

# Urinary tract infection | Te pokenga ara mīmimi

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## Is the resident symptomatic?

Urinary tract infection is the most common bacterial infection in residents in residential care facilities. Asymptomatic bacteriuria is not treated with antibiotics, except in certain circumstances, eg, prior to surgery where it may increase post-operative risk. There is no discernible benefit to the resident (when there is bacteria in the urine without symptoms) and there are risks of antimicrobial resistance and drug reactions.

## Definition of urinary tract infection

- Include only symptomatic UTI
- Surveillance of asymptomatic bacteriuria is not recommended because this represents a baseline status for many residents

### Symptomatic UTI: one of the following criteria must be met

#### 1. Non-catheterised:

Evaluate for symptomatic UTI by adding up points of signs/symptoms present: the resident needs to score 3 or more from signs and symptoms:

- Fever > 37.8°C, or repeated readings of > 37.2°C, or 1°C above normal from any site and/or chills
- New or increased burning or pain on voiding
- New flank or suprapubic pain or tenderness
- Worsening of mental or functional status
- Deteriorating renal function (may be due to multiple reasons).

#### 2. The person with an indwelling urinary catheter has at least 2 of the following signs or symptoms:

- Fever > 37.8°C, or repeated readings of > 37.2°C, or 1°C above normal from any site and/or chills
- New or increased burning or pain or tenderness
- New flank or suprapubic pain or tenderness
- Worsening of mental or functional status
- Deteriorating renal function (may be due to multiple reasons).

### Consider other causes

If there are 2 or more symptoms of non-urinary infection DO NOT order a urine culture.

## Collection of MSU

A urine specimen can take some time to collect. Alerting staff as soon as a UTI is suspected will assist in getting a specimen before any treatment is started. A urine specimen should always be obtained prior to treatment because a negative culture is useful to exclude a UTI. A positive urine culture will show the microorganisms' sensitivity to antibiotics, allowing for judicious prescribing. Antimicrobial's sensitivity to antibiotics is becoming increasingly problematic in residential aged care, increasing the importance of optimising antimicrobial therapy.

## Treatment options

Treatment options need to be individualised for each resident. Deciding when to start antibiotics can be challenging. Possible treatment may include the following:

- **Resident symptomatic but not unwell:**
  - Wait for urine result but continue to monitor.
- **Resident symptomatic and unwell:**
  - Notify GP/NP.
  - Start antibiotics while waiting for MSU results.
  - Eligible for phone order.
- **Resident critically unwell or deteriorating rapidly:**
  - Contact NP/GP ASAP.
  - Are they for palliative care? Activate palliative care plan.
  - Call ambulance to transfer to acute care and complete transport documentation.

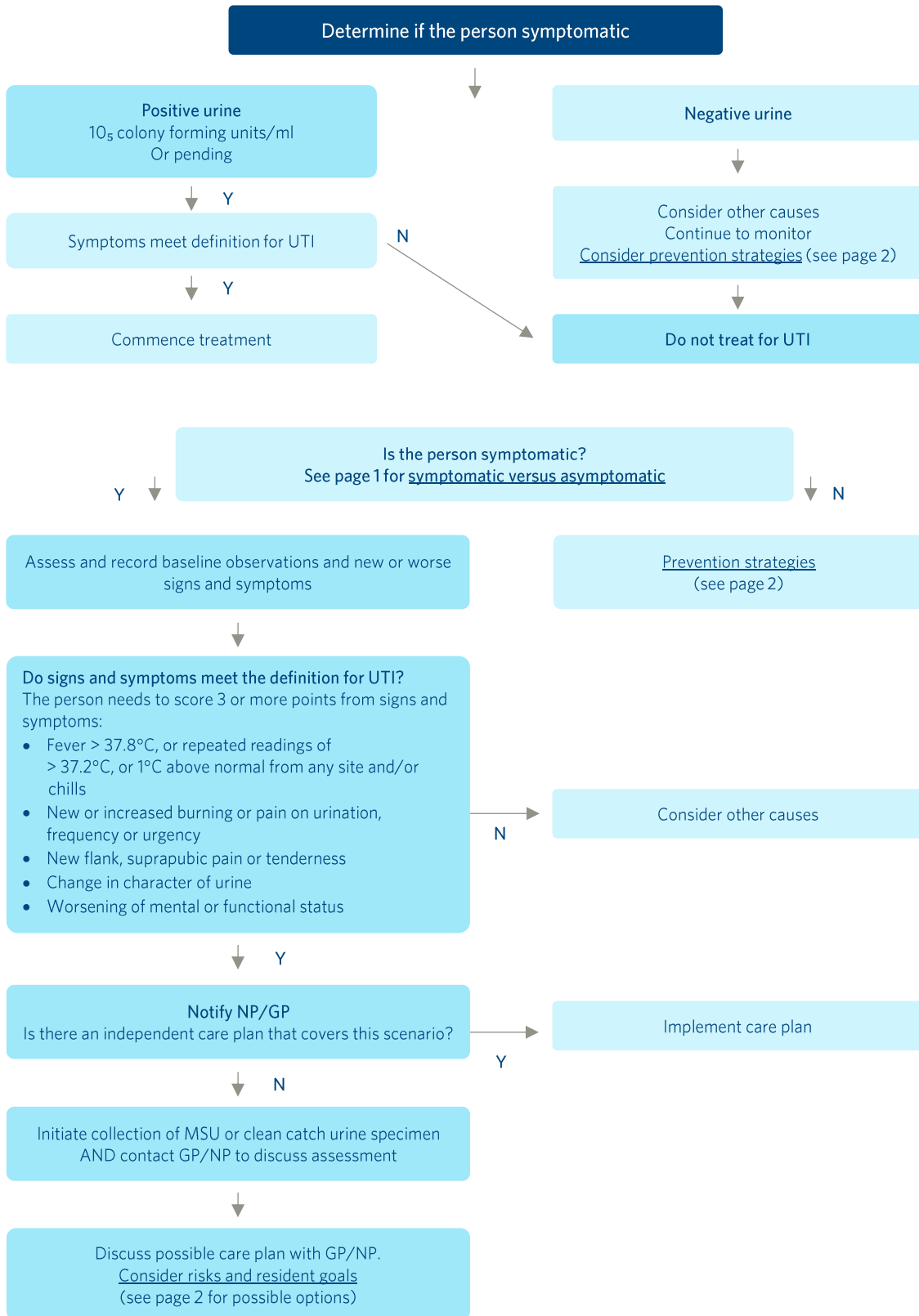
## Prevention strategies

- Adequate hydration to meet daily requirements
- Attention to perineal hygiene and continence management
- D-Mannose to reduce *E. coli* adherence to the bladder wall
- Avoid catheterisation
- Consider atrophic vaginitis and oestrogen cream treatment, if resident continues to suffer multiple UTIs.

## Continue to monitor for change in status and act accordingly

Consider risks, care plan, previous allergies and treatment history, communication with EPOA, welfare guardian, representatives.

Non-catheterised resident



## Bibliography | Te rārangi pukapuka

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### Urinary tract infection

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