



Neuromuscular Blocker Safety Interest Group (SIG)

International Medication Safety Network (IMSN)

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IMSN

Pledge to **promote safe medication practices** globally, encourage and **further the development of safe medication practice centres** in all countries and to **facilitate co-operation** amongst them

- Website development for communication and sharing
- Position Paper on Pharmacovigilance and Medication Errors
- Position Paper on Making Naming, Labelling, and Packaging Safer
- Position Statement on Improving the Safety of International Non-proprietary Names of Medicines (INNs)
- Position Statement on Safety Design of Vaccines Packaging and Labelling
- Global Targeted Medication Safety Best Practices

History of Safety Interest Groups

In December 2020, a member posted to the IMSN blog

- *Does anyone have detailed information with recommendations for preparing the Pfizer vaccine?*

IMSN Executive Committee proposed to develop an international interest group to address issues with roll out of Covid-19 vaccine

The first SIG begins

Safety Interest Groups

2021

- IMSN Covid-19 Vaccine Safety Interest Group

2022

- IMSN Oxytocin Safety Interest Group

2023

- **IMSN Neuromuscular Blocker Safety Interest Group**

<https://www.intmedsafe.net/imsn-cvsig-issues-recommendations-for-global-implementation-of-safe-covid-19-immunization-practices/> <https://www.intmedsafe.net/imsn-oxytocin-sig-issues-recommendations-for-global-implementation-of-safe-oxytocin-use-practices/>

Neuromuscular Blocker SIG

- High-alert medications
- Well-documented history of causing significant injury and death when inadvertently administered to patients who were not receiving proper ventilatory assistance
- IMSN Executive Committee proposed development of a Neuromuscular Blocker Safety Interest Group

Neuromuscular Blocker SIG



- Removed vecuronium from automated storage instead of Versed
 - Warnings on cap and ferrule was missed
- Atracurium was used to prepare vaccines for children
- Atracurium was mixed with measles vaccine
- Succinylcholine was mistaken for sodium chloride and used to reconstitute a medication
- Extubated patient received a neuromuscular blocker
 - The order was not discontinued after extubation

Neuromuscular Blocker SIG

Contributing Factors

- Look-alike packaging and labeling
- Look-alike drug names
- Unlabeled and mislabeled syringes and syringe swaps
- Orders written/entered into the wrong patient's medical record
- Drug shortage issues
- Residual drug flushed through still connected IV tubing after the medication is discontinued
- Reversal agent not available



Neuromuscular Blocker (NMB) SIG

- Co-chaired by Mike Cohen & Christina Michalek (ISMP)
- Thirty-two (32) SIG members
- Two meetings with more to come
 - Charter
 - Country sharing
- Goal: development of comprehensive global applicable recommendations including a guidance document on safe handling and administration of NMB as well as safe packaging and labeling of NMB



IMSN Neuromuscular Blocker Safety Interest Group (SIG) Charter

Introduction:

Neuromuscular blocking agents are considered high-alert medications because they carry a heightened risk of causing significant patient harm when they are used in error. These drugs are used to paralyze skeletal muscles during anesthesia to facilitate endotracheal intubation and to facilitate mechanical ventilation of critically ill patients. Unfortunately, neuromuscular blockers have a well-documented history of causing significant injury and death when they have been inadvertently administered to patients who were not receiving proper ventilatory assistance. Because neuromuscular blockers paralyze the muscles that are necessary for breathing, some patients have died or sustained serious, permanent injuries if the paralysis was not witnessed by a practitioner who could intervene, and the patient was not monitored.

The International Medication Safety Network (IMSN) Executive Committee has proposed development of a Neuromuscular Blocker Safety Interest Group to stimulate global implementation of safe practices that address causal factors of reported medication errors. Recommendations will include those that can be adopted in various aspects of clinical practice as well as by drug storage equipment vendors, drug manufacturers, and regulatory and standard setting agencies.

Mandates:

The primary objectives of the IMSN Neuromuscular Blockers Safety Interest Group are:

1. To share and learn from medication errors and safety issues with members regarding the safe use of neuromuscular blockers (NMB)
2. To develop comprehensive and global applicable recommendations including a guidance document on safe handling and administration of NMB as well as safe packaging and labeling of NMB.



Questions?
