It’s an Ambulance; Not an Airplane!!

Frank P. Mineo, EMT-P, Ph.D.
I would respond lights and sirens to:

1. Confirmed Cardiac Arrest
2. Woman in Labor-First Baby (contractions every 20 minutes)
3. 45 Year Old Male Unable to Speak or Move (no other info)
4. 34 Year Old Female with Stomach Pain
5. 87 Year Old Male fell out of bed, right leg deformed and swollen
Aviation Accidents

There were 45 accidents in 2017 (on Eastern- and Western-built aircraft), down significantly from 67 in 2015 and 2016. The deadliest world aviation accident was the collision of two Boeing 747 passenger planes on the runway of an airport in the Spanish island of Tenerife in 1977.

https://www.iii.org/fact-statistic/facts-statistics-aviation
Motor Vehicle Accidents-EMS

Motor vehicle incidents included collisions, sudden stops and swerving, with almost two-thirds involving a collision with another motor vehicle. Most motor vehicle incidents involved ambulances with nearly half of EMS personnel injured while riding in the front compartment and half injured while riding in the patient compartment. In almost 75 percent of incidents, lights and sirens were not being used and very few personnel identified issues with the weather, road, lighting or vehicle that may have contributed to the incident.
EMS Injuries

EMS personnel experience injuries at a higher rate than workers in many other occupations. In addition to suffering the immediate pain of an injury, personnel may lose time at work and be forced to limit activities outside of work.
Impact of Injuries

Injuries with long-term effects, such as chronic pain or physical disability, can have more serious impacts on the worker. These impacts can include wage or job loss, strains on relationships with family and friends and psychological issues such as depression or anxiety.
Problem

With US Labor statistics projecting that the demand for EMTs and paramedics will increase 24 percent from 2014-2024; it is vital that injuries to workers be prevented to protect and preserve the workers and the workforce.
Between 1992 and 2011 (EMS Nationally)

- 4500 accidents per year
- 34% resulted in injuries
- 84% of providers were NOT restrained
- 33% of patients were secured
- 44% of patients ejected

33 people killed per year!!

EMS World.com, 2015
How about NYS?

• NYS DMV stats show an average of 400 ambulance vehicle crashes/accidents each year.

• 75% occur at a controlled intersection.

NYS*BEMS POLICY 00-13: Operation of Emergency Medical Services Vehicles
What Does NYS Law Say??

- Need to understand NYS Vehicle and Traffic Law, including (applied to emergency operations):
  
  - Okay to proceed past a steady red signal or stop sign, but only after **slowing down** as necessary for safe operations.
  
  - Exceeding the posted speed limit as long as no **danger** to life/property.
Case against red lights and sirens

- Small number of calls are actual emergencies
- Computer Aided Dispatch
- Speed vs. Outcome
- Increased scope of care for EMT providers

Isaacs, 2017
2018 EMS Trend Report

• 94% of EMS Leaders feel provider safety is important

• 72% of providers feel the same

-22% Gap
The “ambulance drivers” perspective (from top 10)

- We Cheat Death
- Seconds Count
- If it saves a life; it’s worth it

Grayson, K, 2013
You Want the Truth......

Operating a vehicle in emergency mode is one of the most DANGEROUS activities the EMS provider is routinely involved in.
Unbelievable Ambulance Accidents

https://youtu.be/zETY7Zrsnjo
Vehicle Construction

- NFPA 1917-Standard for Automotive Ambulances (KKK-A-1822) completed in 2013, recommended 15 changes to construction including:
  - Tire pressure monitors
  - Seatbelt monitoring device
  - Speed maximum of 77mph
  - Chevrons on rear doors
Need for Training

Prepare for real weather and traffic conditions:

- CEVO-4
- EVOC
- Driving Simulators
- Road Test
So...while it may ‘look’ great, its not!!!

https://youtu.be/MiQmMQfiAao