The Sepsis Six
1) Ensure senior clinician attends (ST4+)
2) Give oxygen if required
3) Obtain IV access, take bloods
4) Give antibiotics
5) Give IV fluids
6) Monitor (including urine output, NEWS2, lactate)

NEWS2
- Calculate NEWS2
- Infection + NEWS ≥5 THINK SEPSIS – assess urgently and consider escalation to critical care

Risk factors for sepsis (see NICE guidance)
- Extremes of age (<1 year or >75 years) or frailty
- Recent trauma, surgery or invasive procedure
- Impaired immunity
- Indwelling devices, intravenous drug misusers, any breach of skin integrity
- Note additional risk factors in pregnancy

Key to flowchart
- All Patients
- Selected Patients
- Microscopy, culture & sensitivity (MC&S)
- Polymerase chain reaction (PCR)
- Serology
- Other

Risk stratification
- Inc. sepsis risk factors as per NICE sepsis guidelines

Clinical assessment
- Arrange immediate senior (ST4+) review
- Clinical and results review within 1 hour
- Clinical review and send investigations within 1 hour
- Clinical assessment and manage according to clinical judgement

Sample type
- Blood
- Intravenous catheter
- Urine
- Cerebrospinal fluid
- Nose & throat
- Sputum
- Pus / Tissue
- Stool
- Imaging

First line tests
- Blood culture (peripheral)
- HIV
- Urinalysis
- MC&S
- Respiratory viral panel, including COVID-19
- MC&S
- Acid fast bacilli
- BTS pneumonia guideline
- MC&S
- Bacterial culture/PCR
- C. difficile
- NICE gastroenteritis guideline
- Targeted imaging e.g. CT abdomen/pelvis, ECHO

Second line tests
- Returning traveller guideline
- E.g. malaria if travel history
- Pneumococcal/meningococcal PCR
- MC&S
- BTS meningitis guideline
- MC&S
- C. difficile

Antibiotic considerations
- **Remember** - Start smart, then focus
- Give broad spectrum antimicrobials as per local sepsis guideline within 1 hour
- Discuss with microbiology department if complex patient e.g. immunocompromised, previous resistance
- Review antimicrobials within 48 hours
- In the absence of a confirmed microbiological diagnosis, consider the need for antibiotics

Additional considerations:
- Blood culture should always be performed in suspected sepsis
- Use aseptic technique
- Collect prior to antimicrobial therapy where possible
- 20-30ml of blood should be taken per set
- If a central line is present, take blood both from the central line and from a separate peripheral site when investigating potential infection related to the central line; the peripheral sample should be collected first
- If there is a clear source of infection, cultures of other sites apart from blood culture are generally not needed
- If infection such as intra-abdominal, pelvic, joint or necrotising fasciitis is suspected, refer early; prompt surgical/radiological management is essential
- Consider line removal if line infection is suspected

References