



---

## GUIDE 50

---

### Safety aspects — Guidelines for child safety

Withdrawn

**PDF disclaimer**

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

Withdrawn

© ISO/IEC 2002

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.ch](mailto:copyright@iso.ch)  
Web [www.iso.ch](http://www.iso.ch)

Printed in Switzerland

## Contents

Page

Foreword.....	iv
<b>0 Introduction.....</b>	<b>v</b>
<b>0.1 Relevance of child safety.....</b>	<b>v</b>
<b>0.2 Role of standards.....</b>	<b>v</b>
<b>0.3 Structure of the Guide.....</b>	<b>v</b>
<b>1 Scope.....</b>	<b>1</b>
<b>2 Normative reference.....</b>	<b>1</b>
<b>3 Terms and definitions.....</b>	<b>1</b>
<b>4 General approach to child safety.....</b>	<b>2</b>
<b>4.1 General.....</b>	<b>2</b>
<b>4.2 Risk assessment.....</b>	<b>2</b>
<b>4.3 Preventing and reducing injury.....</b>	<b>2</b>
<b>4.4 Child development and behaviour.....</b>	<b>3</b>
<b>4.5 Physical and social environment.....</b>	<b>6</b>
<b>5 Hazards relevant for children.....</b>	<b>6</b>
<b>5.1 General.....</b>	<b>6</b>
<b>5.2 Mechanical hazards.....</b>	<b>7</b>
<b>5.3 Thermal hazards.....</b>	<b>16</b>
<b>5.4 Chemical hazards.....</b>	<b>19</b>
<b>5.5 Electric shock hazards.....</b>	<b>20</b>
<b>5.6 Radiation hazards.....</b>	<b>20</b>
<b>5.7 Biological hazards.....</b>	<b>21</b>
<b>5.8 Explosion hazards.....</b>	<b>21</b>
<b>5.9 Inadequate protective function.....</b>	<b>22</b>
<b>5.10 Inadequate information.....</b>	<b>23</b>
<b>Annex A (informative) Examples of preventive measures for hazards.....</b>	<b>24</b>
<b>Annex B (informative) Checklist for assessing a standard.....</b>	<b>28</b>
<b>Bibliography.....</b>	<b>29</b>

## Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

Guides are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft Guides adopted by the responsible Committee or Group are circulated to national bodies for voting. Publication as a Guide requires approval by at least 75 % of the national bodies casting a vote.

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

ISO/IEC Guide 50 was prepared by the Joint ISO/IEC Technical Advisory Group (JTAG) for Child Safety.

It should be used in conjunction with ISO/IEC Guide 51, *Safety aspects — Guidelines for their inclusion in standards*.

This second edition cancels and replaces the first edition (ISO/IEC Guide 50:1987), which has been technically revised.

Annexes A and B of this Guide are for information only.

## 0 Introduction

### 0.1 Relevance of child safety

Child safety should be a major concern for society because childhood and adolescent injuries are a major cause of death and disability in many countries. Children are born into an adult world, without experience or appreciation of risk but with a natural desire to explore. Consequently, the potential for injury is particularly great during childhood. Since supervision to the degree that always prevents or controls potentially harmful interactions is neither possible nor practical; additional injury prevention strategies are necessary.

Intervention strategies aimed at protecting children must recognize that children are not little adults. Children's susceptibility to injury and the nature of their injuries differ from those of adults. Such intervention strategies must also recognize the fundamental concept that children do not misuse products or surroundings. Rather, children interact with them in ways that reflect normal child behaviour, which will vary according to the child's age and level of development. Therefore, intervention strategies intended to protect children might differ from those intended to protect adults.

The challenge is to develop products, structures, installations and services (collectively referred to as *products*) in a way in which the potential for injury to children may be minimized. Preventing injuries is everyone's responsibility. Prevention of injuries can be addressed through design and technology, legislation and education.

### 0.2 Role of standards

Standards can play a key role in injury prevention and control because they have the unique potential

- to draw on technical expertise for design and manufacture,
- to implement solutions through legislation, and
- to educate through provisions for instructions, warnings, illustrations, symbols, etc.

If standards are to fulfil their role in childhood injury prevention and control, standards-writers must consider how children might interact with the products their standards are addressing, regardless of whether or not those products are aimed specifically at children.

NOTE The word "standard" in this Guide is intended to include other ISO/IEC publications, for example Technical Specifications and Guides.

### 0.3 Structure of the Guide

This Guide consists of three main parts and two annexes as follows.

- a) General approach to child safety, including the principles for a systematic way to address hazards (4.1 and 4.2).
- b) Specific developmental characteristics of children that place them at particular risk of injury (4.3).
- c) Hazards to which children might be exposed during their use of, or interaction with, a product, along with specific suggestions for addressing those hazards (clause 5). These hazards are also listed in ISO/IEC Guide 51 but, here, the focus is on the specific risk to children associated with those hazards.

Annex A provides an overview of hazards, potential injuries and approaches to solutions. However, it is essential that it be read in conjunction with the main body of this Guide as it only gives a few examples of solutions.

Annex B is intended as a checklist for standards-makers to assess their taking into account child safety.

Withdrawn

# Safety aspects — Guidelines for child safety

## 1 Scope

This Guide provides a framework for addressing potential sources of unintentional physical harm (hazards) to children from products, processes or services that they use or with which they may come into contact, even if they are not specifically intended for children. The framework aims at minimizing risk of injury to children.

It is primarily intended for those involved in the preparation and revision of standards. However, it has important information that can be useful to, amongst others, designers, architects, manufacturers, service providers, communicators and policy makers.

For children with special needs, additional requirements may be appropriate. This Guide does not claim to address those additional requirements in full. ISO/IEC Guide 71 addresses the needs of persons with disabilities.

A product may include goods, structures, buildings, installations or a combination of these.

No specific guidance is given in this Guide for the prevention or reduction of psychological or moral harm or of intentional injuries.

## 2 Normative reference

The following normative document contains provisions which, through reference in this text, constitute provisions of this Guide. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreement based on this Guide are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO/IEC Guide 51:1999, *Safety aspects — Guidelines for their inclusion in standards*