Hospital Surge Plan Checklist and Resources

**Overview**

*Purpose:* The purpose of the Hospital Surge Plan Checklist and Resources is to assist hospitals in developing

and / or up-dating their plans for response to a significant surge event, as well as to provide tools, examples and guides to assist with plan development and implementation.

 *Definition of Surge:*

*A surge event is a significant event or circumstances that impacts the healthcare delivery system resulting in excess demand over capacity and / or capability in hospitals, community care clinics, public health departments, other primary care and secondary care providers, resources, and / or emergency medical services*

Surge, Medical: Describes the ability to provide adequate medical evaluation and care in events that severely challenge or exceed the normal medical infrastructure of an affected community (through numbers and/or types of patients)

Capability, Surge: The ability to manage patients requiring unusual or very specialized medical evaluation and care. Surge requirements span the range of specialized medical and health services (expertise, information, procedures, equipment, or personnel) that are not normally available at the location where they are needed (e.g., pediatric care provided at non-pediatric facilities or burn care services at a non-burn center). Surge capability also includes patient problems that require special intervention to protect medical providers, other patients, and the integrity of the medical care facility. To achieve surge capacity the facility will need to review the need for additional patient beds, available space for triage and treatment areas, as well as the management of the surge space. Surge capacity may be achieved by early discharge of patients, cancellation of elective admissions, and transfer to other healthcare facilities, placing beds, in nontraditional surge locations. This capability applies to a wide range of incidents and emergencies including accidental or deliberate disease outbreak, natural disasters, chemical and conventional explosive events.

Capacity, Surge: The ability to evaluate and care for a markedly increased volume of patients—one that challenges or exceeds normal operating capacity. The surge requirements may extend beyond direct patient care to include such tasks as extensive laboratory studies or epidemiological investigations.

*Surge Plan*:

A hospitals surge plan may be incorporated into its emergency operations plan, as an annex to its CEMP or other such document. Many of the elements may already be included in the EOP, CEMP or other plans, policies, and procedures.

The facility surge plan will need to address internal and external communication regarding current emergency status for surge levels, the type scope, and expected duration of an event, and escalation and de-escalation of the event. In addition the plan should also include JAS, task checklists and other tools for activating and implementing the surge plan.

Surge Capacity Partners

* EMS (and other patient transportation resources)
* Emergency Management
* Public Health
* Public Safety/Law enforcement
* Healthcare Systems
* Hospitals and Hospital associations
* Red Cross
* Behavioral health
* Jurisdictional legal authorities
* Professional associations including pharmacy, medical, nursing, mental health

*Planning Assumptions*:

* There will be little to no prior notice of the event
* The closest hospitals to an incident will be inundated with self-referral (walk-in)

Patients

* Mutual aid agreements may be activated and need for response has overwhelmed this capability.

Staff: A surge event will cause the hospital to consider surge specific staffing needs and to plan accordingly.

Space: Hospitals and other facilities will need to address the fact that hospital beds and space to care for expanded number of sick individuals will be limited.

Supplies and Equipment: Many hospitals operate using a “just-in-time supply chain,” which means very limited supplies are stored on-site and instead are replenished on an as- needed basis.

Capacity Expansion:

* Non-traditional Clinical Space
* Non-traditional Non -Clinical Space
* Traditional Clinical

Processes and System: While hospitals train employees for job-specific tasks and roles, employees may need to assume other tasks/roles during a disaster

*Preparedness:*

Just in Time Training - . While hospitals train employees for job-specific tasks and roles, employees may need to assume other tasks/roles during a disaster. These may include patient transport, use of eFinds, triage and other assignments.

Plan Development

* Begin to assess current discharge practices in your own institutions by asking:
	+ Who are the key individuals involved in the discharge process?
	+ Do you have unit-based discharge teams?
	+ Do you have length-of-stay teams?
	+ Do you have an “Intend to Discharge Form”?
	If so, how is it used?
	+ Do you have policies and procedures governing patient discharge?

*Mitigation*- Develop medical mutual aid agreements for medical facilities and equipment

Sorting Sorting describes provisions to forward deploy triage or pre-screening sites in order to provide appropriate safe and efficient care in an alternate triage location.

Space: Space describes the physical infrastructure and utilities available.

Staff: Just In Time Training will involve a situation report to all staff responding the activation of this plan.

Supplies: A supply list should be created to meet the needs of the surge event.

Systems: Refer to CEMP or other hospital policy/procedure manual. Additional information will be included during the staff just in time briefing

*Response:*

Plan Activation Triggers (see Attachment for CEMP activation matrix):

Trigger One: Information received indicating a situation or event that will have an actual or potential unusual impact on facility operations.

Trigger Two: An actual situation or event that is having a minor unusual impact on facility operations.

Trigger Three: An actual situation or event that is having a moderate unusual impact on facility operations

Trigger Four: An actual situation or event that is having a major unusual impact on facility operations

*Hospital Surge Categories:*

Triage done in the field will have a significant impact on the subsequent healthcare surge capacity system

* Pharmaceuticals
* Mental Health
* Beds
* Staffing
* Mass Casualty Triage
* Medical Equipment

Early Patient Discharge: The following departments / staff should be activated

* Medical Staff
* Case Managers for patient assessment
* Social Workers
* Hospitalists – for patient assessment

*Communications:*

Communication during a surge event is a crucial point that must be included in the plan and have a degree of redundancy. This redundancy should include GETS cards, and the use of the TSP restoration service. In the event of a surge incident, communication among the medical staff will need to be integrated to all other aspects of the plan

Staff members may be required to remain on duty for long durations or be housed by the hospital during an event. When possible, communication mechanisms (e.g., phones, e-mail) will be established so that staff members can remain in contact with their families or to conduct essential business (e.g., banking, bill payment). Information about the event and its impact on staff duty hours will be provided at regular intervals so that ongoing family support needs (e.g., elder care, child care, pet care) can be arranged.

Effective and timely communications are essential to functional command and control; admittedly, communication failure (prehospital, hospital, and public) is a recurrent theme during and immediately after a disaster.

*Resources and Assets* -Many hospitals operate using a “just-in-time supply chain,” which means very limited supplies are stored on-site and instead are replenished on an as- needed basis. The Assessment Tool prompts hospital planners to identify supplies and equipment that may needed and could be difficult to obtain or quickly replenish and consider alternatives

Surge Capacity Resources for Hospitals

|  |  |
| --- | --- |
| Beds | Emergency department beds, intensive care unit beds, general acute care beds, mental health beds, pediatric beds |
| Staffing | Physicians, nurses, pharmacists, mental health professionals, emergency medical technicians, public health professionals and nonprofessional and support staff |
| Supplies and Equipment  | Pharmaceuticals, personal protective equipment (PPE), portable and fixed decontamination systems, isolation beds, ventilators, masks |

Surge Beds: Establish systems that, at a minimum, can provide triage, treatment and initial stabilization, above current daily staffed bed capacity.

*Safety and Security*

Safety and security is a vital aspect of preparedness and response. Hospital security planning will need to address personnel safety, patient safety, and resource safety.

Medical surge receives perimeter security from Emergency Public Safety / Security Response.

*Management of staff* - Hospitals should consider surge specific staffing needs and to plan accordingly. The plan should include a method to notify off duty personnel, and a method for a staged recall of personnel.

* Implement emergency credentialing and privileging procedures.

*Management of Utilities –* The hospital will need to consider how to manage their utilities to maximize the surge space.

*Special Concerns* – Coordinate public health and medical services for those individuals who have been isolated and quarantined.

The Matrix is organized into four different activation levels. For each (1) level (row), the columns from left to right indicate (2) the definition or parameters for determining whether the hospital has reached the noted level, (3) who has the authority to activate the CEMP at that level, (4) a sense of the likely scope of HICS activation at that level, and (5) the notifications to be made when that level is activated.

**1**

**2**

**3**

**5**

**4**

| ***Activation Level*** | ***Definition/Parameters*** | ***Authority to Activate*** | ***Anticipated HICS Activation*** | ***Notifications*** |
| --- | --- | --- | --- | --- |

| ***Definition/Parameters*** |
| --- |
| An actual situation or event that is having a **minor** unusual impact on facility operations. |
| ***Emergency Department and Clinical Factors*****7** |
| Patients from single event | 10 actual patients, or 3 major trauma patients |
| ED waiting time | Greater than 4 hours |
| Increase in ED patient census | Greater than 50 percent above normal over 8 hours |
| Increase in in-patient census (surge) | 1-10 patients admitted above licensed bed count |
| ***Logistical Factors*** |
| Facilities | Physical plant or utility disruption that is limited, contained, and/or has a minor impact on operations (e.g., a partial system failure; failure of a non-mission-critical system) |
| Staff | 15 percent of staff not available for duty |
| Supplies/Materiel | Actual or projected supply shortage of non-critical items, or 48 hours supply remaining of critical items |
| Internal occupancy | Need for horizontal evacuation of patients/visitors/staff from an area of a building |

Within the Definition/Parameters section (2), a broad description is found of the impact level. In Levels 2-4, this is followed by a set of *factors* (6) and *corresponding values* (7) in two groups: Emergency Department and Clinical Factors, and Logistical Factors.

**6**

Experience has shown that no matter what impact-causing event may affect the hospital, it will be detected by influencing at least one of these factors. The hospital’s challenge is to customize the values for each factor to appropriately reflect the degree of impact (minor, moderate, or major). In this way, when the impact level is achieved, it will be readily, objectively, and consistently noted by leadership, who should then be expected to activate the plan accordingly.

A section has been added to reflect the ability of ED leadership to activate the Casualty Care Group immediately upon discovering a situation that meets CEMP activation criteria. The concept here is that the ED is the “tip of the spear.” While notifications may take minutes to flow through the hospital, and more time may be taken by remote leaders in obtaining and evaluating information about an incident, the ED operates in real time; their patients or problems may confront them with no notice. The best practice here is a preparedness-based ED that has staff identified on every shift for their Casualty Care Group assignments, which may be instantly activated by the ED charge nurse. Subsequent notification to the hospital decision-maker on duty reports the Group’s activation, and makes a recommendation regarding follow-on activation of the full CEMP.

*The attached matrix should be revised as needed by the healthcare facility to meet its needs to become site specific*

Anticipated HICS Group Activation should be based on the size of the hospital, amount of staff and the needs of the actual activation. List positions that you will to staff at each level.

Notifications: List positions that will need to be notified at each HICS level, based on your facilities needs and CEMP.

Emergency Department and Clinical Factors should reflect your facility based on the present and anticipated surge needs

Logistical Factors play a very important role to determine if the infrastructure is overwhelmed.

*Activate medical surge plans, procedures, and protocols to ensure medical treatment*

# Empire County Hospital Emergency Operations Plan Activation Matrix

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Activation Level*** | ***Definition/Parameters*** | ***Authority to Activate*** | ***Recommended HICS Activation*** | ***Notifications*** |
| **1** **Alert/Notification** | Information received indicating a situation or event that will have an actual or potential unusual impact on facility operations.*Examples:** National Weather Service issuance - blizzard / hurricane / tornado watch or warning
* Notification from EMS system of a multiple casualty incident (MCI) that may generate patients to the facility
* Activation of internal fire alarm (fire not confirmed)
* Emergency Department (ED) exceeding bed saturation level (admitted patients holding)
 | Administrator on Duty (Business Hours) / Nursing Supervisor (all other times)*Note: Activation can occur at any level and does* ***not*** *require a stepwise sequence of activation. All activities and notifications consistent with lower levels shall be implemented concurrently.* | * Incident Commander
* Command and General Staff ***as needed***
* Individual resources as needed
 | * Administrator on Call
* Emergency Department Charge Nurse
* Emergency Management Coordinator
* Environmental Services Supervisor
* Facilities Engineering Supervisor
* Health System or Network EOC
* Nursing Office
* Safety Officer
* Security Supervisor
* Telecommunications
* Other departments/units/managers as conditions warrant
* Local government/ public safety / public health / EOC (if services, support, or information needed), NYS DOH (as needed)
 |
| **C**asualty Care Group Activation/ Response | An immediate or imminent situation arising in the Emergency Department meets EOP activation criteria. *Examples:** Unexpected arrival of multiple casualties or contaminated casualties
* Incident notification received in the ED from a public safety source indicating the impending arrival (within 15 minutes) of multiple patients from an incident
* Outbreak of an Illness, fire, or unusual situation in the ED
 | ED Charge Nurse(Casualty Care Group Supervisor)ED Director / Supv.  | * Casualty Care Group Supervisor
* Triage Unit Leader
* Immediate Treatment Unit Leader
* Delayed Treatment Unit Leader
* Minor Treatment Unit Leader
 | * Incident Commander–designee:

Administrator on Duty (Business Hours)Nursing Supervisor (all other times) |

| *Activation Level* | *Definition/Parameters* | *Authority to Activate* | *Anticipated HICS Activation* | *Notifications* |
| --- | --- | --- | --- | --- |
| 2MinorImpact | An actual situation or event that is having a minor unusual impact on facility operations. | IncidentCommander | ***Assigned as needed*** * Incident Commander
* Operations Section Chief
* Command Staff as needed
* Liaison Officer
* Safety Officer
* Public Information Officer
* Branches / divisions / groups / units / individual resources as needed
 | * Administrator on Call
* Emergency Department Charge Nurse
* Emergency Management Coordinator
* Environmental Services Supervisor
* Facilities Engineering Supervisor
* Health System or Network EOC
* Nursing Office
* Safety Officer
* Security Supervisor
* Telecommunications
* Other departments/units/managers as conditions warrant
* Local government/ public safety/ public health / EOC (if services, support, or information needed)
 |
| Emergency Department and Clinical Factors |
| Patients from single event | 10 actual patients, or 3 patients requiring immediate ICU or OR services |
| ED waiting time | Greater than 4 hours |
| Increase in ED patient census | Greater than 50 percent above normal over 8 hours |
| Increase in in-patient census (surge) | 1-10 patients admitted above licensed bed count |
| Logistical Factors |
| Facilities | Physical plant or utility disruption that is limited, contained, and/or has a minor impact on operations (e.g., a partial system failure; failure of a non-mission-critical system) |
| Staff | 15 percent of staff not available for duty |
| Supplies/Materiel | Actual or projected supply shortage of non-critical items, or 48 hours supply remaining of critical items |
| Internal occupancy | Need for horizontal evacuation of patients/visitors/staff from an area of a building |

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| --- | --- |
| Recommended Resources * Hospital Beds
* Additional Clinical Staff
* Bed Management staff to provide tracking and movement of patients
* Mobilize non-medical support staff (Activate Labor Pool)
 | Actions * Activate medical surge plans, procedures and protocols
* Consider early discharge of in-patients
 |

| ***Activation Level*** | ***Definition/Parameters*** | ***Authority to Activate*** | ***Anticipated HICS Activation*** | ***Notifications*** |
| --- | --- | --- | --- | --- |
| **3****Moderate Impact** | An actual situation or event that is having a **moderate** unusual impact on facility operations. | IncidentCommander | * Incident Commander
* Operations Section Chief
* Logistics Section Chief
* Command Staff
* Liaison Officer
* Safety Officer
* Public Information Officer
* Medical / Technical Specialists as needed
* Planning Section Chief as needed
* Finance/Administration Section Chief as needed
* Branches / divisions / groups / units / individual resources as needed
 | * Administrator on Call
* Emergency Department Charge Nurse
* Emergency Management Coordinator
* Environmental Services Supervisor
* Facilities Engineering Supervisor
* Health System or Network EOC
* Nursing Office
* Safety Officer
* Security Supervisor
* Telecommunications
* Other departments/units/managers as conditions warrant
* Local government/ public safety/ public health / EOC (if services, support, or information needed)
 |
| **Emergency Department and Clinical Factors** |
| Patients from single event | 20 actual patients, or 5 patients requiring immediate ICU or OR services |
| ED waiting time | Greater than 8 hours |
| Increase in ED patient census | Greater than 100 percent above normal over 8 hours |
| Increase in in-patient census (surge) | 11-30 patients admitted above licensed bed count |
| **Logistical Factors** |
| Facilities | Physical plant or utility disruption affecting a major or mission-critical area or system, or affecting general operations  |
| Staff | 25 percent of staff not available for duty |
| Supplies/Materiel | Actual or projected supply shortage of critical items, or 24 hours supply remaining of critical items |
| Internal occupancy | Need for vertical evacuation of patients/visitors/staff from one floor of a building |
| Event duration | Level 2 event lasting greater than 8 hours |

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| Recommended Resources IN ADDITION TO LEVEL 2 RESOURCES * Assess initial and ongoing need for medical specialists and use as needed
* Ensure adequacy of medical equipment and supplies for restocking supplies and equipment requested
 | Actions * Activate alternate care sites within the facility and overflow emergency care facilities to manage hospital surge capacity
* Complete early discharges
* Consider transfer of some patients to other facilities.
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| ***Activation Level*** | ***Definition/Parameters*** | ***Authority to Activate*** | ***Anticipated HICS Activation*** | ***Notifications*** |
| --- | --- | --- | --- | --- |
| **4****Major****Impact** | An actual situation or event that is having a **major** unusual impact on facility operations. | Incident Commander, in consultation withhospital CEO | * Incident Commander
* Operations Section Chief
* Logistics Section Chief
* Planning Section Chief
* Finance/Administration Section Chief
* Command Staff
* Liaison Officer
* Safety Officer
* Public Information Officer
* Medical / Technical Specialists as needed
* Branches / divisions / groups / units / individual resources as needed
 | * Administrator on Call
* Emergency Department Charge Nurse
* Emergency Management Coordinator
* Environmental Services Supervisor
* Facilities Engineering Supervisor
* Health System or Network EOC
* Nursing Office
* Safety Officer
* Security Supervisor
* Telecommunications
* Other departments/units/managers as conditions warrant
* Local government/ public safety/ public health / EOC (if services, support, or information needed)
 |
| **Emergency Department and Clinical Factors** |
| Patients from single event | 50 actual patients |
| ED waiting time | Greater than 12 hours |
| Increase in ED patient census | Greater than 200 percent above normal over 8 hours |
| Increase in in-patient census (surge) | 31-50 patients admitted above licensed bed count |
| **Logistical Factors** |
| Facilities | Physical plant or utility disruption affecting multiple areas or systems |
| Staff | 40 percent of staff not available for duty |
| Supplies/Materiel | Critical shortage of essential items |
| Internal occupancy | Complete evacuation of a patient care building |
| Event duration | Level 3 event lasting greater than 24 hours |

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| --- | --- |
| Recommended Resources IN ADDITION TO LEVEL 3 RESOURCES * Regional resources that may be available from the local OEM
* Regional resources that may be available from the NYS DOH
 | Actions * Active MOU / MOAs as needed
* Request regional resources
 |