

Good Practice Guidance for CARE STAFF^{1,2,3}: Management of UTIs for older adults >65 years residing in care homes



UTI - What is it?

- A urinary tract infection (UTI) is an infection in any part of the urinary system — the kidneys, ureters, bladder and urethra.
- UTIs are more common in women than in men. Urinary tract infection incidence increases with age for both sexes. (*NICE CKS, NICE QS90*)
- Urinary tract infections were the condition with the highest emergency hospital admissions rate in 2012/13 with 67 admissions per 100,000 population every 3 months on average. (*NHSE 2014*)
- UTIs in the elderly are often over-diagnosed and over-treated. (*NICE QS90*)

UTIs and the Elderly

- The diagnosis of UTIs is particularly difficult in older people, who are more likely to have asymptomatic bacteriuria (bacteria in the urine but no signs or symptoms of an infection)
- Older adults in care homes frequently have unnecessary antibiotic treatment for asymptomatic bacteriuria.
- Asymptomatic bacteriuria may be avoidable with increased volume of water or fluids. For good hydration, most people need 1500-2000mls of fluid per day.
- In older adults (> 65 years of age), the presence of bacteria in the urine does not always mean an infection is present, therefore do not perform a urine dipstick test. Diagnosis of Urinary Tract Infections (UTIs) should be based on clinical signs and symptoms.

Signs and Symptoms of a UTI

A UTI in an older person without a urinary catheter is defined as two or more of the following symptoms:

- Pain on passing urine (this is called 'dysuria')
- New or worsening urinary incontinence (unintentional loss of urine)
- Need to pass urine urgently (this is called 'urgency')
- Need to pass urine much more often than usual (this is called 'frequency')
- Lower abdominal (between belly button and pubic hair) pain
- New lower back pain
- Visible blood in the urine (this is called 'haematuria')
- Inappropriate shivering/chills (rigors) or high temperature >38°C/ low temperature of <36°C
- New or worsening confusion or agitation

In people with a urinary catheter, the symptoms are different because the person is not passing urine for themselves. In older people with a urinary catheter in place, a UTI is defined as one or more of the following symptoms:

- Inappropriate shivering/chills (rigors) or high temperature >38°C/ low temperature of <36°C
- New pain or tenderness where the kidneys are (lower back pain)
- New or worsening confusion or agitation

If you suspect that your resident has a UTI, then refer to and complete the 'Older People >65 years with Suspected Urine Infection (UTI) – Guidance for Care Home staff' document form – see appendix 1 on this document (also available on the Care Home Companion website: <https://carehomecompanion.uk/>)

What can I do to help the residents in my care who are at risk of UTIs?

Dehydration can increase the risk of UTIs developing in the elderly.

Offer your residents plenty of fluids and keep them hydrated.



What are the common causes of dehydration?

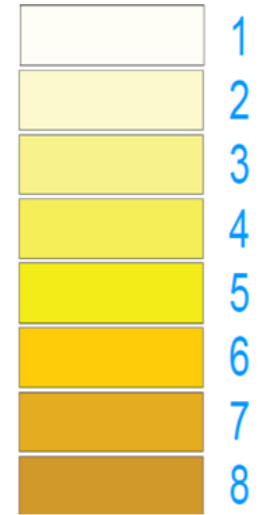
- The elderly have reduced thirst sensation so may not know when they are thirsty
- Unable to communicate (cannot say when they are thirsty)
- Pre-existing medical conditions e.g. diabetes, stroke.
- Dementia – may forget to drink or eat
- Cognitive impairment
- Medications e.g. diuretics, laxatives
- Illness
- Fear of incontinence due to drinking
- Mobility/dexterity issues - can't physically go to get a drink or lift cup/glass
- Excessive fluid losses – diarrhoea, sweating, vomiting

How will I know if someone is dehydrated?

Your resident may have some of the following signs or symptoms if dehydrated:

- Dry mouth
- Headache
- Dizziness
- Tiredness
- Confusion or not wanting to take part in activities
- UTI (urinary tract infection)
- Constipation
- Pressure ulcers
- Falls
- Kidney stones
- Low blood pressure
- Medication toxicity
- Dark coloured urine

Healthy pee is 1-3
4-8 you must hydrate!



How can I help someone keep hydrated?

Remember, adults need to drink 6-8 large glasses of fluid each day to keep hydrated!

Ensure that fluids are the right consistency for your residents if they have swallowing problems.

Not all of these suggestions may be appropriate in dysphagia.

- ✓ Identify those with poor fluid intake/ are at risk of dehydration/ those that require assistance with drinking, make sure to monitor and record their fluid intake
- ✓ Provide ice-pops for the people who may not like drinking
- ✓ Give water or alternative drinks with every meal
- ✓ As the weather gets warmer, increase the availability of drinking water and alternative drinks to encourage residents to drink more
- ✓ Try serving water (hot or cold) with added squash or diluted juices.
- ✓ Many fruits and vegetables also contain water which can help with maintaining hydration
- ✓ Asking residents what their favourite drink is or serving it in a favourite cup/mug etc.
- ✓ Have signs around care homes to encourage people to drink plenty of fluids
- ✓ Encourage sips of fluid little and often in people with poor mouth control
- ✓ Serve water and alternative drinks fresh and chilled
- ✓ Offer water and fluids throughout the day – some people prefer to drink “little and often” (aim for around 100mls every hour). Ensure glasses are filled up!
- ✓ Ensure drinking water is visible and easily accessible
- ✓ Consider use of foods which will contribute fluid to your residents diet such as ice cream, jelly, sauces, soups etc.



Colourful cups
and appealing
trolley

Offering a wide
variety of drinks



Serve drinks
fresh and
chilled



Themed trolley for
special occasions
including fruits
and vegetables



REFERENCES

¹ PHE, Diagnosis of urinary tract infections (UTIs), (accessed April 2018).

[\[https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/619772/Urinary_tract_infection_UTI_guidance.pdf\]](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/619772/Urinary_tract_infection_UTI_guidance.pdf)

² NICE Quality Standard [QS90], June 2015 (accessed April 2018). [\[https://www.nice.org.uk/guidance/qs90/chapter/Quality-statement-1-Diagnosing-urinary-tract-infections-in-adults-aged-65-years-and-over\]](https://www.nice.org.uk/guidance/qs90/chapter/Quality-statement-1-Diagnosing-urinary-tract-infections-in-adults-aged-65-years-and-over)

³ SIGN 88 • Management of suspected bacterial urinary tract infection in adults, July 2012 (accessed April 2018).

[\[http://www.sign.ac.uk/assets/sign88.pdf\]](http://www.sign.ac.uk/assets/sign88.pdf)

ACKNOWLEDGMENTS

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APPENDIX 1:

Older People >65 years with Suspected Urine Infection (UTI) - Guidance for Care Home staff

Complete resident's details, flow chart and actions (file in resident's notes after). **DO NOT PERFORM URINE DIPSTICK** – No longer recommended in >65yrs.

| Resident:..... DOB:..... Carer:..... Date:..... Care Home:..... | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Any symptoms suggesting alternative diagnosis?</th> <th style="text-align: left;">Tick if present</th> </tr> <tr> <td>Increased breathlessness or new cough</td> <td></td> </tr> <tr> <td>Diarrhoea and vomiting</td> <td></td> </tr> <tr> <td>A new red warm area of skin</td> <td></td> </tr> </table> | Any symptoms suggesting alternative diagnosis? | Tick if present | Increased breathlessness or new cough | | Diarrhoea and vomiting | | A new red warm area of skin | | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 50px;">Any ticks</td> <td style="text-align: center; width: 100px;"> <div style="border: 2px solid yellow; padding: 5px; text-align: center;"> UTI unlikely Seek guidance as appropriate </div> </td> </tr> </table> | Any ticks | <div style="border: 2px solid yellow; padding: 5px; text-align: center;"> UTI unlikely Seek guidance as appropriate </div> |
|---|--|--|-----------------|---------------------------------------|--|------------------------|--|-----------------------------|--|---|--------------|---|
| Any symptoms suggesting alternative diagnosis? | Tick if present | | | | | | | | | | | |
| Increased breathlessness or new cough | | | | | | | | | | | | |
| Diarrhoea and vomiting | | | | | | | | | | | | |
| A new red warm area of skin | | | | | | | | | | | | |
| Any ticks | <div style="border: 2px solid yellow; padding: 5px; text-align: center;"> UTI unlikely Seek guidance as appropriate </div> | | | | | | | | | | | |

↓ No ticks

Does the person have a catheter?

| | | | |
|-----|--|----|--|
| YES | | NO | |
|-----|--|----|--|

| New Problem | Tick if present | | |
|--|-----------------|---|----------------------|
| Inappropriate shivering/chills <u>or</u> High or low temperature >38°C or <36°C if measured document°C | | 1 or more ticks ↓ UTI possible- Actions needed | 2 or more ticks ↓ |
| New lower back pain | | | |
| New or worsening confusion or agitation | | | |

| | Tick when done |
|--|----------------|
| Inform GP, ANP of the findings | |
| If outside GP normal working hours Mon – Fri Telephone 111 | |
| Obtain a urine sample and store in the fridge | |
| If catheterised arrange for a catheter change and obtain a sample of urine from the clean catheter See overleaf/page 2 for further information | |
| The urine sample will need sending to microbiology to establish which antibiotic is needed | |

| New Problem | Tick if present |
|--|-----------------|
| Pain on passing urine | |
| New or worse incontinence | |
| Need to pass urine urgently | |
| Need to pass urine much more often than usual | |
| Pain between belly button and pubic hair | |
| Blood in urine | |
| Inappropriate shivering/chills <u>or</u> High or low temperature >38°C or <36°C if measured document°C | |
| New lower back pain | |
| New or worsening confusion or agitation | |

| | | |
|---------------|---|------------------------|
| No ticks → | UTI Unlikely If concerned about a resident, please seek guidance from the GP, ANP or Community Matron | ← Less than 2 ticks |
|---------------|---|------------------------|

Residents with Urinary Catheters: Sampling & changing the catheter



For Nursing Residents:

- A catheter change (if not done within last 7 days) should be performed by a Registered Nurse as soon as possible and a sample of urine obtained from the clean catheter prior to commencing antibiotics
- Registered Nurses only to take catheter urine sample using the needle free sampling port and an aseptic non-touch technique.

For Residential Residents:

- Contact the District Nursing Team to arrange for a catheter change and a urine sample to be taken from the clean catheter before commencing antibiotics

Where available, please use 'Red top' urine sample bottles (contain boric acid to preserve urine until it can be analysed)

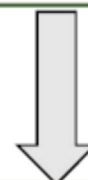
Fill urine bottle to 20ml line*

Fill in resident details carefully, include date and time of collection



*If 'Red top' urine sample bottles are not available or there isn't enough urine to fill bottle to 20ml line, use **universal urine sample bottles** (white/yellow top) which **must be refrigerated**

Residents without a Urinary Catheter: Obtaining a Urine Sample



Urine cultures are very important in the elderly to guide antibiotic choice.

- Try to obtain a urine sample when the resident is in the middle of passing urine (rather than at the start).
- Put the urine into a urine sample bottle, filling to the 20ml line*.
- Fill in the resident's details and type of sample carefully to help the lab to process the sample.
- Samples should be taken to the GP practice *as soon as possible*. 'Red top' urine sample bottles do not require refrigeration. However, if using universal urine sample bottles (white or yellow top), these must be refrigerated until taken to the GP practice at the next possible opportunity*.
- Ensure the GP practice know what to write on the request card (the information from the assessment tool).