# Introduction

The Standing Committee of the Hospitals of the European Union (HOPE) is a nongovernmental European association, which was created in 1966 and since 1995 has been an international association for social gain. It includes national hospital associations as well as representatives from the national health systems of the 15 Member States of the European Union plus Bulgaria, Cyprus, Malta, Romania and Switzerland as observers.

With limited means, the Standing Committee is carrying out its associative mission by information, representation, exchange, study and education. Through the actions of its Sub-Committees on Co-ordination and on Economics and Planning, HOPE is showing the European dimension of health care. By organising the fifth European Health Agora on "Innovations in health management in Europe" on 7-8 October 1999 in Seville (Spain) together with some other European health (care) organisations, hospitals hope to prove again their eagerness to work together in Europe.

This brochure presents briefly the organisation of emergency care and the role of hospitals in it, in the 15 health systems of the Member States of the European Union plus Switzerland. It has been prepared by the Sub-Committee on Economics and Planning and is preceded by a description of the current rights of European patients when moving within Europe. Emergency care has been for a long time a basic concept in this regulation, but this restrictive exception is fading out and came even under pressure, not least by different rulings of the European Court of Justice. For many Europeans needing health care, emergency services will anyway be their first contact with the health care systems abroad. We hope to inform them - and all those prepared to care for them 24 hours a day throughout Europe - better about emergency care in Europe.

HOPE 01.07.1999

# **Obtaining (Emergency) Medical Treatment moving through the EU**

# 1. CURRENT SITUATION: REGULATIONS (EEC) NOS. 1408/71 AND 574/72

- a) To have access to health care and/or obtain reimbursement for such care when moving within the European Union, one has to be covered by the European regulations. It concerns Council Regulation (EEC) No 1408/71 of 14 June 1971 on the application of social security schemes to employed persons, to self-employed persons and to members of their families moving within the Community, as well as Regulation (EEC) No 574/72 of 21 March 1972 laying down the procedure for implementation of Regulation 1408/71. Both regulations have been updated in the annexes of Council Regulation (EC) No 118/97 of 2 December 1996 (O.J. L 38 of 30/1/97). Article 42 (ex-article 51) of the EC Treaty on the coordination of national social security systems forms the legal base of these regulations. These provisions apply exclusively to employed or self-employed workers and - from 1/5/99 - to students who are subject to a social security system or health care organisation (i.e. who meet or met the conditions required by the legislation of a Member State, hereafter called "competent State", to be entitled to benefits) and who are nationals of a Member State of the EU or stateless persons or refugees residing on the territory of a Member State. The Regulation also applies to members of their families and to their survivors (art. 2 Regulation 1408/71). The European Court of Justice considers as "movement" within the Community, in the sense of the Regulations on social security, any movement, even if is not in relation to the profession of the person concerned (CJCE 19/3/64).
- b) To facilitate a temporary stay and access to health care within the territory of the EU, the benefit of art. 22 of Regulation 1408/71 referred to in 1.1.1.b and 1.2. has been extended to *all persons* (*even without professional activity*) who are nationals of a Member State and are insured under the legislation of a Member State and to the members of their families residing with them (new art. 22a of Regulation 1408/71 amended by Regulation (EC) No 3095/95 of 22/12/95, entered into force on 1 January 1996).
- c) Nationals of countries that are not members of the EU, even if they work or reside in the EU, are as hitherto excluded from the scope of application of these Community provisions in the field of social security, except when they are members of the family of a person covered or when they have the status of refugee or stateless person. With a view to modernising and improving social protection in the EU (COM (97) 102), the Commission proposed to amend article 22a in the sense that any person, whatever his/her nationality, who is insured under the legislation of a Member State, as well as the members of his family residing with him should benefit from the same access to health care.

Other proposals formulated by the Commission in 1997 also provide for the inclusion of citizens from third countries in the social security coordination system. This is also true for the draft Council regulation abrogating Regulation 1408/71 (cf. below in 2.4).

# 1.1. TEMPORARY STAY IN ANOTHER STATE OF THE EU

The term "stay", for the purposes of Regulation 1408/71, means *temporary* residence, whereas the term "residence" means *habitual* residence.

## 1.1.1. <u>Reimbursable benefits</u>

Persons falling under the scope of application can be divided into two categories as regards the type of care they are entitled to during a (temporary) stay in another Member State of the EU:

## a) Persons for whom the condition of urgency of treatment is **not** required:

- Pensioners entitled to a pension or pensions as well as the members of their families "receive benefits in kind provided by the institution of the place of stay in accordance with the provisions of the legislation which it administers" (this legislation must notably relate to a branch of social security which concerns them), "the cost being borne by the institution of the pensioner's place of residence" (article 31 (a) of Regulation 1408/71). Hence urgency is not a requirement for these persons to receive treatment during a temporary stay in another country of the EU.
- This is also true for *employed and self-employed persons in unemployment* (as well as the members of their families) who meet the conditions required by the legislation of a competent State to be entitled to benefits in kind and in cash and who go to another Member State to look for a job (for a period of maximum three months) (article 25, 1 a) of Regulation 1408/71).
- Since 1 January 1996, these benefits also apply to *employed or self-employed persons* referred to in the new art. 22b of Regulation 1408/71, *exercising their professional activity in a Member State other than the competent State* as well as to the members of their families accompanying them. They are covered "for any condition requiring benefits during a stay in the territory of the Member State in which the worker is employed".

Let us mention here the particular rules for *frontier workers* (and their families). These workers pursue their occupation on the territory of a Member State and reside on the territory of another Member State (competent State) to which they return in principle every day or at least once a week. They are entitled to benefits in both these countries. Yet, In its article 20 Regulation 1408/71 stipulates clearly that the members of the family of a frontier worker can only obtain benefits on the territory of the competent Institution if there is no agreement between the countries concerned. Moreover, the frontier worker entitled to a pension loses his entitlement to benefits in the country where he pursued his activity, which often entails the forced rupture of a faithful relationship between patient and care provider.

Since 4 October 1997, under the new article 22c of Regulation 1408/71 persons residing in a Member State other than the competent State to pursue *studies or professional training* leading to a qualification officially recognised by the authorities of a Member State, as well as the members of their families accompanying them during the period of residence are also entitled to any benefit which might be necessary during this period, without the urgency of this care having to be determined (art. 1 (3) of Regulation (EC) no 1290/97 of 27/6/97, entered into force on 4/10/97). These benefits are henceforth included in the new article 34 b of Regulation 1408/71 since the adoption of Regulation (EC) no 307/1999 of 8/2/99 (entered into force on 1/5/99), which abolishes art. 22c and extends the application of the social security schemes in general to students.

## b) Persons for whom the condition of urgency of treatment should be met:

Any other person falling under the scope of application of Regulation 1408/71, even without professional activity (cf. 1 b), "whose condition necessitates **immediate** benefits during a stay in the territory of another Member State [...] shall be entitled to benefits in kind provided on behalf of the competent institution by the institution of the place of stay or residence in accordance with the provisions of the legislation which it administers, as though he were insured with it; the length of the period during which benefits are provided shall be governed, however, by the legislation of the competent State" (article 22,1 points a) and i) of Regulation 1408/71).

This category of persons can only use the **form E 111** (cf. 1.1.2.) if their condition is such that they urgently need products or services (medical and dental care, drugs, hospitalisation). It is up to the Medical Council of the institution of the place of stay to evaluate the circumstances of each individual case in order to decide whether the condition of the individual concerned requires immediate care during a temporary stay.

## 1.1.2. Administrative formalities

During a (temporary) stay in another Member State, two situations can occur when a person covered needs care:

- Persons to whom their social security organism (i.e. "competent institution") issued a certificate declaring that they are entitled to services in kind (completed in their own country before their departure) are exempted from any advance on health care costs during their treatment in the country where they reside (art. 20, 21, 31 of Regulation 574/72). If they do not have this certificate, the local social security organism mentioned on the certificate, to whom this document must normally be presented, can apply for it from the competent institution. There are different models of certificates according to the beneficiaries and the type of care required. The form E 111 is meant for pension or annuity recipients for any treatment required and for employed and self-employed workers for any treatment required urgently.
- If these formalities could not be completed before or during his stay, the costs proven by the patient are refunded, at his request, by the competent institution in accordance with the refund rates administered by the institution of the place of stay (art. 34 of Regulation 574/72).

# 1.2. GOING ABROAD TO RECEIVE CARE

## 1.2.1 Regulations (CEE) Nos. 1408/71 and 574/72

Any person (even without professional activity) who is a national of a Member State and is insured under the legislation of a Member State, as well as the members of his family residing with him (cf. 1. a and b), can go to the territory of another Member State to receive appropriate care, at the expense of the competent institution, provided that the latter gave permission in advance. This authorisation, which is granted by means of the **form E 112**, "may not be refused where the treatment in question is among the benefits provided for by the legislation of the Member State on whose territory the person concerned resided and where he cannot be given such treatment within the time normally necessary for obtaining the treatment in question in the Member State of

residence taking account of his current state of health and the probable course of the disease" (art. 22, 1 point c) and 2 of Regulation 1408/71).

"As the expense relating to the treatment in question is the responsibility of the competent institution which gave permission, the institution of the Member State to which the person concerned is authorised to go to receive this care is obliged to provide it given this permission, even if under the legislation which it administers, it is not obliged but would only have the power to grant it" (CJEC of 31/5/79).

If the person concerned does not have the form E 112, the institution of the place of stay can apply for it from the competent institution.

Without such permission and if there is no urgency, the patient retains his right to be treated in another Member State in accordance with the principle of free movement of persons, provided that he defrays the total cost himself. The form E 112 is indeed only required to benefit from the social security cover.

The procedures for obtaining the form E 112 vary from one Member State to another. This also applies to the criteria patients have to fulfil in order to receive permission to be treated abroad.

The granting of the form E 112 may also depend on the way in which patients are insured (private or statutory insurance) as well as on the competent (civil or administrative) courts.

#### 1.2.2. New jurisprudence of the European Court of Justice

When an insured person receives medical products and services in another EU Member State, the Kohll and Decker rulings of 28/4/98 (C-120/95 and C-158/96) have declared any national regulation which makes the coverage of medical products and services eligible for reimbursement subject to prior authorisation contrary to European law (provisions on the free movement of goods and services). This in so far there is none of the *three compelling reasons of general interest* (see below in italics) to justify an infringement of these liberties.

In the Decker ruling (Decker is a Luxembourg citizen) the Court considered that the purchase, without prior authorisation, of a pair of spectacles with correcting glasses from an optician established in another Member State (Belgium) does not involve a *risk of serious damage to the financing or financial equilibrium of the social security system.* In the Kohll ruling (Kohll is also a Luxembourg citizen) the Court concluded that the prior authorisation required by the Luxembourg regulation for provision of orthodontic treatment by a dentist established in another Member State (Germany), outside any hospital infrastructure, was not justified by *public health grounds* either. This questions the validity of the analogue provision contained in art. 22 of Regulation 1408/71 as no litigant has established that this authorisation was necessary to *ensure a balanced medical and hospital service accessible for all*, or that it was indispensable for the preservation of an essential health care capacity or medical competence on the national territory.

The rulings of the Court have, however, not made the use of the form E112 null and void. Alongside this traditional procedure, a new reimbursement procedure has been created for medical products and services delivered abroad without prior authorisation, provided that these products or services are identifiable with an identical "act" in the country of residence and that they are eligible for reimbursement there. The insured person must first take responsibility for advancing the cost and providing proof of

payment. The reimbursement takes then place according to the reimbursement rate of the competent State.

Since the Kohll and Decker rulings, references have been made to the European Court of Justice for preliminary rulings (e.g. by judgments of the *Cour du Travail* in Mons (Belgium) of 9/10/98 and of the *Tribunal d'arrondissement de Luxembourg* of 7/10/98) on *hospitalisation* without prior authorisation in a Member State other than that of the competent institution. The resulting preliminary rulings will be determining for the hospital sector.

# 1.3. REIMBURSEMENT OF EXPENSES BETWEEN INSTITUTIONS

The amount of the benefits in kind provided on behalf of the competent institution by the institution of the place of stay shall be fully refunded. This refund is either provided upon justification of the actual expenditure incurred, i.e. according to the health insurance and maternity rates of the place of stay, or on the basis of the lump sums calculated according to the data in the accounts of the institution which has provided the benefits. In this case the lump sums should guarantee a refund as close as possible to the actual expenditure incurred (art. 36 of Regulation 1408/71 and art. 34 and 93 to 95 of Regulation 574/72).

Refunds are often granted on the basis of average health care cost (per benefit group) in each country, because it is understandable that the competent country is not inclined to pay more for care than it would have done on its own territory (Makarouni A., *op. cit.*, p. 70). Art. 36-3 of Regulation 1408/71 in fact allows Member States to provide other means of refund or to waive all refunds. Some countries have therefore signed agreements on renunciation of the recovery of debts and others have set up a lump-sum based financial flow regulation mechanism (see Hermesse J. and Lewalle H., *L'accès aux soins en Europe. Quelle mobilité du patient?,* Europerspectives, Academia-Bruylant, 1993, p. 31, 42-44).

# 2. FUTURE PROJECTS

# 2.1. HEALTH CARE CARD - SOCIAL SECURITY CARD

Up to now no European health care card (medical data) or social security card (administrative data to facilitate access to health care) has been approved. The Council Conclusions of 29/9/89 recommended that the European Commission should modernise the form E 111 and develop guidelines for mutual recognition of national health care cards to prove the right to immediate health care. Build 7 of the Master Plan for the second stage of the TESS Programme (*Telematic for Social Security*) (1994-1998) deals with the question of the different forms an insured person has to have when he travels to another Member State. This Build raises the question of the possible technologies or methods applicable to simplify and accelerate the *administrative* procedures required for refunding health care provided abroad.

With the same aim, HOPE made a proposal to the European Commission and the authorities of CEN (European Committee for Standardization) concerning a EURO-Patient Card system containing the patient's basic data (name and patient number, name and insurer number), which was approved during its Plenary Assembly held in Luxembourg in 1991.

# 2.2. ELECTRONIC DATA PROCESSING

Since they were amended in 1997, Regulations 1408/71 and 574/72 aim at promoting and developing collaboration between Member States by modernising the procedures required for exchanging information, in particular by adapting the information flow between institutions to telematic exchanges, taking account of the development of the new data processing techniques in each Member State. The main objective of this modernisation is to accelerate the grant of benefits.

To further the use of telematic services for exchanges between institutions of the data required for the application of the Regulations (models of certificates, certified statements,...), documents exchanged electronically will henceforth be accepted in the same way as documents in paper form.

The new art. 117 and ff. of the implementing Regulation 574/72 encourage Member States to gradually establish and use these telematic services in accordance with Community provisions on the protection of individuals with regard to the processing of personal data. The establishment of a Technical Commission with specific responsibilities in the field of data processing under the aegis of the Administrative Commission is also planned.

# 2.3. EMERGENCY CALL NUMBER

In a decision of 29 July 1991 (91/396/EEC) the Council considered that the effect of the various telephone numbers used in the different Member States is to create problems in contacting the responsible services for citizens facing emergency situations in other Member States. The substantial increase in both private and business travel within the Community has created a demand for the introduction of a single European emergency call number.

In 1976 the European Conference of Post and Telecommunications had recommended the use of the number 112 for this purpose. As this recommendation had only been followed by a very small number of Member States, the Council imposed therefore with its decision the introduction of this single emergency call number by 31 December 1992 at the latest, even in parallel to any other existing national emergency call number, where this would seem appropriate. Member States faced with justified technical, financial, geographical or organisational difficulties could communicate a new date for the full introduction of this call number which, however, must be no later than 31 December 1996.

Up to now only Greece has not yet introduced 112 as single European emergency call number, but announced to do so in the course of 1999 (see also *http://europa.eu.int/comm/dg11/civil/112\_en.htm*).

# 2.4. REPEAL OF REGULATION 1408/71 BY A NEW REGULATION

Within the framework of free movement for persons, the European Commission submitted on 21/12/98 a Proposal for a Council Regulation on coordination of social security systems to guarantee within the Community equality of treatment under the various national legislations to the persons involved. These coordination rules must guarantee that persons moving within the Community and their dependants and their survivors retain the rights and the advantages acquired and in the course of being acquired. They would repeal the above Regulation 1408/71. Due to the large differences existing between national legislations in terms of the persons covered, the Commission has again preferred to lay down the **principle that the Regulation applies to all persons** (*even nationals of countries that are not members of the EU*) who are or have been subject to the social security legislation of a Member State.

The articles 16 and 17 contain the general and particular rules concerning (temporary) stay outside the competent State.

Any person insured against the risk of sickness or maternity and the members of his family are entitled to *emergency care*.

All persons pursuing a professional activity or studying in another Member State and all persons insured against unemployment who go to another State to look for a job (as well as their spouses and children) do not have to determine the emergency of care to benefit from it (no change in comparison with Regulation 1408/71).

Article 18 deals with the issue *going abroad to receive there appropriate treatment*. Notwithstanding the Kohll and Decker rulings (cf. above), prior authorisation is always in place.

Hence, the rules contained in art. 16 to 18 of this proposal correspond to those of Regulation 1408/71, except that the condition of being a national of one of the Member States of the EU is repealed for the beneficiaries.

It is, however, probable that the negotiations concerning this proposal will be strongly influenced by the political decisions the Member States will have to take following the Decker and Kohll rulings.

# A - AUSTRIA

### LEGAL BASE

The emergency and ambulance services in Austria are the responsibility of the Federal State. The organisation of the services themselves is the responsibility of the local communities.

### ORGANISATION

With the exception of the community of Vienna, which operates its own emergency and ambulance service, emergency services are not implemented by the communities themselves. They are carried out by recognised emergency organisations commissioned by the local authorities.

Altogether, five organisations are involved in the implementation of emergency and ambulance services. These are the Austrian Red Cross, the Workers' Samaritan Confederation of Austria, St. John's Ambulance Service, the Maltese Cross Hospital Service and the Emergency and Ambulance Service of the City of Vienna. The most important of these in terms of expenditure and number of service providing stations is the nation-wide Austrian Red Cross.

The important sector of emergency services in alpine regions is covered by the Austrian Mountain Rescue Service. This emergency organisation is also organised on the legal basis of an association.

In case of major catastrophes, the technical assistance of the fire fighting services and/or the Federal Austrian Army may also be called on.

The emergency and ambulance services are financed differently in the individual Federal States. On the one hand, the persons conveyed or the relevant providers of health insurance have to pay a charge (based on distance travelled and/or global standing charges) for the services provided. These charges do not, however, cover the costs involved. For this reason, the local communities and the Federal States take on a further portion of the costs ("head quotas"). To a certain extent, donations are also received by the aid organisations. The services provided by voluntary personnel in the emergency services represent a considerable further contribution towards cost containment. Individual providers of health insurance may also claim direct contributions from patients.

## UNIFORM CALL UP SYSTEM • 144 OR 112

The alarm is generally raised by dialling the emergency telephone number of the emergency service (144 or the European emergency number 112, generally via the Red Cross). The emergency guidance office decides on the emergency resources to be deployed. The concept of response time does not exist in laws relating to the emergency services. However, a response time of 15 minutes from notification until the time of arrival at the scene of the accident is considered normal.

## FIRST AID ON THE SPOT

In case of an emergency call up with emergency doctor, at least one emergency doctor and two non-medical assistants are provided.

Non-medical assistants are used in case of emergency call ups without emergency doctor and in case of qualified, emergency valid transport and ambulance operations or ambulance call ups. Some 2,000 motor vehicles and 14 emergency doctors' helicopters are available for emergency operations and for ambulance transport.

## ADEQUATELY EQUIPPED SERVICE

While emergency medical assistance provided from the air via emergency medical helicopters can be described as a nation-wide provision, this goal has not yet been achieved by the ground-based emergency medical services. At present, there are 120 stations designed for these emergency facilities.

#### MANPOWER

With the exception of the Emergency and Ambulance Service of the community of Vienna, which employs exclusively full-time personnel, the other organisations make use of a large proportion of volunteers. Most of the emergency services also use civilian staff.

Doctors themselves are allocated by the hospitals within the community of the relevant emergency station. Non-medical assistants are provided through the relevant emergency organisations or through the Mountain Rescue Service.

A new legal ruling is soon to come into force regarding the training of non-medical assistants (full-time and voluntary). The goal of the new regulation is to create a comprehensive training system, which should guarantee valid training standards (quality assurance) for the whole of Austria.

# **B - BELGIUM**

## LEGAL BASE:

Law of 8 July 1964 as amended by Law of 22 February 1998.

## DEFINITION

Emergency Medical Aid (EMA) means first aid on the spot because of an accident or an abrupt illness or an abrupt complication of an illness and after a call via a uniform call up system, followed by transport to the hospital and admission to a hospital service (art. 1 Law of 8 July 1964 as fundamentally amended by Law of 22 February 1998).

## ORGANISATION

Federal Authority (basic regulation) including provincial committees for EMA – Communities (execution in hospitals).

## UNIFORM CALL UP SYSTEM • 100 OR 112

Uniform telephone call up number of the emergency call centres: "100/112" (art. 1, Royal Decree (R.D.) of 2 April 1965 as amended by R.D. of 10 August 1998).

There are 10 centres by linkup of telephone areas (art. 3, R.D. of 2 April 1965). R.D. of 3 May 1999 imposes a formal contract between the uniform call up system and the ambulance services and all hospital services and functions involved.

## FIRST AID ON THE SPOT

By the doctor/Mobile Emergency Unit (MEU) designated by the officer of the emergency call centre (art. 4 and 4bis, Law of 8 July 1964; art. 2, R.D. of 10 April 1995).

## TRANSPORT

If necessary, the officer of the call centre informs the nearest ambulance service (organised or conceded by public authorities or set up privately but in agreement with the State) having an appropriate vehicle (art. 5, Law of 8 July 1964; art. 7, R.D. of 2 April 1965; Ministerial Decree (M.D.) of 6 July 1998; art. 2, R.D. of 10 April 1995). Fee fixed by R.D.

The MEU (function of a hospital) aims at restricting the response time for people whose health condition presents a real or potential life threatening or a serious member or organ threatening nature. If requested by the officer of the call centre, the MEU must immediately go to the indicated place, provide the required urgent medical and nursing care and see after and care for the patient during his transport to the hospital, possibly indicated by him (R.D. of 10 April 1995). Programming is provided for these MEUs (R.D. of 10 August 1998) and there are licensing standards (other R.D. of 10 August 1998) linking them to the specialised emergency function (see admission).

# ADMISSION AND IMMEDIATE CARE IN THE HOSPITAL

If necessary, the patient must be transported to the hospital designated by the officer of the call centre or by the MEU doctor. This is the nearest public or private hospital having an adequately equipped service linked to the EMA (art. 6, Law of 8 July 1964; art. 6-9, R.D. of 2 April 1965 as amended by R.D. of 10 August 1998 and M.D. of 19 May 1995).

# FREE CHOICE OF THE PATIENT

Starts after the required immediate care has been provided.

# ADEQUATELY EQUIPPED SERVICE

The hospital law of 7 August 1986 provides for a (minimum) function "first admission of emergency patients" in all hospitals without a specialised "emergency" function (reserved to a limited number of hospitals since the Royal Decrees of 27 April 1998). These Decrees also provide licensing standards for both these functions and for the intensive care function which is obligatory linked, together with the scanning equipment, to the specialised emergency function.

# ON DUTY SERVICES

General: on duty services are set up by representative professional associations to guarantee regular and normal provision of health care both in hospitals and at home. The needs are fixed by the medical committee of the province (art. 9, R.D. no. 78 of 10 November 1967).

The basic concept of a general hospital provides for permanent presence of a doctor (art. 4, §1, 4, R.D. of 30 January 1989). Furthermore, some decisions on implementing the hospital law provide for the obligation of organising a specific on duty service.

## MANPOWER

Ambulancemen

Training centre, certificate required (art. 6bis, Law of 8 July 1964 and Royal Decrees of 13 February 1998 and 19 March 1998). Paramedical status in preparation within the High Council for Paramedical Professions.

**Emergency doctors** 

Recognition of a special professional title: M.D. of 12 November 1993.

Emergency nurses

Recognition of a special professional title: M.D. of 16 April 1996.

# D - GERMANY

## LEGAL BASE

Art. 30, 70, 83 of the Constitution ("Grundgesetz") are the basis for the individual legislation of the federal states ("Rettungsdienstgesetze der Länder").

§ 76 Abs. 1 S. 2 of the Social Code Number 5 (Sozialgesetzbuch V - SGB V) defines the constitutional obligation of the doctors ("Kassenärtzliche Vereinigungen") to organise general emergency care.

The individual hospital legislation of nearly all federal states defines that hospitals are obliged to accept patients who have been the subject of an Emergency Medical Service (EMS) response. These patients have precedence over others in hospitals.

## DEFINITION

No formal definition of EMS is specified in the legislation.

Only for hospitals there is a kind of definition in the agreement according to § 112 Abs. 2 Nr. 5 SGB V concerning the organisation of health insurance in Germany. In this agreement the admission of patients to hospital treatment in case of emergency is defined as follows: Every patient is entitled to hospital treatment, if owing to injury, illness or other circumstances he is in danger of life or if a substantial deterioration has to be apprehended when he does not receive hospital treatment immediately (case of emergency). This depends on the circumstances of the individual case and is especially the case when the provision of medical aid is urgent and the help of an established doctor cannot be given in time or would not be sufficient. This also applies to not established doctors (see: § 76 Abs. 1 Satz 2 SGB V). Whenever a patient is taken to hospital by an emergency doctor who is working for the rescue service, the former is entitled to hospital treatment in principle.

The EMS includes the following elements:

-first aid on the spot

–emergency call

-organised emergency care

-transport to the hospital and admission to hospital service.

## ORGANISATION

The organisation of the EMS in each federal state is defined by federal law ("Rettungsdienstgesetze der Länder"). Different forms of organisation are possible, e.g.:

-cities or federal states

–EMS organisations (e.g. Red Cross)

-fire brigade

-private providers.

#### UNIFORM CALL UP SYSTEM • 110 OR 112

The EMS may be activated by any person by means of a telephone call on the EMS number 110 or 112 (or in some federal states: 19222). Calls to these numbers are free of charge. Furthermore, direct telephone lines to the EMS are installed along the super-highways ("Bundesautobahnen") and on federal highways with a (very) high number of accidents ("Bundesstraßen").

## FIRST AID ON THE SPOT

-First aid by non-professionals: the owner of a driving license (classes 1, 3, 4, 5) has to attend a course in "immediate life-saving measures", the owner of a driving license of class 2 (e.g. truck drivers) has to attend a course in "first-aid".

-Organised emergency service: the organised emergency service has the duty to provide care to basic life support level including measures to secure the transportation of the emergency patient. During the transfer the emergency service has to avoid further prejudices to the patient (DIN 13050).

## TRANSPORT

Depending on the situation the transport will be realised with helicopter ("Rettungshubschrauber"), rescue vehicle ("Rettungswagen"), emergency doctor's car ("Notarztwagen"), and ambulance ("Krankentransportwagen"). There are technical standards for each of these means of transport ("Rettungsmittel") as well as standards for the staff.

## ADMISSION AND IMMEDIATE CARE IN THE HOSPITAL

In general all hospitals are obliged to admit patients who have been the subject of an EMS response. That means, in general the hospital will always accept a patient brought in by the EMS. In every case the hospital has to take care of a patient until a hospital is found that is more suitable to take care of this patient, if this would be necessary. The individual hospital legislation of some federal states contains an item on the right of patients to be accepted by any hospital to which they might be transported in case of emergency. These patients have precedence over others in hospitals.

# FREE CHOICE OF THE PATIENT

Free choice of the patient starts once the pre-hospital phase of care and basic in-hospital stabilisation have been completed.

# ADEQUATELY EQUIPPED SERVICE

There are no national standards and specifications for the construction and equipment of emergency admission and casualty departments.

# ON DUTY SERVICES

–EMS, 24 hours a day, 7 days a week

–Emergency ambulances in hospitals, 24 hours a day, 7days a week. ("Notfallambulanz/Notaufnahme im Krankenhaus")

-In duty service depending on the constitutional obligation of doctors ("Kassenärztliche Vereinigungen") to organise general emergency care (§76 Abs. S. 2 SGB V - "Erfüllung des Sicherstellungsauftrags der Notfallversorgung im niedergelassenen Bereich")

## MANPOWER

–Doctors (MD) who are on duty on means of transport for the conveyance of emergency patients are required to have special training and certificates ("Fachkundenachweis Rettungsdienst").

-Emergency assistants ("Rettungsassistenten") who are on duty on means of transport for the conveyance of emergency patients are required to have special training and certificates ("Rettungsassistentengesetz - RettAssG of 10.07.1989").

-Ambulancemen ("Rettungssanitäter") who are on duty on means of transport for the conveyance of emergency patients are required to have special training; an official certificate does not exist ("Grundsätze zur Ausbildung des Personals im Rettungsdienst 520-Std.-Programm").

# DK - DENMARK

# LEGAL BASE

Hospital Law no. 687, 16/8/1995; Law on Health Security no. 509, 1/7/1998; Law on Civil Preparedness no. 1054, 23/12/1992; Government Notice on Ambulance Service no. 987; 06/12/1994.

# DEFINITION

Ambulance assistance is defined as:

• evaluation of the patient's state of health at arrival and during transportation

- •manual transport of patient with stretchers etc.
- basic resuscitation
- support of breathing, supply of oxygen, central personal registration number (CPR)
- anti-chock-treatment and stopping/treatment of bleeding
- stabilisation of broken extremities and spinal column
- acute treatment of torn-off limbs
- •treatment of burns, corrosions and congelations
- •obstetric aid
- basic extrication and firefighting
- •resuscitation with defibrillator
- basic relief of pain and other basic administration of medicine for angina pectoris, asthma and convulsive fit.

## ORGANISATION

County hospital services are responsible for Emergency Medical Care (EMC).

## UNIFORM CALL UP SYSTEM, 112

112 is the telephone number for alarm centres all over Denmark. One is run by the Fire Brigade of Copenhagen covering Greater Copenhagen (1.2 mill. inh.), 40 alarm centres in the rest of the country are run by the local police. The alarm centres will contact the ambulance services, some public (municipalities) and one private (Falck's Rescue Organisation).

## FIRST AID ON THE SPOT

The basic first aid is provided by the ambulance staff or in some counties by a Mobile Intensive Care Unit (MICU) or by a GP with special equipment dispatched by the alarm centre.

## TRANSPORT

The ambulance will normally take the patient to the nearest hospital with an Acute and Emergency Department/ Emergency Ward.

In a few counties systems are being developed for specific transport of special injuries (heart, strokes, burns, traumas etc.) to predesignated hospitals or trauma centres. In case of bigger accidents a doctor at the scene of the accident will indicate the transport destinations.

## ADMISSION AND IMMEDIATE CARE IN THE HOSPITAL

For the time being 71 hospitals have a smaller or larger Acute and Emergency Department (A&E department). A system with restricted admission for self-transporting patients is being developed in most of the counties.

## FREE CHOICE OF THE PATIENT

There is no possibility of free choice as regards hospitals in connection with emergency care.

# ADEQUATELY EQUIPPED SERVICE

There are no national regulations for the levels of Immediate Care at hospitals; it is a political decision of the county.

## ON DUTY SERVICES

Outside working hours GPs are on duty from 4 p.m. to 8 a.m. as well as on Saturdays and Sundays, with their own telephone number. GPs will normally refer patients to the A&E Department in case of more serious illness or smaller traumas for lack of more sophisticated technical equipment.

## MANPOWER

The title of ambulance assistant requires 8 weeks of theoretical and 10 months of practical training.

After a supplementary education of 3 weeks and an examination the ambulance assistant is granted the title of certified ambulance "paramedic", with very restricted authorisation of treatment. (See definition of Ambulance Assistance).

Pre-hospital working MDs are normally specialists in anaesthesiology. There is no specialist certification for pre-hospital work or traumatology. ATLS-courses (Advanced Trauma Life Support) have been introduced in Denmark in 1997.

There is no specialist certification for acute or pre-hospital nurses.

No similar education has been introduced for nurses so far.

# E - SPAIN

## LEGAL BASE

There is no specific Spanish Law about Emergency Medical Care (EMC): Law 14/1986 of 25 April 1986 is the general legal base for health care in Spain. The RD 63/1995 of 25 January makes a distinction between emergency care in primary health care and in hospitals

## DEFINITION

There is no specific definition of EMC.

EMC in hospitals is provided to patients with acute clinical conditions that need immediate care (after which the patient may be admitted to hospital or not). He/she can be sent by the General Practitioners or there may be emergency or vital risk reasons that need diagnostic or therapeutic resources. (RD 63/1995). EMC includes sanitary transportation and first aid on the spot.

## ORGANISATION

The basic health policy legislation is the responsibility of the Central Government and it is up to the Regions (Comunidades Autónomas) to develop it. There are co-ordinating committees with Regional Authorities, Civil Protection and other organisations (Red Cross, Police, Firemen and others). The competencies are transferred to the regions.

# UNIFORM CALL UP SYSTEM • 112 OR 061

In combination with other organisations telephone systems have been developed for emergency situations following the European Guideline. In Spain "112" is the emergencey telephone number (depending on the Autonomous Communities). From this telephone number the sanitary emergency calls are routed to no. 061, which functions in most of the Autonomous Communities (in others it is being installed).

# FIRST AID ON THE SPOT

There is no specific definition in the health legislation. The Uniform Call Up System contacts more adequate devices: ambulance, Mobile Intensive Care Unit (ICU) or Home Emergency Service. First aid is normally provided by ambulances (including GPs and nurses). In some remote accident sites (mountainous regions) it is provided by medicalised helicopters.

## TRANSPORT

Sanitary transportation is included in the National Health Care Service (INSALUD) (RD 63/1995). There are agreements with private companies. There are other organisations (like the Red Cross) with their own transport systems. In some regions there are specific transport systems dependent on the Regional or the Municipal Authorities (as in Madrid). The officer of the Uniform Call Up System informs the nearest ambulance service. A

Ministerial Decree of 7 April 1997 fixes the fees. The Mobile ICUs are manned by specific medical personnel and nurses to provide medical first aid on the spot and see to the patients until they arrive at the nearest hospital centre. RD 619/98 specifies the technical characteristics and personnel and equipment

# ADMISSION AND IMMEDIATE CARE IN THE HOSPITAL

All public hospitals admit patients that have been the subject of an EMC response.

If necessary, the patient will be transported to the nearest public hospital centre endowed with an adequately equipped service. If he requires immediate attention and there is no public hospital with adequately equipped service in the neighbourhood, he may be transported to a private hospital, being refunded by INSALUD. The ambulances are connected with the hospital admission services.

## FREE CHOICE OF THE PATIENT

In the public health care system the patient cannot freely choose the hospital centre.

## ADEQUATELY EQUIPPED SERVICE

There is a Regional Government regulation on standards and specifications for equipped services (resuscitation equipment). Most hospitals are obliged to provide first aid care before the patient is transferred to another hospital or emergency service.

## ON DUTY SERVICES

The Regional Government establishes that hospital and ambulance emergency services are available 24 hours a day, 365 days a year.

#### MANPOWER

Ambulancemen

There is no specific legislation on this profession. Act 619/98 specifies the requirements for them. The auxiliary personnel must have been trained in health.

Emergency doctors

There is no medical speciality for emergencies. Act 619/98 specifies that physicians attending emergency services should be adequately trained in specific resuscitation techniques.

Emergency nurses

There is no nursing speciality for emergencies. Act 619/98 specifies that nurses attending emergency services should be adequately trained in specific resuscitation techniques.

# F - FRANCE

## LEGAL BASE

There are numerous and varied laws and regulations. The most important texts are the following:

Law no. 86-11 of 6 January 1986 regarding emergency medical assistance;

Law no. 87-565 of 22 July 1987 regarding the organisation of public security, the protection of forests against fire and the prevention of major risks;

Decree no. 87-1005 of 16 December 1987 regarding the role and the organisation of the so-called S.A.M.U., which is involved in the service of emergency medical assistance;

Decree no. 95-647 of 9 May 1995 regarding admission and treatment of emergency patients in hospitals.

## DEFINITION

The aim of emergency medical assistance, mainly in relation to the local council and departmental systems of organisation of emergencies, is to ensure that ill and injured people and women in labour, wherever they are, receive the appropriate emergency care.

## ORGANISATION

The organisation of emergency medical care includes the departments participating in the emergency medical care service, called the S.A.M.U., public hospitals, the services of GPs on duty, medical transport, various services related to the Minister of the Interior (public security, fire service, police emergency, radio communication network), the national police force (gendarmerie) and private organisations, the main ones being, the Red Cross and the National Federation of Civil Protection.

Co-ordination depends on the departmental committee for emergency medical assistance and medical transport. The participation of the contributors is determined by agreement. The S.A.M.U. has the following mission:

1° to ensure permanent medical telephone reception;

2° to determine and to put into action, as quickly as possible, the best possible response according to the nature of the calls;

3° to check the availability of public or private hospitalisation adapted to the condition of the patient whilst respecting freedom of choice, and to ensure the preparation of his/her admission;

4° to organise, if necessary, transport to a public or private hospital by calling a public service or a private firm for medical transport;

5° to see that the patient is admitted (article 3 of decree 87-1005).

# UNIFORM CALL UP SYSTEM • 15 OR 112

The single telephone number "15" is almost completely generalised; it is reserved for the administration of post and telecommunication as a "special health number" (the European "112" is also functioning). The "15" centre for reception and routing of calls (CCRA), normally installed close to the S.A.M.U's secretary, allows the public or private regulating doctors (médecins régulateurs) to decide on the appropriate actions and who should take them.

Those who carry out medical transport must be authorised to do so. Medical transport is considered as: "any transport of an ill or injured person or of a women in labour for care or diagnosis, on medical prescription or in case of an emergency, carried out with ground, sea or air transport adapted for this" (article L.51-1 of law no. 86-11).

"When participating in emergency medical assistance the public authorities first of all call on certified companies" (article 7 of law no. 91-1406).

## ADMISSION AND IMMEDIATE CARE IN THE HOSPITAL

Admission of ill and injured people 24 hours a day is the principal and specific function of the public hospital service. The patient's freedom of choice is nonetheless respected.

# FREE CHOICE OF THE PATIENT

"The organisation of the centre of reception and regulation of medical calls guarantees the professional independence of the practitioner and the patient's freedom of choice, provided that he / she is in a fit state to express it" (article 15 of decree 87-1005).

## ADEQUATELY EQUIPPED SERVICE

A hospital can only receive the authorisation to establish an accident and emergency department if it has certain departments including at least resuscitation, general or internal medicine, a cardiovascular department, paediatrics, anaesthesia-resuscitation, orthopaedic and visceral surgery and gynaecology (decree 95-648 of 9 May 1995 regarding the technical conditions for functioning, which hospitals must meet in order to be authorised to admit, care for and treat emergency patients).

# ON DUTY SERVICE

The Emergency Medical Assistance Services (S.A.M.U.) function 24 hours a day, as do hospitals with accident and emergency departments.

## MANPOWER

The mobile units for emergency medical assistance and care that hospitals have include one or several teams made up of: doctors, junior doctors, medical students, state registered nurses, ambulance drivers with the required certificate of proficiency.

# **GB - UNITED KINGDOM**

#### LEGAL BASE

UK NHS Acts concerning the provision of comprehensive health care.

### DEFINITION

**Emergency Admissions** 

An emergency admission occurs when, for clinical reasons, a patient is admitted at the earliest possible time after seeing a doctor. (The patient may or may not be admitted from an Accident and Emergency (A&E) Department. Emergency admissions can be from a waiting list.)

#### **Urgent Admissions**

An urgent admission is a type of emergency admission where the admission is delayed for hospital/patient reasons and the patient's condition is such that that he/she is not clinically compromised or disadvantaged by a short delay. An example of an urgent admission is a patient who attends for an outpatient appointment at which the doctor decides there is a clinical need to admit the patient within the next few days. (If the patient is not already on a waiting list he/she is not placed on it for the duration of the (short) delay. Urgent admissions can be from a waiting list.)

#### **Emergency Treatment**

Emergency treatment may be given by a general practitioner or at a hospital A&E Department for clinical reasons, after which the patient may or may not be admitted to hospital.

#### ORGANISATION

Emergency services are mainly provided by the NHS. Private hospitals do not normally provide A&E services and tend to operate on an elective basis.

## UNIFORM CALL UP SYSTEM • 999 OR 112

In the UK "999" is the emergency telephone number for police, fire and ambulance services. The European Emergency number 112 is functioning as well. When an ambulance is needed the telephone operator switches the caller to an ambulance control centre, which sends the ambulance.

## FIRST AID ON THE SPOT

It is normally provided by ambulance/paramedic staff to the extent of their training. It may also be provided by medical staff (including GPs) and nurses. In some remote areas general practitioners have radio communications to assist in notification and attendance at accident sites.

## TRANSPORT

The NHS provides emergency ambulance service round the clock. This will include air ambulances for the Highlands, islands offshore and other remote areas. The ambulance service has targets for emergency response times.

Emergency service ambulances (as opposed to patient transport ambulances for outpatient department and day hospital appointments, etc) are equipped with resuscitation equipment and are manned by two trained personnel. There is increasing use of qualified paramedics to staff ambulances.

# ADMISSION AND IMMEDIATE CARE IN THE HOSPITAL

Admission and immediate care is the responsibility of the NHS. Private hospitals do not generally deal with emergency. Admission may be through the A&E Department or direct to a hospital ward or department: many hospitals have admission for this purpose.

# FREE CHOICE OF THE PATIENT

This may be exercised after immediate care and on clinical advice.

# ADEQUATELY EQUIPPED SERVICE

Not all NHS hospitals are designated as major trauma centres or have an A&E Department with access to the necessary skills and equipment. Most hospitals, even smaller hospitals, are able to provide "first aid" care, if necessary before a patient can be transferred by ambulance to a hospital with an A&E Department.

# ON DUTY SERVICES

NHS hospital and ambulance emergency services are available 24 hours a day, 365 days a year.

## MANPOWER

Specialist Consultant in Accident and Emergency Medicine. Registered medical practitioner.

Registered first or second level nurse/nurse practitioner. Recognised ambulance paramedic gualification.

# **GR - GREECE**

#### LEGAL BASE

The modern era of pre-hospital care in Greece began in 1989 when the Emergency Medical Services System (E.M.S.S.) was created and became operational. The legislative framework (L. 1579/1985 and L 376/88 of the EMSS is not very flexible to permit innovations.

#### ORGANISATION

The EMSS consists of two independent branches: the ambulances and hospital emergency care.

Each branch of EMSS was developed in different administrative environments. They have different structures and administrative cultures. The ambulances and staffing of EMSS belong jointly to E.K.A.B. (National Centre of Emergency Care), to the hospitals and also to the Primary Health Care Centres (PHCC).

The decision-making power of the above mentioned organisations varies from urban to rural areas and sometimes within rural areas as well. The administrative organisation of the hospital depends on its size and location.

The district departments of EKAB do not have their own managerial responsibilities, but depend on decision-making by the central department, which is located in the capital (Athens).

## UNIFORM CALL UP SYSTEM • 166 OR 199 - 100

In Athens and Salonica the emergency telephone number is 166 or 199. In the rest of the country it is 100. The European emergency number 112 is expected to be operational in the course of 1999.

## FIRST AID ON THE SPOT

There is no specific plan of ambulance distribution within the region and district areas, and as a result there is an increase of patient waiting times. In the capital the average time is 10.5 minutes and in other areas it varies between 20 to 40 minutes.

#### TRANSPORT

There are two types of ambulances, one without medical equipment, and the other group with special mobile units with high technology medical equipment and staff for advanced and basic life support. These special mobile units are only operating in the capital and in Salonica and staff includes a doctor, nurses and paramedics. The simple type ambulance can be converted to a special mobile unit with provision of mobile medical equipment. In rural areas only 20% of ambulance transfers are emergencies.

# I - ITALY

## LEGAL BASE

DPR 27/3/92 (Act of Policy and Co-ordination to the Regions for Establishing Emergency Medical Care).

Guideline no.1/96 (The Emergency / Acute Care System).

## DEFINITION

The Emergency/Acute care system is constituted by:

1) An Alarm system; 2) A territorial system of emergency medical care; 3) A network of services and hospital structures.

The methods of reply are based on: 1) Points of first aid; 2) Hospital first aid; 3) Departments of first and second level emergency/acute care (Chapter on Organisation of the Emergency Medical Care System of Guideline no.1/96). For the definitions also refer to the D.M. 15/5/1992 (Criteria and requirements for the codification of emergency interventions).

## ORGANISATION

The Regions and the Autonomous Provinces issue regulations or regional laws for the organisation of their own territorial system of emergency care on the basis of the national laws. The institution of a Regional medical committee for emergencies is provided for in the guidelines.

# UNIFORM CALL UP SYSTEM • 118 OR 112

There is a single national telephone number "118", which directs the calls to an operational centre of referral, usually provincial. Calls to the European number 112 (Police) are transferred to the 118 centres. Some regions have not yet activated their operational centres (e.g. Campania, Umbria and Sardinia); they are in the process of instituting their operational centres.

# FIRST AID ON THE SPOT

The operational centre represents the mainspring of the alarm system. It unites the territorial and hospital structures and establishes links with other operational centres and with other institutions involved, both public and private.

The guidelines define the location of the operational centres and their functions, which include reception and evaluation of the calls, activation and co-ordination of the assistance (this presumes knowledge of the availability of hospital beds, the location of the doctors on call, sites of first intervention and first aid, the departments of 1st and 2nd level emergency/acute care as well as the distribution of the mobile units of assistance.)

## TRANSPORT

The guidelines also define the typology and the personnel on board the mobile units offering assistance (ambulances for standard care, ambulances for advanced care, unit for advanced care, mobile centre for intensive care, helicopter ambulances.). It is to be noted that for the standard ambulance and for the advanced care ambulance the possible presence of a doctor is decided by the Regional Programme. The above mentioned units are activated following procedures previously established by the operational unit. The units may belong to the local health authority, the Italian Red Cross or another body operating within the National Health Service.

## ADMISSION AND IMMEDIATE CARE IN THE HOSPITAL

In case of necessity the patient is transferred to the nearest hospital emergency care unit or to a hospital chosen by the operational centre, on the basis of the treatment required or the availability of hospital beds.

The hospital emergency units carry out the role of admittance and guarantee emergency/acute care; the department of emergency/acute care, defined as a functional aggregation of operative units, guarantee rapid and complete hospital assistance to the emergencies.

# ADEQUATELY EQUIPPED SERVICE

Hospital first aid departments and departments of 1st and 2nd level emergency/acute care are established and organised following the regional programme on the basis of the national laws which tend towards a complete restructuring of the hospital network (D.L. no 502/92 and successive amendments; L. 549/95; L. 537/93; National Health Plan, etc.)

## MANPOWER

Operational centre: medical personnel (medical staff who have undergone an appropriate period of formation managed by the director of the operational centre; doctors on call who have followed a specific regional course according to the D.P.R. 41/91); nursing personnel (professional nurses who have followed the formation in "triad" managed by the director of the operational centre).

Mobile units: standard ambulances (driver/ambulanceman and a professional nurse or a voluntary helper with adequate preparation); ambulances for advanced care (driver/ambulanceman and a professional nurse with specific preparation verified by the director of the operational centre); unit for advanced care (with nursing staff and doctor on board chosen from the personnel assigned to the operational centre) mobile centre for intensive care (driver/ambulanceman, two professional nurses and an intensive care doctor / anaesthetist); helicopter ambulance (an intensive care doctor / anaesthetist and professional nurses).

# **IRL - IRELAND**

## LEGAL BASE

The legislative basis for the provision of all health services in Ireland is contained in the *Health Act, 1970. Section 57* of that Act states that:

"(1) A health board (regional health authority) may make arrangements for providing ambulances or other means of transport for the conveyance of patients from places in the board's functional area to places in or outside that area or from places outside the functional area to places in that area.

(2) In making arrangements under this section, a health board shall act in accordance with the directions of the Minister (for health)".

There is no other specific legislation governing Emergency Medical Services (EMS) or health transportation.

## DEFINITION

There is no formal definition of EMS specified in law. However, the *Report of the Review Group on the Ambulance Service* (December 1993) forms the basis of current Irish Government policy on the development of ambulance services and EMS generally. Developments in recent years have been along the lines recommended in the Report of

Developments in recent years have been along the lines recommended in the Report of the Review Group.

## ORGANISATION

Ambulance services have been organised on a regional basis since the early 1970s.

## UNIFORM CALL UP SYSTEM • 999 OR 112

Emergency medical assistance may be activated by all persons by means of a telephone call on either the national emergency services telephone number (999) or the European emergency number (112). Calls to these numbers are free.

Calls for emergency services (police, fire, sea rescue, etc) are made to the 999/112 numbers. EMS calls are routed to the appropriate regional ambulance control centre by the telephone operator.

Ambulance calls are received by trained ambulance personnel, generally at the regional ambulance control centre. In regions that have not yet completed the move to centralised command and control of ambulance services, calls are taken at hospital level.

The regional ambulance control centres operate under the auspices of the regional health board.

# FIRST AID ON THE SPOT

Response is generally by emergency ambulance equipped to the national ambulance standards, staffed by emergency medical technicians trained to the national standards, providing care to basic life support level including advisory defibrillation. The Irish ambulance services do not presently operate a service where patients are given advanced care at the scene of the incident. Training programmes for such a service are currently under development.

The appropriate response to a call for EMS is mobilised by the ambulance controller receiving the call.

National standards and specifications for the construction and equipping of emergency ambulances are in existence. These closely follow the draft standards for ambulance vehicles and their equipment currently being prepared by working groups of the European Committee for Standardization (CEN).

### ADMISSION AND IMMEDIATE CARE IN THE HOSPITAL

All public hospitals that operate an accident and emergency service are available to receive patients that have been the subject of an EMS response. Hospitals do not, generally participate in the pre-hospital management of the patient. In general, the hospital will always accept a patient brought in by the ambulance service.

## FREE CHOICE OF THE PATIENT

Starts once pre-hospital phase of care and basic in-hospital stabilisation have been completed.

#### MANPOWER

Depending on regional arrangements, ambulances are staffed by a combination of trained ambulance personnel, nurses trained in accordance with national ambulance standards or fire fighters trained to national standards.

# L - LUXEMBOURG

## LEGAL BASE

Act of 18 November 1976 concerning the organisation of civilian rescue (CR) and Act of 27 February 1986 concerning emergency medical care as well as the implementing regulations.

## DEFINITION

The emergency medical service aims at providing injured or sick people with rapid and qualified emergency care at any time.

## ORGANISATION

a) Intervention of the S.A.M.U.

The S.A.M.U. (Medicalised Ambulance Service / 1 June 1989) is sent in order to assist emergency patients at home or on the public road, whose life is in peril (1st degree urgency). Intervention of the S.A.M.U. automatically entails the intervention of the ambulance of the nearest firs-aid centre.

b) Intervention of the GP

A complementary system has been set up to assist emergency patients at home, whose life is not in danger but who need an urgent diagnosis and/or rapid medical treatment (2nd degree urgency).

When sick or injured people cannot get to their family doctor or the doctor of their choice, they can call on a certain number of GPs, consultants and dentists designated by the association of physicians and dentists. Injured or sick people should do so either via the call centre of the CR emergency service (C.S.U.) or via the "duty hospitals".

Contrary to doctors-anaesthetists-resuscitators of the S.A.M.U., the GPs do not intervene under constraint. This means that, if a doctor cannot follow up the request of the C.S.U. 112, the latter will ask another doctor. The GP intervenes alone to assist an emergency patient whose life is not in danger, if he/she is at home. If necessary, the doctor will call on the S.A.M.U. or the ambulance only.

Together with the S.A.M.U. the GP intervenes to assist emergency patients at home or on the public road whose life is in peril, if they are at a distance of more than 15 km from the stand of the S.A.M.U. The C.S.U. 112 will apply to a GP from the town or village nearest to the emergency. If the GP of the sector's on duty service can get there within the same time, the C.S.U. 112 will first ask him

## UNIFORM CALL UP SYSTEM • 112

Calls are routed by the officers of the emergency service (phone no. 112). The CR Direction will see to it that the officers of the C.S.U. 112 receive the appropriate instructions required for applying the routing guidelines as soon as the emergency medical care service starts operating.

The officer of the CR emergency service immediately sends an ambulance of the competent public ambulance service and, if necessary, also a mobile unit of the emergency medical care service to the emergency site.

Calls for transport of an emergency patient to a hospital are to be made to the call centre of the CR emergency service.

In exceptional cases such as catastrophes the officer of the CR emergency service can call on ambulances belonging to the army or to private or public or state-approved institutions.

The officer tells the ambulance driver to which "duty hospital" the emergency patient must be transported. The ambulance driver may only take the emergency to another hospital when the doctor who provides the first aid asks him in writing to do so. This doctor has to check in advance whether the hospital in question is in a position to take charge of the emergency patient.

# FIRST AID ON THE SPOT

Ambulances can be sent alone to assist public road emergency patients whose life is not in danger and transport them to the "duty hospital".

The ambulancemen will call on the S.A.M.U. when they establish on the spot that the victim's health condition makes immediate medical or surgical care necessary.

## TRANSPORT

• CR ambulance • Ambulance of the professional fire service • Medicalised ambulance (SAMU) • Air rescue (helicopter, aeroplane)

Drivers of CR ambulances are voluntary agents. They are holders of a first-aid worker's or ambulance driver's certificate and are initiated into the handling of radios and standards used by the CR. The ambulanceman that carries out the transport must be holder of an ambulance driver's certificate delivered by the CR Direction or a title declared equivalent by the Minister for Health on the Home Secretary's advice.

The ambulances of the fire service are conducted by professional firemen trained for emergencies. The S.A.M.U ambulance is manned with a doctor anaesthetist.

# ADMISSION AND IMMEDIATE CARE IN THE HOSPITAL

The emergency service is ensured by rotation between hospitals equipped with an emergency service in conformity with the prescribed norms, so that in the three hospital regions a hospital will be ready to receive emergencies at any time. This hospital is called «duty hospital».

# FREE CHOICE OF THE PATIENT

Within the framework of the emergency service, injured or sick people are not entitled to call on doctors other than those on duty. The patient is than free to choose his attending physician after having received the necessary care.

## ADEQUATELY EQUIPPED SERVICE

Luxembourg Regulation of 29 August 1979 establishing the standards to be met by institutions that take part in the emergency service.

## ON DUTY SERVICE

Ministerial Regulation of 4 February 1976 concerning the on duty service for doctors on Saturdays, Sundays and holidays.

## MANPOWER

• Hospital doctor • S.A.M.U. doctor anaesthetist • Nurse anaesthetist • Nurse • First-aid worker - ambulance driver • First-aid worker - rescuer

# NL - THE NETHERLANDS

## LEGAL BASE

The Ambulance Transport Act regulates the transport of sick people and victims of accidents using ambulances. The act was published in 1971 and entered fully into force in 1979. Ambulance transport is the part of health care that deals with:

-the transport of sick people, and;

-the provision of emergency aid.

The ambulance sector is budgeted on the basis of a norm budget which is re-calculated, taking into account the degree of urbanisation of the region (3 classifications) covered by the ambulance service as well as whether it is a private or a public service. There are different tariffs for declarable and first aid drives (the Healthcare Tariff Act is applicable here).

The Act on the Quality in Healthcare Institutions is applicable to the ambulance transport. The law has only global standards; it leaves the assessment and supervision largely to the responsible institutions.

## ORGANISATION

The ambulance sector has been organised at a national level since the early 1980s. It consists of a network of 35 Central Posts for Ambulance transport (CPA) (1996). In certain regions the CPA operates in combination with the fire brigade, from which the operational steering takes place. Every CPA operates several ambulance services (1996: 122 in total). Three-quarters of the ambulance services are private and one quarter are public services (1996). Every ambulance service has 1 or more stands from which the ambulances are called out (1996: 213 in total). The stands are located in such a way that, in case of emergency, the destination can be reached in principle within 15 minutes. The provinces determine where the stands are located; this is fixed in the deployment plan. The number of ambulances is fixed by the Provincial Executive and a license is required for ambulance transport. The license is tested against the deployment plan.

# UNIFORM CALL UP SYSTEM. 112

Calls for an ambulance are routed to the CPA by telephone. The attending telephone operator determines whether transport is necessary and/or to which extent urgency is required.

## TRANSPORT

A difference is made between some five ambulance transfers (the total is higher than 100% because there is some overlapping):

- 1. Declarable transfer (some 85% of the total number): transfer carried out by order of the CPA, transport for a victim/patient being indicated.
- 2. First-aid transfer (some 9% of the total number): ambulance transfer carried out by order of the CPA with the intention of providing assistance and/or transport of one or more victims / patients, after examination or assistance on the spot has made it clear that the victim needs to be transported.
- 3. Stand-by transfer (less than 1% of the total number): at the request of a third party, the CPA orders to temporarily locate an ambulance at a place where there is an

increased risk of incidence of accidents or other emergencies requiring ambulance assistance.

- 4. Conditions creating transfer (some 5% of the total number): transfer carried out by order of the CPA, the ambulance heading to a certain place from where it can reach an emergency case within 15 minutes.
- 5. False transfer (some 4% of the total number): ambulance transfer carried out by order of the CPA with the intention of transporting a person, but later it appears that transport is no more indicated.

## ADMISSION AND IMMEDIATE CARE IN THE HOSPITAL

There are no legal rules for emergency aid. Emergency aid is provided on the basis of internal and external agreements with other hospital departments, ambulance services and care providers. Yet, at present the authorities strive to more regulation. Regional medical officials are now being designated within this framework.

## MANPOWER

The ambulance cars may only be manned by drivers and nursing staff (the attendants) in possession of an ambulance driver's or ambulance nurse's certificate or being trained for this via SOSA education (SOSA = Foundation for Education and Training of Ambulance Staff (decision of 29 July 1994). The training must be completed successfully within 4 years after commencement of employment. Both must also be in possession of a valid driving licence. For the drivers, the SOSA education includes an assisting part beside the transport technical part. The driver must also have a valid first-aid diploma (this requirement is dropped as soon as the person in question has obtained the ambulance driver's certificate).

In 1997, when the Act on the Professions in Individual Medicine was introduced, a functional autonomy was attributed to the ambulance nursing staff in regard to a certain number of reserved acts. The acts may also be performed when the physician is not present.

# P - PORTUGAL

## LEGAL BASE

In 1981, Decree no. 234/81 established the National Institute of Medical Emergency (INEM) whose main objective is to provide an Integrated System of Medical Emergency (SIEM) that will ensure to victims of accidents the prompt and correct health care they need.

This SIEM includes several institutions: INEM, hospitals and health centres, police (PSP), fire brigade, Portuguese Red Cross and the National Guard (GNR).

Decree no. 287/93 created the Commission of Emergency Health Planning (Comissão de Planeamento de Saúde e Emergência). This Commission's objective is to contribute to the definition and permanent updating of health emergency policy and civil planning.

# DEFINITION

SIEM is a set of extra-hospital, hospital and interhospital means and actions with the active intervention of the various components of a community. It is designed to promote fast and efficient actions with the highest economy of means in situations of disease, accidents, catastrophes in which the delay of adequate measures, diagnosis and therapeutics can bring grave risks to the patient.

The definitions of an urgent and an emergency patient are contained in the report of the National Commission on Urgency Reorganisation, which was approved by the Minister for health in 1996. *Emergency* relates to a clinical situation, which arises suddenly and where the failure of one or more vital functions is established or imminent.

*Urgency* relates to a clinical situation, which arises suddenly and may be more or less severe including situations in which there is a risk of failure of one or more vital functions.

# ORGANISATION

The Centre for Orientation of Urgent Patients (CODU) for the Lisbon area was inaugurated in 1987. Since then the emergency calls are received by teams of medical doctors especially trained in emergency, in a central operations unit. These doctors also ensure correct routing and medical advice by phone, correct management of means and quick access of patients to the right hospital. Nowadays, there are also CODUs in the Porto and Coimbra areas which cover 4.3 million inhabitants. In the rest of the country, a cooperation agreement has been concluded between INEM, PSP and the fire departments, which are presently the headquarters of 250 medical emergency posts.

In the areas of Lisbon, Porto and Coimbra there are also 9 medical teams working with medicalised vehicles for emergency resuscitation (VMER).

Accident and emergency care is organised both at regional and national level (see below).

# UNIFORM CALL UP SYSTEM • 112 OR 115

Emergency care is activated by free telephone calls. The service number used is mainly the European emergency number 112; no. 115 and special road telephones can also link callers to the system.

Ambulance transportation to a hospital is carried out according to the clinical situation of the patient and within pre-established geographical areas.

Where VMER is used, there will be a telephone check of vacancies for special facilities.

Medicalisation of aid and transportation is assured by VMER, whose staff has been prepared to act in situations of extreme urgency.

In Lisbon and Porto there are two medicalised helicopters with medical personnel (doctor and nurse) whose mission is to transport emergency patients from the peripheral health units to central hospitals and/or provide aid in remote places. The transport system for conveying high risk newborn children is located in Lisbon, Porto and Coimbra. It guarantees coverage at national level and carries out the transportation of newborn children that need treatment in neonatal intensive care using ambulances and teams specialised in neonatal care.

## TRANSPORT

The regional call centres are situated in "Police Stations" (PSP and GNR) and the emergency calls concerning clinical situations are switched to CODUs where these exist (Lisbon, Porto and Coimbra).

The standard considered adequate in the above-mentioned report for the response time was one hour between the emergency situation and the arrival at a hospital capable to stabilise vital functions.

The skill levels of ambulance staff varies: in the VMER there are medical doctors, in other ambulances the staff may have received special training by INEM, enabling them to perform the immediate care required (first aid).

# ADMISSION AND IMMEDIATE CARE IN THE HOSPITAL

The Portuguese health system is structured in Health Units, and there is a plan for the urgency services depending on the medical specialities.

The SIEM refers the patients to the adequate services.

# FREE CHOICE OF THE PATIENT

In the big urban centres Lisbon, Porto and Coimbra the patients are referred to the hospital of their area of residence according to their pathology. Although in theory there are catchment areas for the health centres and hospitals, the Portuguese have the right to choose the institution where they want to be treated.

## ADEQUATELY EQUIPPED SERVICE

The types of urgency are referred to two different hospital levels. In each region, there are several first level medical/surgical urgency hospital services, and at least one second level, more sophisticated urgency hospital service. The emergency visit is free for patients, except for a fixed fee of 5 Euro with separate fixed fees for analysis, X rays and other diagnostic procedures. For a third party the price of the visit is 43 Euro.

Hospitals are responsible for the payment of ambulance transportation of urgent patients.

# ON DUTY SERVICES

The National Health Service hospital and ambulance services are available 24 hours a day, everyday of the year.

## MANPOWER

Emergency services are manned by a consultant physician, a registered medical practitioner, a registered nurse and trained ambulance staff.

# S - SWEDEN

## LEGAL BASE AND ORGANISATION

Sweden is divided into 24 County Councils (regions). They, and some cities, are responsible for all health care in Sweden. Only a small percentage of health care is private. Each county is economically and politically independent of the government in health care matters.

The hospitals are local, regional or university hospitals.

A County is responsible for financing health care for its inhabitants whenever they need acute medical care.

## UNIFORM CALL UP SYSTEM • 112

One number (112) is used to reach all emergency services e.g. ambulances, police, fire departments, coast guard etc.

The company that runs 112 is called SOS Alarm AB and is owned by government (50%), community of county councils (25%) and federation of cities (25%). Finance is managed by charging the different organisations according to services called on.

SOS Alarm AB is also financed by provided other services e.g. burglary alarms, fire alarms, information and 24 hours distance monitoring.

SOS Alarm AB has, by agreement, the possibility to use all ambulances in Sweden if necessary.

## ADMISSION AND IMMEDIATE CARE IN THE HOSPITAL

All hospitals are obliged to admit and treat all persons staying within their area. Financing must not be an obstacle for treatment. It can be cleared later.

Each acute hospital and some local medical centres are responsible for having acute teams ready to be sent to the scene of an accident. This team can consist of a doctor and two or three nurses trained in acute medical care.

## MANPOWER

Knowledge and preparedness to work at the scene of an accident is important. The National Board of Health and Social Welfare (SoS) supports county councils in sending medical personnel to courses in acute medicine, primarily for working in the disaster area. There are more and more courses that concentrate as well on the hospital with its problems of managing resources, press, relatives as well as managing the problem of co-ordination between hospitals.

SoS has for some years been working on a system for management of acute health care in war. This includes the use of common and separate military and civil resources.

This has led to the development of a common system for managing health care resources and needs in the event of catastrophes and mass injuries.

# SF - FINLAND

## LEGAL BASE

The legislative basis for the provision of emergency health services and ambulance services in Finland is contained in two separate laws - the Public Health Law (1972) and the Specialised Health Care Law (1989) - and in the separate Act on Ambulance Services (1994).

The first law stipulates that the local authorities must organise all the health care services including the first aid services on the territory of that authority. Chapter 3 of the law especially deals with the responsibility to organise and maintain the ambulance and rescue services (except airborne and similar rescue facilities on which there is a separate Act 1993/1051).

The second law also deals with rescue services (chapter 1) and the responsibility of the hospital district to provide all accident and emergency (A&E) care for all who need it regardless of the area of residence, home country or referral (chapters 1 and 6). It also stipulates that the hospital district (as owner of public hospitals in the district) must provide the transport of the patient to the other care facility if this appears to be necessary.

The separate Act on Ambulance Services (1994/565) contains definitions and explains the tasks of the different parties (health centre, hospital district) and the quality standard of the services.

# DEFINITION

Definitions concerning ambulance services are contained in the Act (first aid, ambulance services in general and at primary level as well as special (intensive care) levels. The definition of the emergency patient is contained in the Law (patient without referral and specified admission time and in need of immediate care) and further specified in the Definition of Concepts by the Association of Finnish Local and Regional Authorities.

# ORGANISATION

Ambulance services are organised by the local authorities themselves or by contracting with private ambulance firms. The health centre decides on the standby level. The health centres and hospital districts must inspect and supervise the services. At present 16 health centres take care of the ambulance service themselves, 56 are contracting with the public fire brigades and the rest with private service providers (350).

Accident and emergency care is mainly organised on a regional basis so that increasingly only one hospital unit in the region offers 24-hour services. This is motivated by economic reasons and with a view to the quality of the services. Also some large local health centres might have night emergency (jour). They take care of certain emergency situations based on the agreement between the centre and the hospital. The centralised night emergency service starts generally at 10 p.m. and ends at 8 a.m. However, different regions may have different kinds of arrangements. Usually the price of an emergency visit is more expensive for the purchaser (local authority) than an ordinary visit. For the patient the visit costs ECU 17 and the possible consecutive bed days ECU 21. For the patient the emergency transportation is free of charge.

# UNIFORM CALL UP SYSTEM • 112

Emergency transportation and care can be ordered and activated by free telephone calls. The main service number is at present the European emergency number 112 but all call centres also have reserve numbers. Today all calls are received through 112.

The regional call centres co-ordinate and transmit the calls to the ambulances or fire stations. In cities the average response time from the call to the start of the emergency treatment on the spot or transport of the patient to the hospital is short. However, there are no national waiting-time standards.

# FIRST AID ON THE SPOT

The ambulance unit will provide emergency care before transportation. If there is a physician in the ambulance, all necessary treatment and advanced care can be provided on the scene of the incident and during the transport within the limits of the skills and ambulance facilities. Also ambulances staffed with paramedical personnel - such as firemen - can provide certain treatment depending on the permission given by the chief physician of the local health centre.

There are also five ambulance helicopters with medical personnel including a physician per one million of inhabitants. These are intended for fast calls from remote places or places that are difficult to get to by ambulance- like the archipelago.

## TRANSPORT

The ambulance can first transport the patient to the local health centre but the ambulance staff have to decide on the right place of treatment. In obvious cases the patient will be transported directly to a hospital. The ambulance, the regional call control centre and health centres and hospitals are connected to a centralised phone communication system and they can inform each other on the patient's situation and problems during the transportation mission.

# ADMISSION AND IMMEDIATE CARE IN HOSPITAL

Not all hospitals take A&E patients. Only hospitals and health centres with emergency facilities or departments will take them, and this does not always occur. Usually there is a regional or city-wide plan of emergency services with a time schedule. All ambulances are informed of them.

The physician working in the A&E department decides on whether to admit a patient or send him or her somewhere else. Both health centres and hospitals may have A&E facilities. Hospitals do not operate emergency ambulances but only those for patient transport from the hospital to other facilities or hospitals. However, the hospital takes part in the pre-hospital management of the patient.

The number of A&E visits, which had increased in 1994 and 1995, is now levelling out. In '94 the increase was about 3.5% and a year later about 8%. The number of patients admitted in wards from the A&E department had also increased in '94 and '95 but is also stabilising now.

# FREE CHOICE OF THE PATIENT

The patient cannot choose the hospital or health centre providing first aid and basic inhospital stabilisation. Usually patients keep to the initial care provider, although in theory they can choose the place of treatment later amongst the private care providers or express their will to be sent to a hospital located outside their area of residence.

# ADEQUATELY EQUIPPED SERVICE

By law the health centre physician must accept the ambulance before it can be used for the service. The physician ambulances now already have rather high standards, and some of them have facilities for telemedicine and remote diagnostic.

All units with A&E service should have at least one physician.

## MANPOWER

The training status and skill levels of the ambulance staff vary. Usually there are two persons in the car with at least some level of paramedical education and, if necessary, also a nurse and/or a physician. The staff of an ambulance for non-urgent patient transport may be limited to the driver. The training status and resources depend on the condition and need of the patient.

# **CH - SWITZERLAND**

## LEGAL BASE

National: none Cantonal: diverse/none

# DEFINITION

Emergency Medical Care (EMC) includes a call up system, first aid on the spot, transport to the hospital and admission into a hospital service (emergency chain). (It does not include the non-urgent medical visit at home.)

## ORGANISATION

Different ambulance service organisations –Public –Private –Attached to hospitals

## UNIFORM CALL UP SYSTEM • 112 OR 144

Medical emergency call no. 144 and since 98.01.01 European general emergency call no. 112.

## FIRST AID ON THE SPOT

By the doctor and/or the ambulance crew.

# TRANSPORT

The MICU (Medical Intensive Care Unit) aims at restricting the interval without therapy for people whose health condition presents a real or potential life threatening or a serious member or organ threatening nature. The MICU must immediately go the place indicated by the officer, provide the required urgent medical and nursing care and see after and care for the patient during his/her transport to the hospital. Licensing standards are being prepared.

# ADMISSION AND IMMEDIATE CARE IN THE HOSPITAL

If necessary, the patient must be transported to the hospital designated by the officer. This is the nearest public or private hospital having an adequately equipped service.

## FREE CHOICE OF THE PATIENT

Starts after the required immediate care has been provided.

## ADEQUATELY EQUIPPED SERVICE

No legal standards up to now (but directives by the Swiss Rescue Association). Licensing standards "emergency service" are being prepared.

# ON DUTY SERVICES

General: on duty services set up by representative professional associations to guarantee regular and normal provision of health care both in hospitals and at home. The basic concept of a general hospital provides for permanent presence of a doctor.

### MANPOWER

- •A*mbulancemen:* Training centres up to paramedical status. Recognition by the Swiss Rescue Association.
- *Emergency doctors:* Special professional title by the Swiss Red Cross in collaboration with the Swiss Rescue Association and Medical Society.
- •Official paramedical profession and diploma by the Swiss Red Cross in preparation.