

# Controlling Infection

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# Statistics

- ▶ 5% increase in risk of bacteria in urine each day
- ▶ 24% bacteriuric patients will develop Catheter Associated Urinary Tract Infection (CAUTI)
- ▶ 4% of these will develop severe secondary Infection such as septicaemia
- ▶ Longer duration = Higher risk of infection

Loveday et.al. 2014




# Potential Sources of infection

- ▶ At insertion of catheter
- ▶ Between catheter and urethra
- ▶ Catheter lumen
- ▶ Connection to the valve or bag
- ▶ Sample port
- ▶ Reflux from the bag
- ▶ Tap on bag or valve
- ▶ Self infection
- ▶ Cross-infection by healthcare worker.



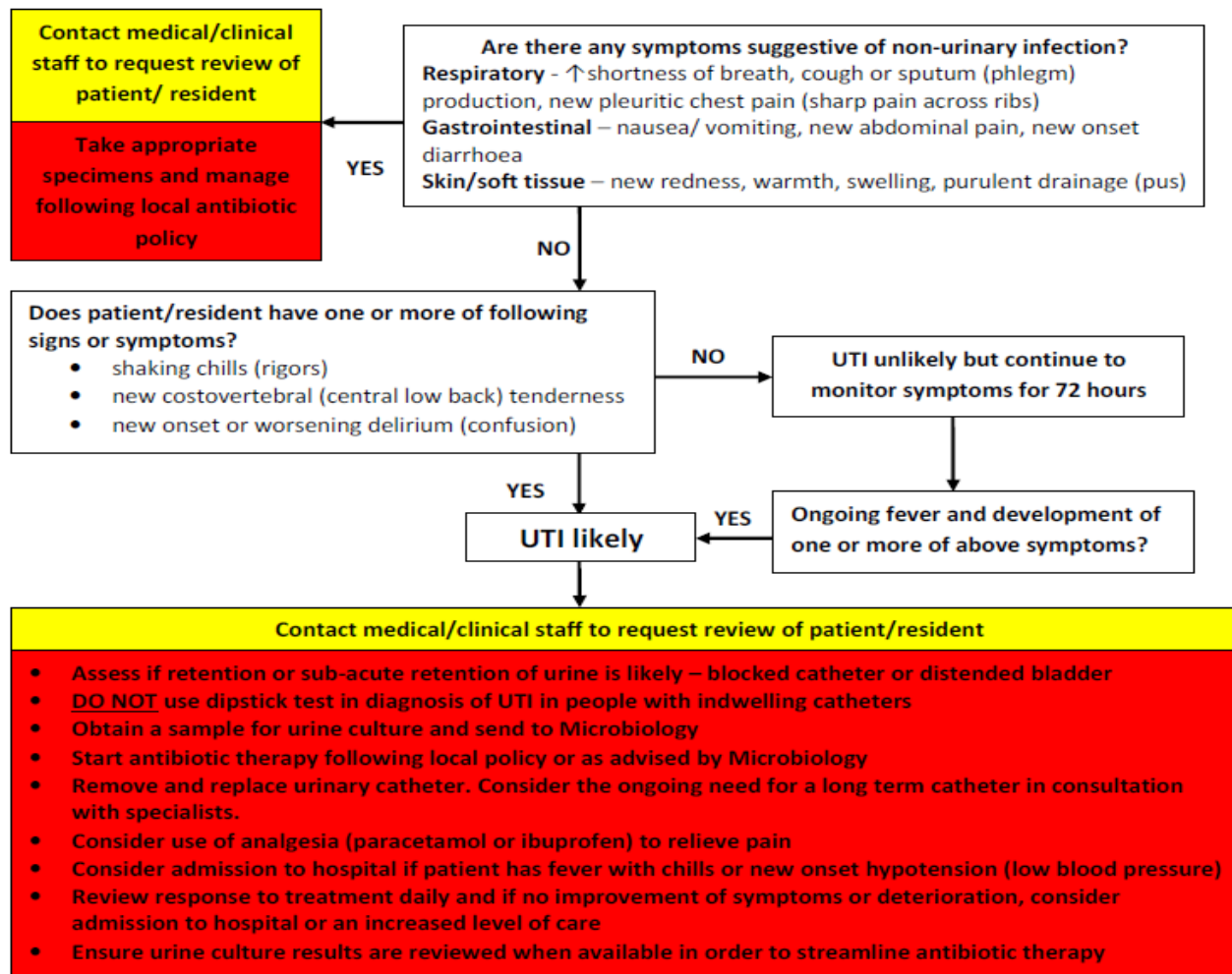
# Types of infection

- ▶ Colonisation
  - ▶ Asymptomatic bacteruria
  - ▶ Symptomatic Urinary Tract Infection
  - ▶ Bacteraemia
  - ▶ Nosocomial Infection
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# Diagnosis of UTI

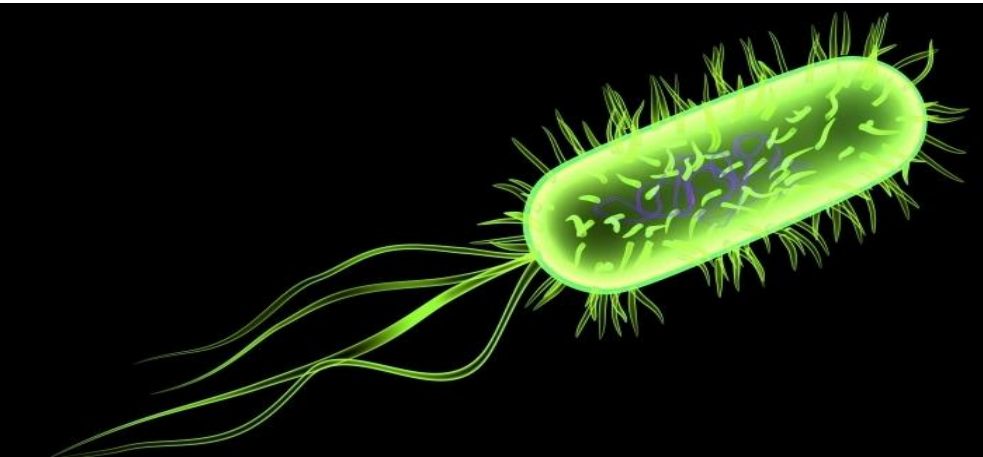
Yellow action boxes provide advice for nursing and care staff.

Red action boxes provide advice for nursing staff and prescribers (medical and non-medical).



# Resistance

- ▶ Be alert to resistant organisms
- ▶ Follow local antibiotic policy
  - Avoid routine prophylaxis
  - Review sensitivities

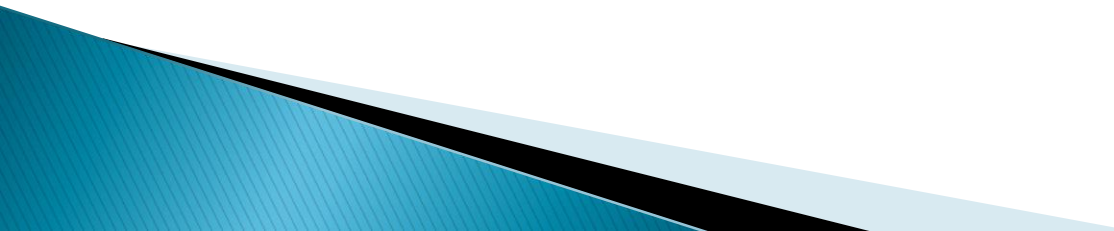


# Infection Prevention

- ▶ Daily assessment of need
- ▶ Maintain closed system
- ▶ Standard Infection Control Precautions
- ▶ Place bag to allow urine to flow
- ▶ Change urine bag only when necessary



# Infection Prevention cont'd

- ▶ Routine daily meatal hygiene
  - ▶ Clean container when emptying bag
  - ▶ No routine bladder solutions
  - ▶ CAUTI bundle
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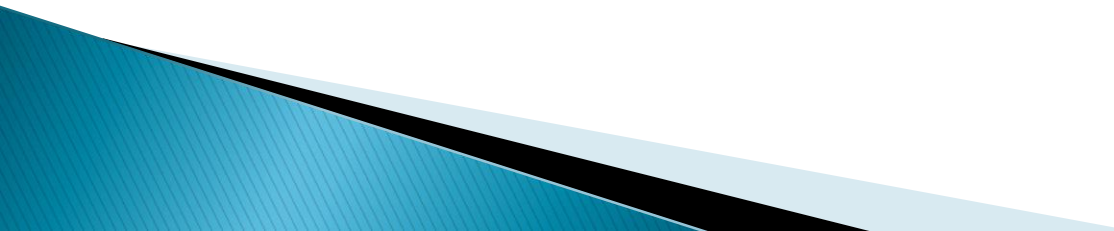


## CAUTI Insertion and Maintenance Bundles

Ensure Alternatives to Indwelling Urinary Catheterisation have been considered.

Indwelling Urinary Catheter Insertion Bundle: Date..... Time..... Gauge.....mls water in balloon (N.B. use smallest gauge and recommend 10mls water in balloon unless clinically indicated) Alternatives to urethral catheterisation considered & clinical reason documented Yes..... No..... Aseptic technique performed at insertion Yes..... No..... Catheter of smallest gauge & balloon filled to recommended level Yes..... No..... Urethral meatus cleaned with sterile saline & sterile lubricant used Yes..... No..... Aseptic technique maintained when connecting catheter to closed drainage system Yes..... No..... Signed..... Date for removal.....								Patient Label:	
Please insert Yes (Y) or No (N) and any comments or deviations in each box daily	DAILY Catheter Day:.....	DAILY Catheter Day:.....	DAILY Catheter Day:.....	DAILY Catheter Day:.....	DAILY Catheter Day:.....	DAILY Catheter Day:.....	DAILY Catheter Day:.....	DAILY Catheter Day:.....	Comments
1. Does patient still require Indwelling Urinary Catheter? (State reason)									
2. Is the urinary catheter continuously connected to drainage system and changed in line with manufacturer's recommendations?									
3. Meatal Hygiene been performed?									
4. Is the drainage bag emptied when clinically indicated using a clean disposable container for each patient?									
5. Is hand hygiene performed immediately prior to access or manipulation of the indwelling urinary catheter?									
6. Is the drainage system kept below bladder level and tap not in contact with any surface e.g. floor?									
Signature on completion (Initials)									
<b>Does Patient fulfil criteria below?</b> CAUTI as defined by: Urinary Catheter in situ or removed within previous 48 hours and diagnosis of CAUTI documented in the medical notes and an antibiotic has been prescribed on the medication chart to treat a CAUTI				If YES: Record as Outcome Measure on Incident Management System (or equivalent)		Completed:.....  Initials:.....		Date Indwelling Urinary Catheter Removed:.....  Initials:.....	

# Obtaining CSU

- ▶ Aseptic technique
  - ▶ Use the sampling port to obtain sample of urine
  - ▶ Clean sampling port with alcohol wipe
  - ▶ Needle free system
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# Aseptic technique

- ▶ ANTT approach
- ▶ Key sites
- ▶ Key parts
- ▶ Aseptic fields



### Prep patient

- Apply waterproof pad & gown.
- Ask patient to lift gown pre step 9.

Preparation zone



**1 Clean hands**  
with alcohol hand rub or soap & water



**2 Clean trolley**  
according to local policy



**3 Gather equipment**

Patient zone



**4 Apply apron**  
(clean hands if contaminated between Steps 3 & 4)



**5 Open catheter pack**  
& position waste bag



**6 Open equipment**  
onto critical aseptic field using non-touch technique (NTT)



- Clean hands
- Apply sterilise gloves



**8 Prepare equipment**  
using non-touch technique (NTT)



**9 Apply aseptic field drapes**  
over genitals & between legs



**10 Clean urethral orifice**  
with normal saline & gauze



**11 Insert lubricating gel**



- Dispose gloves
- Clean hands
- Apply sterilised gloves



**13 Insert catheter**  
using NTT by touching only the plastic wrapping



**14 Inflate balloon**  
using NTT



**15 Attach collection bag**  
using NTT



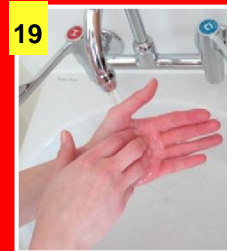
**16 Dispose gloves of waste & .**



**17 Clean hands**  
with soap & water immediately after glove removal

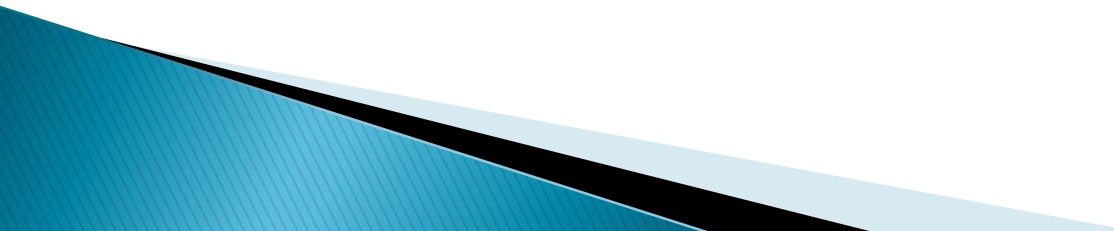


**18 Clean trolley**  
according to local policy



**19 Clean hands**  
with alcohol hand rub or soap & water

# Competence

- ▶ Review your competence regarding catheterisation and catheter care
  - ▶ Online NES modules
    - Aseptic technique
    - Catheter care
  - ▶ Evidence based guidelines
  - ▶ Seek feedback and observe others
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“I did then what I knew how to do. Now that I know better, I do better.”

Maya Angelou



# Thank you for listening

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