



Australian Government

DEFCM003B Analyse causes and identify countermeasures for injuries in physical activities

Release 2

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Modification History

Release	TP Version	Comments
2	DEF12V2	Application Added Range Statement clarified Required Skills and Knowledge clarified Performance Criteria clarified Evidence Guide simplified No change in Outcome
1	DEF12V1	Primary release.

Unit Descriptor

This unit covers the competency required to establish the root cause/s of injuries occurring in physical activity, to develop countermeasures, to report the analysis, and to make recommendations to supervisors.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication. In a Defence context, this means that there is no civilian need to hold this unit in order to meet licensing, legislative, regulatory or certification requirements.

Application of the Unit

This unit was developed for Defence workers involved in analysing causes and identifying countermeasures for injuries in physical activities as a workplace responsibility, but is applicable to all individuals who work in this field.

Typically, these individuals must demonstrate the ability to work independently or as part of a team under indirect supervision. They must be able to use discretion and judgement and take responsibility for the quality of their outputs.

All activities are carried out in accordance with legislative, organisational policies and procedures

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a Unit of Competency.

Performance Criteria describe the required performance needed to demonstrate achievement of the element.

Where *bold italicised* text is used, further information is detailed in the Required Skills and Knowledge and/or the Range Statement. Assessment of performance is to be consistent with the Evidence Guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for a causal analysis	<p>1.1 Appropriate <i>background documentation</i> is identified, obtained and assembled to collate all relevant facts and information that may guide and contribute to the causal analysis.</p> <p>1.2 <i>Relevant personnel</i> are identified and requested to <i>provide input</i> to the causal analysis.</p> <p>1.3 <i>Other relevant sources</i> of information regarding injury causation are identified and assembled.</p> <p>1.4 <i>Methods and tools to be used in the analysis</i> are identified, specified and prepared, in accordance with <i>organisational procedures and guidelines</i></p>
2. Identify the contributing factors involved in causing injury	<p>2.1 Relevant information sources are reviewed to determine <i>contributing factors typically involved in causing injury</i>.</p> <p>2.2 Activities are observed and/or reviewed.</p> <p>2.3 <i>Interviews with relevant personnel</i> are conducted with <i>relevant personnel</i>.</p> <p>2.4 Contexts in which the activities are commonly conducted are reviewed.</p> <p>2.5 Components and aspects of activities which appear to be associated with greater risk of injury are analysed in detail.</p> <p>2.6 Data is recorded using <i>organisational analytical tools</i> in order to compile inputs to the analysis.</p> <p>2.7 Final list of contributing factors involved in injury causation is determined, <i>validated</i> and recorded by cross-referencing results from all causal analysis activities.</p>
3. Undertake a root cause analysis	<p>3.1 Root causes of injury in the activity are determined through further analysis of the final list of contributing factors in the light of contextual information.</p> <p>3.2 List of root causes of injury is determined, validated and recorded.</p>
4. Recommend countermeasures	<p>4.1 Effective countermeasures are identified where possible, for each root cause of injury, from available information and subject matter experts.</p> <p>4.2 Where no proven countermeasure can be identified,</p>

countermeasures are developed from first principles, in consultation with subject matter experts.

- 4.3 Written and oral causal analysis report, including details of recommended countermeasures, is prepared in accordance with organisational policy and procedures and is delivered to decision-makers for consideration.

Required Skills and Knowledge

This describes the essential skills and knowledge and their level, required for this unit.

Required Skills

- analytical and critical reasoning
- advanced literacy skills
- strong communication skills to elicit and convey information through:
 - listening
 - questioning
 - paraphrasing
 - clarifying
 - summarising
- information seeking skills
- team work

Required Knowledge

- causation models and definitions
- cause and effect diagrams
- data collection and management procedures
- format of a brief
- format of an oral presentation
- hierarchy of controls
- organisational policies and procedures
- organisational structure and function
- safety risk and Haddon's Matrices
- workplace health and safety guidelines

Evidence Guide

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Assessment must confirm the ability to:

- prepare for a causal analysis
- identify contributing factors involved in causing injury
- identify root causes of injury
- recommend countermeasures
- demonstrate knowledge of relevant work health and safety legislative frameworks
- identify analysis tools and methods appropriate to the workplace
- demonstrate the application of the principles and practices of work health and safety
- identify intervention points for advice to assist in work and to guide problem solving

Consistency in performance

Evidence for competency in this unit must be gathered over time and across a range of workplace or simulated situations.

Context of and specific resources for assessment

Context of assessment

Competency should be assessed in the workplace or under conditions that accurately simulate a realistic workplace in accordance with all relevant legislation and organisation requirements.

Specific resources for assessment

Access to:

- real or scenario based injury producing activities
- workplace in which causal analysis can be applied
- background documentation/templates/tools
- workplace health and safety guidelines
- organisational policies and procedures
- duty statements and/or job descriptions
- personnel for interview and questioning

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Range Statement

The Range Statement relates to the Unit of Competency as a whole. It allows for different work environments and situations that may affect performance. ***Bold italicised***

wording in the Performance Criteria is detailed below.	
Background documentation may include:	<ul style="list-style-type: none"> • administrative instructions relating to equipment/activity • credible articles and reports on causes of injury in the activity • injury incident reports/injury surveillance reports • previous post-activity reports relating to the equipment/activity • risk and safety management plans for the activity • risk registers and hazard logs relating to equipment and activity • safety inspection reports relating to equipment/facilities • standing orders/routine orders/lesson or activity plans relating to equipment/activity
Relevant personnel may include:	<ul style="list-style-type: none"> • equipment designers/builders • fitness leaders • injured participants and their peers • physical training instructors • preventive health staff • safety staff • training personnel/instructors/coaches • other key stakeholders and subject matter experts
Provide input to the causal analysis may include:	<ul style="list-style-type: none"> • providing direct assistance in the analysis • providing relevant information prior to, or at the time of, the analysis
Other relevant sources may include:	<ul style="list-style-type: none"> • faulty/failed equipment • incident reports • photographic material • video footage
Methods and tools to be used in the analysis may include:	<ul style="list-style-type: none"> • analysing components and aspects of activities which appear to be associated with greater risk of injury • interviewing relevant personnel • observing and/or reviewing activities • reviewing relevant information sources • reviewing the contexts in which the activities are commonly conducted
Contributing factors typically involved in causing injury may include:	<ul style="list-style-type: none"> • equipment failure • errors made by the injured person • errors made by another person • hazards such as potential sources of damage to the

	<ul style="list-style-type: none"> body • lack of conditioning/skill • lack of personal protective equipment • operating at greater speed • peer pressure/social influences • poor visibility • stress or fatigue • system errors
<i>Interviews with relevant personnel</i> may include:	<ul style="list-style-type: none"> • participants • persons conducting the activity • persons experienced in the activity • regular observers of the activity
<i>Organisational analytical tools</i> may include:	<ul style="list-style-type: none"> • cause and effect diagrams • Haddon's matrix • other safety risk management/injury prevention matrices • safety risk management/injury prevention checklists
<i>Validation</i> may include:	<ul style="list-style-type: none"> • cross validation • triangulation methods
<i>Developing countermeasures from first principles</i> may include:	<ul style="list-style-type: none"> • Defence Injury Prevention Program Procedures • Haddon's List of Preventive Strategies • Hierarchy of Controls

Unit Sector(s)

Not applicable.

Corequisite Unit/s

Not applicable.