

**Emergency Department Empiric Antimicrobial Guidelines for Non-pregnant patients >16 years with sepsis (if available, local antimicrobial guidelines should be adhered to in the first instance)**

**THESE GUIDELINES ARE FOR COMMUNITY ACQUIRED INFECTIONS ONLY**

**DO NOT USE THESE GUIDELINES (seek senior or microbiology /infectious diseases advice or refer to local antimicrobial guidelines) IF YOUR PATIENT HAS:**

1. History of colonization/infection with antibiotic resistant organisms (e.g. MRSA / ESBL / VRE). Review previous laboratory results, IT alerts and/or healthcare record notes to determine evidence of previous colonization/infection with antibiotic resistant organisms.
2. Risk factors for antibiotic resistant organisms (e.g. recent (< 6 weeks) hospital admission, nursing home resident, recent antibiotic use, recent foreign travel (to countries of high risk for antimicrobial resistance), healthcare worker, etc.)
3. Allergy /contraindication to listed antimicrobials below
4. Significant immunocompromising condition e.g. transplant patients
5. Indwelling prosthetic material
6. Sepsis in other specific patient groups not listed below (e.g. infective

**Before starting antimicrobials/as soon as possible:**

- IDENTIFY likely source of sepsis to ensure early appropriate antimicrobial treatment is commenced
- SEND appropriate microbiological specimens.
- CHECK previous microbiological culture reports as you may need to alter the antimicrobials below

*The recommendations presented only apply to initial assessment upon ED presentation and treatment may change as appropriate clinical assessment and investigations are performed. Antimicrobial doses listed below are a guide only - adjust doses as appropriate if evidence of renal/hepatic impairment and/or based on local policy. Subsequent dosing interval and antimicrobial regimen based on clinical decision following further investigations and local policy.*

**Empiric antimicrobial recommendations according to source of sepsis.**

Suspected Source of sepsis	Antibiotics
<b>Intraabdominal</b>	Co-amoxiclav 1.2g iv +/-gentamicin* <sup>δ</sup>
<b>Meningitis</b>	Cefotaxime 2g iv (or ceftriaxone 2g iv) + vancomycin <sup>δ</sup> (+/- add dexamethasone as per local policy and aciclovir 10mg/kg iv if evidence or suspicion of viral encephalitis)
<b>Neutropenic</b>	Piperacillin/tazobactam 4.5g iv plus gentamicin <sup>δ</sup>
<b>Respiratory</b>	Community acquired pneumonia: Co-amoxiclav 1.2g iv plus clarithromycin 500mg iv Aspiration pneumonia: Co-amoxiclav 1.2g iv
<b>Skin/soft tissue</b>	Flucloxacillin 2g iv (add clindamycin 900mg iv and benzylpenicillin 2.4 g iv if invasive Group A streptococcus suspected). Infection originating from surgical wound sites following clean-contaminated/contaminated surgery (e.g. surgical procedures performed on gastrointestinal, genitourinary tract) or involving deeper tissues (e.g. necrotizing fasciitis) may have a polymicrobial aetiology (including anaerobic bacteria and gram-negative bacilli) and empiric antimicrobial therapy should be adjusted to reflect this. For these situations consult local guidelines or seek senior or microbiology /infectious diseases advice.
<b>Urinary</b>	Co-amoxiclav 1.2g iv +/- gentamicin* <sup>δ</sup>
<b>Unknown (i.e. source unknown /unidentified following initial clinical assessment)</b>	Without obvious gastrointestinal or genitourinary source Cefotaxime 2g iv (or Ceftriaxone 2g iv) +/- vancomycin* <sup>δ</sup> +/- gentamicin* <sup>δ</sup>

*\*Consider addition of gentamicin or vancomycin (using appropriate dose calculation) based on clinical judgment (particularly in the case of severe sepsis/septic shock)*

*<sup>δ</sup>Calculate initial dose of gentamicin or vancomycin based on patient's creatinine clearance and local dosing policy*