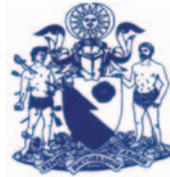




The Royal College of Anaesthetists



The Association of Anaesthetists of Great Britain and Ireland



The Faculty of Accident and Emergency Medicine



The Intensive Care Society

SYRINGE LABELLING IN CRITICAL CARE AREAS JUNE 2004 UPDATE

Since the new standard for syringe labelling was introduced in May 2003,¹ it has become apparent that a number of changes need to be made. These changes are to bring the standard in line with the change from British Approved Names (BANs) to recommended International Non-Proprietary Names (rINNs),² and also to bring the standard in line with the Australian/New Zealand Standard.³ The changes are as follows:

- **BANs to rINNs.**

Examples of these affecting anaesthetic drugs are:

- Thiopentone to Thiopental
- Lignocaine to Lidocaine
- Glycopyrrolate to Glycopyrronium

- **Drug concentrations**

These were all shown on the original document as 'mg/ml'. Correct concentrations should be used. For example:

- Fentanyl micrograms/ml
- Lidocaine %
- Insulin units/ml

- 'Adrenaline' is to be used, not 'Epinephrine' (similarly 'Noradrenaline', not 'Norepinephrine').

- **Suxamethonium and Adrenaline**

All lettering to be black with the exception of the labels for Suxamethonium and Adrenaline which shall be printed against the background colour as bold reverse plate letters within a black bar running from edge to edge of the upper half of the label, the rest of which shall display the coloured background.

- **Antagonists**

To denote a drug of opposite action, 1mm wide diagonal stripes of the designated colour, alternating with a 1 mm wide white stripe is used. The stripes should run from lower left to upper right at approximately 45 degrees. The striping should be omitted behind and below the drug name. Protamine, as an antagonist of Heparin, should be a white label with black stripes.

- **Anti-emetics**

The syringe label for this group of drugs should have the background colour Salmon 156, which is shared by the major tranquillisers.

- **Combinations of drugs**

Drugs which are supplied ready mixed in the ampoule should have a syringe label which denotes the drug name of one of the two drugs against the appropriate background in the upper half of the label, and the drug name of the second drug against the appropriate background in the lower half. For example:

- Glycopyrronium and neostigmine
- Lidocaine % and Adrenaline

An exception to this is the label for Propofol with user-addition of Lidocaine. This label should read 'Propofol/lidocaine' with 'mg/ml' for Propofol against the induction agent background (yellow).

Note to users: The colours are only a guide. It is important to check the drug ampoule and correctly label the syringe with the correctly texted label. Blank coloured labels are a potential source of confusion and should not be used.

Dr John A Carter,
Chairman Safety Committee
Association of Anaesthetists of Great Britain and Ireland

References

- 1 Syringe labelling in critical care areas. RCoA Bulletin 19;May 2003:953.
- 2 Changes in names of certain medicinal substances. Chief Medical Officer, Chief Nursing Officer and Chief Pharmaceutical Officer. DoH;17 March 2004:PL/CMO2004/1.
- 3 User-applied labels for use on syringes containing drugs used during anaesthesia. Australian/New Zealand Standard;4375:1996.

Induction agents

Propofol

.....mg/ml.

Ketamine

.....mg/ml.

Muscle relaxants

Suxamethonium

.....mg/ml.

Vecuronium

.....mg/ml.

Narcotics

Morphine

.....mg/ml.

Fentanyl

.....micrograms/ml.

Vasopressors

Adrenaline

.....micrograms/ml.

Ephedrine

.....mg/ml.

Anticholinergic agents

Atropine

.....micrograms/ml.

Glycopyrronium

.....micrograms/ml.

Anti-emetics

Ondansetron

.....mg/ml.

Hypnotics

Diazepam

.....mg/ml.

Midazolam

.....mg/ml.

Relaxant antagonist

Neostigmine

.....micrograms/ml.

Narcotic antagonist

Naloxone

.....micrograms/ml.

Hypotensive agent

Labetalol

.....mg/ml.

Local anaesthetics

Lidocaine

.....%.

Bupivacaine

.....%.

Miscellaneous

Heparin

.....units/ml.

Protamine

.....mg/ml.

Further information is available from the manufacturer or the following websites: www.astm.org and www.csa.ca

Please note that colours are only a guide and the correct Pantone colour code numbers are listed on the reverse of this sheet. It is still important to check the drug ampoule and correctly label the syringe containing the drug with the correctly texted label. There are several colour schemes currently available in the UK and some of the new standard colours may clash directly with what you are used to. Extra vigilance is required in the change to this standard.

STANDARD BACKGROUND COLOURS FOR USER-APPLIED SYRINGE DRUG LABELS

Drug class	Examples	Pantone® colour (uncoated)
Anti-emetics	Metoclopramide, Ondansetron	Pantone® 156 (salmon)
Induction agents	Thiopental, etomidate, ketamine, propofol	Yellow (process)
Hypnotics	Diazepam, lorazepam, midazolam	Pantone® 151 (orange)
Hypnotic antagonists	Flumazenil	Pantone® 151 (orange) with white diagonal stripes
Depolarising Muscle relaxants	Suxamethonium	Pantone® 805 (fluorescent or warm red lettering out of black above, red below)
Non-depolarising relaxants	Atracurium, Vecuronium	Pantone® 805 (fluorescent or warm red)
Relaxant antagonists	Neostigmine	Pantone® 805 (fluorescent red or warm red) with white diagonal stripes
Narcotics	Morphine, fentanyl, remifentanyl	Pantone® 297 (blue)
Narcotic antagonists	Naloxone	Pantone® 297 (blue) with white diagonal stripes
Major tranquilizers	Droperidol, chlorpromazine	Pantone® 156 (salmon)
Vasopressors	Adrenaline, ephedrine, phenylephrine	Pantone® 256 (violet) (Adrenaline is violet out of black above, violet below)
Hypotensive agents	Nitroprusside, nitroglycerine, phentolamine	Pantone® 256 (violet) with white diagonal stripes
Local anaesthetics	Lidocaine, bupivacaine	Pantone® 401 (grey)
Anticholinergic agents	Atropine, glycopyrronium	Pantone® 367 (green)
Other agents	Oxytocin, heparin, protamine, antibiotics	Pantone® transparent white (Protamine is Pantone® transparent white with black diagonal stripes)

The examples shown are representative, not restrictive. See Pantone® Colour Formula Guide. Pantone® is a registered trademark of Pantone, Inc.