

Risk Assessment & Risk Management

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Presented By:

Angela M. Timperio, BA, CHEP, CHSP-FSM
President/CEO
Life Safety Enterprises Inc.



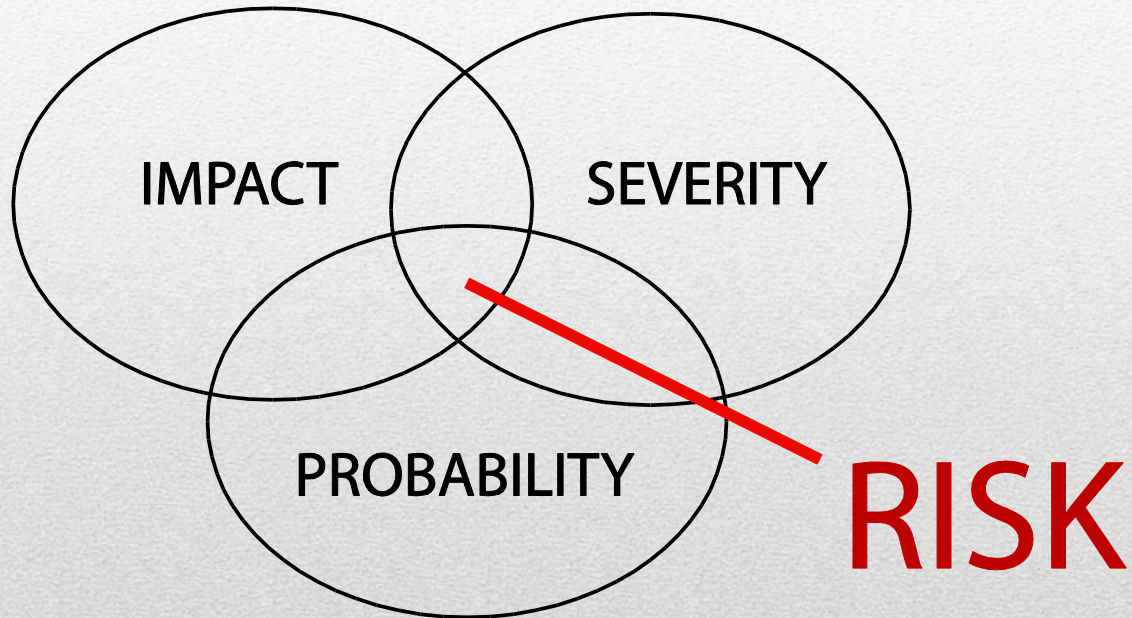
- Risk Assessment (RM)
 - 7 steps Risk Assessment Process
- Failure Mode & Effects Analysis (FMEA)
 - 7 steps in a FMEA
- Root Cause Analysis (RCA)
 - 7 steps in Root-Cause Analysis
- Risk Management
 - Areas of Focus
- Impact with The Joint Commission
- Why Risk Assessment / Risk Management is Important

Agenda Overview

Risk Assessment, Root Cause Analysis & Risk Management

- Conducting a **Risk Assessment or Failure Mode & Effects Analysis (FMEA)** takes a proactive approach to problem resolution; evaluating issues before an event happens.
- **Root Cause Analysis** is the reactive method to evaluate what happened, to prevent future occurrences.
- **Risk Management** is the identification, assessment, and prioritization of risks followed by coordinated and economical application of resources to minimize, monitor, and control the probability and/or impact of unfortunate events or to maximize the realization of opportunities.

THREAT



I. Risk Assessment



Conducting a Risk Assessment takes a proactive approach to problem resolution, evaluating issues before an event/threat happens.

A proactive risk assessment evaluates a process to identify the “weak link” and adjust to improve reliability.

Risk Assessment

- This process identifies the natural hazards, human-caused events, and technology-caused events that are likely to occur.
- Significant impact to people, property and operations.
 - Patient care Impact
 - Business Impact
 - Resource Impact
- Examine the potential cascading effects of regional, national, or international incidents.

Risk Assessment

Risk Assessment is the basis of assumptions planning

- You can't manage everything
- Risk is inherent to people and processes
- Often no clear solution (*gray areas*)
- Range from high incidence/low risk to low incidence/high risk
- Educated guess that drives your assumptions

Risk Assessment

Conducting a Risk Assessment

- Joint Commission utilizes Risk Assessments when a specific Standard is not available
- Use to evaluate any issue that lacks a clear decision
- Clearly document the process
- Determine when to re-assess the issue

Risk Assessment

EC.02.01.01 EP 1

- The hospital *identifies* safety and security risks associated with the environment of care that could affect patients, staff and other people coming into the hospital's facilities.
- *Is there a risk assessment process?*
- *Quality of the risk assessment process*

Risk Assessment

EC.02.01.01 EP 1

- Risk identification
 - Internal sources such as ongoing monitoring of the environment
 - External threats such as natural (weather), man-made events (bomb threats)
 - Results of root cause analysis / HVA
(Hazard Vulnerability Analysis)
 - Results of annual proactive risk assessments of high-risk processes

Risk Assessment

EC.02.01.01 EP 3

- The hospital *takes action* to minimize or eliminate identified safety and security risks in the physical environment. **R**
- Did the organization respond to the risk assessment and correct the identified risk?

Risk Assessment

EXAMPLE:

- Natural Cause – Hurricane / High Winds (50 – 600 miles)
 - Heavy rainfall / spawn tornadoes / extended length of time
- Hospital impact:
 - Power Lines effected
 - Exit signs / elevator cars / emergency alarm system / powered doors
 - Building effected
 - Generator – Fire Pumps
 - Ventilation
 - Telephone / Computer / Network systems
 - Water system
 - Heating / Cooling systems
 - Food preparation
 - Clock system
 - Radio / Communication system
 - Community effected
 - Flooding
 - Shelter
 - Food supply



Risk Assessment

Risk Assessment In The Physical Environment

- **Several tools exist to facilitate risk assessment in the Physical Environment**
 - Environmental Tours
 - ILSM / ICRA
 - Observe the environment
 - Manage By Walking Around
 - Documentation
 - Inspect, Test & Maintain
- **Evaluate the effectiveness of the processes**
 - Occupant feedback (review corrective work orders)

Risk Assessment

Environmental Risks

EC.02.06.05; LS.01.02.01

Proactive Infection Control Risk Assessment

Construction or renovation in occupied healthcare facilities can result in environmental problems such as:

- Noise
- Vibration
- Creation or spread of contaminants
- Disruption of essential services
- Emergency Procedures
- Air quality



ILSM (Interim Life Safety Measures)

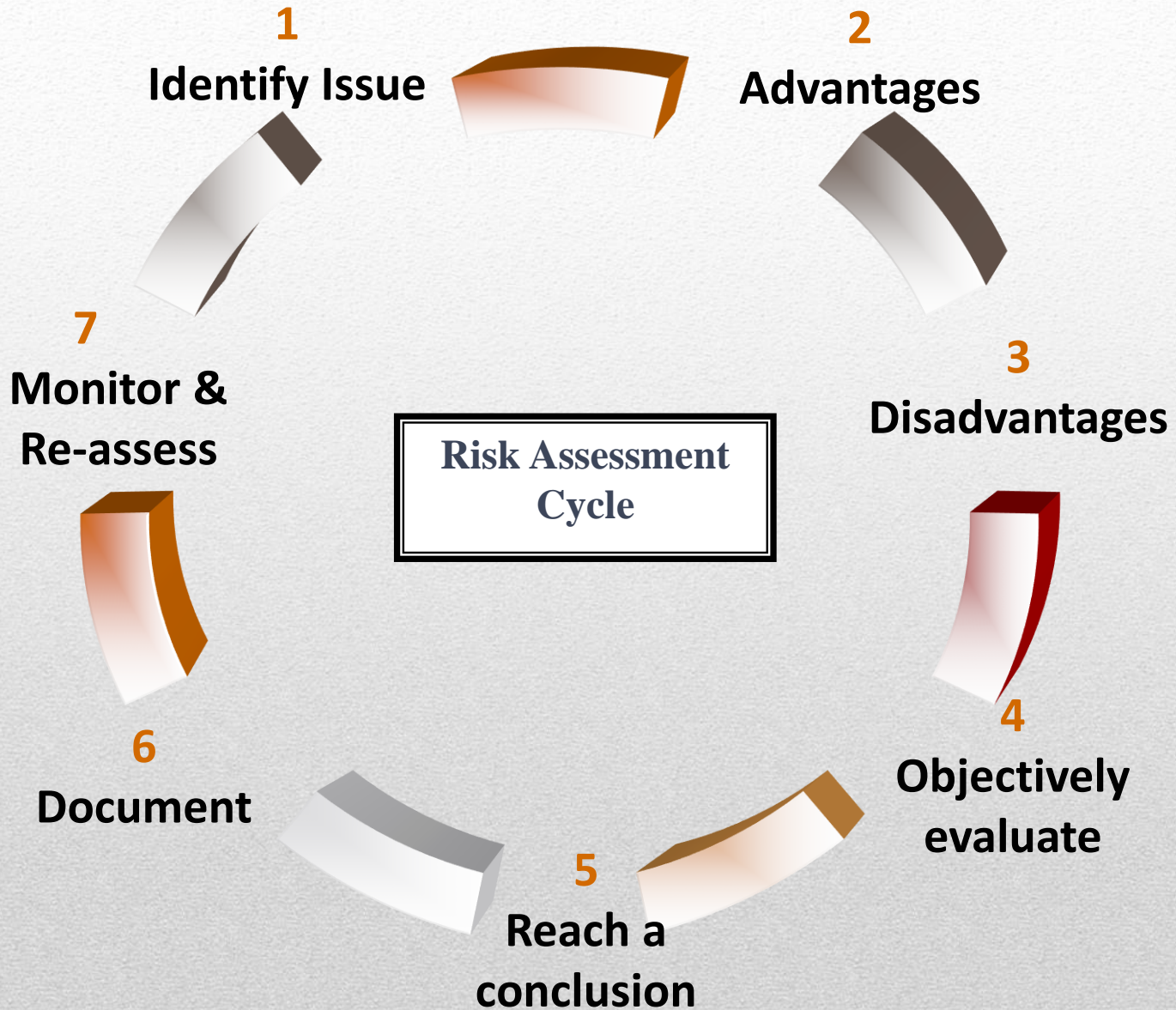
- Fire Watch and Exits regardless of ILSM policy
- ILSM Policy: whenever Life Safety Code deficiencies exist
- Administrative actions

Risk Assessment

Conducting a Risk Assessment: Seven Steps

1. Identify the issue
2. Develop arguments in support of the issue
3. Develop arguments against the issue
4. Objectively evaluate both arguments
5. Reach a conclusion
6. Document the process
7. Monitor and reassess the conclusion to ensure it is right conclusion

Risk Assessment



RISK ASSESSMENT WORKSHEET

ISSUE:

SUGGESTED QUESTIONS	ADVANTAGE	DISADVANTAGE	CONCLUSION
Impact on patient care delivery			
How the issue affects the staff			
How the issue affects the work environment			
How the issue affects any visitors, volunteers, etc.			
Impact on public safety			
Financial impact of the issue on the organization			
Impact on the physical structure, including Buildings, Departments, Units or other areas			
Does the issue affect the exterior environment; including access, exit from buildings, grounds, rest areas, etc.			
Impact on equipment, including its use, function, serviceability, other			
Impact on internal physical systems			

CONCLUSION:

Occasionally a process under consideration involves several components or methods.

Failure Mode & Effect Analysis



Failure Mode & Effect Analysis (FMEA)

- Defined responses to various types of unanticipated adverse events and processes for conducting **proactive** risk assessment/risk reduction activities
- Hospitals should proactively seek to identify and reduce risks to the safety of patients. Such initiatives have the obvious advantage of *preventing* adverse events rather than simply reacting when they occur. (Introduction to the LD chapter)
 - At least every 18 months the organization selects one high-risk process and conducts a proactive risk assessment (LD.04.04.05 EP 10)

FMEA

Seven Steps in a FMEA

1. At least every 18 months select at least one high-risk process
2. Describe (i.e. diagram) intended and actual performance
3. Identify potential ways the process could breakdown or its failure modes
 - a. potential risk to patients, including severity, and
 - b. potential cause of breakdown or failure modes of the process
 - c. prioritize these potential risks of breakdown or failure
4. Prioritize these potential risks of breakdown or failure
5. Redesign the process
6. Implement and testing of the redesigned process
7. Monitor the effectiveness of the redesigned process

Step 1: Select One High-risk

Decision making process of choosing a high risk issue:

- Non-standardized process
- Input from many sources
- Complex issues acceptable, if able to breakdown to root
- High risk processes may be:
 - Heavily dependent on human intervention
 - Hierarchical verses team (i.e. process mandated)
 - Tight time constraints
 - Loose time constraints
- High risk/Low volume may be:
 - New processes
 - New equipment

Step 2: Describe Intended And Actual Process

- Define current ‘high-risk’ process and what makes it high-risk
- Define the desired outcome or proposed changes in the process
- Use of the following may be useful:
 - Flow charts
 - Matrixes
 - Narratives
 - Other Performance Improvement tools

Step 3: Identify Potential Problems

- Assemble a team to assist in identifying the current high-risk process
 - Once the team is together, review Step 2, and discuss
- Ask “What if. . .” questions
- Ask “Why . . . “ questions
- Determine potential risk to patients, staff or visitors
- Determine potential break down conditions or
- Determine potential failure modes of the process

Step 4: Prioritize Potential Risks

- Rank potential risk to patients, including severity
- Rank potential causes of breakdown or failure modes of the process discussed in Step 3
- Prioritize these potential risks of breakdown or failure modes by severity and actual risk

Step 5: Redesign the Process

- Describe an action for each potential failure mode or breakdown to prevent it
- Assemble these actions with desired outcome or proposed changes in the high-risk process
- Identify outcome measures that will be used to analyze and test the redesigned process

Step 6: Implement & Test the Redesigned Process

- Under controls, implement the redesigned process
- Involve the team that reviewed the high-risk process
- Gather comments from those participating in the redesigned process to supply data for analysis
- Initiate the testing process to gather data for analysis

Step 7: Monitor the Effectiveness

- Evaluate the effectiveness of the redesigned process by reviewing data gathered under Step 6
- Determine if the high-risk has been reduced
- If the high-risk is reduced, then design larger implementation strategies
- Communicate to leadership outcomes

- Introduced as a strategy to identify cause of Sentinel Events within healthcare
- Root Cause Analysis is a reactive process for identifying the basic or causal factors that underlie variation in performance, that may contribute to the actual or potential occurrence of an adverse (i.e. Sentinel) event

Root-Cause Analysis

- **Most Frequently Reported Sentinel Events:**

- Unintended retention of foreign objects
- Falls
- Suicide
- Delay of treatment
- Other anticipated events
- Wrong-patient, wrong-site or wrong procedure
- Operative / Post-operative complications
- Criminal event
- Perinatal death/injury
- Medication error

Root-Cause Analysis

• **Most Frequently Identified Root-Causes for Sentinel Events:**

- Human Factors
- Leadership
- Communication
- Assessment
- Physical Environment
- Information Management
- Care Planning
- Health Information Technology
- Operative Care
- Continuum of Care

Root-Cause Analysis

Seven Steps in a Root Cause Analysis

1. Define the event
2. Describe the processes involved/affected
3. Analyze the supporting processes
4. Identify all potential 'root causes' that contributed to the variation of outcome
5. Suggest potential process improvements
6. Create action plan to mitigate future events
7. Create a strategy to measure effectiveness

Root-Cause Analysis

Steps 1 & 2

- Step 1: Define the event
- Step 2: Describe the processes involved
 - The use of flow charts, matrixes, etc. may be useful in defining the processes involved
 - Identify staff involvement
 - Identify equipment involvement
 - Identify the process that directly impacted the event

Root-Cause Analysis

- Secure sensitive areas
- Infant/pediatric abduction
- Hazardous Materials Inventory is risk-based
- Managing hazardous materials is based on risks
- Statement of Conditions™ is based on risk assessment and responding to identified deficiencies
- Medical Equipment and Utilities Management inventories are based on risk assessments

Risk Management - RM

Step 3: Identify supporting processes

- Review those processes that are associated with the main (obvious) processes
- Look for potential weaknesses in the supportive processes
- Address the following for potential contribution to the event:
 - Behavioral & Physical Assessment process
 - Patient Identification & Observation procedures
 - Care planning process
 - Staffing levels & Orientation/training of Staff

Root-Cause Analysis

Step 4: Identify Potential Root Causes

- Review External environmental factors outside of the control of those involved in the event
- Review any organizational or management involvement that may have contributed to the event
- Identify any special causes that may have contributed to the event
 - Especially those causes that are outside the control of those involved in the event

Root-Cause Analysis

Step 5: Suggest Process Improvements

- Develop alternative processes at the supportive process level
- Redesign those affected processes that were identified as the root cause

Root-Cause Analysis

Steps 6 & 7

- Step 6: Create an implementation strategy
- Step 7: Create a strategy for measuring effectiveness and implementation success
 - Monitor the effectiveness of the implementation strategy
 - Redesign if necessary
 - Determine how long process will be monitored

Root-Cause Analysis



III. RISK MANAGEMENT

RM Areas of Focus

- Environment of Care
- Fire Safety
- Hazardous Materials and Waste
- Individual(s) Responsible of medical and laboratory equipment
- Safety and Security
- Utility Systems

Risk Management

Environment of Care

- What Standards Cover



Risk Management

Fire Safety

- EC.02.03.01
 - Response Plans
 - Alarm system
 - Suppression equipment
 - Fire Drills



Risk Management

Hazardous Material and Waste

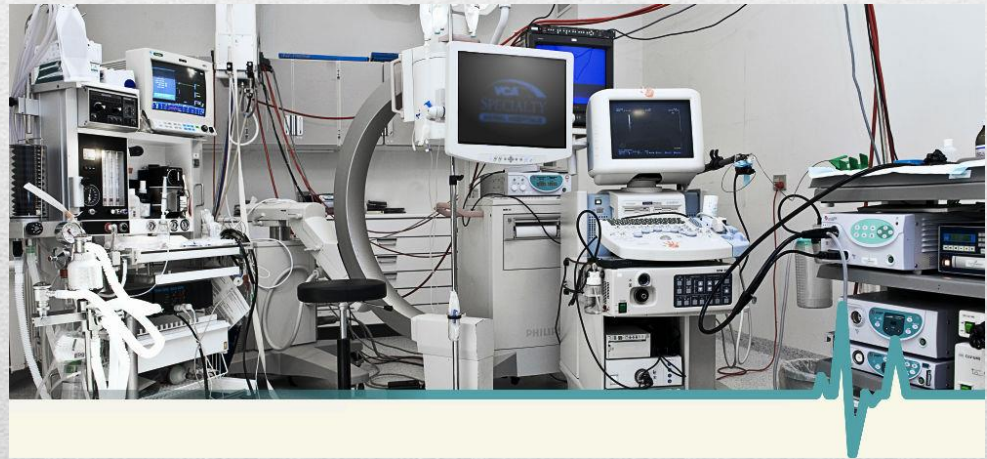
- EC.02.02.01
 - Hazardous chemicals
 - Radioactive materials
 - Hazardous energy sources
 - Hazardous medications
 - Hazardous gases and vapors



Risk Management

Individual(s) responsible for Medical and Laboratory Equipment

- EC.01.01.01
- EC.02.04.01



Risk Management

Safety and Security

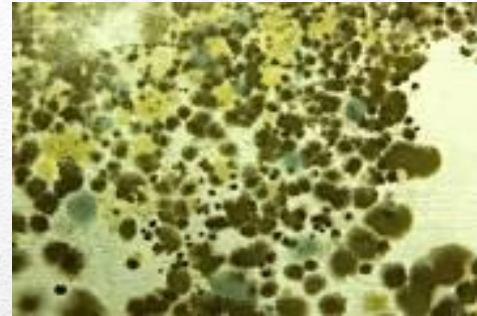
- EC.02.01.01
 - Physical Environment
 - Access to Security-sensitive areas
 - Product Recalls
 - Smoking



Risk Management

Utility Systems

- EC.02.05.01
 - Operating components
 - Control of airborne contaminants
 - Management of disruptions



Risk Management

The Life Safety Surveyor Responsibilities

- LS.01.01.01 (SOC)
- LS.01.02.01 (ILSM)
- EC.02.03.01 (Fire Response Plan)
- EC.02.03.03 (Fire Drills)
- EC.02.03.05 (Fire Equipment Maintenance)
- EC.02.05.01 (EP 15 – Pressure Relationships)
- EC.02.05.07 (Emergency Power Testing)
- EC.02.05.09 (Piped Medical Gas Testing)

Life Safety Surveyor



Top Eight Cited Standards: 2014 – 2015

[RANKING FROM ALL SURVEYS]

Standard	2014	2015
EC.02.06.01: Built Environment	#1	#1
EC.02.05.01: Utility Systems Risks	#2	#3
LS.02.01.20: Means of Egress	#4	#4
LS.02.01.30: Protection	#8	#6
LS.02.01.10: General Bldg Req's	#7	#7
LS.02.01.35: Extinguishment	#9	#8
EC.02.03.05: Fire Safety Systems	#6	#9
EC.02.02.01: HazMat & Waste	#10	#10

Why is Risk Management Important

- Creates awareness of hazards and risks
- Identifies who will be at risk, and how to minimize this group of individuals
- Helps determine existing control measures
- Focus is on reducing injuries and/or illnesses
- Process and tools to evaluate and revise overall potential threats/events

Risk Management

Problem Facing Risk Assessment / Risk Management

Risk Perception Gaps

- Staff buy-in of top threats
- Leadership alignment of priorities
- Leadership support – “Lack of caring”

Risk Management

Overall Goal

Develop a safe and secure environment for all patients, staff and visitors that enter your healthcare facility.

Risk Management



“ Thank You ”



Angela M. Timperio
President / CEO
Life Safety Enterprises Inc.

Atimperio@LifeSafetyEnterprises.com

Headquarters	440-918-1641
Toll Free	855-918-1641
Florida	239-240-6298

www.LifeSafetyEnterprises.com

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