

**Kiirabiautodes kasutatavate kandraamide ja teiste  
patsiendi transpordi abivahendite  
spetsifikatsioonid**

Specifications for stretchers and other patient handling  
equipment used in road ambulances

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 1865:2000 sisaldab Euroopa standardi EN 1865:1999 ingliskeelset teksti.</p> <p>Standard on kinnitatud Eesti Standardikeskuse 31.05.2000 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 22.09.1999.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 1865:2000 consists of the English text of the European standard EN 1865:1999.</p> <p>This standard is ratified with the order of Estonian Centre for Standardisation dated 31.05.2000 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.</p> <p>Date of Availability of the European standard text 22.09.1999.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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ICS 11.140, 11.160, 43.160

**Võtmesõnad:** kandemadrats, kandetekk, kokkupandav kandetool, kühvelraam, mittekokkupandav kandetool, pikk seljalaud, põhikanderaam, tool-kanderaam, vaakummadrats ja -pump

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Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega:  
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ICS 11.140; 11.160; 43.160

**English version**

**Specifications for stretchers and other patient  
handling equipment used in road ambulances**

Spécifications des brancards et  
équipements d'ambulances pour  
les transport des patients

Festlegungen für Krankentragen und  
andere Krankentransportmittel im  
Krankenkraftwagen

This European Standard was approved by CEN on 1999-08-08.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

**CEN**

European Committee for Standardization  
Comité Européen de Normalisation  
Europäisches Komitee für Normung

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## Foreword

This European Standard has been prepared by Technical Committee CEN/TC 239 "Rescue systems", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2000, and conflicting national standards shall be withdrawn at the latest by March 2000.

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this standard.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

## Introduction

This European Standard with the general title "Specifications for stretchers and other patient handling equipment used in road ambulances" incorporates specifications for:

- Main stretcher – undercarriage
- Chair stretcher
- Transfer mattress
- Carrying sheet
- Pick up stretcher
- Vacuum mattress and pump
- Long spinal board
- Foldable carrying chair
- Non-foldable carrying chair

This European Standard is closely related to prEN 1789 "Medical vehicles and their equipment - Road ambulances".

NOTE: Standardisation work will continue with the aim of ensuring the safe transfer of patients and equipment without compromising continuity of patient care and the safety of staff.

## 1 Scope

This European Standard defines minimum requirements for the design and performance of stretchers and other patients handling equipment used in road ambulances for handling and carrying a patient in such a way that supplementary injuries due to handling are reduced to a minimum.

## 2 Normative references

This European Standard incorporates by dated or undated reference provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to, or revisions of any of these publications apply to this European standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

### EN 292-2

Safety of machinery - Basic concepts, general principles for design – Part 2: Technical principles and specifications

### EN 597-1

Furniture – Assessment of the ignitability of mattresses and upholstered bed bases – Part 1: Ignition source: Smouldering cigarette

### EN 980

Graphical symbols for use in the labelling of medical devices

### EN 1021-1

Furniture - Assessment of the ignitability of upholstered furniture – Part 1: Ignition source: Smouldering cigarette (ISO 8191-1 : 1987, modified)

### EN 1041

Information supplied by the manufacturer with medical devices

prEN 1789 : 1999  
Medical vehicles and their equipment – Road ambulances

### 3 Definitions

For the purposes of this standard, the following definitions apply:

#### 3.1 Main stretcher

The main means for the conveyance of sick and/or injured persons in transit in a recumbent position in safety and in comfort whilst facilitating treatment.

#### 3.2 Chair stretcher

A device designed to handle and carry a patient in a sitting or lying position, including conveying a patient in the vehicle.

#### 3.3 Transfer mattress

A device intended to facilitate the transfer of the patient from one stretcher to another.

#### 3.4 Carrying sheet

A special sheet to handle and carry a patient in a lying or sitting position.

#### 3.5 Pick up stretcher

A lifting device, intended to be used for movement of seriously injured people on to other transport devices.

#### 3.6 Vacuum mattress

A device intended primarily to provide whole body immobilization during the transportation of the patient.

#### 3.7 Long spinal board

A device to lift and immobilize patients with spinal injuries.

#### 3.8 Foldable carrying chair

A device intended to handle and carry a patient in a sitting position to the road ambulance but not to be used to transport a patient within the ambulance.

#### 3.9 Non-foldable carrying chair

A device intended to handle and carry a patient in a sitting position to the road ambulance and to be used to transport a patient within the ambulance.

### 4 Requirements

All equipment for handling of patients shall guarantee a safe and smooth manipulation.

All equipment for handling of patients shall be secured so that any movement during ambulance transport is prevented, even in bad transport conditions.

Carrying handles of devices for handling of patients shall permit fixation in extended positions.

All equipment for handling of patients shall be free of any sharp edges or deformation that could cause damage to persons or other equipment on board.

For all patients transported in the patients compartment, patient restraint-systems shall be available.

All patient restraint-systems shall have a quick release system.

The patient restraint-system for all patient handling equipment shall immobilize the patient, but at the same time shall permit treatment of the patient.

The lying-sitting part shall be made of a strong material which is bacterial resistant, fungal resistant, stain resistant, putrid resistant, easy to clean, washable, waterproof and petrol-oil resistant.