

Wirral working together to improve hydration and to prevent and improve treatment of Urinary Tract Infections – Fact sheet for Practices

This factsheet supports the project to reduce the prevalence of UTI and to improve diagnosis and treatment in older people in Wirral.

Who should we not use urine dips for?

The prevalence of asymptomatic bacteriuria in people over 65 and those with urinary catheters means that UTIs can be over diagnosed by relying on urine dips in this population.

Do not use urine dips in:

- People aged **65 years or over**
- Anyone with a **urinary catheter**

In men < 65 years a sample for culture should always be sent. A urine dipstick test with positive nitrites makes UTI more likely in men, but PHE guidance recommends that they are unreliable for ruling out infection.

Who are urine dips useful for?

Urine dips are useful in:

- Women under 65 years where diagnosis is not clear from symptoms. Refer to Flow chart on page 6. [Diagnosis of urinary tract infections - quick reference tool for primary care \(publishing.service.gov.uk\)](#)
- Children > 3 months. Refer to [Recommendations | Urinary tract infection in under 16s: diagnosis and management | Guidance | NICE](#) for interpretation and when to send a sample for culture and sensitivity

What symptoms should diagnosis be based on in people aged 65 years or with catheters?

Either

- Burning, pain or discomfort when passing urine (dysuria)

or

- Tenderness in back, under ribs (kidney pain) (Possible upper UTI/ pyelonephritis)

Or if 2 or more symptoms below:

- Needing to pass urine much more often than usual or more urgently
- New or worsening urinary incontinence
- Visible blood in urine (macroscopic haematuria)
- Pain in lower tummy or above pubic area
- Inappropriate shivering/chills OR temperature below 36 or above 37.9°C New or worsening confusion, agitation or delirium

Which patient groups should urine samples be sent for culture and sensitivity testing?

Always send urine samples for:	Consider risk factors for resistance and send urine for culture if:
<ul style="list-style-type: none"> • Men • Pregnant women • >65 years • Catheter Associated UTI • Symptoms of upper UTI / pyelonephritis • Recurrent UTI (2 episodes in 6m or 3 episodes in 12m) • Failed treatment or non-response • Children under 3 months of age 	<ul style="list-style-type: none"> • Abnormalities of genitourinary tract • Renal impairment • Care home resident • Hospitalisation for > 7 days in last 6m • Recent travel to a country with increased resistance • Previous UTI resistant to antibiotic therapy

Urine should be collected before antibiotics are started.

Must the culture results be available before prescribing?

No, diagnosis should be made based on symptoms. If UTI is likely and antibiotics are indicated offer treatment whilst awaiting the result. Amend treatment, if necessary, once the results are available.

Summary of First line Treatment Options for UTI

For further information and cautions refer to [Anti-infective therapy - Pan Mersey APC](#)

To note that some second line recommendations should only be used where culture and sensitivity results demonstrate susceptibility.

	First line treatment options	Second line treatment options	Duration
Non-pregnant women with uncomplicated lower UTI	Nitrofurantoin MR Trimethoprim	Fosfomycin Pivmecillinam	3 days
Non-pregnant women with complicated lower UTI	Cefalexin	Trimethoprim Co-amoxiclav Ciprofloxacin	7 days
Pregnant women with symptomatic lower UTI	Nitrofurantoin Avoid from 37 weeks of pregnancy.	Amoxicillin Cefalexin	7 days
Pregnant women with asymptomatic bacteriuria	According to culture results	According to culture results	7 days
Adult men with lower UTI	Nitrofurantoin Trimethoprim (if low risk of resistance)	Pivmecillinam Cefalexin	7 days
Pyelonephritis (upper urinary tract), acute	Cefalexin	Trimethoprim Co-amoxiclav Ciprofloxacin	7 days
Catheter-associated urinary tract infection	Nitrofurantoin Trimethoprim (if low risk of resistance)	Amoxicillin Pivmecillinam	7 days
Catheter-associated urinary tract infection in pregnancy	Cefalexin		7 days

How can we help prevent UTI in people > 65 years?

- Encourage hydration
- Explain urine colour chart and signs of dehydration

1	Good
2	Good
3	Fair
4	Dehydrated
5	Dehydrated
6	Very dehydrated
7	Severe dehydration

Target intake in people without fluid restriction

- Weight > 50kg: 1500–2000ml
- Weight 40 – 50kg: 1200-1500ml
- Weight 35-40kg: 1000-1200ml

Target will increase if people are experiencing vomiting or diarrhoea