

Demonstrate knowledge of exercise prescription for people with respiratory conditions

Level 5

Credits 5

Purpose This unit standard is designed for exercise professionals who wish to specialise in working with people with respiratory conditions.

People credited with this unit standard are able to: explain respiratory conditions in terms relevant to an exercise professional; explain acute physiological responses of people with respiratory conditions to exercise; explain chronic physiological adaptations of people with respiratory conditions to exercise; describe the process followed when working with people with respiratory conditions; and identify environmental and social factors and changes in behaviour that enhance adherence to exercise.

Subfield Fitness

Domain Exercise Prescription

Status Registered

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Entry information Open.

Accreditation Evaluation of documentation and visit by NZQA and industry.

Standard setting body (SSB) Skills Active Aotearoa Limited

Accreditation and Moderation Action Plan (AMAP) reference 0099

This AMAP can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Special notes

- 1 This unit standard applies to working with children and adults with a written medical clearance for exercise to improve respiratory conditions. These conditions include mild cardiac obstructive pulmonary disease, asthma and other respiratory conditions requiring pulmonary rehabilitation.

- 2 *Exercise prescription guidelines* for people with respiratory conditions include:
 American College of Sports Medicine. *ACSM's resource manual for guidelines for exercise testing and prescription*. Philadelphia, PA: Lippincott Williams & Wilkins. Latest edition;
 Fitness New Zealand. 2009. *Guidelines for Children in Exercise Facilities*. Available at <http://www.fitnessnz.co.nz>;
 American Thoracic Society/European Respiratory Society *Statement on Pulmonary Rehabilitation*. 2005. Available at <http://www.thoracic.org>;
 Pulmonary rehabilitation: joint ACCP/AACVPR evidence-based clinical practice guidelines. 2007. Available at <http://www.guideline.gov> (browse 'guidelines index');
 Pulmonary Rehabilitation Toolkit. 2006. Available at <http://www.lungfoundation.com.au/content/view/203/215/>
 A useful web-related link for resources is: <http://www.breathingworks.com/index.html>.
- 3 *Exercise types* include: interval, continuous, resistance; and may also include – stretching, upper body strengthening, low impact or aqua aerobic.

Elements and performance criteria

Element 1

Explain respiratory conditions in terms relevant to an exercise professional.

Performance criteria

- 1.1 Risk factors associated with respiratory conditions are explained in terms of management by an exercise professional.
- 1.2 Physiology of people with respiratory conditions is related to limitations, precautions, contra-indications and considerations for exercise.
- 1.3 The information collected by, and the role of medical professionals typically used to screen, monitor and diagnose respiratory conditions, are explained.
- Range medical professional – respiratory specialist, asthma educator, breathing instructor, physiotherapist;
 diagnostic information includes – spirometry tests, allergy tests.
- 1.4 Different types of asthma medication used by people with respiratory conditions are related to limitations, precautions, contraindications and considerations for exercise.

Element 2

Explain acute physiological responses of people with respiratory conditions to exercise.

Range exercise includes – duration, intensity, frequency, body weight strength training.

Performance criteria

- 2.1 Acute physiological responses of people with respiratory conditions to exercise are explained in terms of effects of commencing, sustaining and ceasing exercise.

Element 3

Explain chronic physiological adaptations of people with respiratory conditions to exercise.

Performance criteria

- 3.1 Chronic physiological adaptations of people with respiratory conditions to regular exercise are explained in terms of symptoms, quality of life and impact on asthma medications.
- 3.2 Exercise prescription for people with respiratory conditions is explained in terms of benefits of exercise.

Range benefits must include – psychological and physical factors.

Element 4

Describe the process followed when working with people with respiratory conditions.

Performance criteria

- 4.1 The information required in order to make judgements and prescribe exercise for people with respiratory conditions is described.
- Range personal details, general medical details, status of current activity levels, health status (including injuries and medications), current asthma medications, lifestyle details, exercise history, exercise intentions, exercise preferences.
- 4.2 Exercise prescription for people with respiratory conditions is described in terms of the risks of exercise and the safety considerations.
- Range safety considerations must include – absolute and relative contraindications, modes of exercise that are unsuitable, intensities and durations that are unsuitable, frequencies that are unsuitable, signs that exercise should be ceased, conditions where medical supervision is required; risks must include – immediate risks, risks of ongoing complications or damage.

- 4.3 An exercise programme for people with respiratory conditions is described in terms of the frequency, intensity, time and type recommended in accordance with exercise prescription guidelines.

Element 5

Identify environmental and social factors and changes in behaviour that enhance adherence to exercise.

Performance criteria

- 5.1 Environmental and social factors that may increase or decrease the ease with which people with respiratory conditions can engage in and adhere to exercise are identified.
- Range environmental and social factors – positive, negative.
- 5.2 Behaviour changes that may occur and ways of reinforcing or overcoming those changes in people with respiratory conditions are identified.
- Range behaviour changes – positive, negative.

Please note

Providers must be accredited by NZQA, or an inter-institutional body with delegated authority for quality assurance, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be accredited by NZQA before they can register credits from assessment against unit standards.

Accredited providers and Industry Training Organisations assessing against unit standards must engage with the moderation system that applies to those standards.

Accreditation requirements and an outline of the moderation system that applies to this standard are outlined in the Accreditation and Moderation Action Plan (AMAP). The AMAP also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

Comments on this unit standard

Please contact Skills Active Aotearoa Limited info@skillsactive.org.nz if you wish to suggest changes to the content of this unit standard.