**HOSPITAL ADULT Empirical Treatment of Infection Guidelines**

**NEWS ≥5 AND INFECTION: THINK SEPSIS**

If 2 or more of the following AND clinical suspicion of infection:
- Temperature >38°C or <36°C
- Pulse rate ≥90 beats per minute
- Altered mental state
- Respiratory rate >20 breaths per min
- WCC <4 or >12
- Known or suspected neutropenia

**ALWAYS DOCUMENT INDICATION & DURATION IN NOTES AND MEDICINE CHART**

**REVIEW ANTIBIOTIC THERAPY DAILY—CAN YOU STOP? SIMPLIFY? STATE DURATION?**

**INDICATIONS FOR IV use:** Review IV therapy every 12-24 hours – see IVOST guidelines
- Specific infections e.g. endocarditis, septic arthritis, abscess, meningitis, osteomyelitis
- 2 or more criteria as above out with range (temperature, respiratory rate, pulse, WCC)
- Fibrile with neutropenia or immunosuppression
- Oral route compromised
- Post surgery – unable to tolerate 1 litre of oral fluids
- No oral formulation available

**DOSES (UNLESS OTHERWISE STATED) NOTE: ALL DOSES ASSUME NORMAL RENAL & HEPATIC FUNCTION**

**ANTIBIOTIC**

**ORAL**
- Amoxicillin
- Ciprofloxacin
- Metronidazole
- IV Amoxicillin

**INFECTION SOURCE**

**SEVERE SYSTEMIC INFECTION SOURCE UNKNOWN**

**ADVISE:** Infectious Diseases: Tay-UHB.id@nhs.net or bleep 5075
Microbiology: bleep 4039
Antimicrobial Pharmacists: Tay-UHB.antibioticpharm@nhs.net or bleep 4732

**IVAMICILLIN ALLERGY:**

**MICROMAN:** FOR ANTIBIOTIC ‘RULES OF THUMB’ AND BASIC MICROBIOLOGY INFORMATION ON COMMON INFECTIONS

**GENTAMICIN:** ALWAYS CHECK EXCLUSION CRITERIA PRIOR TO PRESCRIBING
IF IV THERAPY IS STILL INDICATED AFTER 72 HOURS OF GENTAMICIN (OR AFTER 24 HOURS IF POOR/DETERIORATING RENAL FUNCTION):
1. CHECK MICROBIOLOGY RESULTS & SENSITIVITIES 2. CONSIDER SWITCH TO AZTREONAM 3. IF REQUIRED ASK ID OR MICRO FOR ADVICE

**AZTREONAM:** FOR CERTAIN PATIENTS ONLY AS ALTERNATIVE TO GENTAMICIN – REFER TO GUIDANCE

**PENICILLIN ALLERGY:** TAKE ACCURATE HISTORY AND REFER TO GUIDANCE

**MENINGITIS:** Ceftiraxone IV 2g bd + Dexamethasone IV 10mg qds (started with or just before first dose of antibiotics for 4 days) Duration: refer to guidance
- Aciclovir IV (10mg/kg tds) if encephalitis suspected (oral treatment never appropriate)
- Add Amoxicillin IV 2g 4 hourly if ≥ 60 years or immunocompromised

**EPIDERMOTYSIS/SUPRAGLOTTITIS:** Ceftiraxone IV 2g od Refer to ENT Guidance for oral step down and treatment of other infections

**COMMUNITY ACQUIRED PNEUMOCOCCAL INFECTION**

| 0-2 | Mild/Mod | Amoxicillin 1g bd IV/PO (5 days) | (If penicillin allergic: Doycycline PO 200mg on day 1 then 100mg od or IV Clarithromycin* if NBM) |
| 3-5 | Severe | Co-amoxiclav IV 1.2g tds + Doxycycline PO 100mg bd | (If penicillin allergic: IV Levofloxacin 500mg bd monotherapy) |
| ICU/HDU or NBM | | Co-amoxiclav IV 1.2g tds + Clarithromycin* 500mg bd | (If penicillin allergic: IV Levofloxacin 500mg bd monotherapy) |
| | Step down to Doxycycline 100mg bd for ALL patients with severe CAP | TOTAL IV/PO 7 days |

**HOSPITAL ACQUIRED PNEUMONIA**

| Non severe | PO Amoxicillin (if penicillin allergic: PO 100mg bd) TOTAL 5 days |
| Severe | IV Amoxicillin + Gentamicin (if penicillin allergic: IV Co-trimoxazole + Gentamicin) Step down: PO Co-trimoxazole TOTAL IV/PO 7 days |

**Previous ICU admission or history of MRSA:** seek advice

**ASPIRATION PNEUMONIA**

| Non severe | PO Amoxicillin + Metronidazole |
| Severe | IV Amoxicillin + Metronidazole + Gentamicin |
| | Step down: PO Amoxicillin + Metronidazole |

**ACUTE EXACERBATION OF COPD**

Give antibiotics if:
- Sputum purulence
- No sputum purulence then no antibiotics unless consolidation on CXR or signs of pneumonia.1st LINE Amoxicillin 500mg tds 2nd LINE Doxycycline 200mg on day 1 then 100mg od (5days)

**ACUTE COUGH/Acute Bronchitis**

Antibiotics give no significant benefit in clinical improvement but may be considered in the frail elderly.
- 1st LINE Amoxicillin 500mg tds 2nd LINE Doxycycline 200mg on day 1 then 100mg od (5 days)

**ENDOCARDITIS**

- Take appropriate blood cultures
- **ALWAYS check full endocarditis guidance for gentamicin/vancomycin dosing especially if reduced renal function**
- Do not use gentamicin chart/calc

**Native valve indolent (Subacute):** Amoxicillin IV 2g 4 hourly + Gentamicin 1mg/kg bd (use actual body weight - max 120mg/dose)
- Fluclaxocillin IV 2g 6 hourly (4 hours if >85kg)
- when therapeutic vancomycin levels reached add Rifampicin PO 600mg bd (always check for interactions)

**CLOSTRIDIUM DIFFICILE INFECTION**

Refer to full guidance to assess severity

| Non severe | PO Metronidazole 400mg tds (10 days) |
| Severe | Vancomycin IV 1g 4 hourly + Gentamicin 1mg/kg bd (use actual body weight - max 120mg/dose) |
| Recurrent | positive CDI in previous 8 weeks - see guidance |

**PERITONITIS/BILARY TRACT/INTRA-ABDOMINAL** (TOTAL IV/PO 7 days)

| IV Amoxicillin + Metronidazole + Gentamicin |
| Step down: PO Co-trimoxazole + Metronidazole |
| (if penicillin allergic: IV Vancomycin + Metronidazole + Gentamicin) |
| Step down: PO Co-trimoxazole + Metronidazole |

**PROVEN SPONTANEOUS BACTERIAL PERITONITIS**

Mild disease: (incidental diagnosis on routine tap): Co-trimoxazole PO Severe disease: Piperacillin/Tazobactam IV 4.5g tds then step down to Co-trimoxazole PO
- Neutropenic patients: refer to guidance

**ACUTE GASTROENTERITIS**

No antibiotic treatment required. Seek advice if severe.

**ACUTE PANCREATITIS**

Antibiotics unlikely to affect outcome. Seek advice.

**GU**

**UNCOMPPLICATED FEMALE LOWER UTI**

Nitrofurantoin 100mg MR bd or 50mg qds or Trimethoprim 200mg bd (3 days)

**UNCOMPPLICATED MALE UTI**

Nitrofurantoin 100mg MR bd or 50mg qds or Trimethoprim 200mg bd (7 days)

**ACUTE BACTERIAL PROSTATITIS OR EPIDIDYM-OORCHITIS**

Refer to separate guidance and update on quinolone warnings

**BONE/SKIN**

**CELLULITIS**

Refer to full guidance to assess severity (TOTAL IV/PO 7 days)
- Flucloxacillin 1g qds (if penicillin allergic: Doxycycline 100mg bd PO)
- If history of MRSA or not responding: see **CELLULITIS guidance**

**OPEN FRACTURE PSEUDOMYXIS** (including hand injuries)

IV Coadoxiclav 1.2g tds (or IV Co-trimoxazole 960mg bd + Metronidazole 500mg tds) Start within 3 hours for max 72 hours

**DIABETIC FOOT INFECTION**

(7 days)
- Refer to full guidance to assess severity OR if antibiotics in last month
- Mild: Flucloxacillin 1g qds or Doxycycline 100mg bd
- Moderate: Flucloxacillin 1g qds + Metronidazole 400mg tds or Doxycycline 100mg bd + Metronidazole 400mg tds
- *Consider risk of prolonged QT interval and interactions e.g. statins"