FORUM EVENTS

Facility Security

Risk Assessment Guidelines

ASSESSMENT PROCESS OVERVIEW

The Risk Assessment process includes the following steps:

DEFINITIONS

Asset means a person, place, item, or information associated with the operation or function of the facility or organization. Its value may be quantifiable in terms of dollars. The total cost of damage to or loss of an asset is evaluated in the process. This may include replacement cost, repair cost, and the financial impact (consequence cost) of the loss event.

Loss event means physical or financial damage to or destruction of an asset. While human life is priceless, the process requires that each asset be given a value.

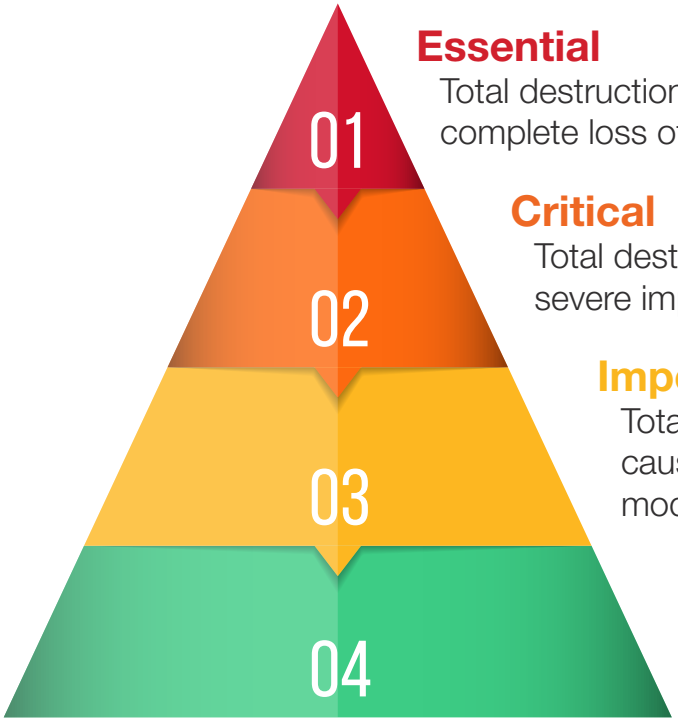
Critical level of an asset is determined by the impact its damage or loss will have on the continued operation of the business and its facilities and personnel. Criticality values are assigned on a scale of 1 through 4. See Rating the Impact of Loss section below.

Threat means any action or event, whether human or natural in origin, that can result in a loss event. Determine the probability of a specific threat successfully causing a loss event, not the probability of the threat occurring. This distinction is important and requires that the threats established be credible and realistic. A credible threat assessment and response should be established and is paramount to a successful security assessment. All possible threats, internal and external, must be carefully considered.

Countermeasure means any action or combination of actions involving physical, technical, administrative, procedural, or other measure(s) taken to reduce the severity of an identified risk.

RATING THE IMPACT OF LOSS

The four levels of critical function(s) of an asset are as follows:



Essential

Total destruction of (or severe damage to) the asset would cause complete loss of business continuity. This is a catastrophic loss.

Critical

Total destruction of (or severe damage to) the asset would cause severe impairment of business continuity. This is a serious loss.

Important

Total destruction of (or severe damage to) the asset would cause noticeable impact on business continuity. This is a moderate loss.

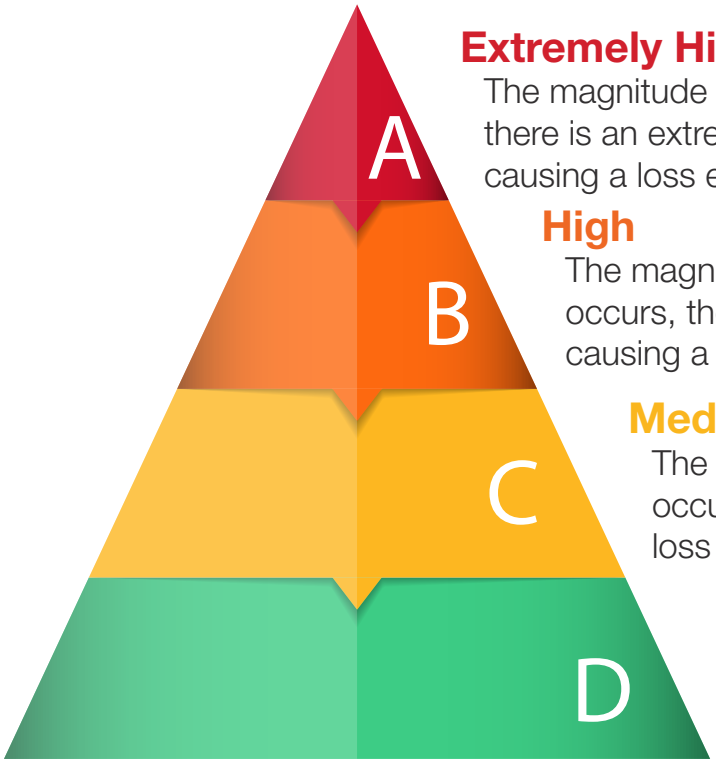
Not Important

Total destruction of (or severe damage to) the asset would cause no noticeable impact on business continuity. This is a minor loss.

ASSET VULNERABILITY RATING

The level of vulnerability of an asset is determined by assessing the threats with the existing countermeasures. If the existing countermeasures are effectively protecting the asset from all threats, vulnerability will be low. If, however, the existing countermeasures are not adequate to prevent or withstand an attack, vulnerability is higher. Vulnerability is measured in terms of the probability of a loss event occurring. Vulnerability values are assigned on a scale of A through D. The levels of vulnerability are provided below.

INTERPRETING PROBABILITY OF LOSS



Extremely High
The magnitude of the vulnerability is such that if a threat occurs, there is an extremely high probability that it will be successful in causing a loss event.

High
The magnitude of the vulnerability is such that if a threat occurs, there is a high probability that it will be successful in causing a loss event.

Medium
The magnitude of the vulnerability is such that if a threat occurs, there is a medium probability that it will result in a loss event.

Low
The magnitude of the vulnerability is such that if a threat occurs, there is a low probability that it will result in a loss event.

Combine the criticality and vulnerability data associated with specific assets in such a way as to indicate the combined severity of impact and the probability of a loss event occurring. The criticality and vulnerability ratings assigned to the major assets are entered in a risk category chart to determine the overall risk probability rating as shown below.

Asset Vulnerability and Criticality	1 Essential	2 Critical	3 Important	4 Not Important
(A) Extremely High	1A	2A	3A	4A
(B) High	1B	2B	3B	4B
(C) Medium	1C	2C	3C	4C
(D) Low	1D	2D	3D	4D

The risk assessment chart allows an employer to identify the most likely security risks with the highest potential severity in order to prioritize resources for security upgrades. This table indicates how the risk categories may be interpreted.

RISK MATRIX MANAGEMENT GUIDE

Asset Risk Category	Interpretation
1A 1B 1C 2A 2B 3A	**These risks are very high and it is recommended that measures be taken to eliminate them.**
1D 2C 2D 3B 3C	These risks are moderate. Management may determine to address these risks.
3D 4A 4B 4C 4D	These risks are low.

SECURITY RECOMMENDATIONS

Once the level of risk is determined for each asset, recommendations for security upgrades are made, if warranted. The first goal of the upgrades is to reduce the level of risk to those assets that are in the very high category to the greatest degree practicable.

A secondary goal is to reduce the level of risk to the assets in the moderate category to the greatest degree practicable. If there are constraints that preclude the immediate or near-term reduction of risks, recommendations should include planning and budgeting to accomplish this in the future.

When deciding which recommendations or countermeasures to use, the safety and security stakeholders for the organization need to discuss:

- Their immediate versus long-term needs;
- The feasibility of the addition or installation;
- The budget, including short- and long-term costs of the options; and
- How these will fit into the organizational climate and employee culture.

Risk Category	Priority