

This is a preview of "ISO 15189:2012". [Click here to purchase the full version from the ANSI store.](#)

Third edition  
2012-11-01

---

---

## Medical laboratories — Requirements for quality and competence

*Laboratoires de biologie médicale — Exigences concernant la qualité et la compétence*



Reference number  
ISO 15189:2012(E)

© ISO 2012

This is a preview of "ISO 15189:2012". [Click here to purchase the full version from the ANSI store.](#)



**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2012

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

Published in Switzerland

This is a preview of "ISO 15189:2012". [Click here to purchase the full version from the ANSI store.](#)

## Contents

Page

|   |    |
|---|----|
| Foreword .....  | iv |
| Introduction .....  | v  |
| 1 Scope .....   | 1  |
| 2 Normative references .....  | 1  |
| 3 Terms and definitions .....   | 1  |
| 4 Management requirements .....   | 5  |
| 4.1 Organization and management responsibility .....                              | 5  |
| 4.2 Quality management system .....   | 8  |
| 4.3 Document control .....  | 9  |
| 4.4 Service agreements .....  | 10 |
| 4.5 Examination by referral laboratories .....                                    | 11 |
| 4.6 External services and supplies .....  | 12 |
| 4.7 Advisory services .....   | 12 |
| 4.8 Resolution of complaints .....  | 12 |
| 4.9 Identification and control of nonconformities .....                           | 12 |
| 4.10 Corrective action .....  | 13 |
| 4.11 Preventive action .....  | 13 |
| 4.12 Continual improvement .....  | 14 |
| 4.13 Control of records .....   | 14 |
| 4.14 Evaluation and audits .....  | 15 |
| 4.15 Management review .....  | 17 |
| 5 Technical requirements .....  | 18 |
| 5.1 Personnel .....   | 18 |
| 5.2 Accommodation and environmental conditions .....                              | 20 |
| 5.3 Laboratory equipment, reagents, and consumables .....                         | 22 |
| 5.4 Pre-examination processes .....   | 25 |
| 5.5 Examination processes .....   | 28 |
| 5.6 Ensuring quality of examination results .....                                 | 31 |
| 5.7 Post-examination processes .....  | 33 |
| 5.8 Reporting of results .....  | 33 |
| 5.9 Release of results .....  | 35 |
| 5.10 Laboratory information management .....                                      | 36 |
| Annex A (informative) Correlation with ISO 9001:2008 and ISO/IEC 17025:2005 ..... | 38 |
| Annex B (informative) Comparison of ISO 15189:2007 to ISO 15189:2012 .....        | 43 |
| Bibliography .....  | 47 |

This is a preview of "ISO 15189:2012". [Click here to purchase the full version from the ANSI store.](#)

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 15189 was prepared by Technical Committee ISO/TC 212, *Clinical laboratory testing and in vitro diagnostic test systems*.

This third edition cancels and replaces the second edition (ISO 15189:2007), which has been technically revised.

A correlation between the second and third editions of this International Standard is provided as Annex B. The third edition continues the alignment established in ISO/IEC 17025:2005.

This is a preview of "ISO 15189:2012". [Click here to purchase the full version from the ANSI store.](#)

## Introduction

This International Standard, based upon ISO/IEC 17025 and ISO 9001, specifies requirements for competence and quality that are particular to medical laboratories<sup>1)</sup>. It is acknowledged that a country could have its own specific regulations or requirements applicable to some or all its professional personnel and their activities and responsibilities in this domain.

Medical laboratory services are essential to patient care and therefore have to be available to meet the needs of all patients and the clinical personnel responsible for the care of those patients. Such services include arrangements for examination requests, patient preparation, patient identification, collection of samples, transportation, storage, processing and examination of clinical samples, together with subsequent interpretation, reporting and advice, in addition to the considerations of safety and ethics in medical laboratory work.

Whenever allowed by national, regional or local regulations and requirements, it is desirable that medical laboratory services include the examination of patients in consultation cases, and that those services actively participate in the prevention of disease in addition to diagnosis and patient management. Each laboratory should also provide suitable educational and scientific opportunities for professional staff working with it.

While this International Standard is intended for use throughout the currently recognized disciplines of medical laboratory services, those working in other services and disciplines such as clinical physiology, medical imaging and medical physics could also find it useful and appropriate. In addition, bodies engaged in the recognition of the competence of medical laboratories will be able to use this International Standard as the basis for their activities. If a laboratory seeks accreditation, it should select an accrediting body which operates in accordance with ISO/IEC 17011 and which takes into account the particular requirements of medical laboratories.

This International Standard is not intended to be used for the purposes of certification, however a medical laboratory's fulfilment of the requirements of this International Standard means the laboratory meets both the technical competence requirements and the management system requirements that are necessary for it to consistently deliver technically valid results. The management system requirements in Clause 4 are written in a language relevant to a medical laboratory's operations and meet the principles of ISO 9001:2008, *Quality management systems — Requirements*, and are aligned with its pertinent requirements (Joint IAF-ILAC-ISO Communiqué issued in 2009).

The correlation between the clauses and subclauses of this third edition of ISO 15189 and those of ISO 9001:2008 and of ISO/IEC 17025:2005 is detailed in Annex A of this International Standard.

Environmental issues associated with medical laboratory activity are generally addressed throughout this International Standard, with specific references in 5.2.2, 5.2.6, 5.3, 5.4, 5.5.1.4 and 5.7.

---

1) In other languages, these laboratories can be designated by the equivalent of the English term "clinical laboratories."