

# Risk Assessment & Management Strategy (RAMS)



**CANTERBURY  
MOUNTAINEERING CLUB**

EST. 1925

### Version Control

Version	Date	Description	Author
1.0	6/6/2021	First revision, based on Rob Frost Mountain Journeys SMS	AM

### Document Properties

Document Name: Risk Assessment Management Strategy (RAMS)

## Introduction

This document deals with:

- Identifying hazards that could be encountered during CMC Instruction Courses
- Determining the level of seriousness of the risk presented by each hazard
- Outlining how each hazard should be controlled in order to maintain an acceptable level of risk

## Risk Assessment & Tolerance

The seriousness of each hazard is assessed according to its likelihood and consequence.

Table 1 Determining Risk Rating

Likelihood	Consequence				
	1 Insignificant	2 Minor	3 Medium	4 Major	5 Life Changing
	Short term impact, very minor effect(s)	Minor injury or illness, treated in-situ; no other medical treatment required	Non-threatening injury or illness that can be treated in-situ; further medical treatment may be required	Non-life-threatening but serious injury or illness which incapacitates a person and for which evacuation and medical attention must be obtained asap.	Incident which causes fatality or permanent disability/illness
1 Very Unlikely	1	2	3	4	5
2 Unlikely	2	4	6	8	10
3 Possible	3	6	9	12	15
4 Likely	4	8	12	16	20
5 Almost Certain	5	10	15	20	25

Table 2 Risk Tolerance

Risk Rating	Risk Seriousness	Risk Management (see 4.3)
1-3	Low Risk	Controls not required
4-6	Moderate Risk	Controls not required but proceed with caution; consider controls
8-12	High Risk	Do not proceed; controls required to reduce risk
15-25	Extreme Risk	

Item	Hazard	Possible Harm or Harmful Activity	Before control implemented			Controls	After control implemented		
			Likelihood	Consequence	Risk Rating		Likelihood	Consequence	Risk Rating
1	Exposure to cold and wet without shelter	Hypothermia	3	5	15	<p>A Check weather forecast prior to every trip. If trip duration is four days or more, also check forecast at least every third day via sat phone or InReach.</p> <p>B Change trip location or route choice if sustained exposed travel during poor weather is otherwise unavoidable.</p> <p>C Be strategic about when exposed travel occurs relative to weather windows.</p> <p>D Carry some form of shelter on all multiday trips outside of ski areas; short side trips without tents can occur if sustained exposure to poor weather is very unlikely.</p> <p>E Ensure all participants have appropriate clothing by going through gear list prior to trip.</p>	2	3	6
2	Participant or group getting caught in avalanche and trapped or buried, or avalanche triggers a large fall/slide	Traumatic injuries; asphyxiation ; hypothermia ; possible death	3	5	15	<p>A All Instructors to be trained to a minimum standard of NZMSC Avalanche Safety Management Level 1 (ARM5) or equivalent, except for when instructing river crossing and navigation courses.</p> <p>B Plan trips to minimise travel in avalanche terrain, and to only travel on terrain appropriate to Instructor's qualifications.</p> <p>C Before trip, Instructor to research current avalanche observations and snowpack conditions, and check weather forecast to determine likely trend in conditions.</p> <p>D If trip is to pass through avalanche terrain during "winter" conditions, Instructor is to discuss intended route choice with at least one other qualified Instructor prior to trip to discuss avalanche potential; at least one Instructor in discussion should be trained to Avalanche Level 2.</p> <p>E Instructor to make continual assessments of snowpack stability while in the field and practice safe travel techniques appropriate to the results of these assessments.</p> <p>F If group is to travel across avalanche terrain on trip with "winter" conditions: (a) everyone in group to wear a transceiver and to carry shovel and probe, and (b) participants are briefed on transceiver use</p>	1	5	5

						<p>and avalanche rescue techniques prior to entering avalanche terrain.</p> <p>G When the avalanche risk on the selected route can be controlled to a low risk level, and trip is outside of winter/spring months, avalanche equipment does not need to be carried.</p> <p>H Instructor is to record in their notebook observations and discussions on avalanche conditions.</p>			
3	Rockfall event while group or participant is in threatened area	Severe injury or death to participant or Instructor	2	5	10	<p>A Trip planning to avoid areas of known high rockfall risk if practicable, in particular considering rainfall and effect of sun and freeze/thaw.</p> <p>B Instructor to maintain safe route selection to avoid unnecessary exposure to rockfall risk</p> <p>C Ensure people are not directly above/below each other if there is a risk of individuals dislodging rocks</p> <p>D Instructor to provide location-specific briefing if traveling through an area of rockfall risk - stressing the importance of concentrating, awareness of location relative to others, and not stopping during defined sections - deal with snacks and clothing layers while still in safe area.</p> <p>E All participants and Instructor(s) to wear helmets in areas where rockfall is reasonably considered to be possible</p>	1	5	5
4	Slips and trips (at location <b>without</b> dangerous slide lines/fall lines)	Moderate injuries like rolled ankle, deep graze, impact against knee, etc	4	3	12	<p>A Trip information before participants sign up will include information on difficulty.</p> <p>B Instruction Officer to review participants submitted prior experience, to ensure trip will be within their abilities.</p> <p>C Participants of similar abilities to be grouped with each other on same trip as much as practicable.</p> <p>D Instructor to manage time so that group does not need to feel rushed. Each trip to have sufficient flexibility such that a half day delay (on trips up to four days) or full day delay (on trips that are five days or longer) can be accommodated.</p> <p>E Instructor to brief participants on appropriate walking techniques and to monitor their pace and ability; Instructor to adjust pace and provide further coaching if required.</p>	2	3	6

5	Slips, slides, trips, or falls (at location <b>with</b> dangerous slide lines/fall lines)	Broken bones, head injuries, or other major injury or death	3	5	15	<p>Controls as above, and:</p> <p>A Instructor to provide location-specific briefing if traveling through an area of heightened consequence - stressing the importance of concentrating, taking time, and being well-fed for that section.</p> <p>B Instructor to closely monitor ability of participants, and to apply appropriate guiding techniques depending on what they judge to be the likelihood and consequence of accidents at that specific location.</p> <p>C All participants and Instructor(s) to wear helmets in high consequence terrain.</p> <p>D Instructor to choose locations for practicing snow skills that have a safe runout, or are low enough angle that sliding will not occur. More exposed locations will only be travelled on when instructor is happy with ability of all participants and briefing regarding hazards has been provided.</p>	1	5	5
6	Falling into "moats" at edge of snow; falling through snow bridges into crevasses or glide cracks	Broken bones, head injuries, or other major injury or death; hypothermia	3	5	15	<p>A Use appropriate glacier travel techniques if traveling in areas that are or may be crevassed. Look out for and avoid crevasses where practicable.</p> <p>B Instructor to carry equipment for basic crevasse rescue at all times when traveling on glaciated terrain.</p>	1	5	5
7	Vehicle accident en route to or from trip	Serious injury or death to Instructor, participants, and/or third party	3	5	15	<p>A Participants are to be given the option of self-driving in their own vehicle or a rental vehicle organised by them if they wish.</p> <p>B All drivers must be aware of their fatigue levels on long drives or after completing a long trip. Drivers to take rests or change drivers as appropriate or as fatigue dictates. Trips will be planned as to avoid long drives after a hard last day.</p> <p>C All drivers for CMC (apart from participants driving their private vehicles) must hold a current full drivers licence appropriate for the vehicle being used, and must obey all road rules and laws, whether or not clients are in the vehicle.</p> <p>D Drivers who are using their own private vehicle(s) while discharging their duties for CMC must ensure that their vehicle possesses a current registration and WOF and that there are no known defects that would make the vehicle unroadworthy.</p> <p>E Any Instructor incurring legal penalties for breaching road rules is entirely responsible for the penalty - CMC will not reimburse any fines imposed</p>	1	5	5

						and a CMC incident report will be filled out. F All drivers must be aware of changing road conditions and match their driving behaviour to suit. G Snow chains are to be carried if there is a risk of snow on the road before or after trip; drivers to be familiar with how to fix chains to tyres if required.			
8	Accident during loading, or damage to aircraft causing crash during flight	Severe injury or death to participant or Instructor	3	5	15	A Follow pilot's instructions regarding loading and unloading. Pilot to handle doors and direct where people and items should go, unless pilot gives specific instructions to Instructor on how to undertake this.	1	5	5

**I have read and agree to comply with the risk management strategy described in the Canterbury Mountaineering Clubs Risk Assessment & Management Strategy (RAMS) document**

**Name:**

**Signature:**

**Date:**