RescueNet Road Safety for Manitoulin-Sudbury EMS

Better Driving
Better Safety
Better Results

June 22, 2011
ZOLL

- A strong, reliable partner
  - Built on the vision of Dr. Paul ZOLL

- A technology innovator
  - Solutions focused on the chain of survival
  - Provides the most current technology for customers

- A focus on improving patient outcomes
  - Saving lives while driving your success
# ZOLL – Improving Patient Outcomes

## ZOLL Expanded Chain of Survival

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What is RescueNet Road Safety?

Road Safety is a driver behavior modification technology.

Immediate, audible feedback adjusts driving behaviors which results in safer driving and minimized impact to vehicle wear and tear.
What does Road Safety Provide?

Greater safety for your staff and patients

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Significant cost savings on vehicle maintenance and insurance
Road Safety prevents scenarios like this…
Emergency Vehicle Accidents

Frequency breeds severity
Even slightly dangerous driving behavior increases the number and severity of accidents
How does Road Safety work?

Proactively modifies driver behavior by providing immediate audible feedback on:

- Speed
- Cornering force – G-force
- RPMs
- Braking intensity
- Seat belts
- Rear spotter

Monitoring alone doesn’t change behaviour.
Other events and behaviors monitored

- Emergency lights, sirens, warning lamps
- Acceleration
- Engine RPM
- Engine idle time - Indicates wasted fuel
- Distance driven
- Turn signals
- Doors
- Auxiliary Power
Data Collection and Driver Feedback System

- Onboard computer installed in each vehicle to assess driving performance

- Data sent wirelessly back to HQ for reporting

- Real-time audible feedback puts drivers in control of performance
Unsafe backing

Estimated 85% of all EMS collisions occur while vehicle is in reverse.

Rear bumpers alone can cost upward of $1200

Audible tone alerts driver that spotter has not verified safe back up situation.
Road Safety Works with Your Agency

- You define the safe driving conditions for your service (control your parameters)
- You monitor and provide feedback on elements that are critical to your organization
- Every unique driver is identified
Data upload and reporting

Second-by-second data collected onboard is fed to central computer.

Multiple reports are available for management analysis and creation of action plans.
ABC’s of Safe Driving

Driver grading system
Average miles
Between
Counts (violations)

Identify your drivers
Reward safe drivers
Manage the exceptions
Immediate, Radical Improvement

Source: Real World Application of an Aftermarket Driver Human Factors Real Time Auditory Monitoring and Feedback Device: An Emergency Service Perspective; Nadine Levick, Larry Wiersch, Michael E. Nagel
Vehicle Response analysis

- Second-by-second response data analysis:
  - Speeds
  - Braking
  - Overforce occurrences
  - Lights and sirens
Road Safety Provides Cost Savings

Save money on maintenance and insurance
Results at Emergency Medical Care

- Collisions reduced by 31% over 3 years
- Cost per claim reduced by 75%

Source: EMC internal analysis
Results at RAA

- $1,364 annual maintenance savings per vehicle
- 20% increased vehicle life expectancy
- 28% decrease in crash related repairs
- 450,000 miles between at fault events

Results at LifeCare Ambulance

- Insurance premiums reduced by 30%
- Over 3,000,000 miles with no injury crashes

Source: LifeCare Ambulance internal analysis
Results at Metropolitan EMS

- 20% reduction in fleet maintenance costs
- 1.9 million miles between crashes
- Incident severity dramatically decreased
- No increase in response times

Source: Metropolitan EMS internal analysis
Return on Investment

Customers have reported:

- ROI of initial investment within 8-24 months
- Over $1500 savings in maintenance per vehicle
- Vehicle life expectancy increased by 20%
- Significant reductions in insurance
- $300 - $1300 in fuel savings per vehicle
What positive impact could RescueNet Road Safety have for your Service?