

Australian/New Zealand Standard™

**Safety in laboratories**

**Part 4: Ionizing radiations**



## **AS/NZS 2243.4:2018**

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee CH-026, Safety in Laboratories. It was approved on behalf of the Council of Standards Australia on 29 March 2018 and by the New Zealand Standards Approval Board on 6 June 2018.

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The following are represented on Committee CH-026:

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Australian Institute of Occupational Hygienists  
Australian Nuclear Science and Technology Organisation  
Bureau of Steel Manufacturers of Australia  
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# Australian/New Zealand Standard™

## Safety in laboratories

### Part 4: Ionizing radiations

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## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee CH-026, Safety in Laboratories, to supersede AS 2243.4—1998.

The objective of this Standard is to promote safe work practices and to prevent unnecessary exposure of persons working in laboratories containing sources of ionizing radiation.

This Standard does not include non-ionizing radiation, which is covered in AS 2243.5, *Safety in laboratories, Part 5: Non-ionizing radiations—Electromagnetic, sound and ultrasound*.

This Standard was prepared after consideration of the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA), *Fundamentals for Protection Against Ionising Radiation* RPS F1 (2014) and *Code for Radiation Protection in Planned Exposure Situations* RPS C1 (2016), the most recent recommendations of the International Commission on Radiological Protection (ICRP), and the International Atomic Energy Agency (IAEA). Where necessary, future relevant publications of ARPANSA, the ICRP and the IAEA should be consulted as they become available.

The sections of this Standard dealing with dose limits, accident and emergency procedures and the requirements for radiological laboratories have been further refined since the 1998 edition. For more detailed information, the referenced source documents should be consulted.

This Standard is Part 4 in the AS/NZS 2243 series. The series is as follows:

### AS

- 2243 Safety in laboratories
- 2243.1 Part 1: Planning and operational aspects
- 2243.2 Part 2: Chemical aspects
- 2243.3 Part 3: Microbiological safety and containment
- 2243.4 Part 4: Ionizing radiations (this Standard)
- 2243.5 Part 5: Non-ionizing radiations—Electromagnetic, sound and ultrasound
- 2243.6 Part 6: Plant and equipment aspects
- 2243.8 Part 8: Fume cupboards
- 2243.9 Part 9: Recirculating fume cabinets
- 2243.10 Part 10: Storage of chemicals

Statements expressed in mandatory terms in notes to tables are deemed to be requirements of this Standard.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of a Standard, whereas an ‘informative’ appendix is only for information and guidance.

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