

Infection Prevention, Surveillance and Care Bundles

Ward 118/116 RIE

Critical care has a long established pro-active commitment to infection prevention.

Mandatory Learning

Doctors in Critical Care must complete the following courses available in LearnPro

NES: Aseptic Technique

- Module 1 Principles of Aseptic Technique
- Module 2 Insertion of a Peripheral Vascular Catheter
- Module 3 Taking a Blood Culture Sample

VAP Bundle

- **Wake and wean**
 - Daily sedation hold (when appropriate, note exclusions)
 - Weaning plan
 - Optimal sedation
- **30 degree angle (HEAD UP)**
(unless clinically contraindicated)
- **Sub glottic drainage tracheostomy tubes**

Insertion and maintenance of Central Venous Catheter (CVC)

CVC daily assessment:

- Where is it?
- How long has it been in situ?
- Is it needed? **Question the need for CVC daily**
- Follow Critical Care Guidelines on Intranet for samples to send if infection is suspected.
- **Hand hygiene, Asepsis & Anti-sepsis**
 - to prepare and administer bolus injections and infusions
 - before injections and infusions, manipulating central venous catheters, administration lines, flush system including transducer
 - always decontaminate Smart-sites® (and allow 30 seconds to dry) before using the lines

Invasive Line												
Line Type (circle): CVC Arterial CVVH PA cath												
Date:			Time:			Operator:						
Site:												
USS: Anatomy check Visualised insertion Not used												
Procedure Checklist: Difficulties/Adjuncts/Complications:												
Antiseptic hand scrub <input type="checkbox"/>												
Gown/gloves/hat/mask <input type="checkbox"/>												
CHG skin prep <input type="checkbox"/>												
Aseptic insertion <input type="checkbox"/>												
Stitched to secure <input type="checkbox"/>												
Line transduced <input type="checkbox"/>												
Operator's Signature:												
Post insertion CXR YES <input type="checkbox"/> N/A <input type="checkbox"/> reviewed by:												
Day No.	1	2	3	4	5	6	7	8	9	10	11	12
Site Clean Y/N												
Drsng/Flush Y/N												
Still required Y/N												

Insertion and maintenance of Peripheral Vascular Catheter (PVC)

PVC daily assessment:

- Where is it?
- How long has it been in situ?
- Is it needed?
- Any signs of infection?
- Remove PVC if not being used

Peripheral Venous catheter												
Date:			Time:			Operator:						
Size (circle): Pink Green Brown Grey												
Site: Right Left Hand ACF Forearm Foot												
Procedure Checklist: Difficulties/Complications:												
Hand hygiene <input type="checkbox"/>												
Chlorhexidine prep <input type="checkbox"/>												
Aseptic insertion <input type="checkbox"/>												
Needle free port <input type="checkbox"/>												
Dressing dated <input type="checkbox"/>												
Day No.	1	2	3	4	5	6	7	8	9	10	11	12
Site Clean Y/N												
Still req'd Y/N												

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Antimicrobial Stewardship

- NHS Lothian and Critical Care antimicrobial guidelines
- Kardex – indication **and** review date/stop date/duration are mandatory
- Document escalation/de-escalation plans suggested by Microbiologist in Trak Clinical Notes



NHS Lothian Antibiotic App - search for “**Microguide**” on iStore and Google Play



Reducing blood culture contamination

It is important to reduce BC contaminants because patients may be started on antimicrobial therapy inappropriately or have unnecessary investigations

Good aseptic technique prevents blood culture contamination

Care bundles have been systematised in Critical Care by using boxes and packs to make it easier for everyone to do the right thing for every patient every time
Examples: blood culture box, Central line box, BAL box, PVC packs

Screening

Carbapenemase Producing Enterobacteriaceae (CPE)

- Hospital transfers, patients with a history of hospital admission abroad (include holiday dialysis) within last 12 months or those known to be previously colonised with CPE should be isolated and screened
- Link to Infection Prevention and Control CPE guidelines are on Critical Care Guidelines Intranet site.
- Seek advice from Microbiologists for antimicrobial treatment

MRSA

- All patients are risk assessed and screened on admission
- MRSA suppression therapy is considered for all MRSA positive patients.
- MRSA guideline on Infection Prevention and Control intranet page
- Check with Microbiologists if Mupirocin resistant

Microbiology Ward Rounds: Dr Ian Laurenson, Dr Ela Czarniak, Dr Olga Lucia Moncayo

- Ward 118 every day usually in the afternoons. Ward 116 once or twice a week.
 - information, patient management, education
 - most efficient: update results then discuss patient
 - complete the patient's microbiology sheets as specimens are requested.
- For Microbiology, Virology & Infection Prevention and Control advice out of office hours & weekends - On-call Microbiologist or On call Virologist via switchboard

Infection Prevention & Control Duty Nurse
(Daily 0830-1600 inc Weekends)
Phone 63373

Urgent Specimens

- phone 26021 0730 - 1800 7 days
- at other times call 26021 or page Biomedical Scientist (BMS) Bleep 2900
- or via switchboard (Virology BMS)
- order investigations on Trak
- forms and labelling
 - need 3 identifiers minimum or specimen will be rejected
 - i.e. patient label OR name & DOB & post code or CHI

Further Information

- To access Critical Care guidelines on the Intranet
Click: Intranet>Directory>Critical Care> Infection and Sepsis
- To access Infection Prevention and Control guidelines on the Intranet
Click: Intranet>Directory>Infection Prevention & Control

Infection Surveillance: Odette Brooks

- All patients with LOS > 2 calendar days
- Infections under surveillance
 - Pneumonia
 - Blood stream infections
 - Central venous catheter related blood stream infections



Alos surveillance for MRSA acquisition, *Clostridium difficile* infection, *Staphylococcus aureus* bacteraemia and multidrug resistant Gram negative bacteria

Contacts and Information

Consultant, Intensive Care (Infection Lead)
Consultant Microbiologists
Consultant Virologist
Infection Prevention & Control Nurse
Critical Care Infection Surveillance Nurse

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