

Ambulance care in Europe

Introduction

Ambulancezorg Nederland is the number one sector organisation for ambulance care in the Netherlands. The organisation offers various types of support to the 24 Regional Ambulance Services (RAVs) and the professionals who work there. It also promotes the collective interests of the sector.

Ambulancezorg Nederland considers it important to extend its horizons across borders. Not only with a view to developments within a European framework and internationalisation in general, but also with regard to the continual improvement of the care provision. After all, we can learn a great deal from one another in an international context.

The basis of international activities is formed by an international network. Extending that network is therefore an important objective of Ambulancezorg Nederland. For this reason we develop English-language information material about Dutch ambulance care, to inform our international partners about ambulance care in the Netherlands.

We also developed a questionnaire and send it to partner organisations in Europe. The intention of this survey was to collect information about ambulance care in the different European countries. To understand more about the ambulance care in Europe ourselves and to share this information with our partners.

In this report we present the information we received from 10 countries. We appreciate their effort to participate in this survey. We consider it as a first step to share information between European partners in ambulance care. We hope that this information will inspire organisations in other countries to share their information with us. So please consider this document as an invitation to contact us or send us information about ambulance care in your country. We will extend this report if we receive new information.

You can find this report and the questionnaire on our website: www.ambulancezorg.nl/english

For more information about the report and the questionnaire, you can contact mrs. M. Hoogeveen, programme manager Ambulancezorg Nederland (m.hoogeveen@ambulancezorg.nl)

Ambulancezorg Nederland
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1. Ambulance care in Austria

1. General characteristics

Austria spreads about 83.700 square kilometers with approximately 52.600 sqkm of alpine regions (mountains). Approximately 8 million people live in Austria permanently. There is no single figure about budgets and financial figures for ambulance services due to the complex system of financing the services and regulating it. An estimated 400 millions euro is spent annually for ambulance services. Ambulance service in this survey is used synonymly for the services of Emergency medical services, ambulance services and patients transport services.

2. Financing

Communities (cities, towns and villages on the one hand and regions on the other hand) are financing the readiness of the system and standby-costs (approx. € 110 millions). Mandatory social insurances in Austria are partly covering the costs of treatment and transportation in a tariff-system (approx. € 170 millions). The rest is covered by donations.

3. Legislation

Austria is a federal republic with 9 regions (Bundesländer) and 84 districts and 2.357 communities (cities, towns and villages). The Austrian constitutional law regulates, that the communities are responsible to provide ambulance services for their citizens on their own (like Vienna) or by contracting a humanitarian aid organization (rest of the communities).

The regions (Bundesländer) are entitled to set ambulance (and disaster relief) acts for their region.

The Austrian social insurance act regulates the mandatory health (and other social) insurance for citizens via their employer or relatives. It also states, that health insurance can cover costs for Ambulance service according to the statutes of the 22 social insurances. Actually the law regulates that the patients can be reimbursed for the costs of ambulance services. In fact, ambulance providers in Austria have contracts with the insurance companies to bill them instead of the patients themselves.

4. Availability and spreading of ambulance care

In Austria a total number of approx. 2.500 ambulances (HEMS not included) is in service.

Approximately 700 of them are in service on an 24/7 basis. There is no legal regulation about the response time of ambulance services in Austria. The Austrian Red Cross as leading provider of Ambulance services in Austria regulated in internal documents that 95% of the emergency sites in a year must be reached within 15 minutes after the emergency call.

5. Regional Ambulance Services and dispatch centre

Based on the regional laws the regional governments are recognizing organizations in their region as approved ambulance service provider. In Vienna (capital) the EMS is provided by the municipal ambulance service of the city of Vienna in cooperation with 4 NGOs (Red Cross, Samaritans, St. Johns, Matese). In the other 8 regions in Austria the EMS is mainly organized by the Austrian Red Cross (approx. 95%). Also Samaritans (approx. 4%) and St. John's (two villages) provide EMS.

Ambulance and patients transport services are provided by the Austrian Red Cross, Samaritans, St. John's, Maltese (all NGOs) and some private, commercial companies (with the Green Cross the biggest of them).

Dispatch centres are operated by the EMS-providing organisations (in 6 regions) or by the regional administrations in cooperation with the EMS services (in Vienna, Lower Austria and the Tyrol). Dispatch centres are usually EMS-only centres (one region has an integrated DC EMS and fire services). EMS-services are available with a nation-wide (location based) emergency number 144. The Euro-Call 112 is rerouted to the police services in Austria. Police, fire services and EMS centres are interconnected to each other.

6. Distinction between emergency transport and ordered transport

In Austria there are four categories of emergency-response. The categories are determined by the EMS-dispatch centre either with a formalized, standardized procedure or informally.

1. Life-threatening emergencies responded by a MICU or a HEMS. There is an emergency-doctor, a paramedic, a driver (mostly also paramedic) and equipment based on EN 1789 Type C. Approximately 170.000 of these emergencies are served annually.
2. Non-life-threatening emergencies responded by an EMS-vehicle. There are two paramedics and equipment based on EN 1789 Type B. Approximately 450.000 per anno.
3. Ambulance service for immobile patients responded by an ambulance. There are two ambulance persons and equipment based on EN 1789 Type A1. Approximately 2.200.000 per anno.
4. Patients transport services for mobile patients responded by a specially equipped ordinary car. There is one ambulance person and equipment based on a national norm Type A0. Approximately 800.000 per anno.

7. Ambulance personnel

- Approximately 59.000 persons are working in the sector.
- Approximately 50.000 volunteers and about 5.000 paid staff is working for ambulance services.
- Approximately 4.000 young men serve as alternative servants for a period of nine months (of which three months is training) in the ambulance services.

8. Training and skills

Austria has a physicians based EMS. All MICUs and HEMS are staffed with emergency physicians. Ambulance personnel is regularly trained and retrained to the stages:

- Rettungssanitäter (ambulance person)
- Notfallsanitäter (paramedic)
- Plus Notfallsanitäter can obtain special skills like venous access, intubation or medication.

There is mandatory retraining in the use of defibrillators and other topics (for 16 hrs per 2 years).

9. National guidelines and protocols

There is no national, legal protocol. The guidelines of the Austrian Red Cross (for BLS and ALS based on the ERC-guidelines) is being accepted by all organizations and by Austrian courts.

10. Cooperation with other partners

General practitioners are included in the EMS in most rural regions. In most remote regions (outside the 15-minutes isochrone) we facilitate "First-Responder"-systems of our trained volunteers. And, of course, EMS is working closely with hospitals and their providers to make sure, that patients receive the medical care they need to survive (like trauma centres, stroke-centres, PTCA-centres, burn-centres).

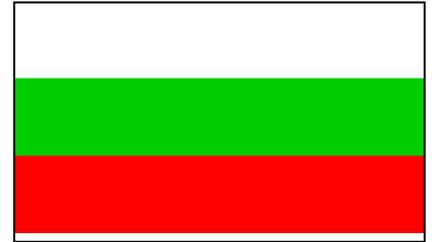
Police and Fire Brigades (also mostly voluntary in Austria) are the closest partners of EMS on a daily basis and during large-scale-accidents and disasters as well as public authorities from the regions.

More and more the Austrian Red Cross is also organizing psycho-social-emergency-services for

affected persons. It is quite common nowadays that EMS-crews are requesting PSS-teams for the relatives of the patient, they were treating and transporting to hospital.

11. Branche organization

There is no publicly authorized organization responsible for the ambulance service sector in Austria due to the wide-spread legal competences as shown above. The Austrian Red Cross is the largest provider of EMS and Ambulance service in Austria. Please contact the Austrian Red Cross by: gerry.foitik@roteskreuz.at.



2. Ambulance care in Bulgaria

1. General characteristics

In Republic of Bulgaria the medical care is done by system of emergency medical care.

The system of emergency medical care is organized during the period 1994-1996.

In Bulgaria, ambulance care (system of emergency medical care) is financed through the State budget. For 2008 the planned budget for the system is BGN 74 962 610 (€ 38.347.500,00).

2. Financing

The citizens in Bulgaria receive a basic package of health services which are guaranteed:

- By the budget of the National Health Insurance Fund
- Guaranteed through the health insurance contributions established by the Health Insurance Act.

Outside the scope of the compulsory health insurance, the Bulgarian citizens receive medical services that are associated with medical help in emergency situations and are funded from the budget.

3. Legislation

Establishing, financing, the structure itself and the operation of the system of emergency medical care are regulated by the Law on Health, Law on medical facilities, Rules of Procedure of the Centres for emergency medical care and Decree № 25 from 04.11.1999 on the provision of emergency medical care.

4. Availability and spreading of ambulance care

The system is structured with 28 medical Centres for emergency care in all 28 regions in Republic of Bulgaria and 192 branches for emergency medical care. These branches are structural units at each centre and their number depends on the size of the territory/area/region. The emergency medical centres for healthcare and also the branches for emergency medical care are organized in the way which satisfies the needs of the population of the region concerned.

The purpose of the system of emergency medical care is to meet 100 percent of the population needs for urgent medical care. A national criterion for the time of arrival of the team for emergency medical care to patients doesn't exist. In the bigger towns there is aspiration that the time of arrival to be limited to 10-20 minutes. In rural and mountainous areas the arrival of the teams depends on the relief and climate terms.

The system of emergency medical care is equipped with 675 sanitary vehicles (ambulances) which are used for providing emergency medical care and about 350 spare vehicles/ambulances, which are designed for transport of patients with chronic hemodialysis and transport of deceased persons in accidental death, occurred in public place.

5. Regional Ambulance Services and dispatch centre

The activity is organized in 28 centres for emergency medical care. The process begins with receipt of the call in the so called Regional coordination headquarters, which are situated in the 28 centres for emergency care. The Regional coordination headquarters are a kind of dispatch/monitoring centre, which receives, handles calls and assess the need to send a team of emergency.

6. Distinction between emergency transport and ordered transport

Receiving of calls in Regional coordination headquarters is conducted in two parallel paths:

- Through telephone 150 and
- Through a single European emergency number 112

In 2007 are received and handled 866.678 calls. Through the Centres for emergency care is organized emergency medical transport of:

- Urgently sick patients from the place of accident to the treatment facility for hospital care and
- Transportation of patients from one treatment facility for hospital care to another with greater opportunities for diagnosis and treatment. This is the case when the state of the patient is defined as urgent and is required escort of a staff, responsible for reanimation services.

Assessment of the need for emergency transport is determined by the team, responsible for emergency medical care and the chief of the clinic/medical establishment which is situated in the hospital for hospital care. The Centres for emergency medical care are responsible for the organization of the transport of the patients with chronic hemodialysis from their home to the centres for hemodialysis and vice versa.

7. Ambulance personnel

In the Centres for emergency medical care are employed:

- 7113 people, including 526 medical and non medical staff who perform administrative functions
- and also 6587 persons involved in providing emergency medical care.

In the Centres for emergency medical care, the medical services are provided by doctors and medical professionals (nurses and paramedic/doctors assistant) which are organized in reanimation teams, emergency teams and travel teams. Each team has non-medical personnel (such as driving staff) trained under certain conditions to help doctors and medical specialists.

The total number of teams is:

- 372, including- 87 reanimation teams, 250 emergency teams and 35 transport teams.

8. Training and skills

Training/education of doctors, which are employed in the system of emergency medical care, is carried out under Decree N^o 34 of 29.12.2006 on the acquisition of speciality in the health care system.

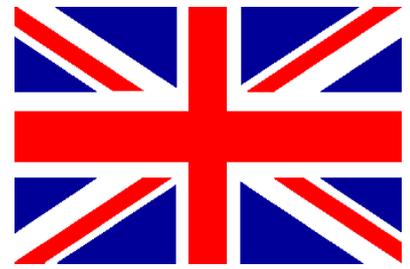
Training of medical specialists is carried out through programs that are individual for each centre for emergency medical care. The Program aimed to train medical professionals is approved by the director of the Centre for emergency medical care. Physician's staff of the centre for emergency medical care plays a leading role in applying urgent/emergency medical care to patients in the place of the incident and during the transportation to the hospital for hospital care.

9. National guidelines and protocols

The level and quality of medical care in emergency situations, which is given by the teams of the Centres for emergency medical care is governed by methodological guidelines for behavior in emergency situations.

10. Cooperation with other partners

The activity of the centres for emergency medical care regarding urgent situations such as disasters and major industrial accidents, or serious car accidents and others is done in close cooperation with the appropriate emergency services – The National Medical Coordination Centre, Fire department, The police, The road police and the divisions of the Ministry of Emergency, as well as the National Civil Protection Agency.



3a. Ambulance care in England and UK

1. General characteristics

Department of Health public spending on the National Health Service (2007). This is total revenue spending plus capital spending minus depreciation

07-08 estimated outturn: £89.568bn (of which £3.316bn capital spend)

08-09 plan: £96.213bn (of which £4.567bn capital spend)

NB: Department of Health gave 52% of its capital budget back to the Treasury in 2005-06 – capital budget was originally £4.411bn. 2007-08 plan for capital has been revised downwards by about £2bn.

2. Financing

Health care including ambulance care is funded by the public through the taxation system.

3. Legislation

-

4. Availability and spreading of ambulance care

At May 2007, there were approximately 1,721 ambulance vehicles (including 286 for Yorkshire Ambulance Trust – December 2006 data) covering 11 UK Ambulance Trusts. The data has not been obtained for the outstanding 8 Ambulance Trusts/health regions in the UK. Ambulance services are organized by Ambulance Trust regions and there are 19 Ambulance Trusts in the UK which provide emergency access to healthcare.

In England, when the public calls for an emergency ambulance and it is an emergency which is immediately life-threatening, the ambulance must reach the patient within 8 minutes of the call being connected to the control room. If the calls are serious and are not life-threatening, an ambulance response must be given within 19 minutes of the call being connected to the control room.

5. Regional Ambulance Services and dispatch centre

There are 19 National Health Service Ambulance Trusts in the UK. (There are also private ambulance organisations in the UK). The National Health Service Ambulance Trusts are publicly organised.

The number of dispatch centre/ambulance stations in the UK is not available. This information has to be obtained from the Ambulance Trusts who have a number of stations which dispatch ambulance vehicles.

6. Distinction between emergency transport and ordered transport

In England, when the public calls for an emergency ambulance and it is an emergency which is immediately life-threatening (*category A call*), the ambulance must reach the patient with 8 minutes of the call being connected to the control room in 75% of cases.

If the calls are serious and are not life-threatening (*category B call*), an ambulance response must be given within 19 minutes of the call being connected to the control room in 95% of cases.

In 2007-08, the total number of emergency and urgent calls, under revised definitions from 1st April 2007 was 7.2 million. Of these, 5.9 million calls (81%) resulted in an emergency response arriving at the scene of the incident. (This information is for England only).

7. Ambulance personnel

Qualified ambulance staff: 17,028 – average annual increase of 1.3% since 1997.

Decrease in numbers of 10.7% 2005-06; ambulance support staff increased by 24.1% in the same period. In terms of the category of ambulance personnel, this will include paramedics, technicians, call handlers, emergency care assistant, emergency care practitioners, emergency medical dispatchers, patient transport services controller, management and administrative staff.

8. Training and skills

Detailed information is available via the website NHS Careers –by the following link <http://www.nhscareers.nhs.uk/amb.shtml>.

9. National guidelines and protocols

Ambulance services in England follow guidelines set by the Department of Health. Its work includes setting national standards, shaping the direction of health and social care services and promoting healthier living. The professional standards for ambulance paramedics are set by the Health Professions Council.

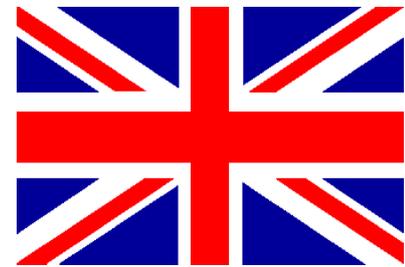
10. Cooperation with other partners

The ambulance service is moving towards greater working partnerships with the wider health sector and social care sector to improve patient care. For example, Ambulance services have set up internal processes to identify and support vulnerable patients including those with dementia, which involves multi-agency partnerships across health and social care boundaries.

Ambulance services also undertake multi agency working on a number of training exercises to tackle a variety of major incidents which could occur, eg flooding, toxic chemicals spillage, response to terrorist attacks.

11. Branche organization

The Ambulance Service Network represents NHS ambulance Trusts work at a policy level rather than on operational issues which are dealt with by specific Director Groups within the ambulance services. Contactperson: liz.kendall@nhsconfed.org



3b. Ambulance care in South East Coast Ambulance Service NHS Trust (Sussex, England)

1. General characteristics

The 2009 Managed Expenditure for Healthcare in Total in the UK amounts to £119billion. Ambulance Care in specific amounts to £20 billion which is 17% of total Healthcare Costs. South East Coast Ambulance in particular has an annual turnover in 2009/10 of £155m which is made up of:

A&E Contract Income:	£137m
Patient Transport Services:	£10m
NMET Funding:	£ 2m
Other (HART/RTA/Etc) :	£ 6m

2. Financing

The total cost of Healthcare provision in the UK is funded predominantly through systems of taxation.

<u>Tax</u>	<u>Source of Revenue</u>
Income Tax	28%
National Insurance	20%
Value Added Tax	13%
Excise Duties	9%
Corporation Tax	7%
Council Tax	5%
Business Rates	5%
Other	<u>13%</u>
	100%

The total Government Receipts in 2009 totalled £496 billion with Ambulance Care costs approaching £20 billion. Out of SECAMB's total of £155m as suggested above almost £145m is funded through the Department of Health to the Strategic Health Authority who then fund the commissioning Primary Care Trusts for our areas. Other income is generated through Service Level Agreements with a number of Acute Trusts, Mental Health Trusts and Primary Care Trusts for example SECAMB currently operate 21 Service Level Agreements with various organisations for the provision of Non Emergency Patient Transport Services generating over £10 million.

3. Legislation

The Department of Health (DoH) governs legislation on Healthcare including Ambulance Trusts. Ambulance Service reforms, performance targets are set by the DoH. www.dh.gov.uk

The Healthcare Commission was a non-departmental public body sponsored by the Department of Health. It was set up to promote and drive improvement in the quality of healthcare and public health in England and Wales. It aimed to achieve this by becoming an authoritative and trusted source of information and by ensuring that this information is used to drive improvement. The Commission was abolished on 31 March 2009 and its responsibilities in England broadly subsumed by the **Care Quality Commission**.

Legislation may be influenced by:

The Ambulance Service Network (ASN) was established as part of the **NHS Confederation** to:

- provide a strong and independent voice for UK ambulance services
- help ambulance services work more closely with the rest of the NHS and other key stakeholders in health and social care.
- Influencing policy and practice on behalf of our members to transform emergency and urgent care.
- Supporting ambulance services to develop and deliver integrated and seamless services across health and social care through partnership working.
- Raising the profile of ambulance services through our work with commissioners, policy makers and key stakeholders.
- Championing the role ambulance services play in improving patient care.
- Sharing best practice through briefings, seminars and events. (www.nhsconfed.org)

The British Paramedic Association (College of Paramedics) www.britishparamedic.org
Health Professions Council (HPC) www.hpc-uk.org

4. Availability and spreading of ambulance care

- The total number of ambulances in 2007/2008 is around 300 Frontline Ambulances and 153 Patient Transport Vehicles
- Emergency Frontline Ambulances are available 24 hours a day and 365 days a year. Our operational rosters are constantly reviewed to meet the needs of a changing community and environment e.g. we have shift patterns covering 0700 – 1900, 1900 – 0700, 0800 – 2000, 1200 – 2400, 1400 – 0200 and variations of.
- SECAmbs routine transport shifts are also designed to cover current trends and demands from primary and secondary care trusts and are constantly under review.
- The strategic positioning and availability of emergency vehicles is aided by Computer Aided Dispatch (CAD), Mobile Data Terminals (MDT) and Airwave Radio. These systems work in conjunction with AMPDS.

Emergency (A&E) ambulances

Frontline emergency ambulances with a crew of two, one of which should ideally be a paramedic, respond to the majority of 999 emergencies and GP urgent calls. The service operates about 300 front-line ambulances and is constantly up-grading the fleet, including the latest vehicles equipped with tail-lifts.

Single Response Vehicles (SRV)

SRVs are usually single-manned by a Paramedic Practitioner, Paramedic or EMT. They are used for making initial assessments of patients and situations and where extra help is needed quickly. They can be in a car, 4x4 vehicle, motorbike or even a bicycle.

Paramedic Practitioners (PP)

Paramedic Practitioners are paramedics who have undertaken extra training. They are able to thoroughly investigate a patient's condition, social situation, etc and then make an informed decision about the correct way to progress their treatment.

Helicopter Emergency Medical Support (HEMS)

We have air support from three helicopters. They can be asked to assist at any incident where they might be needed such as inaccessible terrain or where a very fast evacuation to hospital is preferable to an ambulance journey by road. One helicopter, [H900](#), is operated jointly with the police and the other 2 are provided by [Kent Air Ambulance Trust](#)

Critical Care Paramedic (CCP)

SECAmb was the first UK Ambulance Trust to develop Critical Care Paramedics. They are qualified paramedics who have undergone additional specialist training and education to work in a critical care environment (i.e. within the Critical Care Network in the acute sector). Working alongside doctors, CCPs are able to treat patients suffering from major injury or trauma, providing intensive support and therapy ensuring that they are taken rapidly and safely to a hospital that is able to treat their complex conditions.

Emergency Medical Support

We enjoy support in this area from two voluntary organisations - [SIMCAS](#) and [BASICS](#). Both utilise doctors who have completed specialist training to enable them to help patients in the pre-hospital situation. They are mostly GPs with a special interest in this subject. Although they are only used occasionally, they are invaluable when a doctor's skills are needed.

Community Responder Schemes

These are mainly members of the public who have been trained by the service to "hold the fort" until the ambulance arrives but may also be off-duty members of staff or colleagues from another emergency service. They are able to deliver treatments that are time-critical (where seconds count) such as defibrillation. There are several schemes across our area and they have been an enormous success with many lives saved to their credit.

5. Regional Ambulance Services and dispatch centre

There are 12 Regional NHS Ambulance Services in England, South East Coast (SECAMB) being one of the largest. There are also a large number of private ambulance services in England and the South East that are contracted to cover routine patient transport. SECAMB also has a private ambulance sector which also covers private functions and events, such as motor racing, horse racing, music festivals and airport transfers. There are also Voluntary Services both nationally and within SECAMB's area under the banner of St. John's or The British Red Cross.

SECAMB currently have 3 Emergency Dispatch Centres, covering the legacy areas / counties of Sussex, Surrey and Kent which now make up the South East Coast Ambulance *Service*.

6. Distinction between emergency transport and ordered transport

Emergency or 999 calls

Almost all emergency calls are dealt with by a 'blue-light' response. The only exception to this is where we have been asked to make a discreet approach for clinical reasons or where we are satisfied that there is no immediate clinical urgency. (See Category C below.) H M Government (through the Department of Health) sets standards and targets for each ambulance service to achieve. 999 call are sub-divided into three categories.

Category A

Category A calls are those life-threatening conditions where the speed of response may be critical in saving life or improving the outcome for the patient, e.g. heart attack, serious bleeding, etc. Every effort is made to get a responder to these incidents as quickly as possible. Ideally this would be an ambulance every time. However, on some occasions (particularly in outlying areas) a first responder will be dispatched whilst an ambulance is traveling to the call.

A first responder might be a member of staff who has made themselves available outside of normal working hours or a member of a Community Response Scheme. All such responders are trained to deliver life-saving skills e.g. defibrillation, pending the arrival of the ambulance.

Category A standard: 75% of all Category A calls should be reached within 8 minutes of the call being made. If the first response is not a fully-crewed ambulance then an ambulance should arrive within 19 minutes.

Category B

Category B calls are those conditions which need to be attended quickly, but which will not deteriorate or suffer by a slightly slower response. These calls take precedence over any call time except those in Category A. Category B standard: 95% of Category B calls should be reached within 19 minutes.

Category C

Category C calls are non life-threatening conditions. These are generally assistance calls in which someone needs help - perhaps to get up following a fall where no injury has been sustained - or where a minor or non-clinical issue is the prime cause for the call. Although the Service will always try to help and at least give appropriate advice, it should be remembered that Category C calls may not warrant the attendance of the ambulance service.

Urgent

An urgent call can only be requested by a doctor (usually a GP) or a midwife. The response is tailored to each individual patient's need as determined by the doctor requesting the ambulance. It is important to appreciate that although the patient is often termed an 'emergency admission' as far as the hospital is concerned, it is not necessarily dealt with as a 999 call by the ambulance service. In other words a doctor may arrange an 'emergency admission' to hospital but give the ambulance service two hours or more to carry out the journey.

The standard is to get 95% of patients to the hospital within 15 minutes of the time specified by the doctor when booking the ambulance.

Routine calls

Are booked days, or even weeks, in advance. They are usually carried out by Patient Transport Services of the Trust although occasionally an emergency ambulance may be involved. These calls are generally for taking people to and from out-patient or day hospital patients when no other method of transport is possible.

- Annual Responses for 2008/09 are around 500,000
- Emergency Calls and 450,000
- Non-Urgent or Routine Calls (**SECAMB**)

7. Ambulance personnel

In **SECAMB** around 85% of the workforce is operational, clinically trained, from a total for the region of around 3000 staff.

8. Training and skills

Paramedics, Paramedic Practitioners and Critical Care Paramedics are educated through the Higher Education System at a selection of Universities in the South East of England. Paramedics obtain a Degree in Paramedic Practice or Paramedic Science. Entry to these courses is either through the direct pathway or via in service route. Staff from other Ambulance Trusts will undertake a similar education route; generally in their own area / region. Some nurses are employed as Directors and Assistant Directors and nurses may also work as practitioners in the operations directorate.

All staff are required to undertake in-house training on a yearly basis and are responsible for providing evidence of their own Continuous Professional Development.

More detailed information may be found on the following sites:

www.nhscareers.nhs.uk/amb.shtml

www.sgul.ac.uk

www.surrey.ac.uk

www.sussex.ac.uk

www.herts.ac.uk

SECAmb work very closely with doctors and specialist consultants. A medical director is employed within our Clinical Directorate and we also have specialist advice and guidance from honorary medical directors on all clinical practice e.g. paediatrics, coronary care. General Practitioners work closely in the mentoring and education process for Paramedic Practitioners. Doctors will work alongside a paramedic on HEMS. Please refer to question 4 for reference to BASICS and SIMCAS doctors.

9. National guidelines and protocols

Guidelines are directed by the Department of Health which not only sets the standards for emergency care, but, also shapes future strategies on the nations health through social care, care of vulnerable adults and children and healthy living strategies. The ambulance service has a large part to play in these policies and strategies through it's own procedures and strategies.

The guidelines and protocols are set at *national level*, although there are *some regional differences* e.g. taking blood samples. Guidance on clinical issues are directed by the Joint Royal Colleges Ambulance Liaison Committee (JRCALC) www.jrcalc.org.uk

The Health Professions Council is responsible for the professional standards and code of conduct of paramedics. All paramedics must be registered with the HPC in order to practice and are randomly audited on there practice and continuous professional development.

The British Paramedic Association provides professional guidance on clinical practice and curriculum development. This is currently a voluntary membership for paramedics with an annual registration fee.

10. Cooperation with other partners

SECAmb works very closely with all healthcare professionals and other agencies including other emergency services. With the education and development of our own staff, particularly into the practitioner role we have been able to take more health care to the patient in the home allowing the elimination of unnecessary journeys to hospitals. Patients can be referred directly to other departments avoiding the traditional route through A&E Departments.

Some members of other emergency services are volunteers as community first responders forming part of **SECAmb's** Responder Operations Network. These volunteers will administer life saving skills, including defibrillation, until professional back-up arrives. In the event of major incident or national emergency SECAmb liaise with all emergency services (fire, police, coastguard), military, hospital departments, trauma teams and voluntary organizations.

SECAMB are involved in the development of Hazardous Area Response Teams (HART) www.ambulancehart.org this is a national directive and involves teams of specially trained staff who respond to incidents involving maritime rescue, urban search and rescue, CBRN and tactical firearms. We also have paramedics who work alongside the police in the public order unit and we are responsible for training the police medics in this area. SECAMB has also formed many partnerships and collaborations with other countries.

11. Branche organization

The Ambulance Service Network as part of the NHS Confederation works on and develops policy issues. Director of the ASN – liz.kendall@nhsconfed.org and www.nhsconfed.org

SECAMB's contact: International Development Manager malcolm.finn@secamb.nhs.uk
www.secamb.nhs.uk



4. Ambulance care in Estonia

1. General characteristics

The Estonias' measure is over 45 000 square kilometers and its population is about 1.340 602 (as of 1 January 2008).

- The budget for ambulance care is 420 million EEK (approximately 27 million euro).
- The overall health care budget is 12,6 billion EEK (approximately 0.8 billion euro) in 2008

2. Financing

Ambulance services is financed from the state budget. Everyone in Estonia (citizens as well as temporary residents) are entitled to receive emergency medical care without any additional payment and regardless of their actual insurance coverage by the sickness fund.

3. Legislation

The Health Services Organization Act (which entered into force 2002) establishes the regulatory framework for all HC service providers and services in common, as well as for ambulance care. The owner of the ambulance crew must hold an Health Care Board (HCB) license and may be a limited liability company, a foundation or a state or local government rescue service agency. HCB is responsible for purchasing and administration of ambulance services and concludes contracts with service providers. The overall requirement in law is that there must be at least 1 ambulance brigade to 15 000 inhabitants. The organization of the ambulance care is of state (central government) responsibility – i.e. state (HCB) is obliged to provide service by itself or find a private contractor who has the license and means (a car, equipment, personnel) to provide the service.

4. Availability and spreading of ambulance care

- The total number of ambulances in 2008 is 90.
- An ambulance network covers all Estonia and provides accessible services to all people. Access to ambulance services is regulated by the Ministry of Social Affairs. According to regulations, one ambulance crew is required per 10 000 – 15 000 residents.
- All ambulances are available 24 hours a day, 7 days a week.
- The ambulance crew provides emergency medical care on the bases of a dispatch order received from the call centre. The call centre is the governmental institution under the Ministry of Interior. The criterion for the availability is fixed by the management contract public made between the HCB and service provider. In this contract it is established standards of availability.

5. Regional Ambulance Services and dispatch centre

Estonia has 15 counties and ambulance network covers all counties. Service is not limited by county border. There are 24 ambulance owners and the total number of ambulances is 90.

All service providers except the one in Tallinn, in capital, are private.

These private bodies (23) are owned or organized by the local / central government directly or through the hospitals local government or central government own. In that case the hospitals are organized as private bodies as well. So the owner is public. Only one ambulance service provider belongs to the private owner.

In Estonia there is 1 dispatch centre organized via 4 regional offices.

6. Distinction between emergency transport and ordered transport

In Estonia there are 4 priorities for emergency services and ambulance transport:

- *A (alfa)* – applies the cases that are not life-threatening, patients condition is not urgent. The ambulance must be on site within 2 hours after the emergency call comes in.
- *B (bravo)* - applies the cases that are not life-threatening, not urgent, or call comes from person who has not information about patient's condition. If there are not same time calls C or D, the ambulance must be on site as soon as possible, but not later than 1 hour after the emergency call comes in.
- *C (charlie)* – applies the cases when the patient's condition is pure and may be life-threatening. The ambulance must be on site after 4 minutes.
- *D (delta)* –applies to life-threatening situations. The ambulance must be on site after 1 minute.

The average number of emergency medical care care visits per year is approximately 250.000. Non serious visits of them which do not require immediate intervention are 70%.

7. Ambulance personnel

At the end of 2007, the 90 ambulance crews were manned by 1336 people. A total 23 ambulance crews were led by a doctor specialized in EM or intensive care, and 61 ambulance crews were led by nurse specialized in emergency medical care. Furthermore there are cardiopulmonary resuscitation crews (6, doctor-based) located in capital Tallinn and second largest town Tartu, providing ambulance services all over the country.

In 2007, all together 194 doctors, 766 nurses and ambulance technicians were occupied as a crew members.

8. Training and skills

In order to obtain the qualification in emergency medicine (EM):

- The doctor must pass 4-year residency programme.
- The nurse, in order to obtain the EM speciality must pass after medical school 240 hours
- A person, in order to obtain the qualification of an ambulance technician must pass 400 hours .
- Every physician or nurse have to pass 60-hour training or study program every year, the technician 40-hour program every year.
- The dispatchers are graduated from college and they have to pass 1600 hours training.

9. National guidelines and protocols

In Estonia the ambulancecare uses guidelines and protocols. The guidelines are approved by Ministry Social Affairs (competence, training, equipment etc.) These guidelines and protocols are national.

10. Cooperation with other partners

In Estonia, ambulance care services work in cooperation with other medical services (hospitals, general practitioners) and call centres, rescue services, police, red cross organization.

11. Branche organization

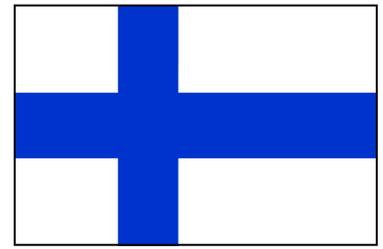
Union of Estonian Medical Emergency

Riia 18

51 010 TARTU, ESTONIA

e-mail: ekliit@pb.uninet.ee

Chairman Mr Ago Kõrgvee



5. Ambulance care in Finland

1. General characteristics

The budget is around 85 million euros for ambulances.

2. Financing

The financing is divided in three parts:

- A. public side where premiums is paid for health insurance through tax
- B. money from the community
- C. patients pays a small amount less than 10 euros per transport.

3. Legislation

The legislation is very complex jus now, but Finland is getting a new legislation in 2010.

4. Availability and spreading of ambulancecare

- Around 800 ambulances. In 2009 the private sector has 392 ambulances who are members of our Association. That is about 95 % of all private ambulances.
- The ambulances are spread all over the country, but some of them are situated in big city centres. In city centres can be given emergency medical assistance within 15 minutes of the incoming call, but in the countryside this is not possible.
- There is no national criterion for the availability of ambulance care such as in the Netherlands.

5. Regional Ambulance Services and dispatch centre

Finland have around 170- 180 private companies in Finland. Regional ambulance services who are owned by the municipalities are 22. There are 15 dispatch centres.

6. Distinction between emergency transport and ordered transport

There are emergency categories from a – d and the ordered transports from hospital to hospital or home. Unfortunately there aren't any official numbers of national responses but it estimated that a – d transports is around 500 – 600.000 and ordered transports around 300 – 400.000 per annum.

7. Ambulance personnel

There is no informatie available of the public sektor, but in the private ambulance sektor there are around 2000 persons working with some level of healthcare/emergency education.

8. Training and skills

In the private sector persons working in ambulances must have some level of healthcare/emergency education

9. National guidelines and protocols

There are a very little national guidelines. Regional guidelines are more common. In year 2010 there will be a new legislation and in that situation there will be possible for ministry to give national guidelines.

10. Cooperation with other partners

Some healthcare areas are using helicopters. The private sector is doing close cooperation with them and sometime with partners in the public order and safety chain, such as police and the fire department, in regular circumstances as well in cases of large scale accidents or disasters

11. Branche organization

Private sector, The Association of Ambulance Entrepreneurs in Finland.

Contactperson: Mikael Söderlund, mikael.soderlund@sairaankuljetusliitto.fi

For the public sector: please contact the ministry of health/ mr Tom Silfvast, tom.silfvast@stm.fi

6. Ambulance care in Italy (only region Piemonte)

1. General characteristics

-

2. Financing

It is the government that every year directly finance the ambulance system. The health system in Italy is free for all the citizens and there is no payment for a health insurance.

3. Legislation

The "unique number for emergency 118" is a Government law since 1992 which regulates the EMS. The 118 system is spread all over the country, but each region has decisional autonomy about the local organization because Italy has very different territories (mountains, islands) and it is impossible to have a single regulation valid for so different regions.

4. What's the total number of ambulances in your country (2007)

In Piemonte, our region situated in the North of Italy, there are about 70 advanced care ambulances and several basic care ambulances. The crew of the basic ambulances is composed of volunteers and for this reason they are not always available and it is very difficult to know their exact number.

Every region has a different availability depending on the characteristics of the territory

There is a national criterium (A1 emergencies must be reached within 8 minutes from the call, A2 emergencies within 20 minutes) but in some rural or mountain areas this criterium is impossible to be applied. For this reason, some regions have a HEMS system (in Piemonte, a mountain region, there are 5 helicopters).

5. How many ambulance services are there in your country?

Red Cross and some other private organizations. Red cross is public, the others are private but no-profit. Every region has a different number of dispatch centres. In Piemonte there are 8 dispatch centres.

6. Which categories for emergency and ordered transport are used in your country?

There are colours codes:

- RED and YELLOW are A1,
- GREEN is A2 and
- WHITE is ordered transport

There are no figures of the whole country. In Novara, one of Piemontes 8 Dispatch Centres, ambulances responded about 30.000 times in 2008, mostly for A2 emergencies.

7. Ambulance personnel

There are Advanced Care ambulances with 2 volunteers, 1 doctor and 1 nurse on board and Basic Care ambulances with 4 volunteers. There are nurses and doctors in the dispatch centres.

8. Training en skills of ambulance personnel

Piemonte had a regional course lasting 6 months and all doctors and nurses are trained with ACLS, ATLS, MIMMS. The dispatch centre staff is trained with emergency dispatch course. All the volunteers are trained with a specific course and BLS.

The physician is on the Advanced Care ambulance and can give ACLS and ATLS treatment directly on the scene. The patient's care begins in the pre-hospital setting following a "stay and play" strategy.

9. National guidelines and protocols

Piemonte uses guidelines, they are regional, but following national principles.

10. Cooperation with other partners

There isn't always a good cooperation between pre-hospital and in-hospital personnel, and this is a pity and a danger for the patient. Actually, this is a very bad situation in all our EMS. There is a good cooperation with police and fire department.

11. Branche organization

Every region has a representative organization.

In Novara the person to be contacted is Egle Maria Valle

Mail to: egle.valle@maggioreosp.novara.it



7. Ambulance care in Lithuania

1. General characteristics

Lithuania measure over 65.200 square kilometres and there are about 3.3 million people. The budget for general care is about 730,1 million EUR (2007 m.). The budget of ambulance care is about 33,3 million EUR (2007 m.).

2. Financing

In Lithuania, ambulance care is being funded by the State Patients' Fund. Territorial Patients' Funds pay to the ambulance care institutions for the duty according to the 1 hrs tariff – 62,9 LTL/hour. Ambulance care institutions acquire the vehicles and medical equipment on their own or their founders' expenses. On the other hand, from 2008 vehicles are purchased by the Health Minister according to the emergency medical care vehicles' renovation program. For the provision of the service vehicles of category B and C, not older then 7 years, should be used.

3. Legislation

Ambulance care is being organized by municipalities, which are founders of public enterprises that provide ambulance care.

Orders issued by Health Minister defines the General requirements of delivering of ambulance care services, organization and payment, ability of personnel of ambulance care, parameters of accessibility of ambulance care. Ambulance care conception, which is approved by the Minister of Health, defines that reform of ambulance care will be pursued by following means:

1. reorganizing and modernizing dispatch centres, which provide an ambulance care service;
2. renewing and providing by necessary means ambulance care vehicles;
3. planning, preparing and training necessary specialists;
4. improving ambulance care organization and payment

4. Availability and spreading of ambulance care

In Lithuania 256 ambulances units are available 24 hours a day, 7 days a week. 10 ambulances units are operated by private providers.

Ambulance care dispatch centres provide to the defined territory. That territory is defined in contract with Territorial Patients' Funds, in agreement with County Governor. In this contract an additional territory is defined, in which ambulance dispatch centre provides service in the case of extreme situation, and conditions of this service.

Number of ambulances is defined according to the normatives:

- In the country-side: one ambulance serves to 10 000-16 000 inhabitants
- In the city: one ambulance serves to 12 000-18 000 inhabitants

Working legal acts define, that citizens should be given emergency medical assistance within:

- 10-15 minutes of the incoming call in the city and
- to 20-25 minutes in the country-side, when it is life threatening condition.
- Other cases: in the city – to 30 minutes, in the country-side - to 45 minutes.

5. Regional Ambulance Services and dispatch centre

Ambulance care in Lithuania is being provided by municipal ambulance stations and ambulance departments of primary health care centres (16 ambulance stations and 42 ambulance departments) and 3 private enterprises. Main business of private ambulance services is transportation of patients, which is paid by inhabitants or organizations. Only three ambulance service centres have signed contracts with Territorial Patients' Funds.

Dispatch centres

Currently all of 56 public ambulance institutions have their own dispatch centres. Besides the general emergency number 112, old emergency services' numbers are still being used.

According to Ambulance care conception it is being supposed to separate ambulance service from the ambulance dispatching, and establish ambulance dispatch centres in the counties (there are 10 counties, which are superior territorial administrative units).

Emergency number

After implementation of the Program of the General emergency number 112 infrastructure development, which is approved by the Government of the Republic of Lithuania, ambulance dispatch centres will be integrated into Emergency Response Centre (ERC). Regional branches of ERC will administer all phone calls to the number 112.

6. Distinction between emergency transport and ordered transport

According to the Essential health care provision's order and conditions, which are approved by the order of the Minister of Health, essential health care cases are divided into three categories:

- 1 category – life-threatening conditions, when active medical intervention is necessary immediately: medical care is provided immediately, at the same time patient's status is evaluated and treatment provided;
- 2 category – cases, when the failure to provide immediate medical care leads to the life-threatening condition; or the cases of extreme pain: patient's status is evaluation and treatment should be provided within 10 minutes. Patient's status is evaluation and treatment often are provided simultaneously;
- 3 category – potential dangers for life, when patient's health status is getting worse and this could lead to the serious consequences: patient's status is evaluation and treatment should be started within 30 minutes.

Ambulance care dispatch centres define the priorities of the calls according to the following categories. Number of persons, who received ambulance care services in 2007: 729 698.

7. Ambulance personnel

Ambulance care is provided by more than 300 physicians, about 1300 ambulance nurses, 750 drivers. Most of the physicians work at the ambulance care in the major cities. The number of physicians and nurses is decreasing. Dispatchers are nursing specialists.

It is planned that in the future ambulance personnel will consist of emergency medical care nursing specialists (nursing specialist, who have completed emergency medicine course) and drivers-paramedics. Dispatch specialists will be trained according to the special programs.

8. Training and skills

Ambulance care is provided by more than:

- 300 physicians

- about 1300 ambulance nurses and
- 750 drivers

Physicians must have valid medical license. Nursing specialists of all qualification must have valid nursing license and ambulance practise certificate. Ambulance personnel are obliged to improve knowledge and skills in specialized courses. Course time shall be no less than sixty hours over 5 years. Ambulance drivers have to complete first aid and CPR courses every 5 years. Ambulance personnel competences and skills lists are provided in the general requirements of delivering of ambulance care services, which are approved by the Minister of Health.

The number of ambulance care physicians is decreasing, they remaining in the major cities only. In the major ambulance care providing institutions physicians are working as the physicians in charge of the shift (their function is to advice others how to provide medical care). Physicians are working at the management of ambulance providers, some of them are chiefs of this institutions.

9. National guidelines and protocols

Resuscitations standards are being used. They are based on the European Resuscitation Council Guidelines for Resuscitation. Standards are national, they are approved by the order of the Minister of Health.

10. Cooperation with other partners

All patients, which are being brought to the hospital ambulance, shall be investigated at the admission wards, and they should be provided by the emergency care according to the competence of the hospital. In the case of need, ambulances transport the patients to a other hospital. Ambulancecare institutions may ask help of other emergency services (police, fire department), when necessary. According to the Law on the Civil Protection of the Republic of Lithuania, ambulance care institutions are defined as a part of civil protection and rescue system. When the origin of emergency situation requires, health care specialist (ambulance care worker) fulfill functions of the leader of rescue operation.

11. Branch organization

- The Ministry of Health of the Republic of Lithuania (Vilniaus st. 33, LT-01506 Vilnius, Lithuania) is responsible for the organization of Emergency Medical Services at the state level.
Contact person is Arunas Anuzis, Head Specialist of the Division of Specialized Medical Care (phone +370 5 266 1477, fax +370 5 266 1402, e-mail arunas.anuzis@sam.lt).
- Health Emergency Situations Centre under the Ministry of Health (Didzioji st. 7, LT-01128 Vilnius, Lithuania) is responsible for reform of dispatching of Emergency Medical Services.
Contact person is Vladas Mireckas, Head of Planning and Control Division (phone +370 5 271 8366, fax +370 5 231 4436, e-mail Vladas.mireckas@sam.lt).
- Lithuanian Association of Emergency Medical Services is a non-governmental organization, which represents public ambulance care providers.
Chairman is Rimvydas Juodvirsis, Director of Klaipeda Ambulance Station (phone/fax + 370 46 313685, e-mail klaipedosgmp@takas.lt).



8. Ambulance care in The Netherlands

4. General characteristics

The Netherlands measure over 41.000 square kilometres and are home to more than 16 million people. The budget for ambulance care is over 360 million euro.

5. Financing

In the Netherlands, ambulance care is financed through premiums. That means every Dutch citizen is insured for ambulance care services by the premiums they pay for their health insurance.

6. Legislation

Financing of ambulance care services and access to them are regulated in the Ambulance Transportation Bill (Wet Ambulancevervoer (WAV) of 1971). It defines quality demands the government makes of the service. Provincial authorities are responsible for the licensing of ambulance services, as well as for their distribution and availability. Financing is the domain of the insurance companies. Municipal authorities regulate and monitor the emergency dispatch centres and play an important role in medical care services during large scale accidents and disasters.

On 2 December 2008, the Upper House of the Dutch Parliament approved the Ambulance Care Act (WAZ). The Act will come into force on 1 January 2011. From that date, a Regional Ambulance Care Facility (RAV) will be responsible in each region for the entire process of ambulance care. The Health Minister will be in charge of licensing, instead of provincial authorities. The licensing area will contain a safety region, or RAV region, in which one organization, the Regional Ambulance Service (RAV) is accountable. The Netherlands will have 25 RAV regions when the new bill is introduced.

4. Availability and spreading of ambulance care

In The Netherlands, 670 (in 2007) ambulances are available 24 hours a day, 7 days a week, to provide ambulance care to patients. These vehicles are spread out across a national framework in such a way that 95% of citizens can be given emergency medical assistance within 15 minutes of the incoming call.

5. Regional Ambulance Services and dispatch centre

Ambulance care in the Netherlands is organized in 25 regions. The Regional Ambulance Service (or RAV) is responsible for providing ambulance care in the region. Within this organization, the ambulance service(s) and the Ambulance Care Dispatch Centre (Meldkamer Ambulancezorg or MKA) work closely together. The RAV can be a public or privately organized, or can be a combination of public and private organizations.

Ambulance care service begins with an incoming emergency call at the Ambulance Care Dispatch Centre (MKA). There are 25 dispatch centres in the Netherlands. The dispatch centre carries responsibility for the process of response assessment, care service allocation and coordination as well as registration. Each call is assessed by a dispatcher in terms of its specific care requirements. If necessary, an ambulance is dispatched. Callers may also be referred to another service or be given advice over the phone.

Sometimes, multiple services are required such as a trauma team, police or the fire department. The emergency dispatch centre plays a central coordinating role. The proper execution of this process requires professionals.

6. Distinction between emergency transport and ordered transport

A distinction is made between emergency transport and ordered transport. In The Netherlands, emergency transport is subdivided into type A 1 urgency and type A 2 urgency.

- A 1 urgency applies to life-threatening situations, and in such cases, the ambulance must be on site within 15 minutes after the emergency call comes in.
- A 2 urgency applies to cases that are not life-threatening, but do call for a fast response : the ambulance should be on site as soon as possible, but no later than 30 minutes after the emergency call.
- Ordered transport, referred to as type B transport, is transport that can be planned, for example between hospitals or from a hospital to a patient's home.

Important to mention is that the so-called '15-minutes' criterium is a criterium for the planning of ambulance care. It is not a 'quality-criterium'.

In The Netherlands, ambulances respond almost 1.000.000 times annually. 400.000 of these are of type A1 and 200.000 are type A 2 emergencies. Some 400.000 are type B transports.

7. Ambulance personnel

Around 4400 ambulance personnel work in the sector:

- 1800 of them are ambulance nurses
- 1700 are drivers
- 400 work as dispatchers.
- About 500 work in staff or management functions.

8. Training and skills

The ambulance care system is a nurse-based system. Ambulance nurses are licensed to administer medical treatment at the level of Advanced Life Support (ALS) independently. In addition to basic training as a nurse, ambulance nurses take additional specialist courses such as Intensive Care and Cardiac Care, next to their standard national training as an ambulance nurse. In order to safeguard expertise and proficiency, ambulance nurses take compulsory national and regional courses. They must also pass the so-called Profcheck once every 5 years.

Ambulance drivers are qualified to give medical assistance to the ambulance nurses. Obviously, they are trained in the safe transportation of patients in medical emergencies. Drivers have taken a national ambulance driving course. They too take additional compulsory courses each year, and must pass the so called Profcheck every 5 years, testing their driving skills as well as the medical assistance they provide.

Dispatch centre staff have undergone basic training as a nurse and have completed the official national emergency services dispatcher's course and attend yearly additional training programmes. There are strict dispatch protocols for each sector.

The Ambulance Care Medical Manager (or MMA) is a licensed physician who has final responsibility for the medical care given within a specific RAV. They are not directly involved on site, but can be consulted at a distance. Quality levels are safeguarded by means of national protocols.

The Ambulance Care Medical Manager (MMA) is responsible for monitoring the proficiency of ambulance personnel and dispatchers based on these protocols.

9. National guidelines and protocols

Quality levels in the ambulance care are safeguarded by means of national guidelines and protocols. Protocols represent the professional standard for the content and the process of ambulance care. In other words, care in accordance with protocols is the - national - standardization of quality during the total process. The Dutch National Standard Dispatch Centre Ambulance Care (NSDCA) and the National Protocol Ambulance Care (NPA) for ambulance nurses and ambulance drivers share the same objective and function. The methodology and content are in compliance with each other and both standards are fully integrated. This way, total quality of the care process is guaranteed.

10. Cooperation with other partners

Ambulance care services work in close cooperation with other partners within the medical emergency sector. There is cooperation with other services on site, such as general practitioners and trauma teams. Being guided through the medical chain properly is considered important for patients, for example when they are handed over to a hospital or trauma team. As a 'mobile care giver', ambulance care links up the elements in the medical emergency chain. In addition, there is close cooperation with partners in the public order and safety chain, such as police and the fire department, in regular circumstances as well in cases of large scale accidents or disasters. In these situations, the regular services respond, but regional authorities coordinate and carry final responsibility.

11. Branche organization

Ambulancezorg Nederland is the representative organization for regional ambulance services (RAV's), local ambulance services and emergency dispatch centres in The Netherlands. The organization is involved in branche representation, policy development, providing information and service. The main areas of policy in which it carries out its tasks are management and financing, labour affairs, quality and ICT.

For more information:

Ambulancezorg Nederland

www.ambulancezorg.nl

contact person: Margreet Hoogeveen, m.hoogeveen@ambulancezorg.nl



9. Ambulance care in Poland

1. General characteristics

The Republic of Poland measure over 312.000 square kilometers and are home to more than 38 million people. The budget for ambulance care in 2007 averaged 1 mld 200 mln PLN (1 PLN = 4.70 EUR – on 26.02.2008).

2. Financing

Prehospital emergency care is financed from budget of Republic of Poland. The ambulances are financed through contracts between each Ambulance provider and National Health Fund. Air Rescue Services are financed throughout Ministry of Health.

3. Legislation

The entire prehospital emergency care in Poland is regulated upon State Emergency Medicine Bill from 8 September 2006. See the entire bill on the Ministry of Health site:

<http://www.mz.gov.pl/wwwmz/index>

In this act there is all information about members of Emergency Medicine System and their competences, obligation and responsibilities. You can see also the competences of Voivode. It stays in the act how the whole system should be financed etc.

4. Availability and spreading of ambulancecare

In Republic of Poland there are 411 (at the end of 2008) ambulances available 24 hours a day, 7 days a week. In Poland ambulances are divided into two categories:

- "P" (basic ambulance team) and
- "S" (expert ambulance team- like Mobile Intensive Care Unit).

There are 611 "S" ambulances and 800 "P" ambulances. State of Emergency Medicin Bill describes differences between "P" and "S" ambulances. The ambulances and equipment are similar.

There are only staff differences:

- "S" ambulance has minimal 3 pers. staff: doctor + emergency nurse + paramedic and additionally driver if the members of personal are not allowed to drive an ambulance.
- "P" ambulance has minimal 2 pers. staff: emergency nurse + paramedic + additionally driver if the members of personal are not allowed to drive an ambulance. Because limited staff on the "P" ambulance board the team have limited competences.

The Voivode is responsible to organize the system so that:

1. The median of reaching the calling patient (in each month) should be not longer than 8 minutes in cities above 10,000 citizens and 15 minutes in smaller cities and villages.
2. The third quartile of reaching the calling patient (in each month) should be not longer than 12 minutes in cities above 10,000 citizens and 20 minutes in smaller cities and villages.
3. The longest time of reaching the calling patient should be not longer than 15 minutes in cities above 10,000 citizens and 20 minutes in smaller cities and villages.

5. Regional Ambulance Services and dispatch centre

In practice there are so many dispatch centres as numbers of powiat (see in Wikipedia what powiat is). There are 379 powiats. The exact number of dispatch centres is unknown.

Poland had also a of Emergency Anounce). The number of CPRs in each voivodeship belong to decision of voivode. It could be one ore more in each voivodeship. It's in constantly under transformation and it's impossible to give you reliable informations.

In the regulation from 2001 CPR was to be organized in each powiat. Now according to the act UoPRM from 2006 there are no informations about numbers of CPR. It's depend to voivode who is responsible to employ appropriate number of dyspozytor medyczny DM (medical dispatcher). DM can be private or public organized and mostly he is the holder of ambulances in his local area.

6. Distinction between emergency transport and ordered transport

Poland has no urgency categories of transportation. In question number 4 you see the time of reaching the calling patient. You can see there also the difference between "S" and "P" ambulance. In theory "S" ambulance is planned for the most acute and serious accident. In practice when the all "S" ambulances in the nearest area are gone the medical dispatcher has to send "P" ambulance. There is no information about annual responses.

7. Ambulance personnel

The numbers below are not exact. It's an estimation.

Around 23 000 personnel of ambulance service:

- "S" ambulances personnel: about 10,260 (611 "S" ambulances x 3,5 staff x 4,8 regular posts)
- "P" ambulances personnel: about 9,600 (800 "P" ambulances x 2,5 staff x 4,8 regular posts)
- Work dispatchers - around 1,740 (279 powiat x 1,3 staff x 4,8 regular posts)
- Staff or management (inkl. accountancy, personnel dept. etc.): around 1,400 (279 powiat x 5 members of staff x 1 regular post).

8. Training and skills

- *Ambulance Driver* (pl. kierowca) - more and more of them are both: paramedic and driver in one person. In UoPRM (Bill) there is no information about minimal requirements. In practice drivers have to be owner of B class drivers license and have to pass psychological tests for emergency vehicles driver.
- *Ambulance doctor* (pl. lekarz) - a doctor with a diploma of emergency medicine or a doctor who already studies an emergency medicine. Till the end of the year 2020 ambulance doctor can be a specialist of: anesthesiology, intensive care, internal medicine, general surgery, pediatric surgery, orthopedic or pediatric. All doctors have to complete CME credits- educational points.
- *Paramedic*: has a university diploma of emergency medicine (3 years study) or has a matura (see wikipedia) and a diploma of private or public emergency medicine school (2 years); has a diploma from EU-country or non EU-country (details in UoPRM-Bill). All paramedics have to complete CME credits- educational points.
- *Nurse*: a nurse with a diploma of emergency nursery or a nurse who already studies an emergency nursery, anesthesiology, intensive care, surgery, cardiology, pediatric and has minimum 3 years practice in hospital wards of this specializations. All nurses in Poland have to complete CME credits- educational points.

- *Medical Dispatcher*: has a doctor, nurse or paramedic education. Was employed minimum 5 years in an ambulance, emergency hospital dept., anesthesiology dept. or hospital reception's room. Medical Dispatcher is obligated to education improvement. The details of education improvement are not describe in UoPRM/Bill.

9. National guidelines and protocols

UoPRM (State of Emergency Medicin Bill) predict national protocols and guidelines. Currently they are no prepared.

10. Cooperation with other partners

Polish ambulance care co-operates with: GPs, fire service, police, mountain rescue and other services they are at first on the place of accident.

- *GP*: You can see an interesting "co-operation". All GPs are obligated to have a contract with a medical transportation company. Actually GPs often orders an ambulance also by no emergency accidents to reduce own costs.
- *Fire service*: by all car accidents fire brigade will be sent to collaborate with ambulance team. Some 112 calls will be firstly answered by fire service and from there re-directed to medical dispatch centre.
- *Police*: police will be sent to all accidents they need police help. Some 112 calls will be firstly answered by police station and from there re-directed to medical dispatch centre.

11. Branche organization

- Ministerstwo Zdrowia (Ministry of Health) is responsible for the quality of emergency care. The website: <http://www.mzios.gov.pl/>. There are in Poland also the other organizations:
- Związek Pracodawców Ratownictwa Medycznego (Medical Care Employers Association)
The Website: <http://www.zprm.pl/>
- Związek Ratownictwa Medycznego (Medical Care Association)
The Website: <http://www.ratownictwomedyczne.org>
- Contactperson: Mateusz Nowak, mateusz.nowak@mp.pl



9. Ambulance care in Turkey

1. General characteristics

Turkey measure over 814.578 square kilometres and home to more than 71 million people. The budget for ambulance care is over 340 million euro (This budget shows only governmental ground ambulances). Personnel, vehicles, maintenance, health equipments are including to this amount. Infrastructure budgets like constructing new buildings or buying new ambulances other vehicles are excluded.

2. Financing

The treatment expenditures are financed by National Social Security System, Social aid and [solidarity](#) trust (for people who has no assurance) and traffic assurance foundation. Personnel salaries and purchasing new ambulances are financed from the share of Ministry of Health's that allocated form general government budget. Medical equipments and supply expenditures and other kinds of expenditures financed by from circulating capital that allocated from provincial budget.

3. Legislation

The 'Emergency Medical Legislation', 'Provincial Ambulance Services Task Directive' were published by Turkish Ministry of Health. The working conditions of 112 Ambulance Services are regulated by these legislations in national level. Besides 'Emergency Health Vehicles and Ambulances Services Task Directive' regulates ambulance services (public and private levels). 112 Emergency Medical Services organized in 81 provinces and work under Turkish Ministry of Health. Private ambulance services are registered and supervised by Provincial Health Directorates for the name of Turkish Ministry of Health.

112 Command and control centre get information from governmental and private ambulances, besides they get online information from the hospitals in the same city about ICU and morgue capacities. EMS (112) dispatch centre has contact with fire brigade (110) and police (155) dispatch center via telephone and radio.

Telephone number for EMS is 112 (working under Ministry of Health), telephone number for fire brigade is 110 (working under local municipalities), telephone number for police is 155 (working under Ministry of Internal Affairs).

4. Availability and spreading of ambulance care

In Turkey there are:

- a. 1208 ambulance stations, 1829 ambulances, 3 HEMS in 2008
- b. 1314 ambulance stations, 2129 ambulances, 30 motorcycle, 17 HEMS in 2009 (August)

These numbers are only 112 ambulance numbers. Private and institutional ambulances are not included. The response time accepted as <10 min (90% of cases) for urban and highly populated places. The response time accepted as <30 min (90% of cases) for rural places.

One ambulance station is available for 50.000 population. The dispatch centres and ambulance stations work for 7 days and 24 hours in 81 provinces.

5. Regional Ambulance Services and dispatch centre

There are 1314 Ambulance stations, 15 HEMS stations works under Ministry of Health. On the other hand there are ambulances registered by provincial health directories like private ambulance services, municipality ambulances and institutional ambulances. 112 dispatchers dispatches those ambulances when needed. EMTs, nurses and medical doctors work in dispatch centres. Medical doctors work as decision maker and supervisor in dispatch centre. Ambulances dispatch only for medical emergencies. They work under Turkish Ministry of Health (HEMS works in subcontracting level)
There are 81 dispatch centres (in every province)

6. Distinction between emergency transport and ordered transport

There are 3 types of ambulances in Turkey:

- Emergency health (medical doctor/paramedic, EMT/nurse, EMT/driver) red striped type,
- patient transport (EMT/nurse, EMT/driver) blue striped type and
- special equipped (ICU, neonatal etc.).

Calls generally categorized in 3 types:

1. The calls that need emergency (urgent) health help [red coded]; the ambulance have to sortie in two minutes time after the call. Emergency help/ advanced life support ambulance or special equipped ambulance, HEMS or motorcycle (plus an ambulance) could be dispatched for this type of call.
2. Patient transport ambulances/BLS ambulances dispatched for non emergency health problems. This type call do not need urgent sortie.
3. The supervisor physician works in Dispatch centre can only refuse the calls that do not need ambulance care. 95 % of the calls do not need ambulance care.

Example: 3.500.000 people live in Izmir. Everyday 15,000 calls come to Izmir 112 dispatch centre. But daily sortie number is 400-450. There were 1,450,000 ambulance responses in 2008, all over Turkey. Approximately 18% of it were intervention on the scene, 52% of them transfer to hospital, 14% inter hospital transport. 22% of them were trauma cases, 18% were cardiovascular and 9% neurological cases.

7. Ambulance personnel

14.144 personnel work in 2009 in Turkey. This number consists of Medical Physicians, Paramedics, EMT's, nurses, drivers, data control staff

8. Training and skills

There are postgraduate certificate courses for physicians, paramedics and EMTs in Turkey:

- Basic Life Support Module (5 days);
- Pediatric Advance Life Support Module (4 days);
- Trauma Resuscitation Course (4 days);
- Advance Life Support Module (3 days);
- Command and control center training course (3 days) for staff that work in dispatch center;
- Ambulance Team Standardization Module (1 day);
- Ambulance Driving Training (5 days);
- Disaster medicine (5 days);
- NBC course (3 days).

The physicians have main roles like managing, development and practice in the system. All personnel that work in Ministry of Health for this department are physicians. The directors in this field in 81 cities are consists of physicians that trained in this topic. The head physicians and deputies (operational, training, PR, finance and information technologies) are all physicians. The decision makers and supervisors that work in 112 command and control centers are also physicians. 1 physician, 1 paramedic and 1/2 pilots works in every HEMS team. The coordination of HEMS operations and mass causality incidents are also physicians. The ratio of ambulances with physicians is 25-50%.

9. National guidelines and protocols

There are paramedic and EMT guidelines that published by Ministry of Health in Turkey. These guidelines are complying with ERC and AHA protocols. Paramedics have limited authorization for usage of drugs. They need to get confirmation from supervisor physicians for some interventions. These confirmations usually get via cell phones or radios. Turkey uses national guidelines.

Cooperation between the ambulance sector and other partners

112 Ambulance services work in relation to hospital emergency services, clinics, family physicians and private ambulance services. 112 Ambulance services work in relation to National Medical Response Teams and rescue teams in case of industrial accidents, mass gatherings, disasters, RTA.

9. Branche organisation

NGO: Emergency Ambulance Physicians Association is a representative organization in our country for ambulance sector.

Public: Ministry of Health, 112 Emergencies and Disasters Department. Dr. Fazil Inan

Emergency Ambulance Physicians Association M.D. Turhan SOFUOGLU (President)

E-mail: turhans112@yahoo.com

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10.

Overview Ambulancare in Europe

	Budget	Emergency number	Calls	Ambulances	Ambulance organisations	Dispatch centre	Protocols	Ambulance personnel
Austria	400 million euro	144 and 112		2500		52	Austrian Red Cross	59000
Belgium		112/100				10	National	
Bulgarije	74 962 610 bgn	112/150	866.678	1020	192	28	Methodical	7113
Cyprus		112				25	x	
Czech republic		155				40	national	
Denmark		112				8	x	
Estonia	27 million euro	112	250.000	90	24	1	National	1336
Finland	85 million	112	900.000	800	200	15	Regional	2000
France		15				103	National	
Germany		112/19222				?	National	
Greece		166				12	National	
Hungary		112/104			1	26	National	
Ireland		112/999				14	National	
Italy		118				103	National	
Latvia		112/03				26	x	
Litouwen	33 million euro	112		256	56	56	National	2350
Luxembourg		112				1	National	
Malta		112/196				1	National	
Nederland	360 million euro	112	1.000.000	670		25	National	4400
Poland	1 mld 200 million	112/999		1400		290	x	
Portugal		112				4	x	
Romania		112				42	x	
Slovakia		155				8	National	
Slovenia		112				12	x	
Spain		112/061				26	x	
Sweden		112				18	x	
United Kingdom	89.568 bn	999	7.000.000	1721	19	33	National	