

PHARMACY

Contacting a Pharmacist

Monday – Friday 9am -5pm	Saturday & Sunday 10.30 – 4pm	Out of hours
ACCU ward pharmacists (Susan, Lauren, Rory)	Weekend pharmacy team	On Call Pharmacist
Bleeps: 4E (1193) 4F (1667) Extension: 60135	Extension: 42323	Via switch

Pharmacy Induction

A talk for ACCU doctors can be found here:

<I:\surgery & anaes\ACCU\ACCU Trainees\Induction\Pharmacy Introduction for ACCU Drs.ppt>

This contains useful medicines related information. A brief summary of the important policies can be found below.

Drug Charts

- ACCU drug charts should be used for all patients
- Please ensure drug charts are re-written in a timely manner during the dayshift – there's nothing worse than having to do them overnight.
- Always complete the allergies section accurately (including detailing the nature of the allergic reaction, if known)

Attach ALLERGY Sticker	ALLERGIES & ADVERSE DRUG REACTIONS (ADR)				HOSPITAL NO.																						
					SURNAME																						
					FORENAME																						
					DATE OF BIRTH																						
					SEX M <input type="checkbox"/> F <input type="checkbox"/>																						
				Weight (kg)		Height (cm)	BSA(m ²)																				
				<table border="1"> <thead> <tr> <th>DRUG / OTHER ALLERGIES</th> <th>REACTION</th> <th>SOURCE</th> <th>INITIAL & DATE</th> </tr> </thead> <tbody> <tr> <td>Nil Known Drug (or other) <input type="checkbox"/></td> <td>Not Possible to Ascertain (Confirm RGP) <input type="checkbox"/></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				DRUG / OTHER ALLERGIES	REACTION	SOURCE	INITIAL & DATE	Nil Known Drug (or other) <input type="checkbox"/>	Not Possible to Ascertain (Confirm RGP) <input type="checkbox"/>														
DRUG / OTHER ALLERGIES	REACTION	SOURCE	INITIAL & DATE																								
Nil Known Drug (or other) <input type="checkbox"/>	Not Possible to Ascertain (Confirm RGP) <input type="checkbox"/>																										
				Condition(s) where medicines are contraindicated?																							

- Print the name of the medication and do not use commercial names (e.g. Augmentin / Tazocin)
- Print your name next to your signature
- Always double check and sign the “allergies checked” box for every drug prescribed
- For ease, the drug charts have pre-printed sections but signatures and start dates are still required

Prescribing Issues

A table of routine prescriptions on ACCU can be found in the policies and guidelines folder at:

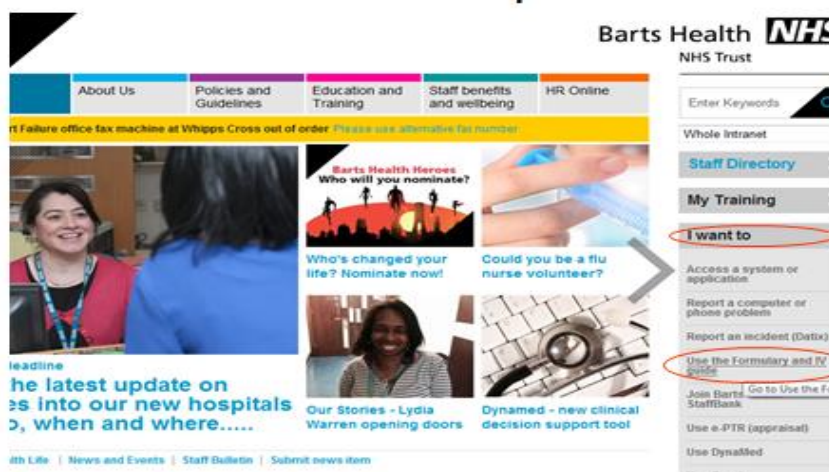
<I:\surgery & anaes\ACCU\Policies and Guidelines\Medicines>

This covers MRSA prophylaxis, thromboprophylaxis, eye protection, GI protection, mouthcare and Arterial/CVC flush.

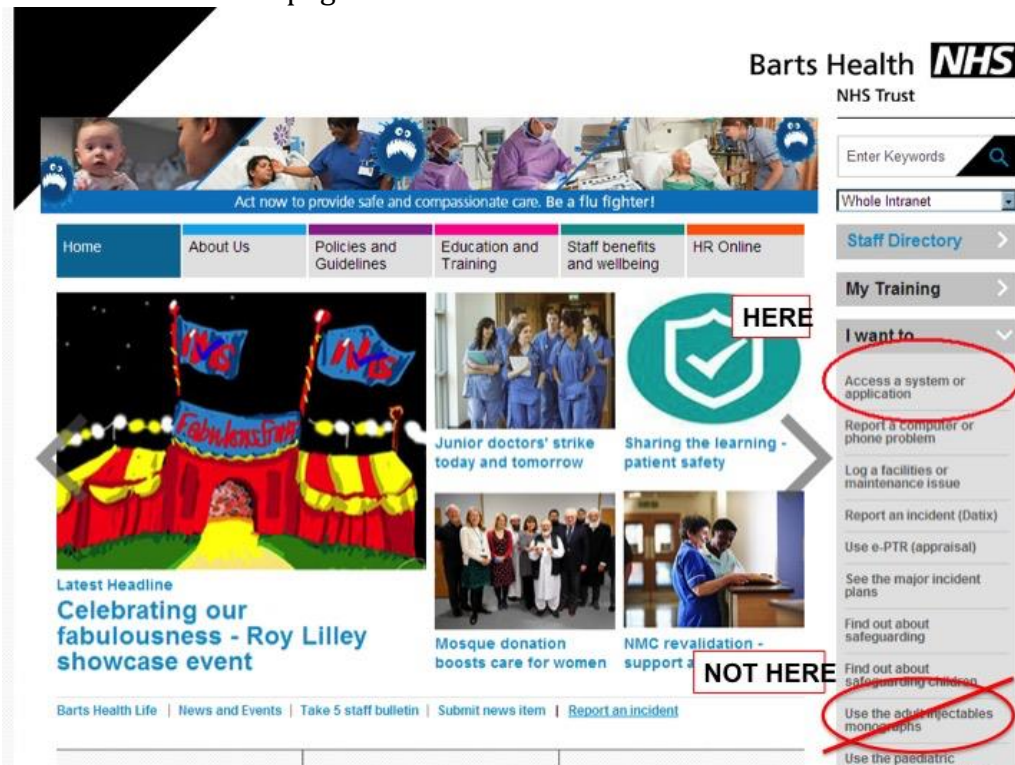
Drug	Dose	Route	Frequency	Comments
Chlorhexidine body wipes	✓	Topical	OD	MRSA prevention protocol
Corsodyl dental gel (chlorhexidine)	✓	Topical	QDS	VAP prevention, mouth care protocol.
Lacrilube	✓	Topical eyes	QDS	If sedated/low GCS
Ranitidine or Lanzoprazole or Pantoprazole	50mg	IV	TDS	Until absorbing full feed.
	30mg	NG	OD	If admitted on it / high risk for GI bleed.
	40mg	IV	OD	
NaCl 0.9% flush bag	500mls	for arterial & CVC flush.	-	On continuous IV infusion page.
Consider: TEDS Flotrons Tinzaparin	Weight based	s/c	OD	If not contra-indicated. Reduce dose in renal impairment or less than 50kg Increase dose if >109kg

Links to Medicines Related Policies

Location of policies



- IV guide
- 1 – from the intranet home page



2

		guidelines	
Incident reporting	Datix	Datix	Datix
NHS Spine Portal	Spine portal	Spine portal	Spine portal
On-call rotas	N/A	RotaWatch	N/A
Pathology	TQuest Keystone		View results: Cyberlab Alternative link to Cyberlab Historic: Pathfinder Download Cyberlab guide
Payroll/Time Capture	Kronos	Use MAPS via desktop icons	PDC
Pharmacy	BNF Formulary Complete Adult injectables monographs on Medusa Paediatric injectables monographs on Medusa	BNF Formulary Complete Adult injectables monographs on Medusa Paediatric injectables monographs on Medusa Dispensary eTTA list	BNF Formulary Complete Adult injectables monographs on Medusa Paediatric injectables monographs on Medusa
Phone book	Phone book	Phone book	Phone book
Qlikview (for Integrated Performance Framework)	Qlikview	Qlikview	Qlikview
Q-Pulse Web Services	N/A	Q-Pulse Web	N/A

Electrolytes


Electrolyte administration on ACCU is different to that on the general wards

This policy is currently under review but can be found here:

<http://rl1vmssp02/BHFileshare/Shared%20Documents/All%20Trust/Pharmacy%20Intranet/BLT/Critical%20Care/Electrolyte%20Administration.pdf>

Internet Explorer window showing the document: <http://rl1vmssp02/BHFileshare/Shared%20Documents/All%20Trust/Pharmacy%20Intranet/BLT/Critical%20Care/Electrolyte%20Administration.pdf>

Barts and The London NHS Trust, Critical Care Unit Page 1 of 2



Administration of electrolytes on the Adult Critical Care Unit

Administration of intravenous electrolytes **MUST** be accurately controlled using a rate controlled syringe driver or volumetric infusion pump

If a patient is absorbing NG feed consider NG administration of electrolytes

Electrolyte	Products	Indication	Administration	Notes
Potassium	Pre-made Potassium Chloride 40mmol or 20mmol in 100ml Sodium Chloride 0.9% (Potassium Chloride concentrate, Sterile 15% (20mmol/10ml) ampoules are also available)	To maintain potassium level between 4.5-5.0mmol/L If K ⁺ < 4.0mmol/L give 40mmol If K ⁺ 4.0-4.4mmol/L give 20mmol	IV CENTRALLY: Either 20mmol or 40mmol in 100ml Sodium Chloride 0.9% over 60 minutes according to potassium level. IV PERIPHERALLY: 40mmol/1000ml – standard bags can be supplied by pharmacy NG: Sando-K: each effervescent tablet contains 12mmol K ⁺	MAXIMUM RATE is 40mmol per hour with continuous ECG monitoring NB: Bags are no longer available in glucose 5%, so should be made on an individual basis if required. USE A STANDARD PRE-MADE BAG IF POSSIBLE
Magnesium	Magnesium Sulphate 50% (= 5g (20mmol) in 10ml) ampoule	To maintain magnesium level between 0.7-1.0mmol/L	IV CENTRALLY: Give 20mmol Mg ²⁺ in 100ml Sodium Chloride 0.9% over 60 minutes IV PERIPHERALLY: If via peripheral line give 20mmol in 250ml Sodium Chloride 0.9% over 2 hours. In renal patients start with lower doses of 4 to 8mmol (1 to 2g) NG: Magnesium Glycerophosphate 1 tablet = 4mmol	MAXIMUM RATE is 36mmol (9g) per hour MAXIMUM CONCENTRATION centrally and peripherally is 20% (= 0.6mmol/ml) E.g. add minimum of 15ml sodium chloride 0.9% to 10ml of 50% MgSO ₄ and give via syringe driver

Written by Ursula Allen, ICU Pharmacist
Checked by Anja Richter, ICU Pharmacist

August 2006

- **Low Molecular Weight Heparin**
 - Thromboprophylaxis and treatment – **Tinzaparin (innohep®)**

Tinzaparin thromboprophylaxis in standard patients			
< 50kg	51-109kg	110-149kg	≥150kg
3500 units od	4500 units od	7000unit od	9000 units od

Round to nearest 1,000 units for treatment doses

LMWH are contraindicated, contact the haematology register for advice.

E. Treatment of Venous Thromboembolism (VTE)

Tinzaparin dose: 175 International Units (IU) per Kg, ONCE a DAY given subcutaneously

Tinzaparin dosing table (doses are below in special patient groups)

Body weight in Kg	Tinzaparin dose (IU)	Tinzaparin dose (mg)	Notes
45	7875	7.9	only indicated for weight doses
50	8750	8.8	
55	9625	9.6	
60	10500	10.5	
65	11375	11.4	only indicated for weight doses
70	12250	12.3	
75	13125	13.1	
80	14000	14.0	
85	14875	14.9	only indicated for weight doses
90	15750	15.8	
95	16625	16.6	
100	17500	17.5	
105	18375	18.4	only indicated for weight doses
110	19250	19.3	
115	20125	20.1	
120	21000	21.0	
125	21875	21.9	only indicated for weight doses
130	22750	22.8	
135	23625	23.6	
140	24500	24.5	
145	25375	25.4	only indicated for weight doses
150	26250	26.3	
155	27125	27.1	
160	28000	28.0	
165	28875	28.9	only indicated for weight doses
170	29750	29.8	
175	30625	30.6	
180	31500	31.5	
185	32375	32.4	only indicated for weight doses
190	33250	33.3	
195	34125	34.1	
200	35000	35.0	
205	35875	35.9	only indicated for weight doses
210	36750	36.8	
215	37625	37.6	
220	38500	38.5	
225	39375	39.4	only indicated for weight doses
230	40250	40.3	
235	41125	41.1	
240	42000	42.0	
245	42875	42.9	only indicated for weight doses
250	43750	43.8	
255	44625	44.6	
260	45500	45.5	
265	46375	46.4	only indicated for weight doses
270	47250	47.3	
275	48125	48.1	
280	49000	49.0	
285	49875	49.9	only indicated for weight doses
290	50750	50.8	
295	51625	51.6	
300	52500	52.5	
305	53375	53.4	only indicated for weight doses
310	54250	54.3	
315	55125	55.1	
320	56000	56.0	
325	56875	56.9	only indicated for weight doses
330	57750	57.8	
335	58625	58.6	
340	59500	59.5	
345	60375	60.4	only indicated for weight doses
350	61250	61.3	
355	62125	62.1	
360	63000	63.0	
365	63875	63.9	only indicated for weight doses
370	64750	64.8	
375	65625	65.6	
380	66500	66.5	
385	67375	67.4	only indicated for weight doses
390	68250	68.3	
395	69125	69.1	
400	70000	70.0	
405	70875	70.9	only indicated for weight doses
410	71750	71.8	
415	72625	72.6	
420	73500	73.5	
425	74375	74.4	only indicated for weight doses
430	75250	75.3	
435	76125	76.1	
440	77000	77.0	
445	77875	77.9	only indicated for weight doses
450	78750	78.8	
455	79625	79.6	
460	80500	80.5	
465	81375	81.4	only indicated for weight doses
470	82250	82.3	
475	83125	83.1	
480	84000	84.0	
485	84875	84.9	only indicated for weight doses
490	85750	85.8	
495	86625	86.6	
500	87500	87.5	
505	88375	88.4	only indicated for weight doses
510	89250	89.3	
515	90125	90.1	
520	91000	91.0	
525	91875	91.9	only indicated for weight doses
530	92750	92.8	
535	93625	93.6	
540	94500	94.5	
545	95375	95.4	only indicated for weight doses
550	96250	96.3	
555	97125	97.1	
560	98000	98.0	
565	98875	98.9	only indicated for weight doses
570	99750	99.8	
575	100625	100.6	
580	10150		

- ACS – **FONDAPARINUX**
See separate guidance
- **Prokinetics**
 - If a patient is not absorbing their feed prescribe metoclopramide 10mg IV tds (reduced to 5mg IV tds if less than 50kg).
 - Prescriptions should be regularly reviewed and stopped as soon as possible with a 5 day maximum in routine cases.

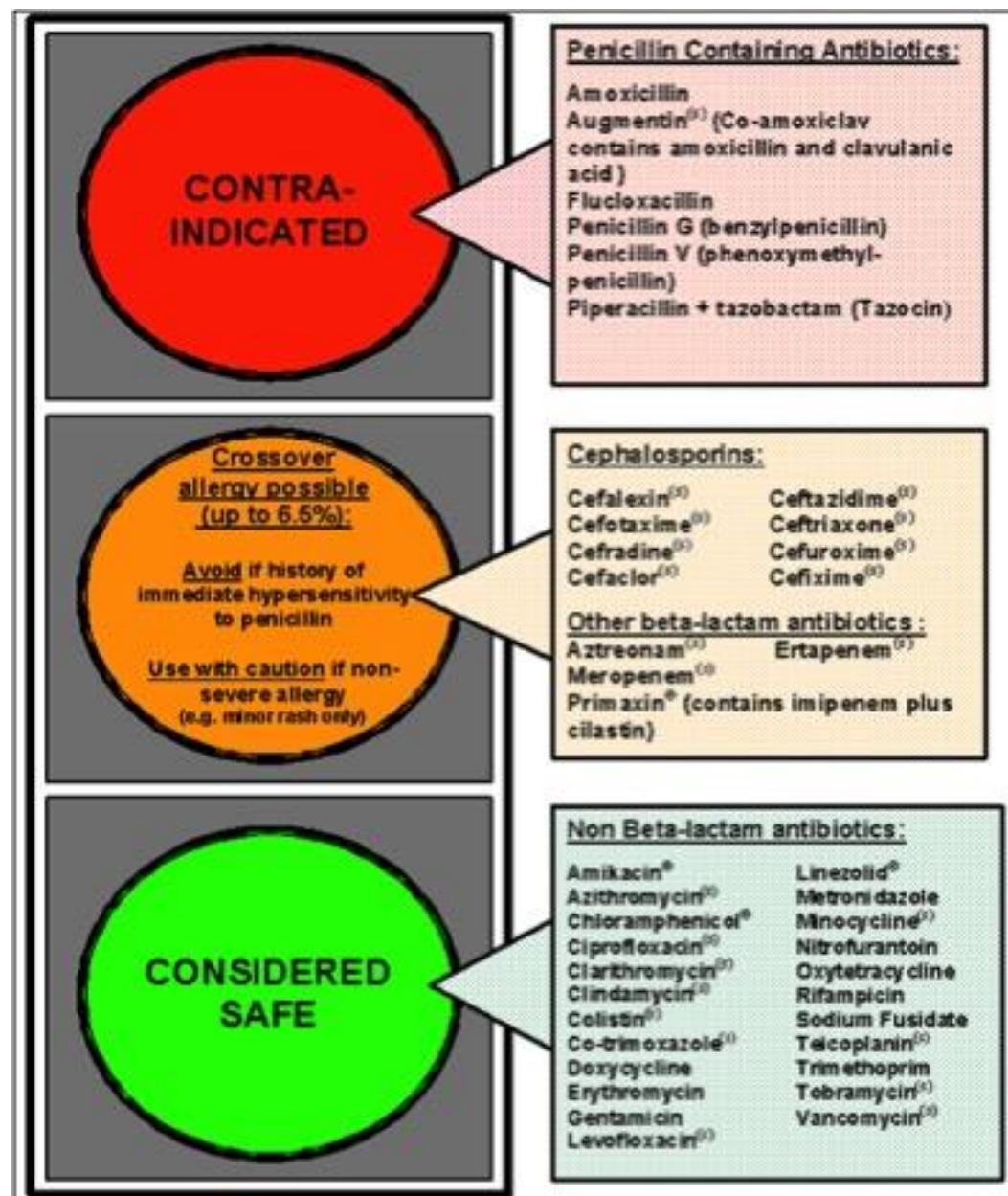
<http://rl1vmmps02/BHFileshare/Shared%20Documents/All%20Trust/Pharmacy%20Intranet/BLT/Surgery%20and%20anaesthetics/Prokinetics.doc>

Antibiotics



MICROGUIDE - See infection control section

When prescribing antibiotics in penicillin allergy please refer to the traffic light poster:



- **Renal doses for antibiotics**

- This pharmacy guide can be used as a starting point when prescribing in renal impairment

<http://rl1vmmps02/BHFileshare/Shared%20Documents/All%20Trust/Pharmacy%20Intranet/BLT/Antimicrobial/Dosing%20in%20renal%20impairment.doc>

Vancomycin

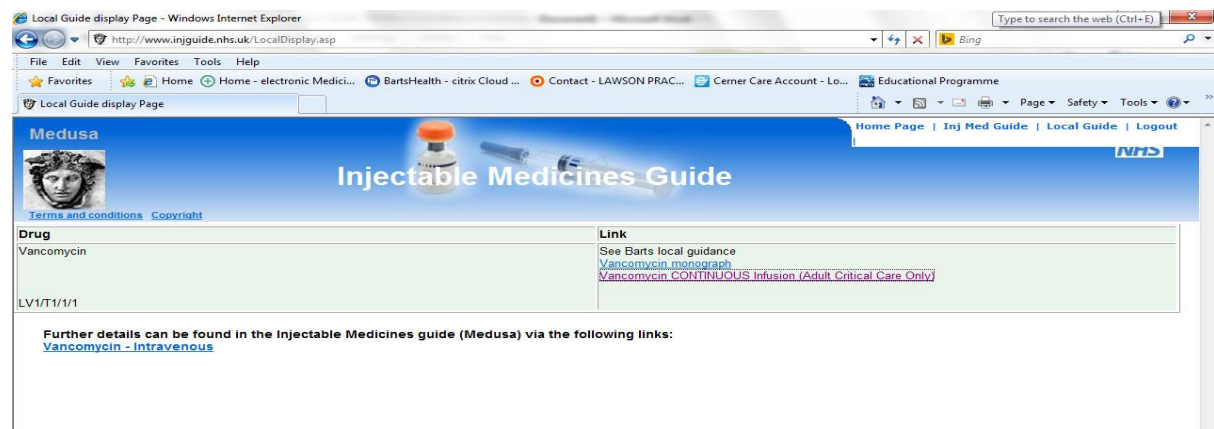
Continuous vancomycin infusions are used on ACCU

Key points:

- Continuous infusions are not suitable for end stage renal patients who are normally on PD/HD unless they are receiving CVVH/HDF (intermittent dosing should be used in ESRD)
- Ensure allergies are checked before prescribing
- All patients require a loading dose unless they have received intermittent vancomycin preadmission
- In cases of previous vancomycin use, a level must be done before prescribing the loading dose for the infusion (if they level is in range no loading dose is required)
- The loading dose is prescribed on the stat side and the continuous infusion is prescribed on the infusion page.
- Bolus dose is 25mg/kg (max of 2g). There is one standard concentration and a standard starting rate for the continuous infusion. The first level will be sent after 12 hours and the rate adjusted accordingly.
- Daily vancomycin levels are done and the infusion rate is altered accordingly (target concentration range – 15-20mg/L)

Current policy:

Access via medusa on the intranet



Local Guide display Page - Windows Internet Explorer

http://www.injguide.nhs.uk/LocalDisplay.asp

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Local Guide display Page

Medusa

Injectable Medicines Guide

Home Page | Inj Med Guide | Local Guide | Logout

Drug	Link
Vancomycin	See Barts local guidance Vancomycin monograph Vancomycin CONTINUOUS Infusion (Adult Critical Care Only)

LV1/T1/1/1

Further details can be found in the Injectable Medicines guide (Medusa) via the following links:
[Vancomycin - Intravenous](#)

http://www.injguide.nhs.uk/local%20files/Barts/Vancomycin%20CONTINUOUS%20Infusion%20(Adult%20Cr - Windows Internet Explorer

http://www.injguide.nhs.uk/local%20files/Barts/Vancomycin%20CONTINUOUS%20Infusion%20(Adult%20Critical%20Care%20Only).pdf

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http://www.injguide.nhs.uk/local%20files/Barts/...

Barts Health **NHS**
NHS Trust

Vancomycin Continuous Infusion Monograph

Adult Critical Care areas only

Background

Vancomycin efficacy is dependant on the length of time serum levels are higher than the minimum inhibitory concentration (MIC) rather than peak concentration levels. Continuous vancomycin infusions have demonstrated more rapidly achieved therapeutic levels, reduced vancomycin costs, easier administration and easier monitoring requirements.

To be used in all adult critical care patients except those receiving Intermittent Haemodialysis or Peritoneal Dialysis

Step 1. Loading Dose

- Required for all patients newly started on vancomycin. It is prescribed as a stat infusion based on the patient's actual body weight.
- Where a patient has already been given vancomycin on the ward prior to admission to critical care a loading dose may not be necessary; the level must be checked before vancomycin is prescribed. If the level is $>10\text{mg/L}$, no loading dose is needed. If the level is $<10\text{mg/L}$, a loading dose must be given.

Loading dose

Emergency Drug Box

There are THREE silver-lidded Tupperware boxes in the pharmacy fridge on ACCU for use in EMERGENCY AIRWAY SITUATIONS.

These boxes **MUST NOT** be used for routine airway management on ACCU

The boxes contain propofol, etomidate, suxamethonium, rocuronium, atropine and metaraminol along with pre-labelled syringes and drawing-up needles. The drugs should not be drawn up until needed for clinical use.

The task of checking that the boxes are stocked sealed and up to date should be allocated to a specific trainee during the morning drill (**usually the first runner**) and this task should be performed immediately after handover.

Restocking the drug box after use is the responsibility of the DOCTOR using the drugs and should be completed as soon as possible after the emergency is resolved so that the drugs are immediately available if there is another airway emergency.