

<b>Title</b>	<b>Demonstrate knowledge of factors that affect the performance of forestry workers</b>		
<b>Level</b>	<b>3</b>	<b>Credits</b>	<b>10</b>

<b>Purpose</b>	<p>This unit standard is intended for people employed in a forestry operation.</p> <p>People credited with this unit standard are able to: demonstrate knowledge of the signs and sources of impairment in forestry workers and the effects of impairment on work performance and safety; explain factors affecting fluid loss for workers in a forestry operation; describe how to maintain adequate hydration in a forestry operation, and explain the associated benefits; explain the role of diet in maintaining the physical wellbeing of forestry workers; describe causes of stress and fatigue in forestry workers, and explain ways to reduce stress and fatigue; and describe ways to manage general health and wellbeing of forestry workers.</p>
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<b>Classification</b>	Forestry > Forest Foundation Skills
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 People seeking to enter the forest industry may elect to complete this unit standard through a training provider.
- 2 Definitions
 

*Accepted industry practice* – approved codes of practice and standardised procedures accepted by the wider forestry industry as examples of best practice.

*Forestry operations* include forest establishment, silviculture, harvesting, forest inventory, and forest and crew management.

*Worksite procedures* refer to documented procedures used by the organisation carrying out the work and applicable to the tasks being carried out. They may include but are not limited to – standard operating procedures, site safety procedures, equipment operating procedures, quality assurance procedures, housekeeping standards, procedures to comply with legislative and local body requirements.

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## Outcomes and performance criteria

### Outcome 1

Demonstrate knowledge of the signs and sources of impairment in forestry workers and the effects of impairment on work performance and safety.

#### Performance criteria

- 1.1 Behaviours which may indicate a person is suffering from impairment are identified and described.
- 1.2 Sources of impairment in forestry workers are identified and explained in terms of how they contribute to impaired behaviours.
  - Range includes but is not limited to – drugs (illegal and legal), alcohol, dehydration, stress, fatigue, poor nutrition, depression.
- 1.3 Impairment in forestry workers is described in terms of adverse effects on work performance and safety.
- 1.4 The action to be taken if a workmate is suspected to be suffering from impairment in the workplace is explained in accordance with worksite procedures and accepted industry practice.
- 1.5 Policy related to impairment through the use, misuse, and abuse of substances by an employee is explained in accordance with worksite procedures and accepted industry practice.

### Outcome 2

Explain factors affecting fluid loss for workers in a forestry operation.

#### Performance criteria

- 2.1 Forestry operations are described in terms of their impact on fluid loss.
  - Range operations include – planting, pruning, tree felling, breaking out, machine operating, quality control, plotting, thinning, spot spraying.
- 2.2 Seasonal changes, climatic differences, and temperature extremes are described in terms of their impact on fluid loss.
- 2.3 Different rates of fluid loss for non-forestry activities are compared in terms of the amount lost due to physical activity.
  - Range non-forestry activities include – timber grader, rugby player, office worker, truck driver, road cyclist, boxer.

**Outcome 3**

Describe how to maintain adequate hydration in a forestry operation and explain the associated benefits.

**Performance criteria**

- 3.1 Physical symptoms of dehydration are described in terms of their effect on performance.
- Range evidence of three physical symptoms.
- 3.2 Benefits of adequate hydration are explained in terms of safety, mental and physical ability.
- 3.3 Suitable and unsuitable fluids for hydration in forestry operations are identified in accordance with accepted industry practice.
- Range evidence of three suitable and three unsuitable fluid types is required.
- 3.4 Fluid intake frequency, timing, and volume requirements are determined for different work operations and conditions in accordance with accepted industry practice.

**Outcome 4**

Explain the role of diet in maintaining the physical wellbeing of forestry workers.

**Performance criteria**

- 4.1 Primary macronutrients are defined in terms of type and energy content.
- Range evidence of three primary macro nutrients.
- 4.2 Energy balance is explained in terms of daily energy intake, weight gain, and weight loss in accordance with accepted industry practice.
- 4.3 Obesity is defined and described in terms of potential effects on forestry worker performance.
- 4.4 Foods high in carbohydrate, fat, and protein are identified.
- Range evidence of three foods for each macronutrient is required.
- 4.5 A healthy diet is defined in terms of the percentage contribution of each macronutrient.
- 4.6 The glycaemic index is defined and described in terms of its role in helping control blood sugar levels.

- 4.7 Potential effects of low blood sugar levels on forestry worker performance are identified.
- 4.8 A workday is planned to ensure energy levels are maintained and a healthy diet is consumed.

## Outcome 5

Describe causes of stress and fatigue in forestry workers, and explain ways to reduce stress and fatigue.

### Performance criteria

- 5.1 Causes of fatigue are identified in terms of the physical nature of work in a forestry operation.
- Range may include but is not limited to – sleep deficit, lack of physical fitness, inadequate nutrition, inadequate hydration, medical conditions, environmental factors, insufficient work breaks, travel time to or from work;  
evidence of five causes of fatigue is required.
- 5.2 Stress is explained in terms of causes.
- Range may include but is not limited to – sleep deficit, medical conditions, financial pressures, family and/or personal issues, job security, work pressures, bullying, harassment;  
evidence of five causes of stress is required.
- 5.3 Stress and fatigue are defined in terms of type.
- Range acute, chronic.

## Outcome 6

Describe ways to manage general health and wellbeing of forestry workers.

### Performance criteria

- 6.1 Factors contributing to physical and mental wellbeing are explained in terms of minimising impairment in a forestry operation.
- Range includes but is not limited to – equipment, exercise, strength and fitness, rest and recreation, nutrition, job technique, job rotation, work/life balance.

- 6.2 Minor conditions common to forestry workers are identified, their potential effects on performance described, and appropriate ways to attend to them identified in accordance with accepted industry practice.

Range may include but is not limited to – cuts, grazes, puncture wounds, blisters, burns, rashes, wet feet, respiratory tract infections, toothache, migraine;  
evidence of three conditions is required.

- 6.3 Consequences of sunburn are described in terms of the short-term impact on the candidate's work performance and long-term consequences to the candidate's health.

- 6.4 Methods of sunburn prevention are identified in terms of those that are suitable for forestry workers.

- 6.5 Short and long-term consequences of exposure to worksite noise are described in terms of the impact on the candidate's work performance and personal life.

- 6.6 Methods of hearing protection are described and those suitable for use in forestry operations are identified in accordance with accepted industry practice.

- 6.7 Methods of protection from weather extremes are described and those suitable for use in forestry operations are identified in accordance with accepted industry practice.

- 6.8 Consequences of poor personal hygiene are described in terms of the short-term impact on the candidate's work performance and long-term consequences to the candidate's health.

Range includes but is not limited to – unwashed socks, unwashed hands.

<b>Planned review date</b>	31 December 2028
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#### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	22 May 2008	31 December 2016
Review	2	19 March 2015	31 December 2017
Review	3	10 December 2015	31 December 2024
Review	4	27 February 2020	N/A
Rollover	5	26 April 2024	N/A
Revision	6	24 October 2024	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0173
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

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**Comments on this unit standard**

Please contact Muka Tangata - People, Food and Fibre Workforce Development Council [qualifications@mukatangata.nz](mailto:qualifications@mukatangata.nz) if you wish to suggest changes to the content of this unit standard.