



Emergency Scope

- How big is this emergency?
 - Personal (auto accident, stranded, ...)
 - Family (house fire, gas leak, medical emergency,...)
 - Local community (flood, fire, evacuation,...)
 - Large community (tornado, hurricane, chemical spill, riots, terrorism, earthquake,)
 - State (hurricane, pandemic, earthquake, terrorism,...)
 - National (pandemic, war, terrorism, major volcano,...)
 - Global (pandemic, war, famine, major natural...)
- Each scenario has a different response
- Each scope has a different response



Response Scope

- Question: With hundreds or thousands of different combinations of emergencies, how can we ever prepare for them all?



Response Scope

- Answer: we prepare for them by being smart
 - Categorize scenarios using a Risk Matrix
 - Look for similarities in the Problem or Solution
 - Build / plan upon those similarities



Risk Matrix

- Risk Matrix: helps people determine how much to prepare for different types of emergencies
- It considers risks based on two factors:
 - How likely it is to happen
 - How bad it is if it does happen

		Consequence				
		Negligible 1	Minor 2	Moderate 3	Major 4	Catastrophic 5
Likelihood	5 Almost certain	Moderate 5	High 10	Extreme 15	Extreme 20	Extreme 25
	4 Likely	Moderate 4	High 8	High 12	Extreme 16	Extreme 20
	3 Possible	Low 3	Moderate 6	High 9	High 12	Extreme 15
	2 Unlikely	Low 2	Moderate 4	Moderate 6	High 8	High 10
	1 Rare	Low 1	Low 2	Low 3	Moderate 4	Moderate 5

Don't stress too much about the details here. I want to introduce you to the concept of risk planning. There are whole professions of people who really get into the details of this.



Risk Matrix

Consequence					Increasing probability			
Severity Rating	People	Assets	Environment	Reputation	A	B	C	D
					Has occurred in Industry	Has occurred in operating company	Occurred several times a year in operating company	Occurred several times a year in location
0	Zero injury	Zero damage	Zero effect	Zero impact	Manage for continued improvement			
1	Slight injury	Slight damage	Slight effect	Slight impact				
2	Minor injury	Minor damage	Minor effect	Limited impact	Incorporate risk-reducing measures		Failed to meet screening criteria	
3	Major injury	Local damage	Local effect	Considerable impact				
4	Single fatality	Major damage	Major effect	Major national impact	Failed to meet screening criteria			
5	Multiple fatalities	Extensive damage	Massive effect	Major international impact				

Figure 1 – A typical Risk Assessment Matrix



Example: Tornado

- In central Virginia
 - The likelihood of a tornado is small
 - If it happened, there would be moderate damage



- In Oklahoma
 - The likelihood of a tornado is very high
 - If it happened, the damage is likely higher



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