Regional Medical Surge Plan
Healthcare Preparedness Coalition
of Utah/ Wasatch Counties

Expanding Local Healthcare Structure
In Mass Casualty Events
Revised July 2014

PREFACE

Healthcare system preparedness is the ability of a community's healthcare system to prepare, respond, and recover from incidents that impact public health and healthcare.

Medical surge planning occurs at multiple organizational levels. Individual healthcare organizations, emergency medical services, county emergency management, community service organizations, local health departments and other related agencies are committed to medical surge management from their own delivery perspectives and collaboratively with the community.

In a mass casualty event (MCE), the resulting surge of patients will likely overwhelm the resources of community health care systems. Pre-planning helps ensure appropriate decision-making for allocation of scarce resources so health care systems can continue to function.

This plan defines how health care and related organizations within the region will work together to prevent, mitigate, respond to and recover from a disaster of any origin. It is intended for use by region personnel in real emergencies and when conducting training, drills and exercises.

This plan may be activated any time a health emergency arises that would create a surge on hospitals and overwhelm available resources. It is a guide for local health departments, hospitals and other medical care facilities, local EMS, community service organizations and medical personnel within the defined region.

The Healthcare Preparedness Coalition of Utah/Wasatch Counties was organized July 17, 2009, to facilitate regional collaboration and coordination of disaster medical response. The coalition supports healthcare system resiliency and promotes strengthening of medical surge capacity and capability through resource building, information sharing, mutual aid and response coordination. It is not a response, command and/or control organization and as such:

- Does not replace individual organizational preparedness or response actions
- Does not encumber participating organizations

Plan Review: This plan will be reviewed and updated every three years by the medical surge capacity coordinator(s) and/or coalition chairman with input from local health officers and coalition members. Coalition members will vote on acceptance of the plan.

Update deadline	Date Accepted	Authorized Agent (electronic signature)
June 30, 2010	July 30, 2010	Jan Rogers, Coalition Chairman
June 30, 2012	June 8, 2012	Jan Rogers, Coalition Coordinator
June 30, 2015	June 22, 2015	Jan Rogers, Coalition Coordinator
June 30, 2018		
June 30, 2021		

Project supported by Hospital Preparedness Program Grant CFDA #93.889 U.S. Department of Health and Human Services (HHS), Office of the Assistant Secretary for Preparedness and Response (ASPR) through a partnership agreement between Utah Department of Health HPP, Utah County Health Department, Wasatch County Health Department and the Healthcare Preparedness Coalition of Utah/Wasatch Counties.

OVERVIEW

Goal

The purpose of the Regional Medical Surge Plan is to strengthen medical surge response capability through a coordinated, collaborative, regional approach to surge planning.

Objectives

- Promote coordination among hospitals, public health, medical care facilities, medical care agencies, and emergency response entities
- Save lives and do the greatest amount of good for the greatest number of people
- Establish and integrate effective, coordinated management systems during emergencies
- Provide operational assistance and/or direction without supplanting local management responsibilities
- Promote established emergency management principles of mitigation, preparedness, response and recovery
- Provide community planners with insights and information that will help them plan for and respond to MCEs
- Establish strategies that support appropriate standards of care for MCEs

Hazard Vulnerability: The scope of this plan encompasses natural, infectious, technological, or terrorism based emergencies and disasters which may be reasonably expected to impact Utah and Wasatch Counties. The plan identifies resources, mitigation, preparedness, response, and recovery actions which may be taken by health officials and responders.

Limitations: This plan has been developed to facilitate collaboration among response partners in obtaining hospital beds, personnel, equipment, expertise and supplies. It is not an emergency operations plan blueprint and is not designed to replace other agency plans or actions.

Non-Discrimination: This plan requires fair and equal treatment to all regardless of race, creed, color, national origin, sex, age, or functional/accessibility need.

Disclaimer: No guarantee is implied by this plan. Health departments, medical facilities, medical personnel and individual county assets and systems may be damaged, destroyed, or overwhelmed in a disaster and each entity can only endeavor to make reasonable efforts to respond based on the situation, information and resources available. Individual entities may be unable to carry out responsibilities due to lack of staff or funding.

It is recommended that organizations and the general population be prepared with food, water, cash, clothing and shelter to be self-sustaining for a minimum of 72 – 96 hours in the event of a disaster of any origin.

NIMS Compliance: This plan supports use of the Incident Command System (ICS) as outlined in the National Incident Management System (NIMS). The Healthcare Preparedness Coalition of

Utah/Wasatch Counties will support training and strategies to improve compliance by informing partners of available trainings and by sponsoring or facilitating such trainings to meet regional demands.

Table of Contents

SECTION 1
MEDICAL SURGE CAPACITY

Definitions

Medical Surge describes the ability to provide adequate medical evaluation and care in events that severely challenge or exceed the normal medical infrastructure of an affected community, due to increased numbers and/or complex medical needs of patients.
Surge Capacity is the ability to respond to an increased number of patients.
Surge Capability is the ability to provide patients with unusual or specialized medical evaluation and care, or the ability to provide adequate and appropriate care in a crisis situation.

Hazard Vulnerabilities (Appendix A)

Medical surge planning in this document reflects locally defined hazard vulnerabilities based on:

- Likelihood of a specific type of disaster or health emergency occurring within this region
- Expected severity of damage or patient impact that could result from that type of incident

Identified hazard vulnerabilities for Utah/Wasatch Counties include but are not limited to:

- Epidemics
- Floods
- Wild fires
- Mass casualty incidents (plane crash, terrorist attack)
- Earthquake
- Temperature extremes, snow/blizzard/winter storm, heat wave
- HAZMAT incidents
- Communications and/or transportation disruptions

Planning Assumptions

The following have been identified as surge capacity planning assumptions:

- Coalition members will make an effort to provide employees with information on effective personal and family preparedness to:
    - Lower the burden on local responders by having a level of self-sufficiency
    - Increase their chances of being able to respond in an emergency without leaving family members in vulnerable or dangerous situations
- Crisis standards of care may be activated when this plan goes into effect; Utah crisis standards of care will be used only under a declaration of disaster by the Governor of Utah
- Facilities may need to be self-sustaining in providing care for 96 hours without re-supply of equipment, supplies and staff
- Hospitals will operate under the Hospital Incident Command System (HICS)
- Mutual aid from the local community, state or federal agencies may be delayed 96 hours

- 40% of staff may not report to work due to transportation disruptions, lack of child care/child supervision, illness or safety concerns
- An austere standard may apply for Nurse-to-Patient ratios – 1:5 for Critical Care Beds (Monitored Beds) and 1:20 for other Medical Surgical Beds (Unmonitored)
- When able, coalition members will make efforts to assist with alternate care for patients not requiring hospitalization by providing:
    - Assistance in setting up, equipping and staffing alternate care sites set up in non-medical locales such as schools, churches, colleges, etc.
    - Assistance in staffing and equipping medical tents that are set up in conjunction with hospitals
    - Assistance in creating alternate care sites within other non-hospital medical facilities such as health centers, private clinics, long-term care facilities
    - Assistance in alleviating hospital crowding by finding available beds and diverting patients

Table 1 ***Tiers of Health Care Disaster Response***

Response Tier	Response Scope	Agencies Involved	Response Role
Tier 1	Individual hospital response	Affected hospitals	Activate Hospital ICS Activities within hospitals to reduce normal census
Tier 2	Healthcare Preparedness Coalition response	Healthcare Preparedness Coalition Partners including all hospitals and Public Health	Activate Utah County Health Department and/or Wasatch County Health Department EOC supplies/equipment Transfer patients within systems Transfer patients between systems
Tier 3	Jurisdictional response	Emergency Medical Services, first responders in Utah and/or Wasatch County communities	Activate Utah County and/or Wasatch County Emergency Operations Center (EOC) Coordinate community response through (EOC)
Tier 4	Regional response	Healthcare Preparedness Coalition and other regional coalitions	Cooperation between jurisdictions ICS
Tier 5	State response	UDOH, Utah Department of Public Safety, Homeland Security	Support jurisdictions Intermediary between jurisdictions and the federal resources
Tier 6	Federal Response	DMORT DMAT CDC	Support state operations Agency involvement depends upon nature of emergency/disaster

Table 2 Recommended Hospital Actions to Increase Capacity in a Mass Casualty Event	Check √ all that apply
Implement the hospital emergency response plan	
Cancel elective surgeries	
Review status of current in-patients and discharge if appropriate	
Divert appropriate patients to other medical facilities (clinics, surgical centers, nursing homes, assisted living facilities, alternate care sites)	
Provide a transition leadership team if alternate care sites are needed (Administrator, Medical Director, Nursing Supervisor, Logistics Coordinator)	
Identify and submit specific support requirements to the EOC (i.e., personnel, equipment, supplies, financial, etc.)	
Bring in additional personnel (non-hospitalists with privileges, MRC volunteers, etc.)	
Actively coordinate all operations through the EOC	
Identify and submit physical security requirements to EOC or local law enforcement	
Coordinate patient flow, resource accountability, information flow with EOC	
Establish a standard of care consistent with events and with pre-established standards	
Enhance Emergency Department capabilities through triage of lower acuity patients to alternative treatment facilities	
Coordinate evacuation of patients with the EOC community transportation representative	
Partner with local health department to provide education and self-help information briefings and/or literature that is consistent with event information	
Cooperate with incident investigation activities (such as patient interviews and evidence gathering)	
If able, provide assistance for expanded mortuary service support activities	
If able, provide accommodations or assistance for expanded social service and victim assistance activities	
Assist in tracking medical supplies, equipment and labor	
Submit periodic requests to the EOC for resupply of personnel, equipment, supplies	
Issue prophylaxis to staff and their families	
Assist in implementing stress management measures for patients and staff	
Provide for staff family support	

SECTION 2
ACTIVATION, DIRECTION AND CONTROL

Objectives

- Maximize favorable outcomes for the greatest number of people
- Handle disaster events first at the local level followed by requests for assistance as needed from regional, state and federal levels
- Understand legal expectations and mandates, legal limitations and potential liability issues before an event
- Encourage partner agencies to reach a consensus on ethical issues before an event
- Foster open communication and transparency with the general public

Plan Initiation

This is a regional plan and may be initiated by the following entities within the region:

- One or more hospitals
- A local health department
- Emergency medical services
- A county emergency operations center or emergency manager

Triggers for Plan Activation

- Unexpected or overwhelming number of patients present to emergency rooms and clinics
- Significant increase in patients due to fear or panic in response to a real or potential health threat
- Shortage of equipment, supplies, pharmaceuticals, beds
- Shortage of personnel
- Disruption of transportation affecting ability to move patients
- Plan may be initiated in anticipation of a potential surge event that may or may not occur

Incident Command

Table 2 outlines the basic courses for NIMS compliance. Other more specific or position related courses are available or under development. Individual facilities are responsible for keeping their NIMS compliance status current. See www.training.fema.gov for a list of all courses.

Table 3 Basic Required Courses for NIMS Compliance

Course Number	Course Name	Training Venue
IS – 700	National Incident Management (NIMS), an Introduction	Computer or Classroom
IS – 800	National Response Framework (NRF), an Introduction (appropriate personnel)	Computer or Classroom
ICS – 100	Introduction to the Incident Command System (ICS)	Computer or Classroom

ICS – 200	ICS for Single Resources and Initial Action Incidents	Computer or Classroom
ICS – 300	Intermediate ICS (appropriate personnel)	Classroom only
ICS – 400	Advanced ICS (appropriate personnel)	Classroom only

Hospitals

Area hospitals will be the primary facilities to provide care in a mass casualty situation, with other medical systems forming a network of support. Upon activation each hospital will:

- Implement its Hospital Emergency Incident Command System (HEICS)
- Coordinate activities through or in conjunction with the Utah and/or Wasatch County Emergency Operations Center (EOC)
    - **Utah County Dispatch: 801-841-4100**
    - **Wasatch County Dispatch: 435-654-1411**
- Activate internal emergency response plans
- Organize a facility EOC utilizing hospital staff, administrators, department heads, and other key hospital personnel
- Two critical goals are maximizing capacity and optimizing efficiency in order to provide appropriate care for the greatest number of patients

Emergency Operations

The focal point for activities will be the local county Emergency Operations Centers working in conjunction with:

- Local Hospital Emergency Incident Command Systems (HEICS)
- Local Public Health Incident Command Systems
- If state assistance is activated, the focal point for all activities will shift to the UDOH Emergency Control Center (ECC)
- The UDOH ECC will coordinate with the State Emergency Operations Center (EOC) and will work with HEICS to implement appropriate portions of the plan
- Requests from hospitals should go to the UDOH ECC, and the UDOH ECC will be responsible for communicating with the State EOC
- The State can be reached at the following number: **1-866- DOH-UTAH (364-8824)**

Local Public Health Department Responsibilities

- Assess the public health impact and potential consequences posed by an emergency and determine an appropriate course of action
- Provide continued monitoring and assessment of casualty care in their jurisdictions
- Provide information and recommendations to the UDOH ECC in response to anticipated changing conditions during the event
- Contact UDOH to request Strategic National Stockpile (SNS) or National Disaster Medical System (NDMS) assistance if necessary
    - UDOH members will be responsible for requesting this resource, implementing mass immunization and mass administration of prophylaxis medication

- The local health department will initiate any required quarantine actions at the recommendation of the State Epidemiologist or designee from the State Office of Epidemiology
- Maintain a 24 hour emergency contact number
    - Utah County Health Department: **801-602-3579**
    - Wasatch County Health Department: **435-657-3333**

SECTION 3
CRITICAL ISSUES

Concept of Operations

- Disaster management begins at the local level with assistance requests for regional, state and federal assistance as needed
- When resources are overwhelmed a tiered system is used to gain assistance
- Requests move from local → county → region → state → interstate → federal (see page 2, table 1)
- The intent is to create a coordinated planning and response network between hospitals, health departments, emergency medical systems, county EOCs, etc.

Strategic Planning Priorities

Using an all hazards planning approach, the following critical needs have been identified as common critical issues affecting health in disasters and mass casualty events, regardless of the type of disaster.

- Standardization of field triage protocols (Appendix D)
  - START for adults and JumpSTART for pediatric patients
  - Train, exercise and improve triage skills at the facility/agency level and at the coalition level
  - Identify and correct discrepancies or weaknesses
  - Once patients are admitted to hospitals, they may be re-evaluated using hospital specific triage guidelines
- Medical bed capacity
  - In a medical surge incident, hospitals are allowed to increase their patient census 20% above capacity without special permission
  - To prepare for a possible medical surge, hospitals regularly practice reporting their open bed counts on the state UHRMS system
  - Bed counts are available to authorized individuals at http://healthcareresources.utah.gov
  - Other possible sources of extra beds include alternate care sites, medical surge tents, public and private healthcare clinics, long term care facilities
- Isolation and quarantine
- Equipment and supplies
- Essential goods and services
- Pharmaceuticals
- Security
- Medical waste disposal
- Service animals, pets and livestock
  - Service animals are allowed to accompany their owner anywhere the person is allowed to go; no justification from owner is required
  - Individuals in disasters often jeopardize their own safety for their pets and animals so pre-planning is essential

- Planning on the local level should focus both on family pet preparedness and options for safe lodging and control of animals

SECTION 4
ALTERNATE CARE SITES

Definition of Alternate Care Site (ACS)

- Non-hospital location to which lower acuity hospital patients may be transferred for treatment by attending hospital staff
- May include schools, clinics, churches, medical tents, event centers, hotels/motels, etc.
- May be co-located in or near shelters for the general public

Staffing Considerations

- Utah County Medical Reserve Corps and Wasatch County Medical Reserve Corps maintain a pool of medical and assistive volunteers who may be requested through the local health department or EOC
- Guidelines and protocols for the care and management of patients in alternate care sites will be provided along with just in time training for adjunct staff
- Staff members and patients will be identified with a name badge system
- Compensation guidelines and overtime pay, should be planned for prior to a disaster

Providing Care (Appendix F)

- Determine the scope of care to be delivered and patient population to be served
- Track activation of each ACS on a Master List
- Activate safety and security plans
- Facilities should be laid out in an organized fashion – a grid system allows clinicians to make "rounds" and know exactly where to find a specific patient (e.g., bed A4)
- Provide delivery of ambulatory or chronic care
- Offload less ill patients from the hospital, thereby increasing the hospital's surge capacity
- Provide primary patient care at an austere level to relieve hospital admissions
- Maintain recommended quarantine, isolation or sequestration of exposed or ill patients
- Provide palliative care
- Separate individuals with special medical needs from the general population when appropriate or necessary

Communications

- Establish a communications plan with the hospital, EMS, law enforcement and the public
- Plan for redundant communication capability, including landlines, cellular phones, and local and regional radio communication

Pharmaceutical Supplies

The specific categories of medications that should be available include those related to:

- Acute respiratory therapy

- Acute hemodynamic support
- Pain and anxiety control
- Antibiotic coverage
- Behavioral health
- Chronic disease management

Logistical Support

- Medical equipment may need to be obtained from hospitals or vendors
- Document and track all equipment that is delivered to the site
- Establish food services and other support services unique to the event
- Establish sanitary services and a plan for infrastructure maintenance

Security

- Law enforcement resources will be taxed – establish a system of breaks and rotations
- Develop security plans and have an experienced hospital security officer at the ACS
- Potential sources of staffing include on or off-duty police officers, activated members of the National Guard, Reserve Officer Training Corps (ROTC) students, or volunteers

Rules and Policies for Operation

- Establish rules of behavior for patients, caregivers, and visitors and post them at the site
- Establish chain of command
- Set criteria for admission, discharge and transfer
- Inform staff of:
    - Clinical roles and responsibilities
    - Infection control protocols
    - Pharmacy and medication control
    - Safety and security policies
    - Housekeeping responsibilities
- Provide forms and protocols for financial and patient documentation

Pre-Identified Alternate Care Sites in Utah and Wasatch County			
Name	Location	Contact person	MOU? (Y/N)
Wasatch County Event Center	415 S. Southfields Road (1200 West), Heber City	John Provost 435-657-0283	
Wasatch County School District buildings	Various	Jim Judd 435-654-0280	

SECTION 5
FUNCTIONAL AND ACCESSIBILITY NEEDS

Objectives

Disaster events naturally increase the vulnerability of the entire affected population. Individuals who may not be "at risk" under normal conditions may be unable to protect and/or care for themselves as usual. Coalition objectives for functional and accessibility planning are to:

1. Assist individuals who have more permanent functional and accessibility needs to survive under conditions where their normal support and supply networks are damaged
2. Help those with temporary needs brought on by the circumstance of being in a disaster
3. Assist all individuals to return to a pre-disaster level of functioning as quickly as possible
4. To promote education and strategies that will strengthen community preparedness capabilities for vulnerable populations

Definition

The definition of functional and accessibility needs is fluid and evolving, but may include:

- Persons at extremes of age (young and elderly)
- Persons with cognitive or intellectual functional impairments
- Persons with special medical needs
- Persons who are homebound due to age, health, or mobility difficulties
- People needing bariatric equipment
- Individuals living in institutionalized settings, including hospital patients
- Persons requiring medications or specialized medical equipment for survival
- Persons who are culturally or physically isolated
- Women in late stages of pregnancy
- Persons with limited English proficiency
- Persons who are economically disadvantaged

Areas of Focus

- Maintaining independence
- Communication assistance services and alternate warning systems for those with hearing or visual impairments
- Access to medications to maintain health, mental health and function
- Separation from usual care providers
- Supervision and or assistance with daily activities
    - eating
    - taking medication
    - dressing and undressing
    - transferring to and from a wheelchair or other mobility aid
    - walking
    - stabilization
    - bathing

    - toileting
    - communicating
- Personal assistance to obtain access to information and services
- Transportation
    - Evacuation during disasters
    - Transport to and from needed services during recovery
    - Wheelchair accessible transport
    - Transport of necessary medical equipment
- Adequate sleeping accommodations
    - Stable, ADA compliant cots
    - Bariatric beds
    - Cribs
    - Railings and other safety equipment
- Service animals
    - Sanitation
    - Food and supplies
    - Portable kennels for containment if needed for safety reasons
- Specialized equipment/dependence on electricity
- Disruption of transportation resources
- Assistance for individuals with cognitive and intellectual disabilities
- Auxiliary aids and services necessary to ensure effective communication for persons with communication disabilities
- Access to an air-conditioned and/or heated environment
- Refrigeration for medications
- Availability of food and beverages appropriate for individuals with dietary restrictions
- Assistance locating, securing, and moving to post-disaster alternative housing

Inclusion

The coalition supports policies, activities and collaborations that encourage inclusion of individuals with functional and accessibility needs in each phase of the emergency management cycle (preparedness, response, recovery, mitigation). The coalition may promote activities to see that the following needs are addressed:

1. Reasonable efforts should be made to reunite members of the functional needs community with necessary durable medical supplies and specialized equipment (wheelchairs, walkers, telephones) that are left behind in an evacuation or emergency transport.
2. Personal and family preparedness education programs and promotion of local jurisdiction registries (such as the 211 Special Needs Registry) in accessible formats and languages should reach most or all people in the jurisdiction.
3. Emergency human services are vital for the long-term recovery of a community and are as important as the repairs to its physical infrastructure.
4. A sustained long-term commitment to providing human services is needed to restore all residents to a state of mental, physical and social well-being.

SECTION 6
CHILDREN IN DISASTERS

Over 35% of the population of Utah and Wasatch Counties is under age 18. This is significantly higher than the national average of 24%. Specific medical surge planning for children is critical to an effective disaster response for the Utah/Wasatch region.

Objectives:

- Protect the safety and security of children in disasters
- Gather and maintain equipment and supplies to meet the basic needs of children in disasters
- Support policies that ensure availability of trained medical personnel for surge events
- Provide prompt reunification of children with appropriate caregivers
- Assist in meeting the needs of medically fragile children who are cared for at home or in community facilities
- Ensure access to mental health services for children
- Facilitate accurate tracking of children in hospitals and shelters
- Protect emotional well-being of children in disasters
- Ensure that respite care programs in disasters are safe and secure
- Assist communities in re-establishment of schools and recreational opportunities
- Assist with planning for children in institutional settings who are living away from primary guardians

Considerations:

- Pediatric patients are subject to higher rates of pediatric medication errors and lower rates of pain management
- Wide variation exists in practice patterns for pediatrics – fewer studies, less standardization
- Children are especially vulnerable to aerosolized biologic or chemical agents
    - Thinner skin and larger skin surface to body mass ratio
    - More rapid breathing rate leads to inhalation of more chemical
    - Closer to the ground where many chemicals settle
- Children are more vulnerable to the effects of blast injuries
    - Chest injuries (blast lung) are a common cause of death in children
        - Shorter trachea makes intubation more difficult
        - Narrower airways
        - Tension pneumothorax common
    - Abdominal injuries – thinner abdominal walls and small, flexible ribs offer less protection
    - Eardrum rupture, eye injuries
    - Orthopedic injuries – bowed bones, greenstick fractures, torsion
    - Cervical spine injury related to immature neck musculature
- Decontamination of children

    - Water only, avoid soaps and chemicals
    - Use high-volume, low-pressure, heated water systems
    - Children are more susceptible to hypothermia – warm blankets, dry clothing
- Unaccompanied children are vulnerable to exploitation, being taken by non-custodial parents or other non-authorized people – many cases of child abuse are missed following disasters
- Extended recovery periods are stressful and are correlated with higher rates of depression and domestic violence
- Mental health issues – short and long-term manifestations
    - PTSD, fear, depression, anxiety
    - Sleep disturbances
    - Social or behavioral difficulties
    - Changes in school performance
    - Susceptible to mirroring parents' reactions – offer family centered intervention
    - Children with pre-existing mental health problems may be more vulnerable

Strategic Planning Priorities

- Offer training to healthcare professionals in pediatric emergency/resuscitative care
    - Pediatric Advanced Life Support (PALS)
    - Advanced Trauma Life Support (ATLS)
    - Other
- Develop pediatric specific policies/protocols
- Establish partnerships to protect and reunite unaccompanied minors
    - National Center for Missing and Exploited Children
        - www.missingkids.com
        - Sharon Hawa shawa@ncmec.org 703-837-6269
    - Team Adam – Missing Child Rapid Response System
    - Rapid on-site assistance for law enforcement
        - Henry Schmidt hschmidt@ncmec.org 703-835-4957
        - No charge if requested officially by state agency (DPS, UDOH, etc.)
    - Unaccompanied Minors Registry
        - https://umr.missingkids.com
        - 1-800-THELOST (1-800-843-5678) answered 24/7
- Establish quality processes to monitor pediatric care
- Establish standardized inter-facility transfer guidelines, agreements and processes
- Establish consulting pathways with Primary Children's Hospital/Denver Children's Hospital
- Pediatric specific equipment/supplies
- Train responders and hospital personnel in pediatric decontamination
- Conduct pediatric based training and exercises

SECTION 7
MASS FATALITY MANAGEMENT

When a mass casualty incident results in increased loss of life, emergency response is often chaotic and uncoordinated, and unfounded fears about epidemics can lead to quick and careless disposition of human remains. Appendix H contains mass fatality operations guidance.

Practical considerations:

- Even in a disaster it is important to treat deceased persons with respect and try to follow the wishes and traditions of surviving family members as much as possible
- Rescue and transport of survivors takes precedence over recovery of human remains
- Increased precautions (medical gloves, masks, protective suits, other PPE) should be used when handling those who have died of infectious diseases or in a pandemic
- Those who have died of traumatic injuries pose little risk of spreading infection and standard precautions are sufficient – do not add lime or other chemicals to the remains
- The surviving population is much more likely to spread disease than deceased persons
- Training and exercises are useful to ensure a culturally competent workforce who are respectful of different customs, death rituals and spiritual expectations
- Prevent PTSD through training and proper assignments
- Develop a logistics support network of personnel, facilities and supplies

Death Certificates

- A death certificate is required before a body can be released to the family or transition to permanent final disposition
- During a healthcare surge it may be difficult to obtain a signed death certificate as hospital staff physicians will be overwhelmed caring for the living
- Licensed physicians who are not hospital staff could augment the medical treatment facilities by reviewing medical records to complete and certify death certificates
- Depending upon the capabilities of the jurisdiction, the Medical Examiner, deputy investigators and their trained staff could also assist in the certification of death

Mass Fatality Resources

Resource	Location	Capacity	Point of contact
Refrigerated truck	Wasatch County Public Works		Brandon Cluff 435-671-8709
Body bags	Heber City Police	13 (1 in each patrol car)	Chief Dave Booth or Lt. Jason Bradley 435-654-3040
	Wasatch County Sheriff's Office	4	Brian Gardner 435-654-1411
	Heber Valley Medical Clinic	2	Blaine Swainston 435-657-4371
Bio-seal system	UVRMC		Leslie Fabian

	Timpanogos Hospital		Brett Kay
Hazardous Waste Disposal System	Wasatch Co – contract with *Stericycle*		866-783-7422 stericycle.com

Mass Fatality Contact List

Utah County Points of Contact County dispatch:801-851-4100			
Name	Role	Contact information	Emergency contact
Ralph Clegg	UCHD Health Officer	801-851-7016	801-602-3579
Brian Andreason Brian Nichols	UCSO Deputy Investigator		County dispatch 801-851-4100
Andrea Shoell	UCHD Vital Records	801-851-7526	County dispatch Pager: 801-691-2178
Ron Tobler	UCHD Emergency Response Coordinator	801-851-7069	Cell: 801-837-1330
Jan Rogers	UCHD Medical Surge Coordinator	801-851-7085	801-404-7172
Lisa Guerra	UCHD Epidemiologist	801-851-7023	801-368-4322
	Utah County Deputy Medical Examiner		
Alec Anderson Teri Sundberg	Funeral Home Representative	801-756-3564 801-225-1530	@yahoo.com 801-376-9738 (cell)
Wasatch County Points of Contact			
Name	Role	Contact information	Emergency contact
Randal Probst	WCHD Health Officer	435-657-3263	435-671-1953
Lewis Hastings	WCHD Emergency Response and Preparedness/ Medical Surge Coordinator	435-657-3262	801-557-4766
Brian Gardner	WCSO Deputy Investigator/ Deputy Medical Examiner	435-654-1411	
Janet Norton	WCHD Vital Records	435-657-3307	
Chris Smoot	WCHD Epidemiologist/PIO	435-657-3254	385-225-2682
Utah State Medical Examiner			
Todd Grey, MD	Utah State Medical Examiner	801-584-8410	
Edward Leis, MD	Deputy Medical Examiner	801-584-8410	
Erik Christensen, MD	Deputy Medical Examiner	801-584-8410	
Pre-determined Fatality Collection Sites			
County	Location or address	Capacity	Point of contact
Utah County	TBD		
Wasatch County	TBD after incident		

SECTION 8
EMERGENCY COMMUNICATION

Redundancy and continuous practice are vital to effective communications in a disaster. It is important that hospitals and coalition members plan and practice using a combination of communication tools. It is important to monitor the Hospital Common Channel during a medical surge incident. This will help in following patient load, assessing hospital needs and finding available outside assistance. Hospitals are cautioned not to turn down the volume on the radios that are being used for communications.

Communication Backup Systems Order of Use

1. Phones (land line and cell)
2. Radio (800 MHz or VHF)
3. HAM Radio Relay
4. Utah Notification Information System (UNIS)
5. Satellite Phone

Available Communication Systems

Communication Resources	Advantages	Disadvantages	Mitigation
Telephone land lines	Reliable when infrastructure is intact Easy to use and familiar to everyone Non-portable phones do not require electricity	May not have phone numbers available Service frequently disrupted in ground zero Lines may be overwhelmed in emergencies	Create hard copy lists of phone numbers Have non-portable plug in phones available in case electricity is unavailable
Government Emergency Tele-communications (GETS)	Low or no cost Gives user priority access on landlines and cell phones	Need a card for access	Each organization set up their own account and acquire an appropriate amount of cards
Everbridge emergency notification system	Reliable when infrastructure is intact Ability to quickly send specific messages to all or part of a community	Only calls landlines unless people have specifically entered cell phone numbers ahead of time Dependent on intact systems	Public awareness campaign to encourage people to enter and update cell phone numbers
Cell phones	Reliable when infrastructure is intact Easy to use and familiar to everyone Do not require electricity	Dependent on intact phone systems Lines may be overwhelmed by heavy use in emergencies Require charging	Have non-electrical phone chargers available

Satellite phones	Reliable, work off satellites	Must be situated where there is a strong signal Training required Require charging	Train and exercise using satellite phones Set up charging schedule
Texting	Easy to use and familiar to many people Puts less burden on cell phone system than calls	Dependent on intact phone systems	Have non-electrical phone chargers available
Fax/ Email	Provides written documentation	Dependent on intact power and/or phone systems, recipients may be away from machines	Generators, alternate power sources, paper
UNIS and Utah Responds	Ability to disseminate information quickly and reliably	Response numbers are long and difficult to remember in an emergency environment	Frequent exercises to teach recipients to respond appropriately
Social media (twitter, tweet, Facebook, Instagram, etc.)	Allows almost instantaneous updates Easy to use	Not everyone is familiar with it May rapidly spread incorrect information Dependent on intact phone systems	Encourage practice
Two-way radios	Easy to use Good for communication between responders on scene	Limited range Need to be charged May have heavy voice traffic	Have a routine charging plan Teach radio etiquette
800 MHz radio (Hospital Commons)	All hospitals in the state have at least one Can operate without electricity	Hospital commons radios are dedicated to May be overrun quickly in a large event	Consider having a second unit dedicated to local emergency channels
HAM radio	Reliable even in emergency situations Portable and programmable	Requires licensed operators and practice Towers may go down and limit range	Increase number of licensed operators Hold frequent practice sessions
Bicycles/runners	Can operate when systems are down	Safety of riders/ runners in disaster zones, roads may be impassable Slow	Bicycle maintenance, PPE, emphasize buddy system

SECTION 9
MEDIA/RISK COMMUNICATION

Objectives

- Improve clear channels of communication to link the public health community, health care entities, and emergency response systems
- Support processes for sharing accurate, real-time situational information with involved stakeholders across multiple jurisdictions
- Provide the community with accurate information about the nature of the healthcare surge

Considerations

- Moving to a population-based set of treatment protocols represents a radical departure from patient-based decision making; efforts should be made well in advance of a surge event to generate public understanding and acceptance for the change
- Messages should be as consistent and timely as possible at all stages
- Official health and medical care messages should be delivered through public media by the local physician/health officer whom the public trusts or by the Utah state health officer, a representative of the CDC, or the Surgeon General
- Spokespersons at all levels should coordinate their messages
- Modes of communication should be tailored to the type of information to be communicated, the target audience for which it is intended, and the operating condition of media outlets
- Include languages other than English and use alternative communication channels outside of usual media outlets as needed
- Specificity and details within messages may vary by target population (affected area vs. neighboring area vs. the rest of the state)

Hospital/ Health Department Public Information Officers Contact List

Name of Facility	PIO	Contact information
American Fork Hospital	Janet Frank, Media Manager	801-357-7766 janet.Frank@imail.org
Mountain View Hospital	Ryan White, Director of Communications	801-714-6515 ryan.White@mountainstairHealth.com
Orem Community Hospital	Janet Frank, Media Manager	801-357-7766 janet.Frank@imail.org
Timpanogos Regional Hospital	Ryan White, Director of Communications	801-465-7102 ryan.White@mountainstairHealth.com
Utah County Health Department	Lance Madigan Eric Edwards (back-up)	801-691-6383 lancema.uchlth@state.ut.us
Utah Valley Regional Medical Center	Janet Frank, Media Manager	801-357-7766 janet.Frank@imail.org
Wasatch County Health Department	Chris Smoot, PIO	435-657-3251 csmoot@wasatch.utah.gov

Heber Valley Medical Center	Amy Tutingham	435-671-1833 atutingham@imail.org

SECTION 10
ASSET SHARING

The Healthcare Preparedness Coalition of Utah/Wasatch Counties has used federal ASPR, HPP and EMPG grant funding to purchase materiel for use in regional health related emergencies or disasters. Each housing location is responsible to make decisions regarding use or loan of resources, and may choose to use the resource at their own facility in an emergency. **Housing organizations are not under obligation to repair or replace items damaged or destroyed in a response event**, however if they are able to or wish to, that would be encouraged. By accepting ASPR funds, organizations do agree to assist in a medical surge response to a disaster if they are able. HPC is not obligated to replace damaged assets, but may choose to do so.

HPC keeps an updated inventory list of shared assets that are housed at health department facilities. Assets are stored in the following locations:

- Utah County Health Department, 151 S. University, Provo, Utah
    - Cage near loading dock, first floor, south end of building
    - Environmental health locked closet
- Suite 2600
- Utah County Health Department, Bureau of Air Quality, 3255 North Main Street Spanish Fork, UT 84660
- Wasatch County Health Department, 55 South 5th East, Heber City, UT 84032
- Various local hospitals

Emergency 24 hour contact numbers:

- Utah County Health Department **801-602-3579**
- Wasatch County Health Department **435-657-3333**

Copies of the following Mutual Aid agreements and Memoranda of Agreement/Understanding are filed in the administration office of the Utah County Health Department, Suite 2800:

- MOU with the Church of Jesus Christ of Latter-day Saints
    - For use of church buildings as dispensing sites for 12 hour periods
    - May be extended or used for other purposes with approval
    - LDS standards apply
- Mutual Aid Agreement among Utah's local health departments
    - Agreement to assist with resources and personnel when possible
- Mutual Aid Agreement among Utah hospitals
- Memorandum of Understanding between the MRC and Mountain Valley Chapter of the American Red Cross
- Memorandum of Understanding with Alpine School District
- Memorandum of Understanding with Nebo School District

- Memorandum of Understanding with Provo School District

.