



PinPoint Risk Assessment Resources

General Liability for Special Events

CHUBB®

Chubb Risk Consulting



Contents

Quick Start Guide	3
Risk Assessment Process	4
Conducting a Risk Assessment	6
PinPoint Safety Hazards Sample Checklist	7
Severity of Loss Rating Scale	9
Probability of Loss Rating Scale	10
Risk Rating Matrix	11
Hierarchy of Controls	12
Risk Assessment Worksheet	14



Quick Start Guide

When to Do a Risk Assessment

Risk assessment is not a one-time event, but an ongoing business process.

Baseline risk assessments can be conducted for all business operations, not just special events, including:

- To enable a company to develop a profile of its risks. Those risks can then be prioritized and mitigated based upon the company criteria for acceptable risk.
- To study a special event which is of particular interest or concern to event managers. Scenarios with the potential for severe hazards or high-level exposure are prime candidates, including concerts, athletic events, political forums, parades, or other large gatherings.
- Whenever an operation is undergoing a change. Serious loss events are more likely to occur during such times.
- During an incident investigation or root-cause analysis after a loss event or potential loss event has occurred. The risk assessment can be particularly helpful in identifying corrective actions that will minimize related operational risks in the future.
- When evaluating or implementing a new type of special event. There may be little past experience to help those involved understand and identify potential hazards, and a risk assessment can be useful in determining if unacceptable risks are present. In such cases, the assessment can identify control techniques that will provide adequate protections until all aspects of the new special event are fully understood.
- To be performed as part of the planning process for special events. This should include events that are reoccurring to ensure that risks have not changed, or apply new information, experience, or technologies to raise the level of control on existing hazards.

Best Practices for Risk Assessments

Obtain management commitment to the process. Management must show a commitment to the importance of identifying and reducing excessive risk in the organization's special events in order to reduce injuries, disruptions to the event, or negative publicity.

Identify a Potentially High-Risk Scenario

Select a high risk or high value special event to perform the risk assessment. Activities or conditions generally targeted for assessment can include events that:

- Have been previously identified as presenting unknown or unusual hazards
- Have previously resulted in an accident or incident
- Are undergoing change
- Involve large crowds
- Involve construction activities such as building a stage or seating
- May draw protests
- Have large media presence or high public profile
- Have high level public participation and awareness

Select the Risk Assessment Team

The team should include an event manager, security manager, representative of local emergency services, contractors, engineering staff, safety and health specialists, risk managers, and an employee knowledgeable with the event. An additional person - consider maintenance or other staff function - is useful to ensure that no details are overlooked.

For less-complicated scenarios, it might be possible for one individual to conduct the risk assessment, but generally this should be discouraged. Much of the value of the risk assessment is derived from the dialogue among team members. Therefore, the more input and discussion during the assessment process, the fuller the understanding of the risk factors and the more accurate the determination of the loss severity and potential.



Appoint a knowledgeable facilitator in conducting risk assessments. Use a trained in-house person, or have the entire team trained directly in conducting the risk assessments. The limits of the risk assessment approach should be discussed with the team members. They should understand that the risk assessment technique is not a precise calculation of risk. The resultant risk rating is a relative versus an absolute rating of the amount of risk a specific hazard presents. The value of the risk assessment process comes from fully exploring the hazards of the event being studied and developing strategies to eliminate or reduce the risk, ideally by implementing a higher level of hazard control.

Conduct a simple risk assessment first. In order to build understanding of the risk assessment process, the team should perform a risk assessment on a simple task or operation. It is important that all team members understand how the risk assessment process is designed to work and their role in making the risk assessment successful.

Identify the hazards. The start of the risk assessment involves identifying all the hazards associated with the special event being reviewed. Use the PinPoint Safety Hazards Checklist as a guide to identify all possible hazards associated with the activity being studied.

Assess the severity and probability and occurrence. Use the PinPoint Probability of Occurrence Rating Scale and the PinPoint Severity of Occurrence Rating Scale to evaluate each possible loss event. The risk rating is the product of the probability and severity ($\text{Risk} = \text{Probability} \times \text{Severity}$). Once again it is important to recognize that an estimate of relative risk (comparing one type of hazard to another) is being developed versus a precise calculation of the actual risk.

Arrive at risk rating as a team. Risk assessors should develop independent assessments of the probability and severity of loss. After independently arriving at initial risk ratings, members should dialog about individual perceptions and judgments to fully explore all factors determining the risk associated with each hazard assessed.

Prioritize management actions according to the organization's risk tolerance. Once the overall risk is calculated, the resulting rating for each risk can be compared to the PinPoint Risk Rating Matrix to determine the appropriate management actions. The risk should also be rank-ordered with the higher-valued risks assigned the highest priority for abatement. Management and team members should understand that the PinPoint Risk Rating Matrix is a guide for management action and can be adjusted according to the circumstance unique to each organization.

Management follow-through to implement improvements. Management must understand that the risks identified and ranked present the thoughtful analysis of individuals trying to minimize the threats to the organization. To that end, management must develop a plan to mitigate the highest risks as business priorities and budgets allow. However, for those risks that are deemed unacceptable, immediate actions to correct or at least manage those risks must be implemented.

Risk Assessment Process

	1 Define the scenario
	2 Assemble the risk assessment team
	3 Identify all of the hazards
	4 Evaluate controls in place to mitigate hazards
	5 Assess the severity of the occurrence
	6 Assess the probability of the occurrence
	7 Calculate the risk rating
	8 Prioritize the management actions
	9 Initiate the mitigation plan
	10 Repeat the risk assessment worksheet

Conducting a Risk Assessment

A Step-by-step Guide

- A. Identify the event** to be analyzed.
The risk assessment scenarios for the event should be subdivided into smaller tasks or subcommittees or steps to manage the factors and process better.
- B. Assemble the risk assessment team.**
Experience has shown that a team approach in conducting risk assessment is the most productive method of identifying and assessing the risks. The size of the team will depend on the type of organization, the complexity of the scenario being assessed, and the nature of the hazards involved. Risk assessment teams can include the following: event manager, representative of local emergency services, contractors, engineering and maintenance staff, safety and health specialists, risk managers, and employees. The size of the team will vary depending on the scope of the risk assessment being conducted, but the key to success is to ensure the individuals with full and current knowledge of the event and the associated hazards be included. Key participants familiar with a specific task or scenario usually know the most about the hazards and controls, and they should be involved whenever possible.
- C. Identify all the hazards** associated with the scenario being reviewed. Use the PinPoint Special Event Sample Checklist as a guide to identifying all possible hazards associated with the scenario.
- D. Evaluate the controls in place to mitigate the hazards** associated with the scenario being reviewed. Use the PinPoint Risk Assessment Worksheet to document the controls.
- E. Assess the severity of occurrence** using the PinPoint Severity of Occurrence Rating Scale to evaluate each possible loss event. For each hazard being assessed, determine the risk category that is most closely aligned with the most serious possible

consequence. It is very important that the potential loss severity of the hazard be evaluated independently of the probability of loss. When the potential severity of a hazard falls between two risk categories, the higher category should be selected. The severity of the hazard should consider the hazard control measures in effect at the time of the rating.

- F. Assess the probability of occurrence** using the PinPoint Probability of Occurrence Rating Scale to evaluate each possible loss event. For each hazard, the probability of occurrence must be assessed. Generally, determining the probability of an adverse incident occurring is a highly subjective and imprecise estimate. As a result, the risk assessment team should estimate how likely an incident will occur by evaluating:
 - Past incident experience
 - Guest exposure (defined as total number of guests times the frequency of their exposure)
 - The installation and effectiveness of hazard controls

In general, a history of past incidents, a higher exposure level, and non-existent or ineffective controls would indicate a higher probability of an incident occurrence.

- G. Calculate the risk rating** through team member dialogue. The product of the probability and severity yields the overall risk rating (Risk = Probability x Severity). It is important to recognize that an estimate of relative risk (comparing one type of hazard to another) is being developed rather than a precise calculation of the actual risk. Risk Assessors should develop independent assessments of the probability and severity of occurrence. After independently arriving at initial risk ratings, members should discuss individual perceptions and judgments so as to fully explore all factors determining the risk associated with each hazard assessed.

- H. Prioritize appropriate management actions.** Once the overall risk is calculated, the resulting rating for each risk can be compared to the PinPoint Risk Rating Matrix to determine the appropriate management actions. The risk should also be rank-ordered, with the higher-valued risks assigned the highest priority for abatement. Management and team members should understand that the PinPoint Risk Rating Matrix is a guide for management action that can be adjusted according to the risk tolerance and management strategy of an organization.

- I. Initiate a mitigation plan.**
Management must develop a plan to mitigate the highest risks as business priorities and budgets allow. However, for those risks that are deemed unacceptable, immediate actions to eliminate or acceptably reduce those risks must be implemented.
- J. Repeat the risk assessment worksheet** with post-mitigation controls to measure risk reduction. Based on the risk assessment of the current state, reconsider the severity and probability using higher or more effective controls. Describe the recommended controls in the PinPoint Risk Assessment Worksheet. Indicate the severity and probability scored that would be achieved with the implementation of those controls and the overall risk score for each hazard. Compare them to the overall risk scores of the current state to demonstrate the level of risk reduction that will be achieved.

PinPoint Special Event Sample Checklist

Scenario: _____

Date of Assessment: _____

Potentially Higher Risk Activities That Impact Severity

The following activities have been identified as factors that can significantly contribute to the severity of a loss, regardless of probability or loss experience. These activities need to be given more focus in the risk assessment process.

- | | |
|--|--|
| <input type="checkbox"/> Use of pyrotechnics
<input type="checkbox"/> Large gatherings
<input type="checkbox"/> Stunts
<input type="checkbox"/> Temporary stages, grandstand seating, or bleacher seating
<input type="checkbox"/> Use of weapons in demonstrations
<input type="checkbox"/> Controversial exhibits or presentations
<input type="checkbox"/> Political Forums | <input type="checkbox"/> Sporting activities such as 5K races, youth tournaments, extreme sports, golf tournaments, etc.
<input type="checkbox"/> Special amusements, fairs, or carnivals
<input type="checkbox"/> Animal rides or acts
<input type="checkbox"/> Contests or events involving extreme physical activity
<input type="checkbox"/> Carnival rides or rides in either motorized or non-motorized vehicles
<input type="checkbox"/> Concerts
<input type="checkbox"/> Water related or themed events |
|--|--|

Risks by Type

Equipment or Rides <input type="checkbox"/> Moving parts <input type="checkbox"/> Sharp edges <input type="checkbox"/> Releases (sparks, chips, fume, dust) <input type="checkbox"/> Stored energy <input type="checkbox"/> Overturning machine or object <input type="checkbox"/> Other	Transport <input type="checkbox"/> Aircraft/watercraft <input type="checkbox"/> Forklift/pallet jack <input type="checkbox"/> Overhead crane <input type="checkbox"/> Golf cart <input type="checkbox"/> Horseback riding <input type="checkbox"/> Water recreation (jet ski, kayak, etc.) <input type="checkbox"/> Housekeeping carts <input type="checkbox"/> Other	Fire and Explosion <input type="checkbox"/> Flammable gas <input type="checkbox"/> Flammable liquid <input type="checkbox"/> Combustible dust or solid <input type="checkbox"/> Chemical reactions <input type="checkbox"/> Reactive chemical <input type="checkbox"/> Hot work, flame, or sparks <input type="checkbox"/> Other	Electrical <input type="checkbox"/> Exposed conductors <input type="checkbox"/> High voltage <input type="checkbox"/> Arc flash <input type="checkbox"/> Defective <input type="checkbox"/> Plugs or wires <input type="checkbox"/> Overloaded sockets or circuits <input type="checkbox"/> Other
Vendor Management <input type="checkbox"/> No oversight of vendors <input type="checkbox"/> No safety rules provided to contractors <input type="checkbox"/> No review of job safety requirements <input type="checkbox"/> No insurance requirements <input type="checkbox"/> Subcontracting by vendor <input type="checkbox"/> Other	Security <input type="checkbox"/> Absence of CCTV and recording <input type="checkbox"/> No on-site security <input type="checkbox"/> Armed private security <input type="checkbox"/> No law enforcement coordination <input type="checkbox"/> No threat assessment <input type="checkbox"/> No access control/screening/credentialing <input type="checkbox"/> No cyber security controls <input type="checkbox"/> No controls for money handling <input type="checkbox"/> Other	Slip, Trip and Fall <input type="checkbox"/> Exposure not considered in risk assessment <input type="checkbox"/> No inspection program for temporary operations <input type="checkbox"/> No inspection program for ongoing operation <input type="checkbox"/> Lack of program to respond to spills <input type="checkbox"/> Lack of contracts for risk transfer <input type="checkbox"/> Other	Contract Management <input type="checkbox"/> Lack of master service agreement <input type="checkbox"/> Lack of insurance/contract tracking program <input type="checkbox"/> Lack of legal review <input type="checkbox"/> Other

Risks by Type			
Miscellaneous <ul style="list-style-type: none"> <input type="checkbox"/> Animal bites, kicks and stings <input type="checkbox"/> Structure, stage, or equipment collapse <input type="checkbox"/> Other 	Hazardous Agents <ul style="list-style-type: none"> <input type="checkbox"/> Pathological organisms <input type="checkbox"/> Biological fluids <input type="checkbox"/> Legionella bacteria <input type="checkbox"/> Community acquired disease (H1N1, COVID, SARS, Ebola) <input type="checkbox"/> Emerging technologies with limited knowledge of hazards <input type="checkbox"/> Other 	Life Safety <ul style="list-style-type: none"> <input type="checkbox"/> Obstructions of regular and temporary means of egress <input type="checkbox"/> Temporary life safety plans not properly displayed and not updated based on occupancy load <input type="checkbox"/> No safety training developed for employees and contractors <input type="checkbox"/> Fire protection systems not properly designed and not correctly installed <input type="checkbox"/> Fire protection systems not periodically inspected, tested or maintained <input type="checkbox"/> Fire alarm notifications not signaled-off to a central monitoring station <input type="checkbox"/> Use of non-fire rated materials or open flames for decorative purposes <input type="checkbox"/> Other 	Parking <ul style="list-style-type: none"> <input type="checkbox"/> Inadequacy and/or lack of visibility of the signage in place (ground clearance, pedestrians not to use ramps, speed limit, mirrors, no trespassing, etc.) <input type="checkbox"/> Absence of speed bumps before intersection and blind turns <input type="checkbox"/> No audio and visual alarms installed to protect pedestrians from vehicles <input type="checkbox"/> Absence of valet parking <input type="checkbox"/> Landscaping not properly maintained <input type="checkbox"/> Inadequate lighting of the parking garage <input type="checkbox"/> Lack of CCTV cameras covering the car park areas <input type="checkbox"/> No regular safety and security inspections conducted <input type="checkbox"/> No carbon monoxide detectors (with automatic fans) installed <input type="checkbox"/> Other
Weather <ul style="list-style-type: none"> <input type="checkbox"/> High speed winds or gusts <input type="checkbox"/> Lightning <input type="checkbox"/> Precipitation such as rain, hail, or snow <input type="checkbox"/> Tornadoes <input type="checkbox"/> Other 	Alcohol and Food Service <ul style="list-style-type: none"> <input type="checkbox"/> No program to prevent over serving of alcohol or sale to minors <input type="checkbox"/> No alcohol service training for staff <input type="checkbox"/> Not in compliance with health codes and liquor licenses <input type="checkbox"/> Fire exposure created by food service operations <input type="checkbox"/> Lack of barriers to prevent visitors from interacting with hot surfaces or objects used for food prep. <input type="checkbox"/> Use of non-glass containers when possible <input type="checkbox"/> Other 	Crowd Control <ul style="list-style-type: none"> <input type="checkbox"/> Lack of plan to manage flow of pedestrians and vehicles and to prevent bottlenecks <input type="checkbox"/> Lack of plan to manage larger than expected crowds <input type="checkbox"/> No plan to manage emergency evacuations <input type="checkbox"/> No public-address system to communicate emergency situations <input type="checkbox"/> Other 	
Emergency Planning			
Plan Does Not Address: <ul style="list-style-type: none"> <input type="checkbox"/> Medical emergency <input type="checkbox"/> Missing person/children <input type="checkbox"/> Natural disasters <input type="checkbox"/> Active shooter <input type="checkbox"/> Release of hazardous materials <input type="checkbox"/> Access for emergency vehicles <input type="checkbox"/> Bomb threat <input type="checkbox"/> Fire emergency <input type="checkbox"/> Civil unrest/disturbances <input type="checkbox"/> Emergency response plan does not use incident command system <input type="checkbox"/> Multiagency coordination (law enforcement) <input type="checkbox"/> Other 			

Severity of Occurrence Rating Scale

For each hazard assessed, assign the risk rating that is most closely aligned with the most serious possible consequence. The severity of the hazard should consider the hazard control measures in effect at the time of the rating. When the potential severity of a hazard falls between two risk ratings, the higher category should be selected.

Score	Rating	Description of Hazards
1	Negligible	<ul style="list-style-type: none"> • Minor injury potential to limited number of guests • Minor damage to third party property that may require repairs • Negligible impact on organization's reputation
2	Marginal	<ul style="list-style-type: none"> • Moderate injury potential to guests which could involve medical treatment • Minor damage to third party property requiring repairs • Potential impact on organization's reputation
3	Substantial	<ul style="list-style-type: none"> • Serious injury potential to guests which could involve being admitted to a medical facility • Damage to third party property requiring repairs and temporary loss of use • Compliance violation (Building Code, Life Safety, etc.) • Impact on organization's reputation • Loss of revenue
4	Critical	<ul style="list-style-type: none"> • Potential for fatality and injury of multiple participants • Damage to third party property resulting in significant impairment or long-term loss of use of property • Serious compliance violation (Building Code, Life Safety, etc.) • Significant impact on organization's reputation • Loss of revenue
5	Catastrophic	<ul style="list-style-type: none"> • Fatality or injury of multiple participants • Total loss of use of third-party property • Repeat willful compliance violation (Building Code, Life Safety, etc.) • Organization requires crisis management team to repair reputation • Total loss of revenue

Probability of Occurrence Rating Scale

For each hazard assessed, determine the probability or likelihood of occurrence. Estimate how likely an adverse incident will occur by evaluating:

- Past incident experience
- Guest exposure (defined as total number of guest times the frequency of their exposure)
- Implementation and effectiveness of hazard controls

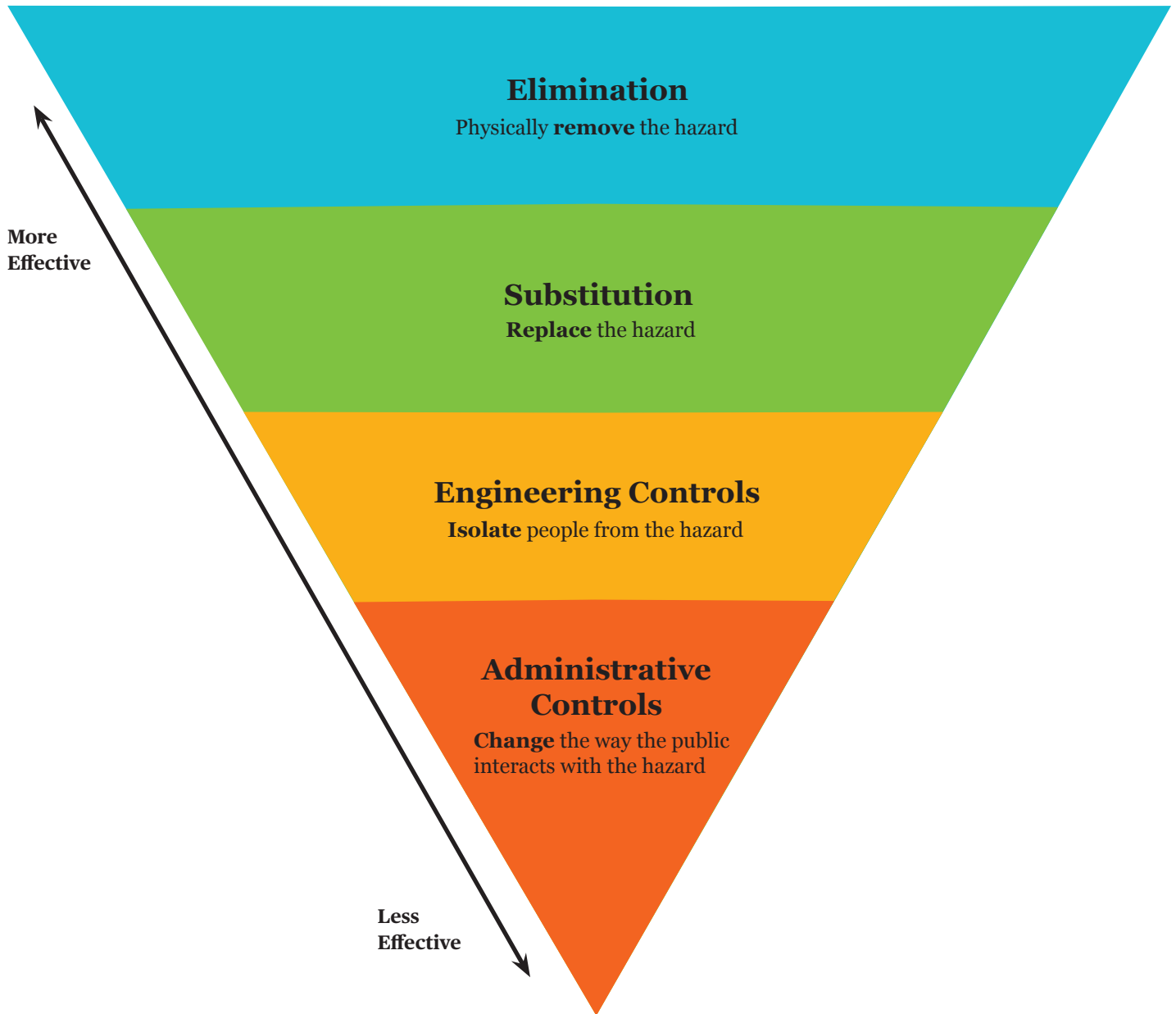
In general, a history of past incidents, a higher exposure level, and nonexistent or ineffective controls indicate a higher probability of incident occurrence.

Score	Rating	Description of Hazards
1	Improbable	<ul style="list-style-type: none"> • May assume it will not happen • Few if any people are exposed less than once a month • Control measures have eliminated hazards • Unintended consequences are very unlikely
2	Remote	<ul style="list-style-type: none"> • Exposing activity happens infrequently • Could expect minimal impact on third parties • Only minimal public exposure • Hazard controls, if needed, are highly effective
3	Occasional	<ul style="list-style-type: none"> • Exposing activity happens regularly or without warning • Could expect an incident during each special event • Public infrequently exposed • Effectiveness of hazard controls vary due to utilization, maintenance, etc.
4	Probable	<ul style="list-style-type: none"> • Exposing activity happens frequently • Could expect multiple incidents during each special event • Public is frequently exposed • Hazard controls are reliant on administrative procedures
5	Frequent	<ul style="list-style-type: none"> • Public is continuously exposed during the event • Incident likely to happen at any moment • Minimal or no hazard controls • Occurrence of unintended consequences are difficult to predict

Risk Rating Matrix

Risk Rating		Severity of Occurrence				
		Catastrophic	Critical	Substantial	Marginal	Negligible
		(5)	(4)	(3)	(2)	(1)
Probability of Occurrence	Frequent (5)	High Risk reduction necessary	High Risk reduction necessary	High Risk reduction necessary	Serious Risk reduction recommended	Medium Management review needed
	Probable (4)	High Risk reduction necessary	High Risk reduction necessary	High Risk reduction necessary	Medium Management review needed	Medium Management review needed
	Occasional (3)	High Risk reduction necessary	Serious Risk reduction recommended	Serious Risk reduction recommended	Medium Management review needed	Low Acceptable risk
	Remote (2)	Serious Risk reduction recommended	Serious Risk reduction recommended	Medium Management review needed	Medium Management review needed	Low Acceptable risk
	Improbable (1)	Medium Management review needed	Medium Management review needed	Low Acceptable risk	Low Acceptable risk	Low Acceptable risk

Hierarchy of Controls





Risk Assessment Worksheet

Hazard/Risk	Statement of Exposure	Current State-Description of Controls

Control

- A. Elimination
- B. Substitution
- C. Engineering Controls
- D. Administrative Controls
- E. Personal Protective Equipment
- F. No Controls

Severity Risk Rating

- 1. Negligible
- 2. Marginal
- 3. Substantial
- 4. Critical
- 5. Catastrophic

Probability Risk Rating

- 1. Improbable
- 2. Remote
- 3. Occasional
- 4. Probable
- 5. Frequent

Control	Severity	Probability	Overall Risk	Post-Mitigation-Description of Controls	Control	Severity	Probability	Overall Risk

Overall Risk Rating

1 - 3

Low

4 - 8

Medium

8 - 12

Serious

12 - 25

High



Chubb is the marketing name used to refer to subsidiaries of Chubb Limited providing insurance and related services. For a list of these subsidiaries, visit our website at www.chubb.com. Insurance provided by ACE American Insurance Company and its U.S. based Chubb underwriting company affiliates. This document is advisory in nature and is offered for informational purposes only as a resource to be used together with your professional insurance advisors in maintaining a loss prevention program. The information contained in this document is not intended as a substitute for legal, technical, or other professional advice, nor is it intended to supplant any duty to provide a safe workspace, operation, product, or premises. You should consult knowledgeable legal counsel or other knowledgeable experts as to any legal or technical questions you may have. No liabilities or warranties are assumed or provided by the information contained in this document. Chubb, 202 Hall's Mill Road, Whitehouse Station, NJ 08889-1600. Form 09-01-0203 (Ed. 10/21)