



Asymptomatic bacteriuria is common among residents in residential aged care homes. Antimicrobials are often prescribed inappropriately for treatment and prophylaxis of asymptomatic bacteriuria. Urinary tract infections (UTIs) and asymptomatic bacteriuria are often overdiagnosed and overtreated, leading to adverse events from excessive antimicrobial use and antimicrobial resistance (AMR).

Aged care homes in Australia have high prevalence

in women. In residential aged care, asymptomatic bacteriuria is present in at least 40-50% of women and 30-40% of men without chronic indwelling catheters. Residents who are functionally impaired are more likely to have bacteriuria. In 2018, 2% of all prescriptions in aged care homes were for asymptomatic bacteriuria.

Eight out of ten of these prescriptions were for prevention of asymptomatic bacteriuria.

### What is asymptomatic bacteriuria?

Asymptomatic bacteriuria is the growth of organisms at counts of  $10^5$  colony-forming units (CFU)/mL or more in a urine specimen in persons without symptoms, consistent with a UTI.

Pyuria or the presence of pus in the urine accompanies bacteriuria for over 90% of older residents in aged care. It is also present in 30% of residents without bacteriuria.

Chronic genitourinary symptoms such as urinary incontinence, dysuria and nocturia are common among aged care residents. These chronic symptoms are not an indication of urinary tract

### Testing

Screening for asymptomatic bacteriuria is not recommended. Identification of pyuria by urinalysis or leukocyte esterase dipstick is not diagnostic for symptomatic urinary infection, nor an indication for antimicrobial therapy. Requesting a urine culture without a clear indication significantly contributes to antibiotic misuse.

Asymptomatic bacteriuria only requires treatment in very limited circumstances, such as people undergoing invasive urological procedures.

For people undergoing joint replacement procedures, screening or treating asymptomatic bacteriuria is not recommended. Treatment is not indicated for catheter changes.

The Australian Therapeutic Guidelines has produced a flowchart on assessment of aged care facility residents with suspected UTI. The flowchart provides different decision pathways depending on whether the resident has a urinary catheter or not.

For both pathways, the next decision step is to identify criteria consistent with an UTI, including:

- Fever
- Acute mental status change
- New or worsening urinary frequency or urgency
- New or worsening suprapubic pain or tenderness
- Costovertebral angle pain or tenderness

