SafeDose



Obstacles to Weight-based Dosing in the Field



Need to perform manual math calculations



Often no backup to double-check correct dosing



Requires fast action in acute care situations

Factors Contributing to Weight-based Dosing Errors



- Inability to weigh patient
- Inaccurate documentation of patient's weight because of incorrect or missing entry of unit of measure
- Failure to correctly convert between pounds and kilograms
- Inaccurate estimate of weight

Growing Responsibilities of EMS Personnel

Failure to adequately perform any of these key tasks can result in drug administration errors





Knowing medication administration protocols

Checking and stocking of emergency vehicle



Ensuring proper quantity of each medication in right location in vehicle



Ensuring medications are labelled properly and not expired

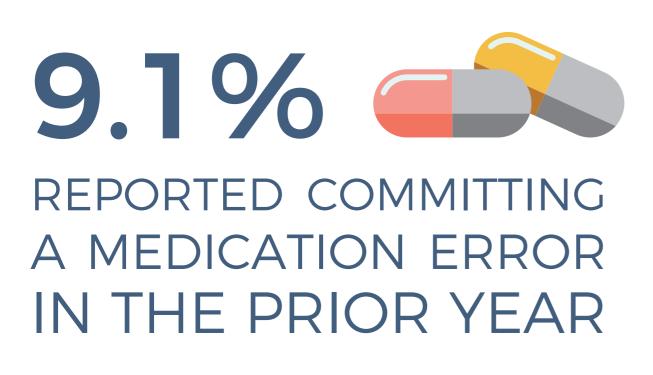
Despite the Dedication and Competency of EMS Personnel, Errors Still Occur



35%

Of prehospital pediatric medication administrations in Michigan involved a dosing error, despite EMS pediatric drug dosing reference implementation

Survey of 352 Paramedics

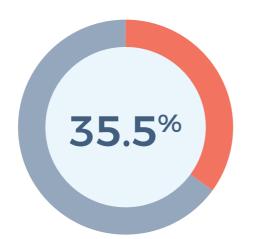


2 out of 3 **OF THE ERRORS** WERE DOSE RELATED

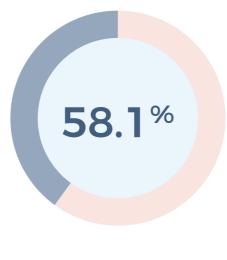
Survey of 1000 Paramedics on Pediatric EMS



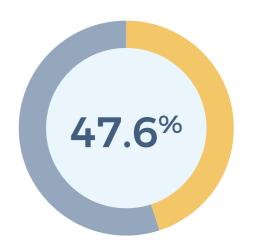
reported familiarity with a case in which pediatric



indicated "I don't get a weight, I just give a



believed they didn't receive enough training



didn't have enough exposure to pediatric patients

Survey of Pediatric Patients Suffering Seizures



49% of patients did not receive the correct dose of benzodiazepines



64% of charts did not include patient weights

89% of errors were from underdosing

SafeDose[®] EMS Leverages Technology to Help Emergency Personnel



Mobile app designed especially for EMS professionals



Eliminates human error manual math calculations in medication dosing



Reduction in average medication preparation time by 8 minutes per event

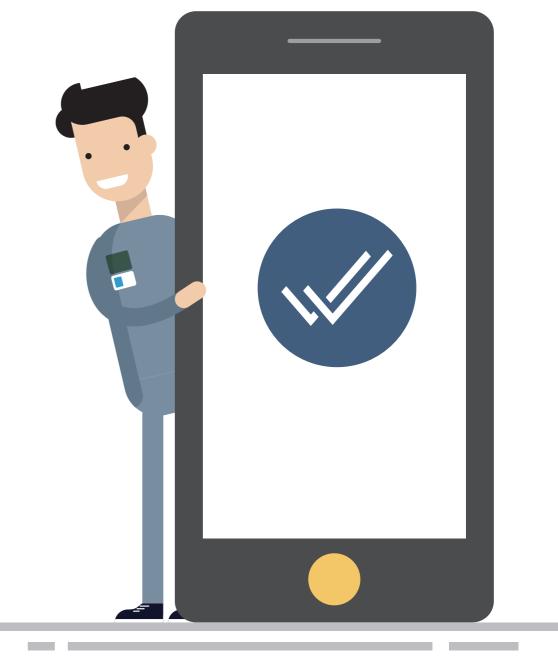






Benefits of SafeDose[®] EMS

- Accelerates response time in the field
- Always delivers the correct medication dose
- Provides 100% reliability •
- Faster than any other weight-based dosing • system for children and adults

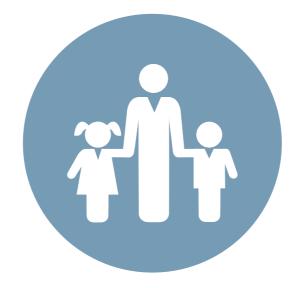


- Provides a valuable double-check for calculating medication doses
- Enables easy access to information and • drugs you must administer every day
- Reduces average medication preparation time by 8 minutes

SafeDose[®] EMS Key Features



Includes medications approved by state registries



Provides emergency related medicines for adults and children



Print codesheets for resuscitation, RSI, seizures, and anaphylaxis for offline use



Automatically time stamps and creates log entry of each medication delivery



Automates calculations for weight-based doses

SOURCES

- An Analysis of Prehospital Pediatric Medication Dosing Errors after Implementation of a State-Wide EMS Pediatric Drug Dosing Reference, Prehospital Emergency Care, February 2023
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- Pediatric Medication Dosing Errors and Paramedic Training Needs, by Sean Britton, NRP, CPH, CEM, Journal of Emergency Medical Services, September 1, 2017
- Study Links Simulation Training with Improved Prehospital Pediatric Care, by David Page, MS, NRP, & Sean Britton, MPA, NRP, Journal of Emergency Medical Services, June 10, 2016
- Weight-based Medication Dose Errors, ISMP Canada Safety Bulletin, Volume 16, Issue 9, December 7, 2016

