

## Why Prepare?

- The first line of defense against a disaster is personal preparedness.
- It is important for all citizens to make their own emergency plans.
- During an emergency, the government and other agencies may not be able to meet your immediate needs.
- Your residents, staff and their families are depend on you.

- Even when faced with the <u>certainty</u> of an event – people still form specific responses to perceived threats that may result in negative consequences. Recent examples?
  - Pandemic H1N1 Vaccine risk perception vs. availability vs. case fatality rate (what if this was much higher?)
  - Seminole, Oklahoma tornadoes (May 2010) –
     Despite a week of advance warning, many people disregarded tornado sirens 5 dead.
  - Hurricane Sandy Some people refused to evacuate, placing first responders in harms way

## **Emergency Preparedness**



HCANJ's Emergency Preparedness Mission
- Improve the ability of our members to
prepare for, respond to, and recover from
catastrophic health events

### The Problems

- Complacency
- Risk Perception/Threat Denial
- Measuring degrees of preparedness
- Lack of familiarity with emergency plans
- Lack of creativity during planning phase
- Lack of "reward" (unless there is an event)
- Over dependence on outside agencies
- Cost



## **COMPLACENCY**

APATHY COMES BEFORE CALAMITY. LOOK IT UP.

## "Big Picture" Problems

LTC has a lack of familiarity with ICS/NIMS

Required drills are often not taken seriously by staff members and are generally too simplistic

Facilities lack expertise to conduct large scale exercises and these exercises are often time and cost prohibitive

MOUs-MOAs (i.e. – transportation) often with same regional providers as other facilities

Lack of inclusion and coordination with outside partners including OEM, EMS, Public Health, etc...

Internal and external communications limitations

No real internal plans to address resident tracking during catastrophic health events or preparation for surge.

### A Novel Crisis!

"Novel" event resulting in lose of control, some bad outcomes regardless of chosen options, unusual bad outcomes, no well defined "end" of the event, potential for loss of life/assets, elevates to political/media involvement, potentially high impact financially, beyond threshold of existing capacity, high uncertainty

#### Natural

 Flood, hurricane, earthquake, volcano, winter storm, wildfire, pandemic

#### Manmade

 Fire, hazardous material spill, computer breach, violence in the workplace, terrorism

#### Public relations

Generation of negative publicity

#### Financial

Reduction of short term liquidity or cash flow

## Examples?









## Preparing for a Crisis

- Prepare a system that will allow you to respond to the emergency (have a plan)
- Develop policies (mission statement)
- Create a crisis management team
- Assemble and organize resources
- Distribute an emergency procedures guide

## Crisis Management

- Removing/reducing risk/uncertainty to allow you more control over your own destiny!
- The ability to predict/plan for an "event" will allow an individual/business to better capitalize on that "opportunity" than the individual/business that <u>fails</u> to prepare.

Problem! - A proactive process — don't wait!

## Crisis Management

- Identify the nature of the current crisis
- Take actions to minimize damage
- Recover from the crisis
- Work with public relations to prevent harm to company reputation (TEPCO offers \$12 dollar per person payout)



## New Jersey is Not Immune



## SOME PERSPECTIVE



## Irene vs. Sandy Impact on NJ Health Care Continuum

#### Irene

#### Sandy

#### Power loss

- 11 Acute Care Hospitals
- 1 FQHC
- 2 Pediatric Day Care Facilities
- 58 Long Term Care Facilities!

#### Evacuations (Full & Partial)

- 4 Acute Care Facilities
- 1 FQHC
- 27 Long Term Care Facilities

#### Power loss

- 36 Acute Care Hospitals
- 1 Rehabilitation Hospital
- 200 Long Term Care Facilities!
  - 137 SNF
  - 63 AL

#### Evacuations (Full & Partial)

- 2 Acute Care Facilities
- 15 Long Term Care Facilities

# How are Emergencies Managed?

## Incident Command System

#### Command

- Defines the incident goals and operational period objectives
- Includes an Incident Commander, Safety Officer, Public Information Officer, Senior Liaison, and Senior Advisors

#### Operations

- Establishes strategy

   (approach methodology, etc.) and specific tactics (actions)
   to accomplish the goals and objectives
   set by Command
- Coordinates and executes strategy and tactics to achieve response objectives

#### Logistics

- Supports Command and Operations in their use of personnel, supplies, and equipment
- Performs technical activities required to maintain the function of operational facilities and processes

#### **Planning**

- Coordinates support activities for incident planning as well as contingency, long-range, and demobilization planning
- Supports Command and Operations in processing incident information
- Coordinates information activities across the response system

#### Admin/Finance

- Supports Command and Operations with administrative issues as well as tracking and processing incident expenses
- Includes such issues as licensure requirements, regulatory compliance, and financial accounting

## LTC Business Risk ID & Analysis

- Are you at risk of having a crisis?
- How vulnerable are you to crisis?
- How likely is a crisis to happen?
- What is the probability?
- What is the impact?
- What is the severity?
- How much damage?
- At what cost?

# Risk (Crisis) Management Process

- Identify the hazards
- Assess the risks
- Analyze potential control measures
- Make control decisions
- Implement risk controls
- Review and improve

 What are we doing here? We are modifying a process in order to increase our chances of success when a crisis event occurs.

# Hazard Vulnerability Analysis (HVA)

A method of hazard identification, risk assessment and analysis of risk control measures.

What is the probability of occurring and what is the impact to my operation?

## Probability Issues – How likely is an event to occur?

- Known risk (Coal miner)
- Historical data (Japan's earthquake 1,000 year event)
- Manufacturer/vendor statistics (BP Gulf Oil Spill Blow Out Preventer failure)

$$P(a) = \left[ \frac{\sum_{i=0}^{a-1} \left( \frac{1-p}{p} \right)^{i}}{\sum_{i=0}^{a+b-1} \left( \frac{1-p}{p} \right)^{i}} \right]$$

Note: It's really NOT that difficult!

#### HAZARD AND VULNERABILITY ASSESSMENT TOOL NATURALLY OCCURRING EVENTS



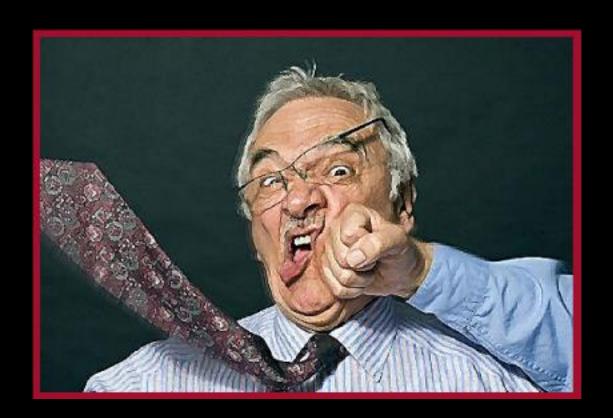
EVENT	PROBABILITY	HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED- NESS	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK
	Likelihood this will occur	Possibility of death or injury	Physical losses and damages	Interuption of services	Preplanning	Time, effectivness, resouces	Community/ Mutual Aid staff and supplies	Relative threat*
SCORE	O = N/A 1 = Law 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = M/A f = Low 2 = Moderate 3 = High	0 = N/A f = Low 2 = Moderate 3 = H/gh	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 - 100%
Hurricane								0%
Tornado								0%
Severe Thunderstorm								0%
Snow Fall								0%
Blizzard								0%
Ice Storm								0%
Earthquake								0%
Tidal Wave								0%
Temperature Extremes								0%
Drought								0%
Flood, External								0%
Wild Fire								0%
Landslide								0%
Dam Inundation								0%
Volcano								0%
Epidemic								0%
AVERAGE SCORE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%

\*Threat increases with percentage.

RISK = PROBABILITY \* SEVERITY 0.00 0.00 0.00

## Human Impact

- Potential for staff death or injury
- Potential for customer, client, patient injury



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۲	HUMAN	PROPERTY	BUSINESS	PREPARED-	INTERNAL	EXTERNAL	RISK

Preplanning

O = N/A

f = High

2 = Moderate

3 = Low or none

0.00

Community/

Mutual Aid staff

and supplies

0 = N/A

f = F V g h

2 = Moderate

3 = Low or none

0.00

Relative threat\*

0 - 100%

0%

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Time.

effectivness.

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2 = Moderate

3 = Low or none

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EVENT	PROBABILITY	HUMAN	PROPERTY	BUSINESS	PREPARED- NESS	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK	

Interuption of

services

O = N/A

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3 = High

2 = Moderate

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PROBABILITY	HUMAN	PROPERTY	BUSINESS	PREPARED-	INTERNAL	EXTERNAL	RISK	

Likelihood this

will occur

2 = Moderate

0.00

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RISK = PROBABILITY \* SEVERITY

0.00

0 = N/A

f = Low

3 = Hlgh

SCORE

Electrical Failure

Fuel Shortage

Sewer Failure

Steam Failure

Failure

Failure **HVAC Failure** 

Failure

Internal

Fire, Internal

Flood, Internal Hazmat Exposure,

Supply Shortage

Structural Damage AVERAGE SCORE

\*Threat increases with percentage.

Fire Alarm Failure

Communications

Medical Vacuum

Medical Gas Failure

Information Systems

Generator Failure Transportation Failure

Natural Gas Failure Water Failure

Possibility of

death or injury

2 = Moderate

0 = N/A

f = Low

3 = Hlgh

Physical losses

and damages

2 = Moderate

O = N/A

f = Low

3 = High

## Property impact

- Cost to replace
- Cost to set up temporary replacement
- Cost to repair
- Time to recover





#### HAZARD AND VULNERABILITY ASSESSMENT TOOL HUMAN RELATED EVENTS



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Mass Casualty Incident (trauma)								0%
Mass Casualty Incident (medical/infectious)								0%
Terrorism, Biological								0%
VIP Situation								0%
Infant Abduction								0%
Hostage Situation								0%
Civil Disturbance								0%
Labor Action								0%
Forensic Admission								0%
Bomb Threat								0%
AVERAGE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%

\*Threat increases with percentage.

RISK = PROBABILITY \* SEVERITY 0.00 0.00 0.00

## Business impact

- Business interruption
- Employees unable to report to work
- Customers unable to reach facility
- Company in violation of contracts
- Imposition of fines, penalties or legal costs
- Interruption of critical supplies
- Interruption of product distribution
- Reputation
- Financial impact/burden

#### HAZARD AND VULNERABILITY ASSESSMENT TOOL EVENTS INVOLVING HAZARDOUS MATERIALS



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			SEVE	RITY = (MAGN	NITUDE - MITIG	ATION)		
EVENT	PROBABILITY	HUMAN	PROPERTY	BUSINESS	PREPARED- NESS	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK
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Mass Casualty Hazmat Incident (From historic events at your MC with >= 5 victims)								0%
Small Casualty Hazmat Incident (From historic events at your MC with < 5 victims)								0%
Chemical Exposure, External								0%
Small-Medium Sized Internal Spill								0%
Large Internal Spill								0%
Terrorism, Chemical								0%
Radiologic Exposure, Internal								0%
Radiologic Exposure, External								0%
Terrorism, Radiologic								0%
AVERAGE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%

<sup>\*</sup>Threat increases with percentage.

RISK = PROBABILITY \* SEVERITY 0.00 0.00 0.00

## Preparedness

- Have we done anything to 'prepare" for the crisis? (Preplanning)
- What is our time structure?
- What else could we do to prepare?

#### HAZARD AND VULNERABILITY ASSESSMENT TOOL EVENTS INVOLVING HAZARDOUS MATERIALS



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Radiologic Exposure, External								0%
Terrorism, Radiologic								0%
AVERAGE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%

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RISK = PROBABILITY \* SEVERITY 0.00 0.00 0.00

## Response issues

- Time to establish an on-scene response
- Scope of response capability
- Historical evaluation of response success (or failure)?



# Assess Internal & External Response Resources

- Do we (internally) have the resources and capabilities (training) to respond to the crisis?
- Will external resources be able to respond to our business during this crisis OR will they have other priority areas to address?

# What can you do to mitigate?

- Develop your emergency procedures
- Conduct additional training
- Acquire additional equipment
- Establish mutual aid agreements
- Practice, exercise, drill

## Risk=Probability X Severity

(The lower the score-the better!)

- Identified risk
- Unidentified risk
- Total risk (identified & unidentified)
- Acceptable risk (pt. of diminished return has been reached)
- Unacceptable risk (No tolerance =must be eliminated)
- Residual risk (acceptable & unidentified)

# Develop the Crisis/Emergency Management Plan

- Establish authority to create, edit and revise the plan
- HCANJ has Emergency Management plan templates available online!



#### Create a Mission Statement

• What is the goal of establishing the plan to address the future crisis?



## Establish a Budget

• How much are you willing to spend to mitigate a future crisis?



### Form the Team

• Who are the decision makers and who are the critical players involved in your organization?



## Training

- Are your employees trained and educated?
- Do they know what their responsibilities are during an emergency?
- Job action sheets



#### Practice

- Test, exercise and drill
- Who does what, under what conditions, and to what standard?



# Develop After Action Report and Improvement Plan

 Typically, this is one area that often gets neglected. Example – (Recently published Justice Department Preparedness Report)

#### Why?

Time, money, personnel, expertise & resources

## **Evaluate & Modify**

- Crisis planning involves organizational change.
- Organizational change is best conducted BEFORE a crisis, but most often occurs AFTER a crisis!
- Resist the dangers of complacence

PREPARE!

## Your Plan?

"The best battle plan is good until the first bullet is fired."

### Preparedness solutions

- Leadership
- Personal commitment
- Profession commitment
- Relationship building
- Enhanced communications
- Training/education
- Exercises/Drills
- Planning
- Creativity
- Passion
- Sustained funding

#### Crisis Media Relations

- "What the hell did we do to deserve this?"
- "The Gulf of Mexico is a very big ocean. The amount of volume of oil and dispersant we are putting into it is tiny in relation to the total water volume."
- "The environmental impact of this disaster is likely to be very, very modest."
- "There's no one who wants this over more than I do. I would like my life back."
- "There aren't any plumes."
- "Food poisoning is clearly a big issue."



## What can HCANJ/LANJ's Emergency Preparedness Program Offer?

- Emergency plan development
- Discussion and operational based exercise planning, development, and evaluation
- Emergency communications
- Disaster response support
- Equipment
- Training

# Adopt a LTC "Culture of Preparedness"

Preemptive vs. Reactive

- Elevate and promote emergency preparedness
- Identify emergency preparedness training/educational needs
- Become involved in Healthcare/Public Health Coalitions
- Develop and deliver HSEEP compliant exercises
- Adopt Incident Command System (ICS) and National Incident Management System (NIMS)
- Establish "emergency preparedness/management best practices" that may be implemented within LTC
- Analyze and evaluate post crisis event response by HCANJ and develop "lessons learned" to improve upon response to future events

#### Thank You!

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#### Resources

- American Medical Association, National Disaster Life Support Foundation (2004), Advanced disaster life support provider manual, ISBN 978-1-57947-879-7
- Drabek, T. (2001). Understanding employee responses to disaster. Australian Journal of Emergency Management, 15-21.
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- Office of Homeland Security, FEMA. (1993). Emergency management guide for business & industry (FEMA 141). Washington, DC, accessed online 1/15/10, <a href="http://www.fema.gov/business/guide/index.shtm">http://www.fema.gov/business/guide/index.shtm</a>