

HAZARD AND VULNERABILITY ASSESSMENT TOOL NATURALLY OCCURRING EVENTS

TSA-G 2024.07.23	PROBABILITY	SEVERITY = (MAGNITUDE - MITIGATION)						RISK
		HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED-NESS	INTERNAL RESPONSE	EXTERNAL RESPONSE	
	Likelihood this will occur	Possibility of death or injury	Physical losses and damages	Interuption of services	Preplanning	Time, effectiveness, resouces	Community/ Mutual Aid staff and supplies	Relative threat*
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 - 100%
Hurricane	2	2	2	3	1	2	2	44%
Tornado	3	3	3	3	2	1	1	72%
Severe Thunderstorm	3	3	3	3	2	3	1	83%
Snow Fall	1	1	0	0	2	1	1	9%
Ice Storm	2	2	2	2	2	2	2	44%
Earthquake	1	1	1	2	3	2	2	20%
Temperature Extremes	2	3	2	2	3	2	2	52%
Drought	2	2	3	3	2	2	2	52%
Flood, External	2	2	2	2	2	2	2	44%
Wild Fire	3	2	2	2	2	2	2	67%
Landslide	0	0	0	0	0	0	0	0%
Dam Inundation	1	0	1	1	0	0	0	4%
Epidemic	2	2	1	2	2	2	2	41%
AVERAGE SCORE	1.50	1.44	1.38	1.56	1.44	1.31	1.19	23%

2

1

3

*Threat increases with percentage.

RISK = PROBABILITY * SEVERITY		
0.23	0.50	0.46

HAZARD AND VULNERABILITY ASSESSMENT TOOL TECHNOLOGIC EVENTS

TSA-G 2024.07.23	PROBABILITY	SEVERITY = (MAGNITUDE - MITIGATION)						RISK
		HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED-NESS	INTERNAL RESPONSE	EXTERNAL RESPONSE	
	<i>Likelihood this will occur</i>	<i>Possibility of death or injury</i>	<i>Physical losses and damages</i>	<i>Interruption of services</i>	<i>Preplanning</i>	<i>Time, effectiveness, resources</i>	<i>Community/ Mutual Aid staff and supplies</i>	<i>Relative threat*</i>
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 - 100%
Electrical Failure	2	1	1	2	1	2	3	37%
Generator Failure	1	1	2	2	1	1	2	17%
Cyber Security Event	2	2	1	3	2	2	3	48%
Transportation Failure	1	3	2	3	2	2	2	26%
Fuel Shortage	1	3	3	2	2	2	2	26%
Natural Gas Failure	2	3	2	2	2	2	2	48%
Water Failure	1	2	2	2	2	3	2	24%
Sewer Failure	1	1	1	2	2	3	2	20%
Steam Failure	1	1	1	1	2	3	2	19%
Fire Alarm Failure	1	1	1	1	1	3	2	17%
Communications Failure	3	3	3	2	2	2	2	78%
Medical Gas Failure	1	3	3	2	2	2	2	26%
Medical Vacuum Failure	1	3	3	2	2	2	2	26%
HVAC Failure	1	2	2	2	2	2	2	22%
Information Systems Failure	2	3	2	3	2	2	2	52%
Fire, Internal	2	3	3	2	2	2	1	48%
Flood, Internal	1	1	2	2	2	3	1	20%
Hazmat Exposure, Internal	1	2	2	1	1	1	1	15%
Supply Shortage	2	2	2	2	2	1	1	37%
Structural Damage	1	3	3	3	2	2	2	28%
AVERAGE SCORE	1.47	2.26	2.16	2.16	1.89	2.21	2.00	35%

*Threat increases with percentage.

RISK = PROBABILITY * SEVERITY		
0.35	0.49	0.70

HAZARD AND VULNERABILITY ASSESSMENT TOOL HUMAN RELATED EVENTS

TSA-G 2024.07.23	PROBABILITY	SEVERITY = (MAGNITUDE - MITIGATION)						RISK	
		HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPAREDNESS	INTERNAL RESPONSE	EXTERNAL RESPONSE		
	<i>Likelihood this will occur</i>	<i>Possibility of death or injury</i>	<i>Physical losses and damages</i>	<i>Interruption of services</i>	<i>Preplanning</i>	<i>Time, effectiveness, resources</i>	<i>Community/ Mutual Aid staff and supplies</i>	<i>Relative threat*</i>	
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 - 100%	
Mass Casualty Incident (trauma)	2	2	2	1	2	2	2	41%	2
Mass Casualty Incident (medical/infectious)	2	2	2	2	2	2	2	44%	1
Terrorism, Biological	1	3	2	2	2	2	2	24%	
VIP Situation	1	1	1	1	3	3	3	22%	
Infant Abduction	2	2	1	1	1	1	1	26%	
Hostage Situation	2	3	1	1	3	1	1	37%	
Civil Disturbance	2	2	2	2	2	1	1	37%	
Labor Action	2	1	1	1	3	2	2	37%	
Forensic Admission	2	1	1	1	2	2	2	33%	
Bomb Threat	2	2	2	2	2	1	1	37%	3
Active Shooter Event	2	3	2	2	1	2	1	41%	
AVERAGE	1.80	1.90	1.50	1.40	2.20	1.70	1.70	35%	

*Threat increases with percentage.

RISK = PROBABILITY * SEVERITY
0.35 0.60 0.58

HAZARD AND VULNERABILITY ASSESSMENT TOOL EVENTS INVOLVING HAZARDOUS MATERIALS

TSA-G 2024.07.23	PROBABILITY	SEVERITY = (MAGNITUDE - MITIGATION)						RISK	
		HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED-NESS	INTERNAL RESPONSE	EXTERNAL RESPONSE		
	<i>Likelihood this will occur</i>	<i>Possibility of death or injury</i>	<i>Physical losses and damages</i>	<i>Interruption of services</i>	<i>Preplanning</i>	<i>Time, effectiveness, resources</i>	<i>Community/ Mutual Aid staff and supplies</i>	<i>Relative threat*</i>	
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 - 100%	
Mass Casualty Hazmat Incident (<i>From historic events at your MC with >= 5 victims</i>)	2	2	1	1	1	3	2	37%	2
Small Casualty Hazmat Incident (<i>From historic events at your MC with < 5 victims</i>)	2	2	1	1	1	1	2	30%	
Chemical Exposure, External	2	2	1	1	2	2	1	33%	3
Small-Medium Sized Internal Spill	2	2	1	1	2	2	2	37%	1
Large Internal Spill	1	1	1	0	2	2	2	15%	
Terrorism, Chemical	1	1	1	1	2	2	2	17%	
Radiologic Exposure, Internal	1	1	1	0	2	1	2	13%	
Radiologic Exposure, External	1	1	1	0	2	2	2	15%	
Terrorism, Radiologic	1	1	1	2	2	2	2	19%	
AVERAGE	1.44	1.44	1.00	0.78	1.78	1.89	1.89	23%	

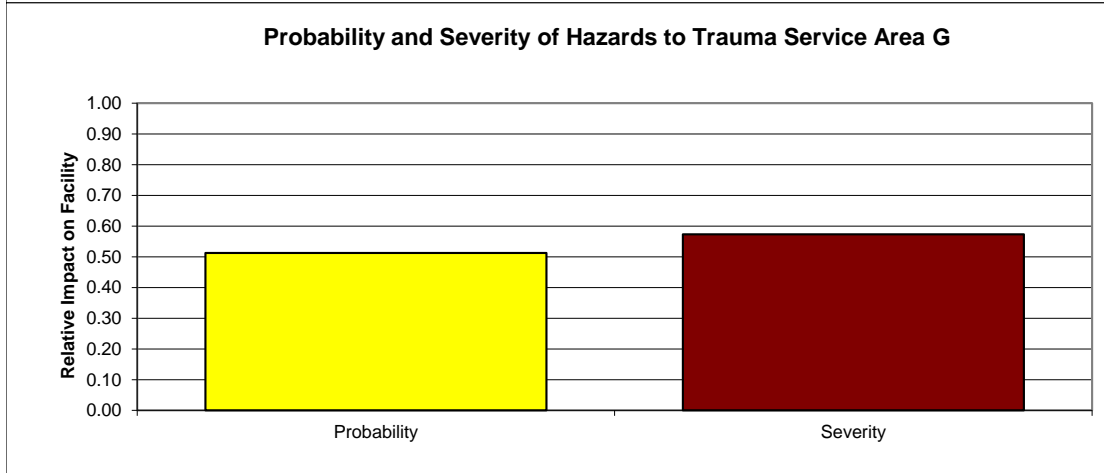
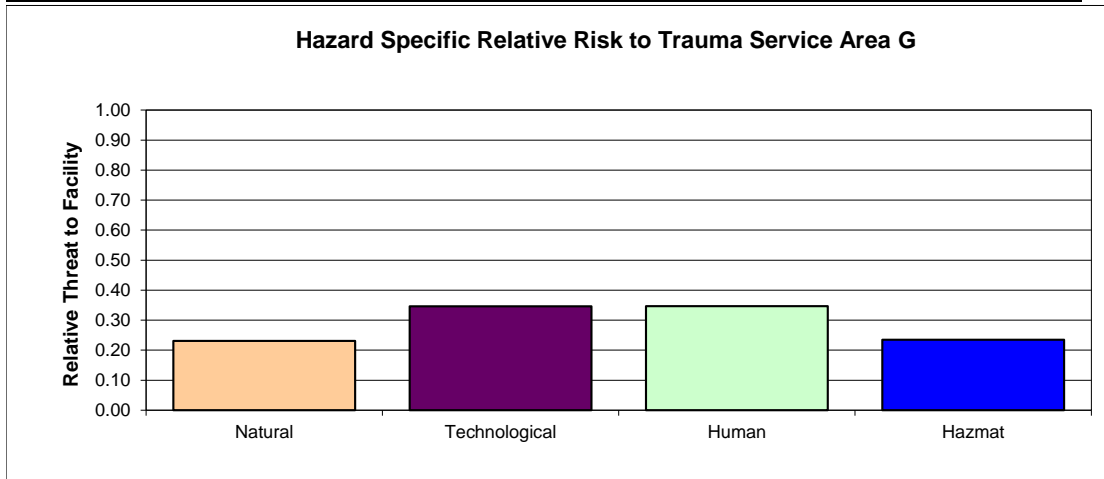
*Threat increases with percentage.

RISK = PROBABILITY * SEVERITY		
0.23	0.48	0.49

SUMMARY OF TRAUMA SERVICE AREA G HAZARDS ANALYSIS

Year: TSA G 2024.07.23

	Natural	Technological	Human	Hazmat	Total for Region
Probability	0.50	0.49	0.60	0.48	0.51
Severity	0.46	0.70	0.58	0.49	0.57
Hazard Specific Relative Risk:	0.23	0.35	0.35	0.23	0.29



This document is a Hazard Vulnerability Analysis tool. It is not a substitute for a comprehensive emergency preparedness program. Individuals or organizations using this tool are solely responsible for any hazard assessment and compliance with applicable laws and regulations.

**HAZARD AND VULNERABILITY ASSESSMENT TOOL
RISK ANALYSIS SUMMARY OF EVENTS**

TSA-G 2024.07.23	PROBABILITY	SEVERITY = (MAGNITUDE - MITIGATION)						RISK		
		HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED-NESS	INTERNAL RESPONSE	EXTERNAL RESPONSE			
	Likelihood this will occur	Possibility of death or injury	Physical losses and damages	Interruption of services	Preplanning	Time, effectiveness, resources	Community/Mutual Aid staff and supplies	Relative threat*		
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 - 100%		
NATURAL										
N-Severe Thunderstorm	3	3	3	3	2	3	1	83%		
N-Tornado	3	3	3	3	2	1	1	72%		
N-Wild Fire	3	2	2	2	2	2	2	67%		
AVERAGE SCORE	3.00	2.67	2.67	2.67	2.00	2.00	1.33	21%		
*Threat increases with percentage.										
<table border="1"> <tr> <td>RISK = PROBABILITY * SEVERITY</td> </tr> <tr> <td>0.21 0.19 1.11</td> </tr> </table>									RISK = PROBABILITY * SEVERITY	0.21 0.19 1.11
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0.21 0.19 1.11										
TECHNOLOGY										
T-Communications Failure	3	2	3	2	2	2	2	72%		
T-Information Systems Failure	2	2	2	3	2	2	2	48%		
T-Natural Gas Failure	2	2	2	2	2	2	2	44%		
T-Fire, Internal	2	2	3	2	2	2	1	44%		
AVERAGE SCORE	0.47	0.42	0.53	0.47	0.42	0.42	0.37	2%		
*Threat increases with percentage.										
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0.02 0.16 0.15										
HUMAN										
H-Mass Casualty Incident (medical/infectious)	2	2	2	2	3	2	2	48%		
H-Mass Casualty Incident (trauma)	2	3	2	1	2	2	2	44%		
Bomb Threat	3	2	2	2	2	1	1	56%		
AVERAGE	0.70	0.70	0.60	0.50	0.70	0.50	0.50	5%		
*Threat increases with percentage.										
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OVERALL

N-Severe Thunderstorm	3	3	3	3	2	3	1	83%
T-Communications Failure	3	3	3	2	2	2	2	78%
N-Tornado	3	3	3	3	2	1	1	72%
H-Mass Casualty Incident (medical/infectious)	3	2	2	2	3	2	2	72%
H-Mass Casualty Incident (trauma)	3	3	2	1	2	2	2	67%