

# Emergency Medical Services Systems in the European Union

Report of an assessment project co-ordinated by the  
World Health Organization

## DATA BOOK

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# Emergency Medical Services Systems in the European Union

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Report of an assessment project co-ordinated by the  
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## DATA BOOK

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Sweden  
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### ■ Matrix

## Emergency Medical Services Systems in the European Union

Acronyms  
Glossary  
Abstract

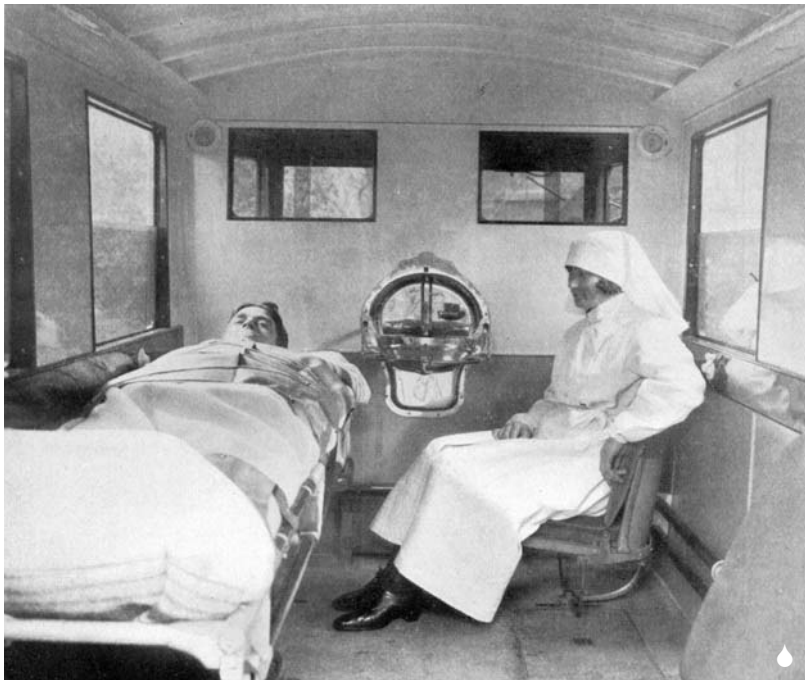
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## ■ Acronyms



<b>AED</b>	automated external defibrillator
<b>ALS</b>	advanced life support
<b>ATLS</b>	advanced trauma life support
<b>CISM</b>	critical incident stress management
<b>DC</b>	dispatch centre
<b>ED</b>	emergency department
<b>EM</b>	emergency medicine
<b>EMS</b>	emergency medical services
<b>EMT</b>	emergency medical technician
<b>EPLS</b>	european paediatric life support
<b>GP</b>	General Practitioner
<b>MoH</b>	Ministry of Health
<b>MRCP</b>	Member of Royal College of Physicians
<b>MRCS</b>	Member of Royal College of Surgery
<b>NGO</b>	non-governmental organization
<b>NHS</b>	National Health Service
<b>N/A</b>	data not available
<b>PHTLS</b>	pre-hospital trauma life support
<b>PM</b>	Prime Minister

## ■ List of Countries

<b>AUT</b>	Austria
<b>BEL</b>	Belgium
<b>BUL</b>	Bulgaria
<b>CYP</b>	Cyprus
<b>CZH</b>	Czech Republic
<b>DEN</b>	Denmark
<b>EST</b>	Estonia
<b>FIN</b>	Finland
<b>FRA</b>	France
<b>DEU</b>	Germany
<b>GRE</b>	Greece
<b>HUN</b>	Hungary
<b>IRE</b>	Ireland
<b>ITA</b>	Italy
<b>LVA</b>	Latvia
<b>LTU</b>	Lithuania
<b>LUX</b>	Luxembourg
<b>MAT</b>	Malta
<b>NET</b>	Netherlands
<b>POL</b>	Poland
<b>POR</b>	Portugal
<b>ROM</b>	Romania
<b>SVK</b>	Slovakia
<b>SVN</b>	Slovenia
<b>SPA</b>	Spain
<b>SWE</b>	Sweden
<b>UNK</b>	United Kingdom of Great Britain and Northern Ireland

Source:  
The European Regional Office of the World Health Organization.

This document is the result of a project whose aim was to describe and assess emergency medical services (EMS) systems across the European Union (EU) and their links with national crisis management systems. Professional standards, organizational structures and coordination mechanisms vary widely across EU Member States. A comprehensive EMS review was considered necessary in order to understand this variety and to identify gaps and possible means to improve harmonization and standardization. The project was co-financed by the Directorate General for “Health & Consumers” of the European Commission and the World Health Organization (WHO) Regional Office for Europe.

The project aimed: (i) to develop a standardized template for use as a data collection tool in order to facilitate country comparisons and the compilation of an essential information package; (ii) to map current EMS preparedness within EU Member States including existing institutional, educational, operational and human resource capacity; and (iii) to collect data on existing crisis management mechanisms to manage health threats. Close collaboration with all 27 EU Member States was considered an important prerequisite for successful implementation of the project and WHO formally requested the appointment of a national representative (NR) from the Ministry of Health in each State. A group of EMS experts, with knowledge and expertise of the subject, was also selected. The first phase of the project involved the development of a standardized template to collect general information and data on EMS across EU Member States. NRs were requested to complete the questionnaire online and WHO supervised the completion of data gathering and ensured finalization. Data from the 27 countries were compared and matched with the aim of finding common features or possible gaps in the organization of EMS in EU Member States.

The group of experts and all 27 NRs met again in Lisbon, Portugal, in December 2007. This meeting provided an opportunity to review progress in data analysis and to agree the main conclusions from the study. Recommendations for improvements in the field of EMS were also discussed and voted on in Lisbon.

The objectives of the project were very ambitious and EU Member States and various stakeholders highlighted their concern in this regard. The difficulty of assessing EMS links with national crisis management systems in the absence of any previous EU-wide study of these national systems was raised. Another major limitation of the project is that all data have come from NRs appointed by Ministries of Health. This sometimes proved to be a constraint especially in those EU Member States where the organization and management of health-care provision are delegated to sub-national authorities. A problem was also encountered in the attempt to promote a standardized study, seeking comparable data using unique and common definitions. On the positive side, the project has followed a highly participatory methodology with reasonable levels of interest and motivation from the majority of participants; moreover the project utilized experts in the field of EMS to peer review the work carried out.

This book is divided into five chapters: legislation and financing; out-of-hospital EMS; in-hospital EMS; education in EMS; and crisis management and EMS systems.

The main result of the study has been to underline the importance of an organic and comprehensive set of rules and laws governing the organization and structure of a fundamental health care service and its integration within the whole health system. Given this finding, WHO Regional Office for Europe is investing resources to help all EU

Member States develop effective coordination mechanisms at a multisectoral level for crisis preparedness and response.

With regard to out-of-hospital EMS, two main concerns were raised by participants: (i) the need to develop performance indicators of an international standard. The application of these indicators to different EU EMS systems could provide the data necessary for benchmarking, comparison and cost-effective optimization of the system; and (ii) the need for greater awareness of 112 as the European emergency call number is necessary to ensure successful implementation, particularly in those countries that have not adopted 112 as the unique emergency call number as yet. The foremost value of EU Directive number (91/396/EEC) is its clear statement of the need to prevent misunderstandings and delays in accessing EMS for all EU citizens.

In considering in-hospital EMS settings, it is evident from the study that hospital-based services play a crucial role in Europe and the EMS system should be thoroughly evaluated for its effectiveness and quality, from the perspective of both public health and financing issues.

A key observation of the study is that the adoption by all EU countries of a common core curriculum, as the basis for an emergency medicine (EM) speciality, would be the most suitable way to meet the EU Doctor's Directive and assure free exchange of EM physicians between EU countries. The situation of other cadres of professional medical staff is more complicated: the role, competencies and educational requirements of nurses and paramedics or technicians are substantially different across countries, to the extent that achieving standardization and quality improvements are unrealistic at the present moment.

In conclusion, EMS systems in the EU still need to find their place in the mechanisms for disaster preparedness and response in many countries. Although rescue and first-line medical care to victims is the primary objective of all emergency services in a disaster, the role of EMS in the EU appears marginalized in the coordination and command framework. Preparedness planning is insufficient if simply carried out at the level of each health service. It should involve the whole EMS system at national or regional level, integrated into the whole health system and in full coordination with other emergency services. International agreements can be effective only if and when they are translated into practical protocols that have been tested and shared by all stakeholders.

Finally, the most important outcome of the project has been the formal creation of the European Inter-Ministerial Panel on Emergency Health Care, a group of experts in the field of EMS, appointed by all concerned Ministries of Health, that should meet on a regular basis and collaborate on exchanging and analysing information on EMS systems across all countries. The proposal to establish this "Panel" could be instrumental in developing and sustaining a continuous process of risk and crisis management at EU level.



Legislation and financing of EMS



Out-of-hospital EMS



In-hospital EMS



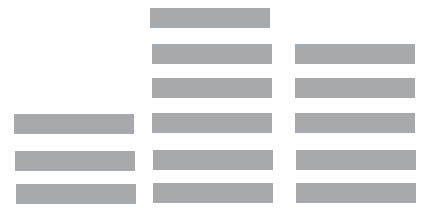
Education in EMS



Crisis management and EMS systems



# SYNOPSIS

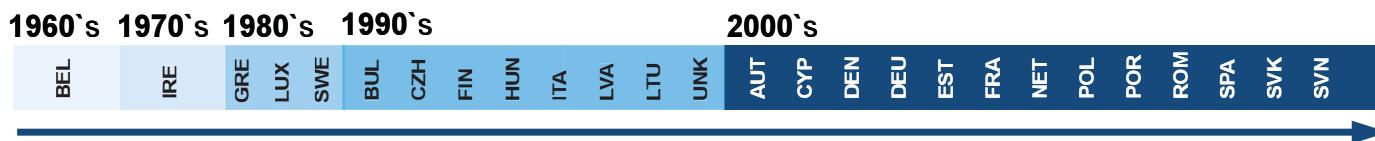


The following synopsis shows with graphics and summaries the results of the study divided into the five main topics: Legislation and Financing of EMS, Out-of-Hospital EMS, In-Hospital EMS, Education in EMS and Crisis management and EMS systems.



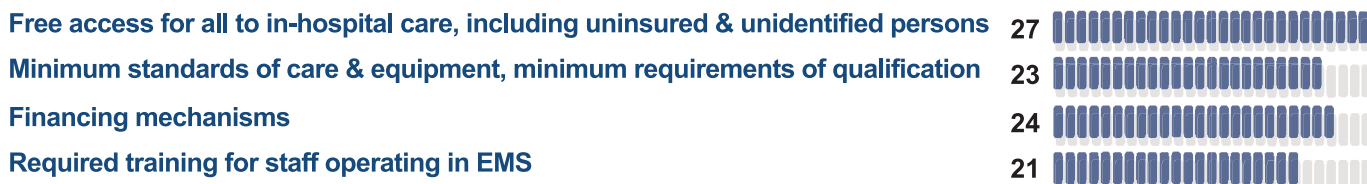
# Legislation and Financing of EMS

## DECADES OF LAWS

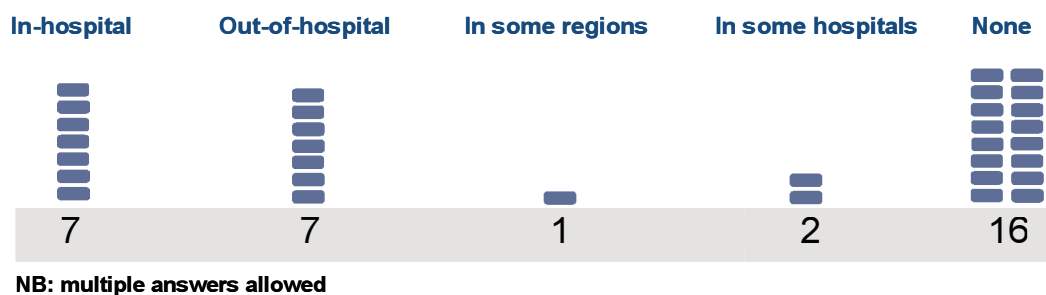


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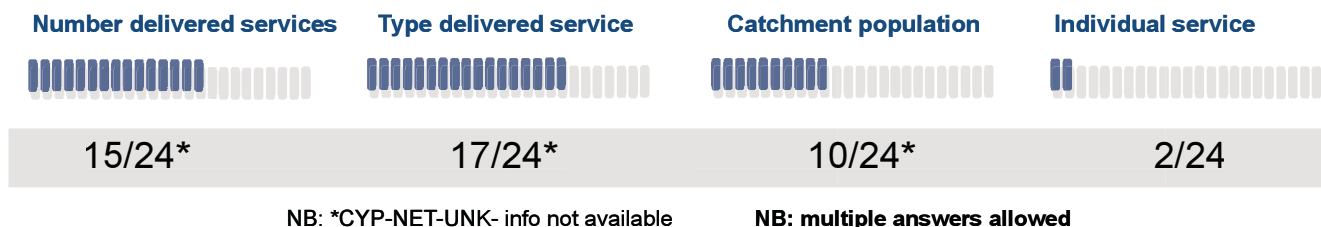
## EMS TOPICS REGULATED BY NATIONAL LAWS



## Request for co-payment fees waived in case of vital conditions

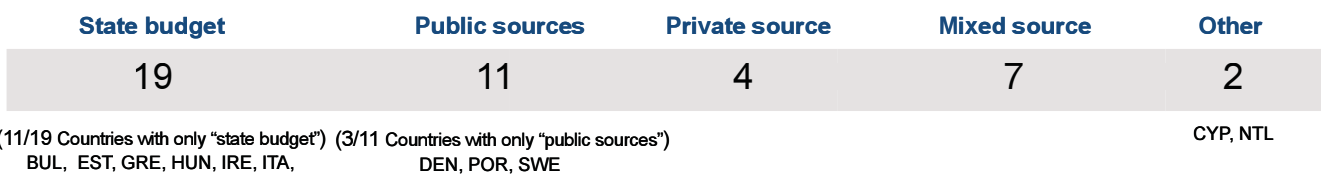


## METHODS OF PURCHASE OF EMS SERVICES BY STATE OR NATIONAL INSURANCES



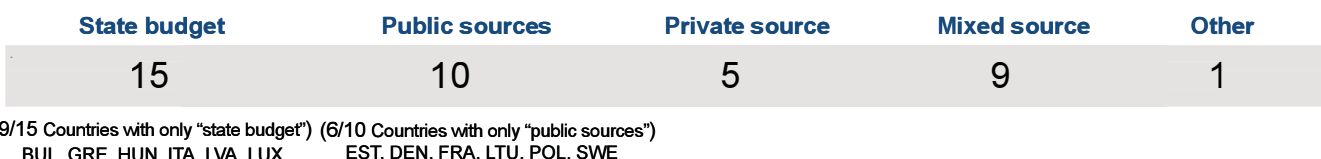
## SOURCE OF FINANCING

### Out-of-hospital



NB: multiple answers allowed

### In-hospital



NB: multiple answers allowed

## INSTITUTIONS DELIVERING O-H-EMS

### AUTHORIZED INSTITUTION

Public independent institution

Pub. Institution depending on Hospital

Pub. Institution depending on Health Authority

Private enterprises

### AMBULANCES

12

9

16

16

### DISPATCH CENTRES

17

5

11

7

NB: multiple answers allowed

## EMS AND CRISIS MANAGEMENT TOPICS REGULATED BY NATIONAL LAWS

Reference to crisis/disaster management and crisis/disaster preparedness

24

Organization of response and dispatch system

21

Special budget for crisis preparedness

13

Reserve budget for prompt crisis response

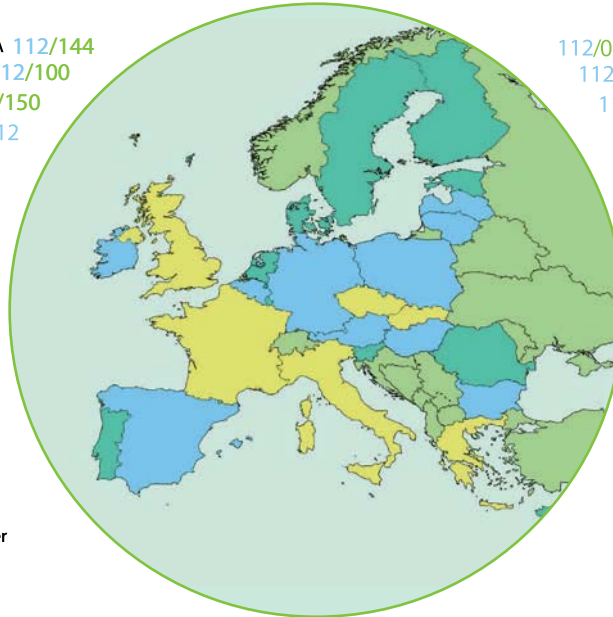
12

# Out-of-Hospital EMS

## EMERGENCY NUMBER

### National telephone number for medical emergencies

AUSTRIA 112/144  
 BELGIUM 112/100  
 BULGARIA 112/150  
 CYPRUS 112  
 CZECH REPUBLIC 155  
 DENMARK 112  
 ESTONIA 112  
 FINLAND 112  
 FRANCE 15  
 GERMANY 19222/112 \*  
 GREECE 166  
 HUNGARY 112/104  
 IRELAND 112/999  
 ITALY 118



112/03 LATVIA  
 112/03 LITHUANIA  
 112 LUXEMBOURG  
 112/196 MALTA  
 112 NETHERLANDS  
 112/999 POLAND  
 112 PORTUGAL  
 112 ROMANIA  
 155 SLOVAKIA  
 112 SLOVENIA  
 061/ 112 \*\* SPAIN  
 112 SWEDEN  
 999 UNITED KINGDOM

■ 112 as unique number  
 ■ 112 and others  
 ■ Others

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the World Health Organization.



\* It varies according to the federal states.

\*\* In 8 of the Spanish regions (and in the towns of Ceuta and Melilla) there is one separate dispatch centre for health emergencies (061) and an integrated dispatch centre (112). In the other 9 regions there is only one integrated dispatch centre (112).

Countries where 112 is the only telephone number to call in case of medical emergencies **10**



CYP, DEN, EST, FIN, LUX, NET, POR, ROM, SVN, SWE

Countries where 112 is the only telephone number to call in case of medical emergencies in some regions or federal states **2**



DEU, SPA

## DISPATCH CENTRES

### Calling 112

First to answer



DEU and LTU report two answers due to regional differences.

### Calling 112

In case of medical emergencies

An integrated dispatch centre

N° countries



Police



Other



Call diverted to a medical dispatcher for consultation

N° countries



Medical consultation within first dispatch centre



### Access to 112 emergency number

Free of charge



Free of area code



English generally spoken during calls

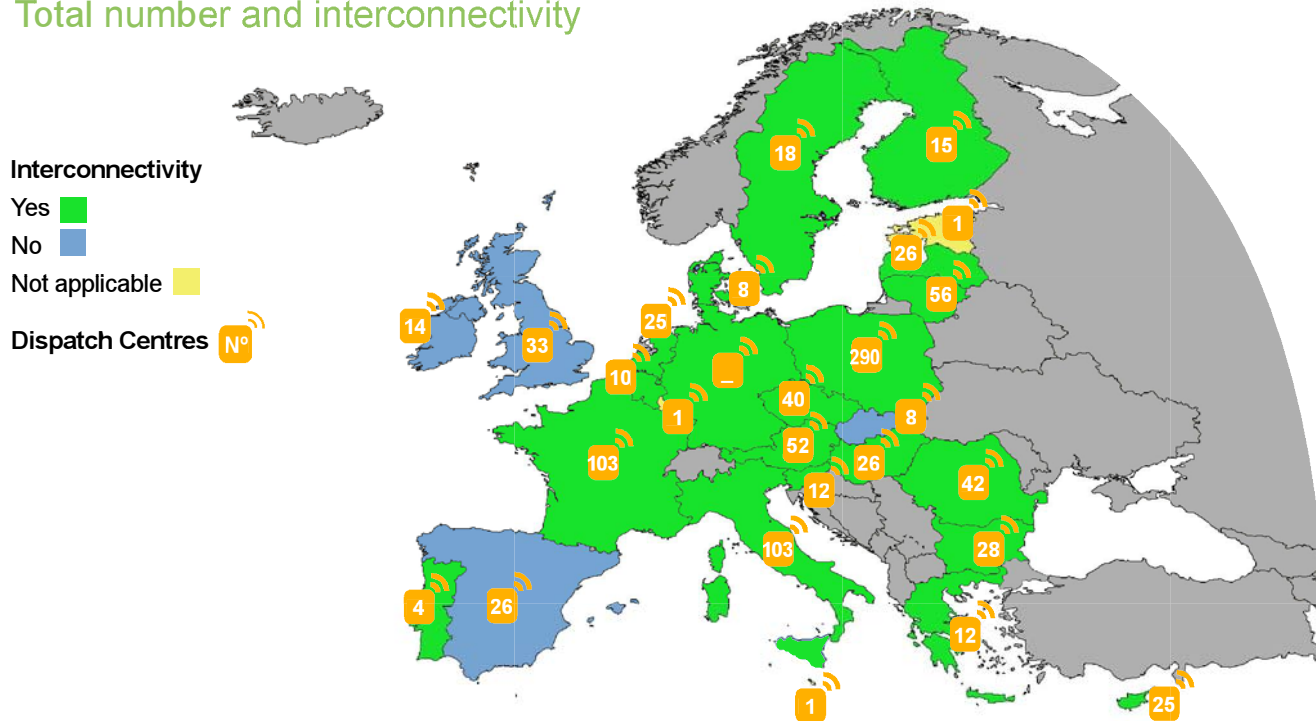


Minority languages generally spoken during calls



## DISPATCH CENTRES

### Total number and interconnectivity

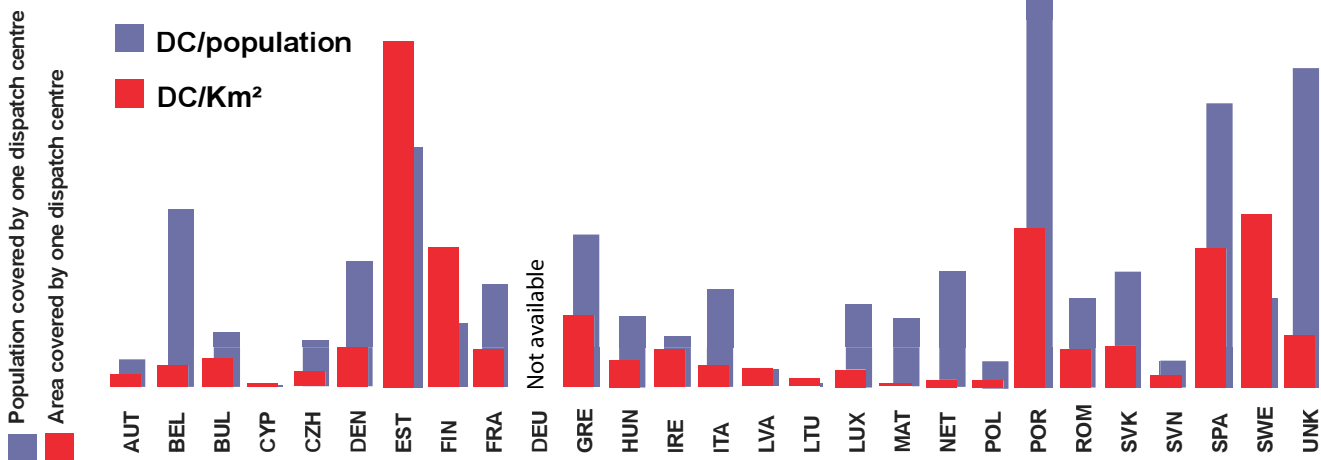


### Interconnectivity between dispatch centres

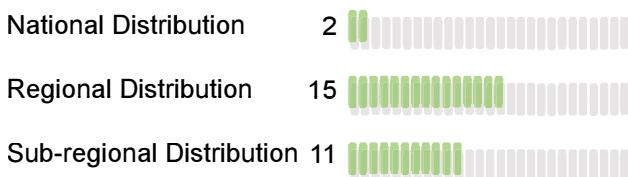


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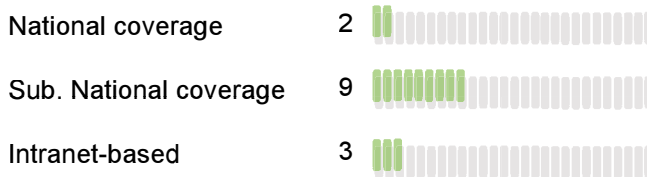
### Distribution of Dispatch Centres



### Geographical distribution



### Real-time update of intensive care beds

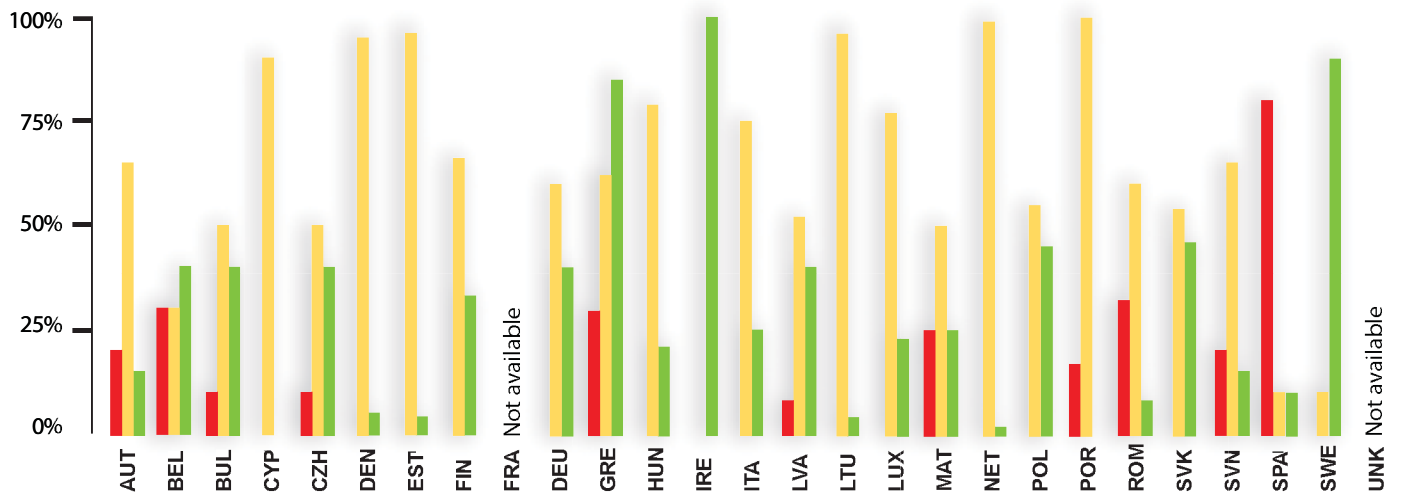


## EMERGENCY VEHICLES

### Medical equipment available in other emergency services vehicles



	Police	Fire Brigade	Volunteers	Other
Cervical collars	2	16	9	3
Oxygen	1	16	7	3
Suction unit	1	9	7	2
Aut external defibrillator (AED)	4	12	8	4
Manual resuscitator	2	11	9	2
Other medical equipment	5	12	10	5
Functional co-ordination with EMS dispatch centre	13	18	8	5

### Percentage of types of emergency vehicles



**Ambulance type A**    
**Patient Transport Ambulance**

“Road ambulance designed and equipped for the transport of patients who are not expected to become emergency patients” \*

**Ambulance type B**    
**Emergency Ambulance**

“Road ambulance designed and equipped for the transport, basic treatment and monitoring of patients” \*

**Ambulance type C**    
**Mobile Intensive Care Unit**

“Road ambulance designed and equipped for the transport, advanced treatment and monitoring of patients” \*

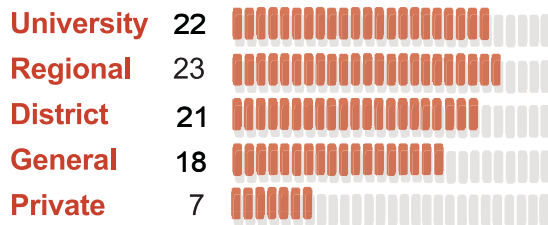


\* Source: EC Standard EN 1789:2007

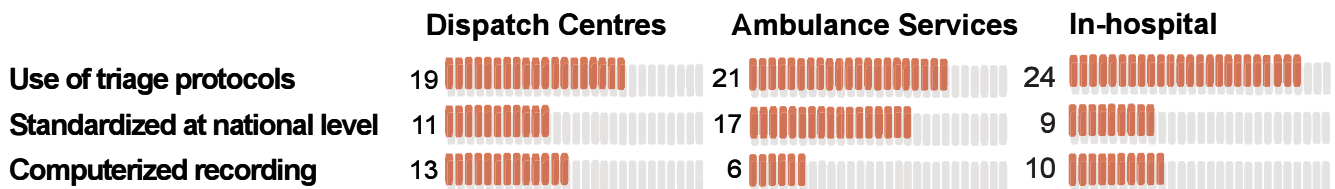


## EMERGENCY DEPARTMENTS

Emergency departments are present in the following types of hospitals

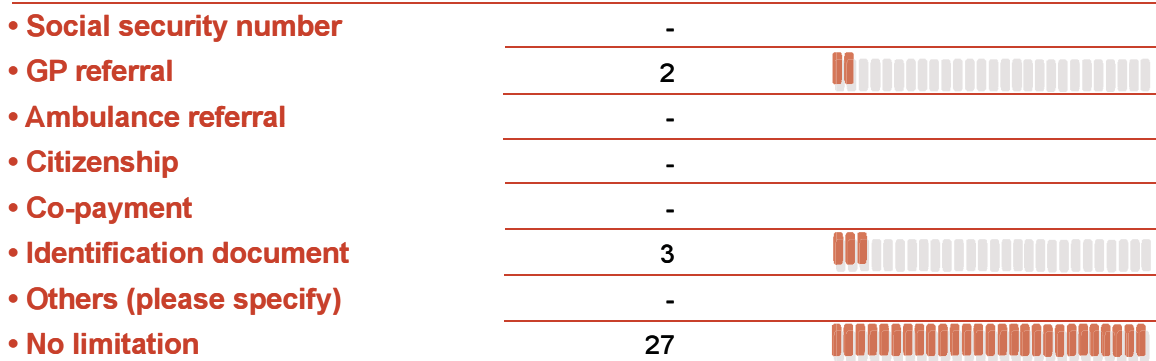


## TRIAGE PROTOCOLS



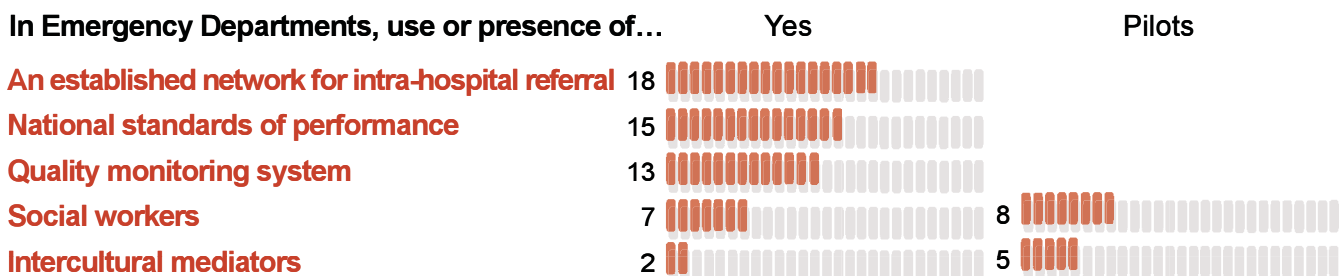
## ACCESS

Conditions to access emergency departments waived in case of vital conditions



NB: Multiple answers allowed

## INTEGRATED CARE AND QUALITY



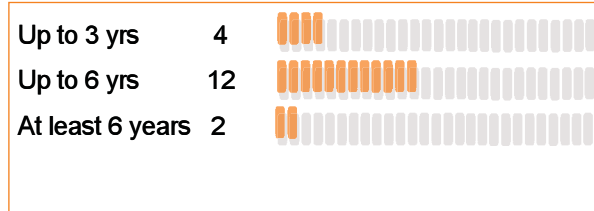
# Education in EMS

## UNIVERSITY STUDIES

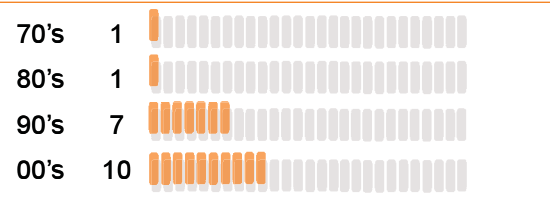
Emergency medicine courses are part of the curriculum at medical school 16 

Emergency medicine specialization is recognized by law 19 

### Length of training



### Decade of establishment



## TRAINING IN EMERGENCY MEDICINE

Follows a nationally approved curriculum 20 


Provides certification for physicians from a professional board/college 21 

Provides certification for nurses from a professional board/college 14 

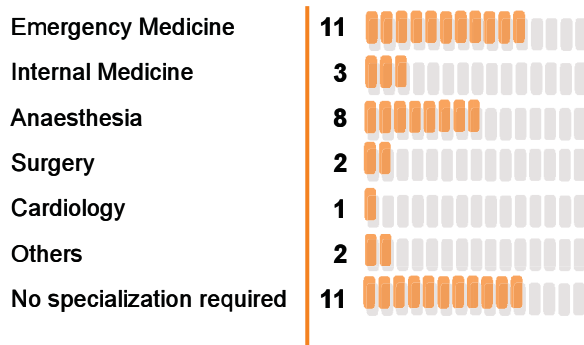
## EDUCATION REQUIREMENT IN EMS

A specialization is legally required for physicians working in

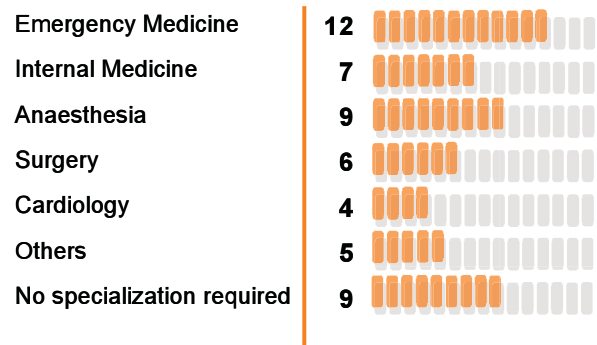
Out-of-hospital 15 

In-hospital 15 

### Type of Specialisation required



### Type of Specialisation required



## POSTGRADUATE TRAINING

	Physicians	Nurses	Paramedics
University-based	10	6	3
Government-based	6	6	9
Private	3	4	2

## ROLE OF EMS

EMS representative is part of the national crisis management team	12	
Role of EMS in the National crisis management Plan specified by law	23	
Role of EMS in Regional/Provincial crisis management plan	24	
Specific training in crisis/disaster management for EMS personnel	20	
International co-operation protocols in EMS	18	

## CRISIS PREPAREDNESS PLAN IN EMS

	Out-of-hospital	In-hospital
Required by law	24	22
Obligatory regular testing	21	18

## LEADING INSTITUTION IN CASE OF NATIONAL CRISIS

Cabinet Office	Firemen	Civil Protection	MoH-EMS	M. Interior	M. Defence	Others	PM Office
1	1	5+1*	1	12	3	2	1








\* Including BUL: Ministry of State Policy for Disasters and Accidents.

## SAFETY MEASURES

Matching the patient with medical records (e.g. wrist bands)	23	
Stress management system (for patients, staff, relatives)	19	



- Legislation and financing of EMS 
- Out-of-hospital EMS 
- In-hospital EMS 
- Education in EMS 
- Crisis management and EMS systems 

*Last update: September 2008*

# AUSTRIA

Legislation and financing of EMS-Out-of-hospital EMS-  
 In-hospital EMS-Education in EMS-Crisis management  
 and EMS systems-Legislation and financing of EMS-  
 Out-of-hospital EMS-In-hospital EMS-Education in  
 EMS-Crisis management and EMS systems-Legislation  
 and financing of EMS-Out-of-hospital EMS-In-hospital  
 EMS-Education in EMS-Crisis management and EMS  
 systems-Legislation and financing of EMS-Out-of-ho-  
 pital EMS-In-hospital EMS-Education in EMS-Crisis ma-



# Legislation and financing of EMS

Main Law: ..... Federal law \*

Decade of issue: ..... 2000's

Electronic version available: ..... [www.ris.bka.gv.at](http://www.ris.bka.gv.at)



\* Under the Austrian constitution matters of disaster relief and rescue service are competencies of the nine federal states. All states have regulations, the latest version of the relevant acts came in to force between 1985 till 2006. The legislation of the federal state and the regional countries can be accessed at internet <http://www.ris.bka.gv.at/>.

## Areas of emergency medicine regulated by current legislation

- ✓ Minimum standards of care & equipment, minimum requirements of qualification
- ✓ Free access for all to in-hospital care, including uninsured & unidentified persons
- ✓ Crisis/disaster management and crisis/disaster preparedness
- ✓ Financing mechanisms
- ✓ Required training for staff operating in EMS
- ✓ Organization of response and dispatch system
- X\* Special budget for crisis preparedness
- X\* Reserve budget for prompt mobilization in crisis response



\* In the case of the region of Styria, there is a special budget for crisis preparedness and a reserve budget for prompt crisis response. In all other regions, federal states reimburse the costs for interventions in case of disaster.

	Method of purchase	Financing sources	Authorized institution
<b>Out-of-hospital</b> <div style="border: 1px solid black; padding: 5px; margin: 5px;">                     Dispatch Centre                      Ambulance Service                 </div>	- By state or national insurance - By number of services - By type of services - By catchment population - By individual: by individual services	- State budget - Public sources - Private sources - Mixed sources	- Public independent institution - Public Institution depending on Health Authorities - Private enterprises
			- Public independent institution - Public Institution depending on hospital - Public Institution depending on Health Authorities - Private agencies *
<b>In-hospital</b> <div style="border: 1px solid black; padding: 5px; margin: 5px;">                     Hospital Emergency Department                 </div>		- State budget - Public sources - Private sources - Mixed sources	

## Co-payment fees required

- X In-hospital
- X Out-of-hospital
- ✓\*\* In some regions
- ✓\*\* In some hospitals
- X None



\* Rescue services are mainly provided by NGOs like the Red Cross which must be licensed by the state governments. The services are further determined by contracts between municipalities and rescue services. In Vienna rescue services ambulances are part of the administration of the Federal State of Vienna.

\*\* Co-payment can be requested particularly in cross border transports (outside of Austria).

Telephone number for medical emergencies **144 and 112**



## Access to medical emergency number

- ✓ Free of charge
- ✓ Free of area code
- ✓ English generally spoken during calls
- ✗ Minority languages generally spoken during calls

## Dispatch centres

Total number	52	Real-time update of intensive care beds
DC/population	1/ 160 000 approx.	✗ Nationally
DC/Km <sup>2</sup>	1/ 1 600 approx.	✓* Regionally
Distribution	Regional and sub-regional	✓* Intranet based
Interconnectivity	✓	

\* There are differences amount federal states.

## Medical equipment available in other emergency services vehicles

	Police	Fire brigade	Volunteers	Others
Cervical collars	✗	✗	✓	✗
Oxygen	✗	✓	✓	✗
Suction unit	✗	✓	✓	✗
Aut. external defibrillator (AED)	✓	✓	✓	✗
Manual resuscitator	✓	✓	✓	✗
Other medical equipment	✓	✓	✓	✓
Functional co-ordination with dispatch centre	✗	✓	✓	✗

There are differences in the nine federal states of the country.



Ambulance Type A	Ambulance Type B	Ambulance Type C	
patient transport ambulance	emergency ambulance	mobile intensive care unit	Lower Austria: A15% B80% C5%
10%	75%	15%	Styria: A26% B8% C66%
			Vienna: A65% B28% C8%
			Vorarlberg: A38% B50% C12%

# In-hospital EMS

## Triage Protocols

	Dispatch Centre	Ambulance Service	In-hospital
Is there a triage system?	✓	✓	✓*
Standardized at national level?	✗	✓	✓
Computerized recording?	✓	✗	✓*



\* It may vary depending on the hospital.

## Emergency departments are available in the following types of hospitals

- ✓ University
- ✓ Regional
- ✓ District
- ✓ General
- ✓ Private



ED might be part of a General or District hospital, but it is not a requirement by law. Concerning private hospitals, there are private non profit general hospitals serving as regional or district hospitals.

## Conditions to access emergency departments

- ✗ Social security number
- ✗ GP referral
- ✗ Ambulance referral
- ✗ Citizenship
- ✗ Co-payment
- ✗ Identification document
- ✗ Others (please specify)
- ✓ No limitation

## In Emergency Departments, there exists

	Yes	Pilots
An established network for intra-hospital referral	✓*	
National standards of performance	✗	
Quality monitoring system	✓**	
Social workers	✗	✓
Intercultural mediators	✗	✓



\* It may vary depending on the hospital.

\*\* Hospitals generally have quality monitoring systems, however no special systems are set for EDs.

- ✓ Emergency medicine courses are part of the curriculum at medical school
- ✓ Emergency medicine specialization is recognized by law

Length of training	Date of establishment
At least 6 years	2006

## Training in Emergency Medicine

- ✓ Follows a nationally approved curriculum
- ✓ Provides certification for physicians from a professional board/college
- ✓ Provides certification for nurses from a professional board/college

## A specialization is legally required for physicians working in

- ✓ Out-of-hospital
- ✓ In-hospital

## Postgraduate training in emergency medicine is

	Physicians	Nurses	Paramedics
University-based	✓	✗	✗
Government-based	✗	✗	✗
Private	✗	✓	✓
Part of professional education	✓	✓	✓


## Medical qualification

	Qualification	Duration	Responsible Institution
Nurse	"Diplomierte Gesundheits und Krankenschwester"	At least 3 years	Special Schools approved by health authorities
Nurse emergency	"Diplomierte Gesundheits und Krankenschwester"	At least 3 years	Special Schools approved by health authorities
Physician	"Dr. med."	At least 9 years	University and Austrian Board of physicians
Acute care physician	"Dr. med." "facharzt"	At least 12 years	University and Austrian Board of physicians
Emergency physician	"Dr. med." "facharzt"	At least 12 years	University and Austrian Board of physicians
Disaster medicine director	"Dr. med."	At least 9 years	University and Austrian Board of physicians

# Crisis management and EMS systems

- ✓\* Role of EMS in crisis management specified by law
- ✓ Sub-national crisis preparedness plan
- ✓ International co-operation protocols in EMS

Croatia  
 Czech Republic  
 Finland  
 Germany  
 Hungary  
 Italy  
 Kingdom of Jordan  
 Poland  
 Slovakia  
 Slovenia  
 Switzerland

 \* Under the Austrian constitution matters of disaster relief and rescue services are competences of the nine federal states. All states have their own regulations.

## Crisis preparedness plan in EMS

	Out-of-hospital	In-hospital
Required by law	✓	✓
Obligatory regular testing	✓	✓

Leading institution in case of national crisis: Ministry of Interior

EMS representative is part of the national crisis management team ✓






Specific training in crisis/disaster management for EMS personnel

Vienna Ambulance service: [www.wien.gv.at/rettung](http://www.wien.gv.at/rettung)  
 Austrian Red Cross: [www.rotekreuz.at](http://www.rotekreuz.at)  
 Fire Brigade: [www.bundesfeuerwehrverband.at/oebfv/index.php?id=1](http://www.bundesfeuerwehrverband.at/oebfv/index.php?id=1)  
 Johanniter-Unfall-Hilfe in Österreich: [www.johanniter.at](http://www.johanniter.at)

## Safety measures envisaged in emergency plans

- ✓ Matching the patient with medical records (e.g. wrist bands)
- ✓ Stress management system available for patients, staff and relatives



- Legislation and financing of EMS 
- Out-of-hospital EMS 
- In-hospital EMS 
- Education in EMS 
- Crisis management and EMS systems 

# BELGIUM

*Last update: September 2008*

Legislation and financing of EMS-Out-of-hospital EMS  
 In-hospital EMS-Education in EMS-Crisis management  
 and EMS systems-Legislation and financing of EMS  
 Out-of-hospital EMS-In-hospital EMS-Education in  
 EMS-Crisis management and EMS systems-Legislation  
 and financing of EMS-Out-of-hospital EMS-In-hospital  
 EMS-Education in EMS-Crisis management and EMS  
 systems-Legislation and financing of EMS-Out-of-hos-  
 pital EMS-In-hospital EMS-Education in EMS-Crisis ma-




# Legislation and financing of EMS

Main Law: ..... Law on a single emergency call number (1964) \*

Decade of issue: ..... 1960's

Electronic version available: ..... [http://www.juridat.be/cgi\\_loi/loi\\_F.pl?cn=1964070831](http://www.juridat.be/cgi_loi/loi_F.pl?cn=1964070831)

 \* Other laws regarding the EMS include: the Royal decree 2/04/1965, the Royal decree 10/08/1998 (MICU) and the Royal decree 27/04/1998 on the Emergency Department.

## Areas of emergency medicine regulated by current legislation

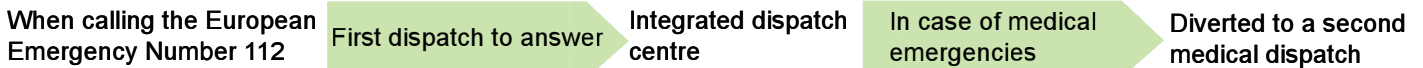
- ✓ Minimum standards of care & equipment, minimum requirements of qualification
- ✓ Free access for all to in-hospital care, including uninsured & unidentified persons
- ✓ Crisis/disaster management and crisis/disaster preparedness
- ✓ Financing mechanisms
- ✓ Required training for staff operating in EMS
- ✓ Organization of response and dispatch system
- ✓ Special budget for crisis preparedness
- ✓ Reserve budget for prompt mobilization in crisis response

		Method of purchase	Financing sources	Authorized institution
Out-of-hospital	Dispatch Centre	- By number of services - By type of services - By catchment population	- Mixed sources	- Public Institution depending on Health Authorities
	Ambulance Service			- Public and private enterprises
In-hospital	Hospital Emergency Department		- Mixed Sources	

## Co-payment fees required

- ✓ In-hospital
- ✓ Out-of-hospital
- ✗ In some regions
- ✗ In some hospitals
- ✗ None

Telephone number for medical emergencies **112/100**



## Access to medical emergency number

- ✓ Free of charge
- ✓ Free of area code
- ✓\* English generally spoken during calls
- ✓\* Minority languages generally spoken during calls

\* Not applicable in all dispatch centres.

## Dispatch centres

Total number	10	Real-time update of intensive care beds
DC/population	1 / 1 000 000 approx.	✗ Nationally
DC/Km <sup>2</sup>	1 / 3 000 approx.	✓* Regionally
Distribution	Sub-regional	✗ Intranet based
Interconnectivity	✓	* Pilot projects.

## Medical equipment available in other emergency services vehicles

	Police	Fire brigade	Volunteers	Others
Cervical collars	✗	✗	✗	✗
Oxygen	✗	✗	✗	✗
Suction unit	✗	✗	✗	✗
Aut. external defibrillator (AED)	✗	✗	✗	✗
Manual resuscitator	✗	✗	✗	✗
Other medical equipment	✗	✗	✗	✗
Functional co-ordination with dispatch centre	✓	✓	✓	✓



**Ambulance Type A**  
patient transport ambulance

30%

**Ambulance Type B**  
emergency ambulance

30%

**Ambulance Type C**  
mobile intensive care unit

40%

# In-hospital EMS

## Triage Protocols

	Dispatch Centre	Ambulance Service	In-hospital
Is there a triage system?	✓	✓	✓
Standardized at national level?	✓	✓	✗
Computerized recording?	✓	✓	✓

## Emergency departments are available in the following types of hospitals

- ✓ University
- ✓ Regional
- ✓ District
- ✓ General
- ✓ Private

## Conditions to access emergency departments

- ✗ Social security number
- ✗ GP referral
- ✗ Ambulance referral
- ✗ Citizenship
- ✗ Co-payment
- ✗ Identification document
- ✗ Others (please specify)
- ✓ No limitation

## In Emergency Departments, there exists

	Yes	Pilots
An established network for intra-hospital referral	✓	
National standards of performance	✓	
Quality monitoring system	✓	
Social workers	✗	✓
Intercultural mediators	✗	✓

- ✗ Emergency medicine courses are part of the curriculum at medical school
- ✓ Emergency medicine specialization is recognized by law

Length of training  
5 years or more

Date of establishment  
1990's

## Training in Emergency Medicine

- ✓ Follows a nationally approved curriculum
- ✓ Provides certification for physicians from a professional board/college
- ✓ Provides certification for nurses from a professional board/college

## A specialization is legally required for physicians working in

- ✓ Out-of-hospital
- ✓ In-hospital

## Postgraduate training in emergency medicine is

	Physicians	Nurses	Paramedics
University-based	✓	✗	✗
Government-based	✗	✗	✓
Private	✗	✓	✗
Part of professional education	✗	✗	✗

## Medical qualification

	Qualification	Duration	Responsible Institution
Nurse	Bachelor	3 years	Vocational Education institution
Nurse emergency	Master	1 year	Vocational Education institution
Physician	Master	4 years	University
Acute care physician	Master after Master	3 years	University
Emergency physician	Master after Master	6 years	University
Disaster medicine director	Cont. Educat.	n/a	University

# Crisis management and EMS systems

- ✓ Role of EMS in crisis management specified by law
- ✓ Sub-national crisis preparedness plan
- ✓ International co-operation protocols in EMS

France  
Germany  
Luxembourg  
Netherlands

## Crisis preparedness plan in EMS

	Out-of-hospital	In-hospital
Required by law	✓	✓
Obligatory regular testing	✓	✓

Leading institution in case of national crisis: Ministry of Interior

EMS representative is part of the national crisis management team: n/a

Specific training in crisis/disaster management for EMS personnel: Katholiek Universiteit Leuven, Université Libre de Bruxelles, Université Catholique de Louvain, Vrije Universiteit Brussel

## Safety measures envisaged in emergency plans

- ✓ Matching the patient with medical records (e.g. wrist bands)
- ✓ Stress management system available for patients, staff and relatives



# Legislation and financing of EMS

Main Law: ..... Law for the Health Care Facilities

Decade of issue: ..... 1990's

Electronic version available: ----- <http://www.mh.government.bg>

## Areas of emergency medicine regulated by current legislation

- X Minimum standards of care & equipment, minimum requirements of qualification
- ✓ Free access for all to in-hospital care, including uninsured & unidentified persons
- ✓ Crisis/disaster management and crisis/disaster preparedness
- ✓ Financing mechanisms
- X Required training for staff operating in EMS
- ✓ Organization of response and dispatch system
- X Special budget for crisis preparedness
- ✓ Reserve budget for prompt mobilization in crisis response

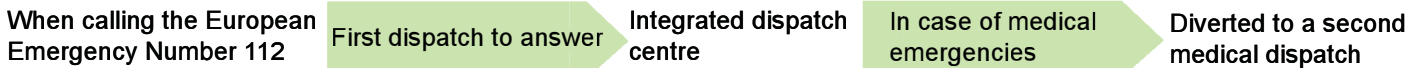
		Method of purchase	Financing sources	Authorized institution
Out-of-hospital	Dispatch Centre	- By number of services - By type of services	- State budget	- Public independent institution
	Ambulance Service			- Both public and private enterprises
In-hospital	Hospital Emergency Department		- State budget	

## Co-payment fees required

- X In-hospital
- X Out-of-hospital
- X In some regions
- X In some hospitals
- ✓ None



Telephone number for medical emergencies 112/150



## Access to medical emergency number

- ✓ Free of charge
- ✓ Free of area code
- ✗ English generally spoken during calls
- ✗ Minority languages generally spoken during calls

## Dispatch centres

Total number	28	Real-time update of intensive care beds
DC/population	1 / 290 000 approx.	✗ Nationally
DC/Km <sup>2</sup>	1 / 3 800 approx.	✗ Regionally
Distribution	Regional	✗ Intranet based
Interconnectivity	✓	

## Medical equipment available in other emergency services vehicles

	Police	Fire brigade	Volunteers	Others
Cervical collars	✗	✗	✗	✗
Oxygen	✗	✗	✗	✗
Suction unit	✗	✗	✗	✗
Aut. external defibrillator (AED)	✗	✗	✗	✗
Manual resuscitator	✗	✗	✗	✗
Other medical equipment	✗	✗	✗	✗
Functional co-ordination with dispatch centre	✓	✓	✗	✗



**Ambulance Type A**  
patient transport ambulance

10%

**Ambulance Type B**  
emergency ambulance

50%


**Ambulance Type C**  
mobile intensive care unit

40%

# In-hospital EMS

## Triage Protocols

	Dispatch Centre	Ambulance Service	In-hospital
Is there a triage system?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Standardized at national level?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> *
Computerized recording?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

 \* Written triage protocols, at hospital level, are in process of elaboration and they will be disseminated in the country after their approval.

## Emergency departments are available in the following types of hospitals

- University
- Regional
- District
- General
- Private

## Conditions to access emergency departments

- Social security number
- GP referral
- Ambulance referral
- Citizenship
- Co-payment
- Identification document
- Others (please specify)
- No limitation

## In Emergency Departments, there exists

	Yes	Pilots
An established network for intra-hospital referral	<input checked="" type="checkbox"/>	<input type="checkbox"/>
National standards of performance	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Quality monitoring system	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Social workers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Intercultural mediators	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

- ✓ Emergency medicine courses are part of the curriculum at medical school
- ✓ Emergency medicine specialization is recognized by law

Length of training	Date of establishment
5 years or more	1990's

## Training in Emergency Medicine

- ✓ Follows a nationally approved curriculum
- ✓ Provides certification for physicians from a professional board/college
- ✗ Provides certification for nurses from a professional board/college

## A specialization is legally required for physicians working in

- ✗ Out-of-hospital
- ✗\* In-hospital



\* Legal requirements for speciality exist only for the Head of Emergency Centre and Hospital Emergency Department.

## Postgraduate training in emergency medicine is

	Physicians	Nurses	Paramedics
University-based	✓	✗	✗
Government-based	✗	✗	✗
Private	✗	✗	✗
Part of professional education	✗	✗	✗

## Medical qualification

	Qualification	Duration	Responsible Institution
Nurse	Master	6 years	University
Nurse emergency	n/a	n/a	n/a
Physician	Master	6 years	University
Acute care physician	n/a	n/a	n/a
Emergency physician	Master after Master	5 years	University
Disaster medicine director	Master	6 years	University

# Crisis management and EMS systems

- ✓ Role of EMS in crisis management specified by law
- ✓ Sub-national crisis preparedness plan
- ✓ International co-operation protocols in EMS

Former Yugoslav Republic of Macedonia  
Greece  
Romania

## Crisis preparedness plan in EMS

	Out-of-hospital	In-hospital
Required by law	✓	✓
Obligatory regular testing	✗	✗

Leading institution in case of national crisis

Ministry of State Policy for Disasters and Accidents

EMS representative is part of the national crisis management team






✓

Specific training in crisis/disaster management for EMS personnel

National Medical Coordination Centre

## Safety measures envisaged in emergency plans

- ✗ Matching the patient with medical records (e.g. wrist bands)
- ✗ Stress management system available for patients, staff and relatives

- Legislation and financing of EMS 
- Out-of-hospital EMS 
- In-hospital EMS 
- Education in EMS 
- Crisis management and EMS systems 

*Last update: September 2008*

Legislation and financing of EMS-Out-of-hospital EMS  
 In-hospital EMS-Education in EMS-Crisis management  
 and EMS systems-Legislation and financing of EMS  
 Out-of-hospital EMS-In-hospital EMS-Education in  
 EMS-Crisis management and EMS systems-Legislation  
 and financing of EMS-Out-of-hospital EMS-In-hospital  
 EMS-Education in EMS-Crisis management and EMS  
 systems-Legislation and financing of EMS-Out-of-hospital  
 EMS-In-hospital EMS-Education in EMS-Crisis ma-

# CYPRUS

# Legislation and financing of EMS

Main Law: ..... Private Hospital Law \*

Decade of issue: ..... 2000's

Electronic version available: ..... n/a



\* There is also a Civil Defence Law (Law 117 (I) 1996 and 42 (I) 1998) which regulates planning and policy for emergency preparedness.

## Areas of emergency medicine regulated by current legislation

- ✓ Minimum standards of care & equipment, minimum requirements of qualification
- ✓ Free access for all to in-hospital care, including uninsured & unidentified persons
- ✓ Crisis/disaster management and crisis/disaster preparedness
- ✓ Financing mechanisms
- ✓ Required training for staff operating in EMS
- ✗ Organization of response and dispatch system
- ✗ Special budget for crisis preparedness
- ✓ Reserve budget for prompt mobilization in crisis response

	Method of purchase	Financing sources	Authorized institution
Out-of-hospital	Dispatch Centre	n/a	- State budget - Private sources - Mixed sources - Other sources
	Ambulance Service		- Institution depending on hospital - Public Institution depending on Health Authorities - Private enterprises
In-hospital	Hospital Emergency Department	- State budget - Private sources - Mixed sources	- Public Institution depending on hospital - Public Institution depending on Health Authorities - Private hospitals and agencies

## Co-payment fees required

- ✗ In-hospital
- ✓ Out-of-hospital
- ✗ In some regions
- ✗ In some hospitals
- ✗ None

Telephone number for medical emergencies **112**



## Access to medical emergency number

- ✓ Free of charge
- ✓ Free of area code
- ✓ English generally spoken during calls
- ✗ Minority languages generally spoken during calls

## Dispatch centres

Total number	25	Real-time update of intensive care beds
DC/population	1 / 30 000 approx.	✗ Nationally
DC/Km <sup>2</sup>	1 / 250 approx.	✗ Regionally
Distribution	Sub-regional	✗ Intranet based
Interconnectivity	✓	

## Medical equipment available in other emergency services vehicles

	Police	Fire brigade	Volunteers	Others
Cervical collars	✓	✓	✓	✓
Oxygen	✓	✓	✓	✓
Suction unit	✓	✓	✓	✗
Aut. external defibrillator (AED)	✗	✗	✗	✓
Manual resuscitator	✓	✓	✗	✗
Other medical equipment	✓	✓	✓	✓
Functional co-ordination with dispatch centre	✓	✓	✓	✗



**Ambulance Type A**  
patient transport ambulance

n/a

**Ambulance Type B**  
emergency ambulance

90%

**Ambulance Type C**  
mobile intensive care unit

n/a

# In-hospital EMS

## Triage Protocols

	Dispatch Centre	Ambulance Service	In-hospital
Is there a triage system?	X	X	✓
Standardized at national level?	X	X	X
Computerized recording?	X	X	X

## Emergency departments are available in the following types of hospitals

- X University
- ✓ Regional
- ✓ District
- ✓ General
- ✓ Private

## Conditions to access emergency departments

- X Social security number
- X GP referral
- X Ambulance referral
- X Citizenship
- X Co-payment
- X Identification document
- X Others (please specify)
- ✓ No limitation

## In Emergency Departments, there exists

	Yes	Pilots
An established network for intra-hospital referral	X	
National standards of performance	X	
Quality monitoring system	X	
Social workers	X	X
Intercultural mediators	X	X



- ✘ Emergency medicine courses are part of the curriculum at medical school
- ✘ Emergency medicine specialization is recognized by law

Length of training  
—

Date of establishment  
—

## Training in Emergency Medicine

- ✘ Follows a nationally approved curriculum
- ✘ Provides certification for physicians from a professional board/college
- ✘ Provides certification for nurses from a professional board/college

## A specialization is legally required for physicians working in

✘ Out-of-hospital

✘ In-hospital

## Postgraduate training in emergency medicine is

	Physicians	Nurses	Paramedics
University-based	✘	✘	✘
Government-based	✘	✘	✓
Private	✘	✘	✘
Part of professional education	✓	✓	✘

## Medical qualification

	Qualification	Duration	Responsible Institution
Nurse	n/a	n/a	n/a
Nurse emergency	n/a	n/a	n/a
Physician	n/a	n/a	n/a
Acute care physician	n/a	n/a	n/a
Emergency physician	n/a	n/a	n/a
Disaster medicine director	n/a	n/a	n/a

# Crisis management and EMS systems

- ✓ Role of EMS in crisis management specified by law
- ✓ Sub-national crisis preparedness plan
- ✗ International co-operation protocols in EMS

## Crisis preparedness plan in EMS

	Out-of-hospital	In-hospital
Required by law	✓	✓
Obligatory regular testing	✓	✓

Leading institution in case of national crisis: Ministry of Defence

EMS representative is part of the national crisis management team: n/a

Specific training in crisis/disaster management for EMS personnel: n/a

## Safety measures envisaged in emergency plans

- ✗ Matching the patient with medical records (e.g. wrist bands)
- ✓\* Stress management system available for patients, staff and relatives



\* Applied at the new Nicosia General Hospital only.

Legislation and financing of EMS 

Out-of-hospital EMS 

In-hospital EMS 

Education in EMS 

Crisis management and EMS systems 

*Last update: September 2008*

# CZECH REPUBLIC

Legislation and financing of EMS-Out-of-hospital EMS-In-hospital EMS-Education in EMS-Crisis management and EMS systems-Legislation and financing of EMS-Out-of-hospital EMS-In-hospital EMS-Education in EMS-Crisis management and EMS systems-Legislation and financing of EMS-Out-of-hospital EMS-In-hospital EMS-Education in EMS-Crisis management and EMS systems-Legislation and financing of EMS-Out-of-hospital EMS-In-hospital EMS-Education in EMS-Crisis management and EMS systems

# Legislation and financing of EMS

Main Law: ..... Memo of MoH about EMS \*

Decade of issue: ..... 1990's

Electronic version available: ..... <http://www.mzcr.cz>



\* A proper and specific law on EMS is under preparation

## Areas of emergency medicine regulated by current legislation

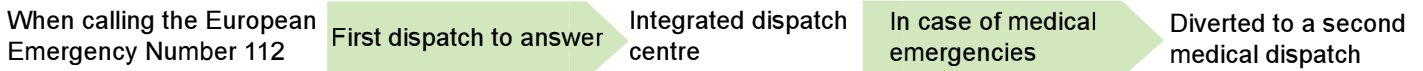
- ✓ Minimum standards of care & equipment, minimum requirements of qualification
- ✓ Free access for all to in-hospital care, including uninsured & unidentified persons
- ✓ Crisis/disaster management and crisis/disaster preparedness
- ✓ Financing mechanisms
- ✓ Required training for staff operating in EMS
- ✓ Organization of response and dispatch system
- ✓ Special budget for crisis preparedness
- ✓ Reserve budget for prompt mobilization in crisis response

		Method of purchase	Financing sources	Authorized institution
Out-of-hospital	Dispatch Centre	- By type of services	- State budget - Public sources - Mixed sources	- Public independent institution
	Ambulance Service			- Public independent institution - Public Institution depending on hospital - Public Institution depending on Health Authorities - Private institution depending on hospitals - Private hospital and agencies
In-hospital	Hospital Emergency Department		- State budget - Public sources - Mixed sources	

## Co-payment fees required

- ✗ In-hospital
- ✗ Out-of-hospital
- ✗ In some regions
- ✗ In some hospitals
- ✓ None

Telephone number for medical emergencies **155**



## Access to medical emergency number

- ✓ Free of charge
- ✓ Free of area code
- ✓ English generally spoken during calls
- ✓ Minority languages generally spoken during calls

## Dispatch centres

Total number	40	Real-time update of intensive care beds
DC/population	1 / 250 000 approx.	✗ Nationally
DC/Km <sup>2</sup>	1 / 2 000 approx.	✗ Regionally
Distribution	Regional	✗ Intranet based
Interconnectivity	✓	

## Medical equipment available in other emergency services vehicles

	Police	Fire brigade	Volunteers	Others
Cervical collars	✗	✓	✓	✗
Oxygen	✗	✓	✗	✗
Suction unit	✗	✗	✗	✗
Aut. external defibrillator (AED)	✗	✗	✗	✗
Manual resuscitator	✗	✗	✗	✗
Other medical equipment	✗	✓	✓	✗
Functional co-ordination with dispatch centre	✓	✓	✗	✗



**Ambulance Type A**  
patient transport ambulance

10%

**Ambulance Type B**  
emergency ambulance

50%

**Ambulance Type C**  
mobile intensive care unit

40%

# In-hospital EMS

## Triage Protocols

	Dispatch Centre	Ambulance Service	In-hospital
Is there a triage system?	✓	✓	✓
Standardized at national level?	✗	✓	✗
Computerized recording?	✗	✗	✗

## Emergency departments are available in the following types of hospitals

✓ University	✓ Regional	✗ District	✗ General	✗ Private
--------------	------------	------------	-----------	-----------

## Conditions to access emergency departments

- ✗ Social security number
- ✗ GP referral
- ✗ Ambulance referral
- ✗ Citizenship
- ✗ Co-payment
- ✗ Identification document
- ✗ Others (please specify)
- ✓ No limitation

## In Emergency Departments, there exists

	Yes	Pilots
An established network for intra-hospital referral	✗	
National standards of performance	✗	
Quality monitoring system	✗	
Social workers	✗	✗
Intercultural mediators	✗	✗

- ✓ Emergency medicine courses are part of the curriculum at medical school
- ✓ Emergency medicine specialization is recognized by law

Length of training	Date of establishment
5 years or more	1990's

## Training in Emergency Medicine

- ✓ Follows a nationally approved curriculum
- ✓ Provides certification for physicians from a professional board/college
- ✓ Provides certification for nurses from a professional board/college

## A specialization is legally required for physicians working in

- ✓ Out-of-hospital
- ✓ In-hospital

## Postgraduate training in emergency medicine is

	Physicians	Nurses	Paramedics
University-based	✗	✗	✗
Government-based	✓	✓	✓
Private	✗	✗	✗
Part of professional education	✗	✗	✗

## Medical qualification

	Qualification	Duration	Responsible Institution
Nurse	Secondary Education Degree/ Bachelor	3-4 years	Secondary education school /University
	Nurse emergency	Secondary Education Degree/ Bachelor	3-4 years
Physician	Master	6 years	University
	Acute care physician	Master	5 years
Emergency physician	Master	5 years	Vocational educational institution
Disaster medicine director	n/a	n/a	n/a

# Crisis management and EMS systems

- ✓ Role of EMS in crisis management specified by law
- ✓ Sub-national crisis preparedness plan
- ✗ International co-operation protocols in EMS

## Crisis preparedness plan in EMS

	Out-of-hospital	In-hospital
Required by law	✓	✓
Obligatory regular testing	✓	✗

Leading institution in case of national crisis

Fire brigades

EMS representative is part of the national crisis management team

✓

Specific training in crisis/disaster management for EMS personnel

NCO NZO: [www.nconzo.cz](http://www.nconzo.cz)  
IPVZ: [www.ipvz.cz](http://www.ipvz.cz)

## Safety measures envisaged in emergency plans

- ✓ Matching the patient with medical records (e.g. wrist bands)
- ✓ Stress management system available for patients, staff and relatives





# Legislation and financing of EMS

Main Law: ..... The Health Care Act 2005 (Announcement on Health emergency planning and prehospital care)\*

Decade of issue: ..... 2000's

Electronic version available: ----- <https://www.retsinformation.dk/Forms/R0710.aspx?id=10074>  
<https://www.retsinformation.dk/Forms/R0710.aspx?id=21622>



\* In Danish: Sundhedsloven: Bekendtgørelsen om planlægning af sundhedsberedskab og præhospital beredskab mv.

## Areas of emergency medicine regulated by current legislation

- ✓ Minimum standards of care & equipment, minimum requirements of qualification
- ✓ Free access for all to in-hospital care, including uninsured & unidentified persons
- ✓ Crisis/disaster management and crisis/disaster preparedness
- ✓ Financing mechanisms
- ✓ Required training for staff operating in EMS
- ✗ Organization of response and dispatch system
- ✗ Special budget for crisis preparedness
- ✗ Reserve budget for prompt mobilization in crisis response

		Method of purchase	Financing sources	Authorized institution
Out-of-hospital	Dispatch Centre	- By number of services - By type of services	- Public sources	- Public independent institution *
	Ambulance Service			- Public Institution depending on Health Authorities
In-hospital	Hospital Emergency Department		- Public sources	




\* Dispatch centres are operated by either the Police or the Copenhagen Fire Brigade (Municipality of Copenhagen).

## Co-payment fees required





- ✗ In-hospital
- ✗ Out-of-hospital
- ✗ In some regions
- ✗ In some hospitals
- ✓ None

Telephone number for medical emergencies **112**







 \* Medical dispatch is done within first dispatch centre i.e. by the Police. The decision about dispatch and response is made by the Police (or in Copenhagen by the dispatch centre at the Fire Brigade).





























## Access to medical emergency number

-  Free of charge
-  Free of area code
-  English generally spoken during calls
-  Minority languages generally spoken during calls

## Dispatch centres

Total number	8	Real-time update of intensive care beds
DC/population	1 / 700 000 approx.	 Nationally
DC/Km <sup>2</sup>	1 / 5 500 approx.	 Regionally
Distribution	Regional	 Intranet based
Interconnectivity		

## Medical equipment available in other emergency services vehicles

	Police	Fire brigade	Volunteers	Others
Cervical collars				
Oxygen				
Suction unit				
Aut. external defibrillator (AED)				
Manual resuscitator				
Other medical equipment				
Functional co-ordination with dispatch centre				



**Ambulance Type A**  
patient transport ambulance

0%

**Ambulance Type B**  
emergency ambulance

95%

**Ambulance Type C**  
mobile intensive care unit

5%

# In-hospital EMS

## Triage Protocols

	Dispatch Centre	Ambulance Service	In-hospital
Is there a triage system?	✓	✗	✗
Standardized at national level?	✗	✗	✗
Computerized recording?	✓	✗	✗

## Emergency departments are available in the following types of hospitals

- ✓ University
- ✓ Regional
- ✓ District
- ✓ General
- ✗ Private

## Conditions to access emergency departments

- ✗ Social security number
- ✗ GP referral
- ✗ Ambulance referral
- ✗ Citizenship
- ✗ Co-payment
- ✗ Identification document
- ✗ Others (please specify)
- ✓ No limitation

## In Emergency Departments, there exists

	Yes	Pilots
An established network for intra-hospital referral	✗	
National standards of performance	✗*	
Quality monitoring system	✗*	
Social workers	✗	✗
Intercultural mediators	✗	✗



\* The standards of performance and quality monitoring system is currently under development in Denmark and is planned to be implemented by 2010 in all of Denmark.

- ✓ Emergency medicine courses are part of the curriculum at medical school
- ✗ Emergency medicine specialization is recognized by law

Length of training	Date of establishment
—	—

## Training in Emergency Medicine

- ✗ Follows a nationally approved curriculum
- ✗ Provides certification for physicians from a professional board/college
- ✗ Provides certification for nurses from a professional board/college

## A specialization is legally required for physicians working in

- ✗ Out-of-hospital
- ✗ In-hospital

## Postgraduate training in emergency medicine is

	Physicians	Nurses	Paramedics
University-based	✗	✗	✗
Government-based	✗	✗	✗
Private	✗	✗	✗
Part of professional education	✗	✗	✓



\* Courses like ATLS, PHTLS, ALS and EPLS are available but they are not nationally required.

## Medical qualification

	Qualification	Duration	Responsible Institution
Nurse	Secondary education degree	3 years	n/a
Nurse emergency	n/a	n/a	n/a
Physician	Master	6 years	University
Acute care physician	n/a	n/a	n/a
Emergency physician	n/a	n/a	n/a
Disaster medicine director	n/a	n/a	n/a

# Crisis management and EMS systems

- ✓ Role of EMS in crisis management specified by law
- ✓ Sub-national crisis preparedness plan
- ✓ International co-operation protocols in EMS

Finland  
Norway  
Sweden

## Crisis preparedness plan in EMS

	Out-of-hospital	In-hospital
Required by law	✓	✓
Obligatory regular testing	✓	✓

Leading institution in case of national crisis: Ministry of Interiors

EMS representative is part of the national crisis management team: \*






Specific training in crisis/disaster management for EMS personnel: \*\*



\* National Board of Health is represented.      \*\* Regions are responsible for the training.

## Safety measures envisaged in emergency plans

- ✓ Matching the patient with medical records (e.g. wrist bands)
- ✓ Stress management system available for patients, staff and relatives

- Legislation and financing of EMS 
- Out-of-hospital EMS 
- In-hospital EMS 
- Education in EMS 
- Crisis management and EMS systems 

# ESTONIA

*Last update: September 2008*

Legislation and financing of EMS-Out-of-hospital EMS  
 In-hospital EMS-Education in EMS-Crisis management  
 and EMS systems-Legislation and financing of EMS  
 Out-of-hospital EMS-In-hospital EMS-Education in  
 EMS-Crisis management and EMS systems-Legislation  
 and financing of EMS-Out-of-hospital EMS-In-hospital  
 EMS-Education in EMS-Crisis management and EMS  
 systems-Legislation and financing of EMS-Out-of-hospital  
 EMS-In-hospital EMS-Education in EMS-Crisis ma-

# Legislation and financing of EMS

Main Law: ..... Health care Administration Act

Decade of issue: ..... 2000's

Electronic version available: ----- <https://www.riigiteataja.ee/ert/act.jsp?id=12911510>

## Areas of emergency medicine regulated by current legislation

- ✓ Minimum standards of care & equipment, minimum requirements of qualification
- ✓ Free access for all to in-hospital care, including uninsured & unidentified persons
- ✓ Crisis/disaster management and crisis/disaster preparedness
- ✓ Financing mechanisms
- ✓ Required training for staff operating in EMS
- ✓ Organization of response and dispatch system
- ✓ Special budget for crisis preparedness
- ✓ Reserve budget for prompt mobilization in crisis response

		Method of purchase	Financing sources	Authorized institution
Out-of-hospital	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Dispatch Centre</div> <div style="border: 1px solid black; padding: 5px;">Ambulance Service</div>	- By number of services - By type of services	- State budget	- Public independent institution
	- Public Institution depending on Health Authorities - Private hospitals - Private agencies			
In-hospital	<div style="border: 1px solid black; padding: 5px;">Hospital Emergency Department</div>		- Public sources	

## Co-payment fees required

- ✓ In-hospital
- ✗ Out-of-hospital
- ✗ In some regions
- ✗ In some hospitals
- ✗ None



Telephone number for medical emergencies **112**




## Access to medical emergency number

- ✓ Free of charge
- ✓ Free of area code
- ✓ English generally spoken during calls
- ✗ Minority languages generally spoken during calls

## Dispatch centres

Total number	1 *	Real-time update of intensive care beds
DC/population	1 / 1 350 000 approx.	✗ Nationally
DC/Km <sup>2</sup>	1 / 50 000 approx.	✗ Regionally
Distribution	Regional	✗ Intranet based
Interconnectivity	✓	

 \* Four regional dispatch centres are going to be located in the South, West, East and North of the country.

## Medical equipment available in other emergency services vehicles

	Police	Fire brigade	Volunteers	Others
Cervical collars	✗	✓	✗	✗
Oxygen	✗	✓	✗	✗
Suction unit	✗	✗	✗	✗
Aut. external defibrillator (AED)	✗	✗	✗	✗
Manual resuscitator	✗	✗	✗	✗
Other medical equipment	✗	✗	✗	✗
Functional co-ordination with dispatch centre	✓	✓	✗	✗



**Ambulance Type A**  
patient transport ambulance

**Ambulance Type B**  
emergency ambulance

**Ambulance Type C**  
mobile intensive care unit

0%

94%

6%

# In-hospital EMS

## Triage Protocols

	Dispatch Centre	Ambulance Service	In-hospital
Is there a triage system?	✓	✓	✓
Standardized at national level?	✗	✓	✗
Computerized recording?	✓	✓	✓

## Emergency departments are available in the following types of hospitals

- ✓ University
- ✓ Regional
- ✓ District
- ✓ General
- ✗ Private

## Conditions to access emergency departments

- ✗ Social security number
- ✗ GP referral
- ✗ Ambulance referral
- ✗ Citizenship
- ✗ Co-payment
- ✗ Identification document
- ✗ Others (please specify)
- ✓ No limitation

## In Emergency Departments, there exists

	Yes	Pilots
An established network for intra-hospital referral	✗	
National standards of performance	✓	
Quality monitoring system	✗	
Social workers	✗	✗
Intercultural mediators	✗	✗

- ✗ Emergency medicine courses are part of the curriculum at medical school
- ✓ Emergency medicine specialization is recognized by law

Length of training	Date of establishment
Up to 6 years	2000 's

## Training in Emergency Medicine

- ✓ Follows a nationally approved curriculum
- ✓ Provides certification for physicians from a professional board/college
- ✓ Provides certification for nurses from a professional board/college

## A specialization is legally required for physicians working in

- ✓ Out-of-hospital
- ✓ In-hospital

## Postgraduate training in emergency medicine is

	Physicians	Nurses	Paramedics
University-based	✗	✗	✗
Government-based	✗	✗	✗
Private	✗	✗	✗
Part of professional education	✓	✓	✓

## Medical qualification

	Qualification	Duration	Responsible Institution
Nurse	Bachelor	3.5 years	College
Nurse emergency	Bachelor	5 years	College
Physician	Master	6 years	University
Acute care physician	Master	9-11 years	University
Emergency physician	Master	9-11 years	University
Disaster medicine director	n/a	n/a	n/a

# Crisis management and EMS systems

- ✓ Role of EMS in crisis management specified by law
- ✓ Sub-national crisis preparedness plan
- ✗ International co-operation protocols in EMS

## Crisis preparedness plan in EMS

	Out-of-hospital	In-hospital
Required by law	✓	✓
Obligatory regular testing	✗	✗






Leading institution in case of national crisis: Ministry of Interior

EMS representative is part of the national crisis management team: n/a

Specific training in crisis/disaster management for EMS personnel: The Training Centre in Tallinn Emergency Medical Service: [www.tems.ee/](http://www.tems.ee/)

## Safety measures envisaged in emergency plans

- ✓ Matching the patient with medical records (e.g. wrist bands)
- ✓ Stress management system available for patients, staff and relatives

- Legislation and financing of EMS 
- Out-of-hospital EMS 
- In-hospital EMS 
- Education in EMS 
- Crisis management and EMS systems 

*Last update: September 2008*

Legislation and financing of EMS-Out-of-hospital EMS  
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 EMS-Education in EMS-Crisis management and EMS  
 systems-Legislation and financing of EMS-Out-of-hospital  
 EMS-In-hospital EMS-Education in EMS-Crisis ma-


# FINLAND

# Legislation and financing of EMS

Main Law: ..... Act on EMS (565/1994) \*

Decade of issue: ..... 1990's


Electronic version available: ..... <http://www.finlex.fi>

 \* A new law is currently under discussion. Further laws regulating EMS system: Law public health care (66/1972), Law on specialised health care (1062/1989), Law on rescue services and Law on dispatch centres

## Areas of emergency medicine regulated by current legislation


- Minimum standards of care & equipment, minimum requirements of qualification
- Free access for all to in-hospital care, including uninsured & unidentified persons
- Crisis/disaster management and crisis/disaster preparedness
- Financing mechanisms
- Required training for staff operating in EMS
- Organization of response and dispatch system
- Special budget for crisis preparedness
- Reserve budget for prompt mobilization in crisis response

	Method of purchase	Financing sources	Authorized institution
<b>Out-of-hospital</b> Dispatch Centre Ambulance Service	- By number of services	- Mixed Sources	- Public independent institution *
			- Public independent institution - Private agencies
<b>In-hospital</b> Hospital Emergency Department		- Mixed Sources	

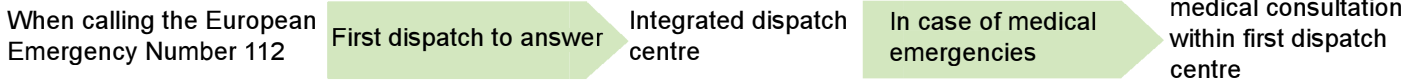
 \* Dispatch centres are managed by the Ministry of Interior and co-directed by the Ministry of Social and Heal Affairs

## Co-payment fees required

- \*\* In-hospital
- \*\* Out-of-hospital
- In some regions
- In some hospitals
- None

 \*\* EMS charges 9€ from patient (billed later) and charges social security a fee based on mileage. The provision of services does not depend on advance information on payment capacity.

Telephone number for medical emergencies **112**



## Access to medical emergency number

- ✓ Free of charge
- ✓ Free of area code
- ✓ English generally spoken during calls
- ✓ Minority languages generally spoken during calls

## Dispatch centres

Total number	15	Real-time update of intensive care beds
DC/population	1 / 350 000 approx.	✗ Nationally
DC/Km <sup>2</sup>	1 / 20 000 approx.	✗ Regionally
Distribution	Regional	✗ Intranet based
Interconnectivity	✓	

## Medical equipment available in other emergency services vehicles

	Police	Fire brigade	Volunteers	Others
Cervical collars	✗	✓	✗	✓
Oxygen	✗	✓	✗	✓
Suction unit	✗	✓	✗	✓
Aut. external defibrillator (AED)	✗	✓	✗	✓
Manual resuscitator	✗	✓	✗	✓
Other medical equipment	✗	✓	✗	✓
Functional co-ordination with dispatch centre	✗	✓	✗	✓



**Ambulance Type A**  
patient transport ambulance

0%

**Ambulance Type B**  
emergency ambulance

66,7%

**Ambulance Type C**  
mobile intensive care unit

33,3%

# In-hospital EMS

## Triage Protocols

	Dispatch Centre	Ambulance Service	In-hospital
Is there a triage system?	✓	✓	✓
Standardized at national level?	✓	✗	✗
Computerized recording?	✓	✗	✗

## Emergency departments are available in the following types of hospitals

✓ University	✓ Regional	✓ District	✗ General	✗ Private
--------------	------------	------------	-----------	-----------

## Conditions to access emergency departments

- ✗ Social security number
- ✗ GP referral
- ✗ Ambulance referral
- ✗ Citizenship
- ✗ Co-payment
- ✗ Identification document
- ✗ Others (please specify)
- ✓ No limitation

## In Emergency Departments, there exists

	Yes	Pilots
An established network for intra-hospital referral	✓	
National standards of performance	✗	
Quality monitoring system	✗	
Social workers	✗	✓
Intercultural mediators	✗	✗



- ✗ Emergency medicine courses are part of the curriculum at medical school
- ✗ Emergency medicine specialization is recognized by law

Length of training  
—

Date of establishment  
—

## Training in Emergency Medicine

- ✗ Follows a nationally approved curriculum
- ✓ Provides certification for physicians from a professional board/college
- ✗ Provides certification for nurses from a professional board/college

## A specialization is legally required for physicians working in

✗\* Out-of-hospital

✗ In-hospital



\* No specialisation is formally required. However the great majority of physicians working in out-of-hospital services are specialised in Anaesthesia.

## Postgraduate training in emergency medicine is

	Physicians	Nurses	Paramedics
University-based	✗	✗	✗
Government-based	✗	✗	✓
Private	✗	✗	✗
Part of professional education	✓*	✗	✗



\* For physicians there is a two-year accreditation programme by the Finnish Medical Association.

## Medical qualification

	Qualification	Duration	Responsible Institution
Nurse	Secondary education degree	4.5 years	Polytechnic
	Nurse emergency	Secondary education degree	4.5 years
Physician	Master	6 years	University
Acute care physician	n/a	n/a	n/a
Emergency physician	n/a	n/a	n/a
Disaster medicine director	n/a	n/a	n/a

# Crisis management and EMS systems

- ✓ Role of EMS in crisis management specified by law
- ✓ Sub-national crisis preparedness plan
- ✓ International co-operation protocols in EMS

Estonia  
Norway  
Russian Federation  
Sweden


## Crisis preparedness plan in EMS

	Out-of-hospital	In-hospital
Required by law	✓	✓
Obligatory regular testing	✓	✓

Leading institution in case of national crisis: Office of the Prime Minister






EMS representative is part of the national crisis management team: ✓\*

Specific training in crisis/disaster management for EMS personnel: National Rescue College: [www.pelastusopisto.fi](http://www.pelastusopisto.fi)

 \* The preparedness Officer from the Ministry for Social Affairs and Health.

## Safety measures envisaged in emergency plans

- ✓ Matching the patient with medical records (e.g. wrist bands)
- ✓ Stress management system available for patients, staff and relatives

- Legislation and financing of EMS 
- Out-of-hospital EMS 
- In-hospital EMS 
- Education in EMS 
- Crisis management and EMS systems 

# FRANCE

*Last update: September 2008*

Legislation and financing of EMS-Out-of-hospital EMS  
 In-hospital EMS-Education in EMS-Crisis management  
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 EMS-Education in EMS-Crisis management and EMS  
 systems-Legislation and financing of EMS-Out-of-ho-  
 spital EMS-In-hospital EMS-Education in EMS-Crisis ma-



# Legislation and financing of EMS

Main Law: .....	Decree of 22 May 2006 (ref. 2006-576) on Emergency Medicine and Decree of 22 Mai 2006 (ref. 2006-577) on the technical setting applicable on Emergency Medicine's structures.
Decade of issue: .....	2000`s
Electronic version available: .....	<a href="http://www.legifrance.gouv.fr/.affichTexte.do?cidTexte=JORFTEXT000000788652&amp;dateTexte=20080408&amp;fastPos=6&amp;fastReqId=80868495&amp;oldAction=rechTexte">http://www.legifrance.gouv.fr/.affichTexte.do?cidTexte=JORFTEXT000000788652&amp;dateTexte=20080408&amp;fastPos=6&amp;fastReqId=80868495&amp;oldAction=rechTexte</a> <a href="http://www.legifrance.gouv.fr/.affichTexte.do?cidTexte=JORFTEXT000000788651&amp;dateTexte=20080408&amp;fastPos=7&amp;fastReqId=411349947&amp;oldAction=rechTexte">http://www.legifrance.gouv.fr/.affichTexte.do?cidTexte=JORFTEXT000000788651&amp;dateTexte=20080408&amp;fastPos=7&amp;fastReqId=411349947&amp;oldAction=rechTexte</a>

## Areas of emergency medicine regulated by current legislation

- ✓ Minimum standards of care & equipment, minimum requirements of qualification
- ✓ Free access for all to in-hospital care, including uninsured & unidentified persons
- ✓ Crisis/disaster management and crisis/disaster preparedness
- ✓ Financing mechanisms
- ✓ Required training for staff operating in EMS
- ✓ Organization of response and dispatch system
- ✓ Special budget for crisis preparedness
- ✓ Reserve budget for prompt mobilization in crisis response

	Method of purchase	Financing sources	Authorized institution
Out-of-hospital	- By number of services	- State budget - Public sources	- Public independent institution - Public institutions depending on hospitals
Dispatch Centre Ambulance Service			- Public independent institutions - Public institutions depending on hospitals - Private institutions only for non emergency ambulances.
In-hospital		- Public sources	
	Hospital Emergency Department		

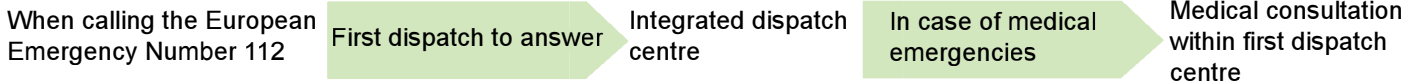
## Co-payment fees required

- ✓ In-hospital
- ✓\* Out-of-hospital
- ✗ In some regions
- ✗ In some hospitals
- ✗ None



\* When the service of out-of-hospital is provided by the Fire Department, then no co-payment is foreseen.

Telephone number for medical emergencies **15**



## Access to medical emergency number

- ✓ Free of charge
- ✓ Free of area code
- ✓ English generally spoken during calls
- ✗ Minority languages generally spoken during calls

## Dispatch centres

Total number	103	Real-time update of intensive care beds
DC/population	1 / 570 000 approx.	✗ Nationally
DC/Km <sup>2</sup>	1 / 5 300 approx.	✗ Regionally
Distribution	Sub-regional	✗ Intranet based
Interconnectivity	✓*	

\* Only some DCs are interconnected between each other

## Medical equipment available in other emergency services vehicles

	Police	Fire brigade	Volunteers	Others
Cervical collars	✗	✓	✗	✗
Oxygen	✗	✓	✗	✗
Suction unit	✗	✓	✗	✗
Aut. external defibrillator (AED)	✗	✓	✗	✗
Manual resuscitator	✗	✓	✗	✗
Other medical equipment	✗	✓	✗	✗
Functional co-ordination with dispatch centre	✗	✓	✗	✗



Ambulance Type A  
patient transport ambulance

n/a

Ambulance Type B  
emergency ambulance

n/a

Ambulance Type C  
mobile intensive care unit

n/a

# In-hospital EMS

## Triage Protocols

	Dispatch Centre	Ambulance Service	In-hospital
Is there a triage system?	✓	✓	✓
Standardized at national level?	✗	✓	✗
Computerized recording?	✓	✗	✓

## Emergency departments are available in the following types of hospitals

- ✓ University
- ✓ Regional
- ✓ District
- ✗ General
- ✗ Private

## Conditions to access emergency departments

- ✗ Social security number
- ✗ GP referral
- ✗ Ambulance referral
- ✗ Citizenship
- ✗ Co-payment
- ✗ Identification document
- ✗ Others (please specify)
- ✓ No limitation

## In Emergency Departments, there exists

	Yes	Pilots
An established network for intra-hospital referral	✗	
National standards of performance	✗*	
Quality monitoring system	✗*	
Social workers	✓	✗
Intercultural mediators	✗	✗

\* Currently under work.

- ✗ Emergency medicine courses are part of the curriculum at medical school
- ✗\* Emergency medicine specialization is recognized by law

Length of training  
—

Date of establishment  
—



\* Emergency care is recognized as a medical discipline (3 years training) but is not an accredited specialization.

## Training in Emergency Medicine

- ✓ Follows a nationally approved curriculum
- ✓ Provides certification for physicians from a professional board/college
- ✗ Provides certification for nurses from a professional board/college

## A specialization is legally required for physicians working in

- ✓ Out-of-hospital
- ✓ In-hospital

## Postgraduate training in emergency medicine is

	Physicians	Nurses	Paramedics
University-based	✓	✗	✗
Government-based	✗	✗	✗
Private	✗	✗	✗
Part of professional education	✗	✓	✗

## Medical qualification

	Qualification	Duration	Responsible Institution
Nurse	Master	3-4 years	Specialised and professional school
Nurse emergency	n/a	n/a	University
Physician	Master	9 years	University
Acute care physician	n/a	n/a	n/a
Emergency physician	Master after Master	2 years	University
Disaster medicine director	Master after Master	1 year	University

# Crisis management and EMS systems

✓ Role of EMS in crisis management specified by law

✓ Sub-national crisis preparedness plan

✓ International co-operation protocols in EMS

Belgium  
Germany  
Italy  
Luxembourg  
Spain

## Crisis preparedness plan in EMS

	Out-of-hospital	In-hospital
Required by law	✓	✓
Obligatory regular testing	✓	✓

Leading institution in case of national crisis

Ministry of Interior \*

EMS representative is part of the national crisis management team

✓

Specific training in crisis/disaster management for EMS personnel

University Claude Bernard, Lyon: [www.univ-lyon1.fr](http://www.univ-lyon1.fr)  
Faculty Necker, Paris: [www.necker.fr](http://www.necker.fr)



\* If it is an isolated health crisis the leading institution would be the Health Crisis Department in the MoH.

## Safety measures envisaged in emergency plans

✓ Matching the patient with medical records (e.g. wrist bands)

✓ Stress management system available for patients, staff and relatives





# Legislation and financing of EMS

Main Law: ..... Rettungsdienstgesetze der Länder \*

Decade of issue: ..... 2000's

Electronic version available: ..... [http://www.bgs-aelrd.de/html/rettungsdienstgesetze\\_der\\_land.html](http://www.bgs-aelrd.de/html/rettungsdienstgesetze_der_land.html)



\* The Federal Republic of Germany has 16 federal states and each one has its own legislation.

## Areas of emergency medicine regulated by current legislation

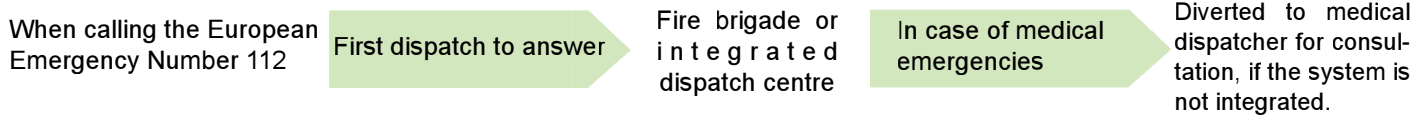
- ✓ Minimum standards of care & equipment, minimum requirements of qualification
- ✓ Free access for all to in-hospital care, including uninsured & unidentified persons
- ✓ Crisis/disaster management and crisis/disaster preparedness
- ✓ Financing mechanisms
- ✓ Required training for staff operating in EMS
- ✓ Organization of response and dispatch system
- ✓ Special budget for crisis preparedness
- ✓ Reserve budget for prompt mobilization in crisis response

		Method of purchase	Financing sources	Authorized institution
Out-of-hospital	Dispatch Centre	- By type of services	- Private and Public Sources	- Public institution depending on Health Authorities
	Ambulance Service			- Public and private enterprises
In-hospital	Hospital Emergency Department		- Private and Public Sources	

## Co-payment fees required

- ✓ In-hospital
- ✗ Out-of-hospital
- ✗ In some regions
- ✗ In some hospitals
- ✗ None

**Telephone number for medical emergencies** It varies according to the Federal States, in some States 19222 in other cases 112



\* 112 is the emergency call number in Germany. It is managed by the fire brigade corps. In some federal states the fire brigade is responsible for ambulance services as well. In those federal states, where the Red Cross is in charge of providing ambulance services, the number 19222 is the direct number for medical emergencies.

## Access to medical emergency number

- ✓ Free of charge
- ✓ Free of area code
- ✗ English generally spoken during calls
- ✗ Minority languages generally spoken during calls

## Dispatch centres

Total number	n/a	Real-time update of intensive care beds
DC/population	n/a	✗ Nationally
DC/Km <sup>2</sup>	n/a	✓ Regionally
Distribution	Sub-regional	✗ Intranet based
Interconnectivity	✓	

## Medical equipment available in other emergency services vehicles

	Police	Fire brigade	Volunteers	Others
Cervical collars	✗	✓	✓	✗
Oxygen	✗	✓	✓	✗
Suction unit	✗	✓	✓	✗
Aut. external defibrillator (AED)	✗	✓	✓	✗
Manual resuscitator	✗	✓	✓	✗
Other medical equipment	✗	✗	✓	✗
Functional co-ordination with dispatch centre	✗	✓	✓	✗



**Ambulance Type A**  
patient transport ambulance

**Ambulance Type B**  
emergency ambulance

**Ambulance Type C**  
mobile intensive care unit

0%

60%

40%

# In-hospital EMS

## Triage Protocols

	Dispatch Centre	Ambulance Service	In-hospital
Is there a triage system?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Standardized at national level?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Computerized recording?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

## Emergency departments are available in the following types of hospitals

<input checked="" type="checkbox"/> University	<input checked="" type="checkbox"/> Regional	<input checked="" type="checkbox"/> District	<input checked="" type="checkbox"/> General	<input checked="" type="checkbox"/> Private
--	--	--	---	---

## Conditions to access emergency departments

- Social security number
- GP referral
- Ambulance referral
- Citizenship
- Co-payment
- Identification document
- Others (please specify)
- No limitation

## In Emergency Departments, there exists

	Yes	Pilots
An established network for intra-hospital referral	<input checked="" type="checkbox"/>	
National standards of performance	<input checked="" type="checkbox"/>	
Quality monitoring system	<input checked="" type="checkbox"/>	
Social workers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Intercultural mediators	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

- ✓ Emergency medicine courses are part of the curriculum at medical school
- ✓ Emergency medicine specialization is recognized by law

Length of training	Date of establishment
Up to 6 years	1990's

## Training in Emergency Medicine

- ✓ Follows a nationally approved curriculum
- ✓ Provides certification for physicians from a professional board/college
- ✓ Provides certification for nurses from a professional board/college

## A specialization is legally required for physicians working in

- ✓ Out-of-hospital
- ✗ In-hospital

## Postgraduate training in emergency medicine is

	Physicians	Nurses	Paramedics
University-based	✓	✗	✗
Government-based	✗	✗	✗
Private	✗	✗	✗
Part of professional education	✗	✓	✓

## Medical qualification

	Qualification	Duration	Responsible Institution	
Nurse	Secondary educational degree	3 years	Vocational educational institution (schools of nurses integrated in hospitals)	
	Nurse emergency	Secondary educational degree + continuing education	5 years	Vocational educational institution (schools of nurses integrated in hospitals)
Physician	Acute care physician	Master	6 years	University
	Emergency physician	Master and continuing education	8 years	University
Disaster medicine director	Emergency physician	Master after master	8 years	University
	Disaster medicine director	Master after master and continuing education	12 years	University and National Board

# Crisis management and EMS systems

✘ Role of EMS in crisis management specified by law

✔ Sub-national crisis preparedness plan

✔ International co-operation protocols in EMS

Austria  
Belgium  
Czech Republic  
Denmark  
France  
Luxembourg  
Netherlands  
Poland  
Switzerland

## Crisis preparedness plan in EMS

	Out-of-hospital	In-hospital
Required by law	✔	✔
Obligatory regular testing	✔	✔

Leading institution in case of national crisis

Ministry of Interior

EMS representative is part of the national crisis management team

n/a

Specific training in crisis/disaster management for EMS personnel

Akademie für Krisenmanagement, Notfallplanung und Zivilschutz des Bundesverwaltungsamtes:  
[www.aknz.de](http://www.aknz.de)

## Safety measures envisaged in emergency plans

✔ Matching the patient with medical records (e.g. wrist bands)

✔ Stress management system available for patients, staff and relatives

Legislation and financing of EMS 

Out-of-hospital EMS 

In-hospital EMS 

Education in EMS 

Crisis management and EMS systems 

# GREECE

*Last update: September 2008*

Legislation and financing of EMS-Out-of-hospital EMS-In-hospital EMS-Education in EMS-Crisis management and EMS systems-Legislation and financing of EMS-Out-of-hospital EMS-In-hospital EMS-Education in EMS-Crisis management and EMS systems-Legislation and financing of EMS-Out-of-hospital EMS-In-hospital EMS-Education in EMS-Crisis management and EMS systems-Legislation and financing of EMS-Out-of-hospital EMS-In-hospital EMS-Education in EMS-Crisis management and EMS systems-Legislation and financing of EMS-Out-of-hospital EMS-In-hospital EMS-Education in EMS-Crisis management and EMS systems



# Legislation and financing of EMS

Main Law: ..... Ministry Resolution: Alternating daily-basis "on-duty" Hospitals in Attica area, and other regulations  
 Decade of issue: ..... 1985  
 Electronic version available: ..... National Printing Office: www.et.gr

## Areas of emergency medicine regulated by current legislation

- ✓ Minimum standards of care & equipment, minimum requirements of qualification
- ✓ Free access for all to in-hospital care, including uninsured & unidentified persons
- ✓ Crisis/disaster management and crisis/disaster preparedness
- ✗ Financing mechanisms
- ✓ Required training for staff operating in EMS
- ✓ Organization of response and dispatch system
- ✓ Special budget for crisis preparedness
- ✓ Reserve budget for prompt mobilization in crisis response

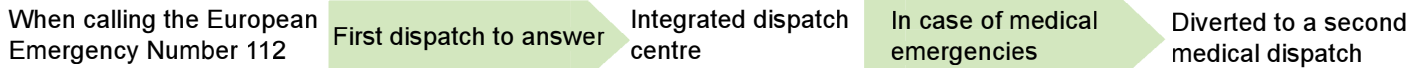
		Method of purchase	Financing sources	Authorized institution
Out-of-hospital	Dispatch Centre	- By type of services	- State budget	- Public Institution depending on Health Authorities - Private enterprises
	Ambulance Service			- Public Institution depending on Health Authorities - Private hospitals and agencies
In-hospital	Hospital Emergency Department		- State budget	

## Co-payment fees required

- ✗ In-hospital
- ✗ Out-of-hospital
- ✗ In some regions
- ✓ In some hospitals
- ✗ None



Telephone number for medical emergencies **166**



## Access to medical emergency number

- ✓ Free of charge
- ✓ Free of area code
- ✓ English generally spoken during calls
- ✗ Minority languages generally spoken during calls

## Dispatch centres

Total number	12	Real-time update of intensive care beds
DC/population	1 / 850 000 approx.	✓ Nationally
DC/Km <sup>2</sup>	1 / 10 000 approx.	✓ Regionally
Distribution	Regional	✗ Intranet based
Interconnectivity	✓	

## Medical equipment available in other emergency services vehicles

	Police	Fire brigade	Volunteers	Others
Cervical collars	✗	✗	✗	✓
Oxygen	✗	✗	✗	✓
Suction unit	✗	✗	✗	✓
Aut. external defibrillator (AED)	✗	✗	✗	✓
Manual resuscitator	✗	✗	✗	✓
Other medical equipment	✗	✗	✗	✓
Functional co-ordination with dispatch centre	✗	✗	✗	✗



**Ambulance Type A**  
patient transport ambulance

29,5%

**Ambulance Type B**  
emergency ambulance

62%

**Ambulance Type C**  
mobile intensive care unit

8,5%

# In-hospital EMS

## Triage Protocols

	Dispatch Centre	Ambulance Service	In-hospital
Is there a triage system?	✓	✓	✓
Standardized at national level?	✓	✓	✓
Computerized recording?	✗*	✗	✗



\* Only at the dispatch centres in Crete as pilot project aiming to be expanded on national basis.

## Emergency departments are available in the following types of hospitals

- ✓ University
- ✓ Regional
- ✓ District
- ✓ General
- ✗ Private

## Conditions to access emergency departments

- ✗ Social security number
- ✗ GP referral
- ✗ Ambulance referral
- ✗ Citizenship
- ✗ Co-payment
- ✗ Identification document
- ✗ Others (please specify)
- ✓ No limitation

## In Emergency Departments, there exists

	Yes	Pilots
An established network for intra-hospital referral	✓	
National standards of performance	✓	
Quality monitoring system	✗	
Social workers	✓	✗
Intercultural mediators	✗	✗

- ✗\* Emergency medicine courses are part of the curriculum at medical school
- ✗ Emergency medicine specialization is recognized by law

Length of training

Date of establishment

—

—



\* In some medical schools.

## Training in Emergency Medicine

- ✗\* Follows a nationally approved curriculum
- ✓ Provides certification for physicians from a professional board/college
- ✓ Provides certification for nurses from a professional board/college



\* There is a 2-year non-nationally approved curriculum.

## A specialization is legally required for physicians working in

✓ Out-of-hospital

✓ In-hospital

## Postgraduate training in emergency medicine is

	Physicians	Nurses	Paramedics
University-based *	✗	✗	✗
Government-based	✓	✓	✓
Private	✗	✗	✗
Part of professional education	✗	✗	✗



\* Several training courses, eg ATLS, PLS at University based.

## Medical qualification

	Qualification	Duration	Responsible Institution
Nurse	Bachelor	4 years	n/a
Nurse emergency	n/a	2 years	n/a
Physician	M.D.	6 years	n/a
Acute care physician	n/a	n/a	n/a
Emergency physician	n/a	n/a	n/a
Disaster medicine director	n/a	n/a	n/a

# Crisis management and EMS systems

- ✓ Role of EMS in crisis management specified by law
- ✓ Sub-national crisis preparedness plan
- ✓ International co-operation protocols in EMS

## Crisis preparedness plan in EMS

	Out-of-hospital	In-hospital
Required by law	✓	✓
Obligatory regular testing	✓	✓

### Leading institution in case of national crisis

General Secretariat of Civil Protection More specific for the Health Sector is the: National Health's Operation Centre – Ministry of Health

### EMS representative is part of the national crisis management team








### Specific training in crisis/disaster management for EMS personnel

National Health's Operation Centre: [www.mohaw.gr](http://www.mohaw.gr)  
KEEL: [www.keel.org.gr](http://www.keel.org.gr)  
National Centre for Emergency Care (EKAK): [www.ekab.gr](http://www.ekab.gr)

## Safety measures envisaged in emergency plans

- ✓ Matching the patient with medical records (e.g. wrist bands)
- ✓ Stress management system available for patients, staff and relatives

- Legislation and financing of EMS 
- Out-of-hospital EMS 
- In-hospital EMS 
- Education in EMS 
- Crisis management and EMS systems 

# HUNGARY

*Last update: September 2008*


Legislation and financing of EMS-Out-of-hospital EMS  
 In-hospital EMS-Education in EMS-Crisis management  
 and EMS systems-Legislation and financing of EMS  
 Out-of-hospital EMS-In-hospital EMS-Education in  
 EMS-Crisis management and EMS systems-Legislation  
 and financing of EMS-Out-of-hospital EMS-In-hospital  
 EMS-Education in EMS-Crisis management and EMS  
 systems-Legislation and financing of EMS-Out-of-hospital  
 EMS-In-hospital EMS-Education in EMS-Crisis ma-

# Legislation and financing of EMS

Main Law: ..... Health Care Act

Decade of issue: ..... 1990's


Electronic version available: ----- [http://net.jogtar.hu/jr/gen/hjegy\\_doc.cgi?docid=99700154.TV](http://net.jogtar.hu/jr/gen/hjegy_doc.cgi?docid=99700154.TV)

 Other regulations regarding EMS are a Governmental order on the financing aspects of ambulance services; Ministerial orders on ambulance services; Ministerial orders on the organizational aspects.

## Areas of emergency medicine regulated by current legislation

- ✓ Minimum standards of care & equipment, minimum requirements of qualification
- ✓ Free access for all to in-hospital care, including uninsured & unidentified persons
- ✓ Crisis/disaster management and crisis/disaster preparedness
- ✓ Financing mechanisms
- ✓ Required training for staff operating in EMS
- ✓ Organization of response and dispatch system
- ✗ Special budget for crisis preparedness
- ✓ Reserve budget for prompt mobilization in crisis response

		Method of purchase	Financing sources	Authorized institution
Out-of-hospital	Dispatch Centre	- By type of services - By catchment population	- State budget	- Public independent institution
	Ambulance Service			- Public independent institution - Private agencies
In-hospital	Hospital Emergency Department		- State budget	

 The sources come from the National Health Insurance Fund both for out-of hospital and in-hospital services.

## Co-payment fees required

- ✗ In-hospital
- ✗ Out-of-hospital
- ✗ In some regions
- ✗ In some hospitals
- ✓ None

Telephone number for medical emergencies 112/104



## Access to medical emergency number

- ✓ Free of charge
- ✓ Free of area code
- ✓\* English generally spoken during calls
- ✗ Minority languages generally spoken during calls

\* Police stations sometimes switch on other police station, where there are English-speaking operators.

## Dispatch centres

Total number	26*	Real-time update of intensive care beds
DC/population	1 / 400 000 approx.	✗** Nationally
DC/Km <sup>2</sup>	1 / 3 500 approx.	✗ Regionally
Distribution	Sub-regional	✗ Intranet based
Interconnectivity	✓	

\*There is a totally centralized system, all the 26 dispatch centres belong to the same public institution: Hungarian National Ambulance and Emergency Service.  
 \*\* Work in progress to disseminate the real-time update system of unoccupied intensive care beds for the whole country.

## Medical equipment available in other emergency services vehicles

	Police	Fire brigade	Volunteers	Others
Cervical collars	✗	✗	✗	✗
Oxygen	✗	✗	✗	✗
Suction unit	✗	✗	✗	✗
Aut. external defibrillator (AED)	✗	✗	✗	✗
Manual resuscitator	✗	✓*	✓**	✗
Other medical equipment	✗	✗	✗	✗
Functional co-ordination with dispatch centre	✓	✓	✗	✗

\*Only few fire brigade vehicles have manual resuscitator (bag valve mask). \*\* Volunteers work only in public events.



**Ambulance Type A**  
patient transport ambulance

**Ambulance Type B**  
emergency ambulance

**Ambulance Type C**  
mobile intensive care unit

0%

79%

21%

# In-hospital EMS

## Triage Protocols

	Dispatch Centre	Ambulance Service	In-hospital
Is there a triage system?	✓	✓	✓
Standardized at national level?	✓	✓	✗
Computerized recording?	✗	✗	✗



The written protocols for dispatch centres are under preparation and they will follow national triage standards.

## Emergency departments are available in the following types of hospitals

- ✗ University
- ✓ Regional
- ✓ District
- ✗ General
- ✗ Private



The opening of new emergency departments is in process. Till now, establishment of the emergency departments were based on different principles. In the Second National Development Plan the aim is to work out unified structure of the emergency departments.

## Conditions to access emergency departments

- ✗ Social security number
- ✗ GP referral
- ✗ Ambulance referral
- ✗ Citizenship
- ✗ Co-payment
- ✗ Identification document
- ✗ Others (please specify)
- ✓\* No limitation



\* Patients have access to health care, but after treatment, those who do not have social security number have to pay the non-emergency treatment.

## In Emergency Departments, there exists

	Yes	Pilots
An established network for intra-hospital referral	✓	
National standards of performance	✗*	
Quality monitoring system	✗	
Social workers	✗	✓**
Intercultural mediators	✗	✓



\* The National Standards and indicators are currently under preparation by the College of EM.

\*\* During daytime, there are social workers and intercultural mediator in the hospitals who are sometimes available also for the EDs.



- ✓ Emergency medicine courses are part of the curriculum at medical school
- ✓ Emergency medicine specialization is recognized by law

Length of training	Date of establishment
Up to 6 years	1979

## Training in Emergency Medicine

- ✓ Follows a nationally approved curriculum
- ✓ Provides certification for physicians from a professional board/college
- ✗ Provides certification for nurses from a professional board/college

## A specialization is legally required for physicians working in

- ✓ Out-of-hospital
- ✓ In-hospital

## Postgraduate training in emergency medicine is


	Physicians	Nurses	Paramedics
University-based	✓	✓	✓
Government-based	✗	✗	✗
Private	✗	✗	✗
Part of professional education	✗	✗	✗

## Medical qualification

	Qualification	Duration	Responsible Institution
Nurse	Secondary education degree	2 years	Vocational educational institution
	Nurse emergency	Bachelor	2 years
Physician	Master	6 years	University
Acute care physician	n/a	n/a	n/a
Emergency physician	Master after Master postgraduate degree	5 years	University
Disaster medicine director	Master after Master postgraduate degree	5 years	University

# Crisis management and EMS systems

- ✓ Role of EMS in crisis management specified by law
- ✓ Sub-national crisis preparedness plan
- ✗\* International co-operation protocols in EMS

 \* There are not any international cooperation protocols, but during the period of developing influenza pandemic plan and hospitals' disaster plans, recommendations and experiences of international and EU bodies were taken into consideration.


## Crisis preparedness plan in EMS

	Out-of-hospital	In-hospital
Required by law	✓	✓
Obligatory regular testing	✓	✓

Leading institution in case of national crisis: Ministry of Interior

EMS representative is part of the national crisis management team: ✓

Specific training in crisis/disaster management for EMS personnel: \* Hungarian National Ambulance and Emergency Service: [www.mentok.hu](http://www.mentok.hu)

 \* There are special post-graduate programs. Accredited instructors of medical universities, medical organizations do that task. National Ambulance and Emergency Service runs a preparatory course for medical commanding in multiple casualty incidents.

## Safety measures envisaged in emergency plans

- ✓ Matching the patient with medical records (e.g. wrist bands)
- ✗ Stress management system available for patients, staff and relatives

- Legislation and financing of EMS ■
- Out-of-hospital EMS ■
- In-hospital EMS ■
- Education in EMS ■
- Crisis management and EMS systems ■

*Last update: September 2008*

Legislation and financing of EMS-Out-of-hospital EMS  
 In-hospital EMS-Education in EMS-Crisis management  
 and EMS systems-Legislation and financing of EMS  
 Out-of-hospital EMS-In-hospital EMS-Education  
 EMS-Crisis management and EMS systems-Legislation  
 and financing of EMS-Out-of-hospital EMS-In-hospital  
 EMS-Education in EMS-Crisis management and EMS  
 systems-Legislation and financing of EMS-Out-of-hospital  
 EMS-In-hospital EMS-Education in EMS-Crisis ma-

# IRELAND

# Legislation and financing of EMS

Main Law: ..... Health Act

Decade of issue: ..... 1970's

Electronic version available: ----- [www.acts.oireachtas.ie/zza1y1970.1html](http://www.acts.oireachtas.ie/zza1y1970.1html)


## Areas of emergency medicine regulated by current legislation

- ✓ Minimum standards of care & equipment, minimum requirements of qualification
- ✓ Free access for all to in-hospital care, including uninsured & unidentified persons
- ✗ Crisis/disaster management and crisis/disaster preparedness
- ✓ Financing mechanisms
- ✓ Required training for staff operating in EMS
- ✗ Organization of response and dispatch system
- ✓ Special budget for crisis preparedness
- ✗ Reserve budget for prompt mobilization in crisis response

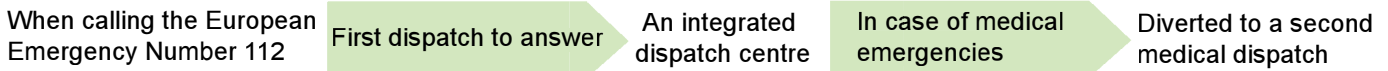
		Method of purchase	Financing sources	Authorized institution
Out-of-hospital	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Dispatch Centre</div> <div style="border: 1px solid black; padding: 5px;">Ambulance Service</div>	- By type of services	- State budget	- Public Institution depending on Health Authorities
In-hospital	<div style="border: 1px solid black; padding: 5px;">Hospital Emergency Department</div>		- State budget - Private budget	- Public Institution depending on Health Authorities - Private agencies

## Co-payment fees required

- ✓\* In-hospital
- ✓ Out-of-hospital
- ✗ In some regions
- ✗ In some hospitals
- ✗ None

 \* Access to emergency care is provided free at the point of access. Charges are subsequently made when there is medical insurance covering the cost.

Telephone number for medical emergencies **112 and 999**



## Access to medical emergency number

- ✓ Free of charge
- ✓ Free of area code
- ✓ English generally spoken during calls
- ✓ Minority languages generally spoken during calls

## Dispatch centres

Total number	14	Real-time update of intensive care beds
DC/population	1 / 280 000 approx.	✗ Nationally
DC/Km <sup>2</sup>	1 / 5 000 approx.	✗ Regionally
Distribution	Sub-regional	✗ Intranet based
Interconnectivity	✗	

## Medical equipment available in other emergency services vehicles

	Police	Fire brigade	Volunteers	Others
Cervical collars	✗	✗	✗	✗
Oxygen	✗	✗	✗	✗
Suction unit	✗	✗	✗	✗
Aut. external defibrillator (AED)	✓	✓	✓	✗
Manual resuscitator	✗	✓	✓	✗
Other medical equipment	✗	✗	✗	✗
Functional co-ordination with dispatch centre	✓	✓	✓	✓



**Ambulance Type A**  
patient transport ambulance

**Ambulance Type B**  
emergency ambulance

**Ambulance Type C**  
mobile intensive care unit

0%

0%

100%

# In-hospital EMS

## Triage Protocols

	Dispatch Centre	Ambulance Service	In-hospital
Is there a triage system?	✗*	✓	✓
Standardized at national level?	✓	✓	✓
Computerized recording?	✓	✗	✓



\* Not all dispatch centres within the country have a triage system.

## Emergency departments are available in the following types of hospitals

- ✓ University
- ✗ Regional
- ✗ District
- ✗ General
- ✗ Private

## Conditions to access emergency departments

- ✗ Social security number
- ✗ GP referral
- ✗ Ambulance referral
- ✗ Citizenship
- ✗ Co-payment
- ✗ Identification document
- ✗ Others (please specify)
- ✓ No limitation

## In Emergency Departments, there exists

	Yes	Pilots
An established network for intra-hospital referral	✓	
National standards of performance	✓	
Quality monitoring system	✓	
Social workers	✓	✗
Intercultural mediators	✗	✗

- ✓ Emergency medicine courses are part of the curriculum at medical school
- ✓ Emergency medicine specialization is recognized by law

Length of training	Date of establishment
Up to 6 years	1990's

## Training in Emergency Medicine

- ✓ Follows a nationally approved curriculum
- ✓ Provides certification for physicians from a professional board/college
- ✗ Provides certification for nurses from a professional board/college

## A specialization is legally required for physicians working in

- ✗ Out-of-hospital
- ✓ In-hospital

## Postgraduate training in emergency medicine is

	Physicians	Nurses	Paramedics
University-based	✗	✗	✓
Government-based	✗	✗	✗
Private	✗	✗	✗
Part of professional education	✓	✗	✗

## Medical qualification

	Qualification	Duration	Responsible Institution
Nurse	Bachelor	4 years	College
Nurse emergency	Bachelor	4 years	College
Physician	Master after Master	5 years	Royal College of Physicians
Acute care physician	Master after Master	5 years	Royal College of Physicians
Emergency physician	Master after Master	5 years	Royal College of Physicians
Disaster medicine director	n/a	n/a	n/a

# Crisis management and EMS systems

- ✘ Role of EMS in crisis management specified by law
- ✔ Sub-national crisis preparedness plan
- ✘ International co-operation protocols in EMS

## Crisis preparedness plan in EMS

	Out-of-hospital	In-hospital
Required by law	✘	✘
Obligatory regular testing	✔*	✔*



\* Within the Health Service we have made it obligatory to test plans however it is not obligatory by law.

Leading institution in case of national crisis

Ministry of Defence

EMS representative is part of the national crisis management team

n/a






Specific training in crisis/disaster management for EMS personnel

Intersectional training in EMS are organised between the Health Service Executive, Garda, Fire Department, etc.  
Graduate Diploma/M.Sc. in Emergency Management in Dublin City University

## Safety measures envisaged in emergency plans

- ✔ Matching the patient with medical records (e.g. wrist bands)
- ✔ Stress management system available for patients, staff and relatives



- Legislation and financing of EMS 
- Out-of-hospital EMS 
- In-hospital EMS 
- Education in EMS 
- Crisis management and EMS systems 

*Last update: September 2008*

Legislation and financing of EMS-Out-of-hospital EMS-  
 In-hospital EMS-Education in EMS-Crisis management  
 and EMS systems-Legislation and financing of EMS  
 Out-of-hospital EMS-In-hospital EMS-Education in  
 EMS-Crisis management and EMS systems-Legislation  
 and financing of EMS-Out-of-hospital EMS-In-hospital  
 EMS-Education in EMS-Crisis management and EMS  
 systems-Legislation and financing of EMS-Out-of-hospital  
 EMS-In-hospital EMS-Education in EMS-Crisis ma-

**Y**  
**L**  
**A**  
**T**  
**E**



# Legislation and financing of EMS

Main Law: ..... Atto di indirizzo e coordinamento alle Regioni per la determinazione dei livelli di assistenza sanitaria in emergenza \*

Decade of issue: ..... 1990's

Electronic version available: ..... <http://www.gazzettaufficiale.it>

 \* There are also other minor laws regulating the EMS system in Italy.

## Areas of emergency medicine regulated by current legislation

- ✓ Minimum standards of care & equipment, minimum requirements of qualification
- ✓ Free access for all to in-hospital care, including uninsured & unidentified persons
- ✓ Crisis/disaster management and crisis/disaster preparedness
- ✓ Financing mechanisms
- ✓ Required training for staff operating in EMS
- ✓ Organization of response and dispatch system
- ✓ Special budget for crisis preparedness
- ✓ Reserve budget for prompt mobilization in crisis response

		Method of purchase	Financing sources	Authorized institution
Out-of-hospital	Dispatch Centre	- By catchment population	- State budget	- Public Institution depending on Health Authorities
	Ambulance Service			- Public Institution depending on Health Authorities
In-hospital	Hospital Emergency Department		- State budget	

## Co-payment fees required

- ✗ In-hospital
- ✗ Out-of-hospital
- ✗ In some regions
- ✗ In some hospitals
- ✓ None

Telephone number for medical emergencies **118**



## Access to medical emergency number

- ✓ Free of charge
- ✓ Free of area code
- ✓ English generally spoken during calls
- ✓ Minority languages generally spoken during calls

## Dispatch centres

Total number	103	Real-time update of intensive care beds
DC/population	1 / 550 000 approx.	✗ Nationally
DC/Km <sup>2</sup>	1 / 3 000 approx.	✓ Regionally
Distribution	Sub-regional	✗ Intranet based
Interconnectivity	✓	

## Medical equipment available in other emergency services vehicles

	Police	Fire brigade	Volunteers	Others
Cervical collars	✓	✓	✓	✗
Oxygen	✗	✗	✓	✗
Suction unit	✗	✗	✓	✗
Aut. external defibrillator (AED)	✓	✓	✓	✗
Manual resuscitator	✗	✗	✓	✗
Other medical equipment	✓	✓	✓	✗
Functional co-ordination with dispatch centre	✓	✓	✓	✓

There might be variations depending upon regions.



**Ambulance Type A**  
patient transport ambulance

0%

**Ambulance Type B**  
emergency ambulance

75%

**Ambulance Type C**  
mobile intensive care unit

25%

# In-hospital EMS

## Triage Protocols

	Dispatch Centre	Ambulance Service	In-hospital
Is there a triage system?	✓	✓	✓
Standardized at national level?	✓	✓	✓
Computerized recording?	✓	✓	✓

## Emergency departments are available in the following types of hospitals

- ✓ University
- ✓ Regional
- ✓ District
- ✓ General
- ✗ Private

## Conditions to access emergency departments

- ✗ Social security number
- ✗ GP referral
- ✗ Ambulance referral
- ✗ Citizenship
- ✗ Co-payment
- ✗ Identification document
- ✗ Others (please specify)
- ✓ No limitation

## In Emergency Departments, there exists

	Yes	Pilots
An established network for intra-hospital referral	✓	
National standards of performance	✓	
Quality monitoring system	✓	
Social workers	✓	✗
Intercultural mediators	✓	✗

- ✓ Emergency medicine courses are part of the curriculum at medical school
- ✓ Emergency medicine specialization is recognized by law

Length of training	Date of establishment
Up to 6 years	2008

## Training in Emergency Medicine

- ✓ Follows a nationally approved curriculum
- ✓ Provides certification for physicians from a professional board/college
- ✓ Provides certification for nurses from a professional board/college

## A specialization is legally required for physicians working in

- ✗ Out-of-hospital
- ✓ In-hospital

## Postgraduate training in emergency medicine is

	Physicians	Nurses	Paramedics
University-based	✓	✓	✓
Government-based	✗	✗	✗
Private	✗	✗	✗
Part of professional education	✗	✗	✗

## Medical qualification

	Qualification	Duration	Responsible Institution
Nurse	Bachelor	3 years	University
Nurse emergency	Master	1 year	University
Physician	Master	6 years	University
Acute care physician	Master after Master	4 years	University
Emergency physician	Master after Master	4 years	University
Disaster medicine director	Master after Master	1-2 years	University and Regional Government

# Crisis management and EMS systems

- ✓ Role of EMS in crisis management specified by law
  - ✓ Sub-national crisis preparedness plan
  - ✓ International co-operation protocols in EMS
- Austria  
France

## Crisis preparedness plan in EMS

	Out-of-hospital	In-hospital
Required by law	✓	✓
Obligatory regular testing	✓	✓

Leading institution in case of national crisis

Civil Protection

EMS representative is part of the national crisis management team






n/a

Specific training in crisis/disaster management for EMS personnel

University of Novara (Nord East Piedmont): [www.dismedmaster.org](http://www.dismedmaster.org)

## Safety measures envisaged in emergency plans

- ✓ Matching the patient with medical records (e.g. wrist bands)
- ✓ Stress management system available for patients, staff and relatives

- Legislation and financing of EMS 
- Out-of-hospital EMS 
- In-hospital EMS 
- Education in EMS 
- Crisis management and EMS systems 

*Last update: September 2008*

Legislation and financing of EMS-Out-of-hospital EMS  
 In-hospital EMS-Education in EMS-Crisis management  
 and EMS systems-Legislation and financing of EMS-  
 Out-of-hospital EMS-In-hospital EMS-Education in  
 EMS-Crisis management and EMS systems-Legislation  
 and financing of EMS-Out-of-hospital EMS-In-hospital  
 EMS-Education in EMS-Crisis management and EMS  
 systems-Legislation and financing of EMS-Out-of-hos-  
 pital EMS-In-hospital EMS-Education in EMS-Crisis ma-


**LATVIA**

# Legislation and financing of EMS

Main Law: ..... Medical Treatment Law \*

Decade of issue: ..... 1990's

Electronic version available: ..... [www.likumi.lv](http://www.likumi.lv)

 \* There are also other regulations such as "Health care organization and financing procedures" and regulations on "System of Emergency and Disaster Medicine of the Republic of Latvia" and "Mandatory requirements for medical institutions".

## Areas of emergency medicine regulated by current legislation

- ✓ Minimum standards of care & equipment, minimum requirements of qualification
- ✓ Free access for all to in-hospital care, including uninsured & unidentified persons
- ✓ Crisis/disaster management and crisis/disaster preparedness
- ✓ Financing mechanisms
- ✓ Required training for staff operating in EMS
- ✓ Organization of response and dispatch system
- ✓ Special budget for crisis preparedness
- ✓ Reserve budget for prompt mobilization in crisis response

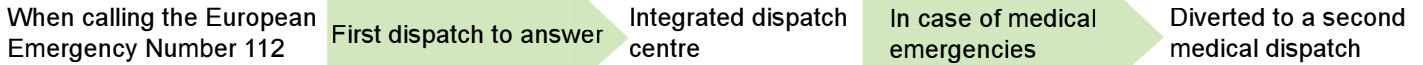
		Method of purchase	Financing sources	Authorized institution
Out-of-hospital	Dispatch Centre	- By number of services - By type of services	- State budget	- Public independent institution - Public institution depending on hospitals
	Ambulance Service			- Public independent institution - Public institution depending on hospitals
In-hospital	Hospital Emergency Department		- State budget	

## Co-payment fees required

- ✗ In-hospital
- ✗ Out-of-hospital
- ✗ In some regions
- ✗ In some hospitals
- ✓ None




Telephone number for medical emergencies **03**



## Access to medical emergency number

- ✓ Free of charge
- ✓ Free of area code
- ✗\* English generally spoken during calls
- ✓\*\* Minority languages generally spoken during calls

 \* English is usually spoken only at 112 dispatch centre.  
\*\* Russian is spoken for the minority population

## Dispatch centres

Total number	26	Real-time update of intensive care beds
DC/population	1 / 90 000 approx.	✗ Nationally
DC/Km <sup>2</sup>	1 / 2 500 approx.	✓ Regionally
Distribution	Sub-regional	✗ Intranet based
Interconnectivity	✓	

## Medical equipment available in other emergency services vehicles

	Police	Fire brigade	Volunteers	Others
Cervical collars	✗	✓	✗	✗
Oxygen	✗	✗	✗	✗
Suction unit	✗	✗	✗	✗
Aut. external defibrillator (AED)	✗	✗	✗	✗
Manual resuscitator	✗	✗	✗	✗
Other medical equipment	✗	✓	✗	✗
Functional co-ordination with dispatch centre	✓	✓	✗	✗



**Ambulance Type A**  
patient transport ambulance

8%

**Ambulance Type B**  
emergency ambulance

52%

**Ambulance Type C**  
mobile intensive care unit

40%

# In-hospital EMS

## Triage Protocols

	Dispatch Centre	Ambulance Service	In-hospital
Is there a triage system?	✓	✓	✓*
Standardized at national level?	✗	✗	✗
Computerized recording?	✗	✗	✗



\* There are triage system in the emergency rooms in the hospital emergency departments but it is not confirmed at national level.

## Emergency departments are available in the following types of hospitals

- ✓ University
- ✓ Regional
- ✓ District
- ✗ General
- ✗ Private

## Conditions to access emergency departments

- ✗ Social security number
- ✗ GP referral
- ✗ Ambulance referral
- ✗ Citizenship
- ✗ Co-payment
- ✗ Identification document
- ✗ Others (please specify)
- ✓ No limitation

## In Emergency Departments, there exists

	Yes	Pilots
An established network for intra-hospital referral	✓	
National standards of performance	✓	
Quality monitoring system	✓	
Social workers	✓	✗
Intercultural mediators	✗	✗

- ✓ Emergency medicine courses are part of the curriculum at medical school
- ✓ Emergency medicine specialization is recognized by law

Length of training	Date of establishment
Up to 3 years	1998

## Training in Emergency Medicine

- ✓ Follows a nationally approved curriculum
- ✓ Provides certification for physicians from a professional board/college
- ✗ Provides certification for nurses from a professional board/college

## A specialization is legally required for physicians working in

- ✓ Out-of-hospital
- ✓ In-hospital

## Postgraduate training in emergency medicine is


	Physicians	Nurses	Paramedics
University-based	✓	✓	✗
Government-based	✗	✗	✗
Private	✗	✗	✗
Part of professional education	✗	✗	✗

## Medical qualification

	Qualification	Duration	Responsible Institution
Nurse	Bachelor	3 years	Medical College
Nurse emergency	Bachelor	3 years	Medical College
Physician	Master	6 years	University
Acute care physician	Master	6 years	University
Emergency physician	Master	6 years	University
Disaster medicine director	n/a	n/a	n/a

# Crisis management and EMS systems

- ✓ Role of EMS in crisis management specified by law
- ✓ Sub-national crisis preparedness plan
- ✓ International co-operation protocols in EMS \* Lithuania

 \* Protocol on the Mutual Support in the Event of Natural Disasters and Other Large – Scale Accidents

## Crisis preparedness plan in EMS

	Out-of-hospital	In-hospital
Required by law	✓	✓
Obligatory regular testing	✓	✓

Leading institution in case of national crisis	Ministry of Interior
EMS representative is part of the national crisis management team	n/a
Specific training in crisis/disaster management for EMS personnel	Emergency and Disaster Medicine Centre: <a href="http://www.kmc.gov.lv">www.kmc.gov.lv</a> Emergency Medicine Centre

## Safety measures envisaged in emergency plans

- ✓ Matching the patient with medical records (e.g. wrist bands)
- ✗ Stress management system available for patients, staff and relatives



# Legislation and financing of EMS

Main Law: ..... Republic of Lithuania Law on the Health System

Decade of issue: ..... 1990's

Electronic version available: ..... [www3.lrs.lt/pls/inter3/dokpaieska.showdoc\\_l?p\\_id=82095](http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=82095)



\* There are also other regulations such as Republic of Lithuania Law on the Health Care Institutions (as amended); Order of the Minister of Health "Regarding validation of the General Requirements of Delivering of Emergency Medical Services"; Order of the Minister of Health "Regarding validation of the Order of organization and payment of Emergency Medical Services and the List of their services and basic prices".

## Areas of emergency medicine regulated by current legislation

- ✓ Minimum standards of care & equipment, minimum requirements of qualification
- ✓ Free access for all to in-hospital care, including uninsured & unidentified persons
- ✓ Crisis/disaster management and crisis/disaster preparedness
- ✓ Financing mechanisms
- ✓ Required training for staff operating in EMS
- ✓ Organization of response and dispatch system
- ✗\* Special budget for crisis preparedness
- ✗ Reserve budget for prompt mobilization in crisis response



\* Municipalities and the Government of Lithuania may cover additional expenses related to crisis/disaster.

	Method of purchase	Financing sources	Authorized institution
<b>Out-of-hospital</b> Dispatch Centre Ambulance Service	- By number of services - Individuals can also purchase EMS services	- Public sources - State budget	- Public independent institutions - Public institutions - Public institution depending on Health Authorities - Private agencies
<b>In-hospital</b> Hospital Emergency Department		- Public sources	

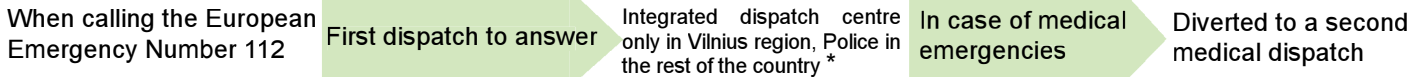
## Co-payment fees required

- ✗ In-hospital
- ✓\* Out-of-hospital
- ✗ In some regions
- ✗ In some hospitals
- ✗ None



\* Whenever the health conditions of a patient are not life threatening or dangerous then co-payment is foreseen.

Telephone number for medical emergencies **112**



\* An integrated dispatch centre will cover the all country in the year 2013.

## Access to medical emergency number

- ✓ Free of charge
- ✓ Free of area code
- ✓ English generally spoken during calls
- ✓ Minority languages generally spoken during calls

## Dispatch centres

Total number	56	Real-time update of intensive care beds
DC/population	1 / 60 000 approx.	✗ Nationally
DC/Km <sup>2</sup>	1 / 1 000 approx.	✓* Regionally
Distribution	Sub-regional	✗ Intranet based
Interconnectivity	✓	



\* Beds are being regionally / locally updated.

## Medical equipment available in other emergency services vehicles

	Police	Fire brigade	Volunteers	Others
Cervical collars	✗	✓	✗	✗
Oxygen	✗	✓	✗	✗
Suction unit	✗	✓	✗	✗
Aut. external defibrillator (AED)	✗	✓	✗	✗
Manual resuscitator	✗	✓	✗	✗
Other medical equipment	✓	✓	✓	✓
Functional co-ordination with dispatch centre	✗	✓	✗	✗



**Ambulance Type A**  
patient transport ambulance

0%

**Ambulance Type B**  
emergency ambulance

94%

**Ambulance Type C**  
mobile intensive care unit

6%

# In-hospital EMS

## Triage Protocols

	Dispatch Centre	Ambulance Service	In-hospital
Is there a triage system?	✓	✓	✓
Standardized at national level?	✓	✓	✓
Computerized recording?	✗	✗	✗

## Emergency departments are available in the following types of hospitals

✓ University	✓ Regional	✓ District	✓ General	✗ Private
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## Conditions to access emergency departments

- ✗ Social security number
- ✗ GP referral
- ✗ Ambulance referral
- ✗ Citizenship
- ✗ Co-payment
- ✗ Identification document
- ✗ Others (please specify)
- ✓ No limitation

## In Emergency Departments, there exists


	Yes	Pilots
An established network for intra-hospital referral	✓	
National standards of performance	✓	
Quality monitoring system	✓	
Social workers	✗	✗
Intercultural mediators	✗	✗



- ✗ Emergency medicine courses are part of the curriculum at medical school
- ✗\* Emergency medicine specialization is recognized by law

Length of training  
—

Date of establishment  
—

 \* Currently under study.

## Training in Emergency Medicine

- ✗ Follows a nationally approved curriculum
- ✗ Provides certification for physicians from a professional board/college
- ✗ Provides certification for nurses from a professional board/college

## A specialization is legally required for physicians working in

- ✗ Out-of-hospital
- ✗ In-hospital

## Postgraduate training in emergency medicine is

	Physicians	Nurses	Paramedics
University-based	✓	✓	✓
Government-based	✗	✗	✗
Private	✓	✓	✓
Part of professional education	✓	✓	✓

## Medical qualification

	Qualification	Duration	Responsible Institution
Nurse	Bachelor	3.5 years	College
Nurse emergency	Bachelor	3.5 years	College
Physician	Master	6 years + residency	University
Acute care physician	Master after Master	6 years + residency	University
Emergency physician	n/a	n/a	n/a
Disaster medicine director	n/a	n/a	n/a

# Crisis management and EMS systems

✓ Role of EMS in crisis management specified by law

✓ Sub-national crisis preparedness plan

✓ International co-operation protocols in EMS

\* Belarus  
\* Germany  
\* Hungary  
\* Latvia  
\* Poland  
\* Sweden  
\* Ukraine



\* Bilateral co-operation agreements on mutual assistance in cases of major disasters and emergencies.

## Crisis preparedness plan in EMS

	Out-of-hospital	In-hospital
Required by law	✓	✓
Obligatory regular testing	✓	✓

Leading institution in case of national crisis

Ministry of Interior

EMS representative is part of the national crisis management team



Specific training in crisis/disaster management for EMS personnel

Department of Emergency Medicine, Kaunas University of Medicine: [www.kmu.lt](http://www.kmu.lt)

## Safety measures envisaged in emergency plans

- ✗\* Matching the patient with medical records (e.g. wrist bands)
- ✗\* Stress management system available for patients, staff and relatives



\* Considerations and draft proposals for implementation of these measures are currently taking place in Lithuania.

- Legislation and financing of EMS ■
- Out-of-hospital EMS ■
- In-hospital EMS ■
- Education in EMS ■
- Crisis management and EMS systems ■

*Last update: September 2008*

Legislation and financing of EMS-Out-of-hospital EMS  
 In-hospital EMS-Education in EMS-Crisis management  
 and EMS systems-Legislation and financing of EMS  
 Out-of-hospital EMS-In-hospital EMS-Education in  
 EMS-Crisis management and EMS systems-Legislation  
 and financing of EMS-Out-of-hospital EMS-In-hospital  
 EMS-Education in EMS-Crisis management and EMS  
 systems-Legislation and financing of EMS-Out-of-hos-  
 pital EMS-In-hospital EMS-Education in EMS-Crisis ma

# LUXEMBOURG



# Legislation and financing of EMS

Main Law: ..... Emergency Medical Aid Law, 27 February 1986

Decade of issue: ..... 1980's

Electronic version available: ----- <http://www.112.public.lu/legislation/index.html>

## Areas of emergency medicine regulated by current legislation

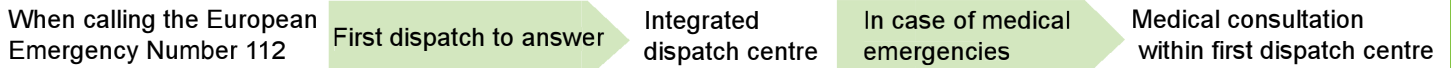
- ✓ Minimum standards of care & equipment, minimum requirements of qualification
- ✓ Free access for all to in-hospital care, including uninsured & unidentified persons
- ✓ Crisis/disaster management and crisis/disaster preparedness
- ✓ Financing mechanisms
- ✓ Required training for staff operating in EMS
- ✓ Organization of response and dispatch system
- ✗ Special budget for crisis preparedness
- ✗ Reserve budget for prompt mobilization in crisis response

		Method of purchase	Financing sources	Authorized institution
Out-of-hospital	Dispatch Centre	<ul style="list-style-type: none"> <li>- By number of services</li> <li>- By type of services</li> <li>- By catchment population</li> </ul>	- State budget	- Public independent institutions
	Ambulance Service			<ul style="list-style-type: none"> <li>- Public independent institutions</li> <li>- Public Institution depending on hospitals</li> <li>- Public institution depending on Health Authorities</li> <li>- Private institutions for non urgent transportation</li> <li>- Private institutions depending on hospital for non urgent transportation</li> </ul>
In-hospital	Hospital Emergency Department		- State budget	

## Co-payment fees required

- ✗ In-hospital
- ✗ Out-of-hospital
- ✗ In some regions
- ✗ In some hospitals
- ✓ None

Telephone number for medical emergencies **112**



## Access to medical emergency number

- ✓ Free of charge
- ✓ Free of area code
- ✓ English generally spoken during calls
- ✗ Minority languages generally spoken during calls

## Dispatch centres

Total number	1	Real-time update of intensive care beds
DC/population	1 / 463 000 approx.	✗ Nationally
DC/Km <sup>2</sup>	1 / 2 500 approx.	✗ Regionally
Distribution	National	✗ Intranet based
Interconnectivity	✗	

## Medical equipment available in other emergency services vehicles

	Police	Fire brigade	Volunteers	Others
Cervical collars	✗	✓	✓	✗
Oxygen	✗	✓	✓	✗
Suction unit	✗	✓	✓	✗
Aut. external defibrillator (AED)	✗	✓	✓	✗
Manual resuscitator	✗	✓	✓	✗
Other medical equipment	✗	✓	✓	✗
Functional co-ordination with dispatch centre	✗	✗	✗	✗



**Ambulance Type A**  
patient transport ambulance

0%\*

**Ambulance Type B**  
emergency ambulance

77%\*

**Ambulance Type C**  
mobile intensive care unit

23%\*



\* Numbers that refer to the public sector.

# In-hospital EMS

## Triage Protocols

	Dispatch Centre	Ambulance Service	In-hospital
Is there a triage system?	✓	✓	✓
Standardized at national level?	✓	✓	✗
Computerized recording?	✗	✗	✗

## Emergency departments are available in the following types of hospitals

✗ University	✓ Regional	✗ District	✓ General	✗ Private
--------------	------------	------------	-----------	-----------

## Conditions to access emergency departments

- ✗ Social security number
- ✗ GP referral
- ✗ Ambulance referral
- ✗ Citizenship
- ✗ Co-payment
- ✗ Identification document
- ✗ Others (please specify)
- ✓ No limitation

## In Emergency Departments, there exists

	Yes	Pilots
An established network for intra-hospital referral	✓	
National standards of performance	✗	
Quality monitoring system	✗	
Social workers	✗	✗
Intercultural mediators	✗	✗

- ✗\* Emergency medicine courses are part of the curriculum at medical school
- ✗ Emergency medicine specialization is recognized by law

Length of training  
—

Date of establishment  
—



\* Luxembourg has no medical universities and relies in other countries' medical universities.

## Training in Emergency Medicine

- ✗ Follows a nationally approved curriculum
- ✗ Provides certification for physicians from a professional board/college
- ✗ Provides certification for nurses from a professional board/college

## A specialization is legally required for physicians working in

∨ Out-of-hospital

✗ In-hospital

## Postgraduate training in emergency medicine is

	Physicians	Nurses	Paramedics
University-based	✗	✗	✗
Government-based	✗	✗	✗
Private	✗	✗	✗
Part of professional education	∨	∨	✗

## Medical qualification

	Qualification	Duration	Responsible Institution
Nurse	Secondary education degree	3 years	Vocational educational institution
Nurse emergency	n/a	n/a	n/a
Physician	n/a	n/a	n/a
Acute care physician	n/a	n/a	n/a
Emergency physician	n/a	n/a	n/a
Disaster medicine director	n/a	n/a	n/a

# Crisis management and EMS systems

- ✓ Role of EMS in crisis management specified by law
  - ✗ Sub-national crisis preparedness plan
  - ✓ International co-operation protocols in EMS
- Belgium  
France  
Germany

## Crisis preparedness plan in EMS

	Out-of-hospital	In-hospital
Required by law	✓	✗
Obligatory regular testing	✓	✗

Leading institution in case of national crisis: Ministry of Interior






EMS representative is part of the national crisis management team: n/a

Specific training in crisis/disaster management for EMS personnel: n/a

## Safety measures envisaged in emergency plans

- ✓ Matching the patient with medical records (e.g. wrist bands)
- ✓ Stress management system available for patients, staff and relatives



- Legislation and financing of EMS 
- Out-of-hospital EMS 
- In-hospital EMS 
- Education in EMS 
- Crisis management and EMS systems 

*Last update: September 2008*

Legislation and financing of EMS-Out-of-hospital EMS  
 In-hospital EMS-Education in EMS-Crisis management  
 and EMS systems-Legislation and financing of EMS-  
 Out-of-hospital EMS-In-hospital EMS-Education  
 EMS-Crisis management and EMS systems-Legislation  
 and financing of EMS-Out-of-hospital EMS-In-hospital  
 EMS-Education in EMS-Crisis management and EMS  
 systems-Legislation and financing of EMS-Out-of-hospital  
 EMS-In-hospital EMS-Education in EMS-Crisis ma-

**MALTA**

# Legislation and financing of EMS

Main Law: ..... There is no law regulating EMS in Malta

Decade of issue: ..... n/a

Electronic version available: ..... n/a

## Areas of emergency medicine regulated by current legislation

- ✗ Minimum standards of care & equipment, minimum requirements of qualification
- ✓ Free access for all to in-hospital care, including uninsured & unidentified persons
- ✗ Crisis/disaster management and crisis/disaster preparedness
- ✓ Financing mechanisms
- ✗ Required training for staff operating in EMS
- ✗ Organization of response and dispatch system
- ✗\* Special budget for crisis preparedness
- ✗\* Reserve budget for prompt mobilization in crisis response



\* Special budget for such crisis are not managed by the MoH but by the National Budget.

	Method of purchase	Financing sources	Authorized institution
Out-of-hospital	- By catchment population	- State budget	- Public institution depending on hospitals
Dispatch Centre Ambulance Service			- Public and private enterprises
In-hospital		- State budget	
			Hospital Emergency Department

## Co-payment fees required

- ✗ In-hospital
- ✗ Out-of-hospital
- ✗ In some regions
- ✗ In some hospitals
- ✓ None

Telephone number for medical emergencies **112 and 196**

When calling the European Emergency Number 112

First dispatch to answer

Integrated dispatch centre

In case of medical emergencies

Diverted to a second medical dispatch

## Access to medical emergency number

- ✓ Free of charge
- ✓ Free of area code
- ✓ English generally spoken during calls
- ✗ Minority languages generally spoken during calls

## Dispatch centres

Total number	1	Real-time update of intensive care beds
DC/population	1 / 380 000 approx.	✗ Nationally
DC/Km <sup>2</sup>	1 / 300 approx.	✗ Regionally
Distribution	National	✗ Intranet based
Interconnectivity	✗	

## Medical equipment available in other emergency services vehicles

	Police	Fire brigade	Volunteers	Others
Cervical collars	✗	✓	✓	✗
Oxygen	✗	✗	✓	✗
Suction unit	✗	✗	✓	✗
Aut. external defibrillator (AED)	✗	✗	✓	✗
Manual resuscitator	✗	✗	✓	✗
Other medical equipment	✗	✗	✓	✗
Functional co-ordination with dispatch centre	✓	✗	✗	✓



Ambulance Type A  
patient transport ambulance

25%

Ambulance Type B  
emergency ambulance

50%

Ambulance Type C  
mobile intensive care unit

25%

# In-hospital EMS

## Triage Protocols

	Dispatch Centre	Ambulance Service	In-hospital
Is there a triage system?	X	✓	✓
Standardized at national level?	X	✓	✓
Computerized recording?	X	X	X

## Emergency departments are available in the following types of hospitals

- X University
- X Regional
- X District
- ✓ General
- ✓ Private

## Conditions to access emergency departments

- X Social security number
- X GP referral
- X Ambulance referral
- X Citizenship
- X Co-payment
- X Identification document
- X Others (please specify)
- ✓ No limitation

## In Emergency Departments, there exists

	Yes	Pilots
An established network for intra-hospital referral	X	
National standards of performance	X	
Quality monitoring system	X	
Social workers	X	X
Intercultural mediators	X	X

- ✗ Emergency medicine courses are part of the curriculum at medical school
- ✓ Emergency medicine specialization is recognized by law

Length of training	Date of establishment
At least 6 years	2007

## Training in Emergency Medicine

- ✓ Follows a nationally approved curriculum
- ✓ Provides certification for physicians from a professional board/college
- ✗ Provides certification for nurses from a professional board/college

## A specialization is legally required for physicians working in

- ✗ Out-of-hospital
- ✗ In-hospital

## Postgraduate training in emergency medicine is

	Physicians	Nurses	Paramedics
University-based	✗	✓	✗
Government-based	✓	✓	✗
Private	✓	✓	✗
Part of professional education	✓	✓	✗

## Medical qualification

	Qualification	Duration	Responsible Institution
Nurse	Bachelor	3-4 years	Vocational Educational Institution
Nurse emergency	n/a	n/a	n/a
Physician	Master	5 years	University of Malta
Acute care physician	n/a	n/a	n/a
Emergency physician	Master after Master	6 years	University in United Kingdom
Disaster medicine director	n/a	n/a	n/a

# Crisis management and EMS systems

✘ Role of EMS in crisis management specified by law

✘ Sub-national crisis preparedness plan

✓\* International co-operation protocols in EMS

\* Undergoing

## Crisis preparedness plan in EMS

	Out-of-hospital	In-hospital
Required by law	✘	✘
Obligatory regular testing	✘	✘

Leading institution in case of national crisis

Civil Protection

EMS representative is part of the national crisis management team

✓\*

Specific training in crisis/disaster management for EMS personnel

n/a








\* Depending on the nature of the accident.

## Safety measures envisaged in emergency plans

✓ Matching the patient with medical records (e.g. wrist bands)

✘ Stress management system available for patients, staff and relatives

- Legislation and financing of EMS 
- Out-of-hospital EMS 
- In-hospital EMS 
- Education in EMS 
- Crisis management and EMS systems 

# NETHERLANDS

*Last update: December 2007*


Legislation and financing of EMS-Out-of-hospital EMS  
 In-hospital EMS-Education in EMS-Crisis management  
 and EMS systems-Legislation and financing of EMS  
 Out-of-hospital EMS-In-hospital EMS-Education  
 EMS-Crisis management and EMS systems-Legislation  
 and financing of EMS-Out-of-hospital EMS-In-hospital  
 EMS-Education in EMS-Crisis management and EMS  
 systems-Legislation and financing of EMS-Out-of-ho-  
 pital EMS-In-hospital EMS-Education in EMS-Crisis ma-

# Legislation and financing of EMS

Main Law: ..... WTZi – health care Law, WAV – ambulance, transportation Act \*

Decade of issue: ..... 2000`s

Electronic version available: ..... n/a

 \* There are also other laws (wBIG and KZI) regulating the quality and safety of care, as well as registration of professionals.

## Areas of emergency medicine regulated by current legislation

- ✓ Minimum standards of care & equipment, minimum requirements of qualification
- ✓ Free access for all to in-hospital care, including uninsured & unidentified persons
- ✓ Crisis/disaster management and crisis/disaster preparedness
- ✓ Financing mechanisms
- ✓ Required training for staff operating in EMS
- ✓ Organization of response and dispatch system
- ✓ Special budget for crisis preparedness
- ✗ Reserve budget for prompt mobilization in crisis response

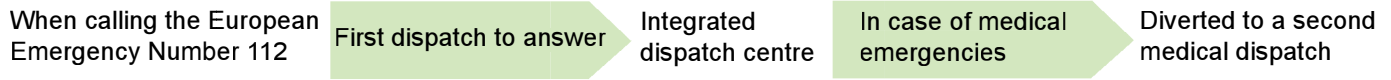
		Method of purchase	Financing sources	Authorized institution
Out-of-hospital	Dispatch Centre	- By type of services	- Public sources - Mixed sources - Other sources	- Public independent institution - Institution depending on hospitals
	Ambulance Service			- Public institution depending on Health Authorities - Private agencies
In-hospital	Hospital Emergency Department		- Mixed sources - Other sources	

## Co-payment fees required

- ✗ In-hospital
- ✗ Out-of-hospital
- ✗ In some regions
- ✗ In some hospitals
- ✓ None



Telephone number for medical emergencies **112**



## Access to medical emergency number

- ✓ Free of charge
- ✓ Free of area code
- ✓ English generally spoken during calls
- ✗ Minority languages generally spoken during calls

## Dispatch centres

Total number	25	Real-time update of intensive care beds
DC/population	1 / 650 000 approx.	✓* Nationally
DC/Km <sup>2</sup>	1 / 1 000 approx.	✗ Regionally
Distribution	Regional	✓** Intranet based
Interconnectivity	✓	

\* The update on intensive care beds is revised on a daily basis  
 \*\* [www.zorg-capaciteit.nl](http://www.zorg-capaciteit.nl)

## Medical equipment available in other emergency services vehicles

	Police	Fire brigade	Volunteers	Others
Cervical collars	✗	✗	✗	✗
Oxygen	✗	✗	✗	✗
Suction unit	✗	✗	✗	✗
Aut. external defibrillator (AED)	✗	✓	✗	✗
Manual resuscitator	✗	✗	✗	✗
Other medical equipment	✗	✗	✗	✗
Functional co-ordination with dispatch centre	✗	✗	✗	✗



<b>Ambulance Type A</b> patient transport ambulance 0%	<b>Ambulance Type B</b> emergency ambulance 99%	<b>Ambulance Type C</b> mobile intensive care unit 1%
--	---	---

# In-hospital EMS

## Triage Protocols


	Dispatch Centre	Ambulance Service	In-hospital
Is there a triage system?	✓	✓	✓
Standardized at national level?	✓	✓	✓
Computerized recording?	✓	✗	✗

## Emergency departments are available in the following types of hospitals

- ✓ University
- ✓ Regional
- ✓ District
- ✓ General
- ✗ Private


## Conditions to access emergency departments

- ✗ Social security number
- ✗ GP referral
- ✗ Ambulance referral
- ✗ Citizenship
- ✗ Co-payment
- ✓\* Identification document
- ✗ Others (please specify)
- ✓ No limitation

 \* There is a general law that everyone must identify him/herself. Uninsured and others will receive care depending on the urgency of their medical needs.

## In Emergency Departments, there exists

	Yes	Pilots
An established network for intra-hospital referral	✓	
National standards of performance	✓	
Quality monitoring system	✓*	
Social workers	✗**	✗
Intercultural mediators	✗	✗

 \* A set of quality indicators to be published in 2008.  
 \*\* The use of social workers is not part of ED activities; they can be called upon if needed.

- ✓ Emergency medicine courses are part of the curriculum at medical school
- ✓ Emergency medicine specialization is recognized by law

Length of training  
Up to 6 years

Date of establishment  
2000's \*



\* The ED-specialty curriculum has recently been adopted and it is already adopted in some hospitals.

## Training in Emergency Medicine

- ✓ Follows a nationally approved curriculum
- ✓ Provides certification for physicians from a professional board/college
- ✓ Provides certification for nurses from a professional board/college

## A specialization is legally required for physicians working in

✗\*Out-of-hospital

✗\*In-hospital



\* There is a general legal binding for professionals to be capable to perform the required medical tasks (Individual health care professions act) and national standards specify these requirements.

## Postgraduate training in emergency medicine is

	Physicians	Nurses	Paramedics
University-based	✗	✗	✗
Government-based	✗	✗	✗
Private	✗	✗	✓
Part of professional education	✓	✓	✗

## Medical qualification

	Qualification	Duration	Responsible Institution
Nurse	Secondary education degree	4 years	Vocational Education Institution
	Nurse emergency Secondary education Degree	6 years	Vocational Educational Institution
Physician	Master	6 years	University
	Acute care physician Master after master	8 years	University/ National Board
Emergency physician	Master after master	8 years	University/ National Board
Disaster medicine director	n/a	n/a	n/a

# Crisis management and EMS systems

- ✓ Role of EMS in crisis management specified by law
  - ✓ Sub-national crisis preparedness plan
  - ✓ International co-operation protocols in EMS
- Belgium  
Germany

## Crisis preparedness plan in EMS

	Out-of-hospital	In-hospital
Required by law	✓	✓
Obligatory regular testing	✗	✓

Leading institution in case of national crisis	The Ministry in charge of the specific crisis
EMS representative is part of the national crisis management team	✓
Specific training in crisis/disaster management for EMS personnel	For hospitals: Hospital major incident medical management and support (HMIMMS)

## Safety measures envisaged in emergency plans

- ✓ Matching the patient with medical records (e.g. wrist bands)
- ✓ Stress management system available for patients, staff and relatives



# Legislation and financing of EMS

Main Law: ..... National Medical Emergency Act of Sept 8th 2006

Decade of issue: ..... 2000's

Electronic version available: ..... n/a

## Areas of emergency medicine regulated by current legislation

- ✓ Minimum standards of care & equipment, minimum requirements of qualification
- ✓ Free access for all to in-hospital care, including uninsured & unidentified persons
- ✓ Crisis/disaster management and crisis/disaster preparedness
- ✓ Financing mechanisms
- ✓ Required training for staff operating in EMS
- ✓ Organization of response and dispatch system
- ✗ Special budget for crisis preparedness
- ✗ Reserve budget for prompt mobilization in crisis response

	Method of purchase	Financing sources	Authorized institution
Out-of-hospital	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Dispatch Centre</div> <div style="border: 1px solid black; padding: 5px;">Ambulance Service</div>	- By catchment population	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">- Public independent institution</div> <div style="border: 1px solid black; padding: 5px;">- Public independent institution - Public Institution depending on hospital - Public Institution depending on Health Authorities</div>
In-hospital	<div style="border: 1px solid black; padding: 5px;">Hospital Emergency Department</div>	- Public sources	

## Co-payment fees required

- ✗ In-hospital
- ✗ Out-of-hospital
- ✗ In some regions
- ✗ In some hospitals
- ✓ None

Telephone number for medical emergencies **112 and 999**

When calling the European Emergency Number 112

First dispatch to answer

An integrated dispatch centre

In case of medical emergencies

Diverted to a second medical dispatch

## Access to medical emergency number

- ✓ Free of charge
- ✓ Free of area code
- ✗ English generally spoken during calls
- ✗ Minority languages generally spoken during calls

## Dispatch centres

Total number 290

Real-time update of intensive care beds

DC/population 1/ 130 000 approx.

✗ Nationally

DC/Km<sup>2</sup> 1/ 1 080 approx.

✗ Regionally

Distribution Regional

✗ Intranet based

Interconnectivity ✓

## Medical equipment available in other emergency services vehicles

	Police	Fire brigade	Volunteers	Others
Cervical collars	✗	✓	✓	✗
Oxygen	✗	✓	✗	✗
Suction unit	✗	✓	✗	✗
Aut. external defibrillator (AED)	✗	✓	✗	✗
Manual resuscitator	✗	✓	✓	✗
Other medical equipment	✗	✓	✓	✗
Functional co-ordination with dispatch centre	✗	✗	✗	✗



Ambulance Type A  
patient transport ambulance

0%

Ambulance Type B  
emergency ambulance

55%

Ambulance Type C  
mobile intensive care unit

45%

# In-hospital EMS

## Triage Protocols

	Dispatch Centre	Ambulance Service	In-hospital
Is there a triage system?	X	X	X
Standardized at national level?	X	X	X
Computerized recording?	X	X	X

## Emergency departments are available in the following types of hospitals

- ▼ University
- ▼ Regional
- ▼ District
- ▼ General
- ▼ Private

## Conditions to access emergency departments

- X Social security number
- X GP referral
- X Ambulance referral
- X Citizenship
- X Co-payment
- ▼ Identification document
- X Others (please specify)
- ▼ No limitation

## In Emergency Departments, there exists

	Yes	Pilots
An established network for intra-hospital referral	X	
National standards of performance	▼	
Quality monitoring system	X	
Social workers	X	X
Intercultural mediators	X	X



- ✓ Emergency medicine courses are part of the curriculum at medical school
- ✓ Emergency medicine specialization is recognized by law

Length of training	Date of establishment
Up to 3 years	2000's

## Training in Emergency Medicine

- ✗ Follows a nationally approved curriculum
- ✓ Provides certification for physicians from a professional board/college
- ✓ Provides certification for nurses from a professional board/college

## A specialization is legally required for physicians working in

- ✓ Out-of-hospital
- ✓ In-hospital

## Postgraduate training in emergency medicine is

	Physicians	Nurses	Paramedics
University-based	✗	✗	✗
Government-based	✓	✓	✓
Private	✗	✗	✗
Part of professional education	✗	✗	✗

## Medical qualification

	Qualification	Duration	Responsible Institution
Nurse	n/a	n/a	n/a
Nurse emergency	n/a	n/a	n/a
Physician	n/a	n/a	n/a
Acute care physician	n/a	n/a	n/a
Emergency physician	n/a	n/a	n/a
Disaster medicine director	n/a	n/a	n/a

# Crisis management and EMS systems

- ✓ Role of EMS in crisis management specified by law
- ✓ Sub-national crisis preparedness plan
- ✗ International co-operation protocols in EMS

## Crisis preparedness plan in EMS

	Out-of-hospital	In-hospital
Required by law	✓	✗
Obligatory regular testing	✓	✗

Leading institution in case of national crisis

Civil Protection

EMS representative is part of the national crisis management team

n/a

Specific training in crisis/disaster management for EMS personnel

n/a

## Safety measures envisaged in emergency plans

- ✓ Matching the patient with medical records (e.g. wrist bands)
- ✓ Stress management system available for patients, staff and relatives




# Legislation and financing of EMS

Main Law: ..... n/a  
 Decade of issue: ..... 2000's  
 Electronic version available: ..... n/a

## Areas of emergency medicine regulated by current legislation

- ✓ Minimum standards of care & equipment, minimum requirements of qualification
- ✓ Free access for all to in-hospital care, including uninsured & unidentified persons
- ✓ Crisis/disaster management and crisis/disaster preparedness
- ✗ Financing mechanisms
- ✓ Required training for staff operating in EMS
- ✓ Organization of response and dispatch system
- ✗ Special budget for crisis preparedness
- ✗ Reserve budget for prompt mobilization in crisis response

		Method of purchase	Financing sources	Authorized institution
Out-of-hospital	Dispatch Centre	- By number of services	- Public sources	- Public Institution depending on Health Authorities
	Ambulance Service			- Public independent institution - Public Institution depending on Health Authorities *
In-hospital	Hospital Emergency Department		- State budget	

 \* Private agencies are allowed to run ambulances for non emergency patients

## Co-payment fees required

- ✗ In-hospital
- ✗ Out-of-hospital
- ✗ In some regions
- ✗ In some hospitals
- ✓ None

Telephone number for medical emergencies **112**



## Access to medical emergency number

- ✓ Free of charge
- ✓ Free of area code
- ✓ English generally spoken during calls
- ✗ Minority languages generally spoken during calls

## Dispatch centres

Total number	4	Real-time update of intensive care beds
DC/population	1 / 2 500 000 approx.	✗ Nationally
DC/Km <sup>2</sup>	1 / 23 000 approx.	✗ Regionally
Distribution	Regional	✗ Intranet based
Interconnectivity	✓	

## Medical equipment available in other emergency services vehicles

	Police	Fire brigade	Volunteers	Others
Cervical collars	✗	✗	✗	✗
Oxygen	✗	✗	✗	✗
Suction unit	✗	✗	✗	✗
Aut. external defibrillator (AED)	✗	✗	✗	✗
Manual resuscitator	✗	✗	✗	✗
Other medical equipment	✗	✗	✗	✗
Functional co-ordination with dispatch centre	✗	✗	✗	✗



**Ambulance Type A**  
patient transport ambulance

0%

**Ambulance Type B**  
emergency ambulance

92,5%

**Ambulance Type C**  
mobile intensive care unit

7,5%

# In-hospital EMS

## Triage Protocols

	Dispatch Centre	Ambulance Service	In-hospital
Is there a triage system?	✗*	✗	✓
Standardized at national level?	✗	✗	✓
Computerized recording?	✗	✗	✓**



\* Currently under construction. \*\* Computerized in some units.

## Emergency departments are available in the following types of hospitals

- ✓ University
- ✗ Regional
- ✓ District
- ✓ General
- ✗ Private

## Conditions to access emergency departments

- ✗ Social security number
- ✗ GP referral
- ✗ Ambulance referral
- ✗ Citizenship
- ✗ Co-payment
- ✗ Identification document
- ✗ Others (please specify)
- ✓ No limitation

## In Emergency Departments, there exists

	Yes	Pilots
An established network for intra-hospital referral	✓	
National standards of performance	✗	
Quality monitoring system	✗	
Social workers	✗	✓
Intercultural mediators	✗	✗

- ✓ Emergency medicine courses are part of the curriculum at medical school
- ✗ Emergency medicine specialization is recognized by law

Length of training

Date of establishment

—

—

## Training in Emergency Medicine

- ✗ Follows a nationally approved curriculum
- ✓ Provides certification for physicians from a professional board/college
- ✓ Provides certification for nurses from a professional board/college

## A specialization is legally required for physicians working in

✗ Out-of-hospital

✗ In-hospital

## Postgraduate training in emergency medicine is

	Physicians	Nurses	Paramedics
University-based	✗	✗	✗
Government-based	✓	✓	✗
Private	✗	✗	✗
Part of professional education	✗	✗	✗

## Medical qualification

	Qualification	Duration	Responsible Institution
Nurse	n/a	n/a	n/a
Nurse emergency	n/a	n/a	n/a
Physician	n/a	n/a	n/a
Acute care physician	n/a	n/a	n/a
Emergency physician	n/a	n/a	n/a
Disaster medicine director	n/a	n/a	n/a

# Crisis management and EMS systems

- ✓ Role of EMS in crisis management specified by law
  - ✓ Sub-national crisis preparedness plan
  - ✓ International co-operation protocols in EMS
- Spain

## Crisis preparedness plan in EMS

	Out-of-hospital	In-hospital
Required by law	✗	✗*
Obligatory regular testing	✗	✗



\* Although there is no legal requirement virtually all hospitals have emergency preparedness plans.

Leading institution in case of national crisis: Civil Protection

EMS representative is part of the national crisis management team: ✓

Specific training in crisis/disaster management for EMS personnel: n/a

## Safety measures envisaged in emergency plans

- ✓ Matching the patient with medical records (e.g. wrist bands)
- ✓ Stress management system available for patients, staff and relatives



- Legislation and financing of EMS
- Out-of-hospital EMS
- In-hospital EMS
- Education in EMS
- Crisis management and EMS systems

# ROMANIA

*Last update: September 2008*

Legislation and financing of EMS-Out-of-hospital EMS-  
 In-hospital EMS-Education in EMS-Crisis management  
 and EMS systems-Legislation and financing of EMS  
 Out-of-hospital EMS-In-hospital EMS-Education in  
 EMS-Crisis management and EMS systems-Legislation  
 and financing of EMS-Out-of-hospital EMS-In-hospital  
 EMS-Education in EMS-Crisis management and EMS  
 systems-Legislation and financing of EMS-Out-of-hospital  
 EMS-In-hospital EMS-Education in EMS-Crisis ma-



# Legislation and financing of EMS

Main Law: ..... Legea de reforma in domeniul sanitar, titlu IV \*

Decade of issue: ..... 2000's

Electronic version available: ..... www.ms.ro



\* Main matters are regulated through ministerial orders e.g.: 1. competencies of personnel; 2. standards of ambulances; 3. interhospital transfer protocols of critical patients.

## Areas of emergency medicine regulated by current legislation

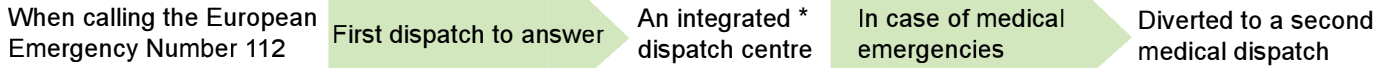
- ✓ Minimum standards of care & equipment, minimum requirements of qualification
- ✓ Free access for all to in-hospital care, including uninsured & unidentified persons
- ✓ Crisis/disaster management and crisis/disaster preparedness
- ✓ Financing mechanisms
- ✓ Required training for staff operating in EMS
- ✓ Organization of response and dispatch system
- ✓ Special budget for crisis preparedness
- ✗ Reserve budget for prompt mobilization in crisis response

	Method of purchase	Financing sources	Authorized institution
Out-of-hospital	Dispatch Centre	- By global budget per capita - By type of services	- Public independent institution - Public Institution depending on Health Authorities
	Ambulance Service		- Mixed sources
In-hospital	Hospital Emergency Department	- Mixed sources	- Public independent institution - Public Institution depending on hospital - Public Institution depending on Health Authorities - Private hospital and agencies

## Co-payment fees required

- ✗ In-hospital
- ✗ Out-of-hospital
- ✗ In some regions
- ✗ In some hospitals
- ✓ None

Telephone number for medical emergencies **112**



\* There are also fully integrated dispatches when calling 112, no more diversion is done for any type of emergency.

## Access to medical emergency number

- ✓ Free of charge
- ✓ Free of area code
- ✓ English generally spoken during calls
- ✓ Minority languages generally spoken during calls

## Dispatch centres

Total number	42	Real-time update of intensive care beds
DC/population	1 / 500 000 approx.	✗ Nationally
DC/Km <sup>2</sup>	1 / 5 500 approx.	✗ Regionally
Distribution	Sub-regional *	✗ Intranet based
Interconnectivity	✓	



\* At level of county.

## Medical equipment available in other emergency services vehicles

	Police	Fire brigade	Volunteers	Others
Cervical collars	✗	✓	✗	✗
Oxygen	✗	✓	✗	✗
Suction unit	✗	✓	✗	✗
Aut. external defibrillator (AED)	✗	✓	✗	✗
Manual resuscitator	✗	✓	✗	✗
Other medical equipment	✗	✓	✗	✗
Functional co-ordination with dispatch centre	✗	✓	✗	✗



**Ambulance Type A**  
patient transport ambulance

32%

**Ambulance Type B**  
emergency ambulance

60%

**Ambulance Type C**  
mobile intensive care unit

8%

# In-hospital EMS

## Triage Protocols

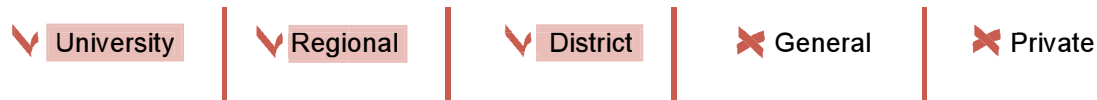
	Dispatch Centre	Ambulance Service	In-hospital
Is there a triage system?	✗*	✗	✓**
Standardized at national level?	✗	✗	✗
Computerized recording?	✗	✗	✗



\* Undergoing work for a national triage index for dispatching medical response.

\*\* In the triage system for in-hospital care, each major hospital has different procedures, still these are not unified and there is high variability between hospitals

## Emergency departments are available in the following types of hospitals



Emergency departments exist in these institutions but are still under development in most of the territory of Romania.

## Conditions to access emergency departments

- Social security number
- GP referral
- Ambulance referral
- Citizenship
- Co-payment
- Identification document
- Others (please specify)
- No limitation

## In Emergency Departments, there exists

	Yes	Pilots
An established network for intra-hospital referral	✓	
National standards of performance	✓	
Quality monitoring system	✓	
Social workers	✗*	✓
Intercultural mediators	✗	✗



\* By law, ED must have on duty social workers. However, it is not applied in the whole country yet.

- ✓ Emergency medicine courses are part of the curriculum at medical school
- ✓ Emergency medicine specialization is recognized by law

Length of training	Date of establishment
Up to 6 years	1990's

## Training in Emergency Medicine

- ✓ Follows a nationally approved curriculum
- ✓ Provides certification for physicians from a professional board/college
- ✗ Provides certification for nurses from a professional board/college

## A specialization is legally required for physicians working in

- ✓ Out-of-hospital
- ✓ In-hospital

## Postgraduate training in emergency medicine is

	Physicians	Nurses	Paramedics
University-based	✗*	✗	✗
Government-based	✗	✗	✓
Private	✗	✗	✗
Part of professional education	✗	✓	✗



\* There is a training for paramedics as part of professional training of fire fighters of the Ministry of Interior.

## Medical qualification

	Qualification	Duration	Responsible Institution
<b>Nurse</b>	Secondary education degree	3 years	College
<b>Nurse emergency</b>	n/a	n/a	n/a
<b>Physician</b>	Master	6 years	University hospital
<b>Acute care physician</b>	Short course	6 months for prehospital 12 for emergency department	University hospital
<b>Emergency physician</b>	Master + Residency	5 years	University hospital
<b>Disaster medicine director</b>	Continuous education	Short term courses	University/fire department


# Crisis management and EMS systems

- ✓ Role of EMS in crisis management specified by law
- ✓ Sub-national crisis preparedness plan
- ✓ International co-operation protocols in EMS

Bulgaria  
France  
Hungary  
Netherlands  
Ukraine

## Crisis preparedness plan in EMS


	Out-of-hospital	In-hospital
Required by law	✓	✓
Obligatory regular testing	✓	✗

 Plans and training of hospitals staff will become a requirement according to a new law likely to come into force in 2008.

Leading institution in case of national crisis: Ministry of Interior \*

EMS representative is part of the national crisis management team: ✗

Specific training in crisis/disaster management for EMS personnel: ✓\*\*

 \* General Inspectorate for Emergency Situations which combines the fire services and the civil protection under the same institution and it is part of the Ministry of Interior.  
\*\* This type of training exists, but not on a general basis and not for all services.

## Safety measures envisaged in emergency plans

- ✗ Matching the patient with medical records (e.g. wrist bands)
- ✗ Stress management system available for patients, staff and relatives



# Legislation and financing of EMS

Main Law: ..... Law in EMS \*

Decade of issue: ..... 2000's

Electronic version available: ..... [www.health.gov.sk](http://www.health.gov.sk)



\* Furthermore, there is an decree of Ministry of Health, which institutes details about EMS.

## Areas of emergency medicine regulated by current legislation

- ✓ Minimum standards of care & equipment, minimum requirements of qualification
- ✓ Free access for all to in-hospital care, including uninsured & unidentified persons
- ✓ Crisis/disaster management and crisis/disaster preparedness
- ✓ Financing mechanisms
- ✓ Required training for staff operating in EMS
- ✓ Organization of response and dispatch system
- ✓ Special budget for crisis preparedness
- ✓ Reserve budget for prompt mobilization in crisis response

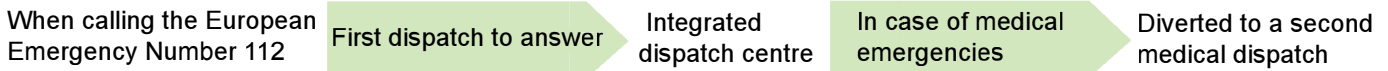
	Method of purchase	Financing sources	Authorized institution	
Out-of-hospital	<ul style="list-style-type: none"> <li>Dispatch Centre</li> <li>Ambulance Service</li> </ul>	<ul style="list-style-type: none"> <li>- By number of services</li> <li>- By type of services</li> </ul>	<ul style="list-style-type: none"> <li>- State budget</li> <li>- Public sources</li> </ul>	<ul style="list-style-type: none"> <li>- Public Institution depending on Health Authorities</li> <li>- Public Institution depending on hospitals</li> <li>- Public Institution depending on Health Authorities</li> <li>- Private hospitals and agencies</li> </ul>
In-hospital	<ul style="list-style-type: none"> <li>Hospital Emergency Department</li> </ul>		<ul style="list-style-type: none"> <li>- Mixed sources</li> </ul>	

## Co-payment fees required

- ✗ In-hospital
- ✗ Out-of-hospital
- ✗ In some regions
- ✗ In some hospitals
- ✓ None



Telephone number for medical emergencies **155**



## Access to medical emergency number

- ✓ Free of charge
- ✓ Free of area code
- ✓ English generally spoken during calls
- ✓ Minority languages generally spoken during calls

## Dispatch centres

Total number	8	Real-time update of intensive care beds
DC/population	1 / 650 000 approx.	✗ Nationally
DC/Km <sup>2</sup>	1 / 6 000 approx.	✗ Regionally
Distribution	Regional	✗ Intranet based
Interconnectivity	✗	

## Medical equipment available in other emergency services vehicles

	Police	Fire brigade	Volunteers	Others
Cervical collars	✗	✓	✗	✗
Oxygen	✗	✗	✗	✗
Suction unit	✗	✗	✗	✗
Aut. external defibrillator (AED)	✗	✗	✗	✓
Manual resuscitator	✗	✗	✗	✗
Other medical equipment	✗	✗	✗	✗
Functional co-ordination with dispatch centre	✓	✓	✗	✗



**Ambulance Type A**  
patient transport ambulance

**Ambulance Type B**  
emergency ambulance

**Ambulance Type C**  
mobile intensive care unit

0%

54%

46%

# In-hospital EMS

## Triage Protocols

	Dispatch Centre	Ambulance Service	In-hospital
Is there a triage system?	✓	✓	✓
Standardized at national level?	✓	✓	✗
Computerized recording?	✓	✓	✓

## Emergency departments are available in the following types of hospitals

- University | 
  Regional | 
  District | 
  General | 
  Private



By definition, there are no Emergency Departments in Slovakia, however some kind of hospital departments provide emergency medical care exist in the above mention type of hospitals.

## Conditions to access emergency departments

- Social security number
- GP referral
- Ambulance referral
- Citizenship
- Co-payment
- Identification document
- Others (please specify)
- No limitation

## In Emergency Departments, there exists

	Yes	Pilots
An established network for intra-hospital referral	✓	
National standards of performance	✓	
Quality monitoring system	✓	
Social workers	✓	✗
Intercultural mediators	✗	✗

- ✓ Emergency medicine courses are part of the curriculum at medical school
- ✓ Emergency medicine specialization is recognized by law

Length of training	Date of establishment
Up to 6 years	2000's

## Training in Emergency Medicine

- ✓ Follows a nationally approved curriculum
- ✓ Provides certification for physicians from a professional board/college
- ✓ Provides certification for nurses from a professional board/college

## A specialization is legally required for physicians working in

- ✓ Out-of-hospital
- ✓ In-hospital

## Postgraduate training in emergency medicine is

	Physicians	Nurses	Paramedics
University-based	✓	✓	✗
Government-based	✗	✗	✗
Private	✗	✗	✗
Part of professional education	✗	✗	✗

## Medical qualification

	Qualification	Duration	Responsible Institution
Nurse	Bachelor or Master	3 or 5 years	University
Nurse emergency	Bachelor or Master	3 or 5 years	University
Physician	Master	6 years	University
Acute care physician	Master after Master	5 years	University
Emergency physician	Master after master	5 years	University
Disaster medicine director	Master after master	5 years	University

# Crisis management and EMS systems

- ✓ Role of EMS in crisis management specified by law
- ✓ Sub-national crisis preparedness plan
- ✓ International co-operation protocols in EMS

Austria  
Croatia  
Czech Republic  
Hungary  
Poland  
Romania  
Ukraine

## Crisis preparedness plan in EMS

	Out-of-hospital	In-hospital
Required by law	✓	✓
Obligatory regular testing	✓	✓

Leading institution in case of national crisis: Ministry of Interior

EMS representative is part of the national crisis management team: ✓

Specific training in crisis/disaster management for EMS personnel: ✗

## Safety measures envisaged in emergency plans

- ✓\* Matching the patient with medical records (e.g. wrist bands)
- ✗\*\* Stress management system available for patients, staff and relatives



\* Matching will be unified starting from June 2008    \*\* A Pilot project for Critical Incident Stress Management (CISM) is currently starting.



# Legislation and financing of EMS

Main Law: ..... Regulation on Emergency medical services in Slovenia.  
The law on health care service \*

Decade of issue: ..... 1990's

Electronic version available: ..... <http://www.mz.gov.si/>



\* There are plans to prepare a law on emergency medicine and emergency medical services.

## Areas of emergency medicine regulated by current legislation

- ✓ Minimum standards of care & equipment, minimum requirements of qualification
- ✓ Free access for all to in-hospital care, including uninsured & unidentified persons
- ✓ Crisis/disaster management and crisis/disaster preparedness
- ✓ Financing mechanisms
- ✗\* Required training for staff operating in EMS
- ✗ Organization of response and dispatch system
- ✗ Special budget for crisis preparedness
- ✗ Reserve budget for prompt mobilization in crisis response



\* It is planned to implement obligatory licences for all physicians and EMTs working in EMS system.

	Method of purchase	Financing sources	Authorized institution
Out-of-hospital	- By number of services	- State budget	- Public independent institution *
		- Public sources	- Public Institution depending on Health Authorities **
In-hospital	- By type of services	- State budget	
		- Public sources	

## Co-payment fees required

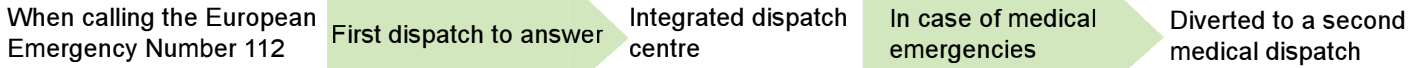
- ✗ In-hospital
- ✗ Out-of-hospital
- ✗ In some regions
- ✗ In some hospitals
- ✓ None



\* The dispatch centres in Slovenia are under the government civil protection agency and they are designed for all kinds of emergency calls.

\*\* The out-of-hospital EMS system is run by the primary health care institutions which are responsible for all out-of-hospital medical care.

Telephone number for medical emergencies **112**




## Access to medical emergency number

- ✓ Free of charge
- ✓ Free of area code
- ✓ English generally spoken during calls
- ✗ Minority languages generally spoken during calls

## Dispatch centres





Total number	12*	Real-time update of intensive care beds
DC/population	1 / 150 000 approx.	✗ Nationally
DC/Km <sup>2</sup>	1 / 1 700 approx.	✗ Regionally
Distribution	Regional	✗ Intranet based
Interconnectivity	✓	

 \* A unique medical dispatch system is under construction.

## Medical equipment available in other emergency services vehicles

	Police	Fire brigade	Volunteers	Others
Cervical collars	✗	✗	✗	✗
Oxygen	✗	✗	✗	✗
Suction unit	✗	✗	✗	✗
Aut. external defibrillator (AED)	✗	✗	✗	✗
Manual resuscitator	✗	✗	✗	✗
Other medical equipment	✗	✗	✗	✗
Functional co-ordination with dispatch centre	✓	✓	✗	✗

			
Ambulance Type A patient transport ambulance	Ambulance Type B emergency ambulance	Ambulance Type B emergency ambulance	Ambulance Type C mobile intensive care unit
20%	65%	65%	15%

# In-hospital EMS

## Triage Protocols

	Dispatch Centre	Ambulance Service	In-hospital
Is there a triage system?	✓	✓	✓
Standardized at national level?	✗	✗	✗
Computerized recording?	✗	✗	✗

## Emergency departments are available in the following types of hospitals

✗ University | ✗ Regional | ✗ District | ✗ General | ✗ Private



According with the definition of a ED "as separate hospital unit with fully dedicated staff and equipment" there are no emergency departments in Slovenia.

## Conditions to access emergency departments

- ✗ Social security number
- ✓\* GP referral
- ✗ Ambulance referral
- ✗ Citizenship
- ✗ Co-payment
- ✗ Identification document
- ✗ Others (please specify)
- ✓\*\* No limitation



\* GP referral is necessary for non vital or severe emergencies.

\*\* Seriously ill or serious trauma patients are accepted with no limitations. Almost all emergency cases come to an ED through the out-of-hospital emergency medical system.

## In Emergency Departments, there exists

	Yes	Pilots
An established network for intra-hospital referral	✗	
National standards of performance	✓	
Quality monitoring system	✗	
Social workers	✗	✗
Intercultural mediators	✗	✗



- ✗ Emergency medicine courses are part of the curriculum at medical school
- ✓ Emergency medicine specialization is recognized by law

Length of training	Date of establishment
Up to 3 years	2007


## Training in Emergency Medicine

- ✗\* Follows a nationally approved curriculum
- ✗ Provides certification for physicians from a professional board/college
- ✗ Provides certification for nurses from a professional board/college

 \*A standardization of emergency medical education is under construction.

## A specialization is legally required for physicians working in

- ✗\* Out-of-hospital
- ✗ In-hospital

 \*A specialization is proposed but not legally required at the time.

## Postgraduate training in emergency medicine is

	Physicians	Nurses	Paramedics
University-based	✗	✗	✗
Government-based	✗	✗	✗
Private	✗	✗	✗
Part of professional education	✓	✓	✗

## Medical qualification

	Qualification	Duration	Responsible Institution
Nurse	Secondary Education degree	4+3 years	Secondary Educational School
Nurse emergency	Secondary Education degree	4+3 years	Secondary Educational School
Physician	Master after master	6+4(6) years	University
Acute care physician	Master after master	6+4(6) years	University
Emergency physician	Master after master	6+4(6) years	University
Disaster medicine director	n/a	n/a	n/a

# Crisis management and EMS systems

- ✓ Role of EMS in crisis management specified by law
- ✓ Sub-national crisis preparedness plan
- ✗ International co-operation protocols in EMS

## Crisis preparedness plan in EMS

	Out-of-hospital	In-hospital
Required by law	✓	✓
Obligatory regular testing	✗	✗

Leading institution in case of national crisis

Ministry of Defence

EMS representative is part of the national crisis management team

n/a

Specific training in crisis/disaster management for EMS personnel






\*



\* There is some occasional training in emergency preparedness but it is not institutionalized.

## Safety measures envisaged in emergency plans

- ✓ Matching the patient with medical records (e.g. wrist bands)
- ✗ Stress management system available for patients, staff and relatives

- Legislation and financing of EMS 
- Out-of-hospital EMS 
- In-hospital EMS 
- Education in EMS 
- Crisis management and EMS systems 

*Last update: September 2008*

Legislation and financing of EMS-Out-of-hospital EMS  
 In-hospital EMS-Education in EMS-Crisis management  
 and EMS systems-Legislation and financing of EMS  
 Out-of-hospital EMS-In-hospital EMS-Education in  
 EMS-Crisis management and EMS systems-Legislation  
 and financing of EMS-Out-of-hospital EMS-In-hospital  
 EMS-Education in EMS-Crisis management and EMS  
 systems-Legislation and financing of EMS-Out-of-hos-  
 pital EMS-In-hospital EMS-Education in EMS-Crisis ma-


# SPAIN

# Legislation and financing of EMS

Main Law: ..... Ley General de Sanidad General Law of Health Real Decreto 1030/2006 \*

Decade of issue: ..... 2000's


Electronic version available: ..... [http://www.msc.es/organizacion/sns/planCalidadSNS/pdf/transparencia/Ley\\_14\\_86\\_GRAL\\_SANIDAD\\_1.pdf](http://www.msc.es/organizacion/sns/planCalidadSNS/pdf/transparencia/Ley_14_86_GRAL_SANIDAD_1.pdf)

 \* Article 41 of this law states that regional governments in Spain (17) have the capability to decide their own regional laws about all the topics not included in the "General Law of Health", including EMS. Consequently all the Regional Governments in Spain have their own regional laws on this.

## Areas of emergency medicine regulated by current legislation

- ✓ Minimum standards of care & equipment, minimum requirements of qualification
- ✓ Free access for all to in-hospital care, including uninsured & unidentified persons
- ✓ Crisis/disaster management and crisis/disaster preparedness
- ✓ Financing mechanisms
- ✗ Required training for staff operating in EMS
- ✓ Organization of response and dispatch system
- ✗ Special budget for crisis preparedness
- ✗ Reserve budget for prompt mobilization in crisis response

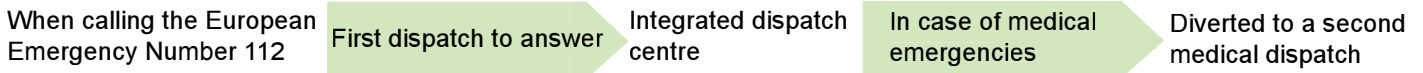
	Method of purchase	Financing sources	Authorized institution
<b>Out-of-hospital</b> <div style="border: 1px solid black; padding: 5px; margin: 5px;">Dispatch Centre</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">Ambulance Service</div>	- By catchment population	<div style="border: 1px solid black; padding: 5px; margin: 5px;">- State budget</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">- Private sources</div>	<div style="border: 1px solid black; padding: 5px; margin: 5px;">- Institution depending on Health Authorities</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">- Private enterprises</div>
		<div style="border: 1px solid black; padding: 5px; margin: 5px;">- Public and private enterprises</div>	
<b>In-hospital</b> <div style="border: 1px solid black; padding: 5px; margin: 5px;">Hospital Emergency Department</div>		<div style="border: 1px solid black; padding: 5px; margin: 5px;">- Private sources</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">- State budget</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">- Mixed sources *</div>	


 \* Generally the EMS are public and financed by regional budget. In some towns, there are some hospitals financed by public and private budget (mixed sources).

## Co-payment fees required





- ✗ In-hospital
- ✗ Out-of-hospital
- ✗ In some regions
- ✗ In some hospitals
- ✓ None


Telephone number for medical emergencies **061 and 112\***







 \* In 8 of the Spanish regions (and in the towns of Ceuta and Melilla) there is one separate dispatch centre for health emergencies (061) and an integrated dispatch centre (112). In the other 9 regions there is only one integrated dispatch centre (112).

## Access to medical emergency number





























-  \* Free of charge
-  Free of area code
-  English generally spoken during calls
-  Minority languages generally spoken during calls

 \* The 112 is the only emergency number free of charge. Other emergency numbers (eg 061) have a reduced cost but are not free of charge.

## Dispatch centres

Total number	26	Real-time update of intensive care beds
DC/population	1 / 1 600 000 approx.	 Nationally
DC/Km <sup>2</sup>	1 / 20 000 approx.	 Regionally
Distribution	Regional	 Intranet based
Interconnectivity		

## Medical equipment available in other emergency services vehicles


	Police	Fire brigade	Volunteers	Others
Cervical collars				
Oxygen				
Suction unit				
Aut. external defibrillator (AED)				
Manual resuscitator				
Other medical equipment				
Functional co-ordination with dispatch centre				



**Ambulance Type A**  
patient transport ambulance  
80%

**Ambulance Type B**  
emergency ambulance  
10%

**Ambulance Type C**  
mobile intensive care unit  
10%

 This table only applies to some of the Spanish regions.

# In-hospital EMS

## Triage Protocols


	Dispatch Centre	Ambulance Service	In-hospital
Is there a triage system?	✓	✓	✓
Standardized at national level?	✗	✗	✗
Computerized recording?	✓	✓	✗

## Emergency departments are available in the following types of hospitals

- ✓ University
- ✓ Regional
- ✓ District
- ✓ General
- ✓ Private

## Conditions to access emergency departments

- ✗ Social security number
- ✗ GP referral
- ✗ Ambulance referral
- ✗ Citizenship
- ✗ Co-payment
- ✓\* Identification document
- ✗ Others (please specify)
- ✓ No limitation

 \* The patient is requested to show the identity card and the social security number when accessing an ED. In case that the patient is not covered by the social security (e.g. immigrants, tourists, etc.), expenses will be covered through the private insurance (if any) or eventually through the State budget.

## In Emergency Departments, there exists

	Yes	Pilots
An established network for intra-hospital referral	✗	
National standards of performance	✗	
Quality monitoring system	✓	
Social workers	✗	✓
Intercultural mediators	✗	✓

✗ Emergency medicine courses are part of the curriculum at medical school

✓\*\* Emergency medicine specialization is recognized by law

Length of training  
—

Date of establishment  
2008

\* Some schools include emergency courses but it is not a general standard.



\*\* Emergency Care as a specialty is planned for 2008. It will be a sub-specialty of three specialties: Internal medicine, family medicine and intensive care medicine.

## Training in Emergency Medicine

- ✓ Follows a nationally approved curriculum
- ✓ Provides certification for physicians from a professional board/college
- ✓ Provides certification for nurses from a professional board/college

## A specialization is legally required for physicians working in

✗ Out-of-hospital

✓ In-hospital

## Postgraduate training in emergency medicine is

	Physicians	Nurses	Paramedics
University-based	✓	✓	✗
Government-based	✗	✗	✗
Private	✓	✓	✗
Part of professional education	✗	✗	✗

## Medical qualification

	Qualification	Duration	Responsible Institution
Nurse	Bachelor	3 years	University
Nurse emergency	Master	1 year	University
Physician	Master	6 years	University
Acute care physician	n/a	n/a	n/a
Emergency physician	Master	1-2 years	University
Disaster medicine director	n/a	n/a	n/a

# Crisis management and EMS systems

- ✓ Role of EMS in crisis management specified by law
  - ✓ Sub-national crisis preparedness plan
  - ✓ International co-operation protocols in EMS
- France \*  
Portugal



\* Catalunya and Aragon have international co-operation protocols in EMS with France.

## Crisis preparedness plan in EMS

	Out-of-hospital	In-hospital
Required by law	✓	✓
Obligatory regular testing	✓	✓

Leading institution in case of national crisis

Ministry of Interior

EMS representative is part of the national crisis management team

✗ \*

Specific training in crisis/disaster management for EMS personnel

EPES\_061: [www.epes.es/cocoon/index.html](http://www.epes.es/cocoon/index.html)  
 SAMU: [www.gruposamu.com/samu](http://www.gruposamu.com/samu)  
 SAMUR de Madrid: [www.munimadrid.es/samur](http://www.munimadrid.es/samur)  
 Escuela Nacional de Protección Civil: [www.proteccioncivil.org/enpc/enpc00.htm](http://www.proteccioncivil.org/enpc/enpc00.htm)








\* EMS representatives are advisors not members.

## Safety measures envisaged in emergency plans

- ✓ Matching the patient with medical records (e.g. wrist bands)
- ✓ Stress management system available for patients, staff and relatives



- Legislation and financing of EMS 
- Out-of-hospital EMS 
- In-hospital EMS 
- Education in EMS 
- Crisis management and EMS systems 

# SWEDEN

*Last update: September 2008*

Legislation and financing of EMS-Out-of-hospital EMS  
 In-hospital EMS-Education in EMS-Crisis management  
 and EMS systems-Legislation and financing of EMS-  
 Out-of-hospital EMS-In-hospital EMS-Education in  
 EMS-Crisis management and EMS systems-Legislation  
 and financing of EMS-Out-of-hospital EMS-In-hospital  
 EMS-Education in EMS-Crisis management and EMS  
 systems-Legislation and financing of EMS-Out-of-hos-  
 pital EMS-In-hospital EMS-Education in EMS-Crisis ma-




# Legislation and financing of EMS

Main Law: ..... The Health and Medical Service Act \*

Decade of issue: ..... 1980's

Electronic version available: ..... <http://www.sweden.gov.se/sb/d/574/a/23125;jsessionid=aO-unLO1Lgfb>

 \* There are also regulations on crisis preparedness as well as on the responsibility and activities of counties and municipalities in case of crisis.


## Areas of emergency medicine regulated by current legislation

- ✓ Minimum standards of care & equipment, minimum requirements of qualification
- ✓ Free access for all to in-hospital care, including uninsured & unidentified persons
- ✓ Crisis/disaster management and crisis/disaster preparedness
- ✓ Financing mechanisms
- ✓ Required training for staff operating in EMS
- ✓ Organization of response and dispatch system
- ✓ Special budget for crisis preparedness
- ✗ Reserve budget for prompt mobilization in crisis response

		Method of purchase	Financing sources	Authorized institution
Out-of-hospital	Dispatch Centre	<ul style="list-style-type: none"> <li>- By number of services</li> <li>- By type of services</li> <li>- By catchment population</li> </ul>	- Public sources **	- Public independent institutions
	Ambulance Service			- Private enterprises *
In-hospital	Hospital Emergency Department		- Public sources	- Public and private institutions **

## Co-payment fees required

- ✓ In-hospital
- ✓ Out-of-hospital
- ✗ In some regions
- ✗ In some hospitals
- ✗ None

 \* Dispatch centres are run by a public institution whereas private enterprises are allowed in the market.  
 \*\* In case of private enterprises for out-of-hospital services (ambulances), the service is run on behalf of the regional health authorities. Concerning the financing sources, some support is given by the state, such as for education and training in disaster medicine.

Telephone number for medical emergencies **112**



## Access to medical emergency number

- ✓ Free of charge
  - ✓ Free of area code
  - ✓ English generally spoken during calls
  - ✓\* Minority languages generally spoken during calls
- \* Minority languages are partially covered by the operators, sometimes interpreters are used.

## Dispatch centres

Total number	18	Real-time update of intensive care beds
DC/population	1 / 500 000 approx.	✗ Nationally
DC/Km <sup>2</sup>	1 / 25 000 approx.	✓ Regionally
Distribution	Regional	✗ Intranet based
Interconnectivity	✓	

## Medical equipment available in other emergency services vehicles

	Police	Fire brigade	Volunteers	Others
Cervical collars	✗	✓	✗	✗
Oxygen	✗	✓	✗	✗
Suction unit	✗	✗	✗	✗
Aut. external defibrillator (AED)	✓	✓	✓	✗
Manual resuscitator	✗	✗	✗	✗
Other medical equipment	✓	✗	✗	✗
Functional co-ordination with dispatch centre	✓	✓	✓	✗



**Ambulance Type A**  
patient transport ambulance

**Ambulance Type B**  
emergency ambulance

**Ambulance Type C**  
mobile intensive care unit

0%

10%

90%

# In-hospital EMS

## Triage Protocols

	Dispatch Centre	Ambulance Service	In-hospital
Is there a triage system?	✓	✓*	✓*
Standardized at national level?	✓	✗	✗
Computerized recording?	✓	✗	✗



\* There are triage protocols at out-of-hospital and in-hospital levels, but they are not nationally standardized, since the county councils are responsible for health care including EMS.

## Emergency departments are available in the following types of hospitals

- ✓ University
- ✓ Regional
- ✓ District
- ✓ General
- ✗ Private

## Conditions to access emergency departments

- ✗ Social security number
- ✓\* GP referral
- ✗ Ambulance referral
- ✗ Citizenship
- ✗ Co-payment
- ✗ Identification document
- ✗ Others (please specify)
- ✓ No limitation



\* In some regions, GP referral is needed.

## In Emergency Departments, there exists

	Yes	Pilots
An established network for intra-hospital referral	✓	
National standards of performance	✗	
Quality monitoring system	✓	
Social workers	✓*	✗
Intercultural mediators	✓*	✗



\* Most EDs have access to social workers and translators.

- ✓ Emergency medicine courses are part of the curriculum at medical school
- ✓ Emergency medicine specialization is recognized by law

Length of training	Date of establishment
Up to 3 years	2000's

## Training in Emergency Medicine

- ✓ Follows a nationally approved curriculum
- ✓ Provides certification for physicians from a professional board/college
- ✓ Provides certification for nurses from a professional board/college

## A specialization is legally required for physicians working in

- ✓ Out-of-hospital
- ✓ In-hospital

## Postgraduate training in emergency medicine is

	Physicians	Nurses	Paramedics
University-based	✗	✗	✗
Government-based	✓	✓	✗
Private	✗	✗	✗
Part of professional education	✓	✓	✗

## Medical qualification

	Qualification	Duration	Responsible Institution
Nurse	Bachelor	3 years	University
Nurse emergency	Bachelor	3+0.5 years	University
Physician	Master	2+5 years	University
Acute care physician	Master after master	2+5+3 years	University
Emergency physician	Master after master	2+5+3 years	University
Disaster medicine director	Continuous Education	2+5+3 years	University



\* Length of education / training is 5+3 years for EMS physician, as other speciality in acute medicine (surgery, internal medicine, cardiology, etc...) is required.

# Crisis management and EMS systems

✘ Role of EMS in crisis management specified by law

✓ Sub-national crisis preparedness plan

✓ International co-operation protocols in EMS

Denmark  
Finland  
Norway

## Crisis preparedness plan in EMS

	Out-of-hospital	In-hospital
Required by law	✓	✓
Obligatory regular testing	✓	✓

Leading institution in case of national crisis

Ministry in charge of the specific accident

EMS representative is part of the national crisis management team

✓

Specific training in crisis/disaster management for EMS personnel

\*

Centre for Teaching & Research in Disaster Medicine and Traumatology, KMC in Linköping: <http://www.lio.se/templates/Page.aspx?id=27405>

Department of clinical Science and Education Karolinska Institutet, Section of Prehospital Care, SPC in Stockholm: [www.prehospitala.se](http://www.prehospitala.se)

Prehospital and Disaster Medical Centre, PKMC in Gothenburg: [http://www.vgregion.se/vgrtemplates/Start\\_\\_\\_41453.aspx](http://www.vgregion.se/vgrtemplates/Start___41453.aspx)

Emergency and Disaster Medical Centre, AKMC in Umeå: [www.akmc.se](http://www.akmc.se)



\* Training curriculum is set up by the Swedish National Board of Health and Welfare and by all different County Councils.

## Safety measures envisaged in emergency plans

✓ Matching the patient with medical records (e.g. wrist bands)

✓ Stress management system available for patients, staff and relatives



# Legislation and financing of EMS

Main Law: ..... n/a

Decade of issue: ..... n/a

Electronic version available: ..... n/a

## Areas of emergency medicine regulated by current legislation

- X Minimum standards of care & equipment, minimum requirements of qualification
- ✓ Free access for all to in-hospital care, including uninsured & unidentified persons
- X Crisis/disaster management and crisis/disaster preparedness
- X Financing mechanisms
- X Required training for staff operating in EMS
- X Organization of response and dispatch system
- X Special budget for crisis preparedness
- X Reserve budget for prompt mobilization in crisis response



In most of the areas mentioned above, there are regulations or standards in place but not laws. Concerning special budget for crisis, institutions are expected to respond to the crisis and the funding will be considered afterwards. DH stands as guarantor for some hospital supply orders in the event of a crisis.

	Method of purchase	Financing sources	Authorized institution
Out-of-hospital	Dispatch Centre Ambulance Service	* - State budget	- Public independent institution - Public independent institutions ** - Private agencies and hospitals
In-hospital	Hospital Emergency Department		- State budget

## Co-payment fees required

- X In-hospital
- X Out-of-hospital
- X In some regions
- X In some hospitals
- ✓ None

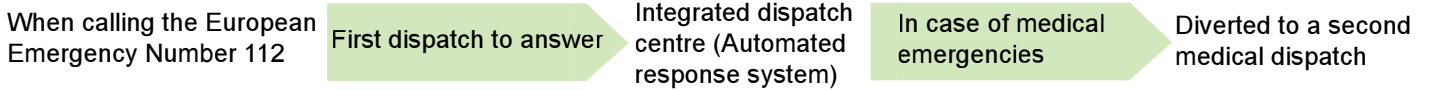


\* NHS ambulance services are commissioned by Primary Care Trusts who commission/purchase healthcare to respond to the assessed health needs of their population. Ambulances are commissioned to respond on a geographic basis but are also expected to provide mutual aid in the event of a crisis.

\*\* Ambulances are run by public services; there are 15 ambulance Trust/Services in UK (There are 12 in England).



Telephone number for medical emergencies **999**



## Access to medical emergency number

- ✓ Free of charge
- ✓ Free of area code
- ✓ English generally spoken during calls
- ✓ Minority languages generally spoken during calls\*

\* Due to the variety of languages spoken in UK, only some are covered.

## Dispatch centres

Total number **33\***

DC/population **1 / 1 800 000 approx.**

DC/Km<sup>2</sup> **1 / 7 500 approx.**

Distribution **Regional**

Interconnectivity **✗**

Real-time update of intensive care beds

- ✗ Nationally
- ✓ Regionally
- ✓ Intranet based

\* The number of dispatch centres will decrease to 22 within the next few years.

## Medical equipment available in other emergency services vehicles

	Police	Fire brigade	Volunteers	Others
Cervical collars	✗	✗	✗	✗
Oxygen	✗	✗	✗	✗
Suction unit	✗	✗	✗	✗
Aut. external defibrillator (AED)	✗	✗	✗	✗
Manual resuscitator	✗	✗	✗	✗
Other medical equipment	✗	✗	✗	✗
Functional co-ordination with dispatch centre	✗	✗	✗	✗

Non-EMS vehicles do not respond to emergency calls. Emergency ambulances carry all the equipment above.



**Ambulance Type A**  
patient transport ambulance

**Ambulance Type B**  
emergency ambulance

**Ambulance Type C**  
mobile intensive care unit

n/a

n/a

n/a

# In-hospital EMS

## Triage Protocols

	Dispatch Centre	Ambulance Service	In-hospital
Is there a triage system?	✓	✓	✓
Standardized at national level?	✓	✓	✗
Computerized recording?	✓	✗	✓*



\* The triage protocols for in-hospital care are computerized in some places.

## Emergency departments are available in the following types of hospitals

- ✓ University
- ✓ Regional
- ✓ District
- ✓ General
- ✗ Private



National Health Service (NHS) is prompt to change the health system in order to have only two types of hospitals: (1) University/Regional hospital; (2) local District General Hospitals.

## Conditions to access emergency departments

- ✗ Social security number
- ✗ GP referral
- ✗ Ambulance referral
- ✗ Citizenship
- ✗ Co-payment
- ✗ Identification document
- ✗ Others (please specify)
- ✓\* No limitation



\* Those who do not have right of abode in the UK will get free at point of access care in the emergency department, but if they require admission they will be charged, for example overseas visitors.

## In Emergency Departments, there exists


	Yes	Pilots
An established network for intra-hospital referral	✓	
National standards of performance	✓	
Quality monitoring system	✓	
Social workers	✓*	✗
Intercultural mediators	✓*	✗



\* In Emergency Departments there exist social workers and intercultural mediators, but not 24/7.

- ✘ Emergency medicine courses are part of the curriculum at medical school
- ✓ Emergency medicine specialization is recognized by law

Length of training	Date of establishment
Up to 6 years	1980's


 \* This question will vary according to different county systems.

## Training in Emergency Medicine

- ✘ Follows a nationally approved curriculum
- ✘ Provides certification for physicians from a professional board/college
- ✘ Provides certification for nurses from a professional board/college

## A specialization is legally required for physicians working in

- ✘\* Out-of-hospital
- ✘\* In-hospital

 \* There is not a legal requirement to have a specialization, but senior doctors would not be appointed without additional qualifications. Doctors in training working in EMS do not necessarily need additional qualifications.

## Postgraduate training in emergency medicine is

	Physicians	Nurses	Paramedics
University-based	✘	✘	✘
Government-based	✘	✘	✓
Private	✘	✘	✘
Part of professional education	✓	✓	✘

## Medical qualification

	Qualification	Duration	Responsible Institution
Nurse	n/a	n/a	University
Nurse emergency	n/a	n/a	University
Physician	MRCP *	5 years	Royal College
Acute care physician	MRCP/MRCS *	5 years	Royal College
Emergency physician	MRCP/MRCS *	5 years	Royal College
Disaster medicine director	MRCP/MRCS *	5 years	Royal College

 \* MRCP: Member of the Royal College of Physicians.  
MRCS: Member of the Royal College of Surgeons.

# Crisis management and EMS systems

- ✓ Role of EMS in crisis management specified by law
- ✓ Sub-national crisis preparedness plan
- ✗ International co-operation protocols in EMS

## Crisis preparedness plan in EMS

	Out-of-hospital	In-hospital
Required by law	✓	✓
Obligatory regular testing	✓	✓

Leading institution in case of national crisis: Cabinet Office

EMS representative is part of the national crisis management team: ✗

Specific training in crisis/disaster management for EMS personnel: There is a large number of institutions providing training at different levels.

## Safety measures envisaged in emergency plans

- ✓ Matching the patient with medical records (e.g. wrist bands)
- ✓ Stress management system available for patients, staff and relatives



# Legislation and financing of EMS

## DECADES OF LAWS

1960's 1970's 1980's 1990's

2000's

BEL	IRE	GRE	LUX	SWE	BUL	CZH	FIN	HUN	ITA	LVA	LTU	UNK	AUT	CYP	DEN	DEU	EST	FRA	NET	POL	POR	ROM	SPA	SVK	SVN
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

\* MAT missing

## EMS topics regulated by National laws

COUNTRY	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom	TOTAL
Minimum Standards of care, equipment and qualification	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	23
Free access for all to in-hospital care	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	27
Financing mechanisms	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X	X	X	X	X	24	
Required training for EMS staff	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X		X	X	X	X	X		X		21	

## Request for co-payment fees waived in case of vital conditions

COUNTRY	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom	TOTAL
In-hospital		X					X	X	X	X			X													X	7	
Out-of-hospital		X		X				X	X				X			X										X	7	
In some regions	X																										1	
In some hospitals	X										X																2	
None			X		X	X						X		X	X		X	X	X	X	X	X	X	X	X	X	16	

## Methods of purchase of EMS services by state or national insurances

COUNTRY	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom	TOTAL
Number of delivered services	X	X	X			X	X	X	X		X				X	X	X				X	X	X	X		X	15	
Type of delivered services	X	X	X		X	X	X			X	X	X	X		X		X		X			X	X	X		X	17	
Catchment Population	X	X										X		X			X	X		X	X			X	X		10	
By individual service	X														X												2	

## Source of financing for Out-of-Hospital

	COUNTRY																				TOTAL							
	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland		Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom
State Budget	X		X	X	X		X		X		X	X	X	X	X	X	X	X		X			X	X	X	X	X	19
Public Sources	X				X	X			X	X						X			X		X		X	X		X	11	
Private Sources	X			X						X															X		4	
Mixed Sources	X	X		X	X			X											X			X					7	
Other				X															X								2	

## Source of financing for In-hospital

	COUNTRY																				TOTAL							
	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland		Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom
State Budget	X		X	X	X						X	X	X	X	X		X				X			X	X	X	X	15
Public Sources	X				X	X	X		X	X						X				X				X		X	10	
Private Sources	X			X						X			X												X		5	
Mixed Sources	X	X		X	X			X											X			X		X		X	9	
Other																			X								1	

## Authorized institution to run Ambulance Services

	COUNTRY																				TOTAL						
	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland		Portugal	Romania	Slovakia	Slovenia	Spain	Sweden
Public indepent institution	X				X			X	X			X		X	X	X				X	X	X				X	12
Public institution depending on Hospital	X			X	X				X						X		X			X		X	X				9
Depending on health authority	X			X	X	X	X				X		X			X	X		X	X	X	X	X	X			16
Private Enterprises	X			X	X		X	X	X		X	X	X	X	X	X	X		X			X	X			X	16

## Authorized institution to run Dispatch Centres

	COUNTRY																	TOTAL										
	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom	
Public indepent institution	X		X		X	X	X	X	X			X			X	X	X		X	X		X		X		X	X	17
Public institution depending of Hospital				X					X						X			X										5
Public institution depending of health authority	X	X		X						X	X		X	X							X	X	X		X			11
Private Enterprises	X			X							X		X	X								X			X	X		7

## EMS and crisis management topics regulated by National laws

	COUNTRY																	TOTAL										
	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom	
Crisis management and crisis preparedness	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	24
Response organization & dispatch system	X	X	X		X		X	X	X	X	X	X		X	X	X	X		X	X	X	X	X		X	X		21
Special budget for crisis preparedness		X			X		X		X	X	X		X	X	X				X			X	X			X		13
Reserve budget for crisis response	X	X	X	X			X		X	X	X	X		X	X								X					12





## Acces to 112 emergency number

COUNTRY	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom	TOTAL
Free of charge	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	27
Free of area code	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	27
English spoken	X	X		X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	24
Minority languages spoken		X			X			X					X	X	X	X							X	X	X	X	12	

## Dispatch centres

COUNTRY	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom	TOTAL
Total number	52	10	28	25	40	8	1	15	103	n/a	12	26	14	103	26	56	1	1	25	290	4	42	8	12	26	18	33	20
Interconnectivity	X	X	X	X	X	X	*	X	X	X	X	X		X	X	X	*	*	X	X	X	X		X		X		20

\* Not applicable.

## Distribution of dispatch centres

COUNTRY	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom
DC/ population *	1/ 160 000	1/ 1 000 000	1/ 290 000	1/ 30 000	1/ 250 000	1/ 700 000	1/ 1 350 000	1/ 350 000	1/ 570 000	n/a	1/ 850 000	1/ 400 000	1/ 280 000	1/ 550 000	1/ 90 000	1/ 60 000	1/ 463 000	1/ 380 000	1/ 650 000	1/ 130 000	1/ 2 500 000	1/ 500 000	1/ 650 000	1/ 150 000	1/ 1 600 000	1/ 500 000	1/ 1 800 000
DC/ Km2**	1/ 1 600	1/ 3 000	1/ 3 800	1/ 250	1/ 2 000	1/ 5 500	1/ 50 000	1/ 20 000	1/ 5 300	n/a	1/ 10 000	1/ 3 500	1/ 5 000	1/ 3 000	1/ 2 500	1/ 1 000	1/ 2 500	1/ 300	1/ 1 000	1/ 1 080	1/ 23 000	1/ 5 500	1/ 6 000	1/ 1 700	1/ 20 000	1/ 25 000	1/ 7 500

\* Population covered by one dispatch centre approx. \*\* Area covered by one dispatch centre approx.

## Geographical distribution of dispatch centres

	COUNTRY																			TOTAL								
	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands		Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom
National Level																	X	X										2
Regional Level	X		X		X	X	X				X								X	X	X			X	X	X	X	15
Subregional Level	X	X		X					X	X		X	X	X	X	X						X						11

## Real-time update of intensive care beds

	COUNTRY																			TOTAL								
	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands		Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom
Nationally											X								X									2
Regionally	X	X							X	X				X	X	X										X	X	9
Intranet Based	X																		X							X	X	3

## Medical equipment available in other emergency services vehicles

	Police	Fire Brigade	Volunteers	Others
Cervical collar	2- CYP, ITA	16- CYP, CZH, FIN, EST, DEU, FRA, FIN, ITA, LVA, LTU, LUX, MAT, POL, ROM, SVK, SPA, SWE	9- AUT, CYP, CZH, DEU, ITA, LUX, MAT, POL, SPA	3- CYP, FIN, GRE
Oxygen	1- CYP	16- AUT, CYP, CZH, FIN, DEN, EST, FRA, DEU, LTU, LUX, POL, SPA, SWE	7- AUT, CYP, DEU, ITA, LUX, MAT, SPA	3- CYP, FIN, GRE
Suction Unit	1- CYP	9- AUT, CYP, FIN, FRA, DEU, LTU, LUX, POL, ROM	7- AUT, CYP, DEU, ITA, LUX, MAT, SPA	2- FIN, GRE
Aut. External defibrillator (AED)	4- AUT, IRE, ITA, SWE	12- AUT, FIN, FRA, DEU, IRE, ITA, LTU, LUX, NET, POL, ROM, SWE	8- AUT, DEU, IRE, ITA, LUX, MAT, SPA, SWE	4- CYP, FIN, GRE, SVK
Manual resuscitator	2- AUT, CYP	11- AUT, CYP, FIN, FRA, DEU, HUN, IRE, LTU, LUX, POL, ROM	9- AUT, DEU, HUN, IRE, ITA, LUX, MAT, POL, SPA	2- FIN, GRE
Other medical equipment	5- AUT, CYP, ITA, LTU, SWE	12- AUT, CYP, CZH, FIN, FRA, ITA, LVA, LTU, LUX, POL, ROM, SPA	10- AUT, CYP, CZH, DEU, ITA, LTU, LUX, MAT, POL, SPA	5- AUT, CYP, FIN, GRE, LTU
Functional co-ordination with dispatch centre	13- BEL, BUL, CYP, CZH, EST, HUN, IRE, ITA, LVA, MAT, SVK, SVN, SWE	18- AUT, BEL, BUL, CYP, CZH, FIN, EST, FRA, DEU, HUN, IRE, ITA, LVA, LTU, ROM, SVK, SVN, SWE	8- AUT, BEL, CYP, DEU, IRE, ITA, SPA, SWE	5- BEL, FIN, IRE, ITA, MAT

## Percentage of types of emergency vehicles

COUNTRY		Type A	Type B	Type C
Austria		15%	75%	10%
Belgium		30%	30%	40%
Bulgaria		10%	50%	40%
Cyprus		n/a	90%	n/a
Czech Rep.		10%	50%	40%
Denmark		0%	95%	5%
Estonia		0%	94%	6%
Finland		0%	66.70%	33.30%
France		n/a	n/a	n/a
Germany		0%	60%	40%
Greece		29.50%	62%	8.50%
Hungary		0%	79%	21%
Ireland		0%	0%	100%
Italy		0%	75%	25%
Latvia		8%	52%	40%
Lithuania		0%	94%	6%
Luxembourg		0%	77%	23%
Malta		25%	50%	25%
Netherlands		0%	99%	1%
Poland		0%	55%	45%
Portugal		0%	92.5%	7.5%
Romania		32%	60%	8%
Slovakia		0%	54%	46%
Slovenia		20%	65%	15%
Spain		80%	10%	10%
Sweden		0%	10%	90%
United Kingdom		n/a	n/a	n/a

# In-Hospital EMS

Emergency departments are present in the following types of hospitals

	COUNTRY																			TOTAL								
	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands		Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom
iversity Hospital	X	X	X		X	X	X	X	X	X	X		X	X	X	X			X	X	X	X	X		X	X	X	22
egional Hospital	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X		X	X		X	X	X	23
District Hospital	X	X		X		X	X	X	X	X	X	X		X	X	X			X	X	X	X	X		X	X	X	21
eneral Hospital	X	X		X		X	X			X	X			X		X	X	X	X	X	X		X		X	X	X	18
Private Hospital	X	X		X						X								X		X				X			X	7

Triage protocols

	COUNTRY																			TOTAL									
	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands			Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom
Use of triage protocols	X	X			X	X	X	X		X	X		X	X	X	X	X		X				X	X	X	X	X	19	DISPATCH CENTRE
Standardized at national level		X								X	X	X	X		X	X		X					X		X	X	X	11	
Computerized recording	X	X				X	X	X				X	X					X					X		X	X	X	13	
Use of triage protocols	X	X			X		X	X	X	X	X	X	X	X	X	X	X	X	X				X	X	X	X	X	21	AMBULANCE SERVICES
Standardized at national level	X	X			X		X	X	X	X	X	X	X		X	X	X	X					X			X	X	17	
Computerized recording		X					X	X					X										X		X		X	6	
Use of triage protocols	X	X		X	X		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	24	IN-HOSPITAL
Standardized at national level	X								X	X		X	X		X		X	X		X							X	9	
Computerized recording	X	X					X	X				X	X								X		X				X	10	

Conditions to access ED waived in case of vital conditions

	COUNTRY																			TOTAL								
	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands		Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom
Social Security Number																												0
GP Referral																									X			2
ulance Referral																										X		0
Citizenship																												0
Co-payment																												0
Identification Document																			X	X					X			3
Other																												0
No limitation	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	27

### Established network for intra-hospital referral

COUNTRY	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom	TOTAL
	X	X	X					X		X	X	X	X	X	X	X	X		X		X	X	X			X	X	18

AU answer that varies according to hospitals

### National standards of performance

COUNTRY	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom	TOTAL
		X					X			X	X	X	X	X	X	X			X	X		X	X	X			X	15

FR, HU: National Standards of Performance are currently under work

### Quality monitoring system

COUNTRY	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom	TOTAL
	X	X								X			X	X	X	X			X			X	X		X	X	X	13

DK, FR: Quality monitoring system are currently under work

### Presence of social workers in ED

COUNTRY	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom	TOTAL
Yes									X		X	X	X	X									X			X	7	
Pilot Projects	X	X						X		X		X									X	X			X		8	

### Presence of intercultural mediators in ED

COUNTRY	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom	TOTAL
Yes														X												X	2	
Pilot Projects	X	X	X									X													X		5	

# Education in EMS

## Emergency Medicine Training

COUNTRY	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom	TOTAL
EM part of the curriculum at medical schools	X		X		X	X				X	X	X	X	X	X				X	X	X	X	X			X	16	
EM specialization by law	X	X	X		X		X			X		X	X	X	X			X	X	X		X	X	X	X	X	19	
Recognized Specialty																												
up to 3 years															X					X				X		X	4	
up to 6 years		X	X		X		X			X		X	X	X					X			X	X		n/a	X	12	
At least 6 years	X																	X									2	

## Years of establishment of Emergency Medicine

COUNTRY	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom	TOTAL
2008														X											X		2	
2007																		X						X			2	
Early 2000s	X						X												X	X			X		X		6	
1990s		X	X		X					X			X		X							X					7	
1980s																									X		1	
1979												X															1	

## Training in Emergency Medicine

COUNTRY	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom	TOTAL
Certificate for doctors	X	X	X		X		X	X	X	X		X	X	X	X	X		X	X	X	X	X	X		X	X	21	
Certificate for nurse	X	X			X		X			X	X			X		X			X	X	X		X		X	X	14	
National Curriculum	X	X	X		X		X		X	X	X	X	X	X	X	X		X	X		X	X	X		X	X	20	

## Educational requirement in EMS

### Legally required

COUNTRY	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom	TOTAL
Out-of-Hospital	X	X			X		X		X	X	X	X		X	X		X			X		X	X	X		X	15	
In-Hospital	X	X			X		X		X	X	X	X	X	X	X		X			X		X	X		X	X	15	

## Postgraduate training

	COUNTRY																				TOTAL								
	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland			Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom
MD		X	X																									10	UNIVERSITY BASED
Nurse									X	X		X			X	X		X				X	X				6		
Paramedic											X	X				X									X		3		
MD					X						X						X			X	X					X	6	GOVERNMENT	
Nurse					X						X						X			X	X				X		6		
Paramedic		X		X	X			X			X								X			X			X	X	9		
MD																X		X							X		3	PRIVATE AGENCIES	
Nurse		X														X		X						X			4		
Paramedic															X			X									2		
MD	X			X			X	X					X	X			X	X	X					X			11	PART OF PROFESSIONAL	
Nurse	X			X			X	X	X	X			X	X		X	X	X			X		X			X	12		
Paramedic	X					X	X		X				X	X		X	X	X							X	X	6		

## Specialization

	COUNTRY																				TOTAL							
	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland			Portugal	Romania	Slovakia	Slovenia	Spain	Sweden
Emergency Medicine	X	X			X		X		X		X	X			X								X	X			11	Out-of-Hospital
Internal Medicine											X	X							X	X		X	X				3	
Anaesthesia							X		X		X	X				X			X	X		X	X				8	
Surgery											X	X							X								2	
Cardiology											X																1	
Others										X															X		2	
No required			X	X		X		X					X	X		X	X	X	X		X						11	
Emergency Medicine	X	X		X			X		X		X	X	X	X	X					X		X					12	In-Hospital
Internal Medicine											X	X	X	X					X	X		X	X		X		7	
Anaesthesia				X			X				X	X	X	X					X	X		X	X		X		9	
Surgery											X	X	X	X					X					X	X		6	
Cardiology											X	X	X	X										X	X		4	
Others											X	X	X	X										X	X		5	
No required			X			X		X								X	X	X	X		X			n/a			9	



# Crisis management and EMS systems

## Role of EMS in crisis management specified by law

COUNTRY	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom	TOTAL
	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	23

## Sub-national crisis preparedness plan

COUNTRY	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom	TOTAL
	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X			X	X	X	X	X	X	X	X	X	24

## International cooperation protocols in EMS

COUNTRY	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom	TOTAL
	X	X	X			X		X	X	X				X	X	X	X	X	X	n/a	X	X	X		X	X	n/a	18

## Crisis Preparedness Plan in Out-of-hospital

COUNTRY	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom	TOTAL
Required by law	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X		X	X	X	X	X	X	24
Obligatory regular testing	X	X		X	X	X		X	X	X	X	X	X	X	X	X	X			X		X	X		X	X	X	21

## Crisis Preparedness Plan in In-hospital

COUNTRY	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom	TOTAL
Required by law	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X			X			X	X	X	X	X	X	22
Obligatory regular testing	X	X		X		X		X	X	X	X	X	X	X	X	X			X				X		X	X	X	18





## The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

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# ASSESSMENT OF EMERGENCY MEDICAL SERVICES SYSTEMS IN THE EUROPEAN UNION

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