Hospital Evacuation

"Hospital Evacuation is a rare and difficult operation. Emergency Physicians are critical to the performance of this process, and the hospital incident command system will be a valuable tool for the successful management of patients and staff."

Augstine, J., Schoettmer, J.T., Evacuation of a rural community hospital: Lessons learned from an unplanned event. *Disaster Management Response*: 2005; 3:68-72

Beginning to plan

Update your Hazard Vulnerability Analysis (HVA)

Any of these hazards force an evacuation

Include in your plan

Who can authorize an evacuation?

What are the triggers / tipping points?

Integrate Hospital Incident Command System

A way to obtain a rapid census report with the information you need

A way to rapidly discharge patients who can go home

Agreements for neighboring facilities to accept your patients (including what staff would go, pharmaceuticals and medical equipment – so you get your equipment back)

Possibilities for internal / vertical evacuation if you can still use some of your building

Transportation needs and assets

Patient tracking system

Family notification system

Internally

A plan for how you will collect (copy) patient records

Collect pharmaceuticals

Will you stage different acuity levels at different places within your facility in preparations to be transported?

What signage would be beneficial? (ie. These stairs down only/ up only)

Considerations for Exercises

Get the right people to the planning table

Develop an exercise calendar with timelines for multiple exercises. (1,2, 3 year)

Start small – no more than 3 objectives

Plan using objectives

Remember that your exercise is test of your plan. (If it's not in your plan, you can't test it)

Develop your evaluation tool early. (How will you determine if you met your objectives?)

Remind your staff that you are testing your plan. If things go wrong it shows you that you had a problem with your PLAN not your PEOPLE.

Never exercise to 'teach people a lesson'

Always finish with an after action report and corrective action report.

Other suggestions: _____

Types of Exercises

Type	Used For	Characteristics	Considerations
Seminar	• Orientation • Assessment • Common framework	• Casual • Lecture based	• relatively inexpensive • little participant time – can easily do in an hour or under depending on the content • one person can put it together and conduct it • doesn't require evaluators or AAR • can be repeated easily • doesn't actually test anything; information only
Workshop	• Developing – Ideas – Processes – Procedures • Build consensus • Collect/share info	• Active participation in discussion/decisions • After Action Report	• relatively inexpensive • can be repeated relatively easily • one person can put it together and conduct it • Takes more time – prep, participation, and AAR • Doesn't require evaluators (AAR is summary of process and work product)
Tabletop	• Identify gaps • Reinforce understanding • Paradigm shift	• Scenario • In-depth discussion • Problem solving	• still relatively inexpensive • takes more time to put together • more components (objectives, scenario, questions) • better using team approach to develop objectives and questions • requires more participant time • can't do this in an hour and expect solid results • doesn't require evaluators but AAR is more complex
Games	• Explore decision making / "what if" • Test strategies	• Models and simulations • May use teams	• off the shelf – limited to that scenario • hard to find • produce your own – very expensive and/or time consuming (Second Life) • fun; friendly competition

Drill	• Testing specific operation – or function of a single agency – Train on equipment – Test a procedure	• Immediate feedback • Realistic but isolated environment	• More complex because you're deploying resources • Requires more time to develop (about same as tabletop) • Need evaluators • good way to test specific skills as prep for more complex exercises
Functional	• Evaluate capabilities of multiple functions • Evaluate EOCs, Command Centers, etc.	• Simulated deployment of resources • Rapid problem solving • Fast-paced and stressful	• Needs more people involved • Need team to design because you're involving multiple functions or capabilities • Need simulation cell to deliver/activate the injects • Takes more to develop and conduct • Need to develop scenario and injects (master scenario events list) • Even though simulating deployment of resources, have to make sure you have place for the sim cell, way to communicate with EOC players • requires more coordination • Need evaluators • Still relatively inexpensive
Full Scale	• Assess plans and procedures under crisis conditions • Evaluate coordinated responses under crisis conditions	• Deployment of resources • Stressful, realistic • Scripted scenario	• Can be expensive (deploying resources and personnel) • Provides realistic environment for testing plans and procedures • Requires a team to design • Requires reasonable lead time (18 months) • Should build up to it through TTX and drills first

Today's Exercise

Simulation of the activity portion of an evacuation exercise with the following objectives:

At the end of this exercise and evaluation, the participants will be able to:

1) Prepare simulated paper patients with the proper (simulated) medical equipment and documentation that would be needed to evacuate with them
2) Given a sample patient census, Demonstrate appropriate reverse triage to prioritize patients for evacuation.
3) Gather, and move the paper patients, with their equipment and remove them from the room.

First:

Create paper patients

Mount the 'Patients' on the walls

Triage:

Given the list of 12 patients, prioritize them for evacuation.

Evacuate:

Remove the patients from the wall and 'transport' (out of the room)

Evaluate and discuss how this might help you plan for your own evacuation exercise.

Patient Census for Generic General Hospital

January 15, 2010

Priority Patient

_____ **Violet** - 90 Yr old F. Admitted for pneumonia. Fever, confusion. In soft restraints.

(Needs blue pills) Non ambulatory. IV, O2. Much improved. Condition: good.

_____ **Gus** - 60 Yr old M. Admitted for chest pain. Heart cath, this a.m. Stable/fair.

(Needs pink pills) Ambulatory, IV, heart monitor, O2.

_____ **Peggy** - 57 Yr old F. Diabetic, Admitted for care of decubitus ulcers back and feet.

(Needs white pills) Non-ambulatory, weighs 400+ lbs. IV.

_____ **Larry** - 28 Yr old M. Post surgical for ACL repair this a.m.

(Needs white and yellow pills) Ambulatory c assistance. Blood

_____ **Diana** - 85 Yr old F. Admitted for dehydration/nausea. IV

(Needs blue pills)

_____ **Danny** - 18 Yr old M. Admitted with stomach pain. Awaiting appendectomy.

(Needs blue pills) Non-ambulatory, IV. 250+ lbs.

_____ **Kathy** - 45 Yr old F. Admitted for complications from gallbladder surgery. Ambulatory, IV

_____ **Jackie** - 63 Yr old F. Admitted for infection following radical mastectomy.

(Needs blue pills) Ambulatory with assist. IV, Blood.

_____ **Adam** - 50 Yr old M. Admitted for possible flu. Fever, chest congestion.

(Needs pink pills) Ambulatory with assist. IV, O2. (Isolation)

_____ **Sheila**- 45 Yr old F. Admitted for possible flu. Fever, chest pain.

Needs white and yellow pills) Ambulatory with assist. IV, O2. (Isolation)

_____ **Pam** - 17 Yr old F. Admitted for possible flu. Condition: good. No meds

Ambulatory with assist. IV. Removed from isolation this AM.

_____ **Nick -** 23 Yr old M. Double amputee (from military injuries)

Admitted through ED awaiting transfer to VA hospital. (Needs red, white and blue pills)

Non-Ambulatory. Infection, anxiety, depression. IV, O2 when tolerated.

Evacuation Exercise

Supplies

Patient Census

Gurney

Wheel chairs

Signs

Lg sheets of paper (for dolls)

Yarn (red, yellow, white)

Baggies

M&Ms

Pill bottles

Stickers for Pt wristbands

Shoe boxes

Oatmeal boxes – painted green

Colored clay or play dough

Vests for transport team – and TP team leader

Paper sacks (for personal items)

Folders (for patient records)

Pens, markers and tape

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