

Role of the EMS Safety Officer



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MONOC Mobile Health Services



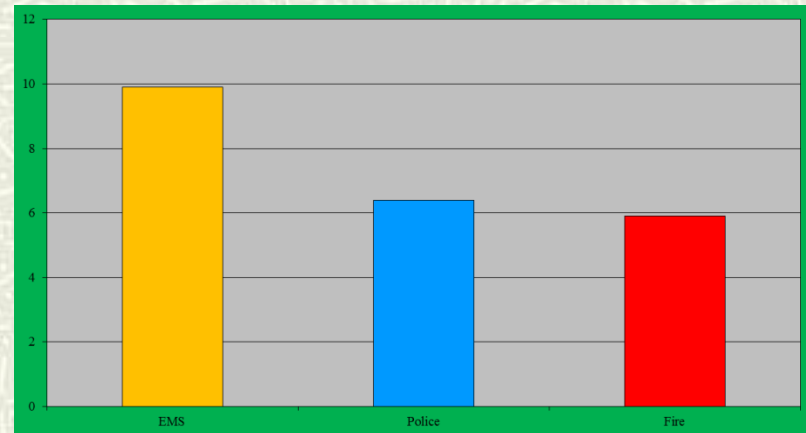
Why have an EMS SO?

- # **Create a safer working environment for the employees**
- # **Comply with regulations and standards**
 - **OSHA / PEOSH**
 - **NFPA**
 - **FHA**
 - **ASTM**
 - **DoH ***
- # **Reduce costs**
 - **Studies show safeguarding has a cost benefit**
 - **Liberty Mutual study: save \$3 for every \$1 invested in safety programs**
 - **OSHA claims savings of \$6 for every \$1**



EMS Injuries

- # Higher than the injury rate for any private industry tracked by the DoL
- # 34.6 injuries/100,K F/T workers per yr
- # 1.5 x higher than fire fighters
- # 5.8 x higher than other health workers
- # 7 x the nation average





Job of the Safety Officer





Responsibilities

- # Implement programs to provide a safe environment for the employees, visitors and patients of the agency.
- # Reduce costs
- # Protect the **ASSETS** of the organization.



Where to start?

- # Look at regulations
- # Usually in response to an accident / near miss
 - Documents
- # Think proactively
 - If it looks unsafe: it probably is





Conduct a RA/HVA

- # Gather info
- # Get documents
- # Take pictures
- # Look at videos
- # Training records
- # Hx of device
- # Ask for help





The HVA

- # How dangerous is it?
- # How often will it happen?
- # What happens if it happens?





OSHA can be helpful...?

OSHA's 2011 TOP TEN Most Frequently Cited Violations

1. Scaffolding (C)
2. Fall Protection (C)
3. Hazard communication
4. Respiratory protection
5. Lockout/tagout
6. Electrical: wiring
7. Powered industrial trucks
8. Ladders (C)
9. Electrical systems design
10. Machine guarding

C = Construction standard





OSHA says:

- # Section 5(a)(1) of the OSH Act, often referred to as the General Duty Clause, requires employers to "furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees".





What to focus on

**F
R
E
Q
U
E
N
C
Y**

HIGH



LOW

<i>HIGH FREQUENCY LOW SEVERITY</i>	<i>HIGH FREQUENCY HIGH SEVERITY</i>
<i>LOW FREQUENCY LOW SEVERITY</i>	<i>LOW FREQUENCY HIGH SEVERITY</i>

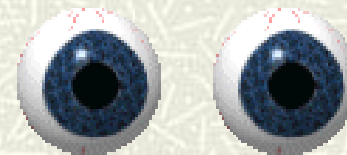


HIGH

SEVERITY



Some things to look at:



- # MVCs
- # Employee Injuries
- # Infection Control
- # Stretcher Drops
- # Patient Injuries
- # High Risk activities.



Sentinel events



- # Near miss – www.emseventreporting.com
- # Close calls - www.firefighterclosecalls.com
- # **Failure to respond**
- # **Injuries**
- # Equipment failure
- # Patient Elopement

1 serious injury

29 minor injuries

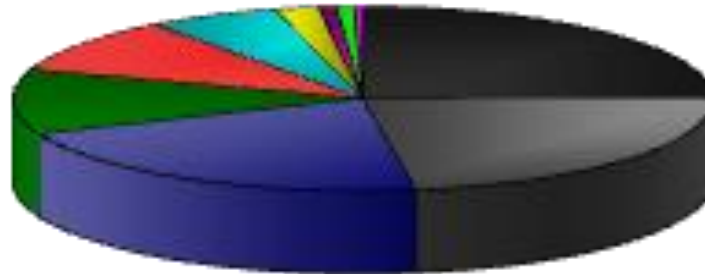
300 near miss events

Problem:

57% are side or rear impacts



Type of MVC



N-246

- | | | |
|----------------|---------------|-------------|
| ■ Vs. Object | ■ Rear End | ■ Broadside |
| ■ SD Sideswipe | ■ Parked Veh | ■ Other |
| ■ OD Sideswipe | ■ Backed Into | ■ Unknown |
| ■ Head-on | | |

Solution: Redesign for hi-vis





One option





Another option

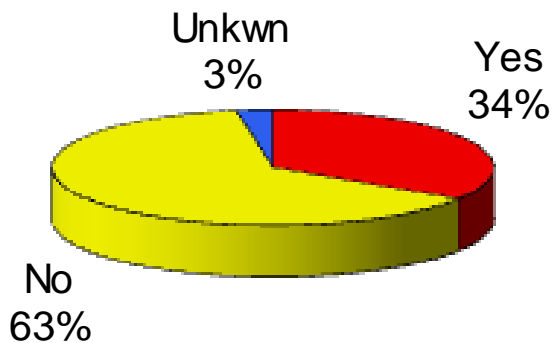




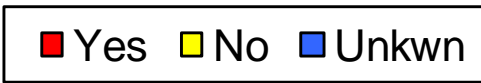
Problem:

High rate of MVCs with L&S

Responding with Lights & Sirens



N=575





Solution: Enforcement of policies



704 - Use of Emergency Vehicle Warning Devices - Microsoft Inter...
 https://www.monoc.org/employee/polview.cfm?id=68

[CLOSE WINDOW](#)

POLICY NUMBER: 704
APPROVED BY: Vince Robbins
EFFECTIVE DATE: January 1, 2001

TITLE:
 Use of Emergency Vehicle Warning Devices

POLICY:
 EMS vehicle warning devices (flashing/rotating lights, strobes, and/or sirens) shall not be utilized after a responding MONOC EMS vehicle arrives at the scene of an emergency and makes patient contact, unless, in the opinion of the EMS team or Medical Control, the benefits of the use of same outweigh the risks of their utilization.

This policy, and/or any compilation of policies is/are NOT a CONTRACT of employment. MONOC is and remains an "At-Will" Employer. NO guarantees of continued/future employment, or employment and/or continued employment under any particular terms and/or conditions are expressed or implied herein.

New York State State Agencies
 Department of Health
 Information for a Healthy New York

You are Here: [Home Page](#) > [Bureau of EMS Home Page](#) > The Operation Of Emergency Medical Services Vehicles

The Operation Of Emergency Medical Services Vehicles

Bureau of EMS Policy Statement	
Policy Statement #	00-13
Date	11/01/00
Subject	Re: The Operation Of Emergency Medical Services Vehicles
Supersedes/Updates	88-20 & 98-12 & 99-02

Emergency Vehicle Operations for Ambulances and Other EMS Response Vehicles Including a Model Standard Operating

Purposes

1. To describe the legal requirements in New York State for driving ambulances and other EMS response vehicles.
2. To establish a standard in New York State for EMS response vehicle emergency operations.
3. To create a climate to help reduce the number of crashes and accidents and thereby reduce the injuries and property damage of emergency vehicle emergency operations.
4. To provide information to develop educational programs for EMS emergency vehicle operators.

Background

Recently an epidemic of ambulance vehicle crashes and accidents has been identified. The magnitude of the problem requires awareness of the problem and take immediate steps to reduce the potential for these accidents.

New York State Department of Motor Vehicle statistics illustrate a consistent yearly frequency of 400 ambulance accidents or day. These statistics also show that most of these accidents are avoidable. Based on these statistics, if each EMS response vehicle at a controlled intersection, 75% of all of these accidents could be prevented.

EMS emergency response vehicles must be operated in a manner that provides for due regard and the safety of all persons on the roadway. The welfare shall always have priority over unnecessary speed or hazardous driving practices while enroute to an incident or to a patient. New York State Law (V&T) authorizes *privileges* that ambulance and other emergency vehicle drivers may use during an emergency operation. These privileges include the use of Emergency Medical Dispatch (EMD), EMT and Advanced EMS training and the patient treatment modalities available during emergency operations.

Legal Background

Problem: Poor seatbelt compliance





Solution: Educational programs

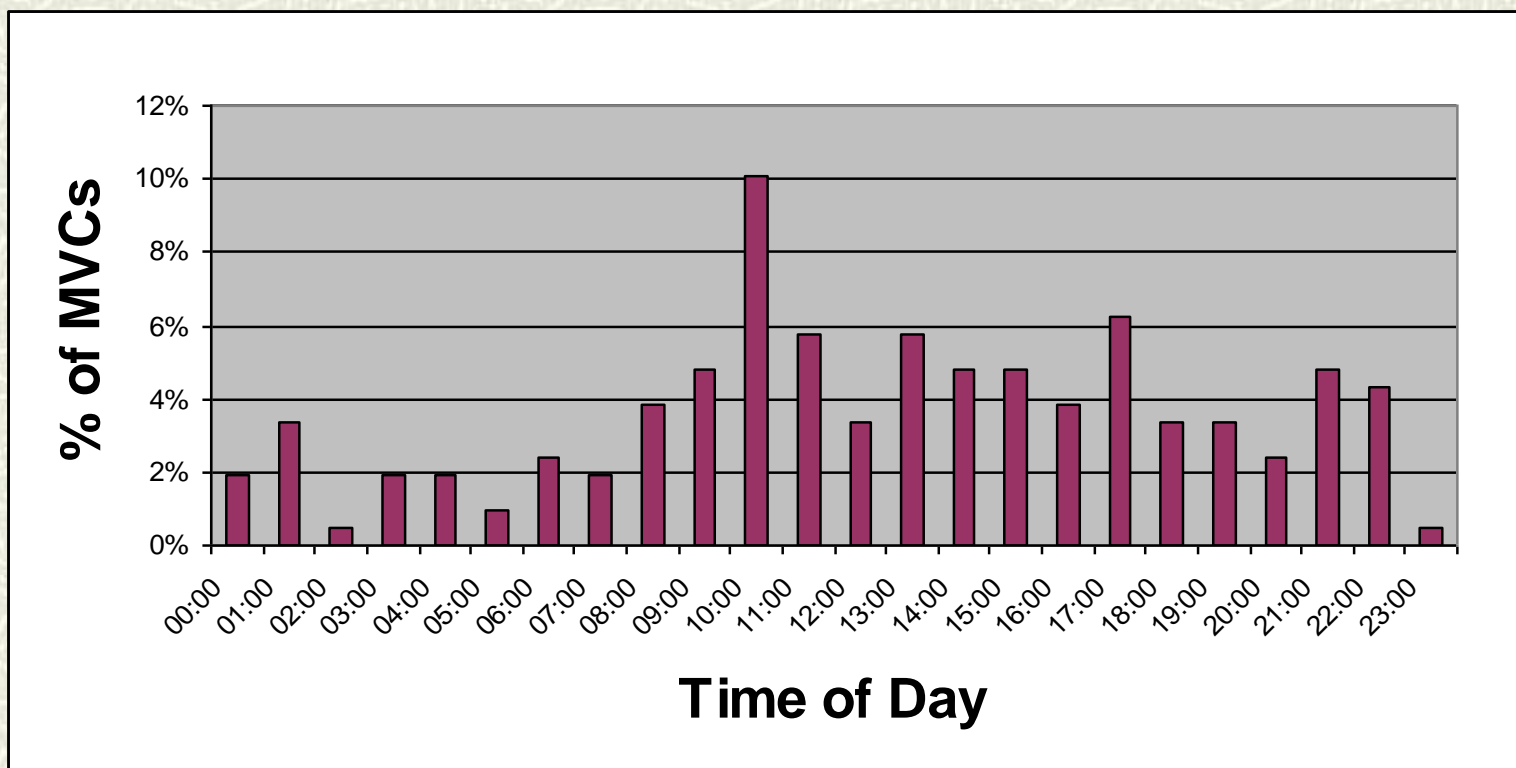








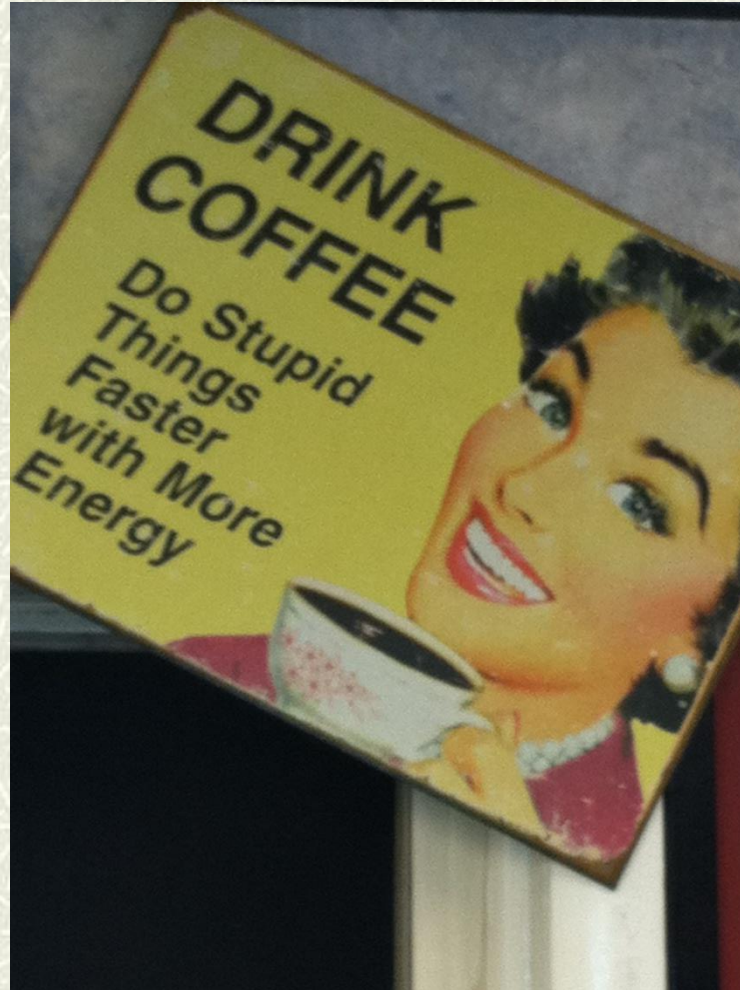
When collisions occur



N= 180



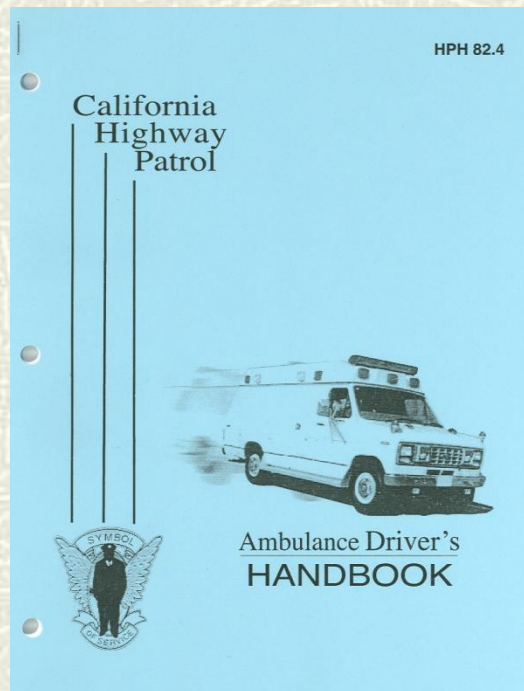
Fatigue





How to prevent MVCs

- # Screen Driver Abstracts
- # Everyone takes CEVO
- # Have policies related to operating the ambulances
- # Use technology
 - The MDCs advise management when the unit is speeding
 - The DriveCam enables us to review collisions and driver behavior





Federal Motor Carrier Safety Admin, DOT SS 382.303 post accident drug testing criteria

Collision involving loss of life or
Bodily injury with immediate medical treatment away
from the scene or
Disabling damage to any motor vehicle requiring tow



Sometimes we can't prevent it



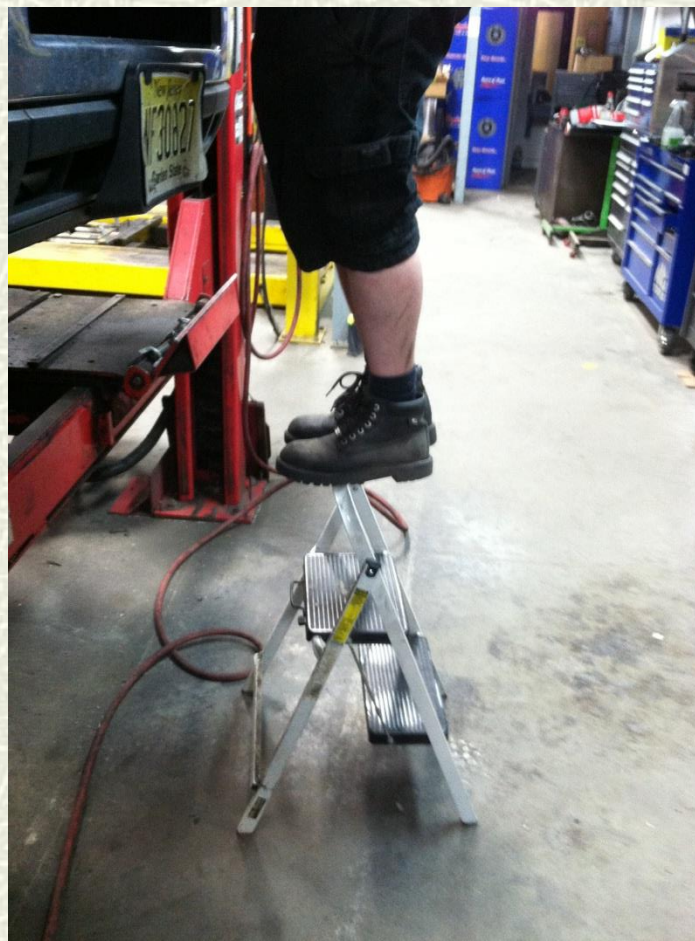


Sometimes we can





Look everywhere





Walk around





Know your equipment





Inservice / OOS



Missing bolt,
nut and spring



Problem: Worker Comp Cases are not



Year	Cases
2010	245
2011	212
2012	216

OSHA's Form 300A (Rev. 01/2004) Summary of Work-Related Injuries and Illnesses

Year 2007
 U.S. Department of Labor
 Occupational Safety and Health Administration
 Form approved OMS no. 1218-0126

All establishments covered by Part 1904 must complete this Summary page, even if no injuries or illnesses occurred during the year. Remember to review the Log to verify that the entries are complete. Using the Log, count the individual entries you made for each category. Then write the totals below, making sure you've added the entries from every page of the log. If you had no cases write "0."

Employees former employees, and their representatives have the right to review the OSHA Form 300 in its entirety. They also have limited access to the OSHA Form 301 or its equivalent. See 29 CFR 1904.36, in OSHA's Recordkeeping rule, for further details on the access provisions for these forms.

Number of Cases			
Total number of deaths	Total number of cases with days away from work	Total number of cases with job transfer or restriction	Total number of other recordable cases
0 (G)	131 (H)	78 (I)	334 (J)

Number of Days	
Total number of days away from work	Total number of days of job transfer or restriction
3,351 (K)	4,068 (L)

Injury and Illness Types			
Total number of... (M)	(1) Injury	(4) Poisoning	(7) All Other Injuries or Illnesses
	425	2	
	9	0	
		0	
	13	04	

Post this Summary page from February 1 to April 30 of the year following the year covered by the form

Public reporting burden for this collection of information is estimated to average 50 minutes per response, including time to review the instruction, search and gather the data needed, and complete and review the collection of information. Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number. If you have any comments about these estimates or any aspect of this data collection, contact: US Department of Labor, OSHA Office of Statistics, Room N-3644, 320 Constitution Ave, NW, Washington, DC 20210. Do not send the completed forms to this office.

Establishment information

Your establishment name Purdue University

Street 401 South Grant Street

City West Lafayette State IN Zip 47907

Industry description (e.g., Manufacture of motor truck trailers)
Higher Education

Standard Industrial Classification (SIC), if known (e.g., SIC 3715)
802211

OR North American Industrial Classification (NAICS), if known (e.g., 336212)
802211

Employment information

Annual average number of employees 20,342

Total hours worked by all employees last year 27,525,278

Sign here

Knowingly falsifying this document may result in a fine.

I certify that I have examined this document and that to the best of my knowledge the entries are true, accurate, and complete.

Joe Mikesel VP - PhysFac
Company executive Title

765-494-8000 1/31/2008
Phone Date



Solution:

Ergonomic assessments and training

- # Reviewing training at orientation
- # Ergo assessments of work stations
- # Updated data collection for W/C cases

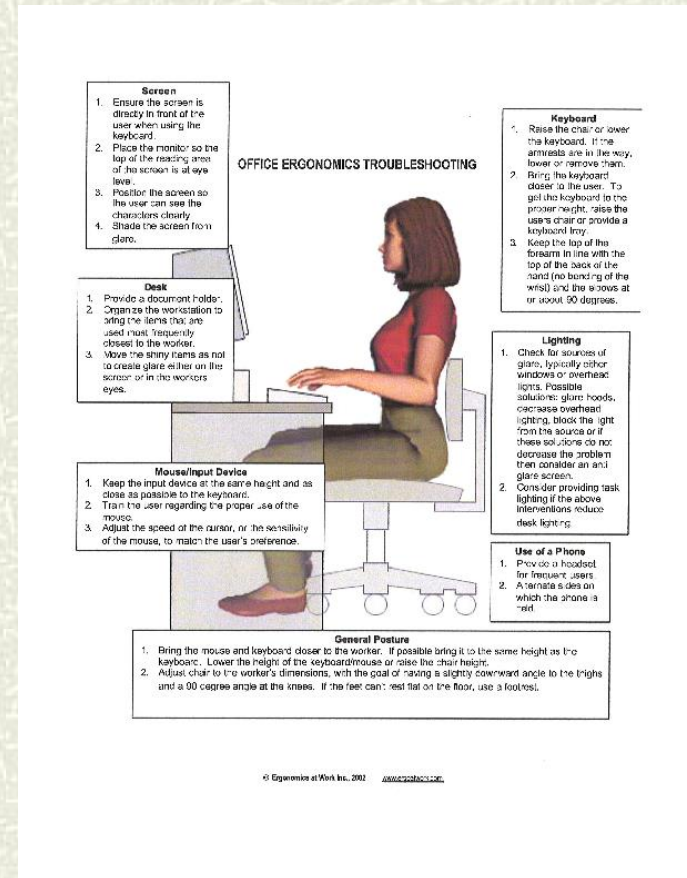




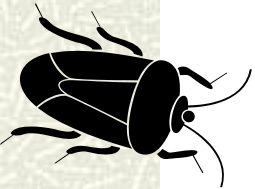
Figure I-BEFORE....



Figure J-AFTER!



Critters



Low Levels of Resistant Bacteria Found in Chicago-Area Ambulances

Page 1 of 3



Low Levels of Resistant Bacteria Found in Chicago-Area Ambulances

1 week ago

2 Comments

Posted in [News](#), [Research](#), [Research & Studies](#), [Environmental Hygiene](#), [Staphylococcus Aureus](#), [Environmental Surface Cleaning](#), [Cleaning](#)

[Print](#)

Treatment areas of ambulances fared well when tested for dangerous bacteria, according to a new study published in the April issue of the American Journal of Infection Control. Approximately 6 percent of sites sampled in Chicago-area ambulances tested positive for *Staphylococcus aureus* (*S. aureus*), a bacterium that can cause serious infections and can easily acquire resistance to potent antibiotics.

A team of researchers from Lewis University in Romeoville, Ill. took samples from 26 areas inside of 71 ambulances from 34 different Chicago-area municipalities. The team recovered 100 *S. aureus* isolates from more than 1,800 sites that were sampled (less than six percent). At least one *S. aureus* sample was found in 69 percent of ambulances tested. Of all isolates detected, 77 percent showed resistance to at least one commonly used antibiotic, and 12 percent were identified as the "superbug" known as methicillin-resistant *S. aureus* (MRSA).

The authors state, "Of interest, only 5 of 71 ambulances tested positive for MRSA in at least one location (yielding the 12 MRSA isolates studied). Although there have been few previous studies of front-line advanced life support ambulances, a higher frequency of suspected MRSA in ambulance fleets has been reported previously."

"These results indicate that first responders are doing a good job of protecting their patients," adds James Rago, PhD, lead study author and assistant professor of biology at Lewis University. "The research is significant because improper



Evaluate new safety devices







Exposure Hazard Control Plans

- # Must be reviewed and updated annually or as needed
- # Document annually, consideration and implementation of appropriate commercially available and effective safer medical devices
- # Solicit input from non-managerial employees responsible for direct patient care who are potentially exposed





How do we clean things





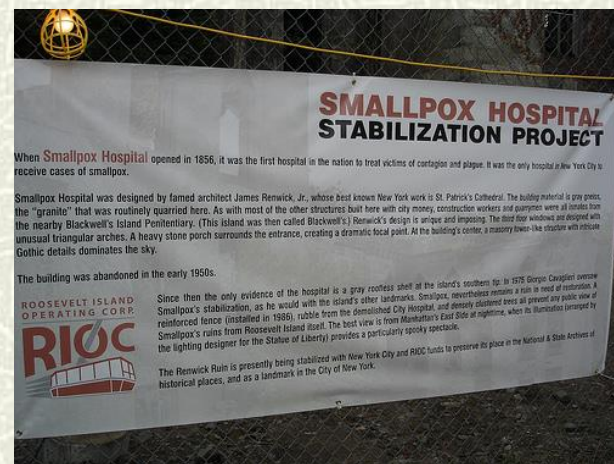
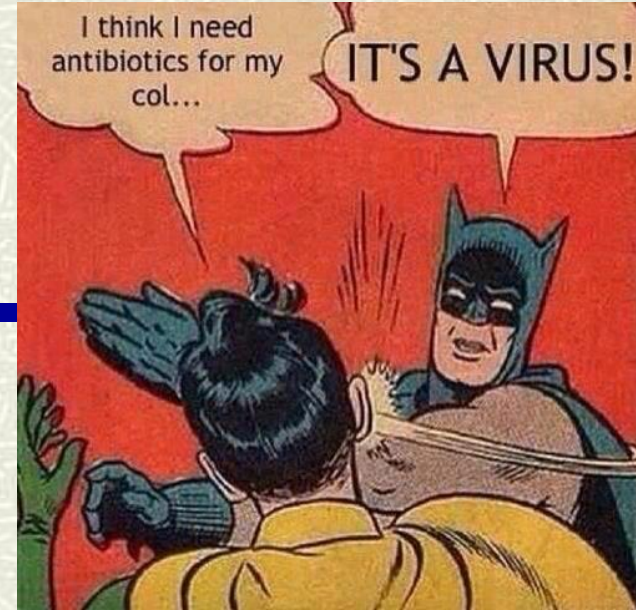
High Percentage of Contamination Found in “Cleaned” Trauma Equipment

MERGINET—A study conducted in the United Kingdom illustrates the need to thoroughly clean and decontaminate ambulance equipment used in trauma situations, and to assess decontamination techniques to insure their effectiveness.

- ✦ Researchers tested extrication boards, cervical collars, straps/buckles, box splints, head blocks and head boards used by three regional ambulance services and six emergency departments over a two-week period to determine the presence of blood on equipment left as ready for patient use. The investigators visibly inspected equipment for blood, but also tested for blood contamination using a forensic technique—the Kastle-Meyer technique which is very specific for blood, is not toxic to tested surfaces, and is used by UK police to identify blood at crime scenes.
- ✦ After testing equipment surfaces most likely to come in contact with patients' skin surfaces, such as the medial side of head blocks, the inner side of head straps, the patient side of straps, buckles and extrication boards, and the back and chin areas of cervical collars, the researchers found the Kastle-Meyer test identified blood contamination on 42 percent of the equipment not visibly contaminated. An additional 15 percent of the equipment had visible blood contamination that researchers confirmed as blood through testing.
- ✦ Overall, 57 percent of the equipment tested in this two-week period remained contaminated despite being identified as ready for reuse, the study authors noted.
- ✦ When the investigators assessed their findings according to who did the cleaning, 57 percent cleaned by ambulance personnel was only slightly less contaminated—42 percent—than that cleaned by hospital staff—52 percent.
- ✦ “The practice of washing heavily contaminated equipment by hosing with cold water and wiping with alcohol impregnated wipes,” the authors wrote.
- ✦ However they added that cold water may not remove lipid viruses such as Hepatitis B and C, which require a five-minute contact period with the surface area to kill most bacteria. They recommend using a 1000 ppm level chemical disinfection for potentially contaminated surfaces or using disposable wipes.
- ✦ While the authors noted no recorded cases of infection from contaminated trauma equipment, they remind that, under ideal conditions, the Hepatitis B virus can survive on surfaces for up to seven days.
- ✦ The high percentage of contaminated equipment identified by this study highlights the need for EMS providers to reassess not only their decontamination practices but their rationale for reusing any blood-contaminated trauma equipment.
- ✦ The citation for the actual study is: Lee, J B, Levy, M, Walker, A. “Use of a forensic technique to identify blood contamination of emergency department and ambulance trauma equipment.” *Emergency Medicine International*

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Traditional vs Atypical Exposures





Information and Training

All employees with occupational exposure are required to participate in training provided at no cost during working hours

- # At the time of employment
- # At least annually thereafter
- # Upon changes to tasks or procedures



Record Keeping

Training records must be maintained for three years

- # Summary of the training session
- # Names and qualifications of persons conducting the training
- # Names and job titles of persons attending the training
- # Vaccines / declination forms



Sharp Injury Log

An employer must establish and maintain an injury log for 5 years

- # Type and brand of device (if a sharp)
- # Where injury occurred
- # Explanation of how the incident occurred



Wake up, we're almost done





Roadway Safety

**You know those orange
cones they put on the
highway for you to knock
down? I just beat my
high score last night!**



Hi Vis clothing





Documentation

TabletPCR 3/8/2013 8:57:02 AM

Trip Patient Subjective Objective Vital Signs Interventions **Outcome** Review

Outcome
Times
Signatures

Disposition	
Outcome SM	
Cancel Reason	
Barriers To Care	
Destination Delay	
Pts Transferred to A...	
Emerg. Dept Disp.	Not Availa...
Hosp. Disposition	Not Known
Protective Equip. U...	
Transport Agency	
TRANSPORT UNI	
Patient Positioned	
Transported On	
Transport Priority	
Priority Changed To	

Pers. Protective Equip. Used: (8 of 29)
Select multiple items in the list.

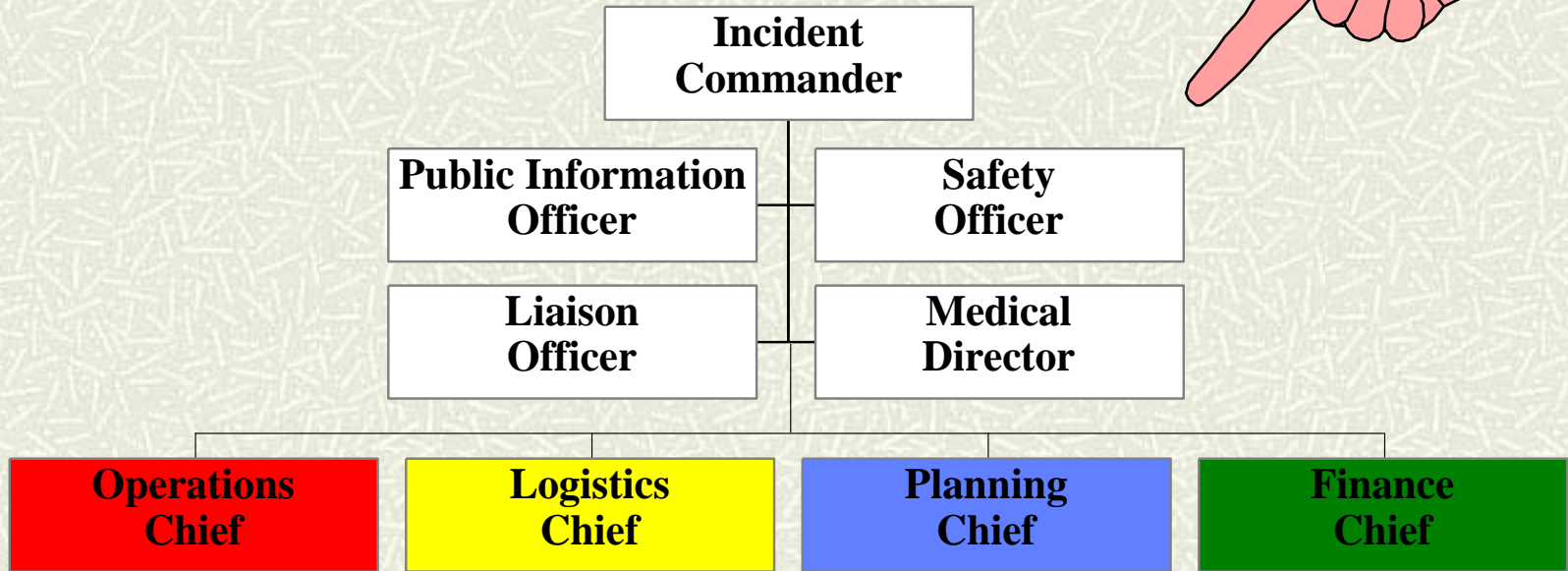
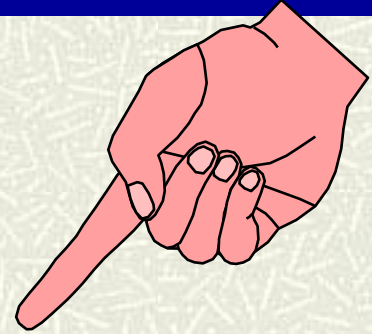
- Eye Protection
- Gloves
- Gown
- Mask
- Not Applicable
- Other
- Reflective Safety Vest

Unselect All

Inbox **Complete PCR** **Help** **Options** **Attach** **Previous** **Next**



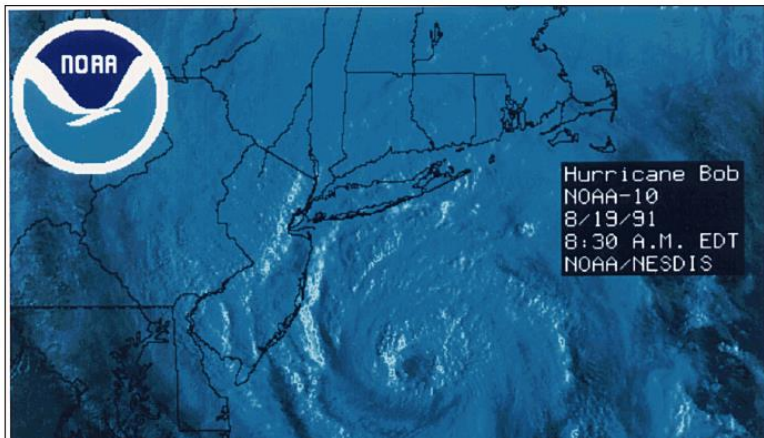
Where does the SO fit in ICS?





New plans

State of New Jersey
**Tropical Storm/Hurricane Management Plan for
Emergency Medical Services**



EMS Task Force

Task Book:
Employee Job Aid

Position: Safety Officer/Assistant Safety Officer

Date: August 2006



FEMA

*Leading America to prepare for, prevent, respond to, and
recover from disasters.*



Medical Plan

MEDICAL PLAN										1. Incident Name		2. Date Prepared		3. Time Prepared		4. Operational Period				
5. Incident Medical Aid Station										Medical Aid Stations		Location				Paramedics				
												Yes	No							
6. Transportation										A. Ambulance Services										
Name			Address				Phone			Paramedics										
										Yes	No									
B. Incident Ambulances										Name		Location				Paramedics				
												Yes	No							
7. Hospitals										Name	Address		Travel Time		Phone		Helipad		Burn Center	
												Air	Grnd.			Yes	No	Yes	No	
8. Medical Emergency Procedures																				

Developed in conjunction with the SO by the Medical Unit Leader under the Logistics Branch



Safety Analysis ICS 215a

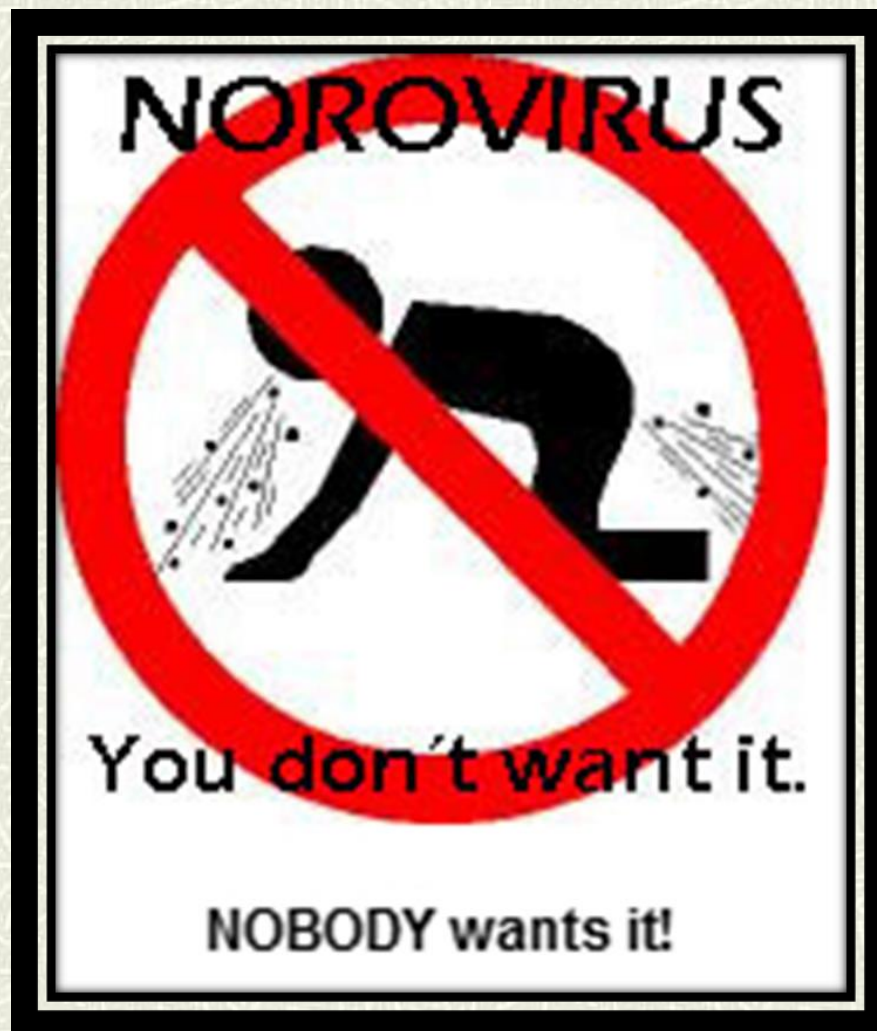
ICS-215A Incident Safety Analysis		Identified Risks										Date & Time: 7/26/10 0600-0600	Operational Period: 24 hours
Incident name - Operation Eagle Flag												Mitigation Actions	
Division/ Group/ Other Location	Work Assignments	No Sharps containers	Lifting and moving	Trip hazards	Transportation flow	Signage							
	MACH 1	X											Place container on MACH 1
	MACH 1		X										Label weight limit on MACH 1 liftgate Use spotter or safety harness
	Logistics crew		X										Identify number of people needed to set up each piece of equipment
	All areas			X									Avoid wires from communication cables and generators from becoming trip hazards
	Staging				X								Use signage to direct flow of traffic
	All areas					X							Non-potable water not labeled on sink in food tent. Door swing area not marked in MACH
	Trailers					X							Trailer lights not operational
ICS-215A All Risk	Prepared By: (Date & Position): Peter I. Dworsky, EMS TF Safety Officer												







EMS Camps





Have clear cut directions





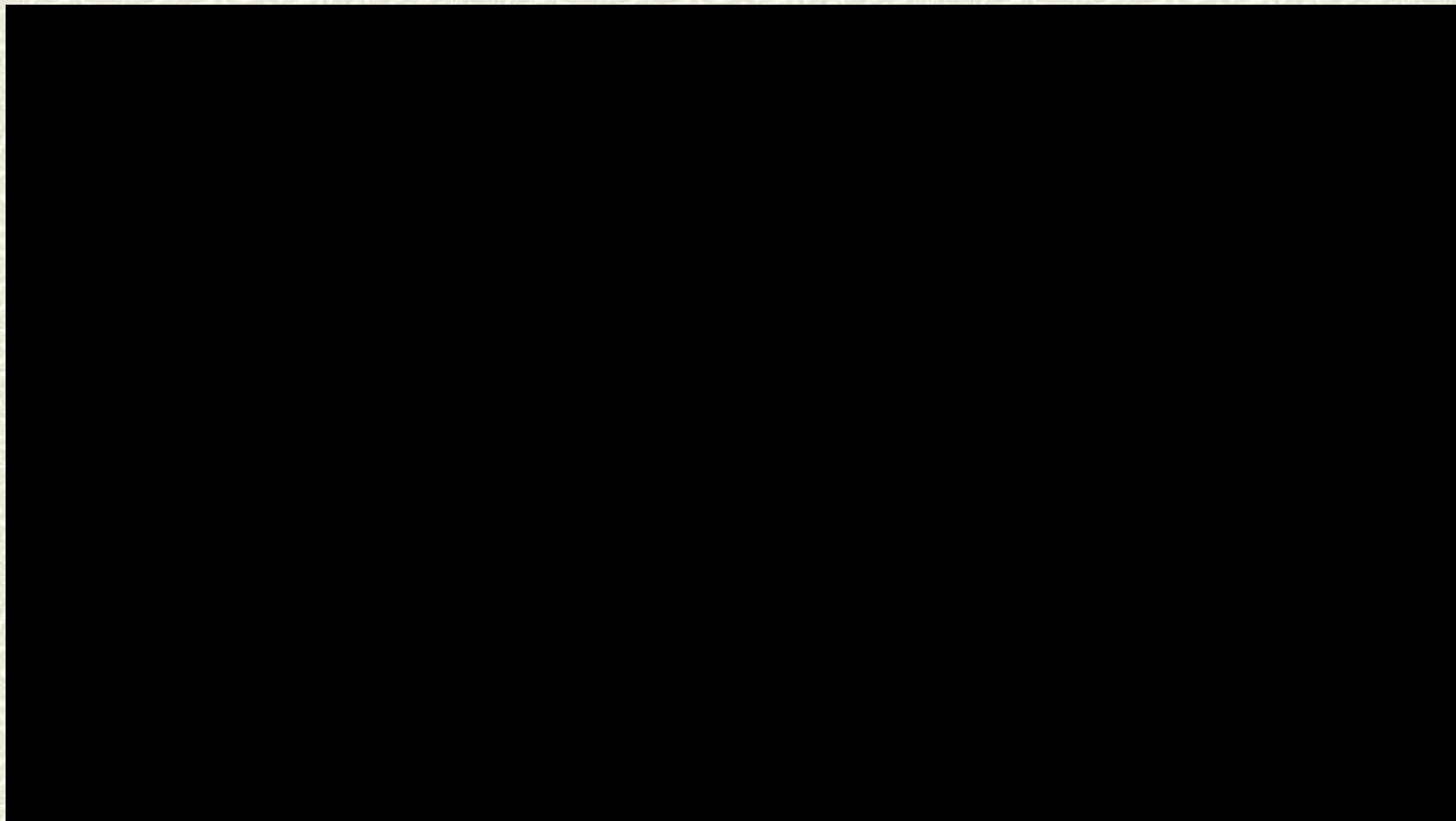
Safety Briefing Messages

- # Seat belts
- # Cell phones
- # Hi Vis clothing
- # Infection control



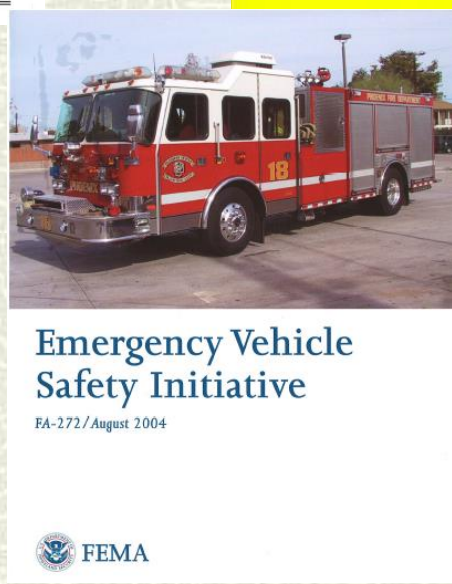
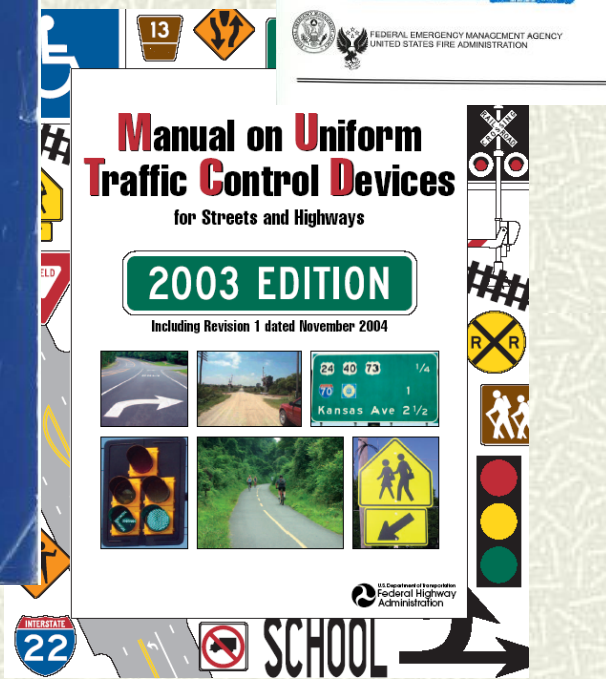
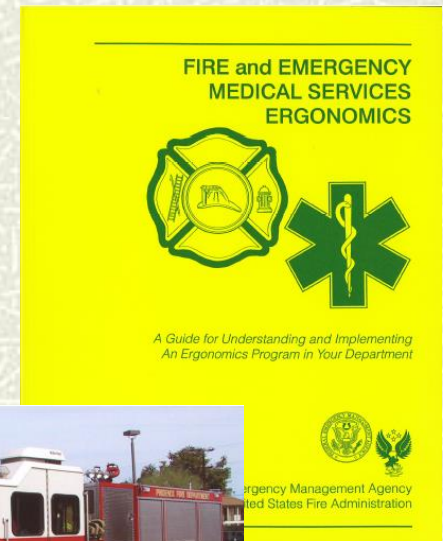
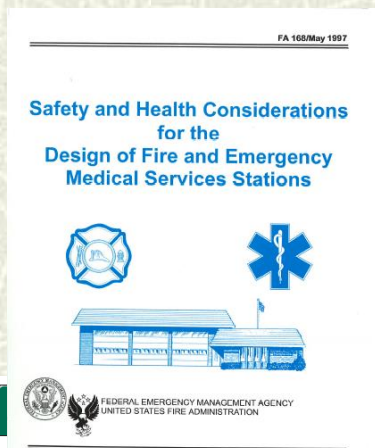
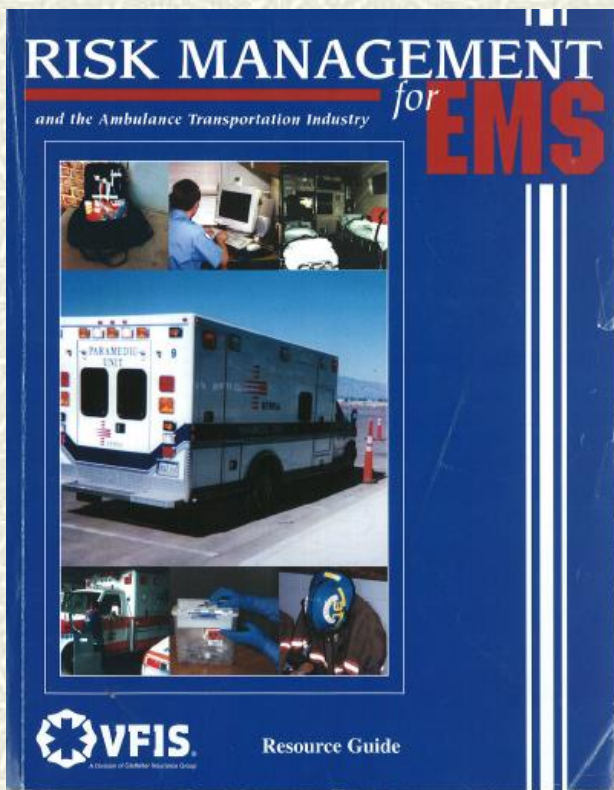
Siren Video –

www.monoc.org/siren-psa.cfm



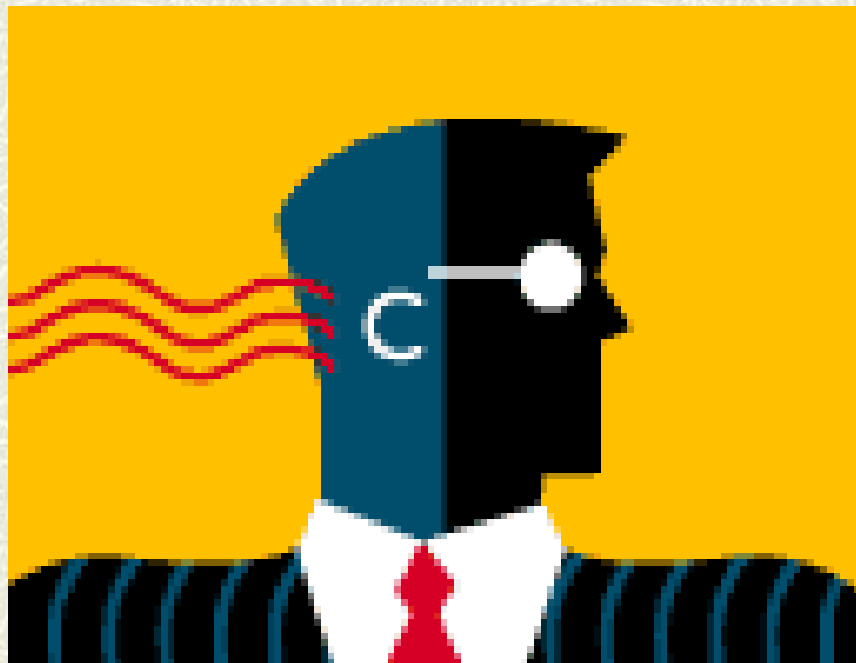


Some resources





QUESTIONS ?



Peter I. Dworsky

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