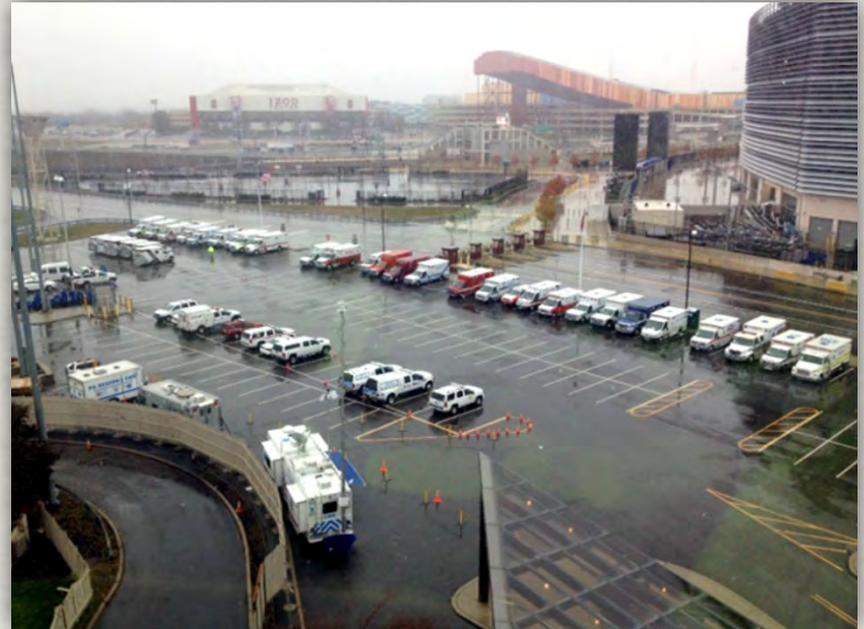




# Establishing the Multi-Casualty Incident Command System



The program highlights appropriate components of the National Incident Management System (NIMS) related to Emergency Medical Services



# Enabling Objectives

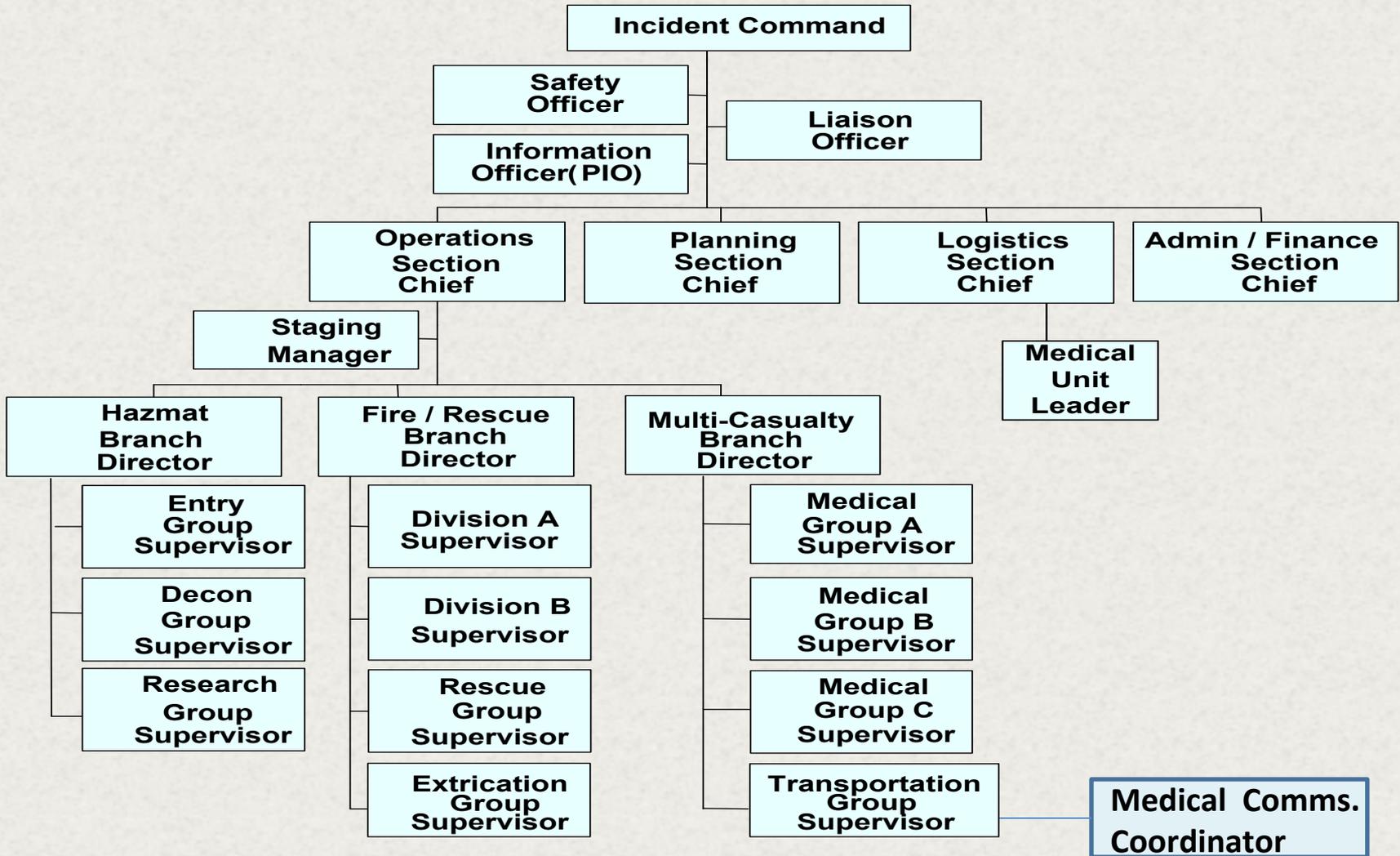
**Upon completion of this training the participant will be able to:**

- **Identify the positions and the organizational structure of the Incident Command System (ICS) as it applies to a Multi-Casualty Incident**
- **Explain the responsibilities of the first unit arriving on scene**
- **Explain patient flow through the ICS Multi-Casualty structure**

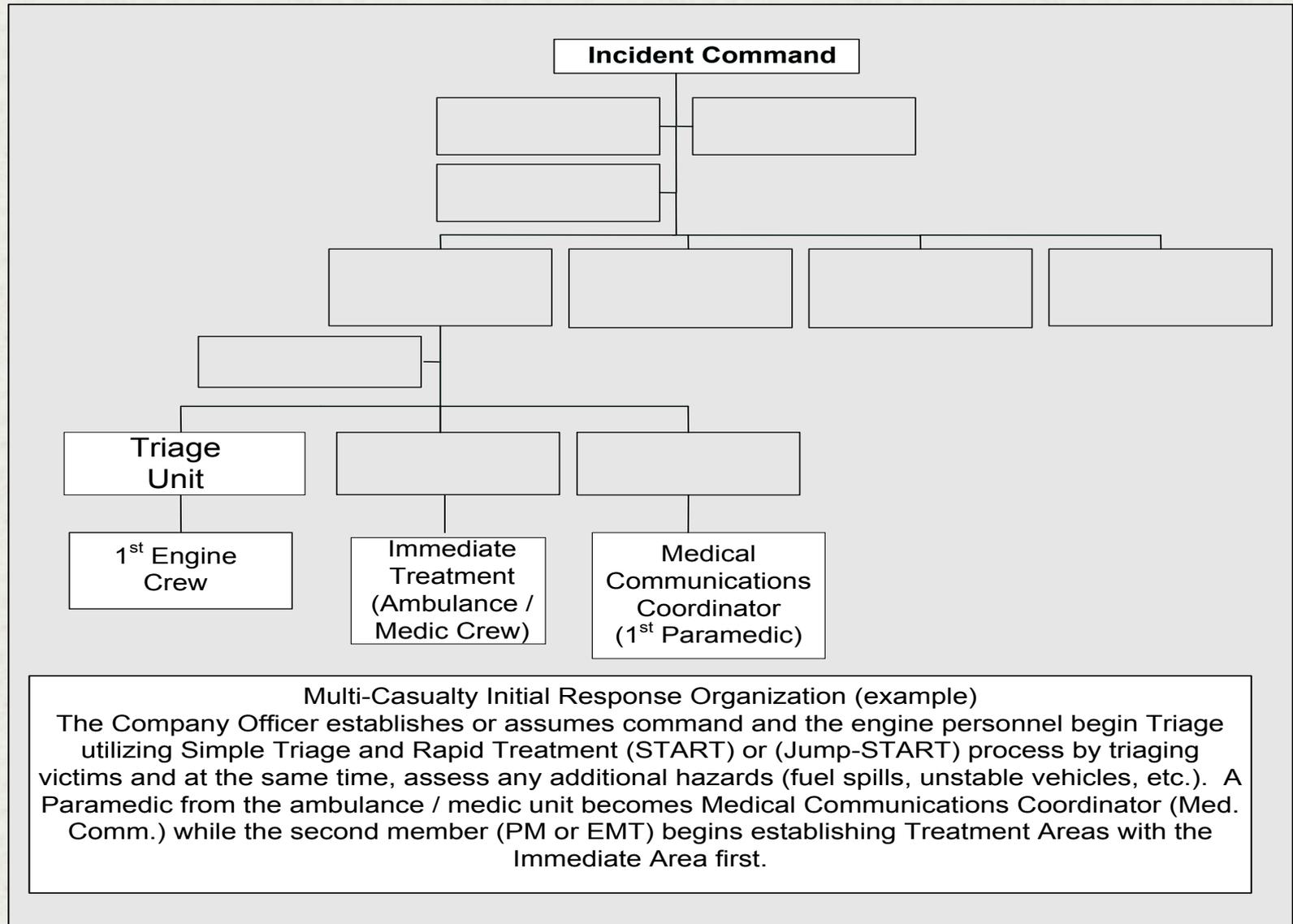


# National Incident Management System (NIMS)

## Expanded Organizational Structure



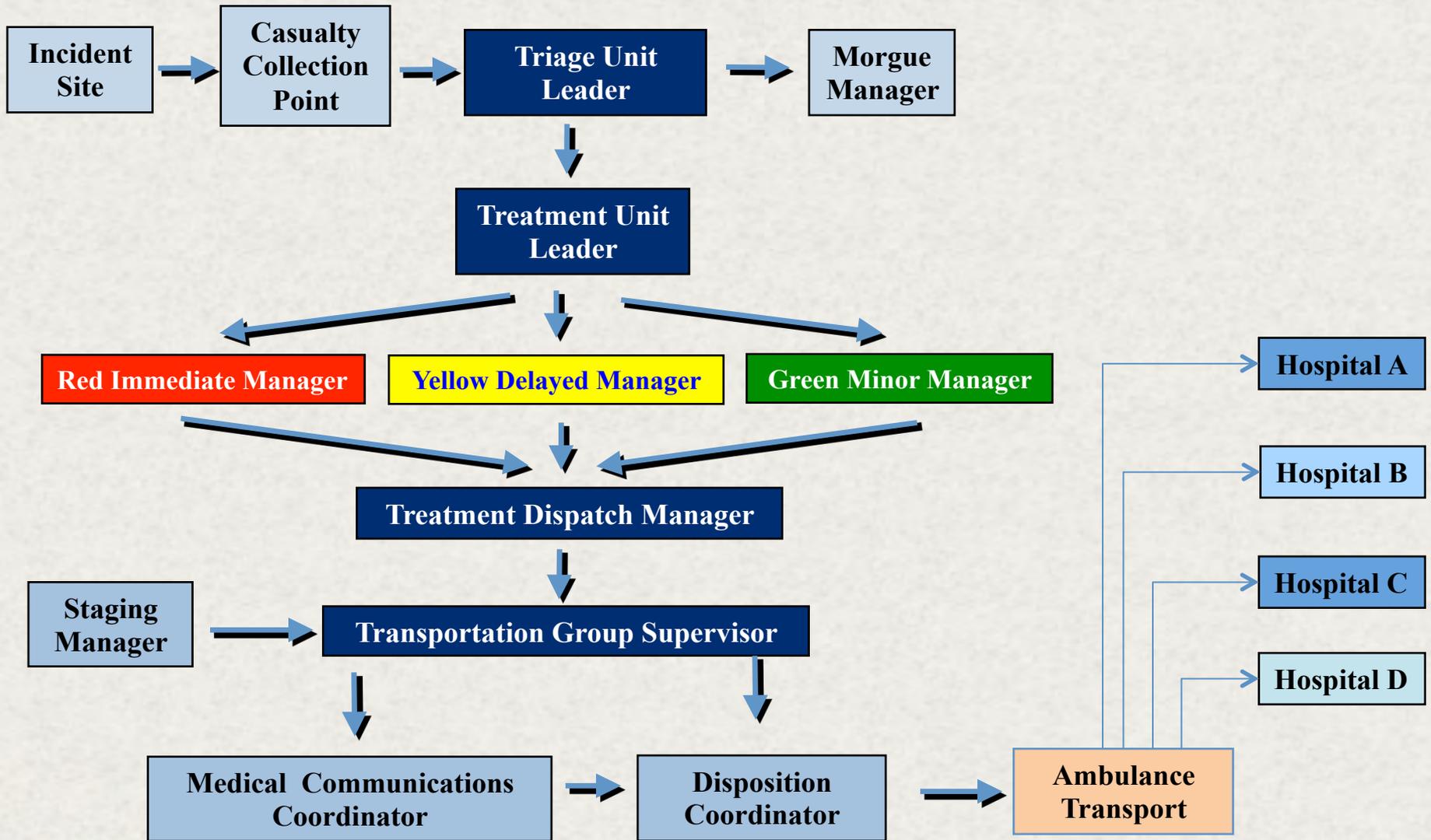
# Initial EMS Response



## Multi-Casualty Initial Response Organization (example)

The Company Officer establishes or assumes command and the engine personnel begin Triage utilizing Simple Triage and Rapid Treatment (START) or (Jump-START) process by triaging victims and at the same time, assess any additional hazards (fuel spills, unstable vehicles, etc.). A Paramedic from the ambulance / medic unit becomes Medical Communications Coordinator (Med. Comm.) while the second member (PM or EMT) begins establishing Treatment Areas with the Immediate Area first.

# Patient Flow



# First Unit/Incident Command

- Assess and Secure the Scene
- Ensure safety
- Establish or assume command
- Direct incoming units
- Request additional resources  
(Order Early and Order Big)
- Establish Triage Unit Leader



# First Unit/Incident Command

- Establish Medical Communications Coordinator
- Notify hospitals (EMRC)
- Establish initial Treatment Area
- Establish Transportation Group  
(when personnel available)
- Maintain the 5 S's of the Multi-Casualty Incident:
  - Safety, Size-up, Send, Set Up, and START/JumpSTART Triage



# Triage Unit Leader



- Coordinate with Treatment Unit Leader to determine if triage will be conducted in:
  - Incident/extrication area
  - Designated Casualty Collection Point (CCP)
  - Treatment area
- Approximate number and severity of victims
- Report this information to command
- Supervise:
  - Triage Teams
  - Porter Teams (Litter Bearers)
  - Additional resources



# Triage Unit Leader



- Ensure safety of all personnel
- Ensure triage of patients is based on START or JumpSTART Algorithm
  - Primary Triage (ribbons only)
- Communicate resource requirements to IC or Medical Group Supervisor
- Provide frequent progress reports
- Establish Morgue if necessary



# Treatment Unit Leader

- Identify and establish Treatment Areas
  - Consider weather, size, accessibility, safety, and hazmat potential
- Assign Treatment Area Managers
- Notify IC of Treatment Area locations and give status report



# Treatment Unit Leader

- Establish communications with Triage Unit Leader
- Ensure each patient is issued a MIEMSS Triage Tag and does **NOT** leave area without one attached
- Utilize Patient Tracking Forms and/or Treatment Area Manager logs to track patients for each area



# Treatment Unit Leader

- Request sufficient medical caches and supplies as necessary
- Provide access for Medical Care Support Units (MCSU)
- Establish communications with patient Transportation Group Supervisor
  - Consider delegating this task to Treatment Dispatch Manager
- Maintain accountability/safety for all patients and personnel
- Assess mental and physical well being of personnel



# Treatment Area Managers

Red Immediate Manager

Yellow Delayed Manager

Green Minor Manager

- Define Entry and Exit points
- Clearly identify each area and delineate each area's boundaries.
- Morgue needs to be distant from treatment areas
- Prepare equipment and supplies
- Brief Treatment Crew(s)
- Ensure Secondary Triage is completed
- Ensure each patient has been issued a Triage Tag
- Prepare and maintain a Treatment Log Sheet



# Treatment Dispatch Manager

- Receive information from Treatment Area Managers
- Establish and maintain communications with Medical Communications Coordinator
- Coordinate with Treatment Managers and Medical Communications Coordinator to transport patients to appropriate medical facilities
- Utilize Triage tags for patient movement and/or mark the hospital destination on Transport Record of the Disaster Triage Tag
- This position is often combined with another position



# Transportation Group Supervisor

- Establish One Way Traffic Flow: There should always be a clear, unobstructed flow of transport units in and out of the transport area. Transport units should pull up, load, leave, but NOT execute a back-up of the vehicle
- Prepare and maintain a Log Sheet
- Establish exit point
- Assign *Communications (SYSCOM/EMRC) and Air/Ambulance Disposition Coordinators*



# Medical Communication Coordinator

- Contact EMRC/Communications Center
  - Advise type of incident
  - Provide location
  - Describe incident
  - Provide approximate patient count (by priority if possible)
  - Request call down of hospitals
- Establish Communications Log



# Medical Communication Coordinator

- Receive bed availability from Communications Center
- Communicate availability to Ambulance Disposition Coordinator
- Update hospitals on incident status every 30 minutes
- Advise hospital(s) when incident is terminated



# Air/Ground Ambulance Disposition Coordinator

- Receive bed availability from Medical Communication Coordinator (EMRC)
- Prepare log sheet for each hospital and their “tickets”
- Update information on Patient Tracking forms

MONTGOMERY COUNTY INCIDENT MANAGEMENT SYSTEM © TRANSPORT RECORDER			PAGE	OF	
1	  	2	  	3	  
4	  	5	  	6	  
RECEIVING MEDICAL FACILITY		7	  	8	  
MEDICAL GROUP					

# SIMPLE MULTI-CASUALTY INCIDENT

Transport Supvr. and Med Comm. Coord. – **Do Not Duplicate** these roles in the incident



Loaders may be actual ambulance crew



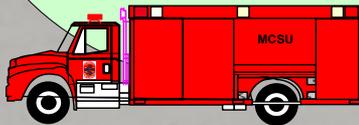
Patient Trans Recorder

Patient Transport Recorder – Reports to Ground Amb Coord. Gatekeeper for all ground evacuated patients



Staging Mgr

Staging Manager reports to Ops Section.



Med Supply Coord

Green Priority 3 Minor Treatment Area

Each Treatment Area has a Manager

Yellow Priority 2 Delayed Treatment Area

Red Priority 1 Immediate Treatment Area

Casualty Collection Point



Patient Porters



Patient Porters

Triage Crew 2



Triage Crew 1



Medical Group Supvr.

Patriot Bus Company

Giant Bus Company

1<sup>ST</sup> ENGINE



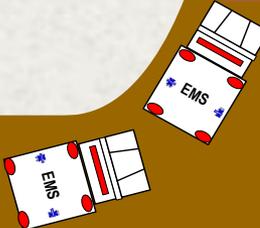
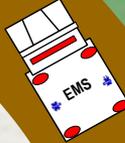
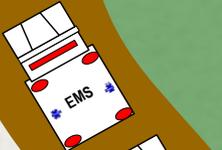
Triage Unit Leader



Command Post with IC and EMS Branch



One Way

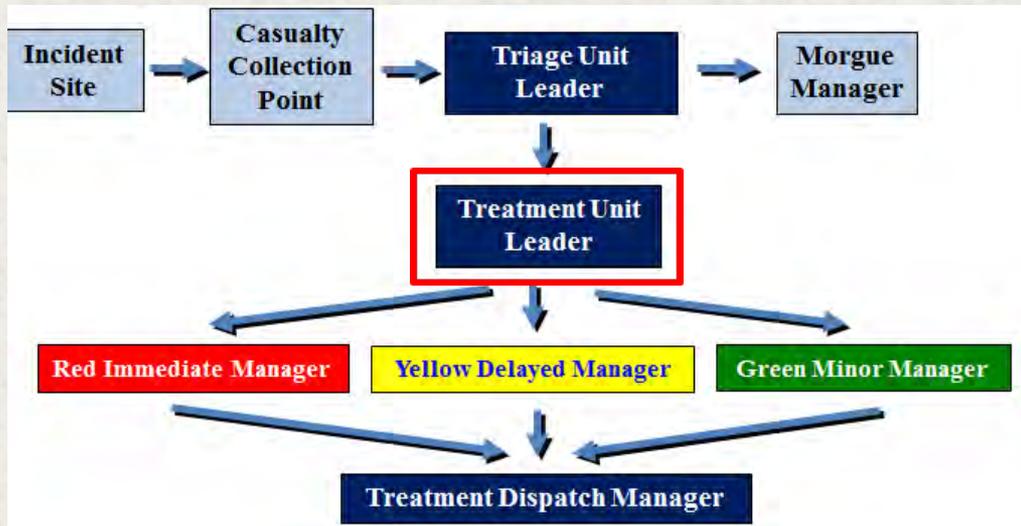


# Tracking Patient Flow



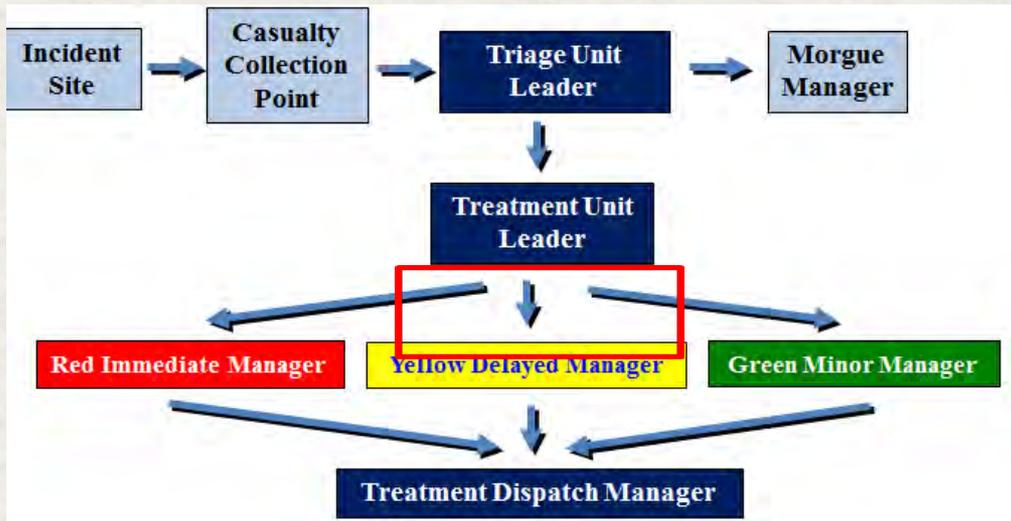
# Treatment Unit Leader

- Attach triage tag to ribbon
  - Each patient **must** receive a triage tag
- Circle priority at initial assessment



# Treatment Unit Leader

- Remove treatment peel-off label and place on treatment log
- Note time on tag



# Treatment Unit Leader

Red Immediate Patients

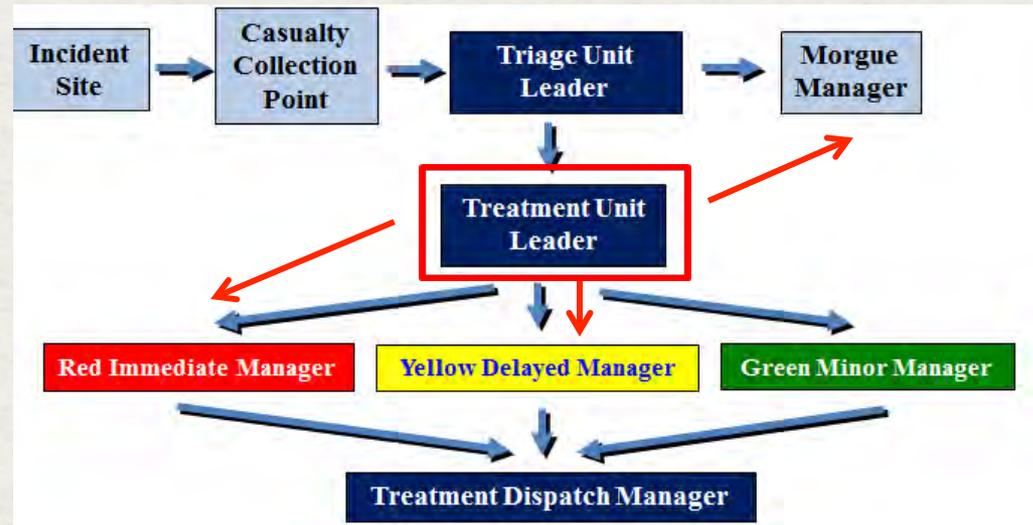
Yellow Delayed Patients

Green Minor Patients

Expectant

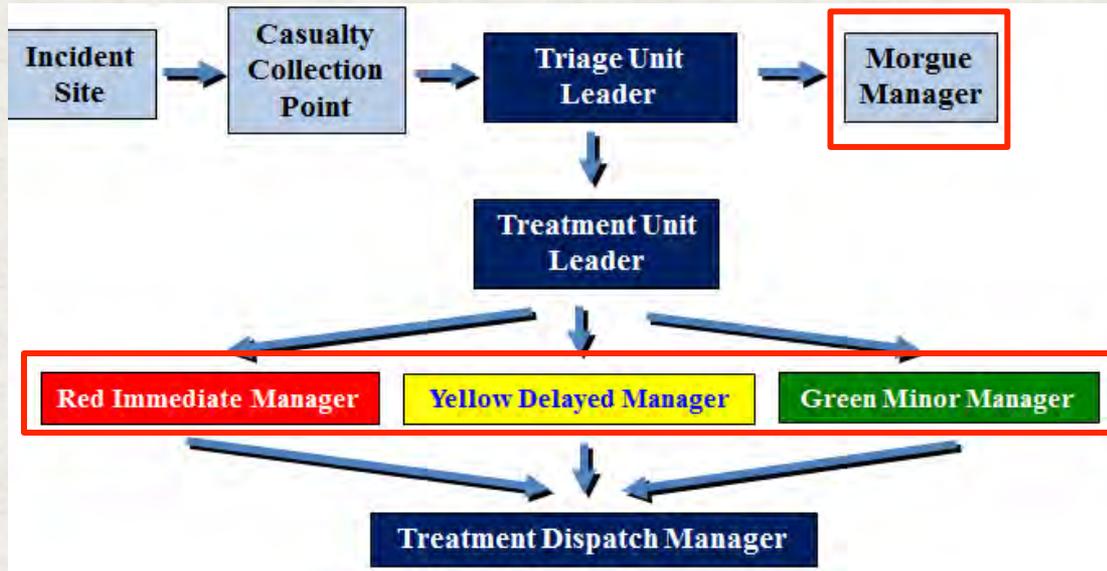
Morgue

Direct crew to appropriate patient area



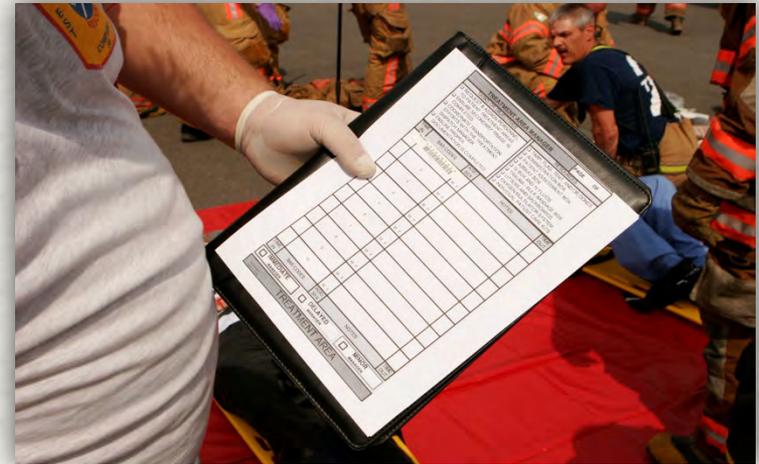
# Treatment Area Managers

- Log patient into area
- Take “*other*” barcode label and place on log

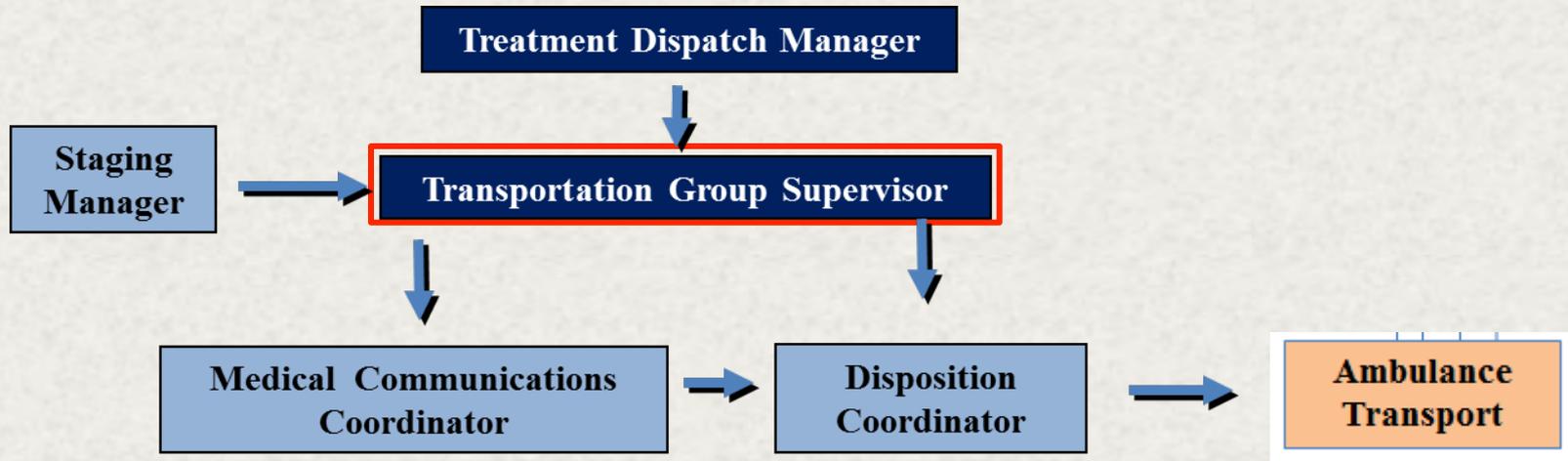


# Treatment Area Managers

- Assign crew to care for patient
  - Reassess *ABC's*
  - Stabilize life threatening conditions (airway, needle decompression, tourniquet, antidote)
  - Immobilize
  - Treat major fractures
  - Package patient for transport to appropriate facility
  - Utilize triage tag to note assessment and treatment interventions and/or on triage tag
- Ensure patient can be transported safely



# Transportation Group Supervisor



- Coordinate loading of patients
- Assign
  - *Medical Communication Coordinator*
  - *Air/Ambulance Disposition Coordinator*



# Transportation Group Supervisor

## Patient Loading

- Contact Staging for transport units
- Contact Treatment Dispatch Manager /Treatment Areas for patients ready to load
- Scan triage tag and insert ***Unit Number and Priority***
- Write information on tear-off transportation record section (commonly called "**Ticket**") part of triage tag

- Peel off a barcode label and place on log sheet

TREATMENT	* M D 4 2 0 7 7 1 *	HOSPITAL	* M D 4 2 0 7 7 1 *
OTHER	* M D 4 2 0 7 7 1 *	OTHER	* M D 4 2 0 7 7 1 *
OTHER	* M D 4 2 0 7 7 1 *	OTHER	* M D 4 2 0 7 7 1 *
OTHER	* M D 4 2 0 7 7 1 *	OTHER	* M D 4 2 0 7 7 1 *

TRANSPORT RECORD	<input type="checkbox"/> UNDETERMINED	AGE	PATIENT NUMBER * M D 4 2 0 7 7 1 *
	<input type="checkbox"/> MALE <input type="checkbox"/> FEMALE	DOB	
	NAME		TRIAGE STATUS <input type="checkbox"/> RED <input type="checkbox"/> YELLOW <input type="checkbox"/> GREEN <input type="checkbox"/> GREY <input type="checkbox"/> BLACK
	CHIEF COMPLAINT		
	DESTINATION	HOSP NOTIFIED	
TRANSPORTATION AGENCY/UNIT		TRANSPORT TIME	



# Patient Loading

- Load patient into transport unit
- Tear off Transportation Record (“Ticket”) and hand to driver



TRANSPORT RECORD	<input type="checkbox"/> UNDETERMINED <input type="checkbox"/> MALE <input type="checkbox"/> FEMALE	AGE	<b>PATIENT NUMBER</b> * M D 4 2 0 7 7 1 * 												
		DOB													
	NAME		<b>TRIAGE STATUS</b> <table border="1"> <tr> <td style="background-color: red; color: white;">RED</td> <td style="background-color: yellow; color: black;">YELLOW</td> <td style="background-color: green; color: white;">GREEN</td> </tr> <tr> <td style="width: 30px; height: 20px;"></td> <td style="width: 30px; height: 20px;"></td> <td style="width: 30px; height: 20px;"></td> </tr> <tr> <td style="background-color: grey; color: white;">GREY</td> <td style="background-color: black; color: white;">BLACK</td> <td></td> </tr> <tr> <td style="width: 30px; height: 20px;"></td> <td style="width: 30px; height: 20px;"></td> <td></td> </tr> </table>	RED	YELLOW	GREEN				GREY	BLACK				
	RED	YELLOW		GREEN											
	GREY	BLACK													
CHIEF COMPLAINT															
DESTINATION	HOSP NOTIFIED														
TRANSPORTATION AGENCY/UNIT	TRANSPORT TIME														



# Patient Loading

- Remind provider to update or complete **Transport Line** on the Tag once hospital is assigned

TRANSPORTATION AGENCY/UNIT	DESTINATION	TIME ARRIVED
----------------------------	-------------	--------------

- On hospital arrival, place **Barcode Labels** on official printout copies of the *Electronic Patient Care Report (ePCR)* or *electronic Maryland EMS Data System (eMEDS)* and hospital chart

TREATMENT * M D 4 2 0 7 7 1 *	HOSPITAL * M D 4 2 0 7 7 1 *
OTHER * M D 4 2 0 7 7 1 *	OTHER * M D 4 2 0 7 7 1 *
OTHER * M D 4 2 0 7 7 1 *	OTHER * M D 4 2 0 7 7 1 *
OTHER * M D 4 2 0 7 7 1 *	OTHER * M D 4 2 0 7 7 1 *



# Medical Communication Coordinator

- Receive ticket from Ambulance Disposition Coordinator
- Communicate information to hospital
  - *Unit, jurisdiction, and number*
  - *Number of patients with priority of each*
- Initial ticket in the “Notified” field

TRANSPORT RECORD	<input type="checkbox"/> UNDETERMINED	AGE	PATIENT NUMBER
	<input type="checkbox"/> MALE <input type="checkbox"/> FEMALE	DOB	
	NAME		
	CHIEF COMPLAINT		TRIAGE STATUS
	DESTINATION	HOSP NOTIFIED	RED YELLOW GREEN
	TRANSPORTATION AGENCY/UNIT	TRANSPORT TIME	GREY BLACK



# Patient Loading

- Direct Transport Unit to Ambulance Disposition Coordinator
- Maintain **One Way** traffic flow
- Do NOT have unit back up or back in



# Ambulance Disposition Coordinator

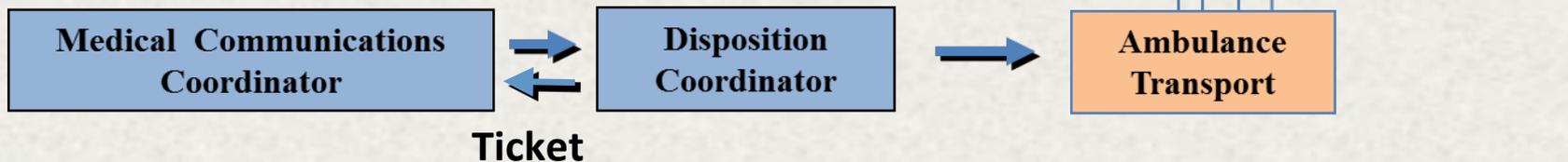
- Receive *Transport Record* (commonly called “Tickets”) from driver
- Transport “Tickets” go from the driver to the Disposition Coordinator

TRANSPORT RECORD	<input type="checkbox"/> UNDETERMINED	AGE	PATIENT NUMBER
	<input type="checkbox"/> MALE <input type="checkbox"/> FEMALE	DOB	
	NAME		
	CHIEF COMPLAINT		TRIAGE STATUS
	DESTINATION	HOSP NOTIFIED	<input type="checkbox"/> RED <input type="checkbox"/> YELLOW <input type="checkbox"/> GREEN
	TRANSPORTATION AGENCY/UNIT	TRANSPORT TIME	<input type="checkbox"/> GREY <input type="checkbox"/> BLACK



# Ambulance Disposition Coordinator

Discusses the destination hospital (appropriate for patient condition) with the Medical Communication Coordinator



# Ambulance Disposition Coordinator

- Give driver destination and confirm directions
- Write destination and transport time on ticket
- Give ticket to

*Medical Communication Coordinator*

TRANSPORT RECORD	<input type="checkbox"/> UNDETERMINED	AGE	PATIENT NUMBER											
	<input type="checkbox"/> MALE <input type="checkbox"/> FEMALE	DOB		* M D 4 2 0 7 7 1 *										
	NAME													
	CHIEF COMPLAINT		TRIAGE STATUS											
	DESTINATION	HOSP NOTIFIED	<table border="1"><tr><td>RED</td><td>YELLOW</td><td>GREEN</td></tr><tr><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td>GREY</td><td>BLACK</td><td></td></tr><tr><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td></td></tr></table>	RED	YELLOW	GREEN	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	GREY	BLACK		<input type="checkbox"/>	<input type="checkbox"/>
RED	YELLOW	GREEN												
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>												
GREY	BLACK													
<input type="checkbox"/>	<input type="checkbox"/>													
TRANSPORTATION AGENCY/UNIT	TRANSPORT TIME													



# Ambulance Disposition Coordinator

- Receives “ticket” back from Medical Communications Coordinator
- Tracks available beds at hospitals
- Places “ticket” label on hospital destination logs and notes time



# The Process in Review

- Incident Occurs
- Walking wounded sent to *Casualty Collection Point*
- Triage of Patients
  - Patient receives a ribbon by *Triage Unit Leader* or designee
  - Only attempt to life-saving interventions (Airway, Needle decompression, Tourniquet, Antidote)
- Patient is moved to various treatment areas at direction of *Treatment Unit Leader* and receives triage tag and treatment



# The Process in Review

- *Treatment Dispatch Manager* coordinates with *Transportation Group Supervisor/Patient Transport Recorder*
  - Arranges for patient to be moved to transport vehicle
  - Triage tag to remain with patient at all times
- EMS Staging Manager dispatches ambulance to designated pick-up area
- Driver is given *Transport Record “Ticket”* piece of triage tag
- Proceeds to *Ambulance Disposition Coordinator*



# The Process in Review

- Driver gives “*Ticket*” to *Ambulance Disposition Coordinator*
  - Coordinates with *Medical Communication Coordinator* for hospital availability and dispatch
- Driver is given hospital transport information prior to leaving scene
- Patient is transported to designated hospital
- Arrival time should be placed on triage tag



# Maryland Triage System



Maryland Institute for  
Emergency Medical Services Systems  
653 West Pratt Street  
Baltimore, MD 21201  
410-706-3996