



ASSESSMENT GUIDELINE

Manage risk for an outdoor activity

Unit Standard: 451

Level: 5 Credit: 4 Version: 6
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Purpose:

People credited with this unit standard are able to: demonstrate knowledge of risk management theory; identify and record in writing the potential risks and hazards in a selected activity, and the management strategies to lessen their impact; demonstrate risk management with groups participating in outdoor activities; and evaluate own performance as a risk manager.

Prerequisite:

Unit 20146, *Demonstrate basic risk management for outdoor recreation*, or demonstrate equivalent knowledge and skills.

Special Notes:

1. Definitions of the 'relationship between risk and competence' as used in this unit standard are described in the *Adventure Experience Paradigm* (Priest and Martin 1991) or the *Competency/Difficulty Model of Adventure Activities* (Davidson 1992, adapted from McConnell 1989, Priest and Bailey 1987).
2. All activities must comply with any relevant environmental, legislative and/or regulatory requirements set out in the New Zealand Environmental Care Code, Health and Safety in Employment Act 1992, Injury Prevention, Rehabilitation, and Compensation Act 2001, and their subsequent amendments. The New Zealand Environmental Care Code is available from the Department of Conservation, www.doc.govt.nz
3. Examples of the types of outdoor activities suitable for element three are: abseil with at least five clients; top rope climbing session; caving trip; river crossing; mountaineering; mountain biking; rafting; sea kayaking; and orienteering.
4. Industry Standards for management of activities refer to guidelines available from sources including but not limited to:
 - Allan, S. (2005). *Outdoor activities – guidelines for leaders*. Sport and Recreation New Zealand www.sparc.org.nz
 - Haddock, C. (2004). *Outdoor safety – risk management for outdoor leaders*. NZ Mountain Safety Council, Wellington.
 - Maritime New Zealand (1999). *Maritime Part Rule 80 – Marine Craft used for Adventure Tourism*. www.msa.govt.nz

- Ministry of Education. (2002). *Safety and EOTC – a good practice guide for New Zealand schools* www.tki.org.nz/e/community/eotc/ (resources | safety)
- <http://www.mountainsafety.org.nz>, info@mountainsafety.org.nz

5. There are minimum assessor requirements for assessment against this unit standard. The details of these requirements are available on the Sfrito website www.sfrito.org.nz

Overview of assessment:

This assessment has three tasks. Tasks 1 and 2 will be completed twice; Task 3 will be completed once after the completion of Tasks 1 and 2.

Task 1: Write a risk management plan for an actual outdoor activity and answer oral questions.

Task 2: Lead a group in the outdoor activity planned for in Task 1.

Task 3: Identify strengths and weaknesses.

Note to the Assessor:

1. Special Notes 3 and 4 (above) are expanded and updated versions of those in the unit standard.
2. Candidates are likely to be assistant outdoor leaders, working under the general supervision of a qualified outdoor leader. This means that a supervisor may have directed major decisions such as the venue and programme, and may be observing the sessions for both safety and educational reasons.
3. The risk management plans will be for the activities that the candidate leads.

Task 1: Write a risk management plan for an actual outdoor activity and answer questions

Overview of Task 1: The focus of this assessment is to demonstrate knowledge of risk management theory in an actual context.

Resources:

- Allan, S. (2005). *Outdoor Activities – Guidelines for Leaders*. SPARC, Wellington. <http://www.sparc.org.nz/education/outdoor-activities-guidelines-for-leaders>
- Haddock, C. (2004). *Outdoor safety – risk management for outdoor leaders*. MSC, Wellington. (Particularly, chapter 3, Principles of managing risk, and chapter 4, Tools).
- Safety Action Plan or Risk Management Plan (Haddock pp. 134-137).

Notes to the assessor

Because the candidate will prepare the two risk management plans before assessment using open resources, you need to ask oral questions to assess their understanding of:

- The elements of the plan
- The theory behind those elements

The answers must be appropriate to level 5 of the NZQA level descriptors. They should differ from the answers required for level 3 risk management assessment by their discussion of the relationships among elements of risk management theory.

The two risk management plans and a written record of oral responses should be filed with the assessment results for moderation.

Instruction to candidate:

During the task you are required to:

- Complete a Safety Action Plan (SAP), Risk Analysis Management System (RAMS), or other appropriate risk management plan for each of two selected activities that you will lead.
- Answer oral questions on risk management theory.

Element 1: Demonstrate knowledge of risk management theory.

Element 2: Identify and record in writing the potential risks and hazards in a selected activity, and the management strategies to lessen their impact.

Performance criteria	Evidence/Judgement
<p>1.1 Contemporary risk management theory and terms are explained and the relationship of terms to each other are described.</p> <p>Range: may include but is not limited to – risk, hazard, danger, incident, accident, crisis, causal sequence, psychological hazards, risk versus competence, challenge, adventure, management strategies, real risk, perceived risk, absolute risk, policies and guidelines, industry standards, emergency procedure (minimum of ten).</p>	<p>Answers to questions demonstrate an understanding of at least 10 of the following terms and their interrelationships:</p> <ul style="list-style-type: none"> • Risk, e.g. the distinction between this term and ‘hazard’ • Hazard • Danger • Incident, e.g. reasons why people often prefer this term to ‘accident’ • Accident and the relationship to ‘causal sequence’ • Crisis • Causal sequence • Psychological hazards

	<ul style="list-style-type: none"> • Risk versus competence, including risk reduction through increased competence and teaching by progression • Challenge, including 'challenge by choice' and its relationship to 'psychological hazards' • Adventure, e.g. Priest's Adventure Experience Paradigm and its relationship to 'Risk versus competence' • Management strategies, e.g. eliminate, isolate, minimise; reduce, retain, transfer • Real risk (or residual risk) • Perceived risk and the relationship to psychological hazards or mental trauma • Absolute risk • Policies and guidelines, including understanding of the difference between the two and awareness of any applicable policies and guidelines • Industry standards, both as a general concept and key examples of industry standards for the specific activity or activities selected by the candidate • Emergency procedures
<p>1.2 The value of using risk management strategies when involved in adventure-based activities is identified and justified based on the contemporary risk management literature.</p>	<p>Answers to questions indicate an understanding of the concepts outlined in Haddock (2004), chapters 3 and 4.</p>
<p>2.1 All risks commonly associated with a selected activity are identified.</p> <p>Range: may include but is not limited to – financial, environmental, cultural, physical, psychological (minimum of three).</p>	<p>The risk management plan appropriately identifies physical risks <u>and</u> at least two of the following types of risk:</p> <ul style="list-style-type: none"> • Financial • Environmental • Cultural • Psychological
<p>2.2 People, equipment or activities, and environmental factors that contribute to hazards are identified.</p>	<p>The risk management plan identifies contributing factors to hazards in the following areas:</p> <ul style="list-style-type: none"> • People • Equipment or activities • Environment
<p>2.3 Hazard management strategies are identified that retain, reduce, eliminate or transfer hazards.</p>	<p>The risk management plan outlines systematically how the candidate will manage each hazard, e.g.</p> <ul style="list-style-type: none"> • Eliminate, isolate, or minimise • Retain, reduce, or transfer
<p>2.4 The relationship between each risk, contributing hazards and managing the potential impact is traced and linked.</p>	<p>The risk management plan indicates the candidate's understanding of the relationship of hazards, risks, and risk management.</p>

<p>2.5 Emergency procedures and resources that may help manage a crisis situation and minimise the potential loss for selected risks and hazards are identified.</p> <p>Range: procedures may include but are not limited to – contingency plan, first aid and trauma, search, fatality, evacuation (minimum of four);</p> <p>resources may include but are not limited to – first aid kit, spare clothes, shelter, communication device, food, water (minimum of four).</p>	<p>The risk management plan identifies:</p> <p>At least four of the following appropriate emergency procedures:</p> <ul style="list-style-type: none"> • Contingency plan • First aid and trauma • Search • Fatality • Evacuation <p>At least four of the following resources:</p> <ul style="list-style-type: none"> • First aid kit • Spare clothes • Shelter • Communication device • Food • Water
<p>2.6 Industry standards for the management of the selected activity are identified and any deviations from them are justified.</p> <p>Range: justification may include but is not limited to – characteristics of specific site, leader experience, group experience, group numbers, ratios, organisational policies (minimum of four).</p>	<p>The risk management plan conforms to the industry standards outlined in <i>Outdoor Activities – Guidelines for Leaders</i>.</p> <p>Any deviation from industry standards includes a justification based on at least four of the following:</p> <ul style="list-style-type: none"> • Characteristics of specific site • Leader experience • Group experience • Group numbers • Ratios • Organisational policies

<p>Task 2: Lead a group in the outdoor activity planned for in Task 1</p>
<p>Overview of task: The focus of this assessment is to demonstrate the application of risk management during the leading of an activity.</p> <p>Resources:</p> <ul style="list-style-type: none"> • Allan, S. (2006). <i>Bushcraft</i>. NZMSC, Wellington. • Allan, S. (2005). <i>Outdoor activities – guidelines for leaders</i>. SPARC, Wellington. • Postill, B. (2002). <i>Abseiling</i>. NZMSC, Wellington • Wyatt, G. (2005). <i>Alpine skills</i>. NZMSC, Wellington. <p>Notes to the Assessor</p> <ol style="list-style-type: none"> 1. Evidence that enables you to assess element 3 should occur naturally where possible. 2. Where you can't obtain naturally occurring evidence, you need to ensure that you don't compromise the participants' experience. You may be able to ask some questions while the activity is in progress, but often you will need to schedule a separate meeting with the candidate, e.g. after the activity.

Instructions to the candidate:

- During this task, you must demonstrate good risk management through leading two different groups for two different activities.
- The two different activities may be in the same discipline, e.g. top rope climbing sessions at two different venues, or they may be in different disciplines, e.g top rope climbing and mountaineering.
- There must be different groups for each of the two activities.

Element 3: Demonstrate risk management with groups participating in outdoor activities.

Performance criteria	Evidence/Judgement
<p>3.1 The chosen activity and the level of challenge for the participants are justified based on the needs of the programme and the relationship between risk and competence.</p>	<p>The candidate selects the activity and venue, and influences the level of challenge, based on their accurate assessment of:</p> <ul style="list-style-type: none"> • The needs of the programme • The relationship between participants' competence and risk <p>Candidate answers questions confirming their understanding of the above two points</p>
<p>3.2 People, equipment or activity, and environmental hazards are identified for the chosen activity.</p>	<p>The candidate identifies specific hazards for the chosen activity in the areas of:</p> <ul style="list-style-type: none"> • People • Equipment or activity • Environment
<p>3.3 Management strategies to retain, eliminate, or transfer hazards are identified and used, before and during the activity, to ensure participant safety.</p> <p>Range: strategies may include but are not limited to – leadership style, disclosure of risks, setting ground rules, clear communication, checking for participants' understanding, demonstration of skills and techniques, role modelling appropriate behaviour, site suitable for weather conditions, ability of group versus chosen activity, sequenced to ensure participants prepared adequately for activity, goal setting, leader and group positioning, instructor awareness, safe zones (minimum of ten).</p>	<p>Before, during, and after (debrief) the activity, the candidate demonstrates hazard management strategies, including at least 10 from the following list:</p> <ul style="list-style-type: none"> • Leadership style • Disclosure of risks • Setting ground rules • Clear communication • Checking for participants' understanding • Demonstration of skills and techniques • Role modelling appropriate behaviour • Site suitable for weather conditions • Ability of group versus chosen activity • Sequenced to ensure participants prepared adequately for activity • Goal setting • Leader and group positioning • Instructor awareness • Safe zones
<p>3.4 The group members are monitored throughout the activity and actions are taken to ensure that the negative impacts of any problems are managed.</p>	<p>The candidate actively monitors group members during the activity and takes action when necessary.</p>

<p>3.5 Activity equipment is used, carried, and stored according to the manufacturer's specifications and any organisational policies and procedures.</p>	<p>The candidate uses, carries and stores equipment according to:</p> <ul style="list-style-type: none"> • The manufacturer's specifications • Any organisational policies and procedures <p>For example, cleaning ropes and logging usage; carrying first aid kit and communication device; carrying all safety equipment.</p>
<p>3.6 The identified emergency resources are available at all times during the activity.</p> <p>Range: resources may include but are not limited to – first aid kit, spare clothes, shelter, communication device, food and water (minimum of four).</p>	<p>The candidate has available at all times the emergency equipment specified in the plan in Task 1, which must include at least four emergency resources from the list below:</p> <ul style="list-style-type: none"> • First aid kit • Spare clothes • Shelter • Communication device • Food and water

Task 3: Identify strengths and weaknesses.

Overview of task: The focus of this assessment is for the candidate to demonstrate an understanding of their strengths and weaknesses, and what they need to do to improve as a risk manager.

Resources:

- Allan, S. (2005). *Outdoor activities – Guidelines for leaders*. SPARC, Wellington. <http://www.sparc.org.nz/education/outdoor-activities-guidelines-for-leaders>
- Haddock, C. (2004). *Outdoor safety – risk management for outdoor leaders*. NZ Mountain Safety Council, Wellington
- Worksheet: Strategy for personal improvement of risk management skills (attached at the end of this document)

Notes to the assessor:

The candidate needs time after the activities to complete the worksheet. It may delay your final assessment.

Instruction to the candidate:

You must complete the worksheet after leading the two assessed activities.

Element 4: Evaluate own performance as a risk manager.

Performance criteria	Evidence/Judgement
<p>4.1 The perceived strengths and areas for improvement in performance as a risk manager are identified.</p>	<ul style="list-style-type: none"> • Candidate completes Worksheet: Strategy for personal improvement of risk management skills, or a similar worksheet. • The listed strengths and weaknesses and the strategy for improvement match the assessor's perception of what was observed during the activities.
<p>4.2 A strategy to address areas for improvement is developed.</p>	

LEVEL	PROCESS	LEARNING DEMAND	RESPONSIBILITY
5	<p>Carry out processes that:</p> <ul style="list-style-type: none"> - require a wide range of specialised technical or scholastic skills - involve a wide choice of standard and non-standard procedures - are employed in a variety of routine and non-routine contexts 	<p>Employing:</p> <ul style="list-style-type: none"> - a broad knowledge base with substantial depth in some areas - analytical interpretation of a wide range of data - the determination of appropriate methods and procedures in response to a range of concrete problems with some theoretical elements 	<p>Applied:</p> <ul style="list-style-type: none"> - in self-directed and sometimes directive activity within broad general guidelines or functions - with full responsibility for the nature, quantity and quality of outcomes - with possible responsibility for the achievement of group outcome.

Candidate Name _____ NSN _____

**Unit 451 (v 6) Checklist
Manage risk for an outdoor activity**

Assessor name: _____

Organisation name: _____

	C/NYC	
Throughout all tasks:	Activity 1	Activity 2
<ul style="list-style-type: none"> • There is a good match of the risk management plan to the activity 		
Task 1: Write a risk management plan for a particular outdoor activity and answer oral questions	Activity 1	Activity 2
<ul style="list-style-type: none"> • Understands 10 risk management concepts and their interrelationships from: risk, hazard, danger, incident, accident, crisis, causal sequence, psychological hazards, risk versus competence, challenge, adventure, management strategies, real risk, perceived risk, absolute risk, policies and guidelines, industry standards, emergency procedure 		
<ul style="list-style-type: none"> • Understands the value of using risk management strategies 		
<ul style="list-style-type: none"> • Identifies all risks commonly associated with the selected activity 		
<ul style="list-style-type: none"> • Identifies contributing factors to hazards 		
<ul style="list-style-type: none"> • Identifies how hazards will be managed 		
<ul style="list-style-type: none"> • Understands the relationship of hazards, risks, and risk management. 		
<ul style="list-style-type: none"> • Identifies emergency procedures 		
<ul style="list-style-type: none"> • Identifies industry standards 		
Task 2: Lead a group in the outdoor activity planned for in Task 1	Activity 1	Activity 2
<ul style="list-style-type: none"> • Selects activity, venue, level of challenge based on accurate assessment of the needs of the programme and the relationship between participants' competence and risk. Justifies decisions. 		
<ul style="list-style-type: none"> • Identifies specific hazards 		
<ul style="list-style-type: none"> • Demonstrates 10 hazard management strategies from: leadership style, disclosure of risks, setting ground rules, clear communication, checking for participants' understanding, demonstration of skills and techniques, role modelling appropriate behaviour, site suitable for weather conditions, ability of group versus chosen activity, sequenced to ensure participants prepared adequately for activity, goal setting, leader and group positioning, instructor awareness, safe zones 		
<ul style="list-style-type: none"> • Actively monitors group members 		
<ul style="list-style-type: none"> • Uses, carries and stores equipment appropriately 		
<ul style="list-style-type: none"> • Four emergency resources are available from: first aid kit, spare clothes, shelter, communication device, food and water 		

Task 3: Identify strengths and weaknesses.

- | | |
|--|--|
| • Strengths are identified | |
| • Weaknesses are identified | |
| • Strategy for improvement is provided | |

DATE	CANDIDATE'S SIGNATURE	ASSESSOR'S SIGNATURE	C/NYC

Comments:



Worksheet

Manage risk for an outdoor activity: Strategy for personal improvement of risk management skills

Unit Standard: 451

Level: 5 Credit: 4 Version: 6

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Answer all questions in full. Questions may be answered in written or oral form.

The questions meet the requirements for PCs 4.1 and 4.2

Chosen activity or activities for Task 2

Activity 1.....

Activity 2 (if different).....

Strengths

1	
2	
3	
4	

Weaknesses

Risk management areas that I can improve	My evaluation of these areas in my chosen activity	How I will improve these areas *
1.		
2.....		
3.....		
4.....		

* Possibilities include:

- Focusing on a specific aspect of the activity, e.g. navigation or first aid
- Observing an experienced instructor working, e.g. by volunteering to be a client on a New Zealand Outdoor Instructors Association (NZOIA) assessment
- Attending a specific technical training course or a risk management course
- Developing personal technical skills
- Logging risk management experience