Public Health Administration Large Conference Room 2240 E. Gonzales, 2nd Floor Oxnard, CA 93036	Pre-hospital Services Committee Agenda	November 14, 2013 9:30 a.m.

I.	**Introductions**	
II.	**Approve Agenda**	
III.	**Minutes**	
IV.	**Medical Issues**	
	A.	Review of IV Ondansetron and QTc Prolongation
	B.	Other
V.	**New Business**	
	A.	Prediction of Sudden Death in Multi-Ethnic Communities – Study Proposal
	B.	Hospital "Encounter Number" on ePCR
	C.	131 – Multi-Casualty Incident
	D.	Other
VI.	**Old Business**	
	A.	Community Paramedicine – TB DOT
	B.	Community Paramedicine – Hospice Patients
	C.	Other
VII.	**Informational/Discussion Topics**	
	A.	Trauma Policy 1404
	B.	Stroke System Update
	C.	Other
VIII.	**Policies for Review**	
	A.	151 – Medication Error Reporting
	B.	Other
IX.	**Agency Reports**	
	A.	Fire Departments
	B.	Ambulance Providers
	C.	Base Hospitals
	D.	Receiving Hospitals
	E.	ALS Education Programs
	F.	EMS Agency
	G.	Other
X.	**Closing**	

Prehospital Services Committee 2013

For Attendance, please initial your name for the current month

Agency	LastName	FirstName	1/10/2013	2/14/2013	3/14/2013	4/11/2013	5/9/2013	6/13/2013	7/11/2013	8/8/2013	9/12/2013	10/10/2013	11/14/2013	12/12/2013	%
AMR	Stefansen	Adriane		AS		AS			AS		AS	AS			
AMR	Panke	Chad		CP		CP			CP		CP	CP			
CMH - ER	Canby	Neil		NC					NC		NC	NC			
CMH/OVCH-ER	Cobb	Cheryl		CC		CC			CC		CC	CC			
OVCH	Patterson	Betsy		BP		BP			BP			BP			
CSUCI PD	Drehsen	Charles		CD					CD		CD	CD			
CSUCI PD	Rice	Al		AR		AR					AR	AR			
FFD	Herrera	Bill		BH											
FFD	Scott	Bob													
GCA	Norton	Tony		TN		TN			TN		TN	TN			
GCA	Shultz	Jeff									JS	JS			
Lifeline	Rosolek	James		BK		JR					JR	JR			
Lifeline	Winter	Jeff		JW		JW			JW		JW	JW			
LRRMC - ER	Beatty	Matt		MB		MB			MB		MB				
LRRMC - ER	Licht	Debbie		DL		DL			DL		DL	DL			
OFD	Carroll	Scott		SC		SC			SC		SC				
OFD	Huhn	Stephanie		SPH		KS			SH		SH	SH			
SJPVH	Hernandez	Sandi		SH		SH			SH		SH				
SJPVH	Davies	Jeff		JD		MR			JD						
SJRMC	Russell	Mark		TL		XX			MR			MR			
SJRMC	McShea	Kathy		KM		KM			KM		KM	KM			
SPFD	Dowd	Andrew				AD			AD		AD				
SVH - ER	Tilles	Ira		IT		IT			IT		IT	IT			
SVH - ER	Hoffman	Jennie		JH		JH			JH		JH	JH			
V/College	O'Connor	Tom		TO		TO					TO	TO			
VCFD	Tapking	Aaron		AT		AT			AT		AT	AT			
VCFD	Utley	Dede				DU			DU		DU	DU			
VNC	Plott	Norm		NP		NP			NP		NP	NP			
VNC	Black	Shannon		SB											
VNC - Dispatch	Shedlosky	Robin		RS					RS		RS	RS			
VCMC - ER	Chase	David		DC		DC			DC		DC	DC			
VCMC - ER	Gallegos	Tom		LW		LW			LW		TG	TG			

Agency	LastName	FirstName	1/10/2013	2/14/2013	3/14/2013	4/11/2013	5/9/2013	6/13/2013	7/11/2013	8/8/2013	9/12/2013	10/10/2013	11/14/2013	12/12/2013	%
VCMC-SPH	Daucett	Michelle				MD			MD		MD	MD			
VCMC-SPH	Malgoza	Sarah									SM	SM			
VCSO SAR	Hadland	Don		DH		DH			DH		DH				
VCSO SAR	Golden	Jeff		DW		DW					JG	JG			
VFF	Rhoden	Crystal				CR									
VFF	Jones	Brad													
Eligible to Vote	**Date Change/cancelled - not counted against member for attendance**														
Non Voting Members															
AMR	Whitmore	Geneva		GW											
AMR	Taigman	Mike		MT		MT						MT			
CSUCI PD	Rice	Lynn				LR									
EMS	Carroll	Steve		SC		SC			SC		SC	SC			
EMS	Buhain	Ruth		RB											
EMS	Frey	Julie							JF		JF	JF			
EMS	Hadduck	Katy		KH		KH			KH		KH	KH			
EMS	Perez	Randy				RP			RP		RP	RP			
EMS	Rosa	Chris		CR		CR			CR		CR	CR			
EMS	Salvucci	Angelo		AS		AS			AS		AS	AS			
EMS	Beatty	Karen													
LMT	Frank	Steve										SF			
VCMC	Duncan	Thomas		TD											
VNC	Gregson	Erica													
VNC	Hatch	Heather													
VNC	Komins	Mark							MK						

TEMPORARY
PARKING PASS
Expires September 12, 2013

Health Care Services
2240 E. Gonzales Rd
Oxnard, CA 93036

For use in "Green Permit Parking" Areas only, EXCLUDES Patient parking areas

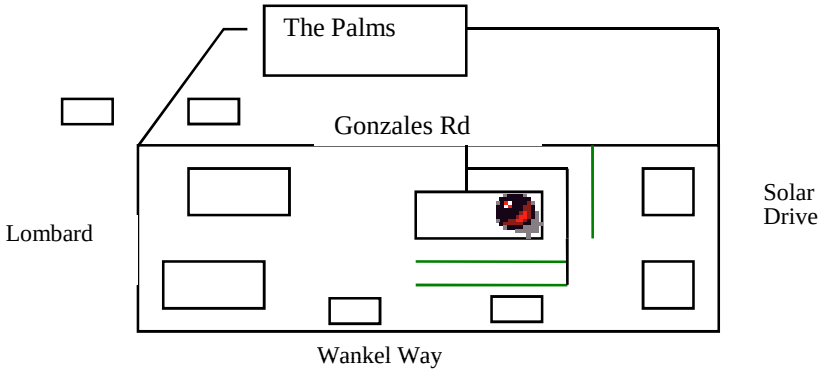
Parking Instructions: Parking at workshop venue is limited. Arrive early to allow for offsite parking if venue parking lot is full.

2240 Gonzales Rd. location
If you park in a designated "green permit parking" slot, fold this flyer in half and place pass face-up on the dash of your car, to avoid receiving a ticket.

2100 Solar Drive
An additional amount of "Green Permit Parking" spaces (only 30) are available in adjacent parking lot, those that back-up against venue parking area, (Enter this parking lot off of Gonzales[3rd driveway] or Solar Drive). **Place this flyer on your dash.** If all of those stalls are occupied, overflow parking is available at The Palms shopping area or side streets.

The Palms - shopping mall
Enter The Palms at Lombard and Gonzales. Allow for a ten minute walk to venue location.

Additional parking is available on side streets, Lombard, Solar and Wankel Way.



Clinical Review-Intravenous Ondansetron and QTc Prolongation

Mark Russell MD
California Emergency Physicians
Assistant Medical Director
St Johns Hospitals

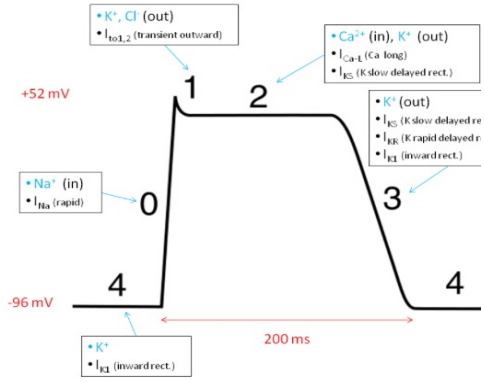
Oct 30, 2013

PURPOSE: The review of IV ondansetron and its association with QTc prolongation. Specifically, to discuss the safety of IV ondansetron pushes in the eprehospital setting.

BACKGROUND: Ondansetron works as an antagonist at serotonin 5-HT3 receptors to reduce nausea. The brand name is Zofran, it is manufactured by Glaxo-Smith Kline. It is approved by the FDA for the treatment and prevention of nausea associated with chemotherapy, radiation, and operative procedures. It is a very commonly administered medication in emergency care, both in the emergency department and pre-hospital setting, for all causes of nausea. Zofran comes in both oral and parenteral formulations. It is well known that Zofran has been associated with prolongation of the QTc interval and polymorphic ventricular tachycardia (torsades de pointes).

PHARMACOKINETICS: Zofran is manufactured in oral tablets (4 and 8 mg), oral disintegrating tablets (4 and 8 mg), oral solution, and for parenteral administration (2 mg/mL). Though there are no formal recommendations on IV dosing for nonspecific nausea, it is commonly given in 4 mg aliquots in adults and 0.1 mg/kg in children. It is given in much higher doses for the above FDA recommendations, sometimes approaching 32 mg. The half-life is 4.5-7 hours. Ondansetron is metabolized by the liver, thus metabolism is prolonged in liver failure.

PATHOPHYSIOLOGY OF QT PROLONGATION: The danger of QT prolongation is its progression to polymorphic ventricular tachycardia. The corrected QT interval is considered prolonged it is greater than 450 ms in males and 470 ms in females. Most pharmacologic agents act on phase two (repolarization) of the cardiac myocyte action potential. Specifically, on delayed rectifier potassium channels. See below.



Increasing the duration of repolarization prolongs the QT interval. This predisposes to torsades de pointes. Zofran is one of a number of medications that prolongs the QT interval. See Table 1 below.

Table 1- Drug Classes associated with prolonged QTc & Torsades de Points

Drug Class	Examples
Macrolide and fluoroquinolone antibiotics	Erythromycin, azithromycin Levaquin, ciprofloxacin, moxifloxacin
Anti-emetics	Zofran, promethazine, cisapride
Anti-psychotics	Haldol, chlorpromazine
Anti-fungals	Voriconazole
Anti-arrhythmics	Amiodarone, sotalol, disopyramide, ibutilide
Miscellaneous	Methadone

The University of Arizona maintains one of the largest online data repositories on medications that prolong the QT interval. It can be accessed at www.torsades.org. According to this site, Zofran is classified as "possible risk of QT prolongation," one of the lower risk classifications, due to insufficient data.

In addition to medications, the QT interval is also influenced by a number of demographic and physiologic risk factors. These are summarized in Table 2.

Table 2 – Risk factors for Torsades de pointes

Hypocalcemia	Cardiovascular disease (CAD, CHF)
Hypomagnesemia	Recent cardioversion with an antiarrhythmic
Hypokalemia	Bradycardia
Female gender	Pt on multiple QTc drugs as listed above
Congenital prolonged QTc syndrome	Polysubstance overdse – many drugs prolong QTc in overdose

SUMMARY OF DATA ON ZOFRAN AND QTc: The association between ondansetron and prolong QTc caused the FDA to mandate GlaxoSmithKline (GSK) to add a warning to their label in September of 2011. They also mandated that GSK to conduct a clinical trial to better elucidate this association. The results of this double blind single dose crossover study became available in 2012. It showed a dose dependent prolongation of the QTc interval as shown below in Table 3. This prompted the FDA to update the warning label to recommend against the use of 32 mg IV doses of Zofran secondary to its excessive QTc prolongation. This study has many limitations regarding its applicability to emergency care. The subjects were all young and healthy volunteers. The outcome was prolongation of cardiac conduction, not the more feared torsades de pointes. The doses used were 8 mg and above, not

the typical 4 mg given in the ED and prehospital setting. Though, because the effect on QT interval is minimal at 8 mg (4 msec), one can imply that it is also minimal at 4 mg. There is a paucity of data on this subject from the emergency medicine and prehospital setting. More research needs to be done.

Table 3 – Summary of QT prolongation from GSK Zofran trial

IV DOSE	QTc Interval Prolongation (msec)
8 mg	+ 4.1
16 mg	+9.1
24 mg	+14
32 mg	+19

RECOMMENDATIONS: There is a clear association between Zofran and QTc prolongation. However, the exact causation of torsades de pointes is often multifactorial, with Zofran being one possible cause. The effect appears to be dose dependent, with significant QTc prolongation occurring at doses of 32 mg, much higher than doses typically given in the prehospital setting. According to cardiac conduction studies, the prolongation of the QTc interval is only 4 msec after a 8 mg dosage in healthy volunteers. While, general recommendations cannot be made due to the lack of data, Zofran appears safe at IV push doses of 4 mg. However, both emergency physicians and paramedics need to be aware of other medications and risk factors as described in Tables 1 and 2 that can also prolong QTc, causing an additive increase in the relative risk of torsades de pointes. Zofran should not be given in patients with a family history of congenital long QTc syndrome. It should be given with caution in patients with cardiac disorders, a history of low electrolytes (potassium, magnesium, calcium), and in patients taking other QTc prolongation medications.

References

http://www.fda.gov/Drugs/DrugSafety/ucm310190.htm. United states FDA. 6/29/2012.

GlaxoSmithKline. A Randomized, Double-blind, Four-period Crossover Study to Investigate the Effect of Intravenous Ondansetron, a 5-HT3 Antagonist, on Cardiac Conduction as Compared to Placebo and Moxifloxacin in Healthy Adult Subjects. Clinicaltrials.gov. NCT01449188

www.torsades.org. A program of the University of Arizona Sciences foundation

Cardiac safety concerns for ondansetron, an antiemetic commonly used for nausea linked to cancer treatment and following anaesthesia. Expert Opin Drug Saf. 2013 May;12(3):421-31. doi: 10.1517/14740338.2013.780026. Epub 2013 Apr 12

PREDICTION OF SUDDEN DEATH IN MULTI-ETHNIC COMMUNITIES (P.R.E.S.T.O.)

Principal Investigator: Sumeet S. Chugh MD (Associate Director, Cedars-Sinai Heart Institute, Cedars-Sinai Medical Center, Los Angeles)

Proposal for including Ventura County as a P.R.E.S.T.O. Community Site

Site PI: Angelo Salvucci MD (Medical Director EMS Agency, Ventura County)

Protocol summary:

1. Observational study only, with the overall goal of identifying novel risk predictors of sudden cardiac arrest. For this purpose we will analyze detailed medical records, first responder records as well as blood/DNA of subjects. The rationale for expanding this study to Ventura County: Thus far, our findings are largely limited to subjects of white, European descent (85% of the Portland Oregon population). However, our preliminary findings in the minority population suggest that the rates of sudden cardiac arrest may be significantly higher in other races and ethnicities. Orange County offers the opportunity to identify risk predictors of sudden cardiac arrest in these ethnicities as well.
2. Blood samples for genetic and biochemical analysis have been collected in Portland, Oregon under separate IRB approval (IRB#: IRB0001425) since Feb 1, 2002. This proposal will expand the study to include study participants in Ventura County.
3. Cases are residents of the Portland Oregon metro area and Ventura County who have suffered sudden cardiac arrest. Control subjects (who have never had sudden cardiac arrest) are identified on an ongoing basis from the Portland Oregon geographic area.
4. Most subjects who suffer sudden cardiac arrest (over 92%) do not survive. In this case medical records and samples are coded and analyzed. Blood samples are obtained by paramedics at the time of sudden cardiac arrest. This consists of a sample (3-5 cc) that is drawn during the testing of the patency of the intravenous line. The collection of this sample has no effect on the resuscitation process for these patients. All survivors of sudden cardiac arrest are approached for consent by researchers at the Cedars Sinai Heart Institute before any research is conducted. All controls are alive and are approached for consent before any research is conducted. The study has been approved at Oregon Health and Science University since 2001; approval is current and valid until February 2014 from a total of 6 IRBs that include Oregon Health and Science University Portland, Oregon; as well as Cedars-Sinai Medical Center, Los Angeles. Additionally, a pilot project to be conducted in LA City has been approved by Cedars-Sinai, UCLA, LA Biomed (Harbor-UCLA) and USC.
5. The blood sample received at the CSHI for analysis does NOT contain any identifiers.
6. We would like to begin with a pilot phase to collect 100 samples over 6 months from Ventura County, expanding to approximately 350 samples a year.

COUNTY OF VENTURA HEALTH CARE AGENCY	EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: Multi Casualty Incident Response	Policy Number 131
APPROVED: Administration: Steven L. Carroll, EMT-P	Date: June 1, 2013
APPROVED: Medical Director: Angelo Salvucci, M.D.	Date: June 1, 2013
Origination Date: September 1991 Date Revised: April 29, 2013 Review Date: March 31, 2014	Effective Date: June 1, 2013

I. PURPOSE: To develop a standardized protocol for Multi-Casualty Incident (MCI) response and training in Ventura County.

II. AUTHORITY: California Health and Safety Code, Section 1797.151, 1798, and 1798.220.

III. California Code of Regulations, Sections 100147 and 100169.APPLICATION: This policy defines the on-scene medical management, transportation of casualties, and documentation for a multi casualty incident utilizing the principles of the incident command system as outlined in the MCI Plan.

IV. DEFINITIONS:

A. **MCI/Level I -** a suddenly occurring event that exceeds the capacity of the routine first response assignment. (Approx. 3 - 14 victims)

B. **MCI/Level II –** a suddenly occurring event that exceeds the capacity of the routine first response assignment. (Approx. 15 - 49 victims)

C. **MCI/Level III -** a suddenly occurring event that exceeds the capacity of the routine first response assignment. (Approx. 50+ victims)

V. TRAINING:

The following training will be required:

A. **Basic MCI Training** for fire companies and field EMS providers.

Focus: Hands-on functions as described in the Ventura County EMS (VCEMS) basic MCI curriculum

1. Initial basic course: 4 hours
2. Prerequisite for the course: Introduction to the Incident Command System (ICS 100), and ICS for Single Resource and Initial Action Incidents (ICS 200).
3. Course will be valid for two years

B. **Advanced MCI Training** for battalion chiefs, EMS managers, field supervisors, and pre-hospital care coordinators

Focus: command and major function integration as described in the VCEMS advanced MCI curriculum.

1. The advanced MCI course is divided into two modules. The morning session (module 1) is designed for new supervisory personnel and will cover specific principles of on-scene

medical management, transportation of casualties and documentation for multi-casualty incidents. The afternoon session (module 2) will consist of a curriculum review and advanced MCI table top scenarios. Participants attending their initial advanced MCI course are required to attend both module 1 and module 2.

2. Initial advanced MCI training will be offered annually in January.
3. Initial Advanced MCI Course: 8 hours
4. Prerequisite for the Course: Introduction to the Incident Command System (ICS100), ICS for Single Resource and Initial Action Incidents (ICS 200), and National Incident Management System, an Introduction (ICS 700)
5. Course will be valid for two years

C. **Basic MCI Refresher Training**

Focus: Overview of multi-casualty operations as described in the VCEMS MCI Basic Curriculum

1. Refresher Course: 2 hours
2. Course will be valid for two years

D. **Advanced MCI Refresher Training** (Module 2 of the Advanced MCI Course)

Focus: Overview of Command and Major Function Integration as described in the VCEMS Advanced MCI Curriculum

1. Refresher Course: 4 hours
2. Advanced MCI refresher course will be offered twice annually, in January and July.
3. Course will be valid for two years

VI. ACTIVATION OF THE MULTI CASUALTY INCIDENT RESPONSE PLAN:

A. Report of Incident

The report of a multi casualty incident (MCI) will ordinarily be made to a Ventura County Public Safety Answering Point (PSAP) in the following manner:

- Citizen/witness report via 9-1-1 Public Service Answering Point (fire service will activate the MCI plan).
- Hospital personnel alert VCEMS.
- Direct report from law enforcement, or an EMS Provider with capability to contact a PSAP.

B. Prehospital Response

1. The first responder agency or other public safety official will determine that the number and extent of casualties exceeds the capacity of the day-to-day EMS response and/or EMS system (depending on the level of the MCI) and will request their PSAP to contact the EMS Agency and activate the MCI Plan. The Incident Commander (IC) or appropriate public safety official will request activation and/or response of any

2. supporting public safety/service agencies which may be needed, for example:
    - Transportation resources; such as additional ambulances or buses
    - Ventura County Chapter American Red Cross
    - Public Health/EMS Emergency Preparedness Office
    - Disaster Caches
3. The IC will appoint a Patient Transportation Group Supervisor. The Patient Transportation Group Supervisor will retain or delegate the Medical Communications Coordinator (MEDCOMM) position to communicate all casualty transportation information to the base hospital or designated VCEMS representative.
   Periodically, a request will be made of involved hospitals to update their status in order to accommodate the number of casualties remaining to be evacuated from the scene. (The first responders will provide for the triage and treatment of casualties utilizing S.T.A.R.T. criteria.)

C. Ventura County Trauma System Considerations

1. The base hospital for any level MCI in which one or more patients present with traumatic injuries will be the trauma center for the area where the incident is located, based on the Ventura County trauma center service area map.
2. On an MCI/Level I, patients with traumatic injuries will be triaged utilizing the Ventura County Field Triage Decision Scheme, in addition to S.T.A.R.T. triage. On an MCI/Level I, the VC step will be relayed to the base hospital by MEDCOMM for all patients with traumatic injuries, in addition to S.T.A.R.T triage category, age, and gender.
3. Patients will be transported in accordance with VCEMS 131 Attachment C ”MCI Trauma Patient Destination Decision Algorithm.”
    a. Refer to VCEMS 131 Attachment D “Initial Trauma Patient Care Capacity” for guidelines on initial capacity for hospitals within Ventura County.

D. Ventura County EMS Agency

Upon receiving MCI information and a request from scene public safety personnel to activate the MCI Plan, EMS may contact the Base Hospital that MEDCOMM has communicated with during the initial phases of the MCI, and request an update before relieving the Base Hospital of this duty. The EMS Agency may then act as the medical clearinghouse and perform the following:

1. Alert all hospitals that an MCI has occurred and request that they prepare to receive casualties from the scene. This communication will include:

- The type, size, and location of the incident.
- The estimated number of casualties involved.
- Advise area hospitals to be prepared to confirm their status and make preparations for the possible receipt of patients.

2. Update all hospitals periodically or when new or routine information is received. Hospitals in unaffected areas may or may not be requested to remain in a stand-by readiness mode.
3. Inform MEDCOMM of each hospital's availability.
4. Relay all requests/information regarding hospital resource needs or surplus to the Regional Disaster Medical Health Coordinator (RDMHC) representative, when appropriate. Coordinate response of additional medical equipment and personnel.
5. Inform all hospitals when remaining casualties have been cleared from the MCI scene.
6. Receive MCI information from PSAP and alert the appropriate VCEMS and Ventura County Health Care Agency (HCA) personnel.
7. Initiate the VCEMS Emergency Response plan to a level appropriate to the information provided.
8. Activate the Health Care Agency – Department Operations Center, when appropriate.
9. Inform the Ventura County Sheriff's Office of Emergency Services (OES) and/or the Operational Area EOC of EMS activity, when appropriate.
10. Alert the RDMHC representative, when appropriate.
11. Request out-of-county medical resources, when necessary, with EMS/HCA management approval. Coordinate requests with OES staff and RDMHC representative.
12. Assist in the coordination of transportation resources.
13. Assist in the coordination of health care facility evacuation.
14. Communicate with hospitals, skilled nursing facilities and appropriate EOCs when warranted.
15. Assist in coordination of incident evaluations and debriefings.

E. Hospital Response

1. Receive/acknowledge incident information and inform hospital administration.
2. Activate the hospital's disaster/emergency response plan to an appropriate level based upon the MCI's location type and number of casualties.
3. Hospitals experiencing difficulty in obtaining needed resources to manage casualties should make needs known to the EMS Agency representative.

F. Documentation

1. Level 1 MCI: The care of each patient will be documented using the Ventura County electronic patient care reporting system (VCePCR)
2. Level 2 and 3 MCI: Each patient transported to a hospital shall have their care documented on a multi-casualty patient record (Policy 131, Attachment A).
    a. The transporting agency is responsible for completion of the multi- casualty patient record. The record is designed to be completed by the transporting crew enroute to the receiving hospital.
    b. The transporting agency retains the original of the multi-casualty patient record. A copy shall be left with the patient at the receiving hospital. The triage tag shall be attached to this copy and is included as official documentation in the patient's medical record.
    c. The transporting agency shall distribute copies of the multi-casualty patient record to the base hospital and EMS Agency within twenty-four hours of de-mobilization of the incident.
    d. Patients not transported from a Level II or Level III MCI, may be documented using the multi-casualty non-transport record, (Policy 131, Attachment B).
3. Ventura County EMS Approved MCI Worksheets
    a. Ventura County EMS Providers shall utilize the approved MCI worksheets described in the Basic and Advanced MCI courses and attached to this policy as follows:
        1. Form 131-C MCI Trauma Patient Destination Decision Algorithm (Policy 131, Attachment C)
        2. Form 131-D Initial Patient Care Capacity – MCI All Levels (Policy 131, Attachment D)
        3. Form 131-1 Level 1 MCI Worksheet (Policy 131, Attachment E)
        4. Form 131-2 Hospital Worksheet (Policy 131, Attachment F)
        5. Form 131-3 Out of County Hospital Worksheet (Policy 131, Attachment G)
        6. Form 131-4 Treatment Tarp Updates (Policy 131, Attachment H)
        7. Form 131-4A Immediate Treatment Area (Policy 131, Attachment I)
        8. Form 131-4B Delayed Treatment Area (Policy 131, Attachment J)
        9. Form 131-4C Minor Treatment Area (Policy 131, Attachment K)
        10. Form 131-4D Morgue Area (Policy 131, Attachment L)
        11. Form 306 Transportation Worksheet (Policy 131, Attachment M)

12. Form 310 Staging Manager (Policy 131, Attachment N)

4. Mobile Data Computer (MDC) Equipped Ambulances
   a. In an effort to enhance patient tracking, transport personnel operating ambulances equipped with MDC's, when able, will document the triage tag number, patient name, and destination in the comment section of the dispatch ticket on the MDC.

VII. DE-MOBILIZATION OF THE MULTI CASUALTY INCIDENT RESPONSE PLAN:

A. Prehospital de-mobilization

1. The Incident Commander (IC) will notify EMS that the MCI has been cleared when all casualties have been removed from the MCI scene.
2. VCEMS will notify all hospitals that the MCI scene has been cleared.
3. VCEMS will advise hospitals that casualties may still be enroute to various receiving facilities.
4. Hospitals will supply EMS with data on casualties they have received via ReddiNet, telephone, fax or RACES.
5. VCEMS will maintain communication with all participants until all activity relevant to casualty scene disposition and hospital resource needs are appropriately addressed.
6. VCEMS will advise all participants when VCEMS is being de-activated.

VIII. CRITIQUE OF THE MULTI CASUALTY INCIDENT:

A. VCEMS Agency may conduct a post-incident analysis of the MCI at their discretion or at the request of agencies involved in the incident. All medically involved participants will be invited.

B. VCEMS Agency may publish a written report following the post-incident analysis. The report will include minutes from the post incident analysis meeting, any summary data available, and written reports.

Ventura County Health Care Agency

EMERGENCY MEDICAL SERVICES
A Division of Public Health

MULTI CASUALTY MEDICAL RESPONSE PLAN

Steven L Carroll, Paramedic
Ventura County EMS Administrator

Angelo Salvucci, MD, FACEP
Ventura County EMS Medical Director

June 2013

County of Ventura
Emergency Medical Services Agency

MULTI CASUALTY MEDICAL RESPONSE PLAN

SECTION I INTRODUCTION

A. Purpose

The proper management of a large number of medical injuries following a natural or human-induced event is imperative if morbidity and mortality are to be minimized. The recognition of the type and number of injured (intelligence), and a rapid dissemination of known information (communication) are necessary elements to begin an effective response to a medical disaster. A well-organized medical community, which has a viable communication system, an effective intelligence-gathering network and scheduled exercises of its disaster response plan, will then be prepared to respond to the needs of the injured community.

The Ventura County Multi Casualty Medical Response Plan is the result of on-going cooperative effort of many public/private agencies and individuals committed to the prevention of further suffering and loss of life following a large medical incident.

The Ventura County Emergency Medical Services Agency (VCEMS) is responsible for leading efforts to define the structure and coordinating various components of the County's Multi Casualty Medical Response Plan. This plan is developed in concert with State, municipal and other Ventura County agencies. It outlines the scope of responsibility for the County's multi casualty responders; however, it does not detail all duties entrusted to a particular organization.

The County of Ventura Multi Casualty Medical Response Plan is modeled after the State's Emergency Medical Services Authority Disaster Medical Response Plan (September 2007), to promote standardization and continuity of response throughout the State of California. Acknowledgement is given herein to the California EMS Authority's commitment to this goal.

B. Goal

It is the goal of this plan to provide definition, structure and coordination to the medical response elements within Ventura County to reduce multi casualty related morbidity and mortality at any time or location within the County.

C. Plan Organization

The County of Ventura Multi Casualty Medical Response Plan is divided into five sections:

- Section I - Introduction
- Section II - Response Organizations
- Section III - Response Narrative
- Section IV - Planning Concepts
- Section V - Information Management
- Section VI - Resource Acquisition

In Section I, the plan goal, organization and authorities are referenced. Also included in this section is a brief discussion on the subject of medical disaster planning and the nature and implications of a medical disaster.

D. Planning for Medical Disasters

1. Levels of Medical Disaster

When a medical disaster occurs it will be important to rapidly ascertain the actual (and projected) number of medical injuries. The number of victims injured will govern the community's medical response. Responsibility lies with responders to accurately report incident information and casualty data. Directors of EMS resources must have reliable knowledge of area and county wide medical capabilities. It is important for decision-makers to know the EMS systems capabilities at any given time during a medical incident response and recovery phase. Together, incident information and resource knowledge can be combined to address the response to medical incidents.

In Ventura County three levels of victim events have been defined. All involve more than one person injured; the separation of levels lies in the resources mobilized to respond to each situation. The listing in Section II begins to delineate the responders and their activities.

The following describes the three levels of victim situations as recognized by VCEMS:

MCI/Level I: a suddenly occurring event that exceeds the capacity of the routine first response assignment (Approx. 3 - 14 victims).

MCI/Level II: a suddenly occurring event that exceeds the capacity of the routine first response assignment. (Approx. 15 - 49 victims)

MCI/Level III: a suddenly occurring event that exceeds the capacity of the routine first response assignment. (Approx. 50+ victims)

2. Addressing Medical Disasters

When planning the mitigation of a medical disaster, there are certain points which must be assumed prior to beginning the process: The MCI/LEVEL I is practiced regularly by local emergency agencies. An MCI/LEVEL ll is less frequent and occurs several times a year. An MCI/LEVEL lll occurs rarely and the following assumptions are primarily applicable to these situations:

The very nature of a medical disaster will injure and kill a large amount of people within a relatively short period of time. This will create a medical need, which will immediately or very quickly overwhelm the day-to-day EMS response system. This situation may occur in one or more geographical locations of Ventura County, or may include the entire County.

The initial assessment of medical injuries may cause the disaster to be classified as a disaster scene at one level; however, further assessment may call for an upgrade of the size or classification. For example: an accident at a chemical plant, which initially injures 15 people, may be at first classified as an MCI/LEVEL II. However, if a toxic material cloud injures 100 more, the incident may be re-classified.

To assess the medical disaster appropriately, two components must be available to responding officials: 1) intelligence regarding the complexity of the incidents, the numbers and types of injuries, and: 2) communications to relay this intelligence to other supporting agencies.

To respond to a medical disaster appropriately two elements are necessary: 1) anticipation of needed medical resources, and: 2) early request (activation) of those resources (in advance of when they are needed if possible.)

The requested medical resources must be rapidly available at the designated area if life and limb are to be saved. These resources may be found inside Ventura County, or sought outside the County.

F. SECTION II RESPONSE ORGANIZATIONS

The following is a list of the organizations that may play a role in the medical response to an MCI. Included is a brief description of the scope of responsibility of each organization. This inventory reflects the primary charge(s), however, other duties/responsibilities may be undertaken which are not listed here.

1. Ventura County Health Care Agency (HCA)

HCA Is the parent organization of all of the County's health services. In a wide spread, declared medical crisis, policy and the general direction of medical services will come from the Agency's Director and the County Health Officer. The divisions of the Health Care Agency are Public Health, Hospitals (Ventura County Medical Center and Santa Paula Hospital), Clinics / Ambulatory Care, Behavioral Health, and the Medical Examiner.

Health Care Agency responsibilities during an MCI include:

- Providing overall direction of medical and health care response to an MCI.
- Requesting/offering of medical mutual aid from/to other counties through the Health Officer.
- Communicating with State agencies (Department of Health Service, Emergency Medical Services Authority, California Emergency Management Agency (CalEMA) in order to report on conditions and/or request needed services.
- Calling for the activation of a Field Treatment Site (FTS).

2. Ventura County/Emergency Medical Services (VCEMS)

VCEMS is a division of the Public Health department within the HCA. VCEMS coordinates and supports medical resources responding to an MCI; particularly those agencies and institutions offering emergency and acute medical care. EMS maintains working relationships with the State Emergency Medical Services Authority (EMS Authority), Ventura County transport and fire service providers, base and receiving hospitals, the Hospital Association of Southern California, and municipal emergency planning coordinators.

VCEMS responsibilities during an MCI may include some or all of the following:

- Coordinating destinations
- Ascertaining hospital availability
- Coordinating medical resources (in and out of county)
- Communicating with the County Health Officer
- Coordinating the dissemination of Public Health information
- Response to the scene, primary dispatch center, HCA Department Operations Center (DOC) or Emergency Operations Center (EOC)
- Obtaining briefing from base hospital for transition
- Establishing communication with OES (consider EOC activation)
- Working within the Incident Command structure, as the medical/health branch of theOperations Section at the County's EOC
- Advising the County Health Officer as to the status of medical resources in Ventura County
- Establishing a liaison with the EMS Authority through the Region I Regional Disaster

Medical/Health Coordinator (RDHMC)

- Coordinating resource requests and availability between acute care hospitals, advanced life support providers, basic life support transport providers, skilled nursing facilities, and mental health facilities
- Maintain communications with receiving hospitals with Ventura County and throughout the region through the use of the Reddinet hospital communications system.
- Establishing direct communications with the Hospital Disaster Support Communications Radio Amateur Civil Emergency Services (RACES)
- Establishing contact with medical coordinators within city emergency operations centers via the Ventura County EOC to ascertain status and conditions at local Medical Aid Stations (MAS) and any other medically related concerns
- Activate the Ventura County Medical Reserve Corps (MRC) as indicated and coordinate all MRC operations through VCEMS and HCA DOC.
- Requesting Disaster Medical Assistance Teams through the RDMHC to implement a Field Treatment Site (FTS) operation.
- Assisting in the request and coordination of deployment of Critical Incident Stress Management teams
- Gathering information and documentation from Medical Communications (Med Comm)
- Initiating / coordinating an incident review
- Collecting data on casualties

3. Municipal Governments

Have the responsibility and most likely the best capabilities for assessment of local community damage and injury. Public safety, Neighborhood Watch teams, Disaster Assistance Response Teams (D.A.R.T.), Community Emergency Response Teams (C.E.R.T.), and RACES operators are some of the data gathering groups which may report on conditions to city/county EOCs. Maintaining effective communications between VCEMS and the EOC managers/coordinators at the city level through the use of a medical/health branch liaison is essential in verifying emergency medical care and available medical resources within the city or county jurisdictions. The city/county and VCEMS will coordinate efforts to facilitate medical aid stations and hospitals in the management of casualty care.

Responsibilities of municipal governments during an MCI include:

a. Ventura County Office of Emergency Services

- Activating the EOC, coordinate large incidents
- Coordinating notifications and non-medical mutual aid requests (regional, state, etc.)
- Obtaining resources for on scene personnel
- Coordinating resource requests

b. Law Enforcement

- Providing force protection
- Providing Search and Rescue (SAR)
- Providing Scene Control
- Providing Traffic Control
- Assisting with Incident Command System (ICS) establishment / Unified Command
- Providing Body protection (morgue)
- Conducting Investigations

- Providing a Public Information Officer (PIO)
- Conducting Damage Assessment
- Managing Law Enforcement Air Operations

c. Coroner / Medical Examiner

- Response to the scene
- Processing fatalities
- Providing body removal bags
- Investigating with law enforcement
- Designating Morgue Manager
- Conducting family notifications
- Requesting additional personnel or resources through the California Coroner / Medical Examiner Mutual Aid Plan (this includes Federal Disaster Mortuary Teams)

d. Fire Departments

The fire departments will engage in public safety activity. Fire suppression, rescue, medical aid and mitigation of hazardous conditions will occupy their resources along with intelligence gathering operations. Fire agencies will report to municipal and County EOCs as appropriate.

Fire agency responsibilities during an MCI include:

- Providing community assessment of damage and casualties
- Conducting Mitigation of physical hazards
- Performing triage and treatment (including setting up, managing and staffing of treatment areas with First Responder ALS resources.
- Conducting Scene Assessment
- Determining resource needs
- Assisting with ICS establishment / Unified Command
- Conducting Hazard Control
- Providing Rescue
- Providing a Public Information Officer (PIO)
- Setting Incident Objectives
- Providing scene documentation
- Driving transport vehicles as needed
- Providing communications as needed (Notify EMS and Coroner)
- Providing Dispatch (automatic responses, coordinate with other fire dispatch, communicate with IC)
- Managing fire and medical air operations
- Providing comfort measures

4. Media

Local television, radio, and newspapers responsibilities during an MCI include:

- Public awareness (traffic, safety issues, etc.)

- Working with PIOs

5. Transportation Agencies

The transportation agencies are those private air / ground ambulance operators licensed within Ventura County. During a time of medical crisis this definition could be expanded to include private and public providers from outside the county, as well as other medical transportation providers such as wheelchair vans and buses (see Ventura County Transportation Authority below).

Responsibilities of transportation agencies during an MCI include:

a. Ground

- Providing MEDCOMM
- Setting up and staffing treatment areas
- Providing medical supplies (initial and ongoing)
- Conducting triage
- Providing documentation (collect and forward information to VCEMS and base/receiving hospitals as needed).
- Providing transport
- Providing scene assessment
- Determining resource needs
- Providing scene documentation (collect documentation and forward to EMS)
- Providing communications
- Advising receiving hospital of number of patients they will receive

b. Air

Air Ambulance

- Providing transport
- Providing documentation
- Conducting transfers
- Providing additional aircraft as needed

Rescue Aircraft

- Providing transport
- Providing documentation
- Conducting transfers
- Providing additional aircraft as needed

6. Hospitals (Acute Care Health Facilities)

Hospitals are considered by many to be the front line or main health care providers following a medical disaster. The base station hospitals will be responsible to coordinate patient destinations until relieved of that duty by VCEMS staff.

The primary responsibilities of a hospital in a medical crisis include:

Base Hospital

- Communicating with MEDCOMM at the scene(s) of an MCI
- Determining initial bed availability

- Establishing destination decisions
- Providing medical control
- Providing treatment
- Establishing patient tracking
- Activating in-house plan (as determined by hospital protocol)
- Coordinating with VCEMS
- Communicating casualty data to VCEMS
- Providing ongoing resource status and patient transport/destination information through the use of the ReddiNet system

Receiving Hospital

- Providing treatment
- Establishing patient tracking
- Activating in house plan (as determined by hospital protocol)
- Communicating casualty data to VCEMS
- Providing ongoing resource status and patient transport/destination information through the use of the ReddiNet system

7. American Red Cross - Ventura County Chapter

American Red Cross will assist in a variety of humanitarian ways to ease the negative consequences following a medical disaster.

American Red Cross identified duties during an MCI may include:

- Deployment of mental health teams for civilian critical incident stress management (Federal Mandate during air disasters).
- Establishing the disaster welfare inquiry service for the purpose of identifying and tracking medical disaster victims.
- Providing care and shelter for victims left homeless or displaced.
- Providing food / comfort services for emergency responders and victims.

8. Calfiornia EMS Authority Region I Disaster Medical/Health Coordination (RDMHC) Area

RDMHC will act as a contact point for needed resources when an MCI exceeds the capability of the operational area (Ventura County) to manage the injuries.

The RDMHC is a network of regional counties, which are formed together in an effort to access medical mutual aid following a large incident or widespread disaster. This region includes San Luis Obispo, Santa Barbara, Ventura, Los Angeles and Orange Counties. Contact between the Region I RDMHC and Ventura County is the responsibility of the County's Medical Health Operational Area Coordinator (MHOAC), or his designee..

Duties of the RDMHC following an MCI/LEVEL III may include:

- Assessing the disaster-affected county to ascertain needed resources.
- Accessing other counties within Region I to acquire resources for the requesting county.
- Contacting the State EMS Authority to request additional resources and coordinate those already obtained.

9. State of California Emergency Medical Services Authority

The Emergency Medical Services Authority ensures quality patient care by administering an effective, statewide system of coordinated emergency medical care, injury prevention, and disaster medical response.

State EMS Authority identified duties during an MCI may include:

- Activate and/or liaison with the Region I RDMHC.
- Liaison between state and federal medical disaster relief.
- Maintaining communication with VCEMS relative to the status of the medical disaster and affected resources.

10. Hospital Association of Southern California (HASC)

The HASC consists of more than 200 hospitals (public, private, not-for-profit, for-profit and specialty hospitals). The region covers six counties: Los Angeles, Orange, Santa Barbara, Ventura, Riverside and San Bernardino.

HASC identified duties during an MCI may include:

Providing support and liaison to its member hospitals during a time of medical crisis.

11. Ventura County Transportation Authority

VCTA will respond at the request of public safety to assist with the evacuation of medical casualties from the scene. Buses, both large and small, may be used to transport casualties to and from hospitals, medical aid stations or field treatment sites.

12. Salvation Army

Salvation Army is called upon to assist in the feeding and sheltering of emergency workers and those in need.

13. State and Federal Agencies that may be involved in an incident include:

- National Transportation and Safety Board
- Federal Aviation Administration
- State Office of Emergency Services
- State Emergency Medical Services Authority
- Regional Disaster Medical Health Coordinator / Specialist
- Federal Bureau of Investigation
- National Guard
- Military
- Alcohol, Tobacco and Firearms
- Hazardous Materials Organizations
- California Department of Forestry
- Federal Emergency Management Administration
- State Parks
- National Disaster Medical System

(NDMS – DMAT, DMORT, etc).

- Coast Guard

SECTION III RESPONSE NARRATIVE

This section provides a narrative picture of the situations, which may typically unfold in the evolution of the three different types of medical disaster levels.

A. Multi Casualty Incident (MCI) LEVEL I

In the MCI/LEVEL I, first responders such as paramedics, fire service companies or BLS ambulance providers will be dispatched to the scene by the 9-1-1 system. Upon arrival they will be presented with a situation which, by virtue of patient numbers, overwhelms the medical resources initially dispatched. The first responders will notify their agency's dispatch of the need for additional resources. In order to organizationally address this incident, the Incident Command System will be utilized with emphasis upon the Multi Casualty Branch of the Operations Section.

The paramedic base hospital will provide direction primarily by assigning those patients involved to a receiving hospital destination; and when necessary, by directing the medical control of those acutely injured victims.

Patient care information transmitted to the paramedic base hospital will be abbreviated and patients will be placed in "immediate", "delayed" and "minor" categories in keeping with the Simple Triage and Rapid Treatment (S.T.A.R.T.) triage plan. Patients with traumatic injuries will also be triaged into the Ventura County trauma system and will be transported to a trauma center as indicated / directed.Patient care is focused upon life stabilizing treatments and expeditious transport of victims to appropriate receiving hospitals.

Receiving hospitals receive those casualties as directed by the base hospital and provide emergency hospital care. They will be notified of the number of patients and classifications prior to their arrival and may be given a minimal accounting of the patient's injuries.

Review of the medical component of an MCI/LEVEL I is coordinated and managed by the base hospital. VCEMS will act primarily in a supportive role for this level incident, but may coordinate certain aspects of the incident as needed. VCEMS Agency may conduct a post-incident analysis of the MCI at their discretion or at the request of agencies involved in the incident. Should a post-incident analysis be conducted,all medically involved participants will be invited. VCEMS Agency will publish a written report following the post-incident analysis. The report will include minutes from the post incident analysis meeting, any summary data available and written reports.

B. Multi Casualty Incident (MCI) Level II

The initial phase of an MCI/Level II is similar to that of the MCI/Level I; first responders are dispatched to an incident via the 9-1-1 system. However, upon arrival, rescuers are immediately presented with a scenario which provides a large number of patients too numerous to treat definitively in the field. The stabilization and transportation of prioritized casualties to an appropriate receiving hospital is the

most immediate objective. Management of the MCI/Level II is predicated on the assumption that there are enough prehospital medical responders, adequate transportation resources, sufficient casualty receiving hospitals, and an intact coordinated hospital communication system. VCEMS will coordinate with local dispatch centers to assess current resources and determine adequacy.

Additional prehospital medical and public safety resources are requested through the appropriate communication center. The Incident Command System is utilized in management of the casualty scene, in accordance with principles and practices outlined in the National Incident Management System (NIMS). Because of the greater number of injuries, more branches and positions of the ICS will be activated. All scene responders, fire, law enforcement, ALS, BLS, first aid teams, and others will fall under the direction of the Incident Commander or Unified Command.

Initial responders will estimate the number of resources needed to triage and transport the casualties. Among the resources requested by the Incident Commander in the very early stages of the MCI/Level II will be the assistance of VCEMS. When VCEMS is activated, a representative will contact the base hospital MICN for an update and may relieve them at that time. VCEMS will also begin filling requests for additional appropriate resources for on scene support. Hospitals may activate disaster plans and prepare to receive casualties. Victims will be transported from the scene as soon as on scene personnel have classified patients according to the S.T.A.R.T. triage system and when transportation resources are available. Considerations for transporting appropriate patients to a trauma center should be made. Because of the number of patients, trauma centers may become quickly inundated at which point patients should be transported to non-trauma hospitals.

If VCEMS is activated to support the on scene personnel, a representative will respond to the scene, the Health Care Agency Department Operations Center (DOC) or Ventura County Fire Communications Center. The VCEMS representative will then contact the base hospital and MEDCOMM. If the incident requires more medical resources than the county can provide, those resources will be requested by the MHOAC (or designee) through the regional disaster medical health system.

The activation of the County's EOC may or may not take place depending upon the complexity and needs of the incident. Activation of municipal EOC(s) may take place, again, depending upon the complexity and needs of the incident. If affected cities do activate EOCs, a limited activation of the County's EOC is required.

The MCI/Level II will begin demobilization as determined by the Incident Commander. The IC will notify EMS when the scene has been cleared. VCEMS will advise all hospitals that the scene has been cleared of casualties, but there may still be patient’s enroute to participating facilities.

VCEMS may conduct a post-incident analysis of the MCI at their discretion or at the request of agencies involved in the incident. All medically involved participants will be invited. VCEMS Agency will publish a written report following the post-incident analysis. The report will include minutes from the post incident analysis meeting, any summary data available and written reports.

C. Multi Casualty Incident (MCI) Level III

The MCI/LEVEL III brings about a situation where one or more of the major components of the emergency medical system are overwhelmed beyond the resources found within Ventura County.

Indications of an MCI Level lll may be identified by many public safety agencies simultaneously. If telephone communications are intact, a flood of 9-1-1 calls will most likely be received. First responders will immediately go into an information-gathering mode in order to attempt to establish the magnitude of the situation. Individual public safety agencies, local municipalities and other emergency medical responders will, in most instances, be the first to recognize the inability of local resources to manage the medical casualties. The County of Ventura Sheriff's Office of Emergency Services will be notified and initiate the opening of the County EOC when directed by the Ventura County Sheriff or Chair of the Ventura County Board of Supervisors.

Overwhelming numbers of victims may require non-traditional medical resources such as cities and their local clinics, urgent care centers, MRC, D.A.R.T, C.E.R.T or medical practices in order to provide initial emergency medical assistance. Spontaneous Aid Stations may be activated by cities, clinics, or the county and may be useful for treating walking wounded. The neighborhood medical first aid plan is built upon a three-way partnership between the city and pre-registered/pre-trained volunteers; all of who operate under ICS. Medical Aid Stations (MAS) will be quick to appear, relatively speaking, considering that the staff of participants has been recruited from the local neighborhood. Consideration should be given to the proximity of MAS to public shelters. The MAS form of community EMS may be quite important if the cause of the medical disaster has a significant impact upon transportation systems, communication networks and other infrastructure. Further instruction on utilization will be given at the time of the event.

Hospitals will be completing assessments of their own capabilities. It is presumed that some hospitals may be able to receive patients, while others may already be overwhelmed with casualties or may have become victims themselves. VCEMS will conduct assessments of all hospitals (as well as other medical care resources) to determine each facility's capabilities and needs following a major incident. RACES and VCEMS personnel at the County EOC or HCA DOC will handle the process of hospital assessment.

With data gathered from the hospitals, medical aid stations, EMS providers, skilled nursing facilities and other information sources, VCEMS will be able to proceed with a number of actions which include the following; 1) Advise the Health Officer to designate Field Treatment Sites (FTS). FTS's will be strategically located around the county, ideally near hospitals. 2) Provide the MHOAC and County Health Officer with a list of medical resources needed and suggest that mutual aid be requested through the Region I RDMH system. The MHOAC will direct medical resources to appropriate locations.

The Health Officer or his/her designee will establish FTSs as needed. The FTS will be a reception site for the patients who have been injured or are ill and unable to receive a hospital disposition. At the FTS, patients will receive a level of medical care commensurate to the level of staff and material resources available. The FTS will also function under the Incident Command System, thus promoting continuity throughout the Ventura County emergency medical care system. Patients sent to a FTS will be treated and held until a receiving hospital can be located. Location of a definitive medical receiving facility will be

done through the cooperative efforts of the disposition personnel at the FTS and VCEMS. Telephone or amateur radio with the assistance of a County designated communicator will handle communication between these two entities, if available.

The requested activation of an FTS implies that the magnitude, complexity and duration of the MCI/Level III medical disaster have exceeded all available medical resources within Ventura County. It may also be apparent to local officials at this point that large amounts of out-of-county resources, such as the military may be necessary to assist with the movement of casualties to other sites of definitive medical care. VCEMS may make a request to the County Health Officer to seek the assistance of the State or Federal authorities in the establishment of a Regional Evacuation Point at a designated airport. The Disaster Medical Assistance Team (DMAT) or State/Federal/military operated Regional Evacuation Point (REP) will be that conduit for the relocation outside of the County of casualties needing definitive hospital care. It needs to be emphasized that this endeavor is rather drastic and an extremely large undertaking. It will only be considered when those hospitals in the Southern California area (within range of rotary wing aircraft) have reached a maximum patient saturation level.

The medical operations of the MCI/LEVEL III, unlike those of the MCI/LEVEL I which may last a few hours or the MCI/Level II which may be sustained for a number of hours, may go on for days or weeks before all casualties are dispositioned. The activation and deployment of personnel and material resources necessary to operate a MAS, FTS or REP will require a significant mobilization of equipment and personnel. It will take days to establish the entire medical response matrix, with some components operational before others.

Local officials at the municipal and county levels will direct demobilization of the MCI/LEVEL III. MAS in communication with their individual city EOCs will mutually determine when their services are no longer needed. This information will be passed on from the city EOC to the VCEMS. In turn VCEMS, in contact with the participating hospitals, will request to be advised when hospitals have decided to "stand down" from their disaster or surge modes and have returned to operations as usual. The collective status of the city EOCs, their MAS, the acute care hospitals, and the general state of the public's health will determine when VCEMS medical disaster operations are to be discontinued. The order to demobilize VCEMS medical disaster operations will be issued by the MHOAC or his/her designee.

VCEMS Agency may conduct a post-incident analysis of the MCI at their discretion or at the request of agencies involved in the incident. All medically involved participants will be invited. VCEMS Agency shall publish a written report following the post-incident analysis. The report will include minutes from the post incident analysis meeting, any summary data available and written reports.

SECTION V INFORMATION MANAGEMENT

VCEMS is dependent upon a multitude of resources for acquiring and processing information; it is called upon to collect credible information and share it with the medical community.

During an MCI/LEVEL I, information will be exchanged through the day-to-day base hospital communications method. Information and data is collected and shared between the base hospital, receiving hospitals and the prehospital care providers. When appropriate, VCEMS will receive data in a post-incident review provided

primarily by the base hospital.
This information includes scene description, casualty numbers and acuity which is gathered and reported by the responding fire service (or other public safety agency), will be relayed to hospitals, transport providers and VCEMS officials. Inter-jurisdictional frequencies normally used to coordinate public safety mutual aid will also be employed.

During an MCI /Level II and above, VCEMS may assume communications at the scene, at the Fire Communications Center (FCC) or HCA DOC (Departmental Operations Center), contact base hospital MICN, and will advise MEDCOMM of hospital availability. Casualty receiving hospitals will receive data about expected patient arrivals and information about events related to the disaster (such as conditions on scene) via ReddiNet, FCC or the HCA DOC. It will be the casualty receiving hospital's responsibility to relay back via the designated radio frequency or phone, information regarding the actual casualties received. RACES Amateur radio operators may provide primary or backup communications, when appropriate, to pass or confirm messages. They may also be used as an alternative means for relaying any data to and from the participating acute care facilities.

The nature of information gathered and transmitted during an MCI/LEVEL III will be different than that of the MCI/Level II. Information will be slower to compile and disseminate because of the magnitude of the disaster and probable disruption to communication systems. It will be the larger MCI/LEVEL III, which will truly test the primary and backup communication paths. There is speculation as to the reliability of the everyday communications systems in an MCI/LEVEL III; if this is true, then there is an urgency to see that those secondary communications pathways are in place. VCEMS plans to act as the medical resource status center after an MCI/LEVEL III. VCEMS will take a proactive posture in assuring that all contacts, State and local, are kept informed with the most current intelligence concerning the disaster and the related medical response.

SECTION VI RESOURCE ACQUISITION

The MCI/LEVEL III scenario assumes a shortage of medical resources within Ventura County. VCEMS will log resource requests and resource availability of health care facilities and medical transportation. With the approval of the MHOAC or designee, VCEMS will direct available medical resources to areas of greatest need based on the best possible intelligence. VCEMS will make resource needs known to the County's EOC, and RDMHC.

GLOSSARY OF TERMS

ARC American Red Cross
The Federally chartered relief organization, which is charged to supply relief services to those with physical and emotional needs in time of war or disaster.

Base Hospital
A hospital that has been approved by the local EMS Agency to provide medical direction to prehospital emergency medical care personnel within its area of jurisdiction.

C.E.R.T. Community Emergency Response Team
An organization of trained volunteers who assist official emergency agencies.

D.A.R.T. Disaster Assistance Response Team
An organization of volunteer Disaster Service Workers serving a governmental agency for the protection of public health, safety and welfare; in accordance with the California Emergency Services Act.

Deceased (patient)
Fourth (last) priority in patient treatment according to the S.T.A.R.T. triage system.

Delayed (patient)
Second priority in patient treatment according to the S.T.A.R.T. triage system. These patients require aid, but injuries are less severe or pose no immediate threat to life.

EOC Emergency Operations Center - City or County
A secured location where disaster / emergency mitigation and recovery efforts may be directed and coordinated by those designated authorities.

EMS Emergency Medical Services
A local government (county) agency with the primary responsibility of coordinating the medical response to a disaster and facilitating the acquisition of additional resources to carry out the medical recovery mission.

EMSA Emergency Medical Services Authority - State of California
That agency within the State Health and Welfare Agency which is devoted to the coordination of policy and practice relative to emergency medical services throughout the State of California. This includes disaster mitigation and planning efforts.

FTS Field Treatment Site
A medical operation called for by the local health officer for the established purpose of collecting injured disaster victims who are in need of definitive medical care.

HCA Health Care Agency - County of Ventura
The local government (county) agency, which is designated to develop, issue and regulate policy in areas of public health and welfare.

HEICS Hospital Emergency Incident Command System
A generic medical response template developed by Ventura County EMS to provide health care facilities with an incident command based, standardized emergency response plan.

Hospital Inventory
The number of "Immediate" and "Delayed" patients which a hospital has identified that it may care for at any given time as a result of an MCI.

Immediate (patient)
First level of patient priority according to the S.T.A.R.T. triage system. A patient who requires rapid assessment and medical intervention in order to increase chances of survival.

MAS **Medical Aid Station**
A neighborhood disaster medical resource center; which may be organized under a three-way partnership; 1) a sponsoring city,
2) host medical site, and 3) community volunteers.

MCI **Multi Casualty Incident**
A suddenly occurring incident, which injures more than one individual, and presents conditions which may require fire and ambulance service mutual aid resources and the assistance of VCEMS.

Minor (patient)
Third priority of patient in the S.T.A.R.T. triage system. A patient requiring only simple, rudimentary first-aid. These patients are considered ambulatory.

NDMS **National Disaster Medical System**
NDMS **is a federally coordinated system that augments the Nation's medical response capability. The overall purpose of the NDMS is to supplement an integrated National medical response capability for assisting state and local authorities in dealing with the medical impacts of major peacetime disasters. Components of NDMS include Disaster Medical Assistance Teams (DMAT), Disaster Mortuary Operational Response Teams (DMORT), International Medical Surgical Response Teams (IMSURT), and National Veterinary Response Teams (NVRT).**

RACES **Radio Amateur Civil Emergency Services**
RACES provides for amateur radio operation for emergency communications purposes only during periods of local, regional, or national emergencies. Members of RACES organizations make their volunteer services available to municipal, county and state governments; additionally, RACES will provide communication services wherever there is a need for life saving and property preserving assistance.

Receiving Hospital
A hospital that has been approved by the EMS Agency to receive patients requiring emergency medical services.

ReddiNet **Rapid Emergency Digital Data Information Network**
Web based computer system to coordinate hospital and paramedic services in the event of a major emergency. In non-emergency situations, ReddiNet provides hospitals with daily diversion status updates to determine which hospitals can provide appropriate patient care.

S.T.A.R.T. **Simple Triage and Rapid Treatment**
A prehospital patient prioritizing system developed by Hoag Hospital and Newport

Beach Fire Department for use during an MCI/LEVEL I, II or III. The S.T.A.R.T. system is based on four levels of prioritization: Deceased, Minor, Delayed, or Immediate.

VCEMS **Ventura County Emergency Medical Services**
That agency within the County of Ventura Health Care Agency, which is responsible for those duties, assigned to the local government EMS.

Ventura County
Emergency Medical Services Agency
MULTI-CASUALTY PATIENT RECORD

(For use on declared Level II or Level III MCI's only)

Date:_____ **Agency**_____ **Unit#:**_____ **Location:**_____ **Incident #:**_____

Patient Name:	**Injuries**:	**Airway**:	**Cap Refill:**	**Tx Prior to Transport**:	**Base Hospital**:	**Comments:**
_____ **Age**:_____ **Sex**:_____ **Triage Tag #**:_____ ☐ **IMMEDIATE** ☐ **DELAYED** ☐ **MINOR**	_____ _____ _____ _____ **VC Trauma Step** _____	☐ Patent ☐ Other (Explain) _____ **Mental Status:** ☐ Follows Simple Commands ☐ Fails to Follow Simple Commands	☐ < 2 Seconds ☐ > 2 Seconds **Skin:** ☐ Normal ☐ Other **Resp Rate**:_____ **Pulse Rate**:_____ **B/P**:_____	☐ C-Spine ☐ Oxygen ☐ IV ☐ Other (Explain) _____ _____ _____ _____	☐ LRHMC ☐ VCMC ☐ SJRMC ☐ SVH **Dest. Hosp**:_____ **Times**: Depart:_____ Destination:_____	_____ _____ _____ _____ _____

Receiving Hospital to Attach Triage Tag Here

_____

PRINTED NAME **LICENSE #** **SIGNATURE**

Distribution: Original – Provider, Copies – Base Hospital, Receiving Hospital & EMS Agency

Copy shall be left with Receiving Hospital at time of arrival and become part of the patient's medical record.
Transport provider to distribute completed copies to Base Hospital and EMS Agency within 24 hours of the incident.

Ventura County
Emergency Medical Services Agency
MULTI-CASUALTY NON-TRANSPORT RECORD
(For use on declared Level II or Level III MCI's only)

Date: ___________ **Agency:** ___________ **Unit #:** ___________ **Location:** ______________________ **Fire Incident #:**_________________

Time: ________________ **Patient Name:** ____________________ **Sex:** ☐ Male ☐ Female **Age:** _________ **Tag #:** ______________	**Airway:** ☐ Patent **Mental Status:** ☐ Awake and Alert ☐ Appropriate for Age	**Skin:** ☐ Normal **Resp:** _________ **Pulse:** _________ **B/P:** _________	**Treatment Provided:** ____________________ ____________________ ____________________ ____________________ ☐ None Indicated	**Comments**: ____________________ ____________________ ____________________ ____________________	**Disposition:** ☐ AMA Obtained ☐ No AMA Obtained Other: ___________ ________________
Time: ________________ **Patient Name:** ____________________ **Sex:** ☐ Male ☐ Female **Age:** _________ **Tag #:** ______________	**Airway:** ☐ Patent **Mental Status:** ☐ Awake and Alert ☐ Appropriate for Age	**Skin:** ☐ Normal **Resp:** _________ **Pulse:** _________ **B/P:** _________	**Treatment Provided:** ____________________ ____________________ ____________________ ____________________ ☐ None Indicated	**Comments**: ____________________ ____________________ ____________________ ____________________	**Disposition:** ☐ AMA Obtained ☐ No AMA Obtained Other: ___________ ________________
Time: ________________ **Patient Name:** ____________________ **Sex:** ☐ Male ☐ Female **Age:** _________ **Tag #:** ______________	**Airway:** ☐ Patent **Mental Status:** ☐ Awake and Alert ☐ Appropriate for Age	**Skin:** ☐ Normal **Resp:** _________ **Pulse:** _________ **B/P:** _________	**Treatment Provided:** ____________________ ____________________ ____________________ ____________________ ☐ None Indicated	**Comments**: ____________________ ____________________ ____________________ ____________________	**Disposition:** ☐ AMA Obtained ☐ No AMA Obtained Other: ___________ ________________

____________________________________ ______________ ____________________________________

Printed Name **License #** **Signature**

Distribution: Original – Provider, Copies – Base Hospital & EMS Agency

Agency completing form will distribute completed copies to Base Hospital and EMS Agency within 24 hours of the incident.

MCI TRAUMA PATIENT DESTINATION DECISION ALGORITHM

TRIAGE ALL PATIENTS UTILIZING START TRIAGE

IMMEDIATE | **DELAYED** | **MINOR**

ESTABLISH A TREATMENT AREA ON ALL MASS CASUALTY INCIDENTS

ESTABLISH A TREATMENT AREA ON ALL MASS CASUALTY INCIDENTS

PERFORM A FOCUSED EXAM AND BEGIN TO PROVIDE TREATMENT AS RESOURCES ALLOW

PATIENTS ON A LEVEL I MCI WITH TRAUMATIC INJURIES WILL ALSO BE TRIAGED INTO THE VC TRAUMA TRIAGE DECISION SCHEME

LEVEL I MCI
FULL ePCR

- **RED TAG** → ANY TRAUMA STEP - TRANSPORT TO A TRAUMA CENTER (CONSIDER OUT OF COUNTY (O.O.C.), CONSIDER AIR TRANSPORT)
- **YELLOW TAG** → STEPS 1, 2, 3 TRANSPORT TO A TRAUMA CENTER (CONSIDER O.O.C.) STEP 4, NO STEP - TRAUMA BASE HOSPITAL DISCRETION
- **GREEN TAG** → STEP 3 TRANSPORT TO A TRAUMA CENTER (CONSIDER O.O.C.) STEP 4 TRAUMA BASE HOSPITAL DISCRETION NO STEP, TRANSPORT TO ANY HOSPITAL

LEVEL II/III MCI
ATTACHMENT "A/B"

- **RED TAG** → TRANSPORT TO A TRAUMA CENTER WHENEVER POSSIBLE (Consider O.O.C., CONSIDER AIR TRANSPORT)
- **YELLOW TAG** → TRAUMA CENTER PREFERRED, IF POSSIBLE (CONSIDER O.O.C.)
- **GREEN TAG** → TRANSPORT TO ANY HOSPITAL

1. When trauma center capacity at local and neighboring county trauma centers has been exhausted, transport to non-trauma hospitals
2. For Level II/III MCI events, red tag patients with traumatic injuries exhibiting the following criteria should be prioritized to trauma centers:
   - Significantly decreased GCS with evidence of neurological trauma
   - Penetrating or blunt injury with signs and symptoms of shock
   - Penetrating wounds to the neck and/or torso

INITIAL TRAUMA PATIENT CARE CAPACITY – MCI ALL LEVELS

FACILITY	CITY	TRAUMA CENTER	MCI LEVEL	RED TAG*	YELLOW TAG*	GREEN TAG
VCMC	VENTURA	*YES – L2*	MCI/Level I	3	4	5
			MCI/Level II	3	6	8
			MCI Level III	3	8	10
LRHMC	THOUSAND OAKS	*YES – L2*	MCI/Level I	3	4	5
			MCI/Level II	3	6	8
			MCI Level III	3	8	10
SJRMC	OXNARD	NO	MCI/Level I	N/A	2 (STEP 4, NO STEP)	4 (STEP 3, 4, NO STEP)
			MCI/Level II	3	6	8
			MCI Level III	3	8	10
SVH	SIMI VALLEY	NO	MCI/Level I	N/A	2 (STEP 4, NO STEP)	4 (STEP 3, 4, NO STEP)
			MCI/Level II	3	6	8
			MCI Level III	3	8	10
CMH	VENTURA	NO	MCI/Level I	N/A	2 (STEP 4, NO STEP)	4 (STEP 3, 4, NO STEP)
			MCI/Level II	3	6	8
			MCI Level III	3	8	10
PVH	CAMARILLO	NO	MCI/Level I	N/A	2 (STEP 4, NO STEP)	2 (STEP 4, NO STEP)
			MCI/Level II	3	6	8
			MCI Level III	3	8	10
SPH	SANTA PAULA	NO	MCI/Level I	N/A	2 (STEP 4, NO STEP)	2 (STEP 4, NO STEP)
			MCI/Level II	1	3	5
			MCI Level III	3	6	8
OVCH	OJAI	NO	MCI/Level I	N/A	2 (STEP 4, NO STEP)	2 (STEP 4, NO STEP)
			MCI/Level II	1	3	5
			MCI Level III	3	6	8

MCI LEVEL I = 3-14 VICTIMS; MCI LEVEL II = 15-49 VICTIMS; MCI LEVEL III = 50+ VICTIMS

A TRAUMA CENTER IS THE PREFERRED DESTINATION FOR RED AND YELLOW TAG PATIENTS WITH TRAUMATIC INJURIES IN A LEVEL II/III MCI. TRANSPORT THESE PATIENTS TO A TRAUMA CENTER WHENEVER POSSIBLE. CONSIDER OUT OF COUNTY DESTINATIONS (UTILIZE REDDINET FOR AVAILABILITY)

LEVEL 1 MCI WORKSHEET

INCIDENT:_____ **DATE:**_____

Person(s) filling out this form:_____

Pt #	AGE	SEX	PATIENT STATUS	VC TRAUMA STEP	INJURIES	DEST	TRANS UNIT ID	TRANS TIME	TRIAGE TAG # (Last 4)
1			I D M						
2			I D M						
3			I D M						
4			I D M						
5			I D M						
6			I D M						
7			I D M						
8			I D M						
9			I D M						
10			I D M						
11			I D M						
12			I D M						
13			I D M						
14			I D M						

	TIME						
VCMC	PCCI: 3I 4D 5M	AVAIL	USED	AVAIL	USED	AVAIL	USED
	IMMEDIATE						
	DELAYED						
	MINOR						
LRH	PCCI: 3I 4D 5M	AVAIL	USED	AVAIL	USED	AVAIL	USED
	IMMEDIATE						
	DELAYED						
	MINOR						
Hospital		AVAIL	USED	AVAIL	USED	AVAIL	USED
	IMMEDIATE						
	DELAYED						
	MINOR						
Hospital		AVAIL	USED	AVAIL	USED	AVAIL	USED
	IMMEDIATE						
	DELAYED						
	MINOR						
Hospital		AVAIL	USED	AVAIL	USED	AVAIL	USED
	IMMEDIATE						
	DELAYED						
	MINOR						
		Total		Total		Total	

TOTAL BEDS ASSIGNED:

_____

HOSPITAL WORKSHEET

INCIDENT:_____ DATE:_____

Person(s) Filling Out This Form:_____

TIME											TOTAL BEDS USED
	AVAIL	USED	AVAIL	USED	AVAIL	USED	AVAIL	USED	AVAIL	USED	
LRHMC											
IMMEDIATE											
DELAYED											
MINOR											
VCMC											
IMMEDIATE											
DELAYED											
MINOR											
SJRMC											
IMMEDIATE											
DELAYED											
MINOR											
SVH											
IMMEDIATE											
DELAYED											
MINOR											
CMH											
IMMEDIATE											
DELAYED											
MINOR											
PVH											
IMMEDIATE											
DELAYED											
MINOR											
SPH											
IMMEDIATE											
DELAYED											
MINOR											
OVCH											
IMMEDIATE											
DELAYED											
MINOR											

OUT-OF-COUNTY HOSPITAL WORKSHEET

INCIDENT:________________________________ **DATE:**________________

PERSON(S) COMPLETING THIS FORM:__________________________________

SANTA BARBARA COUNTY: Santa Barbara Cottage, Goleta Valley Cottage Hospital, Lompoc Valley Medical Center, Marian Medical Center, Santa Ynez Valley Cottage Hospital

LOS ANGELES COUNTY: Henry Mayo, Kaiser Woodland Hills, LAC+USC, Harbor UCLA, Northridge, Holy Cross, St. Joseph, Ronald Regan – UCLA (Westwood), West Hills, Tarzana, Cedars Sinai, Children's Hospital Los Angeles

TIME											TOTAL BEDS USED
	AVAIL	USED	AVAIL	USED	AVAIL	USED	AVAIL	USED	AVAIL	USED	
IMMEDIATE											
DELAYED											
MINOR											
IMMEDIATE											
DELAYED											
MINOR											
IMMEDIATE											
DELAYED											
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DELAYED											
MINOR											
IMMEDIATE											
DELAYED											
MINOR											

TREATMENT TARP UPDATES

INCIDENT:______________________________________ **DATE:**____________________

Person(s) filling out this form:____

TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL
TIME	IMMEDIATE	DELAYED	MINOR	TOTAL

IMMEDIATE TREATMENT AREA

INCIDENT:_____ **DATE:**_____

Person(s) filling out this form:_____

AGE	SEX	TRIAGE TAG # (LAST 4)	INJURIES	TIME OFF TARP

DELAYED TREATMENT AREA

INCIDENT:_____ **DATE:**_____

Person(s) filling out this form:_____

AGE	SEX	TRIAGE TAG # (LAST 4)	INJURIES	TIME OFF TARP

MINOR TREATMENT AREA

INCIDENT:_____ **DATE:**_____

Person(s) filling out this form:_____

AGE	SEX	TRIAGE TAG # (LAST 4)	INJURIES	TIME OFF TARP

MORGUE WORKSHEET

INCIDENT:_____ **DATE:**_____

Person(s) filling out this form:_____

AGE	SEX	TRIAGE TAG # (LAST 4)	NOTES

TRANSPORTATION WORKSHEET

INCIDENT:_____ **DATE:** _____

Person(s) filling out this form: _____

	AGENCY	AMBULANCE ID	TRIAGE TAG (Last 4)	AGE	SEX	PATIENT STATUS	DEST	TRANS TIME
1						I D M		
2						I D M		
3						I D M		
4						I D M		
5						I D M		
6						I D M		
7						I D M		
8						I D M		
9						I D M		
10						I D M		
11						I D M		
12						I D M		
13						I D M		
14						I D M		
15						I D M		
16						I D M		
17						I D M		
18						I D M		
19						I D M		
20						I D M		
21						I D M		
22						I D M		
23						I D M		
24						I D M		
25						I D M		

Staging Area Manager Worksheet
Ambulance Resource Status

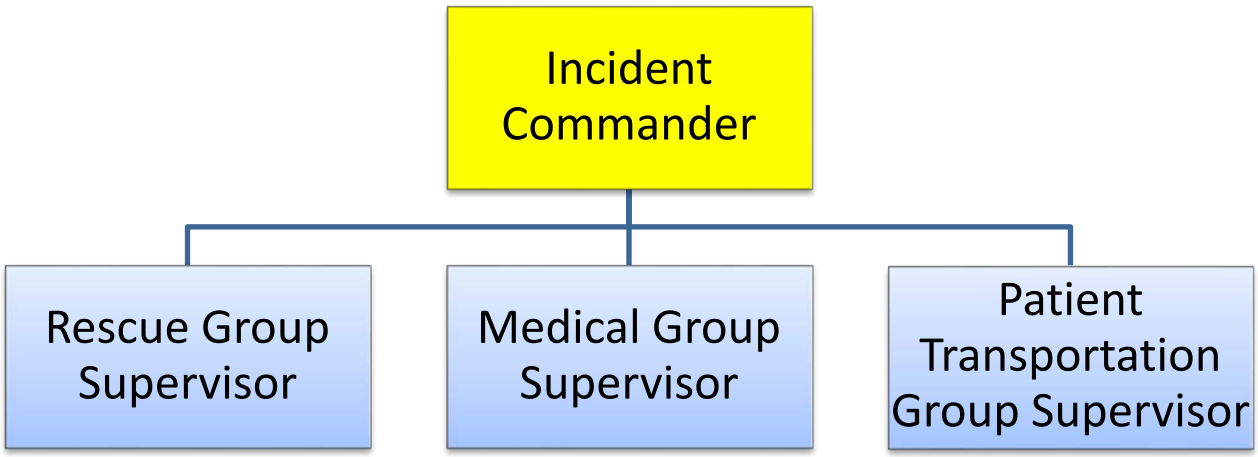
Incident:_____ **Date:**_____

Person(s) Completing Form:_____

AGENCY	UNIT #	ALS/BLS	Time IN	Time OUT

MCI Job Aid

Position: Incident Commander (IC)



Responsibilities:

- The incident commander is the individual responsible for all incident activities, including the development of strategies and tactics and the ordering and the release of resources.
- Typically the first engine company captain (red helmet) or the first battalion chief (white helmet) will assume the role of IC
- Once IC has been established, that information needs to be relayed via radio to dispatch as well as other personnel on scene.
- Name the incident (this may be done automatically by dispatch personnel)
- Declare an MCI/Level __ based on the total number of victims involved (transported or not)
    - MCI/Level I 3-14 victims
    - MCI/Level II 14-49 victims
    - MCI/Level III 50+ victims
- The Incident Commander should ensure that the communications center notifies EMSA duty officer of the MCI (automatic for FCC)

Groups will be assigned as needed (e.g. rescue group or HazMat group). Medical group supervisor will be assigned by IC and is typically an early arriving engine company Captain.

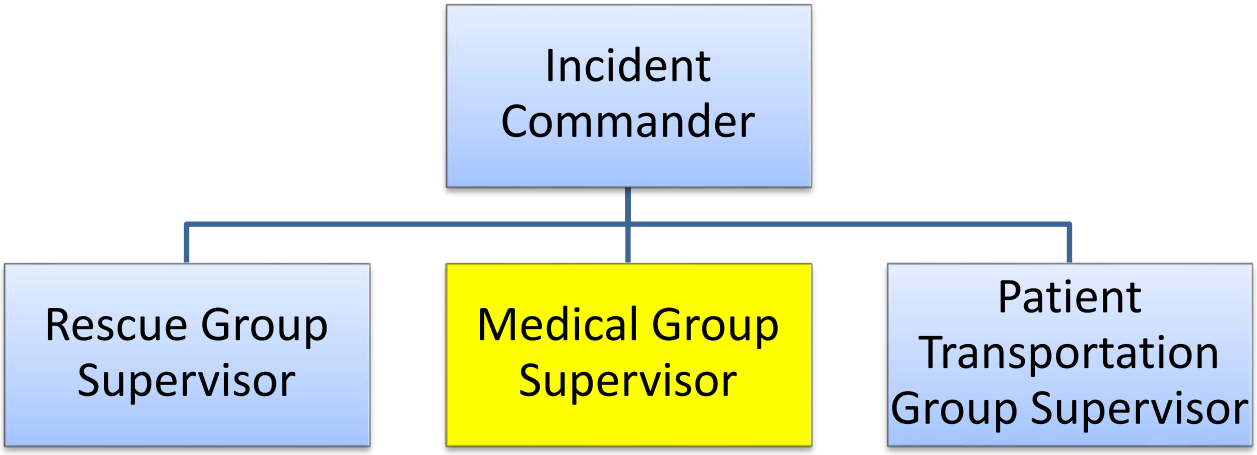
Depending on the level of the MCI, other groups and positions will be assigned. These positions will be assigned by the IC as the incident progresses. The assignment of these groups will be based on need. For MCI, there will always be a need for a medical group and a patient transportation group.

The role of the IC can be passed on as the incident progresses (Captain to Battalion Chief, Battalion Chief to Division/Assistant Chief, etc).

Medical group supervisor may be established on smaller incidents, but the role will likely be under the Operations Section on larger-scale incidents.

MCI Job Aid

Position: Medical Group Supervisor

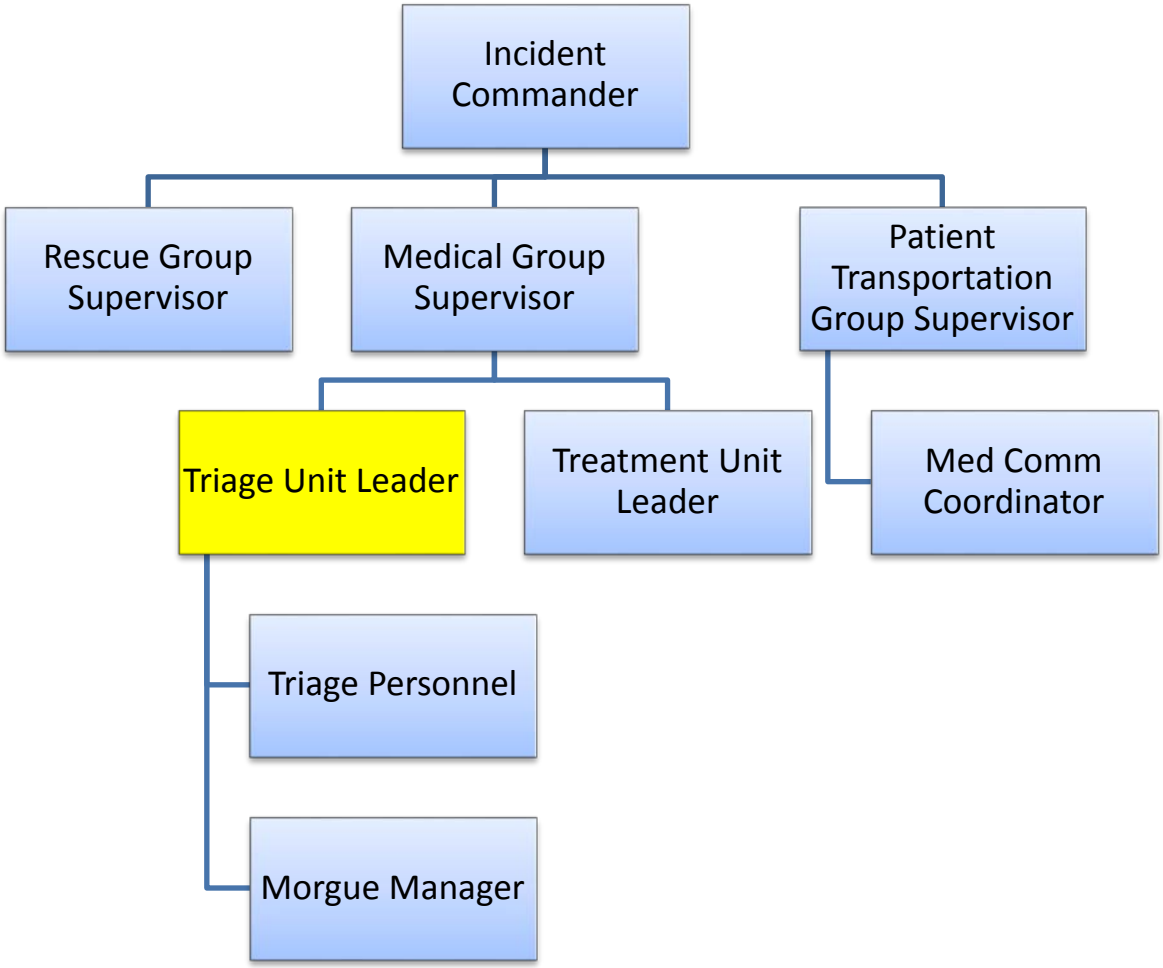


Responsibilities:

- The Medical Group Supervisor reports to the Incident Commander (on smaller incidents) or the Operations Section or Medical Branch Director (on larger incidents) and supervises the Triage Unit Leader, Treatment Unit Leader, and the Medical Supply Coordinator
- Designate treatment and triage unit leaders as well as treatment areas (including morgue)
- Determine amount and type of additional resources and supplies necessary to complete objectives
- Establish face to face communication and coordinate with Patient Transportation Group Supervisor
- Responsible for ensuring adequate medical care to patients is being delivered.
- Maintain a unit log (ICS 214)

MCI Job Aid

Position: Triage Unit Leader

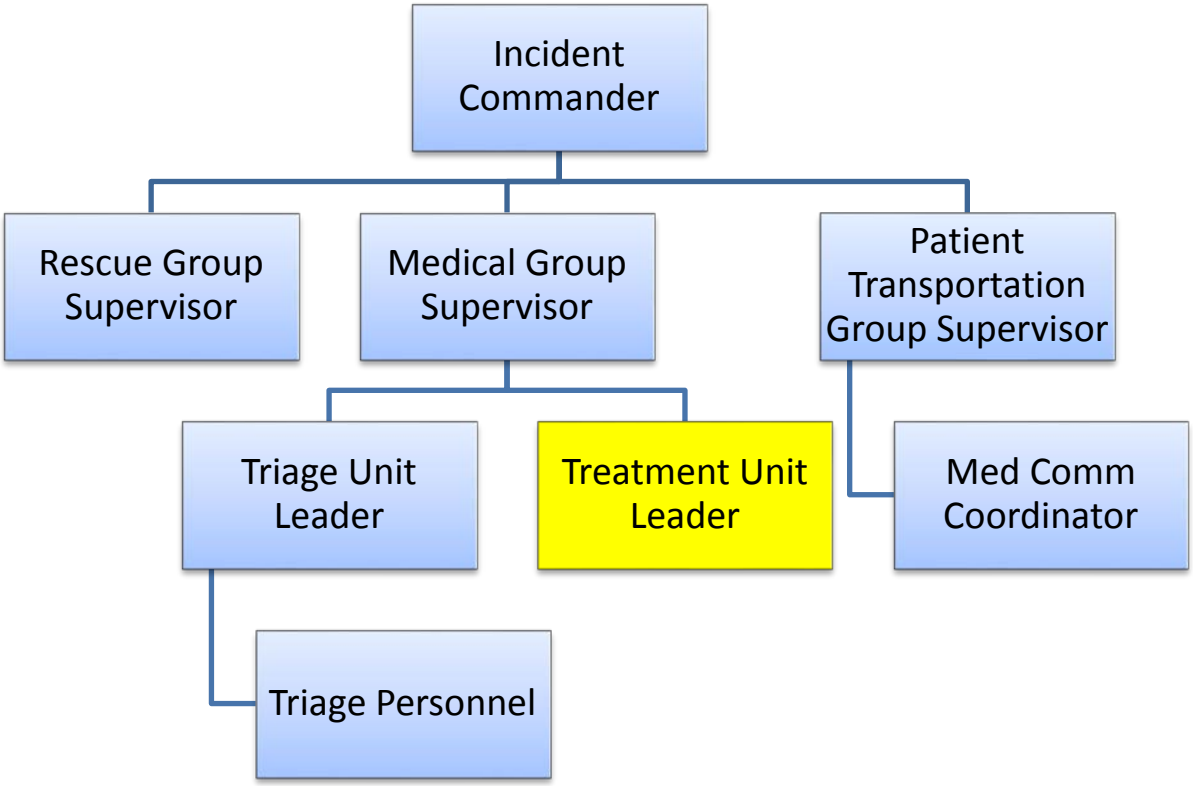


Responsibilities:

- Determine resources required to conduct triage operations
- Communicate resource needs and status reports to the Medical Group Supervisor
- Implement the triage process
- Coordinate movement of patients to appropriate treatment area
- Maintain security and control of the triage area
- Establish a morgue (as needed), an assign a morgue manager

MCI Job Aid

Position: Treatment Unit Leader

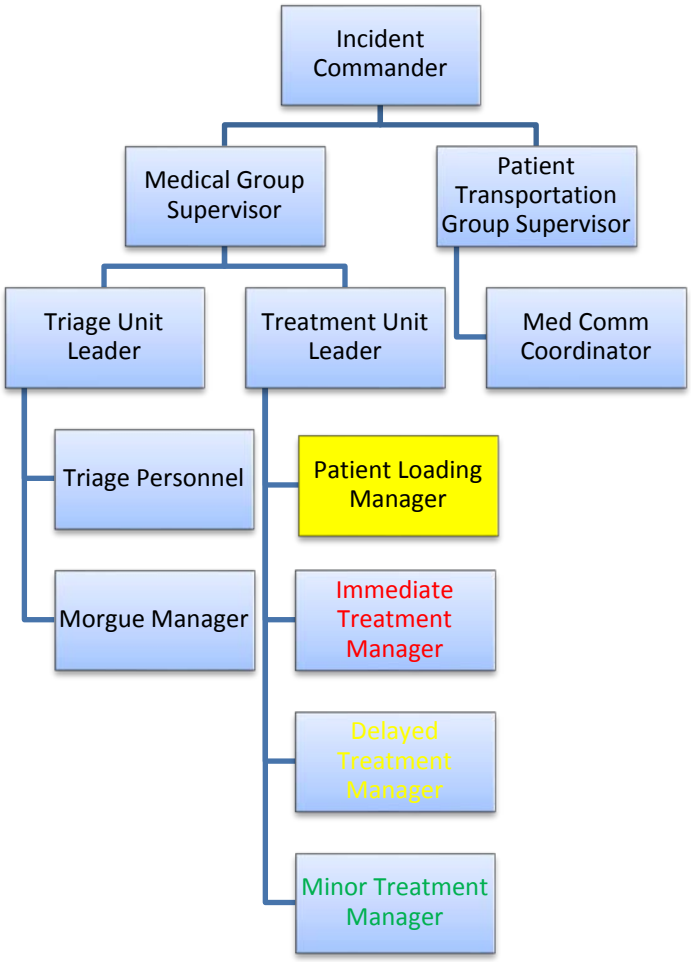


Responsibilities:

- The Treatment Unit Leader assumes responsibility for treatment, preparation for transport, and coordination of patient treatment in the treatment areas and directs movement of patients to loading areas.
- Direct and supervise the Patient Loading Manager as well as the Immediate, Delayed, and Minor Treatment Area Managers.
- Identify a suitable (and safe) area for treatment operations
- Communicate and coordinate the movement of patients from triage to the treatment areas with Triage Unit Leader
- Request additional medical supplies and resources utilizing the proper chain of command
- Establish communication and coordination with the Patient Transportation Group Supervisor
- Direct the movement of patients to the ambulance loading areas
- Retain destination portion of the triage tag (this may be done by the Patient Loading Manager)
- This position can be staffed by fire personnel, and can be an EMT. Ideally, this position will be filled by a fire Captain.

MCI Job Aid

Position: Patient Loading Manager

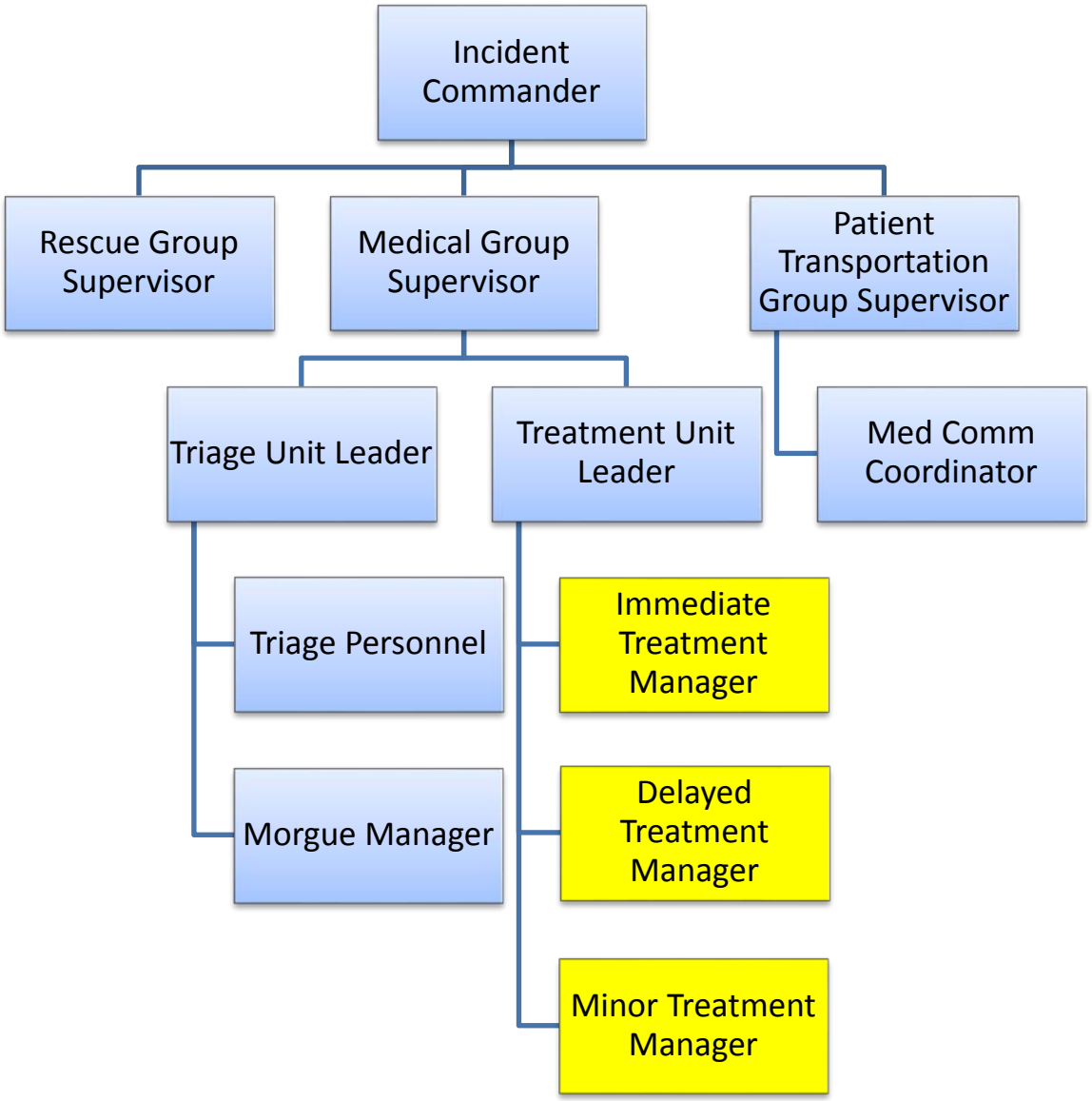


Responsibilities:

- The Patient Loading Manager reports to the Treatment Unit Leader and is responsible for coordinating the transportation of patients out of the treatment area with the Patient Transportation Group Supervisor
- Communicate and coordinate with Immediate, Delayed, and Minor Treatment Area Managers
- Establish communications and coordinate with the Patient Transportation Group Supervisor
- Verify that patients are prioritized for transport
- Coordinate the transport of patients with Medical Communication Coordinator (MEDCOMM) by relaying patient readiness and priority
- Assure appropriate patient tracking
- Coordinate ambulance loading with the Treatment Area Manager(s) and ambulance personnel

MCI Job Aid

Position: Treatment Area Managers



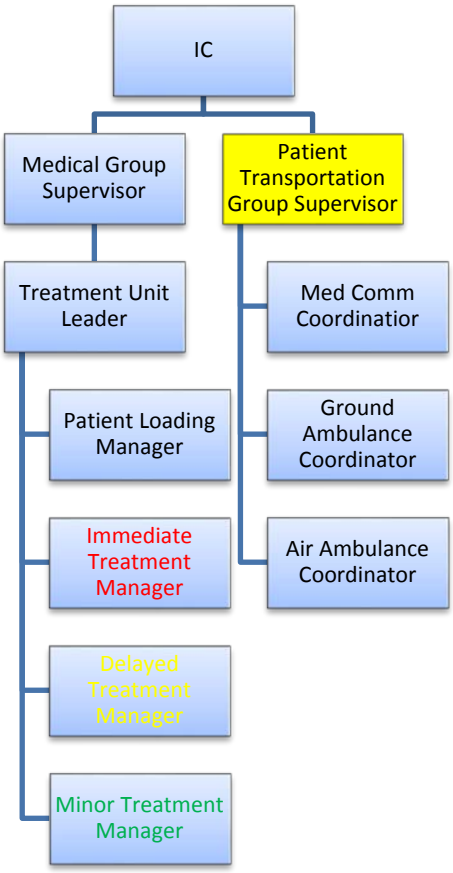
Responsibilities:

- The Treatment Area Managers report to the Treatment Unit Leader and are responsible for the oversight of patient treatment and prioritization of patients assigned to their areas – Immediate, Delayed, and Minor.
- Responsible for requesting and tasking personnel within their given treatment areas.
- Ensure adequate treatment and prioritization of patients in a given treatment area.
- Ensure that personnel within the treatment areas gather and record accurate and detailed patient information and record on the triage tags.
- Minor Treatment Area Manager is responsible for identifying those walking wounded who were initially removed from the triage/hazard area, but who may have potential injuries (sometimes significant).
- **For MCI/Level I – Ensure that patients with traumatic injuries are re-assessed and triaged into the Ventura County Trauma System.**

Note: Minor Treatment Area Manager should coordinate volunteer personnel through Agency reps and the Treatment Unit Leader to assist with care and supervision of the minor category patients.

MCI Job Aid

Position: Patient Transportation Group Supervisor



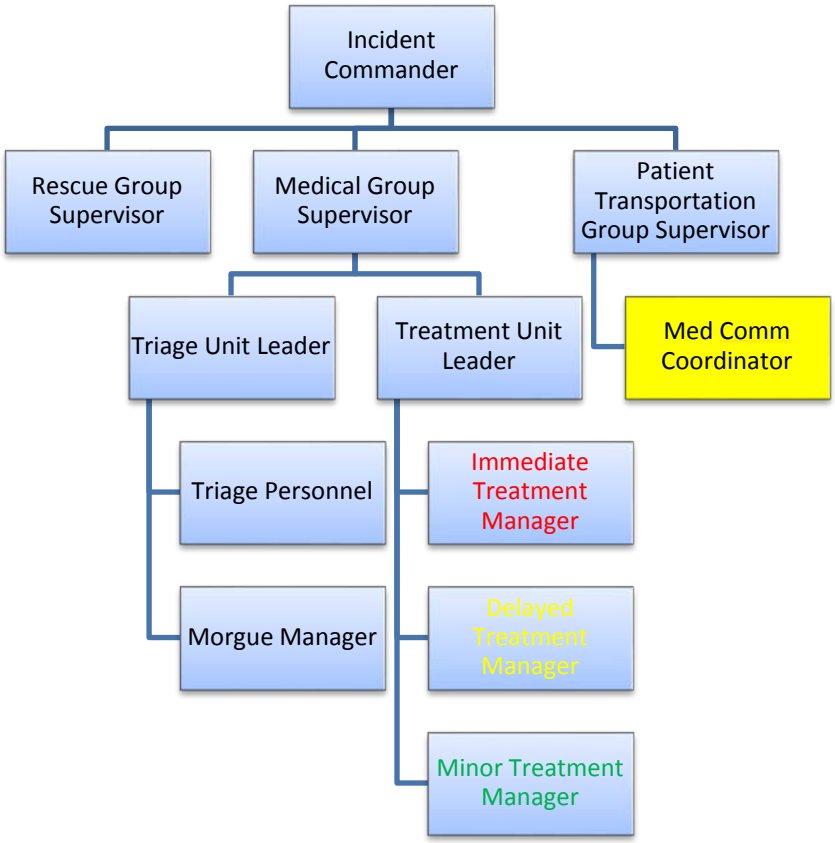
Responsibilities:

Reports to the IC or Operations Section Chief and supervises MEDCOMM as well as the Ground and Air Ambulance Coordinator positions. This is often the first transport paramedic on scene. Responsible for maintaining a wide focus on the incident, as it relates to transporting patients from the incident, to hospitals.

- Ensures MEDCOMM (retain or delegate) has been established and that communications with the base hospital remains efficient and effective.
- Maintain effective communication with IC or Operations Section, as well as the Medical Group Supervisor.
- Ensures that safe and appropriate patient loading area(s) have been established.
- Ensure that ground and air ambulance staging areas/helispots are established.
- Maintain records related to patient transportation and destinations.
- Assign Ground and Air Ambulance Coordinators.
- Utilize Policy 131 Attachments to track patient destinations and unit log.
- Ensures resource and staging needs are communicated effectively through the appropriate chain of command.

MCI JOB AID

MEDICAL COMMUNICATIONS COORDINATOR (MEDCOMM)

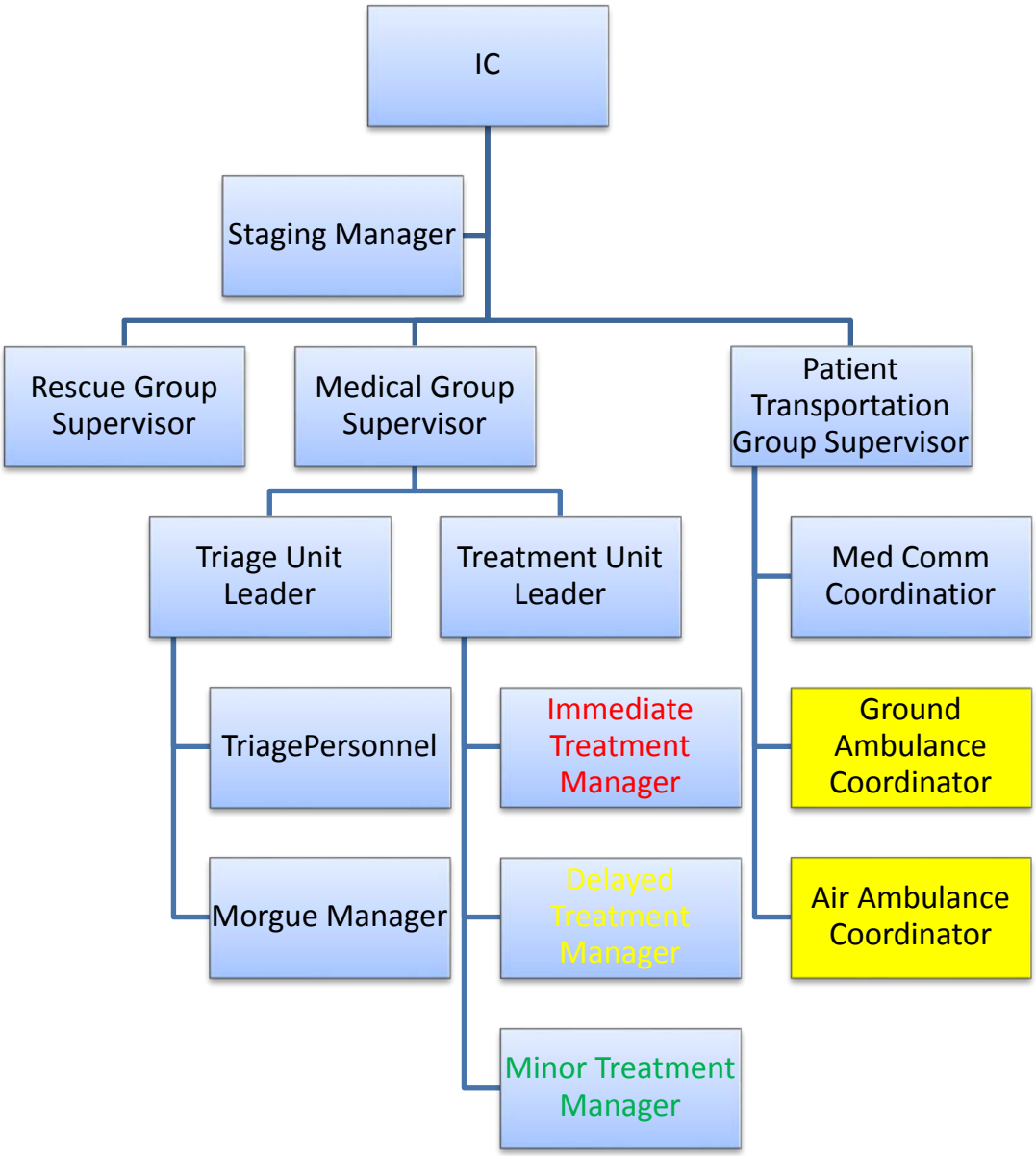


Responsibilities:

- Coordinate method of transport (ground/air) as well as destination for patients being transported. Communicates directly with the Patient Transportation Group Supervisor as well as the Base Hospital to ensure that patients are transported to the most appropriate destination as efficiently as possible.
- Determine and maintain communications with the Base Hospital to ensure that bed availability and destination information remains accurate.
- Receive patient information from Treatment Unit Leader and/or Patient Loading Manager (in larger-scale incidents)
- Maintain accurate records (include triage and transport receipts).
- This position may be held in conjunction with Patient Transportation Group Supervisor, or may be delegated by the Patient Transportation Group Supervisor, depending on scope and scale of the incident.

MCI JOB AID

POSITION: AIR/GROUND AMBULANCE COORDINATOR

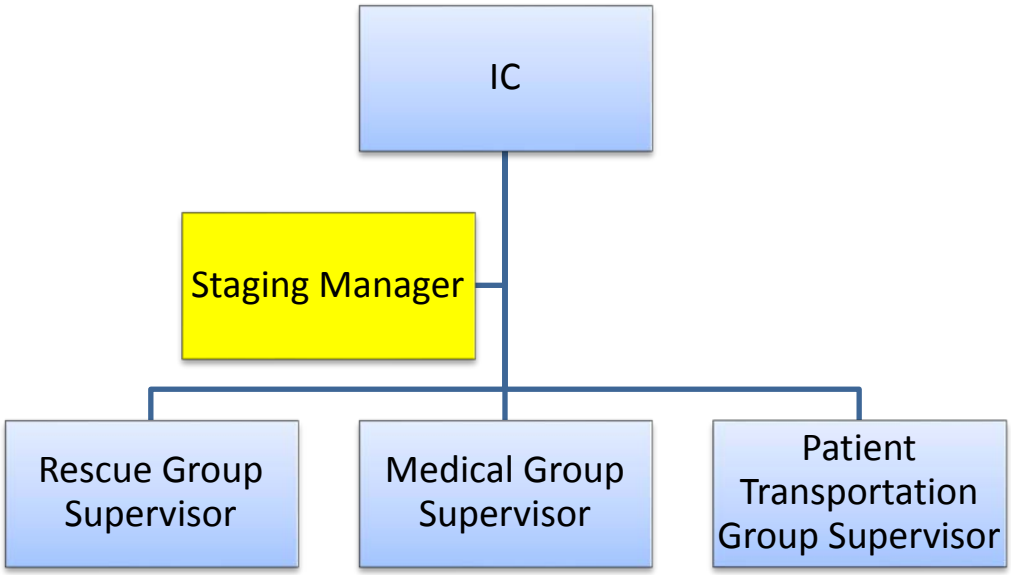


Responsibilities:

- Maintains effective communications with the Patient Transportation Group Supervisor, MEDCOMM, and Patient Loading Manager. Should also maintain effective communications with the Air Ops Branch (if one is assigned).
- Establish appropriate staging area(s) for ground ambulances and safe helispots for air resources
- Establish safe routes of travel for ambulances to or through the incident
- Request additional transportation resources through the proper chain of command.
- Document resources through VCEMS 310 – Ambulance Staging Area Manager Worksheet.

MCI Job Aid

Position: Staging Manager

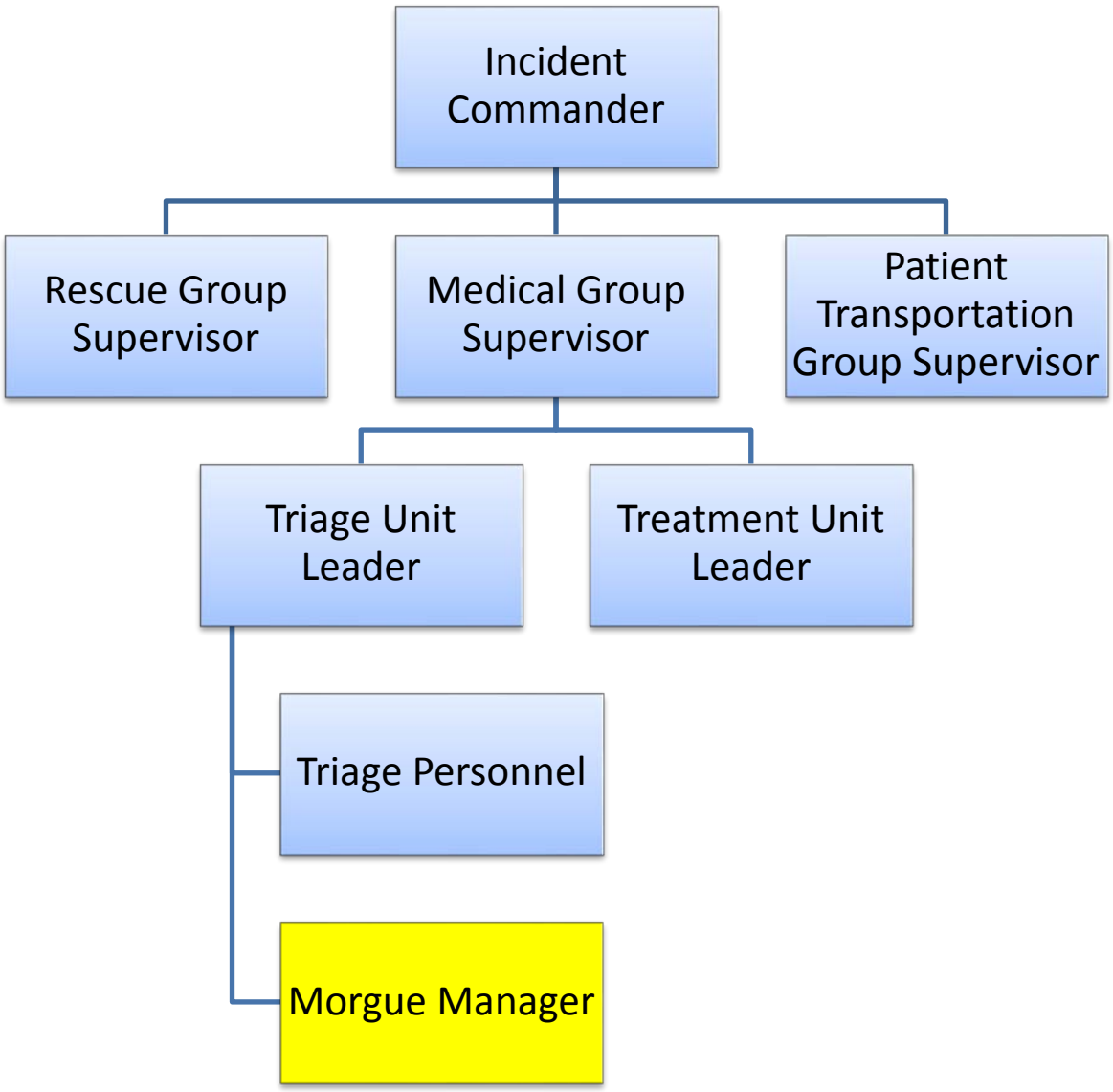


Responsibilities:

- Typically filled on larger incidents (MCI/Level II-III)
- Manages the staging area.
- Communicates with ground ambulance coordinator.
- All personnel should report to staging when arriving at the incident.
- If they are re-assigned to the MCI after transporting a patient, ambulances will return to staging when patient transportation is completed (remain in staging until re-assigned or released).

MCI Job Aid

Position: Morgue Manager

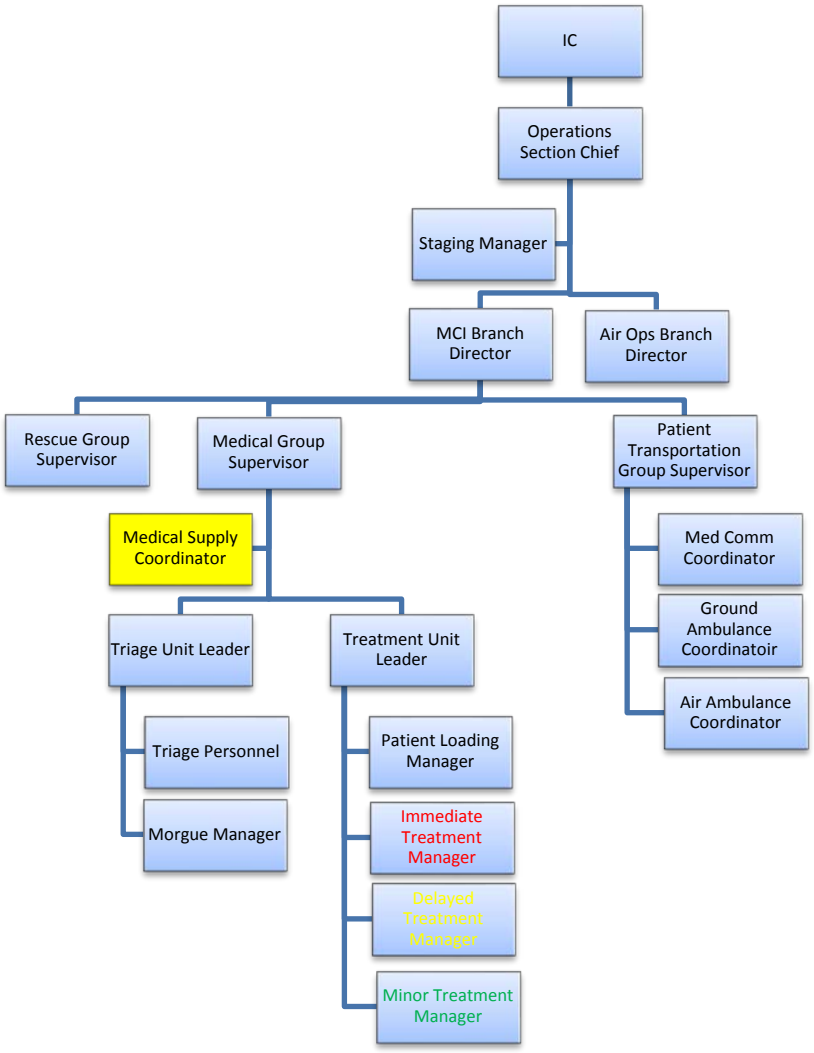


Responsibilities:

- Coordinate and manage all morgue area activities
- Keep area secure and separate from patient treatment areas
- Coordinate with law enforcement and the Medical Examiner's office. Ideally, transition management of the morgue area to one of those entities.
- Maintain accurate records and maintain integrity/privacy of all victim identification/information.

MCI JOB AID

POSITION: MEDICAL SUPPLY COORDINATOR



Responsibilities:

- Reports to the Medical Group Supervisor. Acquires, distributes, and maintains the status of medical supplies and equipment within the Medical Group / Division.
- Request additional supplies (MCI caches/trailers, DMSU)
- Distribute medical supplies to Triage and Treatment Units
- Maintain documentation (ICS 214 – Unit Activity Log).

COUNTY OF VENTURA HEALTH CARE AGENCY	EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: Guidelines for Interfacility Transfer of Patients to a Trauma Center	Policy Number 1404
APPROVED: Administration: Steven L. Carroll, EMT-P	Date: October 29, 2013
APPROVED: Medical Director: Angelo Salvucci, M.D.	Date: October 29, 2013
Origination Date: July 1, 2010 Date Revised: October 29, 2013 Date Last Reviewed: October 29,, 2013 Review Date: December 1, 2015	Effective Date: December 1, 2013

I. PURPOSE: To establish guidelines for the transfer of a trauma patient from a hospital in Ventura County to a Level II trauma center.

II. AUTHORITY: Health and Safety Code, §1797.160, §1797.161, and §1798, and California Code of Regulations, Title 22, §100255.

III. DEFINITIONS:

A. **EMERGENT** Transfer: A process by which a patient with potential life-or-limb threatening traumatic injuries is transferred to a trauma center. The patient requires an immediate procedure at a trauma center, and a delay in transfer will result in deterioration of the patient's condition, and the treating physician requests immediate transport to a trauma center.

1. Trauma Call Continuation: A process by which a patient with potential life-or-limb threatening traumatic injuries who has been taken to the emergency department by ALS ambulance is transferred to a trauma center. The patient requires an immediate procedure at a trauma center, the ALS ambulance is still on the premises, and the treating physician requests immediate transport to a designated trauma center.

B. **URGENT** Transfer: A process by which a patient with time-critical traumatic injuries is transferred to a trauma center. The patient requires a timely procedure at a trauma center, and a lengthy delay will result in deterioration of the patient's condition, and the treating physician requests prompt transport to a trauma center.

IV POLICY: The following criteria will be used as a guideline for the transfer of a trauma patient to a trauma center.

A. For patients who are in the emergency department at a community hospital and have one or more of the following injuries, if the referring physician requests transfer to a trauma center, the trauma center will immediately accept the patient

1. Carotid or vertebral arterial injury
2. Torn thoracic aorta or great vessel
3. Cardiac rupture
4. Bilateral pulmonary contusion with PaO2 to FiO2 ratio less than 200
5. Major abdominal vascular injury
6. Grade IV, V or VI liver injuries
7. Grade III, IV or V spleen injuries
8. Unstable pelvic fracture
9. Fracture or dislocation with neurovascular compromise
10. Penetrating injury or open fracture of the skull
11. Glasgow Coma Scale score <14 or lateralizing neurologic signs
12. Unstable spinal fracture or spinal cord deficit
13. >2 unilateral rib fractures or bilateral rib fractures with pulmonary contusion
14. Open long bone fracture
15. Significant torso injury with advanced co-morbid disease (such as coronary artery disease, chronic obstructive pulmonary disease, type 1 diabetes mellitus, or immunosuppression)

B. Ventura County Level II Trauma Centers:

1. Agree to immediately accept from Ventura County community hospitals, patients with conditions included in the guidelines above.
2. Will publish a point-of-contact phone number for an individual authorized to accept the transfer of a patient with a condition included in the guidelines above, or to request consultation with a trauma surgeon.
3. Will establish a written interfacility transfer agreement with every hospital in Ventura County.
4. Immediately post on ReddiNet and notify EMS Administrator on-call when there is no capacity to accept trauma patients due to:
   a. Diversion for internal disaster
   b. CT scanner(s) non-operational
   c. Primary and back-up trauma surgeons in operating rooms with trauma patients

C. Community Hospitals:

1. Are not required to transfer patients with conditions included in the guidelines above to a trauma center when resources and capabilities for providing care exist at their facility.
2. Will enter into a written interfacility transfer agreement with every trauma center in Ventura County.

D. **EMERGENT** Transfers

1. **EMERGENT** transfers are indicated for patients with life-or-limb threatening injuries in need of emergency procedures at a trauma center. Criteria **MUST** include at least one of the following:
   a. Indications for an immediate neurosurgical procedure.
   b. Penetrating gunshot wounds to head or torso.
   c. Penetrating or blunt injury with shock.
   d. Vascular injuries that cannot be stabilized and are at risk of hemorrhagic shock or loss of limb acutely (excluding fingers/toes).
   e. Pregnancy with indications for an immediate Cesarean section.
2. For **EMERGENT** transfers, trauma centers will:

a. Publish a single phone number ("hotline"), that is answered 24/7, for an individual authorized to accept the transfer of patients who have a condition as described in Section D.1 of this policy.

b. Immediately upon initial notification by a transferring physician, accept in transfer all patients who have a condition as described in Section D.1 of this policy.

3. For **EMERGENT** transfers, community hospitals will:
   a Assemble and maintain a "Emergency Transfer Pack" in the emergency department to contain all of the following:
      1. Checklist with phone numbers of Ventura County trauma centers.
      2. Patient consent/transfer forms.
      3. Treatment summary sheet.
      4. Ventura County EMS "Emergency Trauma Patient Transfer QI Form."

b. Have policies, procedures, and a quality improvement system in place to track and review all **EMERGENT** transfers and Trauma Call Continuations.

c. Maintain an ambulance arrival to emergency department (ED) departure time of no longer than ten minutes.

d. Establish policies and procedures to make personnel available, when needed, to accompany the patient during the transfer to the trauma center.

4. For **EMERGENT** transfers, Ventura County Fire Communications Center (FCC) will:

a. Respond to an **EMERGENT** transfer request by immediately dispatching the closest available ALS ambulance to the requesting hospital.

b. Consider Trauma Call Continuation transfers to be a follow-up to the original incident, and will link the trauma transfer fire incident number to the original 911 fire incident number.

5. For **EMERGENT** transfers, ambulance companies will:

a. Respond immediately upon request.

b. For "Trauma Call Continuation" requests, immediately transport the patient to a trauma center with the same ALS personnel and vehicle that originally transported the patient to the community hospital.

c. Not be required to consider **EMERGENT** transports as an "interfacility transport" as it pertains to ambulance contract compliance.

E. **URGENT** Transfers

1. **URGENT** transfers are indicated for patients with time-critical injuries in need of timely procedures at a trauma center.

2. For **URGENT** transfers, trauma centers will:

a. Publish a single phone number, that is answered 24/7, for a community hospital to request an urgent trauma transfer. Additionally, this line may be used to request additional consultation with a trauma surgeon if needed

3. For **URGENT** transfers, community hospitals will:

a. Maintain an ambulance arrival to emergency department (ED) departure time of no longer than twenty minutes.

4. For **URGENT** transfers, ambulance companies will:
   a. Arrive at the requesting ED no later than thirty minutes from the time the request was received.

V. PROCEDURE:

A. **EMERGENT** Transfers

1. After discussion with the patient, the transferring hospital will:
   a. Call the trauma hotline of the closest trauma center to notify of the transfer.
   b. Call FCC, advise they have an **EMERGENT** transfer, and request an ambulance. If the patient's clinical condition warrants, the transferring hospital will call FCC *before* calling the trauma center's hotline.
   c. Complete transfer consent and treatment summary.
   d. Prepare copies of the ED triage assessment form and demographic information form.
2. Upon request for an **EMERGENT** transfer, the dispatch center will dispatch the closest ALS ambulance and verbalize "MEDxxx E MERGENCY Trauma Transfer from [transferring hospital]". The trauma center will be denoted in the incident comments, which will display on the mobile data computer (MDC). If a unit does not have an operational MDC, the transferring hospital will advise the responding ambulance personnel of the destination trauma center.
3. Upon notification, the ambulance will respond Code (lights and siren).
4. FCC will track ambulance dispatch, enroute, on scene, en-route hospital, at hospital, and available times.
5. The patient shall be emergently transferred without delay. Every effort will be made to limit ambulance on-scene time in the transferring hospital ED to ten minutes.
   a. All forms should be completed prior to ambulance arrival.
   b. Any diagnostic test or radiologic study results may either be relayed to the trauma center at a later time, or if time permits, copied and sent with the patient to the trauma center.
   c. Intravenous drips may be discontinued or remain on the ED pump.
   d. The transporting paramedic will contact the trauma base hospital enroute and provide updated patient information.

B. Trauma Call Continuation

1. Upon determination of a Trauma Call Continuation, and after discussion with the patient, the community hospital will:
   a. Direct the ambulance personnel to prepare to continue the transport to the trauma center.
   b. Notify the designated trauma center ED of the immediate re-triage of a trauma patient, and communicate the patient's apparent injuries or reason for the re-triage, after the call is continued and the patient is enroute to the trauma center.
2. Upon notification of Trauma Call Continuation, the ambulance personnel will notify FCC of their assignment to a Trauma Call Continuation. FCC will link the trauma transfer to the original 911 incident and continue tracking en-route hospital (departure from community hospital), at hospital (arrival at trauma center) and available times.
3. When the transferring physician determines the patient is ready and directs ambulance personnel to continue the transport, the ambulance will emergently transport the patient to the trauma center. The transporting paramedic will contact the trauma base hospital enroute and provide updated patient information.

C. **URGENT** Transfers

1. After discussion with the patient, the transferring hospital will:
   a. Call the trauma hotline for the closest trauma center to request an urgent trauma transfer. This call may be used to request additional consultation with the trauma surgeon if needed.
   b. Call the transport provider to request an ambulance.
   c. Complete transfer consent and treatment summary.
   d. Prepare copies of the ED triage assessment form.
   e. Limit ambulance on-scene time in the transferring hospital ED to twenty minutes.
2. Upon request for an Urgent transfer, the transport provider will dispatch an ambulance to arrive no later than thirty minutes after the request.

D. For all **EMERGENT** and **URGENT** transfers, the transferring hospital will submit a completed Emergency Trauma Patient Transfer QI Form to the Ventura County EMS Agency within 72 hours. The transfer will be reviewed for appropriate and

timely care and to identify opportunities for improvement. Results will be reviewed and discussed at the Countywide EMS Trauma Operational Review Committee.

COUNTY OF VENTURA HEALTH CARE AGENCY		EMERGENCY MEDICAL SERVICES POLICIES AND PROCEDURES
Policy Title: Medication Error Reporting		Policy Number 151
APPROVED: Administration:	Steven L. Carroll, EMT-P	Date: 06/01/2011
APPROVED: Medical Director:	Angelo Salvucci, M.D.	Date: 06/01/2011
Origination Date: Date Last Reviewed: Date Revised: Review Date:	November 1, 2003 December 11, 2010 December 11, 2010 December, 2013	Effective Date: June 1, 2011

I. PURPOSE: To provide a mechanism for prehospital care providers to report medication errors. The information obtained may be used for education and continuous quality improvement to promote a medication error-free environment.

II. AUTHORITY: Health and Safety Code 1797.220

III. POLICY: Medication Errors are reported to the PCC, EMS Supervisor, VC EMS CQI Coordinator, or VC EMS Duty Officer in accordance with the following procedure. Persons reporting the error are immune from any disciplinary action by VC EMS Agency under the following conditions:

A. The event was unintentional
B. There were no major adverse outcomes
C. The law has not been broken
D. An action plan is developed and carried out

IV. DEFINITIONS: Medication Errors include:

A. Wrong dosage
B. Variation from VC EMS 705 Policies
C. Calculation error
D. Exceeding maximum dose
E. Wrong route
F. Wrong medication
G. Medication omitted
H. Incorrect time
I. Wrong person

V. STATEMENT: If a medication error is made whether or not it resulted in an adverse patient outcome, it is an Unusual Occurrence and must be reported as such per Policy 150.

VI. PROCEDURE:

A. Upon discovering a medication error, immediately notify treating physician.

B. Discovering party will complete Medication Error Reporting Form and submit it to the PCC, EMS Supervisor, VC EMS CQI Coordinator, or VC EMS Duty Officer

C. The VC EMS Agency will be notified within 24 hours if it is reportable, and immediately if it is a sentinel.event per VC EMS Policy 150: Unusual Occurrences.

D. The appropriate PCC will conduct and complete the investigation within 10 working days after being assigned the case by VC EMS Agency, and shall submit a report and action plan to VC EMS Agency where it will be evaluated and tracked.

VII. IMMUNITY: VC EMS will grant immunity from disciplinary action to personnel who report medication errors within the guidelines of this policy *and* if there is no adverse patient outcome, no criminal intent and the event was unintentional. No immunity will be granted in cases where knowledge of a medication error is intentionally omitted or not reported. If a person is unaware that they have committed a medication error until notification by VC EMS, they are still eligible for immunity as long as it is found that they did not intentionally withhold reporting.

ATTACHMENT: Medication Error Reporting

VENTURA COUNTY EMS AGENCY
Medication Error Reporting Form

Date of Report: Brief description of event:

Date of event	Time of event	Fire Incident Number	Reporting Party Name and Phone	Reporting Party Agency

AGENCY INVOLVED:		MEDICATION:
☐ AMR	☐ FFD	
☐ GCA	☐ LMT	
☐ VCFD	☐ VFF	
☐ VCSAR	☐ VCFPD	
TYPE OF ERROR:		
☐ WRONG DOSAGE		☐ WRONG ROUTE
☐ VARIATION FROM 705 POLICIES		☐ WRONG MEDICATION
☐ CALCULATON ERROR		☐ MEDICATION OMMITED
☐ EXCEEDING MAX DOSE		☐ INCORRECT TIME
		☐ WRONG PERSON
EXPLANATION: (include any patient signs/symptoms/outcomes)		