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**Prosthetics and orthotics —  
Vocabulary —**

**Part 4:  
Terms relating to limb amputation**

*Prothèses et orthèses — Vocabulaire —*

*Partie 4: Termes relatifs à l'amputation de membres*  
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## 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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 168, *Prosthetics and orthotics*.

ISO 8549 consists of the following parts, under the general title *Prosthetics and orthotics — Vocabulary*:

- Part 1: General terms for external limb prostheses and external orthoses
- Part 2: Terms relating to external limb prostheses and wearers of these prostheses
- Part 3: Terms relating to external orthoses
- Part 4: Terms relating to limb amputation

## Introduction

At present, no internationally accepted terminology describes the complete range of surgical limb amputation levels, amputation procedures, and persons who have had an amputation. Members of clinic teams in different countries have developed their own terminology to meet their own needs.

There is a need for a standard international system of terminology which will allow practitioners to accurately describe the surgical history of persons who have had a limb amputation(s) and to facilitate comparisons with the experience of other practitioners.

The terminology will also be of value to epidemiologists and governmental health officials.

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# Prosthetics and orthotics — Vocabulary —

## Part 4: Terms relating to limb amputation

### 1 Scope

This part of ISO 8549 specifies a vocabulary for the description of surgical limb amputations, amputation procedures, and persons who have had an amputation.

### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 8549-2, *Prosthetics and orthotics — Vocabulary — Part 2: Terms relating to external limb prostheses and wearers of these prostheses*

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### 3 Terms and definitions (standards.iteh.ai)

For the purposes of this document, the terms and definitions given in ISO 8549-2 and the following apply.

ISO 8549-4:2014

#### 3.1 General limb amputation

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##### 3.1.1

##### limb amputation

surgical removal of the whole or part of a limb

##### 3.1.2

##### level of amputation

joint or segment at which amputation is performed

Note 1 to entry: For the upper limb, see [3.1.3](#), and for the lower limb, see [3.1.4](#).

##### 3.1.3

##### upper limb amputation

surgical removal of the whole or part of an upper limb

##### 3.1.3.1

##### partial hand

amputations of the upper limb distal to the wrist joint

Note 1 to entry: These include:

- **Thumb:** Amputation of the whole or part of the thumb;
- **Phalangeal:** Amputation of part of one or more fingers;
- **Metacarpo-phalangeal disarticulation:** Amputation of one or more fingers;
- **Metacarpal:** Amputation of a part of the hand through one or more metacarpals;
- **Carpo-metacarpal disarticulation:** Amputation of a part of the hand at one or more of the carpo-metacarpal joints;

— **Carpal:** Amputation of a part of the hand through any of the carpal bones and/or joints.

Note 2 to entry: The complete description of a partial hand amputation requires the identification of the amputated bones and their levels of amputation.

### 3.1.3.2

#### **wrist disarticulation**

amputation of the upper limb at the wrist joint

### 3.1.3.3

#### **trans-radial**

amputation of the upper limb between the elbow joint and the wrist joint

### 3.1.3.4

#### **elbow disarticulation**

amputation of the upper limb at the elbow joint

### 3.1.3.5

#### **trans-humeral**

amputation of the upper limb between the shoulder joint and the elbow joint

### 3.1.3.6

#### **shoulder disarticulation**

amputation of the upper limb at the shoulder joint

### 3.1.3.7

#### **scapulo-thoracic disarticulation forequarter**

amputation of the upper limb at the scapulo-thoracic and the sternoclavicular joints

### 3.1.4

#### **lower limb amputation**

surgical removal of the whole or part of a lower limb

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#### 3.1.4.1

##### **partial foot**

amputations of the lower limb distal to the ankle joint

Note 1 to entry: These include:

- **Phalangeal:** Amputation of part of one or more toes;
- **Metatarso-phalangeal disarticulation:** Amputation of one or more toes;
- **Metatarsal:** Amputation of a part of the foot through one or more metatarsals;
- **Tarso-metatarsal disarticulation:** Amputation of part of the foot at one or more of the tarso-metatarsal joints;
- **Tarsal:** Amputation of a part of the foot through any of the tarsal bones and/or joints.

Note 2 to entry: The complete description of a partial foot amputation requires the identification of the amputated bones and their levels of amputation.

#### 3.1.4.2

##### **ankle disarticulation**

amputation of the lower limb at the ankle joint

#### 3.1.4.3

##### **trans-tibial**

amputation of the lower limb between the knee joint and the ankle joint



**3.1.4.4****knee disarticulation**

amputation of the lower limb at the knee joint

**3.1.4.5****trans-femoral**

amputation of the lower limb between the hip joint and the knee joint

**3.1.4.6****hip disarticulation**

amputation of the lower limb at the hip joint

**3.1.4.7****trans-pelvic**

amputation of the whole lower limb together with all or part of the hemipelvis

**3.2 Amputation procedures****3.2.1****initial amputation**

first amputation of the whole or part of a limb

**3.2.2****initial upper limb amputation**

first amputation of the whole or part of an upper limb

**3.2.3****initial lower limb amputation (standards.iteh.ai)**

first amputation of the whole or part of a lower limb

Note 1 to entry: The complete description of an amputation has to specify upper or lower limb, left or right side.  
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**3.2.4****revision amputation**

surgical procedure on a previously amputated limb without changing the level of amputation

Note 1 to entry: This can involve removal of soft tissue, bony tissue, or both.

**3.2.5****two-stage amputation**

amputation planned to be carried out in two stages

Note 1 to entry: The first stage involves amputating the devitalized and/or infected parts of the limb. The wound may be left fully or partially open. The second stage involves revision amputation, or even amputation to a higher level, and wound closure.

**3.2.6****reamputation**

amputation of an amputated limb to a higher level

**3.3 Person who has had an amputation****3.3.1****amputee**

person who has had an amputation

Note 1 to entry: The complete description of the person requires the identification of the amputated limbs.

**3.3.2****upper limb amputee**

person who has had an upper limb amputation