Ambulance Transport Safety Summit

Bridging the gap between what we do and what is known

EMS Subcommittee of the TRB Ambulance Transport Safety Summit

October 29th , 2009

TRB TRANSPORTATION RESEARCH BOARD OF THE NATIONAL ACADEMIES

Accident Causes

- Use aircraft accident investigation template
- Causal factors vs contributing factors
- Follow the chain of events
- Know:
  - What happened
  - Why did it happen
  - How do we prevent it from happening again?

TRB TRANSPORTATION RESEARCH BOARD OF THE NATIONAL ACADEMIES

Possible Causes

- Human error –most often primary cause
  - Rest, working hours, meds, vision, etc
- Training
- Equipment (design, mechanical failure)
- Operations (schedules, posting plan)
- Outside factors (weather, other people)
- Supervision / corporate culture

TRB TRANSPORTATION RESEARCH BOARD OF THE NATIONAL ACADEMIES

Corporate Culture example

- Great emphasis on response times
- Negative attention to the crew if late
- Supervisors emphasizing aggressive driving & “max performance” turns
- No accountability for minor accidents
- No connection made to maintenance problems – OK to use ‘em up

TRB TRANSPORTATION RESEARCH BOARD OF THE NATIONAL ACADEMIES

Result

Conclusion

I am the problem

TRB TRANSPORTATION RESEARCH BOARD OF THE NATIONAL ACADEMIES

The Fix

- Change the culture
  - Greater emphasis on safety than on time
  - Deploy black box recorders
    - Immediate feedback through audible tones
    - Provide objective driver scoring system
    - Individual accountability
  - Emphasize the other response time variables ahead of speed

TRB TRANSPORTATION RESEARCH BOARD OF THE NATIONAL ACADEMIES

Response Time Variables

- Dispatch process
- Crew reaction time
- Geography knowledge and GPS tools
- Crew posting plan
- Hospital turns times
- Speed – by far least important

TRB TRANSPORTATION RESEARCH BOARD OF THE NATIONAL ACADEMIES

Lessons Learned

- Accepted by the crews
- Major reduction in at fault accidents
- 38% reduction in insurance rates
- But requires constant reinforcement
  - Old news to the old heads
  - New people have not shared in past experiences to understand the problem
- Back to the culture

TRB TRANSPORTATION RESEARCH BOARD OF THE NATIONAL ACADEMIES

Summary

TRB TRANSPORTATION RESEARCH BOARD OF THE NATIONAL ACADEMIES

Summary

- What we know
- What we don't know
- What we need to know

TRB TRANSPORTATION RESEARCH BOARD OF THE NATIONAL ACADEMIES

Questions??

- Please raise your hand or type in the message box

TRB TRANSPORTATION RESEARCH BOARD OF THE NATIONAL ACADEMIES