AS/NZS IEC 61331.3:2022 IEC 61331-3:2014





Australian/New Zealand Standard™

## Protective devices against diagnostic medical X-radiation

Part 3: Protective clothing, eyewear and protective patient shields



### AS/NZS IEC 61331.3:2022

This Joint Australian/New Zealand Standard<sup>™</sup> was prepared by Joint Technical Committee HE-003, Medical Electrical Equipment. It was approved on behalf of the Council of Standards Australia on 8 May 2022 and by the New Zealand Standards Approval Board on 1 June 2022.

This Standard was published on 17 June 2022.

The following are represented on Committee HE-003:

AusBiotech

Australasian College of Physical Scientists and Engineers in Medicine

Australian & New Zealand College of Anaesthetists

Australian College of Perioperative Nurses

Australian Dental Association

Australian Industry Group

Australian Radiation Protection and Nuclear Safety Agency

Australian Society of Anaesthetists

Certification Body Australia (Certification Interests Australia)

College of Biomedical Engineering Engineers Australia

Department of Defence (Australian Government)

Engineers Australia

Medical Technology Association of Australia

Medical Technology Association of New Zealand

MidCentral District Health Board

National Clinical Engineering Managers Forum (for District Health Boards)

Queensland Health

Therapeutic Goods Administration (TGA)

WorkSafe New Zealand

This Standard was issued in draft form for comment as DR AS/NZS IEC 61331.3:2022.

#### **Keeping Standards up-to-date**

Ensure you have the latest versions of our publications and keep up-to-date about Amendments, Rulings, Withdrawals, and new projects by visiting:

www.standards.org.au

www.standards.govt.nz

ISBN 978 1 76113 831 7

This is a preview. Click here to purchase the full publication.

## Australian/New Zealand Standard™

# Protective devices against diagnostic medical X-radiation

## Part 3: Protective clothing, eyewear and protective patient shields

Originated as AS/NZS 4543.3:2000. Revised and redesignated as AS/NZS IEC 61331.3:2022.



© IEC Geneva Switzerland 2022 — All rights reserved

© Standards Australia Limited/the Crown in right of New Zealand, administered by the New Zealand Standards Executive 2022

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of either the IEC or the publisher, unless otherwise permitted under the Copyright Act 1968 (Cth) or the Copyright Act 1994 (New Zealand). If you have any questions about IEC copyright or have an enquiry about obtaining additional rights to this publication, please see the contact details on the back cover or the contact us page of the website for further information.

### **Preface**

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee HE-003, Medical Electrical Equipment, to supersede AS/NZS 4543.3:2000, Protective devices against diagnostic medical X-radiation, Part 3: Protective clothing and protective devices for gonads.

The objective of this document is to specify requirements for protective devices, such as protective clothing and eyewear for the protection of persons against X-radiation up to 150 kV, during radiological examinations and interventional procedures.

NOTE Protective devices are not intended by themselves to provide complete protection of persons but are used to reduce the dose to persons where other methods of protection against X-radiation are insufficient or not applicable.

This document deals with the following:

- (a) General requirements on the accompanying documents, on design, and on materials used.
- (b) Sizing, particular design features, minimum attenuation properties of materials, marking and standardized forms of statements of compliance with this standard.

It covers protective clothing mainly for the protection of the operator, including the following:

- (i) Protective aprons.
- (ii) Thyroid collars.
- (iii) Protective gloves.
- (iv) Protective mittens.
- (v) Protective eyewear.

The document also covers protective devices for the protection of the patient, including the following:

- (A) Protective gonad aprons.
- (B) Scrotum shields.
- (C) Ovary shields.
- (D) Shadow shields.
- (E) Protective aprons for dental use.

The latter group of protective devices is intended to be used during radiological examinations to minimize the effects of irradiation on the reproductive organs, particularly with regard to genetic damage.

This document is identical with, and has been reproduced from, IEC 61331-3:2014 (ED.2.0), Protective devices against diagnostic medical X-radiation — Part 3: Protective clothing, eyewear and protective patient shields.

As this document has been reproduced from an International document, a full point substitutes for a comma when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

The terms "normative" and "informative" are used in Standards to define the application of the appendices or annexes to which they apply. A "normative" appendix or annex is an integral part of a Standard, whereas an "informative" appendix or annex is only for information and guidance.