

Title	Perform aseptic laboratory techniques		
Level	4	Credits	4

Purpose	People credited with this unit standard are able to: carry out manipulations without contamination; sterilise laboratory equipment; and prepare and dispense complex sterile media.
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Classification	Science > Microbiology
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Available grade	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 (SOP) 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> and <http://infostore.saiglobal.com/store>.
- 3 Legislation applicable to this unit standard includes:
Health and Safety at Work Act 2015;
Hazardous Substances and New Organisms Act 1996.
- 4 Glossary
Laboratory procedures refer to documented systems or processes of operation which may be found in a SOP manual, quality management system, or in protocol system documentation. These procedures are external and/or internal laboratory requirements governing laboratory work.
- 5 Recommended for entry: Unit 26117, *Work safely in a science laboratory*.

Outcomes and performance criteria

Outcome 1

Carry out manipulations without contamination.

Performance criteria

- 1.1 Work environment is prepared to exclude contaminants in accordance with laboratory procedures.

1.2 Manipulations are carried out without contamination in accordance with laboratory procedures.

Range manipulations include – plating, filtering, sampling, pipetting.

1.3 Decontamination is carried out in accordance with laboratory procedures.

Outcome 2

Sterilise laboratory equipment.

Performance criteria

2.1 Sterilisation techniques are selected and laboratory equipment is sterilised in accordance with laboratory procedures.

Range techniques – hot, cold, wet, dry;
equipment – glassware, plasticware, solutions.

Outcome 3

Prepare and dispense complex sterile media.

Range one medium is required.

Performance criteria

3.1 Medium is prepared in accordance with manufacturers' instructions or laboratory procedures.

3.2 Medium is dispensed aseptically in accordance with laboratory procedures.

3.3 Sterility of medium is verified in accordance with laboratory procedures.

Planned review date	31 December 2023
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	24 September 1996	31 December 2014
Review	2	24 February 1998	31 December 2014
Review	3	23 November 1999	31 December 2014
Review	4	21 May 2010	N/A
Rollover	5	27 January 2015	N/A
Review	6	27 September 2018	N/A

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

Comments on this unit standard

Please contact NZQA National Qualifications Services nqs@nzqa.govt.nz if you wish to suggest changes to the content of this unit standard.