

Hazard Identification and Risk Assessment Program

Methodology Guidelines 2019

Annex C: Risk Scoring and Treatment Tables



Office of the Fire Marshal
and Emergency Management



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Introduction

This document contains tables and other resources that can be printed and manually filled to assist in the process of assessing risk.

Once you have determined the level of risk, it is important to consider how any residual risk will be addressed, or 'treated'. This document also contains information about risk treatment, and two tables that can be filled or printed to assist you in thinking about addressing risk.

Risk Assessment

When you are ready to evaluate the risk in your community, you can score it using the equation: **Risk = Likelihood X Consequence**

Use the work sheet below to record the frequency of the hazards that could affect your community. These could be used as part of a brainstorming activity, interviews with subject matter experts, and/or as part of the final compliance submission for HIRA. Print additional sheets if needed.

In addition, the [HIRA Guide Annex C: Risk Scoring Tool](#) is an Excel workbook that automatically calculates total scores based on information you enter into it.

Full-page worksheets are included as follows:

Table 1: Frequency Table

Table 2: Consequence Table

Table 3: Risk Evaluation Worksheet

Table 4: Prioritization Worksheet

Table 5: Vulnerability, Exposure and Capacity Worksheet

Table 6: Vulnerable Groups Worksheet

Table 7: Risk Treatment Options Table

Be sure to include notes for each score, to document why this number was chosen. This will help others understand the justification for the score, and help support continuity of the HIRA data from year to year.

Table 1: Frequency Table

Hazard	Category	Frequency	Notes

Table 2: Consequence Table

Score each hazard in every sub-category. Possible values: High – 3, Medium – 2, Low – 1 or Not Applicable – 0.
 Add all sub-category scores to get a **Consequence Score** (should not be zero).

Hazard	Fatalities	Injuries	Psycho-social	Support System	Evacuation	Property Damage	Critical Infrastructure Service	Environmental	Economic	Reputation	Consequence Score

Table 3: Risk Evaluation Worksheet

Use the scores for likelihood and consequence, and enter them into the table for each hazard.
Multiply the values for likelihood and consequence to get a **total risk score** for each hazard.

Hazard	Likelihood	Consequence	Total Risk Score	Notes

Table 4: Prioritization Worksheet

Prioritise community hazards using the table below to organize them by total risk scores.

Risk Score	Description	Hazards
151-180	Extreme	
121-150	Very High	
91-120	High	
61-90	Moderate	
31-60	Low	
1-30	Very Low	

Table 5: Vulnerability, Exposure and Capacity Worksheet

Summarize the potential assets or populations within your community that are either exposed to or vulnerable to hazards/

Hazard	Exposed populations	Exposed community assets	Vulnerable populations	Vulnerable community assets	Low-Capacity populations	Low-Capacity community assets

Table 6: Vulnerable Groups Worksheet

Possible Vulnerable Groups or community assets	Capacity to cope and adapt	Residual Risk	Plans to Reduce Vulnerability

Risk Treatment

Robust and evidence-based recommendations for risk treatment can be based on the HIRA data you have gathered. These can then be passed to senior levels of government for review.

Identification of residual risk, along with recommendations for risk treatment, are an ideal to support requests for support from senior levels of government in a robust and credible way.

Table 7: Risk Treatment Options Table

This table is designed to capture the results of HIRA in a way that sets the foundation for a risk treatment and risk Mitigation planning.

Hazard	Potential Action	Priority (High, Med, Low)	Partners & Stakeholders	Treatment Type (Accept, Avoid, transfer, reduce, share)	Estimated Timeline	Estimated Cost	Funding Sources



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