Region X Multiple Patient Plan
START Triage
JumpSTART Triage

2014 Mod I ECRN CE
Condell Medical Center
EMS System
Site Code: 107200E-1214

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Objectives

Upon successful completion of this module, the ECRN provider will be able to:

1. Describe the benefits of development and execution of a mass casualty plan.
2. Identify the components of the Region X Multiple Patient Plan (amended March, 2013).
3. Describe the purpose and function of triage, treatment, transportation, and staging sectors.
4. Describe the similarities and differences between the roles in the field versus hospital
Objectives cont’d

5. Describe the role of the Resource and Associate hospitals
6. Describe the purpose of START and JumpSTART triage.
7. Outline the components of the triage process following START and JumpSTART triage.
8. Describe the function and process of using color coded SMART® triage tags
9. Describe implementation of the Region X Multiple Patient Plan.
Objectives cont’d

10. Review case scenarios presented.
11. Given a variety of triage situations, determine the triage level for the patient.
12. Review guidelines for application of spinal immobilization/spinal motion restriction.
13. Review responsibilities of the preceptor role.
14. Successfully complete the post quiz with a score of 80% or better.
Definition Mass Casualty Incident

- Can vary from agency to agency and region to region
- In general:
  - Any incident that depletes the available on-scene resources at any given time
- Generally classified based on magnitude and impact on local resources
  - Ex: MVC with 6 victims up to after-math of a tornado touch down
Benefits: Mass Casualty Plan Development

- Allows an organized and structured approach to a chaotic situation
- Allows community agencies to cross borders and integrate into other geographic areas of need
Benefits: Mass Casualty Plan Execution

- Following well-known frameworks (i.e.: National Incident Management System (NIMS)), all responders work along a common pathway
  - Standardized language and behaviors make crossing territorial lines easier
Components of the Region X Multiple Patient Plan

- Assigned responsibilities to EMS providers and hospitals to coordinate resources and activities when needed
- A classification system for orderly disbursement of patients from the field to hospitals
- Uniform operational guidelines for handling multiple victims
Components cont’d

- A specified communications network from the field to the hospital
- Basic guidelines for management of an emergent evacuation of a healthcare facility
Sectors Established in the Field

- Command
- Triage
- Treatment
- Transportation

- Sectors are established based on need and resources available in the field
- 1 person/sector may take on several roles simultaneously
  - Depends on nature of incident
  - Depends on available qualifications and number of resources
Crossover Roles

- Many roles performed in the field at the site of the incident are performed inside the hospital – may use different terms
  - Occasionally, modifications need to be made

- Incident may occur within the hospital
  - Field responses would be intertwined with hospital responsibilities
  - Definite need to understand each other’s roles
Identification of Leaders

- Roles of authority must be easily identified field & hospital
  - Your department may know by face and voice all your own members
  - Need to be able to identify by sight (i.e.: vests, arm bands, helmet/hat) figures in key roles
Purpose and Function of Command

- Oversees and runs entire incident
- Many activities need to be coordinated
- May need to delegate certain functions and responsibilities to others based on nature and size of incident
- Training and cross training very important for best execution of any plan
Command cont’d

- Generally a role taken by most senior person present
- Initially must be assumed by first responding provider
  - This is true in the field and in the hospital
  - Early decisions can set the tone for a smooth or rocky course for response to the incident
Purpose and Function of Triage Sector

- To sort patients based on severity of injuries
- **Goal:** to do the most good for the most people
- Triage drives subsequent operations
- One of the first functions that must be done at any incident
- At hospital, normally redone at point of entry into the facility
Region X Plan – Field Triage Unit Leader

- Provides coordination for effective categorization & transportation of patients from incident to treatment area
- Supervises triage personnel
- Determines and relays number of patients and general acuity to Medical Group Supervisor
- Confirms all patients have been triaged
- Can be reassigned when primary triage is complete
Primary Triage

- Performed upon first contact with the patient field & hospital
- Needs to be completed quickly and efficiently
- Universally recognized categories:
  - **Red** – immediate care necessary
  - **Yellow** – delayed care acceptable
  - **Green** – minimal care required
  - **Black** – dead or not salvageable
Secondary Triage

- An ongoing dynamic process
- Occurs throughout the incident
  - When moved to treatment areas
  - When receiving medical care
  - When being transported off the scene
  - While receiving care at all points along continuum
- Patients may change over time and need to be upgraded or downgraded
Purpose and Function of Treatment Sector

- To initiate treatment and continue ongoing assessments
- Will require availability of medical equipment
- Patients separated into like categories
  - Allows prioritization of patient treatment and decisions for transportation
Treatment Sector cont’d

- Manner of setting up this area needs forethought
- Best to color code zones with universal colors
  - In hospital, may be designated separated areas
- Can use tarps, cones, flags, tape
- In field, need organized manner for moving patients into treatment AND exiting treatment moving to transportation
Identification Within Field
Treatment Sector
Region X Plan - Treatment Unit Leader

- Establishes and maintains patient treatment area
- Oversees EMS personnel treating and reassessing patients
  - Same responsibilities in the hospital
- Prioritizes patients for transport to hospitals
Purpose and Function of Field Transportation Sector

- Transportation officer must coordinate with staging officer and treatment officer
- Efficient to have one egress pathway for moving ambulances from the scene to area hospitals
- Accurate communication is essential from the scene to receiving hospitals
Transportation cont’d

- Patient tracking is necessary
  - SMART tag transportation strip removed when patient transported from scene
- Hospital communication must start early
  - Should be started by first arriving unit on scene
    - This is the “heads-up” notification so hospitals can prepare to receive patients
  - Continued and early updates important
Region X Plan – Transportation Unit Leader

- Establishes loading of ambulances and records patient destinations
- Communicates with Resource Hospital
  - Number of patients
  - Triage categories
  - Receive & record hospital capabilities as reported by Resource Hospital
  - Specific hospital destination information given to Resource Hospital for number of pts and triage category
Transportation Unit Leader cont’d

- Establishes patient loading area
  - Coordinates with Staging Officer for safe access and egress of ambulances
- Communicates with Staging Area Unit Leader for number of BLS or ALS ambulances
- Notes each patient’s triage tag number on a log
- Assigns destination hospital to each transporting ambulance
Hospital Responsibilities

- Each ECRN needs to review specific duties and responsibilities as a receiving facility
- Staff at Advocate CMC need to know the Resource Hospital responsibilities and duties
- Staff at Northwestern Lake Forest and GEC need to know the Associate Hospital responsibilities and duties
- ALL FACILITIES need to know responsibilities and duties of a receiving hospital!
- Review the Region X Multiple Patient Management Plan at your facility
Do You Know Where Your Plan Is?
Open the plans – review esp pgs 4-5, 7-9

- Advocate Condell
  - Red notebook above the radio
  - “Disaster Plans”
- Northwestern Lake Forest
  - Black Notebook in cabinet above nsg station sink
  - “Multiple Patient Management Plan”
- Northwestern GEC
  - Red binder on desk by radio
- Forms for review & reproduction in Appendix
Hospitals on By-Pass

- Pre-hospital providers could contact the hospital for discussion regardless of by-pass status
- For small scale incident, ED physician will make decision, after discussion with field personnel, to accept or divert patient(s)
- For medium and large scale incidents, hospitals must receive patients regardless of by-pass status
Hospital Communications

- Small scale incidents
  - Closest hospital will serve as communication link from field

- Medium and large scale incidents
  - Resource Hospital serves as a resource
    - Communication link between field and all potential receiving hospitals

- All hospitals could (and should prepare to) serve as receiving facilities
Receiving Hospital Responsibilities

- All hospitals should anticipate a rapid transport of 2 critical patients from the scene prior to a more formal organized transport process being developed
  - These patients are critical and need to move off the scene
    - They cannot wait for all the phone calls to be in place before deciding where to transport the patient
Small Scale Incidents

- Each hospital may serve as Medical Control
  - Closest appropriate hospital can decide to accept all patients or coordinate distribution with field personnel
- Attempt to keep family members together, if possible
- Will receive normal field communication and report on individual patients
- Cannot divert transport when a multiple patient incident has been declared
Role of Resource Hospital

Medium and Large Scale Incident

- Contacted from field for immediate resource assistance
- Assumes role of Hospital Command
  - Serves as Medical Control throughout incident
  - Provides transport management for the field
- Consider activation of internal plan
- Serve as communication link to receiving facilities
  - No direct patient reports received from the transporting ambulance
Resource Hospital cont’d

- Initiate “Hospital Communication Flow Sheet” as a log of activity (plan Appendix)
  - Collaborate with scene personnel regarding needs
  - Assess potential receiving hospitals resources
  - Report information back to field contact
- Serve as Hospital Command liaison with disaster and public agencies
- Complete After Action Report (plan appendix)
Purpose of START Triage

- Widely recognized system
- Simple triage and rapid transport
- Based on anatomical and physiological criteria
- Focuses on 4 areas
  - Ability to walk
  - Respiratory effort
  - Pulses/perfusion
  - Neurological status
START Triage

- This is a classification system
- Not influenced by number of victims
- Not influenced by number of resources available
- **VERY** limited treatment provided in triage
  - Manually open an airway
  - Clear an airway with finger sweep
  - Control major bleeding
    - Remember – you can use “well” bystanders as resources to help
START Triage Principles

Need to know:

✓ What to do upon first encounter with patient
✓ How to assess each victim in under one minute
✓ How to prioritize patients

Begin triage where you are standing
Separate the “greens” from more critically injured
Work moving in forward direction
Utilize the non-injured (i.e.: “green”) to help sicker patients
- Keep airway open
- Direct control of bleeding

Once category decided, **STOP** the assessment, tag the patient, and move onto the next victim
- You’ve already got your category, further triage will not change the patient’s condition!
START Triage Formats

- A variety of views available for the layout of START triage process
- Steps are ALL THE SAME!
- Find the visual pattern that makes sense to you and follow it
- This process works for the field and hospital staff as when receiving a surge of patients
Victim can walk?

NO

Assess breathing without opening the airway

Victim breathing?

NO

Open airway

YES

Assess respiratory rate

> 30/min?

NO

Take pulse at wrist

Present?

YES

Assess level of consciousness

Responsive?

NO

BLACK

YES

YELLOW
START Triage

RESPIRATIONS

NO

Position Airway

NO

Dead or Expectant

YES

Immediate

YES

Over 30/min

PERFUSION

Under 30/min

Cap refill > 2 sec

Control Bleeding

Immediate

Immediate

Cap refill < 2 sec.

MENTAL STATUS

Can follow simple commands

Immediate

Delayed

Failure to follow simple commands
START Triage First Step

- All patients who can get up and walk are instructed to move away from the actual site; but stay close by
  - State location where the patients should congregate
  - These patients’ primary triage category is "green"; at least initially
    - Patient to be tagged by staff in GREEN area
  - These patients will receive secondary triage; category may/may not change
First Step Triage cont’d

- Any patients remaining (i.e.: did not walk away) require MORE triage
- Will be either red, yellow or black
- Further assessment progresses with “RPM” steps
  - Respiratory effort
  - Pulses/perfusion
  - Mental status
- Note: Once triage category decided, stop assessment process, tag patient, and move on
Next Step – Assess Respirations

- Not breathing → manually open airway
  - No time to be concerned about C-spine precautions
  - Patient will certainly die if no intervention provided

✓ If patient starts breathing, tag RED
  ✓ Stop assessment; move to next patient
✓ If patient not breathing, tag BLACK
Respiration Assessment cont’d

- Breathing >30 tag **RED**
  - Stop assessment, move to next patient
- Breathing <30/minute, continue assessment process

- Note: You are not to stop to correct respiratory rates
- *ONLY* airway intervention in triage is to open an airway
Next Step: Assess Perfusion

- Check for radial pulse or capillary refill
  - Pulse absent or capillary refill >2 seconds, tag RED
    - Stop assessment; move to next patient
  - Radial pulse present or capillary refill <2 seconds, move onto next step in assessment

- Note: Only stop in this assessment step is to control bleeding via direct pressure
- Consider use of bystander/another victim
Last Assessment Step: Mental Status

- Patient cannot follow simple commands, tag **RED**
  - This will include unconscious patients
- Patient can follow simple commands, tag **YELLOW**

- Note: You should be through these steps within 1 minute of first interaction with the patient
Remember Focus of Triage

- This is to be a fast process
- Very limited interventions performed
  - Manually open airway if patient not breathing
  - Control bleeding with direct pressure
    - Consider using available resources such as available by-stander or another less injured victim
- Once you have determined the patient’s triage status, tag them and move on
  - No need to continue triage to end of algorithm for each patient if determined to be RED or BLACK early in assessment process
Purpose of JumpSTART Triage

- Objective tool specifically designed for children 1 – 8 years of age
- Based on anatomical and physiological criteria
- Parallels START system for adults
- Reduces emotional burden of making triage decisions on children
  - Reduces risk of over triage
JumpSTART

- For babies under 1 perform the secondary triage process
  - These patients will not “get up and walk” to another area
  - No infant under 1 is to be a “green”
  - Place infants under 1 in the yellow or red category after secondary triage
    - Complete GCS
    - GCS conversion points added to systolic B/P and respiratory rate conversion points
Key Differences START and JumpSTART Triage

- Non-ambulatory infants receive first evaluation in secondary triage.
- If child patient remains apneic after airway repositioned and pulse is present, provide 5 rescue breaths before tagging patient **BLACK**
- Respiratory rate range changes to <15 or >45 for children 1-8 years old.
- Mental status evaluated following AVPU scale for children 1 – 8 years old.
AVPU Scale

A process for quickly evaluating the mental status of a patient

- **A** – awake/alert; not necessarily oriented
- **V** – responds to verbal stimuli*
- **P** – responds only after pain or tactile stimuli added*
- **U** – unresponsive; flaccid

*Note: response may be as minimal as eyelid flickering
Designed for use with children 1 – 8 years of age
Color Coded SMART® Triage Tags

- Designed to show one color at a time
- Card can be refolded if change in patient status
  - Primary triage used to sort and tag victims
  - Secondary triage in treatment sector prioritizes treatment and transportation goals
- Use elastic band to attach to victim’s upper extremity
Triage Tags
Under Low Light Conditions

- Mini-light glow sticks provided in kits to help identify RED tagged patients in low light conditions
  - The most serious need to be attended to and transported as soon as possible
  - Can only attend to the most serious patient if you can find them
Secondary Triage

- Prioritizes treatment and transportation decisions
- Reassess each patient in treatment area
- Based on anatomic and physiologic criteria
  - Glasgow coma scale (GCS), respiratory rate, systolic blood pressure
- Results dictate treatment and transport priorities
- May indicate need for change in triage status
  - SMART triage tag can be refolded if necessary
Eye opening:
- Spontaneous: 4
- To voice: 3
- To pain: 2
- None: 1

Verbal response:
- Orientated: 5
- Confused: 4
- Inappropriate words: 3
- Incomprehensible words: 2
- No response: 1

Motor response:
- Obey commands: 6
- Localizes: 5
- Pain withdraws: 4
- Pain flexion: 3
- Pain extension: 2
- No response: 1

Glasgow Coma Scale Total: [ ]

<table>
<thead>
<tr>
<th>Total Glasgow Coma Scale</th>
<th>13 - 15</th>
<th>9 - 12</th>
<th>6 - 8</th>
<th>4 - 5</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory Rate</td>
<td>10 - 29</td>
<td>more than 29</td>
<td>6 - 9</td>
<td>1 - 5</td>
<td>0</td>
</tr>
<tr>
<td>Systolic BP</td>
<td>90 or more</td>
<td>76 - 89</td>
<td>50 - 75</td>
<td>1 - 49</td>
<td>0</td>
</tr>
</tbody>
</table>

12 = Minimal 3
11 = Delayed 2
10 or less Immediate 1

Time: [ ] [ ] [ ]
Implementation of the Region X Multiple Patient Plan

- Allows response to an incident to be effective and efficient
  - Provides optimal patient care without taxing any single pre-hospital provider or healthcare facility resources
- Activated for small, medium, and large scale incidents
- Activated for emergent evacuation of a healthcare facility with patients requiring medical care
Definition Incident Types - “Business as Usual”

- Can be managed with routine resources
- Usually involves less than 3 responding ambulances
- Command and General Staff positions (other than Incident Command) are usually not activated
- Incident usually contained within first operational period & often terminates within an hour
Definition Incident Types
Small Scale Incident

- Will require more than routine resources to mitigate incident
- Usually involves 3-6 ambulances
- Command and General Staff functions activated if required
- Incident generally limited to one operational period in control phase
Definition Incident Types

Medium Scale Incident

- Capabilities exceed typical initial emergency response
- Appropriate incident command system (ICS) positions added to match complexity of incident
- Usually involves 6-10 ambulances
- Incident may extend into multiple operational periods
Definition Incident Types

Large Scale Incident

- Generally extends beyond capabilities of local control
- May require multiple operational periods
- Involves more than 10 ambulances
- Most or all of Command and General Staff positions filled
<table>
<thead>
<tr>
<th>Event Description</th>
<th>Initial Communication</th>
<th>Patient Disbursement</th>
<th>Triage Tags</th>
<th>Triage Method</th>
<th>Ambulance to Receiving Hospital Communication</th>
<th>Pt Care Reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 - 6 ambulances*</td>
<td>Contact closest appropriate hospital to determine their maximum patient availability. State: “WE ARE ON THE SCENE OF A SMALL SCALE MULTIPLE PATIENT INCIDENT”</td>
<td>Field Command (or designee) coordinates transportation management and destination of patients. Patients shall be disbursed to appropriate facilities (i.e. Category 1 trauma patients to Level 1 Trauma Centers within 25 minutes)</td>
<td>Triage tags not used</td>
<td>Use rapid assessment to identify correct patient Category and appropriate hospital destination.</td>
<td>Every transporting ambulance contacts their receiving hospital with abbreviated report (Abbreviated radio report encouraged). State: “WE ARE TRANSPORTING FROM A SMALL SCALE MULTIPLE PATIENT INCIDENT”</td>
<td>Complete written patient care reports as usual</td>
</tr>
<tr>
<td>7 - 10 ambulances</td>
<td>Contact Resource Hospital State: “WE ARE ON THE SCENE OF A MEDIUM SCALE MULTIPLE PATIENT INCIDENT”</td>
<td>Resource Hospital coordinates transportation management and destination of patients</td>
<td>Triage tags MUST be used</td>
<td>START Triage</td>
<td>NO CONTACT BETWEEN TRANSPORTING AMBULANCE AND RECEIVING HOSPITAL</td>
<td>Complete written patient care reports as usual</td>
</tr>
<tr>
<td>More than 10 ambulances</td>
<td>Contact Resource Hospital State: “WE ARE ON THE SCENE OF A LARGE SCALE MULTIPLE PATIENT INCIDENT”</td>
<td>Regional Hospital Coordinating Center (RHCC®) may be employed for assistance with communication and additional resources</td>
<td>Triage tags MUST be used</td>
<td>START Triage</td>
<td>NO CONTACT BETWEEN TRANSPORTING AMBULANCE AND RECEIVING HOSPITAL</td>
<td>No written patient care reports (Triage Tags serve as written report)</td>
</tr>
</tbody>
</table>

*EMERGENT EVACUATION of a HEALTHCARE FACILITY (PATIENTS REQUIRING MEDICAL CARE)*

- Event description
- Estimate # pts.
- Closest hospitals
- Potential alternative receiving facilities

- Event description
- Estimate # pts.
- Closest hospitals

- Event description
- Estimate patient acuities
- Closest Hospitals

- Event description
- Estimate patient acuities
- Closest Hospitals

- Event description
- Estimate patient acuities

- Event description

*RHCC Region X = NorthShore Highland Park Hospital*
### REGION X: Small Scale Incident ACTIVATION

#### TRAUMA

- Traumatic Arrest, Isolated Burns >20%: Transport to closest Trauma Center
- NO AIRWAY: Transport to CLOSEST comprehensive Emergency Department

<table>
<thead>
<tr>
<th>CATEGORY I</th>
<th>TYPE OF HOSPITAL</th>
<th>CATEGORY I</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unstable Vital Signs:</td>
<td>Transport to highest level Trauma Center(s) within 25 minutes</td>
<td>Transport to closest Emergency Department(s)</td>
</tr>
<tr>
<td>- Systolic BP ≤ 90 x 2 (Peds ≤ 80 x 2)</td>
<td></td>
<td>UNSTABLE</td>
</tr>
<tr>
<td>- Glasgow Coma Scale ≤ 13 or with blunt head injury</td>
<td></td>
<td>- Altered mental status</td>
</tr>
<tr>
<td>- Respiratory Rate &lt; 10 or &gt; 29</td>
<td></td>
<td>- Systolic BP ≤ 90 mmHg</td>
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<thead>
<tr>
<th>CATEGORY II</th>
<th>TYPE OF HOSPITAL</th>
<th>CATEGORY II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanism of Injury:</td>
<td>Transport to closest Trauma Center(s)</td>
<td>STABLE</td>
</tr>
<tr>
<td>- Ejection from automobile</td>
<td></td>
<td>- Patient alert</td>
</tr>
<tr>
<td>- Death in the same passenger compartment</td>
<td></td>
<td>- Skin warm and dry</td>
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<tr>
<td>- Motorcycle crash &gt; 20 mph or with separation of rider from bike</td>
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<td>- Systolic BP &gt;90 mmHg</td>
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<tr>
<td>- Rollover (unrestrained)</td>
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<td></td>
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<tr>
<td>- Falls ≥ 20 feet (Peds falls ≥ 3X body length)</td>
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<td></td>
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<tr>
<td>- Pedestrian thrown or run over</td>
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<td></td>
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<tr>
<td>- Auto vs. pedestrian / bicyclist with &gt; 5 mph impact</td>
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<td></td>
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<tr>
<td>- Extrication &gt; 20 minutes</td>
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<tr>
<td>- High speed MVC: Speed ≥ 40 mph, intrusion ≥ 12”, major deformity ≥ 20”</td>
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</table>

| Co-Morbid Factors: | Transport to closest Emergency Department(s) | |
| - Age ≤ 5 without car / booster seat | | |
| - Bleeding disorders or on anticoagulants | | |
| - Pregnancy ≥ 20 weeks | | |
| - Renal disease requiring dialysis | | |

#### MEDICAL

<table>
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<tr>
<th>OTHER</th>
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<td>OTHER</td>
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<tr>
<th>CATEGORY III</th>
<th>TYPE OF HOSPITAL</th>
<th>CATEGORY III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other simple trauma</td>
<td>Transport to closest hospital(s)</td>
<td>Other simple medical</td>
</tr>
</tbody>
</table>
Region X Plan Similarities and Differences – Initial Contact

- Small scale incident
  - EMS contacts closest appropriate hospital

- Medium and large scale incidents and Healthcare evacuation
  - EMS contacts Resource Hospital

- EMS to state what type of incident they have (i.e.: small, medium, large, emergent evacuation of Healthcare Facility)
Plan Similarities and Differences – Initial Information to Hospital

- Small scale
  - Event description
  - Actual number patients
  - Briefly describe patient conditions

- Medium and large scale incidents
  - Event descriptions
  - Estimated number of patients
  - Estimated patient acuities (i.e.: red, yellow, green)
  - Names of closest hospitals
Plan Similarities and Differences – Patient Disbursement

- Small scale incident
  - ✓ Field command coordinates transportation management & patient destination

- Medium and large scale incidents
  - ✓ Resource Hospital coordinates transportation management & destination of patients

- Healthcare Facility evacuation
  - ✓ Resource Hospital coordinates with field command and administration of affected facility
Plan Similarities and Differences – Triage Tags

- Small scale incident
  - Triage tags **NOT** used
- Medium and large scale incidents and Healthcare Facility evacuation
  - Triage tags **MUST** be used
Plan Similarities and Differences – Triage Method

- Small scale incident
  - Rapid assessment to Categorize patient and then determine appropriate receiving facility

- Medium and large scale incidents
  - START triage

- Healthcare facility evacuation
  - Reverse triage
    - The more well patients rapidly removed; then time spent moving those that will take more resources
  - START triage prior to transport
Plan Similarities and Differences – Ambulance to Hospital Communication

- Small scale incident
  - Every transporting ambulance reports on each patient

- Medium and large scale incidents and Healthcare Facility evacuation
  - NO contact from transporting ambulance
  - Transportation officer from field to provide information to Resource Hospital
    - Resource Hospital in contact with receiving hospitals
Plan Similarities and Differences – Pt Care Reports

- Small and medium scale incident
  - Patient care reports completed as usual

- Large scale incidents and Healthcare Facility evacuation
  - No written patient care reports
  - Triage tags to serve as written patient care report
    - Need to be maintained in patient’s medical records
After Action Report – Forward to Hospital EMS Coordinator

- Review form in Appendix X of the Region X Multiple Patient Management Plan
- Complete form as soon as possible
  - Done at the completion of the incident
  - Can be done as a group or individually
- Once collected from the site, EMS Coordinator will send forms to Resource Hospital
  - All blank forms available in Appendix of Management Plan and is available at all facilities
Case Scenario Review

- The following scenarios paint the picture of a disaster event
  - After review, decide what level incident it is and decide response you should take
- Then, practice providing START and JumpSTART triage to a list of patients provided
Case Scenario #1

Discussion

- EMS receives a call for a 2 car MVC
  - There are 3 patients involved

- What level response would this be?

- Do you categorize these patients as Category I, II or are the terms “red, yellow, green” used?
Case Scenario #1

- This is handled “business as usual”
- Patients are called in as Category I, II, or non-category trauma patient
  - “Red, yellow, green” terminology used in medium and large scale incidents
    - Category I patient – transported highest level within 25 minutes
    - Category II patient – transported closest trauma center
    - Non-category I and II patient – transported to closest appropriate comprehensive ED
Case Scenario #2

Discussion

- EMS responds to a school bus versus dump truck
  - 30 students plus 4 adults on bus
  - 1 victim in truck

- What level response is this?
- How are these patients categorized?
Case Scenario #2 cont’d

- This would be a “large scale incident”
- “Red, yellow, green” terminology used
- Resource Hospital is the field resource
  - Used to coordinate receiving hospitals
- START and JumpSTART triage followed
- SMART® triage tags used
- Transporting ambulance will not communicate with receiving hospitals
- Triage tags are the patient care report
Case Scenario #3

Discussion

- EMS called to a MVC with 4 cars and 12 patients

- What level response is this?
- How would they categorize these patients?
Case Scenario #3

- This could be a medium or large scale event
  - Whichever is first decided, that is how the rest of the actions should roll out
- Patients identified as “red, yellow, or green”
- Resource Hospital used as a resource
- START and JumpSTART triage followed
- SMART® triage tags used
Case Scenario #3 cont’d

- No field communication from transporting rigs with receiving hospital
- If declared a medium scale incident, patient care reports completed on all patients
- If declared a large scale incident, triage tags used as the patient care report
Triage Process Questions

- Use the START and JumpSTART triage flow charts as a resource for answers
- Determine the triage status for the following patients
- Remember, once you have determined the triage status, move on!
  - There may be no need to move completely through the triage flow chart on every patient
According to START triage, what anatomical area do you check to assess an adult pulse???

- Check radial pulses
- Peripheral pulses gives you an idea of B/P status
  - If you can feel a radial pulse, you have some kind of B/P (possibly of 80-90 range systolic)
As you triage the adult, they are not breathing.

What do you do???

- Open the airway manually
  - Tag RED if they start to breathe
  - Tag BLACK if not breathing

Move to next victim, you have already categorized this patient.
Triage Process Question

- Your adult patient has a partially amputated extremity
- Respirations 28/minute
- Radial pulse absent

How do you move through this triage???

- When respirations <30, move to next step
- No radial pulse, tag RED and move to next pt
- Can control bleeding if necessary but don’t spend time in process (i.e.: use bystanders)
Your adult patient has an obvious closed fracture of an upper extremity. They are in pain with no other obvious distress or injury noted. How would you anticipate triaging this patient?

- If they can walk, they are **GREEN**
- If they cannot walk, they would be **YELLOW**
- In secondary triage, they may be re-triaged to green status
Triage Process Question

- An adult is found kneeling
- They say they are too dizzy to walk
  - Respiratory rate is 20 per minute
  - Radial pulse is present
  - They obey commands
- How would you triage them???
  - If the adult cannot walk, they would be YELLOW (at least in triage area)
  - You would be moving thru entire triage assessment/process on this patient
A 2 year-old is unresponsive with a hematoma to the forehead

- Respiratory rate is 34
- Radial pulse is 120

How should this child be tagged?

- With abnormal mental status (unresponsive), this patient is tagged RED

Do not stop for any interventions!!!
Did you remember these points for triaging a child under 1???

- These patients are never tagged **GREEN**
  - Due to low body mass, injuries are likely to be more frequent and/or serious
- Follow JumpSTART triage to determine **YELLOW**, **RED**, or **BLACK** status
- Secondary triage is performed to reassess for **YELLOW**, **RED**, or **BLACK** status
A 3 year-old is found unresponsive, no pulse, and not breathing during triage.

What do you do?

In children, unlike adults, you would attempt 5 rescue breaths.

If they begin to breathe, tag **RED** and move on.

If they do not respond, tag **BLACK** and move on.
Triage Process Question

- A 6 year-old is unconscious but responsive
- Respiratory rate is 10 per minute
- Pulses are present

How would you tag them???

- Tag them **RED** and move on
  - Respirations are too slow
    - <15 or >45 are outliers
- Mental status assessment should not have been addressed (you should have moved on after respiratory assessment)
A toddler is lying on the ground
Respirations are 50 per minute
Distal pulse is palpable
They withdraw from painful stimulus
How would you tag this patient???
- Tag this patient as RED
  - You would stop triage assessment after respiratory assessment which is >45
Practice Triaging

- Read descriptions listed with the following “patients”
- Choose triage status for the variety of “patients” presented in the next few slides
- Compare your answers with those provided following presentation of “patients”
- Use triage cards provided as handout
Practice Triage “Patients”

① 25 y/o 6 months pregnant
- RR 12/minute; capillary refill 4 seconds
- Eye movement to stimulation

② 50 y/o found lying on ground
- RR 32; weak pulses
- Not following commands

③ 45 y/o with open fracture of leg
- RR 28/minute; capillary refill <2 seconds
- Crying for help; able to recall details
Practice Triage “Patients”

④ 16 y/o with scalp laceration and burns to upper extremities
- RR 40/minute; radial pulse present
- Disoriented

⑤ 14 y/o grabbing at rescuers
- Unable to count RR, rapid radial pulse
- Crying hysterically; will not answer questions
Practice Triage “Patients”

6 5 y/o trapped under debris
- RR 18/minute; irregular pulse
- Responds to pain

7 9 month old sitting on floor
- RR 24/minute; palpable pulse
- Crying, responds to voice

8 2 y/o grabbing and clinging to EMS
- RR 20/minute; palpable pulse
- Crying loudly; wandering around
Practice Triage “Patients”

⑨ 6 y/o with deformed arm and sucking chest wound
- RR 40/minute; pulseless
- Withdraws from painful stimuli

⑩ 8 y/o with partially amputated foot with minimal bleeding
- RR 36/minute; distal pulses present
- Screaming
Practice Triage “Patients”

① 8 y/o with no feeling and inability to move legs
  - RR 22/minute; distal pulses present
  - Obeys commands

② 6 y/o sitting on ground with blood in ears
  - RR 28/minute; distal pulses present
  - Not following commands
Answers to Practice Triage Patients

1. Red 7. Yellow
2. Red 8. Green
3. Yellow 9. Red
4. Red 10. Yellow
5. Yellow 11. Yellow
6. Yellow 12. Red
Spinal Immobilization Skills

- What is this?
  - Positioning that maintains the best circulation to the spinal cord to prevent injury/damage
  - Neutral, in-line positioning is preferred
    - Head facing directly forward
    - Eyes directed level
- Manual control is used initially
- Adjuncts continue the immobilization process
“Spinal Motion Restriction”

- Have you heard this phrase before???
- Over time, terminology can change in an attempt to be more reflective of the task
- Above phrase used interchangeably with “spinal stabilization” and “spinal immobilization”
- Above phrase indicates complete restriction of motion of the spine
  - Manual stabilization ➔ c-collar with use of long spine board or full body vacuum splint
Immobilization – Cervical Collar

Goal

- Prevent flexion, extension, and rotation movements
- Will need to use additional adjuncts
- Must measure each individual for determination of appropriate sizing
  - If you find yourself sizing the majority of your patients as “no-neck”, then you are not measuring properly
Cervical Collar Measurement

- Measure with your fingers from top of shoulder to horizontal line drawn under chin
- Measure against the hard plastic of collar (NOT including the foam)
- Adjust size of collar and lock into position
Cervical Collar Measurement

- Notice how fingers are kept *horizontal*
- Fingers DO NOT run angled under the jaw/chin along side of neck!!!
Standing Patient Backboard Application

- Performed when patient found ambulatory
- ED may need to perform for “walk-in”
- Takes a minimum of 3 persons to do safely and properly
- Takes coordination of team to complete task properly and safely for the patient
- Final securing of patient to backboard occurs after patient supine on lowered back board
Standing Backboard Application

- Manual control must be maintained until patient is horizontal and secured
- Tallest person should hold c-spine
- Collar applied while upright
Standing Backboard Take Down

- Rescuers standing next to patient will have control of patient
  - Reach hand under the patient’s axilla to take grasp of the next highest hand hold
- Patient lowered to ground maintaining manual control of patient
- Complete immobilization process with devices, blocks, straps as indicated
Preceptor Role

- How are you at providing feedback to students you are overseeing?
  - Timely feedback is most effective
  - Start with a positive comment – what went well
  - Negative comments should be shared in private
    - Discuss the behavior, not the person
    - Discuss what could be done to improve
  - Document discussions
Bibliography

- Region X SOP’s; IDPH Approved January 6, 2012.
- http://vimeo.com/23084905
- http://citmt.org/Start/answers.htm