



Australian Government

Department of Education, Employment and Workplace Relations

DEFCM003B Analyse causes and identify countermeasures for injuries in physical activities

Release: 1

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Modification History

Not applicable.

Unit Descriptor

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.

Application of the Unit

Application of the Unit

The application of this unit in the workplace - the environments, complexities and situations involved - will be written during Phase II of the Review of the PUA00 Public Safety Training Package. This text will be useful for the purposes of job descriptions, recruitment advice or job analysis; where possible, it will not be too job specific to allow other industries to import it into other Training Packages, where feasible.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite Unit/s

Nil

Employability Skills Information

Employability Skills 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</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, <i>countermeasures are developed from first principles</i>, in consultation with subject matter experts</p> <p>4.3 Written and oral <i>causal analysis report</i>, including details of recommended</p>

countermeasures, is *prepared* in accordance with organisational policy and procedures and is delivered to decision-makers for consideration

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required Skills

- analytical reasoning
- basic literacy skills
- communicate with stakeholders and convey information including skills such as:
 - listening
 - questioning
 - paraphrasing
 - clarifying
 - summarising
- critically evaluate information
- information seeking skills
- work as a team

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

EVIDENCE GUIDE

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

Assessment must confirm the ability to:

- recognise limit of own authority
- refer problems to supervisors
- comply with organisational policies and procedures
- critically analyse relevant sources of information using own underpinning knowledge and organisational analytical tools to determine the root causal factors
- identify and develop options for preventative countermeasures which reduce risk, but are economically and practically viable and do not result in excessive reduction of activity benefits to the organisation
- compile and report root cause analysis findings clearly and concisely in both a verbal and written form.

Consistency in performance

Competency should be demonstrated over a range of scenarios to confirm consistency in performance.

Context of and specific resources for assessment

Context of assessment

Competency should be assessed in the workplace or in a simulated workplace environment.

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.

Range Statement

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

- 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

- 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
- Providing direct assistance in the analysis
- Providing relevant information prior to, or at the time of, the analysis

Relevant personnel may provide input to the causal analysis by

Other relevant sources may include

- Faulty/failed equipment
- Incident reports
- Photographic material
- Video footage

Methods and tools to be used in the analysis will be required for

- 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

RANGE STATEMENT

Organisational procedures and guidelines may include

Contributing factors typically involved in causing injury may include

Relevant personnel to be interviewed may include

Organisational analytical tools may include

Validation may include the use of organisational tools such as

Developing countermeasures from first principles may include using tools and procedures such as

Preparing a causal analysis report may include

- commonly conducted
- ADFP102 (Defence Writing Standards)
- Defence Injury Prevention Program manuals and procedures
- Standard Operating Procedures
- Equipment failure
- Errors made by the injured person
- Errors made by another person
- Hazards such as potential sources of damage to the 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
- Participants
- Persons conducting the activity
- Persons experienced in the activity
- Regular observers of the activity
- Cause and effect diagrams
- Haddon's matrix
- Other safety risk management/injury prevention matrices
- Safety risk management/injury prevention checklists
- Cross validation
- Triangulation methods

- Defence Injury Prevention Program Procedures
- Haddon's List of Preventive Strategies
- Hierarchy of Controls

- ADFP102 (Defence Writing Standards)

Unit Sector(s)

Not applicable.

Corequisite Unit/s

Co-requisite Unit/s Nil