Top 10 Safety Concerns of EMS Crews and Agencies

Jay H. Reich, MD FACEP
EMS Medical Director
Kansas City Fire Department
EMS Section Chief-Department of Emergency Medicine
University of Missouri-Kansas City School of Medicine
#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

- 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
#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

#EMSFORWARD