Oregon Region 1
Burn Mass Casualty Plan
Oregon Burn Center
Legacy Emanuel Hospital

Oregon
Burn Center

LEGACY
Health System

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Oregon Region 1 Burn Mass Casualty Plan
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Introduction

Introduction

The purpose of this plan is to develop a systematic response to an event that generates 100 additional adult and pediatric patients requiring at least initial burn care in a hospital setting. The plan is based on a designated scenario and is aligned with the overall approach developed by the Northwest Oregon Health Preparedness Organization (NWO HPO) to provide reasonable care, in light of available resources, for adult and pediatric patients.

A Burn Mass Casualty Disaster is defined as any catastrophic event in which the number of burn victims exceeds the capacity of the local burn center to provide care. Capacity includes the availability of burn beds, burn surgeons, burn nurses, support staff, operating rooms, equipment, supplies and related resources. The critical Health Resources and Services Administration (HRSA) benchmark for Burn -Trauma Mass Casualty is based on 50 burn victims per one million population. Oregon Region 1 population has a population of approximately 2 million, therefore this plan will be based on a mass casualty event with 100 adult and pediatric burn victims.

The American Burn Association (ABA) defines burn center surge capacity as the capacity to handle up to 50% more than normal maximum number of burn patients when there is a disaster.

The Oregon Burn Center is the only burn center in the state of Oregon. It has a capacity of 16 beds, which can be used for critical care or acute care of the burn injured.

<div align="center">Premises for Burn Surge Mass Casualty Plan</div>

1. Use existing systems; Incident Command System, EMS, Regional Hospital (RH) and regional hospital disaster/emergency management plans.
2. Oregon Burn Center invites all those receiving burn casualty victims to call for immediate and ongoing consultation.
3. Ask that local and regional hospitals provide care for the patients requiring definitive burn care for 24 to 72 hours until transfer arrangements can be made.
4. The Oregon Burn Center will assist hospitals with secondary triage and assistance in relocation of the patient to a center able to provide definitive burn care.
5. Burn unit placement may require transport of patients across the country, depending on the severity of injury and the number of patients injured.

Oregon Region 1 Burn Mass Casualty Plan will be based on the following scenario.

Fire at a wedding reception that is in one of the banquet rooms of the Kelly House at Gearhart by the Sea Resort, Gearhart, Oregon.

250 children and adults involved in a fire
- 160 injured
  - 10 deaths at the scene
  - 5 children minor injuries which may require follow-up outpatient care
  - 45 adults minor injuries which may require follow-up outpatient care

Injured Children - 20		Injured Adults - 80	
3 Rescued by EMS	17 rescued by others or able to walk out	12 Adults pulled out by EMS	68 rescued by others or able to walk out
5 yo with inhalation Injury w/CPR	(5) 10-17 yrs less than 10% burn	(5) 40-60 yrs 60% -80% burn and inhalation Injury	(4) 60 yrs > 60% burn
12 yo 40% burn and inhalation Injury	(2) Babies • 12 % • 14%	(2) 20 yrs 60% burn and inhalation	*(6) 20-50 yrs >60%*
7 yo 90% burn and inhalation Injury	(3) Under 10 yrs with 15% burn	(3) 70+ 20-30 %	(5) Minimal burn, 5-20%, with respiratory distress
	(3) 14-17 yrs 25% burn	(2) 40-50 y inhalation Injury, no burn	(5) Greater than 80% burn
	(4) 3-10 yrs 33% burn		(13) 20-40% burn
			(10) 15-20% burn
			(25) <10% burn

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Triage and Prioritization for Patient Placement

Triage and Prioritization for Patient Placement

In the event of a mass casualty incident (MCI) involving burn patients the American Burn Association established standards for referral and transfer to a burn unit may need to be compromised during the initial triage, and management period. It is our goal that patients that require definitive burn care be transferred to a burn unit within seventy two (72) hours of the incident.

 In the absence of a mass casualty incident burn Injuries that should be immediately referred to a burn unit include:
1. Partial thickness burns greater than 10%, total body surface area (TBSA)
2. Burns that involve the face, hands, feet, genitalia, perineum or major joints
3. Third degree burns in any age group
4. Electric burns including lightning injury
5. Chemical burns
6. Inhalation injury
7. Burn injury in patients with preexisting medical disorders that could complicate management, prolong recovery or affect mortality
8. Any patients with burns and concomitant trauma in which the burn injury poses the greatest risk of morbidity or mortality.
9. Burned children in hospitals without qualified personnel or equipment for the care of children
10. Burn injury in patients who require special social, emotional or long-term rehabilitative intervention.

Field Triage

Triage functions as an objective sorting process that has as it's objective to do the *greatest good for the individual patient.* When the scope exceeds the available resources the objective of triage changes to do *the greatest good for the greatest number of people,* combining acuity with survivability.

Triage priorities include;
- Identification and evaluation of the severity and urgency of the casualties' injuries
- Initiation of immediate critical intervention to stabilize casualties at the injury site
- Transportation of casualties to the appropriate treatment facility for further evaluation and definitive care of injuries requiring specialized care

On-site triage comprises the rapid categorization of victims with potentially severe injuries needing immediate medical care "where they are lying" or at the triage site. The personnel involved are first responders from local EMS or local population. It is based on assessment performed according to accepted standards, e.g., START. Patients are characterized as "acute" or "non- acute". Color-coding is used to categorized according to acuity.

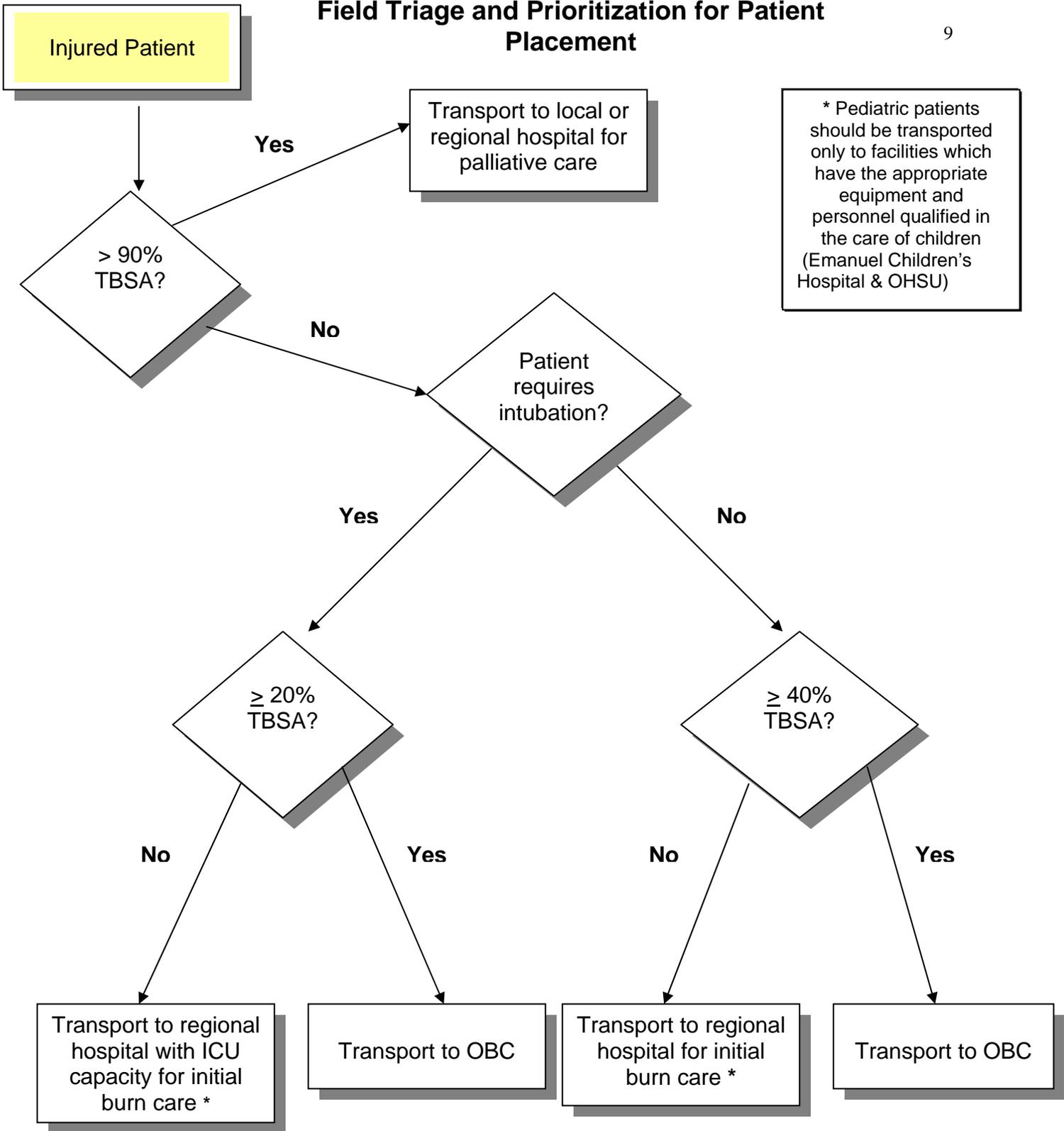|		
Red	Urgent	Casualties who require immediate life-saving interventions (airway, breathing, circulation)
Yellow	Delayed	Casualties who do not require immediate life-saving interventions and for whom treatment can be delayed. .
Green	Minor	Ambulatory casualties who require minimal or no medical care
Black	Deceased or expectant	The deceased or casualties who are not expected to survive due to the severity of injuries complicated by the conditions and lack of resources

Evacuation includes assignment of priorities for transfer to medical facilities, with the goal of appropriate evacuation of victims according to the injury severity and available resources.

Burn Specific prioritization for evacuation

In order to facilitate initial triage and patient distribution to regional hospitals the following will be considered:

- The following patients will be prioritized for direct transport to the Oregon Burn Center:
    1. Adult and pediatric patients with greater than 40% and less than 90% TBSA.
    2. Adult and pediatric patients, that are intubated with greater than 20% TBSA.

- Pediatric patients requiring hospitalization but not requiring initial Oregon Burn Center admission will be transferred only to hospitals able to provide qualified personnel or equipment for the care of children.

- Adult patients that are intubated with no burn or less than 20% TBSA may be transferred to any local or regional hospital with Intensive Care capacity.

- Adult patients with less than 40% burns who are not intubated will be transferred to any local or regional hospital.

- Adult and pediatric patients with greater than 90% burn will be transferred to any local or regional hospital to receive supportive or palliative care.

Field Triage and Prioritization for Patient Placement

Injured Patient

Yes → Transport to local or regional hospital for palliative care

> 90% TBSA?

No → Patient requires intubation?

* Pediatric patients should be transported only to facilities which have the appropriate equipment and personnel qualified in the care of children (Emanuel Children's Hospital & OHSU)

Yes → ≥ 20% TBSA?

No → ≥ 40% TBSA?

≥ 20% TBSA?
- **No** → Transport to regional hospital with ICU capacity for initial burn care *
- **Yes** → Transport to OBC

≥ 40% TBSA?
- **No** → Transport to regional hospital for initial burn care *
- **Yes** → Transport to OBC

Evacuation Logistics

The Burn Surge Table Top exercise brought out issues regarding the availability of emergency transport resources with an event with large numbers of people in a primarily rural community far from the Portland metropolitan area.   It was identified that there are limited number of ambulances readily available to respond to such an event. The scene Incident Commander would need to illicit assistance from neighboring communities as well as the Portland service area. A mass casualty event in a distant location may result in a delay in the ability to immediately transport the severely and critically injured. It is likely that those less severely injured would be able to use their own transportation and could possibly overwhelm local emergency departments prior to the arrival of many of the severely or critically injured.

In addition, those severely injured would need transport from the local emergency department(s) to the Oregon Burn Center as well as hospitals in the Portland metropolitan area which have sufficient resources to care for large numbers of severely injured patients. Initially the use of the transport resources would be used for transport from the scene to local emergency departments and may be not be available for transport out of the service district. Transportation resources are directed by the scene Incident Commander who may need to establish secondary transport logistics to assure sufficient resources for transport to the Portland metropolitan area.

Emergency transportation would also be limited by the on board supplies (e.g. oxygen and fluids) of the transport vehicles. The distance to definitive care, the severity of injury and the number of patients requiring transport all are considerations when evaluating available transportation resources.

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Field or Scene Initial First Aid

- Determining the Severity of the Burn
- Primary Assessment, Monitoring and Intervention
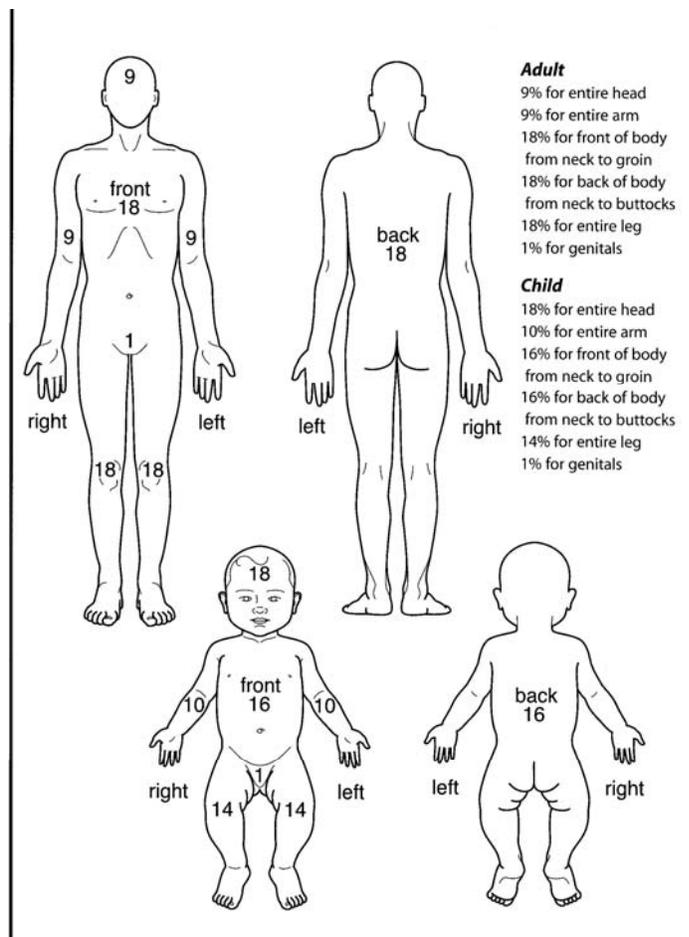
Field or Scene Initial First Aid

Field or Scene Initial First Aid:
- Stop the burning process
- Use universal precautions
- Remove any clothing or jewelry
- Rinse liberally with water, according to protocols, are suspected if chemicals
- Apply clean, dry dressing initially, avoiding hypothermia

Determining the Severity of the Burn

The severity of a burn injury is determined primarily by the extent of the body surface area involved. Additional factors such as depth of the burn, age, the presence of concurrent medical problems and complications are also considered.

Initial Estimation of Burn Size

Adult
9% for entire head
9% for entire arm
18% for front of body
  from neck to groin
18% for back of body
  from neck to buttocks
18% for entire leg
1% for genitals

Child
18% for entire head
10% for entire arm
16% for front of body
  from neck to groin
16% for back of body
  from neck to buttocks
14% for entire leg
1% for genitals

The extent of burn injury is expressed as the percentage of total body surface area (TBSA) burned. In addition to determining the severity of injury, the estimation of TBSA guides fluid resuscitation.

The most commonly used guide for making an initial estimate of burn size is the "Rule of Nines". This method is based on the presumption that the body can be divided into anatomical regions that represent 9% or a multiple of 9% of the entire body surface. In the infant or child the "rule" deviates somewhat because the child's head and the smaller surface area of the lower extremities.

When a burn injury is small or irregularly shaped the palm of the patient's hand can be used to represent 1% of the body surface area.

Precise evaluation of burn size

Injury calculations using a diagram are usually are more precise than those made with the rule of nines, and should be performed following hospital admission. Age-dependent burn diagrams, Lund-Browder charts, use hand drawn charts to "map" the injury on a diagram of the body. To estimate the extent of injury the areas of injury are outlined, excluding first-degree burns. Partial-thickness and full-thickness and indeterminate burns are differentiated by color or shading. The percentage of each anatomic area injured is estimated using the age specific table and the total body surface area burned is calculated.
Contact the Oregon Burn Center for assistance in determining burn size using a Lund-Browder chart.

Burn Depth

It is not always possible to know burn depth for several days as burn appearance may be deceiving or burn injury may deepen.

Degree of Burn	Depth of injury	Wound Characteristics	Treatment Course
First-degree	Limited damage to epidermis, skin intact	• Red • Painful • No blister formation	Heals completely in 3-5 days, without scarring
Superficial partial thickness (second-degree)	Epidermis destroyed, minimal damage to superficial layers of dermis	• Pink or red • Moist • Weepy • Blanching • Blisters • Painful	Heals completely within 5-21 days with little or no scarring. Grafting not required
Deep partial thickness (second-degree)	Epidermis, and dermis involved	• May be red or pearly white • Drier in appearance than superficial injury	May take 3-8 weeks to heal, heavy scarring, may require skin graft
Full thickness (third degree)	All epidermis and dermis destroyed	• White, cherry red, brown or black in color • Hard and leathery • Insensitive to pinprick	Prolonged healing, required skin graft to heal

Primary Assessment, monitoring and intervention
If immediate transfer to a regional Burn Center is not feasible:

Primary Assessment	
Assessment and Monitoring	**Intervention/care**

Airway Maintenance with Cervical Spine Protection
• For signs of airway injury, hypoxia, facial burns, carbonaceous sputum, stridor, nasal singe, history of a closed space fire, intubate early
• Labs:
   o Arterial blood gas
   o Carboxyhemoglobin (CO) level (if inhalation suspected)
	• Chin lift/jaw thrust with cervical spine protection as needed
	• Place an oral pharyngeal airway or endotracheal tube (ETT) in the unconscious patient

Breathing and Ventilation: • Assess for appropriate rate and depth of respirations with adequate air exchange • Monitor pulse oximetry while checking CO level (as needed)	• 100% (15L) FIO2 nonrebreather face mask or by ETT • Mechanical ventilation as needed • Head of bed (HOB) elevated

Circulation with Hemorrhage Control:
• Vital Signs
   • Heart rate
   • Blood pressure
   • Capillary refill
   • Temperature
   • Skin color of unburned skin
• Continuous cardiac monitoring
• Perform brief assessment to determine burn size, utilizing the rule of nines (*see addendum # 1*)
• Labs on admission and every day as dictated by medical condition
   o Electrolyte panel
   o CBC
   o EKG for electrical injury or cardiac history
• CXR if intubated, inhalation injury suspected or underlying pulmonary condition
• Monitor glucose at least every 2 hrs on pediatric burn patients x 24 hours
	• Two large bore peripheral IV's in nonburned, upper extremities, secured well
	   o IV's may be placed thru burned skin if needed, suture to secure in place
	• Initiate burn resuscitation for a patient with a TBSA >20 %:
	   • 4 ml (LR) x body weight (kg.) x TBSA % burn = Lactated Ringers Solution (LR) fluid in first 24 hours post burn (calculate from time of burn)
	      o Patient weight in Kg ÷ 4, x percent of burn = ml/hr
	   • Give half the fluid (LR) in the first 8 hours then the next half (LR) over the next 16 hours
	   o Pediatrics: In <u>addition</u> to the resuscitation formula using LR, children require a fluid with 5% dextrose at a maintenance rate
	   o For first 10 kg of body weight: 100 ml/kg/24 hours
	   o For second 10 kg of body weight: 50ml/kg/24 hours
	   o For each kg above 20 kg: 20ml/kg/24 hours
	
	KEYPOINT: Titrate IV rate to maintain a urine output; 0.5ml/kg for adults (≈30-50ml/hr), 1ml/kg for children < 30 kg
	
	• Tetanus Prophylaxis unless given in last 5 years

Disability • Neurologic checks every 4 hours and prn o Goal is an alert and oriented patient • If altered neurological status consider; associated injury, CO poisoning,	

Primary Assessment	
Assessment and Monitoring	Intervention/care

substance abuse, hypoxia or pre-existing medical condition
• Determine level of consciousness
  • Consider using the "AVPU" method:
    o A - Alert
    o V - Responds to verbal stimuli
    o P - Responds to painful stimuli
    o U – Unresponsive	

Exposure:	• Remove all clothing and jewelry
	• Initially place a clean, dry sheet over the wounds until a through cleaning is done
	• Keep patient normo-thermic especially during wound care:
	  o Keep patient covered
	  o Cover the patients head
	  o Warm the room
	  o Warm IV fluids

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72 Hour Burn Plan – Care of the Burn Patient in a Non-Burn Hospital

- Secondary Assessment and Management
- Ongoing Monitoring and Management

If immediate transfer to a regional Burn Center is not feasible:
Care of the patient with > 20% TBSA burn for 72 hours

Secondary Survey	
Assessment and Monitoring	Intervention/care

History:
• Obtain circumstances of injury
• Obtain medical history
  o Consider the use of "AMPLE" to aid in obtaining information
    ▪ A – Allergies
    ▪ M – Medications
    ▪ P – Previous illness, past medical history
    ▪ L – Last meal or fluid intake
    ▪ E – Events/environment related to the injury	

Complete Physical Examination:
• Head to toe exam
  o If eye involvement or facial burns consult an Ophthalmologist
• Determine the extent/size of the burn by calculating the TBSA burn:
  o Rule of Nines or Rule of the Palm
  o Lund-Browder chart – for pts
• Determine the depth of the burn
  o Superficial (1st degree)
    ▪ Involves the epidermis
    ▪ Red, dry
  o Partial thickness (2nd degree)
    ▪ Involves the entire epidermis and a variable portion of the dermis
    ▪ Red, blistered and edematous
  o Full thickness (3rd degree)
    ▪ Involves the destruction of the entire epidermis and dermis
    ▪ White, brown, dry, leathery with possible coagulated vessels
 	
• Monitor for the following signs and symptoms in full thickness, circumferential burn injuries which may indicate a circulation deficit:
  o Pallor or cyanosis of distal unburned skin on a limb
  o Capillary refill $\geq$ 5 seconds
  o Unrelenting deep tissue pain
  o Progressive loss of sensation or motor function
  o Progressive decrease or absence of pulses
  o Inability to ventilate in patients with deep circumferential burns of the chest
	KEYPOINT: if signs of circulation deficit are present contact the Oregon Burn Center immediately

Secondary Survey	
Assessment and Monitoring	Intervention/care

Comfort:
• Frequent pain/sedation assessment
   • Minimum every 4 hours
   • Before and after pain/sedation medication given
   • Use age appropriate pain scales for pediatric patients
	• IV analgesia is the preferred route during the initial post injury period.
	• Large amounts of IV analgesic may be required to attain initial pain control
	• Administer opioids in frequent (every 5 minutes) small to moderate bolus doses (e.g. Morphine IV 4-5 mg or Dilaudid IV 0.5-1 mg) until pain is controlled.
	
	KEYPOINT: It may take large total opioid doses to achieve initial pain control (e.g. 40 to 60 mg of Morphine)

Wound Care:
• Assess the wound and monitor for:
   o Change in wound appearance
   o Change in size of wound
   o Signs or symptoms of infection
 	
KEYPOINT: In a mass casualty disaster situation wound care for patient with a >20% TBSA burn can be performed once per day
	• Perform wound care every day if using silver sulfadiazine cream
	• Wound care involves washing the wounds with soap and warm tap water with a wash cloth, patting dry
	• Burned scalps and faces should be shaved daily
	• Genitalia and perineal burns may require a foley to maintain patency
	• Apply a double antibiotic ointment around the eyes and mouth to avoid cream from draining into them
	• Apply a thin layer of silver sulfadiazine cream, enough so that the wound can not be seen through the cream
	   o The layer of sulfadiazine should be thick enough to prevent the wound from drying out prior to the next dressing change
	   o The purpose of a dressing is to keep the cream from rubbing off before the next dressing change
	• Wrap fingers separately if burned
	• Place sulfadiazine coated gauze between the toes
	• Elevate burned extremities above the level of the heart

Ongoing Resuscitation and Care	
Assessment and Monitoring	Intervention/care

Monitor Outputs of resuscitation
• Goal Mean Arterial Blood Pressure > 60 mm Hg
• Hourly urine output goals:
  o 0.5 ml/kg/hr (≈30-50 ml/hour) urine output for adults
  o 1 ml/kg/hr urine output for children under 30 kg
Considerations:
  Additional resuscitation fluid needs can occur with:
    • Very deep burns
    • Inhalation injury
    • Associated injuries
    • Electrical injury
    • Delayed resuscitation
    • Prior dehydration
    • Alcohol or drug dependence
    • Small children
• Children, the elderly and patients with preexisting cardiac disease are particularly sensitive to fluid management
• Monitor glucose at least every 2 hrs on pediatric burn patients x 24 hours
	• Insert a foley catheter
	• If urine output is less than goal increase fluids by 1/3.
	  o e.g. u/o 20 ml/hr, fluid rate at 250 ml/hr - increase to 330 ml/hr
	• If urine output is greater than goal decrease rate of infusion by 1/3
	  o e.g. u/o 100 ml/hr fluid rate at 250 ml/hr - decrease to 167 ml/hr
	• Upon completion of the resuscitation phase (24 hrs post burn) decrease hourly fluid volume by 10% per hour to a maintenance fluid with D5 ½ NS with 20 mEq KCL/L

Pigment in the urine (burgundy color)	• Maintain urine output 100 ml/hour for adults and 2ml/kg/hr for pediatrics, increase fluid rate (LR) **KEYPOINT: Diuretics are not indicated** • Mannitol may be used when an osmotic diuretic is needed to maintain urine output • Intravenous sodium bicarbonate may be administered to maintain an alkaline urine, with a pH > 6
Pulse checks (CMS) every 1 hour if there are circumferential burns on extremities • Monitor pulses by palpation or doppler exam • Decreased sensation • Severe deep tissue pain • Diminished distal pulses • Capillary refill ≥ 5 sec After 24-48 hrs decrease frequency of pulse checks to every 2 hours if stable	• Elevate extremities above the level of the heart

Ongoing Resuscitation and Care	
Assessment and Monitoring	Intervention/care
Nutrition Weight on admission	• Dietary consult with daily calorie counts o Usual Kcal needs = REE x 30% • Regular high calorie, high protein diet if able to take PO • If unable to maintain adequate caloric requirements, initiate tube feedings • No free water drinks (plain water) if taking PO, only high calorie liquids • If intubated begin tube feedings at full strength increasing to goal rate • Soft feeding tubes are preferred over hard salem sump nasogastric tube • Ensure stool softeners are ordered to prevent constipation due to pain medications

Mobility	• Obtain Physical Therapy /Occupational Therapy consult
	  o In a disaster therapists may just splint patients in functional positions and help with dressings
	• HOB elevated at all times
	• Elevate burned extremities above the level of the heart
	• Neck burns - Maintain the head in a neutral position
	  o No pillows or blankets under the head flexing the neck forward
	• Axilla burns - Keep arms extended to decrease contractures
	• Out of bed (OOB) - If legs are burned, apply ace wraps when OOB
	• Encourage active range of motion hourly when awake

Infection Control	• Apply universal precautions • If wounds are exposed, gown, mask, and glove ***KEYPOINT: No prophylactic systemic antibiotics are required for the burn injuries***
Psychosocial: Needs may be more on families and staff than patients	• Explain any procedures • Involve patient and family • Social Worker • Spiritual Care

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Medical Supplies/Pharmaceuticals and Equipment

- Pre Packed Medical Resources need to supply a triage station capable of treating 5 patients with severe burns

- Suggested supplies for burn wound care -Adult patient

- Potential supply, pharmaceutical and equipment resources

Pre Packed Medical Resources need to supply a triage station capable of treating 5 patients with severe burns

Supply		Quantity needed for 5 patients
AIRWAY		
Bag-valve-mask (ambu bag)	Adult	3
	Pediatric	3
Suction system & tubing		3
Laryngoscopes	Adult	1
	Pediatric	1
Sylets		2
Endo tracheal tubes	ID 3.5	5
	ID 4.0	5
	ID 5.0	5
	ID 7.0	5
	IC 8.0	5
	ID 9.0	5
Transport ventilators		1
Oxygen (120 L)		1
Oxygen Mask sets	Adult	5
	Pediatric	5
Oropharyngeal airways	# 1 (40 mm)	3
	# 3 (80 mm)	3
	# 5 (100 mm)	3
Nasopharyngeal airways	14 Fr (3mm)	3
	18 Fr (4 mm)	3
	22 Fr (5 mm)	3
	26 Fr (6 mm)	3
	34Fr (8 mm)	3
Pulse oximeter		1
VENOUS LINE SUPPLIES		
Peripheral IV Cannula	14 G	5
	16 G	5
	18 G	5
	20 G	5
	22 G	5
	24 G	5

Pre Packed Medical Resources need to supply a triage station capable of treating 5 patients with severe burns

Supply		Quantity needed for 5 patients
3 Lumen Central Venous Catheterization set	5 Fr 20 cm	2
	6 Fr 20 cm	2
	7 Fr 30 cm	2
	8 Fr 30 cm	2
IV macro drip tubing		10
IV extension tubing		10
3 way stopcocks		10
Adhesive tap rolls		5
FLUID THERAPY		
Lactated Ringers liter bags		20
D5W (250 ml bags)		5
MEDICATIONS		
Morphine	10 mg	25
Lorazepam (Ativan®)	4mg/ml	20 ml
WOUND CARE		
Gloves	Medium	1 box
	Large	1 box
Mild Soap	5 liters	
Kerlex		50 rolls
Silver Sulfadiazine	1000 mg jars	25
Urinary catheters with drainage bags	8 G	5
	14 G	5
	16 G	5
	18 G	5
Naso gastric tubes	8 G	5
	14 G	5
	16 G	5
	18 G	5

Ref: Haberal, M. Guidelines for Dealing with Disasters Involving Large Numbers of Extensive Burns. International Society for Burn Injuries.

SUGGESTED SUPPLIES FOR BURN WOUND CARE ADULT PATIENT				
	Silver Sulfadiazine (100 gm jar)	Kerlix 6 in rolls	18 x 18 burn pad or large lap sponge	Elastic netting optional (inch)
Head (top, back, sides)	3/4	2		10 in
Face	1/2	1		
Neck	1/2	1		
Ears	1/4	No dressings required		
Arm	3/4	1	2	7 in
Hand	1/2	1		4 in
Fingers per 10 fingers	1/2	1 Smear a thick layer of Silver Sulfadiazine on gauze and wrap each finger		5 in
Torso (anterior)	3/4		2	22 in
Torso (posterior)	3/4		3	22 in
Buttocks	1/2		2	22 in
Groin	1/4			-----
Leg	1	2	3	10 in
Foot	1/4	1	1	6 in
Toes per 10 toes	1/4	1 Smear a thick layer of Silver Sulfadiazine on gauze and place between each toe		-----

Potential Burn Supply and Equipment Resources

Region 1 hospitals all have Mutual Aid Agreements (MAAs) in place to obtain additional resources in the event of a MCI.   In the event of a mass burn casualty all Region 1 hospitals will require additional resources, which could rapidly deplete local supplies. The regional hospitals and health systems also obtain medical supply, equipment and pharmaceutical supplies from the same local and regional vendors.   Additional medical supply caches exist in the region, however, access to cache supplies will require regional or state department of health involvement for access.   A clear and organized mechanism for accessing supplies from local, regional and Pacific Northwest resources needs to be addressed at the state level to assure adequate supplies in the event of a burn mass casualty or mass casualty incident.

Resource	Supplies/Equipment Available	Contact/Access
Hospital Capacity Web site	Information about pharmaceutical resources in regional hospitals	www.oregonhospitals.org
Cardinal Warehouse Auburn, WA Contact	Pharmaceuticals	Judy Griffin 1-800-456-5550 "0" for operator ask for Judy.
Sunshine Dairy	Water	
Owens and Minor	Medical supplies	
VA Cache	Medications, IV supplies, gauze, blankets, gloves	Portland VA Emergency Operations Command or the Administrative Officer of the Day. (503) 220-8262
NDMS Cache		
Multnomah Co - all Multnomah Co hospitals have a supply trailer on site.	Airway management supplies, IV supplies, gloves	Multnomah Co. hospitals only -Emergency Command Operations

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Communications

Communications

Regional Hospital will be the primary communication link between the scene, regional emergency departments, regional hospitals and the Oregon Burn Center. Regional Hospital is a community service providing the Emergency Communications Center (ECC). The ECC serves as a central point of contact and notification during Mass Casualty Incidents (MCIs). Through use of various communications means, including 800-mhz trunked radio and web-based client/server applications, the ECC coordinates communications between the scene and the area hospitals on incidents involving more than 10 scene patients.

If the burn center is contacted by an outside source of a major situation involving multiple burn victims the OBC will request that further communication occur via Regional Hospital.

During the initial phase of the incident the Regional Hospital will communicate with the scene regarding patients who should be prioritized for admission to the Oregon Burn Center. Additional incident information will be communicated via the Hospital Capacity Web site.

The Hospital Capacity (Hos Cap) Web site will serve as the patient information tracking mechanism in a burn mass casualty disaster.
The Hos Cap user has the ability to view all the information for any hospital in the website.

Hos Cap Website display of patients during an incident.

Incident:									
All Incidents									
Hospital:				Patient Condition:					
All Hospitals				All Patient Conditions GO					

Patients

	Incident		Pre-Hospital Info					Hospital Info			Action
Hospital	Incident	Pre Hosp No.	Pre Hosp Condition	M/F	Age	Time	Patient Condition	Age	Time	
Tuality	INHALATION AT SCOOGINGS VALLEY RD	24	Green	M		7/28/05 12:04	Unknown		7/28/05 12:04	View | Edit | Delete
Tuality	INHALATION AT SCOOGINGS VALLEY RD	23	Green	M		7/28/05 12:04	Unknown		7/28/05 12:04	View | Edit | Delete
Tuality	INHALATION AT SCOOGINGS VALLEY RD	22	Green	M		7/28/05 12:04	Unknown		7/28/05 12:04	View | Edit | Delete
Tuality	INHALATION AT SCOOGINGS VALLEY RD	21-forest grove	Green	M		7/28/05 11:47	Unknown		7/28/05 11:47	View | Edit | Delete

Hos Cap Website display of patient specific information involved in an incident

View Patient

Patient Number: 106

Hospital Name: Tuality

Incident: INHALATION AT SCOOGINGS VALLEY RD

Gender: M

Age:

Pre-Hospital Condition: Green

Pre-Hospital Identity: 24

Trauma Band: 0

Patient Condition: Unknown

Patient First Name:

Patient Last Name:

Patient Age:

Patient Injuries:

Patient Hospital Identity:

Admitted: No

Notes:

This page contains a form for adding information about a new patient or updating information about an existing patient. For the purposes of this site a patient is anyone who requires emergency medical attention and has been associated with an incident. The OBC will request that hospital facilities receiving burn patients involved in a burn mass casualty incident enter and update this information when the patient is received by the facility.

Oregon Burn Center (OBC) Communication Plan

Incoming phone calls
In the OBC the Unit Secretary/administrative assistant will be assigned to answer the phones and take all calls incoming to the burn unit. Calls will be tracked via a communication log. Calls regarding patient care or requests for clinical expertise will be forwarded to the Burn Clinical Information Nurse. All calls from the media or public will be directed to the Public Information Officer.

The **Burn Clinical Information Nurse** is a nurse with burn experience who will take all calls regarding patient care and coordinate communication with non-burn hospitals that have received burn patients. This role will be assumed by the OBC Nurse Manager, the Burn Wound Care Nurse, the Clinical Nurse Specialist or specially trained OBC charge nurses. Once assigned to this task the Burn Clinical Information nurse will solely be responsible for the tasks of the role. Calls will be tracked via a communication log.

Emergent calls will be directed to the on-call burn surgeon. The burn clinical information nurse will page the burn surgeon on call and relay the information regarding the emergent call. The code # 611 will be used to alert the burn surgeon that the call is an emergent call related to the disaster. If possible the caller will be connected directly to the burn surgeon on call. If the burn surgeon on call is not immediately able to take the call the burn clinical information nurse will relay the information and the call back number to the burn surgeon on call.

Non emergent calls - Calls that are not emergent but require physician follow-up will be communicated to the on-call burn surgeon, with a return call placed to within 6 hours of the initial call by the burn surgeon or his designee.

Tracking of patient information - The burn clinical information nurse will direct all callers to enter patient information about disaster victims on the Hospital Capacity Website. If the hospital that has admitted a burn patient does not know how to access or use the Hos Cap Web site the Burn Clinical Information will attempt to instruct the call on it's use. If the hospital is unable to enter the data following instruction the Burn Clinical Information nurse will enter that data. All patients related to the disaster should have data on the Hos Cap Web site. The burn clinical information nurse may ask that the hospital fax patient information to facilitate data entry.

The burn clinical information nurse will enter data for the Oregon Burn Center and Emanuel hospital regarding the burn mass casualty. As a hospital user the burn clinical information nurse will update information about any patients that were entered during a disaster management incident or a Multiple Casualty Incident (MCI). This data will be obtained from E-Chart, as well as from the hospital Emergency Operations Center The burn clinical information will monitor the Hospital Capacity Website for tracking of patient information.

Oregon Region 1 Burn Mass Casualty Plan
Oregon Burn Center
Legacy Emanuel Hospital

Staffing

Oregon Burn Center Staffing

Activation of the Legacy Emanuel Emergency Response Plan will prompt the establishment of a Labor Pool. All staff called in to respond to the event will check in with the Labor Pool prior to unit deployment.

OBC Staff allocation
1. The OBC IC will assign persons to the following positions or positions will be filled by virtue of position or a request will be submitted to the hospital Emergency Operations Center (EOC):
   a. Operations Officer – an OBC charge nurse
   b. Medical Chief - On-Call Burn Surgeon
   c. Logistics Officer – Materials Services Operations employee, preferably one who works with the OBC
   d. Safety Officer – a security officer (assigned by hospital EOC)
   e. Liaison Officer – OBC office assistant or an office or admin assistant from the labor pool
   f. Public Information Officer – Legacy Public Relations (this position appointed by the hospital EOC)
2. Operations Officer – Conducts OBC unit operations, and directs resources
   a. Assign one unit secretary or office/admin assistant to answer phones (see communication plan)
   b. Assign one unit secretary to take off orders
   c. Assigns a wound care nurse to assist with unit admissions
   d. 1 nurse and 1 other clinical staff member will be required initially for each admission
   e. Assign Clinical Information Nurse
   f. Assures that OBC pharmacist will be located on site in the satellite pharmacy
   g. Requesting Admitting staff to come to OBC to accomplish the registration process
3. Medical Chief – Directs medical staff resources
   a. A Burn physician will be assigned to the Triage Area to assist with prioritization of patient placement
   b. Remaining Burn physicians will be onsite in the Burn Center for patient treatment
   c. Directs resident staff
   d. Directs Physicians Assistant
   e. Identifies need for addition medical staff and requests assistance from EOC Medical Labor Pool
4. Safety Officer Assures that burn unit is secure and that no one not involved in patient
5. Public Information Officer Deals with press and public

Following conclusion of Emergency Operations the Oregon Burn Center will follow the Legacy usual staffing procedures:

1. Staffing Specialists utilize electronic staffing and scheduling software to manage and coordinate staffing resources across the system.
2. Staffing coordination is done by cluster, that is, groups of inpatient units providing care to similar groups of patients relative to acuity, diagnosis, and/or age-group.
3. In collaboration with unit charge nurses, managers and administrative supervisors, daily staffing needs are determined for each unit based on current patient census and acuity, utilizing pre-established staffing guidelines
4. Each unit's staffing needs are compared to the number and qualifications of scheduled staff to determine whether additional staff are needed, or if scheduled staff need to be re-assigned or cancelled.
5. Staffing Specialists will recruit and/or assign additional staff to a unit at the request of the unit manager, charge nurse or administrative supervisor.
6. If vacant shifts occur, due to inability to pre-schedule adequate staff, increased patient volume, increased patient acuity, sick call(s), or other unscheduled absence (jury duty, family illness), the staffing office will contact non-scheduled staff to request additional work.
7. In consideration of staff needs for rest, patient safety, and responsible fiscal management of resources, staff indicating a willingness to work an additional shift will be utilized in the following order:
   a. Full or part-time staff from the unit or the Resource Pool who have been previously cancelled within the pay period, and for whom the additional shift would not result in overtime, additional shift incentive (ASI) or partner shift compensation
   b. All non-scheduled supplemental, on-call or per diem staff
   c. Part-time staff from the unit or the Resource Pool, for whom the additional shift would not result in overtime, additional shift incentive (ASI) or partner shift compensation
   d. Full-time staff from the unit or the Resource Pool, for whom the additional shift would result in overtime, but would not result in additional shift incentive (ASI) or partner shift compensation.
   e. Full or part-time staff from the unit, who are requesting to work for additional shift incentive compensation.
   f. Full or part-time staff from the unit, who are requesting to work for partner shift compensation.
   g. Agency Staff

Suggested Staffing for Care of Burn Patient in a Non-burn hospital

Admission of a burn patient with 20-40% burn requires a minimum of 1 RN and 1 assisting staff member (CNA, LPN, technician) for up to 4 hours.

Ongoing staffing should be assigned based patient acuity criteria of the institution. However, Burn Wound Care requires additional staff resources not ordinarily required

in non-burn hospitals. The time it takes to do a complete dressing change is dependent on the size and location of the wound and the experience personnel performing the wound care. It is recommended that non-burn hospitals utilize the Wound Care Ostomy Nurses as the primary resource to direct the daily wound care.

National Disaster Nursing Staff Resources

Disaster Medical Assistance Teams

The National Disaster Medical System (NDMS) currently managed by the US Department of Homeland Security, includes Disaster Medical Assistance Teams (DMATs). A DMAT is a group of professional and para-professional medical personnel designed to provide medical care during a disaster or other event. Each team has a sponsoring organization, such as a major medical center, public health or safety agency, non-profit, public or private organization that signs a Memorandum of Agreement (MOA) with the DHS. The DMAT sponsor organizes the team and recruits members, arranges training, and coordinates the dispatch of the team. To supplement the standard DMATs, there are highly specialized DMATs that deal with specific medical conditions such as crush injury, burn, and mental health emergencies.

DMATs deploy to disaster sites with sufficient supplies and equipment to sustain themselves for a period of 72 hours while providing medical care at a fixed or temporary medical care site. In mass casualty incidents, their responsibilities may include triaging patients, providing high-quality medical care despite the adverse and austere environment often found at a disaster site, and preparing patients for evacuation. In other types of situations, DMATs may provide primary medical care and/or may serve to augment overloaded local health care staffs. Under the rare circumstance that disaster victims are evacuated to a different locale to receive definitive medical care, DMATs may be activated to support patient reception and disposition of patients to hospitals. DMATs are designed to be a rapid-response element to supplement local medical care until other Federal or contract resources can be mobilized, or the situation is resolved.

DMATs are principally a community resource available to support local, regional, and State requirements. However, as a National resource they can be federalized

ABA and U.S. Department of Health and Human Services (HHS) Public Health Emergency Preparedness Joint Project

200 Public Health Service and other government-employed nurses have been trained in burn care to meet the staffing needs in the event of a burn disaster. The training to be provided consists of:
- Advanced Burn The one-day traditional ABLS course
- A second day of clinical orientation to burn nurse care
- A one-week practicum at a verified burn center

All nurses receiving burn care training are federal employees within such agencies as the Public Health Service and the Indian Health Service. As such, any liability action against them would be covered by the exclusive remedy provisions of the Federal Tort Claims Act (28USC2671 et seq.). They would not be employees of the hospital and would not subject the hospital to liability. All of the nurses are licensed in their state and as federal employees may practice as federal employees in multi-jurisdictional settings. The nurses trained under this program can provide temporary relief in mass burn casualty situations, at the request of the burn center.

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Oregon Burn Center
Legacy Emanuel Hospital

Patient Transfer Process

Patient Transfer Process

A Burn Mass Casualty is defined as any catastrophic event in which the number of burn victims exceeds the capacity of the local burn center to provide care. This will require that local and regional hospitals will be required to provide care for the patients requiring definitive burn care for 24 to 72 hours until transfer arrangements can be made.

The following process will facilitate communication with the Oregon Burn Center and upon patient admission to a non-burn hospital

When burn surge capacity is close to being reached or if a mass casualty incident with more than 10 burn patients occurs the OBC Clincal Resource Coordinator (CRC) will access the Burn Asset Resource Tracking to determine ABA burn center bed status. http://hqapp.hhs.gov/cips The CRC will make the initial contact to the following hospitals to let them know that we have a burn mass casualty event involving xx number of patients. Priority will be given to the burn centers in which there is a letter of understanding for the Transfer of Burn Patient in the Event of a Disaster. The Burn Centers will be asked if they can accept any patients related to the event.

Burn Centers Closest to Oregon

Burn Center	# of beds	Address	Contact Number	Medical Director	Nurse Manager
University of Washington Burn Center Harborview Medical Center **verified**	44	925 Ninth Ave Seattle, WA 98104	206 731 3140	Nicole Gibran MD 206 731 3140	Verna Cain RN 206 731 8708
UC Davis Regional Burn Center **verified**	14	2315 Stockton Blvd. Sacramento, CA 95758	919 734 3636	David Greenbalgh MD 916 453 2051	Linda Moore RN 916 734 7073
Shriners Hospital for Children @ UC Davis Regional Burn Center **verified**	30	2425 Stockton Blvd. Sacramento, CA 95758	919 734 2050	David Greenbalgh MD 916 453 2051	Pam Cornwell 916 734 2110
Intermountain Burn Center **verified**	12	50 North Medical Drive Salt Lake City, UT 84132	801 581 2700	Jeffry Saffle MD 801 581 3595	Lezli Matthews RN 801 585 3691
Torrance Memorial Burn Center	8	3330 Lomita Blvd, Torrance CA 90505	310 517 4622	Roberta Mann MD 810 517 4736	
Arizona Burn Center at Maricopa Medical Center	38	2601 E Roosevelt St Phoenix, AZ 85008	602 344 5637	Daniel Caruso MD 602 344 5637 Kevin Foster MD 602 344 5637	Mark Hibbert 602 344 5301

* the severity of the incident may require patient transfer to burn centers not listed

The OBC will facilitate patient placement at ABA recognized burn centers for patients initially admitted to other area or regional hospitals. This will assure that burn center placement is based on severity of injury and the need for definitive burn care. The goal is to transfer patient's meeting ABA burn admit criteria from a non-burn hospital to a burn center within 72 hours of burn injury.

The following **secondary triage criteria** will be used to prioritize transfer of patients to burn centers;
1. Age
2. % TBSA
3. Comorbidities
4. Social situation, other family members injured in the event

The transferring hospital will enter data on the Hospital Capacity web site regarding patients that need to be transferred for definitive burn care (see above).

The burn clinical information nurse will make further contacts with the hospitals to obtain and clarify patient information. The burn clinical information nurse will then review the patient's information and with the burn surgeon on call will prioritize patients for transfer.

The OBC CRC will assist the burn surgeon in contacting ABA recognized burn centers to verify willingness to accept transfer patients. The OBC burn clinical information nurse will notify transferring hospital of recipient site. The recipient physician will contact the transferring hospital/physician to discuss patient and transfer arrangements. Transferring hospital will be responsible for transport arrangements. The transferring hospital will notify the OBC when the transfer has occurred.

Patients not transferred for definitive burn care

Patients with minimal burn injury, only inhalation injury and or an anticipated short length of stay requiring no burn surgery may not be appropriate for transfer to burn centers out of state. These patients will need to be cared for and discharged from the non-burn hospital. The Oregon Burn Center will continue to be available for phone consultation throughout the patient length of stay. In addition, the patient may be referred to a burn surgeon on discharge for follow-up care.

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Post Event Evaluation

- Burn Multiple Casualty Critique Form
- Additional data to be collected

OREGON BURN CENTER
BURN MULTIPLE CASUALTY CRITIQUE FORM
LOCATION: _____
DATE: _____

Indicator	Yes	No	N/A
Field and Emergency Department Triage			
Was Regional Hospital contacted once it was determined that the incident involved > 10 victims?			
Were patients with > 90° TBSA burns sent to local or regional hospitals for palliative care?			
Were intubated patients with >20° burns sent to OBC?			
Were non-intubated patients with >40° burns sent to OBC?			
Were any patients not meeting the above two criteria sent to OBC? (> 10 victims)			
Was definitive placement for pediatric care either at Emanuel Children's Hospital or OHSU?			
Comments:			
OBC Response			
Did OBC charge RN notify the IAT once contacted about potential burn mass casualty?			
Did OBC charge nurse assume role of OBC Incident Commander(IC)?			
Did OBC IC assure that phone calls to Nurse Manager, all OBC physicians and OBC call rooster occurred?			
Did OBC IC assign persons Operations Officer, Medical Chief, and Burn Clinical Information Nurse roles?			
Did OBC IC request personnel from Hospital EOC for the Logistics Officer, Liason Officer and Safety Officer roles?			
Did Operations Officer and Medical Chief Work identify OBC patients that can be discharged home?			
Did Operations Officer and Medical Chief identify OBC non-burn patients and patients with lower acuity that can be transferred to other Emanuel inpatient units?			
Was additional patient capacity created for patients?			
Were there sufficient staff resources to meet patient needs?			
Was notification timely and effective?			
Comments:			

Indicator	Yes	No	N/A
Communications			
Did Regional Hospital provide timely and accurate information between the scene, regional hospitals and OBC?			
Did hospitals accepting burn patients use the Hos Cap web site to enter patient data?			
Did hospitals accepting burn patients use the Hos Cap web site to obtain information about burn care?			
Did the hospital accepting burn patients contact the OBC with patient care questions?			
If yes to above, were the questions answered in a timely manner?			
Did the hospital accepting burn patients coordinate with the OBC for patient transfer for definitive burn care?			
If yes to above, did the transfer process occur smoothly?			
Comments:			
EMANUEL HOSPITAL EOC			
Was the command center up and staffed per policy?			
Were command center equipment and supplies available in a functional time and functional/useful?			
Were chain of command and areas of responsibility established according to HEICS?			
Did each department respond appropriately (i.e. Facilities, Security, HR, Public Relations, etc.) and per policy?			
Were the written materials you received useful in helping you meet the expectations of your role on the Incident Command staff?			
Was a spokesperson designated for press and family information?			
Comments:			
EMERGENCY SUPPLIES			
Were the emergency supply inventories available within a reasonable time? (i.e. Blood Bank, Pharmacy, Food, MSO)			
Were established par levels adequate and available to replenish supplies?			

Indicator	Yes	No	N/A
Comments:			
SECURITY			
Was adequate security provided?			
Was traffic control established and enforced?			
Were emergency vehicles and personnel able to have access to all areas, equipment, and supplies required?			
Were unauthorized personnel kept away from the incident areas?			
Comments:			
STAFFING AND EMERGENCY RESPONSE			
Were provisions for the management of staff including distribution and assignment of responsibilities and functions adequate?			
Was there adequate staffing and call-in response to cover the disaster?			
Was communication to staff timely and effective?			
Comments:			
PATIENT CARE:			
Were provisions for the management of patients, including scheduling of services, control of patient information, admission, transfer, and discharge adequate?			
Were all incoming patients accounted for, triaged, and prioritized?			
Was all necessary medical treatment readily available and adequate?			
Was patient transfer plan effective and temporary shelter adequate if required?			
Comments:			

FOLLOW UP PLAN (corrective action plans as required)

Corrective Action Required/Taken	Responsible person	Date

Attach: **Debrief notes following the event**
Timeline of the events

Burn Mass Casualty Preparedness Team:

_____

OBC Nurse Manager   **Date of**
Review

_____

Medical Director   **Date of**
Review

_____

Clinical Nurse Specialist   **Date of**
Review

_____

Hospital Administrator   **Date of**
Review

Additional data to be collected

In the aftermath of a burn mass casualty event it is important to know how well the plan met the needs of the community and how well the plan was executed. To facilitate future planning it is important for us as well as others to know the extent of injuries, and the resources required in such an event.

- Number of total victims
  - Age
  - % TBSA
  - Associated injuries
  - Complications
  - Number of surgeries required
  - Final disposition
- Number of patients treated at the Oregon Burn Center
  - Age
  - % TBSA
  - Associated injuries
  - Complications
  - Number of surgeries required
  - Final disposition
- Number of patients treated at other burn centers
  - Age
  - % TBSA
  - Associated injuries
  - Complications
  - Number of surgeries required
  - Final disposition
- Number of patients that remained in the community at non-burn hospitals
  - Age
  - % TBSA
  - Associated injuries
  - Complications
  - Number of surgeries required
  - Final disposition
- OBC Nursing Resources
  - Number nursing hours per patient day required during first 24 hours of event - Break down of resources; RN, LPN, CNA, Unit Secretary
  - Number nursing hours per patient day required during next 48 hours of event - Break down of resources; RN, LPN, CNA, Unit Secretary
  - Number of resource and non-burn unit staff required
  - Ancillary team resource hours required; OT, PT, Nutrition, Social work, Chaplain

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Supporting Documentation

- Oregon Burn Center Policy Response to Multiple Casualty Event, Involving Burn Injury

- OBC Emergency Operations Job Actions Sheets

- Sample letter of understanding

- References

LEGACY HEALTH SYSTEM

Policy: LCC 150-4.020
Effective Date: 10/03
Last Revision Date: 7/06   Page 1 of 14

SUBJECT: OREGON BURN CENTER RESPONSE TO MULTIPLE CASUALTY
             EVENT, INVOLVING BURN INJURY

PURPOSE: To describe the Oregon Burn Center response during a multiple victim mass
             casualty event.

RESPONSIBLE PARTIES: All OBC staff

TEXT:
B. Activation/Notification
   1. When contacted by an outside source of a major situation involving multiple burn
       victims, activate the Emergency Preparedness Response Policy LHS 200.11.
       a. Notify the Incident Assessment Team (IAT) through the hospital operator. The
           IAT consists of:
           1) ED Physician
           2) ED Nurse Manager/designee
           3) Nursing Supervisor
           4) Security Officer
           5) Facilities (when on-site)
       b. The Emergency Department and the responding members of the IAT will
           determine the appropriate hospital response to include decision about an
           immediate hospital lockdown and establishing a protected perimeter around the
           facility.
       c. The IAT will notify the hospital operator to announce Condition External/Internal
           (activation of the hospital based Emergency Operations Command [EOC]) for
           Level 2 or 3, this will also begin the activation of the administrative phone tree.
           1) Level 1 – anticipated admit of 3 burn patients
           2) Level 2 – anticipated admit of 4-7 burn patients
           3) Level 3 – anticipated admit of 8 or more burn patients
       d. If the burn center is contacted by an outside source of a major situation involving
           ≥ 10 burn victims the OBC will request that further communication occur via
           Regional Hospital. (503) 494-7551
       e. Regional Hospital will be the primary communication link between the scene,
           regional emergency departments, regional hospitals and the Oregon Burn Center.
       f. Regional Hospital is a community service providing the Emergency
           Communications Center (ECC). The ECC serves as a central point of contact and
           notification during Mass Casualty Incidents (MCIs). Through use of various
           communications means, including 800-mhz trunked radio and web-based
           client/server applications, the ECC coordinates communications between the scene
           and the area hospitals on incidents involving more than 10 scene patients.

g. During the initial phase of the incident the Regional Hospital will communicate with the scene regarding patients who should be prioritized for admission to the Oregon Burn Center.

KEYPOINT: The American Burn Association defines burn center Surge Capacity as the capacity to handle up to 50% more than normal maximum number of burn patients when there is a disaster.

2. Upon activation the OBC Nurse Manager/charge nurse will initiate the activation of the OBC emergency response plan and assume the role of OBC Incident Commander (OBC IC)
3. Implementation of the OBC emergency response
4. The OBC Incident Commander role may be assumed by the OBC nurse manager or Hospital Nursing Director upon his/her arrival.
5. The OBC IC will assign a unit secretary or designee in the department to call the nurse manager, additional personnel, and all available OBC physicians. The call roster will be utilized and responses noted on each call, as per level of response.
   a. Level 1 – some off duty staff called in
   b. Level 2 – several off duty staff called in
   c. Level 3 – all available staff to come
6. Staff responding to the hospital will report to the Labor Pool to be checked in and assigned for duty for response level.
7. Staffing status, resource requirements and bed availability will be determined by by the OBC IC and sent by fax or runner to the EOC as soon as possible.

C. OBC Staff allocation
   1. The OBC IC will assign persons to the following positions or positions will be filled by virtue of position or a request will be submitted to the hospital EOC:
      a. Operations Officer – an OBC charge nurse
      b. Medical Chief - On-Call Burn Surgeon
      c. Logistics Officer – MSO person, preferably one who works with the OBC
      d. Safety Officer – a security officer (will be assigned by hospital EOC)
      e. Liaison Officer – OBC office assistant or an office or admin assistant from the labor pool
      f. Public Information Officer – Legacy Public Relations (this position appointed by the hospital EOC)
   2. Operations Officer – Conducts OBC unit operations, and directs resources
      a. Assign one unit secretary or office/admin assistant to answer phones (see communication plan)
      b. Assign one unit secretary to take off orders
      c. Assigns a wound care nurse to assist with unit admissions
      d. 1 nurse and 1 other clinical staff member will be required initially for each admission
      e. Assign Clinical Information Nurse
      f. Assures that OBC pharmacist will be located on site in the satellite pharmacy
      g. Requesting Admitting staff to come to OBC to accomplish the registration process

3. Medical Chief – Directs medical staff resources
   a. A Burn physician will be assigned to the Triage Area to assist with prioritization of patient placement
   b. Remaining Burn physicians will be onsite in the Burn Center for patient treatment
   c. Directs resident staff
   d. Directs PA
   e. Identifies need for addition medical staff and requests assistance from LEH Medical Labor Pool
4. Logistics Officer – provides resources and support to meet incident needs.
   a. Assures that equipment and supplies are available
   b. Uses runners from Labor Pool to assist with:
      1) Obtaining supplies from MSO
      2) Obtaining pharmacy supplies;
      3) Moving patients;
      4) Message bearing, etc.
      5) Works with Clinical Pharmacist to assure appropriate medications are available
5. Safety Officer
   a. Responsible for worker safety
   b. Assures that command structure is followed
   c. Assures that burn unit is secure and that no one not involved in patient care and the disaster response is admitted
6. Liaison Officer
   a. Provides communication liaison between the OBC and the EOC
   b. Assures that both EOC and OBC have regular status reports
7. Public Information Officer
   a. Deals with press and public
D. Create capacity in OBC for MCI
   1. The OBC Operations Officer and the Medical Chief will:
      a. Discharge all OBC patients that can be discharged home
      b. Facilitate rapid transfer of OBC non-burn patients and patients with lower acuity to other Emanuel inpatient units
      c. Acute care patients to unit 45, TRACU, or unit 55 to allow for critical care admits
      d. Infants, Children and Adolesecents to PICU or Peds units
      e. Critical Care patients to MCICU, WWICU or ICU E
      f. Notify EOC of patients that can be transferred to other Emanuel inpatient units.
      g. The receiving unit to send staff to transport patient to their unit

KEYPOINT: New physician orders are not required if the transfer is to an equivalent level of care. e.g. burn acute care to unit 45, or burn ICU to WWICU.

   2. The unit capacity may also be increased in the following ways if the patient placement on other Emanuel units is not feasible:
      a. Utilize rooms 8-16 as critical care rooms
      b. Set up to admit two (2) patients to ICU rooms 5, 6 and 7
      c. Patients may be admitted to the admit/resuscitation room (2) and the shower room

        d.   Total increased in unit capacity of 6, for total of 22 critical care patients

  3. Complete Bed Availability form and send to the EOC as directed on the form

  4. Initial Emanuel based triage – the following criteria will be used to guide patient placement at Emanuel

  5. The following patients will be prioritized for direct admit to the Oregon Burn Center:

        a. Adult and pediatric patients with greater than 40% and less than 90% TBSA.

        b. Adult and pediatric patients, that are intubated with greater than 20% TBSA.

        c. Pediatric patients requiring hospitalization but not requiring initial Oregon Burn Center admission will be prioritized for admission to PICU or pediatrics.

        d. Adult patients that are intubated with no burn or less than 20% TBSA will be prioritized for admission to Medical Cardiac ICU, ICU East or West Wing ICU.

        e. Adult patients with less than 40% burns who are not intubated will be prioritized for admission to the MCICU, ICU East, WWICU or adult acute care unit, depending on acuity.

        f. Patients with greater than 90% burn will be prioritized for admission to an acute care unit for palliative care.

E. Patient Admission

  1. Patient admission will be moved from the Triage or initial assessment area to the admission unit immediately.

  2. The admission unit will be the point of care for initial resuscitation and wound care

  3. Equipment procurement; the following equipment will need to be available on the admission units;

        a. IV infusion pumps

        b. IV tubing

        c. Suction heads and set-up

        d. Ventilators for intubated patients or patients with potential airway compromise

        e. Fluid warmers

        f. Central line cart(s)

  4. Medication and supply procurement; the following medications and supplies will need to be readily available on the admission units:

        a. Ringers Lactate

        b. IV Morphine, Fentynal and Dilaudid

        c. Silver Sulfadiazine (Silvadene)

        d. Kerlix – 6 inch rolls

        e. Burn Pads

        f. Elastic netting

        g. Bag/mask adult and pediatric

        h. Intubation kits and supplies

        i. Oxygen masks, cannulas

        j. Urinary catheters adult and pediatric and uro-meter drainage bags

F. Oregon Burn Center (OBC) Communication Plan

  1. In the OBC the Unit Secretary/administrative assistant assigned to answer the phones will take all calls incoming to the burn unit.

        a. Calls will be tracked via a communication log. (attachment A)

        b. Calls regarding patient care or requests for clinical expertise will be forwarded to the Burn Clinical Information Nurse. (see E5 below)

      c. All calls from the media or public will be directed to the Public Information Officer

  2. Burn Clinical Information Nurse is a nurse with burn experience who will take all calls regarding patient care and coordinate communication with outside hospitals that have received burn patients.

      a. This role can be assumed by the OBC Nurse Manager, the Burn Wound Care Nurse, the Clinical Nurse Specialist or specially trained OBC charge nurses.

      b. Once assigned to this task the Burn Clinical Information nurse will solely be responsible for the tasks of the role.

      c. Calls will be tracked via a communication log. (attachment B)

      d. Emergent calls will be directed to the on-call burn surgeon

      e. The burn clinical information nurse will page the burn surgeon on call and relay the information regarding the emergent call. The code # 611 will be used to alert the burn surgeon that the call is an emergent call related to the disaster

      f. If possible the caller will be connected directly to the burn surgeon on call

      g. If the burn surgeon on call is not immediately able to take the call the burn clinical information nurse will relay the information and the call back number to the burn surgeon on call

      h. Calls that are not emergent but require physician follow-up will be communicated to the on-call burn surgeon, with a return call placed to within 6 hours of the initial call by the burn surgeon or his designee

      i. The burn clinical information nurse will direct all callers to enter patient information about disaster victims on the Hospital Capacity Website

      j. If the hospital that has admitted a burn patient does not know how to access or use the Hos Cap Web site the Burn Clinical Information will attempt to instruct the caller on it's use

      k. If the hospital is unable to enter the data following instruction the Burn Clinical Information nurse will enter that data. All patients related to the disaster should have data on the Hos Cap Web site

      l. The burn clinical information nurse may ask that the hospital fax patient information to facilitate data entry

      m. The burn clinical information nurse will enter data for the Oregon Burn Center and Emanuel hospital regarding the burn mass disaster. As a hospital user the burn clinical information nurse will update information about any patients that were entered during a disaster management incident or a Multiple Casualty Incident (MCI).

      o. This data will be obtained from the electronic medical record, as well as from the hospital Emergency Operations Center

      p. The burn clinical information will monitor the Hospital Capacity Website for tracking of patient information

G. Hospital Capacity Web Site

  1. The Hospital Capacity (Hos Cap) Web site will serve as the patient information tracking mechanism in a burn mass casualty disaster.

  2. The Hos Cap user has the ability to view all the information for any hospital in the website.

Hos Cap Website display of patients during an incident.

Hos Cap Website display of patient specific information involved in an incident

Oregon Region 1 Burn Mass Casualty Plan
Contact Oregon Burn Center with questions 503 413 4232; Toll free 1-888 598 4232

3. The OBC will request that hospital facilities receiving burn patients involved in a burn mass casualty incident enter and update this information when the patient is received by the facility.
4. This page contains a form for adding information about a new patient or updating information about an existing patient. For the purposes of this site a patient is anyone who requires emergency medical attention and has been associated with an incident.

H. Burn surge capacity and determination of Burn Center Availability
1. When burn surge capacity is close to being reached or if a mass casualty incident with more than 10 burn patients occurs the OBC Clincal Resource Coordinator (CRC) will access the Burn Asset Resource Tracking to determine ABA burn center bed status. http://hqapp.hhs.gov/cips
   a. The CRC will make the initial contact to the following hospitals to let them know that we have a burn mass casualty event involving xx number of patients. (see list of burn centers below)
   b. The Burn Centers will be asked if they can accept any patients related to the event.
   c. The OBC will facilitate patient placement at ABA recognized burn centers for patients initially admitted to other area or regional hospitals
   d. The goal is to transfer patient's meeting ABA burn admit criteria from a non-burn hospital to a burn center within 72 hours of burn injury.
   e. The following secondary triage criteria will be used to prioritize transfer of patients to burn centers
      1) Age
      2) % TBSA
      3) Comorbidities
      4) Social situation, other family members injured in the event

f. The transferring hospital will enter data on the Hospital Capacity web site regarding patients that need to be transferred for definitive burn care (see above)
g. The burn clinical information nurse will make further contacts with the hospitals to obtain and clarify patient information
h. The burn clinical information nurse will then review the patient's information and with the burn surgeon on call will prioritize patients for transfer.
i. The OBC CRC will assist the burn surgeon in contacting ABA recognized burn centers to verify willingness to accept transfer patients.
j. The OBC burn clinical information nurse will notify transferring hospital of recipient site.
k. The recipient physician will contact the transferring hospital/physician to discuss patient and transfer arrangements.
l. Transferring hospital will be responsible for transport arrangements.
m. The transferring hospital will notify the OBC when the transfer has occurred.

I. Traffic control/media contacts
  1. The Safety Officer will assist in directing people who want access to OBC
  2. Immediate family only will be provided access to the burn center family waiting area
  3. All visitors who are not immediate family of patients will be directed to main hospital lobby.
  4. Media area will be directed to the Medial Plaza Lobby

WESTERN BURN CENTERS

Burn Center	# of beds	Address	Contact Number	Medical Director	Nurse Manager
University of Washington Burn Center Harborview Medical Center **verified**	44	925 Ninth Ave Seattle, WA 98104	206 731 3140	Nicole Gibran MD 206 731 3140	Verna Cain RN 206 731 8708
UC Davis Regional Burn Center **verified**	14	2315 Stockton Blvd. Sacramento, CA 95758	919 734 3636	David Greenbaigh MD 916 453 2051	Linda Moore RN 916 734 7073
Shriners Hospital for Children @ UC Davis Regional Burn Center **verified**	30	2425 Stockton Blvd. Sacramento, CA 95758	919 734 2050	David Greenbaigh MD 916 453 2051	Pam Cornwell 916 734 2110
Intermountain Burn Center **verified**	12	50 North Medical Drive Salt Lake City, UT 84132	801 581 2700	Jeffry Saffle MD 801 581 3595	Lezli Matthews RN 801 585 3691
Bothin Burn Center St. Francis Memorial Hospital **verified**	20	900 Hyde St. San Francisco, CA 94109	415 353 6255	James Macho MD 415 775 2795	Kelly Johnston RN 415 353 6274
Torrance Memorial Burn Center **verified**	8	3330 Lomita Blvd, Torrance CA 90505	310 517 4622	Roberta Mann MD 810 517 4736	
Santa Clara Valley	8	751 S. Bascom	408 885 6666	David Kaufman	Jill Sproul RN

Burn Center	# of beds	Address	Contact Number	Medical Director	Nurse Manager
Medical Center Regional Burn Center		Ave, San Jose, CA 95128		MD 408 885 5315	408 885 6670
UCSD Regional Burn Center	20	200 West Arbor Drive, San Diego, CA 92103	619 543 6502	Daniel Lozano MD 619 543 6001	Janine Dubina RN 619 543 6545
UCI Regional Burn Center **verified**	16	101 The City Drive, Orange, CA 92868	714 456 5304	Marianne Cinat MD 714 456 5755	Victoria Vanderkam RN 714 456 5641
Southern California Regional Burn Center at LAC & USC Medical Center	21	1200 N. State St. 12th floor Los Angeles, CA 90033	323 226 7991	Warren Garner MD 323 226 7759	Ronald Vasquez RN 323 226 3847
Community Regional Burn Center	14	445 South Cedar Ave University Medical Center, Fresno, CA 93702	559 459 4220	William Dominic MD 559 459 4268	Sandra Yovino RN 559 459 4209
Arizona Burn Center at Maricopa Medical Center		2601 E Roosevelt St Phoenix, AZ 85008	602 344 5637	Daniel Caruso MD 602 344 5637 Kevin Foster MD 602 344 5637	Mark Hibbert 602 344 5301

Approval: Oregon Burn Center physician and nursing leadership team 7/06

Oregon Burn Center
Burn Mass Casualty Call Log – Information Tracking
Patient information calls and Non-medical calls

Hospital/Agency Name:
Name, title and contact information of person calling: 　　Name:_____ Title:_____ Phone: _____ext. _____ Email: _____
Patient Information: 　　Name:_____ Identifier_____
Question:
Response/information provided:

Hospital/Agency Name:
Name, title and contact information of person calling: 　　Name:_____ Title:_____ Phone: _____ext. _____ Email: _____
Patient Information: 　　Name:_____ Identifier_____
Question:
Response/information provided:

Oregon Burn Center
Burn Mass Casualty Call Log – Clinical Tracking
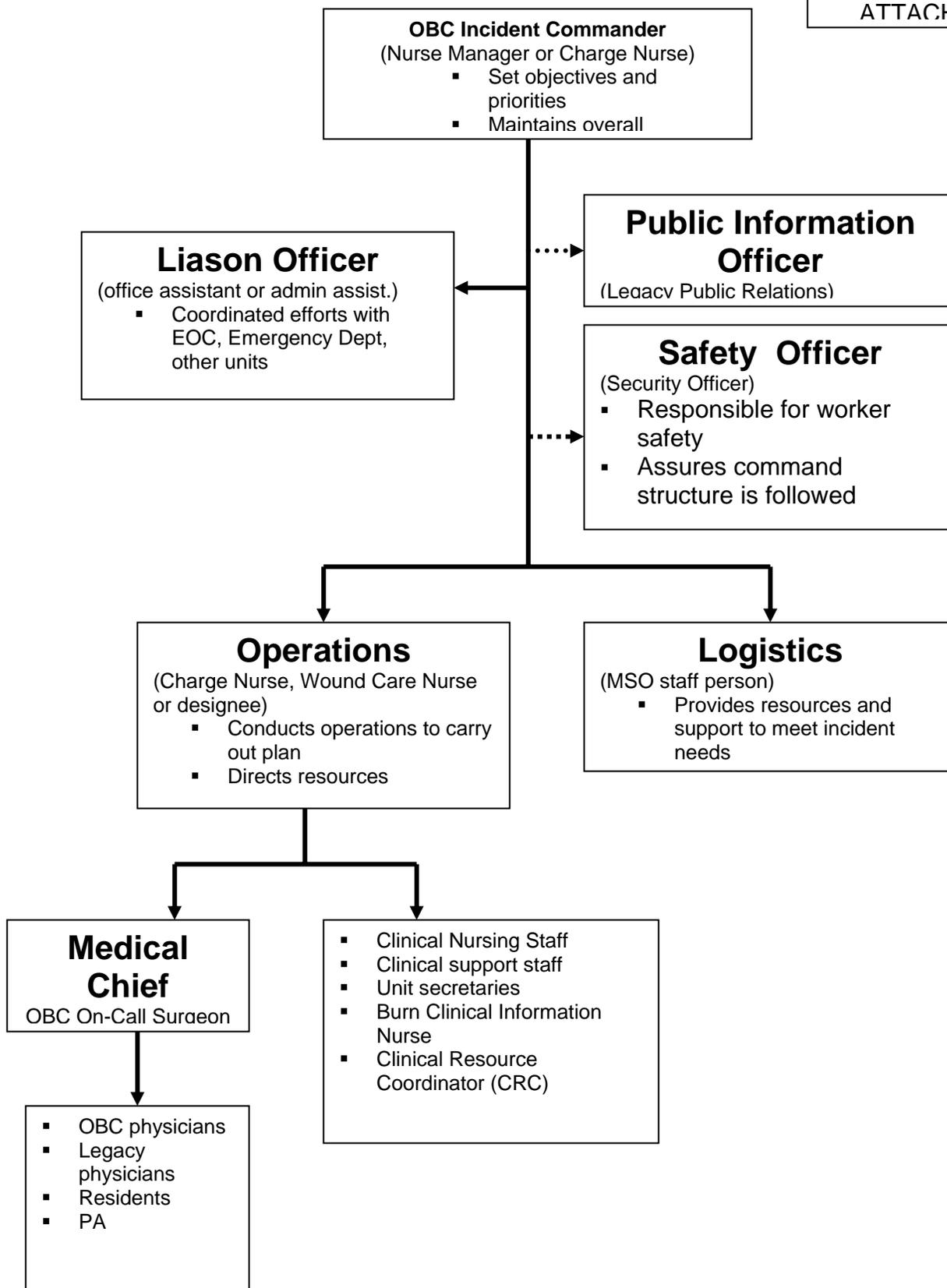
Hospital/Agency Name:	

Name, title and contact information of person calling:

   Name:_____ Title:_____

Phone: _____ext. _____ Email: _____

Patient Information:

    Name:_____ Identifier_____

TBSA: _____ Age:_____

Other injuries/co-morbidities: _____

Family/social issues: _____

Family Contact information:_____
(name, relationship and contact phone number)

Question:

Response/information provided:

Transfer information:
Recipient Facility:_____ Date/Time of Transport:_____

Method of
Transport:_____

FUNCTION	LOCATION	ALTERNATE LOCATION	PHONE NUMBER
Emerg Operations Center (EOC)	**Lorenzen Center room 1702**	**Rooms 1075 / 1077**	**Ph: 34000** **Fax: 413-2573 OR** **413-1030**
Employee Labor Pool	**Room 1075**	**Lorenzen Auditorium**	**Ph: 413-2882** **Fax: 413-0223**
MD Pool	**Lorenzen 1700 A/B**	**MOB East / West**	**Lorenzen 413-2708** **E-413-4527** **W-413-4822**
Media	**Medical Plaza Lobby**	**Medical Plaza Lobby**	
Triage	**ED Ambulance Bay**	**Day Surgery/Presurgical Waiting Area**	**413-4519**
Critical Care Area	**ED Treatment**	**WWICU,**	**ED: 413-4121** **WWICU: 413-2372**
Serious Care Area	**ED Treatment**	**PACU**	**ED: 413-4121** **412-2613** **PACU:413-4211**
Minimal Care Area	**ED Minor Care**	**Ambulatory Care Unit**	**Ph:**
Discharge Area	**Heart Beat Café in Atrium**	**Heart Beat Café in Atrium**	
Dependent Care	**Child Care Across street**		**503-249-5042**
Comfort Care	**MOB East & West**		**413-4748 Desk**
Morgue	**Basement of OBC Building**		**413-4232**
Ambulatory Decon	**Street West of OBC**		**Radios**
Dining	**Department Lounges**		
Employee Entry	**Emergency Department Entrance**	**Lorenzen Center**	

OBC Incident Commander
(Nurse Manager or Charge Nurse)
- Set objectives and priorities
- Maintains overall

Public Information Officer
(Legacy Public Relations)

Liason Officer
(office assistant or admin assist.)
- Coordinated efforts with EOC, Emergency Dept, other units

Safety Officer
(Security Officer)
- Responsible for worker safety
- Assures command structure is followed

Operations
(Charge Nurse, Wound Care Nurse or designee)
- Conducts operations to carry out plan
- Directs resources

Logistics
(MSO staff person)
- Provides resources and support to meet incident needs

Medical Chief
OBC On-Call Surgeon

- Clinical Nursing Staff
- Clinical support staff
- Unit secretaries
- Burn Clinical Information Nurse
- Clinical Resource Coordinator (CRC)

- OBC physicians
- Legacy physicians
- Residents
- PA

OBC INCIDENT COMMANDER
(Charge Nurse, Nurse Manager assumes role upon arrival)

Position Assigned to:
You Report to: _____(LEH Emergency Incident Commander)
Operations Command Center: Lorenzen Center room 1702
Phone: 34000
Fax 32573 or 31030

Mission	Organize and direct emergency operations in the Oregon Burn Center. Give overall directions for OBC operations.
Immediate	❑ Notify Incident Assessment Team through hospital operator of major situation involving burn injury
	❑ Read this entire Job Action Sheet
	❑ Appoint Operations Officer and Medical Chief; distribute job action sheets for each position
	❑ Assign a unit secretary or designee in the department to call the nurse manager, additional personnel, and all available OBC physicians.
	❑ Send by fax or runner staffing status, resource requirements and bed availability to the Hospital EOC
	❑ Request from Hospital EOC the following: Logistics Officer (MOS staff), Safety Officer (security), Liason Officer (office/admin asst.)
	❑ Receive status report and discuss an initial action plan with Operations Officer and Medical Chief
	❑ Authorize a patient prioritization assessment for the purposes of designating appropriate early discharge or transfer.
Intermediate	❑ Request resources from hospital EOC as needed or requested by Operations Officer and Medical Chief
	❑ Maintain ongoing communications with hospital EOC thru the Liason Officer
	❑ Hold routine briefings with Operations Officer and Medical Chief regarding patient status, staffing, logistics and communications
Extended	❑ Observe all staff, volunteers and patients for signs of stress and inappropriate behavior. Remove staff from situation
	❑ Provide for staff rest periods and relief

OBC OPERATIONS OFFICER
(*Charge Nurse, Staff RN*)

Position Assigned to:
You Report to: _____(OBC Incident Commander)
OBC Operations Command Center: Oregon Burn Center
Phone: 34232
Fax: 34592

Mission	Organize and direct unit operations
Immediate	❑ Receive appointment from OBC Incident Commander
	❑ Read this entire Job Action Sheet
	❑ Obtain briefing from OBC incident commander
	❑ Evaluate OBC staff resources
	❑ Request additional staff resources from OBC IC
	❑ Assign one unit secretary or office administrator to answer phones
	❑ Assign unit secretary(s) to take off orders
	❑ Work with Medical Chief to identify OBC patients that can be discharged home
	❑ Work with Medical Chief to identify OBC non-burn patients and patients with lower acuity that can be transferred to other Emanuel inpatient units.
	❑ Assign nursing and support staff to discharge and transfer patients
	❑ Direct staff resources to create capacity for critical care patients
	❑ Convert to 8-16 as critical care rooms
	❑ Prepare to admit patients to the admit/resuscitation room (2) and the shower room
	❑ Set up to admit two (2) patients to ICU rooms 5, 6 and 7
	❑ Complete Bed Availability form and send to the EOC as directed on the form
	❑ Assign Burn Clinical Information Nurse
	❑ Assure that OBC pharmacist is located on site in satellite pharmacy
	❑ Assign nursing and support staff to admit patients as they arrive. 1 RN for each admit, 1 additional support staff to assist
Intermediate	❑ Request additional personnel resources from OBC Incident Commander needed
	❑ Reassign staff resources as required
	❑ Maintain ongoing communications with OBC Incident Commander
Extended	❑ Observe all staff, volunteers and patients for signs of stress and inappropriate behavior. Remove staff from situation
	❑ Provide for staff rest periods and relief

OBC MEDICAL CHIEF
(*Burn Surgeon on call*)

Position Assigned to:
You Report to: _____(OBC Incident Commander)
OBC Operations Command Center: Oregon Burn Center
Phone: 34232
Fax 34592

Mission	Organize and direct overall delivery of medical care in the Oregon Burn Unit. Directs medical staff.
Immediate	❑ Receive appointment from OBC Incident Commander
	❑ Read this entire Job Action Sheet
	❑ Obtain briefing from OBC incident commander
	❑ Assign Burn Surgeon to triage area to assist with prioritization of patient placement
	❑ Assign additional OBC medical staff resources
	❑ With the Operations Officer prioritize patients for discharge, or transfer
	❑ Assign MD to write discharge orders for patients that can be discharged home
	❑ Assign MD(s) and/or PA to admit teams as patients arrive
Intermediate	❑ Request physician resources from OBC Incident Commander as needed
	❑ Reassign medical staff resources as required
	❑ Maintain ongoing communications with OBC Incident Commander
	❑ Participate in routine briefings with OBC Incident Commander and Operations Officer regarding patient status, staffing, logistics and communications
	❑ Communicate with OBC Clinical Information Nurse regarding patients admitted to regional hospitals
Extended	❑ Observe all staff, volunteers and patients for signs of stress and inappropriate behavior. Remove staff from situation
	❑ Provide for staff rest periods and relief
	❑ Immediately respond to emergent calls from the OBC Clinical Information Nurse (pager code# 611)
	❑ Respond to urgent calls from the OBC Communication Nurse
	❑ Review the patient's information and with OBC Clinical Information Nurse and prioritize patients for burn center transfer
	❑ Work with the OBC CRC communicating with ABA recognized burn centers to verify willingness to accept transfer patients.

BURN CLINICAL INFORMATION NURSE
(*Experienced burn staff RN*)

Position Assigned to: You Report to: _____(OBC Operations Officer) OBC Operations Command Center: Oregon Burn Center Phone: 34232 Fax: 34592 Burn Clinical Information Nurse assigned to room: xxxx Phone: Fax:	
Mission	Communications with non-burn hospitals and coordination of transfer of patients requiring definitive burn care to burn centers
Immediate	❑ Receive appointment from OBC Operations Officer
	❑ Read this entire Job Action Sheet
	❑ Obtain briefing from OBC Operations Officer
	❑ Receive all calls regarding patient care and coordinate communication with outside hospitals that have received burn patients.
	❑ Track all calls via the communication log
	❑ Track patient data via the Hos Cap web site: https://capacity.medical.washington.edu/hosp_login.asp?state=Oregon Password:
	❑ For Emergent calls: page the burn surgeon on call and relay the information regarding the emergent call. Use the code # 611 to alert the burn surgeon that the call is an emergent call and related to the disaster
	❑ Non emergent calls: if physician follow-up required communicate info to the on-call burn surgeon
	❑ Direct all callers to enter patient information about disaster victims on the Hospital Capacity Website
	❑ If the hospital that has admitted a burn patient does not know how to access or use the Hos Cap Web site attempt to instruct the caller on it's use.
	❑ If the hospital is unable to enter the data following instruction enter that data. All patients related to the disaster should have data on the Hos Cap Web site. Ask that the hospital fax patient information to facilitate data entry if needed
	❑ Enter data for OBC and Emanuel regarding the burn mass disaster.
Intermediate	❑ Update information about any patients that were entered during a disaster management incident or a Multiple Casualty Incident (MCI). This data will be obtained from E-Chart, as well as from the hospital Emergency Operations Center
	❑ Make further contacts with the hospitals to obtain and clarify patient information
	❑ Review the patient's information and with the burn surgeon on call for will prioritize patients for transfer
	❑ The OBC burn clinical information nurse will notify transferring hospital of recipient site
Extended	❑ Observe all staff, volunteers and patients for signs of stress and inappropriate behavior. Remove staff from situation
	❑ Provide for staff rest periods and relief

OBC LAISON OFFICER
(*Office or administration assistant*)

Position Assigned to:
You Report to: _____(OBC Operations Officer)
OBC Operations Command Center: Oregon Burn Center
Phone: 34232
Fax 34592

Mission	Serve as communication liason between OBC Incident Command and the hospital Emergency Operations Center (EOC)
Immediate	❑ Receive appointment from OBC Incident Commander (via the Hospital EOC)
	❑ Read this entire Job Action Sheet
	❑ Obtain briefing from OBC incident commander
	❑ Share information from EOC with incident commander
	❑ Send by fax or runner staffing status, resource requirements and bed availability to the Hospital EOC
	❑ Assure that both EOC and OBC have regular status reports
Intermediate	❑ Maintain communications with hospital EOC regarding hospital bed capacity, patient location and distribution, OBC staff requirements, OBC logistics requirements
Extended	❑ Observe all staff, volunteers and patients for signs of stress and inappropriate behavior. Remove staff from situation
	❑ Provide for staff rest periods and relief

OBC LOGISTICS OFFICER
(*MSO staff*)

Position Assigned to:
You Report to: _____(OBC Operations Officer)
OBC Operations Command Center: Oregon Burn Center
Phone: 34232
Fax 34592

Mission	Organize and assure medical and non-medical supply resources are available in the burn center. Direct logistic staff resources
Immediate	❏ Receive appointment from OBC Incident Commander (via the Hospital EOC)
	❏ Read this entire Job Action Sheet
	❏ Obtain briefing from OBC incident commander
	❏ Evaluate current medical supply stock
	❏ Assign runner to obtain needed supplies and equipment
	❏ Assign logistics staff to assure rooms are stocked and supplies available
	Assure the following supplies are available in each room for admissions ❏ Suction heads and set-up ❏ Fluid warmers ❏ Ventilators ❏ Central line cart(s) ❏ Bag/mask adult and pediatric ❏ IV infusion pumps ❏ IV tubing
	Assure the following supplies are available in OBC ❏ Ringers Lactate ❏ Oxygen masks, cannulas ❏ IV Morphine, Fentynal and Dilaudid ❏ Urinary catheters, adult and pediatiric and uro-meter bags ❏ Silver Suflfadiazine ❏ Arterial line kits ❏ Kerlix- 6 inch roles ❏ CVC insertion kits ❏ Burn Pads ❏ CVC catheters ❏ Elastic netting ❏ Escharotomy trays ❏ Intubation kits and supplies ❏ Electocautery pads and pencils ❏ Suture – 2.0 silk ❏ Surgery prep trays
Intermediate	❏ Collect and coordinate essential medical equipment and supplies
	❏ Request additional personnel resources from OBC Operations Officer, as needed.
	❏ Reassign staff resources as required
	❏ Maintain ongoing communications with OBC Operations Officer
Extended	❏ Observe all staff, volunteers and patients for signs of stress and inappropriate behavior. Remove staff from situation
	❏ Provide for staff rest periods and relief

Sample letter of understanding

September 1, 2006

[Click **here** and type recipient's address]

Dear name of recipient:

Letter of Understanding for the Transfer of Burn Patient in the Event of a Disaster
The Oregon Burn Center serves the state of Oregon and Southwest Washington, covering approximately 4 million citizens of the two states. The nearest neighboring burn centers are 200, 600 and 800 miles from us. Under the Bioterrorism Act of 2002, we are obliged to plan for a burn disaster that could far exceed the physical and workforce capacity of our burn center. We are currently developing plans for a burn mass casualty event in our region involving 100 patients with burn injury requiring hospitalization. In the event of such an incident the American Burn Association established standards for referral and transfer to a burn unit may need to be compromised during the initial triage, and management period. We anticipate we would need to admit patients both to the Oregon Burn Center and other regional non-burn hospitals. (Our initial triage criteria is enclosed) In the event that we exceed our surge capacity as defined by the ABA, we would look to our neighboring and western regional burn centers to accept patients in need of burn center care. It is our goal that patients that require definitive burn care be transferred to a burn center within seventy two (72) hours of the incident. The Oregon Burn Center is committed to coordinating the prioritization of patient placement, transfer of these patients to your facility and continued follow-up as needed to integrate the burn patient back to our community.
By the same token, we would be happy to participate in such an agreement with your burn center, if you so desire. The sole purpose of this understanding is to facilitate a transfer of burn patients in the event that a disaster occurs in either of our regions. The goal would be to provide excellent care to as may burn patients as possible. If this Letter of Understanding is acceptable to you, please sign below and we will develop this relationship for transfers in the case of a disaster.
Sincerely,

Nathan Kemalyan MD, FACS
Medical Director Oregon Burn Center

_____

Medical Director XXXX Burn Center

References

American Burn Association (ABA) Board of Trustees and the Committee on Organization and Delivery of Burn Care. (2005). Disaster management and the ABA plan. Journal of Burn Care and Rehabilitation 26(2) 102-106
The American Burn Association Plan for the management of mass burn casualties resulting from mass disasters and terrorist acts. Reference source for the triage decision table of benefit to resource ratio based on patient age and total burn size.

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Barillo, D., Jordan, M., Jocz, R., Nye, D., Cancio, L. Hocomb, J. (2005) Tracking the Daily Availability of Burn Beds for National Emergencies. Journal of Burn Care and Rehabilitation 26(2) 174-182.
ABA mechanism for tracking burn unit bed availability in the planning for Operation Iraqi Freedom created a sustainable resource for burn centers to identify bed availability in the event of a MCI.

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Greenfield, E. & Winfree, J. (2005). Nursing's role in the planning, preparation and response to burn disaster or mass casualty events. Journal of Burn Care and Rehabilitation, 26(2) 166-169.
The lessons learned from two Mass Casualty Incidents involving burns. Information includes Non-physician person hours required for the first month after the incident, strategies for staffing and staff satisfaction.

Haberal, M. Guidelines for Dealing with Disasters Involving Large Numbers of Extensive Burns. International Society for Burn Injuries.
Guidelines describes strategies for patient distribution and suggested supplies required for for

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The lessons learned from the fourth deadliest nightclub fire in US history. Patient triage and distribution to burn centers lacked coordination.

Jordan, M. H., Hollowed, K. A., Turner, D. G., Wang, D. S., & Jeng, J. C. (2005). The Pentagon attack of September 11, 2001; A burn center's experience. <u>Journal of Burn Care and Rehabilitation, 26</u>(2), 109-116.
> *The response of a burn center to a MCI involving nine patients with burn injury. Information includes supplies required, emergency and OR resource utilization. A review of patient outcomes and complications is also included.*

Jordan, M. H., Mozingo, D. W., Gibran, N. S., Barillo, D. J, & Purdue, G. F., (2005). Plenary Session II; American Burn Association disaster readiness plan, <u>Journal of Burn Care and Rehabilitation, 26</u>(2) 183-191.

Yurt, R. W., Bessey, P. Q., Bauer, G. J., Dembicki, R., Laznick H., Alden, N., & Rabbits, A. (2005). A regional burn center's response to a disaster: September 11, 2001, and the days beyond. <u>Journal of Burn Care and Rehabilitation, 26</u>(2) 117-124.

Oregon Burn Center Planning Team

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Theresa Meeks RN CCRN – Oregon Burn Center Burn Wound Care Nurse
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Angela Lamvik – Legacy Emanuel Safety and Security