Should I Stay or Should I Go? Evacuation Decision-Making for the Health Care Facility

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Planning  Training  Leadership
Purpose

• Develop the capability to pre-plan the evacuation decision
• Discuss criteria for determining whether occupants should shelter-in-place or evacuate from a threatened HCF
• Learn about a tool for evacuation decision-making
The Challenge

• Absent an imminent threat, there is great resistance to HCF evacuation
• HCF leadership tendency is to ensure certainty of need before initiating evacuation
• Decision-making is often subjective
• Evacuation delayed may be evacuation denied

He who does not learn from history is doomed to repeat it.

--- George Santayana
The Evacuation Decision-Making Process

• Background
• Concept
• Scalability
• Evaluation process for sheltering-in-place
• Development of a decision support tool
Evacuation Decision Overview

- Event occurs
- Immediate response procedures
- Is there an evacuation risk?
  - No:  Shelter-in-place
    - Follow Emergency Operations Plan
    - Conserve resources
    - Maintain contact with community EOC
  - Yes:  Assess critical issues
    - Internal operations / conditions
    - External operations / conditions
    - Evacuation considerations
- Apply Decision Support Tool
Assessing Internal Operations / Conditions

- Physical plant
- Patient clinical and support activities
- Resources and assets
- Security and safety
- Utilities
- Staffing
- Communications
Assessing External Operations / Conditions

- Evacuation urgency
- Duration
- External logistics
- Evacuation difficulties
Assessing Evacuation Considerations

- Destination(s)
- Staff availability
- Transportation logistics
  - Van, bus, ambulette
Model Evacuation Decision Support Tool

- Based on proprietary HVA model
- Excel® spreadsheet platform
- Probability not a factor
- All values scored based on objective criteria statements

\[
\text{Threat score} \times \text{consequence score} = \text{evacuation decision score}
\]

=> evacuation decision recommendation
Evacuation Decision Support Tool Application

- Pre-incident planning
- Community planning
- Incident-specific pre-planning
- Incident-in-progress decision-making
Key Components

• Situations that may lead to evacuation
  – Definitions
  – Facility-based worst case scenarios

• Objective scoring tables and values
  – Threats
  – Consequences

• Evacuation Score
Situations that May Lead to Evacuation

- Loss of external support
- Loss of community infrastructure
- Facility travel or access impedance
- Communications failure
- Critical supply shortage
- Electrical utility power failure
- Fire, internal
- Flood, external
- Flood, internal
- Fuel shortage (oil)
- Generator failure
- HazMat incident affecting facility
- HVAC failure
- Medical gas failure
- Natural gas failure
- Physical plant damage
- Sewer failure
- Smoke or fumes, internal
- Staffing insufficiency
- Steam failure
- Water supply failure
Threats

- Severity
- Duration
- Cascade Potential
- Evacuation Difficulty
- SIP Capability
- Destination Capability
- Recovery Time
Consequences

- Life Safety
- Security
- Staffing
- Physical plant
- Utilities
- Communications
- Resources and assets
- Patient clinical and support
- External logistics
Scoring Process

- Validate the risk list
- Assess the applicable risk
  - Reasonable worst-case scenario development
- Assess the threat based on the worst-case scenario
- Assess the consequences based on the worst case scenario
- The tool calculates the score
Decision Support Scale

0-200
Shelter in Place

201-400
Evacuation Preparations

401-600
Evacuate
0-200 Shelter in Place

- Plan / consider worst-case scenario
- Initiate hardening activities / defensive measures
- Initiate conservation measures
- Enhance staff, supplies, resources
- Relocate patients, assets to safer locations
201-400 Evacuation Preparations

- Review evacuation plan
- Assess and tag patients for transportation assistance level (TAL)
- Establish facility census by TAL
- Communicate with stakeholders
- Identify potential destinations
- Identify transportation resources
401-600 Evacuate

- Discontinue admissions
- Initiate discharges
- Prioritize patients for evacuation
- Mobilize transportation resources
- Determine destinations
- Coordinate with stakeholders
- Depart
- Initiate facility shutdown and Stay Team activities
- Consider recovery activities
Wrap-up

• What have we learned?
• Where are we going?
• Next steps ...
Questions?
Conclusion

• Your feedback is key
• Thank you for your support

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