

# Ensuring Proper Neonatal Medication Administration with eBroselow's SafeDose®

Preventing dosing errors with our most vulnerable patients

There are few more dangerous situations in healthcare than delivering medication to neonatal children. The patients are so small and drug doses are so minute that there is no room for calculation or administration error.

## **Dangerous times for neonatal patients**

Despite the extra care being taken in neonatal intensive care units (NICU), published studies show that medication errors in the NICU are common ranging from 13 to 91 medication errors per 100 NICU administrations or approximately five percent of all medications orders, according to a report from the National Association of Neonatal Nurses (NANN). The report notes that medication errors occur eight times more often in NICU patients than adult patients.<sup>1</sup>

There are risks beyond the day-to-day care of neonatal patients in the NICU. Many hospitals do not have NICUs so transport to a NICU facility presents an even more dangerous time when it comes to drug administration for neonatal patients. Nurses, clinicians, and emergency personnel may not have the intricate training or specific equipment to handle dosing issues so will call ahead to NICU personnel to help guide them through the process. These non-NICU personnel are likely forced to perform manual math calculations to determine proper dosing while awaiting the NICU transport team. Operating in

this type of chaotic setting exposes the neonatal patient to an even greater level of risk.

Medication dosing for children is primarily weight-based and even in today's EHR-enabled facilities, still requires an inordinate amount of manual math calculations to determine a proper dose. Making this critical calculation with tiny neonatal patients makes this process even more difficult. The slightest miscalculation can quickly multiply into a potential fatal event for delicate neonatal patients.

## **eBroselow's SafeDose provides the solution**

SafeDose by eBroselow takes the math out of medicine and enables you to ensure safe drug administration to neonatal children. Developed by Dr. James Broselow and Dr. Robert Luten, inventors of the world renowned Broselow Tape, and key contributors to the creation of the specialty of pediatric emergency medicine, SafeDose is a next generation software solution that ensures providers consistently administer medication rapidly and accurately.

The web-based, mobile enabled clinical support application standardizes and simplifies the complex process of drug administration to dramatically improve pediatric medication safety. It is the first pediatric dosage resource able to replace the need for complex thinking in critical scenarios with a visual decision-making tool.

<sup>1</sup> Medication Safety in the Neonatal Intensive Care Unit, Position Statement #3060, NANN Board of Directors, June 2014

With a simple scan of the U.S. National Drug Code (NDC) bar code of any medication using a desktop, smartphone, or tablet or with a few easy keystrokes, SafeDose allows you to quickly determine the proper medication doses so you can deliver them promptly and accurately. eBroselow is working with the Pediatric Pharmacy Advocacy Group (PPAG) to ensure that the SafeDose application includes the most important, necessary medications for neonatal emergency care.

### **Benefits of SafeDose**

The SafeDose calculator, the most reliable mobile application available on the market, is much simpler to use than any other existing neonatal dosing tool, requiring only one data entry input or one bar code scan to get to the desired dosing information. With SafeDose you can quickly determine the proper dosing for patient weights down to 0.35 kg in tenths of a kg increments.

SafeDose is the only mobile dosing calculator app that provides quick, concise information including the correct dose in both mg and ml by exact weight and indication. It provides dilution and delivery instructions, adverse reactions, Y-site compatibilities and appropriate flow charts. SafeDose also works offline in airplane mode, a key functionality especially for NICU transport teams.

eBroselow's nearly 300 customers use SafeDose in many different acute settings, and all of them rely on SafeDose to ensure safe pediatric dosing. These organizations understand the value of SafeDose in providing a higher level of safety for pediatric medication dosing. SafeDose enables clinicians of all skill and experience levels to feel confident preparing and administering medications to children.

SafeDose has proven to eliminate errors and extra steps in medication preparation and administration in real-world settings and goes a long way toward ensuring medication administration safety in situations involving neonatal patients.

### **About eBroselow**

Headquartered in Southborough, Massachusetts, eBroselow is dedicated to developing a simple, safe, and effective international standard for acute drug administration. Co-founded by Drs. James Broselow and Robert Luten in 2010, eBroselow offers the latest medical innovations to improve care, increase treatment efficiency, and save lives.

For more information and to learn how eBroselow can help ensure safe medication administration in your acute care situation, visit our website: [www.ebroselow.com](http://www.ebroselow.com).