases/12415-urinary-tract-infection-childrens>
6. NHS. Urinary tract infections (UTIs). Updated July 11, 2025. <https://www.nhs.uk/conditions/urinary-tract-infections-utis/>

Reimbursement Policy

7. Brubaker L, Wolfe A. The urinary microbiota: a paradigm shift for bladder disorders? *Current opinion in obstetrics & gynecology*. Oct 2016;28(5):407-12. doi:10.1097/gco.0000000000000298
8. Aroutcheva A, Gariti D, Simon M, et al. Defense factors of vaginal lactobacilli. *American journal of obstetrics and gynecology*. Aug 2001;185(2):375-9. doi:10.1067/mob.2001.115867
9. Harding GK, Zhanel GG, Nicolle LE, Cheang M. Antimicrobial treatment in diabetic women with asymptomatic bacteriuria. *The New England journal of medicine*. Nov 14 2002;347(20):1576-83. doi:10.1056/NEJMoa021042
10. AAFP. Don't perform urinalysis, urine culture, blood culture or C. difficile testing unless patients have signs or symptoms of infection. <https://www.aafp.org/pubs/afp/collections/choosing-wisely/291.html>
11. Cope M, Cevallos ME, Cadle RM, Darouiche RO, Musher DM, Trautner BW. Inappropriate treatment of catheter-associated asymptomatic bacteriuria in a tertiary care hospital. *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*. May 1 2009;48(9):1182-8. doi:10.1086/597403
12. Schito GC, Naber Kg Fau - Botto H, Botto H Fau - Palou J, et al. The ARES study: an international survey on the antimicrobial resistance of pathogens involved in uncomplicated urinary tract infections. *Int J Antimicrob Agents*. 2009;34(5):407-13.
13. Sabih A, Leslie SW. Complicated Urinary Tract Infections. *StatPearls*. StatPearls Publishing; 2024. <https://www.ncbi.nlm.nih.gov/books/NBK436013/>
14. Cooper J, Raeburn A, Hamilton-Miller JM, Brumfitt W. Nitrite test for bacteriuria detection. *Br J Gen Pract*. 1992// 1992;42
15. Devillé WLJM, Yzermans JC, van Duijn NP, Bezemer PD, van der Windt DAWM, Bouter LM. The urine dipstick test useful to rule out infections. A meta-analysis of the accuracy. *BMC Urology*. 2004/06/02 2004;4(1):4. doi:10.1186/1471-2490-4-4
16. Graham J, Galloway A. ACP Best Practice No 167. *Journal of Clinical Pathology*. 2001;54(12):911-919.
17. Schmiemann G, Kniehl E, Gebhardt K, Matejczyk MM, Hummers-Pradier E. The Diagnosis of Urinary Tract Infection: A Systematic Review. *Deutsches Ärzteblatt International*. 2010;107(21):361-367. doi:10.3238/arztebl.2010.0361
18. Wojno KJ, Baunoch D, Luke N, et al. Multiplex PCR Based Urinary Tract Infection (UTI) Analysis Compared to Traditional Urine Culture in Identifying Significant Pathogens in Symptomatic Patients. *Urology*. Feb 2020;136:119-126. doi:10.1016/j.urology.2019.10.018
19. Bruyere F, d'Arcier BF, Boutin JM, Haillot O. Is urine culture routinely necessary before prostate biopsy? *Prostate cancer and prostatic diseases*. Sep 2010;13(3):260-2. doi:10.1038/pcan.2010.8
20. Birnie K, Hay AD, Wootton M, et al. Comparison of microbiological diagnosis of urinary tract infection in young children by routine health service laboratories and a research laboratory: Diagnostic cohort study. 2017;(1932-6203 (Electronic))

Reimbursement Policy

21. Eliacik K, Kanik A, Yavascan O, et al. A Comparison of Bladder Catheterization and Suprapubic Aspiration Methods for Urine Sample Collection From Infants With a Suspected Urinary Tract Infection. *Clin Pediatr (Phila)*. 2016;55(9):819-24.
22. Ducharme J, Neilson S, Ginn JL. Can urine cultures and reagent test strips be used to diagnose urinary tract infection in elderly emergency department patients without focal urinary symptoms? *Cjem*. Mar 2007;9(2):87-92.
23. Price TK, Dune T, Hilt EE, et al. The Clinical Urine Culture: Enhanced Techniques Improve Detection of Clinically Relevant Microorganisms. *Journal of Clinical Microbiology*. 2016;54(5):1216-1222. doi:10.1128/JCM.00044-16
24. Cantey JB, Gaviria-Agudelo C, McElvania TeKippe E, Doern CD. Lack of clinical utility of urine gram stain for suspected urinary tract infection in pediatric patients. *Journal of clinical microbiology*. 2015;53(4):1282-1285. doi:10.1128/JCM.00045-15
25. Petty LA, Vaughn VM, Flanders SA, et al. Risk Factors and Outcomes Associated With Treatment of Asymptomatic Bacteriuria in Hospitalized Patients. *JAMA Intern Med*. Aug 26 2019;doi:10.1001/jamainternmed.2019.2871
26. Coussement J, Scemla A, Hougardy JM, et al. Prevalence of asymptomatic bacteriuria among kidney transplant recipients beyond two months post-transplant: A multicenter, prospective, cross-sectional study. *PLoS One*. 2019;14(9):e0221820. doi:10.1371/journal.pone.0221820
27. Fontserè S, Infante-Domínguez C, Suárez-Benjumea A, et al. Impact of Treating Asymptomatic Bacteriuria in Kidney Transplant Recipients: A Prospective Cohort Study. *Antibiotics (Basel)*. 2021;10(2):218. doi:10.3390/antibiotics10020218
28. AMDA. Don't obtain urine tests until clinical criteria are met. <https://paltc.org/programs/choosing-wisely>
29. AAFP. Avoid ordering follow-up urine cultures after treatment for an uncomplicated urinary tract infection (UTI) in patients that show evidence of clinical resolution of infection. <https://www.aafp.org/pubs/afp/collections/choosing-wisely/361.html>
30. AAFP. Avoid the use of surveillance cultures for the screening and treatment of asymptomatic bacteriuria. <https://www.aafp.org/pubs/afp/collections/choosing-wisely/198.html>
31. WHO. WHO Guidelines Approved by the Guidelines Review Committee. *WHO Recommendations on Antenatal Care for a Positive Pregnancy Experience*. World Health Organization Copyright (c) World Health Organization 2016.; 2016.
32. Robinson JL, Finlay JC, Lang ME, et al. Urinary tract infections in infants and children: Diagnosis and management. Canadian Paediatric Society. <https://www.cps.ca/en/documents/position/urinary-tract-infections-in-children>
33. Roberts KB. Urinary tract infection: clinical practice guideline for the diagnosis and management of the initial UTI in febrile infants and children 2 to 24 months. *Pediatrics*. Sep 2011;128(3):595-610. doi:10.1542/peds.2011-1330
34. Dason S, Dason JT, Kapoor A. Guidelines for the diagnosis and management of recurrent urinary tract infection in women. *Canadian Urological Association journal = Journal de l'Association des urologues du Canada*. Oct 2011;5(5):316-22.

Reimbursement Policy

35. Averch TD, Stoffel J, Goldman HB, et al. Catheter-Associated Urinary Tract Infections: Definitions and Significance in the Urologic Patient. *White Papers*. 2014 2015;2018(06/21/2018)doi:10.1016/j.urpr.2015.01.005
36. AUA. Management and Screening of Primary Vesicoureteral Reflux in Children. <https://www.auanet.org/guidelines-and-quality/guidelines/vesicoureteral-reflux-guideline>
37. Lightner DJ, Wymer K, Sanchez J, Kavoussi L. Best Practice Statement on Urologic Procedures and Antimicrobial Prophylaxis. *J Urol*. Feb 2020;203(2):351-356. doi:10.1097/ju.0000000000000509
38. NICE. Urinary tract infections in adults. Updated February 15, 2023. <https://www.nice.org.uk/guidance/qs90>
39. NICE. Urinary tract infection in under 16s: diagnosis and management. Updated July 27, 2022. <https://www.nice.org.uk/guidance/ng224/chapter/Recommendations#diagnosis>
40. Anger J, Lee U, Ackerman L, et al. Recurrent Uncomplicated Urinary Tract Infections in Women: AUA/CUA/SUFU Guideline. American Urological Association. <https://www.auanet.org/guidelines-and-quality/guidelines/recurrent-uti>
41. Nicolle LE, Gupta K, Bradley SF, et al. Clinical Practice Guideline for the Management of Asymptomatic Bacteriuria: 2019 Update by the Infectious Diseases Society of America. *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*. May 2 2019;68(10):e83-e110. doi:10.1093/cid/ciy1121
42. USPSTF. Screening for Asymptomatic Bacteriuria in Adults: US Preventive Services Task Force Recommendation Statement. *JAMA*. 2019;322(12):1188-1194. doi:10.1001/jama.2019.13069
43. Goldman JD, Julian K. Urinary tract infections in solid organ transplant recipients: Guidelines from the American Society of Transplantation Infectious Diseases Community of Practice. *Clin Transplant*. Sep 2019;33(9):e13507. doi:10.1111/ctr.13507
44. Association of Medical Microbiology and Infectious Diseases Canada. Five Tests and Treatments to Question in Medical Microbiology and Infectious Diseases. Updated July 2022. <https://choosingwiselycanada.org/recommendation/medical-microbiology/>

VI. Revision History

Revision Date	Summary of Changes
09/04/2025	Reviewed and Updated: Updated background, guidelines, and evidence-based scientific references. Literature review necessitated the following changes in coverage criteria: Note 1 revised to expand signs/symptoms of a UTI and added population specific signs/symptoms for children and elderly adults.