

<b>Title</b>	<b>Demonstrate knowledge of the microbiology of air</b>		
<b>Level</b>	<b>6</b>	<b>Credits</b>	<b>2</b>

<b>Purpose</b>	People credited with this unit standard are able to: describe the microorganisms found in air, their origins, and mechanisms of dispersion; describe the significance of microorganisms in air quality; and demonstrate methods of sampling air for microorganisms.
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<b>Classification</b>	Science > Microbiology
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 All work must be carried out in accordance with the quality management system, documented protocol system or Standard Operating Procedures acceptable in a commercial or research laboratory.
- 2 Health and Safety practices must conform to Australian/New Zealand Standard AS/NZS 2243 – *Safety in Laboratories* Parts 1, 2, 3, 7 and 10 available at <http://www.standards.co.nz>.
- 3 Legislation applicable to this unit standard includes:  
Health and Safety at Work Act 2015;  
Hazardous Substances and New Organisms Act 1996.

### Outcomes and performance criteria

#### Outcome 1

Describe the microorganisms found in air, their origins, and mechanisms of dispersion.

#### Performance criteria

- 1.1 Microorganisms found in an air sample are described in terms of the possible origins of the organisms.
- 1.2 Description includes physical methods of aerial dispersal of microorganisms.  
  
Range evidence of three methods is required.

#### Outcome 2

Describe the significance of microorganisms in air quality.

**Performance criteria**

2.1 The description includes examples of situations where the microbiology of air is significant in terms of air quality.

Range air conditioning systems, aseptic packaging, food processing, public health; evidence of two situations is required.

**Outcome 3**

Demonstrate methods of sampling air for microorganisms.

**Performance criteria**

3.1 Sample methods demonstrate the diversity of airborne microorganisms.

Range two methods are required.

**This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.**

**Status information and last date for assessment for superseded versions**

Process	Version	Date	Last Date for Assessment
Registration	1	17 February 1998	31 December 2014
Review	2	23 November 1999	31 December 2014
Review	3	21 May 2010	31 December 2025
Rollover	4	27 January 2015	31 December 2025
Review	5	27 September 2018	31 December 2025
Review	6	30 November 2023	31 December 2025

<b>Consent and Moderation Requirements (CMR) reference</b>	0113
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.