## Top 10 Safety Concerns of EMS Crews and Agencies

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## **#10 Safety Culture**

Just Culture

- Errors are a balance between human factors and system accountability/design
- Encourages open dialog without the fear of blame

#### **#9 Device Failures**

- New and improved technology
  - Improve quality of care and patient safety
  - Reduce workload
- Device failures
  - Operator error, lack of training, improper usage
  - Stressing device
  - Power failure





# **#8 Medication Errors**

#### Morphine and Midazolam

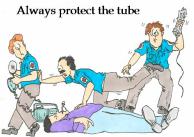
- Five rights!
- Perfect setting errors!
  - Fast-paced



- Decisions made quickly with little information
- Dosages/protocols memorized, perform mental calculations
- Limit reliance on memory, use checklists and cognitive aids

## **#7 Airway Management**

- Confirmation of ET placement using traditional methods alone are unreliable
- Wide range of risks and complications
- Alternatives and backups must be available
- Waveform capnography must be 100% available and its use mandatory!



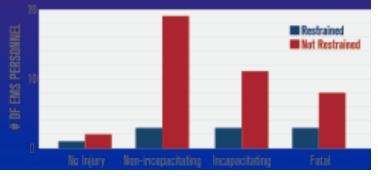
### **#6 Transition of Care**

- Transition to electronic health records; tend to talk less and less, issues with interoperability
- Ways to Improve
  - Encourage direct communication with ED provider
  - Standardize the handoff (SOAP, SBAR, E-STAT)
  - Good technology
  - Increase EMS/ED feedback and understanding of scope of practice

### **#5 Crashes**

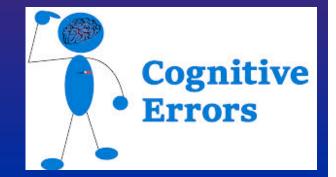
- Ambulances are the most lethal vehicle on the road per vehicle and mile travelled
- Why occur? Lights and sirens, Excessive speed, Distraction, Fatigue
- Recommendations:
  - All occupants must use vehicle restraints when possible
  - Use all belts on the stretcher, shoulder restraints
  - Annual driver training
  - Driver feedback systems

Lajorry Severity and Use of afsig Restraints in ENS Providers'



#### **#4 Pediatric Patients**

- Pediatric calls are the most challenging
  - Lack of experience/training (4% of EMS runs)
  - Anatomy/physiology varies by age
  - Age specific dosing leads to multiple errors
  - High stress leads to "scoop and run" vs. "stay and treat"
- System solutions
  - Appropriately sized equipment
  - Remove memorization and calculations



#### **#3 Behavior Health Encounters**

- Struggle with limited mental health resources
- Frequently law enforcement is not available or not involved
- Situation deterioration—>provider assault
  - Lack of warning
  - Loss of situational awareness
  - Limited training (crisis intervention and deescalation)

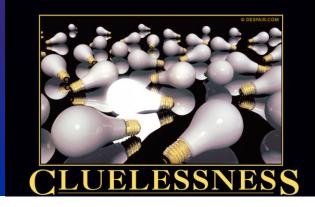
## **#2 Second Victim**

- High risk of psychological stress from nature of work, organization
- Risk factors for becoming a "second victim"
  - Pediatric cases, Bad outcomes / Unexpected (first) deaths Known patients
- Accumulated stress
  - Loss of resiliency
  - Decreased job performance / productivity
  - Poor customer service
  - Increased sick leave / staff turnover



#### **#1 Mobile Integrated Healthcare**

- Evolving specialty for EMS that is still in its infancy
- Focus and context of roles are very different
  - Coordinating care over a longer period
  - Chronic conditions, and complications
- Don't know what we don't know
- Stay tuned!



# Can't address all at once, so pick one or two!

Cultural shift Environment of safety Measure improvement



## For more info:

www.EMSFORWARD.org

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