

## Diagnosis

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- Asymptomatic bacteriuria (ASB) is a positive urine culture in a patient with no signs or symptoms of a urinary tract infection (e.g., dysuria, frequency, urgency, fever, flank pain).
- ASB is common and often associated with pyuria (urine containing  $\geq 10$  white blood cells per high-powered field).

| Population                              | Prevalence of ASB | Prevalence of Pyuria in Persons With ASB |
|---|-------------------|--|
| Healthy premenopausal women             | 1–5%              | 32%                                      |
| Women 70–90 years old                   | 11–16%            |  |
| Female long-term care residents         | 25–50%            | 90%                                      |
| Male long-term care residents           | 15–50%            | 90%                                      |
| Women with diabetes                     | 9–27%             | 70%                                      |
| Men with diabetes                       | 1–11%             |  |
| People receiving hemodialysis           | 25%               | 90%                                      |
| Presence of indwelling urinary catheter | > 90%             | 50–100%                                  |

## Treatment

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- The majority of patients with ASB and/or asymptomatic pyuria **SHOULD NOT** be treated.
- Studies have demonstrated that treatment of ASB does not prevent urinary tract infections (UTIs), but is associated with adverse events related to antibiotic use and the development of future UTIs that are antibiotic resistant.
- Exceptions
  - Pregnant patients: treatment prevents preterm labor and pyelonephritis.
  - Patients about to undergo a urologic procedure in which mucosal bleeding is expected (not urinary catheter placement): treatment prevents urosepsis.

### How can I prevent unnecessary treatment of asymptomatic bacteriuria?

- Do not order urine cultures unless your patient has signs and symptoms of a UTI, including in patients undergoing preoperative evaluation or patients with urinary catheters (except in pregnant patients or those about to undergo a urologic procedure in which mucosal bleeding is expected).

*Note:*

- Foul-smelling or cloudy urine does not indicate a UTI.
- Delirium, insomnia, and falls alone do not indicate a UTI.

## References

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