

**POLICY AND PROCEDURE MANUAL
PHARMACY SERVICES**

CODE: 3.17.0
DATE: 12/2014
REVISED: 4/19/22
APPROVED: Tinh Tran, Pharm. D
MEC APPROVED:

SECTION: INPATIENT PHARMACY SERVICES

SUBJECT: Safe Handling and Storage of Neuromuscular
Blocking Agents (NMBAs)

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PURPOSE

To provide safe practice expectations for the storage and handling of neuromuscular blocking agents (NMBA) in all DHS facilities. NMBAs are commonly used to paralyze skeletal muscles during surgery or are used in patients that require intubation for airway management, and as such require special handling. NMBAs are included in DHS' "High Alert" Core List of medications.

EXPECTATIONS

Terminology:

- Neuromuscular blocking agents should NEVER be referred to as "muscle relaxants" to avoid confusion and ensure these agents are stored, handled and used appropriately.

Assess Labeling and Packaging:

- Pharmacy and Anesthesia evaluates new NMBA packaging and labeling for safety
- Auxiliary label and enhancements and education are introduced prior to distribution.

Standardize Concentrations:

- Standardize NMBA concentration/strength (vials and drips) where clinically appropriate if used outside of the surgical area.

Pharmacy Storage:

- Safeguard storage within the pharmacy. Segregate NMBAs from other medications in all pharmacy storage areas. Clearly identify and differentiate NMBAs with multiple concentrations from one another. Store in secure and isolated marked containers or bins that clearly identify the agent as a high alert NMBA agent.
- Dispense from pharmacy with warning stickers or heat-sealed shrink over-wraps that identify the agent as a high risk paralyzing agent.

Unit Storage:

- Limit availability to patient care areas that routinely care for mechanically ventilated patients (i.e. OR, PACU, ICU).
- Store within automated dispensing cabinets in an isolated drawer (do not utilize a matrix drawer with the exception of OR anesthesia cart).
- Organize anesthesia carts and trays to avoid the proximity of look-alike vials, syringes or bags and so that labels are readily visible.
- Limit override to areas that require rapid sequence intubation or the facilitation of mechanical ventilation.
- NMBA drips will only be compounded and provided by pharmacy.
- Affix auxiliary labels on all storage bins and final medication containers (vials, syringes, and IV bags) of NMBAs that state: "**WARNING: PARALYZING AGENT-CAUSES RESPIRATORY ARREST.**"

Review: 4/19/2022 TT

Approved By: 

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- Clearly identify the beyond-use date of non-refrigerated NMBA vials stored within the automated dispensing cabinet.
- Immediately discard all used/opened bags, vials, or syringes of NMBA after extubation, at the end of procedure, or at discontinuation of therapy. NMBA are not to be stored in unit dose medication carts.

References

1. Institute for Safe Medication Practices: ISMP's List of High-Alert Medications 2008. www.ismp.org
2. The United States Pharmacopeia (USP) National Formulary (USP 29-NF 24), General Chapter <1> Injections; Packaging/Containers for Injections/ Neuromuscular Blocking and Paralyzing Agents; 2457; 2006.
3. Institute of Safe Medication Practices. 2016-2017 Targeted Medication Safety Best Practices for Hospitals. {HYPERLINK "<http://www.ismp.org/tools/bestpractices/TMSBP-for-hospitals.pdf>"}
4. Institute for Safe Medication Practices: Paralyzed By Mistakes Reassess the Safety of Neuromuscular Blockers in your Facility. ISMP Medication Safety Alert. June 2016. {HYPERLINK "<https://www.ismp.org/newsletters/acutecare/showarticle.aspx?id=1141>"}