

## The Challenges of Weight-based Dosing in the Field:

How You Can Help Your Emergency Personnel



### 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



- Failure 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

Survey of 352 Paramedics

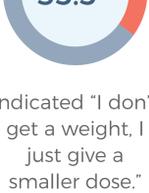
**9.1%** REPORTED COMMITTING A MEDICATION ERROR IN THE PRIOR YEAR

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

Survey of 1000 Paramedics on Pediatric EMS



42.8% reported familiarity with a case in which pediatric patient was given incorrect dose of medication



35.5% indicated "I don't get a weight, I just give a smaller dose."



58.1% believed they didn't receive enough training in pediatric care



47.6% didn't have enough exposure to pediatric patients to maintain competency

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

### eBroselow's SafeDose EMS Leverages Technology to Help Emergency Personnel



Mobile app designed especially for EMS professionals



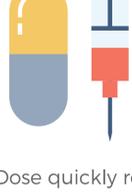
Eliminates human error manual math calculations in medication dosing



Can scan medication vial bar code or use app to search for any medication



Enter weight or Broselow Color



SafeDose quickly returns proper administration dose

### 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



Enables access even offline or in airplane mode



Automatically time stamps and creates log entry of each medication delivery



Automates calculations for weight-based doses

### Developed by Pediatric and Emergency Care Pioneers



**Dr. James Broselow**

Inventor of world-renowned Broselow tape

Recipient of the Institute for Safe Medical Practices Lifetime Achievement Award



**Dr. Robert Luten**

Performed pioneering work in the field of emergency medicine

Helped create the specialty of pediatric emergency medicine in 1993

Spearheaded the development of curriculum and training materials for emergency care

### SOURCES

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