







MEMBERSHIP <b>Services</b>	OCCUPATIONAL <b>Safety</b>	TRAFFIC <b>Safety</b>	EMERGENCY CARE <b>Safety</b>	HOME & COMMUNITY <b>Safety</b>
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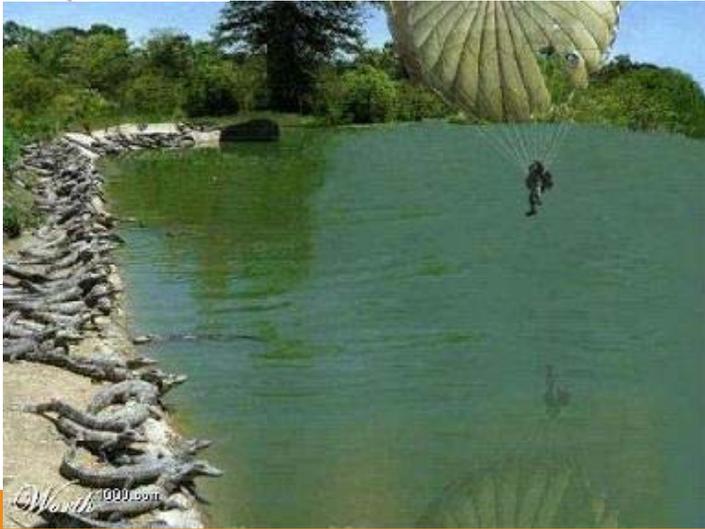
The mission of the Utah Safety Council is to save lives by promoting safety and health through education, services, and products.

UTAHSAFETYCOUNCIL.ORG



UTAH  
**Safety**  
COUNCIL

## Promoting a Risk Management Mindset




## Our Mission

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The mission of the Utah Safety Council is to save lives by promoting safety and health through education, services, and products.



## RISK?

WHAT IS IT?

WHO IS INVOLVED?

HOW TO MANAGE?





## What is Risk??

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(Exposure to) the possibility of loss, injury, or other adverse or unwelcome circumstance; a chance or situation involving such a possibility. (Wikipedia)

the possibility that something bad or unpleasant (such as an injury or a loss) will happen (Webster)

Probability or % of occurrence



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**How Safe is  
Safe Enough?  
99.9%?**



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**IF 99.9% IS GOOD ENOUGH,  
THEN...**



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**12 newborns will be given to the wrong parents daily**



**114,500 mismatched pairs of shoes will be shipped per year**



**2.5 million books will be produced  
with the wrong covers**



**4 crashed flights/day or 1460/year**



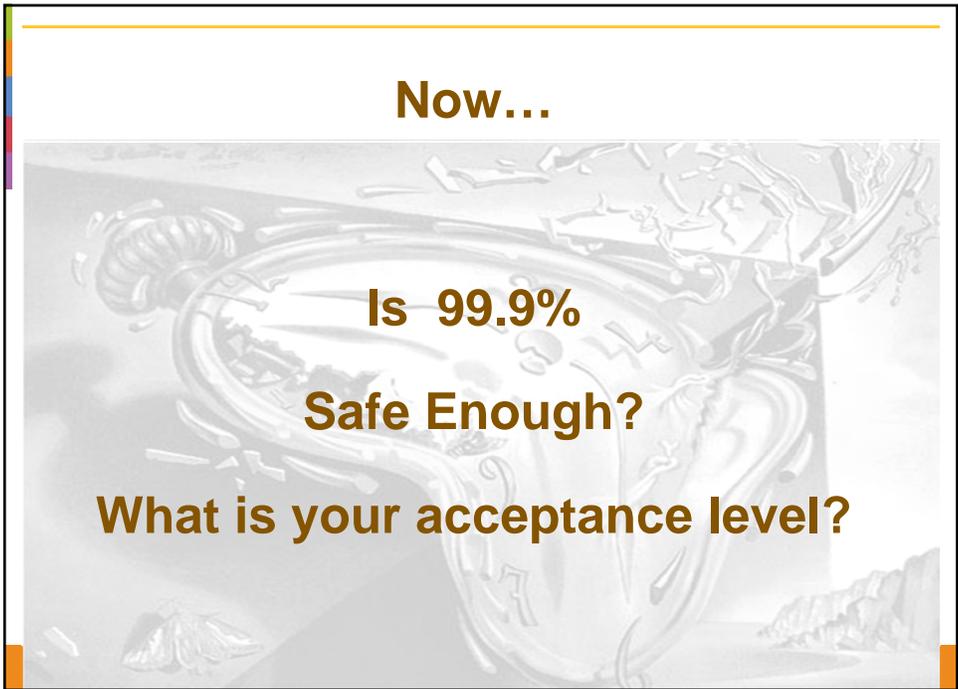
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**880,000 credit cards in circulation will turn out to have incorrect cardholder information on their magnetic strip**



**20,000 incorrect drug prescriptions will be written this year**







## What are risks that we take?



Coming in today - we conducted a survey of use of handrails on the stairs - results - xx% Safe.

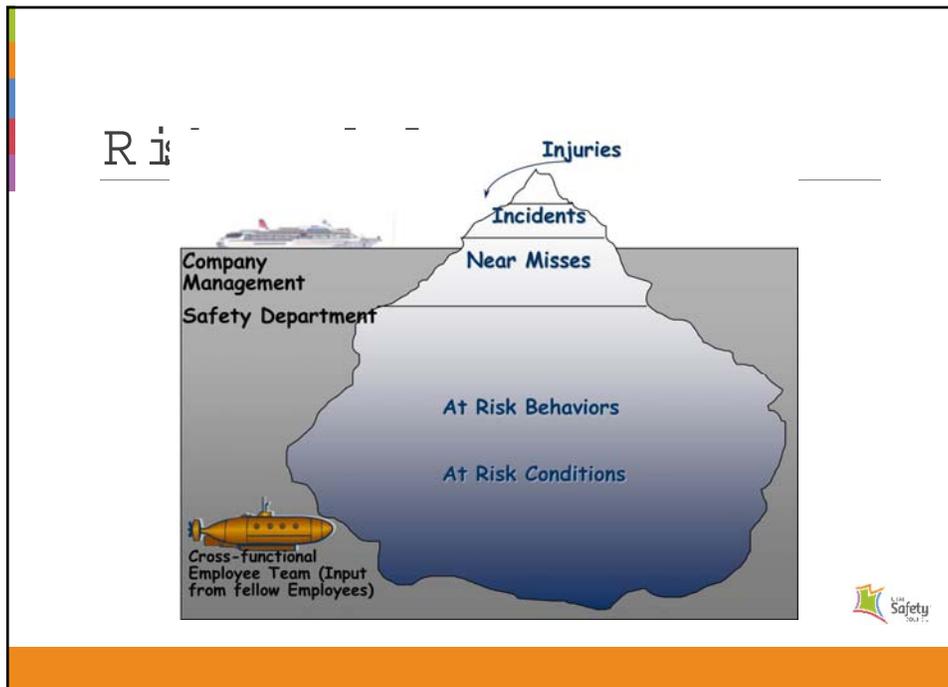
Was this high or low risk?

Was this managed? - By who?

How could we manage this?







Risk

Tolerance / Acceptance

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What is your level of acceptance to Risk?

What is your company's level of acceptance to Risk?

What is your family's level of acceptance to Risk?

Mousetrap demo

The Safety Solutions

## R isk at W hose perspective?

Safety Professional

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Supervisor

Manager

R isk Control Dept.

Accounting/Comptroller

General Manager

Company President

CEO

Employee



## Organizations Striving for Excellence

**SOLD!**

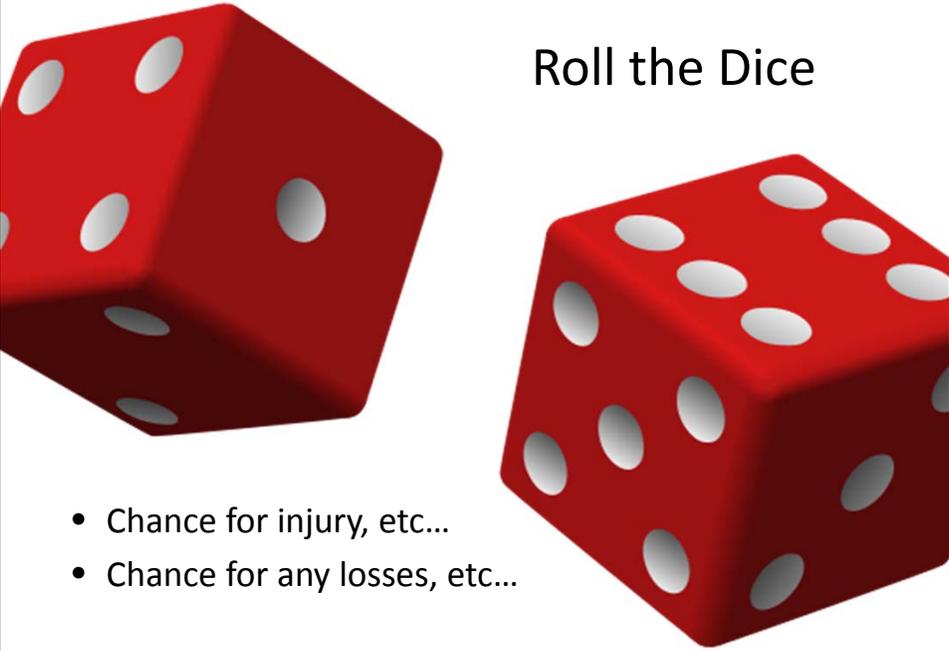
**“Where there is no involvement,  
there will be no ownership.”**

**Stephen R. Covey**

**SOLD!**



## Roll the Dice



- Chance for injury, etc...
- Chance for any losses, etc...



## Leveraging Hierarchy of Controls (Martin Dean)

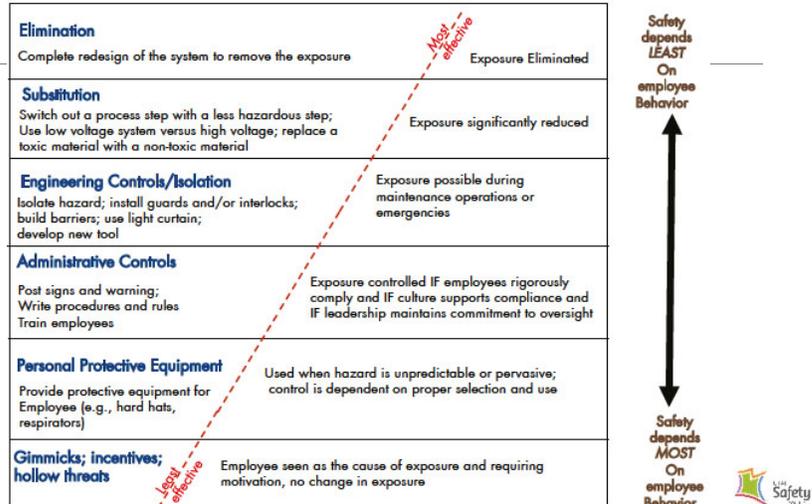
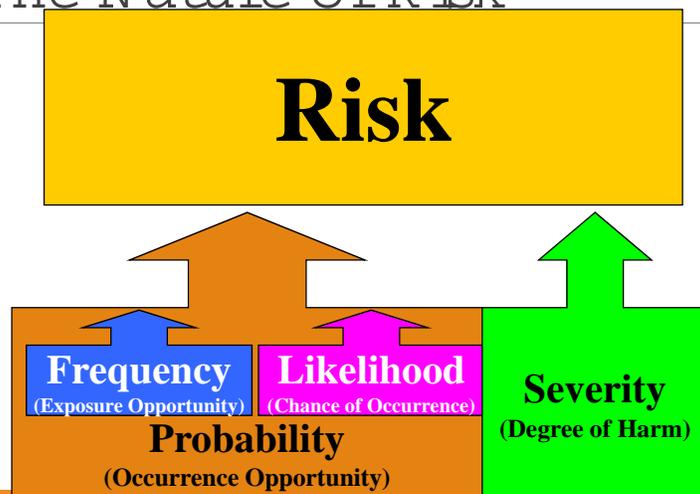


Figure 1. The hierarchy of controls: effect on exposure.

## The Nature of Risk



# Contributing Factors

## Frequency (Exposure Opportunity)

- How often the exposure exists
- How often the task is completed

## Likelihood (Chance of Occurrence)

- Could be subjective
- There is opportunity to reduce the subjectivity by fact finding, assessments, observations, injury/crash history.
- In the life cycle of the system

## Severity (Degree of Harm)

- How bad would it really be.



**1. Risk Identification**  
Identify Risks  
Risk events and their relationships are defined

**2. Risk Impact Assessment**  
Assess Probability & Consequence  
Probabilities and consequences of risk events are assessed

**3. Risk Prioritization Analysis**  
Assess Risk Criticality  
Decision-analytic rules applied to rank-order identified risk events from "most to least" critical

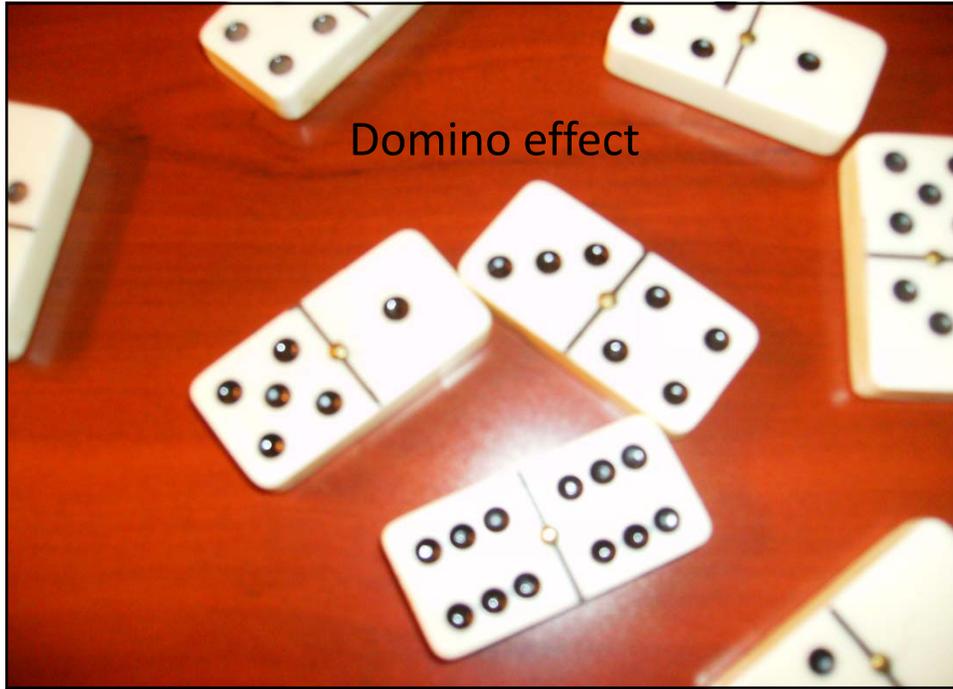
**4. Risk Mitigation Planning, Implementation, and Progress Monitoring**  
Risk events assessed as medium or high criticality might go into risk mitigation planning and implementation; low critical risks might be backlogged on a watch list.

**Risk Tracking**  
Watch-listed Risks

## Other options – many!

		IMPACT		
		High	Medium	Low
P R O B A B I L I T Y	High	1	1	2
	Medium	2	3	4
	Low	4	5	6

Performing Qualitative Risk Analysis		Responsibility																																										
<b>What</b>	<b>Method</b>																																											
<b>Data Quality Assessment</b>	Each threat and opportunity will be further looked at for quality of data available and the risk ratings imparted.	• Risk Team will perform the data quality assessment																																										
<b>Assumptions Testing</b>	Project assumptions will be revisited to ensure that identified risks are still valid.	• Risk Team will perform the assumptions testing.																																										
<b>Risk Matrix</b>	<p style="text-align: center;"><b>Project Risk (Threat and Opportunity) Matrix</b></p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Impact →</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> </tr> </thead> <tbody> <tr> <th>Probability ↓</th> <th>High Risk</th> <th>Minor Risk</th> <th>Moderate Risk</th> <th>High Risk</th> <th>Severe Risk</th> </tr> <tr> <th>(81-100)%</th> <td style="background-color: #f08080;">Low Risk</td> <td style="background-color: #90ee90;">Moderate Risk</td> <td style="background-color: #90ee90;">High Risk</td> <td style="background-color: #ff4500;">Extreme Risk</td> <td style="background-color: #ff4500;">Extreme Risk</td> </tr> <tr> <th>(61-80)%</th> <td style="background-color: #90ee90;">Minimum Risk</td> <td style="background-color: #90ee90;">Low Risk</td> <td style="background-color: #90ee90;">Moderate Risk</td> <td style="background-color: #ff4500;">High Risk</td> <td style="background-color: #ff4500;">Extreme Risk</td> </tr> <tr> <th>(41-60)%</th> <td style="background-color: #90ee90;">Minimum Risk</td> <td style="background-color: #90ee90;">Low Risk</td> <td style="background-color: #90ee90;">Moderate Risk</td> <td style="background-color: #ff4500;">High Risk</td> <td style="background-color: #ff4500;">High Risk</td> </tr> <tr> <th>(21-40)%</th> <td style="background-color: #90ee90;">Minimum Risk</td> <td style="background-color: #90ee90;">Low Risk</td> <td style="background-color: #90ee90;">Moderate Risk</td> <td style="background-color: #ff4500;">High Risk</td> <td style="background-color: #ff4500;">High Risk</td> </tr> <tr> <th>(1-20)%</th> <td style="background-color: #90ee90;">Minimum Risk</td> <td style="background-color: #90ee90;">Minimum Risk</td> <td style="background-color: #90ee90;">Low Risk</td> <td style="background-color: #ff4500;">Moderate Risk</td> <td style="background-color: #ff4500;">High Risk</td> </tr> </tbody> </table>	Impact →	1	2	3	4	5	Probability ↓	High Risk	Minor Risk	Moderate Risk	High Risk	Severe Risk	(81-100)%	Low Risk	Moderate Risk	High Risk	Extreme Risk	Extreme Risk	(61-80)%	Minimum Risk	Low Risk	Moderate Risk	High Risk	Extreme Risk	(41-60)%	Minimum Risk	Low Risk	Moderate Risk	High Risk	High Risk	(21-40)%	Minimum Risk	Low Risk	Moderate Risk	High Risk	High Risk	(1-20)%	Minimum Risk	Minimum Risk	Low Risk	Moderate Risk	High Risk	• Team will use the agreed upon definitions of Risk Matrix cells
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<b>Definition of Probability and Impact</b>	<p>A scale of 1%-100% will be used for Probability.</p> <p>(1-20)% means <b>very low</b></p> <p>(21-40)% means <b>low</b></p> <p>(41-60)% means <b>medium</b></p> <p>(61-80)% means <b>high</b></p> <p>(81-100)% means <b>critical</b></p> <p>A scale of 1-5 will be used for impact ratings</p> <p>1 means <b>negligible</b></p> <p>2 means <b>minor</b></p> <p>3 means <b>moderate</b></p> <p>4 means <b>significant</b></p> <p>5 means <b>severe</b></p>	• Team will use the agreed upon definitions of probability and impact																																										
<b>Application of the Risk Threshold</b>	Any Risk with a probability of over 80% will be treated as a fact and will be addressed in the Project Management Plan and not in Risk Management. Risk threshold (which risks move forward in the process and which ones will be	• Risk Team will determine which risks move forward and which get																																										



## Safety Shoe example

Who needs the shoes?

Who pays for the shoes?

Could this be a deciding factor on Risk acceptance?



So... .

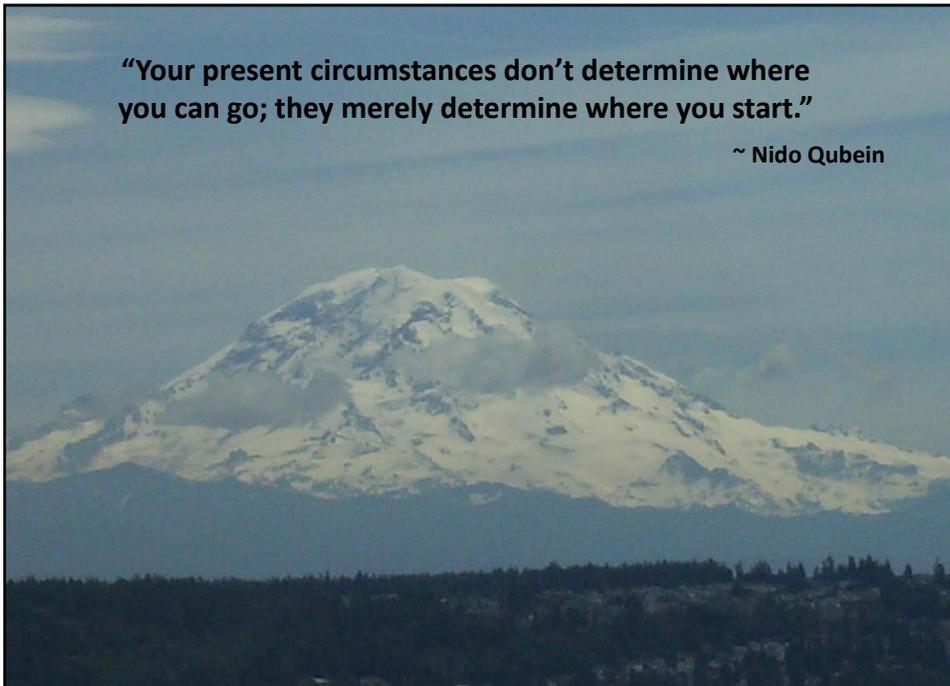


- Risk is everywhere – we determine what is acceptable.
- Involve those actually in the risk area.
- Quantify and/or Control Risks – various options.



**“Your present circumstances don’t determine where you can go; they merely determine where you start.”**

~ Nido Qubein



Thank You !!!

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Q uestions?

