

UNC Department of Anesthesiology
Clinical Practice Guidelines:
Medication Safety

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Background:

The perioperative environment is unique in that anesthesia providers are the only medical personnel who both order and administer medications without the requirement of safety checks by either pharmacy or nursing. As a result, medication errors occur more frequently in the perioperative setting as compared to other clinical areas. In order to improve patient safety by decreasing the volume and magnitude of MEs, UNC Department of Anesthesiology has developed the following clinical practice guidelines.

Details:

1. All medication vials in the perioperative areas are single use only (even if labeled multi-dose) and not intended for use in more than one patient.
2. All medications must be withdrawn from the Pyxis systems under a patient name.
3. Medications should be drawn up using one syringe and one vial at one time. The label on the vial should be checked and matched to that on the syringe. Syringes should not be pre-labeled in batches.
4. When the Codonics Safe Label System is unavailable, medication labels must be legible and include the medication name, medication concentration, date/time of the medication's expiration (12 hours from time of medication preparation), and the name of the individual preparing the medication.
5. Scrub every injection hub with alcohol for 5-10 seconds prior to accessing for the administration of IV medications and/or IV fluids.
6. Immediately discard any medication or solution found unlabeled
7. Do not leave medications on top of Pyxis Anesthesia machines or off-site anesthesia carts when unattended.
8. Given the work flow demands of the perioperative areas, it is acceptable to leave vasoactive medication infusions unattended on infusion pumps for short periods of time.
9. Propofol, benzodiazepines, opioids, and/or other controlled medications must **never** be left unattended.
10. The Pyxis A-machines and off-site anesthesia carts must be locked when left unattended.
11. Do not remove safety caps on prefilled syringes until immediately prior to medication administration. Prefilled syringes missing safety caps should be discarded immediately.
12. Medications given via an infusion should be labelled both on the bag/syringe and at the end of the infusion line.
13. Upon completion of a day's anesthetic cases, the anesthesia cart including the pyxis drawers should be scanned for tidiness and opened medication vials discarded.

References:

1. Nanji KC, Patel A, Shaikh S, Seger DL, Bates DW. Evaluation of perioperative medication errors and adverse drug events. *Anesthesiology* 2016;124:25-34
2. Guidelines for the safe administration of injectable drugs in anaesthesia. Australian and New Zealand College of Anaesthetists, 2009, <http://www.anzca.edu.au/resources/professional-documents/professional-standards/pdfs/PS51.pdf> (Accessed 21.10.09).