

# **Regional Mass Casualty Incident Plan The Southern Colorado RETAC**

**Serving the Counties of:**

**Custer**

**Fremont**

**Huerfano**

**Las Animas**

**Pueblo**

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# **1. The Primary Plan**

## **Introduction**

The Southern Colorado Regional Emergency Medical and Trauma Advisory Council (SCRETAC), comprising the counties Custer, Fremont, Huerfano, Las Animas and Pueblo, was created to develop and support regional emergency medical and trauma care systems to improve the health and safety of residents and visitors to our region.

A mass casualty incident is defined as an event with illness or injuries that exceed the normal response capabilities of an organization providing emergency medical services. It is an event resulting from either man-made or natural causes that result in illness and/or injuries that exceed the EMTS capabilities of any prehospital, trauma unit, hospital, locality, jurisdiction and/or region. It involves three stages: (i) Preparedness; (ii) Response; and (iii) Recovery.

Creation, oversight and continued development of this Mass Casualty Incident Plan is a meaningful component in achieving the mission of SCRETAC. It is currently offered as a guideline to the Counties and agencies we serve, whose successful outcome depends upon the cooperation, shared organization, planning and testing among the health care professionals, public health and administrators in hospitals, clinics, prehospital agencies, disaster related support agencies and government in all levels within the Counties as well as cooperation from appropriate State and possibly even Federal Agencies.

This plan, or guide describes relationships between local, regional, other Colorado RETACs, state medical and health entities and federal agencies. It also explores the roles regional EMS administrators might play in the Mass Casualty planning, response and recovery processes.

However, with few exceptions, this plan and the approaches suggested in it have little direct authority in law to compel compliance by any jurisdiction or entity. Consequently, it is offered as a voluntary document to aid in delivering effective, well-coordinated activities before, during and after a mass casualty incident. Without that coordination, those crucial activities will never be as effective as they need to be in order to preserve the safety and health of lives within our region and possibly surrounding regions as well..

## **The Purpose**

The purpose of this plan is to identify and support a coordinated systems approach ranging from small to large-scale mass casualty incidents involving natural or man-made occurrences as well as acts of terrorism involving Chemical, Biological, Radiological, Nuclear or Explosive weapons.

## The Primary Objectives

The primary objectives of this plan are to:

- 1.) Minimize the loss of life, disabling injuries, and human suffering by providing effective emergency medical assistance through the efficient utilization of medical and other resources in the event of emergencies resulting from multiple casualty incidents.
- 2.) Ensure the provision of adequate and integrated resources needed to mobilize teams to effectively manage casualties while also maintaining the capability and resources to respond to other emergency situations.
- 3.) Identify and support the reception of casualties from disasters occurring outside of Colorado or as a result of military operations.
- 4.) Comply with local, State and Federal rules, statutes and regulations along with the guidelines of the SCRETAC Mass Casualty Incident Plan.
- 5.) Provide for the safety, accountability and overall welfare of all responders during and preceding a mass casualty event(s).
- 6.) Provide efficient, effective and timely preparedness, response and recovery.
- 7.) Give a range from direction to assistance in evacuation and care for a significant number of patients located at any health care facility when both care and transportation exceeds the EMTS capabilities of the location, facility, jurisdiction, region.

## The Scope

While this plan serves the Southern Colorado RETAC and the Southern Colorado All Hazards Region comprising the counties of Custer, Fremont, Huerfano, Las Animas and Pueblo, it is meant to seamlessly integrate with other Colorado RETACs as well as state and federal agencies.

Counties are responsible, within their own statutory authorities, to provide assistance and support to local jurisdictions when they are unable to cope with a disaster emergency situation. Upon the implementation of the Local Emergency Operations Plan, they are responsible for the implementation of assigned County Emergency Functions and the provision of representation, as needed, to the Local Emergency Operations Plan.

This is a *systems* plan providing an overall framework with more specific suggestions and recommendations as to direction of planning and operating principles. It is not an operational plan and does not contain detailed guidance for any role, discipline, jurisdiction or incident type. That level of detail should be contained in individual county, facility and organizational plans.

Importantly, this plan provides the format for a coordinated systems approach and response to a single or multiple site disaster that could overwhelm the day-to-day emergency medical response system, and is designed to supplement a countywide disaster plan.

Colorado legislation authorizes and charges State departments with the responsibility to provide advice, assistance and support to local jurisdictions when these jurisdictions are

unable to cope with a natural or manmade disaster(s). Upon implementation of the State Emergency Operations Plan, State departments are responsible for the implementation of assigned state emergency functions and the provision of representation to the State Emergency Operations Team. In a mass casualty incident, the Colorado Department of Public Health and Environment is responsible for the State Emergency Function #8 (SEF #8) annex titled Health, Medical & Mortuary. State Emergency Function #8 identifies planning needs for: 1) the mobilization of trained health and medical personnel, and 2) the identification of emergency medical supplies, materials and facilities connected with the management of care and treatment for the ill and injured.

Few, if any, local government agencies have the resources to properly respond to major multiple casualty incidents. The Office of Emergency Management, law enforcement, fire service, emergency medical services, trauma units/hospitals, Regional Emergency Medical & Trauma Advisory Councils, Red Cross, amateur radio operators and possibly federal agencies are examples among the public and private agencies that become involved upon activation of this plan.

### **General Agreement/Understanding**

Of critical importance is the recognition that every mass casualty event will be handled most effectively when all participants agree to coordinated planning, training and response, using common concepts and compatible methodologies, management principles and tools.

Local guidelines and the proximity and capabilities of appropriate healthcare facilities shall be primary considerations when designating the health care facilities to which patients are sent during any local, regional, state or federal emergency situation, resulting from the activation of the Mass Casualty Incident Plan.

It is of paramount importance that localities and/or individual prehospital EMS agencies agree to respond with appropriate personnel and equipment as available when the Mass Casualty Incident Plan is activated. When allocating its response to activation of the Plan, each locality and/or EMS agencies should determine which of its resources will be committed while maintaining a reasonable capability for local response.

As endorsed by the SCRETAC - personnel affiliated with all participating EMS agencies, hospitals and/or jurisdictions must operate during an incident or evacuation under a standard Incident Command Structure, when responding outside of their own jurisdictions personnel must operate under the Incident Command Structure of the jurisdiction managing the event.

Emergency Medical Services, Emergency Managers, Medical Care Facilities, County Coroners, Public Health Services, City and County Governments in the SCRETAC region should coordinate and implement mitigation and preplanning programs to support and prepare for both local and region wide Mass Casualty Incidents Plan.

Hospital and prehospital counterparts in the region should participate in annual training exercises of the regional Mass Casualty Incident Plan. These exercises should be held in various localities in the region and coordinated whenever possible with multiple organizations and jurisdictions.

## **Authority**

SCRETAC is charged with the development and implementation of an effective and efficient regional emergency medical service delivery system. This is to include the regional coordination of emergency medical disaster planning and response and should be coordinated with the Southern Colorado All Hazards, one of nine Colorado preparedness and security regions established within Colorado by the Office of Protection, Security and Fire Protection. (See Appendix A)

## **Keeping the Plan Current**

This is a “living” plan and must be kept current based on the following suggestions:

1. Review of this plan should occur at least biannually by a group with collective knowledge in all areas of mass casualty planning – preparedness, response and recovery. In addition, changing threats, improved emergency response capabilities, enhanced management techniques and superior technologies, along with changes in the nature of communities and developing state, federal roles dictate the necessity of an ongoing awareness of the need to review and evaluate this Mass Casualty Incident Plan.
2. This Mass Casualty Incident Plan should be reviewed following any exercise or incident that would point to any needed areas of improvement to insure the overall improvement of this Plan.

## **Planning Assumptions**

The local governments in our region are to provide the initial response to any emergency or disaster. This response is carried out in accordance with local emergency operations plans, procedures, and policies that should be consistent with the State Mass Casualty Plan. When local resources are overwhelmed, (including those available through mutual aid agreements and volunteer resources), assistance is then requested from the next level of government.

The State Emergency Operations Plan activation is built on the assumption that the response capability of the affected local government is or may be quickly overwhelmed, requiring state and/or federal assistance in support of local efforts. The Colorado Office of Emergency Management will activate the State Emergency Operations Plan.

## Potential Types of Mass Casualty Incidents

Are classified from local to federal incidents. Typically, it is the EMS provider(s) on the scene that decide a Mass Casualty Incident has occurred. Available resources typically dictate the decision by the EMS provider(s).

- **Local** – where local resources are sufficient to manage multiple casualty event(s).
- **Community/Countywide** – where community and/or county resources are sufficient to manage multiple casualty event(s).
- **Regional (Minor Disaster)** – where regional aid is required to manage multiple casualty event(s).
- **State (Major Disaster)** – where statewide mutual aid, county disaster declaration activated through County Emergency Management is required to manage a mass casualty incident.
- **Federal (Catastrophic Disaster)** – where State activation of Federal resources by declaration is required to manage a mass casualty incident.

## Colorado S.T.A.R.T. Triage System

In the event of a Mass Casualty Incident the Colorado S.T.A.R.T. triage EMS provider(s) will employ this system – Simple Triage And Rapid Treatment. Each victim is to be triaged using the RPM method – Respiration – Pulse – Mental status.

## Possible Situations of Mass Casualty Incidents

Consider the unique characteristics of the SCRETAC region that make it vulnerable to Mass Casualty Incidents.

**Table 1 – Regional Demographics of SCRETAC**

County	Square Miles	Population	Population Per Square Mile	Households per Square Mile	Median Age (years)
Custer	739	3,503	4.7	2.0	44.9
Fremont	1,533	46,145	30.1	9.9	38.8
Huerfano	1,591	7,862	4.9	1.9	41.7
Las Animas	4,773	15,207	3.2	1.3	40.9
Pueblo	2,389	141,472	59.2	22.8	37.0

- The region ranges from extreme mountain terrain, to semi-aiired high plains, to flat land transitional areas. The data for Table 1 comes from the 2000 U.S. Census and reveals the dramatic range in SCRETAC’s regional demographics. It is rather obvious why four of the five counties are categorized as rural.
- Most of the region would have to be classified as remote, with small communities that can become isolated from sources of assistance and are routinely vulnerable to prolonged response times for incoming resources.

- Railroads, one Interstate highway (I25) which runs north/south through the region, about 12 other highways and countless county roads bear significant traffic, including hazardous materials, mass transit creating many potential situations that could cause, increase complications or number of victims of an Mass Casualty Incident. Depending on the location of an event, the remoteness of the region adds to the threat to life.
- Extreme mountains, lakes and rivers enjoyed for recreational purposes offer potential sites for mass casualty incidences.
- Government centers, key transportation routes, venues of public assembly, centers for higher learning, industrial facilities and other points provide inviting targets for criminal or terrorist activities in addition to their vulnerabilities to natural and technological events. There is no community within the region that is immune to the possibility of a mass casualty incident.

Based on these characteristics, the following represents types of potential mass casualty incidents based on the characteristics of the SCRETAC region.

- Flooding (flash and ravine) pose potential hazards to property, coupled with significant direct and indirect risks of injury and death.
- Wildfire is an increasing threat as the region's rural areas grow.
- Severe weather including winter storms, severe enough to overwhelm snow removal operations, pose significant threat to those individuals trapped in cars and homes with various medical problems. In addition these storms produce risks from potential structural limits of buildings.
- Airplanes, trains, busses and cars pose mass casualty incident potential.
- Technological hazards could include dam failures, hazardous materials storage transportation and use.
- Acts of terrorism, bio-terrorism, civil disorder, and sustained power outages.
- Cascading or secondary effects can occur, such as landslide following a wildfire or civil disobedience, running the risk of leading to a larger-scale incident. Injuries and fatalities may occur even more as a result of a cascading or secondary event than the precipitating incident.

## **Participants**

The major component to a successful EMTS mutual aid response to a mass casualty incident(s) is the close cooperation and coordination of the respondents through effective and efficient communications, planning and on-going training. The regional EMTS mutual aid response to a Mass Casualty Incident or evacuation, as dictated by the scope of the incident, may involve the following:

- EMS providers
- Healthcare facilities, specially trauma centers and hospitals with acute-care and/or other emergency facilities who should activate their own internal disaster plans as dictated by the scope of the incident.
- Trained First Responders and specially trained emergency services personnel such as – firefighters, search and rescue teams, hazardous materials specialists, those

trained in technical or tactical rescue skills, dive and swift water rescue, Citizen Emergency Response Teams.

- Public Health
- Law Enforcement
- Other Local, State and Federal government agencies having responsibilities for mass casualty incident(s).
- Other support components such as pastoral care, the American Red Cross, the Salvation Army, public utilities, airlines, regular and reserve components of the armed forces, the Civil Air Patrol, amateur radio, any other group that supports EMTS operations and any local volunteer or professional organization involved in disaster response and recovery.

## **County Emergency Operation Managers**

Each of the SCRETAC counties and localities should have an emergency operations plan. The SCRETAC Regional Mass Casualty Plan should help these agencies in planning and/or enhancing their own emergency operation plan.

The regional EMTS response planning should be transparent to and support the health and medical annexes or ESF#8 of jurisdictional emergency operations plans. Planning guidance in the Mass Casualty Plan should be made available to local Emergency Managers and Coordinators to help them in their preparation and maintenance of their own plans as it relates to regional mass casualty events and EMTS planning.

The SCRETAC Regional Mass Casualty Plan should be used in the following circumstances:

- The mass casualty event is of such magnitude that it exhausts the local EMTS resources.
- The mass casualty event crosses local boundaries and exhausts one or more of the EMTS resources.
- When a hospital or other health care facility must evacuate patients on a temporary basis and transportation requirements exceed the EMTS capabilities of the facility, locality or region.

Effective and efficient communications is critical. The local Emergency Manager should be contacted by their county's 911-dispatch as soon as possible after the Mass Casualty Plan is activated – or if the possible need for mutual aid exists.

## **Overview to the Mass Casualty Incident**

## **Preparedness**

Preparedness is the actions taken, planning and training made before a mass casualty incident – with the goal of providing a safe, effective, efficient and timely response and recovery.

- The degree of preparedness of the local medical and health planners, leaders and responders, will initially dictate how effective and efficient is the response to a Mass Casualty Incident. Therefore, Local Emergency Plans and the recognition of their critical role, especially in their relationship to regional, state and federal plans, is crucial. It is critical to identify the role of individual agency and facility plans with the goal of maximizing their Standardized Operating Procedures.
- In formulating these plans, it is imperative that planners and response leaders understand roles and relationships that do and should exist between local, regional, state and federal participants.
- Awareness of the size of one event, the potential for cumulative simultaneous size multiple events are critical components of planning for a mass casualty incident(s).
- Since each locality, region, etc. is unique it is vital that the planners, leaders and responders have a thorough understanding of potential events that may occur in their area and surrounding locals.
- Planners, leaders and responders must completely embrace the need and have in place mutual aid agreements, MOU's, backfilling, etc. between agencies, localities and governmental organizations.
- An absolute critical component of the Mass Casualty Incident Plan is the role and standardization of the Incident Command System(s). Effectively, efficiently and timely obtaining, using and accounting for resources from different places and systems is critical to the success of the Plan. Proper management of any major event relies on the communication between individual responders, responding agencies, command staff, various facilities and other participants.
- Effective training and minimum levels of competency are without question an essential ingredient to the success of the Mass Casualty Incident Plan. This involves all levels of responders responsible for the incident, from prehospital to trauma units/hospitals to mortuaries to those involved in incident command to those in local, regional, state and federal government.

## **Initial Response to a Mass Casualty Incident**

### **Mass Casualty Incident Standard Response**

A mass casualty incident may be declared at the scene by the initial (local) responding unit(s). Considerations for initiation of an incident should include:

- (i) location; (ii) number of victims; (iii) weather; (iv) exposures; (v) hazardous materials; (vi) potential cause (Chemical, Biological, Nuclear, Radiological, Explosive); and, (vii) resources available.

## **Mass Casualty Incident – Levels of Response**

Five levels of Mass Casualty Incidents have been established in order to determine (a) the level of impact an emergency has had on a community, (b) standardization of notification, (c) use or need of resources.

- Level I – A Normal Response (Local Response)
- Level II – A Community Emergency Response (Local Resources)
- Level III – A Minor Disaster Response (Local/Regional Resources)
- Level IV – A Major Disaster Response (Local/Regional/State & Federal Resources)
- Level V – A Catastrophic Disaster Response (Local/Regional/State & Federal Resources)

### **Level 1 – Normal / Local Response**

- Routine emergency response
- No significant impact on local resources
- No alerting of backup elements is necessary
- May involve only one agency but may also require minimum cooperation or support from other response agencies

### **Level 2 - Community Emergency / Local Resources**

- Mutual aid resources
- An emergency which exceeds the capabilities of initial on-scene personnel and equipment
- Involves multiple response agencies
- Requires mutual aid support

### **Level 3 - Minor Disaster / Local/Regional Resources**

- County resources
- Magnitude of the incident exceeds the capabilities of routinely available mutual aid
- Requires full mobilization of county resources

### **Level 4 - Major Disaster / Local/Regional/State & Federal Resources**

- State and federal assistance needed
- Situation exceeds available county resources
- Requires substantial mobilization of out-of-county, state, and/or federal resources

### **Level 5 – Catastrophic Disaster / Local/Regional/State & Fed Resources**

- State and federal assistance needed
- Situation exceeds available county resources
- Requires substantial mobilization of out-of-county, state, and/or federal resources

## **Colorado Department of Public Health & Environment (CDPHE):**

The CDPHE can be notified of an incident by telephone at:

CDPHE Emergency Management Program Office - **1-877-518-5608**

Emergency Response/Environmental Spill Hotline - **1-877-518-5608**

**A Federal Disaster** is a disaster that results in the full or partial implementation of the Federal Response Plan. It may have some of the following characteristics: (a) The event exceeds the capabilities of local and state government to provide timely and effective response to meet the needs of the event, (b) An event that has the potential to cause substantial deaths and/or injuries, (c) An event that has the potential to cause significant damage – particularly to the economic and infrastructure of the state or political subdivisions.

## **The SCRETAC Mass Casualty Incident Plan – How is it Activated and What are the Proper Responses?**

The Mass Casualty Incident Plan for EMTS mutual aid can be activated by those having jurisdictional responsibility for a Mass Casualty Incident by the Emergency Manager, Sheriff or Incident Commander at the scene of a Mass Casualty Incident. Activation must be done according to the existing local protocol(s) based on each area.

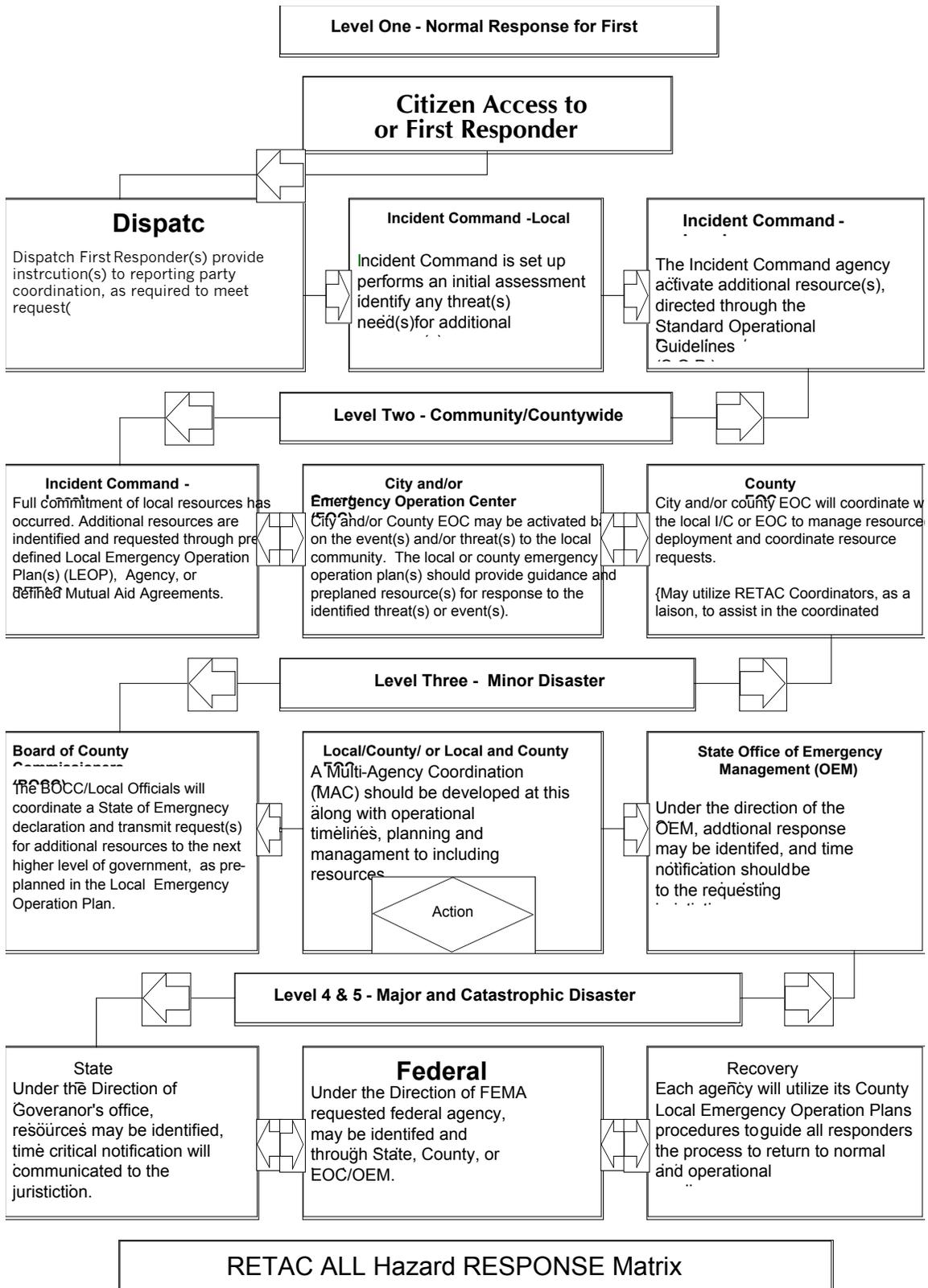
Once activated, the Mass Casualty Incident Plan must be communicated through the local Emergency Operation Communications Center. The person requesting to activate the Mass Casualty Incident Plan should identify himself or herself.

This person should give a brief summary of the incident including:

- (1) Time of the incident
- (2) Type of incident
- (3) Location of the incident
- (4) Initial number of patients involved
- (5) A callback telephone number

The Emergency Communications Center dispatcher should emphasize the mutual aid request for ambulances and/or equipment is activated under the established Regional Mutual Aid Agreement. The resources requested will come by the Emergency Communications Center through the Incident Command. Once the resources are received, they will be reported to the adjoining counties and/or regions.

**The Initial Response to a Mass Casualty Incident is summarized on the following page.**



## Recovery

The following are offered as some points to be considered during the Recovery phase of a Mass Casualty Incident(s). These situations are typically covered by other agencies and systems such as Incident Command Systems and OEM's, and are therefore not within the scope of the SCRETAC's responsibility.

- Prepare for the organized demobilization and documentation of the incident.
- Equipment Loss Recovery – providing a mechanism for the recovery of lost/missing equipment used in the mass casualty incident involving many agencies, etc.
- The proper preparation and maintenance of records and reports, expands in complexity and difficulty based on the level of an event. They provide the means to more appropriately evaluate the response and recovery phases of the Plan.
- Provide guidelines as to methodologies to evaluate the preparedness portion of the Mass Casualty Incident Plan.
- Provide guidance for Critical Incident Stress Management activities and the potential need for long-term assistance.
- Plan for the need to provide possible financial aid to non-for-profit, commercial and/or other private organizations for their participation in the Mass Casualty Incident.

## 2. Preparedness

**Are actions taken in planning and training accomplished prior to a mass casualty incident with the goal of providing safe, effective, efficient and timely response and recovery to the mass casualty incident(s).**

### Local Emergency Plans

#### **Guidelines to be considered:**

Colorado statute provides authority for local emergency planning and incident command to each county and the municipalities within them. Counties assign authorities, roles and functions to offices, positions and agencies within their jurisdictions.

- Local plans should identify the incident command system to be used and provide the detailed specifics necessary to develop and implement effective response operations.
- These details should usually include:
  1. Identification of incident commanders for different types of incidents
  2. Roles for various agencies
  3. Facilities in the jurisdiction, resource lists, contact lists, lines of authority and succession, and other items deemed appropriate by the local incident command system
- County plans should typically include a mass casualty annex with details pertinent to those responses, providing guidance for:
  1. All prehospital, clinical and support organizations and their staffs specific to mass casualty response

**Recommendation:** Every responder, potential responder should be completely familiar with the portions of the local plan pertinent to his or her successful functioning in a mass casualty incident(s).

### Individual Agency Plans and Standard Operating Procedures

#### **Guidelines to be considered:**

SECRETAC suggests that no regional or local plan be so specific that it specifies which individual fulfills each role in a response; rather, that the plan provide progressively more detailed guidance as to what functions each participating entity fills.

Individual plans and Standardized Operating Procedures could provide guidance such as:

- Roles of individual crew members on response vehicles and in facilities
- Stocks of Mass Casualty Incident equipment and supplies and their locations on vehicles and in facilities
- Detailed safety equipment procedures to be used
- Detailed documentation requirements

**Recommendation:** Every responder or potential responder should be completely familiar with the portions of their agency's or facility's local plans and Standardized

Operating Procedures that are pertinent to his or her successful functioning in a mass casualty incident.

## **Organizational Structure**

### **Guidelines to be considered:**

It is critical for planners and response leaders to understand the roles and relationships that exist and how they exist between local, regional and state participants in order to provide effective, efficient and timely response(s).

### **Local**

Elected officials of political subdivisions (counties and municipalities) are responsible for reducing the vulnerability of people and property to the effects of emergency and disasters. They should ensure that local governmental agencies are capable of efficient and responsive mobilization of resources in order to protect lives, minimize property loss, and expedite recovery efforts during an emergency or disaster. They should ensure that an Emergency Management Office serves their jurisdiction. A Local Emergency Operations Plan should be prepared based upon a valid hazards and risk analysis. [Reference: Title 24, Article 32, Part 2107, Colorado Revised Statute, as amended.]

The initial onset of mass casualty incident(s) local government agencies, public and private emergency responders and ancillary agencies typically provide the initial response. The first arriving agency will immediately establish command and control for the incident. Local response will include, but will not be limited to the following first responder and support agencies:

- Communications Centers
- Area Fire Departments
- Area EMS Systems
- Air Medical Operations
- Law Enforcement – City, County Police and Sheriffs
- Area HAZMAT Teams
- Area Hospitals & Surge Capacity
- Mental Health System
- Public Information Officers

The leadership of the responding agencies should be aware of the need to provide continuous service to the remaining community for day-to-day events. Examples would be: (i) back filling stations with mutual aid providers and/or (ii) recalled staff during second or third alarm events.

When the incident surpasses the capabilities and resources provided by local and mutual aid resources, the local Incident Command should initiate a local Emergency Operations Center and then contact the Colorado Office of Emergency Management for an Emergency Declaration. A staff member or responsible party may be reached 24 hours a day at **303-279-8855**. This notification shall initiate the opening and staffing of the State's Office of Emergency Management.

### **Regional Considerations**

According to the CDPHE Prehospital Care Program: A RETAC Coordinator is not required by contract with the State to act in the role of an emergency responder. It is up to the individual RETAC Coordinator and their region to establish the role in a Mass Casualty Incident(s).

Not currently addressed in plans, the RETAC Coordinator could provide a wealth of information useful in the management of a large-scale, long duration Mass Casualty Incident(s). The knowledge of the capabilities of medical facilities, first responder and transport agencies in SCRETAC could prove extremely useful to planners and incident managers.

### **State Level Management**

When an emergency or disaster overwhelms the resources and capabilities of the local and/or the region's jurisdiction, the Governor may exercise authority to use the capabilities and resources of state government and/or that of other non-impacted political subdivision (localities or regions). The management of the state's response is facilitated by the policies and procedures of the Colorado State Emergency Operations Plan and other approved emergency management plans and programs. The Office of Emergency Management is responsible for the implementation of the state response to an emergency or disaster. The state's principal emergency management function is not that of an initial responder, but that of coordinator for the acquisition, prioritization and distribution of state, private, and, if needed, federal resources. Based upon the timely identification and verification of the emergency request of a local jurisdiction, the Director, Office of Emergency Management or the State Coordinating Officer will task to state departments the requirement to provide requested resources. The assigned state department will coordinate the providing of assistance directly with the requesting local agency(s). If the disaster situation is of such magnitude as to require federal assistance; the State, through the State Emergency Operation Center, will function as the primary coordination agency for the rendering of federal assistance.

The purpose of this State Emergency Function is to provide for the coordination of the State of Colorado health, medical and mortuary resources. These resources may be needed to supplement depleted regional, county and municipal assets in response to emergency public health, medical care and mortuary needs following a significant mass casualty incident(s).

The scope of the Health, Medical and Mortuary function is to provide supplemental assistance to local governments in the care and treatment for the ill and injured by mobilizing trained health and medical personnel, medical transport, emergency medical supplies, materials and facilities. This function also provides for public health and environmental sanitation services, disease and vector control, and the collection, identification, and protection of human remains when local resources are depleted and assistance has been requested.

Upon the request for state assistance and the Declaration of a State of Emergency by local government, the Colorado Office of Emergency Management will confirm an emergency and activate the State Emergency Operations Center.

With events involving mass casualties, the Colorado Office of Emergency Management will refer to the State Emergency Operations Plan identifying the Department of Public Health and Environment (CDPHE) as the lead agency for State Emergency Function #8 (Health, Medical & Mortuary). The Colorado Office of Emergency Management will then make notification to the Emergency Management Program, which is responsible for overall CDPHE emergency management assignments and responsibilities. The Prehospital Care Program of the Health Facilities Emergency Medical Service (HFEMSD-PCP) has been assigned the lead program for a mass casualty incident(s) with the Emergency Management Program as the primary support program.

When the CDPHE becomes the initiating entity, the Emergency Management Program shall notify the Colorado Office of Emergency Management as to the situation and activate appropriate call down lists. Emergency 911 communication/dispatch centers shall be notified by the COEM of the incident(s) via telephone and/or radio. Communication/911 dispatch centers shall alert or notify the necessary response agencies/personnel within their jurisdictions via available communication/alert systems. The Emergency Management Program, through the Health Alert Network (HAN), shall notify public and private health care facilities of the incident(s). In addition the CDPHE will activate its Internal Emergency Operations Plan and establish the CDPHE Crisis Management Center.

### **The Colorado Department of Public Health & Environment (CDPHE) Crisis Management Center**

Divisions have been assigned lead and support roles as identified in the State Emergency Support Function section of the CDPHE Internal Emergency Response Implementation Plan document. The following Divisions and programs have lead and support functions for a Mass Casualty Incident(s):

#### **1. The Health Facilities Emergency Medical Services Division - Prehospital Care Program assumes the lead function**

- a. Provide the Crisis Management Center (CMC) as to the capabilities and utilization of medical equipment and supplies;
- b. Provide local assistance with Critical Incident Stress Management (CISM) services;
- c. Provide assistance to other state agencies regarding emergency medical services;
- d. Communicate with prehospital emergency medical services agencies (transport and non-transport) and their physician supervisor requiring preparedness/incident specific information;
- e. Coordinate prehospital transport of patients to facilities as required;
- f. Provide emergency medical services resources and technical assistance capabilities and limitations of transport and non-transport EMS agencies;

- g. Provide a current inventory of resources and capabilities available for support of all medical facilities within the state;
- h. Provide coordination of statewide triage, casualty, evacuation, and hospital facility allocation;
- i. Coordinate with COEM the utilization of medical and health manpower, medical supplies and facilities in Colorado, as required by disaster conditions;
- j. Coordinate the process for acquiring emergency equipment and supplies from healthcare facilities and the means to disburse at the appropriate locations;

**Emergency Management Program provides a support function**

- a. Determine validity and level of response necessary in an emergency event;
- b. Provide personnel to staff the State Emergency Operations Center upon activation;
- c. Coordinate elements of the CDPHE necessary to provide an appropriate response to a request;
- d. Responsible for contacting appropriate State Government resources.

**Hospital Bioterrorism Program provides a support function**

- a. Provide necessary information on hospital preparedness (Bioterrorism);
- b. Provide Assessment tool of hospital resource data;
- c. Provide technical assistance with hospital preparedness;
- e. Act as a liaison for Bioterrorism issues.
- f. Provide identified surge site areas.

**Health Facilities provides a support function**

- a. Provide necessary health facility information to the Prehospital Care Program;
- b. Assist in evaluating hazards and damages to health facilities.

**Disease Control & Environmental Epidemiology Division provides a support function**

- a. Provide procedures and protocols identifying required equipment and supplies necessary to facilitate the operations and responsibilities of the Disease Control and Environmental Epidemiology Division;
- b. Collect, evaluate, and disseminate information concerning the spread of contamination or disease during emergencies and assist in taking whatever steps are indicated to control such diseases;
- c. Evaluate toxicology risks to human health and environmental remedial action, as necessary, due to the release of radiological and chemical hazardous materials.

**The CDPHE can be notified of an incident by telephone at:**

CDPHE Emergency Management Program Office - **1-877-518-5608**  
Emergency Response/Environmental Spill Hotline - **1-877-518-5608**

**Recommendations:** Every planner and potential responder should be familiar with all relationships that will impact a Mass Casualty Incident(s) response. SCRETAC should explore the potential role of their coordinator in an Mass Casualty Incident(s) response, including: (1) the implementation of appropriate plans including emergency contact procedures; (2) the communication of those capabilities and contact information throughout the region; (3) the development of written mutual aid arrangements with neighboring RETACs, and; (4) the development of written mutual aid response capabilities among neighboring councils and coordinators.

## Federal Government Response

According to the Federal Response Plan, in response to a mass casualty incident(s) “State and local governments exercise primary authority to respond to the consequences of the event; the Federal Government provides assistance as required”. As a result the Federal Government has created, trained and equipped a number of specialized teams and systems, however access to many of these Federal resources is limited to State department activation. Prior to the utilization of Federal Resources, the Office of Emergency Management must notify the Governor that the incident has surpassed the capabilities of state resources and federal activation is required.

The Governor must request, through the Federal Emergency Management Agency (FEMA), a disaster declaration in order for the National Disaster Medical System to be activated. Once a declaration is approved the appropriate components – Disaster Medical Assistance Teams, National Medical Response Teams and Disaster Mortuary Teams will be deployed. An emergency declaration is also required for utilization of other federal resources (e.g. those of the CDC). Some federal agencies have local offices that can be engaged prior to a federal emergency declaration (e.g. FEMA, FBI, and the EPA). This is not a complete list of the federal agencies involved in a mass casualty response. It does represent some of the major participants having capabilities that both local and state emergency response personnel should be aware of

- **National Disaster Medical System.** A joint effort of a number of federal agencies and represents a single system to assist state and local agencies in dealing with the medical and health effects of a major disaster. It provides medical assistance in the form of Disaster Medical Assistance Teams and Disaster Mortuary Teams for patient evacuation and hospitalization capabilities. There are more than 1800 participating hospitals nationwide. 18 of these are in Colorado, 13 are in the five county Denver metropolitan area. The Colorado hospitals alone have between 600 and 1500 National Disaster Medical System beds. Nationwide the hospitals are able to care for greater than 100,000 victims of any incident exceeding the capacity of an affected region.
- **Disaster Medical Assistance Teams.** These are teams of approximately 35 civilian medical and medical support personnel trained to provide patient triage, care and evacuation in response to natural, manmade and/or terrorist disasters. These teams are designed to deploy to disaster sites with sufficient equipment and supplies to provide independent primary field care for 72 hours, or to augment primary care services in an existing hospital in the disaster area. The Disaster Medical Assistance

Teams personnel are available within 8-12 hours of activation with full field hospital equipment for 250 patients taking 3-7 days to set up.

- **United States Public Health Service.** Primary agency role for Emergency Support Function #8 – Health, Medical, Mortuary Services, directs the provision of federal government provided health and medical assistance to fulfill the requirements identified by the affected state and/or local authorities. Included in Emergency Support Function #8 – Health, Medical, Mortuary Services is the overall public health response; the triage, treatment and transportation of victims of the disaster; and the evacuation of patients from the disaster area into a network of military services, veterans affairs and pre-enrolled non-federal hospitals located in the major metropolitan areas of the United States.
- **National Medical Response Teams.** There are 4 National Medical Response Teams in the US, with three deployable nationwide. One of these deployable teams is stationed in Denver, CO. Every Disaster Medical Assistance Team contains 50 specialized people, which include a unit of 26 people that is trained and equipped to deploy to a hazardous materials environment within two hours of activation. These teams not only provide medical services and pharmaceutical stocks, but also are fully capable of performing technical decontamination, and thus would play a significant role in a chemical incident.
- **Disaster Mortuary Teams.** Comprised of medical examiners, coroners, pathologists, and other forensic specialists who are deployed along with a complete morgue to provide the necessary technical assistance and personnel to recover, identify and process deceased victims. 10 teams are based nationwide. One of the teams is specifically trained to handle contaminated remains, but all teams have members with this expertise. The Coroner, through the local OEM and subsequently through the SOEM may request this resource. Teams can be on site and fully operational anywhere in the country within 24 hours of their activation. This time will be substantially less in the Denver metro area since FEMA Region VIII team is stationed along the Colorado Front Range.

### **Colorado S.T.A.R.T. Triage System**

In the event of a Mass Casualty Incident the Colorado S.T.A.R.T. triage EMS provider(s) will employ this system – Simple Triage And Rapid Treatment. Each victim is to be triaged using the RPM method – Respiration – Pulse – Mental status

- During the rapid evaluation, simple hemorrhage control and airway protection techniques are used. Adjusting the airway or placing a dressing to stop bleeding should be the only treatment completed during the primary survey.
- Based on the primary survey findings, casualties should be prioritized. The triage team will quickly evaluate and categorize the injured into one of the following groups:

1. **IMMEDIATE (PRIORITY I) (RED TAPE).** Patients of highest priority, removed and treated first – severe airway, breathing, or circulation problems, or altered mental status. Examples may include: (i) airway obstruction; (ii) massive bleeding; (iii) shock; (iv) open chest or abdominal wounds; (v) severe head injuries; (vi) severe cardiac emergencies other than cardiac arrest.
2. **DELAYED (PRIORITY II) (YELLOW TAPE).** Injuries are serious and need attention. Treatment and removal may be delayed until the Priority I patients have been stabilized. These patients do not have severe airway, breathing, circulatory, or mental status problems. Examples may include: (i) burns; (ii) major multiple fractures; (iii) spinal injuries.
3. **WALKING WOUNDED (PRIORITY III) (GREEN TAPE).** Patients in this category have no apparent injuries as described above, may have treatment delayed and are generally transported by some other means other than ambulance. Examples may include: (i) minor fractures; (ii) lacerations with minimal blood loss; (iii) chest injuries without breathing difficulties; (iv) minor burns.
4. **D.O.A./NON-RESUSCITABLE (PRIORITY IV) (BLACK/WHITE TAPE).** Patients are dead or so severely injured that death is certain within a short time, regardless of treatment given. Examples may include: (i) traumatic cardiac arrest; (ii) massive head injuries with brain matter exposed; (iii) massive body mutilation or decapitation.
5. **DECONTAMINATED (BLUE TAPE).** Patients will be triaged according to the START system based upon their injuries. In addition, a blue surveyors tape will be added to indicate that decontamination of the individual has taken place. Patients involved in a HazMat situation will not be moved into treatment areas without determination of appropriate decontamination.
6. **ANTIDOTE GIVEN (ORANGE TAPE).** Patients that have been exposed to a hazardous material and required an antidote to be given will receive an orange tape after the antidote has been administered.

## Levels of Mass Casualty Events

The potential size of any one incident or the cumulative size of a simultaneous combination of incidents is a critical factor that should influence the planning, response, recovery, and mitigation efforts for that incident(s).

The level of a response should be described by a mechanism that will function in any of SECRETAC's communities and ideally state wide, from a major metropolitan center to a remote community. The Categorization of an event by the level of response required is an attempt to accomplish these objectives.

**Level I** – A Normal Response is an event that is handled through normal local response, without reducing the agency’s capability to respond to other medical and non-medical emergencies

- a. Incident Command has determined that the initial response is adequate to meet the needs the incident requires.
  - b. Incident Command may request additional resources individually as the needs of the incident require.
  - c. Incident Command alerts local trauma units/hospitals dictated by need of the incident.
- Examples – (i) A house fire with injuries, (ii) A Hazmat Level 1 incident

**Level II** – A Community Emergency Response is an event that may require an extensive commitment of local resources.

- a. Incident Command determines the incident is of sufficient magnitude to require the use of an expanded incident command system.
  - b. Incident Command notifies dispatch center of Level Two incident status.
  - c. Dispatch Center makes appropriate notifications dictated by local protocols.
  - d. Incident Command determines the utilization of mutual aid and need for off duty personnel.
  - e. Incident Command alerts trauma units/hospitals dictated by the needs of the incident.
- Examples – (i) Multiple Level 1 Hazmat incidents, (ii) A multiple family dwelling fire, (iii) Limited area storm damage

**Level III** – A Minor Disaster Response is an event beyond the response capabilities of one agency and its mutual aid agreements and therefore requires a multi-jurisdictional response.

- a. Local Incident Command should consider requesting a local emergency operation center.
  - b. Recourses and planning should come from the emergency operations center.
  - c. The local emergency operations center determines Level Three incident status and contacts the Regional OEM contact requesting additional assistance and resources.
  - d. Incident Command alerts local trauma centers/hospitals of the incident, the Mass Casualty Incident level and the number and types of patients.
  - e. The Emergency Operations Center alerts regional trauma units/hospitals of the incident, the Mass Casualty Incident level and the number and types of patients.
  - f. The Emergency Operations Center notifies the State Emergency Operations Center which is coordinated through Colorado Office of Emergency Management to request additional resources beyond the mutual aid capabilities.
  - g. CDPHE Crisis Management Center is activated.
  - h. CDPHE may then activate their internal response plan.
- Examples – (i) A storm with area wide minor damage, (ii) A Hazmat Level 2 incident, (iii) Wide spread civil disturbances

**Level IV** – A Major Disaster Response is an event that will exceed local response capabilities and requires a broad range of state and federal assistance.

- a. Local Incident Command should consider requesting a local emergency operation center.

- b. Recourses and planning should come from the emergency operations center.
  - c. The local emergency operations center determines Level Three incident status and contacts the Regional OEM contact requesting additional assistance and resources.
  - d. Incident Command alerts local trauma centers/hospitals of the incident, the Mass Casualty Incident level and the number and types of patients.
  - e. The Emergency Operations Center alerts regional trauma units/hospitals of the incident, the Mass Casualty Incident level and the number and types of patients.
  - f. The Emergency Operations Center notifies the State Emergency Operations Center which is coordinated through Colorado Office of Emergency Management to request additional resources beyond the mutual aid capabilities.
  - g. CDPHE Crisis Management Center is activated.
  - h. CDPHE may then activate their internal response plan.
- Examples – (i) A storm with moderate damage, (ii) A terrorist attack (WMD) with no loss of infrastructure

**Level V** – A Catastrophic Disaster Response is an event of such magnitude that massive state and federal assistance is required.

- a. Local Incident Command should consider requesting a local emergency operation center.
  - b. Recourses and planning should come from the emergency operations center.
  - c. The local emergency operations center determines Level Three incident status and contacts the Regional OEM contact requesting additional assistance and resources.
  - d. Incident Command alerts local trauma centers/hospitals of the incident, the Mass Casualty Incident level and the number and types of patients.
  - e. The Emergency Operations Center alerts regional trauma units/hospitals of the incident, the Mass Casualty Incident level and the number and types of patients.
  - f. The Emergency Operations Center notifies the State Emergency Operations Center which is coordinated through Colorado Office of Emergency Management to request additional resources beyond the mutual aid capabilities.
  - g. CDPHE Crisis Management Center is activated.
  - h. CDPHE may then activate their internal response plan.
- Examples – (i) Major storm damage, (ii) A terrorist attack (WMD) with the loss of infrastructure

**Recommendations:** Through participate in regional and state-level discussions, establish a goal to reach a consensus on these definitions and the mutual aid implications associated with each level. Ideally, these discussions should then lead to a statewide adherence to the standards within the National Incident Management System.

Establish a goal to engage in tabletop, functional, and even full-scale exercises predicated on each of these levels of disaster to gain familiarity with the potential implications of different event sizes. The size of an event will have implications in terms of the planning, response, and recovery efforts associated with: (1) Operations; (2) Logistics; (3) Plans (incident response plans) & Intelligence-gathering; (4) Finance and Administration, and; (5) Unified Command.

## Potential Incidents

Planners, leaders and responders should have a sound understanding of what Mass Casualty Incidents may occur in their locations and neighboring areas. Insight can then be gained when potentially catastrophic events can be anticipated. Importantly, this insight can be translated into possible prevention or mitigating actions associated with each type or category of event. This could mean improved operational effectiveness of the Mass Casualty Incident Plan.

Certainly, it is impossible to list every event that has the potential to create a Mass Casualty Incident(s) in any of our counties. The more planners and every potential responder thinks about possible events of mass casualty incidents, their likelihood – the better prepared we all can be. An event that overwhelms local response resources isn't a possibility it is inevitable. Planning, preparing and practicing for the inevitable assists in the management of when response becomes inevitable.

### Human-made

- Airliner or large payload space vehicle crash
- Arson or accidental fire in an urban/wild land interface area
- Civil Unrest
- Large-scale, industrial, gas-phase chemical release
- Petrochemical, liquid-phase, pipeline rupture
- Terrorism
  - Biological – use of an infectious (biologically self-replicating) agent against a human or food-source animal population to deliberately create panic or unrest
  - Cyber-terrorism (computer systems/Internet via physical or software attack) for political or criminal gain.
  - Chemical – use of a chemical agent as above. This includes conventional amateur bomb-making
  - Nuclear – use of fission-based bomb
  - Radiological – use of a radioactive source spreading-device
  - Explosive or incendiary – use of a device to detonate or ignite fire

### Natural

- Earthquake
- Land slide, mudslide, subsidence and other land movement
- Flood
- Avalanche
- Fire: wild land, structural, major urban, etc.

**Recommendations:** Local, regional and individual agency and facility plans should be reviewed periodically and after each major event. Each review should include exploration of previously unconsidered possibilities and plans revised to consider those events. Training and exercises should reflect a variety of potential events and scenarios that challenge all response disciplines, agencies and facilities. Given the demographics of our region, it is unwise to assume an event in an unpopulated area cannot create a

disaster. What might be considered simple issues of extended patient transport time and resource acquisition can easily create a disaster situation for remote local responders.

## **Mass Casualty Mutual Aid Guide**

A critically essential component of a mass casualty incident(s) response is mutual aid and should be well understood by planners and responders. Mutual agreements should be in place with the goal or attempt to cover all likely disciplines, agencies, needs, etc. in a written format.

The Colorado State Emergency Operations Plan states that “No single local jurisdiction will have all the personnel, equipment, and materials required to cope with a major emergency or disaster. Necessary additional assistance may be rendered through a system of mutual aid agreements, which provide for obtaining additional resources from non-impacted inter/intra-jurisdictional governmental agencies and other organizations. Mutual aid agreements are an essential component of emergency management planning, response and recovery activities. These agreements can significantly increase the availability of crucial resources and improves response and recovery efforts. According to Title 24, Article 32, Part 2113, Colorado Revised Statutes, as amended; it is the responsibility of local government to ensure that local emergency operations plans contain adequate provisions for the rendering and the receipt of mutual aid.”

Just as an example, for mass casualty incident(s) management, mutual aid agreements would likely be necessary with transport and non-transport prehospital care services; hospitals and other healthcare facilities; public health, home health and similar organizations; transportation agencies such as mass transit or school bus services; potential locations for field care sites; and logistical support providers. This is just an example and obviously not meant to be an exhaustive consideration.

It would seem that the reality that most transport and healthcare agencies depend on patient revenues, mutual aid agreements should factor into their planning and development, cooperative aid agreements and other formal response relationships.

**Recommendations:** Local mutual aid agreements should be developed and reviewed periodically. In addition they should be reviewed following significant events to ensure that they contain the disciplines, jurisdictions, entities, and resources that will be required for a wide variety of events. Mutual aid resources should be exercised regularly and included in at least some training and exercises related to mass casualty incident(s) response. Organizations and individuals that have trained and practiced together will likely work more effectively together in an actual mass casualty incident(s).

## **Incident Command System**

Mass Casualty Incident(s) response typically means obtaining, coordinating, using, and accounting for resources from different places and systems. Circumstances common to these events offer plenty of opportunity for miscommunication and confusion, which is compounded when different terms, tools and methods are used. The Incident Command

System is the current recommendation under the National Incident Management System and is the suggested way to manage and properly address these potential difficulties.

There is no single Incident Command System model specified or recommended for local or regional entities because several different models exist and are in use. According to the Colorado State Emergency Operations Plan: “A local incident management system, incorporating the functions, principles and components of the Incident Command System should be adopted and utilized. The Local Emergency Operations Plan should delineate the concept for on-scene incident management to be used by all local agencies involved in emergency operations.”

The Colorado Incident Command System has been adopted at the local level for use in Colorado and is the operating system under which all state agencies should consider operating when in support of state directed emergency operations. The flexibility and rapidly expandable organizational structure, and the use of readily understandable terminology make the system particularly useful when coordinating multi-functional response. It is also easily adapted to supporting multiple agencies and/or multiple jurisdictional emergencies. The Local Emergency Operations Plans should include details on the interface between the on-scene Incident Command System and local emergency operations center.

**Recommendations:** It should be recognized the different Incident Command System models are generally similar but even have small differences that could pose a risk of operational confusion. A common model taught and used in SCRETAC and statewide would be ideal. Unfortunately no authority compels the standardization of Incident Command System models or even language outside of local planning jurisdictions. It appears obvious that working toward such standardization would be a worthwhile development. Possibly lawmakers could enact legislation that would create a statewide Incident Command System standardization could prove to be a critical aspect to effective regional and state-wide Mass Casualty Incident Planning.

If legislation proves ineffective, then it could come to training and exercising with local Incident Command System models with an understanding of attempting to produce a general statewide model of standardization.

Planners, responders and leadership should obtain training on the Incident Command System specified by local jurisdiction for all levels of personnel for the Mass Casualty Incident Plan to be effective. Different levels of personnel should receive the appropriate length and complexity of training for their particular function.

Tabletop exercises would establish and refine methods to respond to an event and would logically come before more involved types of exercises. Actual functional exercises that work on one function at a time would create a more manageable exercise that could then form the basis of larger-scale exercises involving multiple agencies in actual field response simulations.

## **Communications Planning and Preparedness**

Effective management of any major incident relies on communications between individual responders, response agencies, disciplines, command staff, facilities and other participants. To be effective in any major event, communications systems should be far more robust and redundant than required by routine operations.

**The Colorado Emergency Medical and Trauma Services Act, Part 7 requires that the regional EMTS plan include adequate provisions for:**

1. Public safety dispatch to ambulance service and for efficient communication from ambulance to ambulance and from ambulance to a designated facility;
2. Efficient communications among the trauma facilities and between trauma facilities and other medical care facilities;
3. Efficient communications among service agencies to coordinate prehospital, day-to-day, and disaster activities, and;
4. Efficient communications exist between counties and RETACs to coordinate prehospital, day-to-day and disaster activities.

**A number of approaches are available to expand communications capabilities.**

1. Establishing multiple radio frequencies for different functions or sectors of a major event response. (Licenses for additional frequencies might be obtained, compatible with existing and planned equipment for the area to be served.)
2. Supplies of portable and handheld radios could be made available for deployment to events. Identical batteries, straightforward ease of use and the necessary channel information attached to each radio seems logical. They should also have necessary accessories – cases, belt clips, antennas, etc. These radios should be inspected periodically.
3. Redundant field communications could prove critical. Consider items like cellular phones, satellite phones and wireless digital communication to augment two-way radio. Unfortunately, each has its limitations and possibly there is a better solution.
4. Readily available text communication between facilities. Fax and e-mail could prove essential in coordinating mass casualty distribution of resources, and in providing clinical guidance to field and facilities' caregivers. The ideal system should be able to provide rapid, simultaneous exchange of information between many locations, high message integrity, confirmation that messages have been received, and low workload for both senders and receivers.
5. Backup voice communications between facilities, including communications centers, healthcare facilities, EOCs and others are essential. Multiple redundancies are recommended, including:
  - a. Maintain a current list of telephone numbers for all facilities and entities of interest in each jurisdiction and those that might require or provide mutual aid assets. (Appendix B)
  - b. Consider providing redundant radio communications capabilities between key facilities and entities.

**Communications plans and protocols should be in place and practiced in order to provide smooth transition from routine to major emergency communications events and to provide clear guidance to local and mutual aid responders. This planning might include:**

- Radio frequency/channel planning for sectors, communities or functions should be completed in every jurisdiction, facility and entity. Concise, pertinent information regarding each plan should be readily available to each potential user at all times.
- The removal of on-scene coordination traffic due to repeated systems to reduce disruption to unrelated communications. On scene channel discipline could see that communications centers hear only the traffic pertinent to them. This would reduce workload and let people focus on traffic intended for them
- Predetermined use of clear text for radio communications is already a well-accepted practice and is essential during a Mass Casualty Incident between different mutual aid agencies and disciplines.
- Designate primary and multiple backup systems for communicating between the field and facilities, and among facilities. This should include separate radios systems in case one system fails. For the same reason it should include at least one system that does not rely on a repeater or other vulnerable facility.
- Amateur radio groups could provide alternative communications for voice, text, and graphics. Depending on local capabilities, they may even offer backup radio, fax and email systems. These groups could provide fixed site communications in hospitals, EOCs, communications centers and other locations, as well as field communications even in remote sites.
- Many amateurs are organized and trained in support for emergency services, and are eager to train, exercise and respond in those roles. This could prove to be an important capability and considered as part of planning and exercises whenever possible as it relates to incident response whenever practical.

**Recommendations:** Consider the development of a coordinated regional EMS communications plan to help provide commonality among all related facilities, agencies, vehicles and personnel. This plan should also consider the need for redundancy for all response and support functions. SCRETAC could consider establishing a communications subcommittee as part of its MCI Committee, to provide regional perspective and support on local and state EMS communications planning and operations.

Finally, it seems logical that SCRETAC should consider licensing several frequencies on one or more public safety bands for region-wide on-scene EMS coordination. Develop a plan for those frequencies and provide authorization for appropriate entities to use them.

## **Training and Minimum Competencies**

For the SCRETAC Mass Casualty Incident Plan to truly be effective, certain levels of competency will prove vital along every level of the Mass Casualty Incident response.

With the location and coordinated help of Pueblo Community College's EMS Program along with other regional training capabilities this should be an obtainable goal.

1. Initial Training - provide new responders and clinical staff before they assume full independent functions.
2. Continued Intermediate Training - frequent ongoing training to maintain and improve upon skills and knowledge critical to Mass Casualty Incident management.
3. Further Advanced Training – higher-level training to those in each organization as their capabilities and potential Mass Casualty Incident responsibilities become more complex and advanced.

**Some Mass Casualty Incident-related training subjects are listed below:**

- Incident Command System training: should be geared for the highest potential function any participant is likely to be called upon to perform. Training should be provided to personnel in the field, receiving facilities and operational support entities.
- Triage – Colorado has adopted Simple Triage and Rapid Treatment (START) as the approved system for triage of patients in mass casualty events. All triage training should be consistent with this model.
- Mass Casualty Incident(s) Management – EMS field responders should be trained in basic Incident Command System, roles and principles for early effective triage, scene organization, communications and medical care.
- Hazardous Materials – hazmat release can cause multiple casualties or can be another consequence of an event that also causes multiple casualties. Responder, patient and public safety rely on correct decisions and actions of early responders. Specific training in hazmat medical management and decontamination are also recommended for field and receiving facility personnel.
- Weapons of Mass Destruction/Terrorism Response – training should be made available to as many potential responders as possible
- Critical Incident Stress Management – personnel with Mass Casualty Incident(s) responsibilities are candidates to critical incident stress. Awareness and basic training should be provided so these people have some tools to identify, prevent, minimize and address stress issues. More advanced training could provide response leadership with tools to address these issues for their workforces.

The following is a list that should be considered for inclusion in training programs:

1. Emergency Medical Services: (i) Aero-medical providers, rotary and fixed-wing; (ii) Ground ambulance services: public and private, including volunteer; (iii) First response/ non-transport entities.
2. Fire and Rescue: (i) Fire suppression and emergency rescue; (ii) Search and rescue; (ii) Urban search and rescue.
3. Health Departments: (i) Disaster response units; (ii) Epidemiological / Disease surveillance; (iii) Home health/visiting nurse groups.

4. Hospitals: (i) Acute Care; (ii) Sub-acute care hospitals capable of receiving casualties.
5. Law Enforcement: (i) County, city and state law enforcement; (ii) Coroner / Medical Examiner.
6. Offices of Emergency Management: (i) All inter-agency liaison personnel; (ii) All those with incident management responsibilities
7. Emergency Communications Centers: (i) Public Safety Access Points (911 dispatch centers); (ii) Emergency Services Dispatch Centers: law enforcement, fire and EMS; (iii) Hospital communications centers/switchboard operators; (iv) Aero-medical (rotary / fixed wing)
8. Citizen; Volunteer Groups, etc with Mass Casualty Incident(s) response roles: (i) Clergy; (ii) Medical Reserve Corps; (iii) Amateur radio groups; (iv) Others

**Recommendations:** When future legislation and regulation addresses training standards, those should be incorporated into this plan. SECRETAC Subcommittee could be involved in identifying Mass Casualty Incident training needs, means and methods in an effort to achieve these objectives.

### **3. Response - Actions taken during an emergency to protect the public and property**

#### **Management Goals & Incident Priorities**

Having specific incident management goals, assists in predetermining a Mass Casualty Incident(s) response. Mass Casualty Incident(s) management is definitely complex creating the need to coordinate a large number and wide variety of agencies,

organizations, many of which will have their own set of operational and statutory incident management responsibilities. This won't happen over night.

The National Inter-agency Incident Management System as describes the concept of Unified Command: "All agencies who have a jurisdictional responsibility at a multi-jurisdiction incident contribute to the process of:

1. Determining overall incident objectives
2. Selection of strategies
3. Ensuring that joint planning for tactical activities will be accomplished
4. Ensuring that integrated tactical operations are conducted
5. Making maximum use of all assigned resources."

A Unified Command within the Incident Command System involves early establishment of a unified command post having key agency liaisons with the authority to speak for the agencies they represent. These liaisons can be Incident Commanders from other agencies. The overall incident commander must have immediate, face-to-face access to these members of the command staff, and this communication must be ongoing, throughout the duration of the event. Together, members of this unified command structure work to establish a common set of objectives and strategies, and an overall single Incident Action Plan.

### **Initial Response - Declaration**

1. First-in units should ensure personal safety
2. Notify dispatch center – initial radio transmission should be very brief and should:
  - A. Specify exact incident location or area, including GPS coordinates if appropriate
  - B. Provide an alert for any apparent hazards to responders
  - C. Specify access routes and arrival instructions for other units
  - D. Declare a Mass Casualty Incident activation using locally approved wording
  - E. If not already done by dispatch, provide a geographic-related name for the incident - "the X Incident"
  - F. Specify that further size-up of the incident is pending - "stand by for casualty counts and report on conditions"

### **Use of the Incident Command System**

1. First-in units should initiate Incident Command System and assume position of the Incident Commander
2. Next-arriving units should receive initial briefing and assignments from the Incident Command, or possibly assume the role of Incident Command if appropriate
3. Next-arriving command vehicles should park in the designated command post location and in close physical proximity to facilitate face-to-face communications whenever possible

**Size-up - Initial assessment should, at a minimum include:**

1. Minimum safe distance from the scene or area
2. Wind speed estimate and direction
3. First assessments of casualty numbers and triage categories
4. First assessments of physical scene layout for field command post, staging and other key locations

**Notifications – history has shown that it is better to cancel resources than request them too late.**

Upon notification from an incident commander, or by approved local protocol or Standard Operating Procedure, the dispatch center should:

1. Initiate notifications based on pre-determined lists which may include, but not be limited to: (i) Hospitals (receiving, control and specialty care); (ii) Neighboring jurisdictions via communications centers; (iii) Mutual aid response agencies; (iv) Technical specialists; (v) Other entities based on incident type, magnitude and other considerations
2. Avoid making assumptions about severity or complexity of the field situation
3. Respond positively to initially large requests for resources, but never go beyond requesting authority defined by protocol
4. Be more inclined to order or initiate more resources rather than conserving immediately deployable (less than 1 hour), regardless of personal preference, time of day, or multiple simultaneous Mass Casualty Incidents
5. Initiate field unit roll calls if necessary to confirm status of field units
6. Initiate mutual aid requests early, and based on pre-determined protocols
7. Consider alternatives if the dispatch center were to become inoperative

**Pre-determined resource requests - resource acquisition**

1. During planning phase, determine consensus among participating mutual aid agencies – are all clear on who is agreeing to do what and under which conditions?
2. Ensure against multiple agencies claiming jurisdiction over the same resources in times of need.

**Ongoing management**

1. In large, complex environments, assign an on-scene Safety Officer whose sole responsibility is to observe overall scene safety conditions who can immediately and definitively intervene as necessary. The Safety Officer is also in a good position to give periodic updates to the Command Staff as necessary to contribute to up-to-date Incident Action Planning.
2. Field Unit leaders should maintain overall situational awareness to avoid the “tunnel vision” syndrome that creates highly dangerous situations. If necessary -- depending

on incident size -- it is acceptable to assign one person whose sole responsibility is to monitor overall scene conditions for this purpose. This person reports to the scene Safety Officer.

### **Demobilization**

1. Demobilizing units – make all proper notifications prior to scene or area departure
2. Use the proper Incident Command System Demobilization Checkout protocol
3. Determine a checkout procedure for units returning to home stations. Do not let personnel clear and go home until all equipment is accounted for, whether it is back in service, lost, stolen, broken/salvageable, or broken/unsalvageable.

**Recommendations:** Develop exercises that require practice on individual components of the response planning, operations, and demobilization phases of the planning process. Do to the high stress typical of a Mass Casualty Incident(s) it is suggested that a supply of laminated wallet cards be provided to field, dispatch center, and EOC staff that overview the initial steps common to a Mass Casualty Incident(s) response.

### **Participants**

A comprehensive listing of potential Mass Casualty Incident(s) participants is vital to effective planning and response to a mass casualty event since the response may vary according to the nature and scope of the event, its associated hazards and needs.

#### **Response in SCRETAC region would commonly include:**

1. Field EMS providers: Public and private; transport and non-transport; career, volunteer and combination; ground, aero-medical and specialized response and transport services
2. Fire and rescue services, including public and industrial entities
3. Routine receiving facilities including trauma centers and acute care hospitals.
4. Law enforcement agencies (municipal, county, state and other)
5. Mental health and pastoral care professionals that have public safety backgrounds
6. Conventional response resources from distant jurisdictions, including neighboring counties, regions and states
7. SCRETAC coordinator and Council members may take on a response role as determined by the Council

#### **Larger, more sustained operations, less common participation may be required or be offered by:**

1. Sub-acute care hospitals; clinics; skilled nursing facilities and other inpatient and outpatient medical facilities
2. Trained personnel who may rarely use their EMS skills, such as some state and national park personnel, law enforcement, public service entities and their reserve units; search and rescue and Community Emergency Response Teams
3. Public health, including home health and visiting nurse agencies
4. Military and military reserve units

5. Unconventional emergency response and support entities such as: public works; utilities; public transit or other bus services; public and private handicapped services organizations
6. Volunteer groups with primary or secondary mass care or disaster response roles, such as American Red Cross, Salvation Army, Community Emergency Response Teams and Medical Reserve Corps members
7. Commercial and other suppliers of potentially required goods or services, such as: pharmaceuticals; medical supplies; portable generators; heavy equipment suitable for access and rescue; and logistical support
8. Potential providers of field treatment or shelter sites, such as: public and private schools; public auditoriums and similar facilities
9. Amateur radio groups such as RACES and ARRL
10. Groups of minors, such as scouts, explorers and junior auxiliaries may have a Mass Casualty Incident role, however their use must be carefully considered and planned
11. Clubs and other organized groups without planned, organized or trained Mass Casualty Incident roles
12. Spontaneous volunteers, ranging from the medically untrained to physicians

If some within SECRETAC's region contemplate using hospital-based teams of physicians and nurses for triage and/or medical care in the field – such teams should ensure that they have received adequate training in field operations, have proper personal and medical equipment, can be clearly identified as legitimate responders, and have clinical and operational guidelines to ensure that they work effectively. It is suggested that a protocol for team deployment be established by local planning entities.

Large and more sustained operations are likely to require participation of distant mutual aid responders, including those from other counties, regions and states. Use of these resources can be crucial to a successful incident response, however they should be well incorporated into plans and exercises in advance. The more distant these resources are from the requesting jurisdiction, the more important it is that certain considerations be handled. Some examples are:

1. Availability of communications equipment compatible with the local systems—this might include cache radios, preplanned provision for their use of local frequencies or communications interface equipment
2. Use of clear text in radio and direct verbal communications
3. Clear identification of these responders as a legitimate part of the response

Military and/or reserve units may be used in events of any nature or scope, depending on proximity and everyday response agreements or relationships. Military units often operate under much different parameters than their civilian counterparts; sound planning, joint training and exercises are important considerations. Whenever practical, a liaison for the military should be part of any response or exercise that includes such a unit.

**Recommendations:** Again, regional Mass Casualty Incident planning will benefit from participation from all jurisdictions, disciplines, agencies and healthcare facilities in the region's counties and adjacent to them. Detailed, specific lists of participants and contact

information should be part of local plans; the categories of participants identified in local plans should be shared throughout the region to assist the planning efforts of other jurisdictions.

## **Initial Response to a Mass Casualty Incident(s)**

The initial response to a Mass Casualty Incident(s) will likely dictate its effectiveness. Therefore, it is important to maximize a well-trained and executed response early on during the Mass Casualty Incident(s).

Details of the initial response should be contained in local mass casualty plans and Standard Operating Procedures, and therefore, are beyond the intent of this plan. Those plans should be consistent with the locally designated Incident Command System models, Colorado mass casualty training guidelines, other local guidance, and should require early initiation of the local Incident Command System. Our intent is to offer guidance in the formulation, adoption and implementation of these plans.

## **Notifications – early, organized and appropriate notifications can help resolve a Mass Casualty Incident more quickly, effectively, and without undue human cost.**

Specific details should be provided in local plans and Standard Operating Procedures. They should include all field response, receiving, coordination and support entities that may be relied upon in the near term to help mitigate the event. These notifications may include, but are not limited to:

1. Hospitals (receiving, control, and specialty care)
2. Alternate receiving sites (clinics and other healthcare locations)
3. Neighboring/mutual aid response agencies
4. Reserve, auxiliary and other groups affiliated with response entities
5. Technical specialists (hazmat, rescue, industrial, technical rescue, etc.)
6. Other groups, depending on the nature and scope of the event

Field response organizations notifications may take the form of a request to respond; an alert that response may be necessary or an advisory that a hazard or other unusual condition exists that may impact local or neighboring entities.

Facilities notification may include: (i) an alert to stand by for casualties in large numbers or with some special need or complication, such as chemical or radiological contamination; (ii) a request to activate an emergency plan, staff recall or other action; (iii) an alert of an event that may impact the facility, such as a hazardous chemical release in the facility's area or an event that may generate many walk-in patients; (iv) a request to prepare to report facility status and availability of beds and services, (v) a request for a facility to begin coordinating information on the status of multiple surrounding facilities.

Depending on the locality and incident specifics, notifications may be initiated at the request of the Incident Commander, based on criteria established in local policy or Standard Operating Procedure. In criteria-based notification, these should be made only after verified public reports or other highly reliable information is received. The Incident Commander should verify that all critical notifications have been made.

The nature of any notification should typically include: (i) what entities, what communications medium (telephone, fax, EMSSystem®, radio, pager, etc.), (ii) the type of notification, (iii) any action to be taken. It is suggested that specific wording be specified in local plans, protocols and Standard Operating Procedures. What triggers these notifications should also be specified like: a request from any on-scene unit, a request from someone of specified authority, a threshold number of type of casualties, or some other action.

Each facility or unit with responsibility to make notifications should have a complete, current and redundant list of contacts and alternative contact methods – telephone, radio or pager. All notification methods and plans should provide for prompt and positive verification that the notification has been received and understood.

**Recommendations:** Notification methods, channels and other particulars can often be more effective when shared among entities and jurisdictions. Planners should explore how joint planning and operations might provide improved effectiveness and redundancy.

## **Activation of the Mass Casualty Incident(s) Plan**

The activation of the SCRETAC Mass Casualty Incident Plan should be prompt and clearly understood by all who might be involved in its response.

### **Criteria for plan activation rest with local jurisdictions.**

In general, activation should meet these guidelines:

1. Authority for activation should be at the lowest level able to obtain the information necessary and exercise the judgment required for appropriate activation. This could be the initial responder or Incident Commander.
2. It should be able to occur at the earliest opportunity.
3. It should be simple to initiate, by use of a familiar specified phrase – like “X incident”.
4. Activation should probably be protocol driven, with minimal discretionary decisions required. In these cases, the decision should be based on verified public calls or other highly reliable information.
5. The actions to be taken by all concerned in activation should be clear and concise. These actions should be reviewed regularly with Standard Operating Procedures kept current.
6. As appropriate, activation workload should be shared to avoid bottlenecks in communications or actions.

**Responsibilities: Hospitals and Healthcare Facilities - to define basic, common responsibilities among healthcare facilities involved in a Mass Casualty Incident(s) response.**

Typically, experience has shown that ordered, systematic, and practiced Mass Casualty Incident(s) response protocol used within a healthcare facility under actual response conditions reduces mortality, morbidity, and costs, and increases the potential for post-event reimbursement.

Upon receiving notification that a Mass Casualty Incident(s) is in progress, any facility likely to receive casualties in a geographic area or by virtue of the system configuration should:

1. Place hospital on Alert Status. If number, severity, etc. of incoming casualties are known, declare Internal Disaster immediately and begin system notifications protocol. Hospital Alert Status should initiate immediate assessment of:
  - A. Current, best estimate of field situation
  - B. Current admission bed availability, based on BOTH available beds AND available staff
  - C. Current number of staff in house and time requirements for receiving additional staff
  - D. Current operating room capability in terms of cases able to be started immediately and in the next hour, 4 hours, and the next day, in that order
  
2. System Notifications Protocol
  - A. In coordination with dispatch centers, other hospitals, local and state emergency managers, and all field EMS providers in a given jurisdiction, specific, sequenced notification protocols should be developed. These protocols should be updated at least every 2 years
  - B. Any field personnel with 911 responder status, as well as any dispatcher receiving initial notification should have authority to initiate the Protocol
  - C. Only supervisors/managers should have the authority to limit or stop notifications under the Protocol
  - D. Internal Disaster declaration occurs when one or more of the following conditions exist:
    - (i) Information confirmed from field units indicates an immediately overwhelming influx of patients is likely to occur
    - (ii) The magnitude of the Mass Casualty Incident is such that local, regional, and national news coverage is occurring and there is a credible possibility that an immediately overwhelming influx of patients is likely to occur
    - (iii) The hospital has experienced biological or chemical contamination/exposure of patient care area(s) based on credible or confirmed information and the information has been evaluated by no less than two persons consisting of an emergency department

physician and a person with technical expertise in chemical/biological contamination dynamics.

- E. Internal Disaster declaration should entail:
- (i) Canceling all elective surgery
  - (ii) Initiating a process to secure the facility's outer perimeter
  - (iii) Establishing access/egress control at all facility exits
  - (iv) Recalling available off-duty staff and holding over off going staff
  - (v) Ensuring availability of Material Data Safety Sheets
  - (vi) Notifying local and regional hospitals and government emergency managers of status
  - (vii) Establishing communications with subject experts as conditions warrant:
    - a. Local or regional health department epidemiology and/or infectious disease
    - b. Industrial or institutional hazardous materials response
    - c. Fire department hazardous material response
    - d. Radiological emergency response
  - (viii) Determining the status of, or establishing alternate communications systems – amateur radio, FRS radios, etc.

It is recommended that facilities make a distinction between Hospital Alert Status and Hospital Declaration of Internal Disaster. In most cases, it is more prudent to begin with a Hospital Alert Status before moving to a Hospital Declaration of Internal Disaster.

**Recommendations:** (i) Exactly who, and under which MCI circumstances, can initiate Alert or Internal Disaster status should be left to local administrators and managers. (ii) Initial casualty counts and severity reports from the field should be assumed as underestimates for at least one hour after initial notification. (iii) Outpatient surgery centers and clinics should be part of regional planning. (iv) Receiving facilities must be able to track large numbers of patients throughout the continuum of care, the use of a Hospital Emergency Incident Command System is recommended. (v) In larger, acute-care centers, the Occupational and Employee Health Department should work with other hospital departments to assess employees for signs of fatigue, inadequate nutrition/hydration, mental stress, dangerous work practices, etc. during extended disaster response conditions. (vi) Transportation of all patients to the nearest facility should only be done with prior approval of that facility or a control facility. (vii) In smaller hospitals and clinics, staff should be assigned to act as Safety Officers to monitor the overall situation and specific clinical practices.

### **Responsibilities-Pre-hospital - define basic, common responsibilities among pre-hospital care providers involved in a multi-casualty incident response**

As in other Mass Casualty Incident(s) experience has proven that an ordered, systematic, and practiced response protocol used among pre-hospital care providers under actual response conditions reduces mortality, morbidity, and costs, and increases the potential for post-event reimbursement.

### **Initial Responsibilities**

1. Maintain personal and team safety
2. Follow established protocols and guidelines concerning Mass Casualty Incident(s) response
3. Use the Incident Command System
4. Early on, establish face-to-face communications with leadership among other responding agencies
5. Declare Mass Casualty Incident(s) protocol activation with dispatch center using approved terminology
6. Establish casualty collection and treatment areas, preferably color-coded in correspondence with triage tag color categories.

### **Ongoing Responsibilities**

#### **Tactical**

1. Avoid “tunnel vision”
2. Create staging areas that include:
  - (i) Low probability of being affected by dangers imposed by the incident itself
  - (ii) Create a circular pattern for vehicles to enter and leave
  - (iii) Remaining in functional proximity to casualty collection points and treatment areas
  - (iv) Separate helicopter landing and vehicle parking zones by appropriate distances for conditions present
3. Under the Incident Command System, Medical Group Supervisor or Transportation Unit Leader must maintain the ability to conduct patient tracking, regardless of which triage tag or field documentation system is being used. A hospital or receiving facility must be able to take a unique identifier off of a triage tag (or similar document) associated with a particular patient and correlate it with patient logs generated in the field. This tracking continuity should be maintained throughout all phases of medical record development up to the point of patient discharge or morgue transport.
4. Report adversely changing conditions to safety officers, dispatch centers, and incoming units.
5. In the event of large explosions of unknown or confirmed criminal origin, be prepared for secondary blasts. Maintain the ability to initiate a “HALT, FALL BACK” order at any time, per local protocol. If there is no such protocol, it is suggested on be developed.
6. All resources committed to the field response should be reflected within the incident tracking system, usually located at an Incident Command Post or local or regional Emergency Operation Center. The size of a Mass Casualty Incident(s) impacts the tracking of people and equipment.
7. Large Mass Casualty Incident(s), especially those producing large numbers of deceased create a need for proactive and definitive measures in the areas of:
  - (i) Morgue transport
  - (ii) Victim identification and tracking
  - (iii) Personal effects identification and tracking
  - (iv) Evidence preservation and related forensic investigation

8. Assign safety officers to initiate responder support efforts proactively. This includes efforts such as rest breaks, hydration planning, minor injury treatment, etc. Observe personnel for signs of physical depletion and Critical Incident Stress and intervene accordingly.

### **Communications**

1. Maintain clear text radio communications
2. Use tactical frequencies if available
3. Initiate channel net control if necessary. That is, dispatch center assumes control of the channel to control radio clutter

It is understood that the issue of communications warrants further exploration and work toward consensus on equipment standardization, frequency assignments, and budgetary priorities.

### **Law Enforcement:**

1. Maintain perimeter control
2. Proactively create media control areas at appropriate distances from staging or patient care areas
3. Work with law enforcement to control access to equipment and vehicles.
4. Maintain personnel access control. Only those with properly cleared picture identification should be allowed within the perimeter
5. To the extent that patient care is not compromised, secure evidence in the aftermath of known or suspected criminal activity, or in the case of accidents requiring National Transportation Safety Board investigations

### **Demobilization Responsibilities**

1. The decision to demobilize should rest with the Incident Commander, but only after close consultation with all members of the Command Staff establishing a targeted time. The target demobilization time should reflect enough advance notice so that all affected personnel can coordinate their activities.
2. Units clearing the incident should notify the appropriate authority, depending on the size of the response which is best achieved through close control of perimeter access points and assigning demobilization unit leaders physically located at these points.
3. Initiate Critical Incident Stress Management intervention and assume that it will be needed in the future. This resource should be part of the standard recovery procedure.
4. This typically requires coordination between Operations and Finance/Administration Sections within the Incident Command System structure.

### **Administrative Responsibilities**

1. Mass Casualty Incident(s) response protocols should be a routine part of new employee orientation
2. Executive staff should receive annual updates or refresher instruction regarding their roles during Mass Casualty Incident(s) response
3. Records produced by Finance/Administration Section should be maintained for a period not less than those required by statutes of limitation in the affected jurisdiction.

In the case of Mass Casualty Incident(s) involving known or suspected criminal activity, this period may be indefinite.

### **Recommendations concerning various possible protocols for:**

#### **ROUTINE MEDICAL CARE**

Routine Medical Care (RMC) consists of a set of assessments/treatments that should be performed on every patient regardless of presenting complaint. These include:

- The Primary Survey and initial treatment and stabilization of life-threatening airway, breathing and circulation difficulties.
- Spinal stabilization as needed
- Beginning transport in the potentially unstable or critical patient
- A Rapid Trauma Assessment in the case of significant trauma
- Investigation of the chief complaint and associated complaints, signs or symptoms
- An initial set of vital signs:
  - Pulse
  - Blood Pressure
  - Respiration
  - Lung Sounds
  - Mental Status
- Cardiac rhythm (if indicated)
- Pulse oximetry (if available)
- Consider orthostatic vital signs to assess volume status
- Protect patients against temperature extremes

Give initial treatment including oxygen, ventilation if indicated, hemorrhage control if needed, basic wound/fracture care, and IV access if indicated/capable. IV access refers to an intravenous line, with isotonic crystalloid solution (Normal Saline or Ringer's Lactate) at a keep vein open rate unless otherwise noted in the individual protocol.

#### **LEVELS OF CARE**

##### BLS/FIRST RESPONDER

- Employees such as transit drivers, station attendants or building security personnel
- Public safety agency workers such as police or Emergency Medical Technicians

##### ALS HOT ZONE

- Paramedics or other advanced life support providers
- Conditions of operations include contaminated patients and providers fully outfitted with PPE

##### ALS WARM ZONE

- Paramedics or other advanced life support providers

- Conditions of operations include access to patients in a more optimal care-giving environment (patients undressed, decontaminated, providers in lower levels of PPE such as universal precautions, access to full ALS medical equipment/supplies)
- May occur at the scene of the incident, en route to a definitive care facility, at a decontamination station within a definitive care facility

#### HOSPITAL

- Occurs at a definitive care facility capable of emergency department level care
- May be a designated special receiving facility, or a regular receiving hospital or trauma center
- Hospitals should utilize all existing resources, including the Rocky Mountain Poison and Drug Control Center.

### **CONSIDERATIONS FOR STANDARD TREATMENT PROTOCOLS – HAZMAT/WMD**

These Weapon of Mass Destruction (WMD) MCI Medical Treatment Protocols are designed to be utilized by all EMS personnel responding to a potential WMD incident. They should be formatted to comply with the EMS Agency Standard Treatment Protocols. These protocols consist of a Fact Sheet on each agent, an Information Needed section on patient medical history, an Objective Findings section on physical signs, a Treatment section divided into BLS and First Responder actions, ALS provider actions in the Hot Zone, or contaminated area, ALS provider actions in the Warm Zone, or decontamination area, and Hospital provider actions.

These protocols are designed for rendering the maximum appropriate care to each patient affected by these devices. In Multi-Casualty Incident situations, all of these assessments and treatments may not be able to be performed on each patient. Providers should follow established MCI procedures and attempt to do the greatest good for the greatest number of patients.

Remember that patients in potential HAZMAT/WMD incidents may also have non-poison related problems; e.g. head trauma, hypoglycemia, asthma exacerbation. Refer to Standard Treatment Protocols for assessment and treatment strategies related to these complaints.

For victims of Weapons of Mass Destruction, the following additional factors should be considered:

- Under no circumstances should responding personnel at any level of expertise use Personal Protective Equipment or assist in patient decontamination without completing the required training
- The first priority for patients in a Hot Zone is likely to be evacuation to a decontamination area. All examinations and treatment are likely to be provided by personnel in complete PPE, rendering complete exposure of the patient and utilization of such assessment tools as a stethoscope impossible. Hot zone

assessments are limited to those that can be conducted rapidly through PPE. These may include:

- Observation of the patient's mental status
- Observation of the patient's skin signs
- Observation/testing of neuralgic response, including GCS and pupils
- Observation of the patient's airway, secretions, and any vomiting or other bodily fluids
- Pulse check
- Pulse oximetry reading
- Patients need to be removed from the contaminated environment as soon as practical to prevent further contamination.
- The order of RMC may be affected by Incident-specific considerations, e.g. primary survey may be followed by evacuation and decontamination, or in the case of entrapped, live victims RMC may be followed by decontamination in place. In all cases, decontamination of contaminated victims should be considered a vital part of their treatment.
- The removal of contaminating materials, such as clothing, from the patient is at the discretion of the Incident Commander. This should be done as rapidly as practically feasible and should include full patient decontamination.
- Assessments and treatments in the Warm Zone include those that need patient exposure, such as stethoscope exam or initiation of IV therapy.
- Identification of the material released may be difficult. Utilize all resources at your disposal, as outlined in the MMTF Concept of Operations Document. These include (but are not limited to) Hazmat Databases, Poison Control Center, and Base Station Physician consultation.

### **Safety Considerations -provide guidance for field and clinical safety practices specific to Mass Casualty Incident(s) activities**

Safety of responders, casualties and the public are primary considerations in any emergency response. Failure to adhere to sound safety practices has the potential to cause major disruption to response activities and an unacceptable human cost.

#### **Prehospital:**

A safety "culture" should be cultivated in each organization and practiced in everyday operations, exercises and complex responses. As part of that culture, anyone present should be able to draw a potential safety issue to the attention of a co-responder or superior without penalty. Whenever it's possible to correct a safety hazard it should be done without undue delay, and in most cases by anyone who discovers the hazard.

#### **Some common causes of injury on critical incident scenes include:**

- Driving mishaps, including backing and low-speed on-scene vehicle movement.
- Trip hazards from equipment, debris, casualties, disrupted ground or other sources.
- Improper lifting technique applied to casualties, equipment or rescue operations.

- Sharp-edged metal, glass or other materials causing lacerations.
- Failure to be diligent in exercising and enforcing body substance precautions.
- Failure to properly wear and use protective equipment, including gloves, helmet, safety vest/jacket, eye protection and respiratory protection as necessary.
- Falls, even from relatively low heights.
- Operating without adequate lighting.
- Failure to observe minimum safe distances from hazardous situations, e.g. hazardous chemicals, potential structural collapse, line of fire in shooting incidents, and others.
- Hypothermia, heat syndromes and dehydration.
- Fatigue/exhaustion.

**Safety Officer and Assistant Safety Officers:**

At least one person involved in the response should have primary responsibility for the safety of the operation. The Safety Officer has the authority to stop or modify any operation. In large areas or more complex responses, one or more Assistant Safety Officer should be appointed. Where technical operations are under way, such as heavy rescue or hazmat mitigation, the safety officer should be familiar with those activities.

**Air operations:**

Operations around aircraft are always hazardous, and special attention is necessary. Conditions of darkness compound the danger, especially on a scene where ground, lighting and working conditions are not prepared in advance for flight operations. While flight crews generally operate with high regard for their own safety and that of nearby ground personnel, everyone working near operating aircraft must be constantly vigilant, including during ground run-up, approach and departure. An Assistant Safety Officer may be designated for any airfield or landing zone during active aircraft operations.

**Secondary devices and events:**

Unfortunately, secondary devices and events are becoming increasingly common in acts of violence and terrorism. These may include explosive devices timed or triggered to detonate when emergency responders are on scene, an assailant lying in wait to shoot responders during or after their arrival, or a chemical or explosive booby trap, to list just a few. Whenever approaching or operating at an event that may have been created deliberately, every field responder should be especially alert to any object or activity that seems out of place or potentially harmful. A destructive device may be contained within a lunch box, package or piece of luggage, or hidden almost anywhere indoors or out. Any suspicious object should be untouched and personnel moved away from it until it is cleared by the proper technical responder. Staging locations or standoff distances set by law enforcement or other responders should be honored without fail.

**Use of spontaneous volunteers:**

Any large or high visibility incident can draw spontaneous volunteers. While they may legitimately fill many functions, they may not be trained, physically fit or otherwise suitable to do all of the tasks that may be asked of them. The decision to use spontaneous volunteers should be given careful and individual consideration, and the tasks assigned to

each should be carefully chosen and closely supervised by trained responders to reduce the likelihood of injury to the volunteer or others. Assignment of the wrong volunteer as a litter bearer, for example, can result in injury to the patient and all of those helping to carry the litter.

**Clinical:**

A large and complex event can cause “tunnel vision” in even highly experienced staff members, making them vulnerable to accidents that can injure them, co-workers, casualties and others. Every responder should be aware of the issue and should constantly assess themselves and those around them for indications.

A safety “culture” should be cultivated in each organization and practiced in everyday operations, exercises and complex responses. As part of that culture, anyone present should be able to draw a potential safety issue to the attention of a co-responder or superior without penalty. Whenever it’s possible to correct a safety hazard it should be done without undue delay, and in most cases by anyone who discovers the hazard.

**Potential causes of injury at critical incidents in facilities include:**

- Driving mishaps, including backing and low-speed on-scene vehicle movement.
- Slips from spills of body substances and other liquids.
- Trips and falls from equipment and other items left in walkways.
- Improper lifting technique applied to casualties or equipment.
- Needle sticks and lacerations from sharp-edged metal, glass or other materials, including sharps not properly disposed of or over-full sharps containers.
- Injuries caused by distraction or haste in procedures or patient movement
- Failure to be diligent in exercising and enforcing body substance precautions.
- Failure to observe safety precautions and use proper personal protective equipment, including those items necessary for patients requiring isolation or contaminated by chemical or radiological agents.
- Working under emergency lighting conditions that may not be adequate for all clinical activities.
- Fatigue/exhaustion.

**Safety Officers and Safety Monitors:**

Safety monitors/officers should be appointed in adequate numbers and with manageable physical areas of responsibility. The Safety Officer has the authority to stop or modify any activity.

**Air operations:**

Operations on and around hospital helipads can be hazardous, especially when raised or rooftop pads pose a fall hazard and when aircraft are operating. While flight crews generally operate with high regard for their own safety and that of nearby ground personnel, everyone working near operating aircraft must be constantly vigilant, including during ground run-up, approach and departure. An Assistant Safety Officer or monitor may be designated during landing, loading, unloading and departure.

**Recommendations:** It would be a good idea that agencies and facilities should have a current and comprehensive safety plan that is effectively communicated, well known and complied with by staff.

### **Medical Direction and Protocols - clarify operating parameters for medical personnel at an MCI**

When there is mutual aid response by medical personnel it may raise questions about authority to perform advanced procedures and what practices are permitted.

Local responders should operate under existing clinical guidelines. If specific Mass Casualty Incident Plans are in place, they should be followed after authorization or after a triggering or threshold event or status, such as casualty count or other condition.

An Mass Casualty Incident may require response by prehospital and clinical practitioners from different services, jurisdictions, and even neighboring states. While policy on this issue remains a local issue, the following recommendations are simply provided as a tool for guidance.

#### **Basic Life Support:**

All licensed, certified or otherwise authorized emergency medical personnel should be allowed to perform Basic Life Support procedures within their training and capabilities without consultation with medical control or other medical oversight.

#### **Advanced Life Support and Limited Advanced Life Support:**

Advanced level responders from outside of the jurisdiction should be permitted to perform within their authorized scopes of practice during an event that exceeds the capabilities of the requesting jurisdiction's resources. Each of those responders should work within their home protocols, treatment guidelines or other clinical parameters. Under the principles of austere medical care, many advanced procedures should be deferred. Whenever practical, these responders should operate under some level of supervision by practitioners from the requesting jurisdiction and familiar with local practice.

#### **Physicians, nurses, physician assistants and nurse practitioners:**

These practitioners should be authorized to work within their own clinical parameters anywhere within the state issuing their license. Again, the principles of austere medical care should apply. Out-of-state license holders should adhere to any agreements established between their own states and Colorado.

## **Physical Layout of On-Scene Medical Resources - provide guidance for on-scene layout of medical resources**

### **Incident Command - individual responsible for the management of all incident operations. Also referred to as “Command”.**

In an effort to create uniformity and a common language amongst emergency agencies, Colorado has adopted the FIRESCOPE Incident Command System as the sole incident management system used by emergency responders.

- A. The first arriving fire, EMS or law enforcement officer on scene will establish an Incident Command System. Overall command of the situation will be assumed and a command post established. Overall scene command is under the direction of the Incident Commander.
- B. The Incident Commander will identify him/herself and give a brief report of the situation to dispatch that will include:
  - 1. Name of incident and identify Incident Commander
  - 2. Report MCI situation on scene, provide an EMS scene report
  - 3. Assign initial arriving units as needed
  - 4. Position at, and transmit the exact location of the Command Post
  - 5. Consider dedicating a radio frequency to the command if available
  - 6. Identify and designate approach routes and staging areas
  - 7. Request additional resources as needed
  - 8. Have “near” or “local” hospitals alerted as needed
  - 9. Assign sectors/groups for span of control (Extrication, Triage, Treatment and Transport)
  - 10. Insure the safety of responders, the scene and bystanders.

### **Command Post - location where primary Command functions are executed; co-located with unified command when applicable.**

A single site command post should be established and made immediately identifiable by the Incident Commander. The command post will be established, keeping in mind:

- 1. Command post location. Position away from the general noise and confusion associated with the incident
- 2. Position outside of the present and potential hazard zone
- 3. Ease of access. Have the ability to provide security and to control access as necessary
- 4. Location of operations that does not interfere with emergency operations and provides a margin of safety for all command and liaison personnel

### **Command Post Functions Include:**

- 1. A location from which all operations are directed

2. Unified Command will be established as soon as possible
3. Law enforcement, Public Information officers and Safety officers will co-locate at the command post
4. Other agencies and responders will report to designated resources assembly points or, when requested, staging areas when established

**STAGING AREAS - temporary location near an incident where additional personnel and equipment are strategically located while awaiting tactical assignments.**

Staging Areas provide locations for immediately available resources to await active assignments. They also provide greater accountability by having available personnel and equipment together in one location and prevent resources from freelancing or “doing their own thing”.

This plan assumes incidents will dictate the establishment of staging areas for scene management, perimeter control and resource (personnel and equipment) control.

1. Level One Staging - will be utilized for all arriving resources on the initial assignment. This is a temporary location until the resource is assigned a job function or to a sector/group. Level One staging is usually within a short distance of the operation area. An area may be designated to park apparatus not immediately needed in operations.
2. Level Two Staging - will be utilized for additional resources and equipment that are called to assist at the scene. This is an area designated by the Incident Commander that is large enough to function as a staging area for all additional resources necessary. This area should be far enough away from the operations area as to not interfere with movement of personnel and equipment. A staging officer should be established to keep track of personnel and equipment.

**RESOURCE ASSEMBLY POINTS**

An incident of such a magnitude that requires an outside response to respond to the regular community calls or mitigate the incident, should consider identifying Resource Assembly Points (RAP) within their community. These should be large, easily identifiable locations that outside resources would initially respond to and wait for further assignment to either the incident or community response

**Medical Operations** - individual responsible for the overall coordinator of medical resources, patient situation status, and medical supply and equipment needs

The establishment of a Medical Operations branch should be a priority of the Incident Commander. The medical scene is under the direction of the Medical Operations Commander. The priorities of the Medical Operations Commander are:

1. To ensure the safety of the scene for both patients and responders.
2. To establish extrication, triage, treatment and transportation sectors/groups as needed.
3. To coordinate with these groups to provide additional equipment and resources as needed.
4. To coordinate with the Incident Command, report situation status, request resources as needed.

**EXTRICATION – typically a first responder who is responsible for site safety, responder safety and the movement of victims/patients into a safe zone**

Extrication is the removal of victims that may still be in physical danger because of their location. The first priority, following scene safety, is to locate patients and remove them from any immediate physical danger into a safe zone. “Where they are found” could be within a “hazard zone”, that is within a vehicle(s), an aircraft, a HazMat situation or a collapsed building. Trapped victims requiring prolonged extrication should receive advanced life support care as required and feasible. The extrication supervisor and the safety officer are responsible for the safety of all those within any hazard zone.

If the disaster location is explosive or hazardous, victims will be moved to a safe location at least 300 feet upwind.

**TRIAGE - the French word meaning “to sort”.**

Initial triage consists of a “walk through” by the Triage Supervisor and first arriving emergency care personnel to determine an approximate patient count and injury severity. This information is relayed to the Incident Commander. This information will be the basis for initial treatment and transport decisions that will then occur. Simple extrication and triage might include assisting the walking wounded to a location where they may be gathered and accounted for.

Triage should be conducted in a safe location for both victims/patients and rescue personnel. The Extrication Supervisor will be responsible for determining whether to provide initial triage “where they are found” or to move the victim(s) quickly to the Treatment Area.

The “START System” (Simple Triage and Rapid Transport) is a method of rapidly assessing and triaging mass casualty patients. The triage group should implement the “START” system whenever an incident involves four or more patients.

Whenever available, a START triage belt system should be utilized to assist the rescue personnel in triaging and tagging patients.

**TREATMENT - to provide definitive basic and advanced life support for stabilization and continuing care of patients until they can be transported to a medical facility.**

A treatment tag should be filled out in the Treatment Area for each patient. The treatment tag should indicate priority and serve as an area in which to write vital signs, injuries, and other pertinent patient information. Begin treatment of casualties, immediate priority first, delayed second, and so on, in accordance with local protocols. Treatment should not delay transport unless absolutely necessary to stabilize life threatening injuries.

The Treatment Group Supervisor is responsible for the establishment and operation of the treatment area. The location should be determined by terrain, circumstances of the incident or accident, and existing safety hazards at the site. This area should be readily accessible to ambulances but isolated from any dangerous conditions associated with the incident.

The Treatment Area shall have a readily identifiable entrance with easy ambulance access. Signs, traffic cones, or other markers should be utilized to mark the entrance to this area. The Treatment Area location should be made known to all members of the medical group. The Treatment Area shall be divided into three separate zones. These zones can be readily marked with red, yellow and green barrier tape, flags or colored plastic tarps to identify the appropriate treatment area. Traffic cones or barriers may be used to create approach paths for delivery of patients into these areas.

First arriving patients should be placed near the rear or exit to the Transportation Area. Place all patients in an orderly manner. Adequate space should be provided between patients to allow working room for treatment personnel. Treatment personnel must provide ongoing assessment of all patients for changes in conditions to maintain appropriate triage classification and to establish treatment and transportation priorities.

**TRANSPORTATION - facilitate the movement of patients out of the scene and to area hospitals, a transportation area will be established in conjunction with the treatment area.**

The Transportation Group Supervisor is responsible for providing and coordinating all of the patient transportation. Generally, a person from the first ambulance on scene will assume this responsibility until relieved by a supervisor or another designee. The Transportation Group will generally be under the direction of the local ambulance provider.

The Transportation Group Supervisor will set up operations close to the exit of the Treatment Area and very close to where patient loading will take place. The Transportation Group Supervisor will work closely with the Treatment Supervisor in determining which patients are to be transported first. The Transportation Group Supervisor will provide the appropriate transportation, air or ground as needed or available.

The Transportation Group Supervisor needs to have radio communications with the incident site commander, local ambulances, air ambulances and hospitals.

Additional ambulances should be staged in an area that is accessible to the scene and with a clear entrance and exit. Vehicles used for transporting patients should be staged as close as possible. Extra equipment is to be off-loaded upon arrival at the staging area, to be utilized by the triage and treatment teams. Transport teams are to stay together with their ambulances.

As soon as possible, a status board should be initiated and maintained that indicates the number of patients that each local hospital is able to accept and how many patients at what level of criticality have been transported to each facility. Communications should be established with the receiving hospital as early as possible to indicate the numbers and injury severity of patients requiring transportation and treatment.

It is important that there are no delays in transporting patients to area hospitals. Patients are to be distributed to hospitals in such a manner that no single hospital becomes overloaded. If necessary, two or three ambulances can be loading simultaneously. The Transportation Group Supervisor will coordinate helicopter transportation with the Air Division Supervisor.

**AIR OPERATIONS - When available, air transportation of the injured may greatly enhance survivability of the severely injured. The Transportation Group Supervisor should consider the availability of patient movement by helicopter.**

The Transportation Group Supervisor should assign an Air Division Supervisor. The Air Division Supervisor will be responsible for:

1. Landing zone selection
2. Communication with the arriving aircrews
3. Providing security of the landing zone
4. Assisting in the loading of the aircraft
5. Coordination and tracking of patient's destinations with the Transportation Supervisor

The first priority for movement of casualties by air will be given to those in the immediate (RED) group, who are physically and mentally fit for air transportation.

## **MISCELLANEOUS TRANSPORTATION**

The number and severity of injuries can quickly overwhelm local resources. The Incident Commander and the Transportation Group Supervisor should consider:

**Shelter In Place** - If necessary, patients who may be able to be stabilized can be sheltered in place. Consider the nearby community resources that may be utilized as a holding area for transportation. Be sure to consider patient and rescuer comfort needs. Areas that can be considered for a shelter in place include:

- Churches
- Schools
- Public and/or private meeting places
- Recreation halls

**Casualty Collection Points** - If local area hospitals are overwhelmed with patients or unavailable, they may need to be sheltered in Casualty Collection Points (CCP's) until health care facilities can be made available. Resources will need to be requested from local, State, and Federal agencies to assist in the care of these individuals. (see Appendix E, Hospitals & Surge Capacity Facilities)

**Mass Transportation** - A large number of patients may be transported by mass transportation. The transportation officer should group those individuals, who do not require immediate medical attention and transport these patients using mass transportation. These will generally fall into the GREEN or "walking wounded" category. Consider utilizing the following resources for mass transportation:

- RTD
- School Buses
- Shuttle Vans

### **Field Morgue**

For obvious reasons, this function should be located where the deceased are relatively out of view of other casualties, the media and the public and won't be a distraction for staff. In addition, it should be located where security can be maintained by a minimum of personnel

## **Incident Communications - provide guidance for the organization of MCI communications**

### **Optimal incident communications will include these features:**

- Suspension of routine ambulance-to-hospital communications for medical control or patient reports; ambulance-to-hospital communications should be kept to a minimum.
- Use of clear text in all radio, telephone and other communications.
- Adequate radio channels to provide for effective communications in each function without undue interference with or from other functions.
- Adequate numbers and types of radios to provide for communications within all functions and between key personnel, including mutual aid responders who arrive without radio equipment compatible with the local system.
- The ability to minimize the on-scene radio traffic that must be monitored by, or causes interference with, communications centers, facilities and other units. This can usually be accomplished by moving incident traffic to one or more tactical channels or using simplex (also called “direct” or “car to car”) functions to avoid unnecessary widespread rebroadcast of on-scene traffic over a repeater system.
- The ability to exchange timely, accurate information between the scene and receiving facilities or a control facility without interference from other functions.
- Redundancy in communications capacity, such as use of different systems, channels or bands; availability of cellular or satellite phone; rapid availability of amateur radio and other backups in case of one or more system failures or saturation.
- Ability (by technology and SOP) to have a control facility coordinate status reports and patient distribution information, reducing the workload of on-scene personnel. This might be a hospital or communications center.
- Inclusion of major potential receiving facilities, including clinics and other subacute care sites in the radio network, exercises and events, as necessary.

### **Essential communications will include:**

- Communications between the scene and communications center for status reports, resource requests and other necessary information.
- Notification of receiving hospital(s) or a control facility of initial and ongoing situation status and numbers, triage categories, general categories (e.g. head injury or burn) and ETAs of casualties to be received by them.
- On-scene communications between key Medical Branch positions.
- Coordination of approaching ground and air resources for assignment or staging.
- Ability to quickly and effectively alert participants of safety hazards.

## **Field Patient Documentation - provide guidance for field documentation of mass casualty incident patients**

MCI response may not provide the time to complete a routine patient care report. Documentation remains essential, and alternatives are available to exchange necessary information on patient identities, clinical findings and care rendered.

The demands of a Mass Casualty Incident may make it necessary to delay or suspend routine prehospital patient documentation. Some measure of documentation remains essential to identify patients and communicate field findings and treatment information to receiving facilities, to provide continuity of care and to assist in response cost recovery. Information that may be available to field responders to help identify patients may be destroyed, lost, destroyed later in an event if no attempt is made to preserve or record it.

Minimum documentation should include completion of written documentation on each patient's triage tag, to include name, age, medical history, medications and allergies, baseline vital signs and significant prehospital treatment rendered. When time and workload permit, additional information such as address and serial vital signs may be added. Information should be documented according to the instructions for the tag.

After delivery of the patient to a receiving facility, and ideally before departing the facility, the field crew should obtain a photocopy of both sides of each patient's tag. If a photocopy is not available, a written copy of the minimum information should be obtained.

Diligent maintenance of log information on each ambulance can help reconstruct this information as necessary.

## **Fatalities Issues and Mortuary Services Interface - To identify interface issues between EMS responders and other response personnel specifically associated with the management of fatalities that result from a Multi-casualty incident and to cite planning considerations that will help jurisdictions mitigate the consequences of such an incident.**

General authority of this issue lies with 49 Code of Federal Regulations - CHAPTER VIII - PART 830, National Transportation Safety Board, Local and state statutes regarding evidence, disposition of deceased persons

### **General recommendations:**

1. Be usable and expand on or supplement current operating plans.
2. Address protection of personnel who handle remains.
3. Address the final disposition of remains with the intent of returning remains to the family.
4. Be supported by sound science or technical information.

5. Address processing the deceased with honor, dignity, and with an awareness of family members' religious belief systems, when applicable.
6. Fall within a standardized incident management system such as MACS or ICS.
7. Provision for mass morgue capability must be included in local plans and these must be supported by regional and state plans
8. For MCI responses involving significant numbers of fatalities, Incident Commanders must establish liaison relationships with mortuary/morgue resource leaders as soon as practicable. 24/7/365 coroner's office contact numbers should be immediately available to both field units and dispatch centers
9. Operational issues associated with chemical contamination of remains, and disease and vector control should be handled in accordance with Universal Precautions standards. However, it is important to note that use of Personal Protective Equipment (PPE) creates training and deployment costs.
  - Field evidence collection requires the medical examiner to wear PPE. Most medical examiners however do not have the budget to train personnel to use PPE nor do they have a budget that can maintain this equipment for a "possible" event. Therefore, the following guidelines are provided:

#### Guidelines for Mass Fatality Management During Terrorist Incidents Involving Chemical Agents

- Despite a lack of resources, local medical examiners can begin training personnel to use PPE through mutual agreements with local fire departments, HazMat teams, local private industrial Hazmat teams, or their local/state environmental protection agency equivalent. A specialized team of at least four individuals should be trained to the HazMat Technician Level, so that they are prepared to enter a Hot Zone in Level A or B PPE. This provides the medical examiner two teams of two individuals, so that each team has a backup that can relieve the other when an evaluation takes longer than the thirty-minute air supply. The rest of the staff should be trained to use Level C PPE.
- An MCI that overwhelms regional and state emergency morgue capability may lead to activation of a DMORT or other federal resources. Local planning efforts should define thresholds that determine when the call for federal help is initiated in this regard.

### **Technical Rescue Operations Considerations - identify MCI considerations related to technical rescue needs and operations**

Technical rescue may be necessary for gaining access to multiple patients and may have other effects on mass casualty response.

Many causes of MCI will also create a need for technical rescue. Examples may include a large transportation incident involving a passenger train, aircraft or multiple automobiles; structural collapse such as building or bleachers; avalanche, land movement or flood.

The large portion of organizations that provide both rescue and emergency medical care make it possible that large and/or sustained rescue operations may make many responders unavailable for medical care and transportation during and after rescue.

Many technical rescue operations are extremely hazardous; medical personnel may be called upon to provide medical support for rescue teams, or to care for injured rescuers. Medical responders should be aware of existing or potential hazards of each rescue operation, and should observe standard safety procedures and any direction of on-scene safety personnel.

After rescue or extrication, casualties turned over to medical personnel may have unique injuries, such as massive crush injuries common in structural collapse, may be exposed to or contaminated by hazardous materials, or both. While waiting for patient rescue, EMS personnel may have the opportunity to develop general triage, treatment, care and transportation plans.

Whether the same or different services, both disciplines should work closely together in planning and training, and should exercise jointly whenever possible. Exercises should include scenarios that provide realistic operational challenges such as conflicting needs for common responders, and plans should provide for backup sources of both types of personnel and equipment.

During all such operations, responders should keep in mind that the event may be a consequence of a criminal act. Crime scene and evidence preservation practices should be employed whenever possible.

**Recommendations:** Jurisdictions should identify their technical rescue resources and potential needs, and should plan, train and exercise them jointly with local EMS and neighboring agencies

### **Public Information Considerations - To provide guidance for dissemination of information to media and the public**

Effective public information dissemination can aid in effective mitigation of a major incident, education the public, and provide positive impressions of response organizations and the jurisdiction

Public Information is a function of ICS immediately below the Incident Commander.

The EMS responder's role in public information may be to provide specific incident, response or technical information. No responder should speak with the media or public without the express approval of the PIO. Whenever possible, the PIO should provide guidance regarding what information is wanted or appropriate for media or public consumption. If not PIO has been identified inquiries should be directed to the IC.

Some suggestions for addressing the media or public include:

- Be factual—don't speculate or offer opinion; be willing to say you don't know the answer to a question.
- Protect the confidentiality of patients and patient information.
- Remember that newspapers and television will want good visuals to illustrate their stories; radio may want incident-related background sound such as radio audio.
- Remember that most of the public will never see emergency services at work personally, and will draw their conclusions about local services by what they see and hear in the media.

### **Mass Casualty Incidents and the Medically Fragile - To provide a guideline on responding to the needs of medically fragile populations under Mass Casualty Incident(s) response conditions**

The frail elderly, persons with severe physical disabilities, children at home on 24-hr medical care, and related categories of the medically fragile place significant and complicated demands upon disaster and emergency response systems. Global demographic changes and more widespread use of in-home medical technologies are increasing the density of these populations in any given community. Proactively addressing the MCI response implications of this trend results in lowered mortality, morbidity, and response costs. It also increases the possibility of post-event reimbursement for response costs.

A variety of strategies are appropriate for addressing MCI-related needs among these populations:

#### **Emergency Responder Strategies**

- Emergency responder education, including dispatch personnel:
  - Educate personnel as to the special needs and resultant MCI response requirements that can be expected during an MCI affecting significant numbers within these populations. Use subject experts outside the traditional EMS education field.
  - Resource lists kept immediately available both in the field and in the hospital, dispatch center, or EOC
    1. Sign language interpreters
    2. Mobility assistance equipment and sensory augmentation device sources
    3. Durable medical goods suppliers
    4. Meal delivery organizations
    5. Restaurants that have donated food in previous large emergencies
    6. Guide dog support /veterinary resources
- Mass Casualty Incident(s) response planning:
  - Incorporate para-transit vans.
  - In rural areas, pre-locate individuals who will likely become vulnerable to a local MCI and update this information regularly among agencies responsible for that response zone.

- Transportation needs—Transportation appears to be one of the greatest limitations for the elderly during a disaster, primarily due to their physical limitations. Response plans should assume this need and initiate emergency transportation agreements with provider agencies ahead of time.

**Recommendations:** Use day-to-day EMS operations as a means of linking these individuals to community resources – ambulances and fire rescue vehicles responding to the homes of persons within these populations create contacts that can be capitalized on to benefit both the responders and the individuals. These contacts represent an opportunity to pass out literature and conduct patient education. Additionally, whenever a patient care report is initiated on these individuals, it represents a chance to identify persons to the system who could later become especially vulnerable to a local emergency. Disaster planners would do well to use these data in their mitigation and response planning efforts. Issues of confidentiality can easily be addressed through sharing data with specific identifiers removed. The emergency planning community can then use these data to either, a) locate concentrations of these populations and plan accordingly; or, b) locate isolated individuals within these populations and plan accordingly.

#### Agency/ Community Strategies

- Involve the same agencies that provide services to these populations on a daily basis in disaster exercises. Community non-profit organizations such as centers for the blind or hearing impaired, or Meals On Wheels would be typical examples. Involving the local chapter of the American Red Cross and local schools in community service projects focused on MCI mitigation are well worth the effort and expense. This also provides a great opportunity for sharing ideas and cross educating among traditionally separate disciplines.
- Community Education by EMS Provider Agencies and Hospitals to develop personal strategies of preparedness and response among fragile populations and their family members. Involve high schools and churches as community service partners in this effort.
- Proactive planning among agencies that provide services to these populations. For instance, in New York City, Meals on Wheels delivers up to four days of meals when bad weather (such as major snowstorms) is forecast. This could be tremendously useful when an MCI affecting supply lines occurs.
- Aid distribution—Agencies that regularly provide financial, medical, food, and/or transportation assistance should be proactive in offering assistance to the frail elderly, rather than waiting for requests.
- Warning design—Given the visual, auditory, and cognitive impairments common to the frail elderly, emergency warnings should be designed with these limitations in mind. Such warnings should be redundant and communicated using multiple venues. Service providers and agencies with regular contact with the frail elderly also could

be used to distribute more detailed information about where to seek shelter or assistance.

- Healthcare access—Treatment of chronic health conditions is difficult and can overwhelm resources during disasters. Medical assistance for the treatment of traumatic injuries is needed for only a relatively short period during the post-impact phase of emergency response. The need, however, to care for chronic conditions reliant on technology or exacerbated by environmental stressors can continue for long periods and medical planning should be done accordingly. Healthcare is more than hospitals; home-based care, outpatient care for chronic conditions, access to medications and sensory- or mobility-assistive devices, dialysis and other critical services are related to transportation, highlighting the interdependencies of emergency and routine medical response.

Augmenting the existing emergency management system and the existing services already supporting the medically fragile is more likely to be successful and sustainable than developing and maintaining separate, independent capabilities. Finally, the community must acknowledge and address the special recovery needs of the elderly.

#### **4. Recovery - The actions taken to return the impacted area and public to a pre-event status**

As stated in the introduction the Recovery phase of a Mass Casualty Incident(s) is not considered to fall under the RETAC. The following offered as some points to be considered during the Recovery phase of a Mass Casualty Incident(s). These situations are typically covered by other agencies and systems such as Incident Command Systems and OEM's, and are therefore not within the scope of the SCRETAC's responsibility.

- Prepare for the organized demobilization and documentation of the incident.
- Equipment Loss Recovery – providing a mechanism for the recovery of lost/missing equipment used in the mass casualty incident involving many agencies, etc.
- The proper preparation and maintenance of records and reports, expands in complexity and difficulty based on the level of an event. They provide the means to more appropriately evaluate the response and recovery phases of the Plan.
- Provide guidelines as to methodologies to evaluate the preparedness portion of the Mass Casualty Incident Plan.
- Provide guidance for Critical Incident Stress Management activities and the potential need for long-term assistance.
- Plan for the need to provide possible financial aid to non-for-profit, commercial and/or other private organizations for their participation in the Mass Casualty Incident.

#### **Demobilization Responsibilities**

- The decision to demobilize should rest with the Incident Commander, but only after close consultation with all members of the Command Staff. In virtually all Mass Casualty Incident(s) responses, this is a planned decision, with a target demobilization time being reflected in the current Incident Action Plan. The target demobilization time should reflect enough advance notice so that all affected personnel can coordinate their activities.
- Units clearing the incident must notify the appropriate authority, depending on the size of the response. This is best achieved through close control of perimeter access points and assigning demobilization unit leaders to be physically located at these points.
- Initiate Critical Incident Stress Management intervention and assume that it will be needed in the future. These resources should become part of the standard recovery procedure.
- The demobilization process typically involves close coordination between the Operations and Finance/Administration Sections within the ICS structure.

## **Equipment Loss Recovery Responsibilities**

Most field response organizations are good about marking their equipment, at least when it is first placed in service, however over time some organizations change their name and contact information. Each item of equipment should be permanently marked with the organization's name and a current telephone number; unique identification numbers may be included. Some examples of such equipment are:

- Backboards, flat stretchers and other transport devices
- Immobilization devices
- Patient monitoring and care devices such as monitors/defibrillators, oximeters, and laryngoscopes
- Rescue equipment and tools
- Operations equipment, such as portable radios, cellular or satellite telephones, MCI or ICS kits and clipboards
- Safety and protective equipment such as helmets, vests, bunker gear and respirators

During an incident equipment is often misplaced, left behind or transported with a patient, possibly to a receiving facility distant from the event or the equipment's owner. In many cases, patient equipment must remain at the receiving facility, often for a protracted period.

During and after demobilization, efforts should be made to return equipment to its owner as identified on each item. These efforts might include:

- Checking during demobilization for equipment that doesn't belong to the agency that possesses it. An organization may return items to neighboring organizations; documentation of specifics should be recorded before each unit departs.
- Requesting that receiving facilities hold durable patient care devices such as splints and backboards for pickup; coordinating collection of those items for secure storage pending delivery to, or recovery by, their owners.
- Organized notification of equipment owners, including recovery instructions or an offer to return it.
- Facilitating the equipment return: Depending on the scope of the event, this may require significant time and travel. While delivery of equipment to those who responded to the event is not obligatory, it is certainly a nicety that is usually appreciated.

## **Records and Reports Responsibilities**

Each ICS model includes forms for key positions and functions. Those forms and the necessary writing implements should be readily available to each responder who will be expected to use them (in the case of plastic or laminated items this may be a grease pencil, and a pen or pencil may not work). They are often kept with appropriate ICS vests or in incident management kits. Ample supplies should be available for large and/or sustained operations.

Some records are to be turned in at the end of a shift or operational period, others at demobilization. Instructions for completion and routing should be provided on or with each form.

Before or during demobilization departing units and personnel should be asked for any outstanding records they might have. Submission of some records may be deferred at the discretion of incident leadership, however this is not recommended except in unusual circumstances.

Every major response should prompt development of an after action report (AAR). These should always be factual, candid and timely in their creation, and their distribution should be designed to benefit all response organizations and those responsible for plan evaluation and revision.

Specific reports are required for events that are, or will be, declared state or federal emergencies or disasters. Timely submission of incident records and reports by all concerned can aid in timely reimbursement.

### **Post-Event Evaluation Responsibilities**

It is rather obvious that no Mass Casualty Incident Plan is perfect or finished. Therefore, continued refinement of the Plan and its implementation are the trademark of the professional emergency planner.

#### **Some General Evaluation Guidelines:**

1. Evaluation need not wait until an event occurs. Disaster exercises at all levels – Table Top; Functional; Full Scale – create huge amounts of useful information that should drive the planning process.
2. Exercises, as well as actual events, should result in printed and distributed After Action Reports as a matter of protocol.
3. Still photography, voice, and video recording are extremely helpful in the evaluation process. To this extent, involvement of media in disaster drills – “embedding,” to use a popular term – can create positive media relationships and produce professional quality video records of exercises and response activities useful to the planner, trainer, and evaluator.
4. System leadership must maintain an atmosphere of confidentiality, trust and support among all participating agencies to avoid whitewashing After Action Reports. These reports can be used for confidential internal distribution, with edited copies used for media distribution. Seek legal counsel on this subject.
5. Debriefing meetings or post-event “Hotwashes” should be predicated upon the principle articulated in #4 above so as to produce harshly factual information that is respected by all concerned parties.

### **Critical Incident Stress Management (CISM) Follow-up**

While Critical Incident Stress Management is often an important element of the Mass Casualty Incident(s) response, there are needs for ongoing assessment and intervention especially as it relates to long-lasting effects on individuals.

It would be a good idea for local plans to consider including well-developed plans for Critical Incident Stress Management follow-up or a provision for one or more suitable organizations to develop incident-specific plans. Those might include a time frame for periodic assessment or reassessment of all responders, those identified as affected, or representative sample groups.

### **Prehospital Care Reimbursement and Cost Recovery**

By its nature, financial recovery in the event of a Mass Casualty Incident(s) is difficult at the very best. In declared emergencies and disasters some reimbursement may be available from the state of Colorado, the federal government, or both. However, most of these programs limit compensation to those costs incurred by public entities for activities conducted in direct response to the event and subsequent activities necessary to preserve public safety. In some cases, private organizations may receive compensation for services provided under a contract with a governmental entity. In this case, a private ambulance with a contract to serve a jurisdiction may be eligible, while one operating without a contractual obligation may not. More information is available from OEM staffs and FEMA offices.

In all cases, availability of complete, accurate and timely documentation can help a response organization or facility capture the compensation it is due.

## **APPENDIX A**

### **Authority**

#### **Colorado Department of Public Health and Environment**

CRS 25-3.5-101 through 709 and 25-1-107 (1)(L) – Authority for the CDPHE to license hospitals and other health care facilities, certify emergency medical technicians, establish minimum standards for training EMTs and county licensure of ambulance services, licensure for air medical services and designate trauma centers.

### **State**

Title 24, Article 32, Part 2104, Colorado Revised Statutes, “ Colorado Disaster Emergency Act of 1992, “ The Governor, as the executive head of state, has the inherent responsibility, constitutional and statutory authority, to commit state and local resources (personnel, equipment and financial) for the purpose of meeting the dangers to the state and its people presented by disasters.

### **Federal**

Public law 93-288, Robert T. Stafford Disaster Relief & Emergency Assistance Act of 1988 – Authorizes federal resources to supplement state and local efforts; defines the intent of federal disaster aid; establishes federal assistance programs and procedures; establishes federal and state disaster preparedness programs

**APPENDIX B****Emergency Contact Information, dated February 15, 2004**

<b>AGENCY</b>	<b>PHONE</b>	<b>FAX</b>	<b>EMAIL</b>
<b>CUSTER COUNTY:</b>			
Custer County Ambulance	719-783-2380	719-783-2377	
Wetmore Volunteer Fire Department	719-784-3130	719-784-3101	
Custer County Coroner	719-783-2761	719-783-9085	
Wet Mountain Fire Protection District	719-783-9245	719-783-3025	
Custer County Public Health Nursing Service	719-783-3369	719-783-0959	
Custer County Search and Rescue	719-783-2270	719-783-9085	
Custer County Sheriff's Department	719-783-2270	719-783-9085	
West Custer County Hospital	719-783-2380		
<b>FREMONT COUNTY:</b>			
American Medical Response of Canon City	719-275-1395	719-275-1695	
Florence Vol. Fire Department	719-784-4848	719-784-2079	
Penrose Vol. Fire Department	719-372-3001	719-372-3000	
Canon City Fire Protection District	719-275-8666	719-275-1486	
Arkansas Valley Ambulance			
Deer Mountain Fire Department	719-942-4444	719-942-9610	
Northwest Fremont EMS, Inc.	719-275-3450	719-275-4350	
Canon City Police	719-276-5600		
Fremont County Sheriff			
Florence Police Department	719-784-4848		
St. Thomas More Hospital	719-269-2000	719-269	
<b>HUERFANO COUNTY:</b>			
Huerfano County Ambulance Service	719-738-1919	719-738-1717	
Gardner Ambulance Service (Huerfano County AS)	719-738-1919		
Gardner Fire Department			
La Veta Fire Protection District	719-742-3656		
Huerfano County Fire Protection District	719-738-1877		
Walsenburg Police Department	719-738-1044		
Huerfano County Sheriff's Department	719-738-1600		
Huerfano Search & Rescue			
Spanish Peaks Regional Health Center			
<b>LAS ANIMAS COUNTY:</b>			
Trinidad Ambulance District	719-846-6886	719-846-8431	
Kim QRT's	719-846-6886	719-846-8431	
Branson QRT's	719-846-6886	719-846-8431	
Bon Carbo QRT's	719-846-6886	719-846-8431	
Aguilar QRT's	719-846-6886	719-846-8431	
Stonewall QRT's	719-846-6886	719-846-8431	
Trinidad Police Department	719-846-4441	719-846-3453	
Trinidad Fire Department	719-846-3411	719-846-2432	

Mt San Rafael Hospital	719-846-9213	719-846-3540	
<b>PUEBLO COUNTY:</b>			
American Medical Response of Pueblo	719-545-1226	719-545-0112	
Beulah EMS	719-485-2367	719-485-3349	
Beulah Fire Department			
Lake Pueblo State Park	719-561-9320	719-564-9455	
Pueblo Fire Department	719-542-1352	719-545-7997	
Pueblo West Fire Department	719-547-7337	719-547-1769	
Rocky Mountain Steel Plant Protection	719-561-7523	719-561-7022	
Boone Volunteer Fire Department	719-947-3311	719-947-3904	
Pueblo City County Health Department	719-583-4323	719-583-4322	
Parkview Medical Center	719-584-4400	719-584-4446	
Pueblo Rural Fire District	719-948-4646	719-948-3390	
Rye Fire Protection District	719-676-3522	719-676-3523	
Transportation Technology Center, Inc.	719-584-0599	719-584-0690	